

Saltcoats, Storms, and Small Barques; Sea Salt Production & Trade in West Lancashire, 1650-1715.

Introduction

From the earliest times salt has been a commodity of the greatest practical utility and value to the economy of the British Isles. From the Middle Ages and throughout the early modern period virtually every household used salt for butter, cheese, and bread making, for preserving beef, bacon, and fish, and for seasoning food, cleaning utensils, and for medicinal purposes.

The designs for this dissertation are twofold; namely to assess the compass of salt manufacturing activities, and to situate with greater detail than has been formerly divulged, the salt-makers and traders who inhabited the coastal townships of West Lancashire, and who died there between 1650 and 1715. The latter objective is particularly intended to avail future archaeological investigations of information which may identify potential locations of salt workings along this stretch of coastline. This period has not been selected arbitrarily. Coastal salt production had been practised here for over four centuries, and probably for much longer but during the quarter century following the Restoration of Charles II in 1660, rose to a crest of production and trade which thereafter simply could not compete with the fortuitous discovery of vast stratified deposits of rock salt in Marbury, Cheshire in 1670, and which almost entirely died out as a viable process by 1720, having been beaten by natural disasters and the first enclosed commercial sea dock which became operational in Liverpool in 1715.

The principal focus of this investigation centres on those who lived along the most southerly arm of Morecambe Bay between the estuaries of the rivers Lune and Wyre, but salt making was also practised eighteen miles due north on the Furness peninsula as far west as Ulverston. Pockets of salt production south of the Ribble estuary at Hesketh Bank and North Meols may also be evinced at least until around 1661. For a tenable dataset, 1169 probate bundles held at Lancashire Archives have been examined for documentary evidence of salt production, and of its organised processing for local commerce and for coastwise shipping ventures. We cannot hope to trace all of those individuals who lived and may have involved themselves in salt production during this now distant period. Although surviving documents in the form of readable probate bundles are abundant, it is inevitable that a great many have been lost or have perished; and that in the period under review, not everyone was able to make a will before they died, or to have a full inventory of their possessions appraised by their peers and drawn up shortly after their demise. Those documents

which remain¹ provide a rich and unique historical record across a broad social range.

By their very particular nature, probate inventories and wills have preserved intimate details about individuals for whom we would otherwise know nothing save perhaps a bald entry in a parish register. Probate documents invariably reveal livelihoods and occupations, and offer tantalising glimpses of land-holdings and of its utilisation in the pre-tithe map era. Inventories list and appraise the value of livestock, crops, and every tangible chattel; all household contents, and the tools of farming, trade and craft occupations. Wills convey their subsequent disposal as bequests. Both can provide illuminating indications of the wealth and status of the deceased, but vitally, should we attempt to draw too certain conclusions from this preserved data, such indications apply only around the time of his or her death. Neither document purports to disclose the fluctuations in health or fortune of an individual, or divulge their changing occupations throughout a lifetime. This was not their function. One positive and valuable aspect however, and the most germane to this discussion, is that the inventories in particular offer an opportunity to consider the scope of the secondary occupation of farming quantities of salty sand and producing good salt from the foreshore, and for its trading opportunities coastwise in locally built ships. It should be noted that this study does not aim to discuss the practical mechanics of sea salt production in great detail, this most interesting and technical subject having been comprehensively covered by other writers.² Suffice it to say that sand was collected in great quantities from the tidal flats, leached through several times with sea water in troughs or trenches, and the ensuing brine boiled to evaporation in lead pans over peat fires. The last of these processes, and the drying out of the product, was carried out in small purpose built cottage workshops known as saltcoats or saltcotes.

Salt production was very rarely a primary trade or occupation. In a predominantly coastal-agrarian pre-industrial society, life at all status levels, including the relatively few 'gentlemen', revolved around the farming and religious calendars as it had since time immemorial. For these communities on the periphery of English society, in the coastal townships that fringe Morecambe Bay and the Wyre estuary, tolerable levels of subsistence first had to be wrested annually from an environment where tidewater, sand and marsh leached into turf-moss, pasture and plough-land, and blustering westerly winds of varying strengths constantly flew in across the grey-brown Irish Sea. Principal objectives were keenly focussed on husbanding healthy, productive cattle and horses, and working with the weather and the Will of God to ensure that

¹ Henry Fishwick (ed), *A List of the Lancashire Wills proved within the Archdeaconry of Richmond, Vol.10 1457-1680; Vol.13, 1681-1748* (Manchester, 1884, 1886). J.P. Earwaker (ed), *An Index to the Wills and Inventories now preserved in the Court of Probate at Chester, Vol.15, 1660-1680; Vol.18, 1681-1700; Vol.20, 1701-1720* (Manchester, 1887, 1888, 1889). They have also been listed in 'LANCAT', Lancashire Archives' main digital catalogue. This total includes 142 records for S. Ribble and 39 for Glasson and Thurnham. 26 exhibit wills only, and 4 are female inventories.

² W.Brownrigg, *The Art of Making Common Salt* (1748). R.Taylor. 'The Coastal Salt Industry of Amounderness', *Trans. L&CA Soc.* Vol.78 (1975), pp. 15-21. Andrew & Annelise Fielding, *The Salt Industry* (Princes Risborough, 2006).

every cultivable close, parcel or tack of land yielded sufficient harvests of cereals, flax, hemp and hay. Put bluntly; in the seventeenth century, if you were not able to make it, grow it, brew it and store it, you and your household went without it, or were in debt to obtain it. Yet even in this fulsome round of requisite labour some were able to take advantage of the natural environment and make time for additional, occasional, seasonal activities; for the secondary occupations of cloth-weaving, sea-fishing, coastal trading and salt-making. Where an accumulation of surpluses over subsistence occurred, financial credits could be extended and received, additional land could be leased, and outbuildings and salt coats erected and maintained. At the highest level of local commercial speculation, men collectively invested in partial, fractional shares, in the building and running costs of ships capable of a variety of coastwise trading ventures. Such opportunities were not of course confined to the coast of Lancashire and, albeit with regional variations and economic fluctuations, similar activities were common around the coastline of Britain, as was in many places the production of sea salt itself.³

Of the 800 inventories for the eight southerly Morecambe Bay and Wyre estuary townships, 91 make direct references to salt in quantities other than for household use, a not inconsiderable 11.4%.⁴ Ownership of around 165.5 salt pans from 57 of these inventories⁵ also informs that 7.125% of all householders from these eight townships owned one or more lead salt pans at the time of their death.⁶ 101.5 pans, or 61.3% of these were itemised in the inventories for Cockerham and its ten named settlements; 52, around 31.4% came from Pilling, and the remainder from Preesall to Poulton. Importantly, of the ninety-one, 36 direct references to saltcoats can also be evinced, as can 23 vessels directly involved in shipments of the end product.⁷ Of the Furness townships, although the count is inevitably less from 184 extant inventories, 26 salt pans from 10 inventories, or 5.43% of householders in Lindale (Grange), Scales near Aldingham, and Ulverston have been recorded by appraisers. The latter being the most populous of the townships, with its settlements of Dragleybeck and Steps also had most pans, five of the six recorded salt coats, but no vessels.⁸

For the purposes of this discussion the geography of the relevant probate bundles for the southern arm of Morecambe Bay can be divided into three principal areas of salt production. From north to south; Cockerham and its settlements, Pilling and the Moss, and the east bank Wyre townships from Preesall through Stalmine, Staynall and Hambleton. Practical divisions to permit sensible demarcations of these township groupings would be lines running SE inland between Wrampool and Pilling

³ A & A Fielding, *The Salt Industry*, pp.13-20. T.S.Willan, *The English Coasting Trade 1600-1750* (Manchester 1938, repr.1967). D.Hussey, *Coastal and River trade in Pre-Industrial England, Bristol and its Region 1680-1730* (Exeter, 2000).

⁴ See appendix p.41-43. Seven other documents reference salt in other than its production or trade.

⁵ Four of the southern inventories, and three in Furness referenced salt pans in the plural without disclosing how many. A conservative count of two for each has therefore been allowed in the figures quoted.

⁶ Excepting Thornton, for which no salt pans were recorded.

⁷ This figure includes three vessels proposed and under construction.

⁸ See appendix p. 44.

Hall,⁹ and one similarly inclined to run inland from Bibby's Farm, thus dissecting Pilling Moss from Preesall and Stalmine¹⁰. A fourth grouping can be made of the townships of Thornton and Poulton, on the western banks of the Wyre estuary. Although none of the 118 inventories for the period record evidence of saltcoats, the effects of the proximity and access to salt on local consumption and trade will be noted later in this discussion.

High Tides and Tempests

The townships which record the most references to salt are Cockerham and Pilling to the south of Morecambe Bay, and to a lesser extent Ulverston to the north. Pilling is a linear settlement, then a chapelry of the parish of Garstang. It had developed along a low-lying ridge which is just higher than the sand and marsh and sea ahead of it, and the vast turf-moss lands behind it. Cockerham, its near neighbour differs in its geography. The raised hub of an extensive parish, Cockerham village sits on a hill with commanding views from the churchyard over farmland and sea. It too has access to great moss lands which adjoin to those of Pilling and extend northwards to Thurnham. Around it, as from the nave of a cart wheel are at least fifteen named settlements, of which, in the seventeenth century, no less than eleven had some connection with salt production.¹¹ On its north-western promontory beyond Bankhouses stand the remains of Cockersand Abbey, and to the north beyond Hillam lie the moss lands of Thurnham and Old Glasson. Whilst no documents for our period record a contemporary interest in salt pans, coat-gear, or active workings here, three inventories reference an earlier site of salt production on the marshy estuary of the river Conder, midway betwixt Thurnham and Glasson. Those of Margaret Yeats, deceased 1662, her daughter-in-law Grace, 1676, and Richard Jackson, 1671, are all described by their contemporaries as being, "... of Saltcoat Brows".¹²

On the more northerly arm of Morecambe Bay, the large parish and township of Ulverston, and its settlement of Dragleybeck, is situated on the Furness peninsula overlooking the broad estuary of the river Leven on its eastern flank. On the first Ordnance Survey map of 1847, two saltcoats appear to be marked as extant structures here. One had its site on the north side of the Carter Pool outlet below Dragleybeck; the other was situated further inland at the foot of Swarth Moor on Rake Lane, just two hundred metres from the Quaker Meeting House.¹³ The first of these continues to be marked 'Salt Cotes' on the present OS 'Explorer Map',¹⁴ and may well have been the site noted as being the last in north-west England to which Brownrigg made this reference; '[none survive] except at one or two very

⁹ OS Map 1:50000, Preston, Blackpool & surrounding area, Sheet 102, (1986), ref. 423 494.

¹⁰ OS Map, sheet 102, ref. 367 490.

¹¹ See appendix p41. Other settlements in Cockerham were; Highgate, Churchland Hill, Crookey, and Launds.

¹² Lancashire Archives [hereafter LA], WRW/A, Thurnham, (1662), Margaret Yeats, (1676) Grace Yeats, (1671), Richard Jackson.

¹³ OS Map 6", Ulverston, Sheet 16, (1847).

¹⁴ OS Map 1:25000, The English Lakes South-Eastern Area, Sheet OL7, (2008). Ref. 304 773

inconsiderable works nigh Ulverston in Lancashire...¹⁵ An immediate observation occurs from comparing those for Ulverston with the first, and the most recent Ordnance Survey maps for the southern arm of Morecambe Bay. Not only are no saltcoats whatsoever mentioned on the modern 1:25000 map of 2010,¹⁶ but more significantly, no record of their existence appears on the maps of 1848 either,¹⁷ and even 'Saltcote Brows' at Thurnham appears today merely as 'Brow's farm'.¹⁸

There seems to be no question that the exploitation of Cheshire brine, and then rock salt, and its relative ease of transportation to the rapidly expanding port of Liverpool far out-stripped and out-competed traditional sea salt production along the Lancashire coast by the early 1700s. There exists the possibility however that it was extreme weather, in the form of catastrophic gales and flood tides which brought all production of the commodity to an abrupt and dramatic end. On the night of 3 October 1701 a tempest at sea wrought such destruction in Lancaster that William Stout, the iron merchant of Bolton-le-Sands recorded in his annuary that,

On the third day of the eight month [October] this year, about 10 in the evening was the highest tide in this river [Lune]... It surprised many in their houses here, and some in bed before they were aware of it, and many sufred damage in their goods, houses and lands...¹⁹

Not far down the coast at Cockerham, the storm had brought about the complete financial ruin of Peter Townley, whose only recourse was to make the following petition to the Justices of the Peace at the next Quarter Sessions.

...your poor petitioner having been a housekeeper and Trader in Salt for Considerable years, through many losses and disappointments, was together with his wife and children reduced to a low State and Condiçion Yet notwithstanding desirous to use all honest Endeavours for the support of his Family, he rented a Salt Coat in the Management whereof he was obliged to lay out all his Substance, where he together with his two Sons, whome he made Proprietors of his worke, Imployed themselves till Fri. 3d. of October last, At which time It happened to be a springing flood attended with a great tempestuous Wind, Washed downe the Salt Coate Carried away all their Salt Sand Turfe and all the Materyalls together with some Corne, and a Mare from his house, as also his Family at that time and since has Laid under a great Visitacion of Sickness, all which has tended to his utter Ruine unless relieved.²⁰

¹⁵ W Brownrigg, *Art of Common Salt*, p.135.

¹⁶ OS Map 1:25000, Lancaster, Morecambe & Fleetwood. Sheet 296, (2010).

¹⁷ OS Maps 6", Sheet 38, Cockerham; Sheet 39, Pilling (1848).

¹⁸ OS Map, sheet 296, Ref. 453 559.

¹⁹ J.D.Marshall (ed), *The Autobiography of William Stout of Lancaster 1665-1752* (Manchester, 1967) pp. 136-137.

²⁰ LA QSP 870/9. Also cited in Taylor, *The Coastal Salt Industry of Amounderness*, p.17. Peter Townley was an exceptional case, and doubly unfortunate to have been a salt-weller for his principal occupation.

Storm damage that night affected people all along the coast. As the Lune flooded the environs of Lancaster, and gales swept across Morecambe Bay, so also did the tempest swell the muddy waters of the Ribble estuary to a level higher than in any previous recollection. At Warton, James Dixon and Richard Abram, joint owners of a saltcoat experienced the similar misery of utter loss to that of Peter Townley. Their summer investment and hard-won labour having also been obliterated, they too were obliged to present their petition for relief to the Justices at the Preston Sessions on 16 April 1702, where they humbly showed...

