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**Food and Drink: Ireland's Overseas Trade in the
Later Middle Ages**

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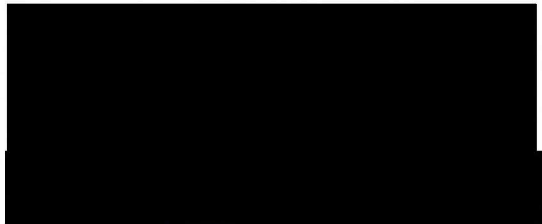
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Abbreviations

- CARD* *Calendar of Ancient Records for Dublin, Vol i, J. Gilbert (Dublin, 1898).*
- CDI* *Calendar of Documents Relating to Ireland, 1171-1307, 5 vols (London, 1875-1886).*
- CPR* *Calendar of Patent Rolls, 1232-1509, 52 vols (London, 1891-1916)*
- CCR* *Calendar of Close Rolls, 1272-1509, 47 vols (1892-1963),*
- DRO* *Devon Records Office, Exeter.*
-
- Rot. Pat. Hib. Rotulorum patentium et clausorum cancellariae.*
- SRO* *Somerset Record Office, Taunton.*
-
- TCD* *Trinity College Dublin*
- TNA* *The National Archive, Kew, London.*
- ZMB* *Cheshire Record Office, Mayor's Books.*
- ZSB* *Cheshire Record Office, Sheriff's Books.*

Declaration

I have composed this thesis myself on the basis of my own work.



Colin Stephen Fitzpatrick

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Abstract

This thesis examines Ireland's overseas trade in food and drink commodities in the later Middle Ages. The study focuses primarily on trade between Ireland and ports on the west and south west coast of England but also covers Ireland's continental trade.

In order to provide an outline of trading conditions in and around the Irish Sea, Chapter One examines what type of ships freighted commodities from and to Ireland. This chapter also analyses shipbuilding on both archaeological finds and documentary sources. Other topics covered include harbours and their accessibility; legal issues relating to mariners and merchants; the threat and impact posed by piracy on trade; and personnel be they merchants, shipmasters, or crew on ships in Irish waters.

In Chapter Two the analysis turns to the grain and bean trade. The heavily regulated overseas grain trade is examined to explain the change in grain supply from the glut of grain in Ireland after the Black Death to the virtual cessation of Irish exports of grain after 1450. Beans as well as grain will be analysed to account for the large quantities imported from Bridgewater and Bristol to Ireland in the fifteenth century.

Chapter Three is a study of the fish industry in Ireland. Herring, hake and salmon made up the bulk of fish exports from Ireland. Irish processors and merchants had the most up to date curing methods to preserve the catch and were sourcing the raw materials to do so (salt and old wine) domestically and from abroad. The impact of political unrest on the fish trade will be examined.

Chapter Four sets out to determine the importation of wine. Most probably it came from Gascony but additional supplies arrived from Iberia and via England. Wine imports before and after the Black Death will be assessed to determine the quantities imported to Ireland. Who consumed wine in Ireland and the reasons for its consumption will also be outlined.

Chapter Five focuses on salt, honey, spices, fruit and nuts. Most of these products were imported to be used as either food additives or as food dyes. Some spices (cinnamon, saffron) were imported in small quantities for medicinal purposes.

The final Chapter focuses on the impact of trade on the Irish economy. It deals with the aftermath of the Black Death, population levels, coin and its use in the Irish economy and finally the economics of trade. The costs associated with overseas trade will be set out including licences, ship hire, freight rates, insurance and port levies, keelage, crantage, and the measurement of commodities. This chapter suggests that the Irish economy was generally performing well for most of the fifteenth century.

Introduction to Thesis

The primary intention of this study is to analyse Ireland's trade in food based commodities with England and continental Europe between *c.*1350 and *c.*1550. The geographical zone for this study encompasses the Celtic Sea, the Atlantic Ocean and the Irish Sea and places further afield with which Ireland traded.

In Chapter One the methods and modes of transport will be outlined to discover the advances and impediments to trade experienced in Ireland during the later Middle Ages. Topics considered include ship types, shipbuilding, navigation, the merchants and mariners traversing through the seas around Ireland, the laws as they related to trade and merchants and piracy. Ireland's trade in foodstuffs, especially arable crops and legumes, forms the basis of Chapter Two. Wheat, barley and oats were important exports for Irish merchants in the high Middle Ages, but the change from exporter to importer of arable crops will be explained and the impact of this on the Irish economy, especially after the Black Death, will be discussed. Legumes (almost exclusively beans) became a very important import from Somerset. This too will be considered. The fish trade from Irish waters to England and Continental Europe will be examined in Chapter Three. This chapter will set out the types of fish traded, the processing of the catch, the numbers of fish exported and who was involved in fishing.

Wine ships arriving in Ireland mainly from Gascony and to a lesser extent from Iberia, will be examined in Chapter Four. Wine re-exported from Ireland to England will also be explored, as will viticulture and the consumption of wine. The final chapter will outline the economies of trade, primarily focussing on the economic impact of emigration, costs associated with labour, taxes, freight charges and their impact on trade. The chapter will make some

reference to non-food products (such as hides) in order to provide the broader context into which Ireland's trade in food based commodities can be understood.

The principal unpublished primary source material scrutinised for this study are the 'particular' customs accounts and local customs accounts surviving for ports on the west and southwest coasts of England. The loss by fire in 1922 of most of the Irish public records left a lacuna of similar material relating to Ireland. There is, however, some surviving customs material relating to Ireland for the period from the thirteenth to the sixteenth centuries, and the scope of Ireland's trade can be substantially analysed through recourse to the customs accounts still extant for ports on the west coast of England.¹ National customs levied were used by the crown to finance expensive wars and in part to pay towards the administration of the lordship, whilst local customs were used to finance local port repairs and the upkeep of harbours. National customs were levied on some commodities from the thirteenth century. In 1275 a custom on wool, woolfells and hides, known as the ancient or great custom, was levied on aliens and denizens alike.² These taxes were levied in Ireland, too.³ In 1303 Edward I negotiated an extra fifty percent increase on the custom of 1275 with foreign merchants. New taxes were imposed on wine, cloth and wax. Three pence in the pound were

¹ T. McNeill, *Anglo Norman Ulster: The History and Archaeology of an Irish Barony 1177-1400* (Edinburgh, 1980), 132-134. McNeill has listed the receipts of the Great New Customs from their inception in 1275 to 1335; see too P. Dryburgh & B. Smith, eds, *Handbook and Select Calendar of Sources for Medieval Ireland in the National Archives of the United Kingdom* (Dublin, 2005), 276-300. Two particular accounts for Bridgewater 1482, 1486 are fully transcribed. A customs account for hides leaving Galway is extant. There are also two wine accounts transcribed for Gascony 1307/8 and 1412/13; E. Carus-Wilson, *Overseas Trade of Bristol in the later Middle Ages* (Bristol, 1939 reprint 1967), 168-269. Wool custom accounts for Bristol are transcribed for the years 1323-25, 1331, 1332-33, wine account 1339-40, subsidy account 1378-1379, cloth custom 1390-91, subsidies account 1476, Tunnage and Poundage account, 1461, Tunnage and Poundage, 1479-80; W. Childs, 'Ireland's Trade with England in the later Middle Ages', *Irish Economics and Social History*, ix (1982); A. Longfield, *Anglo-Irish Trade in the Sixteenth Century* (London, 1929). A Bristol customs account synthesised for 1504/5; Alf O'Brien Collection includes some handwritten copies of customs accounts housed at Kew, in the papers he bequeathed to Cork City Library.

² N. Gras, *The Early English Customs System: a documentary study of the institutional and economic history of the customs from the thirteenth to the sixteenth century* (Cambridge, 1918 bibliophile reissue), 86.

³ S. Ellis, 'Irish Customs Administration under the Early Tudors', *Irish Historical Studies*, xxii (1982), 271-2; G. MacNiocaill, *Ná Buirgéisí*, ii (Dublin, 1964), 523-5.

to be levied on all other imports and exports.⁴ This custom (*Carta Mercatoria*) gave foreign merchants freedom to trade and exemptions from some local tax.⁵ English merchants declined to pay the new tax because they had nothing to gain. Wine taxes were also levied in Ireland. The petty custom was a combination of the new custom of 1303 and the cloth custom of 1347. The petty custom was levied on non staple goods of denizen and alien merchants.⁶ The additional 3d per £ value of goods was probably still levied on alien merchants.⁷ The petty custom was levied in Ireland by 1380.⁸ In 1347 a cloth custom was levied on merchants which included a subsidy called tunnage and poundage. This was applied at a rate of 5% *ad valorem* tax on all imports and exports.⁹

In the fourteenth century customs and subsidies were collected in Dublin, Cork, Youghal, Drogheda, Limerick, Waterford, Galway and Ulster. Customs and subsidies were most likely collected on wool, woolfells and hides.¹⁰ In Ireland officials at Irish ports were collecting customs from the thirteenth century. The records of these taxes do not survive after c.1330 but customs on goods were still levied. For example Williem de Widsor governor and keeper of Ireland, was exempt from paying customs for fifteen years.¹¹ William Ilger and Richard son of William of Lombard were given the cocket for Waterford for ten years, paying £100 to the Exchequer.¹² The Irish parliament introduced temporary new customs for ships entering or leaving port. These taxes were primarily levied on food and drink items. These customs were introduced in 1380 to provide revenue for the defence for Ireland.¹³

⁴ A. Brown, *The Governance of Late Medieval England 1272-1461* (London, 1989), 66.

⁵ Gras, *The Early English Customs*, 86.

⁶ Gras, *The Early English Customs*, 435.

⁷ V. Threadwell, 'The Irish Customs Administration in the Sixteenth Century', *Irish Historical Society*, xx (1977), 387.

⁸ H. Berry, *Statistics Ordinances, Acts of Parliament of Ireland, John to Henry V* (Dublin, 1907), 527.

⁹ Gras, *The Early English Customs*, 86.

¹⁰ Chancery.tcd.ie/docs 7, patent roll 19 Richard II (08/10/2013).

¹¹ CPR, 1377-1381, 489.

¹² CPR, 1377-1381, 490.

¹³ Chancery.tcd.ie/docs, 4, 6, 87, patent rolls 43 Edward III, 12 Richard II (15/07/2014).

A cocket was a seal belonging to the customs house. It was used to authenticate documents showing that customs had been paid.¹⁴ Royal charters issued in 1412 to Limerick, in 1413 to Waterford, in 1466 and 1470 to Cork, and in 1485 to Youghal stated that the customs was to be collected by municipal officials for each town's own use.¹⁵ In 1487 the proceeds from the poundage tax were also given to the municipality of Waterford.¹⁶ Poundage tax was a subsidy agreed with merchants for the protection of their merchandise at sea. Tonnage and poundage tax was reaffirmed in England in 1472.¹⁷ In 1474 it was introduced into Ireland to finance the militia protecting the Pale.¹⁸ National and local custom taxes in Ireland were not, however, effective revenue generators because too many merchants were exempt. Freemen of Dublin and Drogheda in 1474 were exempted from payment of the poundage tax as were those from Waterford in 1476.¹⁹ Although the crown again sought to levy poundage 'in perpetuity' from 1500 in Ireland, freemen of Dublin, Drogheda and Waterford remained exempt.²⁰ After 1479 crown-appointed governors were expected to finance their administrations from revenue collected in the lordship, but this was made difficult by all the exemptions.²¹ The collection of subsidies from Ireland at the latter end of Richard II's reign was probably minimal.²² In Henry VIII's reign a statute was drafted detailing the integrity of the customs collection system in Ireland. The denizen merchants in the ports of Limerick, Cork, Youghal and Waterford had paid no taxes to the king of either subsidy or poundage.²³ These towns did not collect customs from aliens; this encouraged foreign merchants to give preference to

¹⁴ Longfield, *Anglo-Irish Trade*, 233.

¹⁵ S. Ellis, 'Irish Customs Administration under the Early Tudors', 272.

¹⁶ *CPR*, 1485-1494, 176.

¹⁷ T. Tomliss & W. Taunton, eds, *Statutes of the Realm, Richard II to Henry VII*, ii (London, 1816), 433.

¹⁸ Threadwell, 'Irish Customs Administration', 387.

¹⁹ Threadwell, 'Irish Customs Administration', 387-8.

²⁰ Threadwell, 'Irish Customs Administration', 388.

²¹ Ellis, 'Irish Customs Administration', 273.

²² J. Brewer & J. Bullen, eds, *Calendar of Carew Manuscripts, V, Book of Howth* (London, 1871 reprint Nendelen, 1974), 385.

²³ Brewer & Bullen, eds, *Calendar of Carew Manuscripts*, 467.

transacting trade with the Munster ports to the detriment of ports in the counties loyal to the crown, namely Dublin, Drogheda and Louth. O'Sullivan argues that grant of customs by the king to the earl of Kildare in 1497 were of no use because subsequently the Munster ports were not collecting customs, cockets, poundages or prise of wines.²⁴ An alternative view to O'Sullivan's argument is that the southern port towns were still exacting customs but only from denizens, and possibly using the revenue for local needs.

Since Cheshire was a palatinate no customs were rendered to the royal exchequer.²⁵ In Chester, customs accounts were noted in the chamberlain's accounts. The mayor's and sheriff's books recording customs are kept in the local archive in Chester. (Cheshire Record Office, Duke Street, Chester).

A number of national customs accounts survive for the ports of Bristol, Bridgewater, Exeter, Plymouth, Fowey, Poole, Dartmouth and Southampton. They record both ships from Ireland and foreign vessels trading with Ireland. These accounts are kept at The National Archives, at Kew in London.²⁶ Most of the accounts provide information regarding the ships's name, shipmaster, merchants with cargoes aboard, date of arrival or departure, origin, and on occasion destination. The status of the merchants, be they alien, denizen or Hanse, and a list of cargo on which tax was payable. The recording of national custom accounts, however, differs in some ways from port to port. For example, customs accounts for Bristol and its creeks invariably attest from where ships came and went.²⁷ Most accounts for Bridgewater

²⁴ W. O'Sullivan, *The economic history of Cork city, from the earliest times to the Act of Union* (Cork, 1937), 57; E. Curtis, ed., *Calendar of Ormond Deeds*, iii (Dublin, 1935), 254.

²⁵ G. Barraclough, 'The Earldom and County Palatinate of Chester', in *Transactions of the Historic Society of Lancashire and Cheshire*, ciii (Liverpool, 1952), 26-28. Chester was a principality where the King's writ was not law, also there was no state intervention in internal affairs of Chester. The King, however, retained the power to appoint bishops.

²⁶ TNA, E122 (particular Kings Rembrancer National Customs Accounts for the ports mentioned in the text), *passim*.

²⁷ TNA, E122/19/10, fo. 3v, fo. 4. An example of the *Katherine* of Minehead arriving from Ireland to Bristol on

do not show from where the ship arrived or went.²⁸ Another variation may be found in the Plymouth and Fowey accounts, which record explicitly the type of vessels entering or leaving port. The compilers of the Bristol accounts instead used only *bata* (small vessel), *batella* (mid-sized vessel) or *navis* (large ship).

Ireland's wine trade from Gascony is noted in the E101 customs accounts compiled by the constable of Bordeaux and now stored in The National Archive at Kew. The E101 accounts note the ship's name, shipmaster, merchant names, wine totals, date of arrival and departure. A value is not given to the wine cargoes but quantities are noted. On rare occasions other commodities are noted, analysis of which is provided in the spices chapter.²⁹

Aside from the records of the national customs levies, some evidence survives regarding local customs. Some of these are published. These include the only surviving local customs account for Bristol dating from 1437/8 and some local accounts for the city of Chester.³⁰ Information relating to Ireland is also present in the local customs for the ports of Bridgewater and Exeter.³¹ All of these local accounts are useful for a number of reasons. Primarily they provide information on produce delivered directly to the port in question and not to one of the outlying creeks or havens. Secondly, they offer an insight into port charges including the taxes levied on crantage, the measurement of commodities. (Included also are charges for weighing produce and if required its storage). Local customs were levied in

24th April 1474.

²⁸ TNA, E122/26/8, m. 1. The *Katherine* of Ireland departed to Ireland on 6th November 1481.

²⁹ TNA, E101 (customs accounts for Bordeaux), passim; A. O'Brien, 'Commercial Relations between Aquitaine and Ireland c.1000 to c.1550', in J. Picard, ed., *Aquitaine and Ireland in the Middle Ages* (Dublin, 1995), 60. O'Brien has noted global sums of wine cargoes on Irish ships in the Middle Ages. He also describes some of the disadvantages to the source.

³⁰ H. Bush, ed., *Bristol Town Duties; a collection of interesting documents intended to explain and elucidate the above subject* (Bristol, 1828); K. Wilson, *Chester Customs Accounts, 1301-1566* (Lancashire and Cheshire Record Society, Devon, 1969).

³¹ Somerset Record Office, Taunton; Devon Record Office, Exeter.

Ireland too. MacNiocall records some of this information in his work on the boroughs of Ireland.³²

Both the national and local customs accounts for ports on the west coast of England record sufficient information to make an analysis of food and drink commodities traded between Ireland and England. A number of questions will focus the examination of the records.

Firstly, to what extent did Ireland's foreign trade recover after the Black Death?

The second question will focus on how well did Irish merchants, mariners and maritime craftsmen adapt to new technologies? The change in shipbuilding, navigational instruments and sailing techniques will be considered in Chapter One. The changing process of fish preservation and the ability of Irish fish processors to adapt will be set out in Chapter Three.

Finally, how well did Irish/English merchants and shipmasters exploit food commodities (crops, fish) harvested from land and sea for profit in the later Middle Ages? Chapter Six will give an insight into Ireland's economic status especially in the fifteenth century. Other commodities for example cloth and hides, not dealt with in the body of the thesis will also be used to analyse the progression in the Irish economy after the Black Death up to the dissolution of the monasteries by Henry VIII in 1541.

Non payment of customs, licences in the Irish Sea

The uncustomised and unlicensed grain transported through the Irish Sea was a cause of concern for the crown in the period after the Black Death. Corn was taken from the realm, illegally, and supplied to the king's enemies in Scotland and France. It was, therefore, decreed

³² G. MacNiocall, *Na Buirgéisí*, 2 Vols (Dublin, 1964), *passim*.

in 1349 that exports could only be licensed through major ports, such as Exeter and Bristol.³³ Licences and customs added to the cost of trade for merchants; therefore, they often sought a means of avoiding such payments. Indeed, the illegal trade in grain was more to do with making profit by avoiding expense than sympathising with the king's enemies. An example of illicit trade in grains occurred in 1364, when two shipments of 160 quarters of corn and malt were conveyed from Bridgewater to Ireland by John Godsland in a ship owned by John Malpas of Waterford.³⁴ Richard Deyere and Roger de Wolington, the bailiffs of Bridgewater, could not account for the corn which was subsequently arrested.³⁵ More serious subterfuge was perpetrated by James Cotenham. He, pretending to be the earl of Rutland and admiral of Ireland, levied 12d on every wey of wheat leaving Ireland. He dispatched ships on three occasions with grain bound for Scotland during the reign of Richard II.³⁶ There were occasions, however, when licences and safe conducts were issued to Scottish merchants trading in Ireland.³⁷ In March 1413 Robert Gallane and others were appointed to arrest all vessels from Bray Head to the Nany river carrying grain, to ensure unlicensed wheat and malt was not being exported.³⁸ They were all to have licences to transport corn. In 1423 the admiral of Ireland was ordered to stop any merchant from exporting unlicensed wheat and grain.³⁹

More frequent fraud occurred when ships arrived at the outports of Bristol, sold their cargoes on the coastline, without paying customs. The crown was also concerned with the illegal

³³ CPR, 1348-1350, 311.

³⁴ CPR, 1364-1367, 72.

³⁵ TNA, E122/190/22.

³⁶ J. Brewer and W. Bullen, eds, *Calendar of the Carew Papers preserved in the Archbishop Library of Lambeth: Book of Howth Miscellaneous*, v (London, 1871), 385.

³⁷ D. MacPherson, J. Carey and W. Illingworth, eds, *Rotuli Scotiae in Turri: Londinensi et in domo capitulari Westmonasteriensi* (London, 1814-19), i, 822, ii, 172, 265; a licence was issued in 1357 and, 1404, safe conduct was issued in 1428/9.

³⁸ Chancery.tcd.ie/doc, 9/patent roll 14 Henry V (23/01/2015).

³⁹ Chancery.tcd.ie/doc, 28/close roll 2 Henry VI (23/01/2015).

supply of corn and victuals to Scotland.⁴⁰ The sporadic references to unlawful grain trade from England to Ireland would suggest it was not a major issue. Evan Jones has found evidence in the 1540s of discrepancies between the Bristol customs accounts not matching up to a merchants set of accounts.⁴¹

Some Irish merchants were engaged in customs avoidance. On 8th June 1442 John Cleremond, in a Limerick vessel, failed to pay customs for Gascon wine and other goods which were forfeited in the name of the king.⁴² In May 1443 John Whyche, the customs searcher in the port of Bristol, arrested an Irish ship carrying skins. The merchants had not paid customs on the cargoes and were in debt to the king for 34s 6d.⁴³ Jones maintains that only if a strong economic incentive exists do merchants try to flout the law of licence.⁴⁴ He examined Smyth's accounts (a Bristol merchant) in the year 1540 and discovered a significant difference in the quantities shipped over and above the licence permitted. Jones also found evidence of possible bribes taken by the customs officials.⁴⁵ Flavin argued that grain was the exception to this rule. She maintained that since there were occasional prohibitions on the conveyance of grain to Ireland; the illegal importation of grain to Ireland was a potentially profitable venture for merchants. The *ad valorem* value given to grain was a fraction of the real market price.⁴⁶ It was possibly the cost of expensive licences merchants had to procure and profits that possibly drove them to flouting the law. Most grain and beans imports to Ireland, however, comprised small cargoes of mixtures or lower-value items, such

⁴⁰ *CPR*, 1385-1389, 318, 319, 320, 551.

⁴¹ E. Jones, 'The Bristol Shipping Industry in the Sixteenth Century' (unpublished PhD, University of Edinburgh, 1998), 40-59. There is a convincing argument put forward by Jones that comparing Bristol customs accounts with the ledger of John Smythe does show differences between quantities cocketed at Bristol and those in his ledger.

⁴² TNA, E122/185/59, m. 1.

⁴³ TNA, E122/185/59, m. 2.

⁴⁴ Jones, 'The Bristol Shipping Industry in the Sixteenth Century', 18.

⁴⁵ Jones, 'The Bristol Shipping Industry in the Sixteenth Century', 49-50.

⁴⁶ S. Flavin, 'Consumption and Material Culture in Sixteenth Century Ireland', *Economic History Review*, lxiv (2011), 1161.

as malt, beans and rye, unlike the large exports of grain from Bristol to continental Europe. Besides from the monetary argument to grain export the law invoked in 1361 allowed landowners, be they secular or religious, to move grain freely within the realm.⁴⁷ This law made it legal to transport surpluses of grain within the confines of the Irish Sea, without paying for expensive licences and avoided the risk of arrest.

A number of historians have examined the economic status of Ireland during the later Middle Ages. Some have focussed on trade. Timothy O'Neill produced a survey focussing on all aspects of Irish Trade.⁴⁸ This was a study, however, devoid of any use of customs records for either Bristol or Bridgewater. He collaborated with Wendy Childs to give an overview of Ireland's overseas trade which concentrated on the later fifteenth century.⁴⁹ Childs wrote two articles one which gives a histographical insight into Ireland's overseas trade in the later Fifteenth century.⁵⁰ Childs view that although Irish ships had a considerable presence in Bristol, Bridgewater and Chester late in the fifteenth century; it was nevertheless minor in comparison with England's trade with the rest of Europe.⁵¹ In this article Childs also highlights the probability that the value of hides exported from Ireland to Flanders was considerable as too was the Iberian trade with ports on the west coast of Ireland.⁵² Childs other article on Irish trade analyses the merchants and mariners who transacted trade especially with Bristol and Bridgewater. This article examines ship movements between Ireland and England; more importantly, however, Childs tries to differentiate between English and Anglo-Irish mariners. She even tries to examine the role of Gaelic Irish merchants in

⁴⁷ Gras, *The Evolution of the English Corn Market*, 135.

⁴⁸ T. O'Neill, *Merchants & Mariners in Medieval Ireland* (Dublin, 1987).

⁴⁹ W. Childs and T. O'Neill, eds, 'Overseas Trade', in A. Cosgrave, ed., *A New History of Ireland*, ii (Oxford, 2008), *passim*.

⁵⁰ W. Childs, 'Ireland's Trade with England in the Later Middle Ages', *Irish Economic and Social History*, ix (1982), *passim*; W. Childs, 'Irish Merchants and Seamen in the late Medieval England', *Irish Historical Studies*, xxxii (2000), *passim*.

⁵¹ Childs, 'Ireland's Trade with England', 21-32.

⁵² Childs, 'Ireland's Trade with England', 32-33.

overseas trade, a difficult task which I will examine in Chapter One.⁵³ Kevin Downs's article, though not directly related to trade does offer important insights into the Irish economy in the later Middle Ages.⁵⁴ Down concentrates his argument on the rural economy, especially the cultivation of crops. He also looks at labour, the fishing industry and the Irish economy. A number of historians have examined Irish trade for the sixteenth century. In 1929 Ada Longfield produced a work examining Ireland's overseas trade predominantly concerned with the west coast of England.⁵⁵ Evan Jones and Susan Flavin published the Bristol customs accounts for the sixteenth century which provides researchers with vital data in examining Bristol's influence in the Irish Sea zone.⁵⁶ Alf O'Brien examined trade between Brittany, Gascony and Aquitaine and Ireland.⁵⁷ His work includes the trade in wine, corn, salt and saintonge pottery between regions in France and Ireland. He built upon the important contribution that Jacques Bernard produced.⁵⁸ O'Brien also analysed trade for the major Munster ports of Cork and Youghal.⁵⁹

⁵³ Childs, 'Ireland's Trade with England', *passim*.

⁵⁴ K. Down, 'Colonial Society & Economy', in A. Cosgrove, ed., *A New History of Ireland 1169-1534*, ii (Oxford, 2008), *passim*.

⁵⁵ A. Longfield, *Anglo-Irish Trade in the Sixteenth Century* (London, 1929), *passim*.

⁵⁶ S. Flavin & E. Jones, eds, *Bristol's Trade with Ireland and the Continent 1503-1601* (Dublin, 2009).

⁵⁷ A. O'Brien, 'Commercial Relations between Aquitaine and Ireland c.1000 to c.1550', in J. Picard, ed., *Aquitaine and Ireland in the Middle Ages* (Dublin, 1995).

⁵⁸ J. Bernard, 'The Maritime Intercourse Between Bordeaux and Ireland c.1450-c.1520', *Irish Economics & Social History*, vii (1980).

⁵⁹ A. O'Brien, 'Politics, Economy and Society: the development of Cork and the Irish south coast region c.1170 to c.1583', in P. Flanagan and C Buttimer, eds, *Cork History and Society* (Dublin, 1993).

CHAPTER 1

Shipping in the Irish Sea zone c.1350-1550

Before discussing the trade of commodities through the Irish Sea, it is important to examine the various challenges, necessities and skills required to facilitate this trade. It is my intention in this chapter to set out what was required to import or export food-based commodities from and to Ireland. The topics covered in this chapter include shipbuilding and harbours – what types of vessels, if any, were built in Ireland or at ports in the Irish Sea zone? Did Ireland have the necessary raw materials, especially from timber, to construct vessels? The skills required to construct vessels in the Irish Sea zone will also be analysed.

Archaeological documentary evidence and the customs accounts for the ports on the west coast of England will be used to discover the different ship types used by merchants. Access to harbours and creeks will be examined to gauge the difficulties for ships entering or leaving port. Navigation and the problems of sailing in poor weather conditions will be set out including the change in technologies to aid sailors on their voyages. The threat of piracy at sea (be it from war-like actions of alien nations or by privateering) was a significant issue for shipmasters. This section will analyse safe conducts, protection for shipping and the types of vessels used in piratical activities. Finally, analysis will focus on the shipmasters and merchants who plied their trade through the Irish Sea. How often did merchants load their goods on ships? Was there a family maritime tradition? What nationality were the crews who worked on these vessels?

Shipbuilding and the Archaeological Dimension within the Irish Sea Zone

There is a paucity of information relating to shipbuilding in the Irish Sea zone. There are,

however, intermittent entries in government records which give an overview of what was involved in building ships, how they were built and the use of raw materials required to construct a vessel.¹ More detailed information still is available from the archaeology of both underwater marine locations and terrestrial sites.²

The most important item required for shipbuilding was timber. The customs accounts for the ports on the west coast of England show that large quantities of shipboards were exported from Ireland in the later fifteenth and early sixteenth centuries. A surplus of the key raw materials required for shipbuilding was clearly available in Ireland. It is less clear if ships were built in Ireland and if so how often and where, despite shipbuilding having been a vibrant industry in the eleventh and twelfth centuries.³

Shipbuilding architecture had altered by the middle of the fourteenth century. Up to this juncture, ships had been single-masted, but subsequently they were often fitted with two or three masts.⁴ The change in technologies allowed for more robust, heavier vessels. In the fifteenth century the crown had developed its own shipyards to build such craft. In 1416 work began in Southampton on the *Gracedieu*: this was a very large ship and had a capacity of 1,400 tons. A special dock was made for its construction. An industry developed around this ship; a large storehouse was constructed and a smithy was employed for the manufacture of iron nails. Shipbuilding craftsmen on the site included carpenters, sawyers, clenchers, holders and labourers.⁵ It was probable that the boat underwent construction beside a temporary wall on the dockside so that upon completion, at high tide, it could be launched. It

¹ CPR, 1350-54, 385, 386; W. Carpenter-Turner, 'The building of the *Gracedieu*, *Valentine* and *Falconer* at Southampton 1416-1420', *Mariner's Mirror*, XL (1954), 55-72.

² A. Catsambis *et al*, eds, *The Oxford Handbook of Maritime Archaeology* (Oxford, 2011), *passim*.

³ S. McGrail, *Medieval Boat and Ship Timbers from Dublin* (Dublin, 1993), 86-87.

⁴ G. Hutchinson, *Medieval Ships & Shipping* (London, 1994), 27.

⁵ I. Friel, *The Good Ship: Ships, Shipbuilding and Technology in England 1200-1500* (London, 1995), 54.

was unlikely that such a level of infrastructure and resource would have been available to private merchants in England or the lordship of Ireland. Still, a warship was apparently built in Drogheda in 1408, and repairs to ships are recorded at Waterford and Kinsale in c.1460 and 1476-7.⁶ The shipwrights required for the work on the *Gracedieu* were brought in from the West Country which would suggest that there was more shipbuilding expertise around Bristol than in the ports of southern England.⁷

Bristol was, certainly, a location in which large ships could be constructed. For instance, in 1460 William Cannings built a 900-ton ship, the *Mary & John*, in Bristol. At a cost of over £2,500 this was a mammoth shipbuilding project.⁸ But small craft were built too. In 1475 the city of Bristol forbade anyone without licence 'to break any ground in or around Bristol to make any ship'. This was because of the damage caused to the coastline by unlicensed shipbuilding, suggesting a small scale but vibrant industry.⁹ The normal method for launching a new ship was to dig a gully from the construction site down to the waterside. The ship would then be rolled down to the jetty. Trenches were dug towards the completion of construction. The damage to river and sea defences was potentially hazardous to shipping. It is probable that larger sailing ships were launched from a dry dock and then floated out to sea.¹⁰ Large shipbuilding projects were the preserve of either the king or wealthy merchants. The *Gracedieu* (1416) and the *Regent* and *Sovereign* (after 1485) were large ships constructed in an organised, planned manner. The latter were built in dry docks, a new innovation for the sixteenth century.¹¹ The monarchy had ready access to free lumber but

⁶ T. O'Neill, *Merchants and Mariners in Medieval Ireland* (Dublin, 1987), 112.

⁷ Hutchinson, *Medieval Ships & Shipping*, 24; Carpenter-Turner, 'The building of the *Gracedieu*, *Valentine* and *Falconer* at Southampton 1416-1420', 55-72.

⁸ G. Scammell, 'Ship owning in England c.1450-1550', *Transactions of the Royal Historical Society*, xii (1962), 111-112.

⁹ I. Friel, *The Good Ship* (London, 1995), 54.

¹⁰ Hutchinson, *Medieval Ships & Shipping*, 24.

¹¹ Friel, *The Good Ship*, 57-59.

merchants did not.¹² Sometimes, however, wealthy merchants were prevented from constructing new ships as was the case in 1437 when Thomas Gille was precluded from building a large ship at Dartmouth.¹³

There is little evidence of large shipbuilding projects in Ireland in the later Middle Ages, but James Butler, earl of Ormond, and Lord Lieutenant of Ireland, sanctioned the construction of a great tri-masted galley totally fitted out to protect Limerick.¹⁴ Irish merchants, however, probably had insufficient resources to engage in shipbuilding. Some minor shipbuilding was probably undertaken in mid-fifteenth-century Dublin, where in 1461 Edmund Lobusby undertook to accept John White as an apprentice shipwright. The surviving indenture outlined what was expected from both master and apprentice. Edmund was to instruct John in all aspects of shipbuilding for five years. He was to feed him and to clothe and supply him with bed linen. John was not to divulge his master's ship's secrets (probably the construction plans). He was not to marry, gamble or absent himself, day or night, without permission. The penalty for any indiscretion was a doubling of his time to ten years. John was to be paid a sum of 10s a year in his fifth year.¹⁵ It is not clear how extensive the opportunities were in Dublin for apprentices such as John White. Other apprentices had to travel to Bristol for experience. In the 1540s Thomas Pers, a merchant's son of Wexford, negotiated an apprenticeship with George Narrer, a ship's carpenter from Bristol. Pers, having served seven years, received an annual wage of 20s. He was then entitled to an axe, a gennet, a borer, a sledgehammer, a mallet, two caulking irons and a handsaw, the tools of his trade. Similarly, in 1543 Walter Roche's son, William of Wexford received an apprenticeship in Bristol from

¹² Friel, *The Good Ship*, 46.

¹³ D. Gardiner, ed., *Calendar of Chancery proceedings for West County shipping*, p. xxi (Devon & Cornwall Record Society, 1976), no. 39, 42.

¹⁴ M. Lenihan, *Limerick: its history and antiquities, ecclesiastical, civil and military, from the earliest ages* (Dublin, 1866), 70.

¹⁵ J. Gilbert Smyly, 'Old Deeds in the Library of Trinity College IV' in *Hermathena*, lxx (1947), 17.

William Evans with the same contract details (excluding the mention of tools).¹⁶ Shipwrights and in some cases carpenters were the architects of vessel construction. In 1416, during the construction of the *Gracedieu*, the shipwright, John Hoggety was paid 8d per day and the carpenters 6d per day. The lesser trades, such as clenchers, received 5d per day and labourers 4d per day. In later medieval shipbuilding smiths (who manufactured nails, spikes and bolts) were employed with clenchers and caulkers (who helped to waterproof the vessel) to carry out the construction of vessels.¹⁷

Whatever ships were constructed in Dublin, Bristol or elsewhere, those who built them required timber. In some cases trees were felled for a specific boat construction, as was the case for the construction of the *Katherine Pleasance*, built at Deptford in 1519. In this instance carpenters, who sometimes acted as shipwrights, selected different shaped trees for curved frames and the ship construction was completed in eight months.¹⁸ In the fifteenth century Arklow and Wicklow supplied Dublin with timber. Dublin also received timber from Ormond lands. Drogheda received timber from Carlingford.¹⁹ Timber was certainly still available for shipbuilding in the later sixteenth century because in 1568 the earl of Argyll was constructing galleys in Scotland using Irish timber delivered from Carrickfergus and Wexford.²⁰ Elsewhere, once trees were felled, timber was often transported by river from its felling site to the ports. Local shipbuilding supplies were available in Wales, where timber was floated down the Conway to Trefew, the limit to where large seagoing craft could

¹⁶ E. Ralph & N. Hardwick, eds, *Calendar of the Bristol Apprentice Register Book 1542-1552: Part II*, xlii (Bristol Record Society, 1980), 76; D. Hollis, ed., *Calendar of the Bristol Apprentice Book 1532-1565*, Part I, xiv (Bristol Record Society, 1949), 38.

¹⁷ Friel, *The Good Ship*, 63; Friel, *Maritime History in England and Ireland*, 77; Carpenter-Turner, 'The building of the *Gracedieu*, *Valentine* and *Falconer* at Southampton', 58.

¹⁸ Friel, *The Good Ship*, 67.

¹⁹ P. Slattery, 'The Timber and Wood Trade, Woodlands, Housebuilding and Repairs in the English Colony in Ireland c.1350-c.1570', part 1 of 2, forthcoming *Journal of the Royal Society Antiquaries of Ireland* (2012/13), 6. I would like to thank Dr. Peadar Slattery for the advance look at his article.

²⁰ B. Cunningham, ed., *Calendar of State Papers, Tudor Period, 1568-71* (Dublin, 2010), 83.

travel.²¹ Timber was transported to Irish ports either by boat or by cart. Timber arrived in Youghal in 1358 and Galway in 1361 by boat, most likely by way of the Blackwater and Corrib rivers respectively.²²

There is little topographical archaeological evidence which survives for shipbuilding in Ireland or on the west coast of England at this time. This suggests that small ships were not built in major ports but in locations along the shoreline where shipwrights had availability to raw materials. Docks that were not reconstructed after the completion of a ship building project were hazardous to ships docking in port.²³ Despite this, William Cannings and Thomas Strange were successful Bristol merchants who built some of their fleets of ships in Bristol. In 1474, when Edward IV visited Bristol, he tried to encourage large shipbuilding projects by promising 'to reward anyone who would build a ship of large value'.²⁴

The large quantities of Irish boards delivered to England suggest that mature woodlands grew successfully in much of Ireland.²⁵ Nevertheless, sixteenth-century maps appear to show that woodland in Ireland had declined over the course of the previous century. The forests that had surrounded Kinsale and Cork especially, appear to have diminished by 1580. The afforested areas on the Idrone map appear, instead, to be concentrated in the lowlands along river courses. (Map 4). Wooded areas on this map seem to show a thinning of afforested areas in the southern region where tributaries meet the main river. The probable lack of mature woodland, however, in the later sixteenth century was possibly only localised. This was probably caused by the significant exports of timber from Ireland to England and owners

²¹ A. Carr, 'Wales Economy & Society', in S Rigby, ed., *A Companion to Britain in the later Middle Ages* (Chichester, 2009), 133.

²² Slattery, 'The Timber and Wood Trade', i, 3.

²³ Friel, *The Good Ship*, 54.

²⁴ Carus Wilson, 'The Overseas Trade of Bristol', in E. Power & M. Postan, eds, *Studies in English Trade in the Fifteenth Century* (London, 1933), 241.

²⁵ Slattery, 'The Timber Trade', 6.

of forests who did not maintain young woodlands.²⁶ This may be because some woodlands were not replenished after felling.

Boards were dispatched from several major Irish ports, including Drogheda, Waterford, Youghal, Dungarvan and Kinsale to Bristol and ports in Cornwall, south-west England and Wales.²⁷ These boards had previously been cut and transported from forests in Trim, Tipperary and East Cork.²⁸ The surviving customs documents for Bristol provide data on approximately two to three shipments of timber dispatched from Ireland per year. In 1404 the *Thomas* and the *Saint Marie* both from Bristol between them transported 200 shipboards from Ireland to Bristol. In 1410/11 shipboards arrived in Barnstable from Kinsale. In 1414 125 boards went from Ireland to Bridgewater. Irish timber exports increased significantly to Bristol, Plymouth and Fowey after 1475. Bristol received 560 boards from Ireland in 1475, 650 boards in 1486/7 and 960 boards in 1492/3 (Table 1.1). Often cargoes were smaller. For example, the *Mary* from Wexford entered Bridgewater with fifty shipboards in May 1482, and the *John* of Wexford delivered sixty boards to Ilfracombe in March 1519.²⁹ But there were also some very large shipments of boards from Ireland to England. For example, in 1505 the *Sunday* of Kinsale freighted 800 Irish boards to St Ives whilst in May 1508, the *Mary* of Kinsale transported 720 Irish boards to Plymouth.³⁰ Large numbers of shipboards sent to Penryn, Barnstable, Fowey, St Ives, Padstow, Plymouth, Teyncastle and Mountsbay in 1492/3, 1505, 1507/8, 1516/17 and 1525/6 indicated a vibrant ship repair or shipbuilding industry making use of imported Irish timber all along the west coast of England (Table 1.1). In the sixteenth century, between 1515 and 1519, 6,370 boards were exported on ships from

²⁶ E. Curtis, ed., *Calendar of Ormond Deeds 1413-1509*, iii (Dublin, 1935), no. 66.

²⁷ TNA (E122 customs accounts for the ports on the west coast of England), *passim*.

²⁸ P. Slattery, 'Woodland Management, Timber and Wood Production, and trade in Anglo-Norman Ireland c.1170-c.1350', *Journal of the Royal Society of Antiquities of Ireland*, cxxxix (2009), 70.

²⁹ TNA, E122/26/9, fo. 3; TNA, E122/42/4, m. 21 v.

³⁰ TNA, E122/115/11, fo. 30; TNA, E122/115/12, m. 17.

Cork, Kinsale, and Wexford to Bristol, Dartmouth and Fowey (Table 1.1). This suggests Ireland was a significant supplier of timber to ports on the west coast of England for the purpose of shipbuilding and ship repairs and possibly for other uses between c.1460 and 1526.

It is possible that by the sixteenth century Ireland was supplying ports in Gloucestershire and Devon with enough timber to construct complete vessels. An indication of the quantity of boards required to construct a vessel may be gauged by an 18-ton ship constructed for the priory of Norwich which used 219 planks.³¹ In 1507/8 there was enough Irish timber transported to Padstow, Plymouth, Fowey, Penryn, Mountsbay and St Ives (a total of 7,584 boards) to construct possibly up to thirty vessels of the Norwich craft's size. (Table 1.1).

Irish timber was exported by a significant number of merchants in small quantities but rarely did the same merchants supply timber on a regular basis. In 1516/17 a significant quantity of shipboards were transported to Bristol and Fowey but William Barry was the only shipmaster to deliver shipboards to both ports. Robert Verdon on Barry's vessel delivered 60 boards to Bristol on 9th March 1517; just over three months later, on 20th July, his ship again transported timber to England, this time to Fowey with 600 shipboards.³² This, however, was unusual that few merchants specialised in timber exports perhaps suggests that merchants in Ireland had limited access to supplies of wood.

The purchase of large ships built in foreign locations like Danzig which had an abundance of timber was probably confined to ports on the east coast of England, although, in 1428 the

³¹ P. Slevin, *Bread and Ale for the Brethren* (Hatfield, 2012), 87.

³² Flavin & Jones, eds, *Bristol's Trade with Ireland and the Continent, 1503-1601* (Dublin, 2009), 144; TNA, E122/116/4, fo. 29v.

Hanseatic diet, meeting in Lübeck sought to end the practice of English merchants purchasing ships in their sphere of influence.³³ The law was reinforced many times, in an attempt to stop English shipowners controlling the freighting of boat building materials from Danzig to England.³⁴ Shipboard imports from Ireland to the ports on the west and south-west coast of England were possibly a more reliable source. Although wealthy merchants did not always have to construct new vessels. Shipowners had other ways to enlarge their fleets. It is possible, however, that most ship captures by sailors of the realm occurred off the east coast of England or in the English Channel. Foreign ships were captured by merchants to bolster their own fleets. William Cannings did, however, purchase ships from other locations including Prussia, but Cannings and Strange were the exception rather than the rule. In 1449 Thomas Daniel took by force the *George* of Prussia renaming it the *Danyellis Hulke* with the full knowledge of the crown.³⁵ Trade in ships between England and the northern economies, however, improved in the reign of Henry VIII, who added foreign-built ships to his navy, for example, the procurement for Henry VIII's navy of the *Jesus* of Lübeck and the *Strauss* of Danzig.³⁶ It was possible that timber exports from Ireland to the west coast of England were sufficient to maintain the merchant fleet with recourse to capturing vessels from alien realms in contrast to mariners on the south coast and east coast of England.

Irish boats, though in general small, were soundly constructed. Galley planks and nails found in Dublin show the presence of pine resin and calcium carbonate, possibly signifying the application of waterproofing substances to the timbers. The Drogheda wreck also had a resin base (possibly tar) applied, to the exterior of the hull. Here, too, there were samples of

³³ M. Postan, 'The Economic and Political Relations of England and the Hanse 1400-1475', in E. Power & M. Postan, eds, *English Trade in the Fifteenth Century* (London, 1933 reprint reissued, 1966), 141.

³⁴ Postan, 'The Economic and Political Relations', 141.

³⁵ R. Beadle & C. Richmond, eds, *Paston Letters and Papers of the Fifteenth Century*, iii (Oxford, 2005), 68.

³⁶ J. Hattendorf, R. Knight, A Pearsall, N. Rodger and G. Till, eds, *British Naval Documents 1204-1960* (Navy Records Society, 1993), 78, 101.

terrestrial sulphur found in a quantity of lathing timbers, an additional protection against biological damage.³⁷ Cots and currachs did not require a large supply of timber to construct. They were inexpensive to build and required no specialist dry docks. It has been asserted that ships were built in many of the eighty locations in Ireland: there is, however, no historical evidence to substantiate this view.³⁸ Still small ships (such as cots) were more probably built in Wexford and other locations. Many Wexford cots visited Bridgewater in the mid-sixteenth century, and most of these vessels were owned by Wexford merchants. The use of cots probably spread because a number of these craft were owned by merchants from New Ross. A distinct advantage of the cot was its ability to access the port of Bridgewater with ease compared to larger craft.³⁹ The export of timber from Ireland to England indicates that it made more sense to profit on the surplus of raw material.⁴⁰ It was possibly more cost effective to purchase a completed vessel than to build a boat in Ireland. The other major raw material for boat building was iron imported into Ireland in small quantities, probably not enough to indicate significant shipbuilding projects.⁴¹ It was possibly more cost effective to construct only small boats in Ireland.

Archaeological evidence of ship finds from the Middle Ages in the Irish Sea

Archaeological evidence of ships in the Irish Sea has unearthed three medieval ship's remains in the past two decades. These vessels date from three different centuries and they show significant differences in construction technologies. The three vessel types are similar in their hull design but differ in most other aspects. The boat remains discovered at Magor Pill

³⁷ H. Schweitzer, 'Drogheda Boat: A Story to Tell', N. Günsenin, ed., *Between Continents. Proceedings of the Twelfth Symposium on Boat and Ship Archaeology* (Istanbul, 2009), 228.

³⁸ J. De Courcy Ireland, 'County Wexford in Maritime History', in K. Whelan, ed., *Wexford History and Society* (Dublin, 1987), 493.

³⁹ De Courcy Ireland, 'County Wexford in Maritime History', 493.

⁴⁰ A. Longfield, *Anglo-Irish Trade in the Sixteenth Century* (London, 1929), 118-121. Shipboards were exported from Ireland to England, Scotland and Spain for the construction of vessels in the sixteenth century.

⁴¹ Longfield, *Anglo-Irish Trade in the Sixteenth Century*, 217. Iron was not just used for shipbuilding, but also for house construction and copperage.

have been dendrochronologically dated to the middle of the thirteenth century. The vessel was of clinker design supported by a keel. The planks were held together by iron rivets. The vessel measured approximately fifteen metres in length and at least two and a half metres in width.⁴² The ship was constructed in accordance with English, and possibly Irish, tradition and adapted to meet the demands of trading in the Bristol Channel.⁴³ Its oak floor timbers were not fixed to the keel; the stern was curved; the frame spacing was narrow. Irish influences on its construction included the use of a short vertical hooded keel stem. There were similarities with a keel fragment found in Dublin.⁴⁴ The cargo on board was iron ore which probably came from the Vale of Glamorgan. The ship appears to have been involved in coastal trade but could also have traversed the Irish Sea.

The wreck from Newport in South Wales was originally constructed in c.1465-6. This was a much larger vessel than that found at Magor Pill. The ship measured over twenty-five metres in length.⁴⁵ Like the Magor Pill find, it was of clinker construction but it was of Nordic design. The ship was dated using dendrochronological analysis from its knee timber, but other timbers used in repairs were cut from English trees probably felled after 1459.⁴⁶ Timber used to strengthen the boat was felled possibly in England.⁴⁷ The Newport wreck, at a width of eight metres, would probably have been designed for much longer voyages than the find at Magor Pill. The ship appeared to have had a long life of over twenty years, and showed many signs of repair. There was a crack in the mast step and hull, and extra pumps had been

⁴² M. Redknap & E. Gifford, 'Building a full size model', in N. Nayling ed., *The Magor Pill Medieval Wreck* (York, 1988), 138-139. A reconstruction of the wreck shows it to be a minimum of thirteen metres in length and over two and a half metres in width.

⁴³ N. Nayling, *The Magor Pill Medieval Wreck* (York, 1988), p. xiii.

⁴⁴ M. Redknap, 'The Historical and Archaeological Significance of the Magor Pill Boat', in N. Nayling, *The Magor Pill Wreck* (1988), 146.

⁴⁵ J. Delgado, 'Ships on Land', in A. Catsambis *et al*, eds, *The Oxford Handbook of Maritime Archaeology* (Oxford, 2011), 192, 193.

⁴⁶ B. Trett, ed., *Newport Medieval Ship* (Newport, 2010), 4, 7.

⁴⁷ Trett, *Newport Medieval Ship*, 7.

added to help remove water from the bilge.⁴⁸ The size of this vessel would indicate that it had a capacity of between 150 and 300 tons – a large ship for its time and all the more notable because Newport in the fifteenth century was normally used by vessels of less than 100 tons. A silver coin dating from mid 1446, bearing the coat of arms of Dauphin in south eastern France, was found between the keel and stern post. This coin was rare in Wales and would have been placed in the boat for good luck.⁴⁹ It suggests that the vessel had been constructed in France. Four Portuguese coins were also found on board the craft, minted in the middle of the fifteenth century; however it would be unwise to deduce that the Newport vessel necessarily traded with Portugal. (Merchants probably carried all types of coins on their person; they may have obtained Portuguese coin in Wales or in ports elsewhere from visiting Portuguese sailors). The ship had some of the attributes of the cog, but it had the new tri-sail propulsion method of the mid-fifteenth century. The craft shows evidence of significant technological advancement when compared with the Magor Pill find. The vessel's association with Bristol is clear from marks on the barrels that resemble a Bristol merchant who in 1460 traded with Spain.⁵⁰

The Drogheda boat find dates from c.1520. It was similar to the other two archaeological finds in the Irish Sea in that it was clinker built. Most of the timbers used to construct this vessel were felled between 1525 and 1535. Repair planks were from trees cut down between 1532 and 1560, suggesting that the vessel had a long working life of at least forty years. It is likely that the vessel was constructed in Ireland as the repair and original timbers were both felled in eastern County Antrim.⁵¹ The craft was smaller than the other two discoveries,

⁴⁸ Trett, *Newport Medieval Ship*, 12-16.

⁴⁹ Trett, *Newport Medieval Ship*, 14.

⁵⁰ Trett, *Newport Medieval Ship*, 18, 22.

⁵¹ Schweitzer, 'Drogheda Boat', 230.

measuring nine metres in length and three metres in width.⁵² This vessel, like the other boats, was built in a traditional shell first construction. It was constructed almost entirely of oak, the exception being the bow mast step which was made from elder. The presence of clenched nails and wooden pegs suggests a similarity to the other two craft. Iron clenched nails were used to clamp the overlapping planks. The charring on the planks probably indicates that they were heated over an open fire to shape them before fitting to the craft. These planks were fitted to the frame using willow dowels.⁵³ The outside facing timbers of the vessel were coated with a resin and sulphur to protect the timbers from rot and biological attack. The internal timbers of the Drogheda boat were not of such good quality as the external timbers.⁵⁴ There were no ceiling planks in the vessel; the lack of ceiling planks which would have made the transport of cargo in poor weather a hazardous undertaking. In stormy weather the vessel would have taken in a lot of water. The Drogheda boat appeared to be able to navigate internal rivers, such as the Boyne, but it was also capable of crossing the Irish Sea.

Marine archaeological data informs our knowledge of the 3 shipwrecks from 4 centuries found in the Irish Sea from the thirteenth, fourteenth, fifteenth and sixteenth centuries. All were of clinker construction. This was a basic structure of a shell first construction with overlapping timbers, reinforced beams and light frames. The Drogheda vessel was constructed of seasoned oak in the stern whereas newer less hardened oak was used for the internal framing.⁵⁵ These ships were not built according to the caravel design which had come from the Mediterranean in c.1400.⁵⁶ The Magor Pill find was single-masted, the

⁵² Schweitzer, 'Drogheda Boat', 227.

⁵³ Schweitzer, 'Drogheda Boat', 227.

⁵⁴ Schweitzer, 'Drogheda Boat', 229.

⁵⁵ Schweitzer, 'Drogheda Boat', 230.

⁵⁶ F. Hocker, 'Post Medieval Ships and Seafaring in the West', in A. Catsambis *et al*, eds, *The Oxford Handbook of Maritime Archaeology* (Oxford, 2011), 450. Hocker explains that the caravel design arrived in western Europe c.1400.

Newport ship either single or tri-masted, whilst the Drogheda boat was two-masted.⁵⁷ These types of constructions support the view that ship technologies were evolving throughout the Middle Ages. The Drogheda boat would be probably best described as a *bata*, or *batella*, vessel types recorded in the customs accounts, as would the Magor Pill wreck. The Newport find would be best described as a *navicula* or *navis*. The Drogheda boat timbers do suggest that vessels of this size were constructed in some Irish ports. The repair timbers also indicate that wood from forests was available in Ireland for shipbuilding materials in the early sixteenth century.

Shipbuilding of the pre-1500 period seems to have been carried out in or near ports but also elsewhere on the coastline, with predominantly small craft being constructed in the ports of Ireland. Larger craft were probably constructed by wealthy merchants in the large staple ports of England. The availability of lumber, iron, shipwrights, finance and the location to construct ships was difficult except for the wealthiest of merchants and the crown. It was, therefore, probable that from 1450 to 1550 only small craft were built along the shoreline, a view supported by the fact that most Irish ships had a capacity of between six tuns and thirty tuns.⁵⁸

Ship types and Harbours in the Irish Sea zone c.1350–1550

It is difficult to undertake an in-depth analysis of ship types based solely upon archaeological evidence and the English customs records. These documents in general, and especially those for Bristol, do not register the exact type of ship entering or leaving port. Vessels are instead given one of the generic terms of *bata*, *navicula* and *navis*. *Bata* was a small ship, *navicula* a mid-sized craft and *navis* a large ship. In the late fourteenth and early fifteenth century most

⁵⁷ Trett, *Newport Medieval Ship*, 12.

⁵⁸ TNA (E122, customs accounts for ports on the west coast of England), *passim*.

ships arriving or leaving Bristol were referred to individually as *navis*.⁵⁹ Elsewhere, however, customs documents provide more precise categories. The accounts for Plymouth/Fowey from the late fifteenth and early sixteenth centuries refer to Irish ships as *scaffa*, caravel, picard or *batella*.⁶⁰ The early fifteenth-century customs documents for Bridgewater refer to *navis*, picard, crayer, but mostly *batella*.⁶¹

The early fifteenth-century customs accounts also refer to cogs, which made frequent voyages from and to Ireland up to c.1420. Dublin seals from the late thirteenth century appear to depict a cog with small fore and aft castles with a single mast.⁶² Cogs from Cork (the *Sante Crucis*, and *Sancta Marie*) were also noted in the Bordeaux customs accounts for 1310.⁶³ The cog, a single masted vessel, remained the mainstay of trade in the North Sea and perhaps the Irish Sea up to the beginning of the fifteenth century. Cogs had a straight stem and stern post, large aftercastle and small forecastle. They appear to have had a tonnage capacity of between 30 and 240 tons.⁶⁴ In 1210, for example, the crown hired Frisian cogs to transport King John and his men to Ireland. They were previously quite large. Wine ships from Bordeaux, along with other examples, freighted over 100 tuns of wine per shipment. In November 1307 two cogs, both freighted with over 100 tuns of wine, were owned by mariners from Cork.⁶⁵ In 1363 six cogs were part of an expedition sent from Bristol to Ireland. Four of these cogs were owned by Irishmen. Two were from Youghal, the *Marie* and the *John*. One cog, the *Marie*, was from Cork, and the fourth cog was the *Katherine*

⁵⁹ TNA, E122/17/11, *passim*; TNA, E122/16/34, *passim*.

⁶⁰ TNA, E122/206/1, *passim*; TNA, E122/116/4, *passim*.

⁶¹ TNA, E122/23/5; TNA, E122/25/7.

⁶² R. Stalley, 'Sailing to Santiago: The Medieval pilgrimage to Santiago de Compostela and the artistic influences in Ireland', in J. Bradley, ed., *Settlement and Society in Medieval Ireland: Studies Presented to F. X. Martin* (Kilkenny, 1988), 406.

⁶³ TNA, E101/163/4, fo. 17, fo. 36..

⁶⁴ Hutchinson, *Medieval Ships & Shipping*, 15; D. Burwash, *English Merchant Shipping 1460-1540* (Toronto, 1947), 186-189; TNA, E122 (*Customs Accounts for Bristol and Bridgewater*), *passim*.

⁶⁵ TNA, E101/162/1, fo. 32 v, fo. 33. The ships were named the *Cog Sante Crucis* and the *Cog Sancte Marie*.

from Drogheda. The fifth and sixth cogs were also named *Marie* and *John* and were from Bristol. These vessels transported between 50 and 120 men each.⁶⁶ In 1387 the *Cog Deglane* and *La Rodecog* departed Bristol for Ireland.⁶⁷ After c.1400 cogs, whilst important to the northern European trade, were less visible in the source records for the Irish Sea.⁶⁸ Cogs were replaced on the wine trading routes from Bordeaux to Ireland in the second half of the fifteenth century.⁶⁹ The ship types hired by the crown from English mariners in the reigns of Henry IV and Henry V included only three cogs out of a total of eighty-four ships. Conversely, a much higher proportion of cogs were leased from foreign traders. Of the thirty alien owned vessels, twenty-four were cogs.⁷⁰

Hulks, a vessel not often noted in the Irish Sea was of a crescent shaped construction fanned out from the top of the mast to the topside of the boat from stern to stern. In the fifteenth century the term hulk was applied to large vessels used by the Hanse in the Baltic.⁷¹

Of the many other types of vessels which can be attested in the Irish Sea, barges were among the most common in the early fifteenth century. Barges were clinker-built and seem to have used sail power and oars.⁷² They possessed the capability of going inland along rivers.⁷³ These vessels were recorded at Waterford in 1388 and the same vessel types, possibly Irish, were also noted at Bristol in 1398. Barges had a varied load-bearing capacity similar to the

⁶⁶ TNA, E122/161/31, *passim*.

⁶⁷ TNA, E122/40/12 m. 1. (On 22nd March 1387, *La Rodecog* departed Bristol with cloths probably for Youghal); TNA, E122/40/12 m. 3 (10th June 1387, *La Rodecog* departed Bristol with cloth probably bound for Youghal); E Carus-Wilson, 'The Overseas Trade of Bristol', in E. Power and M. Postan, eds, *Studies in English Trade in the Fifteenth Century* (London, 1900) 197. The *Cog Deglone* departed Bristol on 23rd March 1391 bound for Youghal with cloth; CPR, 1354-1358, 636 (a cog loaded at Les Cluses for Wales was pushed by storm into Plymouth).

⁶⁸ J. Bernard, ed., *Navires et gen de mer à Bordeaux Vers 1400-1550*, iii (Paris, 1965), *passim*.

⁶⁹ Hutchinson, *Medieval Ships & Shipping*, 20. Cogs ceased to be important in the freighting of commodities.

⁷⁰ Burwash, *English Merchant Shipping 1460-1540*, 186, 187.

⁷¹ O'Neill, *Merchants and Mariners*, 108.

⁷² O'Neill, *Merchants and Mariners*, 107, 109.

⁷³ Hutchinson, *Medieval Ships & Shipping*, 121.

cog, ranging from 40 tons to 240 tons.⁷⁴ O'Neill claimed that they were between 50 and 100 tons, used for naval purposes especially as convoy escorts possibly for ferrying troops from and to Ireland.⁷⁵ Whilst his view of the capacity of barges is incorrect O'Neill's argument as to barges being used as troop carriers is supported by the frequent use of these vessels in the royal expeditions to Ireland at the end of the fourteenth and the beginning of the fifteenth centuries. Barges were, however, also used to carry cargoes over longer distances, as in 1412 and 1433, when Breton merchants came to Dublin to trade.⁷⁶

The balinger was a late medieval clinker-built craft which may have originated in the Bay of Biscay. It could be either a single or a two-masted vessel which used oars as a complementary form of propulsion.⁷⁷ The size of the balinger ranged from 25 to 60 tons in capacity. In certain circumstances balingers could be built to larger specifications – when Henry V's ship the *Gracedieu* was being built, two large balingers were constructed alongside.⁷⁸ One had a capacity of 100 tons and both were propelled by oars.⁷⁹ Balingers were deployed in Irish waters either for naval, piratical or commercial purposes. The *Catherine*, a Dublin balinger, for example, was involved in the wine trade, in Rochelle on 2nd June 1468.⁸⁰ These vessels were also used by pirates because of their speed and manoeuvrability. A balinger, the *Craccher*, once owned by John Hawley, was most likely used off the Devon coast for piratical activities early in the fifteenth century.⁸¹

⁷⁴ Burwash, *English Merchant Shipping*, 188.

⁷⁵ O'Neill, *Merchants and Mariners*, 109.

⁷⁶ *CPR*, 1385-1389, 492; *CPR*, 1396-1399, 438; *CPR*, 1396-1399, 584. Richard Ely's shipmaster of a barge called *Nicholas de Tour* took a ship to Ireland for an expedition, *CPR*, 1401-1405, 132; *CPR*, 1408-1413, 474, 475; *CPR*, 1429-1436, 300; Hutchinson, *English Merchant Shipping*, 188-189.

⁷⁷ S. Rose, ed., *The Navy of the Lancastrian Kings: Accounts and Inventories of William Soper Keeper of the King's Ships 1422-1427* (London, 1982), 250, 253.

⁷⁸ Carpenter Turner, 'The building of the *Gracedieu*, *Valentine* and *Falconer* at Southampton', 55-72.

⁷⁹ Hutchinson, *Medieval Ships and Shipping*, 152-3.

⁸⁰ *CPR*, 1452-61, 120; J. Bernard, 'The Maritime Intercourse between Bordeaux and Ireland c.1450-c.1520', *Irish Economic and Social History*, vii (1980), 11.

⁸¹ Friel, *The Good Ship*, 147.

The main trading vessels in the waters between Ireland and England in the later Middle Ages were picards and crayers. Picards were in general smaller vessels than balingers; apparently half of the English merchant ships in the port of Bridgewater in the first half of the sixteenth century and a larger proportion of the Irish boats recorded there were picards.⁸² Longfield described the picard as a large sailing boat used for coastal or inland waterway use. O'Neill described it as a transporter which brought small cargoes from Bridgewater to Ireland.⁸³ McKee claimed that the word 'picard' derives from the Spanish *picar* (to harpoon).⁸⁴ Whatever its origin, this type of vessel was used regularly in Irish waters. In 1482 alone customs accounts show several picards in Irish waters, for example the *Mary Grace* of Cork.⁸⁵ In the sixteenth century many more Irish picards sailed between Ireland and Bridgewater. Cargoes transported from Bridgewater to Youghal were freighted on forty-two picards in 1510-11. Their cargoes were only of between six and ten tons in weight which possibly indicates that the picard was a small vessel. Similarly, in the early sixteenth century cargoes carried on picards were very small, averaging approximately six quarters of beans per shipment.⁸⁶

Crayers were normally smaller vessels than picards, and were especially useful in Dublin coastal waters. The water depths in Dublin's inner harbour were insufficient for large vessels to berth, and in 1358 the merchants of Dublin requested permission to unload cargoes at Dalkey and to use crayers and other small craft to bring merchandise to Dublin.⁸⁷

Nevertheless, crayers were also deployed in the open sea. In 1374 Edmund, earl of March

⁸² Burwash, *English Merchant Shipping*, 127.

⁸³ Longfield, *Anglo Irish Trade in the Sixteenth Century*, 235; O'Neill, *Merchants & Mariners*, 112.

⁸⁴ J. McKee, 'The Weston-Super-Mare Flatner', *Mariner's Mirror*, lvii (1971), 39.

⁸⁵ P. Dryburgh & B. Smith, eds, *Handbook of Select Calendar of Sources for Medieval Ireland in the National Archives of the United Kingdom* (Dublin, 2005), 279, 281.

⁸⁶ TNA, E122/27/1, m. 8, m. 9, m. 12, m. 16, m. 20; E122/27/m. 1, m. 2, m. 3, m. 5, m. 12, m. 13, m. 14, m. 15.

⁸⁷ *CPR*, 1358-1361, 103.

and Ulster, used a crayer to transport victuals from and to Carrickfergus.⁸⁸ The abbot of Furness was licenced in 1380 to load a crayer with victuals transported from Ireland to England.⁸⁹ In 1386 James Butler, earl of Ormond, was allowed to trade in England, Ireland and elsewhere with his crayer, the *Gabriel*; and in 1414 the crayer *Patrick* of Kinsale, entered Bridgewater with fish and cloth, returning to Kinsale with beans.⁹⁰ In the early years of the fifteenth century, four shipments of old wine were transported by crayers from Bristol to Sligo; other shipments from elsewhere in Ireland were also delivered on crayers.⁹¹ These craft probably had a capacity ranging between 4 and 20 tons. It would be unwise, however, to equate the *batella* recorded in the customs accounts with crayers because in the 1413/1414 Bridgewater account the *Patrick* is referred to on three occasions as a crayer while all the other vessels in this account are either *batellae* or *naves*.

The spinace, another vessel used in the Irish Sea in the fifteenth century, was propelled by both oars and sail. Skiffs were a smaller craft, normally used for fishing.⁹² These vessels were commonly found in the channel ports.⁹³ Irish spinaces were rare but a spinace of Waterford entered Exeter in 1462, and one from Kinsale was in Plymouth in 1497/8, as were others from Cork and Kinsale in 1505/6 and from Cork in 1514. Spinaces from Youghal and Kinsale were also in Dartmouth in 1519.⁹⁴ Skiffs from Kinsale, Youghal and Dungarvan frequented ports in Plymouth/Fowey at the end of the fifteenth and into the sixteenth

⁸⁸ CPR, 1374-1377, 11.

⁸⁹ CPR, 1377-1381, 503.

⁹⁰ TNA, E122/25/5, m. 4, m. 5; CPR, 1385-1389, 107.

⁹¹ CPR, 1385-1389, 107; CPR, 1399-1401, 260. A licence was issued to Thomas Clerk in April to transport twenty tons of old wine to Sligo, CPR, 1401-1405, 209. In 1403 *La Trinité*, a crayer owned by Richard Brown, transported four tons of old wine; similarly John Spyne on his crayer *La Mare*, CPR, 1401-1405, 376. In 1404 John Levéngé transported 8 tons of old wine on a crayer *La Laurence*, from Bristol to Ireland.

⁹² Burwash, *English Merchant Shipping*, 41.

⁹³ Burwash, *English Merchant Shipping*, 110; TNA, E122/206/1, passim. A lot of vessels entering Plymouth and Fowey were either spinaces or skiffs.

⁹⁴ TNA, E122/115/7, m. 17, v; TNA, E122/115/11, fo. 6; TNA, E122/206/2, fo. 11 v; TNA, E122/40/10, m. 1, v; TNA, E122/42/4, m. 21.

centuries. For example, in 1465 a skiff, the *Mary* of Youghal, entered Plymouth. In 1499 two skiffs from Dungarvan entered Penryn, whilst the *Sonday* of Kinsale entered Padstow and the *James* of Cork landed at Padstow in the same year. Irish owned skiffs entered the ports of Plymouth in 1500, 1505/6 and 1507/8.⁹⁵

Another common vessel in Irish waters, the cot, had originated many centuries previously as a vessel that was used on lakes and rivers. The word 'cot' derived from *coite*, meaning log-boat. Over the centuries the cot became a tub-ended boat: its ends were tapered. This hull shape gave more stability to the vessel for sea travel. The cot builders may have taken some of its design from the Somerset flatner.⁹⁶ Cots might have been similar or identical to the 'stout fishing vessel', used for whaling which was of French or Irish origin.⁹⁷ A still smaller vessel, the currach, may possibly have been used occasionally for overseas trade. A French document (*Le Livre des Faiz de la marine et navigaiges*), dated after 1540, describes the Irish currach or skin boat.

Two large ship types, caravels and carracks, designed for Mediterranean waters, were also found occasionally in the Irish Sea. Caravels were of Portuguese origin. These were fine-lined ships, originally confined to coastal trading, with lateen sails and usually double-masted. These craft became integral to the great voyages of exploration in the fifteenth and sixteenth centuries, especially off the coast of Africa. Caravel construction was easier and

⁹⁵ TNA, E122/114/3, m. 2; E122/115/7, m. 10, m. 11, m. 22, m. 23; E122/115/8, m. 4, m. 5, m. 12; E122/115/11, fo. 41, fo. 42, fo. 43, fo. 45; E122/15/12, m. 3, m. 4, m. 29, v; E122/206/1, m. 11, m. 15, v; E122/206/2, m. 11, m. 15, v.

⁹⁶ D. Roberts, 'The Cots of Rosslare Harbour and Wexford', in *The Mariner's Mirror*, lxxi (1985), 13-15.

⁹⁷ J. De Courcy Ireland, 'Irish Maritime trade and Irish ships at the close of the Middle Ages', in P. Adam *et al*, *Medieval Ships and the Birth of Technological Societies*, i (Malta, 1989), 118. The author of the French manuscript was Antoine de Conflans. Cots may have been described as nefez which may have been similar to French vessels.

required less skilled labour than other more complex vessels.⁹⁸ They could cope better than clinker-built craft with adverse sailing conditions.⁹⁹ These vessels traded with Bridgewater from ports in Normandy, the south of France, as well as from Spain and Portugal but, according to Burwash, they were foreign-owned vessels, not English, and they were not normally used for the transport of fish which was the chief import from Ireland to England.¹⁰⁰ There were exceptions. Two caravels - the *Rescadon de Port* and the *Mary Bacer* - entered Bridgewater from Ireland in 1482.¹⁰¹ There were also a small number of Irish-owned caravels, such as the *Mary* of Kinsale, skippered by Robert Appleyard, which entered a port in the precincts of Plymouth on 7th October 1465.¹⁰² Two caravels, both named *Peter* and skippered by John Margyn and Hugh Comen, entered Bridgewater on 21st January 1482.¹⁰³ Another caravel, the *Sonday* of Cork, skippered by William Barry, entered Fowey on 20th July 1517.¹⁰⁴ Although caravels were still scarce in the Irish trading fleets, some Bordeaux caravels also visited Ireland, including the *Bonaventure* in 1475, the *Maro* in 1477, the *Magdalene* and the *Bonaventure* also transported commodities to Ireland in 1505 and in 1517.¹⁰⁵

The carrack was an enhanced large cog which started to appear in English documentary sources c.1350. These ships had a rounded hull that had been referred to as *coche* or *navis* in Genoa, their town of origin. In c.1400 the single mast had evolved into a two-masted ship. The carrack before the early fifteenth century ranged in capacity from approximately 60 tons to over 240 tons. By 1450 carracks were, however, constructed with three masts; they were

⁹⁸ R. Unger, 'Changes in Ship Design and Construction: England in the European Mould', in P. Gorski, ed., *Roles of the Sea in Medieval England* (Woodbridge, 2012), 29.

⁹⁹ Gardiner, ed., *Cogs, Caravels & Galleons*, Glossary, 181.

¹⁰⁰ Burwash, *English Merchant Shipping*, 131.

¹⁰¹ Dryburgh & Smith, eds, *Handbook of Select Calendar of Sources for Medieval Ireland*, 279.

¹⁰² TNA, E122/114/3, m. 1.

¹⁰³ TNA, E122/26/8, m. 3.

¹⁰⁴ TNA, E122/116/4, fo. 29, v.

¹⁰⁵ T. Bernard, *Navires*, iii, 18, 19, 24, 25, 196, 297, 402, 403.

large, multi-decked vessels with a big aftercastle. Carracks became the main ship of newly formed navies in the 1500s until superceded by galleons.¹⁰⁶ They did not often appear in the Irish Sea; however, a carrack was seized in Bristol in 1410 and in 1412 the king's carrack was captured at sea. A Venetian carrack was captured on a voyage from Brittany to Dublin in 1431.¹⁰⁷

There were, intermittently, also larger ships in Irish waters, such as the unspecified 320-ton London ship which arrived in Ross to collect pilgrims in 1477.¹⁰⁸ Previously, in 1403/4 the *Trinity* of Cork, the *Marie* of Waterford and the *Marie* of Dublin all carried large cargoes possibly of 100 tuns or more.¹⁰⁹ In 1406/7 the *Jonetz* of Bristol transported commodities (possibly weighing over 100 tons) from Ireland to Bristol in October 1406.¹¹⁰

Ships trading between Ireland and England were generally larger in the earlier years of the fifteenth century than at the end. From 1460 the customs documents for the ports on the west and south west coast of England suggest that the majority of vessels traversing the Irish Sea were in the range of six to thirty tuns. They were, in other words, quite small. There are several reasons that perhaps explain the growing use of smaller craft. Firstly, in the absence of a royal navy, the crown often commandeered ships above twenty or thirty tons.¹¹¹

Secondly, smaller vessels could access ports and inner harbour waterways with a greater degree of ease, especially in ports such as Dublin and Drogheda which were difficult to

¹⁰⁶ Gardiner, ed., *Cogs, Caravels & Galleons*, Glossary 182; Hutchinson, *Medieval Ships & Shipping*, 42-43.

¹⁰⁷ *CPR*, 1408-1413, 182, 422; Childs & O'Neill, 'Overseas Trade', 494.

¹⁰⁸ O'Neill, *Merchants and Mariners*, 110.

¹⁰⁹ TNA, E122/17/8, m.1, m. 2.

¹¹⁰ TNA, E122/17/37, m. 2; R. Zupko, *A Dictionary Of Weights And Measures For The British Isles: The Middle Ages to the Twentieth Century* (Philadelphia, 1985), 302. Dry materials such as currants were stored in 120 gallon barrels weighing possibly 1 ton each. A pipe of salmon had a capacity of 84 gallons; with the addition of liquid, it possibly weighed $\frac{3}{4}$ of a ton.

¹¹¹ *CPR*, 1361-1364, 317, 415; *CPR*, 1396-1399, 438. There are many examples in the calendar of patent rolls of the arrest of ships above twenty to thirty tons for the king's use.

navigate.¹¹² Thirdly, smaller craft had the capability of greater manoeuvrability in the event of adverse weather conditions or piracy. The first two issues will be dealt with now, while the third matter will be explored under the piracy heading in this chapter.

Because the crown possessed no standing navy before the sixteenth century (with the notable exception of Henry V's reign), it often requisitioned merchant ships to transport troops, ordinance and victuals. Ships were requisitioned by the crown in most decades from *c.*1350 to *c.*1480. The crown usually sought the service of ships with a capacity of between 20 tons and 150 tons.¹¹³ In 1399 for example, the sergeant of arms for Bristol, John Drax, arrested ships in Bristol, Dartmouth and London to convey the duke of Surrey and his men to Ireland. The ships were over twenty-five tons in size. The shipmasters of eight ships complained that their balingers, crayers and barges had been arrested even though they had full cargoes, with customs paid, bound for foreign lands. The ships were accordingly de-arrested and the mariners allowed to continue on their journey. Drax was, however, desperate to secure any type of craft. He even seized 'doggers' – specialised Norfolk fishing vessels which the crown deemed inappropriate for the transportation of men across the Irish Sea.¹¹⁴ In order to avoid the requisition of their vessels there was thus an incentive for Irish merchants to use smaller boats. Merchants who used small crayers, picards, cots and currachs were less likely to see their profits disappear as a result of requisition. Moreover, shipmasters whose vessels were requisitioned often had to wait for payment and sometimes payment terms were uncertain. Shipmasters had no control over the length of time their vessels were detained.

¹¹² *CPR*, 1358-1361, 54, 103, 114.

¹¹³ *CPR*, 1350-1354, 376; *CPR*, 1361-1364, 17,18; *CPR*, 1361-1364, 33; *CPR*, 1361-1364, 203, 204; *CPR*, 1361-1364, 307, 317; *CPR*, 1361-1364, 415; *CPR*, 1361-1364, 518; *CPR*, 1364-1367, 12; *CPR*, 1367-1370, 177; *CPR*, 1370-1374, 344, 347; *CPR*, 1374-1377, 396; *CPR*, 1374-1377, 336; *CPR*, 1377-1381, 385; *CPR*, 1385-1384, 131; *CPR*, 1388-1392, 134, 385, 405; *CPR*, 1396-1399, 438; *CPR*, 1396-1399, 511, 584; *CPR*, 1416-1422, 274; *CPR*, 1416-1422, 319, 320; *CPR*, 1422-1429, 122; *CPR*, 1422-1429, 327; *CPR*, 1429-1436, 72; *CPR*, 1429-1436, 153; *CPR*, 1441-1446, 79; *CPR*, 1446-1452, 238; *CPR*, 1452-1461, 120; *CPR*, 1461-1467, 100; *CPR*, 1467-1477, 524; *CPR*, 1441-1446, 439; *CPR*, 1467-1477, 545.

¹¹⁴ *CCR*, 1396-1399, 327, 328, 331, 438, 446, 551.

Accessibility to many ports was difficult and traffic to the inner harbour waterways was often compromised because of silting by the middle of the fourteenth century. Shipments to Dublin were, therefore, often offloaded at Dalkey and transported into the city on crayers and other small boats.¹¹⁵ The difficulties in using Dublin's harbours are further highlighted by the number of craft departing from creeks such as Malahide, Howth and Rush.¹¹⁶ Indeed, archaeological evidence suggests that there were many small harbours in the Dublin region. These include Skerries where it was proposed to build a harbour in the fifteenth century.¹¹⁷ The prior of Holmpatrick (Skerries) had not completed its construction in 1493; he was to receive the poundage and custom of the creek in order to do so.¹¹⁸

Silting was not a problem confined to ports in Ireland. It affected Irish and other shipping visiting ports on the west coast of England too. In 1543 an Act of Parliament prohibited ships from dumping ballast in the Bristol Channel, at the entrance of the River Avon.¹¹⁹ (Bristol is situated on a complex river system with the River Avon flowing into the Severn which then debouches in the Bristol Channel).¹²⁰ The dumping caused an obstruction to the movement of heavily laden ships. The improvement and upkeep of harbours was also critical for accessing havens. Narrow entrances to ports were also an issue in other locations for shipping in England; in October 1365 Robert Plante received a licence to unload his 140-ton ship at

¹¹⁵ *CPR*, 1358-1361, 103, 114.

¹¹⁶ Wilson, ed., *The Chester Customs Accounts*, 103-116.

¹¹⁷ N. Brady, 'Dublin Maritime Setting and the Archaeology of its Medieval Harbours', in J. Bradley *et al*, eds, *Dublin in the Medieval World* (Dublin, 2009), 308-311.

¹¹⁸ D. Quinn, 'The Bills and Statutes of Irish Parliaments of Henry VII and Henry VIII', *Analecta Hibernia*, x (1941), 88.

¹¹⁹ E. Jones, 'The Bristol Shipping Industry in the Sixteenth Century' (unpublished Ph.D thesis, University of Edinburgh, 1998), 133.

¹²⁰ P. Fleming, 'Looking out from the edge of the world: Bristol, Gascony and Iberia in the Later Middle Ages', in J. Telechea, M. Bochaca and A. Andrade, eds, *Gentes de mar en la Ciudad Atlántica Medieval* (Riojanos, 2012), 150.

Colpol because it could not navigate within the narrows of Topsham, an outport of Exeter.¹²¹ The inner harbour of Exeter was itself always difficult to navigate. Bridgewater too was difficult to access. In the 1380s its western waterways were blocked.¹²² Political problems in 1358 sometimes also made port access problematic.¹²³ The port of Drogheda (Uriel) situated on the marches with the Gaelic Irish could not guarantee safe access to port. From 1358 ships bound for Drogheda were allowed by licence issued for twelve years to discharge their cargo at Dalkey, Lambay or Howth.¹²⁴ Ports in Wexford and Waterford and in northern locations such as Carlingford probably improved their quayside accessibility in the fourteenth century.¹²⁵ There were, however, difficulties for some maritime havens on the east and northeast coast of Ireland. In 1543 Drogheda was described as a 'bad haven', possibly either as a result of narrow access or security issues. In the mid-sixteenth century Dundalk was described as a creek, possibly too small for large vessels to enter.¹²⁶ There were probably no such issues with Waterford, which was on the south coast of Ireland and which was probably Ireland's largest port. It had a long quayside of possibly up to half a mile in length. Up to sixty ships could safely moor alongside. From there small vessels transported goods inland.¹²⁷ Other significant ports in Ireland included New Ross, Cork, Kinsale, Limerick, Galway and Carrickfergus which were apparently accessible to shipping throughout the Middle Ages.

The smaller craft trading in the Irish Sea zone were better able than larger vessels to cope with the issue of accessibility to harbours and rivers, due to their size and manoeuvrability.