That ye petition'rs had the last Summer made a considerable quantity of salt which being in their said Salt Coats in October last, was by the Great Storm & Inundacons of ye Sea totally washed away & p[er]jished together w'th the Salt houses pannes & oth'r utensells...²¹

It is not possible to know with certainty from which materials their saltcoats had been constructed. They had to at least have been semi-permanent structures, yet for most producers, salt making was an intensive, sporadic, fine-weather occupation; and other than storing salt, or turves to dry in preparation for the next boiling, saltcoats stood idle for much of the year. We can only take clues from the evidence for domestic rural architecture of the Fylde and Wyre. The most common materials used in the construction of the 'Fylde Longhouse',²² (which includes those of Pilling, Cockerham and Over-Wyre), would have been of timber cruck frames, set on plinths of cobblestones, inset with rough timber uprights and infilled with puddled clay, known locally as "clam staff and daub". Interior divisions of light timber interwoven with willow or hazel wands were similarly puddled with "clat and clay".²³ Roofing materials were of thin flags, set as a capping under the eaves and then thatched with wheaten straw, rushes or grass sods. Saltcoat Cottage, Lytham, c.1600, Kennedy Ridge, Grange Farm, and Damside Cottage Pilling, (all seventeenth century); and Cockers' Dyke, Preesall c.1629, were typical of this region. We know that outbuildings such as barns, shippons, and drying kilns were also constructed from these materials.²⁴ Therefore it would be logical to consider that there is no reason for saltcoat buildings to have been constructed any differently. While being put to use they became busy workshops in which several men performed their semi-industrial process over turf fires. Crystalline salt was skimmed from up to half a dozen three feet square or rectangular lead boiling pans²⁵ and hung to dry in numerous pointed

²¹ LA QSP 875/30. As is almost always the case, the amount of damages, and the quantity of bushels of salt lost have not been recorded.

²² Richard C. Watson and Marian E. McIntock, *Traditional Houses of the Fylde*, (Lancaster, 1979). Ch. 3.

²³ Watson and McIntock, pp.15-16. R.W. Brunskill, *Illustrated Handbook of Vernacular Architecture*, (London, 1971), p.56.

²⁴ Watson and McIntock p.76, p.60, p.42, p.40. Eric Mercer, *English Vernacular Houses*, (HMSO, London, 1975), p.65 & p.182, also describes Saltcoats Cottage, Lytham, which has since been demolished.

²⁵ A & A Fielding, *The Salt Industry*, photo, p.8. Though relatively common items in the mediaeval and early modern eras, only twenty lead salt pans remain, having been found in various parts of Cheshire.

wicker baskets of a bushel or half-bushel capacity.²⁶ Though not large buildings necessarily, saltcoats would clearly have to have been sufficiently spacious to allow these activities to be performed. Thus allowing that they were as sturdy in their construction as any other permanent agricultural building, intended to stand for many years, and indeed to be heritable property, it is nevertheless self-evident that most saltcoats were built on the exposed coastal margins. It has also been suggested that they were often built on the hills of used sand piled up from earlier leachings.²⁷

In any event, they were sited on the front line of assaults by tempests and high tides, and greater misfortune even than that of 1701 was to follow. Within a generation, in 1720, wholesale depredation of a multitude of buildings and livelihoods was caused by the visitation of another storm of an even wilder force than its predecessor. Over three days the entire infrastructure for salt production from Cockerham to Pilling was swept away by gales and drowned by floodwater.

The contemporary eye-witness accounts which follow shine an unique spotlight on a shocking series of events which occurred three hundred years ago, and to which the present reader may care to recall the devastating gales in south-east England in October 1988, the sweeping away of the railway line at Dawlish, and the flooding of vast fertile areas of the Somerset Levels in January & February 2014.²⁸ In his annuary, William Stout wrote five hundred words or more on the disaster of 1720. He records that a powerful westerly gale on the 18th and 19th December of that year caused 'the greatest sea flood that has been in the memory of any man then living',²⁹ observing that the accompanying tide was six inches higher than even that of 1701. In Lancaster, a 90 ton ship was driven against the causeway leading to Skerton Bridge, then the main crossing of the Lune, which itself had two feet of water coursing over it. The Custom House was flooded, and the dirty water ruined tobacco, wine, and brandy casks, as it also ruined the contents of workshops and domestic houses nearby. The night tide fell by four feet but the following day it rose again with another violent storm behind it, flooding far inland drowning livestock and saturating both the newly sown cereal crops in its path, and the great quantities which had been thought safely stored to over-winter in barns and garner. News of the devastation along the southern arm of Morecambe Bay soon reached Lancaster, and Stout records that the floodwater,

²⁶ Weights and measures of the Seventeenth century are notoriously difficult to standardise and estimate as they varied according to local custom. Weights were often expressed in multiples of 7lbs/3.125kg; thus a stone, or peck, weighed 14lbs, a quarter (of a hundredweight), 28lbs, a bushel 56lbs, and one hundredweight 112 lbs. For ease of comparison, but for guidance only, when a bushel is referred to in the text it could have weighed around 56lbs, or 25 kilos.

²⁷ Taylor, *The Coastal Salt Industry of Amounderness*, p.15.

²⁸ At the time of amending this draft, on 26 Decmber 2015, two hundred flood warnings have been announced by the Environment Agency for the UK. In Cumbria; Carlisle, Keswick, Cockermouth and Kendal have been flooded for several weeks, and in Lancashire, St. Michaels on Wyre and Croston have been flooded, and every river in Lancashire is today at a record level of flood.

²⁹ Marshall (ed), *Autobiography of William Stout*, pp.181- 2.

... remained like a sea [in] Thernham [sic] and other low lands for some days, till the powes could drain it; houses beat down, and many got upon their houses till boats could fetch them. And eight people were drowned in Thernham Moss, many people being 48 hours without meat or drink. It beat down Cocker and Pillin[g] bridges, and smaller bridges at its return... And it's computed that the loss sustained upon the sea co[a]sts of this county by this flood could not be less than forty thousand pounds ... Many poor people have lost what goods they had, who are [now] objects of charity, and have gone inlands to begg, where they are relieved.

As a shop-keeper and merchant with several properties in Lancaster and Bolton-le-Sands, Stout was fortunate that his own possessions and livelihood were unaffected; for as it had been in 1701, the tempest had not been exclusive in heaping further misery on poor families but had adversely affected most levels of society with life-altering consequences. Such was the magnitude of the flood damage across Thurnham Moss and the lowlands around Cockerham and Pilling that petitions for relief were presented by groups of men and women, “ on behalf of themselves and above one hundred other inhabitants ffarmers & Rack Tenant Sufferers”, in each township.³⁰ On 10 January 1721, the Justices of the Peace at the General Quarter Sessions in Lancaster heard,

That upon Sunday Monday & Tuesday the 18th: 19th & 20th of December last, there happened a most violent Tempest of Wind which falling out at the Change of the Moone & the very height of the Spring Tides occasioned such an extraordinary fflood that broke downe & washed away all the Banks Ramparts Sea ffences and ... Overflowed a vast quantity of Land utterly destroying their wheat Rye & Clover Grasse Sown hereon together with above thirty dwelling houses entirely washed down & the Barnes & Outhousing thereto & so much damaged the Remainder that very few are left Habitable Carrying away all their Corne Turfe Cattle Sheep Household goods Wearing Apparell money and everything necessary for subsistence attended with the losse of severall persons drowned (especially women and children) who had no opportunity by reason of the Suddenness & violentnesse of the Tide & the low Scituation of the Countrey to make their Escapes & others for the Safety of their lives obliged to sit upon the raft[er]s & Beams of their houses without any manner of ffood till the ffloods & Storme abated So that it appears by [the estimation of John Winter, vicar, several gentlemen, [and], by several experienced Workmen & Husbandmen that above thirty familyes [have been] entirely ruined & without Habitation having nothing now to depend upon but the Charity of their Neighbours for lodging & Sustenance & their Losse by the Computation of the said persons will amount to at least

³⁰ LA QSP 1169/1, Lancaster, 10 January 1720/1; LRO QSP 1170/17, Preston, 12 January 1720/1.

One Thousand Seven hundred [and] thirty six pounds & Seven Shillings besides the irretrievable Losse [of] many p'sons Lives.

As this is a Case publickly known to yo' Worships & such as the memo[ry] of Man cannot parallel & not occasioned by negligence as severall other misf[ortunes] may have been for which a publick Releife has been Granted Yo'r petition[ers] therefore humbly Pray That yo'r Worships will be pleased to Grant yo'r petition[er]s a ... Certificate under yo'r hands with a due Representation of [these] Losses in order to obtaine his Maj'ties Gracious leave for the Collecting & Receiving the Charitable Contributions [as] such well disposed Christians as shall be duly touched [text missing] of human misfortunes & therefore be ready & willing in some measure to Contribute to such an Unexampled Losse.

Two days later at Preston, the 'humble petition' on behalf of the inhabitants of Pilling township relayed a similarly harrowing and vivid account of the losses occasioned by the 'dreadful inundacon of the sea' which;

... washed away great quantities of arable land ... and overflowed fifteen hundred acres of land destructive of all the wheat and Rye sown thereon together with above fferty barnes and outhouseing thereto belonging either entirely demolished or soe ruined [that] few or any of them are either left habitable or anyways usefull carrying away [all] of their corne hay turfe household goods and wearing apparel money and [necessaries] with great quantities of salt and numbers of cattle & sheep, and that a great many [only] escaped with their lives by reason of the violence and suddenese of the storm in the country some Spereing themselves with great difficulty by hanging by the timbers [or standing] breast high or upwards in the water so that it appears by the view [of several named witnesses], that above fferty families are entirely ruined and without habitacon [and must therefore] relye on but the charity of their neighbours for lodging and sustenance...³¹

This time, the sea-salt industry in West Lancashire was neither rebuilt nor revived thereafter. The storm tides of 1701 and 1720 had washed away both sand stacks and saltcoats forever. Flood water had swamped the drying turves and carried away

³¹ LA QSP 1170/17, Preston, 12 January 1720/1: These case studies highlight an example of the level of sophisticated administration which prevailed in England at this time, and it is also worth noting the very specific and calculated estimate of the losses. Although there was no central government fund for relief of such disasters as there would be today; where such certificates for relief were granted (as these were), they were passed to the Lord High Chancellor and thence disseminated to the parishes of England. This method of collecting moneys through the congregations of Anglican churches dates from Henry VIII, who as Supreme Head of the Church and Clergy in England automatically assumed the right of such authorisation. In 1625 Charles I delegated the responsibility of the privy seal and this continued with the Restoration of Charles II and thereafter. Parish Registers often record collections taken for other parishes many miles distant from them, and illustrates the point that charitable contributions and empathy with the misfortune of others whom we may never know, is not only a feature of the modern era.

the sand-coups, harrows and ‘all the husbandrie geere belonging to the saltcoat’. Worst of all perhaps, the flood had reclaimed the crystal salt which had been hanging to dry in its baskets, and contaminated any saleable product beyond redemption. The reason for the complete absence of saltcoat locations on the first Ordnance Survey maps of Morecambe Bay for 1847- 48 seems clear. Their footprint had been completely erased from the coastal geography if not from the memory of man. To perhaps explain the reason for Ulverston’s enduring references to salt production, it may have transpired that the tempest of 1720 failed to destroy the infrastructure there. Self-evidently, parts of the jagged coastline of the Furness peninsula, including that below Ulverston face eastwards and are backed by steep, hilly ground which may have sufficiently sheltered the salt workings from the force of the gale and the height of the tide. Thus they not only survived but were able to continue production into the mid-eighteenth century when William Brownrigg observed them.³²

The Productive Years

Fifty years before this cataclysm, sea-salt production along the southern arm of Morecambe Bay was in its heyday. In the ten years from 1661-1671, 74 salt pans and 12 saltcoats were recorded in the inventories and wills of the recently deceased, a greater number than in any equivalent period. More significantly, 17 of the 23 vessels described were active or under construction at this time; up to twelve of which had carried salt southwards into Wales, and/or northwards to the small Furness ports, which rare and illuminating aspect of Lancashire’s coastal trade will be discussed later.

Common sense would suggest that when, for example, William Lea of Pilling died in June 1662, in possession of two salt pans; ‘torfes & sand at saltcote,, and ‘torfes in [the] mos[s]e,³³ he had not suddenly come upon these things and may well have been involved in salt production for many years prior to his death. It is also revealing that in addition to these assets, Lea owned the tools and livestock necessary for a standard of living that appears to have thrived above mere subsistence for some years. He and his wife Alice, and mature children, Henry, Richard and Mary, kept bees, had ‘nets and steakes’ for fishing, or perhaps for trapping birds, and unusually for the last day of June, had the luxury of, ‘one whoile bacon’, valued at 5s. Also of note was his possession of ‘one paire of Loumes, trough Reedes & Ringes belonginge unto them’, thus expanding his economic interests to; farming, salt-processing, fishing/trapping, and cloth-weaving. Thomas Lamb of the same township was able to enjoy similar diversification of occupations. In 1669, he too left a sufficiency of healthy livestock, (two bullocks, seven cows, one calf and six horses, valued at £27); sand coups for salt work, as well as ‘two ploughs and fower harrowes’. He had also been able to extend his dwelling such that he owned; ‘in the

³² Brownrigg, *Art of Common Salt*, p. 135.

³³ LA WRW/A, William Lea, Pilling, (1662), inventory total £80.0.0.

new chamber one bed & bedding', at £2.2s, and, 'in the other Chamber one paire of loomes and two load[s] of salt', at £1.³⁴ Both men were described by their appraisers as 'husbandmen', and it seems clear that their occupations of salt-making and weaving had not sprung from the necessities of having to 'make shift', but from confidence in their own abilities, and the social freedom to provide for their families by diversifying and making investments for present improvement and future prosperity.³⁵

Their experiences were not out of the ordinary, in either a regional or from a national perspective. Broadly speaking, England and Wales had been experiencing a period of gradual economic growth and expansion which had its roots in the Reformation and which had continued an upward trend into the seventeenth century. The first fifty years had seen a steady expansion of domestic production, regional specialisation of skilled trades, and overseas development, although this trend had frequently been interrupted, and national progress punctured, by crises in the cornfields and in parliament. Periods of severe weather conditions caused country-wide dearth and famine in 1623, in 1630, and again in 1637, when the worst barley harvest in the seventeenth century was recorded. Further poor yields during the 1640s culminated in a record price for the wheat harvest of 1648,³⁶ which coincided with the profound upheaval of the Civil War, after which, in January 1649, Charles I was executed, and a parliamentary Protectorate established which could then not sustain itself following the death of Oliver Cromwell. Although such turbulent events would appear to have been deleterious to national economic health and to sustainable long-term growth, neither political uncertainty nor recurring periods of dearth could truncate the progress which had been building over several generations.³⁷ Notwithstanding the positive impetus which had been occasioned by the Restoration of Charles II in 1660, it is perhaps equally important to comment that this in itself was not a major turning point. In terms of the economy of the nation, the period of Interregnum had brought beneficial trading conditions, and encouraged England's growing overseas ambitions. The Navigation Acts, initiated in 1651 were both a turning point and a springboard for confidence and national security. Expressed most simply, they prohibited the importation of any goods into Britain unless they were carried in English ships, commanded by English masters, and manned by predominantly English crews. Other European nations, and in particular the Dutch, were thus prevented from participating in the coastal trade and excluded from British fisheries. The impetus and security which this afforded British maritime interests cannot be overestimated.

³⁴ LA WRW/A, Thomas Lamb, Pilling, (1669), inventory total, £62.18.6.

³⁵ William Lea bequeathed a field and half of the saltcoat to his son Francis, who appears not to have survived his mother Alice, (d'cd, February 1666); who owned two salt pans, the sand coup and what appears to have been the customary one third of her late husband's estate. She then bequeathed this equally between, Henry, Richard, and Mary, her remaining sons and daughter.

³⁶ Joan Thirsk (ed), *The Agrarian History of England and Wales, Vol. V:ii, 1640-1750, Agrarian Change* (Cambridge, 1985), pp. 46-59.

³⁷ Keith Wrightson, *Earthly Necessities Economic Lives in Early Modern Britain* (Yale, 2000), Ch. 10, pp. 227-248.

Conditions for personal initiatives and investments thus became particularly favourable in the third quarter of the seventeenth century. Other than during a few years of the 1670s, an extended period of generally improved weather and dry summers prevailed from 1664-1691.³⁸ Cereal yields increased, as did the overall density of livestock. Whereas the country had been obliged to import Baltic grain in the 1620s in times of national want, half a century later English ports and the growing number of vessels, were regularly exporting the healthy surpluses coastwise. Neither could it be said that England was over-populated. An approximate population of 5.23 million had fallen to 5.06 million in 1701,³⁹ owing in large part to late marriages, high infant mortality, and to the migration of almost one quarter of a million people to the emerging colonies along the eastern seaboard of North America.

In West Lancashire collective investment confidence based upon regular surpluses over sufficiency was underpinned by the traditional strength and certainty of the rights of tenancies, and the freedom of heritability at will of land holdings. Most people in the seventeenth century didn't own their land, that social condition is a twentieth century phenomenon. However, under the terms of land leases, the owner has possession, but surrenders occupation in return for a capital sum and an annual or regular payment. In the majority of those of West Lancashire, leases were mutually indentured for terms of occupation for many years beyond those of the living, or for a succession of (usually three), named lives. A lease could be passed on to heirs with lives in being, and allowing for the universal uncertainty of mortality, new lives could be added in substitution of those deceased. In either customary arrangement, and notwithstanding the pre-condition that leases have always to terminate at an end point, the occupation of land for a period even of 99 years was effectively a mutual contract in perpetuity.

Sea salt production in Morecambe Bay was, by tradition and practice, a common and important occupation. In the particular arrangements pertaining to the leasing or constructing of a saltcoat, ancient customary legislation had also to be observed. In Cockerham, regulations pre-dating 1326 differentiated between the burning of turves for household and for saltcoat consumption. The taking of the sand itself from the foreshore, and the boundaries of 'sand' and 'moss', were also strictly regulated. It has also been proposed that the division of the tidal flats into 'sand floors' in the Middle Ages, remained those which were referred to in probate documents from the late 1600s.⁴⁰ It is not difficult then, to perceive of the depths of loss and bewilderment felt by Peter Townley, James Dixon, Richard Abrams and many others in 1701 and 1720, when the violent storms and tides altered forever the very shape of their familiar coastline.

³⁸Thirsk, *Agrarian History*, p.57.

³⁹Wrightson, *Earthly Necessities*, pp.228-229.

⁴⁰Taylor, *The Coastal Salt Industry of Amounderness*, p.17.

Active involvement in sea salt production as the proprietor of a saltcoat, involved set-up expenditure and ongoing running costs. As with any investment aiming to harvest a commodity the venture carried risks as well as income opportunities, and it would be useful to break these down. Although some probate inventories reveal entries which are helpful to us to determine the costs of renovating and extending dwelling houses, no records remain which allow us to ascertain the precise cost of building a saltcoat. There is indeed scant evidence for the costs of vernacular house-building from any source known to this writer. The few examples available are informative nevertheless.

In an influential (and subsequently debated), journal article of 1953, W.G.Hoskins proposed that between the early years of the reign of Elizabeth I, and the outbreak of the English Civil War, housing stock throughout England was improved to such an extent that the country enjoyed nothing short of a housing revolution, or 'Great Rebuilding'.⁴¹ Examples of costings which illustrated his theory suggest that an average-sized farmhouse in the late sixteenth century may have cost £20 - £30 to build, and that by 1654 costs had risen such that a typical Essex farmhouse, (which in this case had burnt down), cost around £40 to rebuild.⁴² M.W.Barley also cites this latter example, and helpfully informs that in 1686, a 'mud and stud' cottage was built in Saleby, Lincolnshire, for £18.⁴³ It is of course somewhat audacious to assert that this lone example from the eastern side of England may be taken as a paradigm to approximate the costs of building saltcoats on the western coast. However, the probability exists that these purpose-built workshop cottages would have been constructed using materials common to domestic and utility vernacular buildings in West Lancashire, and that such costs would feasibly have been replicated in most other regions of England. Therefore it would be reasonable to assume that the costs of materials and construction labour of a saltcoat, which does not require the same internal divisions as a domestic dwelling, but which does require roof beams and designated areas for boiling, hanging, drying and storage, would have nevertheless represented a build investment in the region of £12 - £15.

For a detailed investigation into the assets which would have been required to set up and enable the profitable operation of a saltcoat, valuable if disparate information is recorded in the inventories, through which it is nevertheless possible to propose a reasonably accurate investment model. After the building itself, the most vital assets are of course the lead salt pans. At this point it is worth observing that although many of the inventories record salt pans, the fact of their possession does not in itself confirm or imply that the owner had been actively involved in salt-processing. Salt pans were commonly held items through bequests. They were heavy items made from a non-corroding material in a period when all metals; pewter, pan-brass, and iron, as well as gold and silver, were weighed up and valued by the pound or

⁴¹ W G Hoskins, *The Rebuilding of Rural England, 1570-1640*, *Past And Present*, No.4 (Nov. 1953), pp.44-59.

⁴² Hoskins, p.52, p.53.

⁴³ M W Barley, *The English Farmhouse and Cottage*, (London, 1961), p.223.

ounce, and were sold and recycled in an age when little could afford to be wasted. Owning salt pans was, in itself only a modest domestic asset, but most people of able means would possess items of value which could be sold if necessary, and bequeathed if not. In Cockerham, the township exhibiting the greatest holding of salt pans, the average value per item was just over 13s each, a useful sum to have in reserve.⁴⁴ It was possibly to that end that the yeoman Thomas Curwen, died in 1699 in possession of '3 old Salt panns' at £1.4s, or 8s each.⁴⁵

From those inventories where salt pans form part of a going concern, holdings of 6 salt pans were recorded in five of the Cockerham inventories, and two from Pilling.⁴⁶ In the latter instance, when Richard Johnes of Pilling died in 1670, his eldest son Thomas took over his salt processing operation which included six salt pans. They had been valued on 14th November at £5.5s, (17s.6d each). When Thomas died less than two and a half years later, the same pans were appraised, on 29th March 1673 to £4.10s; (15s each), which of itself seems to represent a reasonable valuation of well used, depreciating items. In only thirteen of the ninety-one 'salt' inventories in our dataset, is it possible to clearly extract details of the other capital equipment necessary for a working saltcoat, this is however, sufficient for our requirements.

Wet sand is heavy, and vast quantities are needed to produce even a bushel of crystal salt. Transportation over even short distances of sand, mud and marsh required a deep-sided, two-wheeled cart known as a 'Sand Coupe'. These were invariably accompanied by a spare pair of spoked wheels. Richard Johnes left 'fower sandcoupes with wheeles and raithes thereunto belonging', at £1.12s, in 1670, (8s. each).⁴⁷ His son Thomas had retained the use of, 'three paire of sandcoupe wheeles & coupes', at £1; (6s.8d each), in 1673. John Lamb of The Marsh, in Cockerham had, 'Two paire of sandcoup wheels with two sandcoups' at £1; (10s each), in 1683.⁴⁸ Other requisite tools in the southern Morecambe Bay, and the Furness saltcoats, would have been, wheelbarrows, harrows, long flat rakes or 'haps', metal scoops, spades, hemp sacks, chests, buckets, and baskets. Thus Edward Jackson of the Crimbles, in Cockerham, 1670; possessed no less than four sandcoupes and spare wheels, and 'two says [buckets] wth their barrows with sand shovels, a salt met [measure], & a pike [pick], at 10s, while Thomas Heay, of Pilling, in 1696, had also 'Barowes & says att ye Saltcoat', at 10s.⁴⁹ In an unique reference to the shape of the pointed baskets which were essential for draining the fresh crystalline product, John Dobson, basket weaver of the Breck in Poulton (1664), left; 'wiskets &

⁴⁴ In Cockerham, 101.5 salt pans were recorded in 31 inventories. 83.5 pans, clear of other items were found in 24 inventories, with an overall value of £54.14s. The precise calculation per salt pan, is 157.22d.

⁴⁵ LA WRW/A, Thomas Curwen; Bankhouse, Cockerham, (1699).

⁴⁶ The Cockerham inventories which record six salt pans are: LRO WRW/A, John Bradshaw, Wrampole, (1664); Edward Jackson, Crimbles, (1670); Thomas Gardner, Harestones, (1688); Thomas Jackson, Crimbles, (1694); and Anthony Gardner, The Marsh, (1695);

⁴⁷ 'Raithes' are side planks or cartboards.

⁴⁸ LA WRW/A John Lamb, The Marsh, Cockerham, (1683).

⁴⁹ LA WRW/A Thomas Heay, Pilling, (1696).

Beehives & Salt hives', worth 5s, indicating their similarity to the traditional 'skep' bee hive.⁵⁰

Once the saltcoat had been built, thatched and fitted out, additional expenses would have had to be incurred in the payment of wages for labour at a daily rate of about 8d,⁵¹ for the vital pre-production task of harrowing and raking the top few inches of sand, which had to be harvested between the tide lines left by the neap and spring tides. The heavy work of loading and carting this raw-material away from the tidal flats gave employment for several men and boys, not to mention one or two horses to draw the coupes.

A paucity of neatly differentiated data makes it difficult to convey the sheer extent of this manual endeavour. Inventories rarely record sand or turf holdings in isolation, the appraisers, quite sensibly for their purposes valued salt, sand, and turves together. Robert Taylor cites the only seemingly surviving example; wherein a saltweller from Hesketh-with-Becconsall (on the southern bank of the Ribble estuary), had collected 500 cartloads valued at £5; (or 2.4d per cartload), but this had been recorded in 1565.⁵² If we allow the assignation of a higher value of (say), 4d per coupeload one century later, the following examples are conservatively instructive. Richard Holme, Pilling, 1668, 'for sand to well', 15s; William Lea, Pilling, 1662, 'torfes & sand at saltcoate', £5.10s; Richard Johnes, Pilling, 1670, 'turves & sand at ye Saltcoat', £9; John Hey, Cockerham, 1676, 'Torfe and sand', £9; Robert Beckett, Cockerham, 1686, 'sand & turfe att Coate', £5. Thus even if there were to be an equal valuation of sand to turf, these citations suggest that between 45 and 255 coupeloads of sand had to be harvested from the foreshore, and it is likely that the actual amounts were much higher.

There was, of course a cost for entry and for the annual lease of a saltcoat. Taylor provides evidence that the cost rose from 5s. per annum in 1590, to £1 a year in 1698, citing these records from Hesketh-with-Becconsall, and Hambleton respectively.⁵³ From our entire dataset just one example survives, and even this is tantalising rather than definitive. Henry Threlfall/Threlfay of Pilling, who described himself as a 'Husbandman', died at the end of February 1663 leaving an inventory to the value of £91.19s. He bred cattle and horses, kept 'twentie eight sheepe', was involved in salt making and moved in social circulation with others with similar business interests. His 'perse with money his apparel saddle and bridle with furniture for riding', was valued at £6; and one 'John Bradshawe of wrampoole', of whom more later, supervised the execution of his will and acted as principal appraiser of

⁵⁰ LA WRW/A, John Dobson, Breck, Poulton (1664).

⁵¹ Joan Thirsk (ed), *Agrarian History of England and Wales, Vol.V: ii 1640-1750*, Statistical Appendix, Table xxviii, daily wage rates of agricultural and building labourers, p.876-7. The figure above has been taken from data cited for West Riding and Lancashire, c.1690-1720.

⁵² Taylor, *The Coastal Salt Industry*, p.15.

⁵³ Taylor, *The Coastal Salt Industry*, p.18.

five men who valued his inventory. Among the bequests of 'Henrie Threlfay', dictated on 26 February 1663, is this illuminating detail for the costs of an established lease.⁵⁴

...Whereas I stand possessed of one messuage & Tenement wth Twoe Saltcoats of the yearely rent of Twoe pounds seaven shillings lying att the Sandside in pillinge and alsoe of a parcel of another Tenement att the moseside Lykewise in pillinge of the yearely rent of one shillinge, the one halfe of both w^{ch} said Tenements I bequeath to Issabell my wife dureing her natural Lyfe...

The proposed model by way of a reasonable estimate for the set-up investment and costs of proprietorship of a saltcoat are therefore as follows:

| | |
|---|------------|
| Saltcoat built complete, | £14.00.00. |
| 4 x salt pans, @ 13s each, | £ 2.12.00. |
| 3 x sand coupes & wheels, @ 8s each, | £ 1.04.00. |
| Husbandry & salt tools, sacks, baskets etc, | 16.00. |

This calculation suggests that at the very least, £18.12s, would have to be found, in addition to the entry fine and annual lease fee, to set up a salt producing concern. Once the cost of several cart loads of turves had been considered, initial costs would easily have exceeded £20. This was a considerable sum of money; and in the unfortunate Peter Townley's case, even by making his two sons joint proprietors the venture could very well have seen him, 'obliged to lay out all his substance', to get into the business.

However, for the majority of saltcoat proprietors in the first two decades of Charles II' reign, particularly those for whom salt production was a secondary occupation the prospects were encouraging and the rewards tangible. Indeed Peter Townley's circumstances and general misfortune as a saltweller by trade stand out as a surprisingly rare case, even as late as in 1701. For most proprietors in our dataset, their investments seem eminently affordable; in a period when English society in general was buoyed by growth in the regional specialisation of production, an emerging national and international economy, demographic stability, and tolerable fluctuations in grain and livestock prices.

It has been noted earlier that saltcoats were only in a state of activity for a few months of the year. Regular maintenance to their thatch and fabric was undoubtedly needed to retain them in operational good order, and to keep the interior spaces sufficiently dry for storing turves and finished salt throughout the autumn and winter. The build quality and level of repair work assuredly varied, yet at best, saltcoats were intended to endure years of hard weather. It is highly probable for example, that

⁵⁴ LA WRW/A Henry Threlfall/Henrie Threlfay, Pilling, (1663).

William Johnson of Pilling (deceased 1702), inherited the saltcoat from Thomas Johnson (1688); and William Thornton of Pilling (1677), inherited that of William Thornton (1662), suggesting that in either case, the saltcoats must have stood for at least fifteen years. Even in the lowliness of their utility they, like field barns, tanneries and smithies, would have had to have been constructed from seasoned wood and well presented cladding materials. Annual remedial work is not calculable from the records but the value of goods and raw materials held in storage is. The 33 proprietors of 35 saltcoats, from Cockerham to Hambleton who were inventoried at their demise held turf, sand, salt, carts, pans and tools to an average value of just over £7.16.11, per saltcoat.⁵⁵ This in itself was a substantial sum to most people in the seventeenth century. As a grouping, the gross sum of their inventories is £6123.07.11, or an average of £185.11.02, each. What is notable therefore is that quite unlike the Townley example, this represents just 4.23% of their entire worth.

Saltcoat proprietorship was a status occupation. These men were literate and industrious and had a standing in their communities. In an age before the emergence of a class structure we would recognise today, they were of the 'Middling Sort'.⁵⁶ They were called upon to hold parish offices such as Churchwardens, and Overseers of the poor. They would have appraised the inventories and witnessed the wills of their late fellows, and had theirs appraised by their peers. These men did not always see the need to describe their occupations on wills, or to be described on their inventories. Even where such a labelling exists, it can often be the case that a husbandman can leave an inventory of much higher value than a yeoman. Of our thirty-three proprietors, 15 have no such appellation, while 10 are 'Yeoman' and 8 are 'Husbandmen'.