¹²¹ *CPR*, 1364-1367, 167.

¹²² *CPR*, 1381-1385, 511, 512.

¹²³ *CPR*, 1358-1361, 114

¹²⁴ *CPR*, 1358-1361, 114.

¹²⁵ J. MacLaughlin, *Troubled Waters: A Social and Cultural History of Ireland's Sea Fisheries* (Dublin, 2010), 59.

¹²⁶ A. Swan, 'The Port of Dundalk', *Louth Archaeological Society*, xvii (1970), 66.

¹²⁷ E. Carus-Wilson, 'The Overseas Trade of Bristol', in E. Power & M. Postan, eds, *Studies in English Trade in the Fifteenth Century* (London, 1933, revised 1966), 192.

Even though trade between Liverpool and Ireland is unquantifiable in the later Middle Ages, it is important to note its importance in Irish affairs. Accessibility did not seem to be a problem because Lionel of Clarence and his men embarked for Ireland from Liverpool in 1361 and 1363.¹²⁸ Its accessibility possibly led to Liverpool overtaking Chester in the 1490s.¹²⁹ The growing importance of Liverpool as not just a creek but a haven for overseas trade is exemplified by the appointment of Richard de Aynshaugh as king's deputy to take wine prise in 1366.¹³⁰

Navigation and Weather Systems in the Irish Sea Zone

The navigation of the Irish Sea zone was a difficult undertaking in the Middle Ages. Richard Fitzralph, archbishop of Armagh, commented that men could wait for up to four months because of bad weather, before a favourable passage could be embarked upon.¹³¹ Routine difficulties arising from bad weather was compounded by storms. In 1361 and 1363 great storms off the Irish coast caused many ships to be lost.¹³² Some of them perhaps belonged to Lionel, duke of Clarence.¹³³ The mariners who traversed this region required experience, knowledge of navigational aids, and the ability to read landmarks.

The most rudimentary navigational aid was the interpretation of line of sight to land. Shipmasters looked at the Pole star and a series of constellations to plot their course at night. The positioning of the moon in the sky was a basic adjunct. This rudimentary knowledge coupled with learned and memorised sailing routes, would have formed the basis of English

¹²⁸ CPR, 1361-1364, 19, 21, 36; CCR, 1360-1364, 212.

¹²⁹ J. Laughton, *Life in a Late Medieval City: Chester 1275-1520* (Oxford, 2008), 17.

¹³⁰ R. Jarvis, 'The Headport of Chester and Liverpool its Creek and Member', *Transactions of the Historic Society of Lancashire and Cheshire*, cii (Liverpool, 1951), 71.

¹³¹ T. O'Neill, 'Trade and Shipping on the Irish Sea in the later Middle Ages', M. McCaughan & J. Appelby, eds, *The Irish Sea, Aspects of Maritime History* (Belfast, 1989), 27-28.

¹³² M. Lyons, 'Weather, Famine, Pestilence and Plague in Ireland, 900-1500', E. Crawford, ed., *Famine – The Irish Experience* (Edinburgh, 1987), 67.

¹³³ CPR, 1361-4, 18, 19, 33, 36, 203, 204, 307, 317, 415, 518; TNA, E122/212/11, m. 1.

and Irish mariners' knowledge before 1350.¹³⁴ The recognition of landmarks, and the behaviour of animals and birds, was an important indicator for the shipmaster to observe. The importance of understanding the strength, humidity and temperature of the wind was also part of the skillset for shipmasters.¹³⁵ These attributes were attested by Chaucer's shipman in *The Canterbury Tales*, who extolled the virtues of a mariner's skill of understanding lunar cycles and memorising tidal routes.¹³⁶ An important breakthrough for plotting a course to a distant shore was the magnetic compass. The compass was used on some ships from the twelfth century. It started out as a rudimentary device using a lodestone and iron needles. However, this device had to be continually re-magnetised.¹³⁷ In the middle of the fifteenth century, compasses were manufactured which were properly pivoted using a windrose allowing for more accurate readings. These enhanced compasses could, however, still be unreliable, because of the difficulty in plotting the true North.¹³⁸ On shorter distances in the Irish Sea compasses were not a vital tool for the shipmaster, as line of sight of land was never far off, but for shipmasters entering the Irish Sea from locations in northern and southern Europe, possession of a compass would prove invaluable. I have, however, found no evidence of compasses used in the Irish Sea before the sixteenth century. If the ship did not have rudimentary navigational devices, the ship's captain could put a lookout on top of the mast of his ship. The shipmaster could then ascertain distance a long way from shore. If the mast were fifty feet high, the observer could see a hill top of one hundred feet in height from

¹³⁴ I. Friel, *The Maritime History of Britain and Ireland c.400-2001* (London, 2003), 85; Burwash, *English Merchant Shipping*, 12.

¹³⁵ R. Ward, *The World of the Medieval Shipmaster: Law, Business and the Sea, c.1350-1450* (Woodbridge, 2009), 123.

¹³⁶ Ward, *The World of the Medieval Shipmaster*, 123. Chaucer's depiction of the shipman states: 'But of his craft to rekene wel his tydes, his stremes and his daungers hym besides, his herberme, and his moon, his lode manage...He knows all the havenes, as they were...'

¹³⁷ Ward, *The World of the Medieval Shipmaster*, 144.

¹³⁸ Burwash, *English Merchant Shipping*, 5; Ward, *The World of the Medieval Shipmaster*, 145. The earliest known use of magnetic direction compasses in England dates to 1410-12, when compasses were recorded on the inventory of the ship *Plenty*.

twenty miles away.¹³⁹ The importance of line of sight navigation is illustrated on a woodcut excavated near Christ Church, Dublin, dating from the eleventh century, which depicts a lookout on a ship searching for landfall.¹⁴⁰

The fifteenth century heralded advances in instruments used to measure latitude. The development of quadrants, astrolabes and cross staffs began in southern Europe. They helped to decipher latitude, which was particularly helpful on long voyages.¹⁴¹ Although the use of these implements would have been limited on the shorter routes sailed on the Irish Sea, to orientate a ship with no sign of land was an important capability even on shorter voyages. I have not, however, found any evidence that sophisticated navigational equipment was used in the Irish Sea.

Among the more useful recorded navigational equipment for sailing shorter distances were sandglasses, sounding leads and sundials. Sandglasses or running glasses measured time. These timers were vital for calculating daily watches and sailing runs.¹⁴² Records kept for sixty-one royal ships in service from 1399 to 1422 reveal that at least half of the vessels had sounding leads and sandglasses.¹⁴³ Running glasses were also found on trading ships: archaeologists discovered, on the Newport ship, a sandglass dating from the middle of the fifteenth century.¹⁴⁴ The sounding lead was especially useful for entering or exiting silted up port entrances. The sounding lead was used to determine the depths of water in which the ship was travelling. The weights varied between 7 lbs and 14 lbs. Later, lead lines were

¹³⁹ Ward, *The World of the Medieval Shipmaster*, 128-9. The measurement of distance by this method was confirmed by William de Worcestre's survey of the Bristol Channel in 1480.

¹⁴⁰ Hutchinson, *Medieval Ships & Shipping*, 167.

¹⁴¹ Friel, *The Maritime History of Britain and Ireland*, 86. The astrolabe, quadrant and cross staff did not calculate longitude. Their usefulness was limited until longitude became discernible in the 1700s.

¹⁴² Friel, *The Maritime History of Britain and Ireland c.400-2001* (London, 2003), 85.

¹⁴³ Friel, *The Maritime History of Britain and Ireland*, 85.

¹⁴⁴ Trett, ed., *Newport Medieval Ship*, 23.

made with recesses at their base, filled with tallow, to allow for examination of the seabed.

This information was vital to mariners sailing in coastal waters across western Europe.

Dangerous waters surrounding the Bay of Biscay off the French coast, were lined with darker stones on the sea floor whilst the safer English side had lighter stone debris in the depths.¹⁴⁵

There is a depiction of an English ship entering the English Channel using a large sounding lead as it progressed through the sea.¹⁴⁶ The taking of soundings was especially vital on the shores of Ireland. The continental shelf in places is only ten to twenty miles off the coastline. It was important for sailors not to run aground, coming from very deep waters into the shallows.¹⁴⁷

Shipmasters and mariners also used sundials. These implements were useful for short voyages. Dating to the Viking era, the sundial was used to calculate the length of the shadow as the sun moved across the sky.¹⁴⁸ Pocket sundials (called *naviculae*, because they looked like ships) were discovered on the remains of sailors on the *Mary Rose* which sank in 1545.¹⁴⁹ There is, however, no evidence of the use of sundials in the Irish Sea.

The crossing from Ireland to England was easier than the return route.¹⁵⁰ Shipmasters required an understanding of tides in the Irish Sea. The Atlantic waters are funnelled into the Irish Sea between Antrim and Kintyre, and through the St George Channel. It was important to know the effects this had on tides, winds and currents.¹⁵¹ William Worcestre wrote of the tidal ranges at Bristol sometime before 1480. The spring tide at Bristol was one of the largest

¹⁴⁵ Ward, *The World of the Medieval Shipmaster*, 133.

¹⁴⁶ D. Waters, *The Rutters of the Sea: The Sailing Directions of Pierre Garcie* (Hartford, 1967), front piece and inside cover.

¹⁴⁷ Hutchinson, *Medieval Ships & Shipping*, 169.

¹⁴⁸ Ward, *The World of the Medieval Shipmaster*, 130.

¹⁴⁹ Hutchinson, *Medieval Ships & Shipping*, 178.

¹⁵⁰ O'Neill, 'Trade and Shipping on the Irish Sea in the later Middle Ages', 27.

¹⁵¹ A. Cathcart, 'The Forgotten '45: Donald Dubh's Rebellion in the Archipelago Contest', *The Scottish Historical Review*, xci (2012), 245.

in the known world at the time (approximately 12 metres at Avonmouth).¹⁵² Two volumes of water in the Irish Sea and Atlantic are dragged by the gravitational pull of the moon and sun four times every twenty-four hours. This produces two low and two high tides. When the sun and moon are in conjunction or opposite it produces high and spring tides. When these orbs are at right angles to the earth it produces neap tides (low). The understanding of tides and the preparation of sailing times had to be calculated.

Landmarks were of little use at night to decipher direction. In some locations navigation was helped by strategically placed fires. There was, for example, a 'light' (probably dating from the fifth century) at Hook in Wexford. It was probably a constantly lit fire to warn ships of their location. The beacon was maintained by the Augustinian canons who extracted a local toll for its upkeep. Other 'lights' are noted at St Ann's in Wales, at Youghal and at approximately a dozen positions on the coast of England.¹⁵³ These included Ilfracombe, Minehead, Hartland and St Ives.¹⁵⁴

In the Middle Ages guidance relating to depth and impediments to port access was difficult to ascertain. There were probably marker buoys and poles at some haven entrances but little detail is known of such arrangements.¹⁵⁵ The presence of buoys made from cork and wood on the *Gracedieu* in 1420 hints at the possibility that similar items were placed at harbour entrances.¹⁵⁶ Ward argued that sailors kept the knowledge of harbour navigation quiet so as to keep pirates at bay.¹⁵⁷ There is no evidence to support his theories about secrecy but pilots

¹⁵² J. Harvey, ed., *William Worcestre Itineraries* (Oxford, 1969), 169-173; Ward, *The World of the Medieval Shipmaster*, 136.

¹⁵³ Friel, *The Maritime History of Britain and Ireland*, 87; Hutchinson, *Medieval Ships & Shipping*, 171.

¹⁵⁴ Hutchinson, *Medieval Ships & Shipping*, 173.

¹⁵⁵ Friel, *The Maritime History of Britain and Ireland*, 87.

¹⁵⁶ Carpenter-Turner, 'The Building of the *Gracedieu*', 69.

¹⁵⁷ Ward, *The World of the Medieval Shipmaster*, 139. Ward explains his rationale by stating that the early rudders were stronger on tidal information and off-shore depths but not on depths at harbour entrances.

certainly had an economic interest in maintaining a monopoly on knowledge of local port entrances. A local pilot's knowledge was vital to the success of a trading voyage. Pilots more than likely knew their regions better than shipmasters from foreign ports. When in 1467 the Iceland-bound *Trinity* of Southampton was driven off course, landing in the Scilly Isles, pilots were recruited in Mountsbay to ensure safe passage through Irish waters.¹⁵⁸ *The Libelle of English Policy*, a political tract written to lobby the crown with regard to control of the seas, depicted these coasts as 'grete and godely bays, sure Wyde and depe, and of ryght gode assayes att Waterforde and coostes monye one'.¹⁵⁹

Written instructions in the form of pilot books surviving from the fifteenth century included details of English and Irish waters. Burwash argued that this information was of interest to few people except English seamen.¹⁶⁰ It was more likely that early pilot books were short on relevant detail and that oral knowledge was required to give a full picture of coastlines. For example, the maritime itineraries of Breton and Irish sailors did not vary over centuries.¹⁶¹ They would have learned the routes and probably passed on the information by word of mouth. Possibly as a result of increased visits to the Irish Sea by European traders, there was a requirement for more accurate information about ports and creeks. Early maps, such as that of Mathew Paris (c.1250), the Hereford *Mappa Mundi* (c.1311), and the Gough map (c.1360), were of little use to navigators.¹⁶² These maps did not describe the features of the landscape or how to navigate within ports though they did show inland waterways.¹⁶³ By 1300 Italian mariners/merchants had drawn rudimentary portolons of the Irish Sea zone. Many, such as

¹⁵⁸ Burwash, *English Merchant Shipping*, 28.

¹⁵⁹ G. Warner, ed., *The Libelle of English Policy* (Oxford, 1926), lines 674 to 676, 35.

¹⁶⁰ Burwash, *English Merchant Shipping*, 24.

¹⁶¹ O'Brien, 'Commercial Relations between Aquitaine & Ireland' in J. Picard, ed., *Aquitaine and Ireland in the Middle Ages* (Dublin, 1995), 44, 45.

¹⁶² Burwash, *English Merchant Shipping 1460-1540*, 6-8; Hutchinson, *Medieval Ships and Shipping*, 117.

¹⁶³ Hutchinson, *Medieval Ships and Shipping*, 116, 117.

the Pisau and Peter Vesconte maps, did not depict Ireland.¹⁶⁴ Of those that did, Baptist Agnesi's map of 1544 showed Ireland as an indeterminate landmass. This map, however, included many details relevant to ports.¹⁶⁵ Still, such maps were of limited practical use to the mariner. They provided information pertinent only to the location of the port but little other information of use to a pilot.

The mouths of the harbours leading into Dungarvan, Youghal, Kinsale and Dingle all featured castellated structures in prominent visible locations from the sea. The most impressive promontory structure was at the mouth of Waterford harbour. A tower was located on each bank of land with the castle situated a short distance inland (Map 5). The east coast of Ireland was also punctuated with many structures close to the coastline. The ports around Dublin, including Skerries, Malahide, Dalkey and Balbriggan, all had either churches or defensive constructions close to the harbour inlets. The larger ports of Dublin, Drogheda, Dundalk, Carlingford, Carrickfergus and Ardglass were all visible and discernible from the sea with large structures, including castellated features, at the mouths of their harbours (Map 5).

William de Worcestre's survey of 1480 included distances from the Isle of Man to Ireland. He estimated that landfall to the Isle of Man (about half the distance between Ireland and Bristol), was 4 kennings (80 nautical miles). At an approximate speed of 3.3 knots, it would take a day and night to reach the Isle of Man. Modern day measurements confirm this theory. Worcestre's writings also included valuable information on distances from the coastal ports to each other. His calculations aided inexperienced shipmasters or those not familiar with the

¹⁶⁴ T. Westropp, 'Early Italian maps of Ireland from 1300 to 1600, with notes on foreign settlers and trade', *Proceedings of the Royal Irish Academy*, xxx (1912-13), 364.

¹⁶⁵ Westropp, 'Early Italian maps of Ireland', plate xlv.

Irish Sea to approximate time and distance between ports. Worcestre's deliberations indicated that the coastal voyage from Dublin to Drogheda would take half a day. These itineraries also gave useful information on the distances of the rivers from the ports.¹⁶⁶

The earliest sailing and navigational guides scripted in English date from the fifteenth century. These documents were called rutters.¹⁶⁷ In 1483 Pierre Garcie set down directions in the *Grand Routier* (rutter) for the use of mariners in the fifteenth century, noting coastal features of England, Ireland but also those of France, Portugal and Spain.¹⁶⁸ The third chapter of this rutter described the waters of the Bristol Channel, from Land's End to Avonmouth. It outlines the seas around Ireland too starting from the south-east coast to the west, and back around to the north coast. Chapter three contains valuable insights into general navigation issues relating to the Irish Sea and elsewhere there is tidal information.¹⁶⁹ Garcie also produced *Le routier de la mer*, probably written between 1502 and 1510. Robert Copeland translated Garcie's *Le routier de la mer* into English between 1520 and 1528. By then, however, Richard Proude's compilation of a mid-fifteenth century rutter from an unknown English mariner already existed. William Ebesham transcribed this document which outlined the circumnavigation of England, Wales and Ireland during the reign of Edward IV.¹⁷⁰ This document outlines landmarks near Dublin such as Lambay and Dalkey. These later sea charts offer more detail for pilots to plot their course in and out of the hazardous creeks. Although woodcuts were provided to help in the recognition of headlands for those who could not read, ships continued to hire local pilots to navigate their vessels into port.¹⁷¹

¹⁶⁶ Harvey, ed., *William Worcestre Itineraries*, 171-173.

¹⁶⁷ Friel, *The Maritime History of Britain and Ireland*, 85. The word rutter comes from the French word *routier*.

¹⁶⁸ Waters, *The Rutters of the Sea*, 199-205.

¹⁶⁹ Burwash, *English Merchant Shipping*, 25.

¹⁷⁰ Waters, *The Rutters of the Sea*, 4.

¹⁷¹ Hutchinson, *Medieval Ships & Shipping*, 165.

The final difficulty in plotting a course was the effect of adverse weather. Poor visibility and strong winds could make sailing difficult at night. Vessels with both oars and sail were better equipped to deal with challenging weather events. When facing storms, vessels close to land could drop anchor, or head for navigable rivers or a safe haven. For example, in the 1460s a Bristol ship, the *Le Raphaell*, encountered a major tempest off the Devon coast. The ship sought shelter in Bedebay, Devon, anchoring seventy miles up the Severn River. This did not, however, save the ship. The mast was cut down in a vain attempt to save the craft but the ship finally foundered at Kilkampton and the cargo from Danzig was cast ashore.¹⁷² From a navigational and climatic point of view, smaller vessels were generally easier to manage in storms and in narrow channels and this in part perhaps explains why the customs accounts for Bristol and Bridgewater record that most vessels trading after 1450 between England and Ireland were small.

The Law and Legal Practice as it related to Shipping and to Mariners traversing the Irish Sea Zone

When problems occurred at sea resulting for example in shipwreck, maritime law offered solutions. On the other hand mercantile issues in the main were heard in port towns throughout the realm. It is my intention to examine the implications for merchants and mariners of both legal structures. Before the arrival of the Anglo-Normans to Ireland the Gaelic Irish possibly followed the old wisdom text (*Tecosca Cormaic*). These laws include aspirational references to ships entering port as a sign of recognition of a good king. The old Gaelic laws did not, however, include references to the professions of merchant or shipmaster, indicating either a low level of importance to their status or that separate laws

¹⁷² CPR, 1467-1477, 168.

were used to control their maritime activities.¹⁷³

The *Lex Mercatoria* (Merchant Law) set out laws to be used in trading disputes in staple ports in England.¹⁷⁴ Procedures from this text were used in Tolzey and Market Courts probably before the fourteenth century.¹⁷⁵ On the other hand the main basis for maritime law in western and northern Europe during the Middle Ages was the *Rôles de Oléron*. The *Rôles* were initially designed to regulate the wine trade from Brittany and Normandy to England, Scotland and Flanders and they were probably used to determine maritime law from c.1266.¹⁷⁶ They existed in two versions, both using elements from older Mediterranean laws. One version of the text included Flemish and German laws, while the Castilian and Anglo-Norman text was more relevant to English controlled waters.¹⁷⁷ The twenty-four articles of the *Rôles* dealt with the various legal responsibilities of the owner, shipmaster, merchants and crew. The role of the shipmaster was covered by articles 1-12, 15, 16, 18-20 and 24. The crew's responsibilities were covered in sections 3, 6, 8, 11, 15 and 21. Other articles included the discipline of the mariners (5, 6, 12 and 14), employment issues (17-21), health and safety (7, 8, 10, 16 and 17), seamanship (4, 8, 9, 11, 13, 15, 16 and 22-24), and the responsibilities of merchants on board the craft (4, 8-11, 13, 15, 22 and 23).¹⁷⁸ The *Rôles* were an important breakthrough for encompassing many aspects of maritime law. These were not, however, the only sea laws in Northern Europe. The Inquisition of Queensborough was established in 1375 to clarify points of maritime law. It met sporadically until 1403, examining case law from deliberations by jurors in previous cases. The members of this enquiry included the

¹⁷³ F. Kelly, *A guide to early Irish law* (Dublin, 1988), 7.

¹⁷⁴ F. Bickley, ed., *The Little Red Book of Bristol*, i (Bristol, 1900), 57-86. The laws are transcribed in Latin from the original text.

¹⁷⁵ E. Veale, ed., *The Great Red Book of Bristol*, iii (Bristol, 1951), 55.

¹⁷⁶ E. Frankot, 'Medieval Maritime Law and its practice in the towns of Northern Europe' (unpublished PhD Thesis University of Aberdeen, 2004), 20. www.admiraltylawguide.com/documents/oleron.html (Date accessed 07/11/2011).

¹⁷⁷ Ward, *The World of the Medieval Shipmaster*, 20.

¹⁷⁸ www.admiraltylawguide.com/documents/oleron.html (Date accessed 07/11/2011).

warden of the Cinque Ports, the admiral of the North, and mariners from ports around England.¹⁷⁹ The first section of the Queensborough laws, articles one and two, clarified the law of jettison. Articles three to fifteen and seventeen concerned wages and portage, and article sixteen referred to pilots. Article seven, of the Queensborough laws in particular was directly relevant to Ireland. It set out wage rates and cargo rights for mariners travelling from London to Ireland with increased rates given to mariners passing beyond Tuskar and the Old Head of Kinsale.¹⁸⁰ Articles eighteen to eighty were added to the original laws possibly at the beginning of the fifteenth century. The second section of the laws, articles eighteen to seventy, dealt with prizes, piracy, aiding an enemy, felonies, deaths, mayhem, desertion, affrays, fishing, customs evasion, discipline, claims of wreck, forestalling and regrating. The third section, articles seventy one to eighty, dealt with the responsibilities of the admiralty.¹⁸¹

Venues for the settling of mercantile disputes

In 1303 the *Carta Mercatoria* gave alien merchants the right to have their cases heard in local courts.¹⁸² In England and Ireland the local port officials constituted the starting point for enforcing commercial sea law. Disputes that were not complex were heard in the local mayor's court. Mayors' courts grew out of the Hundred Court, used in England before the twelfth century.¹⁸³ The statute of the staple in 1353 provided a legal forum for merchants who could have their disputes settled in a fair and prompt fashion. (Staple ports were the only locations from where wool, woollfells and hides could be exported.) Staple courts were held in the staple towns of England, Wales and Ireland. The staple court was presided over by a mayor and two constables. It dispensed justice quickly (because of the transitory nature of

¹⁷⁹ Ward, *The World of the Medieval Shipmaster*, 23.

¹⁸⁰ T. Twiss, ed., *Black Book of the Admiralty*, i (London, 1857 reprint Abingdon, 1985), 141.

¹⁸¹ Ward, *The World of the Medieval Shipmaster*, 23.

¹⁸² Ward, *The World of the Medieval Shipmaster*, 15.

¹⁸³ Veale, ed., *The Great Red Book*, iii, 5-8.

merchants and shipmasters) and met daily. This type of court dealt mainly with financial disputes. Edward III's charter of 1353 confirmed that the court of the mayor and bailiffs would be distinct from the courts of the mayor and sheriffs.¹⁸⁴ The Tolzey Court derived from a market court where disputes between merchants and mariners were heard. The Tolzey Court was not, however, always the appropriate venue for pleas.

Neither was the mayor's court always the correct forum for foreign merchants because of possible local prejudices in favour of local merchants. Petitioners of the mayor's court who were dissatisfied with the court's decision, or were sceptical of the court's impartiality, could appeal to the court of the chancellor.¹⁸⁵ In 1432 Geoffrey Jenkins petitioned the chancellor relating to goods in his ballinger that had been lost at sea, Philip and John Tankard of Waterford answering for their return. Jenkins had been arrested by the sheriff and was incarcerated.¹⁸⁶ In 1465 a petition was sent to the chancellor by John Lewis. In it he outlined that the earl of Warwick had set out in a balinger, the *Mary of Bristol*, owned by John Mathew, freighted by Lewis and bound for Portugal. On the voyage to Portugal the earl and his navy commanded John Mathew to go to Ireland. The earl demanded that Mathew use his vessel to transport some of the earl's men, contrary to their original agreement. Subsequently John Mathew issued a suit against John Lewis in Bristol for the cost of freight, to the value of £200. Lewis sought a *writ de certiorari* to the Tolzey Court in Bristol, so that he could receive a fair hearing.¹⁸⁷

Speed of justice was, however, not always the primary motive for merchants. It was equally important to receive a fair hearing. Cases of a complex nature could not be heard in the

¹⁸⁴ Ward, *The World of the Medieval Shipmaster*, 19.

¹⁸⁵ Dryburgh & Smith, eds, *Handbook of Select Calendar Sources of Medieval Ireland*, 130-131.

¹⁸⁶ Dryburgh & Smith, eds, *Handbook of Select Calendar Sources of Medieval Ireland*, 124.

¹⁸⁷ Dryburgh & Smith, eds, *Handbook of Select Calendar Sources of Medieval Ireland*, 131.

Tolzey Court, mayor's court or piepowder courts. Petitioners who did not obtain legal satisfaction in any of these could have their cases heard at the King's Bench. In the case of *Hamely vs Alveston* in 1381, convened in the maritime court at Padstow, John Alveston was found guilty of pillaging from Osbert Hamely's vessel. The fine of 200 marks awarded against Alveston could not be obtained or arrested within the precincts of Padstow. The case went forward to *coram rege*. Compurgation was used by Hamely (the use of six to eleven witnesses to substantiate a claim). The crime had been upgraded to one of trespass for non-compliance of a court order.¹⁸⁸

In the later fifteenth century disputes at fairs and markets were held in the piepowder court which was convened to settle arguments between mariners and merchants not only at Bristol but elsewhere in the realm during the yearly fairs.¹⁸⁹ The piepowder court was a venue used to speed up court's resolutions and to encourage merchants to trade in the larger ports of the realm. It was ratified throughout the realm by statute in 1478 to counteract local dignitaries not dispensing fair justice. Prior to 1470, stewards, bailiffs and commissaries had abused their positions for profit. The 1478 statute proposed that merchants would preside in piepowder court to ensure a prompt and fair outcome.¹⁹⁰ The piepowder court in Youghal was a venue set up by the mayor of the town for fair and market disputes. In 1497 such a court was granted by charter to resolve disputes lawfully for strangers arriving in Youghal. Merchants could levy fines and deal lawfully with regrators and forestallers.¹⁹¹

Ships lost at sea

¹⁸⁸ Ward, *The World of the Medieval Shipmaster*, 13, 38.

¹⁸⁹ E. Veale, ed., *The Great Red Book of Bristol*, iii (Bristol Record Society, 1951), 18; Ward, *The World of the Medieval Shipmaster*, 16.

¹⁹⁰ R. Horrox, ed., *The Parliament Rolls of Medieval England 1275-1504*, xv (London, 2005), 63-64.

¹⁹¹ R. Caulfield, *The Council Book of the Corporation of Youghal, from 1610 to 1659, from 1668 to 1687, and from 1690-1800* (Guildford, 1878), p. xxix.

There were legal matters which shipowners and shipmasters referred directly to the King's Council. In 1351 the admiral of the west, John de Montgomery, arrested the *Dieu Barge* for service in Gascony. The owners of the ship, John le Spicer of Bristol and John de Wycombe, gave the ship by admiral's warrant to Oliver de Longhorn. The ship was lost at sea on the return voyage. A fine of £60 was issued, but the king later pardoned this amount.¹⁹² The problems experienced by the over-zealous admirals culminated in various complaints to the crown, including those of William Colie of New Ross, William Gosse and others of Waterford in 1352. These merchants had experienced countless arrests, the taking of their goods for debts of other merchants, and prizes. The king took them under his special protection.¹⁹³ The powers of the court of the admiralty were curtailed after statutes were enacted in 1390 and 1392. Henceforth, the court's authority was restricted to offences committed at sea. The laws related to the admiralty were added to the Queensborough Inquisition in the first decade of the fifteenth century. They were more than likely initiated by the landing of French troops in Wales in 1403.¹⁹⁴ Statutes enacted in 1390 and 1392, used to restrict the admirals' power, emanated from complaints made in parliament. The difficulty for western ports in England was not with the admirals' abuse of power but with getting court orders implemented.¹⁹⁵ In the fifteenth century the king's admirals and their lieutenants were using the *Rôles de Oléron* and Queensborough to their own advantage. The rules governing the admiral's court (not a court of record until the sixteenth century) allowed for the abuse of power under the admirals. In 1478 in the house of All Saints, Baldoyle, Dublin, William the prior of the house made representations that they had been unfairly treated by the admiralty. In response the crown gave power to William and his house to have jurisdiction over their

¹⁹² CPR, 1350-1354, 68.

¹⁹³ CPR, 1350-1354, 127, 306.

¹⁹⁴ Twiss, ed., *The Black Book of the Admiralty*, i, 133-177; Ward, *The World of the Medieval Shipmaster*, 213.

¹⁹⁵ Gardiner, ed., *Calendar of Early Chancery Proceedings relating to West Country Shipping 1388-1493*, p. xi, p. xii.

stretch of coastline.¹⁹⁶ In the Irish Sea once a ship left port with or without commodities, there was theoretically a legal framework to protect the ships, crew and merchandise.

Laws of shipwreck and jettison of cargo

Shipwreck was a term used in the realm and was open to abuse. In general, land owners in coastal areas were allowed the rights to wreck of sea. For example, in 1395 John Fetesham was allowed rights to wreck of sea in Balbriggan and elsewhere on the Dublin coast.¹⁹⁷ The same was the case in England. In 1387 Thomas Flemming was appointed with the sheriff of Devon to convene an enquiry into a complaint made by Arnold de la Garde of Bayonne. De la Garde's complaint was that his barge, *La Sainte Marie*, was laden with a large consignment of merchandise bound for Bristol. The vessel was destroyed in a storm and the goods were cast ashore. People on the shore took them as if they were spoils of wreck. One mariner survived the sinking and made his way to shore. The commission determined that the cargo or the monetary value should be returned to the merchant's attorney, Peter de Arlon. This judgement is in accordance with article twenty-nine of the *Rôles de Oléron*, which states that if even one sailor escapes to shore that the cargo on board cannot be prize of wreck.¹⁹⁸ In 1405 Geoffrey Gallan, a shipmaster from Dublin, freighted 100 tuns of wine on his new ship; it was wrecked by storm off the coast of Cornwall.¹⁹⁹ The tenants on John Arundel's lands broke up the ship. Richard Rede and others had to take the case to chancery. These two examples of shipwreck highlight the difficulty in enforcing the laws of wreck owing to the length of time it took to get justice and the probable lack of knowledge of who had purloined the merchandise.

If there came a time on a ship's voyage to jettison merchandise in order to save a vessel, the

¹⁹⁶ [Chancery.tcd.ie/doc.3/patent roll 18 Edward IV](http://Chancery.tcd.ie/doc.3/patent%20roll%2018%20Edward%20IV) (29/10/2014).

¹⁹⁷ [Chancery.tcd.ie/doc.3/patent roll 18 Richard II](http://Chancery.tcd.ie/doc.3/patent%20roll%2018%20Richard%20II) (29/10/2014).

¹⁹⁸ *CPR*, 1385-1389, 387-8; www.admiraltylawguide.com/documents/oleron.html (Date accessed 28/03/2013).

¹⁹⁹ [Chancery.tcd.ie/doc.22/patent roll 6 Henry IV](http://Chancery.tcd.ie/doc.22/patent%20roll%206%20Henry%20IV) (008/10/2013).

shipmaster had to consult with the merchants on board his vessel.²⁰⁰ Although no mention is made in the Queensborough Inquisition specifically to jettison, it is noted under article eight of the *Rôles de Oléron*, which gave a distinct set of circumstances shipmasters had to follow with regard to the throwing of commodities overboard. In May 1285 Edward I issued a mandate clarifying the responsibilities to shipmasters, crew and merchants on ships of the realm. Shipmasters were not to seek full freight charges for jettisoned goods. All goods saved with the exception of ship fittings, armour, utensils could be used in restitution to those who lost cargo.²⁰¹

Theft on board ship

It was not just shipmasters and merchants who were governed by maritime laws. Crews on ships also had responsibilities. The *Rôles de Oléron* were invoked in the case of *Pilk vs Venere* (1351). This dispute was heard in the Tolzey Court in Bristol. It centred on the argument of whether a shipmaster was responsible for the theft of cargo by crew members. The court decided that he was.²⁰² The safety of crew members was also enshrined in the *Rôles de Oléron*. The crew could find protection in the ship's shrine; they could freight small cargoes on board. When the occasion arose sick mariners had to be put ashore for care.²⁰³ The rights of crew members on board ships with denizen status in the realm were further strengthened by the aforementioned mandate issued by Edward I in 1285.²⁰⁴

There were, however, complications with the crossover between mercantile and maritime law. On occasion legal cases started out as straightforward but subsequently, possibly as a result of

²⁰⁰ Ward, *The World of the Medieval Shipmaster*, 95-7.

²⁰¹ *CPR*, 1281-1292, 168.

²⁰² Ward, *The World of the Medieval Shipmaster*, 18-20.

²⁰³ Friel, *Maritime History of Britain and Ireland*, 62.

²⁰⁴ *CPR*, 1281-1292, 168.

an unsatisfactory resolution to the initial case initiated another breach of law. The case of *Gernesey vs Henton* in 1389 started out as a commercial brief. Gernesey was trying to recover money for freight of goods. The case was brought before William Thomer, a deputy admiral at Bridgewater. Another case evolved out of this litigation. *Henton vs Kedewelly* (Thomer's bailiff) centred on breaking and entering to recover goods for the original debt. Subsequently, from 1389 to 1404, the case was appealed to the Admiral's Court, Privy Council and then directly to the King's Court.²⁰⁵ If a case were not properly defined as either a merchant or maritime legal dispute, complications arising from confirmed venue and court jurisdictions ensued.

The capture of vessels at sea

The capture of ships was a major issue for the judiciary in the fifteenth century. In 1450 a less severe act superseded a more draconian act of 1414 in relation to the capture of ships at sea.²⁰⁶ The chancellor had jurisdiction over issues of truce breaking and unlawful purloining of ships. After the accession of Edward IV in 1460 it became the rule that petitioners' requests regarding the capture of ships at sea were heard before the king.²⁰⁷

Several factors complicated the judicial resolution of disputes resulting from the capture of vessels. For one, legal cases could be complicated by either party over estimating their losses. In 1451 Edmund Mulso had freighted the *Mary of Dublin*, for London, with hides, frieze mantles, tallow and a prisoner of Brittany; the total value of the cargo was £157 3s 3d. Thomas Bodulgate took the vessel and tackle valued at £100 and all its goods to Fowey. Mulso valued his losses at £400, Bodulgate argued that the goods were not of the value that

²⁰⁵ Ward, *The World of the Medieval Shipmaster*, 40.

²⁰⁶ Tomlins & Taunton, eds, *Statutes of the Realm*, ii, 198, 199, 451.

²⁰⁷ Gardiner, ed., *A Calendar of Early Chancery Proceedings relating to West Country Shipping*, p. xvii.

Mulso put on them and contested Mulso's version of the events that unfolded in the taking of the vessel. Bodulgate also argued that the bill should be determined by common law and that it was not substantive enough for him to answer in the chancery court because the ship was owned by others.²⁰⁸

The crown also had to ensure that truces and treaties were observed. For example, in 1396 an Anglo-French truce was agreed for twenty-eight years.²⁰⁹ This did not stop French ships from being attacked in Irish waters. On occasion the king's subjects ignored truces in both England and Ireland. In 1412 the crown sent a writ to Dublin, Drogheda and Waterford, Bayonne and Bordeaux stating that Breton ships were being despoiled. Cyron Pasceu master of the *St David* had his ship taken despite the truce between the king and duke of Brittany. Restitution of the goods was the outcome. Devon and Cornish mariners despoiled the *Notre Dame* of Gironde despite the treaty. The king ordered the goods to be returned to their owners. Those who did not comply, they were to answer to the court of chancery. English mariners were not blameless either. In the same year, four Breton ships were captured by English subjects. The commodities taken from the Breton vessels were to be returned. In 1424 the crown commissioned an enquiry, requesting the mayor and sheriff at Bridgewater to preside over a case on a complaint made by James Tehier of Brittany directly to the king.²¹⁰ In all these cases restitution of goods to their owners was decreed. English monarchs had to be seen to be powerful enough to enforce laws. Those who did not comply had to appear in the chancery court.²¹¹

²⁰⁸ Gardiner, ed., *A Calendar of Early Chancery Proceedings relating to West Country Shipping*, no. 70 a, b, c, d, 78-80.

²⁰⁹ Gardiner, ed., *A Calendar of Early Chancery Proceedings relating to West Country Shipping*, p. xiii.

²¹⁰ *CPR*, 1422-1429, 220, 221; *CPR* 1408-1413, 175, 178, 373, 381, 433.

²¹¹ D. Gardiner, ed., *A Calendar Of Early Chancery Proceedings Relating To West County Shipping 1388-1493* (Torquay, 1976), p. ix-xix.

Complex mercantile legal disputes

In 1483 the merchants of Waterford initiated a complex legal case that could possibly have had serious political ramifications to English rule in Ireland. The case was based on an English statute passed in 1429.²¹² This statute stated that staple commodities wool, hides and skins exported from England, Wales or Ireland to the continent were to be sent only to Calais, on forfeiture of the value of the cargo. This was not advantageous for Irish merchants and in 1364 merchants from Drogheda and Waterford had already complained that it was not profitable for them to follow this rule. In 1403 John Conner encountered the same difficulty.²¹³ Essentially the English parliament probably wanted the export wool, hides and skins on the continent to be made through Calais. It was perhaps an opportunity to collect extra levies from shipping both denizen and alien. Calais was almost entirely inhabited by English merchants, a secure location to transact continental trade.²¹⁴ In 1483 the staple law caused a serious legal issue for Irish merchants, when it was discovered that Waterford merchants had been exporting staple goods to Sluys in Flanders. This was possibly a regular practice. The king's treasurer, Sir Thomas Thwaites, discovered where the ship was heading and declared the cargo forfeit. The Waterford merchants petitioned the king to have their cargoes restored but this was denied. Royal charters granted to Waterford merchants in 1390 to trade on the continent were valid; but the contention that Ireland had its own parliament to make and change its own laws on such matters was rejected.²¹⁵ The judgement handed down recognised the legislative power of the Irish parliament, but stated 'but this is understood of lands and things in that land only to be affected; but the persons are the king's subjects and subjects are bound by anything to be done with Ireland against the Statute as in the

²¹² Tomlins & Taunton, eds, *Statutes of the Realm*, ii, 255.

²¹³ O'Brien, 'Commercial Relations between Aquitaine and Ireland', 38; *CCR*, 1402-5, 221.

²¹⁴ W. Johnston, 'The English Legislative and the Irish Courts', *Law Quarterly Review*, xl (1924), 99. Calais, of course, remained an English enclave in France until 1558.

²¹⁵ *CCR*, 1388-1392, 211.

inhabitants of Calais, Gascoigne and Guisnes were they subjects'.²¹⁶ This case highlights England's ability to influence the trade of Medieval Ireland.

Piracy in the Irish Sea Zone circa 1350 – 1550

One of the greatest impediments to trade in the Middle Ages was piracy. Piracy was either the unsanctioned taking of goods, persons and ships at sea or it was sanctioned by the crown through privateering. Postan argued that most pirates were opportunistic merchants rather than professional pirates and that the same people often operated as privateers under official licences from the crown.²¹⁷

Unsanctioned piratical activity was carried out off all Irish coasts. The narrow straits between the north coast of Ireland and Scotland were difficult to navigate because of the actions of Scottish and Hebridean mariners in the early fourteenth century. Be it piracy or acts of war, victuals were taken from captured vessels and important crew members were ransomed for provisions.²¹⁸ Further difficulties arising from the taking of ships, victuals and personnel occurred for example in 1337, 1345-7, 1385/6 and in 1518.²¹⁹ For this reason Bristol ships going to Iceland favoured a much longer route circumnavigating the south coast of Ireland.

²¹⁶ Johnston, 'The English Legislative and the Irish Courts', 101.

²¹⁷ M. Postan, *Medieval Trade and Finance* (Cambridge, 1973), 113. *CPR*, 1350-1354, 24, 543; *CPR*, 1374-1377, 45; *CPR*, 1385-1389, 492; *CPR*, 1399-1401, 254; *CPR*, 1408-1413, 65, 178, 373, 381, 433, 310; *CPR*, 1413-1416, 65, 115; *CPR*, 1416-1422, 209, 418; *CPR*, 1422-1429, 104/5, 220, 221; *CPR*, 1441-1446, 201; *CPR*, 1446-1452, 215, 238; *CPR*, 1452-1461, 119, 60, 61, 612, 608, 175, 258, 615; *CPR*, 1461-1467, 33; *CPR*, 1467-1477, 354; *CPR*, 1467-1477, 450; *CPR*, 1476-1485, 78, 79; *CPR*, 1494-1509, 41; *Letters & Papers Foreign & Domestic Henry VIII, 1535*, 866; *Letters & Papers Foreign & Domestic Henry VIII*, xii, 613; *Letters & Papers Foreign & Domestic Henry VIII*, xiii, 1538, 872; *Letters & Papers Foreign & Domestic Henry VIII*, xiv, 1539, 471, 21.

²¹⁸ *CPR*, 1317-1321, 313; *CPR*, 1321-1324, 121, 126.

²¹⁹ O'Neill, *Irish Merchants and Mariners*, 120-121; De Courcy Ireland, *Ireland & the Irish in Maritime History*, 81; Carus-Wilson, 'The Overseas Trade of Bristol' 194; TNA E122/20/5/ fo. 31; J. Vanes, *The Ledger of John Smythe 1538-1550* (Bristol Record Society, 1971), 25.

The seas around parts of Ireland were also intermittently unsafe for shipping. In 1381-2 the men who had charge over Irish ports were commissioned to muster ships against the Gaelic-Irish O'Driscoll clan who preyed on shipping off the south and west coast of Ireland.²²⁰ The O'Driscolls' unsanctioned piratical activity continued into the sixteenth century. Their actions culminated in 1538, when Finian O'Driscoll, his son Conor and Gill Duff took a Portuguese ship, *Ion Sancta Maria de Feci*, which was freighting wine from Waterford. The ship had been blown by a storm into Baltimore, where the crew was imprisoned and its cargo taken. The news reached Waterford and Pierce Dohen sailed with his men to aid the Portuguese sailors. They released the Portuguese prisoners, who vowed to return. The mayor, with three ships carrying four hundred men, arrived back in the region. They took the O'Driscoll castle, and burned the village, the abbey, the surrounding islands and the parish church.²²¹ Intermittent piratical activity by the O'Driscolls was an impediment to the Anglo-Irish mariners transacting their trade with foreign traders. The interruption to trade caused by piracy especially after 1460 was a serious matter for the Anglo-Irish controlled ports because the contraction of the lands surrounding the major port towns in the sixteenth century made it vital to convey victuals and wine by sea in and out of these urban centres, to provide victuals to the populations of the towns.

Occasionally in the fourteenth and fifteenth century war and privateering sanctioned by the respective kingdoms in Spain and France was perpetrated in ports and off the coast of Ireland. Mariners occasionally engaged in piracy rather than trade were known to attack vessels in port. The ports of Waterford and Cork were under threat at the latter end of the fourteenth century. In 1375 ships and goods were destroyed in Waterford harbour. In 1388, in the same port, Spanish, French and English rebels destroyed a ship in the harbour. Cork did not escape

²²⁰ O'Neill, *Irish Merchants & Mariners*, 126.

²²¹ J. Gardiner, ed., *Letters & Papers Foreign & Domestic Henry VIII*, xiii, Part 1 (Vaduz, 1965), 321.

piratical attention either.²²² In 1423 the mayor of Cork complained that the town was been regularly attacked by the Gaelic Irish. At the beginning of the fifteenth century Galway had to pay a tribute to the O'Malley clan of Connacht for protection of the city. This protection turned to piracy at the end of the fourteenth century Nicholas Kent, a burgess of Galway, had to go to Bristol for aid. Four Bristol ships were dispatched to Galway to deal with those threatening the city.²²³ Nicholas Kent and other Galway merchants were, however, involved in taking of £400 from William Clerk (owner of the *Gracedieu* of Dartmouth) when he entered Galway, having traded in Flanders and Spain.²²⁴

In an attempt to protect the seas surrounding the realm from the warlike intentions of other kingdoms, admirals were appointed in strategic coastal locations around the realm. For example in 1382 William Spalding was appointed admiral of Ireland in Waterford.²²⁵ The scope of enquiries for admirals' courts were set out in the Queensborough Inquisition from 1375 to 1403. Articles fifty-one to fifty-four dealt with the roles of judges, disruption and weights and measures. In fact most of the articles from eighteen to seventy concerned the share of prizes, unlicensed export and many other issues at sea.²²⁶ Admirals did, however, overstep their remit of authority; in 1402, the Irish parliament decreed that the admirals and their deputies only concern themselves with matters at sea and not those on land.²²⁷

In 1467-8 plans were put in place to fortify Lambay Island, an island close to the inlet at Dublin harbour. Lambay was a good location to lay in wait for unsuspecting shipmasters sailing in the vicinity. This island appeared to be a haven for Bretons, French, Spaniards and

²²² *CPR*, 1374-1377, 45; *CPR*, 1385-1389, 492, 495; *CPR*, 1422-1429, 104-5.

²²³ *CPR*, 1399-1401, 254.

²²⁴ *CPR*, 1401-1405, 134.

²²⁵ [Chancery.tcd.ie/doc. 81/patent roll 8 Richard II](http://Chancery.tcd.ie/doc.81/patent%20roll%208%20Richard%20II) (28/10/2014). In fact, admirals were appointed regularly in Ireland throughout the later fourteenth and fifteenth centuries.

²²⁶ Twiss, ed., *Black Book of the Admiralty*, i, 133-177.

²²⁷ [Chancery.tcd.ie/doc. 255/patent roll 3 Henry IV](http://Chancery.tcd.ie/doc.255/patent%20roll%203%20Henry%20IV) (28/10/2014).

Scots who lay in wait for merchant ships.²²⁸ It is difficult to discern if pirates from these regions or nationalities were acting under letter of marque or were engaged in privateering. The fortifications were, however, not complete by 1496.²²⁹ Pirates occasionally landed in secrecy, and they used the ebb of the tide to attack on the mainland. At this juncture as previously noted in this chapter, the Abbott of Holmpatrick was given the customs and subsidies of Skerries in order to build a fortified harbour from Skerries to the isle of Mellock.²³⁰ The attacks by the Gaelic Irish in the late fourteenth century in Drogheda forced vessels to try and dock in the creeks near Dublin. Pirates probably preyed on ships coming from Bristol, Chester and Liverpool to ports and creeks in the region from Dublin to Dundalk. Attacks of this nature made trade between the ports on the west coast of England with Ireland very difficult.

Privateering was a mechanism used by the crown to unleash its merchant shipping in times of war to prey on the king's enemies. As England had little by way of an organised navy before 1500 the privateers implemented the king's wishes by attacking vessels of hostile kingdoms. The prize for the shipmasters and owners was that they could claim two-thirds of the cargo of captured ships with the remaining third going to the king.²³¹ Problems arose if attacks occurred during times of truce or if the goods on board captured vessels were owned by merchants of a country at peace with the king. Sometimes such mistakes were caused by the government's failure to communicate with the privateers in a timely fashion. It was difficult to communicate royal messages about truces quickly and occasionally unlawful acts of privateering or piracy ensued. In 1414, when Henry V nullified a truce between England and France, a statute was invoked making it high treason to ignore safe-conducts or to hide those

²²⁸ O'Neill, *Merchants and Mariners*, 125.

²²⁹ [Chancery.tcd.ie/doc. 17/patent roll 11 Henry VII \(28/10/2014\)](http://Chancery.tcd.ie/doc.17/patent%20roll%2011%20Henry%20VII%20(28/10/2014).).

²³⁰ [Chancery.tcd.ie/doc. 17/patent roll 11 Henry VII \(28/10/2014\)](http://Chancery.tcd.ie/doc.17/patent%20roll%2011%20Henry%20VII%20(28/10/2014).).

²³¹ *CPR*, 1399-1402, 168, 349.

who offended against these mandates.²³² This was a reaction to a previous treaty in force from 1408; ten ships' captains and owners complained about Richard Dychet of Exeter and men from other ports in England, who contravened the treaty between Brittany and the king of England by attacking their vessels.²³³ The act of 1414 did little to alleviate the issue of truce breaching. Henry V decreed that truce breaking was an act of treason. Later on, however, successive acts of 1450, 1452 and 1460 did have an impact on the behaviour of those who broke truces.²³⁴ Ships freighting wine from English held territories in France to Bristol were especially vulnerable to attack. In 1408 a ship laden with wine and sailing from La Rochelle to Bristol was attacked by John Williams in a barge and the cargo taken to Ireland. In 1472 John Mercier, master of a Breton ship called *Le Saint Goustina*, which was delivering goods from Waterford to Brittany, was attacked by Cornish pirates, in contravention of the truce between the duke of Brittany and the king.²³⁵

There was a legal mechanism to counteract privateering used by shipmasters entering alien controlled seas. Ships entering or exiting the Irish Sea could purchase expensive safe-conducts in order to protect their ships, goods and personnel. Some foreigners obtained safe-conducts through Bristol merchants by paying £12 per voyage. On the other hand John Wylly, a Bristol brewer purchased a safe-conduct from the French king for 40 marks in order to trade with his ship the *Julien* in French waters.²³⁶ Safe-conducts were legal documents issued by government to individuals or groups who wished to travel safely to or through the monarch's lands of issue; they were generally enrolled in England's case in the treaty rolls or

²³² Gardiner, ed., *Calendar of Chancery Proceedings for the West Country Shipping*, p xiv.

²³³ *CPR*, 1405-1408, 418.

²³⁴ Gardiner, ed., *Chancery Proceedings Relating to West Country 1388-1493*, p. xvii; Tomlins & Taunton, eds, *Statutes of the Realm*, i, 198, 199, 451.

²³⁵ *CPR*, 1408-1413, 65; *CPR*, 1467-77, 354.

²³⁶ Carus-Wilson, 'The Overseas Trade of Bristol', 242.

patent rolls.²³⁷ They were usually valid for one or two years though some were only issued for a few months. Still, safe-conducts did not guarantee safety of travel on the sea.²³⁸ In 1354 the *St Marie*, coming from La Rochelle to Bristol under safe-conduct, was stopped by the *Bartholomew* of Plymouth in Cornwall. The master of the *St Marie* refused to pay 200 florins and was forced to abandon ship.²³⁹ In 1443 merchandise on the *Anthony* of Biscay bound for Dalkey in Ireland was captured by John Colville despite travelling under the protection of safe-conducts. The goods were then taken to Bridgewater.²⁴⁰ Ship owners and masters possibly sought safe-conducts to protect their investments at sea. Safe-conducts were a form of protection against the loss of goods, ships and personnel; they were in some ways a substitute used by kingdoms for not having a standing navy.

Safe-conducts did offer a chance of restitution but the process could be protracted. For example in 1475 John Payn and John George from Bristol lost a ship, despite their Spanish safe-conduct, by a Castilian ship at Deva with its master having a letter of marque (a letter issued by a monarch which permitted the recipient approval to attack vessels of a named jurisdiction). Payn and George should have received restitution in the Castilian court. They did not receive compensation from Castile but in 1482 Payn received a grant from the English king leviable on customs and subsidies granted to Guipúzcoan merchants. The protracted nature of proceedings was, however, of no use to George who had already died while Payn had spent three quarters of his recompense fighting his case.²⁴¹ A similar situation arose in the 1540s for Walter Piparde who petitioned the king's council through the council of Ireland to write on his behalf to the French king. He and his goods had been robbed at sea by

²³⁷ W. Childs, *Anglo-Castilian Trade in the later Middle Ages* (Manchester, 1978), 48.

²³⁸ O'Brien, 'Commercial relations between Aquitaine & Ireland', 47.

²³⁹ *CPR*, 1350-1354, 543.

²⁴⁰ *CPR*, 1441-1446, 201, 247.

²⁴¹ Childs, *Anglo-Castilian Trade*, 162.

Breton pirates. It took six years to retrieve a portion of the money owed.²⁴² Mariners incurred significant costs if they allowed safe-conducts to expire. If there was a delay in using the document it became null and void. The earl of Warwick, who was transporting personnel to Ireland, requisitioned Wylly's vessel and delayed the merchant's plans. When Wylly got his ship back the safe-conduct had expired. Furthermore, the merchants who freighted goods in his ship, the *Julian*, were now suing him for late delivery.²⁴³

The policing of the seas caused further difficulties in times of war. Sanctioned piracy broke out in ports and seas around Ireland occasionally during the Hundred Years' War. The conflict was not confined to the English Channel. For example, in 1380 Spanish and French sailors engaged in a warlike activities in Kinsale which resulted in the deaths of over 400 people.²⁴⁴ In 1388 ships, barges and vessels were captured in Waterford by French and Spanish mariners. In the early fifteenth century the English Channel and Irish Sea was the theatre of hostilities for the Hundred Years' War. Privateers sustained the conflict involving many kingdoms in the Irish Sea, their actions drew out the hostilities at sea especially from c.1380 to 1409. They included some prominent English mariners who acted as privateers in the Irish Sea. The Hawley family (already mentioned on page 17) had become powerful, its actions possibly speeding up the introduction at a further date of a standing navy. In 1379 John Hawley was given a licence to engage the king's enemies with seven ships in his ownership. Hawley was mayor of Dartmouth on many occasions; he was also an MP, a collector of customs, a ship-owner and a merchant. There was, however, an allegation in 1386 of piracy against him, when two of his ships tried to capture a Genoese vessel. The Hawleys had the ideal craft for engaging in their piratical activities. Even their vessels were

²⁴² C. Ford, 'Piracy or Policy: the Crisis in the English Channel 1400-1403', *Transactions of the Royal Historical Society fifth series*, xxiv (UCL, 1979), 63-72.

²⁴³ Carus-Wilson, 'The Overseas Trade of Bristol', 242.

²⁴⁴ *CCR*, 1379-1381, 276, 367.

designed for privateering rather than as merchant ships. These included a 56-ton balinger, the *Craccher*. Balingers were ideal for piracy because of their manoeuvrability. In 1389 he tried to capture another two ships. Despite or because of these actions, power was given to Hawley in 1400 to command the English fleet which emboldened Hawley's actions of harassing shipping for the next decade. In 1403 with his son John Hawley, and Thomas Norton of Bristol, they seized seven Castilian ships. These ships carried valuable cargoes belonging to many towns and regions including Florence, Genoa, Flanders, Navarre and Castile.²⁴⁵ At this juncture the king had to intervene in Hawley's activities. Once unleashed the actions of privateers was difficult to reign in. In an attempt to control privateering Hawley junior was punished by imprisonment in 1406.²⁴⁶ The Hawleys were, however, not the only important family involved in multifarious maritime activities. The Courtenay family, whose patriarch was the earl of Devon, had a ship *Le Petre Courtenay*. On one of their voyages the Courtenays boarded the *Le Marie* of Dordrecht. The ship was despoiled of approximately 25 tons, belonging to John Jay and other merchants of Bristol. The other ship which assisted in the attack was the *Gaylot*, partly owned by John Fennel.²⁴⁷ Henry V probably realised that to protect the realm from Breton and other French ships as well as those of their allies from Gascony he had to capture, construct and create his own navy.²⁴⁸

Although the conflict at sea between 1400 and 1409 has been examined at various stages through the thesis, it must be stated that this was an unusual and complex conflict that drew in ships from much of the continent. In 1402 the Castilian ambassador presented to the king's

²⁴⁵ S. Pistono, 'Henry IV and John Hawley, Privateer, 1399-1408', *The Devonshire Association for the Advancement of Science, Literature and Art*, III (1979), 145.

²⁴⁶ M. Kowaleski, 'The Port Towns of Fourteenth Century Devon' in M. Duffy *et al*, eds, *The New Maritime History of Devon*, i, *From Early Times to the Late Eighteenth Century* (London, 1992), 68; J. Appleby, 'Devon Privateering from Early Times to 1688' in M. Duffy, eds, *The New Maritime History of Devon*, i, *From Early Times to the Late Eighteenth Century* (London, 1992), 91.

²⁴⁷ Appleby, 'Devon Pirating from Early Times to 1688', 92.

²⁴⁸ Friel, *The Maritime History of England and Ireland*, 58-59.

court twenty-nine offences committed by English pirates between 1401 and 1402. The English counter-claimed stating that eleven offences were perpetrated on English ships by those of Castile.²⁴⁹ The conflict spilt over into the Irish Sea; on a number of occasions the mayor of Bristol was asked by the crown to bring armed men on their ships to protect their victuals.²⁵⁰ Possibly at this juncture articles 19, 20 and 58 were added to the Queensborough Inquisition to respond to the activities of pirates and also more immediately to react to a French force landing to aid Glyn Dwr in Wales in 1403.²⁵¹ French forces even cut off supplies of victuals to English held lands in Bayonne. Garcias de Arnauld was issued a licence in 1403 to source eighty tuns of grain and beans from Bristol for the relief of the port.²⁵² To protect the king's southern ports John Hawley and Richard Spicer and others, including Mark Mixto and Henry Pay, were given command of an unofficial fleet. The conflict simmered for the next two years, culminating in the capture of ships by both French and English privateers. It was not until March 1404 that an Anglo-French truce was sealed stipulating that the unlicensed privateering by both sides must cease.²⁵³ The conflict at sea eased in 1404. In order to protect vessels trading within the English realm many more safe-conducts were still issued after 1425.²⁵⁴ Even though the main theatre of the conflict had been near the Cinque Ports, it did not preclude vessels traversing the Irish Sea to elude attack. The taking of ships and goods at sea continued throughout the fifteenth and sixteenth centuries, though probably not to the same extent as between 1400 and 1409. A Bristol vessel freighting goods from Ireland was captured by Bremen pirates in 1445.²⁵⁵ In 1539 the

²⁴⁹ Childs, *Anglo-Castilian Trade*, 43.

²⁵⁰ *CPR*, 1401-1405, 298, 300.

²⁵¹ Twiss, *Black Book of the Admiralty*, i, 149; Ward, *The World of the Medieval Shipmaster*, 213.

²⁵² *CPR*, 1401-1405, 325.

²⁵³ C. Ford, 'Piracy or Policy: the Crisis in the English Channel 1400-1403', *Transactions of the Royal Historical Society fifth series*, xxiv (UCL, 1979), 63-72.

²⁵⁴ Childs, *Anglo-Castilian Trade*, 48-49.

²⁵⁵ D. Ditchburn, 'Bremen Piracy and Scottish Periphery: The North Sea World of the 1440s', in A. Macinnes, T. Riis and F. Pedersen, eds, *Ships Guns and Bibles in the North Sea and Baltic States, c.1350-c.1700* (East Linton, 2000), 6.

Matthew and the *Margaret* of Bristol were set upon by the *Santa Maria* of Deva (Spain) on their way from La Rochelle to Bristol.²⁵⁶ Occasionally in the first half of the sixteenth century, acts of war were carried out in Irish ports. In 1540 Johan de Monstier's ship *Le Salveur* of Dieppe was plundered in Kinsale by the crewmen of a hulk from Hamburg. The owners of the hulk had promised to compensate them for their losses. The clerk of the hulk was imprisoned in Calais until the situation was resolved.²⁵⁷

The focus of both sanctioned and unsanctioned piracy included not only attacks at sea but also atrocities perpetrated in bays and harbours. It is my intention to examine how serious a threat this was in Ireland. Pirates and privateers were probably incentivised to attack shipping at anchor after 1370 because of new legislation enacted that ships should travel in convoy, with extra men on board for protection.²⁵⁸ Attacks of ships in harbours may have offered easier targets in contrast to attacking heavily armed flotillas at sea. In 1454 Michael Tregury, archbishop of Dublin, was abducted in Dublin Bay and taken to Ardglass for ransom.²⁵⁹ Acts of criminal intent, though sporadic, indicate shipmasters from all jurisdictions had to be vigilant in port. It was not merely that English and Breton ships were involved in piracy; some crafts from other European locations were engaged in piratical activities. George Donell and others from Minehead had their forty ton ship taken by mariners from Youghal. In recompense until restitution of their losses were made good, Donell was allowed to take any ship in Youghal.²⁶⁰ However, the most audacious instance of an Irish act of piracy occurred in 1477 when a 320-ton vessel owned by Bartholomew Couper was seized coming into Waterford. The *Mary London* had just returned from Santiago with

²⁵⁶ J. Vanes, ed., *The Overseas Trade of Bristol in the Sixteenth Century* (Bristol Record Society, 1979), 104.

²⁵⁷ *Letters Foreign & Domestic Henry VIII*, xv, 1540, 21.

²⁵⁸ Hutchinson, *Medieval Ships & Shipping*, 98.

²⁵⁹ O'Neill, *Merchants & Mariners*, 124.

²⁶⁰ *CPR*, 1494-1509, 41.

400 pilgrims when 800 men on three ships robbed the owners and pilgrims of 140 marks. Nicholas Devereux, John Muligan and Philip Sergeant from Waterford were owners of the vessels. The shipmasters were from Youghal. Bartholomew Couper was taken hostage and held for three years.²⁶¹ Ports around Ireland were vulnerable to attack, from Youghal to Kinsale, Rathlin Island, Carlingford, Carrickfergus, Waterford, Dungarvan and Galway being particular targets.²⁶² Attacks in bays and harbours continued into the late fifteenth-century. It was not only boats from the realm that were vulnerable to attack; foreign vessels, too, were still occasionally set upon in Irish havens. In 1484 Octavian, the archbishop of Armagh witnessed three Breton ships entering Drogheda on the Louth coast. Within four hours two vessels from Liverpool captured two of the Breton ships – the *Michell* of Garrant and the *Katherine* of Croswyk – and took them away, with their merchandise.²⁶³ Attacks by pirates in havens and the possibility of a ship being taken as recompense from a native of that port possibly contributed to merchant shipping transacting their business in port with great haste.

One Irish port in particular in Ireland is often cited as a haven for pirates. Kinsale has perhaps been unfairly labelled by Lyons, O'Neill and Carus-Wilson as a port utilised regularly by pirates.²⁶⁴ It was apparently a prosperous location, judging from the number of ships trading with havens on the west coast of England. Kinsale was sometimes, however, a safe haven for vessels and ships' captains who flouted the law.²⁶⁵ For example, the mayor of Bristol requested that Kinsale merchants be arrested in 1447 because John Galway from Kinsale had captured an English vessel. The barge seized by Galway was owned by Richard

²⁶¹ CPR, 1476-1485, 78.

²⁶² M. Lyons, 'Maritime Relations between Ireland & France', *Irish Economic & Social History*, xxvii (2000), 21.

²⁶³ M. Sughi, ed., *Registrum Octaviani: The Register of Octavian de Palatio Archbishop of Armagh 1478-1513*, i (Dublin, 1999), 114.

²⁶⁴ Lyons, 'Maritime Relations between Ireland & France', 21; O'Neill, *Merchants and Mariners*, 128; Carus-Wilson, 'The Overseas Trade of Bristol', 193.

²⁶⁵ O'Neill, *Merchants & Mariners*, 128.

Clyvedon, one of the valets of the crown.²⁶⁶ Two years later, in 1449, the Bristol ship *La Marie* captured *La Carveule*, a 55-ton Spanish vessel, off the south coast of Ireland. *La Marie* was then attacked by eight people on ships from Kinsale. Thomas Hangagh, one of the protagonists who entered the port of Kinsale with a cargo of fish, the following year, had to account in court for his part in piratical activities involving the *Marie* and *Carveule*. They took the goods valued at £160 and distributed them around the town.²⁶⁷ This act of piracy may have been sanctioned, since the war between Castile and England was ongoing.²⁶⁸ The skipper of the Bristol vessel, John Wyche, sued for his losses through the English chancery. It is likely that Wyche legally captured the Spanish vessel but that Kinsale pirates then illegally took his prize.²⁶⁹ In 1529 Thomas Sall seized goods on the *Christopher* of Kinsale – from the vessel owned by William Roche and others for not paying customs.²⁷⁰ These examples do not necessarily support the view that Kinsale was always a haven for pirates. There were but a half dozen recorded instances of piracy in Kinsale over a 200 year period. O'Neill, Childs and Carus-Wilson considered these incidents constituted consistent piratical activity, but this was not the case.²⁷¹ If Kinsale was seen to be a haven for pirates with only a handful of attacks in two centuries, then it poses the question of how rampant piracy was in the later Middle Ages in the bays and harbours in Ireland. It would appear from the evidence that attacks in harbours (including acts of war) were probably only reported if they were significant occurrences. Small scale skirmishes possibly went unreported.

At the beginning of the sixteenth century the English crown and the king's council sought to end the practice of privateering. The fleets of vessels that had acted as privateers for the

²⁶⁶ F. Bickley, ed., *The Little Red Book of Bristol*, ii (Bristol, 1900), 232.

²⁶⁷ De Courcy Ireland, *Ireland & the Irish in Maritime History*, 82.

²⁶⁸ Childs, *Anglo-Castilian Trade in the Later Middle Ages*, 50.

²⁶⁹ CPR, 1452-1461, 60-61; Dryburgh & Smith, eds, *Handbook of Select Calendar of Sources*, 129.

²⁷⁰ Vanes, *The Overseas Trade of Bristol in the Sixteenth Century*, 62.

²⁷¹ Childs & O'Neill, 'Overseas Trade', 523.

crown during the Hundred Years' War had possibly become disruptive to trade, causing freight rates to rise.²⁷² Indeed, Breton pirates caused serious problems in Irish waters as did reprisals against Breton shipping in the 1450s, and by the 1480s Breton ships were attacking merchant shipping of all nationalities, despite peace treaties.²⁷³ The royal navy was resurrected (it had been previously disbanded in 1422) in the reigns of Henry VII and Henry VIII. The Royal Navy was probably in place in the final years of Henry VII, with further consolidation under his son Henry VIII.²⁷⁴ Privateering possibly gave too much autonomy to wealthy mariners whilst simultaneously causing severe difficulties to merchant shipping.

Piratical attack and defence

In times of hostilities, the Irish Sea was a dangerous highway for shipping. This was especially so from 1401 to c.1409. The types and locations of piracy outlined in this section highlight that any ship on the horizon could be friend or foe. Masters of vessels had to be aware of both defensive and offensive tactics when encountering hostilities at sea.

Shipmasters employed a number of strategies for conflict at sea. In the thirteenth, fourteenth and early fifteenth centuries and later vessels needed to get wind advantage on their opponent. Small cannon, longbows and crossbows were used to clear the decks of personnel on opposing ships. The topcastles were then captured before boarding. The deployment of cannon in the fourteenth and fifteenth centuries was perhaps not overused as it slowed a ship down; nevertheless they had their uses because guns created smoke which could help a ship to escape in the ensuing smog. It was best to attack boats of similar or slightly larger sizes.²⁷⁵

If the attacking vessel was much larger, then ramming was a probable solution. In 1440 the 320-ton *Christopher* sank the *George* of Wells using these tactics. It did require, however,

²⁷² O'Brien, 'Commercial relations between Aquitaine & Ireland', 41.

²⁷³ O'Brien, 'Commercial relations between Aquitaine & Ireland', 46-47.

²⁷⁴ Friel, *The Good Ship*, 12.

²⁷⁵ Friel, *The Good Ship*, 141-146.

expert seamanship to engineer this mode of attack.²⁷⁶ By the sixteenth century the tactics of war at sea had changed from exclusively close up combat to initial engagement of ships and ports from a larger distance. The size of vessels and the range of weapons on board ships allowed the initial engagement in battle over a greater distance between opponents.

Until the beginning of the sixteenth century cannon had been the primary defence for ships with the longbow, crossbow, sling and catapult used as secondary protective weapons. Secondary weapons were not particularly effective. The first recorded use of a cannon was on an English cog, *All Hallows* in 1337.²⁷⁷ Guns were certainly present on Henry V's *Gracedieu* in c.1420.²⁷⁸ It was, however, not until the end of the fifteenth century that significant numbers of ships traversing the sea had gunpowder on board.²⁷⁹ The first recorded sinking of a vessel by broadside was in 1513.²⁸⁰ One of the main reasons for the ineffectiveness of canon in the Irish Sea into the sixteenth century was that gun ports could not be incorporated into a clinker-built hull. The strain on the structure was too great.²⁸¹ This change of focus for the crown, apart from the technological advantages canon gave, came about because piracy was probably destabilising the commercial activities in the Irish Sea. Mariners entrusted with these fleets were themselves the worst offenders attacking merchant shipping.²⁸² In 1440 it became royal policy to order sergeants-at-arms in all the major ports on the west coast of England, including Exeter, Bristol, and Bridgewater, to requisition under compulsion thirty boats, including barges and balingers, to combat piracy.²⁸³ Ports in the Irish Sea zone still had to protect themselves. For example, in 1505 the town of Limerick

²⁷⁶ Friel, *The Good Ship*, 141.

²⁷⁷ K. DeVries, 'The Effectiveness of Fifteenth-Century Shipboard Artillery', *The Mariner's Mirror*, lxxxiv (1998), 390.

²⁷⁸ Carpenter-Turner, 'The Building of the Gracedieu', 69.

²⁷⁹ J. Loughton, *Life in a Late Medieval City, Chester 1275-1520* (Oxford, 2008), 174.

²⁸⁰ DeVries, 'Shipboard Artillery', 389.

²⁸¹ DeVries, 'Shipboard Artillery', 386.

²⁸² Childs, *Anglo-Castilian Trade*, 161.

²⁸³ *CPR*, 1436-1441, 411.

chose to construct a large galley of approximately 40 metres in length to patrol the waterways from the coast into Limerick city.²⁸⁴ In 1537 Bristol and the Welsh ports were perhaps also encountering serious problems to their trade. Philip Oibbys of Tenby had his ship robbed on the Cornish coast. Two French ships had captured a fishing boat off Milford Haven. Worse was to follow as French pirates waiting for ships from Ireland, England and Wales attacked vessels they came across on their way to the biennial fairs staged in Bristol.²⁸⁵ Shipmasters of merchant shipping had to protect their ships, crews, merchants and cargo and regions who wished to have vessels transport victuals to their havens had to keep harbours protected from attack.

Monarchies gave at the very least tacit approval to privateering, especially in times of war, allowed an unpaid navy to keep a conflict simmering.²⁸⁶ This tactic allowed merchants and privateers to concentrate on piracy to the possible exclusion of their trading activities, especially when trade became stagnant because conflict had caused havens to be closed off.²⁸⁷ The reintroduction of a navy in the sixteenth century probably gave the king more control over defence of the realm. This in turn helped protect merchant shipping.²⁸⁸ In 1512 the English navy engaged with the French in a sea battle with the resultant loss of the *Regent*; this suggests that even with control of the navy, loss of ships was likely.²⁸⁹ In 1552 Edward VI had at his disposal thirty-four seaworthy vessels.²⁹⁰ The king had resources to construct larger more robust vessels, probably precluding his ships from being rammed by smaller

²⁸⁴ M. Lenihan, *Limerick: Its History and Antiquities* (Dublin, 1866 reprint Domain), 70.

²⁸⁵ J. Gardiner, ed., *Letters & Papers Foreign & Domestic Henry VIII*, xii (Vaduz, 1965), 225.

²⁸⁶ R. Unger, *The Ship and the Medieval Economy* (London, 1980), 259.

²⁸⁷ M. Postan, *Medieval Trade and Finance* (Cambridge, 1973), 133.

²⁸⁸ J. Hattendorf et al, eds, *British Naval Documents 1204-1960* (Aldershot, 1993), 15. An excerpt from *The Governance of England* written by J. Fortescue, c.1470. 'And though we have not always war upon the sea, yet it shall be necessary that the king have always, some fleet upon the sea, for the repressing of rovers, saving of our merchandise, our fishers..?'

²⁸⁹ Hattendorf, et al, *British Naval Documents*, 81.

²⁹⁰ Hattendorf, et al, *British Naval Documents*, 100-101.

vessels. Although the navy also allowed merchant shipping to carry out its function of trade without constantly fearing compulsory requisition, it was not entirely successful at doing so because the bulk of the navy was stationed in the English Channel. In the sixteenth century mariners involved in trade had to continue to protect themselves from the illegal actions of pirates.²⁹¹

Irish Shipmasters and Mariners Traversing the Irish Sea

Irish merchants and seamen trading within and through the Irish Sea are difficult to differentiate from English mariners in the later Middle Ages. The reasons for this are two-fold. The tunnage and poundage customs documents for the ports on the west coast of England do not differentiate between Irish and English mariners: both were regarded as denizens. The other reason is that most, if not all, Irish mariners noted in the customs accounts were of Anglo-Irish origin. There were, however, several shipmasters who frequented Chester, such as Blak Patryck and John Brette, who could be either Gaelic Irish or Anglo-Irish, and there are some shipmasters with gaelicised names in the customs documents for Bristol and Bridgewater.²⁹² (Table 1x). Names of possible Gaelic Irish extraction include Donnel, Nangil and Lawless, all of whom are mentioned in the customs accounts for Bristol and Bridgewater over an extended period.²⁹³ The differentiation between Gaelic Irish and Anglo-Irish mariners by name is difficult. In 1410 a bill was proposed that no Gaelic Irishman should have letters of denization unless he found surety with the chancery. Irish parliament refused, however, to implement the proposed legislation. Gaelic Irish were not protected by law to the same degree as the Anglo-Irish, making their participation in overseas

²⁹¹ Hattendorf et al, *British Naval Documents*, 60.

²⁹² Wilson, *Chester Customs Accounts*, 121, 122, 124.

²⁹³ W. Childs, 'Irish Merchants and Seamen in the late Middle Ages', *Irish Historical Studies*, xxxii, no.125 (2000), 30.

trade difficult to transact.²⁹⁴ A statute in 1463 stated that Irishmen dwelling among the English must take the name of their town, a colour or of a profession. This made it virtually impossible to differentiate between Anglo-Irish and Gaelic Irish seafarers.²⁹⁵ Gaelic Irish were denizens, not aliens; therefore it is not possible to trace specifically Gaelic Irish merchants with any degree of certainty in the customs records for Bristol, Bridgewater, Plymouth & Fowey, Exeter, Dartmouth and Southampton.

Irish shipmasters and mariners were trading on many vessels with ports on the west coast of England. The presence of large numbers of Irish mariners in England in the fifteenth century is indicative of significant Irish involvement in trade with England. Shipmasters on many occasions owned all the cargo onboard a vessel, especially on small vessels travelling to Bridgewater. On other occasions named merchants are listed with specific quantities of cargoes allocated to them. Some of these may have also been crew employed to sail the vessel. As stated earlier in the chapter the Inquisition of Queensborough allowed crew members to transport certain cargoes as part of their wages.²⁹⁶

In 1404-5 the local Chester accounts highlight 330 trade transactions with nearly three quarters mentioning Ireland.²⁹⁷ In the same years, of the seventy-five identified vessels entering Chester from Ireland, seventy-four were from Dublin, Drogheda or their smaller outports.²⁹⁸ However, in the late fourteenth and early fifteenth centuries merchants from the

²⁹⁴ G. Hand, 'Aspects of Alien Status in Medieval English Law, with special reference to Ireland', in D. Jenkins, ed., *Legal History Studies 1972* (Cardiff, 1975), 132-133.

²⁹⁵ H. Berry, ed., *Statutes Rolls of the Parliament of Ireland, First to the Twelfth Years of the Reign of Edward IV* (Dublin, 1914), 291.

²⁹⁶ Twiss, *Black Book of the Admiralty*, 141. A mariner was allowed to earn ten shillings and the carriage of three dickers of hides from London to Ireland. Stated in article seven of the Queensborough Inquisition in 1385.

²⁹⁷ Childs, 'Ireland's Trade with England in the later Middle Ages', 23; Wilson, *Chester Customs Accounts*, 103-116.

²⁹⁸ Childs, 'Irish Merchants and Seamen', 31, K. Wilson, *Chester Customs Accounts*, 103-116.

east coast of Ireland also traded with Bristol. In 1391 the surviving customs documents show that two merchant ships arrived from Malahide in Bristol, whilst four Dublin and three Drogheda ships entered Bristol in 1403-4.²⁹⁹ It was the outports such as Malahide and Howth that merchants freighted and unloaded ships bound for Dublin and Drogheda. A small number of vessels also entered Chester from Wicklow and from ports on the east coast of Ireland between Drogheda and Carrickfergus. Only a few reached Chester from the southern ports of Ireland. The customs accounts for Chester, however, suffer from many lacunae of detail, offering far less data than the Bristol accounts. The first local customs account that survives in partial form is for the year 1398/9. The Chester accounts are fuller for the early 1400s and there are a number of full civic year local accounts available from 1422 to 1566. It may be stated that merchants from ports north of Wicklow up to Carrickfergus traded with Chester, whilst ports south of Wexford to Kinsale traded with Bristol and Bridgewater and later in the fifteenth century with ports on the south-west coast of England.

Irish merchants can be identified; in some cases their home port is mentioned. For example, John Wolf (Wulf) from Rush made three exits from Chester to Ireland in 1404/5. Likewise, Simon Dryll from Malahide arrived twice in the port of Chester in 1404/5. Most of the other mariners who entered Chester did so only once in this period.³⁰⁰ For example in 1467/8 John Brette, a shipmaster from Dublin, arrived in Chester on the *Peter* in February, April, and July. He, or a namesake, also appeared in Chester in September on the *Katherine*. Merchants with goods from Ireland did not always use the same ship on each occasion to transport their wares. Brette transported cargo for many merchants, whose names differed on each voyage. The only merchant's cargo present on all four of his shipments in 1467/8 was that of John

²⁹⁹ TNA, E122/16/21, m. 1, m. 4; In 1391 John Herald arrived in Bristol on his ship *Le Cog John*, the same for Richard Holbroke on the *Rodebot*; TNA, E122/17/11, m. 3, m. 5, m. 6, m. 7; in 1403-4 four Dublin ships, three Drogheda ships and one from Limerick arrived into Bristol.

³⁰⁰ Wilson, *Chester Customs Accounts*, 104, 106, 109, 112, 114, 8, 9; Z M B II, *passim*.

Fowler.³⁰¹ Ideally cargo holds had to be full to maximise profits. Brette freighted goods for different merchants on each voyage, suggesting that he had to call to many of the smaller creeks in the Dublin region and Drogheda to have sufficient surplus victuals for overseas shipment. Brette and other shipmasters were probably dealing with small scale local producers. Blak Patryck, master of a picard, entered Chester on five occasions from October 1467 to September 1468. In this accounting year Patryck was master on two ships, the *Jericot* and the *Katherine*. Patryck and Brette differed, however, in their assemblages of cargo. The merchants on Blak Patryck's ships remained consistent freighters of goods on each of his voyages.³⁰²

Irish merchants had a significant influence in the trade of goods across the Irish Sea, possibly even more control than English merchants. In the 1404-5 local customs accounts for Chester at least fifty percent of merchants were Irish trading by land and sea.³⁰³ Likewise Irish shipmasters also controlled the trade of commodities from Ireland to Bristol. The export of salmon from Ireland to England in the surviving customs documents between 1378 and 1517 records 132 Irish skippered boats compared to 115 English or foreign craft transporting cargoes to Bristol (Table 3k).³⁰⁴

Ireland's trade with Bristol came almost exclusively from the southern part of Ireland. In the last quarter of the fourteenth century, a significant proportion of all shipping entering or leaving Bristol was from the southern coast of Ireland from Wexford to Kinsale.³⁰⁵ Ships normally left the head port empty and collected cargo in the outports of Bristol on the return

³⁰¹ Wilson, *Chester Customs Accounts*, 121, 122, 124, 127, 130; Z M B II, *passim*.

³⁰² Wilson, *Chester Customs Accounts*, 119-130.

³⁰³ Wilson, *Chester Customs Accounts*, 103-116.

³⁰⁴ TNA, E122 (customs accounts for ports on the west coast of England), *passim*.