The Coastal Trade

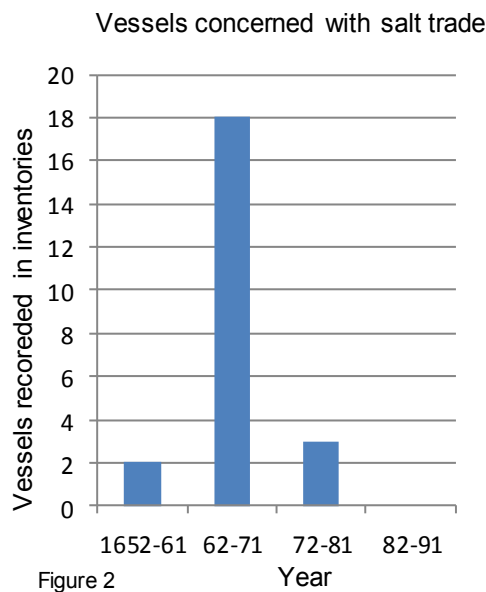
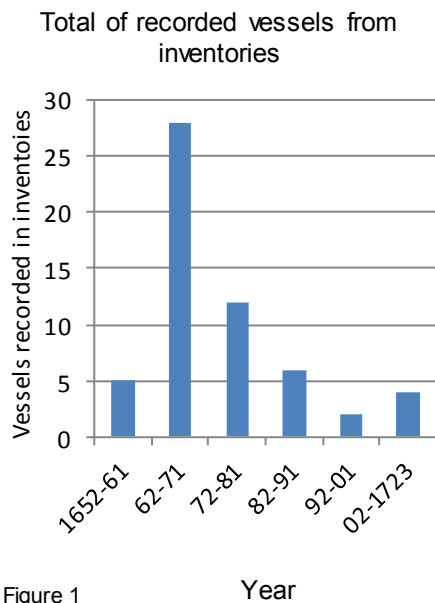
For a few enterprising men on the Lancashire coast, a twenty year window of opportunity opened around 1660, during which period their salt became a highly saleable commodity that could be shipped to the Furness peninsula, and much further, around the coast to the little ports of mid-Wales. Those who invested in ships in west Lancashire at this time were among the vanguard of a national trend. Between 1660 and the dawn of the eighteenth century, the overall tonnage, and the size and number of vessels which plied the coastal trade around England and Wales grew by 27%.⁵⁷ Such growth is indicated by the 57 ships recorded within our eight hundred inventories, (see figs.1 & 2 below, and appendix). These figures must be interpreted with caution since they relate to the death of their owners and not the

⁵⁵ This figure discounts the saltcoat of Thomas France, Cockerham, (1692), recorded as a bequest only.

⁵⁶ Keith Wrightson, *English Society 1580-1680* (Abingdon, 1982, 2003), Ch.1. 'Degrees of People', pp.25-46, & pp. 142-4. Note that in West Lancashire the demarcation between the status of 'Yeoman' to 'Husbandman', is arguably more blurred than elsewhere in England, owing in part to the relative absence of a regional gentry or aristocracy.

⁵⁷ Wrightson, *Earthly Necessities, Economic Lives in early Modern Britain*, p.246.

year of the vessels' construction. However, twenty of them had a connection with the salt trade, three more were under construction by men who traded in salt (in 1662, '64 and 1669), and no less than ten of these vessels were directly involved with the conveyance of salt into Wales. It becomes clear though, that ownership, or part ownership, of these vessels does not necessarily correlate with the proprietorship of a saltcoat. Only the wealthy yeomen, John Bradshaw of Wrampoole, whose affairs we will discuss in some detail, owned vessels and saltcoats, as did Edward Reeder of Cockerham, who died in 1670, leaving an inventory of £424.0.6. Reeder owned two vessels, 'Eagle', and 'Dilligence', and also a saltcoat; with 'sand & turfe ... with necessary things belonging to ye saltcoate', to the value of £15.⁵⁸



There were 14 saltcoats and 6 vessels for Cockerham; 3 saltcoats and 12 vessels for Preesall, Stalmine & Hambleton; 0 saltcoats and 4 vessels for Thornton and Poulton; but of particular note, the township of Pilling, between 1652 and 1712, recorded just one vessel in connection with salt, but boasted at least 16 saltcoats⁵⁹. The vessel, 'the one halfe of one barke called Michael', at £30 was carrying; 'thirtie six quarters of salte', [9 cwt/c.450kg], at £16.4s, a highly valuable cargo, when its co-owner John Tomlinson died in 1652.⁶⁰ The quantity and appraisal value is rare and instructive, showing the salt to have an agreed resale value estimated at 3.86d per pound. It is notable also that after 1652, only three other vessels were recorded by ownership in Pilling; Robert Carter's bequest of 'my part of the bark I have in possession...'; Henry Kirkham's one sixth share of 'Antylop', at £18, in 1675; and the unnamed 'one barke with all her Riginge bedclose & necesaris belonging to her', at £40, which was in Richard Dickinson's ownership in 1677.⁶¹ These vessels do not

⁵⁸ LA WRW/A, Edward Reeder, Cockerham, (1670).

⁵⁹ This estimate allows for duplication through bequests.

⁶⁰ LA WRW/A, John Tomlinson, Pilling, (1652).

⁶¹ LA WRW/A, Robert Carter, Lower End, Pilling, (1653); Henry Kirkham, Pilling, (1675); Richard Dickinson, Pilling, (1677).

appear to have been part of the salt trade. In an absence of conclusive documentary evidence, common sense would suggest that the output of sea salt from the relatively numerous saltcoats at Pilling, would be sold by the proprietors, or ventured on credit, to vessel owners in neighbouring townships which enjoyed better access to the Irish Sea through the deeper water channels of the rivers Lune, and Wyre. The salt made at Pilling would have combined to form aggregate cargoes which may have been shipped out via Glasson, by Cockerham/Thurnham, or more conveniently from the small harbours of Skippool on the Wyre estuary at Thornton/Poulton, and Wardley's Pool below Hambleton.

Arthur Smith and Richard Fisher both died in 1670,⁶² leaving no less than five vessels between them. Arthur Smith's 'New Lion' held '42 barell of Salt of ye deced't pper goods aboard the vessel at his death at 6s the barell', which was valued at £2.12s. The 'New Lion', was valued separately to its cargo, at £55; for which sum, in 1670, by an incidental and comparative note, could also have built a comfortable eight room farmhouse with two or three hearths, brick chimneys and outbuildings. Richard Fisher's principal vessel, 'Rainbow', was valued with 'her loading of salte and coles', to £122.10s. Smith and Fisher were both from Staynall, less than a mile from Wardley's Harbour on the east bank of the Wyre estuary. Between 1655 and 1670, only three saltcoats were recorded in the vicinity,⁶³ and none local to this area thereafter, whereas Pilling had by far the greater number. There are no port records to confirm the presumption that it nevertheless seems highly likely that salt made at Pilling was shipped out via Wardley's Harbour, or ferried across the river to vessels taking cargoes at Skippool, and shipped from there.⁶⁴

It should be kept in mind that although just a few miles separate each township, and it is merely twelve miles from Cockerham to Hambleton via Preesall, these were all very small towns sited in peripheral locations. Nothing more permanent than an irregularly maintained, unlit, hard track and lane network linked the communities along Morecambe Bay, and only the ancient main highway beyond the vast mosslands provided a route capable of conveying travellers and heavy goods north and south between Preston, Lancaster, Carlisle and London. We have discussed earlier how extreme rainfall and tidal incursions would swiftly cover the land and isolate communities, and recall again William Stout's solemn report, 'And eight people were drowned in Thernham Moss', in 1720. Fair weather access to the estuaries and the seas beyond to and from safe harbours, however small, thus provided a broader scope for transport and communication; albeit a two or three season one, and its possibilities encouraged investments, trade, and financial

⁶² LA WRW/A, Arthur Smith, Staynall, (1670), vessels, 'Old Lion', 'New Lion'; Richard Fisher, Staynall, (1670), 'Rainbow', 'Deliverance', 'Swallow'[sic].

⁶³ LA WRW/A, Thomas Clarkson, Fearn Hill, Preesall (1655); Francis Shakeshaft, Stalmine, (1667); John Carter, Hambleton, (1670).

⁶⁴ There was no bridge across the river Wyre estuary until 1864. The inventories for two ferry-boat operators are; LA WRW/A, Thomas Gaunt, Hambleton, (1674); Robert Parke, Hambleton, (1689).

partnerships between kinsmen and neighbours; which by its very nature, in its recording and documentation, illustrates a level of social sophistication and business competence of no lesser merit than in our present century.

Once in every two or three hundred probate bundles, a name stands out and becomes forever memorable to the researcher. Although the long deceased man's final papers are likely to be all we shall ever know him by, the lines of details contained therein cast refreshing shafts of light onto the period and place in which he lived, and offer unique insights into his own thoughts and wishes. The names of his confederates and beneficiaries create fruitful links which lead us to examine the wills and inventories of these people also. The impressions which emerge, however incomplete of all desirable details they may be, broaden our perceptions and augment the sum of our knowledge of people in their own time. Such are the uncommon riches held within the documents of Richard Curwen of the Bankhouse in Cockerham,⁶⁵ and his immediate contemporaries.

Richard Curwen was described by the four men who appraised his worth on the 7th August 1662, as a 'Seafaring man'. His inventory came to a respectable £88.07.07, and its summation covered just twenty-four lines of entries. While levels of social status were blurred, Curwen would have been comfortably of the middling sort. One immediate clue regarding such status, may be observed from the high valuation of; 'his app'ell and furniture for ryding', which at £7, was over four times the general average appraisal for male clothing of around £1.10s. Unusually there were no appraisals or valuations for livestock other than, 'one horse and one Stagg [colt]', at £3. Curwen, at his death, had no husbandry gear; ploughs, harrows or land tools, and he appeared to have grown no wheat, barley, or field beans during a time in which it has been noted, virtually every rural dweller of means held a semblance, or a wealth of all those things. Therefore, by way of a further example of the caution required while interpreting probate inventories, Curwen had already bequeathed, '... unto Thomas Curwen my nephew (son of my brother Thomas Curwen deceased) all my whole estate of what nature or kinde forever...' Once thus pre-disposed, none of the above, or the entire contents of his house would have been recordable for probate purposes. He was not a salt producer on his own account either, yet much of his inventory points to a regular handling and transportation of the commodity, and almost all the remainder to the requisites and tools necessary for coastal trading.⁶⁶

He was credited as having, 'salt that's in Wales', at £11.7s; and '20 Bushells of Salt lying at B'urick-ales & Bardsey', at £3. Bardsea is a small town set on a low hill overlooking the Leven estuary below Ulverston, and Borwick Rails, a small harbour that served Millom on the Duddon estuary further round the coast above Walney Island. Curwen also held, '8 pecks [2cwt/c.100kg] of Salt at ye Bankhouse', at 5s 4d,

⁶⁵ LA WRW/A, Richard Curwen, Bankhouse, Cockerham, (1662).

⁶⁶ LA WRW/A, Inventory of Richard Curwen, Bankhouse, Cockerham (1662).

and 'salt clothes [cloths] Salt Sacks and pokes', at £1.4s. It is notable that the salt stocks in Furness and at Curwen's home, were valued at .64d/lb, and .57d/lb, respectively, which is significantly less than that recorded in the inventory of John Tomlinson of Pilling ten years earlier. It is apparent that Curwen was accustomed to transporting cargoes of salted herring as he possessed, 'bearcaske & herring barrells being 23 in all', at 19s 2d, but he was not a fisherman. The most likely explanation for this disparity in value is that in the absence of any intelligence as to the cause of Richard Curwen's death, only that he dictated his will in sickness on 22nd May and died in early August 1662, it is quite possible that the salt had simply deteriorated through prolonged storage and inattention. It is also possible that in salting herring, an inferior grade of unrefined salt proved to be adequate for the task, and which would also account for the lower valuation.⁶⁷ However, salt was a commodity with a great many uses. The finest and whitest product would have commanded the highest price and value on inventory, but quality would have differed considerably in the output of one saltcoat to another and there are no specific records for its end use as a shipped article. Most of the salt exported coastwise would have been unloaded at the quayside and thence either stored or used in situ for salting barrels of herrings.

It is unclear whether the 'halfe a hundred of panell boards', at £1.03.04, were intended to form part of a cargo, or to be used for fitting out a ship. Curwen possessed the full range of traditional shipwright's tools necessary for carrying out running repairs, alterations, or indeed building a wooden ship; with 'axes, adzes, wimbles, chisels, Sawes & other iron', at £1. Rare utilitarian details have also been recorded of his on-board comforts and utensils: 'one bedcase one pair of blankets two old caddows [bedcovers] and a poke full of flocks', at 18s 4d; the latter item, a triangular hemp sack filled with wool tufts and rag fibres would have served for his pillow; 'one pan and a frying pan', at 3s, 'a peece of bacon or lard', at 1s, '3 peeces of pewter & 3 wood cans', at 4s 6d, '3 Chists 2 Coffers & 5 stone bottles', at 11s 9d; and for his spiritual comfort, '2 bibles and other 2 bookes', at 5s. Curwen also had, 'one pair of ounceles', worth 1s 4d. In the century before standardisation and a nationwide regulation of weights and measures, 'ounce-weights' were commonly used to weigh household and farm goods. 'Ouncels' were a general name for sea-stones of a variety of shapes and sizes, but of a proven weight, which could be used in trade by mutual consent between buyer and seller. For self-protection Richard Curwen was armed with, 'one sword w'th a belt & 2 fowling peeces', at 18s 4d. These appear to have been high quality items, and possession of a sword may imply some involvement in the Civil War two decades earlier. 'Fowling pieces', were commonly owned by men of means in coastal or moorland locations, and would have cost around 5s, or 6s 8d, when new. They were longer and heavier than a pistol but shorter than a musket and were (simply put), the distant forerunner of the sporting shotgun. Migrating wildfowl of all species were hunted with fowling pieces,

⁶⁷ A & A Fielding, *The Salt Industry*, p.11, for an illustration of salt grades.

and all smaller birds with nets and stakes. However, being equipped with two of these persuasive mid-range firearms suggests an air of caution and preparedness while at sea. Most illuminating of all his seagoing items are Curwen's navigation aids, the pieces of equipment most vital to any sea voyage prior to the modern era, where the journey required accurate navigation beyond the sight of land. All sea voyages were potentially hazardous in a small wooden ship, and it was one matter to make the crossing of Morecambe Bay from Glasson or Skippool, to the creeks on the Furness peninsula, but quite another to sail west-south-west through the Menai Straits, around the Lleyn peninsula, and further southwards into Cardigan bay to land cargoes in West Wales. The port of Cardigan is by a modern calculation, 231 nautical miles from Fleetwood, which at a steady 5 knots requires a full two days sailing.⁶⁸ Interpreting the positions of the sun and the stars in their relation to the horizon was an essential skill, as was a rigorous attention to each passing hour sailed beyond a previously known position, which cumulative calculations enabled mariners in the seventeenth century to estimate the ship's speed and to plot its subsequent passage by dead-reckoning. Curwen owned, '2 hower-glasses one sundyall one p'spectve glass with one looking glase', at 5s. Of all the inventoried references to vessels large and small, no other rewards the reader with quite this level of operational detail. There is certainly no other from the mid-century which makes a reference to a 'perspective glass', or telescope.

It is apparent that Richard Curwen had almost all he required as a seafaring man, except that curiously, he had no ship. Any share he held in an existing vessel at the time of his death would have been recorded. It is immediately obvious though, that the most outstanding entry on Curwen's inventory is the first line of it which heralds his great investment: 'layd out (upon account) towards ye building of a vessel or barke', £54. As with any inventory, almost all of the deceased's past life is lost beyond any revelation. Had Curwen owned vessels formerly and had they been wrecked off the coast, or simply worked to exhaustion? Conjecture is futile as to the facts, yet it is highly probable that this 'seafaring man' may well have bought fractional shares in vessels past, and as was commonly the case with experienced (and fortunate) mariners in the seventeenth and eighteenth centuries, bought into vessels of which he was the master. The late Professor Ralph Davis, whose seminal work on trading vessels in the early modern period has not been eclipsed, neatly summarises this possibility.⁶⁹

'The ships master could have no better investment than the ship he commanded, if he were confident of his own abilities ... the active mariner had a strong incentive to put his money into a ship, because this was the simplest way towards securing all the perquisites of a ship's master. The retired mariner, who had settled ashore with a small or moderate fortune,

⁶⁸ www.ports.com/sea-route, accessed 19 December 2015.

⁶⁹ Ralph Davis, *The Rise of the English Shipping Industry*, (London, 1962), p.85.

might feel he could best use his resources by turning his maritime expertise to account in organising and managing shipping partnerships’.

We cannot ascertain the age of Richard Curwen at his demise, but in August 1662 the sickness that incapacitated him in May, took his life before his credits were met or his plans realised. He did not live to see his new ship completed, but in his will was nevertheless determined that it should be built.

... and whereas there is a vessel in building amongst four of us, to wit John Bradshawe of Wrampool & his brother George Bradshaw, Richard Deane & my selfe and the money that hath beene dispursed & appended for and towards the building of the said vessel doth amount to the sume of £154 of which said sume, £80 is already layd out by the said John Bradshawe & the said George Bradshawe and the rest by the said Richard Deane & my selfe, that is to say £20 of the said Richard Deane's money and £54 of myne owne, it is my minde & will that the said Thomas Curwen shall have my whole title of the said vessel and that he may ioy[n] [*sic*] p'porcionally with the said other three in going on to finish the said vessel. Provided that the said Thomas Curwen my nephew shall pay or otherwise allowe unto the said Richard Deane £20 of the sd sume of £54 already layd out of myne owne money about the said vessel, w'ch sd £20 will make that the said Richard Deane wilbe as forward already in the reckoning about the said vessel as any one of them, and for my funeral expenses it is my mynd and will that the same be discharged out of my said estate already given and bequeathed unto the said Thomas Curwen my nephew, whole Executor of this my last Will and Testament.⁷⁰

The complete absence of port records for sailings or cargo listings for this period make any estimates of the size of this new vessel somewhat hazardous. Professor Davis has made the general assertion, that by prohibiting the importation into Britain of cheap Baltic and Norwegian materials in Dutch-owned vessels, the costs of ship building rose after 1651, and that ships of 150 – 250 tons built on the Thames estuary would be charged out at around £5 per measured ton by 1675. However it was also the case that ships built in the provinces inevitably cost less, and this writer proposes that an estimation of £3.15s to £4 per ton would therefore indicate the tonnage of Curwen and partners' proposed vessel with reasonable probability to approximately 40 tons. This rough estimation cannot of course attempt to factor in the depreciation of vessels for which we have no knowledge of their age or condition and does not seek to provide a reliable guide to the tonnage of others which were appraised on inventories and referred to in this discussion. Suffice it to say that these mid-century coasting vessels were mostly small, generally one or two-masted ships

⁷⁰ LA WRW/A, Richard Curwen, Bankhouse, Cockerham, will extract, 22 May 1662.

which ranged in size from around 15 to 60 tons burden.⁷¹ This estimate finds some accordance with Professor Willan's calculations, who informs by example that whereas the average size of a coasting vessel out of Chepstow in the early 1630s was only 15.7 tons, and from Bridgwater 17.4 tons, (within a range of 8 to 40 tons), by the end of the seventeenth century the average burden of English coasting vessels had grown to 80 tons.⁷²

With regard to Richard Curwen's three co-investors, almost all we know of George Bradshaw is that he was the second son of George Bradshaw and his wife Anne and that he was buried on 19 December 1681, at the age of fifty-five. Of his older brother John, who died less than two years after Richard Curwen in May 1664 considerably more information has survived. His extensive inventory is highly detailed and was fulsomely recorded on two long sheets of parchment which were stitched together to record an impressive, 'summa totalis' of £1024.12.08.⁷³ The document unrolls to 46 inches/1.17 metres long. Inventories for £1000 or above, (those which have survived), are only uncommonly found in West Lancashire in the seventeenth century. John Bradshaw was described by his peers as 'Yeoman', not 'Gentleman', but with his considerable range of investments would have associated with every level of local society. Like Richard Curwen, and Henry Threlfall, Bradshaw liked to dress well. 'His apperell w'th rydinge furniture' came to £6.13.0. Also like Curwen, John Bradshaw would have regarded himself as one of the middling sort. His financial investments included eight bonds with a net value of £270, which were to mature annually from 1665 to 1671. In other credits and loans too numerous for the appraisers to record as individual entries, the amount stood at £116.16.06. Most notable though is the cash entry. Men of any kind of means or social condition had their 'purse and apparel' recorded along with any ready cash in what was usually an eclectic assortment of silver and gold coins, many of antiquity, totalling around five or ten pounds in a chest in the house when they died. John Bradshaw held £115.10.04. Almost two centuries before regional banking premises and institutions were established, and thirty years even before the Bank of England was founded, men like John Bradshaw effectively assumed the role of banker for a broad section of their society. His financial investments, loans and credits would have brought a respectable and legal five or six per cent interest per annum; and with no less than five oxen, one bull, and thirty-nine other cattle; ten horses, sixty-four sheep, and twenty-six acres sown to oats and barley, John Bradshaw (had he lived longer), would have been able to call upon year on year surpluses to augment and sustain his various investments, including the business of ships and salt production.

⁷¹ Davis, *English Shipping*, pp.372-375. Prof. Davis gives Whitby, Tyne and Humberside as provincial examples where raw materials and wages would be lower. For a rare illustration of contemporary coasting vessels, there are two oil paintings, with the title, 'View of Liverpool in 1680', held at the Merseyside Maritime Museum.

⁷² T.S. Willan, *The English Coasting Trade 1600-1750*, (Manchester 1936, repr. 1967), pp. 11-13.

⁷³ LA WRW/A, John Bradshawe, Wrampool, Cockerham, (1664).

Bradshaw was among the most committed investors in both the trade and production of the commodity for whom records survive for this region. On 20 May 1664, he possessed 'Turfe ould & new at Saltcoats [,] house & on the mosse w'th sand gotten this yeare', at £30,⁷⁴ 'Six salt pannes', at £5; and a further £7.6s, laid out for, 'fflower saues', 'Shovles hopps barrows & scoops', 'Sixe paire of sandcoup wheeles raites & Coupes w'th sills', which brought the combined sum to £42.06s. In addition to local trade, Bradshaw had already shipped salt into Wales to the value of £19 in his barque, 'Dolphin'; a good sized vessel of around sixty or seventy tons burden, in which he held a one quarter share for £64. The last line of his inventory refers thus; 'for his parte of the new barke in building', at £22. Twenty months after the death of Richard Curwen, the vessel which it was intended would have carried their business onwards to an increase in the scope and volume of their trade, remained uncompleted. Bradshaw's share of this new vessel at his death has clearly reduced. In May 1662 it stood at £40, or £80 equally committed with his brother George. On his inventory a share of just one seventh part of the original £154 was recorded.

The complete absence of George Bradshaw's probate documents are a loss to this discussion in regard to the outcome of their proposed vessel. George, the middle brother, had also made financial loan arrangements with his youngest brother Peter, who until his death in August 1677, lived in Preesall, leaving a substantial inventory of £432.10.09.⁷⁵ Peter Bradshaw's appraisers recorded four bonds of £18.05s each, which were beholden upon George to repay annually from 1666 to 1671. Peter was also credited with, 'owinge for salte in wales', at £3; and owned, '1 theirde pt of a barkue Called the Satisfaction', at £46.13.04. His principal appraiser was Richard Johnes, the 'husbandman' from Pilling, whom we know was also the proprietor of a saltcoat. It is likely that Peter chose to restrict his investments and business arrangements to his own social catchment; the appraisers of his inventory are drawn from Preesall, Hackensall, Stalmine and Pilling, rather than Cockerham, but the loans to his brother George in 1664 or '65 may have been at least in part intended to keep the projected new vessel moving forward towards its completion.

When Richard Deane, a neighbour of Richard Curwen at the Bankhouses died in early October 1670, he left an inventory which totalled £132.01.01,⁷⁶ and was described as a 'husbandman' by his appraisers, of whom the first written was Thomas Curwen, Richard's nephew and beneficiary. Deane had apparently prospered in the eight years since Richard's decease. He left a good, small dairy herd, at £16.03.04, and a horse, a colt, two mares and a foal, at £10. His principal cereal crop was oats, at £12; and barley, beans and peas, at £6. Of outstanding note is the line, 'In Hempe, hempseed & some pottaties', at 12s. Such an early record of potatoes being grown on the Lancashire coast places Richard Deane amongst the

⁷⁴ It seems clear to the writer that a comma should have been inserted here, and that the reference to turf is for three locations, and that there are two saltcoats with three salt pans apiece.

⁷⁵ LA WRW/A, Peter Bradshaw, Preesall, (1664).

⁷⁶ LA WRW/A, Richard Deane, Bankhouses, Cockerham, (1670).

first named half dozen men in England to have grown potatoes as an agricultural crop, and to have had the lifted tubers accorded a value on a probate inventory.⁷⁷ Deane possessed, 'one salt pan' at 16s. He is also credited with, 'More in salt with a 4th pte of a Barke', at £46. The figure could be a significant one. Were the value of the salt to have been six pounds, the balance of forty pounds would match his improved share in the new vessel, which if this now be it, still has no name. While it is acknowledged that this calculation does not exactly equate to 'a 4th pte', it is surely close enough, although the absence of George Bradshaw's papers are again a hindrance.

Coasting vessels were built up on the foreshore by just one or two skilled local men.⁷⁸ Once the keel planks and mast stocks had been securely laid, and the ribs set and framed, the skeleton was propped with sturdy beams to endure hard weather during its construction and fitting out. They did not take eight years to build, and in this decade of progress and trade opportunities, for a half-finished ship to moulder unattended on the sands of Morecambe Bay would have been an improbable outcome and an unlikely waste of costly materials. Whether Richard Curwen's nephew and beneficiary Thomas took the instructions from his will and entirely fulfilled their intentions towards the vessel we shall never know, although it appears from Richard Deane's ultimate share that Thomas behaved honourably with regard to the twenty pound legacy. Thomas would have known and maybe shared the generous affection his uncle had for Richard Deane, and a close scrutiny of Deane's inventory shows that he possessed, 'one pepective one howerglass one old sword & ye half of a trough', at 2s 6d. As sole inheritor of the house, livestock and tenement at the Bankhouse, Thomas may not have seen fit to take to the sea, and the notion that he made a gift to Richard Deane of his uncle's telescope, hourglass and sword as a gesture of friendship and goodwill is an attractive one.

There are other men whose inventories reveal an active participation in the salt trade into Wales, if not the production of the salt itself. On the Wyre estuary at Thornton, Robert Tinkler possessed, 'one vessel called the Eagle', at £54, and 'Another vessel called the 'Godspeed', at £34, and at the time of his death in 1669 he is credited with 'salt in Wales upon a Venture', at £10. Richard Fisher of Staynall, it was noted earlier owned three ships, one laden with salt, and was credited with, 'salte in Walles & in the North', when he died in 1670; as similarly had Roger Danson of Stalmine Grange, two vessels; the 'Paradockes', and the 'Hoppwell', with 'Sallt in Walles' at £8.⁷⁹

⁷⁷ It is thought by the writer that the first inventory in England upon which a potato crop was recorded was; LA WRW/A, Thomas Scarisbricke (the elder), Formby (1663). That several others of this early date were all from Formby, and then from Cockerham, suggests an impetus and motivation of a coastal trade link which it is intended will be discussed in a separate paper.

⁷⁸ LA WRW/A, John Carter, Stalmine (1661), and Roger Danson, Staynall (1685), for example, were both described as, 'Ship Carpenter'.

⁷⁹ LA WRW/A, Robert Tinkler, Thornton, (1669); Richard Fisher, Staynall, (1670); Roger Danson, Stalmine Grange (1671).

Only four further inventories have survived which are available to augment this area of discussion. The deceased men for whom they were drawn up each lived on the Wyre estuary at Stalmine, Staynall and Preesall, and who would have shipped out of Wardley's harbour on the east bank. Their special value lies in the greater detail they provide the reader with regard to the precise destinations of the salt cargoes. The entries were written by scribes who were drawn from their peer group, neighbours or kin who had of course never been to Wales, or indeed to Ireland which also now appears as a destination. Recording the names of persons and places unknown to them, they made honest attempts to write them down as best they heard them. Thus for example, 'abellgrifie of cardecn', is likely to have been one 'Abel Griffiths of Cardigan'. These inventories are also illuminating in their confirmation of how far these mariners were prepared to venture around the coast in pursuit of trading opportunities. They also illustrate a point of interest that prior to the rise of the ports of Lancaster, Liverpool and Chester in the eighteenth century, which created their own trading hinterlands there were numerous other smaller creeks and harbours where goods could be landed. During this period, port books were held at 122 maritime centres, and an increasing number of officers collectively responsible for the entire coastline of England and Wales.⁸⁰

When William Smith of Stalmine died in 1661, he owned 'one therd part of a barke called the lion', at £24. Although salt is not referred to specifically he was credited with, 'deptes in Irland', at £5; 'deptes at Cardikan', at £6; and 'george prickher [Pritchard?] in hand', owed him £12. As is so frequently the case, William left no final will, and the frustratingly incomplete records in the Stalmine Parish Registers render it impossible to ascertain the family relationship between William, Arthur and Richard Smith.⁸¹ Arthur died in February 1670, and Richard followed almost exactly one year later, being buried on 15 Feb 1671. Their financial arrangements were closely interwoven. We have observed that Arthur died with shares in both the 'Ould Lion', at £13.06.08, and a half share of the 'New Lion', at £55; also that the newer ship was laden with forty two barrels of salt, valued at 6s per barrel at the time of his death. The other £55 share in the vessel was held by Richard Smith, who was most probably Arthur's brother. As with that of Richard Curwen, Richard Smith's inventory implies a connection between the sea salt being produced in Morecambe Bay serving a geographical sector of the herring trade, as there was; 'oweing by Mast'r butler for heareing', £1.

Richard Smith's inventory also glimpses the complex and often sophisticated background dynamic of social introductions and interactions which would have been essential to the engagement of trading partners and the facilitation of credits. Written deeds of financial commitment, or bonds, whereby one party was legally bound to

⁸⁰ Hussey, *Coastal and River Trade in Pre-Industrial England*, p.7.