³⁰⁵ Childs, 'Irish Merchants and Seamen', 25.

trips to Ireland. These ports included Gloucester, Milford Haven, Minehead, and Ilfracombe.³⁰⁶ At least fifteen Anglo-Irish shipmasters regularly frequented Bristol at the end of the fourteenth century. Robert Doude, for example, brought the *St Mary* in and out of Bristol yearly from 1383 to 1396. His son, Richard, brought the same ship in to Bristol in 1397, and from 1394 to 1404 was the master of the *Trinity* of Cork.³⁰⁷ Some shipmasters, for example William Williams, exited Bristol bound for Ross on at least three occasions in 1397 and 1398 making a number of annual trips with cloth.³⁰⁸

The origin of Irish shipmasters is as equally difficult to decipher as it was to identify merchants of either Gaelic Irish or Anglo-Irish birth. In 1437 one hundred shipmasters and merchants recorded at Bristol came from thirteen different Irish locations. Eight shipmasters came from Kilkenny, one from Callan, two from Rush and Drogheda and one from Galway and Kinsale. The preponderance of shipmasters from Kilkenny may have resulted from a special relationship Kilkenny had with Bristol.³⁰⁹

It is difficult to ascertain if shipmasters frequented more than one port, because full one-year customs accounts for Bristol and Bridgewater only overlap over two accounting periods in the fifteenth century. Even at the beginning of the Tudor kingship Irish shipmasters held sway in the transport of goods to England. In 1485/6 twenty-one Irish shipmasters made the trip from ports in Ireland to England.³¹⁰ In the same year eleven shipmasters transported goods to Bridgewater.³¹¹ David Walsh was probably the only shipmaster to visit both ports; he entered Bristol with fish on the *John* on 20th January 1486 and departed from Bridgewater

³⁰⁶ Childs, 'Irish Merchants and Seamen', 28; D. Taylor, 'The Maritime Trade of the smaller Bristol Channel ports in the sixteenth century' (unpublished PhD University of Bristol, 2009).

³⁰⁷ Childs, 'Irish Merchants and Seamen', 31.

³⁰⁸ TNA, E122/16/34, m. 3, m. 5, m. 7.

³⁰⁹ D. Edwards, *The Ormond Lordship in County Kilkenny, 1515-1642* (Dublin, 2003), 43.

³¹⁰ TNA, E122/20/5, *passim*.

³¹¹ TNA, E122/26/13, *passim*.

with beans and cloth on 13th February. He returned to Bristol on 11th March.³¹²

Irish shipmasters trading between Ireland and England outnumbered other nationalities by a ratio of 3:2. Bridgewater was, however, frequented by probably a much higher percentage of Irish shipmasters and merchants in comparison to other nationalities, albeit in smaller craft. Most Bridgewater accounts just record ships as entering or leaving. The 1481/2 customs account records twenty-nine ship movements, with twenty-eight different Irish shipmasters.³¹³

There are a number of Irish names that occur regularly in the customs accounts. (Table 1.2 a, b, c). In 1482 John Downell on the *Katherine* and Germain Downell on the *Mary*, both from Youghal, frequented Bridgewater. The Donards and the Donells were also prolific shipmasters, albeit with small craft. John Donart (Donard) imported beans from Bridgewater to Youghal on the *Peter* and from Axwater in the first two decades of the sixteenth century. Donart (Donard) was also the merchant.³¹⁴ There appeared to be a number of Donells involved in overseas trade between ports on the west coast of England and Youghal. Maurice Donell, John Donell and William Donell were importing beans and grain to Youghal from Bridgewater, Axwater and Poole in the early years of the sixteenth century. Maurice Donell was the most prolific with his ship the *Christopher* in Bridgewater in 1511, 1519, and in Axwater in 1518, 1519 and 1520; in 1504 John and Nicholas Donell were transporting fish on the *Katherine* to Poole.³¹⁵ Previously, in 1492-3 Cornelius Donnell entered Bristol on three occasions and exited on three occasions from Ireland on the *Margaret* of Bristol. He

³¹² TNA, E122/20/5, fo. 8, 8 v; TNA, E122/26/13, m. 4.

³¹³ TNA, E122/26/8, *passim*.

³¹⁴ TNA, E122/269/9, fo. 2, 3; TNA, E122/27/1, fo. 12; TNA, E122/27/2, m. 2; TNA, E122/27/3, fo. 7; TNA, E122/27/3, fo. 13.

³¹⁵ TNA, E122/27/2, m. 1; TNA, E122/27/3, fo. 6; TNA, E122/27/3, fo. 7; TNA, E122/27/2, m. 3; TNA, E122/27/3, fo. 13; TNA, E122/27/5, m. 2; TNA, E122/27/5, m. 2; TNA, E122/120/10, fo. 3.

was transporting fish. Donnell also freighted goods on other ships including *Le Anne*.³¹⁶ Another Irish name (more than likely Anglo-Irish) prominent in the customs accounts for ports on the west coast of England was the Roche family, who were frequently masters of vessels of Cork, Wexford and Youghal which were recorded coming in and out of Bristol and Bridgewater in the fifteenth century.³¹⁷ Some may possibly have been related to a branch of the Roche family that owned land in Munster from the fourteenth century to the sixteenth century.³¹⁸ There may have been a family tradition in mercantile trade, but, there is no solid evidence to suggest they were related. The Roche name appears as early as 1391, when one William Roche was the master of the *Maribot* departing from Bristol for Youghal.³¹⁹ William Roche may have been an ancestor of the Roche family who frequented the ports of the south west of England in the fifteenth and sixteenth centuries. Philip Roche was master of the *Mary*, bringing beans back to Ireland on a number of occasions in 1487. In 1470 Philip Roche also transported goods to Ireland.³²⁰ A William Roche imported beans to Youghal in 1518, on the *Katherine* from Bridgewater and in 1520 from Minehead.³²¹ A possible relation of William's, Edmund Roche also imported beans on the *James* in 1518 and 1519 from Bridgewater, and in 1520 from Axwater and Minehead.³²²

The treatment of Irish mariners and merchants on the west coast of England differed from port to port. At Chester, Irish merchants were generally held in higher regard than those at Bristol.³²³ Between 1474 and 1475 the merchant guild of Chester elected seven Irishmen out

³¹⁶ TNA, E122/20/9, fo. 15, 35, 41.

³¹⁷ Childs, 'Irish Merchants and Seamen', 31-32; A. Green, *The Making of Ireland and its Undoing* (Dublin, 1920), 37.

³¹⁸ K. Nicholls, 'The Development of Lordships in County Cork, 1300-1600' in P O'Flanagan & L. Buttimer, eds, *Cork History & Society* (Dublin, 1993), 185.

³¹⁹ Carus-Wilson, *The Overseas Trade of Bristol*, 195.

³²⁰ TNA, E122/19/13 m. 8 v, m. 11 v; TNA, E122/19/7 fo. 3, fo. 3v.

³²¹ TNA, E122/27/2 m. 2; TNA, E122/27/5, m. 3.

³²² TNA, E122/27/2 m. 2; TNA, E122/27/3, fo. 11; TNA, E122/27/5 m. 3; TNA, E122/27/2, m. 2.

³²³ Laughton, *Life in a Late Medieval City*, 174. Ireland had very close trading ties with Chester; Z M B II,

of sixteen new council members. The Irish presence in Chester was in comparison to Bristol in terms of trade, much greater. The treatment of Irishmen in Bristol was, however, not as cordial. At Bristol in 1413, 1417, 1431, 1432 and 1439 the English government tried to expel Irishmen from England to preserve the peace and defend the lordship of Ireland. Irish merchants and apprentices were, however, exempt from expulsion. Nevertheless, Irish merchants probably sought security of status by obtaining licences no matter what port they were visiting in England. In Chester forty-two Irish people paid for licences to remain in 1439.³²⁴ Irish mariners were, however, included in some of the expulsion lists from England. In 1440 a new alien tax was introduced in England. This should not have affected the Irish who were denizens, but it did. Over a quarter of those listed were identifiably Irish, such as Geoffry Sligo, Denis Kinsale and Walter Waterford.³²⁵ (The movement of people will be more closely examined in chapter six.) Similar to Chester, Irish merchants did occasionally prosper in Bristol. John Bannebury of Bristol (whose original name was John Toky from Limerick) became a significant merchant in Bristol, appearing in the customs accounts from 1383 to 1402. Bannebury bequeathed lands and properties in Bristol, Gloucester, and Limerick upon his death. Bannebury may have anglicised his name, to make it easier to rise through the ranks of Bristol society. Other Irishmen prospered too, Nicholas Devonish, a merchant who sought an exemption from the expulsion order in 1413, became a bailiff in 1417.³²⁶

Irish shipmasters did trade their wares to continental Europe too. Some Irish shipmasters visited the continent from a base in Bristol. Germanus Lynch, for instance, transported goods from and to Bordeaux in the middle of the fifteenth century. He was also a goldsmith in

passim; Z S B II, *passim*. The local accounts for Chester are replete with Irish merchants.

³²⁴ Laughton, *Life in a Late Medieval City*, 105.

³²⁵ Childs, 'Irish Merchants and Seamen', 33-36.

³²⁶ Childs, 'Irish Merchants and Seamen', 35; *CCR*, 1381-1385, 147; Childs & O'Neill, 'Overseas Trade', 501, 517.

London and in 1461 was appointed keeper of the Irish mints. Moreover, Lynch was a shipmaster on the *John Evangelist*, bound for Iceland in 1478.³²⁷ Denis Galway was another shipmaster who for a decade transported goods on non-Irish routes. Galway skippered the *Michael* of Bristol to Huelva in 1478 and Seville in 1478. In 1486 he was master of three different ships bound for Lisbon. One dispatched to Huelva and on a separate voyage travelled to the Algarve later in the same year.³²⁸ Irish shipmasters must have had knowledge of not just Irish Sea shipping lanes but also those of the continent.

Ireland's trade with Flanders, the Iberian peninsula, Gascony, Brittany, and Normandy was conducted through the Irish Sea. Merchants from Galway and Limerick traded with Flanders and Iberia. Analysis of this trade gives an idea of how shipmasters from Ireland adapted to sailing conditions outside the Irish Sea. In the fourteenth century, Irish ships on occasion called into the ports of Bristol, Southampton, Chichester and Sandwich possibly en-route to the continent. Sometimes they were asked to pay customs twice, even though their cargoes had already been cocketed in Ireland for export to continental ports. They were often laden in several Irish ports. In 1340 William Gilbert loaded his craft with hides in Waterford and Youghal; another ship skippered by Robert de Wrynton had collected hides in Galway, Carrickfergus and Waterford, which were then shipped to Flanders. In the same year William Morton and other merchants loaded their ships with hides in Drogheda, Wexford and Youghal.³²⁹ These shipmasters had to convince the customs collectors that their subsidies had already been paid, by showing evidence of cocket. Collection of cargo at various ports may have either indicated shortages in the supply of a specific commodity, or tramping by vessels to collect enough cargo for export. It was worth traversing various ports in Ireland for

³²⁷ T. O'Neill, 'A Fifteenth Century Entrepreneur Gernyn Lynch fl.', in J. Bradley, ed., *Settlement and Society in Medieval Ireland: Studies presented to F. X. Martin* (Kilkenny, 1988), 425.

³²⁸ Childs, 'Irish Merchants and Seamen', 35-36.

³²⁹ CCR, 1339-41, 591, 592; CCR, 1369-74, 213; CCR, 1381-85, 72,73; CCR, 1402-05, 221.

shipmasters in order to fill their holds. Price variances from port to port may have given commercial impetus to merchants' decisions. Before the late fifteenth century Irish merchants were trying to take advantage of new continental markets. Irish shipmasters on occasion went even further afield. Oliver Herweserton from Ireland paid a toll to travel on the River Scheldt.³³⁰ There is little evidence, however, of Irish ships travelling further north-east before 1600, judging by the absence of Irish ships or shipments using the straits between Sweden and Denmark.³³¹ There was, however, a more consistent trading relationship with regions in France, Castile and possibly Iceland. Trade probably increased during the truces in The Hundred Years' War. For example in 1381 and 1409 Ireland exported tanned hides, cloth and wool to Rouen.³³² Thomas Barton, a Limerick merchant, was at Herfleur in 1397.³³³

Irish shipmasters made occasional trips to Brittany and on the return journey brought back salt and iron.³³⁴ There was some trade between Ireland and Castile in the later Middle Ages though part of this trade was transhipped from Bristol. Cloth found at Navarre of Irish origin was more than likely transhipped from Bristol. The same may be said for Irish linen customised in Avignon.³³⁵ Iceland's trade with Ireland possibly recommenced in the fifteenth century because Bristol merchants used Irish ships to transport commodities from the west coast of Ireland to Iceland. The Irish ports involved in this trade were from the west and the south-east, possibly from Galway to Youghal.³³⁶ It appears from the surviving evidence that

³³⁰ H.G. Smit, *Bronnentot de Geschiedenis von den Handel met England, Schotland, en Ierland 1150-1485* (2 Vols; S. Gravenhage, 1928), 1088.

³³¹ www.soundtoll.nl. (Date accessed 24th March 2013), ships from Donegal, Cork, Dublin and Drogheda paid a toll after 1600. Records are available from 1497-1600 and show no Irish ships are attested in these documents.

³³² C. Fréville, *Mémoire sur le commerce de Rouen, depuis les temps les plus reculés jusqu' à la fin du XVI siècle*, i (Paris, 1857 revised Ulan Press), 296-298; O'Brien, 'Commercial Relations between Aquitaine and Ireland', 36.

³³³ O'Brien, 'Commercial Relations between Aquitaine and Ireland', 36.

³³⁴ O'Brien, 'Commercial Relations between Aquitaine and Ireland', 43-45.

³³⁵ E. Kane, 'Irish Cloth in Avignon in the Fifteenth Century', *Journal of the Royal Society of Antiquaries of Ireland*, cii (1972), 249-251.

³³⁶ Childs, *Anglo-Castilian Trade in the later Middle Ages*, 79; E. Carus-Wilson, 'Iceland Trade' in J. Power &

trade with these regions was irregular before c.1450.

It is difficult to analyse the make-up of the nationality of crews sailing in Irish vessels. Crew sizes could be between five and twenty hands, depending on the size of the craft.³³⁷ The *Mary* of Kinsale was, for instance, a one-hundred-ton craft, had a crew of twenty, though only four were of Irish birth, the others coming from England, Castile, Wales and possibly Flanders.³³⁸ In 1480 the *Trinity* of Bristol, sailing to Andalusia, took on eight of its crew at Kinsale.³³⁹ Generally crews were probably composed of various nationalities; which possibly owed much to the shipmasters ability to collect crew at a number of different ports on any particular journey. Small ships especially from Youghal, Wexford and Kinsale which arrived in Bridgewater and the creeks in its vicinity probably had shipmasters and crew from the southern region of Ireland. The cargoes were small; therefore, the owner probably had to fulfil four functions: owner, shipmaster, crew member and merchant.³⁴⁰

The number of Irish ships and shipmasters active in the Irish Sea from c.1400 to c.1520

It is difficult to quantify the number of Irish ships working in the Irish Sea. Childs and O'Neill state that thirteen to twenty-four ships transported cargoes from Ireland to Bristol each year, six to eighteen ships to Bridgewater, and ten to eleven ships at Chester. Overall there were approximately one hundred to one hundred and twenty ships in the Irish fleet, with possibly the same number of Irish shipmasters.³⁴¹ Chester encountered heavier Irish traffic before 1480 but it had reduced by the end of the fifteenth century. In 1422, 1428, 1430, 1452, 1455, 1467, 1469, 1474, 1476 and 1477 there was an average of over twenty Irish ships

M. Postan, eds., *Studies in English Trade in the Fifteenth Century* (London, 1966), 174, 175.

³³⁷ Childs, 'Irish Merchants and Seamen', 32.

³³⁸ Childs, 'Irish Merchants and Seamen', 32. Two of the crew were on the *Mary*; their surnames were Roche.

³³⁹ Childs, 'Irish Merchants and Seamen', 32.

³⁴⁰ TNA, E122/27/2, m. 2; TNA, E122/26/8, m. 3; TNA, E122/27/3, fo. 11. These are examples from the customs accounts for Bridgewater.

³⁴¹ Childs & O'Neill, 'Overseas Trade', 514.

entering Chester. (This is an average calculated from ten full-year returns surviving from 1422-1480).³⁴² The decline of Chester's salt exports made it less attractive for Irish ships.³⁴³

Bristol was a busier port for Irish shipping than Chester. There were, however, years in which very few Irish ships arrived in Bristol. From March to September 1471 only four Irish vessels docked at Bristol.³⁴⁴ In 1485/6 there were twenty-four shipments from Ireland to Bristol. In 1492-3 there were similar ship movements for Irish ships in Bristol.³⁴⁵ An average of thirteen to twenty-four ships entered Bristol annually. Irish shipping increased in volume to Bristol in the sixteenth century. In 1504/5, thirty-nine ships entered the port of Bristol and thirty-five exited. In 1516/17 there was a further increase to fifty-three Irish vessels arriving at Bristol whilst there was also an increase to forty-seven Irish ships exiting.³⁴⁶ Most of these ships came from Waterford, Kinsale, Cork and Ross.³⁴⁷

In the 1480s there was a vibrant trade in goods on Irish ships from ports in Ireland to Bridgewater. Eighteen Irish ships entered Bridgewater and there were thirty-nine exits in 1481/2. In 1484/5 four Irish ships arrived at Bridgewater whilst there were ten departures. In 1485/6 nine vessels from Ireland landed in Bridgewater whilst there were ten departures.³⁴⁸ The numbers of Irish vessels were significantly down in 1481/2 in comparison to the middle of the decade. Ship movements from Ireland to Bridgewater increased dramatically in the sixteenth century. In 1510/11 there were thirty-four ship movements from Ireland to

³⁴² Wilson, *Chester Customs Accounts 1301-1565*, 149, 150.

³⁴³ Wilson, *Chester Customs Accounts 1301-1565*, 150, 151.

³⁴⁴ TNA, E122/19/8, *passim*.

³⁴⁵ TNA, E122/20/9, *passim*; TNA, E122/20/5, *passim*.

³⁴⁶ S. Flavin & E. Jones, eds, *Bristol's Trade with Ireland and the Continent 1530-1601: The Evidence of the Exchequer customs accounts* (Dublin, 2009), 103-196.

³⁴⁷ Longfield, *Anglo-Irish Trade in the Sixteenth Century*, 219.

³⁴⁸ TNA, E122/26/9, *passim*; TNA, E122/26/11 *passim*; TNA, E122/26/12, *passim*; TNA, E122/26/13, *passim*.

Bridgewater and fifty-two exits.³⁴⁹ Ships were also exiting Axwater for Youghal. Five ships departed in 1518, six in 1519 and six in 1520.³⁵⁰

At the end of the fifteenth century Irish ships were trading with Plymouth, Fowey, Exeter and Dartmouth. In 1497/8 eight vessels entered ports in the jurisdiction of Plymouth whilst seven departed. Some of the creeks in the jurisdiction of Plymouth included Padstow, Truro, Penryn and St Ives.³⁵¹ In 1498/9 two ships entered Barnstable in the jurisdiction of Exeter and Dartmouth (Map 1).³⁵² Like Bridgewater, ship movements in and out of Plymouth and Fowey and Exeter and Dartmouth greatly increased in the sixteenth century. By 1507/8 there were twenty-seven entries and eight exits from creeks in Plymouth and Fowey.³⁵³ In 1508/9 there were also significant Irish ship movements in Exeter and Dartmouth with eleven incoming vessels and five outgoing.³⁵⁴ There is no doubt that ship movements increased dramatically from Ireland to most ports on the west and south-west coast of England after 1480.

Childs and O'Neill have argued that approximately one hundred shipmasters were working in the Irish Sea is probably understated. The traffic in smaller ports and creeks, especially in the early sixteenth century was considerable. The illicit trade of vessels to the smaller ports possibly increases the numbers of vessel movements in the Irish Sea zone.³⁵⁵

Not all Irish ships are noted in the customs documents. For example consideration has to be given to monastic exports and exports by secular lords exporting goods to ports or havens

³⁴⁹ TNA, E122/27/1, fo. 2 - fo. 15.

³⁵⁰ TNA, E122/27/2, m. 3; TNA, E122/27/5, m. 2.

³⁵¹ TNA, E122/115/7, m. 10 - m. 23.

³⁵² TNA, E122/201/2, fo. 16.

³⁵³ TNA, E122/115/12, m. 3 - m. 33.

³⁵⁴ TNA, E122/42/1, m. 40 - m. 85.

³⁵⁵ Taylor, 'The Maritime Trade of the smaller Bristol Channel Ports in the Sixteenth Century', 16.

that have no accounts surviving. There were many licences, also issued to freight goods from Ireland to England. For example, in October 1386 Brother Shirton of Llanthony in Gloucester purchased commodities in Ireland.³⁵⁶ Overall, however, taking into consideration Irish shipmasters in non Irish trade, it was possible that over 150 Irish shipmasters were traversing within and without the Irish Sea, by the beginning of the sixteenth century.

Conclusion

Ireland's maritime strategy changed in the second half of the fifteenth century to adapt to the challenges of the Irish Sea. Small vessels favoured by Irish shipmasters/mariners were too small to be requisitioned by the crown. Vessels were cheaper to build and own. Special docks did not have to be built. Small craft evaded capture at sea and were more manageable in poor weather conditions. Smaller vessels owned by Irish mariners were able to navigate their vessels through silted harbours in both England and Ireland (for example the Drogheda boat). In the fifteenth century the legal status for merchants improved at ports within the realm. Irish merchants had a more equitable legal forum to settle legal disputes (for example the piepowder court). Irish shipmasters and merchants had grown in numbers arriving to Bristol in the sixteenth century. The cessation of The Hundred Years War in 1453 probably helped the traversing of the Irish Sea for merchant ships from the realm. Certainly, by 1516/17 the number of Irish and English vessels trading with Bristol was far greater than had been the case two centuries earlier. The following chapters will elucidate the increased trade between Bristol, Bridgewater and Ireland. The movement of food and drink commodities on Irish ships to more ports and havens on the south-west and southern regions of England after 1460 is further evidence of the increase in trade from Ireland.

³⁵⁶ Chancery.tcd.ie/doc. 211/patent roll 10 Richard II (22/05/2014).

CHAPTER 2

Grain Trade and Bean Trade c.1350-1550

Two main groups of food-based dry commodities were traded in the Irish Sea zone in the later Middle Ages. These were grains (malt, wheat and rye) and beans (including peas).¹ This chapter will analyse both groups in turn. The statistics relating to each group of commodities imported from England is set out in tabular form at the end of the thesis highlighting the port of origin on the west coast of England and, where possible, the port of delivery in Ireland (Table. 2a-h). The staple commodities will be discussed in the following pages demonstrating their different levels of importance to the population and economy of Ireland.

Grain

There were a number of methods for cultivating cereals. The older of the methods was the two-field system, of a crop sown in one field while the other field was left fallow.² Wheat and other cereals could probably not be cultivated in the same ground two years running because the crops became susceptible to disease.³ Three course rotation (more widely used in Ireland after the arrival of the Normans in the twelfth century) allowed for more land to be cultivated.⁴ This system utilised an open or common field strategy. The open fields were very long tracts of land on manor demesnes close to villages or settlements. The tenant had strips of land interspersed through the field system, so good and inferior land was shared

¹ TNA, E122, King's Rembrancer (Customs Accounts for the ports of Bristol, Bridgewater, Exeter/Dartmouth, Poole, Plymouth/Fowey), *passim*.

² K. Down, 'Colonial Society and Economy', in A. Cosgrove, ed., *A New History of Ireland 1169-1534*, ii (Oxford, 1987), 467.

³ R. Britnell, *Britain and Ireland: Economy and Society 1050-1530* (Oxford, 2004), 8-9.

⁴ M. Murphy and M. Potterton, eds, *The Dublin Region in the Middle Ages* (Dublin, 2010), 292-3.

between tenants. The three course system provided for only a third of land to be left fallow. This allowed demesne tenants to grow winter corn, which consisted mostly of wheat and rye, in the section that had been fallow the year before. Wheat was a winter crop, difficult to grow but ultimately more valuable than spring crops. Wheat grown in the fresh soil gave the seed the best chance to germinate and resist disease.⁵ The second sector of land was used to grow spring crops. These included oats and barley, which were cheaper to produce and hardier than wheat.⁶ Oats were normally reserved for animal consumption while barley was presumably used mainly for brewing. There was, however, a subtle difference between open and common field systems. They were similar, in that both were set in open hedgeless lands, and in that strips of land were shared by the tenants. The difference was that the villages or tenants could feed their livestock on the field left fallow in the common field system.⁷ Ultimately, the advantage of the three-course system compared to the two-field system was the capacity to produce more food for individual tenant farmers. These scattered strip-holdings were an important aspect to the rural economy of medieval Anglo-Ireland.⁸ Indeed, the three-course system was vital in supplying corn to feed a population that had grown significantly from c.1086 to c.1290. The two-field system required a three-acre plot whilst the three-field system only required two and a quarter acres to supply a yearly food quota per person.⁹

Change in the grain supply in Ireland from c.1290 to c.1500

The arable husbandry boom that had lasted (with some interruptions because of famine) from the middle of the eleventh to the end of the thirteenth century was caused by a number of

⁵ Down, 'Colonial Society and Economy', 467.

⁶ Down, 'Colonial Society and Economy', 467.

⁷ Britnell, *Britain and Ireland 1050-1530*, 530, 534.

⁸ J. Otway-Ruthven, 'The Organisation of Anglo-Irish Agriculture in the Middle Ages', *Journal of the Royal Society of Antiquaries of Ireland*, cxxxi (1951), 3.

⁹ J. Titow, *English Rural Society* (London, 1969), 21.

factors.¹⁰ Population levels in England and Ireland had increased from a combined total of approximately 3,000,000 in 1086 to over 5,000,000 in 1290.¹¹ (Table. 2i). The burgeoning population was fed by assarting more land (from woodland, bog and higher ground) and putting it to the plough. There were, however, advantages and disadvantages in using previously uncultivated land. Assarted lands were initially conducive to grain-based food production. The burned woodlands provided a nitrogen rich fertilisation to the soil. The earth in these newly farmed regions had a naturally low level of weeds. The advantages were soon outweighed, though, by the disadvantages. The soils were heavy and difficult to plough and the denuded forests gave no natural cover from wind to protect the crops.¹²

Weather systems worsened in England and Ireland towards the end of the thirteenth century. The failure of the grain crops, especially wheat (a delicate crop to grow) from 1294 to 1296, and between 1308 and 1310, precipitated famine.¹³ These famines were the precursor of the devastating Europe-wide famine of 1315-22.¹⁴ Wheat crops failed again because of frequent storms. Poor harvests, coupled with a marauding army led by the Bruces between 1315 and 1318, devastated crops in much of Ireland.¹⁵ Some of the meagre returns of the harvest of 1316 were sent from Carrickfergus to Scotland by the earl of Ulster for the release of his Irish cousins.¹⁶ Cumulatively, these events resulted in a population decrease in the order of ten

¹⁰ Britnell, *Britain and Ireland*, 305-306.

¹¹ B. Campbell, 'Benchmarking Medieval Economic Development in England, Wales, Scotland and Ireland c. 1290', *Economic History Review*, lxi (2007), 36; M. Overton & B. Campbell, 'Statistics of Production and Productivity in English Agriculture 1086-1871', in *Economic History Review*, cxi, 36. Population levels will be outlined in more depth in Chapter Six.

¹² W. Jordan, *The Great Famine* (Princeton, 1994), 30.

¹³ M. Lyons, 'Famine, Pestilence, Plague in Ireland 900-1500', in E. Crawford, ed., *Famine - The Irish Experience* (Edinburgh, 1989), 61-62.

¹⁴ Jordan, *The Great Famine*, *passim*.

¹⁵ Lyons, 'Famine, Pestilence, Plague in Ireland 900-1500', 62-63; S. Duffy, 'The Bruce invasion of Ireland: a revised itinerary and chronology', in S. Duffy, ed., *Robert the Bruce's Irish Wars* (Stroud, 2002), 26.

¹⁶ J. Lydon, 'The Impact of the Bruce Invasion 1315-1327', in S. Duffy, ed., *Robert the Bruce's Irish Wars* (Stroud, 2002), 136.

percent in Ireland and England.¹⁷ This serious demographic change was further worsened by a more devastating event in 1348. The Black Death set population levels in England and Ireland to a level approximately half of what they were in 1300. Part of the Malthusian thesis had come to fruition.¹⁸ Malthusian theory states that populations grow geometrically but food supplies grow arithmetically. Malthus's argument that scarcities led to war and disease was correct, but it was climate change from 1300 that was the catalyst for famine. The devastation after 1350 caused by further outbreaks of plague had a profound effect on economic factors, such as labour supply and the balance between arable and pastoral farming. The new economic reality encouraged a move away from arable farming and towards pastoral farming, which required less labour.

After 1350 land cultivation in Ireland declined significantly.¹⁹ There was a widespread abandonment of settlement, exacerbated by the emigration of agricultural workers to England.²⁰ (Labour issues in Ireland will be dealt with more fully in Chapter Six). These economic trends were made worse by the impact of Gaelic Irish incursion onto Anglo-Irish held territories. After the Bruce invasion the Gaelic Irish periodically invaded the Anglo-Irish lands in the southern regions of Ireland. Political issues in Munster in the 1340s and poor weather conditions in 1349 caused serious economic problems especially in Cork.²¹ In 1350 Cork, Clonmel and New Ross successfully petitioned for relief from taxes because they

¹⁷ C. Dyer, *Standards of Living in the Middle Ages, social change in England 1200-1520* (Cambridge, 1989), 4.

¹⁸ www.bluepete.com/biographies (date accessed 11/3/2009). Thomas Robert Malthus in his essay, *An Essay on the Principle of Population* (London, 1798 new edition Oxford, 1993) argued that populations increase in a geometric fashion, whilst the means of subsistence increase in an arithmetic fashion. The causes of these are war, vice, disease and crime.

¹⁹ A. O'Brien, 'Politics, Economy and Society - The Development of Cork and Irish South Coast Region c.1170-1583', in P. O'Flanagan and C. Buttimer, eds, *Cork History and Society* (Dublin, 1993), 124.

²⁰ O'Brien, 'Politics, Economy and Society', 124.

²¹ Lyons, 'Weather, Famine, Pestilence and Plague in Ireland', 66-67; O'Brien, 'Politics, Economy and Society', 124.

claimed to be reduced to pauperdom.²² Following the ravages of plague in Youghal in 1351 it was reported that of ninety-one burgages surveyed, thirty-nine were not represented by their heirs, suggesting a recent sharp decline in population.²³ The ports of Cork, Kinsale, Youghal and Wexford became importers of cereals rather than exporters.²⁴ Because of the shortage of grain crops available to port towns in the southern region of Ireland under English control, they were occasionally permitted to trade with the resurgent Gaelic Irish. Cork obtained such permission in 1382, as did Limerick in 1391 and Kinsale in 1400.²⁵ From 1450 the availability of local food supplies in these towns had probably declined. In 1463 legislation was passed to allow all manner of trade, except for arms, for the express reason of helping financially the beleaguered port towns of Cork, Limerick, Waterford and Youghal.²⁶

In February 1349 Edward III decreed that no grain or victuals were to be exported to any location outside the king's realm.²⁷ This was in response to merchants exporting corn and conveying it to the king's enemies. In response to the illegal export of grain from Ireland, a series of licences were issued from 1351 to those who exported corn from Ireland to other parts of the king's domain. Licences were issued for a fee with the final destination within the realm noted on them so that shipmasters transporting the grain could only deliver grain to the king's lieges and not to his enemies. In 1352 a total of over 8,000 quarters of wheat and oats were exported under licence from Ireland to England and Gascony.²⁸ Licences were acquired in some cases by religious houses bringing corn from their lands in Ireland to England; others were obtained by merchants transporting corn to England and Gascony

²² P. Ziegler, *The Black Death* (Harmondsworth, 1969), 204.

²³ O'Brien, 'Politics, Economy and Society', 124.

²⁴ O'Brien, 'Politics, Economy and Society', 128.

²⁵ O'Brien, 'Politics, Economy and Society', 133.

²⁶ H. Berry, ed., *Statute Rolls of the Parliament of Ireland, First to the Twelfth years of the Reign of Edward IV* (Dublin, 1914), 138-140.

²⁷ *CPR*, 1348-50, 311.

²⁸ *CPR*, 1350-1354, 196, 244, 254, 320, 346, 365.

because of shortages in these regions. Dublin, which was short of essential commodities because of the Black Death, sent a petition to the king asking that the city be permitted to buy 1,000 quarters of grain in Ireland to export to England for profit.²⁹ In March 1352 burgesses from Dublin and Drogheda purchased a licence to take 3,000 quarters of corn from Ireland to England. Further highlighting the shortage of grain in England, in 1352 John Bek, a Dublin merchant, was fined 20s for exporting corn to Bordeaux and Bayonne because there was a shortage of grain in England.³⁰ In 1351 Andrew de Guildford and others were given licence to purvey 500 quarters of wheat to convey from Ireland to England and Gascony. In 1352 a licence was granted to William Smale of Dartmouth to buy 1,000 quarters of both wheat and oats in Ireland for shipment to England or Gascony. In the same year at least five other licences were issued to export from Ireland to England over 4,000 quarters of wheat.³¹ These licences and the quantities of exports they permitted were reminiscent of the large quantities of grain purveyed from Ireland for Edward I's wars with Scotland between 1294 and 1326.³² Even with the Black Death, adverse climate issues and the contraction of arable lands in the lordship, there still existed in the 1350s a significant surplus of grain.

For the remainder of the 1350s grain remained scarce in England but in relative terms abundant in Ireland. Licences were issued in 1353, 1355, 1356 and 1357 to transport grains, including oats, from Ireland to England.³³ These licences were issued to merchants; to clergy, such as Thomas de Mevil, prebendary of Swords, who transported 1,000 quarters of corn from Ireland to England; and to absentee landlords, such as Thomas Wogan, transporting 200 quarters of wheat and oats from his manors in Ireland (Table. 2j). Both landlords and

²⁹ *CPR*, 1350-1354, 258

³⁰ *CPR*, 1350-1354, 313.

³¹ *CPR*, 1350-1354, 196, 235, 242, 415.

³² *CPR*, 1350-1354, 235; *CPR*, 1292-1301, 585; J. Lydon, 'The Dublin Purveyors and the Wars in Scotland, 1296-1324' in G. McNiocail, Wallace and J. Lydon eds, *Keimelia: Studies in Medieval Archaeology and History in Memory of Tom Delaney* (Galway, 1988), passim.

³³ *CPR*, 1350-1354, 415, 439; *CPR*, 1354-1358, 186, 474, 476, 491, 621.

religious houses in England were eager to repatriate grain from their lands in Ireland. This suggests that either the social structures in Ireland had recovered from the ravages of plague to the extent that crops were in surplus: or that the population levels had reduced to a greater extent than England, leading to an oversupply of grain for the surviving population. It is probable, however, that on demesnes the ravages of the Black Death were not as severe because there was enough labour to harvest significant quantities of crops in Ireland.

The ongoing shortage of grain in England forced the crown to regulate its export for the remainder of the fourteenth century. By 1437 no licence was required to export corn, subject to three conditions: corn was not to be dispatched to the king's enemies; customs on grain were to be paid in full and, finally, the price of wheat in ports should not exceed 6s 8d per quarter.³⁴

Initially, in 1347, the Black Death did not cause the price of grain to rise in England. In the years 1349-1352 and 1355-1357, however, prices of grain rose sharply, indicating a shortage of grain in England. The dearth of grain was probably in part at least made good by supplies from Ireland.³⁵ Indeed, because of the scarcity and high prices in the region in 1356, Carlisle was allowed to source 1,000 quarters of wheat in Ireland.³⁶

The transport of grain supplies from Ireland to England was made easier and cheaper by new legislation. From 1361, as long as landowners owned land in both England and Ireland, they were free to import or export commodities once national customs had been paid.³⁷ After 1361 there were only a small number of licences or permits issued for the export of grain from

³⁴ N. Gras, *The Evolution of the English Corn Market from the Twelfth to the Eighteenth Century* (London, 1915), 135.

³⁵ J. Rogers, *A History of Agriculture and Prices in England*, i, 1259-1400 (Oxford, 1866), 208-211.

³⁶ CCR, 1354-1360, 178.

³⁷ Gras, *The Evolution of the English Corn Market*, 135.

religious houses to England probably as a result of the legislation. Still, in 1377 licences were issued to Robert de Crull and in 1380 to John de Colton, dean of St Patrick's in Dublin, and to the abbot of Furness to export significant quantities of grain to England.³⁸

Nevertheless, grain exported from ecclesiastical lands is difficult to quantify because, the grain from granges transported from Ireland to England is not normally mentioned in government records after 1361.³⁹

Licences were also issued for the export of grain (but primarily) wheat from Ireland to continental Europe. The period in which licences issued in the later Middle Ages was from c.1350 to c.1450. These licences were issued in short concentrated periods, as opposed to licences for grain exports from Ireland to England. (Table. 2j). In the aftermath of the Black Death from 1351 to 1352 licences were issued for c.3,900 quarters of wheat and oats to be transported to the continent primarily by English merchants. William Smale from Dartmouth sourced 1,000 quarters of oats and the same quantity of wheat in Ireland for delivery to England and Gascony.⁴⁰ In 1352 Thomas de Bellocamp earl of Warwick transported 800 quarters of wheat from Ireland to Bordeaux.⁴¹ The next batch of licences purchased from chancery was from 1387 to 1393. These licences were issued for smaller quantities of wheat sourced from the east coast of Ireland by merchants from Dublin, Drogheda or in some cases by merchants from Bayonne. (Table. 2j). In 1387, John Harleth and John Karlell sourced wheat from the Dublin region and under licence transported 780 quarters to Portugal, Gascony or Bayonne.⁴² In 1389 William Symcok transported forty-eight quarters of wheat to Gascony or Spain. In 1390 and 1393 John of Bayonne and William Spalding (admiral of

³⁸ *CPR*, 1377-1381, 61, 237, 462, 503.

³⁹ *CPR*, 1350-1354, 244. Richard Archbishop of Armagh exported 100 quarters of corn from Ireland to John Bishop of Exeter.

⁴⁰ *CPR*, 1350-1354, 196.

⁴¹ *CPR*, 1350-1354, 365.

⁴² [Chancery.tcd.ie/doc.258/patent roll Richard II](http://Chancery.tcd.ie/doc.258/patent%20roll%20Richard%20II), 258 (15/07/2013).

Ireland) carried 120 and sixty quarters of wheat from Ireland to Bordeaux. (Table. 2j).

In the fifteenth century smaller quantities of wheat were licensed for export from Ireland to the continent in contrast to the large shipments made between 1350 and 1400. Some merchants were exporting wheat to return with wine. Nicholas Woder from Dublin transported thirty-six quarters of wheat to Bordeaux in order to return with a wine cargo. Other shipments were made by Bristol merchants purchasing wheat surpluses probably on the east coast of Ireland. For example, in 1405 John Aylmar carried 144 quarters of wheat from Ireland to Bordeaux. Likewise, Mark Hugeon from Bristol was licensed to convey sixty quarters of wheat to Portugal in 1414.⁴³ In 1432 four licences were issued, two to Bayonne merchants, one to a Breton and one to Ralph Pembroke and John Yenell. The *Julianne* of Gironde delivered wheat to the Bay (of Biscay) area, the *Anthony* of Bayonne to Bayonne, the *Notre Dame* of Namore transported wheat to Brittany, whilst Ralph Pembroke transported his cargo to Bayonne. The shipments totalled 342 quarters.⁴⁴ It is apparent that when required, merchants from Bristol, Dublin, Drogheda, Gascony and Brittany purchased grain, very likely from the surpluses available in the east coast of Ireland. Most of these licences were issued to merchants from Dublin and Drogheda and to merchants from the west coast of England. There were times, however, when there was no surpluses in the Pale so some English grain had to be imported for the relief of southern Irish port towns. In 1387 Henry Lane purchased a licence to source 300 quarters of wheat, 200 quarters of beans in England and to ship them from Bristol, Bridgewater, or Chepstow for the relief of Waterford. In the same year 780 quarters of wheat was transported from Ireland to the continent. The surpluses of wheat on the east of Ireland were probably only in the order of 2,000 quarters per year because the requirements of Waterford in 1387 were over and above the surplus of supplies in

⁴³ Chancery.tcd.ie/doc. 17/patent roll 1 Henry V, 17 (15/07/2013).

⁴⁴ Chancery.tcd.ie/docs, 139, 138, 137 patent rolls 10 Henry VI (20/07/2013).

both Dublin or Drogheda.

The evidence indicates that grain continued to be exported from Irish to English ports throughout the later fourteenth century, suggesting that corn remained abundant in parts of the lordship of Ireland, especially in Dublin, Meath and Louth. Licences were still required for secular grain exports from Ireland to England. In 1375 seven licences were issued to transport wheat from Ireland to England, Wales and Scotland. (Table. 2j). In 1376, for example, Nicholas Howth was given such permission. Also in 1376 Richard Plunket, Richard White, John Talbot, and John White were licensed to ship 400 quarters of corn from Dublin and Drogheda to England and in the same year Nicholas Staky and John Kendal transported 400 quarters each to Kendal (Westmoreland) from Dublin and Drogheda.⁴⁵ In the southern region of Ireland also grain seems to have been readily available at the end of the fourteenth century. There were, however, periodic interruptions to supplies.

In 1375 Gaelic and rebel English forces were attacking southern towns.⁴⁶ In the same year Thomas Walpole transported six quarters of grain from Dublin to Youghal.⁴⁷ Grain shortages occurred in the south probably because of political instability in the arable hinterland. It is possible that the Gaelic-Irish stopped victuals from reaching the southern port towns from overland routes. The immediate impact was that external grain supplies delivered by sea, were required to make good the deficiency. Corn was, therefore, sent from Dublin, Meath and Louth to southern ports in Munster in 1375 and 1376. Richard Reeve was authorised to send almost 100 quarters of corn to Cork and Youghal.⁴⁸ John Brit, sheriff of Cork, also in

⁴⁵ *CPR*, 1374-1377, 301, 303, 304, 305.

⁴⁶ Chancery.tcd.ie/docs, 13, 59/patent rolls 49 Edward III (10/05/2012).

⁴⁷ Chancery.tcd.ie/doc. 225 patent roll 49 Edward III (10/05/2012).

⁴⁸ *Rot. Pat. Hib.*, 95.

1375, was allowed to ship corn from his lands at Rathfarnham to the south.⁴⁹ Demands for grain were not confined to Munster ports. Ulster was sourcing wheat and other grains from the Pale by 1375. In 1375 John Stamen was commissioned to deliver thirty quarters of malt to Ulster and in the same year the mayor of Carrickfergus sought forty-eight quarters of wheat. Moreover, the earl of Ulster, Edmund Mortimer, sought a licence to transport c.100 quarters of grain from Dublin/Meath and to Ulster. (Table 2j).

The infrequent shortages in the southern and northern towns continued at least periodically. Statutes enacted in the reigns of Edward IV and Henry VI also highlighted a shortage of corn in the southern Irish ports.⁵⁰ Four licences for the importation of corn from Dublin and Wexford or any port in Ireland, were issued in 1386, two in 1387, and one each in 1390, 1410 and 1422.⁵¹ In 1449 and 1450 the Irish parliament allowed merchants to deliver grain from Dublin and Drogheda to Cork, Kinsale, Youghal, Waterford, Kilkenny and Wexford, suggesting the continued decline and dearth of grains cultivated in the Munster region.⁵² These shipments of wheat were said to be necessary for the town of Cork because of the sterility of the surrounding countryside and the possible resurgence of the Gaelic Irish.⁵³ Deliveries of corn were coming from the sea rather than over land because protection money was sought by the Gaelic Irish for goods passing through areas under their control.⁵⁴ There were, of course, years in which there were surpluses in some of the southern port towns. Grain supplies must have recovered in the vicinity of Kinsale in the early fifteenth century, because on occasion, wheat was probably exported from Kinsale to England. Three ships

⁴⁹ *Rot. Pat. Hib.*, 95.

⁵⁰ H. Berry, ed., *The Statute Rolls of the Parliament of Ireland, First to the Twelfth year of the Reign of King Edward IV* (Dublin, 1914), 139; H. Berry, ed., *The Statute Rolls of the Parliament of Ireland, Reign of Henry VI* (Dublin, 1910), 171, 237-9.

⁵¹ *Rot. Pat. Hib.*, 36, 136, 196.

⁵² H. Berry, ed., *Statute Rolls of the Parliament of Ireland, Reign of Henry VI* (Dublin, 1910), 171, 237-9.

⁵³ [Chancery.tcd.ie/doc.216/patent roll 10 Richard II \(02/3/2014\)](http://Chancery.tcd.ie/doc.216/patent%20roll%2010%20Richard%20II%20(02/3/2014)).

⁵⁴ Down, 'Colonial Society & Economy', 483. In times of Gaelic Irish resurgence it was safer and cheaper to transport victuals by sea.

from Kinsale, the *Simona* and *Flotman*, both freighted with 48 quarters of wheat, and the *St Marie*, with 33 quarters of wheat on board, arrived in Exeter on 9th and 22nd April and 26th September 1400.⁵⁵ These shipments followed the arrival of the *Michel* of Kinsale which docked in Exeter on 20th April 1399 with 5 tuns of barley, 2 tuns of wheat and 9 tuns of beans.⁵⁶

From the middle of the fifteenth century much of the rest of Ireland probably experienced grain shortages because of a substantial shift from arable to pastoral farming, renewed population growth and the incursions of Gaelic Irish on Anglo-Irish lands. It is perhaps suggestive of these shortages that in 1452 Dublin citizens who regrated corn (for example who purchased corn and sold it for a higher price) were to be punished. Haggardmen were also included in legislation; they were only allowed to sell their corn to their neighbours.⁵⁷ As in times past scarcity of corn forced civic authorities to be more stringent about its supply.

Like other major urban centres Dublin required a steady supply of grain.⁵⁸ Dublin, Drogheda and possibly Waterford were exporters of grain up to the 1430s, suggesting adequate supplies from the hinterlands of these towns. By 1437, however, Bristol was perhaps shipping minor quantities of corn to Ireland.⁵⁹ After this grain, cultivated within the Pale probably usually satisfied local demand, though there are signs that the relative scarcity of grain supplies increased its value to society. In her will of 1457 Ellen Stewart bequeathed wheat and oats in the fields as well as a quantity of four couples of wheat and oats in the hagar. In 1468 Thomas Hizdon and his wife recorded in their will ten measures of malt and fields of wheat

⁵⁵ DRO, ECR, 1399-1400, m. 1, m. 2.

⁵⁶ DRO, ECR, 1398-1399, m. 9.

⁵⁷ *CARD*, i, 278.

⁵⁸ B. Campbell, et al, *A Medieval Capital and its grain supply: Agrarian Production and Distribution in the London Region c.1300* (London, 1993), 3.

⁵⁹ E. Carus-Wilson, 'The Overseas Trade of Bristol', in E. Power and M. Postan, eds, *Studies in English Trade in the Fifteenth Century* (London, 1933 reissued, 1966), 199.

and oats.⁶⁰ Over twenty wills dating between 1457 and 1478 from the Dublin region mention large quantities of wheat, oats and barley in the fields and in the hagar.⁶¹

Even in the Pale grain cultivation began to contract in the last quarter of the fifteenth century. In 1475 the export of corn from Ireland was forbidden.⁶² The county of Dublin had ceased to be a supplier of grain to the rest of the lordship and had problems meeting its own needs by 1480.

Still, the shortfall in grain was not annual, Carus-Wilson's assertion, that constant shipments of corn were coming from Bristol to Ireland in the last quarter of the fifteenth century, does not tally with the evidence from Bristol customs documents (Tables. 2a-e).⁶³ Small quantities of grain were sent from Bristol to Ireland in 1465/6 and 1469/70 (Table. 2a). Contrary to Longfield's view, grain exports to Ireland do not appear, however, in the Bristol customs accounts for 1465/6, 1469/70, 1471, 1472, 1473, 1477/78, 1483 and 1485/6.⁶⁴

Importation of wheat to Ireland

Wheat was used primarily for making flour to bake breads. It was the most prized grain and favoured by the wealthy. Although not imported annually in the later fifteenth-century, wheat was occasionally sourced in England. In 1475 the *Katherine* of Bristol departed Bristol with forty-two quarters of wheat for an unknown destination in Ireland. The ship was also carrying wine, iron and cloth and so it was not a single commodity cargo. Two Irish ships the

⁶⁰ H. Berry, ed., *Register of wills and inventories of the Diocese of Dublin* (Dublin, 1898), 1-2, 191. A couple of wheat was probably twelve pecks.

⁶¹ H. Berry, ed., *Register of wills*, 2-52.

⁶² H. Berry, ed., *Register of wills*, *passim*.

⁶³ Carus-Wilson, 'The Overseas Trade of Bristol', 199.

⁶⁴ TNA, E122/17/11, TNA, E122/17/10, TNA, E122/7/8, TNA, E122/17/37, TNA, E122/19/4, TNA, E122/19/6, TNA, E122/19/7, TNA, E122/19/8, TNA, E122/19/9, TNA, E122/19/10, TNA, E122/19/13, TNA, E122/19/15, TNA, E122/20/1, TNA, E122/20/5.

Mary of Kinsale and the *Sonday* of Youghal also delivered small quantities of grain in June and July 1475, probably to Kinsale and Youghal. The *James* of Cork freighted a mixture of 144 quarters of wheat and barley in 1475.⁶⁵ The only other Bristol grain exports on Irish vessels in the fifteenth century occurred in 1479/80 and 1492/3: in 1479/80 the *Trinity* of Waterford carried a small quantity of wheat to Ireland.⁶⁶ Thirteen years later six Irish ships and one English vessel departed Bristol with grain.⁶⁷ Four of these vessels, the *Maudlyn*, the *Katherine*, the *James* (twice), and the *Mary White*, were probably bound for Waterford. The other Irish vessel, the *Trinity* of Wexford, delivered a small cargo of nine quarters of wheat to Ireland. The English boat the *Davy* from Bristol dispatched forty-two quarters of wheat to Ireland. The largest shipment was on the *Maudlyn*, whose cargo included sixty-three quarters of wheat, owned by the merchant John Joyce.⁶⁸ These shipments, unusually large (in relation to other small cargoes of wheat sent from Bristol), were perhaps required because of unfavourable weather in Ireland in 1491, when it is known that some of the corn crops had been destroyed.⁶⁹

In normal years local shortages in Ireland were probably made good by coastal trade from Dublin and the east coast but in 1492 the wealthy citizens of Wexford and Waterford imported wheat from Bristol (Table. 2a). The burgesses of Wexford and Waterford were not, however, satisfied with their wheat supplies from Bristol. In the spring of 1493 more wheat arrived from Exeter and Dartmouth, in return for cloths and fish dispatched to Exeter. Three picards, the *Trinity* of Wexford, and the *Trinity* and the *Mary* of Waterford, delivered a total of seventy-two quarters of wheat to Ireland (Table. 2b). It is possible that Wexford and

⁶⁵ TNA, E122/19/11, fo. 6, 11, 12.

⁶⁶ TNA, E122/19/14, fo. 18.

⁶⁷ TNA, E122/20/9, fo. 36, 36 v, 39, 39 v, 46, 48 v.

⁶⁸ TNA, E122/20/9, fo. 36 v.

⁶⁹ Lyons, 'Famine, Pestilence, Plague in Ireland 900-1500', 72.

Waterford merchants had sourced wheat in Exeter because of shortages at Bristol. Whilst Bristol in normal years acquired corn from Gloucestershire, Wiltshire and Herefordshire, much of this was used to feed its own sizable population; little was left for export. By contrast, Exeter was further away from Ireland than Bristol, but given its fertile and extensive arable hinterland it probably offered a more secure supply of grain. That Irish traders did not visit more frequently was perhaps on account of the additional costs of dispatching wheat from more distant Exeter. When supplies were interrupted, Bristol too relied on coastal ships to bring in supplies of wheat from elsewhere.⁷⁰ In years when surpluses were available in Bristol in the sixteenth century, regular shipments of wheat were dispatched from Bristol to Ireland. In 1516/17 small amounts, amounting to approximately six quarters per vessel, were sent on three Waterford ships, one each from Youghal, Cork and Kinsale from Bristol to Ireland. In the same year two English craft also carried small quantities of wheat, possibly to a southern port in Ireland. (The location of delivery was not given in the record).⁷¹ These voyages took place in the months from March to May, perhaps indicating that wheat stocks were running low as the southern port towns awaited the new harvest. In the following year cargoes of wheat freighted on five Irish ships from Bristol were again bound for southern ports in Ireland. Three of these vessels, the *Andrew*, *Jesus* and *Sunday*, were from Dungarvan, bringing in deliveries of approximately twelve quarters per cargo. Some of this wheat came from Barnstable and, similar to the wheat shipments from Bristol, these ships probably arrived in Dungarvan in March and April.

In the last quarter of the fifteenth century Bridgewater too supplied very small quantities of wheat to Ireland. Although in some years no wheat was exported from Bridgewater to Ireland, in other years up to fifty quarters per annum was dispatched (Table. 2c). In 1496 two

⁷⁰ CPR, 1361-1364, 409; CPR, 1374-1377, 101.

⁷¹ Flavin & Jones, eds, *Bristol's Trade with Ireland and the Continent*, 162. 163.

ships from Comwich carried small amounts of wheat from Bridgewater to Ireland. The *Katherine* and the *Marie* departed for Ireland in April/May 1496.⁷² In August of the same year Robert Harstoke and John Row loaded between them thirty quarters of wheat on the *Undligorte*. Wheat was a small part of a large cargo of cloth, corrupt wine and beans.⁷³

So, compared to the late fifteenth-century the early years of the sixteenth century witnessed a small increase in the amount of wheat imported to Ireland. These imports mainly occurred in years of dearth. In 1500, for example, bad weather damaged the wheat crop in Ireland.⁷⁴ This year, for the first time in thirty years, an Irish ship (the *George* of Waterford) visited Southampton. It returned to Ireland with fourteen quarters of wheat.⁷⁵ There are no customs accounts available for other ports on the west coast of England for this year. Nevertheless, for an Irish ship to travel all the way to Southampton might suggest either that the ship was returning to Ireland from continental Europe via Southampton and/or that Waterford was desperate for corn. The ship's cargo suggests that there was a severe shortage of victuals in southern Irish ports. Its hold included six quarters of oats, eight quarters of peas as well as ten quarters of barley (Table. 2d). Most of these commodities were not normally traded between England and Ireland because generally Ireland produced enough of its own (Tables a-h).

This diverse range of English ports in which Ireland acquired grain in the early sixteenth century stretching from Bristol to Southampton and including Plymouth and Poole, represented a significant change in trading patterns. Ireland was usually self sufficient in grain until the fifteenth century. From the mid-fifteenth century small quantities of grain

⁷² TNA, E122/26/20, m. 1.

⁷³ TNA, E122/26/20, m. 3.

⁷⁴ Lyons, 'Weather, famine, pestilence and plague in Ireland, 900-1500', 73.

⁷⁵ TNA, E122/209/2, fo. 44.

came to Ireland from ports on the west coast of England. By the early sixteenth century grain shipments were becoming significant. In 1517/18 eighty-four quarters were dispatched from Exeter and Dartmouth on the *Margaret* of Youghal, while the *Andrew*, *Jesus* and *Sunday* of Dungarvan all delivered small cargoes of wheat probably to their home port. Another shipment was sent from Exeter to Kinsale, on the *Katherine*.⁷⁶ The following year ninety-nine quarters were imported from the same port to Ireland. The *Christopher* of Kinsale transported six quarters of wheat, barley and oats from Fowey to Ireland in 1516/17.⁷⁷ The following year, 1518/19, five Irish ships collected wheat from Dartmouth. Two ships, the *Mary* and the *Grace* brought wheat to Ireland, probably to Dungarvan. Meanwhile, two ships, the *John* and the *Bartolomeu*, probably went to Wexford and finally the *Patrick*, with a larger cargo of wheat than the other vessels (thirty quarters) probably arrived in Youghal.⁷⁸ The variety of different English creeks and ports featuring in these consecutive years suggests that wheat surpluses were low across much of the west coast of England, as well as around the southern ports in Ireland: merchants were, it would seem, shopping around in many different English ports and presumably unable to purchase large supplies in any one location. Of the Irish ports, Dungarvan is rarely mentioned before the sixteenth century but a demand for grain seems to explain, partially at least, its new prominence.⁷⁹

Wheat was sourced by Irish merchants not just in England. By the later fifteenth century it also arrived from Bordeaux. A very large cargo of wheat, comprising a hundred tons, was sent from Bordeaux to Kinsale, Cork and Youghal in September 1493.⁸⁰ The quantities of wheat coming from Gascony to Ireland subsequently increased even further. In 1507 and

⁷⁶ TNA, E122/42/3, m. 18, m. 19.

⁷⁷ TNA, E122/116/4, fo. 30.

⁷⁸ TNA, E122/42/4, m. 19, 19 v.

⁷⁹ A. O'Brien, 'The Development & Evolution of the Medieval Borough & Port of Dungarvan, Co Waterford, c.1200- c.1530', *Cork Historical Society Journal*, xcii (1987), 85.

⁸⁰ J. Bernard, *Navires et Gens de mer & Bordeaux vers 1400 vers 1550*, iii, appendices (Paris, 1968), 16-17.

1510 at least seventy-five tons of wheat was sent from the Bordeaux region to either Youghal, Kinsale or Cork.⁸¹ Poor harvests or political unrest continued to stimulate grain imports to Ireland in later years.⁸² In 1511 two ships were chartered to transport a total of over eighty tons of wheat to Dingle.⁸³ In the same year Nicholas Lynch chartered the *Marie* of Penmarch to freight thirty-five tons of wheat to Galway. In 1512 the same vessel was chartered by James Josse and Dominic Deen to transport over seventy tons of the crop to Galway.⁸⁴ In 1511 and 1512 the *Bonaventure* of Croisic and the *Katherine* of Dieppe delivered significant quantities of wheat to the same city.⁸⁵ In 1520 the *Julienne* of la Rochelle freighted with forty tons of wheat, landed in Waterford. Other French grains arrived from Normandy in the first two decades of the sixteenth century, as did manufactured wheat products.⁸⁶ In 1517, for example, the *Jenette* of Dieppe arrived in Limerick with ten lasts of flour brought in by Limerick merchants. This was, however, a very unusual import.⁸⁷

Shortages of corn in the lordship continued into the 1520s. As stated earlier a statute of 1521 reaffirmed all previous statutes made by the Dublin parliament relevant to the prohibition on the burning of corn or ricks punishable as a treasonable offence.⁸⁸ The on-going demand for wheat which is evident in the ports of the lordship of Ireland in the sixteenth century was partly as a result of Gaelic Irish incursions. The arable lands of Dublin, Louth, Meath and in normal years Kilkenny and parts of Munster constituted the primary grain growing regions of

⁸¹ Bernard, *Navires*, iii, 250, 251, 290, 291.

⁸² A. Moody et al, *A New History of Ireland*, viii, (Oxford, 1989), 183-185. In 1507 Niall Mór Mac Uí Néill Buidhe captured Carrickfergus Castle. Monasteries at Clougher and Aghavea in Fermanagh were damaged. In 1510 the earl of Kildare captured Munster.

⁸³ Bernard, *Navires*, iii, 294, 295, 302, 303.

⁸⁴ Bernard, *Navires*, iii, 292, 293, 330, 331.

⁸⁵ Bernard, *Navires*, iii, 312, 313 324, 325.

⁸⁶ M. Mollat, *Le commerce maritime normand à la fin du moyen age; étude d'histoire économique et sociale* (Paris, 1952), 155-6.

⁸⁷ Bernard, *Navires*, iii, 388, 389; *CPR*, 1292-1301, 344, 388, 389. Flour was normally used by armies on the move, such as that supplied from Ireland to Edward I's armies in Scotland in 1298.

⁸⁸ Moody et al, *A New History of Ireland*, viii, 188.

Ireland after the Black Death.⁸⁹ A combination of Gaelic Irish incursions and a move towards pastoral farming possibly meant there were fewer surpluses available to send southwards.

Instead, Dublin and the ports on the south coast of Ireland had to look to the ports on the west and south west coast of England for grain. It was, however, not just the arable lands in the Pale that were under threat. In 1524 the earl of Desmond was testing the earl of Ormond's defences in Tipperary.⁹⁰ The traditional corn growing areas of the previous 175 years had become battle grounds for feuding earls. As a result, by 1526 Ireland was importing large quantities of wheat from England.

The plight of the Anglo-Irish in accessing grain in the sixteenth century is recorded in the customs accounts for Bristol. Large quantities of grain arrived from Bristol on both Irish and English ships. Cargoes exported from Bristol to Ireland in 1526 included all types of grain, but especially wheat (fig. 2a). Over 1,400 quarters of wheat were dispatched from Bristol to southern Irish ports. Between February and August 1526 fifty ships loaded with all types of grain came from Bristol to Ireland. It was, however, predominantly Irish craft involved in transporting significant quantities of grain to Ireland at this time. Eighteen ships from Waterford carried grain as did fourteen from Wexford and seven vessels from Youghal. Smaller shipments possibly went to Cork, Wexford and New Ross (Table. 2a).

It was not just the southern ports in Ireland replete of domestic grain supplies. The east coast by the 1520s was in need of grain shipments from abroad. Even Dublin, normally amply supplied by its hinterland, sent three ships to Bristol for grain. One vessel, the *Francois*, departed Bristol in February. The other two cargoes were transported on the *Trinity* of

⁸⁹ D. Quinn, 'English Policy in Irish Affairs 1520-34' in A. Cosgrove, ed., *A New History of Ireland 1169-1534*, ii (Oxford, 2005), 674-675.

⁹⁰ Quinn, 'English Policy in Irish Affairs 1520-34', 673.

Dublin, which left Bristol with grain in May and July 1526.⁹¹ (Table. 2a). Dublin's grain shortages had an impact on other coastal regions that traditionally relied on grain supplies from Dublin. No licences were issued to Dublin merchants to supply grain in Ireland or abroad from the middle of the fifteenth century. The wheat shortages in the southern ports from Youghal to Wexford were much more pronounced than in the eastern region of Ireland. Once the English influence of the Pale started to diminish in the early sixteenth century, the towns on the west and south coast of Ireland became more isolated and were increasingly unable to obtain grain supplies from the Pale. Instead, these ports probably had to import grain or substitute commodities from abroad.

Malt

In the customs documents malt is usually referred to as *brasei* or *brac* or *bracy*. In Latham's *Medieval Latin Dictionary* the derivatives of this word all relate to brewing but not distilling.⁹² Brady also concluded that malt in Ireland was required for brewing rather than distilling.⁹³

The process of malting grain was achieved by germinating corn artificially, then halting the process by drying the grain in kilns at its optimum.⁹⁴ The malt used to brew ale was then allowed to germinate. Malting increases the volume of barley by 14% while reducing its weight by 25%.⁹⁵ The spring barley or oats were then dried ready for the brewing process. Then malted barley and wheat grains could then be readily converted into ale.⁹⁶ In English

⁹¹ S. Flavin & E. Jones, eds, *Bristol's Trade with Ireland and the Continent 1503-1601* (Dublin, 2009), 252-270.

⁹² R. Latham, *Revised Medieval Latin Word List from Bristol and Irish Sources* (Oxford, 1965 reprint 2004), 55.

⁹³ N. Brady *et al*, 'The processing of cereal products', in M. Murphy & M. Potterton, eds., *The Dublin Region in the Middle Ages* (Dublin, 2010), 414.

⁹⁴ Brady *et al*, 'The processing of cereal products', 414.

⁹⁵ P. Slevin, *Bread and Ale for the Brethren: The Provisioning of Norwich Cathedral Priory 1260-1536* (Hatfield, 2012), 163.

⁹⁶ K. Pearson, 'Nutrition and the early-medieval Diet', *Speculum*, lxii, no. 1 (1997), 5.

and Scottish towns it was predominantly women who brewed, though ale was also brewed in both strong and weak formats in monasteries.⁹⁷ So important was the malting process that in 1433 Thomas Stanley, Lord Lieutenant of Ireland, brought his own 'maltman', William Valaunce, to Dublin to produce his ales.⁹⁸ Longfield suggests that imported malt was used to make whiskey (*Uisce-bagh*).⁹⁹ It is probable, however, that all types of malted grains imported to Ireland in the later fifteenth and early sixteenth centuries were mainly used for the manufacture of ale. Malted ales were not just important to the Anglo-Irish. At most Gaelic banquets in the later Middle Ages ale and malt liqueurs were served. Mead and dark mead was also available to drink whilst whiskey was occasionally offered at mealtimes.¹⁰⁰ After 1500 large shipments of hops were imported from Bristol to Ireland, especially to ports on the south coast.¹⁰¹ Hops is an extract from a flower which stabilises ale, basically turning it into beer and giving it a flavour.¹⁰² It was probable, therefore, that ale and later beer was brewed in Ireland. Small quantities of beer were, however, also imported from Bristol to Ireland in the sixteenth century.¹⁰³

In the 1450s all types of malt, such as wheat, barley, oat and dredge malt, were on occasion available in Dublin and no doubt in other towns too.¹⁰⁴ Barley malt and oats for brewing ale were most likely the malt grains imported to Ireland, though in most cases the customs accounts for the fifteenth century do not usually specify which malten grain types were bound for Ireland.¹⁰⁵ It was, however, only from the end of the fifteenth century that malt was

⁹⁷ Slevin, *Bread and Ale for the Brethren*, 159-162.

⁹⁸ *CPR*, 1429-1436, 283.

⁹⁹ A. Longfield, *Anglo-Irish trade in the Sixteenth Century* (London, 1929), 175.

¹⁰⁰ C. O'Sullivan, *Hospitality in Medieval Ireland 900-1500* (Dublin, 2004), 103.

¹⁰¹ S. Flavin, 'Consumption and Medieval Culture in Sixteenth Century Ireland', in *Economic History Review*, lxiv, no. 4 (2011), 1155.

¹⁰² Flavin & Jones, eds, *Bristol's Trade with Ireland & the Continent*, 952.

¹⁰³ Flavin & Jones, eds, *Bristol's Trade with Ireland & the Continent*, *passim*.

¹⁰⁴ *CARD*, i, 275. In 1452 a tax was levied in Dublin on wheatmalt, oatmalt and dredgemalt.

¹⁰⁵ Brady et al, 'The processing of cereal products', 414.

imported in significant quantities. Between 221 and 237 quarters per year were transported from Bristol to Ireland, in 1492/3, 1503/4 and 1516/17. (Table 2b). In April 1493 a Waterford vessel the *Katherine* transported almost ninety quarters of malt from Bristol to Ireland. It is possible that two other ships freighting malt to Ireland in the same year may have been heading to one of the southern ports of Ireland but it is difficult to be certain because both ships were registered in Bristol.¹⁰⁶ Malt also arrived in Ireland in the early sixteenth century from Poole and Exeter/Dartmouth (Tables. 2b, c, d). This rise in imports is best explained by diminished arable husbandry.

Unlike the fifteenth century some customs documents in the early sixteenth century mention a specific type of malt. On 20th March 1503 the *Sunday* of Cork and the *Trinity* of Kinsale transported oaten malt from Barnstable. More oaten malt was carried from Barnstable, most likely to Ireland, on 29th March, aboard the *James* of Wexford and the *Patrick* of Ross. The *Aviter* of Waterford on the same day delivered an inferior malt called dredge, possibly to Waterford.¹⁰⁷ The only other customs account for Exeter and Dartmouth that documents oaten malt dates from 1515/16.¹⁰⁸ Elsewhere, the *Katherine* of Dungarvan in March 1516, and the *Christopher* of Kinsale in May 1516, dispatched oaten malt from Barnstable to Ireland.¹⁰⁹ Supplies of malt of any type were possibly scarce at the ports in England that normally traded with Ireland. Ships from Dungarvan did not, however, appear in either Bridgewater or Bristol for malt, but their masters did seek supplies in Dartmouth and Exeter. It was probable that there were insufficient malt supplies in Bridgewater. Quantities of malt surpluses were sourced from whoever they were available on the south-west coast of England. There were three shipments in 1517/18 and one in 1518/19 from Devon to

¹⁰⁶ TNA, E122/20/9, fo. 36, fo. 52, fo. 55.

¹⁰⁷ TNA, E122/41/25, m. 15, m. 15 v.

¹⁰⁸ TNA, E122/42/2, m. 4 v.

¹⁰⁹ TNA, E122/42/2, m. 4.

Dungarvan.¹¹⁰ Elsewhere, William Dale imported thirty quarters of malt from Ilfracombe in June 1518, having transported hops and other commodities from Bristol in 1517.¹¹¹

Of the southern Irish towns Youghal especially appeared to have experienced prolonged shortages of malt in the first quarter of the sixteenth century. In 1500 two cargoes came from Poole; in 1503/4 five shipments of malt arrived from Bristol; and in 1504 two shipments came from Poole (Tables 2a-e).¹¹² Although Youghal had long since accepted malt imports, by 1516 all large ports on the south coast of Ireland witnessed similar shipments. In 1516, 1516/17, 1517/18, 1518/19 and 1525/26 cargoes of malt were arriving in Ireland on ships from Youghal, Dungarvan, Kinsale, Waterford and Wexford. In 1526 the southern Irish ports between them imported over 808 quarters of malt (Table. 2a). Indeed, forty-four Irish vessels transported malt from Bristol to Ireland. Over half of the malt was carried to Ireland in 1526. Shortages may have continued into the summer because 178 quarters was delivered in June.¹¹³ (Table 2a). Imports to Ireland of any type of malt, however, for the remainder of the sixteenth century were negligible.¹¹⁴ The significant quantities of rye delivered to Ireland of 492 quarters between February and August suggest that all grains were in short supply in Ireland in 1526.

Ancillary grains

Oats, rye and grain mixtures such as drage were cheaper alternatives to the expensive grains of wheat and malted grain. Of these grains, oats were probably the most intensively

¹¹⁰ TNA, E122/42/3, m. 18; TNA, E122/42/4 m. 19.

¹¹¹ TNA, E122/201/6, fo. 39; Flavin & Jones, *Bristol's Trade with Ireland & the Continent*, p. xx.

¹¹² TNA, E122/20/10; TNA, E122/120/11.

¹¹³ Flavin & Jones, *Bristol's Trade with Ireland*, 197-284. The forty-four ships were from six Irish ports. Fifteen were from Waterford, thirteen from Wexford, seven from Youghal, six from Kinsale, two from New Ross and one from Dublin.

¹¹⁴ Flavin, 'Consumption and Material Culture in Sixteenth Century Ireland', 1155, 1156; the customs accounts deciphered by Flavin from 1526 to 1600 records very little grain imports to Ireland.

cultivated crop in Ireland. They were grown by the native Irish as well as by the Anglo-Norman community.¹¹⁵ Oats adapt to poor weather and adverse soil conditions, making them ideal for cultivation in marginal lands inside and outside the Pale. Archaeological discoveries at Tulsk in Co. Roscommon, for example, show the use of a plough pebble (to aid ploughing) and the predominance of oats on these lands.¹¹⁶ Some oats were used for pottages (a type of porridge with beans) and others turned into malt for the production of inferior ale.¹¹⁷

Unsurprisingly, almost no oats were imported to Ireland in the later Middle Ages. The rare years in which oats were imported coincide with evidence of high wheat prices in England, and possibly political instability in Ireland. In 1506 Henry VII planned an expedition to Ireland with 6,000 men. In 1516 Piers Butler earl of Ormond was defeated by Edmund son of Thomas Butler.¹¹⁸ Maybe as a response, merchants may have tried to import oats in case of shortages because of crops destroyed. On 20th March 1506 the *Patrick* of Youghal left Poole with oats.¹¹⁹ On 5th May 1516, the *Christopher* of Kinsale departed from Exeter with oats.¹²⁰

Mixed grains and bean grain mixtures were not often imported, though when they were, large quantities figured on cargoes (Tables. 2a, b, c, d, e). Bean and grain mixtures featured significantly by the end of the fifteenth century; for example in 1503/4, eight vessels, three of them English, were freighted in Bristol with cargoes of approximately forty-five quarters each.¹²¹ In the same year five Irish craft delivered these mixtures, probably to Waterford and Kinsale. The probable reason for grain mixtures was that the harvest of wheat had been poor

¹¹⁵ K. Down, 'Colonial Society & Economy', 470; Murphy & Potterton, *The Dublin Region in the Middle Ages*, 303.

¹¹⁶ N. Brophy, 'When mounds become castles: a case for the later usage of early medieval sites', C. Corlett & M. Potterton, *Rural Settlement in Medieval Ireland* (2009), 21.

¹¹⁷ Murphy & Potterton, *The Dublin Region in the Middle Ages*, 313.

¹¹⁸ Moody, et al., *A New History of Ireland*, vii, 183, 187.

¹¹⁹ TNA, E122/120/11, fo. 9.; J. Lydon, *The Lordship Of Ireland in the Middle Ages* (Dublin, 2003), 220.

¹²⁰ TNA, E122/42/2, m. 4 v; T. Moody, F.X. Martin & F. Byrne, eds, *A New History of Ireland*, viii (Oxford, 1989), 186. Aodh Dubh Ó'Domhnaill captured castles in four locations near Sligo.

¹²¹ Flavin & Jones, eds., *Bristol's Trade with Ireland & the Continent*, 2-102.

in England in 1502/3 and, more importantly, the barley harvest in the early 1500s had also produced low returns.¹²² Shortages probably motivated producers to mix grain and beans to form a malt/beans mixture. Alternatively, on occasion a sprouted grain, not malt mixed with beans, was used to create a saleable commodity which in times of need added bulk to inferior bread or pottage recipes.

The bean/grain mixtures exported from Bridgewater to Ireland in 1496 were different to those exported from England in the early sixteenth century (Table. 2c). Firstly, the volumes were significantly larger. The largest shipment on the *John* of Bridgewater was over 160 quarters of wheat and beans.¹²³ The other three shipments, on the *Trinity* and *Margaret* from Wexford, and on the *Sunday* of Youghal, were smaller cargoes of approximately fifty quarters each. The mixture was of unmalted barley and beans. Weather conditions were good in England and Ireland in 1495 and 1496 for growing crops, so these large shipments from England to Ireland are not explained by food shortages.¹²⁴ They may have been shipped because supplies were abundant in England. Alternatively, there may have been political reasons for the demand in Ireland especially in Munster where the earl of Desmond and the crown were locked in dispute until August 1496.¹²⁵ The largest shipment was on the *John* which set sail for the southern ports of Ireland with 162 quarters on 8th June, whilst the *Sunday* of Youghal departed Bridgewater on 6th July with 60 quarters of beans and barley.

Rye

Shipments of rye in the later Middle Ages from England to Ireland were negligible (Table.

¹²² Dyer, *Standards of Living in the Later Middle Ages*, 263.

¹²³ TNA, E122/26/20, m. 2.

¹²⁴ Dyer, *Standards of Living in the Later Middle Ages*, 263; Lyons, 'Famine, Pestilence, Plague in Ireland 900-1500', 46, 47, 72.

¹²⁵ O'Brien, 'Politics, Economy and Society', 137, 138.

2a-e). Rye was grown on demesne lands in Ireland in very small quantities.¹²⁶ It produced an inferior bread for poorly resourced consumers; it could not be malted and the straw was only useful as a roofing material.¹²⁷ The presence of rye in the customs documents suggests severe food shortages in the regions into which it was imported. The presence of rye in 1525/6 in shipments of grain from Bristol is no surprise, as this was the same year in which wheat and malt imports to Ireland reached their height (Fig. 2a).

There were other years too, in which food shortages led to unusual imports. Three picards departed Exeter/Dartmouth for Ireland with small quantities of wheat, malt and rye between 27th March and 28th March 1493.¹²⁸ In 1494 the *Patrick* from Rush, Co. Dublin, departed a port in the jurisdiction of Exeter/Dartmouth with nine quarters of rye. It was unusual for a Dublin vessel to visit Devon and the *Patrick* did not unload a cargo from Ireland in this region.¹²⁹ It had, perhaps, been commissioned simply to acquire an inexpensive emergency cargo of grain. The only other shipment from this region was made in 1494 by Walter Barry, who transported six quarters of rye on his Wexford vessel to Ireland.¹³⁰

Beans

Beans were recorded in the customs documents as *faber, faberum*.¹³¹ It was probable that these entries refer to broad beans. Broad beans contain complex carbohydrates including fibre and protein, along with vitamins B2, (niacin) and B6, and important chemicals – potassium, magnesium and iron.¹³² These ingredients were sufficient to sustain life as a

¹²⁶ Murphy & Potterton, *The Dublin Region in the Middle Ages*, 305, 309.

¹²⁷ Murphy & Potterton, *The Dublin Region in the Middle Ages*, 308; Britnell, *Britain and Ireland 1050-1530*, 388.

¹²⁸ TNA, E122/41/14, m. 6, fo. 23 v.

¹²⁹ TNA, E122/41/18, fo. 23.

¹³⁰ TNA, E122/41/18.

¹³¹ TNA, E122 (Bristol and Bridgewater Customs Accounts), *passim*.

¹³² K. Pearson, 'Nutrition and the Early-Medieval Diet', in *Speculum*, lxxii, no. 1 (1997), 6.

single food source in times of dearth; however, this pulse legume had to be consumed in very large quantities to provide the necessary calorific return which peasants who worked the fields needed to sustain life. The main gastronomical dietary usage of beans was in the form of pottage, a gruel containing a mixture of peas, beans and grains.¹³³ This was predominantly a mixture eaten by the poorer classes. An alternative use of coarser beans (possibly overripe broad beans) was as fodder for horses. These older beans were ground down and in times of dearth and made into bean breads which became a substitute for breads made from grain.¹³⁴

Beans were grown in Ireland in significant quantities earlier in the Middle Ages but to a lesser extent than oats or wheat.¹³⁵ In the later Middle Ages they were grown in the Dublin region on several demesnes and granges –including the Templar manor of Clontarf, and the archiepiscopal manor of Swords and Clonkeen.¹³⁶ Recent archaeological discoveries in Laois, Meath and Dublin have also revealed a small concentration of pulse crops dating from the Middle Ages.¹³⁷ Beans were grown across much of Ireland in sufficient quantities for large exports to have been compiled during the Scottish wars of the late thirteenth century.¹³⁸

Although common in many other parts of Ireland, beans were probably not grown on any large scale in the southern counties after 1300. Firstly, the prevailing wet climate after 1300, especially in exposed areas on the southern coasts, was not conducive to their cultivation.¹³⁹ Secondly, the decline in cereal growing adversely affected beans too. Before 1300 nitrogen-rich bean stalks were ploughed back into the land. The cultivation of wheat, barley or oats,

¹³³ Dyer, *Standards of Living in the later Middle Ages*, 153.

¹³⁴ Murphy & Potterton, *The Dublin Region in the Middle Ages*, 314.

¹³⁵ Murphy & Potterton, *The Dublin Region in the Middle Ages*, 314.

¹³⁶ Murphy & Potterton, *The Dublin Region in the Middle Ages*, 314, 315.

¹³⁷ S. Lyons, 'Beans and starchy staples – the contributions of archaeobotany to understanding pulse crops in medieval Ireland' *passim* (forthcoming Seanta, 2013).

¹³⁸ *CPR*, 1301-1307, 417; *CPR*, 1321-1324, 94.

¹³⁹ Longfield, *Anglo-Irish Trade in the Sixteenth Century*, 174.

on lands once sown with legumes, benefited from this fertilising process.¹⁴⁰ After 1350 the need for fertilizers declined as arable land usage went into abeyance and Ireland became merely a pastoral economy benefiting from the export of hides and skins.¹⁴¹ There is consequently little evidence of beans stored by Dublin townspeople; and although a large number of Dublin wills record grains, only one will makes mention of beans.¹⁴² Despite the lack of beans in Dublin wills, they were frequently consumed in Dublin because archaeological evidence shows the presence of a bean eating insect (*Bruchus rufimanus*) in a cesspit on Essex Street. Beans were also consumed in south eastern Ireland: evidence of the insect was also discovered in Waterford.¹⁴³

The popularity of beans as a long life food source probably encouraged growers in the west of England to widen their cultivation on Gloucestershire manors after 1368. As a consequence, legume crops were grown in the Severn and Avon valleys in the fifteenth century.¹⁴⁴

The trade in beans from Bridgewater and Bristol to ports on the south coast of Ireland

Demesne land in Somerset were extensively cultivated with large quantities of beans some may have been for its own consumption within the region. More importantly, however, surpluses were exported in huge quantities to Iberia.¹⁴⁵ There were still sufficient beans left over each year, however, for Irish and English merchants to export the residue to Ireland. Beans were an ideal commodity when grain was in short supply. Beans had a significant

¹⁴⁰ M. Murphy & M. Potterton, *The Dublin Region in the Middle Ages*, 314, 315.

¹⁴¹ Down, 'Colonial Society and Economy', 486.

¹⁴² Berry, ed., *Register of wills*, 58.

¹⁴³ S. Duffy, ed., *Medieval Dublin*, iv, 53.

¹⁴⁴ B. Campbell, 'The Diffusion of Vetches in Medieval England', in B. Campbell, ed., *Field Systems and Farming Systems in Late Medieval England* (Farnham, 2008), 204.

¹⁴⁵ Flavin & Jones, eds, *Bristol's Trade with Ireland and the Continent*, *passim*.

advantage in comparison to grain. It could be stored for much longer periods.¹⁴⁶ They could be dried and kept for many years before being rehydrated with water in times of dearth.

When famine struck most foods were in short supply, beans had the added benefit of containing protein. This, however, does not explain the very large quantities of beans shipped to Ireland in years when there was no famine. In the last decade of the fourteenth century, licences permitted the export of significant quantities of beans from Bridgewater to ports in Ireland.¹⁴⁷ In the fifteenth century large quantities of beans were also exported from Bordeaux to Ireland. Between 1479 and 1488, no adverse weather affecting crops or animals are recorded in Irish annals.¹⁴⁸ Yet in 1481/2 and 1485/6 there were 2,607 and 1,998 quarters of beans respectively imported from Bridgewater to Ireland (fig. 2g). Similar quantities came from Bristol in 1485/6 and 1486/7: over 600 and 1,200 quarters of beans respectively were then imported into the southern ports of Ireland (Table. 2f).