⁸¹ LA WRW/A, William Smith, Stalmine (1661); Arthur Smith, Staynall (1670); Richard Smith, Stalmine (1671).

pay another by mutual agreement, were a universal facilitation which ensured that wholesale business arrangements in the seventeenth and early eighteenth centuries were founded on trust and sworn guarantees, and therefore only rarely required to be settled entirely by cash transactions at the point of sale. When shipping salt to the Welsh ports and salted herring to Ireland the entrepreneurs of the Morecambe Bay townships had to secure relationships with both purchasers and their credit guarantors, the latter being described usually as 'yeomen' and 'gentlemen', of integrity and solvency who preferably possessed property in London and were trusted to have been creditworthy on their own account. In the unhappy event of a dispute, ensuing litigation was costly and burdensome, and even in the event of an award in favour of the aggrieved claimant, the occasion of his death would have made any equitable settlement via the executor somewhat remote. Thus it transpired that when Richard Smith died, he was owed £10, 'by abellgrifie of cardecn gentleman upon a Judgment'; a further £15.00.01; 'oweing by Master Thomas Lewas of cardecn gentleman'; and as a credit recorded in both his will and inventory, 'william prichet of the geast [Borth-y-Gest, Porthmadog], in the county of carnervan oweing to me, £7.08.00'. Richard made his will on 10 February 1671, and was buried on the 15th. On the first document was the reminder to all that there was, 'one bond in the hands mackforlay of Strauforth [Strangford] in Ireland', of £3.14s, that would needs be conveyed and eventually redeemed, and on his inventory of the 18th, this credit had been reduced by whatever means to £1.07s.

The only other individual for whom we have documentary evidence of the coastwise trade in salt, is John Moore of Preesall, who died in January 1680, leaving an inventory of £332.18.08, and who described himself as 'Yeoman'. Unlike our previous case studies, Moore had not involved himself in a consortium of family, confederates or kin, but had operated his secondary occupation on his own account. Interestingly, he was described three years earlier as 'Mariner', in the will of John Dobbikins, who bequeathed to him a bond to the nett value of £20, beholden of the widow Ellen Ffife and her sister Mrs. Knipe.⁸² John Moore owned the whole of, 'one vessel with Solte in her'; and was credited with, 'Solte att Dufey & the gareke in weales', at £25. Once again, the destinations draw our attention. 'Dufey', was without doubt the port of Aberdovey/Aberdyfi; but, 'the gareke', was either a reference to a now long disused landing place at Clarach Bay ten miles further down the coast of Cardigan Bay above the thriving herring port of Aberystwyth, or another well-meant struggle by the scribe-appraiser to wrestle with 'Carreg' or 'Cardigan'.

Other men of the Wyre towns of Poulton and Thornton who involved themselves in the salt trade at this time were, James Hull of Poulton, who in 1660 held an undisclosed share in a coaster of £22; one salt pan, at 13s 4d, and a considerable cargo or warehousing of salt at £24.14s. If a simple comparison can be made with Arthur Smith's cargo, Hull had at least eighty barrels of salt which were ready for

⁸² LA WRW/A, John Moore, Preesall (1680); James Dobbikims, Preesall (1677).

shipment. In 1669, John Hodgson of nearby Thornton, had salt to the value £4.19s; and had also been attracted to invest in the trade, as he had, 'Layd downe to the building of a Barke', the sum of £60.⁸³

A number of destinations have thus been identified to which these enterprising men of Cockerham and the Wyre townships ventured during a brief period of history between 1660 and 1680. Cargoes of salt, primarily for preserving herring were shipped to Strangford Lough in Northern Ireland; to Millom and Bardsea on the Furness peninsula, and into the Welsh ports of Porthmadog, Aberdovey/Aberdyfi, Aberystwyth, and Cardigan.

Why then, did this regular trade in Morecambe Bay salt, a paradigm of regional specialisation which in its own way made up one small, but valid element of the burgeoning cohesion and growth of a British economy come to a shuddering halt? Beyond all else, the fact remains that only John Moore of Preesall continued in the coasting trade until his death in 1680. After this date the writer can find no evidence of salt being shipped to the customary destinations of a trading nexus which had been painstakingly developed over the course of a generation. Closer examination of the records in our dataset reveals a sombre if somewhat prosaic outcome. To any person, not least those who have broad ambitions, investments capitalised, plans in progress and men employed, death is of the greatest inconvenience. In just under three years between 1669 and 1671, fourteen men, almost all of the key figures who were or had been involved in the salt trade, from Cockerham, Stalmine, Hambleton and Thornton, had died.⁸⁴ Between them, they owned outright, or had shares in, six saltcoats and twelve vessels. Causes of death cannot be ascertained as they were afforded no diagnoses. Beyond obvious fatal accidents or drownings human mortality in this period was still accepted and lamented as an unavoidable aspect of God's will. Richard Curwen was described in his will, as were men and women in the majority of wills drawn up at the time as, 'being sick in body but of good & p[er]fect remembrance'. The last point, however flexible in its interpretation, and often the cause of legal disputation, was (and still is), a mandatory condition that the testator is in a fit mental state to make rational bequests before witnesses and to confirm the clauses when read back to him or her before signing the same. Sometimes the unrelieved suffering of former centuries is pulled into sharp relief. For William Lea of Pilling, 'being Sicke and Crased in bodie prased be the Lord for the same but of sound and perfect memory', it can only have seemed a long and arduous twelve weeks between the drawing up of his will on 7 April and his eventual surrender on 30 June 1662. The bubonic plague had spent its devastating, recurring force by 1665, when it swept through London and England for the last time. On the coast of West Lancashire, diseases such as small pox, typhus, malaria, gastric fevers, septicaemia and gangrene were common and perennial killers of men and women of all ages.

⁸³ LA WRW/A, James Hull, Poulton (1660); John Hodgson, Thornton (1669).

⁸⁴ See appendix p41-42.

Salt production continued in Cockerham and Pilling until the storms of 1701, and 1720 swept the infrastructure away, but the window of opportunity for coastal exports which had opened around 1660 was closing again. Throughout the 1670s and 1680s, there was a steadily increasing output of rock and brine salt from Cheshire and Droitwich. By the 1690s, Anglo-French conflict forced an embargo on all imports from that nation, which boosted demand throughout England and Wales for all home produce, including salt. These events prompted a significant increase in the estuarine and coastwise trade through Liverpool and Frodsham on the Mersey; through Chester, Shrewsbury via the Severn, and through Gloucester, Bristol and Bridgwater in Somerset to the Welsh markets.⁸⁵ Small fishing and coasting vessels continued to be built at Skippool and Glasson but, always allowing that these records which remain are a representative sample of a prevailing contemporary condition, their numbers and tonnages were locally in decline.

Thomas Curwen outlived his uncle by thirty-six years. His inventory was compiled on 20 December 1698, and appraised to £153.02.05. In his will, he describes himself as a 'Yeoman'. Among his possessions, were '3 old Salt pannels', at £1.4s. At eight shillings each, and to Curwen at least, they had become tarnished relics of a former endeavour, and were valued accordingly.⁸⁶ It can be interpreted from his inventory that at his demise on the cusp of a new century, Thomas Curwen was also of the middling sort, and was becoming what would later be referred to as a 'Yeoman Farmer' of the middle-class of society. He had undoubtedly improved the inherited tenement at the Bankhouse. Livestock values in north-west England had risen from 1680–1709, and Curwen's 'seven cows', at £24.10s, or £3.10s, each, were closely priced to the average for the whole region.⁸⁷ He owned a valuable mare at £4; oats, barley, beans, wheat, rye and hay, to £43; two cheese presses of good quality, 'Linnen Cloth Canvas and hempyarne', at £8.5s; '10 Windles of Oats att the Kill[ne]', at £2.5s; and a 'Silver spoon and Bookes', at 4s 9d. Like his uncle, he chose to dress well, owning 'purse apparel & Riding Furniture', at £5. It appears that he also chose to follow the example of his late friend Richard Deane, as he too grew potatoes.

It would be quite impossible to quantify the profits or otherwise of the salt trade. We will never know if the debts in the Welsh ports were redeemed to the benefit of the executors and beneficiaries of the deceased, and if they were, to what legal cost or personal endeavour? All we may interpret from extant records is that a few men of means and vision, who were active between 1660 and 1680, took a traditional, regionally produced commodity and exploited an opportunity to profit from a source secondary to, and separate from their principal occupation of animal husbanding and

⁸⁵ David Hussey, *Coastal and River Trade in Pre-Industrial England, Bristol and its Region 1680-1730*, ch.5, The coastal trade in operation, pp.151-195.

⁸⁶ LA WRW/A, Thomas Curwen, Bankhouse, Cockerham (1698/9).

⁸⁷ Joan Thirsk, (Ed), *The Agrarian History of England and Wales, Vol. V:ii, 1640-1750*, Table XIV, Price indices of sheep and cattle, p.861.

arable farming. It has also been demonstrated that the practice of trading sea salt coastwise to divers destinations was deemed sufficiently lucrative for some men to continue investing in saltcoats, their infrastructure and tooling, and in new ships. Furthermore, that peer-partnerships and family consortia would be formed to fulfil those aims. The writer knows of only one physical structure which stands testament to the success of the men of Morecambe Bay, and upon which the positive effects of the salt trade may be traced and partly attributed. The following case study leads the discussion through the final section in which we may review the salt makers' bequests, for evidence of place names if not other physical structures in the landscape, around which further historical or archaeological investigations it is hoped may be fruitfully undertaken.

Legacies and locations

When John Bradshaw of Wrampool died in May 1664, we have seen that he had acquired a substantial fortune worth more than one thousand pounds, of which his saltcoats, shipping interests and exported salt made up 14.35% of his inventoried wealth. The key elements of his financial arrangements have been outlined earlier as have his considerable livestock holdings and acreages of cereal crops. Careful scrutiny of the one hundred and twenty-eight lines of his inventory reveal that in general, he possessed what many others possessed, only in notably greater abundance. The settlement of Wrampool/e lies approximately three and one half miles south west of Cockerham, and half a mile from Pilling Hall. At its heart, and sited on an undulating ridge is Wrampool/e House which overlooks the southern tail of Cockerham Moss.⁸⁸ If not of a much earlier period, Wrampool House had been inherited or built by one George Bradshaw, the late father of Curwen's co-investors, whose family came from Preesall, and who died in 1638. At the time of the death of his eldest son John twenty-six years later, the old house comprised at least fifteen rooms with three hearths. Among the rooms were a servant's chamber, two private closets, a 'greate' and 'litle parler', and a 'greate buterye', and 'litle buterye'. The property had its own 'entrye' in which was installed an impressive cheese press and wooden vats valued at 10s. The 'house', or main living and dining room was large enough for 'two tables with formes', at £1.06s, although it is likely that the widowed John and his eight children ate their meals and prayed together in the privacy of 'the greate parler'; in which as was customary, were also, 'one table w'th formes', at £1, and a feather bed, boulder and coverings of a high quality at £3.16.08.⁸⁹ Either physically attached to, or closely adjacent to the old Wrampool House was a garner with a 'blynde loft', a stable, and a 'greate barne'. There were also of course, two saltcoats nearby. Wrampool House was but a fraction of the size of the great houses

⁸⁸ OS Sheet 102, 1:50000, ref, 425 496.

⁸⁹ LRO WRW/A, John Bradshaw, Wrampool. Cockerham (1664). In the early modern period, those who could afford any degree of privacy, commonly utilised the parlour downstairs as a master bedroom, dining room and private reception. Younger children invariably occupied loft chambers, which were warm, and being adjacent to the servants' accommodation, could be attended by them during the night if necessary.

of the day, let alone the vast edifices of a later era which necessitated the functions of armies of men and women in all levels of domestic and agricultural service. Nevertheless 'yeoman' houses like Wrampool were centres of production, employment and accommodation and it is not fanciful to suggest that perhaps twelve to sixteen of Bradshaw's servants and farmhands ate their meals daily around the two long tables in the house.

John's eldest son George, at twenty-three years old became the principal beneficiary of his father's estate. We cannot know to what extent George continued his late father's interest in salt production, or whether or not he poured his energies into maintaining the 'Dolphin' in seaworthiness, and pursued his inherited one seventh share of the 'Curwen' vessel? George and his wife Margaret both died around 1712, less than a year after the death of their eldest daughter Elizabeth, but their probate documents have not survived. However, during the twenty years after John's death, the Bradshaws continued to prosper and during 1685, entirely rebuilt Wrampool house. The property stands today and remains a working farm. It was extended in the nineteenth century with the addition of a new wing built at ninety degrees from the façade of the earlier structure. As a consequence, the handsome date stone 'GBM 1685', which once proclaimed its owners' achievements over the former front door, now seems incongruously tucked into a corner. The stone has been ornately carved, is several feet square, and is recessed and framed within a raised stone border. It is possible that in the ornateness of the lettering, and the archaic numeral 'five' were a broad hint that although the past twenty-five years had seen a restored and resurgent Church of England work to overcome the practices of Roman Catholicism, the Bradshaws were sympathetic to the faith. George [senior], who died in 1638 had been cited and fined for being a papist and delinquent.⁹⁰ However the year in which Wrampool House was rebuilt seemed to be about to usher in a new dawn for English Catholicism, for in 1685, the newly crowned king James II was a Catholic. In any event, it is clear that the third George Bradshaw wished to let it be known to all, and from some distance away, that this was his house.

There was honest, hard-won money to be made from making salt. Testators were as particular and specific in their bequests as they were with all assets which involved land tenure, taking great care to pass the means of production and legal title to the succeeding generation without dispute. The examples which follow serve to demonstrate the importance and perceived value of saltcoats and saltcoat gear, by testators from the northern and southern extent of Morecambe Bay, over a period of sixty-six years. Perhaps the most notable aspect of what follows is that salt production maintained its commercial appeal as a potentially profitable secondary occupation throughout the latter half of the seventeenth, and into the eighteenth centuries, even though it now seems probable that salt surpluses were no longer

⁹⁰ Emmeline Garnett, *The dated Buildings of South Lonsdale*, (Lancaster, 1994), p.57. Ms. Garnett provides a written sketch of several Bradshaws, and a penned illustration of the stone.

exported to Wales after c.1680. On the Furness peninsula, and in accordance with the observations of William Brownrigg regarding the longevity of salt production in that region of Lancashire, it seems the will of the latest date to make a reference to salt is that of John Ashburner of Dragley Beck, Ulverston, who dictated his will on 28 April 1716. He appointed his wife Esther executrix and principal beneficiary, bequeathing to her, 'all my houses lands and tenements whatsoever as also my peat moss and Turbary in Ulverstone moss during her natural life provided she remaine a widow'. Ashburner then willed the following item; 'I give and dispose to my son Thomas & his heires ffor ever my salt coat with all the rights and priviledges thereunto belonging'.⁹¹ Salt production had a long tradition. Richard Taylor of Lindall composed his will on 23 December 1650, with precise instructions for the disposal of his property among his four sons.⁹²

Itm I give the Tenement at Lindall which was due to me by birth right to my son Arthur taylior and the widow Estat of Jennett Taylior my wife ...
 Itm I give my son James Taylior the midowe called maychell pa[r]ke after my decease
 Itm I give to my sone Richard Taylior the midowe called Sandie Brigge park
 Itm I give to my son William Taylior the Salt Coat I bought on Richard ffletcher and half the Coat geare and four lead panes: I give to my son Arthur the other half of the Salt Coat geare and five lead panes:

Almost thirty years later, on 28 November 1679, William Clegg of Ulverstone, 'Husbandman', requested his body, 'to bee buried in my p[ar]ish church-yard of Ulv'ston neare unto my Ancestors', and in a similar gesture of beneficial apportionment;

I doe give unto Ellin my wife after my decease All my now dwelling house & houses garth and onsett which I bought of Thomas Richardson for & dureinge her natural life; And likewise both ye salt coats; And after her decease ... I doe give unto my said son Richard Clegg the salt coate w'ch I built & th'one halfe of ye sand floore And the other Saltcoate w'ch I bought of Eliz: Scale, I doe give unto my son Will'm Clegge w'th th'other halfe of ye sand floor; Ite I doe give unto them all my mosse & turbary in Ulverston Moss w'th'app'tnces [with the appurtenances/accessories].⁹³

⁹¹ LA WRW/F, John Ashburner, Dragley Beck, Ulverston (1716). Whether or not this location was the former site of the present Salt Coats Farm referred to earlier in the text cannot presently be proven.