We can only speculate as to what became of these imports. Beans were a useful food should famine strike and even though there is no record of famine in the years of import, perhaps they were imported as a precautionary measure. It is, of course, also possible that beans were simply used as ballast in the absence of more profitable cargoes. Vessels needed to be kept stable in order to withstand adverse weather conditions.¹⁴⁹ Beans could be freighted cheaply and without containers on board a ship.¹⁵⁰ Moreover, unlike grains, beans did not require special transport sheets to stop them sifting through the clinker-built timber hulls. The use of beans as a ballast cargo has merit when the value of beans is compared to the value of high quality fish transported to Bridgewater. I am only using fish as a value comparative to beans

¹⁴⁶ Jordan, *The Great Famine*, 14. In the fourteenth century most people lived from harvest to harvest: *Seanda*, (2008), 28-30. Grain could be kiln-dried so it would not overheat and rot – this process would allow the grain to be stored for two seasons.

¹⁴⁷ *CPR*, 1361-1364, 35, 61, 176; *CPR*, 1370-1374, 52.

¹⁴⁸ M. Lyons, 'Famine, Pestilence and Plague in Ireland 900-1500', *passim*.

¹⁴⁹ Jones, 'The Bristol Shipping Industry in the Sixteenth Century', 133.

¹⁵⁰ TNA, (E122 customs accounts), *passim*.

to test the veracity of beans used as a ballast cargo. The customs accounts for Bridgewater reveal that low value fish such as stockfish were transported from Ireland to England, when compared; the price of the two commodities does not support the ballast theory.¹⁵¹ For example, the *Mary* of The Isle of Wight, the *Savior* of Wexford and the *Sunday*, all entered Bridgewater in 1485/6 with higher value cargoes of beans than the fish they transported to England.¹⁵² Similarly, in May 1486 the *Anne* of Bristol left Bridgewater with a higher valued cargo of beans than the stockfish it imported from Ireland.¹⁵³ The hypothesis of bean cargoes used as a ballast only holds water when the value of beans is compared to high value fish such as salmon, hake and herring. The value of beans dispatched to Ireland in these comparisons was of inferior value. (Table. 2i). In the main, high value fish sourced and exported from Ireland far exceeded the exports of cheap fish. (Table. 2i). In many cases the valuable fish exports constituted three times the value of bean exports on return journeys to Ireland (Table. 2i). For example, in 1486 the *Margret* of Kinsale and the *Margret* of Bristol delivered cargoes of fish to Bristol of greater value than beans.¹⁵⁴ There were a number of advantages to transporting beans to Ireland. They were a ballast cargo; they were easy to transport and could be stored for long periods. Indeed, the importation of large quantities of beans may even have contributed to a continued decline in their cultivation in Ireland. As a result beans were probably not grown in quantity in southern Ireland in the fifteenth century. Instead the land may have been used for pastoral farming.

Beans may have replaced stone imports as ballast previously sourced from Somerset to Ireland. Merchants were used to the region because Irish vessels had been trading with the

¹⁵¹ TNA, E122/20/7 m. 5, m. 6, *Le Margret* of Bristol arrived to Bristol in March 1486 with a cargo of fish valued at approximately 600s and then returned to Ireland with beans and cloth valued at approximately 580s.

¹⁵² TNA, E122/26/13, m. 1, m. 2, m. 3.

¹⁵³ TNA, E122/20/5, m. 18, m. 20.

¹⁵⁴ TNA, E122/20/5, fo. 12.

Somerset region from the end of the twelfth century. Ever since 1175, heavy cargoes of oolitic limestone from Dundy Hill in Somerset had been imported to most Irish ports between Drogheda on the east coast and Kinsale on the south coast. It was used in church building close to busy ports in Ireland. The stone was not, however, imported from Somerset in the later fifteenth and early sixteenth centuries.¹⁵⁵ After 1400, once large scale building projects in Ireland had ceased, beans may have replaced stone as a bulk cargo to give stability to vessels.

Ireland imported practically no beans from Southampton, Plymouth, Fowey, Poole, Exeter or Dartmouth (Table. 2h).¹⁵⁶ Instead, bean imports came overwhelmingly from Bristol and Bridgewater and their creeks though even then only a few Irish ships transported beans from Bristol to Ireland after 1477/8. It was, rather, predominantly on English ships that beans reached Ireland. The ratio of English to Irish vessels involved in this trade was always in favour of English ships except in 1516/17, the largest consignments of bean shipments to Ireland were recorded. (Table. 2f). In this year 2,186 quarters of beans were dispatched to Ireland, between two and three times that recorded in other years. The increase in the number of craft, too, was exceptional. Forty-three vessels, half of them Irish, delivered their cargoes to the southern Irish ports (Table. 2f). The Irish vessels involved in the bean trade were evenly split between Youghal, Waterford, Wexford and Kinsale - an average of five vessels per port. This broadening of participation of shipping from Wexford and Kinsale in the bean trade in the sixteenth century was possibly new: in the fifteenth century Irish craft had normally only delivered beans on boats from Waterford, Kinsale and Wexford. (Table. 2f).

¹⁵⁵ D. Waterman, 'Somersetshire and other foreign building stone in Medieval Ireland, c.1175-100', *Ulster Journal of Archaeology*, xxxiii, Third series (1970), 63-78.

¹⁵⁶ TNA, E122/19/13, *passim*.

Bristol, as the primary English port trading with Ireland, would have been expected to have supplied the bulk of beans to Ireland. It was, however, in Bridgewater that the majority of bean exports to Ireland originated.¹⁵⁷ This was because of the town's close proximity to the large cultivation areas in Somerset.¹⁵⁸ Moreover, unlike most years at Bristol, Irish vessels far outnumbered English ships in transporting beans from Bridgewater to Ireland. Some Bridgewater customs accounts dating from the early sixteenth century do not state the destination of departing vessels (Table. 2g). Some Bridgewater accounts such as those for 1413/14, 1484/5 and 1486/7 do record destinations, but in these years the importation of beans to Ireland was minimal.¹⁵⁹ In some years, however, in the fifteenth and sixteenth centuries, such as in 1481/2, 1496 and 1510/11, bean exports from Bridgewater to Ireland were very significant.¹⁶⁰ In these years between 2,500 and 3,500 quarters of beans were dispatched from Bridgewater to Ireland. In 1481/2 and 1510/11 vessels from Cork, Youghal and Wexford delivered beans to Ireland. Youghal ships were often at Bridgewater with many craft returning to Ireland with beans. In 1481/2 fourteen ships probably delivered beans to Youghal whilst nine vessels possibly transported them to Cork. A similar pattern of trade occurred in 1510/11 – nineteen shipments departed on Youghal ships, whilst ten were transported on Wexford vessels and a further ten ships were from Cork (Table. 2g). A total of eighty-one cargoes of beans were delivered to the southern ports of Ireland; almost sixty percent of these were transported on Irish boats. Although grain was not dispatched from Bridgewater to Ireland in either 1481 or 1510/11, bean imports were still significant on the south coast of Ireland.¹⁶¹ Forty-six shipments totalling c.2,000 quarters of beans were

¹⁵⁷ TNA, E122/25/5; TNA, E122/26/8; TNA, E122/26/9; TNA, E122/26/13; TNA, E122/26/14; TNA, E122/26/16; TNA, E122/26/20; TNA, E122/27/1.

¹⁵⁸ J. Rogers, *A History of Agriculture and Prices*, iv, 260-290. There are some entries of bean prices from demesnes in Somerset.

¹⁵⁹ TNA, E122/25/7, *passim*.

¹⁶⁰ TNA, E122/26/8, *passim*; TNA, E122/26/20, *passim*; TNA, E122/27/1, *passim*.

¹⁶¹ TNA, E122/26/8, *passim*; TNA, E122/26/9, *passim*; TNA, E122/27/1, *passim*.

transported to Ireland for the three years from 1518 to 1520.¹⁶²

It was in the months January to March that the largest quantities of beans were usually sent from Bristol to Ireland (Table. 2f). These months coincided with the worst weather conditions for sea travel and shortages in the port towns awaiting the new harvest in Ireland. Bridgewater, however, supplied beans to Ireland over a longer period in the year, and were at their peak from January to May. Later in the fifteenth century bean shipments from Bridgewater to Ireland in 1496 totalled 2,322 quarters. Bean imports from England to Ireland continued to flourish in the sixteenth century. In 1510/11 Ireland imported 2,866 quarters - up to the month of July probably indicating collective concern about anticipated poor harvests or the anticipation of political uncertainty in Ireland. (Table. 2f). This was possibly the case in 1497 when a significant famine occurred in Ireland whilst beans were cheap in regions in England.¹⁶³ Beans may have been the food substitute of choice of not just Ireland but also Iberia. There were, of course, other markets such as kingdoms in Spain which took huge quantities of beans from Bristol. For example in 1516/17, the *John* and *Mawdalen* of Errenteria (Spain) and *Jesus* and *Matthew* of Bristol, combined, transported 1,077 quarters of beans to Iberia.¹⁶⁴ The demand for beans at the end of the fifteenth century may possibly have prompted growers in Gloucester to increase their acreage.¹⁶⁵

Conclusion: Grain and Grain Mixtures and Beans

Trends in the grain trade between Ireland and England may be viewed as a tale of two periods. In the years from 1350 to c.1420 Ireland was a significant exporter of grain but

¹⁶² TNA, E122/27/2, *passim*; TNA, E122/27/3, *passim*; TNA, E122/27/5, *passim*.

¹⁶³ Lyons, 'Famine, Pestilence and Plague in Ireland 900-1500', 75; Rogers, *A History of Agriculture and Prices*, iii, iv, 248.

¹⁶⁴ Flavin & Jones, *Bristol's Trade with Ireland and the Continent*, 114, 120, 121, 132.

¹⁶⁵ B. Campbell, 'The Diffusion of Vetches in Medieval England', in B. Campbell, *Field Systems and Farming Systems in Late Medieval England* (Farnham, 2008), 204.

between 1420 and 1525 the lordship became a modest importer of corn. For a brief period in the sixteenth century Ireland required significant quantities of grain. In the period from 1350 to 1450 Ireland did not import or export beans to any great degree, but between c.1460 and 1520 Ireland was a very significant importer of beans. The surviving Bristol customs documentation from the first half of the fifteenth century shows no activity at all for the trade of grain across the Irish Sea (Table. 2a). Licences issued to merchants, however, do show some export of grain in this period. (Table. 2a). In the early part of the fifteenth century Ireland exported wheat to Bayonne and Bordeaux. The lordship, had become a destination for grains dispatched from Bordeaux by the end of the fifteenth century. Gradually, after 1450, grain imports from England to Ireland increased. The amount of wheat arriving from Bordeaux to Ireland, in the early sixteenth century was even more significant, even though Gascony was lost to England in 1453. The scarcity of cereals in the west and south-west of Ireland, which had been in the fourteenth century so replete of grains, was symptomatic of political and economic change. Gradually throughout the fifteenth century land used for crops and legumes reduced significantly in Ireland. As a result there were probably three main reasons for grain and bean importation to Ireland. Firstly, Ireland had changed from arable to pastoral farming possibly as a result of the Great Famine and climate change. Secondly, in the fifteenth century absentee landlords, emigration, Gaelic Irish incursion and intermittent outbreaks of plague caused Ireland to import grains and beans from Bristol and Bridgewater. Finally, the instability of domestic supplies caused by warfare and political tensions in the Pale (once the supplier of grains to the rest of Ireland and on occasion to the realm and Iberia). The decline of the Pale meant that there were no surplus grains available to transport to the southern regions in Ireland, or anywhere.

CHAPTER 3

The Exportation Of Fish From The Rivers And Seas Of Ireland

In the Middle Ages fish was Ireland's largest food based export in terms of value and volume.¹ Conversely, Ireland was not a significant importer of fish. I intend in this chapter to demonstrate the importance of fish caught off the coast of Ireland and its impact in relation to the diet of people living in Ireland, England and continental Europe. The species of fish consumed in Ireland will be compared to the fish exported to foreign ports. Archaeological and historical data will be used to determine this. The chapter will include a study of the methods whereby fish were caught in the three environments in which fishermen were active. These were freshwater, estuarine locations, and the sea. The processes used to preserve the catch, both in Ireland and in foreign locations, will be elucidated. The preservation of both freshwater and sea fish was essential for its exportation. The curing process which occurred soon after fish were harvested from the sea will, therefore, be discussed and the dietary significance of fish to the medieval household.

The transport of fish from Ireland to destinations in either England or continental Europe required that it be stored in robust containers to ensure its marketability. Once fish from Irish ports was delivered to Bristol, Bridgewater, and later to Plymouth and Fowey, Exeter, Dartmouth and Southampton, it was inventorised for taxation purposes by the collector of customs. The surviving particular customs accounts for fifteenth and early sixteenth-century English ports include records of fish exports from Ireland and these exports are outlined later in this chapter in tabular form.² These tables provide an in-depth view of the commercial

¹ TNA, E122 (Particular customs accounts for the ports of western England), *passim*. Example: TNA, E122/17/11, particular customs account from December 1403 to March 1404, all membranes denote fish going from Ireland to Bristol.

² TNA (E122 customs accounts), *passim*

trends for each species of fish exported from Ireland. Unfortunately, few customs accounts survive for continental Europe and none of those that do include evidence of the fish trade involving Irish ships in similar detail to that available for England.³ While there are gaps between customs accounts there is, however, enough information from the surviving accounts and other sources to indicate that there was a significant trade in fish from Ireland to England, such as the data contained within the calendars of patent and close rolls for England as well as the chancery papers for Ireland. Furthermore, the activities of some Irish and English merchants involved in the salmon trade noted in the patent rolls for England can be especially useful when their names are compared to those in the customs documents. There are, too, some small snippets of information relevant to the trade between Ireland and continental Europe.

The export of fish from Ireland was governed by two criteria. Firstly, if there was the demand for a particular species of fish, such as herring or hake, had Irish fishermen the capability of supplying it? Secondly, the export of certain species of fish/crustaceans was constrained by their rapid perishability. The range of fish caught in Irish waters was significant. The *Libelle of Englyshe Polycye* mentions salmon, hake and herring among the country's exports. The absence of certain species of fishbones from the archaeological evidence does not necessarily mean that they were not part of the food chain. For instance salmon, a fish both exported from Ireland and consumed within the island, is in most cases missing from fishbone discoveries.⁴ This is because salmon fishbones are high in calcium and do not survive as well as the other types of fish skeletal finds.⁵ But the documentary sources indicate that salmon

³ Childs, 'Ireland's Trade with England in the Later Middle Ages', *Irish Economic & Social History*, ix (1982) 8, 9, M. Murphy & M. Potterton, *The Dublin Region in the Middle Ages* (Dublin, 2011), 395.

⁴ Murphy & Potterton, *The Dublin Region*, 393. There appears to be no evidence of medieval salmon bones remains from excavations in Dublin.

⁵ D. Sergeatson *et al.*, 'Fish consumption in Medieval England' in C. Woolgar *et al.*, eds, *Food in Medieval Diet and Nutrition* (Oxford, 2011), 106.

was an important export. So too were herring, saltfish (including cod and pollock), hake and pike, all noted in the particular customs accounts for ports on the west coast of England. It is rapid perishability which perhaps explains why little or no shellfish were exported from Ireland in the later Middle Ages, even though such fish were harvested from Irish shores.⁶ Furthermore, sea bream, lampreys and conger eel, though consumed in Ireland, were rarely recorded in cargoes and they are not mentioned among the Irish fish exports in the *Libelle of Englyshe Polycye*.⁷ There were, then, differences between the species of fish that were exported from Ireland and Irish waters and those caught and consumed in Ireland. The main species caught in and around Ireland was as the *Libelle* suggests herring, salmon and hake which were abundant in Irish waters.⁸ Archaeological evidence from the medieval Dublin locations of High Street and Thomas Street and the possible herring fishery at Hammond Lane in Dublin as well as evidence from Waterford substantiate the existence of a salted fish industry. Indeed, the preservation of saltfish was probably a significant enterprise in larger Irish ports, such as Dublin, Waterford and Wexford.⁹ Remains of ling and cod were found at Arran Quay in Dublin along with small fragments of hake, bass, sea bream and conger.¹⁰

Herring

Herring was the most significant of Ireland's fish exports in the fifteenth and early sixteenth century.¹¹ Indeed, it had been exported at least occasionally to towns in Normandy (such as Rouen) from before the thirteenth and fourteenth centuries.¹² It is certain that by the late

⁶ Murphy & Potterton, *The Dublin Region*, 393. Fish remains discovered in the twelfth to sixteenth century archaeological sites included cockles, mussels, oysters, periwinkles, scallops and crab. None of these crustaceans are mentioned in the customs accounts for ports on the west coast of England.

⁷ TNA, E122 (particular customs accounts for Bristol), *passim*; Chancery.tce.ie/doc.134 Patent roll 32 Edward III (date accessed 2012/2015).

⁸ G. Warner, ed., *The Libelle of Englyshe Polycye. A poem on the use of sea power 1436* (Oxford, 1926), line 658, 34.

⁹ Murphy & Potterton, *The Dublin Region*, 393.

¹⁰ S. Hamilton-Dyer, 'The Fishbone' in S. Duffy, ed., *Medieval Dublin V* (Dublin, 2004), 236.

¹¹ TNA, E122 (particular customs accounts for the ports on the west coast of England), *passim*.

¹² C. Fréville, *Mémoire: sur le commerce maritime de Rouen depuis les temps les plus récentes jusqu'à la fin du*

fourteenth century herring was being fished in Irish waters.¹³ By then, both the Irish Sea coast and the Atlantic coastline were fished extensively for herring by both foreign and local fishermen.¹⁴ Waterford and its coastline in particular was a rich resource for herring fishermen.¹⁵ The areas surrounding the northwest of Ireland (Carlingford, Dublin, the southern ports of Ireland, Galway and Sligo) were also important herring fishing centres and some indications of the vibrancy of the trade at a local level can be seen from O'Neill's study of Kilclougher between 1475 and 1477.¹⁶ There were several spawning areas in the Irish Sea for herring. The closest to the Irish coast was at Mourne, half a day's sail from Drogheda. (Map 6). The spawning at Mourne occurred in the last weeks of September (compared to the spring spawning herring of the Clyde) and other spawning grounds were located off the coasts of Dunmore East and Cork.¹⁷ There, no hindrance was to be put on the Dublin or Drogheda fishermen trading in and out of Kilclougher once they had paid a toll of one *mease* of herring yearly. We have no evidence how much coin or fish was collected, but that a levy was imposed at all reveals its significance. Nevertheless, although herring may have been common off the coast of Ireland, the shoals were not static. A statute of 1470 outlined the constant movement of herring shoals caused by wind, storm and the migratory nature of the species. It also stated that fishermen were not to be impeded either by day or night in pursuit of herring.¹⁸ The herring fleets relocated to where the fish had moved in a particular season.

XVI siècle i, 109. In the twelfth century most of the trade between Normandy and Ireland was through Rouen; J. Round, *Feudal England, Historical Studies on the Eleventh and Twelfth Centuries* (London, 1895, reprint 1964), 354. At least from the twelfth century marten skins are traded with bones.

¹³A. O'Brien, 'Commercial Relations between Aquitaine and Ireland', in J. Picard, ed., *Aquitaine and Ireland in the Middle Ages* (Dublin, 1995), 36; TNA, E122/17/11; TNA, E122/17/10; TNA, E122/17/37; K. Wilson, ed., *The Chester Customs Accounts 1301–1565* (Liverpool, 1969).

¹⁴TNA, E122 particular customs accounts for ports on the west coast of England shipments of herring on Irish, English and foreign vessels; W. Childs, 'Eastern Fisheries' in D. Starkey et al., eds, *The Commercial Sea Fisheries of England and Wales since 1300* (London, 2000), 27.

¹⁵Down, 'Colonial society and economy', in A. Cosgrove, *New History of Ireland*, (Oxford, 1987), 487.

¹⁶T. O'Neill, *Merchants & Mariners in Medieval Ireland* (Dublin, 1987), 31.

¹⁷J. Harland, Technical Report: 'Fish remains from the Drogheda Boat, Ireland' *Reports from the Centre for Human Palaeoecology* (University of York, 2009), 8.

¹⁸H. Berry, ed., *The Statute Rolls of the Parliament of Ireland, First to Twelfth Years of the Reign of Edward IV* (Dublin, 1914), 665.

But other man-made regulations also influenced the movements of the fishing fleet. A statute in 1449-50 prohibited fishing off the coast of Baltimore. This was as a result of tributes exacted from fishing vessels by the local Gaelic chief Fineen O'Driscoll, to the detriment of the crown revenues. Nevertheless, the number of ships noted fishing off the Baltimore coast in 1449-50 attests to the distance vessels sailed from their home port.¹⁹

Fishermen could fish for herring either on the coastline or in deeper waters. This pelagic fish was found on the coastline or in the upper layers of the ocean.²⁰ Depending on the locations, fishermen used various strategies for catching herring including (drift) nets which were deployed at sea and in estuarine weirs. Later in the fifteenth century the *Vleet* net already used by Dutch fishermen may have found its way into the Irish fishing industry.²¹ Welsh fishermen used a device called *goredi*, an oval shaped trap to contain herring on the coast when the tide ebbed.²² In the waters surrounding the Severn estuary sea weirs were constructed with wooden posts in a V shape to capture herring, cod and other fish.²³ In Ireland, too, fish traps were used in estuarine weirs, though not exclusively for herring.²⁴ Herring were caught in the Shannon estuary; the abbey of St Senan on Scattery Island (off Kilrush) levied from every vessel 500 herring once a year.²⁵ But small craft that fished for herring used other methods too. Fishermen in the Netherlands went out in small boats at

¹⁹ H. Berry, ed., *The Statute Rolls of the Parliament, Reign of Henry VI* (Dublin, 1910); J. Morrissey ed., *The Statute Rolls of Edward IV, Twelfth and Thirteenth Years to the – Twenty First and Twenty Second of the Reign of Edward IV* (Dublin, 1939), 389.

²⁰ R. Robinson, 'The Common North Atlantic Pool', D. Starkey et al., eds, *The Commercial Sea Fisheries of England and Wales since 1300*, (London, 2000), 10.

²¹ R. Unger, 'The Netherlands Herring Fishery in the Late Middle Ages: The False Legend of Willem Beukels of Biervliet', *Viator: Medieval and Renaissance Studies*, ix (1978), 348. The *Vleet* net was a group of smaller nets joined together, used by Dutch fishermen from the 1420s.

²² W. Childs, 'Fish Production, Trade & Consumption', in D. Starkey et al, eds, *England's Sea Fisheries* (London, 2000), 26.

²³ Childs, 'Fish Production, Trade & Consumption', 26.

²⁴ Murphy & Potterton, *The Dublin Region*, 394.

²⁵ A. Went, 'Historical notes on the fisheries of the Estuary of the River Shannon', *Journal of the Royal Society of Antiquaries of Ireland*, cxi (1981), 113. This levy was in place at the dissolution of the monasteries, c.1541.

night to catch herring feeding on the surface of the ocean.²⁶ This is possibly similar to the trawling for herring off the Irish coastline which was attested in the will of Alice Cassell of Lusk who, in 1472, bequeathed a small boat, valued at £4, with fourteen sea nets and ship's equipment. Irish fishermen purchased herring nets manufactured in Bordeaux to catch this fish in Irish waters.²⁷ The inventory also outlines three *mease* of probably 'red' herring (numbering 1,860), presumably caught at sea using this equipment, as part of her legacy.²⁸ The type of vessel and equipment Cassell noted in her will was possibly similar to the craft in a map dating to 1580.²⁹ (Map 6).

Earlier in the Middle Ages herring had been lightly salted but not gutted. The fish became inedible very quickly. Light salting delayed putrefaction, but the fish still had to be consumed quickly and export delayed consumption. Fishermen and merchants gradually developed a new technology to overcome these problems.³⁰ Since herring are oily and do not lend themselves to wind drying, they were cured, and subsequently referred to as white herring (*allei alba*) and red herring (*allei ruby*).³¹ White herring were cured by firstly gutting the fish and then by washing them in salt. The herring were then placed into barrels, numbering 1,000 each, and topped up with brine. None of the bones were removed.³² The curing employed to create white herring perhaps had its origins in Skania but was then developed extensively by the Dutch fishermen in the fourteenth century. The Dutch method, referred to as *kaken* (to cure), was a very precise treatment for preserving the herring from the point where they were removed from the drift net. Even the date of the catch was to be etched on

²⁶ Unger, 'The Netherlands Herring Fishery', 340.

²⁷ Bernard, *Navires*, iii, 213.

²⁸ H. Berry, ed., *Register of wills and inventories of the diocese of Dublin in the time of Archbishop Tregury & Walton 1457-1483* (Dublin, 1898), 51-52.

²⁹ TNA, MFP/1/86. Map of the Irish Sea c.1580.

³⁰ Cutting, *Fish Saving*, 57.

³¹ TNA, E122 (particular customs accounts for the ports on the west coast of England), *passim*.

³² Harland, 'Fish remains on the Drogheda Boat', 2, 4.

the barrels.³³ Our best evidence relating to the curing of Irish herring comes from the remains of herring bones found on the excavated Drogheda boat from c.1520. Remnants of fourteen barrels were found on this vessel, the extent of herring bones numbering 513.³⁴ The herring had been butchered on the vessel to extract the gills and part of the guts. The *claitra*, *scapulae*, *urohyals* and *supraclaitra* had been removed in most of the fish. The curing process was aided by leaving the *pyloric caecae* in the fish. Trypsin, the enzyme produced by this gland, was the catalyst for preservation. The catch was brought ashore, where the blood from the fish which had mixed with the brine was replaced by fresh salt and water.³⁵ The fish were then re-packed in salt and brine.³⁶ The herring was placed into air-tight barrels ready for transportation. The fish ranged in length from 23cm to 28cm. The size variations of up to 5cms indicate that there was not a uniform grading system for storing fish. The butchered and preserved herring bones found on the Drogheda ship were, however, very similar to those found on Dutch ships.³⁷ This was not a new curing method for herring as Willem Beukels of Biervliet was credited by the town of Ostend in 1483 with the introduction of this type of curing into the Netherlands fisheries in c.1400. The Dutch system allowed for herring to be cured on board the vessel immediately after they had been caught. The Dutch and the Skania methods of curing were essentially the same. The gills and some of the insides were removed; some of the guts remained to assist the enzymes to preserve the fish. The fish were layered in opposite directions at every second level in the barrel where additional salt was added. The extra salt helped to stop the fat in the fish turning rancid. When the fish had settled in the barrels, the receptacles were topped up with fish of a similar curing. They were

³³ Cutting, *Fish Saving*, 62

³⁴ Harland, 'Fish remains on the Drogheda Boat', 12.

³⁵ Unger, 'Netherlands Herring Fishery', 336; J. Laughton, *Life in a Late Medieval City: Chester 1275-1520* (Oxford, 2008), 67. Salt in fishing communities may have been placed in salt ships with water. The fish market in Somerset is similar to the find in Nantwich, Chester.

³⁶ Harland, 'Fish remains on the Drogheda Boat', 14.

³⁷ Harland, 'Fish remains on the Drogheda Boat', 14.

then made airtight to exclude the effect of damaging oxygen for long-term storage.³⁸ It may be surmised that the white herring were full (*plenum*) which meant that they were full of roe and not shotten (*vacuum*), for example herring that had already spawned.

An alternative method of preservation produced red herring. Red herring were lightly salted on board ship and then, upon landing, washed and re-salted. They do not appear to have been gutted, but they were then smoked in smokehouses for several weeks.³⁹ Red herrings could be full or devoid of roe. Red herrings were also described in Ireland as whole, ungutted fish, heavily salted and close smoked until hard.⁴⁰ They were packaged by the *mease*, a quantity which varied but is interpreted in the collation of the customs documents as containing 620 herring. The *mease*, or *cade* in some sources, was a type of barrel to accommodate the smoked herring.⁴¹ While white herring, especially those pickled by the Dutch method, could last in an air-tight barrel for up to a year, red herring did not keep for as long.⁴² White herring were, therefore, more valuable than red herring, as is apparent from customs data from English ports.⁴³ Herring of both types were exported with and without roe. The *Bonaventure* of Cork delivered five lasts of herring with roe and without roe to Plymouth on 26th January 1513.⁴⁴ There are other instances too where a similar description was recorded. The *Mary* of Cork, entered Fowey in February 1512 with four lasts of herring with roe and without. The *Panke* of Youghal entered Fowey in February 1514 transporting forty-two barrels of herring with roe but Roger Copinger, on the same ship, freighted herring with and without roe.⁴⁵ The same monetary customs valuations were given for both types of herring even though the

³⁸ Harland, 'Fish remains on the Drogheda Boat', 4-5.

³⁹ Harland, 'Fish remains on the Drogheda Boat', 6

⁴⁰ A. Went, 'Red Herrings in Ireland', *proceedings of the Royal Society of Antiquaries of Ireland*, cviii (1978), 108.

⁴¹ Cutting, *Fish Saving*, 71.

⁴² Cutting, *Fish Saving*, 26.

⁴³ Longfield, *Anglo-Irish Trade*, 48; TNA, E122 (particular customs accounts for Bristol), *passim*.

⁴⁴ TNA, E122/206/1, m. 8.

⁴⁵ TNA, E122/206/1, m. 8; TNA, E122/206/2, fo. 6.

quality of fish differed without the presence of roe. Herring devoid of roe were normally thinner and in poorer condition.⁴⁶

One other type of herring was recorded in the Bristol customs documents. This was cured (*corf*) herring, noted on two ships transporting fish from Ireland to Bristol in 1403/4. Five and a half lasts of cured herring arrived on 2nd December 1403 on board the *Marie* of Levant.⁴⁷ The other shipment was landed at Bristol on the *Mariebot* of Combwich.⁴⁸ These herring were processed using an old method for preserving herring by partially salting the fish and placing them in non air tight containers. The fish were not gutted. This process was more than likely used in Ireland before the Skania/Dutch curing method was implemented.⁴⁹ The Skania/Dutch curing process was probably introduced to Ireland later than at ports on the east coast of England, where regular contact between the fishermen and the merchants of the North Sea facilitated the transfer of technology.

The demand for fish, and herring especially, was stimulated by the terms of religious convention. On approximately one hundred and twenty to one hundred and eighty days a year it was deemed appropriate to mark religious festivities by eating fish and not meat. Observance of these stipulations is reflected in the account of the Priory of the Holy Trinity in Dublin where fish (especially herring, oysters and salmon) was consumed regularly. On Ash Wednesday in 1339, for example, the monastic table was adorned with herring, white fish and salmon.⁵⁰ Lent marked the start of a continuous period of fasting. At such times it was of paramount importance for monasteries to have a stock of preserved fish in their larders. It is probably significant that from late in Lent until the summer, white herring shipments from

⁴⁶ TNA, E122/206/1, m. 8, m. 11.

⁴⁷ TNA, E122/17/10, m. 3.

⁴⁸ TNA, E122/17/11, m. 3

⁴⁹ Unger, 'The Netherlands Herring Fishery', 341.

⁵⁰ J. Mills, ed., *Account Roll of the Priory of the Holy Trinity, Dublin* (Dublin, 1892), 1-9.

Ireland to Bristol declined significantly. (Table 3a). Stocks of preserved herring had already been transported from Ireland to ports on the west coast of England to supply the unusual large Lenten demand.⁵¹

Writing late in the sixteenth century, Thomas Nashe stated that red herring did not keep as well as white herring.⁵² Even white herring was not always palatable. Sir Toby Belch complained about pickled herring wreaking havoc with his health.⁵³ This was also the assessment of Falstaff in Shakespeare's *Henry IV*, who lamented the poor quality of shotten herring fed to his men.⁵⁴ Herring in its preserved form was a mass-produced food for everyone. Even the more expensive white herring was eaten by all sections of society.⁵⁵ For example, in 1549 Sir William Petre of Essex had filled his larders with white herring as well as with the cheaper and more perishable red herring which were perhaps destined for the workers on his demesne.⁵⁶ Manorial accounts in England indicate that herring was fed to the workers at harvest time.⁵⁷ Herring was also consumed in religious houses, such as Clonkeen and Holy Trinity in Dublin.⁵⁸

The trade in herring from Ireland to the ports on the west coast of England

The trade in herring from Ireland to Chester, Bristol and Bridgewater was already significant by the early fifteenth century (Table 3a, c).⁵⁹ Whilst the customs accounts for these ports are incomplete, the extant data reveals that significant supplies of herring were arriving from

⁵¹ Woolgar, 'Take this penance now and afterwards' in D. Starkey *et al.*, *The Commercial Sea Fisheries of England and Wales since 1300* (London, 2000), 37.

⁵² Cutting, *Fish Saving*, 72.

⁵³ Cutting, *Fish Saving*, 26.

⁵⁴ W. Shakespeare, *Henry IV*, Part 1, Act II, Scene III.

⁵⁵ C. Dyer, *Making a Living in the Middle Ages: The People of Britain 850-1520* (Yale, 2002), 206. Dyer's assertion was made for the period before 1315.

⁵⁶ Cutting, *Fish Saving*, 31.

⁵⁷ Sergeatson *et al.*, 'Fish consumption', 122.

⁵⁸ Mills, ed., *Account Roll of the Priory of the Holy Trinity*, 9, 13.

⁵⁹ Wilson, *Chester Customs Accounts*, 103-116; Z M B II, *passim*.

Ireland. In 1404/5 the local customs accounts for Chester note that vessels from Dublin, Drogheda, Malahide and Rush delivered cargoes totalling almost 250,000 white herring. The same ships also landed possibly with up to 100,000 red herring.⁶⁰ In 1403/4 vessels freighting herring to Bristol came from ports which stretched from Dublin around the south coast to Limerick. These ships (from both Ireland and England) deposited over 3,500,000 white herring onto the quaysides at Bristol (Table 3a). A much smaller quantity of red herring was also landed – just over 80,000 fish (Table 3b). In 1413/14 customs officials in Bridgewater, on the west coast of England, took account of 163,000 white herring and just under 30,000 red herring (Table 3d). In years in the fifteenth century for which national customs accounts do not survive, local customs accounts for Bridgewater reveal the continued vibrancy of trade in herring from Ireland. For example, in 1473 John Kenny freighted 30,000 herring from Ireland to Bridgewater whilst 20,000 herring from Waterford were shipped to Bridgewater in 1503/4.⁶¹ In the fifteenth and early sixteenth centuries exports of herring from Ireland to the ports on the west coast of England ranged from approximately 1,500,000 up to 4,000,000 herring in a fiscal year (Table 3a-g).

Chester's importance as a port receiving herring from Ireland diminished after the middle of the fifteenth century. The local customs accounts for 1467-8 show no importation of herring from Ireland.⁶² Similarly the local accounts for 1525-6 show few herring arriving at Chester.⁶³ The apparent decline in shipments of Irish herring arriving in Chester may have been related to the difficulty in accessing the port. The silting of the River Dee meant that large ships could not dock in Chester in the fourteenth and fifteenth centuries. As early as 1358 fish

⁶⁰ Wilson, *Chester Customs Accounts*, 103–116; Z M B II, *passim*.

⁶¹ SRO, D/B/BW 1985; SRO, D/B BW1429.

⁶² Wilson, *Chester Customs Accounts*, 119-130; Z M B II, *passim*.

⁶³ Wilson, *Chester Customs Accounts*, 132-142; Z M B II, *passim*.

stalls, nets and weirs blocked the passage of craft along the Dee.⁶⁴ Instead, vessels from Dublin and Drogheda increasingly offloaded their freight in the creeks in the Dee estuary at Heswall, Redbank, Neston and Gayton.⁶⁵ Although the city was inaccessible to large craft, mid-range shipments of herring dispatched from Ireland to Chester probably did not decline after 1450.⁶⁶ Small lighters (boats) could have transported the cargoes of herring from the outports to Chester. The *Anne* of Drogheda arrived on 25th July 1468 freighted with less than ten tons of goods. The *Katherine* and *Mary* of Dublin, arriving in August, were less than twenty tons in capacity.⁶⁷ Vessels from Baldoyle and Malahide carried small cargoes into Chester in the same year. In the sixteenth century the citizens of Chester may have raised funds to improve the inner harbour.⁶⁸ As a result, in 1525/6, large cargoes of herring and other commodities were again entering the harbour at Chester. The *Michael* of Dublin arrived on 3rd February 1526 with eighteen barrels of herring and other produce. The *Katherine* and *Margaret* both arrived in December and January with over twenty tons of herring. The Palatinate accounts reveal that large quantities of wine were also arriving in the early sixteenth century into the creek closest to Chester, namely Denhall. These vessels were laded with over 2,500 tons of wine and were unloaded in Chester between 1510 and 1520. These craft could not have navigated the estuary without the improvements to the outer reaches of the harbour.⁶⁹

Another reason for the seeming decline of herring shipments arriving from Ireland to Chester between 1450 and c.1525 is revealed by the local customs accounts for the palatinate. These

⁶⁴ Laughton, *Life in a Late Medieval City*, 136.

⁶⁵ K. Wilson, 'The port of Chester in the fifteenth century', *Translations of the Historical Society of Lancashire and Cheshire*, xcvi (1965), 6.

⁶⁶ Wilson, 'The Port of Chester', 1-3.

⁶⁷ Wilson, *Chester Customs Accounts*, 128, 129.

⁶⁸ R. Wilson, 'The Port of Chester in the Later Middle Ages' (unpublished PhD, University of Liverpool, 1965), 83.

⁶⁹ Wilson, *Chester Customs Accounts*, 103-116, 132, 138, 142.

indicate that salt was exported to Ireland in fairly significant quantities before the middle of the fifteenth century. For example, in 1423 the *Trinity* from Lusk arrived in Chester with six *mease* of herring and then returned to Dublin with six crannocks of salt. Later in 1423 the *Bride* of Malahide landed fifty-eight *mease* of red herring in Chester and took on board fourteen crannocks of salt bound for Ireland.⁷⁰ However, for the next century the direction of the salt cargoes reversed. In the local account for 1525/6, the *Patrick* of Howth arrived in Chester with 30 barrels of salt. In July 1526 the *Mary Fortune* arrived with 50 tons of salt whilst in October 1526 the *Patrick* of Chester arrived with 1½ tons of salt. There was no export of salt to Ireland noted in this account.⁷¹ This reflects the decline in salt reserves at Nantwich, Northwich and Middlewich after 1450.⁷² The decline in salt reserves did not recover in Nantwich.⁷³ Irish merchants relied on the proximity of the salt mines to Chester in a symbiotic relationship between Ireland and the Cheshire port. The ability of Irish merchants to source salt from the very locations where fish was destined was advantageous.

By contrast with Chester, in 1403/4 the cargos of herring arriving in the Bristol region were more constant. However, Bristol was accepting over ten times more herring from Ireland than the amount landed in Chester. Indeed, the cargoes carried by some ships were enormous. For instance the *Thomas* of Bristol, the *Nicholas* of Bristol and the *Marie* of Berkeley combined, transported over half a million herring in Bristol in 1404.⁷⁴ Nevertheless, it would be a mistake to think that English ships predominated in the freighting of herring from Ireland to Bristol. The largest consignment in 1403/4 arrived at Bristol on 30th November 1403 aboard the *Gracedieu* of Waterford, which contained almost 500,000 white herring.⁷⁵ There

⁷⁰ Wilson, 'The Port of Chester', 11.

⁷¹ Wilson, *Chester Customs Accounts*, 6.

⁷² M. Postan, *Medieval Trade and Finance* (Cambridge, 1973), 169.

⁷³ J. Lake, *A History and Guide to Nantwich* (Chester, 1982).

⁷⁴ TNA, E122/17/10, m. 1, m. 2.

⁷⁵ TNA, E122/17/10, m. 2.

were large quantities of herring from other Irish ports transported on Irish vessels too. The *Marie* of Ross arrived in Bristol on 2nd December 1403 with over 130,000 white and red herring.⁷⁶ The *Trinity* of Waterford, the *Mariebot* of Kinsale, the *Katherine* of Wexford, the *Nicholas* of Wexford and the *Marie* of Dublin all transported significant quantities from Ireland.⁷⁷ In all herring was carried on twenty-eight Irish ships arriving in Bristol in 1403/4, compared with eighteen cargoes on English and foreign vessels in the same year (Table 3a). The three busiest Irish locations supplying ships involved in this trade were Kinsale (with nine deliveries), Waterford (with five) and Wexford (with four). This year may, however, have been exceptionally busy as the only other particular customs account surviving for Bristol in the first decade of the fifteenth century tells a very different story.⁷⁸ In the five months from September 1406 to February 1407, only 275,000 white herring were transported to Bristol from Ireland on a total of five ships. The only Irish boat that carried herring to Bristol in this period arrived on 16th October 1406: the *George* of Wexford with 62,000 herring on board.⁷⁹ There were no deliveries of red herring on any ships to Bristol in 1406/7. Moreover, the quantities of herring cargoes on each of the English vessels in each year varied greatly. The explanation for this variation in the volume of herring shipments remains conjectural. It may reflect poor stocks of fish or difficulties in catching them. In the early years of the fifteenth century, there were few herring caught in the Skania fisheries in the Baltic too. The paucity of herring there, especially in 1411, 1412, 1416 and 1425, mirrored shortages off the coast of Ireland.⁸⁰ It is also possible that contraction in trade had been caused by a shortage of either fishing boats or trade ships; or that the unusually low quantities of herring exported from Ireland in 1406/7 was related to the disruption caused by the revolt

⁷⁶ TNA, E122/17/10, m. 2.

⁷⁷ TNA, E122/17/11, m. 2, m. 3, m. 4, m. 6.

⁷⁸ TNA, E122/17/37, *passim*.

⁷⁹ TNA, E122/17/37, m. 1 v.

⁸⁰ Unger, 'Netherlands Herring Fisheries', 340.

of Owen Glyn Dyr in Wales.⁸¹ In 1402 strict ordinances were issued in Chester stating that no victuals were to be supplied to the Welsh rebels. Victuals from Ireland probably had been required for Irishmen going on the King's orders to storm the castles held by Glyn Dwr.⁸² Some of the large quantities of herring exported from Ireland to Bristol in 1403/4 may have been used to feed the King's army.

The customs account for Bridgewater from 1413 to 1415, although damaged, does show that only small quantities of herring were imported from Ireland. The shortfall in herring exports was made up by trout, ling, pollock, whiting and houndfish suggesting that the shortfall was in herring, not other species.⁸³ This account does not specify the provenance of the Irish herring ships. I have excluded English vessels from the trade tables because there is no way of knowing if they were coming from Ireland or not (Table 2j). Four different ships from Wexford (the *George*, *Marie*, *Palmere* and *Patrick*) arrived in Bridgewater, each with between 24,000 and 40,000 white herring. These cargoes, although not large in comparison to the size of herring shipments at Bristol in 1403/4, were greater than those of the four ships from Kinsale that deposited white herring in Bridgewater in the same year 1413/14 (Table 3c). The *Marie* and *Katherine* of Kinsale entered Bridgewater in 1413/14 with small cargoes. No large vessels arrived from Ireland in this port.⁸⁴ These ships had cargoes of between 6,000 and 14,000 white herring in their holds. Wexford and Kinsale vessels supplied only small quantities to Bridgewater. It would seem that the larger ships from the southern Irish ports visited Bristol whilst the smaller vessels frequented Bridgewater. The early fifteenth-century customs records reveal that Irish ships did not transport herring to two different ports in the same season on the west coast of England.

⁸¹ R. Britnell, *Britain & Ireland, 1050-1530* (Oxford, 2004), 337.

⁸² R. Davies, *The Revolt of Owain Glyn Dwr* (Oxford, 1995), 157, 188, 189, 285, 286.

⁸³ TNA, E122/25/7, m. 1, m. 4, m. 8.

⁸⁴ TNA, E122/25/5, m. 3, m. 3 v, m. 4.

There was also different types of merchants utilising large and small craft in terms of resources. The varied cargo sizes suggests that there were two different types of herring merchant trading from Ireland to Bristol and Bridgewater. Well resourced fish merchants from Bristol, such as John Erle, Walter Sutton and John Heth, traded with ports in Ireland. They regularly transported large quantities of herring to Bristol.⁸⁵ Wealthy Irish fish merchants such as John Rokell of Youghal, Walter Okisford of Waterford, Thomas White of Dublin and William Williams of New Ross, similarly plied their trade with Bristol. The Irish and English merchants who frequented Bridgewater did so on a much smaller-scale. The voyages undertaken by shipmasters on crayers, skiffs and cots which sailed from Wexford and Kinsale in 1413/14 to the smaller creeks of Bridgewater, were of a far smaller scale than those at Bristol. The trade did however, engage both English and Irish merchants such as the Englishman John Hasham (who owned two small cargoes on different vessels) and John White and Richard Brown (both of Wexford).⁸⁶

The herring trade from Ireland to Bristol and Bridgewater remained vibrant for the remainder of the fifteenth and early in the sixteenth centuries (Table 3a). It is likely that from 1400 to 1460 (taking into consideration the absence of full particular accounts for the years up to 1460) herring was freighted on both Irish ships and English ships (Table 3a). The local customs account for Bristol of 1437/38 still showed a vibrant trade of herring coming from Ireland. There was approximately 320,000 white herring delivered into the inner port of Bristol in that year.⁸⁷ The six particular national customs accounts that cover full or almost full years in the late fifteenth and early sixteenth centuries (1479/80, 1485/6, 1487/7, 1492/3,

⁸⁵ TNA, E122/17/10, m. 1, m. 2, m. 3.

⁸⁶ TNA, E122/25/5, m. 3, m. 4.

⁸⁷ H. Bush, ed., *Bristol Town Duties, A collection of original and interesting documents, intended to explain and elucidate the above important subject* (Bristol, 1828), 17-25.

1516/7), point to 1406/7 and 1413-1415 being anomalous years, when abnormally low quantities of white herring entered Bristol, further emphasising the hypothesis that from 1405 until 1412 herring stocks in the Irish Sea were low, as they were in the Baltic herring fisheries. The later fifteenth and early sixteenth centuries trading patterns were busier than 1406/7 and 1413-1415 with between twenty and forty-six ships arriving in Bristol each year, freighted with white herring. In the later years of the fifteenth century Bridgewater received herring mainly from Wexford. The cargoes of herring on board such ships were small but regular. There were a small number of English ships engaged in exporting white herring from Ireland to Bridgewater, too, surpassing in quantity the cargoes carried on Wexford vessels (Table 3c).

The trade in red herring was different. Exports of red herring from Ireland to Bristol were smaller in quantity than those of white herring (Table 3b). As stated earlier red herring represented only ten per cent of the total of all types of preserved Irish herring going to Bristol. Red herring was mainly shipped in small quantities on both Irish and English vessels (Table 3b). The lack of red herring exports may signify that it was uneconomical for merchants to fill their holds with large quantities of a product which only had a limited market in English ports. Alternatively, there was only a small surplus of red herring available from Ireland. Whatever the case, small quantities of red herring topped up the holds of both Irish and English ships sailing to Bristol with other more valuable fish. Aside from Bristol, small quantities of red herring also arrived sporadically from Ireland in Bridgewater. Wexford ships exported most of the smoked herring to Bridgewater every year, although even these quantities were very small.⁸⁸

⁸⁸ TNA, E122/25/5, m. 3, m. 4

In the second half of the fifteenth century Irish ships began to sail further afield, beyond Chester and the Bristol Channel, to ports on the south and southwest coast of England. A small number of cargoes of both red and white herring, especially from Waterford, arrived in the ports of Exeter and Dartmouth (Table 3c). Two ships from Waterford (the *Godyere* and the *St John*), both primarily freighted with white herring, entered the region a week apart in February 1464.⁸⁹ In 1481 the *Domina* of Cork and the *Trinity* of Waterford also entered the jurisdiction of Exeter and Dartmouth with herring. The goods were cocketed in Bridgewater.⁹⁰ In March 1493 the *Trinity* of Waterford, another vessel of the same name and the *Mary* of Wexford arrived into Exeter or Dartmouth on the same day.⁹¹ Irish ships were also beginning to appear in Plymouth and Fowey. The *Mary* of Kinsale entered an unknown port in the jurisdiction of Plymouth and Fowey in October 1465 whilst the *Mary* of Youghal did likewise on 1st January 1466.⁹²

Aside from this expansion of Irish trade along the south coast of England, decline at Chester after 1450 was paralleled by some growth elsewhere in the north west. A small number of Irish merchants were present in Liverpool by 1460 and by the 1490s a substantial quantity of Irish goods can be traced on the quay side of the same port.⁹³ It is probable that only ports on the east coast of Ireland, especially, perhaps Drogheda and Dublin, had extended their trade to Liverpool by the sixteenth century.⁹⁴ The expansion of the more southern trade was spearheaded by shipmasters from ports such as Wexford, Waterford, Cork and Youghal.⁹⁵ Further new destinations were exploited by Irish fishermen from the same regions in the early

⁸⁹ TNA, E122/40/10, m. 1 v, m. 2.

⁹⁰ TNA, E122/41/6, m. 5, m. 5 v. More Irish ships are perhaps recorded in this document but it is impossible, even with the use of ultra violet light, to decipher.

⁹¹ TNA, E122/41/14, m. 6.

⁹² TNA, E122/114/3, m. 1, m. 2.

⁹³ J. Laughton, *Life in a Late Medieval City: Chester 1275-1520* (Oxford, 2008), 168.

⁹⁴ Wilson, 'The Port of Chester', 94.

⁹⁵ Wilson, *Chester Customs Accounts*, 150, 151.

sixteenth century. Youghal, especially, had become a more prominent port in the exportation of white herring trade in the sixteenth century. For example, the *Katherine* of Youghal (with John Donnell as master) entered Poole on 15th June 1504. There were six merchants, all with quantities of white herring cargoes laded on board the ship. Only two weeks earlier, on 2nd January 1504, Thomas Fitzjohn, the master of the *Patrick* of Youghal, entered Weymouth with a quantity of white herring.⁹⁶ In 1506 two ships with the same names entered Poole on 25th February 1506 freighted with herring though the shipmasters (John Hussey and David Wolle) were different from the previous visits in 1504. Thomas Fitzjohn (shipmaster and merchant two years previously) was a merchant on the *Patrick* on this occasion.⁹⁷ Poole, too, constituted a new market for herring from Ireland: there is no evidence of the herring from Ireland reaching Poole in the particular customs documents that are extant for that port before the beginning of the sixteenth century.⁹⁸

In the early sixteenth century the steady increase in white herring exports continued (Table 3a). Over 5,000,000 white herring were exported from Ireland to Bristol in 1503/4. In 1503/4 Seventy-seven ships and in 1516/17 sixty ships were involved in the Ireland to Bristol herring trade. The ratio of English to Irish ships engaged in this trade was in favour of the English vessels by a factor of nearly 2:1. Waterford ships were the busiest Irish vessels involved in white herring exports. In 1503/4, for example, although none were delivered to Bridgewater, ten cargoes of white herring left for Bristol and two cargoes were dispatched to Exeter/Dartmouth (Tables. 3 a-f). Aside from white herring, most of Ireland's red herring exports probably came from Waterford. Cork and Wexford were subordinate in the quantifiable importance of smoked herring exports (Tables. 3b). In 1503/4 eleven Waterford

⁹⁶ TNA, E122/120/10, fo. 3, fo. 10.

⁹⁷ TNA, E122/120/11, fo. 6, fo. 10.

⁹⁸ TNA, E122/119/2, 3, 4, 5, 10, 11, 19, *passim*.

ships, as well as three from Cork, and one craft from Wexford and Youghal freighted herring to Bristol, and some of the twelve English vessels that loaded their ships from Ireland, such as the *Frances* of Bristol and the *Peter* of Comwich, perhaps also did so from Waterford.⁹⁹

After 1503/4 most red herring seems to have been available in ports other than Bristol.

Sporadic cargoes were dispatched to Exeter and Dartmouth.¹⁰⁰ There was little demand for red herring on the west coast of England, probably because it had its own smoking apparatus; this had probably accounted for Waterford's surfeit of trade.

On 28th February 1500 the *George* and the *Trinity* from Wexford both arrived at Southampton.¹⁰¹ Southampton too was a new, if very occasional destination, for Irish herring. One entry in the customs documents does not of course mean that it constituted significant a market for Irish herring. Nevertheless, the expansion of the Irish herring trade along the south coast of England now reached Exeter, Poole, Plymouth, Dartmouth and Southampton. Herring was now transported on both Irish and on English ships, along the entire west coast of England from Chester and Liverpool to Southampton.¹⁰² It is possible that the herring exported to some of the new destinations was not always of good quality. It is probable that the partly spawned herring shipped from Ireland to Plymouth, Fowey and Penryn between 1512 and 1514 were caught in late September and despatched in mid-winter.

White herring that was full of roe were the most sought after fish. As stated earlier the quality of herring deteriorated after spawning, causing the fat content of the fish and therefore the

⁹⁹ Flavin & Jones, *Bristol's Trade*, 1-103.

¹⁰⁰ Appendices Tables 3b, d, e, f. Waterford ships did not supply red herring to Bridgewater in 1510/11 or Bristol in 1516/17. Deliveries to ports in Exeter and Dartmouth only occurred in some years on Waterford vessels.

¹⁰¹ TNA, E122/209/2, fo. 30 v, fo. 31 v.

¹⁰² TNA, E122 (particular customs accounts), *passim*; Wilson, *Chester Customs Accounts*, *passim*.

quality to reduce significantly.¹⁰³ The exportation of both white and red herring to English ports generally coincided with the autumn spawning of the herring. The pickling, curing or smoking process carried out in October or November ensured that herring could be landed to their destination over a five-month period from November to March (Tables. 3a-f). Cargoes were transported to Bristol and Bridgewater in all of these months.¹⁰⁴ The smaller shipments of herring to Poole, Exeter, Dartmouth and Plymouth were dispatched between January and March (Tables. 3e-g). The largest quantities of herring (sent predominantly to Bristol) arrived in January or February of each year. In 1403/4, 1465/66, 1479/80 and 1503/4 almost 1,500,000 herring were delivered to Bristol from Ireland in these months (Table 3a). There were only a few years when pre-Christmas deliveries (in the fifteenth and early sixteenth centuries) of herring exceeded 1,500,000 fish, such as in November/ December 1403/4 and again in 1503/4. There were earlier-than-usual deliveries of herring, notably in 1403/4, perhaps coinciding with Owen Glyn Dwr's uprising. These shipments are perhaps explained by the need to provision Henry IV's troops arriving in Wales. In January 1403 the Welsh raided into English-held territory, besieging the castles of Beaumaris, Caernarfon and Harlech. These castles relied heavily on victuals delivered by sea, some very probably from Ireland.¹⁰⁵

The Continental Trade In Herring From Ireland

On occasion herring were exported to regions in France, including Normandy, Brittany and Gascony. Breton ships made good use of the waters off the Irish coast in the late fifteenth and early sixteenth centuries. They traversed Irish waters as far as Donegal to return with their catch of herring to either Brittany or England.¹⁰⁶ In the first half of the fifteenth-century

¹⁰³ Unger, 'The Netherlands Herring Fishery in the Late Middle', 340.

¹⁰⁴ TNA, E122 (particular customs accounts for the ports on the west coast of England), *passim*.

¹⁰⁵ Davies, *The revolt of Owain Glyn Dwr*, 110, 111.

¹⁰⁶ M. Lyons, 'Maritime Relations between Ireland & France, c. 1480-1630' *Irish Economic & Social History*,

licences were issued to Breton merchants to freight salt to Ireland, probably to preserve their catch of herring. This occurred in 1412, 1415, and 1435. The crown was concerned in the middle of the fifteenth century that herring in Irish waters were being fished for by foreign ships. Foreign fishermen sometimes protected their catch by paying tribute to local Gaelic lords. This revenue was not received by the crown. An Act of Parliament in 1465 tried to redress this issue by insisting that all foreign vessels required licences to fish in Irish waters.¹⁰⁷ However, Breton ships were still trading herring between Ireland and Bristol in 1470: the *St Roman* of *Kempil Coratyne* (probably Quimper) delivered herring, salmon and eels into Bristol.¹⁰⁸ And in the sixteenth century the town of Dungarvan chose to impose levies on Breton vessels for fishing in the area without licence.¹⁰⁹

Trade between Ireland and the ports of Normandy had been ongoing from before the fourteenth century.¹¹⁰ Irish herring were transported from New Ross and Limerick to Normandy and Irish merchants were recorded at Honfleur in 1391, 1397 and 1409.¹¹¹ During a period of truce in the Hundred Year's War, in 1390/91, Irish fish was also imported to Rouen.¹¹² In the sixteenth century Irish ships still made for the ports of Normandy; they even (at least occasionally) sailed up the Seine, where in 1510 the count of Tanquerville enjoyed the proceeds of toll imposed on an Irish ship which was using the inland waterways to transport timber.¹¹³ Further south, the trade between Ireland and La Rochelle probably also included herring. The Irish ports of Galway, Cork, Kinsale, Waterford, Dublin, Drogheda and

xxvii (2000), 8.

¹⁰⁷ A. Green, *The Making of Ireland and its Undoing* (London, 1920), 138.

¹⁰⁸ TNA, E122/19/7, fo. 3.

¹⁰⁹ O'Brien, 'Commercial Relations', 44.

¹¹⁰ O'Brien, 'Commercial Relations', 32, 33.

¹¹¹ Mollat, *Le commerce de la haute Normandie au XV siècle et au debut du XVI* (Paris, 1952), 146.

¹¹² Fréville, *Mémoire*, i, 294.

¹¹³ Fréville, *Mémoire*, ii, 40.

Dundalk all delivered commodities to this destination.¹¹⁴ The port of La Rochelle had been an English possession up to 1372, but trade between Ireland and this town possibly did not flourish until the end of the Hundred Years War.¹¹⁵ Further south still, Bordeaux was occasionally importing Irish herring; for example, in 1513 a Bordeaux ordinance mentions herring from Ireland.¹¹⁶ However, Irish ships are not known to have transported herring to the region. English and Flemish ships, however, did load their vessels from Ireland with fish. These fish were caught off the coast of Ireland and England and occasionally in waters close to Iceland for transportation to Bordeaux.¹¹⁷ Irish ships had availed of timber herring casks which were not the only item desired by Irish fishermen from the French coast. (Barrels for storing fish and wine were always difficult to obtain: they were in short supply in Chester in the early fifteenth century, there was a severe shortage of barrels).¹¹⁸ Regions in France required herring supplies; wine was perhaps exchanged for herring. In 1499 the *Nicholas*, under the stewardship of Oliver Daniel, returned to Lannion from Cork with herring; in 1502 the *John* of Pont-l'Abbé freighted herring back to La Rochelle for Maurice Donnell. Further shipments of herring on the *Guinole* of Penmarch in 1503 and on the *Julienne* of Quimper came from Ireland. Furthermore, in 1505 three vessels returned to Bordeaux from Ireland with herring. The *Marie* from Youghal or Waterford, the *St Esprit* from Kinsale, and the *Veau* of Penmarch all returned to Bordeaux with quantities of herring.¹¹⁹ The Bordeaux region was supplying the south coast of Ireland with wine. Consequently, vessels returning to Bordeaux did avail of the opportunity to return there with herring. Ships from Cantabria (Iberia) were also exploiting the herring fisheries off the northern coast and in 1534 the *Isabella de Locquirec* (chartered by Irish merchants) agreed that, once their wine was unloaded, the

¹¹⁴ O'Brien, 'Commercial Relations', 49, 50.

¹¹⁵ Childs, 'Ireland's Trade with England', 7, 8.

¹¹⁶ O'Brien, 'Commercial Relations', 69.

¹¹⁷ J. Bernard, *Navires et gens de mer à Bordeaux vers 1400 – vers 1550*, iii (Paris, 1968), 136-7.

¹¹⁸ Laughton, *Life in a Late Medieval City*, 157.

¹¹⁹ Bernard, *Navires*, iii, 84, 85, 132, 133, 150, 151, 168, 169, 186, 187, 192, 193, 196, 197.

shipmaster could fish off the Irish coast before sailing to La Rochelle.¹²⁰

As well as Bretons, Castilian fishermen were also fishing in Irish waters. In 1351, during a truce with England, Castilian sailors sought permission to fish in the Irish Sea.¹²¹ Wendy Childs suggested that there were approximately fifteen Castilian ships active in the port of Bristol annually in the fifteenth century.¹²² It is possible that some of these ships visited Ireland, on their voyage to England, but the number of Iberian vessels fishing specifically and/or exclusively in Irish waters is impossible to assess. Nevertheless, by the early sixteenth century Irish fish was certainly taken on ships to the Iberian Peninsula. Herring were exported to Castile from Plymouth, Bristol and Bridgewater. Some of this herring was possibly delivered to these ports on Irish ships.¹²³ More certainly still, in 1519 Diego Ramírez, the magistrate of Lequétio in the lordship of Vizcaya, imposed a new tax for cargoes entering or leaving his jurisdiction; it was imposed on every 1,000 herring coming from Flanders or Ireland.¹²⁴ This law could be interpreted in two ways: perhaps ships were coming from Flanders and were calling to ports in Ireland, purchasing herring and then dispatching their cargoes of fish to ports in Castile; alternatively Irish ships were possibly delivering their catch directly to Lequétio.

In the fifteenth century, Portuguese ships, too, were calling to Ireland for herring. In 1353 Edward III had sealed a treaty with the Portuguese crown to legalise trade between England and Portugal for a term of fifty years. The *Mary Grace* of Lisbon sailed from Ireland to

¹²⁰ B. Bolumburu, 'Gentes de mar en los puertos medievales del Cantábrico', in J Telechea, M. Bochaca and A. Androde, eds, *Gentes de mar en la ciudad atlántica medieval* (Riojanos, 2012), 34.

¹²¹ W. Childs, *Anglo-Castilian Trade in the later Middle Ages* (Manchester, 1978), 99.

¹²² Childs, 'Ireland's Trade with England', 9.

¹²³ Childs, *Anglo-Castilian Trade*, 99.

¹²⁴ Alf O'Brien Collection, no. 252, (Archivo Municipal de Lequétio), reg 16 m13 folio 8R-12V IV.

Bristol on 15th February 1466, with a large consignment of herring.¹²⁵ John Shipward and John Greywode, merchants from Bristol, had chartered this ship. There were other types of cargo on board, chiefly other species of fish and cloth which was probably being transported back to Portugal.¹²⁶ Freighting of cargo in this fashion was not uncommon. Other Portuguese ships were noted in Irish harbours though not specifically for trading purposes. In 1374 the *St Mary Oliver* sailed from Lisbon to Waterford. In 1403 John Botewelle a merchant from Lisbon had to land his ship in Waterford because of bad weather.¹²⁷ An Oporto ship in 1416 was *en route* from Galway to Normandy, Flanders and Zeeland when it was seized in Southampton.¹²⁸ After the middle of the fifteenth century, seven Irish merchants are noted among the twenty who received safe conducts to trade with Portugal.¹²⁹ It is possible that Portuguese merchants/shipmasters were using their safe conducts to trans-ship commodities from Ireland to England. At the end of the fifteenth century, in 1490, John Fenmarch on the *Mary* of Porto transported a full cargo of fish to Bridgewater returning to Ireland with cloth and beans.¹³⁰

In the early fifteenth century vessels from the Levant occasionally delivered herring from Ireland to Bristol.¹³¹ The *Marie* of Levant entered Bristol on 2nd December 1403 with a large cargo of herring. Nicholas Ouro transported cured herring for John Brent of Bristol.¹³² On 26th February 1404 the cog *Thomas* of Levant came from Ireland to Bristol with a large cargo of herring.¹³³ The surviving customs documents, however, offer no further evidence of such ships bound for Bristol with Irish fish before the middle of the sixteenth century and one

¹²⁵ TNA, E122/19/4, fo. 8 v, fo. 9.

¹²⁶ TNA, E122/19/4, fo. 3, fo. 3 v.

¹²⁷ J. George, 'Anglo-Portuguese trade during the reign of João I of Portugal', 1385-1433, ix.

¹²⁸ CPR, 1416-22, 42.

¹²⁹ O'Neill and Childs, 'Overseas Trade', 498.

¹³⁰ TNA, E122/26/16, m. 1, m. 3.

¹³¹ Vanes, *The overseas trade of Bristol in the sixteenth century*, 24, 25, 161.

¹³² TNA, E122/17/10, m. 3.

¹³³ TNA, E122/17/11, m. 6 v.

should probably not read too much in this very occasional traffic. It could be that, instead of tramping with herring, ships from this region freighted their vessels with herring to take back to the Levant.

The Trade Of Saltfish, Whitefish, Cod And Ling From Ireland Through The Irish Sea

Saltfish was a term used in the Middle Ages for a combination of cod and ling that were dried and pickled in salt.¹³⁴ Saltfish probably comprised other types of white fish, including hake, flatfish and possibly even whiting. (Cod and ling were two types of deep water fish that, unlike herring, were not oily; drying and salting were sufficient to preserve them for an extended period). Cod and ling were certainly caught and consumed in Ireland in the Middle Ages. The remains of cod and ling bones found at Arran Quay, Dublin dating from the Middle Ages were in a good state of preservation. Gutting and head removal at the site signifies that fish processing was undertaken here too. These ling and cod were approximately one metre in length and possibly weighed eight to ten kilos each.¹³⁵ They were, therefore, much larger than herring. The archaeological evidence supports the presence of saltfish manufacture at Arran Quay in Dublin, and the fact that merchants were being fined for illegally selling cod and ling in Dublin in 1400 indicates that saltfish was readily available.¹³⁶

Saltfish was not just consumed on the coastline. Ocean fish remains were discovered as far inland as Trim Castle.¹³⁷ In the late fourteenth century saltfish purchased from merchants of Malahide and Howth appeared in the Justiciar's household accounts.¹³⁸ Llanthony Abbey

¹³⁴ Cutting, *Fish Saving*, 2; Woolgar, 'Fish Consumption in Medieval England', 105.

¹³⁵ Hayden, 'Excavation of the Medieval River Frontage of Arran Quay', 236.

¹³⁶ O'Neill, *Merchants and Mariners*, 32.

¹³⁷ Murphy *et al.*, eds, *The Dublin Region*, 399.

¹³⁸ Murphy *et al.*, eds, *The Dublin Region*, 400.

(County Meath) exported small quantities of cod, along with some salmon and herring.¹³⁹

Saltfish were processed in a different manner to herring in England. The cod and ling, once caught, were brought ashore, dried and then salted. Processing was carried out either in fish houses similar to the ones owned by the monks at Syon Abbey on the west coast of England or on the beach.¹⁴⁰ Similar methods of drying saltfish were also employed in Ireland. A map from 1580 shows fishhouses on the shoreline at Portrush (Map 7) which were probably used for this purpose. In 1482 two factions of the Treunt family feuded over fishing rights in Dingle. Their dispute revolved around who had the use of the shore for salting and drying of fish.¹⁴¹ Dried saltfish was supposedly safer to consume than preserved herring. Processed saltfish also lasted longer than herring - that is if the rhyming couplet of Thomas Tusser is to be believed: 'Spend herring first, save saltfish last, for saltfish is good when Lent is past'.¹⁴² Saltfish, along with air-dried stockfish and old ling, were well thought of as a food source; they were consumed when other food stuffs were in short supply. Nonetheless it was important for manors and religious houses to have enough saltfish in their larders during Lent and other periods of extended fast.¹⁴³ The alternative (wind dried) stockfish had been traded over the centuries between Ireland and England. The process involved drying only and not salting, but stockfish were very rarely noted in the customs accounts.¹⁴⁴ It was probable that by the fifteenth century demand in the west of England markets was for saltfish and not stockfish. The situation was very different to ports on the east coast of England which imported regular supplies of stockfish from Norway.

¹³⁹ A. Hogan, *The Priory of Llanthony Prima & Secunda in Ireland* (Dublin, 2008), 126.

¹⁴⁰ M. Kowaleski, 'The Western Fisheries', in D. Starkey *et al.*, eds, *The Commercial Sea Fisheries of England and Wales c. 1300* (London, 2000), 23.

¹⁴¹ O'Neill, *Merchants and Mariners*, 34.

¹⁴² Cutting, *Fish Saving*, 32.

¹⁴³ Cutting, *Fish Saving*, 31; Sergeantson & Woolgar, 'Fish consumption in Medieval England', 105.

¹⁴⁴ Cutting, *Fish Saving*, 12.

Saltfish from Ireland was an important food source in the ports of England, especially before the middle of the fifteenth century (Tables, 3l, m). At the beginning of the fifteenth century very few saltfish were transported from Ireland to Bristol, Bridgewater or Chester. In 1403/4 approximately 2,000 saltfish were dispatched from Ireland to the creeks of Bristol.¹⁴⁵ In 1403 a licence was issued to John Slene of Rush to export 4,000 saltfish to England. These saltfish did not pass through Bristol between 11th December 1403 and 25th March 1404.¹⁴⁶ The local customs accounts for Chester record no importation of saltfish from Ireland in 1404/5.¹⁴⁷ Similarly in 1406/7 no saltfish were dispatched from Ireland to England, an absence symptomatic of the low level of fish exports in this year (Tables, 3l, m). The only other particular customs account to survive from the early years of the century dates from 1413/14 for Bridgewater. This account, too, records no saltfish deliveries from Ireland, with only meagre dispatches of other fish, such as pollock.¹⁴⁸ This evidence, though patchy, may indicate that cod and ling were in short supply for the production of saltfish in Ireland in the first decade of the fifteenth century or that demand in England was limited. Whatever the case, saltfish exports from Ireland to Bristol, Minehead and Bridgewater dramatically increased after the middle of the fifteenth century (Tables, 3l, m).

The Bristol customs accounts for the second half of the fifteenth century indicate that the saltfish trade was busiest from February to May (Table 3m). These months coincided with the Lenten fast; however, saltfish was also delivered in smaller quantities to Bristol in June and July. Even though the quantities landed at Bridgewater were small in comparison to these shipped to Bristol, the pattern suggests that saltfish were delivered in similar months during the year from February to June to both ports (Table 3m).

¹⁴⁵ TNA, E122/17/10, *passim*.

¹⁴⁶ *Rot. Pat. Hib.*, 71, 136.

¹⁴⁷ Wilson, *Chester Customs Accounts*, 101-106.

¹⁴⁸ TNA, E122/25/5, *passim*.

After the mid 1460s ships from Minehead began to deliver large quantities of saltfish to their home port and Bristol. In 1477/8, eight cargoes of saltfish were transported from Ireland to the Bristol region on Minehead vessels. Moreover, eleven Irish cargoes were shipped to the Bristol region in 1479/80, also on Minehead craft. These ships possibly sailed back into Minehead rather than Bristol.¹⁴⁹ Indeed, more fish were delivered to Minehead than to much larger ports such as Exeter, Dartmouth, Plymouth and Bridgewater. Furthermore, in 1496/7 Minehead had imported fish to the value of £41, representing almost half of its total trade.¹⁵⁰

Ships from Minehead and Bristol were the major carriers of saltfish from Ireland to England. In April and May 1487, the *Mary*, *Andrew*, *Savior*, *Patrick*, *Marie* and *Mawdeleyn* – all from Minehead – dispatched a combined total of over 5,000 saltfish to the Bristol region.¹⁵¹

Typically it was large ships of both Minehead and Bristol which exported cargoes of approximately 1,000 saltfish each from Ireland.¹⁵² Minehead vessels also delivered regularly to Bridgewater. Bridgewater, however, only imported small quantities of this commodity from Ireland. After 1460 when complete or substantial customs material is available for Bridgewater, it is noteworthy that less than 1,000 saltfish were delivered annually to the port. (Table 3m).

Growing exports of saltfish from Ireland may in part be explained by increased demand in England. In Bristol it was enacted in 1464 that no wet unsalted fish were to be sold in the marketplace unless it was in perfect condition. Saltfish made a good alternative to the ban on

¹⁴⁹ TNA, E122/19/13, *passim*; TNA, E122/19/14, *passim*.

¹⁵⁰ M. Kowaleski, 'The expansion of the south western fisheries in later Medieval England', *Economic History Review*, liii (2000), 436-8.

¹⁵¹ TNA, E122/20/7, m. 13 v, m. 14, m. 14 v, m. 15.

¹⁵² TNA, E122/19/8, fo. 4; TNA, E122/19/15, m. 1.

wet fish.¹⁵³ From c.1450 the three ports in Ireland exporting the majority of saltfish to the west coast of England were probably Waterford, Youghal and Kinsale (fig. 3i, j). Indeed, most of the ships were from Waterford. From the 1470's to 1517 between four and seven ships freighted saltfish each year from Waterford to Bristol. Most of these ships transported small cargoes: the *Mary*, *Marie*, *James* and *Katherine* all arrived in Bristol in January 1487 with 200 saltfish per cargo. By contrast, English ships on the same port conveyed larger volumes from Ireland; the *Margaret* from Bristol, for example, arrived in Bristol in January 1487 with 1,130 saltfish on board.¹⁵⁴ In 1465/6 the *Michael*, *Sampson*, *Mary* and *Michell* all from Minehead carried over 500 saltfish each in their holds. Moreover, a few small consignments of the commodity were carried on Irish ships; for example the *Mary* of Kinsale transported 600 saltfish to Bristol in the same year.¹⁵⁵ Other Irish ships, the *Leonard* of Youghal in July 1471 and the *Katherine* of Youghal in April 1479, also carried large quantities of saltfish to the Bristol region. The exception was 1484/5. In this year five ships carried between them 3,620 saltfish. These vessels were the *John* of Bridgewater, *Lawrence* of Comwich and *Mawdelyn*, *Trinity* and *Anthony* of Minehead, which all arrived into the creeks of Bridgewater.¹⁵⁶ In 1485 Ireland had an abundant surplus of saltfish of which over 3,600 were exported between April and August to Bridgewater; similarly, large quantities of saltfish totalling 9,240 were delivered to Bristol in March 1486. There was either a surplus in Ireland or an unusually high demand for saltfish on the west coast of England between April 1485 and March 1486.¹⁵⁷

The trade in Irish fish at Bridgewater followed the same pattern as at Bristol. Ships from the Bristol Channel were supplying their own hinterlands with Irish saltfish, meaning Minehead

¹⁵³ E. Veale, ed., *The Great Red Book of Bristol* (Bristol, 1951), 115.

¹⁵⁴ TNA, E122/20/7, m. 7, m. 7 v, m. 8, m. 8 v, m. 9.

¹⁵⁵ TNA, E122/19/4, fo. 10, fo. 11 v, fo. 12, fo. 3.

¹⁵⁶ Example TNA, E122/26/12. These vessels all arrived in April 1485 in Bridgewater.

¹⁵⁷ TNA, E122/26/12 fo. 1 – fo. 5; TNA, E122/20/5, *passim*.

was not the only port from which ships came to Ireland for saltfish. It was, however, predominantly English vessels that transported saltfish from Ireland, possibly in the main, to their home ports in England. For example, in 1473 fourteen English ships travelled to the Bristol region with saltfish from Ireland whilst no Irish ships did.¹⁵⁸ Demand for saltfish was high in Bristol which local supply perhaps did not satisfy. The customs documents that do survive for Bristol reveal that eighty-six Irish ships delivered saltfish to Bristol between 1470 and 1516; in comparison two hundred and three English vessels freighted saltfish in the same period (fig. 3i). The ratios of 2:1 strongly suggest that it was essentially the creeks in the Bristol Channel that sought Irish saltfish - especially Minehead, and to a lesser extent Milford Haven and Combwich. Merchants were not speculatively exporting saltfish from Ireland to the west coast of England.

Saltfish was generally delivered to England in relatively small quantities in comparison to herring. This allowed small scale fishermen to participate in the trade. Irish ships transported saltfish to the west coast of England most likely from Waterford and ports located on the south and south east coast of Ireland. Merchants possibly had to wait for sufficient saltfish supplies to arrive in port, especially as fish processors in the saltfish trade were perhaps poorly rewarded. Ballycotton, though geographically closer to Youghal than Waterford offers a glimpse of how saltfish, cod or ling reached ports throughout the region. In Ballycotton, Co. Cork, fishermen (almost the population of the whole town) rented their cottages from the bishop. The bishop received cod and ling as part payment of rents from the fishermen, possibly also in payment of tithes.¹⁵⁹ The surplus fish were presumably sent to the local headport either to Youghal or Waterford for collection by merchants on English and Irish vessels. Here was a means by which small scale fishermen could access lucrative overseas

¹⁵⁸ TNA, E122/19/10, fo. 3 to fo. 18.

¹⁵⁹ 'The Pipe Roll of Cloyne', *Cork Historical Society*, xix (1913), 60, 158.

markets. Unlike herring and salmon, saltfish were probably shipped overseas unbarrelled. Saltfish was measured by the burden for transport on ships, which normally amounted to twenty fish.¹⁶⁰

Cod, ling and pollock are also listed separately on the customs documents for Bristol and Bridgewater. In the fifteenth century cod (millwell) was exported from Ireland in small quantities, such as in the years 1403/04 and 1479/80. However, in the years 1406/7, 1470, 1475, 1476, 1485/6, 1486/7, 1492/3, 1503/4 and 1516/17 no cod was recorded in the customs accounts, though some may have been used in the production of saltfish. A customs account for Bristol in 1479/80 perhaps supports this view. The *Katherine* of Bristol arrived from Ireland on 14th February 1480. On board were cod or cod derivatives: these were 1,380 cod (milwell), 2,100 saltfish, 7,640 pollock and 3,340 haburden.¹⁶¹ With its varied cargo of cod, it seems possible that this vessel had visited Iberian waters before arriving in the Irish Sea. Throughout the later Middle Ages pollock, cod and haburden were rarely exported from Ireland as single species. Even more unusual was haburden (haberdeen), a large, hard, dried cod, common in the Basque country of Spain and associated especially with the Labard region.¹⁶² Harburden was rarely found in the customs accounts for ports on the west coast of England. There is only one other instance of it relating to Irish trade; sixty haburden arrived in Bristol on the *Christopher* of Newport, three days after the *Katherine* in 1479/80. The fish on the *Christopher* were owned by the merchant, John Ap Prine, who was also the skipper on the *Katherine*, where he had loaded this vessel with 960 of this type of cod.¹⁶³ However, it is important to note that the Bristol customs officials valued identically the smaller milwell (cod) and the larger haburden, which could mean that in other years haburden was not

¹⁶⁰ R. Zupko, *A Dictionary of Weights and Measures* (Philadelphia, 1985), 54.

¹⁶¹ TNA, E122/19/14, fo. 16 v.

¹⁶² Cutting, *Fish Saving*, 36, 120; Woolgar, 'Fish Consumption', 105. In the past it had been thought that haburden was a type of cod caught off Aberdeen in Scotland, but this is not so.

¹⁶³ TNA, E122/19/14, fo. 17 v.

differentiated from milwell and was generally referred to as cod. Overall, there were possibly throughout the fifteenth-century few surplus cod caught in Irish waters of sufficient size to export.

Ling, though a species in its own right, was used generally in the production of saltfish. Ling was a type of cod – called ‘greenfish’ when it was wet salted; but upon drying it remained ling.¹⁶⁴ The ling species is only mentioned on a few occasions in the customs documents. At Bridgewater 1413/14, four pounds weight of ‘leng and millewell’ was recorded on the crayer *Patrick* of Kinsale.¹⁶⁵ In the early sixteenth century further examples of ling exports are referenced in ports on the west coast of England: for instance the *Peter* of Cork entered Penryn on 31st January 1506 with a ling/cod mixture; the *Katherine* of Youghal arrived in Poole in January 1504 with a ling/cod combination owned by Thomas Tobin; and the *George* of Waterford moored in Southampton on 28th February 1504 also with a mixture of ling and cod.¹⁶⁶ The customs collectors in these ports recorded these mixtures as ling/cod rather than saltfish (which was the practice in Bristol and Bridgewater). Irish ling (like cod) was probably not of sufficient size, weight or abundance to export regularly in its own right. As saltfish, ling was, however, important in supplementing the fish trade at the beginning of the sixteenth century.¹⁶⁷ Shipments of derivatives (ling etc) were transported from Dublin to Chester in the early sixteenth century. For example in August 1526 the *François* of Dublin arrived in Chester with ling and assorted fish. The *Michael* of Dublin had arrived a month earlier with dogfish.¹⁶⁸ From the middle of the fifteenth century Ireland appeared to have a

¹⁶⁴ Cutting, *Fish Saving*, 120.

¹⁶⁵ TNA, E122/25/5, m. 3.

¹⁶⁶ TNA, E122/115/10, fo. 42 v; TNA, E122/120/10, fo. 3; TNA, E122/120/11; TNA, E122/209/2, fo. 30 v.

¹⁶⁷ A. Went, 'The Ling in Irish Commerce', *Journal of the Royal Society of Antiquaries of Ireland*, dxxviii (1948), 119-120. Went is incorrect, however. He stated that the price of ling had fallen considerably from 2d each in 1364 to 2s for 13 burdens of fish. A *burden* contained twenty fish which was sold in 1364 at 2½ d each.

¹⁶⁸ Wilson, *Chester Customs Accounts*, 141.

regular surplus of saltfish to trade with the west coast of England.

Pollock, a whitefish, was highly prized in the Middle Ages.¹⁶⁹ It was, however, not valued as highly as cod in the customs accounts. Its weight disparity in comparison to cod may have been a factor because it was recorded at half its value.¹⁷⁰ Like cod it was not imported from Ireland to Bristol every year. In most years approximately 500 to 2,000 pollock were carried from Ireland to Bristol with the exception of 1479/80 when a huge quantity of over 12,700 pollock was landed on the quayside in Bristol. Normally the western ports of England rarely imported pollock from Ireland probably because the normal fishing grounds for pollock were off the Devon and Cornwall coasts. Demand was probably satisfied by west county fishermen operating their own vessels fishing in their local seas.¹⁷¹

The trade of saltfish, cod and other whitefish from Ireland to Europe is difficult to quantify. Some Irish saltfish were exported to Bordeaux normally on English ships.¹⁷² Foreign fishermen also sought saltfish (ling, cod and whitefish) in the same way that they fished herring in the Irish Sea.¹⁷³ In 1535 Henry VIII proposed to limit foreign involvement in the Irish fisheries by stipulating that one third of the catch be left in the kingdom. Longfield suggests that the loss of customs revenue prompted this legislation.¹⁷⁴ The problem for the crown losing revenue from customs for saltfish, was not, however, new. In 1430 the crown claimed to be losing approximately £200 - £300 per annum in custom duties because of the unlawful export of saltfish from Ireland.¹⁷⁵

¹⁶⁹ Cutting, *Fish Saving*, 119.

¹⁷⁰ TNA, E122/19/14, fo. 16 v.

¹⁷¹ Cutting, *Fish Saving*, 119.

¹⁷² O'Brien, 'Commercial Relations', 68-9.

¹⁷³ O'Neill and Childs, 'Overseas Trade', 504.

¹⁷⁴ Longfield, *Anglo-Irish Trade in the Sixteenth Century*, 42.

¹⁷⁵ CCR, 1429-35, 69.

The Trade Of Hake From Ireland Through The Irish Sea Zone

Hake is a gadoid, demersal fish whose habitat is near the sea bed.¹⁷⁶ In the Middle Ages this species of fish grew to an optimal length of eighty to ninety centimetres.¹⁷⁷ The main concentrations of hake shoals were to be found in the Irish Sea. It was predominantly fished off the coasts stretching from Devon to the south coast of Ireland.¹⁷⁸ However, hake may have had a larger habitat as ships from Iceland also on occasion delivered this species in small quantities to Bristol.¹⁷⁹

Despite hake normally occupying regions of the lower depths of the ocean, they may have been caught in shallower waters. Childs argues that this fish were captured by using long lines or by using mackerel-baited hooks to land the fish.¹⁸⁰ It may be that strong nets were required to trawl for hake as they were a much larger fish than herring; therefore nets for hake would have to be sturdily built. Once landed, the fish was preserved. Entries in the customs documents for the west coast of England refer to hake as either *sicit* (dried) or as '*haak*' or '*hakes*'. This indicates the use of different types of preservation. It is likely that the hake exported from Ireland in the fifteenth and sixteenth centuries was either wet or *corf* (cured) fish. Wet hake was gutted and salted.¹⁸¹ The hake exported to Bristol was either preserved by complete or partial gutting and then salted. Cured fish (*corf*) was preserved in the same way as the Dutch method of preserving herring (for example by selective gutting and salting).

¹⁷⁶ Woolgar *et al.*, 'Fish Consumption', 115; E. Carus-Wilson, 'The Overseas Trade at Bristol', in E. Power & M. Postan, eds, *Studies in English Trade in the Fifteenth Century* (London, 1966), 197.

¹⁷⁷ Woolgar *et al.*, 'Fish Consumption', 115.

¹⁷⁸ W. Childs, 'Control, Conflict and International Trade', in D. Starkey *et al.*, eds, *England's Sea Fisheries, The Commercial Sea Fisheries of England and Wales since 1300* (London, 2000), 27; Woolgar *et al.*, 'Fish Consumption', 115.

¹⁷⁹ E. Carus-Wilson, 'The Iceland Trade', in E. Power & M. Poston, eds, *Studies in English Trade in the Fifteenth Century* (London, 1966), 176.

¹⁸⁰ Childs, 'Control, Conflict and International Trade', 27.

¹⁸¹ Childs, 'Control, Conflict and International Trade', 27

Dried hake and coarse hake (larger fish) are rarely referred to specifically in the customs documents, though there are some exceptions - for example, the *Katherine* of Youghal, entered Poole on 15th January 1504; its shipmaster, John Donell, and his relative, Nicholas Donell, freighted dried hake.¹⁸² A shipment of coarse hake is also specifically noted on the *Patrick* of Youghal entering Poole on 25th February 1506: Thomas Fitzjohn possessed 600 coarse hake while John Tobin delivered 160 of the same type of hake on the same vessel.¹⁸³ It was more than likely that hake was loaded onto vessels from Ireland individually and not in barrels. There appears to have been no price variation between coarse hake and the general use of the term hake in the cargoes, but there was a difference in price between hake and dried hake. The dried hake on board the *Katherine* of Youghal which entered Poole on 15th January 1504 was customised at one shilling for ten fish.¹⁸⁴ Usually hake were valued for customs purposes at two shillings per ten hake. The prisage of fish by the water bailiffs in Bristol mentions both salt and dried hake, but according to the customs documents for Bristol, the port was almost exclusively receiving salted hake from Ireland.¹⁸⁵

It is probable that compared to the early in the fifteenth-century hake like other shipments from Ireland to Bristol subsequently declined. In 1403/4, 34,780 hake were transported from Ireland to Bristol; in the surviving documents for 1407 only 3,600 hake was exported in January of that year, with no further hake shipments recorded from December to February.¹⁸⁶ The local Bristol customs accounts for 1437/8 record nine ships arriving with hake. Six of the vessels were from Kinsale, with one each from Cork, Youghal and Waterford. In keeping with the low quantities of hake arriving from Ireland at Bristol these ships carried only

¹⁸² TNA, E122/120/10, fo. 3.

¹⁸³ TNA, E122/120/10, fo. 8.

¹⁸⁴ TNA, E122/20/10, fo. 3.

¹⁸⁵ E. Veale, ed., *The Great Red Book of Bristol Vol IV* (Bristol Record Society, 1953), 123-4.

¹⁸⁶ TNA, E122/17/10, 8, 11, *passim*; TNA, E122/17/37, *passim*.

approximately 11,740 fish.¹⁸⁷

The largest concentration of hake on Irish and English ships was transported between December and February (Tables. 3h-k). After the middle of the fifteenth century Irish ships became less prominent in their transport, instead giving way to English ships. Waterford, Kinsale, Cork and Youghal were the most prolific Irish ports exporting hake to the Severn estuary. Although Waterford ships did not transport hake to Bristol in 1403/4 or 1406/7, in the last quarter of the fifteenth-century Bristol became a prominent port for Waterford ships delivering hake. In 1479/80 three cargoes of Waterford hake arrived in Bristol and in 1503/4 thirteen craft made the same journey. By the end of the fifteenth-century an average of approximately six Waterford ships delivered hake to Bristol. Cork was the most consistent exporter of hake to Bristol, whilst Youghal increased its share of the hake trade after the 1480's (Table 3h). By then some ships from Kinsale were also frequenting Bristol and Bridgewater. Nevertheless, in years where full customs accounts are available for Bristol (in 1485/6, 1486/7, 1492/3), no Kinsale vessels are recorded arriving with hake on board. Hake from Kinsale is also absent from the Bridgewater accounts for 1485/6 and 1489/90.¹⁸⁸ The lack of Kinsale ships in these years coincided with the coronation of Henry VII in England in early 1486. The turbulence brought about by the actions of the pretenders to the English Crown in the south coast region cannot be underestimated. In 1488 with the unrest brewing, Sir Richard Edgecome landed in Kinsale and forced the Barrys and Courceys to take oaths of fealty to the crown.¹⁸⁹ Few ships left Youghal and Cork in 1486/7 and 1492/3, with the only activity in hake exports involving a Cork ship, the *Marie*, which arrived in Bristol on 19th

¹⁸⁷ Bush, ed., *Bristol Port Duties*, 17-25.

¹⁸⁸ TNA, E122/20/5, *passim*; TNA, E122/20/7, *passim*; TNA, E122/20/9, *passim*; TNA, E122/26/13, *passim*; TNA, E122/26/16, *passim*.

¹⁸⁹ A.O'Brien, 'Politics, Economy and Society, The Development of Cork and the Irish South Coast region c.1170 to c.1583', in P. O'Flanagan & C. Buttimer, eds, *Cork History and Society* (Dublin, 1993), 137.

April 1493 with 1,920 hake.¹⁹⁰ Waterford ships in 1485/6, however, remained regular suppliers of hake from Ireland to England. In 1485/6 four shipments of hake were sent on Waterford vessels to Bristol. In 1486/7 Waterford was the only exporter of hake from Ireland to Bristol, supplying seven shipments. (Table 3h). The reason for Waterford's prominence in this trade was its access to hake and perhaps too the protection it was afforded by the earl of Ormond, a supporter of the Tudor succession to the crown.¹⁹¹

In the later Middle Ages the largest consignment of approximately 118,389 hake was exported in 1479/80 from Ireland to England during a lull in the political unrest. In January 1486 over 71,000 hake were exported to Bristol.¹⁹² Fourteen ships delivered the fish, including six from Bristol, three from Waterford, one each from Minehead and Wexford, two from Cork and one from Limerick.¹⁹³ The bulk of the cargo was delivered on English vessels, which freighted 44,995 hake whilst Waterford ships delivered 16,410. The two Cork craft, the *John* and the *George*, only carried just over 3,000 hake between them.¹⁹⁴ (Table 3h).

The large quantities of hake exported in 1479/80 was not surpassed in the period reviewed.¹⁹⁵ In 1485/6, 1486/7 and 1492/3 the numbers of hake exported from Ireland were 86,620, 68,724 and 72,890 respectively. (Table 3i). When the political situation had stabilised, the Cork ports recovered their exports and by 1503/4 the Cork region had fully recovered its status as a significant hake exporter when nine ships from Cork and seven from Kinsale transported over 30,000 hake to Bristol.¹⁹⁶

¹⁹⁰ TNA, E122/20/9, fo. 35, fo. 36 v.

¹⁹¹ O'Brien, 'Politics, Economy & Society', 137.

¹⁹² TNA, E122/20/5, fo. 5, fo. 5 v, fo. 6, fo. 6 v, fo. 7, fo. 7 v, fo. 8, fo. 8 v.

¹⁹³ TNA, E122/20/5, *passim*.

¹⁹⁴ TNA, E122/20/5, fo. 8, fo. 8 v.

¹⁹⁵ TNA, E122/19/4, *passim*.

¹⁹⁶ Flavin & Jones, *Bristol's Trade with Ireland*, 21, 23, 30, 31, 64.

In most years in the Middle Ages Bridgewater received less than ten percent of Irish hake sent to Bristol. (Table 3o). Nevertheless, there were years such as 1485/6, 1489/90 and 1510/11 when percentages of fish deliveries rose, with abnormal numbers of ships from Wexford and Waterford supplying Bridgewater.¹⁹⁷ The cargoes on Wexford and Waterford vessels going to Bridgewater were smaller than those carried from the same ports to Bristol. Most of the vessels bound for Bridgewater carried consignments belonging to only one or two merchants. In 1485/6, hake shipments from Ireland to Bridgewater amounted to only 14,725.¹⁹⁸ The 1489/90 account is difficult to decipher because of its poor condition; nevertheless, there is enough information to determine an export from Ireland of approximately 21,000 hake.¹⁹⁹ In 1510/11 fifteen hake cargoes landed in Bridgewater, half of these ships were from Wexford. The quantities of hake exported were consistent with those in 1489/90, at 21,000.

Hake exports from Ireland to Bridgewater increased in the sixteenth century.²⁰⁰ The largest quantities came on ships from Youghal, Dungarvan and Kinsale. The *Katherine* of Dungarvan arrived to Bridgewater on 28th March 1511 with 6,120 hake. In 1510/11 Kinsale ships exported a total of 4,600 hake, Youghal vessels carried 6,360 hake, Dungarvan craft transported 6,720 but a single vessel from Cork only supplied 120 hake.²⁰¹ Conversely, the total of the seven Wexford ships supplying hake to Bridgewater in 1510/11 amounted to only 2,520. The Wexford cargoes were small, relative to most vessels from Cork or Waterford.²⁰² The Wexford vessels were probably cots or small boats which were plentiful, easy to build and were suited to coastal fishing. The masters of some of these Wexford craft were probably Gaelic Irish. Possible Gaelic merchants included Richard Donell, master of the *Katherine* of

¹⁹⁷ TNA, E122/26/13, *passim*. There was one exception. A ship from Cork docked in Bridgewater in 1485/6.

¹⁹⁸ TNA, E122/26/13, *passim*; TNA E122/20/5, *passim*.

¹⁹⁹ TNA, E122/26/16, *passim*.

²⁰⁰ TNA, E122/27/1, m. 2, m. 3 v, m. 4, m. 4 v, m. 5, m. 5 v, m. 6, m. 7.

²⁰¹ TNA, E122/27/1, *passim*.

²⁰² J. De Courcey Ireland, 'County Wexford in Maritime History', in K. Whelan & W. Nolan eds, in *Wexford History & Society* (Dublin, 1987), 493.

Wexford, and Geoffrey Toulan, master of the *MacKeown*, who delivered hake to Bridgewater in 1511.²⁰³ Larger shipments loaded on Kinsale vessels, delivered hake to Bridgewater on 29th March 1511. A Kinsale ship, the *Patrick*, whose master was Richard Donnell freighted 1,200 hake for David Roche.²⁰⁴

There were three possible reasons for the smaller craft transporting cargoes of hake from Wexford to Bridgewater. Firstly, the lack of continuity of the same shipmasters/merchants on these crafts indicates that small scale hake fishing was not easy or profitable. Secondly, Gaelic Irish fishermen may have had only enough resources to finance one trip every few years. Thirdly, there was normally little surplus hake available from the Wexford region. When there was, larger ships exported the bulk of the cargo.

Cots or small boats may not have, however, been solely used by Wexford fishermen. In 1510/11 two Wexford ships (the *Michell* and the *Blasi*) arrived in Bridgewater along with the *Patrick* and *Nicholas* of Dungarvan and the *Barry* of Cork. All five vessels were carrying small cargoes of hake.²⁰⁵ All of these vessels transported just 60 hake each.²⁰⁶ It was possible that some of the craft operating out of Dungarvan and Cork were also cots.

The trade of hake to areas outside the Irish Sea zone is very difficult to quantify. However, hake was exported in 1502 on the *John* of Pont-l'Abbé from Ireland to Bordeaux or La Rochelle and on the *Christopher* of Audierne in the same year.²⁰⁷ The merchants on both vessels were probably Gaelic Irish. Maurice Donnell freighted his hake from Kinsale, Baltimore, Valentia or Waterford to La Rochelle. Robert Tobin from Youghal exported his

²⁰³ TNA, E122/27/1, m. 4 v, m. 5, m. 7.

²⁰⁴ TNA, E122/27/1, m. 5.

²⁰⁵ TNA, E122/201/4, fo. 8 v, fo. 19, fo. 21 v, fo. 22, fo. 22 v.

²⁰⁶ TNA, E122/201/4, fo. 21 v.

²⁰⁷ Bernard, *Navires*, iii, 132-3.

hake on the *Christopher* from the same ports. Other hake exports (in 1505 from Kinsale and from Youghal in 1520) point to an emerging trade in hake from the southern regions of Ireland to Bordeaux.²⁰⁸

Trade Of Freshwater / Seawater Salmon & Eels

Salmon caught in Irish rivers and estuaries in the Middle Ages was highly prized in England, France and much of Europe. Eels, on the other hand, were not exported in significant numbers from Ireland.²⁰⁹ In order to gauge the importance of exported salmon from Ireland, it is necessary to begin with the lifecycle of the species. Then, the methods used for capturing the fish by Irish salmon fishermen will be explained and compared to apparatus used for catching salmon on the south-west coast of England. The ownership and leases of weirs and salmon/eel fisheries in Ireland will be outlined. The indigenous consumption will be set out *vis à vis* the export of both species of fish from Ireland. Finally, the preservation of salmon in order to transport it safely on ships out of Ireland will be elucidated. The following research questions will be posed: who was involved in the catching and export of salmon; what was the level of trade and in which months of the year was the trade transacted? Did salmon constitute a major export from Ireland, and was the preservation of salmon similar to that of herring and other species of fish? Once again data from the customs accounts for the ports on the west coast of England will be complimented by other evidence, including the notarial accounts for Bordeaux. The continental trade will also be assessed within narrower parameters because of the already noted lacuna of customs information for ports outside the realm.

²⁰⁸ Bernard, *Navires*, iii, 192-3, 478-9. In 1505 the *S. Esprit* returned from Kinsale. J. Macre a merchant of Kinsale went to Bordeaux with hake. In 1520 the *Laurence* of Benodet with Peter Arthurs, Oliver Arthurs and Dominic of Portugal and of Youghal brought hake to the Bordeaux region.

²⁰⁹ TNA, E122 (Particular customs accounts for Bristol), *passim*. In most years there were no eel exports from Ireland and even when there was, those exports were minimal.

Unfortunately, as mentioned earlier, salmon fish bones are rarely discovered in archaeological excavations. The remains do not survive well in soil because of their high calcium content, though there are exceptions, such as the medieval salmonoid deposits found at Hamwic in England.²¹⁰ On the whole, however, the archaeology of salmon bones does not provide comparable evidence to those of herring and saltfish. Similarly there is little archaeological information available for eels though those remains that do survive suggest that eels in the fifteenth and sixteenth centuries were larger by 10 to 15 cms in comparison to Saxon finds, possibly up to 50cm in length. Moreover, it has been established that some eels weighed up to 10kgs.²¹¹

The salmon frequenting Irish rivers in the Middle Ages were of the *salmo salar* species. Each year this type of salmon migrated between sea and freshwater environments. The returning salmon set their fertilised eggs in the stones of a fast flowing river in midsummer, having been at sea for the previous year. Normally salmon returned to the river of their birth. Three months after the eggs had hatched the young salmon (or smolts) made their way down river to the sea to return again a year later.²¹² Once salmon have spawned, they become emaciated from the exacting journey upriver for they did not feed in freshwater. The spent fish (kelts) normally died; those that did survive went back to sea, to return again in time for the next spawning period. Only a small number of salmon survived two or more years of spawning.²¹³

Primarily there were four methods used for capturing salmon in the Middle Ages. The first strategy involved the use of spears, shaped like tridents, to capture small numbers of the fish. At night a light was used to attract the fish and a spear with a rope attached was thrown to

²¹⁰ Woolger & Sergeanston, 'Fish Consumption', 124.

²¹¹ Woolger & Sergeanston, 'Fish Consumption', 123, 124. The large 50cm, 10 kg eels were females.

²¹² Went, 'The Pursuit of Salmon in Ireland', *Proceeding of the Royal Irish Academy*, lxiv (1962-64), 192.

²¹³ Went, 'The Pursuit of Salmon', 192.

retrieve the catch. An example of this type of fishing was described in a letter issued to Richard Challoner in 1538 which detailed where and how to fish on the river in Galway. Challoner was not permitted to fish at three narrow stretches on the river as another licensee, Thomas Marten, already had a lease for these locations.²¹⁴

A second method for capturing salmon required the use of nets dropped into a river from small currachs. Small vessels were employed on the Boyne, which were operated by one person who probably used a casting net to capture the fish.²¹⁵ In Dublin from the twelfth century onwards the abbey of St Mary's had the right to maintain a boat on the Liffey for fishing. Its fishermen probably used a draft net to surround the fish and haul them to shore.²¹⁶ An alternative type of net used for fishing was the snap net. This fishing process, used on the Blackwater river, was complicated as it involved two small boats (cots) working side by side.²¹⁷ Two men in each boat suspended a weighted net over the water; simultaneously they released it, then they drew up the net with the captured fish. Other netting strategies were used on rivers in Ireland for example, at one point there was a fixed net trap destroyed in 1251 at Dublin Bridge.²¹⁸

The most important devices for capturing salmon were the head weir and the riverine weirs. A significant proportion of weirs were subject to crown authority. In the Middle Ages the tidal areas of most rivers in Ireland fell under royal jurisdiction. The weirs on the Shannon, Bann, Limerick and Athlone were all under royal stewardship.²¹⁹ The most significant type of weir was the head weir, normally of a V-shaped construction set close to the shoreline. When

²¹⁴ Went, 'The Pursuit of Salmon', 192, Longfield, *Anglo-Irish Trade*, 53-4.

²¹⁵ Went, 'Irish Monastic Fisheries', *Cork Historical Society*, 60, 52.

²¹⁶ A. Went, 'Fisheries on the River Liffey II: notes on the corporation fisheries from the dissolution of the monasteries', *Journal of The Royal Society of Antiquaries of Ireland*, dxxiv (1954), 56-57.

²¹⁷ Went, 'The Pursuit of Salmon', 233.

²¹⁸ Went, 'Fisheries on the River Liffey II', 57.

²¹⁹ O'Neill, *Merchants and Mariners*, 38.

the tide came in, it captured the salmon. Subsequently, once the tide ebbed, the fish were caught in its enclosure. The trapped fish were engulfed in a stake and wattle construction. A cone-shaped net snared the fish and kept them captive.

Monastic and royal weirs were much sought after by both English and Anglo-Irish merchants.²²⁰ These valuable weirs were in demand by merchants, and in 1386/7 the king leased the Galway fisheries to Richard Panys, and in the same year the valuable Bann fisheries to Rado Molyneux and William Symcok of Drogheda. In April 1408 the salmon fishery at Drogheda was leased to Nicholas Silke, Patrick Johnson and William Roche.²²¹ The complexity of setting up a fishery is exemplified in the grant of fishing rights on the Nobber River in County Meath in 1410. John Drake of Drakerstown granted to Simon Ducton a fishery, with free entry and exit over his land. He was allowed to use stone and sods to construct the fishery, subject to the customary services owed to the landlord and to pay 200 eels for the lease of the fish trap at each feast of All Saints.²²²

The other principal salmon and eel snaring device was the riverine weir. River weirs required a continuous run of water flowing in one direction to operate at its optimum. The weir obstructed most of the river, utilising a trapping system to snare the salmon. These devices were referred to as either boxes, cruives or cribs.²²³ The hospital of St John of Jerusalem had a salmon weir near Islandbridge (Dublin) using traps for catching salmon.²²⁴ Up to the 1530s a significant proportion of these weirs was the preserve of the monasteries. At the time of the dissolution of these institutions in 1536/7, there were over thirty-five salmon fisheries/weirs under the ownership of these ecclesiastical institutions, although they did not own the most

²²⁰ O'Neill and Childs, 'Overseas Trade', 505.

²²¹ *Rot. Pat. Hib.*, 135, 193.

²²² J. Smyly, 'Old Deeds in the Library of Trinity College IV', *Hermathena*, lxx (1951), 6.

²²³ Went, 'The Pursuit of Salmon', 213, 214.

²²⁴ Went, 'Fisheries on the River Liffey II', 57.

famous weir in Ireland, the Laxweir on the Shannon, which was under the ownership of the crown. There were, however, significant monastic salmon weirs on the Liffey at Leixlip, Lucan, Chapelizod and Irishtown at the time of the dissolution of the monasteries.²²⁵ The success of the salmon river weirs brought with it logistical problems. In 1298 the passage of vessels was obstructed on the Suir River from New Ross to Athy by weirs. Material dislodged by storm activity or illegal netting of salmon caused weir blockages. Likewise, in 1537 Inistioge priory had constructed a weir that obstructed boats and in the same year the town of Clonmel complained that the proliferation of weirs from Carrick to Cahir was causing danger to property and life.²²⁶

The river and tidal weirs had to be operated correctly at specific times of the year to catch salmon. If salmon were caught on their way to spawn, it would adversely affect the population of the species. Alternatively, salmon captured departing the river system were small smolts, spent kelts or a small number of mature fish. In England there were, from 1386, attempts to prohibit salmon fishing on the Thames, from Gravesend to Henley, between 3rd May and 6th January each year.²²⁷ This would indicate that the fish were to be caught as smolts on the way back out to sea along with the larger two or three-year old salmon. The legislation was perhaps prompted by overfishing of salmon which possibly occurred in Irish waters too. Some fishermen were able to select the optimum size of fish by setting up fish in ponds. There are a number of charters which include agreements between the prior of Tristernagh and leasees for ponds beside windmills with the priory receiving as payment half the catch.²²⁸

²²⁵ Went, 'Fisheries on the River Liffey II', 51-55.

²²⁶ D. Waterman, 'Somersetshire and other foreign building stone in Ireland, c.1175-1400', *Ulster Journal of Archaeology*, xxxiii (1970), Third series 73; A. Went 'Historical notes on the fisheries of the River Suir', proceedings of *The Royal Society of Antiquaries of Ireland*, lxxxvi (1956), 194.

²²⁷ Cutting, *Fish Saving*, 84.

²²⁸ M. Clarke, ed., *Register of the prior of the Blessed Virgin Mary at Tristernagh* (I.M.C. Dublin, 1942), 1, 5,

River eels were caught in separate weirs.²²⁹ The nets to catch eels were tightly weaved compared to those used for larger salmon. Eel weirs were constructed on the Shannon, King's River and Erne, but also on smaller rivers such as the Dee, Maigue and the Inny. The huge quantities of eel weirs on the Rivers Boyle (twenty-four are recorded) and on the Erne (twelve are recorded) were in direct contrast to the small number of salmon weirs on the same stretch of these rivers. The abundance of eels in these waters and their body shape probably necessitated a greater number of weirs with narrower apertures.

Like salmon, eels spent a portion of their lives at sea. The less confined habitat of the sea possibly allowed eels to grow larger. The number of eels caught in these traps could have been very large, that is if the 40,000 eels supplied annually by Kilree Manor to the bishopric of Derry was typical.²³⁰ Even though eels could be salted, they were customarily kept alive in long boxes of freshwater, ready for eating. However, there were potential problems with fresh eels being stored in freshwater containers. Eels were sometimes transported in wooden containers which resulted in losses and degradation to the fish. It was possible that non-salted eels were sold in local markets close to where they were caught; a long journey would have caused putrefaction of the eels.²³¹

Salmon exported from Ireland were usually pickled in salt and then topped up with brine.²³² They were then stored in pipes (barrels) in preparation for shipping.²³³ This type of preservation is demonstrated by a series of licences issued to Bristol merchants importing

51, 59, I wish to thank Dr. Arlene Hogan for alerting me to this footnote and translations.

²²⁹ Went, 'Irish Monastic Fisheries', 54.

²³⁰ D. Chart, ed., *The Register of John Swayne, Archbishop of Armagh, 1418-1437* (Belfast, 1935), 3, 171.

²³¹ Cutting, *Fish Saving*, 28. In the later Middle Ages fresh fish (eels) were kept for up to a week in containers of fresh water in Europe. Berthold de Rafisto wrote of those who would meet their death if they ate the fish.

²³² Cutting, *Fish Saving*, 83.

²³³ TNA, E122 (particular customs accounts for Bristol), *passim*.

salmon from Ireland between 1400 and 1416. These licences allowed the merchants to bring copious amounts of salt and corrupt wine to Ireland and to return with salmon. Most of the licences stated that the salmon were to be salted before they were placed on ships returning to England. O'Neill suggests that the corrupt wine may have been used as part of the preservation process.²³⁴ There is merit to this view for two reasons. More specific evidence comes from a number of the licences which state very clearly that wine used in pickling must be undrinkable.²³⁵ On 18th February 1406 Robert Russell of the *George* of Bristol arrived in Ireland with vinegar, salt and flour to victual the King's lieges.²³⁶ The combination of food additives may indicate that the salmon were marinated in vinegar and salt. In *Henry IV*, Falstaff refers to the pickling of fish in old wine: 'If I be not ashamed of my soldiers, I am a soused gurnet'.²³⁷ This is an allusion to the practice of preserving fish in alcohol. Indeed, Irish and English merchants were still importing large quantities of corrupt wine from Bristol and to a lesser extent from creeks in Bridgewater and Exeter later in the fifteenth century.²³⁸ Throughout the 1470s, 1480s and 1490s English ships were predominantly responsible for transporting decayed wine to Ireland. For example the *Katherine* of Ermouth (most likely Exmouth or Yarmouth) left Bristol for Ireland on 1st May 1487 with ten tuns of corrupt wine. The same ship returned on 25th May with twelve and a half barrels of salmon. The *Katherine* sailed to Ireland again on 24th June 1487 with one and a half tuns of corrupt wine, to return on 25th July with two pipes of salmon and cloth.

Once packed and preserved in pipes (barrels), Ireland's surplus salmon was then exported.²³⁹

²³⁴ O'Neill, *Merchants and Mariners*, 39.

²³⁵ CPR, 1399–1401, 403, 425.

²³⁶ CPR, 1405–1408, 144.

²³⁷ W. Shakespeare, *Henry IV*, Act IV scene II; Cutting, 'Fish Saving', 27, 35.

²³⁸ TNA, E122 (customs accounts for Bristol, Bridgewater and Exeter), passim.

²³⁹ R. Zupko, *A Dictionary of Weights and Measures for the British Isles: The Middle Ages to the Twentieth Century*, 29, 222; J. Rogers, *A History of Agriculture and Prices in England* (Oxford, 1876), 613; Rogers states that a pipe of salmon was approximately half a ton which contained ninety six salmon, and that a

The particular customs accounts reveal that salmon exported from Ireland were mainly in pipes with a capacity of 84 gallons each. In addition there are also references to barrels (also known as butts) which were half the size of a pipe and measuring 42 gallons. The kilderkin had a capacity of a quarter of a pipe whilst the firkin was valued for customs purposes as one eighth of a pipe. Normally a pipe composed of forty-eight salmon.²⁴⁰

Unlike herring and saltfish, cargoes of salmon were exported from Ireland to Bristol throughout the year (Table 3n). In 1403/4 over 10,000 salmon were exported to Bristol in January. In August 1471 nearly 5,000 salmon were loaded on the quayside in Bristol (Table 3n). In September 1470 and September 1486 and August 1475 over 2,000 salmon were landed at quaysides in the Severn estuary (Table 3n). It may be argued that the most significant shipments occurred between January and March, though significant consignments were exported in most years from June to September (Table 3n). The preservation methods were of such a standard that the salmon could be dispatched from Ireland to Bristol throughout the year.

In the years when customs accounts are available for Bristol, they record that trade was normally shared between Irish ships and English vessels (Table 3n). However, the partial account for 1403/4 reveals different trends to those evident at the beginning of the sixteenth century. In 1403/4 Irish ships came to Bristol with salmon from the Irish ports stretching from Drogheda around the south coast to Kinsale. (Table 3n). In comparison to later in the fifteenth century, the cargoes of salmon sent from Ireland were very large in 1403/4. Ships from Waterford, Cork, Ross, Kinsale, Drogheda, Youghal, Dublin and Wexford all transported

barrel was half this amount. I have used Zupko's measurement taken in 1439 of a pipe of salmon numbering forty-eight and a barrel half this amount

²⁴⁰ Zupko, *A Dictionary of Weights and Measures*, 141, 303; TNA, E122/25/5, m. 3.

salmon to Bristol in this year.²⁴¹ Among the vessels recorded, the *Trinity* of Cork landed at Bristol on 13th November 1403 with a huge cargo. Richard Rys had freighted over 2,000 salmon on board Peter Walsh's ship. Although cargoes of salmon were large in 1403/4 overall, there were few ships exclusively active in the salmon trade.²⁴² Among the exceptions were the *Marie* and the *Peter* of Youghal which both arrived in Bristol on 14th January 1404. The two vessels combined had over 2,500 salmon in their holds.²⁴³ One of the merchants on the *Peter* was also the master of the *Nicholas* of Drogheda, which arrived in Bristol a month earlier with over 1,500 salmon.²⁴⁴ There were a small number of vessels active in the Irish-Bristol trade in 1403/4. These ships that were freighted very large cargoes. The shipmaster Oliver James of the *Mawdelyn* arrived in Bristol on 29th January 1404 with over 6,500 salmon. The same ship carried 2,688 salmon belonging to Thomas Baylebyn, who was also the shipmaster of the *Cog John* of Bristol which arrived with more salmon a week later, on 8th February 1404.²⁴⁵ Another merchant on the *Mawdelyn*, John Barnbury (formerly John Toky, mentioned in Chapter 1), carried the single largest quantity of salmon landed by a merchant in Bristol in that year, of 3,360 fish.

Although shipments of salmon were transported throughout the year individual Irish and English merchants usually exported salmon only once or at most twice a year to Bristol (Table 3n). It would seem that merchants stockpiled the merchandise to ensure that sufficient quantities of salmon were available for single cargoes. Long term storage was made possible because of the quality of preservation. This, in turn, enabled merchants to forestall the salmon, and then to sell their fish at the most advantageous time, when salmon could yield the

²⁴¹ TNA, E122/17/11, *passim*; These ships were named, *Trinity* of Cork, *Gracedieu* of Waterford, *Marie* of Ross, *Nicholas* of Drogheda, *Peter* and *Marie* both of Youghal, *Marie* of Dublin, *Nicholas* of Wexford, and three ships from Kinsale, *James* twice and *Marie* once.

²⁴² TNA, E122/17/8, m. 1.

²⁴³ TNA, E122/17/11, m. 3.

²⁴⁴ TNA, E122/17/11, m. 2.

²⁴⁵ TNA, E122/17/11, m. 5, m. 6.

greatest monetary return.

The contrast between cargo sizes of salmon in the fifteenth and early sixteenth centuries is best exemplified by the evidence for 1516/17, when forty-four ships delivered salmon to Bristol.²⁴⁶ The four largest cargoes shipped on Irish ships in 1516/17 were much smaller than their equivalent in 1403/4. The cargoes carried by the *Konolagh* of Kinsale, the *Patrick* of Youghal, *George* of Waterford and *Nicholas* of Waterford combined, comprised fewer than 6,000 salmon.²⁴⁷ To draw a balanced comparison, I propose to compare only the months of October to March 1516/17, the same months for which data survives in the Bristol account of 1403/4. In both accounts salmon was transported by four times as many Irish as English ships. However, the number of ships and cargo sizes had greatly altered. In 1403/4 seventeen ships freighted 18,072 salmon to Bristol. In 1516/17 double the number of ships carried (12,276), two thirds of the 1403/4 deliveries of salmon. (Table 3n). Furthermore, in 1516/17 Irish ships carried more salmon than the largest English ship, the *Anthony* of Bristol, which freighted just 600 salmon.²⁴⁸

The single largest cargo was on the *Marie* of Limerick which docked in Bristol on 20th January 1486. Thirteen merchants freighted over 7,000 salmon on the ship.²⁴⁹ The merchants with the largest quantities of salmon on the *Marie* of Limerick were Patrick Stacboll (1,920), John Crathe (912) and Maurice Kyrnan with (1,608).²⁵⁰ It is the only Limerick ship recorded in the surviving fifteenth century customs accounts for Bristol with a cargo of salmon. It is surprising that no other salmon was exported from Limerick to west coast English ports, considering the large Laxweir placed in the Shannon. It is possible that surplus salmon from

²⁴⁶ Flavin & Jones, *Bristol's Trade with Ireland*, 103-196.

²⁴⁷ Flavin & Jones, *Bristol's Trade with Ireland*, 103-196.

²⁴⁸ Flavin & Jones, *Bristol's Trade with Ireland*, 103-196.

²⁴⁹ TNA, E122/20/5, fo. 5, fo. 5 v, fo. 6, fo. 6 v, fo. 7, fo. 8, fo. 8 v, fo. 8.

²⁵⁰ TNA, E122/20/5, fo. 8.

this region were instead exported from Limerick to regions in France.²⁵¹

As outlined earlier there was a new dynamic in the fish trade in the latter half of the fifteenth century. The decline in the quantities of salmon exported from Ireland in the middle of the 1480s, coupled with an increase in the number of ships required to freight them, reflects a number of developments. It is possible that political upheaval, especially in the west of Ireland, had an impact on exports, disrupting both the supply of salmon from river weirs, and the supply channel to the port towns. There was feuding between branches of the Butlers of Ormond from 1487 to 1497 and in May 1487 the earl of Lincoln brought 2,000 German mercenaries to Ireland, following the coronation of the pretender Lambert Simnel in Cork.²⁵² In years when salmon were readily available in Ireland there was a political and economic equilibrium allowing for the export of healthy surpluses. In 1403/4, 1479/80 and 1485/6 over 18,000 salmon *per annum* were delivered to Bristol from Ireland. (Table 3n). In the years of shortage, such as 1486/7, 1492/3 and 1503/4, only between 5,000 and 9,000 salmon were exported from Ireland to Bristol. The supply of freshwater fish would seem to have been affected more than that of sea fish by political instability.

Other problems exacerbated by plague perhaps explain the low numbers of salmon reaching Bristol in 1503/4.²⁵³ Once these had abated, salmon exports revived. This is best exemplified in January 1485/6 when there was a lull in political tensions, and almost 13,000 salmon reached Bristol from ports in Ireland. This cargo was carried on twelve ships - four from Bristol, three from Waterford, two from Wexford and one from Limerick.²⁵⁴ In the 1480s when plague or political unrest was not prevalent, salmon exports to Bristol were 18,612 in

²⁵¹ O'Brien, 'Commercial Relations', 36, 68-70.

²⁵² T. Moody, F. Martin & F. Byrne, eds, *A New History of Ireland* viii (Oxford, 1989), 176, 177-180.

²⁵³ Moody *et al.*, *A New History of Ireland*, viii, 183.

²⁵⁴ TNA, E122/20/5, fo. 5, fo. 5 v, fo. 6, fo. 6 v, fo. 7, fo. 8, fo. 8 v.

1479/80 and 18,552 in 1485/6. Conversely, in 1503/4 when Ireland experienced political problems and plague, only 5,028 salmon were exported to Bristol. In 1516/17 salmon exports recovered but only reached 13,812 which may indicate that salmon surpluses in Ireland were declining (Table 3k-j). War and political unrest affected supplies of freshwater fish to a greater extent in comparison to the supply of sea fish.

Although most Irish salmon was shipped to Bristol, other ports on the west coast of England also sought small quantities of Irish salmon. Exports of salmon from Ireland to Bridgewater in the fifteenth century were, however, meagre compared to exports to Bristol. (Table 3o.) The bulk of Bridgewater cargoes were delivered in February and March. The most significant recorded exports were in 1485/6, when nine shipments were made on three ships from Waterford, two from Wexford, two from the Isle of Wight and one each from Minehead and Bridgewater.²⁵⁵ Although these deliveries coincided with the highest quantities of salmon exports from Ireland to Bristol, shipmasters did not deliver salmon to both ports. Merchants did, however, transport salmon to both destinations. For example, John Vaughan owned salmon on the *Anne* of Bristol and the *Trinity* of Minehead, both of which were in Bristol in January 1486. On 26th February 1486 the same John Vaughan freighted salmon on the *Katherine* of Waterford, which sailed into Bridgewater.²⁵⁶ Between 27th December 1485 and 21st January 1486 William Clifford sent salmon on the *Trinity* of Minehead and the *George* of Cork to Bristol, and on 27th December 1485 he freighted salmon on the *John* of Bridgewater to Bridgewater.²⁵⁷

Irish salmon exports to Exeter and Dartmouth were negligible. In the fifteenth century

²⁵⁵ TNA, E122/26/13, m. 1 v, m. 2, m. 3, m. 4, m. 4 v.

²⁵⁶ TNA, E122/20/5, fo. 5 v, fo. 6; TNA, E122/26/13, m. 4 v.

²⁵⁷ TNA, E122/20/5, fo. 6, fo. 8 v; TNA, E122/26/13, m. 1 v.

almost no salmon were sent to these locations, though a few Irish ships in the sixteenth century did dispatch salmon to these ports including Barnstable. For example in 1506/7 the *Peter* of Cork, the *Sunday* and *Marie* of Wexford all entered Barnstable between 27th February and 1st March 1507. There were less than 200 salmon on each vessel.²⁵⁸ The most significant quantity of salmon exported to this region (384 fish) arrived in Exeter aboard the *Peter* of Waterford on 2nd March 1507.²⁵⁹ Salmon was not, however, the primary cargo of fish on any of these crafts, which also carried a medley of species including herring, pike, saltfish and hake. Salmon exports to Devon gradually increased during the early sixteenth century unlike exports to Bristol and Bridgewater.

The export of eels from Ireland to the west coast of England was generally insignificant in the later Middle Ages, though in some years eels formed a small portion of fish cargoes going to Bristol.²⁶⁰ The lack of evidence relating to the exportation of eels to England is surprising, as they were plentiful in Ireland.²⁶¹ This was attested in 1452, when large packs of eels were transported from Athlone to Trim and Athboy and on to Dublin were lost during a skirmish.²⁶² Throughout England and Ireland it was likely that eels were consumed fresh from river systems either from the weirs or, as is the case in England, from specially constructed ponds.²⁶³ Therefore, if fresh eels were available from other sources in time of need, then any surpluses available from Ireland were not required. Nevertheless, there were in some years minor quantities of eels exported from Ireland to England such as in 1470, when 10 barrels went to Bristol.²⁶⁴ In 1478 a large consignment of 25 barrels were exported to Bristol.²⁶⁵ A barrel of eels (salted) contained approximately 120 fish. The evidence from the customs

²⁵⁸ TNA, E122/201/3, fo. 33 v, fo. 34.

²⁵⁹ TNA, E122/201/3, fo. 13, fo. 13 v.

²⁶⁰ TNA, E122 (Particular customs accounts), *passim*.

²⁶¹ O'Neill, *Merchants & Mariners*, 41, The archbishop of Armagh received as part of a rental payment 40,000 eels per year from the Kilree manor in Derry in the fifteenth century; Went, 'Monastic Fisheries', 55, an appendix of a large number of eel weirs in the ownership of monastic orders, of almost one hundred weirs.

²⁶² A. Green, *The Making of Ireland and its Undoing* (Dublin, 1920), 47.

²⁶³ Woolgar *et al.*, 'Fish Consumption', 124.

²⁶⁴ TNA, E122/19/7, fo. 3, fo. 3v.

²⁶⁵ TNA, E122/19/7, fo. 3, fo. 3v; TNA, E122/19/10, fo. 4.

documents shows that 1478/9 was the year when the largest quantities of eels were exported to Bristol. In this year four ships freighting eels arrived at Bristol.²⁶⁶ These included two Bristol ships, one of which (the *Katherine*) had five merchants, including Elizabeth Kew, who freighted twenty-six barrels of eels, the other vessel *Christopher* only carried one cask. Two ships from Waterford each carried barrels containing 120 eels by the long hundred (120), the *Marie* and the *Trinity*. The increased export of all types of fish in 1478/9 from Ireland to England probably explains the increased number of eels transported to Bristol.²⁶⁷

The export of salmon and eels beyond the Irish Sea zone cannot be quantified, because no adequate customs accounts survive for non-English ports. Salmon was occasionally exported from Ireland to Rouen.²⁶⁸ The Dieppe customs accounts and the Bordeaux notarial accounts record few exports.²⁶⁹ Since Galway and Sligo had regular commercial interaction with Castile and Portugal, some west of Ireland salmon may have been traded there. Salmon may also have been transhipped from Bristol to Spain by at least one Malahide merchant, John Mold, who had contact with merchants of Bristol. He died owing money to a prominent Bristol merchant who had exported fish to Spain.²⁷⁰

Pike

In the Middle Ages pike was a much prized fish consumed by the wealthy.²⁷¹ Its status as a luxury fish is exemplified in the fifteenth century by the king's fishponds at Southwark which were full of pike.²⁷² It was not just the royal table that enjoyed pike; in literature, Chaucer's

²⁶⁶ TNA, E122/19/13, m. 3, m. 5, m. 8.

²⁶⁷ TNA, E122/19/13, m. 8. James White was the merchant on both ships arriving into Bristol on 21st January and 29th 1480.

²⁶⁸ O'Brien, 'Commercial Relations', 36.

²⁶⁹ Bernard, *Navires*, iii, 16-503.

²⁷⁰ E. Carus-Wilson, *The Overseas Trade of Bristol in the Later Middle Ages* (London, 1937), 193, 196.

²⁷¹ Woolgar, 'Fish Consumption', 126. In 1344-7, the King's wardrobe had in storage thirty-nine large pike.

²⁷² Cutting, *Fish Saving*, 26.

franklin owned fishponds that were also full of pike.²⁷³ There is little archaeological evidence from Ireland for fish ponds, though they may have existed at the Franciscan friary of Rosscrilly and at the Dominican friary of Tulsk in Roscommon. In the kitchen at Rosscrilly there was a large stone fish tank sunk in the floor, presumably used for storing freshwater fish, perhaps including pike.²⁷⁴ Secular lords, too, owned fish ponds in Ireland. Askeaton Castle had at least two fish ponds in the great garden in Limerick.²⁷⁵ Originally, however, most exported pike along with other freshwater fish, were caught in weirs and traps. There is, for example, evidence of pike being caught in weirs such as that on the River Maigne and at the priory of Tristernagh.²⁷⁶

Pike have also been found in medieval archaeological sites in England. They were approximately thirty centimetres or less in length.²⁷⁷ Pike exported from Ireland were not uniformly of the same size. There are references to small pike ('pikerals') as well as medium-sized fish. The 600 pike on the *Mary* of Youghal, referred to as 'large', may have been over three feet in length.²⁷⁸

Pike was unsystematically loaded onto ships, probably having been dried (*siccardi*).²⁷⁹ It is also possible that some exported pike were pickled, probably in salt.²⁸⁰ Pike were not exported to either Bristol or Bridgewater in the fifteenth century or in the early sixteenth

²⁷³ G. Chaucer, *The Canterbury Tales*, lines 349-50 'Full many a fat partrich hadde he in muwe, and many a breem and many a luce in stuwe'. *The Canterbury Tales* are, to some extent, a reflection on a real pilgrimage from London to Canterbury in 1387. The word LUCE (for 'pike') is probably derived from Norman French; quite a number of French words were introduced into the English language during the fourteenth century.

²⁷⁴ C. Ó Clabaigh, *The friars of Ireland 1224-1540* (Dublin, 2012), 131, 132.

²⁷⁵ McLaughlin, *Troubled Waters*, 86.

²⁷⁶ Went, 'Irish Monastic Fisheries', 53.

²⁷⁷ Woolger, 'Fish Consumption', 124.

²⁷⁸ Cutting, *Fish Saving*, 39.

²⁷⁹ Longfield, *Anglo-Irish Trade*, 49, 52.

²⁸⁰ Cutting, *Fish Saving*, 39.

centuries.²⁸¹ However, this species was exported from Ireland in small quantities to ports in the jurisdiction of Plymouth and Fowey (Table 3q). On 26th March 1498 William Dowling entered Padstow on his vessel the *Katherine* of Youghal with 120 pike.²⁸² In 1506/7, the *Peter* of Cork and the *Katherine* of Dungarvan delivered pike to Penryn, while the *Sunday* of Cork freighted its pike to Padstow.²⁸³ The largest cargo of pike delivered into the ports of Plymouth and Fowey in the late fifteenth and early sixteenth centuries was conveyed on 16th February 1514. This single largest shipment into the region was from Youghal. A pickard, the *Parke* of Youghal, skippered by Maurice Nell freighted 2,340 pike for its merchants, Roger Copinger and John Hare.²⁸⁴

Exeter and Dartmouth were importing pike from Ireland too but in much greater quantities than the supplies going to Plymouth or Fowey (Table 3r). The home ports of the Irish ships arriving in the Exeter ports were also more diverse than those entering Plymouth and Fowey. On the south coast of Ireland, they included Youghal, Kinsale, Waterford, Dungarvan, Wexford and New Ross.²⁸⁵ Pike was exported in the fifteenth-century from Ireland to Exeter. For instance on, 16th February 1433 the *Katherine* of Wexford entered Exeter with 6,000 pike. In 1463, 180 pike were dispatched from Ireland to Exeter.²⁸⁶ Trade increased in the sixteenth century. The most significant year for exports of pike from Ireland was 1508/9, when ten ships visited the Exeter harbours between January and March 1509. These composed of two ships each from Wexford, Youghal, Dungarvan and Waterford, and one each from Cork and New Ross. Combined, they freighted over 12,000 pike to the ports of Exeter and

²⁸¹ TNA, E122 (Particular Customs Accounts for the Ports of Bristol and Bridgewater), *passim*.

²⁸² TNA, E122/115/7, m. 10.

²⁸³ TNA, E122/115/11, fo. 42 v, fo. 43.

²⁸⁴ TNA, E122/206/2, fo. 6.

²⁸⁵ TNA, E122/201/2, fo. 16. The *Katherine* of Youghal entered Barnstable on 20th Feb 1499; TNA, E122/41/25, m. 14 v. The *James* of Wexford entered Barnstable 22nd Feb 1503; TNA, E122/201/3. The *Peter* of Waterford entered Exeter on 2nd March 1507.

²⁸⁶ ELCR, 11 Henry VI – 12 Henry VI, m. 3.

Dartmouth.²⁸⁷ The largest shipments were again from Youghal. The *Katherine* of Youghal, with John Husey as the master, unloaded 3,600 pike on 5th February 1509.²⁸⁸ The *Margaret* of Youghal, a day later, discharged 6,120 pike.²⁸⁹ The shipments of pike on Youghal vessels represented over 75% of the total Irish pike exports to Exeter in 1508/9.

Freshwater fish were not part of the daily diet in Exeter because of its high cost, with the exception of the elite.²⁹⁰ Wealthy landowners and citizens of the ports on the southwest coast may have found it easier to import pike from Ireland than keep expensively stocked fish ponds. Irish and English merchants were perhaps taking advantage of a demand for pike that was not satisfied by supplies within the south west coast region of England.

There is not much evidence of pike being exported to continental Europe from Ireland, though the *Marie* of Quimper whose master was Richard Barry exported pike to the Bordeaux region in 1504.²⁹¹ In 1512 Richard Lynch from Galway exported pike on the *Trinity* to St Malo.²⁹² It would seem reasonable to conclude, given the similarly lack of pike exports in Bristol and Bridgewater, that pike constituted only an occasional supplement to cargoes shipped from Ireland to the continent.

Seals, Porpoises and Maritime mammals: with notation of fish species rarely exported from Ireland

Some other species of fish were very occasionally exported from Ireland apart from those already discussed. In February 1414 John Hasham, master/merchant of the *George* of

²⁸⁷ TNA, E122/42/1, *passim*.

²⁸⁸ TNA, E122/42/1, m. 41.

²⁸⁹ TNA, E122/42/1, m. 41 v.

²⁹⁰ Kowaleski, *Local Markets and Regional Trade*, 319, fn. 190.

²⁹¹ Bernard, *Navires*, iii, 158-9.

²⁹² Bernard, *Navires*, iii, 330-1.

Wexford, entered Bridgewater with one barrel of sturgeon and one of trout.²⁹³ Since sturgeon was not an indigenous species of fish in Irish waters, it is not surprising that this is the one of the very few examples of its exports from Ireland. Trout, on the other hand, would have been an abundant fish in Irish and English river waters. Indeed, a barrel of trout was customised at 20d, a fifth of the value imposed on a barrel of herring.²⁹⁴ The very low value given to trout and its abundance in English rivers probably explains why there are few records of its export from Ireland.

Seal and porpoise were also exported to England in small quantities. Archaeological finds on medieval sites in Ireland have unearthed the remains of seals in County Kildare and a porpoise on High Street in Dublin.²⁹⁵ This would indicate that these mammals were eaten or their oil harvested.²⁹⁶ Seals and porpoise were not, however, exported in any great quantities.²⁹⁷ The only year when significant seal exports are recorded was in 1479/80. On 3rd February 1480 the *Marie* of Cork included a cargo of two seals, freighted by David Goode.²⁹⁸ A much larger cargo of twenty-five seals was transported to Bristol by John Dillon on the *Katherine* of Bristol.²⁹⁹ The customs valuation of 2s 6d per seal would suggest that the value of the catch, compared to the effort in pursuing this elusive mammal, did not make great commercial sense. This unusually large concentration of seals may have been the result of a chance encounter with fishermen. In 1492/3 only one seal and one barrel of porpoise were landed in Bristol.³⁰⁰ There is no other evidence of exports of seals or porpoise up to the

²⁹³ TNA, E122/25/5, m. 3.

²⁹⁴ TNA, E122/25/5, m. 3, White herring in this account was valued for customs purposes at 100d per barrel.

²⁹⁵ Murphy & Potterton, *The Dublin Region*, 393.

²⁹⁶ Longfield, *Anglo-Irish Trade*, 51.

²⁹⁷ TNA, E122/17/1, m. 3, The *Marie* of Youghal arrived on 14th January 1404 into Bristol with 1 pipe of porpoise; m. 6, The *Marie* of Dublin arrived into Bristol on the 11th February 1404 with two seals.

²⁹⁸ TNA, E122/19/14, fo. 13.

²⁹⁹ TNA, E122/19/14, fo. 17.

³⁰⁰ TNA, E122/20/9, fo. 31, fo. 31 v. John Clerc freighted a seal on the *Katherine* entering Bristol on 14th April 1493.

1520s.³⁰¹

There were no seals delivered to Bridgewater, Plymouth, Fowey, Exeter, Dartmouth or Poole in the fifteenth and the early years of the sixteenth centuries.³⁰² However, small quantities of porpoise were infrequently transported to these ports. Porpoise was exported in barrels or part thereof. The *Marie* of Kinsale, whose skipper was William Long, arrived in Bridgewater in March 1414 with one barrel of porpoise, worth one shilling.³⁰³ The low value attributed to the porpoise signifies that the meat and oil were of little use to merchants in the markets of western England or that supplies were ample for local needs. The next instance of a porpoise in the customs documents does not appear until the *Anthony* of Milford Haven freighted one barrel of porpoise belonging to John Eliot to Bristol in May 1493.³⁰⁴ The value of this cargo had increased by a factor of over three to 3s 4d per barrel. This equated with the price of a barrel of porpoise sent to Poole on the *Katheryn* of Youghal on 25th February 1506. Although by 1518/19 the customised price of porpoise had doubled in value again to 6s 8d.³⁰⁵ This barrel was transported on a spinace, the *Nicholas* of Youghal, skippered by John Grant. Grant also delivered porpoise to Dartmouth on 11th June 1519.³⁰⁶

Ireland was fortunate to have available from its rivers and coastline prodigious resources of both freshwater fish and seafood. Herring, hake and salmon were abundant in Ireland and raw materials were available for the preservation of the catch. There was availability of local salt and more came from Chester and from the Bay of Bourgneuf; old wine was easily accessible from Bristol for the preservation of salmon. The raw materials for storing the catch made

³⁰¹ Flavin & Jones, *Bristol's Overseas Trade*, *passim*.

³⁰² TNA, E122, (Particular Customs records for Bridgewater, Plymouth and Fowey, Exeter and Dartmouth, Poole and Southampton), *passim*.

³⁰³ TNA, E122/25/5, m. 3 v.

³⁰⁴ TNA, E122/20/9, fo. 36 v.

³⁰⁵ TNA, E122/120/11, fo. 5.

³⁰⁶ TNA, E122/42/4, m. 21.

from wood was readily available in Ireland to make barrels for transporting overseas herring and salmon. New preservation technologies early in the fifteenth-century had become available to Irish fishermen. It appears that the Skanian/Dutch preservation method had been adopted by Irish fish processors in the middle of the fifteenth century. This was a fulfilment of what was necessary to safely transport herring to English markets.

Primarily, demand for Irish fish was focused on the west coast of England. This demand aided Ireland's economic growth in the fourteenth, fifteenth and sixteenth centuries, stimulated by religious edicts which fuelled demand for fish. There were, however, temporary threats to Ireland's ability to supply freshwater fish, caused by intermittent political tensions and disease. The Irish fishing industry encountered these difficulties in the late fifteenth and early sixteenth centuries. Much more hazardous to Ireland's position as a major fish exporter was an unforeseen threat that befell the fishing industry in Ireland by the middle of the sixteenth century. The Reformation, the Dissolution of the Monasteries and new markets for fish sourcing came from the New World especially to Bristol. Seafish, particularly saltfish and cod later in the fifteenth-century were the most under threat portion of the Irish fishing sector.³⁰⁷ Another issue was the possible disappearance of the herring shoals from Irish shores. An analysis of these threats to the Irish economy will be set out in the final chapter which focuses on the economic aspects of the period c.1350 to c.1550.

³⁰⁷ Flavin & Jones, *Bristol's Trade with Ireland*, 195, 392. In 1575 large quantities of fish arriving in Bristol from the New World. In 1540 25,000 salted fish arrived in Bristol from Newfoundland.

CHAPTER 4

Ireland's Wine Trade In The Later Middle Ages

Grapes were almost certainly not cultivated in Ireland during the Middle Ages. The observations of Gerald of Wales, noted in 1183, that Ireland 'has no vineyards' were affirmed by his comments that 'the vine was neither cultivated nor gave its fruit there'.¹ Wine, therefore, had to be imported to satisfy the various needs of society. This chapter concerns fresh, drinkable wine. Corrupt wine, used in the process for preserving salmon, was discussed in the third chapter. Here the initial analysis will focus on relevant primary sources. Wine-growing regions trading with Ireland will be assessed. Viticulture will be explained, to provide an insight into the cultivation of grapes. Once picked the processes used to manufacture wine will be outlined. Analysis will follow of the types of wine imported to Ireland, and of the uses to which wine was put. This will include a discussion of the re-export of wine from Ireland to the ports on the south-west coast of England. Primary sources are scarce for the systematic study of wine importation from continental Europe to Ireland. There is, however, a record of exports from Gascony to Ireland for some years in the fourteenth and fifteenth centuries. Some material relevant to the Iberian wine trade is available. Although not from customs records, it does allow an examination of sorts for wine arriving in Ireland from regions in Spain and Portugal.

Several sources allude to Ireland's wine trade in the Middle Ages. The source that best illustrates wine imports to Ireland are the accounts of the Constable of Bordeaux.² These accounts relate almost exclusively to wine. They are preserved in The National Archives at Kew, and survive in

¹ J. O'Meara, *Gerald of Wales, The History and Topography of Ireland* (London, 1982), 35.

² TNA, E101 (Bordeaux customs accounts), *passim*. Irish ships were loaded with wine in Bordeaux. These vessels paid customs for their freight to this English-controlled region.

varied states of fragility.³ For example, the customs account for 1431, in its original binding of vellum, is in excellent condition.⁴ However, there are other accounts, such as those for 1402/3, which are in very poor condition.⁵ Some accounts, such as E101/189/7 (1409-10) and E101/181/8 (for an unknown date between 1327 and 1377), include no Irish material. Although most accounts are legible, they do not include as much information as the records of tonnage and poundage available for later medieval Bristol. While both the Bristol and Bordeaux accounts provide names of ships, shipmasters and merchants, dates of custom and quantities of cargo, the Bordeaux accounts do not usually provide information about ship destinations or, in almost all cases, the value of cargoes. It is not, therefore, stated categorically, but nonetheless probable, that Irish ships brought their wine cargoes to Ireland.⁶ There are seventeen full or almost complete accounts for Bordeaux from 1300 to 1450. In the same period there are only six full or almost complete tonnage and poundage accounts for Bristol.⁷ The Bristol accounts do, however, offer some valuable information relevant to transshipping of wine from Ireland to England, as do the tonnage and poundage accounts for Exeter, and for Plymouth & Fowey.⁸

The Bordeaux customs accounts end abruptly because Gascony passed permanently to French control in 1453. It is, therefore, necessary to source material elsewhere to examine the wine trade from the later fifteenth-century onwards. From the 1470s this lacuna can be partially compensated for by notarial records which outline charter agreements made by Bordeaux traders,

³ TNA, E101 (Bordeaux customs accounts), *passim*. There are seventeen full year accounts with Irish ships noted from c.1302 to c.1349. The customs details and files are noted on Table 4b. However, there are a number of accounts namely E101/181/10, E101/182/1, E101/182/2, which have no year correctly attributed to them.

⁴ TNA, E101/191/3.

⁵ TNA, E101/185/11.

⁶ TNA, E101/179/10.

⁷ A. O'Brien, 'Commercial relations between Aquitaine and Ireland c.1000-c.1550' in J. Picard, ed., *Aquitaine and Ireland in the Middle Ages* (Dublin, 1995), 59. Alf O'Brien argues that the survival rate of the wine accounts for Bordeaux is one of its major flaws. However these documents survive in much greater quantity than the tonnage and poundage accounts for Bristol covering almost the same period.

⁸ W. Childs, 'Ireland's trade with England in the later Middle Ages', *Irish Economic and Social History*, ix, 1982, ii; M. Mollat, *Compatibilité du port de Dieppe au XV^e Siècle* (Paris, 1951). There is no evidence of Irish ships or merchants involved in the wine trade from Dieppe in the years 1470-80.

though these notarial records do not offer a comprehensive record of all shipping from and to Bordeaux.⁹ Many of these documents set out the quantity of wine exported on named ships, the shipmasters and merchants, and in some cases the commodities to be brought back to Gascony. There is also mention of transport costs and voyage lengths, issues which are explored further in the final chapter. The notarial documents are not, however, unproblematic as a source. Most notably, we do not know for certain whether all contracts were carried through to completion.

Since climatic factors ensured that no viticulture could take place in Ireland, most of its wine came from overseas sources. Southern areas of England produced small quantities of inferior wine, some of which may have come to Ireland. Most, however, was acquired from continental sources either directly from the continent or indirectly in English ports.¹⁰ Rhenish wine was among the many types of wine available in Ireland. John Fitzralph delivered twelve hogsheads of white Rhenish wine from Ireland to London for the king's use in 1295.¹¹ Wines from the Dordogne region were present in Limerick and Drogheda in 1292 and 1293.¹² Wine from Burgundy also arrived occasionally in Ireland. In 1330-1 Burgundian wine was transported to Ireland, for onward shipment to Scotland.¹³ It is, however, unlikely that significant quantities of Rhenish, Dordogne or Burgundian wine reached Ireland. Ireland's contact with the Low Countries, the source of much Rhenish wine, was only minimal.¹⁴ Dordogne merchants were present in England before 1300, but direct contact with much of southern France was cut because of the Anglo-French wars of the fourteenth and fifteenth centuries. Instead, as an English owned

⁹ J. Bernard, *Navires et gens de Mer à Bordeaux, vers 1400- vers 1550*, iii (Paris, 1968) Vol III, *passim*. Due to the lack of customs accounts we cannot be sure that all vessels entering or leaving port were accounted for.

¹⁰ J. Rogers, *A History of Agriculture and Prices in England*, iii (Cambridge, 1882), 509, 683. Vines appear to have been grown in Windsor, with wine referred to as Windsor and a plot of land for rent called Vineyard. Wine produced in Otterton in Devon was only used for spiced wine.

¹¹ *CDI*, iv, 164.

¹² J. Westropp, 'Early Italian Maps of Ireland from 1300 to 1600, with notes on Foreign Settlers and Trade', *Proceedings of Royal Irish Academy*, xxxi (1912-13), 379.

¹³ P. Hore, 'Extracts from the Great Roll of the Irish Exchequer Relating to Waterford and Ross, A. D. 1273-1483', *Cork Historical Society*, xxiv (1918), 22.

¹⁴ S. Rose, *The Wine Trade in Medieval Europe 1000-1500* (London, 2011), 97. The export of Rhenish wine was tightly regulated.

territory, Bordeaux dominated the wine trade to England and Ireland up to 1453.¹⁵ But wine came from the Iberian peninsula to Ireland, too, and probably in fairly significant quantities.¹⁶ The types of Iberian wine reaching Ireland may be noted from the ship's manifest of the *Oliver* of Lisbon which reached Galway in November 1485. On board were thirty-three butts of malmsey, a highly prized sweet wine.¹⁷ There were also twenty-three tuns of an unspecified wine and over two tuns of other non-sweet wine on board the vessel. There were no other specified wines aboard this craft; however, osey, produced near Lisbon, was a sweet white wine which occasionally reached Ireland in the fifteenth century and on occasion too, wine from the Algarve and Andalusia was delivered to Rouen and from there transported to Bristol and Ireland.¹⁸ Meanwhile, in the sixteenth century shipments from Bordeaux of red, white and claret wines were imported to Ireland. For example, the *Juliene* of Keroyle in 1519 and again in 1520 transported all three of these types of wines specifically to Ireland. (Table 4a). Other wines also reached Ireland either directly or via England.¹⁹ These included wines from the Algarve and Andalusia.

In the Middle Ages vines were generally grown on higher ground; in some instances poor soils on hills helped produce greater harvests.²⁰ Vines were supported in various ways in different regions. Trellises, props and spars, and even small trees were used to support the plant.²¹ Once harvested, grapes were pressed in vats repeatedly to maximise the output of the crop. The initial extraction of juice produced superior wine.²² The wine making process, however, was difficult and dangerous. Pressers had to keep their feet clean in order not to spoil the beverage. During

¹⁵ E. Veale, ed., *Studies in the Medieval Wine Trade* by M. James (Oxford, 1971), 80.

¹⁶ Childs, 'Ireland's Trade with England', 11.

¹⁷ TNA, E122/20/5, fo. 3, fo. 3v.

¹⁸ M. Mollat, *Le commerce maritime normand à la fin du Moyen Age* (Paris, 1952), 155-156; Rose, *The Wine Trade*, 110.

¹⁹ O'Brien, 'Commercial Relations', 40

²⁰ Rose, *The Wine Trade*, 21.

²¹ Rose, *The Wine Trade*, 21.

²² M. Adamson, *Food in Medieval Times* (Westport, CT, 2004), 40-50.

pressing, the vats locked in carbon dioxide, putting the pressers in danger of asphyxiation if they could not keep their heads above the brim of the vat. The must (scum) that set on top of the wine was run off during fermentation and the temperature had to be maintained between 15°C and 20°C. Extra heat could cause an explosion.²³ Red wine produced in vats contained both the juice and skin of the grape. It had a longer life and was valued more highly than white wines.²⁴ Almost all wine (on account of its spoiling) had to be consumed within fifteen months of the grapes being harvested.²⁵ Even though white wine, red and claret wines were exported to England and more than likely to Ireland from Bordeaux, it was claret (like a modern rosé wine) that made up the bulk of the exports.²⁶ Sweet wines were recorded in English records as malmsey, vernage, tyre and muscadel (Greek wine). Most sweet wines were produced in the eastern Mediterranean region in the later Middle Ages. The grapes were normally picked later in the year than those in Bordeaux. They were dried in the sun which increased their alcohol content as well as giving sweetness to the wine. As a result sweet wines stayed fresh for longer than non-sweet wines produced in Bordeaux.²⁷

In many areas casks were cleaned thoroughly with salt water to prevent contaminants spoiling the wine.²⁸ Once full, casks were sent to port ready for shipment. This was a critical juncture in the wine's life cycle. Strong odours would spoil wine, especially if the cargoes carried previously on the vessel included fish (either preserved in salt or corrupt wines). Moreover, if a wine was becoming acrid it was not beyond the seller's capacity to add hops, galingale or sugar to stabilise the wine, thereby rendering it dangerous to drink.²⁹ The mixture of chemicals in the

²³ Rose, *The Wine Trade*, 33, 4.

²⁴ Adamson, *Food in Medieval Times*, 49, 50.

²⁵ C. Dyer, 'Seasonal patterns in food consumption in the later Middle Ages', in C. Woolgar, D. Serjeanston and T. Waldron, eds, *Food in Medieval England: Diet & Nutrition* (Oxford, 2011), 208.

²⁶ Rose, *The Wine Trade*, 35.

²⁷ Rose, *The Wine Trade*, 101-102.

²⁸ Rose, *The Wine Trade*, 21.

²⁹ Rose, *The Wine Trade*, 21.

wine could make the wine poisonous. Casks of wine freighted on vessels in the Bordeaux region weighed 1 tun, a pipe containing $\frac{1}{2}$ tun of wine. The tun or *doleum* had a capacity of 252 gallons whilst the pipe probably contained 125 gallons.³⁰

Wine was thought by communities in the Middle Ages to have medicinal properties; however red wine appears to have had the best health benefit, when consumed in moderation.³¹ In the late Middle Ages spices were often added to both red and white wine in Europe and probably in England and Ireland too, not only to mask its taste but almost certainly to aid in the digestion of meals. Wine had to be consumed in small quantities at the beginning of the meal to open the stomach and at the end of the meal to aid digestion.³²

Wine was in demand in both religious and secular communities. Ecclesiastical institutions had a requirement for wine for two purposes. Red wine was used in the celebration of mass: some secular donations of wine to religious orders were explicitly for this purpose. In 1351 William Folyng granted benefices to the Dominicans and Franciscans, the profits from which were intended to provide bread and wine for masses celebrated in their churches and in 1394 Thomas Holbeyn used income from a tenant in Kilkenny for the same purpose.³³ But clerics also consumed wine with meals. At Holy Trinity Dublin the table was adorned with white wine, for example, on 6th July 1346, when the prior entertained the archbishop and the justiciar of Ireland.³⁴ Wine was probably also given to the brethren on major religious occasions, such as Christmas Day, Epiphany and Easter Sunday.³⁵

³⁰ TNA, E101 (customs accounts) *passim*; R. Zupko, *A Dictionary of Weights and Measures for the British Isles: The Middle Ages to the Twentieth Century* (Philadelphia, 1985), 425.

³¹ Adamson, *Food in Medieval Times*, 49-50.

³² Adamson, *Food in Medieval Times*, 49-50.

³³ C. Ó'Clabhaigh, *The Friars in Ireland 1224-1540* (Dublin, 2012), 101, 138.

³⁴ Mills, *Accounts Roll of the Holy Trinity*, 112.

³⁵ Mills, *Accounts Roll of the Holy Trinity*, 101-2.

Wine was also consumed by the ruling urban elite and by the aristocracy of both Anglo-Irish Ireland and Gaelic Ireland. John Blake, a burgess of Galway, was requested to bring his wine for sale to Roscommon and in 1468 the same John Blake bequeathed one tun of wine to his daughter and a half tun of wine to his sister.³⁶ He had even left a barrel of wine to each of the nurses of his children.³⁷ Meanwhile, the earls of Ormond had prisage of wines in Ireland from the fourteenth century taking one cask from every twenty landed at Irish ports. The taxation of taking wine from each cargo by the landed classes suggests they also probably consumed wine at table.³⁸ Irish bardic poets often praised their patrons when feasts were lavishly supplied with wine. Gaelic Irish lords probably valued wine as much as Anglo-Irish nobility in Ireland.³⁹ For example, in the fourteenth century Donough Mac Conmara was referred to in verse as ‘a handsome purveyor of the wine feast’. Despite the perceived health benefits of red wine in comparison to white, in c.1390 a poem in honour of Fergal Mór O’hEadra suggested that white wine was preferred above all other alcohol.⁴⁰

Wine Imports from Bordeaux to Ireland

It is my intention to examine the Gascon wine trade with Ireland over three periods. The first phase covers the golden age of wine imports from Bordeaux to Ireland from c.1300 to just after the Black Death. The second period examines wine imports from c.1350 to c.1453 when English rule finally finished in Gascony. The third section, using the notarial accounts of the Bordeaux wine trade, extends from c.1450 to c.1520.

³⁶ M. Blake, *Blake Family Records 1300 to 1600: a chronological catalogue with copious notes and genealogies of many branches of the Black family* (London, 1902), 38-41.

³⁷ Blake, *Blake Family Records*, 46.

³⁸ D. Quinn, 'The Hegemony of the earls of Kildare', in A. Cosgrave, ed., *A New History of Ireland: Medieval Ireland 1169-1534*, ii (Oxford, 1987), 659.

³⁹ K. Simms, 'References to Landscape and Economy in Irish Bardic Poetry', in H. Clarke, J. Prunty & M. Hennessey, eds, *Surveying Irelands past: Multidisciplinary essays in honour of Anngret Simms* (Dublin, 2004), 145.

⁴⁰ C. O’Sullivan, *Hospitality in Medieval Ireland 900-1500* (Dublin, 2004), 104-105; there are many references to the high status of wine at feasts hosted by Gaelic Irish lords.

During the first and part of the second phase England imported the larger part of the wine making capacity of Bordeaux. In most years England imported between 8,000 and 9,000 tuns of wine from Bordeaux.⁴¹ But some Gascon wine went to Ireland too. In the first two periods up to 1453 the region was probably Ireland's principal source for wine.⁴²

In the first phase from c.1300 to c.1348 Ireland's ships were very significant importers of Gascon wine. In 1307/8, for instance, eighteen Irish vessels transported over 1,600 tuns of wine more than likely to Ireland.⁴³ Shipments were probably at their peak in the early years of the fourteenth century. In 1309/10, a total of seventeen wine cargoes were transported on Cork vessels alone.⁴⁴ In April 1308 the *Porteyra* carried over one hundred tuns of wine, as did the *Lauroussa* and the *Planter* in 1309, the *Cruis* and *St Marie* in 1310.⁴⁵ These ships were loaded with similar sized cargo to those sailing on English vessels from Bordeaux to England. There is a possibility, in addition to wine delivered from Gascony on Irish ships that some English ships also delivered cargoes of wine to Ireland. Some Irish ships, certainly transported wine from Bordeaux to England. For example, in 1352/3, two Irish ships delivered wine to Padstow and a vessel from Youghal freighted wine to Falmouth in 1361/2.⁴⁶

In the second period between 1350 and 1453 Irish and English ships continued to transport wine from Gascony. Irish ships were transporting Gascon wine to Chester - for example, in 1394/5 the *Magdalene* of Drogheda arrived in Chester from Bordeaux with fifty tuns of wine; and in 1396/7 the *James* of Waterford and in 1399/1400 the *Trinity* of Dublin were freighted with a total

⁴¹ TNA, E101 (customs accounts for Bordeaux), *passim*; Veale, *Medieval Wine Trade*, 55-56.

⁴² Childs, 'Ireland's Trade with England', 11.

⁴³ P. Dryburgh & B. Smith, eds, *Handbook and Select Calendar of Sources for Medieval Ireland in the National Archives of the United Kingdom* (Dublin, 2005), 293-299.

⁴⁴ TNA, E101/163/1, *passim*; ships were freighted with 80 to 180 tuns of wine.

⁴⁵ TNA, E101/163/1, fo. 29, v, fo. 30, fo. 92.

⁴⁶ Childs, 'Ireland's Trade with England', 14.

of five tuns of wine to Chester.⁴⁷ In 1395 Peter Morris of La Rochelle loaded the *Marie* of Waterford with wine bound for Scotland.⁴⁸ In 1377 the cog *John* of Bristol probably transported thirty tuns of wine to Dublin.⁴⁹ In 1393/4 Chester merchants chartered a ship to collect wine from Bordeaux and then to transport it to Dalkey, Drogheda or Chester. In the same year the *Marie* of Dartmouth was to sail from La Rochelle or Bordeaux to Dalkey or Chester with wine.⁵⁰ In 1396/7 the *Saint Marie* departed Bristol for Ireland with wine and cloth.⁵¹ Similarly, Irish merchants on occasion also transported wine to Welsh ports, such as Beaumaris, Carmarthen and Cardigan in 1394/5.⁵² Wine was also transported from Ireland *via* Wales - for example twelve tuns of wine were freighted by Thomas Gower from Hereford to Ireland in the 1390s.⁵³

After 1350 wine cargo sizes carried on Irish ships were generally smaller than those of the early fourteenth century. Irish ships carried wine cargoes of between 80 and 180 tuns in the first decade of the fourteenth century.⁵⁴ By contrast, in 1372, 1373 and 1400 less than fifty tuns of Gascon wine were freighted on Irish craft (Table 4b); and in 1355, 1378 and 1385 Irish ships transported annually an average of only eighty-five tuns of wine (Table 4b). There were, however, a number of single cargoes that were exceptionally large after 1350. On 1st December 1356 *la Trinité* of Cork left Bordeaux with 144 tuns and one pipe of wine.⁵⁵ The *Marie* of Wexford carried 154 tuns in 1448. Normally Irish ships freighted from Bordeaux to Ireland no more than 500 tuns per annum.

After 1350 the most exceptional year for the importation of fairly large volumes of Bordeaux

⁴⁷ K. Wilson, *Chester customs accounts 1301-1565* (Liverpool, 1969), 24.

⁴⁸ *CPR*, 1391-1396, 634.

⁴⁹ *CPR*, 1377-1381, 24.

⁵⁰ E. Veale, ed., *Medieval Wine Trade*, 135, 152.

⁵¹ TNA, E122/16/21, m. 6, m. 12.

⁵² E. Lewis, 'A Contribution to the Commercial History of Medieval Wales, with tables/accounts from 1301-1547', *Y Cymmrodor*, xxiv (1913), 115.

⁵³ Lewis, 'A Contribution to the Commercial History of Medieval Wales', 158.

⁵⁴ TNA, E101 (customer accounts for Bordeaux), *passim*.

⁵⁵ TNA, E101/173/4, fo. 107 v.

wine arriving in Ireland was probably 1402/3. Destinations for wine cargoes are not given in the Bordeaux customs for this year, but almost 600 tuns of wine was probably dispatched to Ireland on ten Irish ships. Seven of the ten Irish craft which departed Bordeaux in this year were from Dublin. On 11th October 1402 three Dublin vessels the *Katerina* (with 16 tuns 1 pipe), the *Michel* (with 13 tuns 1 pipe) and the *Maria* (with a cargo of 46 tuns 1 pipe) sailed from Bordeaux.⁵⁶ Less than a month later, on 5th November, the *Maria* of Dublin (carrying 68 tuns 1 pipe) travelled in convoy with the *Christopher* of Waterford, the *Marie* of Drogheda and the *James* of Kinsale.⁵⁷ Two more ships from Dublin, the *Maria* of Dublin (with 5 tuns), and the *Michel* of Dublin (with 60 tuns and 1 pipe) set out from Bordeaux on 2nd April 1403.⁵⁸ Finally, on 18th October 1403 the *Katheryne* of Dublin made its way to Dublin freighted with 73 tuns 1 pipe of wine.⁵⁹ The number of Dublin ships involved in the Gascon wine trade in 1402/3 was extraordinary. At no other time between 1300 and 1453 did more than two Dublin ships yearly transport wine from Bordeaux.⁶⁰ The unusually high volume of traffic in 1402/3 almost certainly relates to the unstable maritime situation in the Channel as piracy reached a crescendo by the middle of 1402. Traditional wine trade routes from Bordeaux were on the edge of the zone of conflict but it was probably safer for shipmasters freighting wine ships to navigate a course to Dublin rather than to the ports of eastern England, thereby avoiding passing through the danger zone. Presumably the wine was then transhipped from Dublin to ports on the west coast of England, therefore timing the shorter crossing when there was a lull in the conflict in the English Channel. Dublin was also sufficiently stocked with wine in 1402 and 1403 when three separate licences were issued to Ralph Ebbe, William Symcok and Geoffrey Gallane to transport wine to Lough Foyle and Lough Swilly in Ulster from Dublin and Drogheda.⁶¹

⁵⁶ TNA, E101/185/11, fo. 2, fo. 2 v.

⁵⁷ TNA, E101/185/11, fo. 7, fo. 13, fo. 13 v, fo. 14 v.

⁵⁸ TNA, E101/85/11, fo. 59, fo. 60 v.

⁵⁹ TNA, E101/185/11 fo. 62.

⁶⁰ TNA (E101, Bordeaux customs accounts), *passim*.

⁶¹ Chancery.tcd.ie/docs, 4 patent roll 4 Henry IV; 3, 11, 189, patent rolls 5 Henry V (08/10/2013).

There is an additional reason that might be the unusually large volume of ships transporting wine from Bordeaux to Dublin in the first decade of the fifteenth century. Large quantities of wine may have been intended for the king's forces dealing with the uprising initiated by Owen Glyn Dwr in Wales. While wine had arrived in Beaumaris in 1397/8, no wine was transported to a port anywhere in North Wales up to at least 1404 indicating that there was either a sufficient wine store there or that wine ships could not access the region.⁶² In the months from April to October Henry VI's forces attacked Glyn Dwr's manors and moved to relieve Harlech Castle in June and Beaumaris in October 1403.⁶³ French forces arrived in Wales, landing at the Llyn Peninsula with wine and spices in 1405, to aid Glyn Dwr in his endeavours.⁶⁴

Once the Glyn Dwr uprising and the crisis in the Channel had passed, the transportation of Gascon wine returned to its normal pattern. It was transported on ships from Dublin, Kinsale, Waterford, New Ross and Wexford between 1413 and 1449 (Table 4a). Wine shipments on Irish vessels were noted in most surviving Bordeaux customs accounts in the first half of the fifteenth century with the exception of 1409-10.⁶⁵ Indeed, Irish ships were generally transporting slightly more Gascon wine from 1404 to 1448 than in the second half of the fourteenth century. In 1413, 1416, 1417, 1431, 1443 and 1448 the average quantities of wine carried on Irish ships was 187 tuns per year (Table W.1). The increased wine trade did not, however, compare to the greater quantities carried on Irish ships from 1300 to 1340.

As already indicated, the Gascon wine trade involved some of Ireland's most important ports including Cork and Dublin. The largest recorded cargo to arrive from Gascony was aboard the

⁶² Veale, *Medieval Wine Trade*, 118.

⁶³ R. Davies, *The Revolt of Owain Glyn Dwr* (Oxford, 1995), 113.

⁶⁴ Davies, *The Revolt of Owain Glyn Dwr*, 193.

⁶⁵ TNA, E122/184/19, *passim*.