⁹² LA WRW/F, Richard Taylor, Lindale (1652); Lindale sits above low mosslands west of the river Winster which discharges itself into the Kent channel, one mile east of Grange-Over-Sands.

⁹³ LA WRW/F, William Clegg, Ulverston (1680); Garth: A small area of enclosed ground, garden, paddock or yard, usually adjacent to a building. Onset: a dwelling, farm building or stable on the land being bequeathed.

Eighteen months later in Ulverston, William Ellithorne was obliged to take a different route to provide a secure future for his young children. On his demise in the first week of April 1681, Ellithorne was found to possess goods to the meagre value of just £17.14s. He owned but one cow and one horse at £2.15s, and scarcely sufficient straw and hay for them at 3s. All his clothes were worth just ten shillings and his bible eight pence. Worthy of note is the sum owing to him, doubtless from several neighbours and kin (though unspecified), of £8.15.10. In the society of this small town as elsewhere across the Morecambe Bay townships and beyond, the ability to extend and to be in receipt of credits and loans was vital to the profluence of the local economy. In effect, over half his wealth at the point of his death was tied up in redeemable loans. Ellithorne was clearly aware of his circumstances. In his will of 31 March, which curiously seems to overlook his wife Ellen, he gives the following instructions for the disposal of his estate.⁹⁴

First it is my minde & will & I give & bequeath unto George Mount of Ulverstone aforesaid Glover & James Troughton of Rattenrow ... Husbandman ... All that my Dwellinghouse outhouses Barne stable & Hempgarth as they are erected standing lyeing & beeinge in Ulverstone ... And Alsoe all that my Saltcoat & fflower [floor] Belongeinge to it And Alsoe All those my ffour p'cells of Mosse & Turbary In Ulverstone Mosse Containe[ing] in all about Two acres or thereabouts bee it more or lesse to bee by them Sould or otherwise disposed of Accordeinge to the best & surest Endeavour ffor the bringing up of my Two Children Thomas & Joseph.

A few pertinent records of testators from Cockerham to the Wyre have survived also. They too speak of a tradition of secure land tenure. On 8 september 1653, Thomas Gardner, 'of the Haire stones in the p[ar]ishe of Cockerham', bequeathed to his wife Marie her half share, with their eldest son Thomas; 'of all my Messuage tenem't houses barnes saltecoate sand stones & turbarie with the moytie & one halfe of all the outside grounds in Cockerham aforesaide to me belongeinge.'⁹⁵ William Lea of Pilling, whose ability to diversify into several secondary occupations including weaving was discussed earlier, faced a common paternal conundrum of deciding how to divide his property in fair proportions amongst his large family; which on the last day of June 1662, included his wife, two married daughters and one unmarried, and four sons of whom two were under twenty-one. Frances, the eldest son became the principal beneficiary and head of the Lea family, inheriting their dwelling house and the land on its west side.

Item I give unto my three Sonnes Willlyam Lea hennery Lea [and] Richard Lea all my whole Estate undisposed except Allis my wifes part which is

⁹⁴ LA WRW/F, William Ellithorne, Ulverston (1681).

⁹⁵ LA WRW/A, Thomas Gardner, Harestones, Cockerham (1653).

halfe duringe the tearme of her natural life [.] Willyam these two Cloases on the South side of [the] house paying unto my daughter Mary Tenn poundes within one whole yere next after my decease...Item I give unto my sonne ffrancis all the field on the north side of the garden with halfe of my part of the saltcoat paying all Rents and dues belonging unto them both and to enter upon them both at Candlemas next after Allis my wife decease...and Henery to have the Cloase next [to] Robert Jolliff's [land], with his third part of housings and salt Coate...my mind is that Richard Lea shall have leas field with his third part of housing and salt Coat...for my loumes and nets my mind is that my sonne hennery shall have [them], by the prasment [the impartial inventoried valuation], in his part of twenty pounds...Item I give full pour [power], for all my sonnes to fetch watter...at the pit in the north field one [sic] the East side of the said pit or to watter any goodes for their owne use which is needful for their profit.⁹⁶

Henry and Richard were in their minority, and as was customary Lea included the provisional opportunity for William to buy his youngest brothers' shares for twenty pounds payable to each of them. It does however invariably transpire that we are left only with impotent conjecture as to whether or not any of the four brothers continued to produce sea salt. When their mother Alice Lea died in February 1666, she retained title to; 'one sand Coupe w'th loose wood', at 5s, and 'two salt panes', at £1.11s, in an inventory of goods to the value of £12.7s. She made her will on 13 February, and although there is nothing more for Frances and William, or her two married daughters, she continued to provide for and maintain her three younger children.

I give and bequeath unto mary lea my daughter the bed whereon I now lie w'th all the bedclose thereunto belonging with one gird Iron and also one Iron pott...[the remainder]...I give & bequeath unto Henry Lea Richard Lea & the sd Mary Lea my sons & daughter to be equally divided amongst them.⁹⁷

The probate documents for Richard (1676), and William Lea/Leah (1694), have survived, but make no reference to salt. Francis appears to have retained the family home and taken his late father's skills in gillnet and line fishing to supplement what seems to have become near subsistence husbandry, owning 'Nets, Lines & Hooks', at £1.7s. At his demise, in an inventory valued at just £28.14.04; there were, 'Debts owing by ye desesed by sev'rall bills of obligation and in funeral expencis to the value of...£25.05.00'. His brother William had fared little better, leaving livestock and goods to the value of just £20.11s. Dividing the flourishing estate into four portions seems not to have had the desired long-term outcome, and it is quite possible that

⁹⁶ LA WRW/A, William Lea, Pilling, (1662).

⁹⁷ LA WRW/A, Alice Lea, Pilling, (1666).

William Lea [senior's] saltcoat, which he had taken pains to bequeath to his sons had been appropriated by the younger William after Richard's death and subsequently sold to either Thomas Johnes or Thomas Johnson, whom we know to have possessed saltcoats at their demise. In an unprovable connection or coincidence, when William Lea died in 1694, two of the appraisers for his inventory were William Johnes, and William Johnson, the latter having inherited a saltcoat from his father, Thomas Johnson.⁹⁸

Once again it may be observed that long term security of tenure in an environment not over-burdened with sitting gentry, was almost as good as outright ownership during the early modern period. Leases were often taken up with landowners whose interest in their land portfolio extended only so far as to receive its annual rents and dues. William Lea's will continues to provide interest as he describes a common legal arrangement which was validated and could be extended by renegotiation for a fee, upon a succession of three recorded lives.⁹⁹

...one Lease of my Estaite where upon I nowe live houlden under Edmond Wearden of Preston in Amounderness in the County of Lancaster, gentleman bearing daite the fffifteenth day of July in the year of our Lord God 1659 houlden for the tearme of nintie & nin yeres if ffrancis Lea Richard Lea and hennery lea fortune so longe to live yealdinge and painge theirefore all Rents bounes and Sevisses theire unto belonginge'.

Edmund Wearden/Werden, died around 1663/4. His son Thomas, who was a woollen draper, inherited his father's estate and the income from his leases, but died in December 1665. He named his brother John, (also described as 'Gentleman'), and John's sons, Henry and William as beneficiaries, reverting any remaining surplus, 'to my deare and loveinge mother Elizabeth Werden of preston, widowe'.¹⁰⁰ John Wearden died in May 1669 and left no will, of his son Henry there is no record. If then it is Henry's brother William, who died in 1679 as a beneficiary, and allowing for one or more of the Lea brothers sharing the rental costs of the saltcoat and their other assets at Pilling, the connection has become remote but the terms remain workable. It is not difficult to conceive that in all likelihood, William's beneficiaries would have been content to have collected such annual rents and fees from their tenants in Pilling without interference or stipulations over land use.

Of the remaining documents for Pilling testators, William Thornton (1677), followed the route of passing on, 'one messuage and tenem't with a saltcoate thereunto belonging', to his father, then his wife, 'untill my son Jonathan accomplish the age of

⁹⁸ LA WRW/A, Richard Lea, Pilling (1676); Francis Lea (1686); William Lea (1694); and see appendix p.42.

⁹⁹ This form of leasing arrangement was more common south of the Ribble estuary. For a full discussion of 'life leases' see; A.J.Gritt, 'The operation of lifeleasehold in south-west Lancashire, 1649-97', *Agricultural history Review*, Vol. 53, (2005), pp. 1-23.

¹⁰⁰ LA WRW/A, Thomas Wearden, Preston (1665); John Wearden, Preston; William Wearden, Preston (1669).

twenty one yeares and then shall enter upon halfe of all ye said messuage tenem't and saltcoate paying unto my other fower children five pounds a peece'. Thomas Johnson (1688), bequeathed to his son William, the eldest of his six sons, 'yt [that] Salt Coat with ye sand floors & ye parracks [meaning unknown], yt he have y'm intirely himself'.¹⁰¹ William also gained 'Crosses Tenement', in Out Rawcliffe, from whence originated this branch of the Johnson family for one hundred pounds payable to his younger brothers, and several individually specified items of value; '(viz) one Clock, one silver watch ye table fformes & fire iron in ye parlour', and, 'ye silver bowl'. The value of the silver bowl is notable at £4; the clock even more so, since at £3.10s, it is the most valuable of any identified by the writer, north of the Ribble in this period.

The longevity and enduring potential of salt making, if not of its coastwise exportation may be demonstrated by the bequests of the two extant Cockerham testators in the last decade of the seventeenth century. On 17 March 1693, Thomas France left to his wife Clemence;

...one third of my tenem't whereon I now inhabit call'd the ancient tenem't one third pte of my tenem't at Hillom call'd Prestons tenem't & one third pte Bonds tenem't of [the] Marsh during her natural life ... Itm it is my will & minde & I doe imediately after my my [sic] death give unto Robert ffrance my oldest son my Saltcoat & Moss thereunto belonging.¹⁰²

Two years later, in August 1695, Anthony Gardner of Cockerham Marsh was faced with the not uncommon dilemma of making provisions in his will for his wife and their young family, and also for one or more unborn children who were likely to arrive after his death.

...my children Wm Gardner Thomas Gardner and such son or daughter child or children as my wife hath already conceived and shall bring forth ... shall be maintained & educated forth and out of the other two parts of the said two tenem'ts dureing their minority ... that the clear yearly profits thereof and of the saltcoate Mosse & turbary thereunto belonging be reced & improved yearly of the same shall become due by my said Exec'rs towards the benefit & behoof of my younger children... [and after all funeral expenses and debts], paying then the sum of tenn pounds to ye Publick grammar School of Cockerham aforesaid towards a publick stock for the same.¹⁰³

¹⁰¹ LA WRW/A, William Thornton, Pilling (1677); Thomas Johnson, Pilling (1688).

¹⁰² LA WRW/A, Thomas France, Cockerham (1693).

¹⁰³ LA WRW/A, Anthony Gardner, The Marsh, Cockerham (1695).

Conclusion

By the end of the 1600s sea salt production was in decline as both a principal and secondary occupation in Morecambe Bay. As a well-practised sub-regional speciality with a long tradition, evidence of sea salt making could have been seen almost everywhere along the coast; as commonly occurring buildings and familiar physical infrastructure, and in the identification by name of portions and features of the agricultural landscape. Citations of these customary designations had served countless lease arrangements and wills for centuries by way of legally recognised proof of tenure and inheritance.

Edmund Lancaster of Preesall, was buried on 11 January 1696, two months short of his sixty-seventh birthday. His inventory was valued on 17 January at £178.10.10, and one of the four appraisers was George Bradshaw. He was able to make his will on 15 March 1695, wherein he described himself as 'Yeoman', and owned to 'being aged and infirme'.¹⁰⁴ Although the limitations of probate documents are again exposed here, for there is no evidence from the inventory which attests to his direct involvement with salt making, the bequests to his eldest sons both imply a former interest from the land use, and in so doing, communicate a richness of language from the customary names portrayed therein.

[To George] And first I give devise and bequeath all these my severall closes and parcells of land (being lands of inheritance) lyeing and being in preesall aforesaid by me formerly purchased from George Smith gen[tleman] and called and knowne by the severall names of the Greate Saltcoate Marsh the Grainge Marsh and Allice pooles Saltcoate Marsh containeing by estimacon foure acres and a halfe of land or thereabouts unto my eldest son George Lancaster for life...

[To Edward] And Whereas I have and enjoy one messuage with the appur'tences and severall leasehold lands in Preesall...called the Coatwalls where I now live, two closes and parcells of land called and knowne by the names of the Great Clod and Clod meadowe containeing Eight acres of land or thereabouts [and] one called and knowne by the name of the Nookes containeing two acres of land or thereabouts [and] one other...commonly called the Clods Carre containeing one acre of land or thereabouts for several long termes to come.

In Edmund's bequest to George Lancaster, the lands purchased from George Smith of Stalmine Grange, who died in 1678¹⁰⁵ included those in the name of Alice Poole. A reference to one 'Alles Powle', christened on 29 November 1589, is entered in the

¹⁰⁴ LA WRW/A, Edmund Lancaster, Preesall (1696).

¹⁰⁵ LA WRW/A, George Smith, Stalmine Grange (1678).

Stalmine Parish Registers.¹⁰⁶ Whether any of these ancient names referred to in this discussion survived into the tythe map era may be a fruitful line of investigation in determining and locating former salt making sites.

Although nothing now remains to remind us of the importance of salt production on the west Lancashire coastline, here in the seventeenth century salt and all things pertaining to it, would have formed the substance of daily parlance and conversation. Its social and business influence cannot be overestimated. For four men of Poulton, who died between 1681 and 1705, the salt chest, as a purpose built piece of furniture stood in the principal reception room in their houses or kitchens as a focal point and perhaps a status piece. Robert Hodgson (1685), owned a 'Salt Chest & three quisions [cushions]' at 3s. The sadler, Thomas Browne (1697), 'one table in the house & Salt Chest' valued at £1.2s. The cooper Edward Moore (1681), enjoyed a well-furnished kitchen with; 'One Gun Iron materials & necessarys in the Kitchen', also, 'one table 1 saltchest 1 saltbox 4 shelves and seats belonging to the aforesaid table', although at a valuation of 5s, they seem to have been well used. The 'Yeoman', Richard Fisher of 'Poulton Magna', died on 21 June 1705 with one foot in the eighteenth century. His inventory is just one of a growing number from this period which hints at a new age of modernity and sophistication of domestic appliances. In the principal reception of his ten-roomed house stood; '1 Cupboard 2 tables 5 chairs 3 stooles & 1 Salt Chest' at £1; '1 ffire iron 1 iron Girdle, Iron Crow, tongs & other Iron Ware' at 10s, 'one jacke', at 4s, and 'one pendulum Clocke & Case' at £1.¹⁰⁷ These men had no need to make salt, but had furniture built to contain it.