Marie of Wexford, which sailed from Bordeaux on 26th November 1448, freighted with 154 tuns. This was only the second Wexford vessel noted in the Bordeaux wine customs between 1350 and 1450. It is possible that this Wexford craft was used because of its large capacity in comparison to the predominantly smaller craft from the region.⁶⁶ The destination of the Gascon wine aboard the *Marie* is conjectural. The ship may have been bound for one of the larger Irish ports. Dublin almost certainly, and perhaps other major ports too, acted as an *entrepôt* for the distribution of wine to lesser creeks or havens, especially as already indicated in Ulster.

Wine exports from Gascony on Irish ships began to decline from the first half of the fifteenth century in comparison to earlier in the fourteenth century, perhaps affected by The Hundred Years War. More problematic still in 1453 the English crown relinquished control of Gascony and temporarily its wine trade. This possibly allowed other kingdoms for example in Iberia, to gain a foothold in the transportation of Gascon as well as their own wine to English and Irish ports. In 1455 Pedro Garcia from Arriga (Spain) transported wine from Bordeaux to Ireland.⁶⁷ It is probable, however, that English and Irish ships resumed transporting wine soon after 1455, though extra expense was added to the transport of Gascon wine. In the decade after 1463, English and Irish merchants had to stop at Blaye to disarm themselves and collect expensive one-month licences to stay in Bordeaux.⁶⁸ In 1475 when the Anglo-French treaty was sealed at Picquigny, it stipulated that all restrictions on trade between the two nations be removed with the exception of customs dues; this should have helped English and Irish merchants in their quest for Gascon wine.⁶⁹

Between c.1300 and c.1453 Bordeaux merchants probably had almost complete control over the

⁶⁶ TNA, E101/194/3, m. 65 v; TNA, E101/195/19, m. 58 v.

⁶⁷ L. Suárez Fernández, *Navegacion y Comercio en el golfo de Vizcaya* (Madrid, 1959), 117, n. 41.

⁶⁸ E. Carus-Wilson, *Medieval Merchant Venturers* (London, 1954), 47.

⁶⁹ Carus-Wilson, *Medieval Merchant Venturers*, 48.

transport of Gascon wine to Ireland on English and Irish ships: even though the shipmasters were probably Irish, the wine merchants were in most cases from Gascony.⁷⁰ The notarial accounts for Bordeaux suggest significant change after 1453 to Ireland when many of the merchants recorded shipping wine from Bordeaux were from Ireland.⁷¹

Our knowledge of the vessels involved in the wine trade after 1453 is more limited than for earlier in the period. If Irish ships still sailed to Gascon they faced increasingly stiff competition from Breton shipping from ports such as Penmarch, Audierne and Crozon. After 1453 Breton shipping became more dominant in the transport of goods from as far south as Andalusia to as far north as the Netherlands. They were already in frequent contact with Irish shores delivering salt from the Bay and probably returning with hides and fish.⁷² In the 1460s, for example, Breton ships were sailing to Ireland with salt, and then on to Bristol before returning to Ireland with cloth.⁷³

The third section of the Gascon wine trade from c.1450 to 1520 is analysed by using a different type of evidence, the notarial documents for Bordeaux. Cargo sizes on wine ships between 1450 and 1520 were probably smaller by comparison with those recorded in the Bordeaux customs accounts for the first half of the fifteenth century (Table 4a). In the notarial documents Breton ships were each freighted with between ten and eighty-eight tuns of wine. (Table 4b). It was also possible that Irish merchants were becoming more prominent in the Gascon wine trade after 1450. Evidence from the notarial documents shows a significant presence of Irish merchants in the Gascon wine trade by the end of the fifteenth century. The E101 customs accounts record,

⁷⁰ J. Bernard, 'The Maritime Intercourse between Bordeaux and Ireland c.1450-c.1520', *Irish Economic & Social History*, vii (1980), 8, 9.

⁷¹ Bernard, *Navires*, iii, *passim*.

⁷² Bernard, 'The Maritime Intercourse', 11. Bernard implies that Breton shipping took over the transportation of wine to Ireland because of their experience in navigating the old Celtic sea-track.

⁷³ TNA, E122/161/31, fo. 3, 4, fo. 12. This document is undated and more than likely for a year in the 1460s.

however, almost no presence of Irish merchants up to 1449. Almost all the merchants are from Gascony. It was probable that wine merchants from Gascony were fulfilling demand in Ireland or the transactions for wine were carried out in advance of sailing.

Between *c.*1470 and *c.*1500 there were only small quantities of wine recorded in the notarial accounts from Bordeaux to Ireland. In 1473, 1475 and 1494 less than a total of fifty tuns of wine transported to Ireland was noted in the notarial accounts. There was, however, a significant increase in the volume of trade recorded in the notarial accounts from 1499 to 1520. It is important to note that the notarial accounts do not record all wine shipments to Ireland. In 1499, Henry Fogan, a Waterford merchant, freighted wine on two vessels going to Waterford, (the *André* of Audierné and the *Barbara* of Audierné).⁷⁴ There was, also a significant increase after 1475 of Irish merchants, from Drogheda and along the east and south coasts to Sligo, being involved in the wine trade. They included Maurice Donell and Robert Tobias of Youghal, Richard Lynch from Galway, Bernard Nash and Richard Barry of Kinsale, and J. Nobert, Richard Donell and David Lynn of Dingle.⁷⁵ In fact, in 1499 over 270 tuns of wine was transported from Bordeaux to Ireland with a significant presence by Irish merchants. There was, however, some years between 1499 and 1520 in which the wine shipped from Bordeaux to Ireland was not regularly noted in the notarial accounts. For example, in 1500 and 1501 wine imports to Ireland of only 43 and 53 tuns respectively were transported to a single location in Ireland, Youghal. The average wine shipments noted in the Bordeaux notarial accounts showed a significant sustained growth after 1502, and before 1520, totalling over 230 tuns per annum. The annual transportation of wine from Gascony to Ireland from 1403 to 1448 or between 1450 and 1498 was not as significant as the wine shipments noted in the notarial accounts for the early sixteenth century (Table 4a). In 1503, 1504, 1505 and 1520 wine noted in the notarial

⁷⁴ Bernard, *Navires*, iii, 76, 77.

⁷⁵ Bernard, *Navires*, iii, 158, 159.

documents to be sent to Ireland ranged annually between 329 tuns and 419 tuns (Table 4a).

The notarial accounts outline some of the trading destinations in Ireland taking deliveries of wine from Bordeaux. Most notarial documents mention more than one Irish port as a destination for wine deliveries from Bordeaux (Table 4a). This was probably included in the document to ensure that all the wine on board the vessel could be sold by allowing the shipmasters to move from port to port to deliver all the wine in his hold. Youghal was, however, mentioned on a number of occasions as a single delivery port for Gascon wine. Moreover, after 1500, the largest single destination for wine shipments was Youghal. (For example in 1504, 1505, 1517 and 1518 Youghal probably received over 100 tuns of wine per annum).⁷⁶ In the same period Dublin was not regularly recorded in the notarial accounts receiving only half the quantity of wine that Youghal received (Table 4a). Indeed, even Waterford (probably the largest port in Ireland in the later Middle Ages) received less than Youghal according to the notarial documents. Dublin and Waterford more than likely sourced their wine on ships not noted in the notarial accounts. Destinations for Bordeaux wine deliveries in Ireland included Dingle, Baltimore, Valentia, Derry and Ballinskelligs - locations not mentioned in the customs accounts for the trade of goods from and to the west coast of England in the fifteenth century.⁷⁷ Dingle received wine on one shipment in 1500, two in 1508, three in 1511 and possibly one in 1544 (Table 4a). At the very least, it was possible that the number of Irish ports increased in dealing directly with Gascony in the wine trade in the sixteenth century. This suggests that perhaps a growing market for Gascon wine had re-opened in Ireland.

The new Tudor administration sought to initiate some changes to the wine trade. It wished to halt the practice of foreign vessels freighting wine to England, Wales and Ireland. Between 1485

⁷⁶ Bernard, *Navires*, 100-101, 118-119, 150-151, 158-159.

⁷⁷ Bernard, *Navires*, iii, 344, 345; TNA, E122 (customs accounts for Bristol, Bridgewater), *passim*.

and 1488 legislation was enacted to ensure that only English or Irish vessels and shipmasters transported wine.⁷⁸ Politically Henry VII's new government would appear secure if the navy of the realm and merchant ships were capable in transporting much needed wine supplies to the realm. Henry VII wished to increase wine imports without use of large Spanish ships and the smaller vessels of other jurisdictions, he enacted statutes in 1485 and 1488.⁷⁹ Legislation was not successful with vessels from alien nations remaining involved in the wine trade to England.

Conclusion: Gascon Wines

Bordeaux customs accounts record no involvement by Irish merchants in the wine trade up to 1453. This may, however, be misleading because it may have been easier to use factors or intermediaries by Irish merchants. The notarial documents record many instances of Irish involvement after 1473 in the wine trade between Gascony and Ireland. Irish merchants may have used similar agreements earlier in the fourteenth and fifteenth centuries which enabled Gascon merchants to transact the business for them. There is no evidence to support this view; however, it is difficult to believe that such a turnaround in Irish involvement happened so quickly. Whatever the case, Irish ships in the notarial documents generally carried smaller cargoes of wine compared to ships noted in the Bordeaux customs accounts. Between 6 tuns and 126 tuns were carried to Ireland, with an average vessel freighted with fifty-seven tuns. These cargo sizes were slightly smaller than those transported on Irish vessels in the Bordeaux customs accounts between 1350 and 1448 which were at an average of sixty-one tuns each (Tables 4a-b). These average cargo sizes, however, from 1350 to 1520 were much less than average cargo sizes of 100 tuns for Irish ships trading with Bordeaux in the early fourteenth century.

⁷⁸ Veale, ed., *Medieval Wine Trade*, 49; Tomlins & Taunton, eds, *Statutes of the Realm*, ii 534-5.

⁷⁹ Veale, ed., *Medieval Wine Trade*, 49.

Iberian Wine

It is much more difficult to examine the Iberian wine trade with Ireland as there is little relevant customs data from either Iberia or Ireland. There are, however, several examples of Spanish vessels in Irish waters. A Castilian ship freighted hides from Drogheda to Flanders in 1353, possibly on a return journey having delivered wine.⁸⁰ Small quantities of Iberian wine arrived in Ireland by at least the mid-fourteenth century. In 1356, for example, forfeited Spanish wine was transported from Kinsale to Dublin for use by the king, and in 1402 the *Gracedieu* of Dartmouth was chartered to sail to Flanders, then to Castile and then to Athenry with wine.⁸¹ Spanish wine was also delivered to Dublin. In 1409 David Archer and Nicholas Sylke transported four tuns of Spanish wine from Dublin to the Bann in Ulster.⁸² In 1435 Thomas Skethe, also of Dublin, was licensed to take two 200 tuns ships to Brittany and Spain and to return with wine.⁸³ There was trade too between the merchants of Galway and Spain. In 1507 Henry Blake transported hides to Spain, with the idea of returning to Ireland with a cargo possibly including wine.⁸⁴ In 1452 a Castilian carvel was despoiled of its fifty-five tun cargo of wine near Kinsale.⁸⁵ In July 1510 a decree was issued by Stephen Lynch Fitz James which specified seven pipes of Spanish wine.⁸⁶ These references to Spanish wine in Ireland suggest there was at least some regular wine shipments transported to Ireland.

Portuguese wines were also transported to Ireland in small quantities, possibly as early as 1377.⁸⁷

In 1380 a proclamation was issued by Richard II that merchants could come safely to Ireland

⁸⁰ *CCR*, 1349-1354, 578.

⁸¹ [Chancery.tcd.ie/doc. 2](http://Chancery.tcd.ie/doc.2) close roll 30 Edward III (23/06/2014). K. Down, 'Colonial Society & Economy', in A. Cosgrove, ed., *A New History of Ireland*, ii (Oxford, 1987), 507-8.

⁸² [Chancery.tcd.ie/doc. 180](http://Chancery.tcd.ie/doc.180) patent roll 10 Henry IV (23/06/2014).

⁸³ [Chancery.tcd.ie/ doc. 48](http://Chancery.tcd.ie/doc.48) patent roll 13 Henry V (23/06/2014).

⁸⁴ Blake, *Blake Family Records*, 58, 60-61.

⁸⁵ *CPR*, 1441-46, 422.

⁸⁶ Blake, *Blake Family Records*, 58, 60-61.

⁸⁷ *CCR*, 1377-1381, 24, Le cog *John* of Bristol collected thirty tuns of wine in Lisbon to transport to Dublin or England. The wine, however, was arrested in Kinsale.

with wine, and Irish merchants were afforded reciprocal permission in Portugal.⁸⁸ In 1387 a licence was issued to John Kartell to carry wheat to Portugal, Gascony and Bayonne and to return to Ireland with wine and iron.⁸⁹ It was possible that in the fifteenth century Irish merchants had factors in Lisbon. Indeed, Henry the Navigator installed an agent in Galway.⁹⁰ The available fragmentary evidence indicates that some Portuguese wine was delivered to Ireland in the fifteenth century. Though we do not know the total quantities of wine that arrived, in February 1446 a Portuguese ship, the *Spiritus Sanctus*, freighted with thirty-three tuns of wine arrived in Ireland. The *Saint Mary Grace* of Lisbon arrived in Bristol with fish from Ireland and it is possible that the vessel had previously freighted wine from Portugal to Ireland.⁹¹ It is possible too that some Portuguese wine cargoes were significant. For example, on 15th February 1466 John Hartell, the master of the *Nicholas* of Cork, delivered a large quantity of Portuguese cork to Bristol.⁹² In September 1475 two Portuguese vessels sailed to Limerick, each containing fifty tuns of osey.⁹³ Portuguese wines were also present further up the west coast of Ireland. The *Oliver* of Lisbon was in Galway on 16th November 1485. The vessel then made for Bristol with malmsey and other wines. One of its merchants, Oliver Lynch, was from Galway.⁹⁴ There were possibly other Portuguese ships travelling more frequently in the Irish Sea zone in the sixteenth century. Certainly in 1537 four Portuguese vessels laden with Spanish wines bound for Waterford instead were forced by storms to Baltimore.⁹⁵ In 1538 a captured Portuguese ship was taken into Chepstow, whilst in 1550 Thomas Hope had freighted ninety-tuns of Portuguese wine on a carvel heading for Chepstow.⁹⁶ The significant quantities of Spanish sweet wine and

⁸⁸ H. Berry, ed., *Statutes and Ordinances and Acts of the Parliament of Ireland, King John to Henry V* (Dublin, 1907), 477.

⁸⁹ Chancery.tcd.ie/doc.258 (Date accessed 23/06/2014).

⁹⁰ V. Shillington & A. Chapman, *The Commercial Relations of England and Portugal* (New York, 1907), 66-67.

⁹¹ TNA, E122/19/4, 75, fo. 8, fo. 8, 75.

⁹² TNA, E122/19/4, fo. 9.

⁹³ CPR, 1441-6, 422; H. Berry, ed., *Statute Rolls of Ireland, First to the Twelfth Year of the Reign of Edward IV* (Dublin, 1914), 377-379.

⁹⁴ TNA, E122/20/5, fo. 3, fo. 3v.

⁹⁵ O'Sullivan, *Hospitality in Medieval Ireland*, 246.

⁹⁶ I. Waters, *The Port of Chepstow* (Chepstow, 1977), 14.

Portuguese wine that arrived in Beaumaris throughout the sixteenth century possibly arrived from Bristol, Chester, or the east coast of Ireland.⁹⁷

Transshipment of wine between Ireland and England

After 1460 there was trade in wine across the Irish Sea between Irish and English ports. Whilst the cargoes were small, several vessels were involved annually. For example, in 1465/6 four vessels freighted with small quantities of wine arrived in Bristol from Ireland. The four ships, three from Bristol and one from Ross, collectively transported ten tuns of wine to Bristol.⁹⁸

There were further minor shipments of wine from Ireland to Bristol in 1475 as well as those sent to Bridgewater in 1414 and 1496 and Barnstable in 1493. (Table 4c). A significant change in the pattern of the wine re-export from Ireland to England occurred in the early sixteenth century.

Cargo sizes remained small; but the number of ships involved in the trade increased. In 1502/3 the *Antoin* of Youghal entered Barnstable with a half tun of wine, whilst a larger shipment of 4 tuns of wine on the *George* of Wexford arrived in Exeter on 11th May 1503.⁹⁹ Bridgewater also imported supplementary wine supplies from Ireland in the early sixteenth century.¹⁰⁰ In 1504 nine ships from the creeks in the Bristol area loaded their vessels in Irish ports with wine. Seven of the nine vessels were from the smaller creeks in the Bristol region. These included Chepstow, St Ives, Gatcombe, Milford Haven, Berkeley, Gloucester and Minehead.¹⁰¹ Wine deliveries from Ireland arrived in these ports normally in the months between February and September, outside the regular delivery cycle from November to January on ships from Gascony. (Table 4c). The Bristol customs accounts for 1516/17 record an increase in the number of vessels to twenty-two transporting wine from Ireland to Bristol, including ships from Waterford, Cork and Youghal.

⁹⁷ Lewis, 'A Contribution to the Commercial History of Medieval Wales', 161-183.

⁹⁸ TNA, E122/19/4, fo. 5, fo. 10, fo. 12.

⁹⁹ TNA, E122/41/25, m. 14, m. 16v.

¹⁰⁰ TNA, E122/26/1 (1502-3); TNA, E122/26/22 (1503-4); TNA, E122/26/24 (1505-6). These are examples of customs accounts for Bridgewater that do not give the port of origin of any ships.

¹⁰¹ S. Flavin & E. Jones, *Bristol's Trade with Ireland and the Continent, 1503-1601* (Dublin, 2009), 23, 35, 39, 52, 59, 74, 98.

New destinations for the receipt of wine from Ireland were opened up in the creeks within the Bristol region, which included Carmarthen, Shirehampton and Huntley.¹⁰² Indeed, it was not only the creeks of Bristol that imported wine reserves from Irish ports. The outports of Bridgewater, Exeter and Dartmouth, Plymouth and Fowey, all imported wine from Ireland.

The 1510/11 Bridgewater customs account specifies in some cases unsweetened (very like Gascon) wine.¹⁰³ Wine shipments from Ireland to Bridgewater spanned a longer period in the year than those to Bristol. Eleven of these craft delivered wine to Bridgewater in the months from January to October. This coincided again (similar to wine deliveries to Bristol) with the lull in the supply of Gascon wine to the region. One ship, the *Katherine* of Kinsale, entered later in April.¹⁰⁴ Four of the ships were from Cork, three from Kinsale, and four from Youghal.¹⁰⁵ The origin of the ships transporting wine from Ireland to Bristol and Bridgewater were different also. The twelve craft that transported wine to Bridgewater were all Irish; the wine deliveries to Bristol, however, were normally on English craft.

There were only a few wine deliveries from Ireland to Plymouth and Fowey. In the sixteenth century a skiff, the *James* of Youghal, entered Padstow on 28th May with one tun of wine returning to Ireland a week later with grain.¹⁰⁶ In 1508 two Kinsale vessels, the *Patrick* and the *Corssok*, both departed Mountsbay on 10th June with small quantities of wine.¹⁰⁷ In 1518/19 a number of vessels from the south coast of Ireland arrived with wine at Dartmouth. Five Irish vessels (three from Youghal, one from Wexford and one from Kinsale), delivered a total of seven tuns of wine to the port. The *Patrick* of Youghal, the *Marie* of Kinsale and the *John* of Wexford

¹⁰² Flavin & Jones, *Bristol's Trade*, 100-197.

¹⁰³ TNA, E122/27/1, m. 11, m. 13, m. 14.

¹⁰⁴ TNA, E122/27/1, m. 6 v.

¹⁰⁵ TNA, E122/27/1, passim.

¹⁰⁶ TNA, E122/115/7, m. 23 v.

¹⁰⁷ TNA, E122/115/12, m. 30.

all entered Dartmouth in June 1519.¹⁰⁸ After 1520 re-exports of wine from Ireland to England ceased. Instead, in the third and fourth decades of the sixteenth century, ports on the east and south coast of Ireland were relying on supplies from the west and south coast of England to supplement their stock of wine. Ships from Drogheda and Dublin in the sixteenth century were on occasion collecting wine in Chester probably returning with it to Ireland. In February 1527 a vessel called the *Michael* of Dublin transported nineteen tuns of Gascon wine from Denhall in Chester. In 1529 the *Michael* of Dublin transported seven tuns of wine from Portpool in Chester possibly to Dublin.¹⁰⁹ In July 1529 the *George* of Drogheda freighted wine in Portpool, whilst in March 1534 the *Trinity* of Drogheda was loaded with twelve tuns of wine, also at Portpool.¹¹⁰ In 1537 the shipmaster on the *Bryen* of Waterford paid in Bridgewater to have twenty tuns and one pipe of wine weighed and stored which possibly meant that the ship was outbound rather than inbound.¹¹¹ In 1539 a merchant from Cork had his wine of one tun and one pipe measured at Bridgewater. Not only were wine shipments arriving in Ireland from England. These shipments were generally larger from England to Ireland in comparison to the deliveries to ports on the west coast of England from Ireland to England between 1495 and 1520.

Conclusion

The number of wine shipments on Irish craft from Gascony declined from c.1300 to c.1400. The greatest rate of decline in wine shipments to Ireland probably occurred between 1311 and 1355; cargo sizes also declined per ship. The Hundred Years' War and the warlike actions between Scottish, French and English mariners in the Irish Sea, along with the Glyn Dwr conflict in Wales, probably accounts for the extra wine shipments delivered to Dublin between 1401 and 1403. The quantities of wine on Irish ships between 1401 and 1403, were, however, still much

¹⁰⁸ TNA, E122/42/4, m. 20, m.21.

¹⁰⁹ K. Wilson, *Chester customs accounts 1301-1565* (Liverpool, 1969), 47, 48.

¹¹⁰ Wilson, *Chester customs accounts*, 48, 54.

¹¹¹ SRO, BW/1451, fo. 5, fo. 7.

smaller than the wine freighted on Irish ships from 1302 to 1310. After the initial outbreak of the Black Death, the largest shipment of wine on Irish ships was in 1356 (c.430 tuns). Volumes increased in 1402/3 to (c.600 tuns), before declining in 1413 (c.237 tuns) and 1448 (c.226 tuns). The quantity of wine, however, on Irish vessels in these years was well above the normal wine shipments from Gascony to Ireland in 1355, 1372, 1375, 1378, 1385, 1416, 1417 and 1449. In these years wine freighted from Gascony only averaged less than sixty-seven tuns per annum.

The combination of predominantly Gascon wine and to a lesser extent wines from the Portuguese and Spanish regions in the later Middle Ages, probably satisfied demand for wine in the main port towns in most years throughout Ireland. The very large cargoes of wine from Gascony transported on Irish ships may have arrived in Ireland in the late thirteenth and fourteenth centuries in part for transshipment to the Scottish wars of Edward I, Edward II and Edward III. The arrival of over 3,000 tuns of wine to Scotland suggests there was more wine arriving in the lordship than was recorded in the E101 accounts for Bordeaux.¹¹² It was unlikely that imported wine from continental sources to Ireland ever rose above 500 tuns in most years. The re-export of wine from Ireland to England between 1495 and 1520 does suggest that more than c.500 tuns of wine arrived in the lordship at the end of the fifteenth century, supplemented by wine delivered on foreign vessels outside the Irish Sea zone. Ireland was, therefore, probably adequately supplied with wine in most years between c.1300 and 1519.

¹¹² P. Connolly, ed., *Irish Exchequer Payments 1270-1446*, i (Dublin, 1998), 132, 196, 197, 199, 202, 215, 221. Hore, 'Extracts from the Great Roll', 22.

CHAPTER 5

Salt, Honey, Spices, Fruit and Nuts

In the fifteenth century Irish and foreign merchants shipped exotic foods and food additives, which in some cases doubled up as dyes, to add value to commodities. These commodities included salt, honey, and a variety of spices including saffron, ginger, cinnamon, cumin, liquorice, pepper, fruit, sugar, almonds, walnuts and rice. Many of these goods are recorded in the customs accounts of Bristol, Chester and occasionally Bordeaux. Only a few of these goods, for example salt, saffron and honey, were indigenous to England. In the main the accounts note the re-export of goods to Ireland. Most spices (other than saffron) and significant quantities of salt came to Ireland from continental Europe. But since continental customs accounts are sparse for this period, there is a limitation to the quantitative analysis which can be undertaken.¹ Brief glimpses of this traffic are, however, revealed. The *Oliver*, possibly from Lisbon but certainly from Iberia, arrived from Galway to Bristol in 1466, with a cargo of alum (a valuable sulphite for drying cloth), sugar, raisins and fruit.² In 1505 a tax had to be paid at Lequeitio in Spain on every load of salt shipped to Ireland.³

Salt

Salt was probably the most important preservative used by Irish processors. It was derived either by mining (for example in Cheshire, England) or by panning on the coastline (for example in County Down). The curing of hides and fish (the two most valuable exports from Ireland in

¹ W. Childs, 'Ireland's Trade with England in the Later Middle Ages', *Irish Economic and Social History*, ix (1982), 9.

² TNA, E122/2/5, fo. 3-3 v.

³ Alf O'Brien Collection, doc. No. 252: reference; (Archive municipal de Lequeitio Ref 16, number 13), fo. 21-23.

the later Middle Ages necessitated the use of large quantities of salt.⁴ Longfield suggested that no salt was produced in Ireland prior to 1550.⁵ There were almost certainly times and places when it was in short supply. The annals of Ulster record a shortage in 1486.⁶ Nevertheless, there is evidence that some salt was produced in Ireland in the thirteenth century. In April 1203 a grant was issued to the church of St Mary's in Drogheda of a salt grange held by the king in Lognamanagh.⁷ Furthermore, a salt pan at Dundrum, County Down, was valued at £2 in 1211-12.⁸ In 1282 the de Mandevilles destroyed a salt pan worth £1 at Laughlinstown, County Down.⁹ The townland referred to as Salt in the Pale may also relate to salt production.¹⁰ Other place names in Ireland, for example, Saltmills (County Wexford) and Saltee Islands (off the coast of Wexford), were possibly locations used to salt fish.¹¹ In 1541 the survey of monasteries recorded that the tidal waters at Ballyhack were used to operate saltmills for the Dunbrody estate.¹² But not all of Ireland's salt needs were provided from domestic sources. Much was imported from Chester in England and from the Bay of Bourgneuf, between Brittany and Poitiers. This was one of the largest salt production centres in medieval Europe.¹³ The salt from the Bay was extracted from seawater by allowing the water to evaporate in specially manmade structures in the shallows of the sea.¹⁴ Much of the salt was placed on ships for export and there are many examples of salt shipments to Ireland. In 1383 for example, a Limerick vessel and two Wexford boats were loaded at the port of Le Collet in the Bay region.¹⁵ By the fifteenth century

⁴ A. Longfield, *Anglo Irish Trade in the Sixteenth Century* (London, 1929), 163.

⁵ Longfield, *Anglo Irish Trade in the Sixteenth Century*, 163

⁶ T. O'Neill, *Merchants and Mariners in Medieval Ireland* (Dublin, 1987), 88.

⁷ H. Sweetman, ed., *Calendar of Documents Relating to Ireland 1171-1251* (London, 1875), 28.

⁸ T. McNeill, *Anglo-Norman Ulster: The History and Archaeology of the Irish Barons 1177-1400* (Edinburgh, 1980), 41.

⁹ McNeill, *Anglo Norman Ulster*, 41.

¹⁰ M. Murphy & M. Potterton, *The Dublin Regions in the Middle Ages* (Dublin, 2010), 32.

¹¹ B. Cunningham, ed., *Calendar of State Papers Ireland Tudor Period 1566-1567* (Dublin, 2009), 195; D Flanagan and L. Flanagan, eds, *Irish Place Names* (Dublin, 2002), 252. Saltee Islands translated as salt islands.

¹² B. Colfer, *The Hook Peninsula: County Wexford* (Cork, 2004), 62.

¹³ T. O'Neill, *Merchants and Mariners* (Dublin, 1987), 84; W. Childs, 'Ireland's Trade with England in the Later Middle Ages', *Irish Economic and Social History*, ix (1982), 7.

¹⁴ O'Neill, *Merchants and Mariners*, 84.

¹⁵ Childs & O'Neill, 'Overseas Trade', 508.

the bulk of Bay salt probably arrived in Ireland on Breton vessels. In 1412 four Breton merchants freighted three vessels for Ireland with salt valued at c. £500.¹⁶ In 1435 the merchants William Preston, Richard Barton and John Fowler were given licences to freight two ships with salt and other victuals from Brittany to Ireland. In the same year, Preston and Barton, along with three other Drogheda merchants, joined with John Gayncote, a merchant of Dartmouth, to freight eight 200 ton ships back to Ireland with salt.¹⁷ In this year too a Dublin merchant, Thomas Skethe, obtained a licence to freight salt and other commodities from Brittany to Ireland; and in 1408/9 three Breton ships, including the *Sainte Nano* of Penmarch, sailed to either Limerick or Drogheda with salt.¹⁸ The trade of salt from the Bay to Ireland may reflect the diminishing salt imports from Chester. It is possible that imports of salt from the Bay increased to the eastern ports of Ireland after 1450.¹⁹ Nantes (on the Bay of Bourgneuf) perhaps took over as the principal Irish source for salt.²⁰ More destinations opened up at the beginning of the sixteenth century for imports of salt to Ireland. Other regions in France such as Dieppe and La Rochelle were ports where salt could be sourced.²¹

By the mid-fifteenth century continental Europe was probably satisfying most of Ireland's imported salt needs. In addition to salt deliveries from western France, more probably came from Portugal.²² Certainly, large quantities of salt were exported from Portugal to Wales in the early sixteenth century.²³

¹⁶ CPR, 1408-13, 474-75.

¹⁷ A. O'Brien, 'Commercial relations between Aquitaine and Ireland c.1000 c.1550' in J. Picard, ed., *Aquitaine and Ireland in the Middle Ages* (Dublin, 1995), 43-4.

¹⁸ O'Brien, 'Commercial relations between Aquitaine and Ireland', 51.

¹⁹ H. Touchard, *Le Commerce Maritime Breton à la fin du Moyen Age* (Paris, 1967), 384.

²⁰ W. Childs, 'Ireland's Trade with England in the Later Middle Ages', *Irish Economic and Social History*, ix (1982), 7.

²¹ M. Lyons, 'Maritime Relations between Ireland and France c.1480-c.1630', *Irish Economic and Social History*, xxvii (2000), 13.

²² T. Bowley, 'Herring of Sligo and Salmon of Bann: Bristol's Maritime Trade with Ireland in the Fifteenth Century', in R. Gorski, ed., *Roles of the Sea in Medieval England* (Woodbridge, 2012), 160.

²³ A. Lewis, 'Contribution to the Commercial History of Medieval Wales', *Y Cymmrodor*, xxiv (1913). In 1501 three

When Irish processors could not obtain enough salt from domestic or continental sources, they looked to Bristol and Bridgewater for supplies. In February 1379 the *St Marie* transported three and a half lasts of salt to Ireland.²⁴ In 1416 the *Gabriel* of Bristol left Bristol for Ireland with four barrels of salt.²⁵ Shortages of salt in Ireland continued into the 1430s. In 1433/4, Waterford officials decreed that no merchant could sell salt from his ship, but only from his cellar.²⁶ This salt was perhaps originally from Iberia or France. The steady increase of salt cargoes arriving in Ireland from Bristol after 1475 suggests that costs could be lessened if Irish merchants obtained continental salt in the ports along the Bristol Channel.

The greatest export of salt from Bristol to Ireland during the fifteenth century came in the year 1479-80.²⁷ There were also significant salt deliveries to Ireland in 1475, 1485/6, 1486/7, and 1503/4.²⁸ In these years salt supplies arrived fairly regularly throughout the year. In 1486 shipments left Bristol to Ireland in February, April, July, August and November (Fig 2j). In 1503 Irish vessels were travelling to Bristol anyway with fish and many returned with salt. For example, the *Anne* of Bristol in 1486 with John Flasse as skipper twice departed Bristol with salt before returning from Ireland to Bristol with salted fish.²⁹ It seems likely that Breton ships delivered surpluses of salt not sold in Ireland to Bristol. In 1460 the *Mighell* of Le Conquet entered Bristol from Ireland with 100 tuns of salt. Likewise in 1475 the *Katherine* of Concarneau failed to sell its salt in Ireland and it then went to Bristol.³⁰

ships from Porto and one from Averno delivered 176 tuns of salt to Tenby.

²⁴ E. Carus-Wilson, *The Overseas Trade of Bristol in the Later Middle Ages* (Bristol Record Society, 1937), 184.

²⁵ TNA, E122/212/13, m. 1.

²⁶ O'Neill, *Merchants and Mariners*, 88, 89.

²⁷ Childs & O'Neill, 'Overseas Trade', 508.

²⁸ TNA, E122/18/39, *passim*; TNA, 122/20/5, *passim*; TNA, E122/20/7, *passim*.

²⁹ TNA, E122/20/5, fo. 20 v, fo. 24, fo. 28, fo. 29.

³⁰ O'Brien, 'Commercial Relations between Aquitaine and Ireland', 45.

Bridbury stated it was difficult to quantify salt shipments to Ireland before 1450. His assertion was, however, overly pessimistic in at least estimating the salt trade from Chester to Ireland in the early fifteenth century.³¹ In 1400-1401 salt shipments from Chester to Ireland are regularly mentioned in the Mayor's book.³² Wilson's compilation of the local customs account for 1404/5 hints at a very significant export of salt to Ireland.³³ This local account does not always record commodities in detail but when it does it shows salt going to Dublin, Rush, Lusk, Malahide and Drogheda. Generally the commodities carried from Ireland to Chester were corn or malt and herring. On the return trip the principal cargo was salt. There were in 1404/5 at least eleven instances of corn arriving in Chester in 1404/5, salt was then transported back to Ireland.

Honey

Honey was normally collected from domestic hives or from the wild.³⁴ It was used as a sweetener or in alcoholic drinks such as mead.³⁵ It also had curative powers and was a commodity of status; it was important enough to mention in wills. In 1420 John Blake Junior bequeathed one and a half pipes of honey in his will as did Valerie Blake in 1500. The will stated that John Lynch Fitzedmund owed a debt to Blake's heir of thirty-three gallons of honey.³⁶

The sweetened product that bees created from pollen was an essential part of maintaining healthy fruit trees. The pollination of trees by bees ensured a healthy orchard. For this reason religious orders and secular manors often kept apiaries. Though little mention is made of honey among the saleable commodities from the Llanthony Abbeys in Ireland or from the fruit farm

³¹ A. Bridbury, *England and the salt trade in the later Middle Ages* (Oxford, 1955), 20.

³² ZMB, 2, fo. 17 v salt to Ireland, fo. 21 v salt to Malahide, fo. 72 v and fo. 93 d, some of the folios in this source are not in good condition.

³³ K. Wilson, ed., *Chester customs accounts 1301-1565* (Cheshire, 1969), 103-116.

³⁴ K. Pearson, 'Nutrition and the early-modern diet', in *Speculum*, lxii (1997), 14.

³⁵ Pearson, 'Nutrition and the early-modern diet', 14.

³⁶ Blake, *Blake Family History*, 46

demesnes in Dublin, eleven hives were kept at Kilcloggan, an ecclesiastical estate in County Wexford in 1307.³⁷ Honey is also mentioned in the murage charters for major towns such as Athenry and Youghal, which record honey as a taxable commodity for sale.³⁸

Besides domestic production, some honey was imported from England and France. For example, the *Gabriel* of Kinsale in 1413, and the *Juliana* of Kinsale in December 1431 transported five tons of honey from Bordeaux to Ireland.³⁹ More honey imports are recorded in the early sixteenth century. The largest quantities were freighted from Bordeaux to Limerick in 1506, 1508, 1512 and 1515 and from Bordeaux to Galway in 1503, 1511 and 1512. Limerick received 44 tons in 1506 and 35 tons in 1515 and Galway acquired upwards of ninety tuns in 1512. (Table 5a).

Bristol was the only port on the west coast of England supplying honey to Ireland.⁴⁰ The quantities imported from Bristol were normally small though in 1465/6, 1475 and 1503/4 more significant quantities were imported. (Table 5b). In December 1465 the *Peter* of Kinsale shipped a barrel of honey valued at 14s.⁴¹ A cargo of one pipe of honey valued at 25s was freighted aboard the *Mary* of Cork on 28th February 1466.⁴² (Table 5a). A third shipment of 1465/6 was, much larger. John Butler, through his attorneys, freighted the *Mary* of New Ross with one tun and one hogshead of honey valued at £5.⁴³ In 1475 a smaller quantity of honey was freighted aboard the *Mary* of Kinsale for Thomas Walsh at the end of June.⁴⁴ In contrast, in

³⁷ A. Hogan, *The Priory of Llanthony Prima and Secunda in Ireland 1172-1541* (Dublin, 2008), 115, 116; M. Murphy & M. Potterton, *The Dublin Region in the Middle Ages* (Dublin, 2010), 349-351; Colfer, *Hook Peninsula*, 56.

³⁸ Chancery.tcd.ie/docs, 5 13, 129 patent rolls 49 Edward III. (10/05/2012).

³⁹ TNA, E101/185/7, fo. 64; TNA, E101/191/3, m. 6.

⁴⁰ TNA, E122 (Customs Accounts for Poole, Plymouth & Fowey, Exeter, Dartmouth and Bridgewater), *passim*.

⁴¹ TNA, E122/19/4, fo. 6.

⁴² TNA, E122/19/4, fo. 10.

⁴³ TNA, E122/19/4, fo. 12. A doleum is one tun of honey, whilst the hogshead is perhaps a quarter of a tun.

⁴⁴ TNA, E122/19/11, fo. 11.

the same year Richard Parte on the *Michaell* of Barnstable delivered a dole (one tun) of honey worth £4.⁴⁵ Compared to shipments at the end of the fifteenth century, dispatches of honey from Bristol to Ireland were negligible in the sixteenth century.⁴⁶

The pattern of honey cargoes from Bristol suggests that demand in Ireland was normally either satisfied by local supplies or by continental imports. Much larger honey supplies from Bordeaux early in the sixteenth century dwarfed the Bristol shipments to Ireland. The supplies already noted which were sent to Galway and Limerick and others on occasion sent to Cork, Kinsale and Youghal were between five and fifty times the supplies that Bristol could muster to Ireland.⁴⁷

Spices

Most of Ireland's spice requirements came from the continent.⁴⁸ Castile and Portugal were the probably the main source, though smaller imports came from Bristol until late in the fifteenth century (Table 5b). In the late fourteenth century the main spice distributors across Europe were the Venetians, Genoese and Catalans. They received their spices primarily from Syria.⁴⁹

England and many other parts of Europe were receiving spices from Genoese merchants who sourced their goods in Egypt or Syria in the fifteenth-century. An alternative source of supply emerged late in the fifteenth century once the Portuguese had discovered the Cape route to India.⁵⁰

Ireland received some of its spice imports from English ports, though only small quantities of

⁴⁵ TNA, E122/19/11, fo. 8.

⁴⁶ S. Flavin & E. James, eds, *Bristol's Trade with Ireland and the Continent 1503-1601* (Dublin, 2009), *passim*.

⁴⁷ Bernard, *Navires*, iii, *passim*.

⁴⁸ Longfield, *Anglo-Irish Trade in the Sixteenth Century*, 185.

⁴⁹ C. Wake, 'The changing pattern of Europe's pepper and spice imports c.1400-1700', *Journal of European Economic History*, viii (Autumn, 1979), 370.

⁵⁰ Wake, 'The changing pattern of Europe's pepper and spice imports', 370; A. Edwards, *Cork Remembrancer – Tablet of Memory* (Cork, 1792), 56.

cinnamon, pepper, ginger, cumin, mace and liquorice reached Ireland from Bristol. The main spices dispatched from Bristol to Ireland at the end of the fifteenth century were saffron and aniseed. Saffron is made from the dried stigmas of the crocus.⁵¹ This dried flower probably had three uses in the Middle Ages. It was firstly used as a food additive: contemporary cook books note saffron used with fish, fowl, legumes and dough.⁵² Saffron was secondly used (sometimes combined with urine) as a dye to give cloths a rich yellow colour.⁵³ Saffron was probably substituted by yellow ocre, which was a cheaper dye, later in the sixteenth century.⁵⁴ Another reason for the replacement of saffron with ocre was Henry VIII's wish to halt the use of saffron as a cloth dye.⁵⁵ Thirdly, saffron was used for medicinal purposes. The stigmata of the flower contained the material needed for its curative powers.⁵⁶

Saffron (crocus) was one of the few spices cultivated in medieval England. Crocus plants were cultivated on the east coast of England, at Lewes.⁵⁷ Saffron was probably also cultivated in other areas of England. It gave its name to Saffron Waldon in England.⁵⁸ It was probably cultivated in the Cambridge area.⁵⁹ Despite this domestic production some saffron did arrive in England from foreign markets (for example Castile) but generally, according to evidence from the customs records, it arrived only in small quantities.⁶⁰ Since the crocus was grown in England and the

⁵¹ Flavin & Jones, *Bristol's Overseas Trade with Ireland*, 958.

⁵² Adamson, *Food in Medieval Times*, 15.

⁵³ S. Flavin, *Consumption and Culture in Sixteenth-Century Ireland: Saffron, Stockings and Silk* (Woodbridge, 2014), 120.

⁵⁴ Flavin, *Consumption and Culture*, 125.

⁵⁵ Longfield, *Anglo-Irish Trade*, 180.

⁵⁶ J. Rogers, *A History of Agriculture and Prices in England* (Cambridge, 1866-72, reprint 2011), i-iv, 631.

⁵⁷ Rogers, *A History of Agriculture*, i, 147; iv, 660.

⁵⁸ Rogers, *A History of Agriculture*, i, 147.

⁵⁹ R. Britnell, *Britain and Ireland 1050-1530: Economy & Society* (Oxford, 2004), 354.

⁶⁰ W. Childs, *Anglo-Castilian Trade in the later Middle Ages* (Manchester, 1978), 107, 124. Some saffron was imported from Aragon to England. W. Childs, ed., *The Customs Accounts of Hull 1453-1490* (Leeds, 1986), 91. There is only one recorded entry of a ship freighting saffron to Hull in 1465, on the *Mary* of Danzig; J. Wade, ed., *The Customs Accounts of Newcastle-Upon-Tyne 1454-1500* (Durham, 1995), 22, 26. Saffron is only mentioned once, freighted on the *Christopher* of Newcastle in 1454; P. Struder, ed., *The Port Books of Southampton 1427-1430* (Southampton, 1913), 77, 90, 106. There are a number of recorded entries for merchants trading with saffron, however, there are only two carracks, one from Savona (Italy) and one from

record of its importation to England is limited, it seems likely that the large quantities of saffron arriving in Ireland from Bristol after 1490, were of English origin, probably delivered overland to Bristol.

The quantities of saffron imported from Bristol to Ireland substantially increased in the first half of the sixteenth century. In 1485/6 less than 11lb of the substance arrived in Ireland from Bristol. In 1492/3 the quantities imported rose to 56 lbs. By 1542/3 over 450 lbs of saffron reached Irish shores from Bristol (Table 5b). Waterford vessels were the main transporters of the product. In 1516/17 nine Waterford ships dispatched saffron to Ireland, falling to seven ships in 1525/6, then rising again to sixteen ships in 1541/2, before returning to eleven craft in 1542/3. Some ships from Cork, Kinsale, New Ross, Youghal and Dungarvan were also involved in importing saffron to Ireland.⁶¹ But Ireland also sourced saffron from continental markets. In 1468/9 three Breton ships transported saffron to Limerick or Drogheda, and in 1490 the *Sante-Marie* of San Sebastian carried saffron to Limerick and Galway.⁶² Saffron's primary function in Ireland was probably as a dye. The substantial quantities of saffron imported from Bristol to Ireland up to c.1525 coincided with a vibrant cloth industry in Ireland. The decline in the cloth manufacturing industry after 1550 in Ireland mirrored the decline in saffron imports from England.⁶³

Aniseed was used in the Middle Ages for medicine, perfumes and as a sweetener.⁶⁴ It was, dispatched from Bristol to Ireland in much smaller amounts than saffron, normally having

Venice (Italy) with small quantities of saffron in Southampton; H. Cobb, ed., *The Overseas Trade of London Exchequer Customs Accounts 1480-1* (London, 1990), 22, 24, 60, 62. In 1481 there are only four ships recorded with saffron on board arriving in London on the *Margret* of Dieppe, *Trego* of Arnemindon, *Trinity* of Antwerp and the *Julian* of London. Aside from the *Margret* which freighted 281lbs of saffron, the other vessels only carried small quantities, Flavin & Jones, *Bristol's Trade with Ireland*, 1-456. There was almost no saffron imported from abroad to Bristol between 1501 and 1543.

⁶¹ Flavin & Jones, *Bristol's Trade with Ireland*, 100-456.

⁶² O'Brien, *Commercial Relations between Aquitaine and Ireland*, 51.

⁶³ Longfield, *Anglo-Irish Trade*, 181.

⁶⁴ Flavin & Jones, *Bristol's Trade with Ireland*, 943.

arrived in Bristol on ships from Spain and Portugal.⁶⁵ A variety of other spices were transported from Bristol to Ireland. These included cinnamon (a food spice from east India), cumin (a spice made from aromatic seeds from the Levant), ginger (a food spice with medicinal qualities sourced from India), cloves (from the Spice Islands), pepper (a food additive from southern India), and nutmeg (mace is derived from the outer part whilst nutmeg is the seed), a food spice. The Portuguese in Europe perhaps had control of the nutmeg in the later Middle Ages.⁶⁶ If this were so, nutmeg would possibly have been delivered to Bristol then re-exported to Ireland.

Small quantities of liquorice arrived from Bristol in Ireland; it was probably used for medicinal purposes. The quantities of spices and liquorice increased in volume dispatched from Bristol to Ireland in the first half of the sixteenth century but the quantities were much less in comparison to saffron and aniseed (Table 3b).

Fruit and Nuts

The two most important recorded shipments of fruit and nuts from Bristol to Ireland were a century apart from each other, in 1403/4 and 1503/4.⁶⁷ There is a significant lacuna in source material for the intervening years, but it is noticeable that shipments occurred in times of war. The earlier date coincided with the major hostilities between the commercial fleets of England and France from c.1400 to c.1407.⁶⁸ In 1503/4 there was Gaelic Irish infighting as well as battles in Ulster and the west of Ireland. At the end of 1504 an outbreak of plague occurred.⁶⁹ Fruit and nuts from traditional continental suppliers were probably temporarily replaced by supplies transhipped from Bristol to Ireland. Ireland was almost certainly not short of fresh fruit

⁶⁵ Flavin & Jones, *Bristol's Trade with Ireland*, 100-456.

⁶⁶ Adamson, *Food in Medieval Times*, 19.

⁶⁷ TNA, E122/17/16; TNA, E122/16/11; Jones & Flavin, eds., *Bristol's Trade with Ireland and the Continent*, 1-102.

⁶⁸ C. Ford, 'Piracy or Policy: The Crisis of the English Channel 1400-1403', *Transactions of the Royal Historical Society*, xxix (1979), 63-72.

⁶⁹ Moody, et al, *A New History of Ireland VIII*, 182-183.

supplies. Much was grown in ecclesiastical orchards but excavations of a latrine in Tintern Abbey (Wexford) showed the remains of blackberries, strawberries, prunes, sloes as well as apples and pears.⁷⁰ Records of the dissolution of the monasteries in 1540 indicated that a large number of orchards had existed all over Ireland.⁷¹ Imports were perhaps of fruits not grown domestically. Robert Russell, a merchant on the *Mary* of Drogheda transported twenty tuns of fruit valued at £31 in 1404. In the same year the *Nicholas* of Drogheda, freighted fruit and a large quantity of almonds. William Lawless was the master of the *Nicholas* and a merchant in the *Peter* of Youghal, which had transported a small quantity of almonds to Ireland.⁷² Further deliveries of fruit and almonds were made on the *Mary* of Dublin, by the merchants John Walsh and John Glynn.⁷³ Moreover, William Beatty transported a small quantity of fruit on the *Navis Poule* to Waterford in February 1404.⁷⁴ In 1377 twenty-six couples of fruit (measurement of fruit) were transported from Lisbon to Dublin or England but instead arrived in Kinsale.⁷⁵

Shipmasters on Waterford ships used Bristol for its short-term supplies of spices. For example, the *Lenard* of Waterford transported spices to Ireland on three occasions in 1503/4. The shipmaster, as part of his cargo, imported saffron, fruit and ginger to possibly satisfy local food shortages.⁷⁶ Waterford ships were the main carriers of spices from Bristol to Ireland. In 1503/4 they freighted spices including cinnamon on the *Sonday* (twice), the *Mary* and the *Mawdelen*.⁷⁷ Two ships delivered spices to New Ross and Cork. It was certainly the case that Breton ships delivered spices in 1468/9 to Ireland, three ships from that region delivered liquorice to these

⁷⁰ C. Ó Clabaigh, *The friars of Ireland 1224-1540* (Dublin, 2012), 134; Hogan, *The Priory of Llanthony Prima and Secunda in Ireland*, 115-116

⁷¹ Ó Clabaigh, *The friars of Ireland*, 134.

⁷² TNA, E122/17/11, m. 5.

⁷³ TNA, E122/17/11, m. 5 v.

⁷⁴ TNA, E122/17/11, m. 5 v.

⁷⁵ CCR, 1377-1381, 24.

⁷⁶ Jones & Flavin, eds, *Bristol's Trade with Ireland*, 6, 55, 59.

⁷⁷ Jones & Flavin, eds, *Bristol's Trade with Ireland*, 56, 79, 87, 98.

shores.⁷⁸

The number of ships, both English and Irish, carrying spices, salt and honey grew from an average of ten to twelve vessels in the years before 1500 to twenty-seven craft, evenly split between Irish and English craft, arriving in Ireland in 1503/4.⁷⁹ It was only at the beginning of the sixteenth century that quantities of cinnamon, liquorice (both food flavourings) and aniseed formed part of ships' manifests from Bristol. There was an increase in the importation of spices and new varieties of commodities arriving from Bristol in Ireland in 1541/2. These were pepper, cinnamon and cumin.⁸⁰ The timing of the upsurge in spices arriving from Bristol coincided with the dissolution of the monasteries and the probable decline in the orchards under their control. The spice commodities may traditionally have been sourced by the clergy at the large fairs attended by foreign merchants such as those held at Drogheda.⁸¹ Salt especially was used for the processing of Ireland's primary exports, fish and hides. Saffron too was important at least up to the middle of the fifteenth century. The other goods and spices though valuable may be categorised as luxury rather than necessities to economic growth.

⁷⁸ O'Brien, 'Commercial relations between Aquitaine and Ireland', 51.

⁷⁹ Jones & Flavin, eds, *Bristol's Trade with Ireland and the Continent 1503-1601*, 1-102.

⁸⁰ S. Flavin, 'Consumption and Material Culture in sixteenth century Ireland', *Economic History Review*, lxiv, 4 (2011), 1155, 1156.

⁸¹ Hogan, *The priory of Llanthony Prima*, 115.

CHAPTER 6

The Impact of Trade on the Irish Economy

The Irish Economy from c.1290 to c.1534

The Irish economy, like other economies in Europe, experienced a severe contraction of its resources after c.1350. The problems of the later fourteenth century came on the back of already difficult circumstances. Ireland was probably at the limits of its capacity for food production because by c.1300 land, much of it marginal, had been assarted in order to feed the populace.¹ Secondly, an adverse change in climate had already led to crop failures in the earlier fourteenth century.² Moreover, the purveyance of victuals for the king's wars in Scotland from 1296 to 1324 had denuded cereal reserves in the lordship.³ Short term profits made by Dublin purveyors especially, and to those employed in the grain trade more generally, had all but ended by 1324. After the so-called Gaelic resurgence following the Scottish invasions of Ireland in 1315, the crown's finances and political influence in Ireland began to diminish which meant that English held lands in Ireland were not as secure as before.⁴ Ireland, like much of north western Europe, experienced two catastrophies in the early fourteenth century. A severe famine occurred between 1315 and 1322 caused by adverse weather and overpopulation. The over reliance on cereal crops for food led to the assarting of pastoral land, woodland and bog, for example on the Llanthony lands of Meath and Louth.⁵ These difficult circumstances were compounded by the arrival of the Black

¹ M. Murphy, 'Lordship in Medieval Ireland', in C. Doran & J Lyttleton, eds, *The Profits of Lordship: Roger Bigod, earl of Norfolk and the lordship of Carlow 1270-1306* (Dublin, 2007), 95.

² R. Britnell, *Britain and Ireland 1050-1530 Economy & Society* (Oxford, 2004), 87-88; I. Kershaw, 'The Great Famine and Agrarian Crisis in England 1315-1322', *Past and Present*, 1 (1973), 3.

³ *CPR*, 1279-1288, 150, 273; *CDI*, 1295-1301, 608, 609; *CPR*, 1301-1305, 35.

⁴ B. Campbell, 'Benchmarking Medieval Economic Development: England, Wales, Scotland, and Ireland c.1290', *Economic History Review*, lxi (2007), 2.

⁵ A. Hogan, *The Priory of Llanthony Prima and Secunda in Ireland, 1172-1541: lands, patronage and politics* (Dublin, 2008), 212, W. Jordan, *The Great Famine* (Princeton, 1994), 2.

Death which first hit Ireland in 1347. This virulent disease, often thought to have been transmitted by rats, reached Ireland by ship and then spread to the hinterland.⁶ A malnourished populace weakened by intermittent dearths, and poor dietary nutrition probably resulted in great susceptibility to the Black Death.⁷ After the Black Death many English landowners returned to England leaving their Irish demesnes vulnerable to attack by the Gaelic Irish. Revenues amassed by the Anglo-Irish lords during the arable boom of the thirteenth century in Ireland had all but disappeared. For example, the financial gains that had accrued in the Bigod estates in Ireland in the 1270s and 1280s had been used up in building projects.⁸ The severity of the monetary situation gave rise to Roger Bigod in Carlow and William de Vescy in the liberty of Kildare surrendering their lands to Edward I from 1302 to 1306.⁹ Customs revenues and total Irish government receipts fell dramatically between 1285 and 1349, confirming a serious downturn in the Irish economy. Although customs revenues rose slightly from 1305 to 1314, revenues only amounted to half what they had been in *c.* 1280.¹⁰

Malthusian theory helps explain the consequences of the changing pattern of food production and impact on population levels in the first half of the fourteenth century. Malthus stated that populations increased in a geometric ratio, while the means of subsistence increase in an arithmetic fashion. When mapped onto the fourteenth century, Malthus concluded that the means of subsistence did not move fast enough to match population growth. Malthus also

⁶ M. Kelly, *A History of the Black Death in Ireland* (Stroud, 2004), 15; www.historylearningsite.co.uk (date accessed 05/05/2014). In north London in 2014, archaeological excavations revealed skeletal bones of humans. When the body was examined it was found that the Black Death was airborne and not as previously thought transmitted by the rat flea.

⁷ Kelly, *A History of the Black Death*, 22.

⁸ Murphy, 'Lordship in Medieval Ireland', 95.

⁹ Murphy, 'Profits of lordship', 95; M. Lyons, 'Manorial Administration and the Manorial Economy', (unpublished Phd, Trinity College, Dublin, 1984), 53.

¹⁰ Campbell, 'Benchmarking', 2.

argued that populations were affected by crime, disease, war and vice.¹¹

General climatic and demographic conditions were exacerbated by the Scottish army under the command of Edward Bruce which had wreaked havoc on the Irish landscape between 1315 and 1318. Edward's brother, Robert, had used slash-and-burn tactics in Scotland destroying crops, a military tactic was probably carried out also by the Bruce forces in Ireland.¹² The decline of cereal production in Ireland was probably not compensated for a surplus of all types of fish in the early fourteenth century.¹³ When the Black Death arrived in 1347-8, Ireland was already suffering from the consequences of famine, overpopulation, climate change and war. In Ireland the Bruce invasion of 1315-18, the famine of 1315-22, the Black Death of 1348-49 and climate change cumulatively devastated the economy on the island from the middle of the fourteenth century with subsequent outbreak of pestilence occurring in 1361, 1370, 1383 and 1398.¹⁴ Ireland continued to suffer from adverse climatic conditions as well as disease throughout the fifteenth century. Moreover, there were fifteen years in the century when plague/Black Death returned to Ireland: in 1401, 1406, 1408, 1414, 1419, 1446, 1447, 1448, 1466, 1470, 1478, 1488/9, 1497 and 1498.¹⁵ The outbreak in 1439 was particularly virulent, causing 3,000 deaths in Dublin alone. The populace of Ireland also endured severe hardship in the fifteenth century through famine, crop failures, drought and floods. There were seventeen occurrences of famine worthy of note recorded in the annals in fifteenth century. These events took place in 1407, 1410, 1420, 1434, 1444-1447, 1461-1462, 1465, 1468, 1471, 1477, 1491, 1497 and 1498. Black Death and adverse weather seemed to

¹¹ www.econlib.org (date accessed 05/05/2014). Thomas Robert Malthus explained his theories in his mid nineteenth-century treatise. *Principles of Population* (London, 1798 reprint, 1993).

¹² R. Frame, *Colonial Ireland 1169-1369* (Dublin, 1981), 115; S. Duffy, *Ireland in the Middle Ages* (Basingstoke, 1997), 34-38.

¹³ *CPR*, 1292-1301, 480; 10,000 dried fish were exported from Ireland to Scotland in 1300.

¹⁴ M. Lyons, 'Weather, Famine, Pestilence and Plague', in G. Crawford, ed., *Famine the Irish Experience* (Edinburgh, 1989), 66, 67.

¹⁵ Lyons, 'Weather, Famine, Pestilence and Plague', *passim*.

occur in close proximity.¹⁶ There appeared to be a relationship between malnourishment, climate, disease and war. It is my intention to analyse the serious impact of all these issues on population trends. The importance and presence of coin in Ireland will also be examined as to its importance to the Irish economy in the fifteenth century.

Population

Population levels for late thirteenth century Ireland are difficult to calculate. Bruce Campbell estimated that Ireland's population in c.1290 was between 800,000 and 1,000,000.¹⁷ Kevin Down suggested a lower figure of c.750,000.¹⁸ Even at the height of the agrarian boom of the thirteenth century Dublin probably had a population of c.11,000, Kilkenny of c.4,500 and Wexford of c.1,500 inhabitants.¹⁹ Campbell's estimates that in c.1290 out of a population of c.800,000, c.94,000 people lived in small or large towns. If this was the case then the population of the county of Dublin before the Black Death was possibly c.35,000. It is likely that, as in England, the famine of 1315-18 precipitated a mortality rate in Ireland of at least 10%.²⁰ Subsequent deaths from the pestilence of 1348-49, and later outbreaks of plague perhaps reduced the population by between 33% and 50%.²¹ The mortality rate was so high in the county of Dublin, that a death rate of 14,000 out of a shire total of 35,000 inhabitants suggests that a significant proportion of the c.11,000 citizens of the city of Dublin must have died as a result of the Black Death.²²

¹⁶ Lyons, 'Weather, Famine, Pestilence and Plague', *passim*.

¹⁷ Campbell, 'Benchmarking', 32.

¹⁸ K. Down, 'Colonial Society & Economy', in A. Cosgrove ed., *A New History of Ireland*, ii (Oxford, 1987), 446.

¹⁹ Campbell, 'Benchmarking', 16.

²⁰ C. Dyer, *Standards of Living in the Later Middle Ages c.1200-1520* (Cambridge, 1989), 4. Dyer includes a graph which depicts population in England falling from approximately 5 million to 4.5 million between 1315 and 1322.

²¹ J. Hatcher, *Plague, Population and the English Economy 1348-1530* (London, 1977), 31.

²² B. Williams, ed., *The Annals of Ireland by Friar John Clyn* (Dublin, 2007), 111.

Famine and plague were not the only issues affecting population levels in Ireland. In the middle of the fourteenth century landlords were largely absent from their Irish demesnes. It is possible that over 75% of them had abandoned their lands.²³ They were, therefore, not able to control or protect their holdings effectively against Gaelic incursions. Although legislation in 1380 had compelled absentee landlords to return or place others in their lands to protect their interests, there is little evidence that this was observed.²⁴ The Anglo-Irish were effectively relinquishing control of their lands by default. Meanwhile, wage rates rose in the immediate aftermath of the Black Death. In 1349 a statute was enacted to prohibit wage inflation. Those who could work were ordered to do so. The able bodied were banned from begging and labourers who left the service of their employer were to be imprisoned.²⁵ Labour shortages were perhaps not new. Indeed, in 1355 Peter Wilton could not fulfil a licence to export corn from Drogheda to England because of a lack of labour.²⁶ In 1344, before the Black Death, but again in 1359 and 1360, decrees were enacted stating that no-one was to leave for foreign parts without a licence.²⁷ This was followed up in 1366 when the Statutes of Kilkenny stipulated that servants and labourers were prohibited from departing the country.²⁸ Ireland was still under populated in the 1390s. In 1398, before taking up his lieutenancy in Ireland, the duke of Surrey sought permission to bring a man and a woman from each parish in Surrey to repopulate the land.²⁹ It is unlikely that this happened and by 1410 parliament expressed further concern that the husbandry of the land and the incursions of the Gaelic Irish

²³ J. Lydon, *The Lordship of Ireland* (Dublin, 2003), 135; A. O'Brien, 'Politics, Economy & Society: The Development of Cork and Irish South Coast Region c.1170 to c.1583', in P. O'Flanagan & C. Buttimer, eds, *Cork History and Society* (Dublin, 1993), 124.

²⁴ H. Berry, ed., *Statutes and Ordinances of Ireland and Acts of the Parliament of Ireland, King John – Henry V* (Dublin, 1907), 476, 579.

²⁵ Berry, ed., *Statutes of Ireland, John-Henry V*, 367, 369.

²⁶ Chancery.tcd.ie/doc. 129/close roll Edward III. (15/07/2013).

²⁷ O'Brien, 'Politics, Economy and Society', 125.

²⁸ Berry, ed., *Statutes of Ireland, John – Henry V*, 465.

²⁹ Lydon, *Lordship*, 140.

in Kilkenny was on the point of being destroyed because of diminished populace.³⁰

Nevertheless, the exodus of labour from Ireland continued into the middle of the fifteenth century. Further attempts to prohibit emigration were issued in 1421 and 1429, suggesting it was still rife.³¹

The decision to depart from Ireland involved great expense. In 1455 Irishmen and women sought passage on ships at a rate of 3-4d per person for transport from Ireland to England.³² This sum of money was probably up to three days pay for an unskilled worker but less than a day's wages for a legal clerk.³³ The career prospects for migrants in England, however, were good. From 1422 several Irish men were enrolled at the Lincons Inns for legal studies.³⁴ Small but regular numbers of Irish clerics were ordained in London from 1360 to 1450: the greatest annual number was twenty-five in 1360.³⁵ In the later Middle Ages the numbers of Irish resident in London was usually quite small. For example, in 1394 only fourteen Irishmen were recorded as resident in London.³⁶ Most Irish emigrants would have, however, toiled with their hands rather than studied and there were many Irish people elsewhere in England.³⁷ In June 1394, when Richard II was preparing for his expedition to Ireland, he ordered all Irish in England to return home. Licences were issued for 521 Irish people to remain in England. Given the cost of these licences (6s 8d each) only an affluent fraction of the total number of Irish residing in England could afford to stay.³⁸ It was likely that most

³⁰ Chancery.tcd.ie/doc.99/II Henry IV (10/05/2012).

³¹ O'Brien, 'Politics, Economy and Society', 125-6.

³² H. Berry, ed., *Statute Rolls of the Parliament of Ireland reign of Henry VI* (Dublin, 1907), 476, 579.

³³ P. Connolly, *Irish Exchequer Payments Vol II, 1326-1446* (Dublin, 1998), 557-558. In 1427 messengers at the exchequer were paid 1½d per day. Robert Caudrey Clerk (Chief Engrosser) was paid 5d per day in 1427.

³⁴ P. Brand, 'Irish Law Students and Lawyers in late medieval England', *Irish Historical Studies*, xxxii (2000), 167.

³⁵ V. Davis, 'Irish Clergy in Late Medieval England', *Irish Historical Studies*, xxxii (2000), 151.

³⁶ J. Bolton, 'Irish Migration to England in the Late Middle Ages: The evidence of 1394-1440', *Irish Historical Studies*, xxxii (2000), 13.

³⁷ Bolton, 'Irish Migration to England', 14-15.

³⁸ Lydon, *Lordship*, 139.

Irish immigrants to Bristol were from poor circumstances and in 1440/1 they possibly made up 8% of Bristol's population.³⁹ There were difficulties in tracking migrant agricultural labour because some anglicised their names and others moved between the two tax collection dates of Easter and Michaelmas. There were, however, at least 1,000 adult Irishmen in England in 1440, mostly servants and agricultural workers.⁴⁰ In this year there were 135 Irish immigrants settled in Northamptonshire and others in London (134 people), Wiltshire (125 people), Warwickshire (c.128 people), Devon (92 people), and Cornwall (65 people).⁴¹ In addition there were others in Gloucestershire (44 people) and Somerset (16 people). As stated earlier Irish immigrants were not particularly welcome in Bristol, hence the relatively low numbers settling in the Bristol region. Most Irish immigrants probably travelled to England along traditional trading routes landing in Chester (for onward travel to the Midlands), Bristol and Bridgewater (the disembarkation ports for those from the southern regions of Ireland, who more than likely settled in Devon and Cornwall).⁴²

Most Irish immigrants were not from the wealthy ranks of society. They were tailors, brewers, builders and the greatest numbers were labourers and servants. Irish immigrants probably had two decisions to make as to where in England they settled. Primarily, where was the best location to find work, especially for unskilled labourers looking for agricultural work in rural areas. Secondly, Irish immigrants both skilled and unskilled possibly had to compete for work with other alien immigrants. Immigrants from the Low Countries and the Rhineland were also seeking work in England. Irish immigrants were probably influenced by

³⁹ P. Fleming, 'Identity and Belonging: Irish and Welsh in Fifteenth-Century Bristol', in L. Clark, ed., *The Fifteenth Century VII, Conflicts, Consequences and the Crown in the Late Middle Ages* (Woodbridge, 2007), 181.

⁴⁰ Bolton, 'Irish Migration to England', 14-17.

⁴¹ S. Thrupp, 'A survey of the Alien Population of England in 1440', *Speculum*, xxxii, no. 2 (1957), 270-272.

⁴² Bolton, 'Irish Migration to England', 11.

these factors in the decision to where to settle in England.⁴³

The motivation for unskilled or semi-skilled labour to depart Ireland was probably multifactored. Primarily labourers on estates in Ireland were made up of free tenants, who were lowly paid and hired-in labourers.⁴⁴ However, there were also unfree tenants, mostly Gaelic Irish, who were tied to the demesne they worked for; they had to perform specific labour tasks each year for the lord of the manor. These labour tasks owed to the lord of the manor were far less than those carried out in England.⁴⁵ Emigrants from both groups were perhaps attracted to England by more lucrative employment and/or greater security. Estate servants had year round employment in Ireland. They may, however, have been unsettled by the absenteeism of their lords, as well as by attacks on the Pale by the native Irish. Paradoxically, after the initial outbreak of the Black Death, absentee landlords may have enticed the free labourers on the Irish manors to relocate to England, to take up employment opportunities caused by the high mortality rates on their England demesnes. The inducement was probably monetary.⁴⁶

In Ireland in the 1340s some casual labourers were employed for short periods in various jobs at a rate of 1d per day.⁴⁷ In 1343 skilled craftsmen (such as carpenters and roofers) were paid 2 - 2½d, for a day's work in Dublin.⁴⁸ A thatcher was paid approximately 1d per day, whilst the women who supplied him with straw were only paid ½d daily.⁴⁹ In England in the 1340s carpenters received 3d - 4½d per day, slaters 4d per day, and thatchers 2½d per day. In the

⁴³ Bolton, 'Irish Migration to England', 18.

⁴⁴ Down, 'Colonial Society and Economy', 463.

⁴⁵ Down, 'Colonial Society and Economy', 463. Down states that nowhere in Ireland did labour services to the lord even come close to those of English villein.

⁴⁶ Rogers, *History of Agriculture*, i, 303-368.

⁴⁷ J. Mills, ed., *Account Roll of the Priory of the Holy Trinity, Dublin 1337-1346* (Dublin, 1891), p. xxiii, 19, 28, 31, 32.

⁴⁸ Mills, *Account Roll*, 28-9, 31-2, 59-61.

⁴⁹ Mills, *Account Roll*, 37-39.

aftermath of the Black Death and up to 1380 wages in England doubled.⁵⁰ Labour shortage and high wages in England may have induced non-agricultural Irish workers to relocate. The attractions were, however, also significant for agricultural workers. In the 1340s in Ireland they were paid in money and food allowances. The bailiff of the lands owned by the prior of the Holy Trinity in Dublin received 6s 8d *per annum* and up to eight bushels of wheat every ten weeks.⁵¹ Ploughmen, carters and drivers received between 4s and 5s each year along with 6½ bushels of wheat every ten weeks. On occasion a greater allowance was issued of peas and beans instead of wheat.⁵² In England wages in the 1340s were broadly similar to those in Ireland for ploughmen, carters and drivers.⁵³ As in the building sector wages rose significantly after the Black Death. In light of wage inflation, efforts were made by Richard II to regularise wage rates in both Ireland and England. In Ireland in 1388 a statute of labour stipulated that various trades, including agricultural and non-agricultural workers such as carpenters, be paid 2d a day, labourers were to receive 1d per day and threshers of corn also 1d per day.⁵⁴

Despite attempts to control wages, by the end of the fifteenth century wage rates had increased significantly in Ireland. In Dublin in 1490 a carpenter was paid 5d to 7d per day; a helier (slater) was paid *c.* 6d per day whilst a labourer was paid *c.* 3d to 4d per day.⁵⁵ Wage rates elsewhere were probably lower. In Kilkenny a carpenter was paid only *c.* 3d per day in *c.* 1537, whilst a labourer was paid 1d, 2d, or 3d per day depending on the time of the year.⁵⁶

⁵⁰ Rogers, *History of Agriculture*, i, 312, 317.

⁵¹ Mills, *Account Roll*, p. xxiii, 84.

⁵² Mills, *Account Roll*, p. xxiii.

⁵³ Rogers, *History of Agriculture*, p. ii, 331-333.

⁵⁴ Berry, ed., *Statutes of Ireland, John – Henry V*, 489.

⁵⁵ Rogers, *History of Agriculture*, i, 265; A. Empey, ed., *The Proctors' Accounts of the Parish Church of St Werburgh, Dublin 1481-1627* (Dublin, 2009), 50, 52.

⁵⁶ J. Ainsworth, ed., 'Corporation Book of the Irish town of Kilkenny 1537-1628', *Anaelecta Hibernica*, xxviii (1978), 5.

The level of remuneration in Dublin was similar to that in England.⁵⁷ As yet we have no systematic analysis of wages in medieval Ireland. But the evidence suggests that the exodus of labour from Ireland between c.1380 and 1450s had perhaps forced an increase in Irish wage rates.⁵⁸

Money as it related to money transactions

Money (coin) was increasingly used as a method by which merchants in Ireland transacted their trade in and out of Ireland. Some of the coin in circulation in fourteenth-century Ireland had probably been present since the reign of John (1199-1215).⁵⁹ Limited silver supply probably explains this longevity. Nevertheless, there were domestic sources of silver and gold. In 1295, for example, William de Boreham and four miners went to Cork to bore for ore.⁶⁰ In 1359/60 Robert Cadogan was searching Oulys in County Limerick for gold and silver ore.⁶¹ The pursuit of silver was, ongoing throughout the later Middle Ages. In 1450 Richard Ingram, a miner, claimed to have found silver, lead, iron and coal in Ireland.⁶² Seven years later William Willerton from Dublin received a licence for twenty years to work a silvermine in County Wexford.⁶³ Aside from some silver ore, silver objects were also to be found in Ireland. Religious orders possessed significant stock of artefacts made from silver. For example, in 1463 Donald MacMeriman Y Donnayll, dean of Raphoe, melted down a silver chalice; and in 1468 John Collyn, formerly dean Waterford Cathedral, bequeathed a significant quantity of silver, including rings, salt cellars, cogues and cups of considerable

⁵⁷ Empey, ed., *Proctors' Accounts*, 60, 84.

⁵⁸ Rogers, *History of Agriculture*, iii, 616, 628.

⁵⁹ M. Dolley, 'Coinage to 1534 the Sign of the Times' in A. Cosgrove, ed., *A New History of Ireland 1169-1334* (Oxford, 1987), ii, 822.

⁶⁰ S. Sweetman, ed., *Calendar of Documents Relating to Ireland, 1293-1301* (Dublin, 1881).

⁶¹ P. Connolly, ed., *Irish Exchequer Payments 1326-1446* (Dublin, 1998), ii, 501.

⁶² Berry, ed., *Statute rolls of the parliament of Ireland in the reign of Henry VI*, 285.

⁶³ T. Barry, *The Archaeology of Medieval Ireland* (London, 1988), 108.

silver content.⁶⁴ Even in secular society wills bequeathing legacies in Dublin from c.1457 to c.1483 show many instances of silver objects.⁶⁵ Coin was also bequeathed in wills in Dublin. William Lawless left £5 6s in coin, Richard Bogs left 60s and Dame Margaret Nugent bequeathed £16 18s.⁶⁶

Despite some local sources of silver, no coin was minted in Ireland between c.1339 and c.1424.⁶⁷ There had been two unsuccessful attempts to do so in the intervening period: the first was in 1380, perhaps as a response to an influx of Scottish groats, (Scottish groats had less silver content than the English equivalent), and were valued at 3d, instead of 4d.⁶⁸ The second but unsuccessful attempt to mint coin was in 1412-13, when the crown attempted to provide Irishmen in England with an incentive to return and repopulate Ireland.⁶⁹ By then coin may have been running short in the lordship. In 1425 low denomination coins were struck in Henry VI's name, possibly because coins from the reigns of John, Henry III, Edward I and II had filtered out of the colony to pay for imports.⁷⁰ Dublin minted coins have been found in Chester, Coventry, Oxford and York.⁷¹ But there were other reasons too why new coins were required in Ireland. Firstly, the English coin minted between the reigns of Edward III and Henry VI in Ireland was heavily clipped, rendering its intrinsic value (based on its silver content) much lower than its face value.⁷² Secondly, the Irish parliaments held at Trim in 1447 and Naas in 1456 had denounced the practice of Gaelic Irish traders

⁶⁴ D. MacEiteagáin, 'The Renaissance of the late Medieval Lordship of Tír Chonail 1461-1555', in L. Nolan, L. Ronayne and M. Dunlevy, eds, *Donegal History and Society* (Dublin, 1995), 210. N. Byrne, ed., *The Registry of St Saviour's Chantry of Waterford* (Dublin, 2013), 11-15.

⁶⁵ H. Berry, ed., *Register of the wills and Inventories of the Diocese of Dublin in the times of Archbishops Tregury & Walton 1457-1483* (Dublin, 1898), 3, 24, 27, 69, 85.

⁶⁶ Berry, ed., *Register of Wills*, *passim*.

⁶⁷ Dolley, 'Coinage to 1534', 822.

⁶⁸ M. Dolley, *Medieval Anglo-Irish Coins* (London, 1972), 16-17; Berry, ed., *Statutes of Ireland, John – Henry V*, 479.

⁶⁹ Berry, ed., *Statutes of Ireland John – Henry V*, 565; A. Cosgrove, 'England and Ireland, 1399-1447', in A. Cosgrove, ed., *A New History of Ireland, Medieval Ireland 1169-1534* (Oxford, 1987), ii, 529.

⁷⁰ Dolley, *Anglo-Irish Coins*, 17.

⁷¹ M. Murphy & M. Potterton, eds, *The Dublin Region in the Middle Ages* (Dublin, 2010), 472.

⁷² Dolley, *Anglo-Irish Coins*, 18.

counterfeiting coinage which became known as O'Reilly's money.⁷³ The practices of clipping and counterfeiting coin drove the better coin out of the economy, or it was hoarded.⁷⁴ In order to keep the meagre stock of silver in Ireland, another act was passed in the 1456 parliament. All silver leaving Ireland through trade by French, Spanish and Portuguese merchants was subject to a levy of 8d per pound.⁷⁵

After the brief activity of the Dublin mint in 1425, coin next minted in Dublin in 1459/60.⁷⁶ The coin that was then produced was of an intrinsically lower value than that produced in England.⁷⁷ This probably boosted Ireland's foreign trade because foreign merchants may not have factored in the lower silver content of Irish coin when purchasing goods. From 1467 coin was being minted in most of the major Irish port towns, including Dublin, Limerick, Waterford, Galway, Drogheda and Carlingford.⁷⁸ There were, however, unsanctioned mints in some other Irish major ports (including Cork, Wexford, Kinsale and Youghal) which had become operational by the 1470s.⁷⁹ It is probably significant that mints were located in port towns, where the need for coinage and access to foreign silver coins was perhaps at its greatest. The proliferation of mints was nevertheless short-lived. From the beginning of Richard III's reign, in 1483, Ireland returned to having a single mint in Dublin.⁸⁰ The coins minted in Richard III's reign remained in circulation for the next century. It is possible that the greater confidence in the new coins (they had a new obverse showing that they were of lower value than the English equivalent) helped to promote new trade links between Ireland and the west coast and south west coast of England. English coin had greater value compared

⁷³ Berry, ed., *Statutes of Ireland, Henry VI*, 91, 451.

⁷⁴ www.princeton.edu/greshams law date accessed 05/05/2014. Sir Thomas Gresham (1519-79) was an English financier, in the reigns of Henry VIII, Edward V, Mary I and Elizabeth I.

⁷⁵ [Chancery.tcd.ie/doc.7/patent roll 35 Henry VI](http://Chancery.tcd.ie/doc.7/patent%20roll%2035%20Henry%20VI) (16/03/2015).

⁷⁶ Berry, ed., *Statutes of Ireland, Henry VI*, 91, 451.

⁷⁷ Dolley, *Anglo-Irish Coins, passim*.

⁷⁸ Dolley, *Anglo-Irish Coins*, 24.

⁷⁹ Dolley, *Anglo-Irish Coins*, 26.

⁸⁰ Dolley, 'Coinage to 1534', 824.

to Irish coin, giving English merchants greater purchasing power. The customs accounts for Plymouth/Fowey and Exeter/Dartmouth record new outlets for Irish products in these ports.⁸¹ From 1485 Irish coin was, however, only to be minted in Dublin or Waterford. In 1489 two men were imprisoned in Bristol for attempting to use Irish coin into the town.⁸² Even though no evidence exists the coin used by these merchants was possibly minted in one of the unsanctioned mints in Ireland. The silver content was possibly well below what it should have been. Coin production in Ireland ceased at the beginning of the sixteenth century. At the same time in 1505 English mints were producing shillings for the first time, whilst the Dublin mint was shut down for a period of forty three years.⁸³

There are two reasons why Irish mints did not produce large quantities of coins in the later part of the fifteenth century. Firstly, there was a shortage of silver sent to the mint. There was, of course, a shortage of silver generally in Europe. This manifested itself in the heavily clipped coinage in circulation. Moreover, clipped coins required more silver to recast them to their original value.⁸⁴ It is likely that those with wealth hoarded coins and kept their silver valuables away from the mint, concerned that they would not receive the full value for their coins from the mint. The serious lack of silver coin in Ireland perhaps encouraged at least on occasions a return to bartering of goods in overseas trade. In 1469/70 Thomas Cusack and Christopher Preston petitioned parliament to take corn to London instead of coin as there was none available in Ireland.⁸⁵ In the same year, Richard Codde, an Irishman living in London, petitioned parliament to transport wheat and malt from Ireland in settlement of a debt as there

⁸¹ TNA, E122 (customs accounts for Exeter, Plymouth, Fowey, Dartmouth and Poole), *passim*.

⁸² L. Smith, ed., *The Maire of Bristow is Kalendar* by Robert Ricart, *Town Clerk of Bristol 18 Edward IV* (Camden Society, 1872, copied Ulan Press), 47.

⁸³ Dolley, *Anglo-Irish Coins*, 36; J. Fitzgerald, *The Cork Remembrancer being a Historical Register – since the creation to the present year 1783* (Cork, 1783), 41.

⁸⁴ Dolley, *Anglo Irish Coins*, 18.

⁸⁵ H. Berry, ed., *Statute Rolls of the Parliament of Ireland first to twelfth year of the reign of Edward IV* (Dublin, 1914), 3, 24, 27, 69, 85.

was no money available in Ireland.⁸⁶ Certainly, in 1479/80 Ireland was seriously deficient of bullion.⁸⁷

The second reason why Ireland was not minting significant quantities of coin at the end of the fifteenth century was because the coins were too highly nominated, groats and half groats, they were intrinsically less valuable than English coin by 1460. They were of little use for everyday domestic trade because of their high nominated value. If new coin was not useful for foreign trade, it was certainly of little use for small transactions. Smaller coins, such as the copper farthings, silver and billon penny, were probably still too highly nominated for small purchases. Taverns in Dublin on occasion issued tavern tokens for transactions because there was no coin small enough to effect the transaction.⁸⁸ Ecclesiastical institutions used counters in their accounting systems.⁸⁹ There was also a problem in using groats for overseas trade. The Irish merchants exporting commodities were, however, at a disadvantage because it was probable that foreign traders did not want coin of lower silver content in exchange for their own. Merchants purchasing Irish goods with English coin probably benefitted by the purchasing power and desirability of the more valuable English coin. In 1948 a hoard of nineteen silver English groats were found near Portmarnock. Twelve of these coins were minted in Edward IV's reign, seven in London, two in Bristol and one from York.⁹⁰ There were, however, no Irish minted coins in the hoard. Wealthy merchants in Ireland may have wished to retain the more valuable coin and trade with Irish coin of less intrinsic value. The groats produced in 1483 in Dublin were still circulating in Ireland a century later possibly signifying that this coin may have continually returned to Ireland through trade, or that

⁸⁶ Berry, ed., *Statute Rolls, Edward IV*, 793, 795.

⁸⁷ Berry, ed., *Statute Rolls, Edward IV*, 747.

⁸⁸ H. Clarke, S. Dent and R Johnson, eds, *Dublinia: The Story of Medieval Dublin* (Dublin, 2002), 87.

⁸⁹ J. Carruthers, 'On Hoards of Coins', *Ulster Journal of Archaeology*, xvii (1953), 164.

⁹⁰ M. Dolley & S. Lane, 'A Find of Fifteenth Century English Groats from Co. Dublin', *Journal of the Royal Society of Antiquities of Ireland*, 102 (1972), 143 - 145.

foreign merchants did not want it. Groats minted at Dublin, Waterford and Drogheda in the reigns of Edward IV and Henry VII were used for internal trade in Ireland: coins minted in these locations have been found as far away as Caledon county Tyrone.⁹¹

The closure of Irish mints at the end of the fifteenth century probably had a number of consequences for Irish merchants. Firstly, merchants may have had to rely on credit arrangements to conduct overseas trade. John Smythe a wealthy Bristol merchant recorded in his ledger a significant number of transactions that were based on credit. There is other evidence too of Bristol merchants using credit.⁹² Similar arrangements may have been developed by Irish merchants, though there is little evidence of this. Indeed, foreign vessels coming to Ireland to trade were issued with letters of credit. In 1435 John Bergendorp was issued with a letter of credit by Lübeck town officials for his journey to Dublin.⁹³ The wine trade certainly lent itself to the credit agreements. Merchants, vintners, townspeople and nobles could participate in its trade. English vintners on occasion purchased wine direct from the growers on credit in Bordeaux.⁹⁴ Irish merchants probably did the same. Shipmasters gave loans to merchants (they were probably not on board) to be repaid out of profits on the safe arrival of the wine. They were normally repaid in various currencies.⁹⁵ There were no interest rates charged on these loans but shipmasters probably profited by inflating freight rates.⁹⁶ The use of foreign currency in the settling of a debt may have been a way around the lack of Irish coin. William Bargayn, a Breton merchant gave an undertaking to repay £50 by a bill written in his own hand to an Irish merchant Geoffrey Lynch once he had sold his goods

⁹¹ Carruthers, 'On Hoards of Coins in Ireland', 164.

⁹² J. Vanes, ed., *The Ledger of John Smythe, 1538-1550* (London, 1974), 19-20.

⁹³ G. MacNiocall, *Na Buirgéisí*, ii (Dublin, 1964), 506.

⁹⁴ M. Postan, *Medieval Trade and Finance* (Cambridge, 1973), 6.

⁹⁵ J. Bernard, 'The Maritime Intercourse Between Bordeaux and Ireland c.1450-c.1520', *Irish Economics & Social History*, vii (1980), 18-19.

⁹⁶ Bernard, 'The Maritime Intercourse Between Bordeaux and Ireland', 19.

in Portugal.⁹⁷ Handwritten notes recording debts were also found in bequests. In 1471 Richard Boys a merchant from Coventry was owed £17, recorded on a sheet of paper written in the hand of the debtor Nicholas Bourke of Dublin.⁹⁸ There were also other outstanding debts from other clients of Boys owed for cloth and money.

The second consequence resulting from Ireland's mints not producing coin was noted in Richard Boys' will which records the probable use of barter instead of money in the settlement of debt. Robert Goldsmith owed him 300 goat skins worth £3 15s probably signifying that Richard Boys expected the skins instead of the coin in the settlement of the debt.⁹⁹ Childs and O'Neill have examined how Gaelic Irish merchants transacted their trade in the west of Ireland. It appears that debts were settled with hides and not coin.¹⁰⁰

A damaging and negative consequent to an economy of not minting its own coin was counterfeiting. As discussed coinage known as O'Reilly's money caused good coin to be adulterated as well as causing the hoarding of good coin. In Gaelic Irish regions the ready availability of hides probably negated the need for a functioning coinage. However, if trading overseas, merchants could only transact trade with economies that required hides, or commodities abundant in Ireland such as herring, salmon and up to c.1450 grain.

Part II The Economics of Trade

Towns held yearly fairs and regular markets in late summer or in the autumn in both Ireland

⁹⁷ W. Childs & T. O'Neill, 'Overseas Trade', in A. Cosgrove, ed., *A New History of Ireland*, ii (Oxford, 1987), 520.

⁹⁸ H. Berry, ed., *Register of Wills and Inventories of the Diocese of Dublin in the time of Archbishop Tregury and Walton 1457-1483* (Dublin, 1898), 8-11.

⁹⁹ Berry, ed., *Register of Wills*, 9.

¹⁰⁰ Childs & O'Neill, 'Overseas Trade', 520.

and England.¹⁰¹ There was an increase of Irish towns in the thirteenth and fourteenth century granted the right to hold fairs.¹⁰² Irish and foreign merchants involved in overseas trade would almost certainly have purchased goods at these fairs.¹⁰³ Some indigenous merchants had the opportunity to procure commodities at local markets and fairs to transport overseas for profit. Those from the port towns could travel into the countryside gathering local products for export.¹⁰⁴ They probably had to have permission. For example, John Blake and Juliane French were invited by letter to bring their merchandise for sale in Roscommon.¹⁰⁵ Wealthy merchants could source commodities by using factors to buy in bulk, then to sell to less resourced mercantile clients.¹⁰⁶ In the sixteenth century foreign merchants travelled beyond port towns to trade.¹⁰⁷ Traders probably needed to complete other transactions before they had the wherewithal to repay a debt. Alternatively, Irish and non-Irish merchants could wait for produce to arrive in the port town; they then could purchase the commodities at fairs and markets and prepare them for export. Fairs were normally held twice yearly in the large port towns facing onto the Irish Sea both in England and Ireland. Since 1252, for example, Dublin had hosted one fair lasting fifteen days each year in July.¹⁰⁸ From 1222 a large fair lasting fifteen days was held in both Drogheda and Dundalk each year.¹⁰⁹ Youghal staged an annual fair from 28th September to 12th October and Dungarvan from 31st July to 7th August each year.¹¹⁰ The number of fairs grew significantly throughout Ireland in the thirteenth century. Grants were issued regularly in the first half of the thirteenth century, ten issued in

¹⁰¹ M. Murphy & M. Potterton, eds, *The Dublin Region in the Middle Ages* (Dublin, 2010), 470.

¹⁰² A. Otway-Ruthven, *A History of Medieval Ireland* (New York, 1968), 124.

¹⁰³ K. Down, 'Colonial Society & Economy', in A. Cosgrave, ed., *A New History of Ireland* (Oxford, 1987), ii, 483.

¹⁰⁴ K. Nicholls, 'Gaelic Society and Economy', in A. Cosgrave, ed., *A New History of Ireland* (Oxford, 1987), ii, 419.

¹⁰⁵ M. Blake, *Blake Family Records 1300 to 1600* (London, 1902), 38.

¹⁰⁶ TNA, E122/19/4, *passim*. There are thirty two examples of larger scale merchants such as Robert Baron, sourcing fish, linen etc in Ireland for their associates.

¹⁰⁷ Nicholls, 'Gaelic Society and Economy', 419; A. Longfield, *Anglo-Irish Trade in the Sixteenth Century* (London, 1929), 59-60.

¹⁰⁸ *CDI*, 1252-84, 349.

¹⁰⁹ A. Hogan, *The Priory of Llanthony Prima and Secunda In Ireland, 1172-1541* (Dublin, 2008), 114, 115.

¹¹⁰ A. O'Brien, 'Politics and Economy and Society', 93.

1226 rising to thirteen in 1252.¹¹¹ In England, the port of Bristol too held two large fairs each year, one in May/June (Pentecost) and the other in September.¹¹² It was probable that at a local level debts were paid off at specific times throughout the year.¹¹³

Once food commodities had been purchased, merchants faced other expenses before their goods were exported to foreign markets. The first arose from local taxes. Between 1358 and 1404 most of the major towns in Ireland obtained murage charters which entitled them to levy taxes for the upkeep of the town walls. In 1375 alone such privileges were issued to Youghal, Jerpoint, New Ross, Kilkenny, Thomastown, Killmallock and Fethard.¹¹⁴ The range of impositions was extensive, at, for example, Dublin a ¼ d was charged on each load of corn entering or leaving the city.¹¹⁵ Herring was taxed at ¼ d per mease/barrel whilst wine was levied at ¼ d per bottle. Grains, animals, meat, cloth, fish building materials and many other commodities were also taxed.¹¹⁶ The main ports in England transacting trade with Ireland (Chester, Bristol and Bridgewater) also levied local taxes on incoming and outgoing produce.¹¹⁷ However, local taxes were not levied at the same rate in each port. Chester imposed higher local duties than ports in Ireland or Bristol. In 1438/9 the local rate for a barrel of herring was the same in Bristol and Dublin at ¼d each. Two quarters (probably constituting a cart load) in Bristol of all types of corn, malt, salt and beans were taxed at ¼ d

¹¹¹ K. Holton, 'From charters to carters: aspects of fairs and markets in Medieval Leinster', in D. Cronin, J. Gilligan and K. Holton, eds, *Irish Fairs and Market, Studies in Local History* (Dublin, 2001), 20.

¹¹² F. Bickley ed., *The Little Red Book of Bristol*, (Bristol, 1900), i, 106, 238.

¹¹³ J. Davis, *Medieval Market Morality, Life, Law and Ethics in the English Marketplace, 1200-1500* (Cambridge, 2012), 205-207.

¹¹⁴ Chancery.tcd.ie/doc.13, patent roll 49 Edward III, *passim*. Example the Youghal charter for 1375 is on document 13 (2014).

¹¹⁵ Chancery.tcd.ie/doc.158, patent roll 32 Edward III (2014) (a grant made in Castledermot to the community of Dublin to levy tolls for fifteen years on goods entering or leaving the city). Most grants were for between five and twenty years. They were normally renewed. This charter was for an additional ten years after the 1343 charter expired.

¹¹⁶ Chancery.tcd.ie/doc.2/patent roll 19 Henry VI (date accessed 10/05/2012).

¹¹⁷ K. Wilson, ed., *Chester Customs Accounts 1301-1565* (Liverpool, 1969), 143-145; SRO (local customs accounts), *passim*; H. Bush, ed., *Bristol Town Duties. A collection of interesting documents intended to explain and elucidate the above subject* (Bristol, 1828), 17-25.

per load.¹¹⁸ Bridgewater was a small port and port charges were less than in Dublin and Bristol.¹¹⁹ Incoming ships paid 1d each for murage tax. In comparison, vessels that entered Bristol had to pay 6d.¹²⁰ High local taxes could possibly deter merchants from freighting their goods to a port with high local taxes even if demand was high for the commodities on board their vessels.

Expenses incurred by merchants for freighting wine and other commodities inland were high. If moving goods by land, horses were probably required. The English parliament tried to fix carriage prices at ½d for every twenty-five miles travelled overland in 1330. This was increased in 1354 to ½d per thirty miles before it was reduced in 1380 to ½d for fifty miles.¹²¹ River transport by boat was, however, probably the preferred way to travel inland over long distances. Small vessels, such as half deckers and quarter-deckers, transported merchandise at a cost up and down for example the Barrow, Nore and Suir. Port charges included two barge stones which were carried on board and used to pay a fee to enter port.¹²² Efforts were made in Dublin and Waterford from the beginning of the fourteenth century to keep freight prices fixed. Wine, for instance, at the beginning of the fourteenth century delivered to a house outside the walls of Dublin cost a merchant 3d per ton. It cost the same to transport a wey of salmon from the quayside of Dublin to the Dublin market.¹²³ Legislation to halt the practice of selling goods from ships instead of at the market were a mechanism to make sure port fees and transport were paid.¹²⁴

¹¹⁸ Bush, *Bristol Town Duties*, 35-6.

¹¹⁹ SRO, 1435, fo. 6.

¹²⁰ Bush, *Bristol Town Duties*, 35.

¹²¹ G. MacNiocaill, *Na Buirgéisí XII-XV* (Dublin, 1964), 380; CCR, 1330-33, 410; CCR, 1354-60, III; E. Veale ed., *Studies in the Medieval Wine Trade Margery James* (Oxford, 1971), 147.

¹²² Byrne, ed., *The Great Parchment Book of Waterford*, p. xxiii.

¹²³ MacNiocaill, *Na Buirgéisí*, ii, 380.

¹²⁴ CARD, i, 24.

Further costs were incurred by merchants involved in foreign trade. These were applicable at the quayside of both the ports of arrival and departure. Pilots were normally required on sea routes and at the head of rivers and more especially in seaports to navigate vessels successfully into and out of ports.¹²⁵ In 1394/5 a shipmaster agreed to pay pilotage from Milford Haven to Beaumaris or from Dalkey to Chester.¹²⁶ In one instance John Smythe, a wealthy merchant from Bristol, paid 15d per ton for the successful docking of one of his ships.¹²⁷ Vessels entering Irish ports also required local pilots at extra expense to navigate difficult harbours. Dublin ships arriving in Dublin or Drogheda were in need of pilots to safely berth their vessels in the smaller havens. The burgesses of Dublin and Drogheda sought relief from penalties for ships not delivering goods to the staple (vessels had to offload goods at out ports because of silt in the main port, these out ports were not considered part of the staple). In Drogheda's case the port was on the marches of the king's enemies, so instead merchants sought to offload goods at Lambay, Howth or Dalkey. They then had to locate a pilot to bring the ships into town at their own risk.¹²⁸

Once anchored, shipmasters probably hoped to load or unload their cargo swiftly.¹²⁹ By the fifteenth century cranes were used in many ports to discharge large cargoes. Merchants had to pay for each portage by the lifting device. Cranage (probably by block and tackle) was noted at Dublin in 1369/70 and subsequently sophisticated cranes were put into use.¹³⁰ In 1450 John Rodwell, a Dublin merchant, was appointed keeper of the crane.¹³¹ In August

¹²⁵ J. Vanes, ed., *The Port of Bristol in the sixteenth Century* (Bristol, 1977), 2, 3; W. Childs & T. O'Neill 'Overseas Trade', in A. Cosgrave, *A New History of Ireland 1169-1534* ii (Oxford, 1987), 521.

¹²⁶ C. Smith, *Dalkey: Society and Economy in a small Medieval Irish Town* (Dublin, 1996), 47.

¹²⁷ Vanes, ed., *The Ledger of John Smythe*, 106.

¹²⁸ *CPR*, 1358-1361, 114.

¹²⁹ Vanes, ed., *The Ledger of John Smythe*, passim. Costs were high for storing cargoes in ports. Insurance and expenses were also significant.

¹³⁰ *CARD*, i, 238.

¹³¹ *CARD*, i, 274.

1482 the crane was situated beside Robert West's house on Dublin quay.¹³² A new crane, constructed in 1489, was attached to a series of counter balance lead weights ranging from 20 stones to ½ stone to weigh heavier goods such as barrels of fish and wine.¹³³ Elsewhere too, cranes were used. John Smythe noted in his register three occasions on which he had utilised a crane in Bristol in 1539/40.¹³⁴ Indeed, there were a number of cranes on the quayside of Bristol by the middle of the sixteenth century.¹³⁵ Bridgewater, a smaller port than either Dublin or Bristol, had a crane on its quayside by the 1540s and probably earlier.¹³⁶ Southampton too, at least from 1429/30, had a crane to unload large cargoes, but it is possible that some large ports such as Chester had no crane.¹³⁷

By the sixteenth century there were many other financial charges placed on merchants in ports. The local Bristol customs account for 1437/8 noted levies of custom, keelage (for keeping harbours accessible) and quayage (the maintenance of quay walls).¹³⁸ Merchants were paying for quayage in Bridgewater too: shipmasters of three Irish picards paid 12d for the use of the quay.¹³⁹ Plankage (probably for the repair of the quay walkways) was a further tax raised in some places.¹⁴⁰ Certain commodities, such as wine, incurred extra financial exactions. A wine drawer (wnyng) gauged a ship's wine at Bridgewater: for example, the *Bryan* of Waterford, with twenty tons of wine, was gauged at Bridgewater in 1537/8. The ship's cargo incurred further costs for storage of wine in cellars, and for the quantification of the cargo (mesurage) culminating in a total cost to the merchants in this example of 6s

¹³² C. Lennon, J. Murray, eds, *The Dublin City Franchise Roll, 1468-1512* (Dublin, 1998), 54.

¹³³ *CARD*, i, 238.

¹³⁴ Vanes, ed., *The Ledger of John Smythe*, 41, 44, 167.

¹³⁵ Vanes, ed., *The port of Bristol in the sixteenth century*, 5.

¹³⁶ SRO, W 1436, fo. 6 v.

¹³⁷ Wilson, ed., *Chester Customs Accounts, passim*; P. Struder, ed., *The Port Books of Southampton 1427-1430* (Southampton, 1913), 4, 6, 8.

¹³⁸ Bush, *Bristol Town Duties*, 49.

¹³⁹ SRO, W 1441, fo. 14 v.

¹⁴⁰ *CARD*, i, 364.

10d.¹⁴¹ Loose cargoes such as beans were also subjected to a measuring tax. Beans and grain were probably weighted (or measured) when unloaded from horse driven carts of a uniform capacity in quarters.¹⁴² At Bridgewater, for example, Thomas Duggan paid 7d to have seven weys of beans measured in 1503/4. Likewise an unnamed merchant paid 4d, as did a man from Cork in 1539, for the quantifying of beans in the same town.¹⁴³ The extra charges imposed by the water bailiffs in Bridgewater were almost certainly replicated at other ports in the lordship of Ireland and in English ports. Short term local impositions could also have impact on the profits of merchants. For example, in 1483 Dublin imposed a local tax of 2d on all ships and boats arriving at the harbour for docking and plankage.¹⁴⁴

Merchants ideally required a speedy transaction in foreign ports. Both Bristol and Gascon merchants used contacts with Irish families. By the fifteenth century Gascon merchants had established trading links with Irish families including the Donells, Tobins, White and Lynches and merchants of the southern and western ports of Ireland. (Table W.2). Further north in Tir Chonail trading liaisons had been in place with Bristol and Brittany. In 1436 Bristol merchants were purchasing salmon from O'Domhnaill Lord of Assaroe.¹⁴⁵ Moreover, Bristol merchants in the fifteenth century would spend months at a time with the O'Domhnail clan at the port of Assoroe not only trading for salmon but other goods also.¹⁴⁶ The ports of delivery and the cargoes were normally set out in charter party documents such as (the Bordeaux

¹⁴¹ SRO, W 1451, fo. 5, 7, 8v. R. Latham, *Revised Medieval Latin Word List* (London, 1965), 523, 78, Latham describes Wynyng as Wnydrawerius, wine drawer the word Syllerys is noted as either butler (wine tax official) or cellar (storage unit). Measurage is noted as measuring wine in this dissertation.

¹⁴² B. Campbell, J. Galloway, D. Keene and Margaret Murphy, eds, *A Medieval Capital and its Grain Supply: Agrarian production and Distribution in the London Region c.1300* (London, 1993), 193-194.

¹⁴³ SRO, D/B/BW 1429, fo. 7, 1437, fo. 9, 1440 fo. 11.

¹⁴⁴ *CARD*, i, 364.

¹⁴⁵ W. Childs & T. O'Neill, 'Overseas Trade', in A. Cosgrove, ed., *A New History of Ireland: Medieval Ireland 1169 – 1534* (Oxford, 1987), ii, 505.

¹⁴⁶ D. MacEiteagáin, 'The Renaissance and the late medieval lordship of Tirchonail 1461-1555', in W. Nolan, Liam Ronayne, M Dunlevy, eds, *Donegal History Society* (Dublin, 1995), 206-7.

notarial records) including on occasion freight charges.¹⁴⁷

The hire of ships could be expensive. In 1358/9 William Passelewe, master of the *Jerusalem*, hired a ship in Dublin for £21, the hire of the ship included the wages of seven crew.¹⁴⁸ It was a longer voyage to travel from Ireland to Sandwich compared to the distance from ports in Ireland to either Bristol or Bridgewater, so a hire cost to the ports on the west coast of England of possibly half of the £21 would be more accurate. This figure possibly only applied to large craft above 100 tons, because the higher the capacity of a ship the more expensive were the freight charges. Smaller craft such as those freighting goods to the value of under £10 possibly only charged a fraction of that amount.

In favourable conditions a vessel could hope to progress at fifteen kilometres per hour although in rough seas progress could slow to five kilometres per hour.¹⁴⁹ At the faster speed most ports in England were within a day and a night's sailing from ports on the south and east coast of Ireland. At the slower rate of progress, the journey time and, in turn, expenses could increase significantly. The further a ship travelled from its home port, the more expensive the freight charges. There is little evidence regarding the freight rates for ships sailing between England and Ireland. Some merchants engaged factors to transact their trade in distant ports.¹⁵⁰ These journeys were normally short, and would have cost significantly less than trading outside the Irish Sea, though delays caused by inclement seas could increase charges. An example, in 1330-1 Emery de Godore purveyor of victuals for the king paid £148 for thirty seven casks of wine to be transported from Waterford (Ross) to Skinburness (outport

¹⁴⁷ Bernard, *Navaires*, iii, *passim*.

¹⁴⁸ P. Connolly, ed., *Irish Exchequer Payments 1270-1446* (Dublin, 1998), 487, 495.

¹⁴⁹ D. Ditchburn, 'Maritime Ports & Transport c.1200-c.1560', *Scottish Life and Society*, xxiii (2010), 39.

¹⁵⁰ M. Lyons, 'Maritime relations between Ireland & France 1480-c.1630', *Irish Economic and Social History*, xxvii (2000), 17.

for Carlisle) at a freight cost of £14 16s.¹⁵¹ Freight rates also increased significantly from the end of the thirteenth century, when transport of Gascon wine to Ireland normally cost 8s per mease/barrel.¹⁵² By 1393/4 the *James* of Dartmouth freighted wine from Bordeaux to Dalkey at 14s 6d per tun, and another part of the cargo was transported at a rate of 22s per tun to Drogheda.¹⁵³ A year later the *Trinity* of Ottermouth carried Gascon wine to Drogheda at a rate of 16s per tun.¹⁵⁴ Ships freighting cargo from Gascony to southern Irish ports charged slightly reduced freight rates, the same shipment of wine delivered to Waterford was charged at 14s per tun. Changes in freight charges in the 1390s reflected the safety of the cargo travelling through the Irish Sea. For example subsequent to the Anglo-French peace treaty sealed in 1376 freight charges reduced.¹⁵⁵ It was behoven on merchants to factor in a broad band of rates in relation to hazards experienced at sea such as piracy and adverse climatic conditions.

By 1449 freight charges from Bordeaux to the Dublin region had increased. The owners of the *Bartholomew* of Bristol charged its merchants 21s per tun to deliver wine from Bordeaux to Dublin, Malahide and Drogheda.¹⁵⁶ There was at times insecurity for vessels off the coast of France at Bordeaux. Trade was hazardous from this region as the English were besieged at Bayonne and Landes in 1450.¹⁵⁷ Freight rates were, therefore, higher compared to transporting merchandise in times of peace. In contrast, four years later in 1453, a large consignment of salt from Lisbon, much further south than Bordeaux, to Sligo and Galway

¹⁵¹ P. Hore, 'Extracts from the Great Roll of the Irish Exchequer relating to Waterford and Ross A.D. 1273 to 1483', *Cork Historical Society*, xxiv (1918), 22.

¹⁵² M. Poston, *Medieval Trade and Finance* (Cambridge, 1973), 123.

¹⁵³ Veale, ed., *Medieval Wine Trade*, 152.

¹⁵⁴ Veale, ed., *Medieval Wine Trade*, 152.

¹⁵⁵ Veale, ed., *Medieval Wine Trade*, 145.

¹⁵⁶ E. Carus-Wilson, *The Overseas Trade of Bristol in the later Middle Ages* (London, 1967), 111-2; O'Neil, *Merchants and Mariners*, 37, incorrectly states 1499 as the year when the *Bartolmew* sailed to Ireland.

¹⁵⁷ S. Rose, *The Wine Trade in Medieval Europe 1000-1500* (London, 2011), 71.

was charged at a lower rate per mile.¹⁵⁸ The *Julian* of Bristol had freighted salt at 21s per tun. This was a shilling cheaper per tun over a much greater distance than Bordeaux to any port in Ireland.

Despite the challenges faced by ships at sea, insurance was probably rarely initiated for short voyages. Italian merchants from as early as the thirteenth century had used a 'sea loan', as part of a contract which provided the starting point for insurance.¹⁵⁹ On longer voyages, however, as in 1490, a marine insurance agreement was sealed between merchants and the owner of a Spanish vessel chartered in La Rochelle bound for Galway and Limerick.¹⁶⁰ It was possible that safe conducts and licences though expensive to purchase were used as a form of insurance. For example, Mamoyne de Manos, master of the *Trinity* of Bayonne, in 1450, paid 23s 4d for a licence in Ireland to transport forty-two quarters of wheat back to Bayonne.¹⁶¹

The Valuation Of Commodities

Values given to victuals were broadly similar in the tonnage and poundage customs accounts for the ports on the west coast of England from c.1390 to c.1520.¹⁶² There were, however, some exceptions. White herring landed at Bristol was normally valued at 5s per barrel.¹⁶³ At Poole, on the other hand, it was valued at 6s 8d per barrel in 1503/4 and 1505/6.¹⁶⁴ Customs values had, however, not increased in all ports because Bristol records in 1503/4 noted white herring still at its fifteenth-century value of 5s per barrel.¹⁶⁵ The customs rate for red herring

¹⁵⁸ Carus-Wilson, *Overseas Trade Of Bristol*, 106-108.

¹⁵⁹ Postan, *Medieval Trade and Finance*, 338.

¹⁶⁰ Bernard, 'The Maritime Intercourse', 19.

¹⁶¹ Chancery.tcd.ie/doc. 24, patent roll 29 Henry VI (09/11/2014).

¹⁶² TNA, E122 (Kings Remembrancer, customs accounts for the ports on the west coast of England), *passim*.

¹⁶³ TNA, E122/17/8, *passim*.

¹⁶⁴ TNA, E122/120/10, fo. 3, fo.10v; TNA, E122/120/11, fo. 5, fo. 8.

¹⁶⁵ E. Jones & S. Flavin, eds, *Bristol's Trade with Ireland and the Continent 1503-1601* (Dublin, 2009), 30.

was even more varied from port to port. Two mease (barrels) of red herring arrived in Bristol on the *Gracedieu* of Waterford on 30th November 1403, valued at 3s 4d each.¹⁶⁶ The same commodity was, however, valued differently on at least three separate occasions in the Bristol account of 1485/6. On the *Katherine* of Dublin it was recorded at 8s 4d per mease but on the *Christopher* from Cork it was assessed at 6s 8d per mease, and at 5s each on The *Mary* which left Bristol for Bordeaux.¹⁶⁷ Valuations for customs purposes were important because the higher the valuations placed on commodities by customisers, the more *ad valorem* tax the merchant had to pay.

In 1344 white herring sold in the Dublin market cost consumers 16d per 200 fish. This equated to 6s 8d per barrel.¹⁶⁸ In 1539 Richard Smythe paid a debt owing on a levy at 10s per barrel.¹⁶⁹ By 1551 there had been a significant increase in the price of herring. The same 16d would only purchase 24 herring.¹⁷⁰ However, in 1568 white herring was valued at 16d per 64 herring.¹⁷¹ The price of white herring appears to have increased in the sixteenth century. These prices were not reflected in England, where herring in the marketplace was fetching prices of between 9s and 12s per barrel between 1401 and 1530.¹⁷² But after 1550 prices in England also increased significantly to between 20s and 24s per barrel.¹⁷³ The price of red herring also rose dramatically. In 1298 red herring could be purchased at twenty fish to the penny in London.¹⁷⁴ This was a similar price to that achieved in Ireland in 1258.¹⁷⁵ In 1357 red herring was not to be sold in Yarmouth for more than 40s per cask (15½ red herring for

¹⁶⁶ TNA, E122/17/8, m. 8.

¹⁶⁷ TNA, E122/20/5 fo. 9v, fo. 12, fo. 31v.

¹⁶⁸ Mills, ed., *Account Roll*, 74. The number of fish may have been 240 if it was measured by the long hundred.

¹⁶⁹ Vanes, ed., *The Ledger of John Smythe*, 31.

¹⁷⁰ A. Green, *The making of Ireland and its undoing* (Dublin, 1920), 157.

¹⁷¹ J. Brewer, & W. Bullen, eds., *Calendar of Carew Papers 1515 – 1574*, i (London, 1867), 382.

¹⁷² J. Rogers, *A History of Agriculture and prices in England from the year after the Oxford Parliament (1259) to the commencement of the Continental War (1793)*, iv (Cambridge, 1872), 545.

¹⁷³ Rogers, *History of Agriculture*, iv, 545.

¹⁷⁴ Cutting, *Fish Saving*, 39.

¹⁷⁵ Chancery.tcd.ie/doc. 4 (22/05/2014).

1d). Whilst red herring was sold at between 5s and 7s per cask (barrel) in England, it must be remembered that there were only 620 fish in a barrel of red herring compared to 1,000 in the white herring cask. There may have been little incentive for merchants to sell red herring in England because of the extra poundage tax paid per mease for red herring compared to the relatively smaller tax levied for white herring. At the upper price range merchants could double their profits whilst taking advantage of the lower tax paid with the use of consistent customs values over the fifteenth and early sixteenth centuries. Higher prices for herring in England allied to a static customs tax in general for white herring must have encouraged merchants to further profit from fisheries around Ireland.

In the earlier years of the fifteenth century most saltfish was valued at 1½ d per fish, as on occasion was cod.¹⁷⁶ After 1450 saltfish, including cod and ling, were valued at 2d per fish in the customs accounts. In the latter part of the fifteenth and early part of the sixteenth century the true value of saltfish in England was between 1d and 5d per fish.¹⁷⁷ We do not know the full costs of saltfish production and neither do we have freight costs for this type of fish but it is possible that these unavoidable costs left saltfish exports unprofitable at the lower price levels.

As already stated, salted salmon exported from Ireland was highly prized on the west coast of England. In 1437/8 over 1,500 salmon were exported from Ireland to the inner port of Bristol.¹⁷⁸ Irish salmon competed with salmon from the Severn which Rogers claimed commanded the highest price in England.¹⁷⁹ It is possible that some of these salmon originated in Ireland. If salmon was readily available in the Severn why did large quantities

¹⁷⁶ TNA, E122/17/8, m. 1 The *Mary* of Kinsale arrived in Bristol on 24th November 1403, with a cargo of 360 cod valued at 45s, which equates to 1½d each.

¹⁷⁷ Rogers, *History of Agriculture*, iii, 310-334.

¹⁷⁸ Bush, *Bristol Town Duties*, 17-25.

¹⁷⁹ Rogers, *History of Agriculture*, iv, 529.

arrive to the Bristol Channel each year? Salted salmon sold in Cambridge in 1427 and in 1437 for 1s and 1s 8d respectively.¹⁸⁰ This replicated prices at places where Irish salmon was consumed. These sale prices made for a healthy profit above the customs valuation of the individual salmon at 7½d each.¹⁸¹ Certainly, retail prices achieved in England for salmon were reasonably consistent from c. 1400 to c. 1540, fluctuating between 22s and 34s per pipe. This correlates with a customs valuation of 30s for the same quantity. After the reformation the price of fish rose dramatically. Supplies of herring and salmon were probably over fished even though the Reformation had little effect on fish consumption. Another factor for salmon supplies was England's wars with France and Scotland, which probably disrupted the supply lines for salmon. Prices in England of both salmon and white herring doubled from 1540 to 1582.

As stated in chapter two, cereals, grains and beans were produced in great quantities in the Pale up to the second quarter of the fifteenth century (Ref Table G.2).¹⁸² There was a significant decline in the export of wheat and other grains after 1425 and by 1450 Ireland was exporting virtually no grain. The price of wheat and other grains may provide an explanation for this development. In 1344 wheat was sold by the Priory of Holy Trinity in Dublin at 2s 11d per crannock.¹⁸³ This valuation was similar to that of other grains including malt and beans which were accounted for in the English customs accounts at 2s 4d per quarter (almost the same measure as the crannock) up to the second decade of the sixteenth century.¹⁸⁴ After the Black Death in 1348/9 there were great shortages of grain in Ireland and, therefore, prices

¹⁸⁰ Rogers, *History of Agriculture*, iii, 312-3.

¹⁸¹ TNA, E122 (customs accounts for Bristol, Bridgewater), *passim*.

¹⁸² Reference Table G.2 on page 111. The licences and commissions in this table show large quantities of wheat and other grains being exported from Ireland up to 1425.

¹⁸³ Mills, ed., *Account Roll*, 56.

¹⁸⁴ TNA, E122 (customs accounts for Bristol and Bridgewater), *passim*.

rose.¹⁸⁵ There were also years when natural disasters caused grain crops to fail further inflating grain prices. In 1346 wheat prices rose to 12s per crannock in Kilkenny.¹⁸⁶ When wheat prices were high in Ireland it made its export uneconomical for two reasons. Firstly, wheat prices never rose above 10s per quarter in England in 1346/7.¹⁸⁷ If Irish prices were higher why then did English prices not follow suit? It was licences, transport costs, and port fees that drove up the costs for merchants. Secondly, the shortage of grain in England necessitated its importation. It was probable that even with high wheat and grain prices in Ireland from c.1349 to c.1420 in general the cost of grain in Ireland was probably lower in comparison to prices in England. Whatever the price differentials, grain supplies in Ireland probably had to feed a proportionally lower population than that of England. There were certainly surpluses of grain produced in Ireland judging by the significant quantities exported before 1420. (Table 2j).

Wheat and grains were a necessary source of carbohydrate source in medieval Ireland. However, they were expensive to cultivate and wheat especially was sensitive to fluctuations in the climate. Some demesne lands owned by secular landlords were leased to tenants.¹⁸⁸ The rental rate for land depended on its fertility in the fourteenth century. For example, land prices in County Meath ranged from 10d to 16d per acre.¹⁸⁹ Tenants in the sixteenth century rented land in the Wexford region for between c. 4d and 12d per acre.¹⁹⁰ The seed corn required for an acre was approximately a quarter of the previous year's harvest. Moreover, equipment and labour inputs were a necessary expense to plant the seed corn in order to

¹⁸⁵ Williams, ed., *The Annals of Friar John Clyn*, 252. There was a shortage of corn in Kilkenny probably from the lack of labour inputs. The high mortality rates sweeping inland caused by the Black Death was a contributory factor to lack of labour to work the land.

¹⁸⁶ Williams, *The Annals of Ireland*, 238.

¹⁸⁷ Rogers, *History of Agriculture*, ii, 120-121.

¹⁸⁸ Down, 'Colonial Society and Economy', 468.

¹⁸⁹ J. Mills & M. McHenry, eds, *Calendar of the Gormanstown Register* (Dublin, 1916) 4,5.

¹⁹⁰ P. Hore, *History of the Town and County of Wexford* (London, 1904), 360, 421.

produce a good crop. The threshing of a crannock of wheat cost approximately 2½d.¹⁹¹ Weeding of wheat cost approximately 1d per acre. A good horse to pull a plough could cost as much as 10s, depending on the quality of the beast. Plough beasts were a cheaper option. Evidence of their use may be seen in the Bristol customs accounts. On 13th November 1403 the *Trinity* of Cork arrived at Bristol with two plough beasts valued at 2s 4d each.¹⁹² Maintenance of farm animals was also expensive with horseshoes costing 1d each.¹⁹³ Plough manufacture was a further ongoing expense. In 1344 the timber to manufacture one plough cost 3d, the handle cost ¼d, the iron used to strengthen the plough was 10d per plough while the smith received 6d for each plough iron.¹⁹⁴ Two men were required to operate each plough, their wages, fodder costs, which included wheat and meat, had to be added to the costs of each acre harvested. Moreover, at harvest time carts were required to transport grain either to the barn or market. It perhaps cost 4s to manufacture a cart in order to transport grain to a mill and the surplus to the marketplace.¹⁹⁵ The mill cost from 10s to 40s per year depending on its size.¹⁹⁶ Extra labour was usually required at harvest time. Grain production and the cost of processing of other food related victuals were not the only expense; producers had to pay tithes to the local church. Furthermore, grain was taxed in towns and ports around Ireland.

The crown treated grain differently to other food commodities exported from Ireland. Wheat was regulated by controls on price and export. In 1413, 1423 and 1424, for example, ships

¹⁹¹ Murphy & Potterton, eds, *The Dublin Region in the Middle Ages*, 323.

¹⁹² Mills & McHenry, *Gormanstown Register*, 10; TNA. E122/17/8, m 1. Plough beasts are noted in the account as 'bestys carn' with a loop in the N. Latham's Latin dictionary translated *bestila carnacataria* as 'plough beasts'. On 13th November 1403 the *Trinity* of Cork arrived at Bristol with two plough beasts at 2s 4d.

¹⁹³ R. Refaussé, M. McHenry, eds, *A History of Christchurch Dublin, Christchurch Deeds* (Dublin, 2001), 80.

¹⁹⁴ Mills, ed., *Account Roll*, 57-58.

¹⁹⁵ Mills, ed., *Account Roll*, 59.

¹⁹⁶ Hogan, *The Priory of Llanthony Prima and Secunda in Ireland 1172-1541* (Dublin, 2005), 685; Mills & McHenry, *Gormanstown Register*, 5.

were to be arrested if shipmasters took cargoes of grain out of Ireland unlicensed.¹⁹⁷ Licences were expensive (Table 2j); William Spicer and Richard paid 16s in October 1405 to transport 24 quarters of wheat and the same quantity of oats to Caernarvan in Wales. In the same month John Aylmer and John Pentestown of Bristol paid 40s for a licence to ship 144 quarters of wheat to Bordeaux.¹⁹⁸ Both licences were levied on the various grains at between 3d and 4d per quarter. The price of wheat in England between 1352 and 1353 was between 7s and 14s per quarter, which possibly created an opportunity for both Irish and English merchants to profit from cheaper Irish grain surpluses.¹⁹⁹ The cost of the licences only added two to four per cent to the price of a quarter of wheat. Another licence was issued to the mayor of Dublin in 1352 in response to the plight of the impoverished people of the city. The city dwellers wished to sell surplus wheat sourced from Ireland for export to England. They purchased 1,000 quarters of grain in Ireland to transport to England for profit.²⁰⁰ Irish wheat was much in demand in 1352 when ten licences were issued to Irish/English merchants to transport wheat, oats and corn to England, Wales and Bordeaux (Table 2j). In 1452 no haggardmen were to sell corn to strangers outside the city, once the price of wheat reached 8d per peck. Citizens who did or who regrated the commodity could potentially lose their franchise.²⁰¹ Furthermore, an upper limit was put on Dublin grain prices in 1457, 1461, 1465, 1469 and again in 1471.²⁰² Wheat prices in Ireland were not allowed to rise above 12s 8d per quarter. It was difficult to cap prices when demand for wheat was high. The price of grain had risen consistently from the middle of the fifteenth century. Wheat prices were more than double what William Topper Cellarer of the Holy Trinity Dublin had paid for wheat in 1368.²⁰³

¹⁹⁷ Chancery.tcd.ie/docs. 9, patent roll Henry IV 28, 29 (22/05/2014).

¹⁹⁸ Chancery.tcd.ie/docs. 32, 31, patent roll Henry IV (22/05/2014).

¹⁹⁹ Rogers, *History of Agriculture*, 128, 129.

²⁰⁰ *CPR*, 1350-54, 258.

²⁰¹ *CARD*, i, 275, 278.

²⁰² D. Harkness & M. O'Dowd, eds, *The Town in Ireland* (Dublin, 1981), 19, 20.

²⁰³ Mills, ed., *Account Roll*, 202.

Price inflation caused by the general decline in arable acreage was reflected in the marked decline in permits and licences issued to export grain from Ireland after 1420. (Table 14). Population decline after the Black Death (caused by both death and migration) resulted in less but more expensive labour; this and climate change had forced landowners to move away from arable farming to animal husbandry of livestock such as cattle and sheep, especially in the south midland regions bordering the Gaelic Irish. Perhaps one reason why the populace in the ports on the southeast coast of Ireland were consuming so many imported beans in the fifteenth and sixteenth century because of diminished arable cultivation in the south east of Ireland.²⁰⁴

Towards the end of the fifteenth century a new form of wealth was created in the Irish economy. The increased use of land for pastoral use probably encouraged more sheep farming. Sheepskin exports were worth c.£70 in 1479/80. These increased to c.£118 in 1492/3. Moreover, lambskins were available for export as a result of higher birth rates (sheep-grazing areas were now larger, consequently sheep production increased) rising from c.£2 in 1479/80 to £20 in 1485/6, then to £27 in 1486/7 increasing to £46 in 1492/3. In 1525/6 Ireland exported lamb and sheepskins to the value of c.£100 to Bristol.²⁰⁵ The rising exports of sheepskin and lambskin from Ireland to Bristol in the late fifteenth and early sixteenth centuries, suggests that land formerly used as arable was now used for sheep farming.²⁰⁶ The increased use of Irish lands for animal husbandry also led to a growth in cattle farming. Hides and skins were probably exported in large quantities on some Irish but mainly on foreign vessels to Flanders and elsewhere.²⁰⁷ Between 1466 and 1483 over 83,000

²⁰⁴ TNA (customs accounts for Bridgewater), *passim*.

²⁰⁵ W. Childs, 'Ireland's Trade with England in the later Middle Ages', *Irish Economic & Social History*, ix (1982), 19.

²⁰⁶ W. Childs, 'Ireland's Trade with England', 19; S. Flavin & E. Jones, *Bristol's Trade with Ireland and the Continent 1503-1601* (Dublin, 2009), 1-102.

²⁰⁷ Childs & O'Neill, 'Overseas Trade', 501.

hides/leather were reportedly exported from Ireland to Pisa though whether directly so, or via another port is not clear.²⁰⁸ Irish skins were also exported to Bruges in 1499/1500, transport of skins and hides was probably ongoing since the fourteenth century.²⁰⁹

It is difficult to determine the monetary value of wine from the customs documents, as prices for wine were almost always omitted from both the Bristol and Bordeaux customs accounts.²¹⁰ Wine was, however, subject to a customs levy which was calculated in a different manner from the levies imposed on other commodities. The customs on wine were similar in England and Ireland. Letters patent were issued in England in 1355 and 1372 confirming the type of prisage to be levied on wine.²¹¹ In Ireland the grant of the prisage of wine was issued to James, earl of Ormond, before 1350 and this was reaffirmed in 1371.²¹² Tax on wine was calculated at 1 tun from a cargo of 20 tuns or less, while a cargo of over 20 tuns had a prisage of two tuns.²¹³ In 1420 a monetary value for customs was issued to James White, a collector of customs in Dublin, who was asked to collect 20s on each tun of prisable wine.²¹⁴ In one instance a value was placed on wine noted in the Bristol customs accounts: Maurice Donell on the *Mary* of Berkeley arrived from Ireland on 4th April 1504 with two tuns of wine valued for customs purposes at £4 per tun.²¹⁵ In 1340 wine was purchased by the priory of the Holy Trinity in Dublin for the equivalent of *c.* £4 per tun.²¹⁶ When wine prices reached 8d per gallon in 1382 legislation was passed locally in Drogheda that wine prices

²⁰⁸ M. Mallet, 'Anglo-Florentine Commercial Relations, 1465-1491', *The Economic History Review*, xv (1962), 265.

²⁰⁹ L. Gilliodts- van Severen, ed., *Archives de la ville de Bruges* (Bruges, 1883-1885), vi, 420.

²¹⁰ TNA, E122 (customs accounts for Bristol), *passim*; TNA, E101 (customs accounts for Bordeaux), *passim*.

²¹¹ *CPR*, 1354-1360, 368.

²¹² [Chancery.tcd.ie/doc. 8](http://Chancery.tcd.ie/doc.8) (22/05/2014).

²¹³ [Chancery.tcd.ie/doc. 64](http://Chancery.tcd.ie/doc.64) (22/05/2014).

²¹⁴ [Chancery.tcd.ie/doc. 1](http://Chancery.tcd.ie/doc.1) (22/05/2014).

²¹⁵ Flavin & Jones, eds, *Bristol's Trade*, 60.

²¹⁶ Mills, *Account Roll*, 109, 112.

were not to exceed 8d per gallon.²¹⁷ Nevertheless, on some occasions in Ireland wine reached a wholesale price of 10d per gallon.²¹⁸ Meanwhile, the retail price of wine appears to have been the same as the value given wine in the customs documents. For example, in 1447/8 a tun of wine was sold for 100s per tun in Oxford, almost the same retail price for wine in Cambridge in the same year.²¹⁹ Once the wholesale price rose, the retail price followed. There was, however, a large difference between the lowest and highest price of wine in England, ranging from 4d in 1424/5 to 12d per gallon in Oxford in 1484 and 1486; and 13d in 1492.²²⁰ The volatility of prices may have been reflected in Ireland, especially in the second half of the fifteenth century, which made the customs valuation of wine a more equitable method of taxation to tax by quantity and not by value.²²¹ In some years merchants possibly lost money on their wine shipments. Depending on the price in the marketplace 20s per tun was approximately 15-20% of the resale value of wine.

Meat, such as bacon and beef, salted fish (both consumed in Ireland and exported), hides and fells, all required salt for its preservation. Huge salt supplies of up 10,000 tons were probably required in Ireland each year. At least 500 large vessels would have been required to transport salt of this magnitude to Ireland. Some salt requirement was almost certainly panned for in coastal regions, as outlined in chapter five. The lordship would not have had, however, the resources required to spend c.£10,000 importing salt per year or in the quality of ships of that capacity. The customs accounts for Bristol had placed a valuation on salt at 16s 8d per ton. Continental salt also arrived in Ireland from regions in France and Iberia.

Ireland's salt requirements were not just for fish.²²² However the many different weights used

²¹⁷ G. MacNiocaill, *Na Buirgéisí*, (Dublin, 1964), ii, 368-9, fn. 17.

²¹⁸ T. O'Neill, *Merchants and Mariners* (Dublin, 1987), 55.

²¹⁹ Veale, ed., *Medieval Wine Trade*, 60-63.

²²⁰ Veale, ed., *Medieval Wine Trade*, 60-69.

²²¹ TNA, (E122 customs accounts), *passim*.

²²² Bridbury, *England and the Salt Trade*, 3, 160.

by the customers at Bristol complicate matters for the researcher.²²³ Ports in England used different types of measurements to quantify salt in comparison to measurements in Ireland. It must have been difficult for customs officers to levy the correct taxes for each measurement recorded in the customs accounts. For instance, the *Michael* departed Bristol for Ireland in 1486 with a ½ wey of salt valued at 10s.²²⁴ The *Mary* of Bristol departed for Ireland on 26th February 1504 with a hogshead of salt valued at 4s 2d, while on the same vessel salt was valued by the pipe at 8s 4d.²²⁵ The measurement used for salt in some Irish sources is the crannock.²²⁶ It would appear that salt was, on most occasions undervalued in the customs documents compared to market prices. In 1316 during the Great Famine (1315-18) salt was valued in Kilkenny at £10 per ton, while in 1322 its cost in the same region had reduced to £5 per ton.²²⁷ Salt prices had reduced further in 1380, to £2 per ton in Ireland.²²⁸ By 1429 prices resembled more closely the customs valuation with a ton of salt in Waterford valued at 20s.²²⁹

Irish merchants and processors in the Middle Ages appeared to have had available domestically or had access from abroad the food preservatives necessary to add value to Irish exports. Salt and old wine was available domestically and from England. Irish merchants were able to use the revenues from fish and hides to import wine and iron. The availability of fish and grain and the raw material necessary to preserve fish and meant the Irish economy was probably not as depressed in the late fourteenth and fifteenth centuries as some historians have stated.²³⁰ Certainly the large amounts of money pumped into Ireland to finance armies

²²³ TNA, E122/20/5, fo. 24. John Flosse was a merchant on the *Anne* of Bristol which departed for Ireland on 12th June with 1 dole (ton) of salt.

²²⁴ TNA, E122/20/5, fo. 23.

²²⁵ Flavin & Jones, eds, *Bristol's Trade*, 42.

²²⁶ Refaussé & McHenry, *Christchurch Deeds*, 171.

²²⁷ Williams, *Annals of Ireland*, 164, 176.

²²⁸ Refaussé & McHenry, *Christchurch Deeds*, 171.

²²⁹ N. Byrne, ed., *The Great Parchment Book of Waterford* (Dublin, 2007), 159.

²³⁰ D. Chart, *An Economic History of Ireland* (Dublin, 1920), 22. Chart stated that there was no economic advance in Ireland between 1318 and 1485.

out-stripped the profits achieved through trade.²³¹ The collection or not of the national customs came nowhere near the revenues required to run the lordship. For example, a force raised in Ireland by Ormond in May 1377 cost the English exchequer over £5,000.²³² Armies between 1378 and 1450 were raised on no less than fourteen other occasions.²³³ Irish exports probably never reached more than £5,000 per year.²³⁴ Nevertheless, the range of Ireland's imports in the late fourteenth and early fifteenth century of manufactured goods, suggests the Irish economy was in a reasonable state. At the end of the fourteenth century Ireland was importing large quantities of cloth. Such was the demand for cloth in Ireland that in 1390/1 1,220 cloths were imported to Ireland.²³⁵ Between 23rd May 1398 and Michaelmas 1399 fifty ships, twenty-four of them were Irish, delivered the commodity from Bristol to Ireland.²³⁶ Even as Ireland's economy was recovering from the Black Death, huge quantities of grain were leaving the lordship between 1350 and 1400. Moreover, licences were issued to Bristol merchants coming to Ireland in order to exploit salmon stocks in the early part of the fifteenth century.²³⁷ At the beginning of the fifteenth century Ireland's overseas trade was brisk. From 1402-3 wine customs for Bordeaux record eleven Irish ships freighted with 597½ tuns of wine (Table 4b). The tonnage and poundage accounts for Bristol record that large quantities of fish were exported from Youghal to England. Irish merchants were profiting from longer voyages. Irish ships were trading goods from Flanders to Spain before the end of the fourteenth century. An Irish ship, the *Marie* of Kinsale was freighted with Flemish cloth at Sluis in 1397 bound for Spain.²³⁸ Merchants in the west of Ireland were exporting large

²³¹ Lydon, *Lordship of Ireland*, 157. In February 1369, for instance, Windsor was to receive £20,000 for three years to protect and govern the lordship.

²³² A. Otway-Ruthven, *A History of Medieval Ireland* (New York, 1968), 309.

²³³ A. Otway-Ruthven, 'Royal Service in Ireland', in P. Crooks, ed., *Government, War and Society in Medieval Ireland* (Dublin, 2008), 175-176.

²³⁴ Childs, 'Anglo-Irish Trade', 13; TNA, E122 and E101 (customs accounts), *passim*.

²³⁵ Carus-Wilson, *The Overseas Trade of Bristol*, 191-203.

²³⁶ TNA, E122/16/34, *passim*.

²³⁷ CPR, 1399-1401, 260.

²³⁸ R. Hunnisett, ed., *Calendar of Inquisitions Miscellaneous* (London, 1963), vi, 101.

surpluses of hides. In 1404 over 16,000 hides were exported from Galway at a customs value of over £1,000 outlining Ireland's prosperity from c.1390 to c.1405.²³⁹ Irish merchants were given permission to trade skins as far as Zeeland in 1428.²⁴⁰ It was, perhaps the case that the Irish economy in periods such as between 1355 and 1370, 1390-1405 and then some years in the 1430s was thriving. The surplus of fish, skins and grain exported from Ireland was an indication of a generally robust trading economy. This echoes Britnell's view that economies should be viewed in shorter time spans instead of Chart's view that the Irish economy was in a poor state from 1318-1485. Ireland's economy was boosted by the ability to produce and repair books, as well as wealthy individuals owning books produced elsewhere.²⁴¹ Indeed, the priory of the Holy Trinity in Dublin had brethren who were able to produce books and charters judging by the quantity of parchment paper they purchased.²⁴² Furthermore, the new Prior in 1348, Stephen de Derby had commissioned after 1348 the Psalter of Christchurch a very elaborate work of art.²⁴³ The fact that Irish merchants could trade overseas with finished goods (white and red herring), hides ready for turning into leather and mantles suggests a fully functioning medieval economy. There is, however, little doubt that the Irish economy contracted from c.1350 to c.1390. Although from 1400-1405 wine imports into Ireland were especially strong as were fish exports. (Tables 6a, c).

Fifteenth-century Ireland had the ability to purchase manufactured goods with the revenue received by its merchants from strong exports in the fifteenth and early sixteenth century. It has been established in this thesis that Ireland was able to make food products from grain, erect buildings, produce ale, manufacture forms of farm machinery and on occasion mint

²³⁹ Dryburgh and Smith, eds, *Handbook and Select Calendar*, 291.

²⁴⁰ H. Wood, 'Commercial intercourse with Ireland in the Middle Ages', *Studies*, iv (1915), 262.

²⁴¹ McHenry & Refaussé, *Christchurch Deeds*, 156; Mills, ed., *Account Rolls of the Priory of St Marys*, 170. In 1326 Walter de Istalep had his goods seized. Copies of the biblia, liber de rose, and liber de saint grail were included in the inventory.

²⁴² Mills, ed., *Account Roll*, p. xxiv, 41.

²⁴³ Mills, ed., *Account Roll*, p. xxv.

coin. The Irish economy was able to adapt quickly after the Black Death to selling overseas its surpluses of grain, hides and fish.

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- 3 (j) Exeter and Dartmouth – hake from Ireland.
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Table 1.1

The Export of Boards & Timber from Ireland to Bristol

Place of Delivery	Year	Port / Place of Origin	Quantity of Boards	Number of Shipments
Bristol	1403/4 (½ y)	Ireland	200	2
Bristol	1470 (1/3 y)	Ireland	300	1
Bristol	1475 (1/3 y)	Cork, Kinsale	560	2
Bristol	1479 (1/3 y)	Kinsale, Ireland	350	2
Bristol	1485/6 (fy)	Cork, Ireland	650	3
Bristol	1486/7 (fy)	Ireland	50	1
Bristol	1492/3 (fy)	Wexford, Ireland	980	5
Bristol	1503/4 (fy)	Cork	100	1
Bristol	1516/17 (fy)	Cork, Kinsale, Cork	1610	6
Bristol	1525/26 (fy)	Kinsale, Wexford, Ireland	1434	7

Source: TNA, E122/17/10; TNA, E122/19/4; TNA, E122/19/16; TNA, E122/19/14; TNA, E122/20/5; TNA, E122/20/9; S. Flavin & E. Jones, eds, *Bristol's Trade with Ireland and the Continent 1503-1602* (Dublin, 2009), *passim*.

The Export of Boards and Timber from Ireland to Exeter & Dartmouth

Place of Delivery	Year	Port / Place of Origin	Quantity of Boards	Number of Shipments
Dartmouth	1502/3 (fy)	Cork, Kinsale	700	1
Barnstable	1502/3 (fy)	Cork, Kinsale	838	2
Barnstable	1493 (½ y)	Kinsale	100	1
Barnstable	1506/7 (fy)	Cork, Dungarvan	400	2
Barnstable	1509/10 (fy)	Cork	200	1
Barnstable	1515/16 (fy)	Ireland	100	1
Dartmouth	1515/16 (fy)	Ireland	300	1
Barnstable	1410/11 (½ y)	Kinsale	200	1
Dartmouth	1518/19 (fy)	Kinsale	100	1
Ilfacombe	1518/19 (fy)	Wexford	50	1

Source: TNA, E122/25/2; TNA, E122/26/8; TNA, E122/26/11; TNA, E122/26/12; TNA, E122/26/14; TNA, E122/26/16; TNA, E122/26/16; TNA, E122/26/20; TNA, E122/26/13; TNA, E122/27/1.

Table 1.1

The Export of Boards & Timber from Ireland to Plymouth & Fowey

Place of Delivery	Year	Port / Place of Origin	Quantity of Boards	Number of Shipments
Plymouth	1497/8 (fy)	Kinsale, Cork	650	3
Penryn	1497/8 (fy)	Kinsale	200	1
St Ives	1497/8 (fy)	Kinsale	300	2
Padstowe	1499/1500 (py)	Kinsale	150	1
Fowey	1505 (½ y)	Cork, Kinsale	1200	3
Penzance	1505 (½ y)	Kinsale	250	1
St Ives	1505 (½ y)	Dungarvan, Kinsale	713	2
Padstow	1507/8 (fy)	Kinsale	650	2
Plymouth	1507/8 (fy)	Waterford, Kinsale, Cork	2134	4
Fowey	1507/8 (fy)	Kinsale	400	1
Penryn	1507/8 (fy)	Kinsale	1400	2
Mountsbay	1507/8 (fy)	Kinsale	1950	4
St Ives	1507/8 (fy)	Kinsale	1050	3
Teyncastle	1511/12	Kinsale	850	2
Fowey	1511/12	Kinsale	300	1
Mountsbay	1511/12	Kinsale	450	1
Padstowe	1511/12	Cork	600	2
St Ives	1512/13	Kinsale	300	1
Fowey	1516/17	Kinsale	1760	3
Fowey	1516/17	Cork	3600*	7

*1000 of these boards were small

Source: TNA, E122/114/3; TNA, E122/115/7; TNA, E122/15/8; TNA, E122/115/11;
TNA, E122/115/12; TNA, E122/206/1; TNA, E122/206/2;
TNA, E122/116/4.

The Export of Boards & Timber from Ireland to Bridgewater

Actual Place of Delivery	Year	Port / Place of Origin	Quantity of Boards	Number of Shipments
Minehead	1482 (py)	Wexford	50	1
Bridgewater	1482 (py)	Cork	400	2
Bridgewater	1482 (py)	Kinsale	400	1
Bridgewater	1496 (½ y)	English ship	100	1
Bridgewater	1413/14 (½ y)	Ireland	125	1
Bridgewater	1510/11 (fy)	Cork	123	3

Source: TNA, E122/26/8; TNA, E122/26/9; TNA, E122/26/11; TNA, E122/26/20;
TNA, E122/27/11.

Table 1.2a

A Sample of Irish Merchants Frequenting Bristol c.1350-1500

DATE	SHIP NAME	MASTER	MERCHANT	CARGO	PORT OF DESTINATION	PORT OF ORIGIN
20/11/1391	<i>la Deglan</i>	-	William Lawless	Cloth	Bristol	Ireland
15/10/1398	<i>la Mariboot</i>	Richard Dowd	Denis Roche	Cloth	Kinsale	Bristol
04/04/1399	<i>La St Mari boat</i>	-	William Lawless	Cloth	Youghal	Bristol
13/12/1403	<i>James</i>	-	John Roche	Fish	Bristol	Kinsale
20/12/1403	<i>Nicholas</i>	William Lawless	-	-	Bristol	Drogheda
14/01/1404	<i>le Peter</i>	-	William Lawless	Fish	Bristol	Youghal
15/01/1404	<i>Nicholas</i>	William Lawless	-	-	Drogheda	Bristol
22/01/1404	<i>le Patrick</i>	-	Nicholas Roche	Fish	Bristol	Wexford
13/01/1404	<i>Marie</i>	Robert Dowd	-	Fish	Bristol	Kinsale
01/02/1404	<i>le Peter</i>	-	William Lawless	Fruit/nuts	Youghal	Bristol
03/02/1404	<i>James</i>	-	Philip Roche	Fish	Bristol	Kinsale
17/03/1404	<i>Marieboot</i>	-	Nicholas Nangle	Fish	Bristol	Kinsale
17/02/1466	<i>le Christopher</i>	Maurice Donell	M Donnell attorney for merchant	Fish	Bristol	Cork
17/02/1466	<i>le Mary</i>	Philip Roche	Philip Roche attorney for merchant	-	Bristol	Kinsale
	<i>le Patrick</i>	Philip Roche	-	Fish	Bristol	Kinsale
29/10/1470	<i>le Patrick</i>	Philip Roche	-	-	Kinsale	Bristol
28/09/1470	<i>le Christopher (E)</i>	-	George Roche	Fish	Bristol	Ireland
20/11/1472	<i>le Katherine (E)</i>	-	George Roche	Fish	Bristol	Ireland
28/05/1474	<i>le Nicholas</i>	Philip Roche	-	-	Bristol	Cork
10/06/1474	<i>le Nicholas</i>	Philip Roche	-	-	Cork	Bristol
30/08/1474	<i>le Mary</i>	-	John Lawless & George Roche	Cloth	Wexford	Bristol
11/05/1475	<i>le Nicholas</i>	-	Raymond Roche	Shipboards	Bristol	Cork
27/06/1475	<i>le Mary</i>	Cornelius Donell	-	Corn/honey	Kinsale	Bristol
06/07/1475	<i>le Sunday</i>	John Donell	P Irishman	Corn	Youghal	Bristol
06/06/1475	<i>le Nicholas</i>	-	George Roche	-	Ireland	Bristol
08/12/1478	<i>le Katherine (E)</i>	-	William Donell	-	Bristol	Ireland
23/12/1478	<i>le Katherin" (E)</i>	-	William Donell	Honey	Ireland	Bristol
31/01/1478	<i>le Mary</i>	Philip Roche	-	Fish	Bristol	Cork
07/03/1478	<i>le Mary</i>	Philip Roche	Philip Roche	Fish	Bristol	Cork
11/03/1478	<i>le Mary</i>	Philip Roche	-	-	Cork	Bristol
04/02/1478	<i>le Trinity</i>	-	Raymond Roche	Fish	Bristol	Cork
12/12/1478	<i>le Fortune</i>	-	George Roche & Thomas Donel	Fish	Bristol	Waterford
02/02/1479	<i>le Mary</i>	-	Philip Roche	Fish	Bristol	Cork
--/1486	<i>le Margaret (E)</i>	-	Cornelius Donell	Fish	Bristol	Ireland
05/05/1486	<i>le George</i>	-	Edward Roche	Timber	Bristol	Cork
29/05/1486	<i>le Katherine (E)</i>	-	John Nangil	Fish	Youghal	Bristol*
20/07/1486	<i>le Christopher (E)</i>	-	James Nangil	Cloth	Ireland	Bristol
04/07/1486	<i>le Patrick</i>	-	John Nangil	Cloth	Bristol	Youghal
21/01/1486	<i>le George</i>	-	Edmund Roche	Fish	Bristol	Cork
08/02/1486	<i>le George</i>	-	Edmund Roche	Honey/beans	Cork	Bristol
17/03/1486	<i>le Katherine</i>	-	John Nangil	Fish	Bristol	Youghal
09/05/1486	<i>le George</i>	-	Edmund Roche	-	Cork	Bristol
29/05/1486	<i>le Katherine</i>	-	John Nangil	Fish	Bristol	Youghal
10/10/1486	<i>le Mighell (E)</i>	-	Cornelius Donell	Fish	Bristol	Ireland
20/11/1486	<i>le Marie (E)</i>	-	Thomas Donell	Fish	Bristol	Ireland
07/02/1487	<i>le Mighell (E)</i>	-	Cornelius Donell	Fish	Bristol	Ireland
06/05/1487	<i>le Marie (E)</i>	George Donell	-	-	Bristol	Ireland
08/08/1487	<i>le Marie (E)</i>	George Donell	-	-	Ireland	Bristol
12/09/1487	<i>le Margret</i>	Cornelius Donell	-	-	Ireland	Bristol
16/09/1487	<i>le Christopher (E)</i>	Philip Nangil	-	-	Ireland	Bristol
10/10/1492	<i>le James (E)</i>	Thomas Donell	-	-	Minehead	Bristol
23/10/1492	<i>le Katherine (E)</i>	Maurice Roche	-	-	Bristol	Ireland
24/11/1492	<i>le Ame (E)</i>	Chris Donell	-	-	Bristol	Ireland
23/12/1492	<i>le Ame (E)</i>	Chris Donell	-	-	Ireland	Bristol
15/04/1993	<i>le Margret (E)</i>	Cornelius Donell	David Roche	Fish	Bristol	Ireland
03/05/1493	<i>le Marie</i>	Philip Nangil	Maurice Donell	Fish	Bristol	Ireland
08/05/1493	<i>le Margret (E)</i>	Cornelius Donell	-	-	Ireland	Bristol
09/06/1493	<i>le Anne (E)</i>	Philip Nangil	-	-	Ireland	Bristol
20/06/1493	<i>le Margret (E)</i>	Cornelius Donell	-	-	Ireland	Bristol
12/09/1493	<i>le Margret (E)</i>	Cornelius Donell	-	-	Bristol	Ireland
16/05/1493	<i>le Saviour</i>	John Roche	-	-	Bristol	Wexford

* Fish going back to Youghal

Source TNA, E122 (Customs accounts for Bristol), *passim*

A Sample of Irish Merchants and Shipmasters Frequenting Bridgewater c.1350-1511

DATE	SHIP NAME	MASTER	MERCHANT	CARGO	PORT OF DESTINATION	PORT OF ORIGIN
02/03/1414	<i>le Marie</i>	David Roche	David Roche	Fish	Bridgewater	Wexford
--/03/1414	<i>le Marie</i>	Philip Roche	Philip Roche	Fish	Bridgewater	Kinsale
18/02.1482	<i>le George</i>	Thomas Roche	-	Beans	Wexford	Bridgewater
18/02/1482	<i>le Mary</i>	Philip Roche	-	Beans	Cork	Bridgewater
--/--/1482	<i>le Sunday</i>	-	William Roche	-	Kinsale	Bridgewater
26/02/1482	<i>le Mary</i>	William Roche	-	-	Wexford	Bridgewater
07/05/1482	<i>le Kateryn</i>	John Downell	-	-	Youghal	Bridgewater
09/05/1482	<i>le Mary</i>	Philip Roche	Philip Roche	Beans	Cork	Bridgewater
09/05/1482	<i>le Mary</i>	Germyn Downell	-	Beans	Youghal	Bridgewater
09/05/1482	<i>le Mary</i>	Walter Barry	Walter Roche	Shipboard & salt	Bridgewater	Wexford
09/05/1482	<i>le Mary</i>	Walter Barry	Walter Roche	Beans	Wexford	Bridgewater
20/05/1482	<i>le Mary Grace</i>	-	Richard Galway	Beans	Cork	Bridgewater
08/05/1482	<i>le George</i>	Richard Galway	-	Fish & shipboards	Minehead	Cork
03/02/1485	<i>le Mary</i>	-	William Roche	Fish	Bridgewater	Kinsale
01/03/1485	<i>le Mary</i>	-	William Roche	Beans	Kinsale	Bridgewater
02/03/1485	<i>le Robin Hood</i>	-	John Roche	Fish	Bridgewater	Wexford
22/03/1485	<i>le Robin Hood</i>	-	John Roche	Beans	Wexford	Bridgewater
25/03/1485	<i>le Magret</i>	-	Walter Roche	Beans	Wexford	Bridgewater
04/02/1486	<i>le Tollocke</i>	William Roche	-	-	Bridgewater	Wexford
10/02.1486	<i>le Robin Hood</i>	-	John Roche	Fish	Bridgewater	Wexford*
15/02/1486	<i>le Mighell</i>	-	Richard Nargill	Cloth	Ireland	Bridgewater
--/--/1486	<i>le Christopher</i>	-	alice Good	Malt	Ireland	Bridgewater
20/02/1486	<i>le Robin Hood</i>	-	John Roche	Beans/wine/cloth	Wexford	Bridgewater
23/02/1486	<i>le Tollocke</i>	William Roche	William Roche	Beans/cloth	Wexford	Bridgewater
27/07/1487	<i>le Kateryn</i>	Maurice Roche	Maurice Roche	Fish	Bridgewater	Ireland
02/03/1490	<i>le Robin Hood</i>	-	John Roche	Fish	Bridgewater	Wexford
26/03/1490	<i>le Robin Hood</i>	-	John Roche	Beans	Wexford	Bridgewater
15/03/1511	<i>le Patrick</i>	Richard Donell	David Roche	Beans	Kinsale	Bridgewater
28/03/1511	<i>le Katerine</i>	Richard Lawless	-	-	Wexford	Bridgewater
29/03/1511	<i>le Patrick</i>	Richard Donell	David Roche	Fish	Bridgewater	Kinsale
01/04/1511	<i>le Nicholas</i>	Maurice Roche	Maurice Roche	Beans	Cork	Bridgewater
18/05/1511	<i>le Trinity</i>	John Roche	John Roche	Cloth	Kinsale	Bridgewater
18/05/1511	<i>le Trinity</i>	John Roche	John Roche	Beans	Bridgewater	Kinsale
03/07/1511	<i>le Nicholas</i>	Maurice Roche	Maurice Roche	Beans/cloth	Cork	Bridgewater
27/07/1511	<i>le Nicholas</i>	Maurice Roche	Maurice Roche	Fish/wine/cloth	Bridgewater	Cork
10/11/1511	<i>le Nicholas</i>	Maurice Roche	Maurice Roche	Beans	Cork	Bridgewater
05/04/1511	<i>le Sunday</i>	John Roche	-	-	Wexford	Bridgewater
06/04/1511	<i>le Nicholas</i>	Maurice Roche	Maurice Roche	Beans	Cork	Bridgewater
06/04/1511	<i>le Nicholas</i>	Maurice Roche	Maurice Roche	Wine	Bridgewater	Cork
06/04/1511	<i>le Sunday</i>	John Roche	John Roche	Fish	Bridgewater	Wexford
12/05/1511	<i>le Kateryn</i>	Richard Galway	Richard Galway	Wine/cloth	Bridgewater	Kinsale
16/05/1511	<i>le Kateryn</i>	Richard Galway	Richard Galway	Beans	Kinsale	Bridgewater
23/02/1511	<i>le Sunday</i>	William Donell	William Donell	Beans	Ireland	Bridgewater
03/03/1511	<i>le Nicholas</i>	William Roche	William Roche	Beans	Ireland	Bridgewater
03/01/1511	<i>le Sunday</i>	William Donell	William Donell	Fish	Bridgewater	Ireland
12/05/1511	<i>le Sunday</i>	William Donell	William Donell	Fish	Bridgewater	Ireland
19/04/1511	<i>le Patrick</i>	John Roche	-	Fish	Minehead	?

Source: TNA, E122 (Customs accounts for Bridgewater), *passim*.

A Sample of Irish Merchants and Mariners
Frequenting Poole from c.1424-1519

DATE	SHIP NAME	MASTER	MERCHANT	CARGO	PORT OF DESTINATION	PORT OF ORIGIN
15/01/1504	<i>le Kateryn</i>	John Donell	Nicholas Donell	Fish	Poole	Youghal
25/02/1504	<i>le Kateryn</i>	John Donell	Nicholas Donell	Grain	Youghal	Poole

Irish Frequenting Portsmouth c.1350-1550

DATE	SHIP NAME	MASTER	MERCHANT	CARGO	PORT OF DESTINATION	PORT OF ORIGIN
1424	<i>Holyghost</i>	-	Patrick Nangle	Hides	Portsmouth	Dublin

Some Irish Frequenting Exeter/Dartmouth c.1350-1550

DATE	SHIP NAME	MASTER	MERCHANT	CARGO	PORT OF DESTINATION	PORT OF ORIGIN
22/02/1503	<i>le James</i>	-	Nicholas Roche	Fish	Barnstable	Wexford
28/02/1503	<i>le Garat</i>	Leonard Roche	Leonard Roche	Fish	Barnstable	Kinsale
20/03/1503	<i>le Trinity</i>	John Roche	John Roche	Malt	Kinsale	Barnstable
26/03/1503	<i>le Mary</i>	James Galway	James Galway	Fish	Barnstable	Cork
11/04/1503	<i>le Mary</i>	James Galway	James Galway	Cloth	Cork	Barnstable
20/03/1503	<i>le Sunday</i>	Maurice Roche	-	Malt	Cork	Barnstable
02/05/1503	<i>le Peter</i>	John Roche	John Roche	Shipboards & cloth	Barnstable	Kinsale
08/06/1503	<i>le ffortenic</i>	Robert Roche	-	-	Barnstable	Waterford
22/06/1503	<i>le Mary</i>	James Galway	-	Shipboards & cloth	Barnstable	Cork
27/06/1503	<i>le Mary</i>	James Galway	James Galway	Salt & cloth	Cork	Barnstable
19/07/1507	<i>le Nicholas</i>	Edmund Roche	-	-	Barnstable	Cork
06/02/1509	<i>le Margret</i>	-	John Galway	Fish	?	Youghal
14/03/1509	<i>le Margret</i>	-	John Galway	Wool	Youghal	?
23/02/1515	<i>le James</i>	Edmund Roche	Edmund Roche	-	Ilfracombe	Youghal
05/05/1515	<i>le Christopher</i>	Richard Donell	-	Malt	Kinsale	Dartmouth
12/07/1515	<i>le Nicholas</i>	Richard Lawless	-	-	Wexford	Dartmouth
05/05/1516	<i>le Christopher</i>	Richard Donell	-	-	Kinsale	Exeter
22/02/1516	<i>le James</i>	Edmund Roche	-	Wheat	Wexford	Dartmouth
17/02/1519	<i>le Bartolomew</i>	Richard Lawless	-	-	Dartmouth	Wexford

Source: TNA, E122 (particular customs accounts for Bristol, Bridgewater, Exeter/Dartmouth, Plymouth/Fowey, *passim* .

Bristol: Exports to Ireland - Grains and Grain Mixtures, measured in quarters (Fig. 2a)

Year	October	November	December	January	February	March	April	May	June	July	August	September	Wheat	Malt	Barley	Rye	Oats	Beans/Grain Mix	Grain Mix	Irish Ships	English Ships
Aug - Dec 1391		3																		1	
Mar - Sept 1475								144	15	21	42	63	15						144	3	1
Nov - March 1477/8			18		12									12	18					1	
Mich - Mich 1485/6				18											18						1
Mich - Mich 1486/7					27			6					6	27							1
Mich - Mich 1492/3							165	51	69	60	60	60	138	237					60	7	3
Mich - Mich 1503/4				311	192	14					102			227				368	12	9	6
Mich - Mich 1516/7				6		224	42	252					109	221				192		16	6
Mich - Mich 1525/6*					1203	66	168	96	549	451	159		1392	808		492			132	50	0

* Only Irish ships noted in this account because port of origin of the ships are not given.

Sources:

TNA, E122/40/17; TNA, E122/19/11; TNA, E122/18/39; TNA, E122/19/13; TNA, E122/20/5; TNA, E122/20/7; TNA, E122/20/9; S. Flavin & E. Jones, eds, *Bristols Trade with Ireland and the Continent 1503-1601*, (Bristol Record Society) Vol 61 2009, 1-284.

Exeter & Dartmouth: Exports to Ireland - Grains, Cereals & Mixtures, measured in quarters (Fig. 2b)

Year	October	November	December	January	February	March	April	May	June	July	August	September	Wheat	Malt	Barley	Rye	Oats	Beans/Grain Mix	Grain Mix	Irish Ships	English Ships
Mich - Mich 1480/1							33						33							2	0
Mich - Mich 1492/3						96				24			72	6		18				4	0
Easter - Mich 1494									39							39				2	0
Mich - Mich 1502/3						111	72							57	42				84	6	0
Mich - Mich 1508/9							18						18							1	0
Mich - Mich 1509/10					12	36							30		12	6				2	0
Mich - Mich 1515/16						12		18						21			9			2	0
Mich - Mich 1517/18					60	54	18		36				84	74						5	0
Mich - Mich 1518/19				12	24			105					99	30			12			5	0

Sources:

TNA, E122/41/6; TNA, E122/41/14; TNA, E122/41/15; TNA, E122/41/18; TNA, E122/41/25; TNA, E122/42/1; TNA, E122/201/4; TNA, E122/201/5; TNA, E122/42/2; TNA, E122/42/3; TNA, E122/42/4.

Bridgewater: Exports to Ireland - Grains, Cereals & Mixtures, measured in quarters (Fig. 2c)

Year	October	November	December	January	February	March	April	May	June	July	August	September	Wheat	Malt	Barley	Rye	Oats	Beans/Grain Mix	Grain Mix	Irish Ships	English Ships
Mich - Mich 1481/2	-	12	-	-	-	42	27	24	-	-	-	-	24	81	-	-	-	-	-	6	0
Mich - Mich 1484/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mich - Mich 1485/6	-	-	-	-	36	60	-	12	-	-	-	-	30	78	-	-	-	-	-	1	6
Nov - Mich 1486/7	-	-	-	-	-	-	-	-	-	-	18	-	6	12	-	-	-	-	-	0	1
Mich - Mich 1489/90	-	-	9	-	-	-	15	12	6	-	39	-	-	81	-	-	-	-	-	2	4
Easter - Mich 1496	-	-	-	-	-	-	24	-	243	60	30	-	42	12	-	-	-	303	-	3	3
Mich - Mich 1510/11	-	-	-	-	-	21	21	30	-	-	-	-	30	42	-	-	-	-	-	6	0

Sources:

TNA, E122/26/8; TNA, E122/26/11; TNA, E122/26/12; TNA, E122/26/13; TNA, E122/26/14; TNA, E122/26/16;
TNA, E122/26/18; TNA, E122/26/20; TNA, E122/27/11.

Poole: Exports to Ireland - Grains, Cereals & Mixtures, measured in quarters (Fig. 2d)

Year	October	November	December	January	February	March	April	May	June	July	August	September	Wheat	Malt	Barley	Rye	Oats	Beans/Grain Mix	Grain Mix	Irish Ships	English Ships	
<i>Mich - Mich 1503/4</i>					74								23	22	12		3		12	2		
<i>Mich - Mich 1505/6</i>						11							18	30	24	9	6 barrels of flour		30	2		

Sources:

TNA, E122/20/10; TNA, E122/120/11.

Southampton: Exports to Ireland - Grains, Cereals & Mixtures, measured in quarters

Year	October	November	December	January	February	March	April	May	June	July	August	September	Wheat	Malt	Barley	Rye	Oats	Beans/Grain Mix	Grain Mix	Irish Ships	English Ships	
Feb - Mich 1500						32							14	12	6						1	0

Source:

TNA, E122/209/2.

Plymouth & Fowey: Exports to Ireland - Grains, Cereals & Mixtures, measured in quarters (Fig. 2e)

Year	October	November	December	January	February	March	April	May	June	July	August	September	Wheat	Malt	Barley	Rye	Oats	Beans/Grain Mix	Grain Mix	Irish Ships	English Ships	
Mich - Mich 1497/8						37		20	9			20	22		37				28	6	0	0
Mich - Mich 1505/6						2		10	19				30	1						4	0	0
Mich - Mich 1507/8								17	6					10	13					3	0	0
Mich - Mich 1511/12									24	15									39	2		
Mich - Mich 1512/13						2								2							1	
Mich - Mich 1516/17													1		2		3				1	

Sources:

TNA, E122/115/7; TNA, E122/115/11; TNA, E122/115/12; TNA, E122/206/1; TNA, E122/206/7; TNA, E122/116/4.

Bristol: Export of Beans to Ireland, measured in quarters (Fig. 2f)

Year	Port/Place of Delivery for Irish ships												English Ships	Total Beans											
	October	November	December	January	February	March	April	May	June	July	August	September			Ireland	Cork	Youghal	Kinsale	Waterford	Wexford	Dingle	New Ross			
Aug-Dec 1391		1												1									1		
Dec-Mar 1403/4				12		72										1							1		84
De-May 1465/6					24												1								24
Nov-Mar 1477/8		60	198		438	294											2	2	1				7		990
Mar-July 1479							90					126													216
Full year 1485/6	-	48	-	60	114	180	-	84	30	24	-	72					1						10		612
Full year 1486/7	-	78	126	498	126	78	-	192	-	30	-	144						6					12		1272
Full year 1492/3	-	-	36	-	48	108	-	333	189	42	42	156						3	1				15		954
Full year 1503/4	-	60	-	33	219	206	-	-	72	72	20	12						2	1	1			9		694
Full year 1516/17	24	252	27	288	390	707	234	264	-	-	-	-						5	5		2		22		2186

Sources:

TNA, E122/40/7; TNA, E122/19/11; TNA, E122/18/39; TNA, E122/20/5; TNA, E122/20/9;

S. Flavin & E. Jones, eds, *Bristol's Trade with Ireland and the Continent 1503-1601*, (Bristol Record Society), Vol 61, 1-284.

Bridgewater: Export of Beans to Ireland, measured in quarters (Fig. 2g)

Year	Port/Place of Delivery for Irish ships												English Ships	Total Beans										
	October	November	December	January	February	March	April	May	June	July	August	September			Ireland	Cork	Youghal	Kinsale	Waterford	Wexford	Ross	Alien		
Nov-Mich 1413/4					288		30	30								1	1					3	348	
Mich-June 1481/2		30			462	582	594	939							9	14	2	6		0			-	2607
Mich-Mich 1484/5	-	-	-	120		174	48	234	36	108	36					1	11	4	1			11	7	
Mich-Mich 1485/6			90	132	507	627	360	102	48						1		1	5	3			23	1998	
Nov-Mich 1486/7					48	108	84											3				3	360	
Mich-Mich 1489/90	-	-	120	84	240	390	174	132	162	30						2	1	7		1		9	1332	
Easter-Mich 1496							654	465	894	318	162				4	5	3	1				23	2493	
Mich-Mich 1510/11	186	42	-	258	438	360	675	405	492	624	-	54	5*	10	19	3	1	10				33**	3492	

* Dunganvan

** Ships not denoted as going to Ireland, it is probable that they did.

Sources: TNA, E122/25/5; TNA, E122/25/7; TNA, E122/26/8; TNA, E122/26/11; TNA, E122/26/12; TNA, E122/26/13; TNA, E122/26/14; TNA, E122/26/16; TNA, E122/20/20; TNA, E122/27/1

Plymouth & Fowey: Export of Beans to Ireland, measured in quarters (Fig. 2h)

Year	Port/Place of Delivery for Irish Ships																	
	October	November	December	January	February	March	April	May	June	July	August	September	Cork	Youghal	Waterford	Wexford	English Ships	Total Beans
Mich - Mich 1497/8						18								1				18
Mich - Mich 1511/12						54							1					54

Sources: TNA, E122/115/7; TNA, E122/206/1

Poole: no beans imported

Exeter & Dartmouth: no beans imported

Southampton: in March 1550, approx. 2 quarters beans imported in Waterford on *The George*

Source: TNA, E122/209/2

The value of fish exported from Ireland to England compared to the transportation of Beans on the return journey (Table. 2i)

	Ship's Name	Date to and from Ireland	Type of Cargo	Value of Cargo
1	<i>Le Margret</i> of Bristol	Entered 29th November	Fish	Approx. 600 s
		Exited to Ireland	Beans	Approx 187 s
2	<i>Le Trinity</i> of Waterford	Entered 1st March	Fish	Approx 800 s
		Exited 17th March	Beans & Cloth	Approx 250 s
3	<i>Le Patrick</i> of Minehead	Entered 30th April	Fish	Approx 245 s
		Exited 1st May	Beans	Approx 186 s
4	<i>Le Mary</i> of Bristol	Entered 30th April	Fish	Approx 367 s
		Exited 3rd May	Beans	Approx 106 s
5	<i>Le Anne</i> of Bristol	Entered 12th June	Fish	Approx 176 s
		Exited 15th June	Beans & other goods	Approx 90 s

Source:

TNA, E122/20/5

Ships entering and exiting the port of Bristol 1485/6

	Ship's Name	Date to and from Ireland	Type of Cargo	Value of Cargo
1	<i>Le Margret</i> of Bristol	Entered 7th January	Fish	Approx 541 s
		Exited 12th January	Beans	Approx 200 s
2	<i>Le Margret</i> of Kinsale	Entered 6th February	Fish	Approx 411 s
		Exited 12th March	Beans	Approx 133 s
3	<i>Le Margret</i> of Bristol	Entered 6th March	Fish	Approx 366 s
		Exited 17th March	Beans & Cloth	Approx 270 s
4	<i>Le Anne</i> of Bristol	Entered 2 May	Stock Fish	Approx 93 s
		Exited 6th May	Beans & Cloth	Approx 125 s

Source:

TNA, E122/20/7; TNA, E122/20/5

Licences, commissions etc in documents relating to the Irish Chancery (Fig. 2j)

Year	Commodity	Quantity in quarters	Type of Permission	Merchant/Producer	From	To
*1350	wheat	200	licence	Thomas de Oувkeshull	Ireland	Any port in the realm
1351	corn	300	licence	John Bishop of Hereford	Ireland	Hereford England
1351	wheat	60	licence	Simon Keppok	Ireland	England - Wales
1351	corn	500	safe conduct	Andrew de Guildord	Ireland	England & Gascony
1352	wheat and other corn	3000	licence	David, Tyrel, Drogheda: merchants of	Ireland	England
1352	wheat	200	licence	Thomas Wogan (from his own lands)	Ireland	England
1352	oats	200	licence			
1352	oats	1000	licence	William Smale/Dartmouth	Ireland	England & Gascony
1352	wheat	1000	licence			
1352	corn	100	licence	Richard Archbishop of Armagh	Ireland	Exeter
1352	wheat and oats	300	licence	Richard Goldwell	Ireland	England
1352	wheat	600	licence	William Folynd and others	Ireland	England/Wales & Gascony
1352	wheat	1000	licence	Merchants of Dublin	Ireland	England
1352	wheat	300	licence	William de Asshelden	Ireland	England
1352	wheat	200	licence	Thomas de Alberton	Ireland	England
1352	oats	100	licence	Thomas de Alberton	Ireland	England
1352	wheat	600	licence	Thomas de Bellocomp	Ireland	Bordeaux
1352	corn	200	licence	Thomas de Bellocomp	Ireland	Bordeaux
1353	corn	1000	licence	Thomas de Nevil to transport own corn	Ireland	England
1353	oats	200	licence	William Folynd	Ireland	England
1355	corn	300	licence	Richard de Brehall	Ireland	England
1355	crops	-	licence	Abbot Furness (his own crops)	Ireland	England
1355	wheat	30	licence (unused)	Peter Wilton	Drogheda	England
1355	wheat	420	permit	Robert Hollywood, his own harvest	Ireland	England
1355	wheat/oats	60	permit	Abbot of Furness; wheat from his tenants	Ireland	England
1355	malt	12	permit			
1356	corn	600	licence	Ralph de Stansfeld	Ireland	England
1357	wheat	150	licence	Ralph de Stansfeld	Ireland	Scotland
1357	other corn	150	licence			
1358	wheat	1200	licence	Richard Hegreve, Dublin	Ireland	England
1358	wheat/oats	1200	purveyance	John Sward, sheriff of Kildare	Kildare	Leinster
1364	wheat/grain	160	licence	David Roche	Shorham	Ireland

Year	Commodity	Quantity in quarters	Type of Permission	Merchant/Producer	From	To
1365	peas/beans	-	licence	Walter de Alderbur	Bridgewater, England	Ireland
1371	barley	500	licence	Richard atte Mille	England	Ireland & Ales, Waterford, Cork & Cardiff
	beans	500	licence			
1372	wheat	1200	permit	Provision by king for earl of Kildare	Dublin	Kilkenny
	oats	1200	permit			
1374	corn etc	-	commission	army purveyance for use of Governor	Kilkenny	Ireland
1375	wheat/oats	c.100	licence	Edmund Mortimer, earl of Ulster	Dublin/Meath/Louth	Ulster
1375	grain	6	licence	Thomas Walpole	Dublin/Meath/Louth	Youghal
1375	malt	9	permit	Edward, prince of Wales	Dublin	Wales
1375	corn etc	18	licence	house of Mary of Dundrenan	Ireland	Galway or Galloway
1375	wheat	18	commission	John Stamen	Ireland	England or Wales
1375	malt	30	commission	John Stamen	Dublin/Meath/Louth	Ulster
1375	wheat	24	licence	John Ward & Thomas Levenes	Ireland	England
1375	wheat	6	commission	John of Ayr	Ireland	Scotland
1375	wheat/malt	60	commission	Thomas Mynot; his own grain	Ireland	Chester
1375	wheat	33	licence	John Selker and others	Ireland (Dublin)	England
1375	wheat	24	commission	Robert Lughtebourgh	Ireland (Dublin)	England/Wales/ Ireland
1375	wheat	18	commission	Archibald Douglas	Ireland (Dublin)	Scotland
1375	malt	12	commission	John Mongtomery to his merchant	Ireland (Dublin)	Ulster (Carrickfergus)
1375	wheat	100	licence	Richard Reeve	Ireland	Cork; Youghal
1375	wheat	48	commission	Mayor of Carrickfergus	Ireland (Dublin)	Ulster (Carrickfergus)
1375	wheat	400	licence	Adam Clerk, Richard Clerk	Ireland	-
	beans/peas	400				
	malt	400				
1375	corn	9	licence	John Brit, his own corn	Rathfarnham	Cork
1376	corn	-	permission	king's lieges	Dublin/Meath/Louth	Youghal
1376	wheat	400	licence	Nicholas Preston	Ireland	England
1376	wheat	400	licence	John de Kendale	Ireland	Kendale Westmoreland
1376	corn	-	4 licences	Richard Plunkett	Ireland	England
1376	wheat/corn/oats	360	licence	James Boyle person of Carrickfergus	Ireland	England
1376	wheat	400	licence	John White Dublin	Ireland	England

Year	Commodity	Quantity in quarters	Type of Permission	Merchant/Producer	From	To
1375	wheat	240	licence	Willie Lunberd of Waterford	Ireland	England
1376	malt	60	licence	Willie Lunberd of Waterford	Ireland	England
1376	oats	60	licence	Willie Lunberd of Waterford	Ireland	England
1377	grain	?	purveyance	James Butler Ormond	Ireland	Limerick
1380	corn	-	licence	Robert de Crull prebendary of Swords	Ireland	England
1382	wheat	300	licence	Abbot of Cockersand Lancashire	Ireland	England
1382	wheat	6				
1382	malt	12	licence	Thomas Rath of Drogheda	Drogheda	Ulster
1382	beans/peas	12				
1382	wheat/malt/oats	72	licence	Thomas Chambers	Dublin/Meath/Louth	Ulster (Carlingford)
1382	wheat, barley & beans	96	licence	Richard del Veer	Ireland	Ulster
1386	wheat, oats	2000	suggested purveyance	To Sheriff of Dublin	Ireland	Ireland
1386	wheat, barley & oats	36	licence	To William Sygys	Wexford	Cork
1386	wheat/barley	36	licence	William Sygyn	Wexford	Cork/Kinsale
1386	barley/oats	36	licence	William Sygyn	Dublin/Meath	Cork
1386	wheat/oats	48	licence	Gregory Hare	Dublin/Meath	Cork/Kinsale
1387	wheat/barley/oats	21	licence	William Hosely	Dublin	Cork/Youghal/Kinsale
1387	wheat	24	licence	John Lovell	Dublin	Cork
1387	wheat	300	licence	Henry Lane Bristol	Bristol, England	Waterford, Ireland
1387	beans	200	licence			
1387	wheat	360	licence	John Karlell	Dublin	Portugal/Gascony/ Bayonne
1387	wheat	420	licence	John Harleth	Ireland (Dublin)	Portugal/Gascony or Bayonne
1389	wheat	60	licence	Richard Franpestown (Drogheda)	Ireland (Dublin)	overseas
1389	wheat	48	licence	William Symcok	Drogheda	Gascony/Spain
1389	beans	100	licence	John Brit & Ralph Hopes	Redcliff, Somerset	Kinsale
1389	beans	100	licence	John Brit & Ralph Hopes	England	Kinsale
1391	wheat	-	licence	citizens of Cork	Any Irish Port	Cork
1390	wheat	120	licence	John of Bayonne	Ireland	Bordeaux
1390	wheat	300	licence	John Hanley	Ireland (Dublin)	England
1390	wheat	72	kings grant	Thomas Cawod, Coventry	Ireland	within the realm
1391	wheat	600	licence	Richard de Ferc of Chester	Ireland	England
1391	corn etc	-	licence	Richard Bishop of Ossory	Ireland	England/Wales

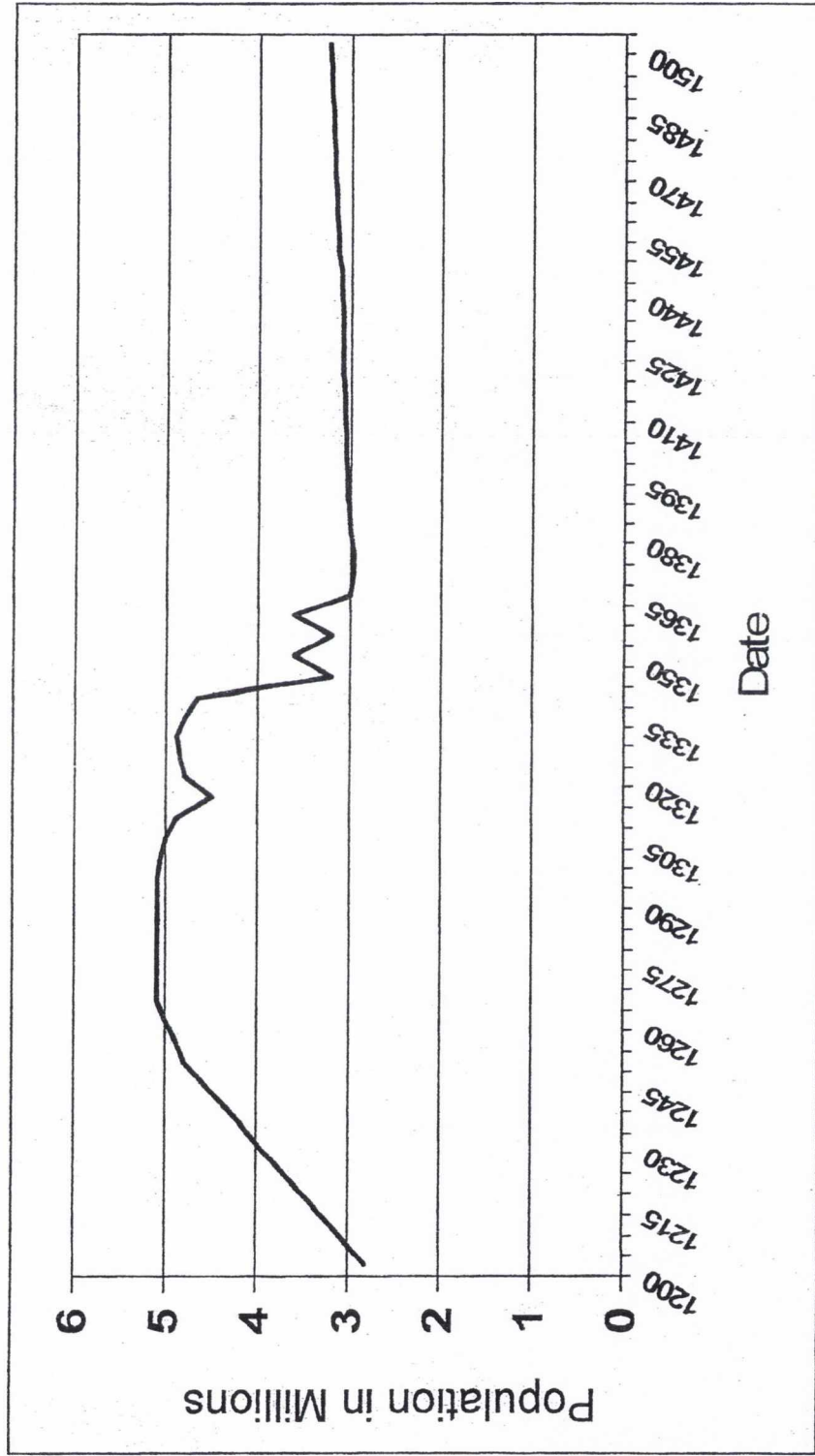
Fig 2j. Page 3

Year	Commodity	Quantity in quarters	Type of Permission	Merchant/Producer	From	To
1391	corn etc	-	10 year licence	Walter de Bruggee parson of Trim, presbytery of Howth	Ireland	England/Wales
1391	corn	-	licence	Robert Archbishop of Dublin (for his own use)	Ireland	England
1391	wheat	1000	licence	Nicholas Finglas	Ireland	England
1391	wheat	400	licence	Roger Gortsilowe	Dublin, Malahide, Clontarf	England
1393	wjeat	60	licence	William Spalding	Ireland	England/Bayonne/ Gascony
1393	wheat/oats	700	purveyance	James Butler earl of Ormond	Ormond	Wexford
1395	wheat	18	licence	William Symmesson	Ireland	England
1396	corn	100	licence	Richard Clerk	Ireland	Beaumaris Wales
1396	malt	100	licence			
1396	corn	240	licence	William de Parr	Ireland	Kendale England
1400	wheat	-	licence	John Rule & Walter Spence	Waterford	wherever they wish
1400	wheat	12	permit	Thomas Ardenne	Ireland (Baldoyle)	Wales (Bangor)
1400	wheat	-	purveyance	Laurence Newtown	Ireland (Meath) / varied	Ulster (Carrickfergus)
1401	wheat	20	licence	Thomas Worcester & Percy	Ireland	England
1401	wheat/oats	240	levy	levy for oats/wheat	Ireland	Ireland
1401	wheat	20	licence	Thomas Party Worcester	Ireland	England
1401	wheat	12	licence	John Hull owner of destroyed ship St Mary of Liverpool	Ireland	probably to England
1401	wheat/oats	240	licence	John & Thomas More	Ireland (Louth)	Carlingford & Greencastle, Ulster
1402	wheat	33	licence	Robert Urswyk and others	Ireland	England (Lancashire)
1402	wheat/malt	18	licence	John Dymser & Robert Mason	Ireland	Carrickfergus
1403	wheat/flour/salt/ale	-	licence	Roger Grymeston, Dublin; John White, Carrickfergus	Ireland (Carrickfergus)	Scotland
1404	wheat	36	grant	Nicholas Woder (Dublin)	Ireland (Dublin)	Bordeaux
1404	wheat	24	licence	William Symcok	Ireland	Wales (Tenby/ Red-welly)
1405	wheat.oats	48	licence	William Spicer, Richard Sutton	Ireland	Wales (Caernarvon)
1405	wheat	144	licence	John Aylmre, Bristol & others	Ireland	Bordeaux
1406	wheat/malt	72	licence	Simon Birford and others	Ireland	England/Wales

Year	Commodity	Quantity in quarters	Type of Permission	Merchant/Producer	From	To
1406	wheat/malt	60	licence	John Marshall, Ralph Pembroke	Ireland	Wales (Tenby)
1406	flour	-	licence	Robert Russell of Bristol	England	Ireland
1407	wheat	120	licence	John Bassare	Ireland	Bayonne
1409	wheat	144	licence	William Pontfret	Ireland	England (London)
1409	wheat	180	grant	Thomas Albert	Ireland (Dublin)	England (London)
1409	wheat	180	licence	Edward Evans	Ireland (Dublin, Meath, Louth)	Ireland (Youghal)
1410	wheat	24	licence	John	Ireland	Cork
1412	wheat	36	licence	Robert Southern	Galway	Scotland
1412	wheat	72	licence	William Symcok	Drogheda	Bordeaux
1412	wheat	72	licence	John Darbyde	Ireland	Spain
1414	wheat	60	licence	Martin Hudgeon (Bristol)	Ireland	Portugal
1416	wheat, oats, barley, peas, beans	-	commission	Henry Mosley	Ireland	household of lieutenant
1417	wheat	24	licence	Nicholas White (Drogheda)	Ireland	England
1417	wheat	12	licence	Richard Lacy (Swords), his own grain	Ireland (Dublin)	Waterford.Cork
1421	wheat	48	licence	William Fisher (ransom)	Ireland	Scotland
1421	wheat.malt	23	licence	Michael Savage (Beaumont)	Ireland	Wales
1421	wheat	48	licence	Richard Taylor (Swords)	Ireland	England
1422	wheat/malt	18	licence	Richard Talbot	Ireland	England/Wales
1422	wheat	18	licence	John Skynlour	Ireland	England
1422	wheat	36	licence	Richard Herbert/ Richard Taylor (Swords)	Ireland	England (Furness)
1422	wheat	-	licence	Robert Taylor (Swords)	Dublin	Kinsale
1423	wheat/malt	-	licence	Robert Walsh, John Golding	Ireland	Wales
1424	wheat	24	licence	Maurice Nagle, John Roche	Ireland (Dublin)	Kinsale
1425	wheat etc	-	purveyance	James Butler household	Ireland	Ireland
1431	wheat	36	licence	William Brady	Ireland	England
1432	wheat	180	licence	Ralph Pembroke etc	Ireland	Bayonne
1432	wheat	60	licence	Myngod of ship of Anthony of Bayonne	Ireland	Bayonne/ Bordeaux
1432	wheat	72	licence	Ivor Caource master of Juliana of Gironde	Ireland	Bayonne

Year	Commodity	Quantity in quarters	Type of Permission	Merchant/Producer	From	To
1432	wheat	30	grant	Da Loghwarrior of ship Notre Dame of Narmore	Ireland	Brittany
1449	corn	-	Irish parliament	merchants	Dublin/ Drogheda	Cork, Kinsale, Youghal, Waterford, Kilkenny & Wexford
1450	wheat	42	licence	Mamoyne de Manos on ship Trinity of Bayonne	Ireland	Bayonne
1450	corn	-	Irish parliament		Dublin/ Drogheda	Cork and Munster ports
1451	wheat/malt	18	licence	Richard Dwyn	Ireland	Wales (Aberystwyth)
1481	wheat	2000	licence	Richard Duke of Gloucester	England/Wales/ Ireland	England
	barley/oats/rye	1000	licence			
1487	wheat	100	2 year licence	Abbott of St Marys - licences vacated after 3 years	Ireland	England

Population of England



Source:
C. Dyer, *Standards of Living in the Middle Ages*, 4.

Ships entering and exiting the port of Bridgewater 1485/6 (Fig. 21)

	Ship's Name	Date to and from Ireland	Type of Cargo	Value of Cargo
1	<i>Le Mary</i> of Isle of Wight	Exited 12th December	Beans	Approx 160 s
		Entered 23rd January	Fish/Cloth	Approx 65 s
2	<i>Le Mary</i> of Combwich	Exited 7th January	Beans/Other	Approx 139 s
		Entered	Fish/Cloth/Stockfish	Approx 41 s
3	<i>Le Trinity</i> of Waterford	Entered 10th February	Fish	Approx 200 s
		Exited 16th February	Beans	Approx 53 s
4	<i>Le Robin Hood</i> of Wexford	Exited 20th February	Beans/Cloth	Approx 111 s
		Entered 10th February	Fish	Approx 295 s
5	<i>Le Tullock</i> of Wexford	Entered 4th February	Fish	Approx 270 s
		Exited 23rd February	Beans/Cloth	Approx 100 s
6	<i>Le Saviour</i> of Wexford	Entered 4th February	Fish/Stockfish	Approx 116 s
		Exited 23rd February	Beans/Cloth	Approx 140 s
7	<i>Le Sunday</i>	Entered 18th March	Stockfish	Approx 6 s 8 d
		Exited	Beans	Approx 66 s
8	<i>Le Mawdlen</i> of Minehead	Entered 16th December	Fish	Approx 316 s
		Exited 3rd February	Beans	Approx 120 s
9	<i>Le Katherine</i> of Waterford	Entered 26th February	Fish/Skins	Approx 242 s
		Exited 28th February	Beans/Cloth	Approx 203 s

Source: TNA, E122/26/13

Bristol: Importation of Herring (White) from Ireland measured in Barrels (1000 herring each) (Table 3a)

Year	October	November	December	January	February	March	April	May	June	July	August	September	Waterford	Westford	Cork	New Ross	Youghal	Limerick	Dublin	Drogheda	Kinsale	Total Irish Ships	Total English Ships
Nov 1378 - May 1379			6			6									1							1	1
Oct - Mar 1403/4		1130	836	1425	225	16							5	4	1	2	2		3	1	9	28	18
Sept 1406 - Feb 1407	94		150	27										1								1	4
Mar 1461 - Sept 1461										24		145										0	2
Dec 1465 - May 1466			248	195	1498	...	...						4		3	1	1			3	12	8	
Aug 1469 - Nov 1469	67																					0	2
Aug 1470 - Nov 1470	172										90										1	1	3
Mar 1471 - Sept 1471										48	110									1		1	3
Nov 1472 - Dec 1472		44																				0	1
Easter 1473 - Mich 1475							39	...	8	...												0	4
Mar 1475 - Sept 1475											3											0	1
July 1476 - Sept 1476											3											0	1
Nov 1477 - Mar 1478	108	379	490	699	470	55							5	2	7						2	16	18
Sept 1479 - Sept 1480	223	197	627	470	1446	300	...	...	...	...	...	...	3	2	7		2				3	17	23
Mich 1485 - Mich 1486		102	26	758	103	157	...	...	...	...	...	188	5	1	4	1	1	1	1		1	15	14
Mich 1486 - Mich 1487	107	209	48	661	94	215	4	...	...	...	...	...	8			1						9	20
Mich 1492 - Mich 1493	116	31	6	42	...	333	379	286	...	...	...	...	5	4	1							10	16
Mich 1503 - Mich 1504	656	869	875	1360	591	770	41	...	...	...	38	46	10		5	1	3				7	26	51
Mich 1516 - Mich 1517	85	629	405	87	433	571	...	...	...	...	...	30	5	5	4	2	3	1A	1B	1	3	25	45

A = Wicklow B = Malahide

Sources:

TNA, E122/17/10; TNA, E122/7/8; TNA, E122/17/11; TNA, E122/17/37; TNA, E122/19/4; TNA, E122/19/6; TNA, E122/19/7; TNA, E122/19/8; TNA, E122/19/9; TNA, E122/19/10; TNA, E122/18/39; TNA, E122/19/11; TNA, E122/19/13; TNA, E122/19/14; TNA, E122/20/5; TNA, E122/20/9. S. Flavin & E. Jones, eds, *Bristol's Trade with Ireland and the Continent, 1503-1601* (Dublin, 2009), passim.

Bristol: Importation from Ireland of Herring (Red) measured in Mease (620 herring each) (Table 3b)

Year	October	November	December	January	February	March	April	May	June	July	August	September	Waterford	Wexford	Cork	Youghal	Dublin	Ireland	Nes Ross	Kinsale	Total Irish Ships	Total English Ships
Oct - Mar 1403/4		48		79	9								1	4			1		3	1	10	5
Sept 1406 - Feb 1407	-	-	-	-	-																	
Nov 1465 - May 1466			12	1	3811	28	5						3	1	2	1		1*	1	2	11	10
Aug 1469 - Nov 1469		...	...	...															
Aug 1470 - Nov 1470		...	...	...															
Mar 1471 - Sept 1471	...	...	...	...	...												
Nov 1472 - Dec 1472	...	9																				
Easter 1473 - Mich 1473	...	...	...	...	...	...															0	1
July 1475 - Mich 1475																						
Nov 1477 - Mar 1478			5	131	149	3							5	2	6						13	3
Sept 1479 - Sept 1480		6	9	30	246	45							3	2	7						12	7
Mich 1485 - Mich 1486		6		41	128	39							1		3	1	1				6	1
Mich 1486 - Mich 1487		26	19	27	58	166	...	...	...	...	...	...	7			1					8	4
Mich 1492 - Mich 1493		...	...	...	...	...	72	53	...	...	...	...	3								3	1
Mich 1503 - Mich 1504	10	17	149	55	96	223	...	...	...	...	...	3	10	1	3	1					15	12
Mich 1516 - Mich 1517		1	2	...	...	250	...	...	...	...	...	...	4				1A	1B		1	7	3
Nov 1378 - May 1379						6							1								1	0

A = Wicklow

B = Malahide

Sources:

TNA, E122/17/10; TNA, E122/7/8; TNA, E122/17/11; TNA, E122/17/37; TNA, E122/19/4; TNA, E122/19/6; TNA, E122/19/7; TNA, E122/19/8; TNA, E122/19/9; TNA, E122/19/10; TNA, E122/18/39; TNA, E122/19/11; TNA, E122/19/13; TNA, E122/19/14; TNA, E122/20/5; TNA, E122/20/9. S. Flavin & E. Jones, eds, *Bristol's Trade with Ireland and the Continent, 1503-1601* (Dublin, 2009), passim.

Bridgewater: Importation from Ireland of Herring (White) measured in Barrels (1000 herring each) (Table. 3c)

Year	October	November	December	January	February	March	April	May	June	July	August	September	Waterford	Wexford	Cork	Youghal	Dublin	Ireland	Kinsale	Total Irish Ships	Total English Ships
Nov 1413 - Mich 1414					121	42							4						4	8	0
Mich 1481 - April 1482				90	24	16						1	1	1		4	1*	1		8	0
Mich 1484 - April 1485		172	108	48	35	24							2	2					1	3	7
Mich 1483 - Mich 1486			199	25	17							2	2							4	5
Nov 1486 - Mich 1487		6		36	17	29						1								1	4
Mich 1489 - Mich 1490	48	192		2		3						2	1							3*	1
Easter 1496 - Mich 1496												12								0	1
Mich 1510 - Mich 1511			22	174	7	54	12						7	1	1	1				9	4

*The rest of the other ten ships, no way of knowing their origin due to document damage

Sources:

TNA, E122/25/5; TNA, E122/26/8; TNA, E122/26/9; TNA, E122/26/11; TNA, E122/26/14; TNA, E122/26/16; TNA, E122/26/20;
 TNA, E122/26/13; TNA, E122/27/11.

Bridgewater: Importation from Ireland of Herring (Red) measure in Mease (620 herring each) (Table. 3d)

Year	October	November	December	January	February	March	April	May	June	July	August	September	Waterford	Wexford	Cork	Youghal	Dublin	Ireland	Kinsale	Total Irish Ships	Total English Ships	
Nov 1413 - Mich 1414					17	29								2					1	3	0	0
Mich 1481 - April 1482				10	10	19								2				1		3	0	0
Mich 1484 - April 1485		19	12			39								2						2	2	2
Mich 1485 - Mich 1486			4	85	123								2	2						4	2	2
Nov 1486 - Mich 1487						39							1							1	0	0
Mich 1496 - Mich 1490											
Easter 1496 - Mich 1496											
Mich 1510 - Mich 1511		...	3	...	...	123	...	...	...	...	...	...		6						6	1	1

Sources:

TNA, E122/25/5; TNA, E122/26/8; TNA, E122/26/9; TNA, E122/26/11; TNA, E122/26/14; TNA, E122/26/16; TNA, E122/26/20; TNA, E122/26/13; TNA, E122/27/11.

Exeter and Dartmouth: Importation from Ireland of Herring (White) measure in Barrels (1000 herring each)
(Table. 3e)

Year	October	November	December	January	February	March	April	May	June	July	August	September	Waterford	Wexford	Cork	Youghal	Dublin	Ireland	Dungarvan	Kinsale	Total Irish Ships	Total English Ships	
1463 - 1646					72								2									2	0
Mich 1480 - Mich 1481						42							1		1							2	0
Mich 1492 - Mich 1493						84							1	2								3	0
Mich 1498 - Mich 1499					36											1				1		2	0
Mich 1502 - Mich 1503					41	95							2	1	1	2	1			1		8	0
Mich 1506- Mich 1507						215							2		1				2			5	0
Mich 1508 - Mich 1509				12	21	40							1	2	1			1*				5	0
Mich 1509 - Mich 1510				16	18	23								2	1				3			6	0
Mich 1517 - Mich 1518				2																		1	0
Mich 1518 - Mich 1519			14		44											1			1			2	1

* New Ross

Sources:

TNA, E122/40/10; TNA, E122/41/6; TNA, E122/41/14; TNA, E122/41/15; TNA, E122/41/18; TNA, E122/201/2; TNA, E122/41/25; TNA, E122/201/3; TNA, E122/42/1; TNA, E122/201/4; TNA, E122/201/5; TNA, E122/42/2; TNA, E122/42/3; TNA, E122/42/4.

Exeter & Dartmouth: Importation from Ireland of Herring (Red) measured in Mease (620 herring each) (Table. 3f)

Year	October	November	December	January	February	March	April	May	June	July	August	September	Waterford	Wexford	Cork	Youghal	Dublin	Ireland	Dungarvan	Kinsale	Total Irish Ships	Total English Ships	
Mich 1463 - Mich 1464				39									2									2	0
Mich 1480 - Mich 1481						19							1	1								2	0
Mich 1492 - Mich 1493																	
Mich 1498 - Mich 1499																
Mich 1502 - Mich 1503					6	44							1		1			1				3	0
Mich 1506 - Mich 1507					80	58							3	1								4	0
Mich 1508 - Mich 1509				20									1									1	0
Mich 1509 - Mich 1510				30	30								1	1								2	0
Mich 1517 - Mich 1518				55		3								2					1			3	0
Mich 1518 - Mich 1519					38									2								2	0

Sources:

TNA, E122/40/10; TNA, E122/41/6; TNA, E122/41/14; TNA, E122/41/15; TNA, E122/41/18; TNA, E122/201/2; TNA, E122/41/25; TNA, E122/201/3; TNA, E122/42/1; TNA, E122/201/4; TNA, E122/201/5; TNA, E122/42/2; TNA, E122/42/3; TNA, E122/42/4.

Plymouth & Fowey: Importation from Ireland of Herring (White) measured in Barrels (1000 herring each) (Table. 3g)

Year	October	November	December	January	February	March	April	May	June	July	August	September	Waterford	Wexford	Cork	Youghal	Dublin	Dungarvan	Kinsale	Total Irish Ships	Total English Ships	
Mich 1465 – Mich 1466	4			40												1				1	2	0
Mich 1497 – Mich 1498	-----	-----	-----	-----	-----	-----	-----															
Mich 1505 – Mich 1506				93*	1.5									1	2			1			4	0
Mich 1511 – Easter 1512				20	48	12									3						3	0
Mich 1512 – Mich 1513				60											1						1	0
Mich 1513 – Mich 1514					42											1					1	0
Mich 1516 – Mich 1517						62									2						2	0

Sources:

TNA, E122/114/3; TNA, E122/115/7; TNA, E122/115/8; TNA, E122/115/11; TNA, E122/115/12; TNA, E122/206/1; TNA, E122/206/7; TNA, E122/206/2; TNA, E122/116/4

Bristol: Importation of Hake from Ireland measured individually (Table 3h)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Waterford	Wexford	Cork	New Ross	Youghal	Limerick	Dublin	Drogheda	Kinsale	Irish Ships	English Ships	
Nov-May 1378/9			2340																				0	1
Oct-Mar 1403/4		2180	14240	12840	4380	1140								1								8	9	3
Sep-Feb 1406/7			3600																			1	1	0
Mar-Sep 1461												145											0	1
Nov-May 1465/5			24260	4160	32420		120	360					3		3		1	1				3	11	5
Aug-Nov 1469	2460																							1
Aug-Nov 1470	780																							1
Mar-Sep 1471																						1	1	0
Easter-Mich 1472		1800										720										0	0	1
Mar-Mich 1473							2760				300											0	0	1
Jul-Sep 1476																						0	0	5
Nov-Mar 1477/8	960	14660	2765	9475	8525	2160							6	1	5							2	14	17
Mar-Jul 1479							60										1						1	0
Sep-Jul 1479/80	11550	5130	22164	24705	41740	12980	120						3		7		3					3	16	26
Mich 1485/6		2280	840	71595	5785	3960			120	360	1680		4	1	3	1	3	1					13	16
Mich 1486/7	20220	2820	2700	29799	4920	3750	375	1320		2820	120		7										7	0
Mich 1492/3		11100		2400		12800	33165	13125				300	4	3	1								8	21
Mich 1503/4	3753	12450	7625	38455	18251	18085	865				2055	840	13	1	5	1	3	Dingle				7	32	36
Mich 1516/7	3525	13690	8955	16140	40800	113800				960	2880		6	5	4		7	Wicklow	Malahide		1	8	33	47

Sources:

TNA, E122/17/10; TNA, E122/7/8; TNA, E122/17/11; TNA, E122/17/37; TNA, E122/19/4; TNA, E122/19/6; TNA, E122/19/7; TNA, E122/19/8; TNA, E122/19/9; TNA, E122/19/10; TNA, E122/18/39; TNA, E122/19/11; TNA, E122/19/13; TNA, E122/19/14; TNA, E122/20/5; TNA, E122/20/9; S. Flavin & E. Jones, eds, *Bristols Trade with Ireland and the Continent, 1503-1601* (Bristol, 2009).

Bridgewater: Importation of Hake from Ireland measured Individually (Table 3i)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Waterford	Wexford	Cork	Youghal	Dublin	Ireland	Dungarvan	Kinsale	Irish Ships	English Ships
Nov-Mich 1413/4					12	340														4	4	0
Mich-Apr 1481/2				2280	360	780										4	Malahide					
Mich-Apr 1484/5		1080	360		2280		360	2400			240		1	1			1			1	7	0
Mich 1485/6			12960	145	1260								3	2							1	6
Nov-Mich 1486/7		960		960	1200	120				1920			The other four vessels were probably from England					1			5	6
Mich 1489/90	1200	6960	1200	8280	120	3240							1	Eight other vessels entered from Ireland but the vessels origin unreadable							1	4
Easter-Mich 1496									2220			840	The origin of vessels unreadable								1	4
Mich 1510/11			1440	360	4560	9600	5160						7	1	1	3			2	2	15	3

Sources:

TNA, E122/25/5; TNA, E122/26/8; TNA, E122/26/9; TNA, E122/26/11; TNA, E122/26/12; TNA, E122/26/14; TNA, E122/26/16; TNA, E122/26/20; TNA, E122/26/13; TNA, E122/27/1

Exeter & Dartmouth: Importation of Hake from Ireland measured in Units (Table 3i)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Waterford	Wexford	Cork	Youghal	Dublin	Ireland	Dungarvan	Kinsale	Irish Ships	English Ships
1463/4					120								1								1	0
Mich 1480/1						960							1									
Mich-Apr 1492/3						1200							1	1								
Mich 1498/99																						
Mich 1502/3																						
Mich 1506/7					14	840																
Mich 1508/9																						
Mich 1509/10				60	1860	840							2	1					2		5	0
Mich-Easter 1515/6																						
Mich 1517/8																						
Mich 1518/9																						

Sources:

TNA, E122/25/2; TNA, E122/26/8; TNA, E122/26/11; TNA, E122/26/12; TNA, E122/26/14; TNA, E122/26/14; TNA, E122/26/16; TNA, E122/26/20; E122/26/13; TNA, E122/27/1

Southampton: Importation from Ireland of Hake (measured in units) (Table 3k)

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Waterford	Wexford	Cork	Youghal	Dublin	Ireland	Dungarvan	Kinsale	Total Irish Ships	Total English Ships	
Feb 1500-Mich 1500				2160									2									2	0

Sources
TNA, E122/209/2

Bristol: Importation of Salfish from Ireland measured individually (Table 3I)

Year	October	November	December	January	February	March	April	May	June	July	August	September	Waterford	Wexford	Cork	New Ross	Youghal	Dublin	Drogheda	Kinsale	Total Irish Ships	Total English Ships	
Oct-Mar 1403/4		40	/	670	810	600								1		2		1A		4	8	1	
Mar 1461 - Sept 1461				/	/			1540	1320	1000		920										0	12
Sept 1406 - Feb 1407	/	/	/	/	/								1									0	0
Dec 1465 - May 1466			680		1336	3880	820	160												2	4	13	
Aug 1469 - Nov 1469	60																					0	1
Aug 1470 - Nov 1470	560																			1	1	2	
Mar 1471 - Sept 1471								280		840	2200						2					2	6
Nov 1472 - Dec 1472																							
Easter 1473 - Mich 1473																							
Mar 1475 - Mich 1475							4390	3530	540	1400	2860											0	14
July 1476 - Sept 1476								1200	160	340	1040											0	6
Nov 1477 - Mar 1478	40	40	40	70	3535	3920					2136										0	3	
March 1479 - July 1479													5				2			1	8	12	
Sept 1479 - July 1480	120	80	100	300	2530	3910	2030	1220	/	3520			1				1			1	3	9	
Mich 1485 - Mich 1486	/	480	/	1805	150	9240	760	800	80	/	480		2	1	2		1			2	8	26	
Mich 1486 - Mich 1487	720			1490	2640	310	2470	3020	590	185	460		6	1	1		3	1C		1	13	18	
Mich 1492 - Mich 1493	60	40	/	60	/	360	1470	4000	30	/	240		7								7	19	
Mich 1503 - Mich 1504		720	120	1895	1165	3510	3080	270	/	2780	420	2020	6	1	1						8	20	
Mich 1516 - Mich 1517	80	39	922	320	240	5447	550	328	/	590	200		6	1	1	1	6		1	6	17	27	
																					3	19	29

Sources:

TNA, E122/17/10; TNA, E122/7/8; TNA, E122/17/11; TNA, E122/17/37; TNA, E122/19/4; TNA, E122/19/4; TNA, E122/19/1; TNA, E122/19/7; YNA, E122/19/8; TNA, E122/19/9; TNA, E122/19/10; TNA, E122/18/39; TNA, E122/19/11; TNA, E122/19/13; TNA, E122/20/5; TNA, E122/20/9; Flavin & Jones, eds, *Bristol's Trade with Ireland and the Continent, 1503-1601* (Dublin, 2009), *passim*.

Bristol: Importation of Saltfish from Ireland measure individually (Table 3m)

Year	October	November	December	January	February	March	April	May	June	July	August	September	Waterford	Wexford	Cork	Youghal	Dublin	Ireland	Dungarvan	Kinsale	Total Irish Ships	Total English Ships	
Nov 1413 – Mich 1414	-----	-----	-----	-----	-----	-----	-----	-----															
Mich 1482 – May 1482								370							1	1				2	4	0	0
Mich 1485 – May 1485							1120	240	2220		40											0	5
Mich 1485 – Mich 1486			80	70	100	320	460					2	1									3	6
Nov 1486 – Mich 1487		180				492								1				1				2	2
Mich 1489 – Feb 1490				140	500	420	20							2		2						4	3
Easter 1496 – Mich 1496									20							1						1	0
Mich 1510 – Mich 1511				20	160	305	380		10					2	1	5			2	2	12	1	1

Sources:

TNA, E122/25/2; TNA, E122/26/8; TNA, E122/26/11; TNA, E122/26/12; TNA, E122/26/14; TNA, E122/26/14; TNA, E122/26/16; TNA, E122/26/20; TNA, E122/26/13; TNA, E122/27/1

Bristol: Importation of Salmon from Ireland measured individually (Table 3n)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Waterford	Wexford	Cork	New Ross	Youghal	Ireland	Dublin	Drogheda	Kinsale	Irish Ships	English Ships
Nov-May 1378/9						384								1	1							2	0
Oct-Mar 1403/4		3360	3024	10416	1272								1	1	2	2	2	1	2	1	3	14	3
Sep-Feb 1406/7	3792											120	1									1	1
Mar-Sep 1461																						0	1
Nov-May 1465/5				24	768	120	72						2	2	2			Ballyhack 1			1	6	4
Aug-Nov 1469	1056																					0	2
Aug-Nov 1470	2952										2448										1	1	2
Mar-Sep 1471								96		504	4944					1				1		2	4
Easter-Mich 1473							1266	288	384													0	5
Mar-Mich 1475								48			2808											1	1
Jul-Sep 1476											2136											0	2
Nov-Mar 1477/8			96	1932	456	120			384	2064			4	1	5		1				2	12	5
Mar-Jul 1479							336	336		436												1	3
Sep-Jul 1479/80	552	1008	2400	3264	5124	4248	240	336	1440				3	2	5	3	3					13	14
Mich 1485/6				13512	1080	720		336	240	24	240	2400	4	3	3	1	4	Limerick 1				13	14
Mich 1486/7	936		480	2928	456	360	72	600	96	96		7										7	15
Mich 1492/3		564		24		96	2004	1080	216	72		972	6	3	1							10	12
Mich 1503/4	1356		1464	444	816	1032	228		96	2100	384	1116	10	1	3	1	1				2	18	17
Mich 1516/7		2604	1272	24	600	7776		24	12	1452	48		5	2	5	3	9	Wicklow 1	Malahide 1	1	7	34	9

Sources:

TNA, E122/17/10; TNA, E122/7/8; TNA, E122/17/11; TNA, E122/17/37; TNA, E122/19/4; TNA, E122/19/6; TNA, E122/19/7; TNA, E122/19/8; TNA, E122/19/9; TNA, E122/19/10; TNA, E122/18/39; TNA, E122/18/39; TNA, E122/19/11; TNA, E122/19/13; TNA, E122/19/14; TNA, E122/20/5; TNA, E122/20/9; Flavin & Jones, eds, *Bristol's Trade with Ireland and the Continent, 1503-1601* (Dublin, 2009).

Bridgewater: Importation of Salmon from Ireland measured individually (Table 3o)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Waterford	Wexford	Cork	New Ross	Youghal	Ireland	Dublin	Drogheda	Kinsale	Irish Ships	English Ships
Nov-Mich 1413/4		/	/	/	336	/	/	/	/	/	/	/		1							1	2	1
Mich-Apr 1481/2				72	/	408		216					1	1	1	2						5	0
Mich-Apr 1484/5					24	144	96				96		1	1							1	3	2
Mich 1485/6			528	192	588	48							3	2								5	4
Nov-Mich 1486/7						48								1								1	0
Mich 1489/90				72	48	96	24	48					1				1					2	4
Easter-Mich 1496								224									1					1	1
Mich 1510/11						144	96		48	24				4	1	3						8	0

Sources:

TNA, E122/25/5; TNA, E122/26/8; TNA, E122/26/9; TNA, E122/26/11; TNA, E122/26/12; TNA, E122/26/14; TNA, E122/26/16; TNA, E122/26/20; TNA, E122/26/13; TNA, E122/27/11

Exeter & Dartmouth: Importation of Salmon from Ireland measured Individually (Table 3p)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Waterford	Wexford	Cork	New Ross	Youghal	Ireland	Dublin	Drogheda	Kinsale	Irish Ships	English Ships
1463				16									1									1	0
Mich 1481			24										1									1	0
Mich-Apr 1492/3			72										1	1								2	0
Mich 1498/99																							
Mich 1502/3			60	276	12								2	1				1				4	0
Mich 1506/7			216	456									2	1	1							4	0
Mich 1508/9			12	108	132								1	1	1	1		New Ross				5	0
Mich 1509/10			12	72	12									2	1			1				3	0
Mich-Easter 1515/6																							
Mich 1517/8		36												1		1						2	0
Mich 1518/9				432					48					1		2						3	0

Sources:

TNA, E122/40/10; TNA, E122/41/6; TNA, E122/41/14; TNA, E122/41/5; TNA, E122/41/18; TNA, E122/201/2; TNA, EQWW/41/25; TNA, E122/41/25; TNA, E122/201/3; TNA, E122/201/3; TNA, E122/201/3; TNA, E122/42/1; TNA, E122/201/4; TNA, E122/201/4; TNA, E122/201/5; TNA, E122/42/2; TNA, E122/42/3; TNA, E122/42/4

Plymouth & Fowey: Importation from Ireland of Pike measured individually (Table 3q)

Year	October	November	December	January	February	March	April	May	June	July	August	September	Waterford	Wexford	Cork	Youghal	Dublin	Dungarvan	Kinsale	Total Irish Ships	Total English Ships
Mich 1465 - Mich 1466				600												1				1	0
Mich 1497 - Mich 1498						120										1				1	0
March 1499 - June 1499						960													1	1	0
Mich 1505 - Mich 1506				950		150									2			1		3	0
Mich 1512 - Mich 1513				240		240									1			1		2	0
Mich 1513 - Mich 1514					2340											1				1	0
Mich 1516 - Mich 1517						360									1					1	0

Sources:

TNA, E122/114/3; TNA, E122/115/7; TNA, E122/115/8; TNA, E122/115/11; TNA, E122/115/12; TNA, E122/206/1; TNA, E122/206/2; TNA, E122/206/7; TNA, E122/206/7; TNA, E122/206/2; TNA, E122/116/4

Exeter, Dartmouth: Importation from Ireland of pike measured individually (Table 3r)

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	July	August	Sept	Waterford	Wexford	Cork	Youghal	Dublin	Ireland	Dungarvan	Kinsale	Total Irish Ships	Total English Ships	
Mich 1463 - Mich 1464																							
Mich 1480 - Mich 1481																							
Mich 1492 - April 1493																							
Mich 1498 - Mich 1499					1320																		
Mich 1502 - Mich 1503					625																	2	0
Mich 1506 - Mich 1507						3680							2	1								3	0
Mich 1508 - Mich 1509				60	12075	2190							2					1	2			4	0
Mich 1515 - Mich 1516					4200								1	2		2	1					8	0
Mich 1517 - Mich 1518				2100		1860										1			1			1	0
Mich 1518 - Mich 1519			1200		2520									2		1			2			5	0
														2		1						3	1

Sources:

TNA, E122/40/10; TNA, E122/41/6; TNA, E122/41/14; TNA, E122/41/15; TNA, E122/41/18; TNA, E122/201/2; TNA, E122/41/25; TNA, E122/201/3; TNA, E122/42/1; TNA, E122/201/4; TNA, E122/201/5; TNA, E122/42/2; TNA, E122/42/3; TNA, E122/42/4

Notarial records for wine shipments from Bordeaux to Ireland Table 4a

Year	Quantity cargo	Destinations	Shipnames	Irish Merchant
1473	65 tuns	Ireland	<i>Nicholas De Bretagne</i>	
1475	15 tuns	Flanders, Ireland, Picardy	<i>Caravel Bon Aventure Guerande</i>	
1477	41 tuns	Drogheda	<i>Caravel Katherine Concerneau</i>	
1477	71 tuns	Cork, Kinsale, Youghal	<i>Caravel Marie Audierne</i>	
1485	10 tuns	Zeeland, Ireland	<i>Cavavel Trinity of Concerneau</i>	
1494	37 tuns	Youghal & Kinsale	<i>Katherine of Bordeaux</i>	
1497	88 tuns	Youghal	<i>Marie Jehan Bordeaux</i>	J Mahon
1498	42 tuns	Waterford, Youghal, Kinsale	<i>Nicholas of Bordeaux</i>	
1498	-	Ireland	<i>Marie of Bayonne</i>	
1498	58 tuns	Sligo & 2 other ports	<i>Marguerite Saint-Malo</i>	John Fonte, Galway
1499	43 tuns	Kinsale & Limerick	<i>Nicholas Loctudy</i>	Guilleme Haboll, Henry Martel
1499	24 tuns	Drogheda, Waterford, Kinsale	<i>Jennete of Marlaix</i>	
1499	29 tuns	Dublin	<i>Jehannete of Crozon</i>	M More, Dublin
1499	35 tuns	Waterford	<i>Andre of Audierne</i>	Henry Fagan, Waterford; Thomas Har, Dungarvan
1499	25 tuns	Waterford	<i>Barbara of Audierne</i>	Henry Fagan, Waterford
1499	81 tuns (probably less than a ¼ to Dublin)	Milford, Dublin & 3 ports in Scotland	<i>Michelle Conquest</i>	
1499	65 tuns	Cork	<i>Nicholas of Lanion</i>	Thomas Lebalys, Cork
1500	33 tuns	Dingle	<i>Nicholas of Loctudy</i>	Eguard de Nagle, Dingle
1500	10 tuns	Waterford	<i>Ship of Penmarch</i>	Thomas Har Dwyeren
1501	52 tuns	Youghal	<i>Marie of St-Jean-de-Luz</i>	Thomas Colerc, Youghal
1502	29 tuns	Youghal	<i>Cristofle of Bordeaux</i>	Henry Da Houghal
1502	39 tuns	Kinsale, Baltimore, Valentia, Waterford	<i>Jehon of Port-Láthé</i>	Maurice Donell, Youghal
1502	32 tuns	Kinsale, Baltimore, Waterford	<i>Christofle Andierne</i>	Robert Tobin, Youghal
1502	59 tuns	Cork	<i>Michelle of Hersfleur</i>	James Barry, Cork
1503	24 tuns	Galway	<i>Marie of Audierne</i>	Richard Lynch, Galway
1503	31 tuns	Galway	<i>Barbe of Audierne</i>	

Year	Quantity cargo	Destinations	Shipnames	Irish Merchant
1503	115 tuns	Youghal, Waterford, Kinsale	<i>Guinolé Penmarch</i>	Richard Donell, Youghal
1504	54 tuns	Waterford, Cork	<i>Bonaventure of Conquet</i>	Maurice Donell, Robert Tobin, J Portugal, Patrick Walsh
1504	83 tuns	Youghal, Kinsale, Baltimore, Waterford		Robert Tobin, Patrick Walsh, Maurice Donell, J Portugal
1504	115 tuns	Youghal	<i>Guinote of Penmarch</i>	Maurice Donell, J Portugal. J Toby, Robert White
1504	15 tuns	Kinsale	<i>Marie of Quimper</i>	Bernard Nash, Richard Barry, J Yon
1504	-	Ireland	<i>Jehon of Port-l'abbé</i>	-
1504	44 tuns	Waterford, Kinsale, Cork, Drogheda		
1504	44 tuns	Youghal	<i>Julienne of Quimper</i>	J Tobin
1505	25 tuns	Kinsale	<i>Marie of d'Arvert</i>	Richard Barry, Patrick Roche
1505	52 tuns	Kinsale	-	-
1505	42 tuns	Youghal, Waterford, Kinsale	<i>Marie of Bénodet</i>	-
1505	36 tuns	Youghal, Cork, Kinsale	<i>Magdalene of Conquet</i>	
1505	36 tuns	Dublin (Skerries), Drogheda	<i>Guynolé Of Landerneau</i>	-
1505	51 tuns	Kinsale	<i>Sanct-Esperit of St-Jean-de-Luz</i>	J Macre, Kinsale
1505	113 tuns	Waterford, Kinsale	<i>Veau of Penmarch</i>	
1505	110 tuns	Youghal	<i>Caravel Magdalene of Loctudy</i>	James Mahon, Youghal
1506	24 tuns	Dublin, Drogheda, Dundalk, Kinsale	<i>Magdalene of Driar</i>	J Lenfalle, Dublin
1506	6 tuns	Limerick	-	-
1508	10 tuns	Dingle, Limerick	<i>George of Croisic</i>	
1508	21 tuns	Ireland	<i>Marie of Croisic</i>	
1508	29 tuns	Youghal	<i>Fiacre of Penmarch</i>	James Moan, Peter Arthur, J Forest Ireland
1508	36 tuns	Youghal, Cork, Waterford, Kinsale	<i>Nicholas of St-Jean-de-Luz</i>	Richard Comyn, Youghal
1508	10 tuns	Drogheda	<i>Marie of Croisic</i>	
1508	59 tuns	Kinsale, Cork, Youghal, Waterford	<i>Cerf of Penmarch</i>	
1508	62 tuns	Dingle	<i>Susanne of Croisic</i>	J Nobert, Richard Donell, David Lynn, Patrick Poigot, Nicholas Roche
1509	c. 20 tuns	Sligo, Derry	<i>Jacques of Bénoder</i>	
1510	48 tuns	Waterford	<i>Reynard of Conquet</i>	Robert Devreux, Waterford

Year	Quantity cargo	Destinations	Shipnames	Irish Merchant
1510	53 tuns	Youghal, Cork, Kinsale	<i>Marie of Loctudy</i>	Dominic Bernard, Youghal
1511	15 tuns	Galway	<i>Marie of Penmarch</i>	Nicholas Lynch, Dominic Dea, Galway
1511	32 tuns	Ireland	<i>Magdalene of Croisic</i>	
1511	44 tuns	Dingle	<i>Julienne of Loctudy</i>	J Don, Maurice Little, Ramond Kent, Dingle
1511	24 tuns	Baltimore, Dingle	<i>Julienne of Loctudy</i>	Richard Dwlyn, Ramond Trent, Etienne Roache of Dingle
1511	41 tuns	Ireland (possibly Limerick)	<i>Bonaventure of Croisic</i>	
1511	89 tuns	Dingle	<i>Guindeam of Loctudy</i>	13 Irish merchants
1511	47 tuns	Dingle	<i>Marie of Lannion</i>	Denis Fin, Richard Noble, R Trent, J Dwlyn, J Don, Richard Dinnegan, Patrick Bigot
1512	42 tuns	Kinsale	<i>Marie of Penmarch</i>	Patrick Roche, Andrew Roche, Richard Barry
1512	64 tuns	Ireland	<i>Guynole of Croisic</i>	
1512	2 tuns	Galway	<i>Magdalene of Conquet</i>	Richard Lynch, Galway
1512	6½ tuns	Galway	<i>Marie of Penmarch</i>	Dominic Deen, James Josse of Galway
1514	50 tuns	Waterford, Kinsale, Youghal, Dublin		
1514	76 tuns	Waterford, Kinsale, Cork, Dublin, Drogheda, Limerick, Ballinskelligs, Dingle	<i>Marie of St-Pol-de-Leon</i>	
1514	74 tuns	Cork	<i>Marie of Conquet</i>	James Creach, James Berne
1515	70 tuns	Dublin	<i>Marie of Croisic</i>	James Brown
1515	56 tuns	Derry (Lough Foyle)	<i>Marguerite of Conquet</i>	Michael Mealy, Duncan Makaler both of Ballymoney
1514	41 tuns	Ireland	<i>Marie on Londerneau</i>	
1515	15 tuns	Limerick	<i>Jehannek of Dieppe</i>	David Wit, Nicholas Strip
1516	98 tuns	Youghal	<i>Anne of Audierne</i>	Guill Mea, Youghal
1516	c. 50 tuns	Dunbarton, Waterford	<i>Petit-Lyon of Penmarch</i>	
1516	c. 50 tuns	Dunbarton, Waterford	<i>Nycholas of Granville</i>	
1516	30 tuns	Dublin	<i>Catherine of Croisic</i>	Nicholas Albert, Dublin

Year	Quantity cargo	Destinations	Shipnames	Irish Merchant
1517	46 tuns	Cork	<i>Francyose Penmarch</i>	David Terre, Cork
1517	36 tuns	Limerick	<i>Jehannette of Dieppe</i>	Nicholas James
1517	54 tuns	Dartmouth & Limerick	<i>Julliere Croisic</i>	Walter Rys, Limerick
1517	126 tuns	Youghal	-	Dominic Portugal & Richard Noble merchants of Youghal
1517	c. 30 tuns	Dunbarton, Waterford	<i>Caravel Bonaventure</i>	
1518	15 tuns	Cork	<i>Marie-Jacques (Cork)</i>	David Roche
1518	?	Beaumaris, Chester, Dublin	<i>Lucas of Loctudy</i>	
1518	103 tuns	Cork	<i>Brigartin of Loctudy</i>	David Barry, J nash, George Lombard
1518	120 tuns	Youghal	<i>Grand Julliene</i>	possibly 5 Youghal merchants
1518	50 tuns	Youghal	<i>Marie of Brest</i>	Richard Reynard, J Bluet, Youghal
1519	61 tuns	Dublin	<i>Pierre of Crozon + 1 tun of brandy</i>	
1519	46 tuns	Kinsale	<i>Marie Penmarch</i>	Richard Nash, Kinsale
1519	45 tuns (blancs, rouges clarets)	Kinsale, Cork, Dungarvan, Youghal, Dublin, Drogheda	<i>Julienne of Keroyal</i>	
1519	25 tuns	Youghal/Dungarvan	<i>Margarite of Ouessant</i>	Thebault White, Youghal
1519	60 tuns	Waterford/Youghal	<i>Marie of Piriac</i>	
1520	44 tuns	Dungarvan/Waterford	<i>Nef Julienne Penerf</i>	Matthew Hart, Thomas Hart, Dungarvan
1520	90 tuns	Waterford/Youghal	<i>Trinite of Penmarch</i>	
1520	80 tuns	Youghal	<i>Laurence of Bénodet</i>	Peter Arthurs
1520	c. 22 tuns	Waterford	<i>Nef Petit Julienne of Loctudy</i>	
1520	40 tuns	Waterford	-	Henry Fagan and others
1520	38 tuns	Cork	<i>Petite-Barbe of Audierne</i>	
1520	20 tuns	Youghal/Cork, Dublin	<i>Saulveur of Morbihan</i>	
1520	35 tuns (blancs, rouges/clarets)	Dublin	<i>Julienne Keroyal</i>	Christopher Foyt
1520	50 tuns	Dungarvan	<i>Nef Bonne Aventure</i>	Matthew Hart, J Nagle

Source:

J. Bernard, ed., *Navires et gens de mer à Bordeaux (Vers 1400 - Vers 1500)*, iii (Paris, 1968), *passim*.

Bordeaux Wine Customs Accounts Relating to Ireland from c.1350-c.1450 Table 4b

Month/Year	Quantity of Wine	Name and origin of ship	Shipmaster
November 1355	57 tuns 1 pipe	<i>la Paul Drogheda</i>	Alexander Preston
December 1355	43 tuns	<i>la Margerite Waterford</i>	Nicholas Pyn
November 1356	106 tuns 1 pipe	<i>la James Youghal</i>	Paul Stretoner
November 1356	63 tuns	<i>la Levanard Youghal</i>	John White
December 1356	64 runs	<i>la Poghel Drogheda</i>	Guybon de Halle
March 1356	52 tuns	<i>la Levanard Youghal</i>	John Blanc
December 1356	144 tuns 1 pipe	<i>la Trinity Cork</i>	Walter Fischer
December 1372	30 tuns	<i>la Grace Dieu Waterford</i>	Yenet of Waterford
January 1375	32 tuns	<i>la Grace Dieu Waterford</i>	John Grace
February 1378	37 tuns 1 pipe	<i>la Grace Dieu Waterford</i>	Yenet Vinto
November 1378	40 runs	<i>la Marie Dublin</i>	Nicholas Fox
December 1385	77 tuns 1 pipe	<i>la James Kinsale</i>	Richard Brian
December 1400	18 tuns	<i>le Leonard Galway</i>	John Russel
November 1402	80 tuns 1 pipe	<i>le James Kinsale</i>	Richard Russel
October 1402	16 tuns 1 pipe	<i>la Katerina Dublin</i>	Oliver James
October 1402	13 tuns 1 pipe	<i>la Maria Dublin</i>	John Holxxx
November 1402	46 tuns 1 pipe	<i>la Maria Dublin</i>	Roger Reymund
November 1402	68 tuns	<i>la Maria Dublin</i>	John Benet
November 1402	64 tuns	<i>la Christopher Waterford</i>	Stephen Brown
November 1402	89 tuns 1 pipe	<i>le Marie Drogheda</i>	John Passavant
November 1402	80 tuns 1 pipe	<i>la James Kinsale</i>	Richard Russel
April 1403	5 tuns	<i>la Maria Dublin</i>	Roger Reynolds
April 1403	60 runs 1 pipe	<i>la Michel Dublin</i>	John Holxxx
October 1403	73 tuns 1 pipe	<i>la Kateryne Dublin</i>	William Cole
February 1413	91 tuns	<i>le James Kinsale</i>	Richard Russel
February 1413	36 tuns 1 pipe	<i>le Marie Dublin</i>	Jack Benet
February 1413	75 tuns	<i>Gabriel Kinsale</i>	John Hyde
February 1413	35 tuns	<i>Michael Kinsale</i>	German Hyas
December 1416	74 tuns 1 pipe	<i>la Marie Dublin</i>	John Benet
March 1417	63 tuns	<i>la Christopher Waterford</i>	Stephen Brown
April 1417	63 tuns	<i>le Michel Dublin</i>	John Hoton
December 1431	38 tuns	<i>la Juliana Kinsale</i>	Matthew Davis
December 1431	41 tuns	<i>la Katerina New Ross</i>	William Williams
November 1443	c. 72 tuns	<i>Jacmes Dublin</i>	Andreas Walstade
December 1443	96 tuns	<i>la Marie Wexford</i>	Henry Vaile
November 1448	72 tuns 1 pipe	<i>la Marie Dublin</i>	Andreas Walstade
November 1448	154 tuns	<i>la Marie Wexford</i>	---
March 1449	72 tuns 1 pipe	<i>la Marie Dublin</i>	Andreas Walstade

Sources:

TNA, E101/173/4; TNA, E101/179/10; TNA, E122/180/2; TNA, E101/182/5; TNA, E101/182/6; TNA, E101/183/11; TNA, E101/184/19; TNA, E101/185/11; TNA, E101/185/7; TNA, E101/191/3; TNA, E101/194/3; TNA, E101/195/19.

Sample of Wine Trade between Ireland and Bristol c.1460-1520 Table 4c

Year	Ship name and origin	Master	Merchant	Enter/Exit	Cargo Size
1466	<i>le Patrick of Bristol</i>	Richard Walsh	George Mercer	exit	½ tun
1466	<i>Mary of Sherlok</i>	William Edward	John Shipward & Associates	exit	1½ tuns
1466	<i>Mary Grace Bristol</i>	William Lord	John Shipward & Associates	exit	8 tuns / 5 tuns perry
1466	<i>Mary of New Ross</i>	William Kerne	Robert Brown	exit	¼ tun
1475	<i>Katherine of Bristol</i>	John Tanke	Cornelius/ Adam Godearr	exit	2½ tuns
1485/6	<i>Olivier of Lisbon (coming from Galway to Bristol)</i>	Vaspasianos	Many including Oliver Lynch	enter	-
1504	<i>Tribute of Chepstow</i>	William Butler	William Clark	enter	½ tun
1504	<i>Trinity of Cork</i>	Peter Butler	William Clark	exit	½ tun
1504	<i>Christopher of St Ives</i>	Nicholas Blake	Nicholas Blake	enter	½ tun
1504	<i>Geore of Gatcombe</i>	Walter Nashe	John Bolfeiche	enter	2 tuns
1504	<i>Margret of Milford Haven</i>	David Lloyd	David Griffith, David Browne	enter	6½ tuns
1504	<i>Mawdlen of Berkely</i>	Thomas Senekins	Maurice Donell	enter	2 tuns
1504	<i>Kymborgh of Gloucester</i>	Philip Fox	David Westerbie, Thomas Ayleworth	enter	3 tuns
1504	<i>Margret of Minehead</i>	John White	Patrick Goold	enter	½ tun
1504	<i>Sunday of Waterford</i>	John Walshe	Walter Clarke	exit	2½ tuns
1516	<i>George of Bristol</i>	William Apprice	David Vagan	enter	1½ tuns
1516	<i>Katherine of Shirehampton</i>	John Jenkin	Thomas Donell	enter	¾ tun
1516	<i>Mare of Carmarthan</i>	Robert Doyou	Thomas Walter	enter	1 tun
1516	<i>George of Wicklow</i>	Patrick Albury		enter	
1516	<i>Nicholas of Drogheda</i>	Nicholas Jones	Prior of Llanthony	enter	¼ tun
1517	<i>Katherine of Youghal</i>	Patrick Browne	William Compton	enter	¾ tun
1517	<i>Patrick of Youghal</i>	Maurice Russell	Patrick Arthur	enter	¼ tun
1517	<i>Patrick of Cork</i>	Robert Broder	William Millan	enter	½ tun
1517	<i>Trinity of Milford-Haven</i>	Thomas Allen	John Mayvre	enter	½ tun
1517	<i>Sunday of Waterford</i>	Edmund Mulrony	Edmund Mulrony, Thomas Whaley	enter	1¾ tuns
1517	<i>Elizabeth of Milford-Haven</i>	Watkyn John	William Robinet	enter	¼ tun
1517	<i>Nicholas of Milford-Haven</i>	David Philip	John Mayne	enter	½ tun
1517	<i>Trinity of Huntley</i>	John Browning	Nicholas Cokk	enter	1 tun
1517	<i>Mighell of Gatcombe</i>	John Marks	John Marks	enter	3 tuns
1517	<i>Patrick of Waterford</i>	John Fitzharry	John Walsh	enter	8 tuns
1517	<i>Sunday of Waterford</i>	Edmund Mulrony	John Walsh	enter	¼ tun
1517	<i>Patrick of Youghal</i>	Maurice Russell	Maurice Russell, Richard Nangil	enter	5 tuns
1517	<i>Mawdelyn of Combwich</i>	John Kent	Richard Arthur, John Kent	enter	2¼ tuns
1517	<i>Patrick of Youghal</i>	Richard Staunton	Patrick Walsh	enter	1 tun
1517	<i>Sunday of Waterford</i>	Edmund Mulrony	John Blake	enter	¾ tun
1517	<i>Mare Boshier of Waterford</i>	Nicholas Power	Nicholas Power	enter	2¾ tuns
1517	<i>Mare of Bristol</i>	Thomas Nangil	William Avyntyre, Thomas Nangil, Alice Poplay, Edmund Pers		3 tuns

Sample of Wine Trade between Bridgewater and Ireland c.1400-1520

Year	Ship name and origin	Master	Merchant	Enter/Exit	Cargo Size
1414	<i>George of Wexford</i>	Henry Coine	John Hasham	enter	½ tun
1496	<i>Margret of Minehead</i>	William Trent	John May	enter	½ tun
1510	<i>Mary of Cork</i>	Richard Mariner	Richard Mariner	enter	½ tun
1510	<i>Patrick of Youghal</i>	Thomas Walsh	Thomas Walsh	enter	¼ tun

1511	<i>Nicholas of Cork</i>	Maurice Roche	Maurice Roche	enter	½ tun
1511	<i>Peter of Youghal</i>	John Donard	John Donard	enter	1 tun
1511	<i>Katherine of Kinsale</i>	Richard Galway	Richard Galway	enter	¼ tun
1511	<i>Nicholas of Youghal</i>	William Howman	William Howman	enter	1 tun
1511	<i>Mare of Cork</i>	Richard Madnon	Richard Madnon	enter	¼ tun
1511	<i>Katherine of Youghal</i>	David Walsh	Denis Bessyn	enter	¼ tun
1511	<i>Katherine of Kinsale</i>	William John	Patrick Bourke	enter	¼ tun
1511	<i>Patrick of Youghal</i>	Mary Nele	Mary Nele	enter	¼ tun
1511	<i>Trinity of Kinsale</i>	John Roche	John Roche	enter	¼ tun
1511	<i>Nicholas of Cork</i>	Maurice Roche	Maurice Roche	enter	2 tuns

Sample of Wine Trade between regions of Plymouth & Fowey and Ireland

Year	Ship name and origin	Master	Merchant	Enter/Exit	Cargo Size
1498	<i>James of Youghal</i>	Germanus Maire	Germanus Maire	entered Padstow	1 tun
1508	<i>Patrick of Kinsale</i>	Denis Lody	Denis Lody, Jeffrey White	exit Mountsbay to Ireland	½ tun
1508	<i>Corrsok of Kinsale</i>	Germyn Hollehorn	Germyn Hollehorn	exit Mountsbay to Ireland	¼ tun

Sample of Wine Trade between regions in Exeter & Plymouth and Ireland

2	Ship name and origin	Master	Merchant	Enter/Exit	Cargo Size
1493	<i>Sunday of Waterford</i>	Maurice Conegam	Maurice Conegam	entered Barnstable	½ tun
1503	<i>Antoin of Youghal</i>	John McCarthy	John McCarthy	entered Barnstable	¾ tun
1503	<i>George of Wexford</i>	John Browne	John Whitingdell, William Andrew	entered Exeter	9½ tuns
1518	<i>Ship of Youghal</i>	Garet Holbert	Garet Holbert	entered Exeter region	?
1519	<i>Patrick of Youghal</i>	Cornelius Heynold	William Christopher	entered Dartmouth	¾ tun
1519	<i>Nicholas of Youghal</i>	John Grant	John Grant, William Christopher	entered Dartmouth	3½ tuns
1519	<i>Marie of Kinsale</i>	William Flemming	Edmund Colcher, John Clement	entered Dartmouth	2 tuns
1519	<i>Sunday of Youghal</i>	Jermayn Clere	Jermayn Clere	entered Dartmouth	½ tun
1519	<i>John of Wexford</i>	Henry St John	Master & Richard Turner, Walter Flemming, James Walsh	entered Exeter region	¼ tun

Sources:

TNA, E122 (particular customs accounts for Bristol, Bridgewater, Plymouth/Fowey, Exeter/Dartmouth), *passim*.

The importation of honey to Ireland from the Bordeaux Region in the fifteenth and early sixteenth century Table 5a

Ship name	Year/Date	Merchants	Proposed Destination	Quantity
<i>Gabriel of Kinsale</i>	14 th Feb 1413	-	Kinsale	2 tons
<i>Juliana of Kinsale</i>	6 th Dec 1431	-	Kinsale	5 tons
<i>Nicholas of Loctudy</i>	1499	Guileme Statbol, Limerick; Henry Marks, Kinsale	Limerick, Kinsale	Unspecified
<i>Jehon Port l'abbé</i>	1502	Maurice Donell, Youghal	Youghal	3 tons
<i>Michelle of Harfleur</i>	1502	James Barry, Cork	Cork	1/3 ton
<i>Marie of Audierne</i>	1503	Richard Lynch, Galway	Galway	31 tons
<i>Barbé of Audierne</i>	1503	Foreign merchants	Galway	30 tons
<i>Bguinole of Penmarch</i>	1503	Richard Donell, Youghal	Youghal	1 ton
<i>Marie d'Arvert</i>	1505	-	Kinsale	2/3 ton
<i>Magdalene of Loctudy</i>	1505	James Mahon, J Forest, Irish	Ireland	c. 2 tons
<i>Ship</i>	1506	J Menyer of St Malo	Limerick	44 tons
<i>George of Croisière</i>	1508	-	Dingle, Limerick	21 tons
<i>Marie of Penmarch</i>	1511	Nicholas Lynch, Dominic Dene of Galway	Galway	38 2/3 tons
<i>Magdelane of Croisic</i>	1511	Foreign merchants	Ireland	11 tons
<i>Katherine of Dieppe</i>	1512	David Herault, Limerick and others	Limerick	30 tons
<i>Marie of Penmarch</i>	1512	Pat Roche, Andrew Roche, Richard Barry, Kinsale	Kinsale	1 ton
<i>Guynole Croisic</i>	1512	French merchants	Ireland	10 tons
<i>Magdelane</i>	1512	Richard Lynch, Galway	Galway	51 tons
<i>Trinity of St Malo</i>	1512	Richard Lynch, Galway	Galway	20 tons
<i>Marie of Penmarch</i>	1512	James Josse & Dominic Dene, Galway	Galway	18 1/4 tons
<i>Guynole Penmarch</i>	1513	French merchants	Ireland	12 tons
<i>Marie of Conquet</i>	1514	James Barry and others, Cork	Cork	5 tons
<i>Jeanette of Dieppe</i>	1515	Nicholas Strip, David Wit, Limerick	Limerick	c. 35 tons
<i>Katherine of Penmarch</i>	1516	French merchants	Youghal, Cork, Kinsale, Waterford	23 tons

Sources:

TNA, E101/185/7; TNA, E101/191/3.

J. Bernard, ed., *Navires et gens de mer à Bordeaux (Vers 1400 - Vers 1500)*, iii (Paris, 1968), *passim*.

Bristol: Value of exports of commodities (spices, luxury goods) to Ireland in shillings and pence Table 5b

Year	October	November	December	January	February	March	April	May	June	July	August	September	Salt	Honey	Almonds	Pepper	Fruit	Rice	Ginger/ Aniseed/ Cinnamon/ Cumin	Sugar	Irish Ships	English Ships	Saffron
Aug - Dec 1391		160s											160s								2	0	
Dec - Mar 1403/4				88s6d	154s18d	150s							150s	30s	30s8d		180s	2s18d			4	0	
Sept - Mar 1415/6	6s8d												6s8d								0	1	
Nov - May 1465/6			114s		290s								240s	164s							4	0	
Mar - Mich 1471												4s									1	0	
July - Mich 1475			3s4d		1049s12d	76s1d			15s				899s12d	296s13d					3s4d		4	4	
Mar - July 1479										16s8d			16s8d								1	0	
Mich - Mich 1485/6					69s		100s		26s8d	100s	95s18d	25s	347s6d	69s12d							2	8	6s8d
Mich - Mich 1486/7		93s1d						307s	33s4d		150s	113s6d	676s5d	22s16d							1	10	
Mich - Mich 1492/3	20s11d	6s				12s16d		65s12d		16s8d			65s12d	12s16d		2s16d			18s1d	6s8d	1	7	563s4d
Mich - Mich 1503/4	8s3d	9s	113s4d		136s10d	13s6d		74s		164s1d	189s1d	53s	421s6d	140s		14s3d	7s6d		130s9d		14	13	2297s6d
Mich - Mich 1516/17		15s4d				67s4d	5s2d	3s1d	1d10d	26s3d	92s5d		192s9d	16s8d		2s16d					17	2	
Mich - Mich 1525/6																							1935s
Mich - Mich 1541/2																							4530s
Mich - Mich 1542/3																							4553s

Sources:

TNA, E122/40/17; TNA, E122/7/8; TNA, E122/17/37; TNA, E122/19/7; TNA, E122/19/8; TNA, E122/19/9; TNA, E122/19/11; TNA, E122/19/14; TNA, E122/20/5; TNA, E122/20/9.
S. Flavin & E. Jones, eds, *Bristol's Trade with Ireland and the Continent, 1503-1601* (Dublin, 2009), *passim*.

Bridgewater: Exports to Ireland of spices (luxury goods) Table 5c

Year	October	November	December	January	February	March	April	May	June	July	August	September	Salt	Honey	Almonds	Pepper	Fruit	Irish Ships	English Ships	
Mich - Mich 1413/4					50s								50s						1	1
Mich - Mich 1484/5			266s8d										266s8d						1	1
Mich - Mich 1485/6					854d								854d						1	1

Exeter & Dartmouth: Exports to Ireland of spices (luxury goods)

Year	October	November	December	January	February	March	April	May	June	July	August	September	Salt	Honey	Almonds	Pepper	Fruit	Irish Ships	English Ships
Mich - Mich 1502/3									26s8d	20s			46s8d					2	
Mich - Mich 1506/7										658d			658d						

Plymouth & Fowey: Exports to Ireland of spices (luxury goods)

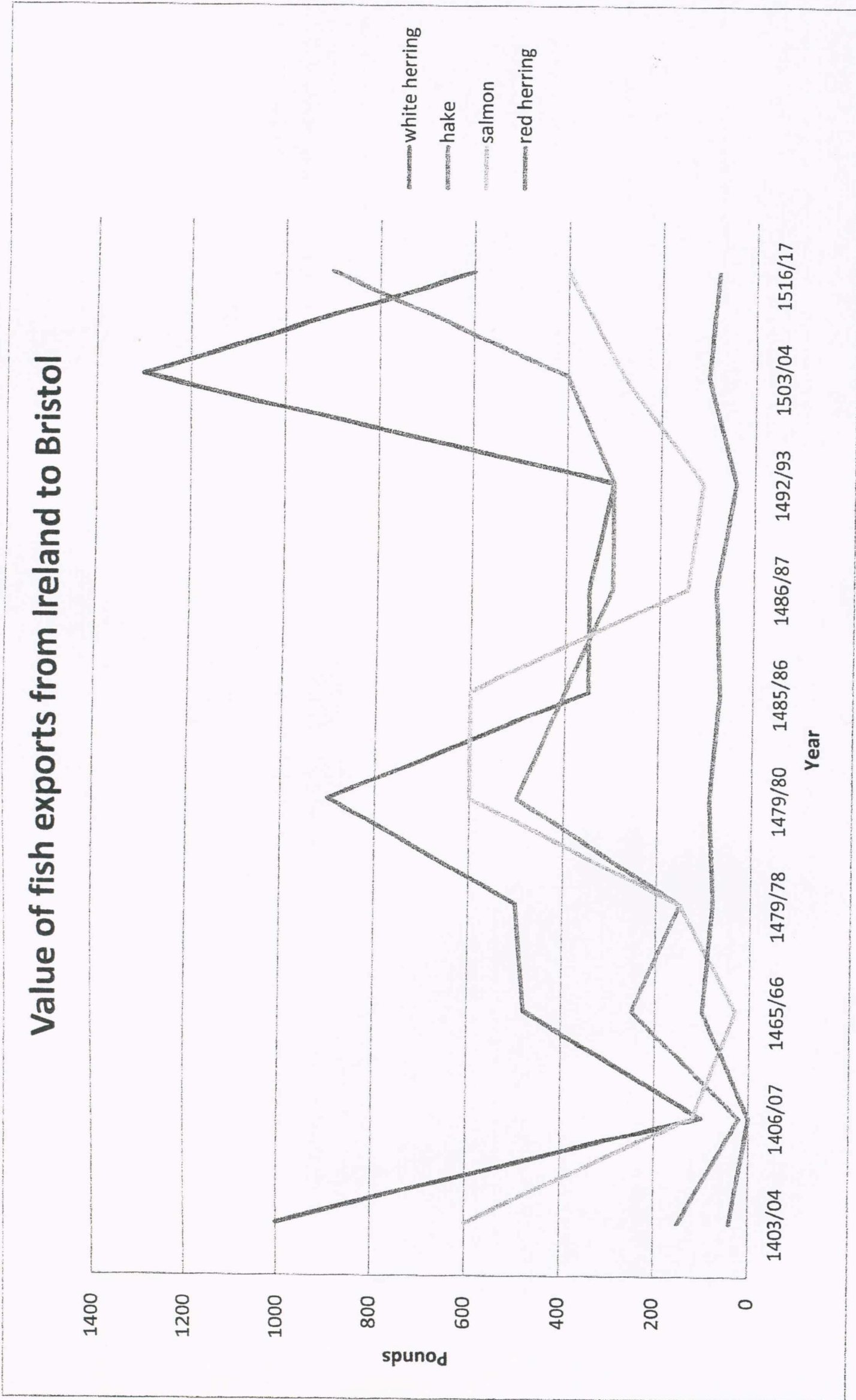
Year	October	November	December	January	February	March	April	May	June	July	August	September	Salt	Honey	Almonds	Pepper	Fruit	Irish Ships	English Ships
Mich - Mich 1497/8												26s8d	26s8d					1	
Mich - Mich 1505/6									10s				10s					1	
Mich - Mich 1507/8								20s					20s					1	
Mich - Mich 1512/13						10s		6s8d					16s8d					2	
Mich - Mich 1516/17								13s4d					13s4d					1	

Poole: Exports to Ireland of spices (luxury goods)

No exports of spices to Ireland

Southampton: Exports to Ireland of spices (luxury goods)

No exports of spices to Ireland



*The trends are not accurate because of the large gaps in source material.