The writer readily acknowledges that the sums referred to throughout this discussion are generally modest but defers from being drawn into unworthy or facile comparisons with monetary values of the twenty-first century, these being often posited but rarely helpful. Let it suffice that as it has been alluded to, in early-modern England £50 would have built a decent house or a coasting ship; £20 would have built and fitted out a saltcoat, smithy, or tannery, and to the majority of ordinary families, even an extra five shillings would have been a useful sum to hold as coin, or to have as credit. The amounts cited herein should not have to appear sensational to have relevance or importance as historical data. Thus to have died with cargoes of salt which had been landed in the Welsh ports to the value of twenty-five pounds, was to these men and their executors a huge sum to recover. Notwithstanding the risks involved, and at least until 1680, to the individual heads of families who formed partnerships with their kin and confederates to engage in salt making and shipping, the considerable pains were a worthwhile labour. There were also, from wet sand to














¹⁰⁶ Mrs. W.E. Robinson (trans), *The Registers of the Parish Church of Stalmine 1583-1724*, Lancashire Parish Register Society (Wigan, 1914), p.4.

¹⁰⁷ LA WRW/A, Robert Hodgson, Holmes, Poulton (1685); Thomas Browne, Poulton (1697); Edward Moore, Poulton (1681); Richard Fisher, Poulton Magna (1705). A magnificent example of a country yeoman's house with a fully furnished kitchen from c.1730 may be seen at the National Trust property, Townend at Troutbeck, Windermere, Cumbria.

Welsh ports, a series of complex rational processes which drew on experience of organisation, by-employments and the highest levels of craft skills and expertise to achieve. The Smith family of Staynall built the vessel 'New Lion' to replace its ageing predecessor. Richard Curwen was determined when near death that a new vessel should be built to expand and continue a lucrative trade to the benefit of his nephew and their investment partners. Even for a local market in 1701, Peter Townley was prepared to risk all he had to make salt for a living.

History rarely if ever presents comfortable or teleological sets of processes towards readily definable outcomes in any dimension. The Bradshaws of Wrampool enjoyed considerable wealth and expansion of their many interests, for example, whereas during the same period, the assets accrued by William Lea's lifelong endeavours became fragmented and diminished through the well-intentioned division of his property. Similarly in the Morecambe Bay townships themselves, and while the Furness towns may have been less adversely affected by natural disasters, the overall fortunes of Cockerham and Pilling were devastated by the floods of 1701 and 1720, the latter proving to be a violent setback from which they could not recover their brief regional economic eminence. Meanwhile, owing in part to trade embargoes on French and other European commodities, the coastal trade of inland produce had been increasing. Salt had become readily available via Liverpool, from which in 1690 was shipped 2,385 tons, or 95,400 bushels of Cheshire salt coastwise, this considerable quantity increasing to 7,509 tons in 1699. Over half of this product went to Bristol and the ports of south-west England, to the emerging manufactories of soap and glass, and to curing the herring and cod brought in from Newfoundland. The remainder was shipped to the smaller ports of Lancashire, Cheshire and into Wales.¹⁰⁸ The sheer comparative enormity of these amounts and the evolving complexities of large-scale organisation, structured hierarchies and transport integration dispensed entirely with the need or demand for entrepreneurial shipments by 'venture' from individual producers and small-scale consortia from the Morecambe Bay townships. Whether the entrepreneurs of Cockerham, Pilling and the Wyre townships or their successors could have forged their part of that growth, as did individual merchants and mariners in Bridgwater, Barnstaple, Gloucester or Frodsham, may only be conjectured, and it was of particular misfortune that so many of the key figures died in the early 1670s. It is hoped however that their legacy, modest though it may have been, having now been identified and discussed, may prompt further historical and archaeological research and investigation.

¹⁰⁸ Hussey, *Coastal and River Trade in Pre-Industrial England*, pp.155-6

| COCKERH'M | | | Total salt pans | Salt coat Gear/sand | Salt coats | Vessels | Salt other | Status | Inv total |
|-------------|------|---------------------|-----------------|---------------------|---|---------|------------|-------------|----------------|
| Cock'm | 1650 | Alexander Sweetinge | | | | | 1 | - | 61.11.1 |
| Marsh | 1657 | Thomas Lamb | 5 | | | | | - | 150.15.2 |
| Cock'm | 1657 | William Catton | 2 | 1 | | | | - | 62.18.2 |
| Cock'm | 1653 | James Willson Snr | | | | | 1 | Salt dealer | 24.3.8 |
| Harestones | 1653 | Thomas Gardner | 4 | 1 | | | | - | 212.0.4 |
| Cock'm | 1662 | Thomas Thomlinson | | 1 | | | | Husb'n | 53.13.2 |
| Cock'm | 1662 | George Calvert | 2 | | | | | Husb'n | 25.10.2 |
| Bankhouse | 1662 | Richard Curwen | | | | V (W) | | Seafaring | 88.7.7 |
| Boonreed | 1663 | Francis Devis | 5 | | | | | - | 117.19.0 |
| Marsh | 1664 | Elizabeth Brade | 2 | 1 | | | | Widow | 44.18.6 |
| Wrampoole | 1664 | John Bradshaw | 6 | |  | V V (W) | | Yeoman | 1024.12.8 |
| Marsh | 1667 | Thomas Carter | 2 | 1 | | | | Yeoman | 86.15.3 |
| Bankhouses | 1668 | John Deane Eld'r | 3 | | | | | Husb'n | 16.4.4 |
| Marsh | 1668 | John Devis | 4 | | | | | Yeoman | 60.10.7 |
| Cock'm | 1670 | Anthony Gardner | 2 | 1 |  | | | Husb'n | 79.1.4 |
| Cock'm | 1670 | Edward Reeder | | 1 |  | V V | | Yeoman | 424.0.6 |
| Cock'm | 1670 | Matthew Cropper | 1 | 1 |  | | | Yeoman | 336.3.2 |
| Bankhouses | 1670 | Richard Deane | 1 | | | V (W) | | Husb'n | 132.1.1. |
| Uptowne | 1670 | Robert Carter | 2 | |  | | | Yeoman | 117.16.4 |
| Crimbles | 1670 | Edward Jackson | 6 | 1 |  | | | Yeoman | 448.9.10 |
| Holleth | 1671 | John Blackburne | | | | | 1 | - | 45.9.1 |
| Crimbles | 1671 | Richard Caton | | 1 | | | | Yeoman | 67.3.9 |
| Marsh | 1672 | Thomas Davis | 4 | | | | | Yeoman | 90.14.4 |
| Marsh | 1678 | John Jackson | 2 | | | | | Carpenter | 27.14.0 |
| Marsh | 1678 | Thomas Braide | 4 | 1 |  | | | Yeoman | 161.14.4 |
| Cock'm | 1679 | Thomas Becket | 1 | 1 |  | | | - | 102.19.8 |
| Laithwater | 1681 | Oliver Reeder | 4 | | | | | Yeoman | 299.6.2 |
| Bankhouse | 1682 | Christopher Gardner | 3 | 1 |  | | | Husb'n | 318.11.0 |
| Marsh | 1683 | John Lambe | 3.5 | 1 | | | | Yeoman | 116.1.0 |
| Crimbles | 1685 | Thomas Allenson | | | | | 1 | Husb'n | 71.5.6 |
| Marsh | 1686 | Robert Beckett | 3 | 1 |  | | | - | 102.5.4 |
| Harestones | 1688 | Thomas Gardner | 6 | 1 | | | | - | 103.3.8 |
| Crimbles | 1691 | John Clarkson | 2 | | | | | - | 766.9.3 |
| Marsh | 1691 | Francis Lambe | 1 | | | | | - | 277.6.11 |
| Cock'm | 1692 | Thomas France | | |  | | | - | bequest no inv |
| Gt Crimbles | 1694 | Thomas Jackson | 6 | 1 |  | | | Yeoman | 372.17.6 |
| Sandside | 1695 | William Lambe | 2 | 1 | | | | - | 420.6.2 |
| Marsh | 1695 | Anthony Gardner | 6 | 1 |  | | | - | 221.16.10 |
| Bankhouse | 1699 | Thomas Curwen | 3 | | | | | Yeoman | 153.2.5 |
| Cock'm | 1715 | John Sweeting | 4 | | | | | Yeoman | 282.13.4 |
| | | | 101.5 | 19 | 14 | 6 | 4 | | |

(W) indicates vessels specifically used for salt shipments into Wales.

| PILLING | | | Total salt pans | Salt coat Gear/sand | Salt coats | Vessels | Salt other | Status | Inv total |
|--------------|------|---------------------|-----------------|---------------------|------------|---------|------------|-------------------|-----------|
| Plg | 1652 | Edward Poole | 4 | | | | | Husbandman | 37.19.6 |
| Plg | 1652 | John Tomlinson | | | | V | | - | 103.12.9 |
| Plg | 1662 | William Thornton | 2 | 1 | 🏠 | | | - | 50.6.8 |
| Plg | 1662 | William Lea | 2 | 1 | 🏠 | | | Husb'man(weaver) | 80.0.0 |
| Plg Moss | 1663 | Richard Kirkham | 1 | | | | | Carpenter | 69.8.2 |
| Plg Sandside | 1663 | Henry Threlfall | 3 | | 🏠🏠 | | | Husb'n as bequest | 91.19.0 |
| Plg | 1664 | Thomas Bell | 4 | | | | | - | 120.0.0 |
| Plg | 1664 | Henry Tompson | 1 | 1 | | | | - | 27.4.0 |
| Plg | 1666 | Alice Lea | 2 | 1 | | | | Widow | 12.7.0 |
| Plg | 1668 | John France | | | | | 1 | - | 39.18.0 |
| Plg | 1668 | Richard Holme | 4 | 1 | 🏠 | | | - | 95.14.0 |
| Plg | 1669 | John Hey | 2 | 1 | | | | Yeoman | 76.13.0 |
| Plg | 1669 | Thomas Lamb | | 1 | | | | Husb'n(weaver) | 62.18.6 |
| Plg Layne | 1670 | William Thornton | 1 | 1 | | | | Husb'n | 96.12.6 |
| Plg | 1670 | Richard Johnes | 6 } 1 | 1 | 🏠 | | | Husb'n | 179.9.0 |
| Plg | 1673 | Thomas Johnes | 6 } 1 | 1 | 🏠 | | | Husb'n | 117.3.10 |
| Plg | 1676 | John Hey | | 1 | | | | - | 189.2.6 |
| Plg | 1677 | William Thornton | 2 | 1 | 🏠 | | | Husb'n | 74.11.4 |
| Lower End | 1677 | Edward Braide | 1 | | | | | Yeoman | 102.2.10 |
| Plg | 1678 | Edward Bradshaw | 1 | 1 | 🏠 | | | - | 64.17.8 |
| Plg | 1680 | John Bell | | 1 | | | | - | 52,11,4 |
| Plg | 1688 | Thomas Johnson | | 1 | 🏠 | | | Yeoman | 503.18.10 |
| Plg | 1690 | Robert Waide | | 1 | 🏠 | | | - | 31.11.10 |
| Plg | 1692 | Richard Johnes | | 1 | 🏠 | | | - | 116.0.10 |
| Plg | 1694 | John Dickonson | | 1 | 🏠 | | | Yeoman | 117.1.4 |
| Plg | 1695 | Richard Thornton | | 1 | | | | Yeoman | 66.12.4 |
| Plg | 1696 | Edward Thornton | | 1 | 🏠 | | | - | 39.10.0 |
| Plg | 1696 | Thomas Hey | | 1 | 🏠 } | | | - | 64.3.4 |
| Plg | 1696 | Robert Hey | | 1 | 🏠 } | | | - | 69.18.4 |
| Plg | 1702 | John Burton | 4 | 1 | 🏠 | | | - | 121.2.0 |
| Plg | 1702 | William Johnson | 4 | 1 | 🏠 | | | Yeoman | 207.7.6 |
| Plg | 1712 | Christopher Gardner | 2 | 1 | 🏠 | | | Yeoman | 147.5.2 |
| | | | 52 | 25 | 19 | 1 | 1 | | |

Note: Bracketed entries suggest probable father to son bequests of salt pans and saltcoats, as also probable, Thomas Johnson (1688), to William Johnson (1702).

| PREESALL | | | Total salt pans | Salt coat Gear/sand | Salt coats | Vessels | Salt other | Status | Inv total |
|--------------------|------|--------------------|-----------------|---------------------|------------|---------|------------|----------|-----------|
| Fearne Hill | 1655 | Thomas Clarkson | | 1 | 🏠 | | | - | 53.17.2 |
| Prsl | 1667 | Peter Bradshaw | | | | V (W) | | Yeoman | 432.10.9 |
| Hackensall | 1679 | John Taylor | 1 | | | V | | - | 124.2.4 |
| Prsl | 1680 | John Moore | | | | V (W) | | Yeoman | 332.18.8 |
| Prsl | 1696 | Edmund Lancaster | | | | | 1 | Yeoman | 178.10.10 |
| STALMINE HAMBLET'N | | | | | | | | | |
| Stalmine | 1667 | Francis Shakeshaft | | 1 | 🏠 | | | Husb'n | 73.11.4 |
| Stalmine | 1667 | Edward Bibby | | | | | 1 | Husb'n | 39.10.6 |
| Stal Grange | 1671 | Roger Danson | 2 | | | V V (W) | | - | 227.11.4 |
| Staynall | 1661 | Henry Dicconson | 3 | | | | | Husb'n | 77.19.8 |
| Stall | 1670 | Henry Dickenson | | | | V | 1 | Yeoman | 100.15.8 |
| Stall | 1670 | Arthur Smith | | | | V V | | - | 122.2.2 |
| Stall | 1670 | Richard Fisher | | | | VVV(W) | | - | 251.1.0 |
| Hambleton | 1670 | John Carter | | 1 | 🏠 | | | - | 50.2.1 |
| Hambleton | 1675 | John Thornall/ow | | 1 | | V | | Husb'n | 94.9.6 |
| Hambleton | 1677 | George Carter | 2 | | | | | - | 118.15.4 |
| THORNTON POULTON | | | | | | | | | |
| Pltn Holmes | 1660 | James Hall | 1 | 1 | | V | | - | 192.9.8 |
| Pltn | 1661 | John Breckell | 1 | | | | | Husb'n | 72.18.10 |
| Pltn | 1663 | Thomas Breckell | 2 | | | | | - | 10.11.2 |
| Pltn | 1664 | John Dobson | | | | | 1 | Husb'n | 8.7.6 |
| Pltn | 1681 | Edward Moore | | | | | 1 | Cooper | 47.5.0 |
| Pltn Holmes | 1685 | Robert Hodgson | | | | | 1 | - | 25.18.0 |
| Pltn | 1689 | Henry Kirkham | | | | | 1 | Merchant | 660.14.3 |
| Pltn | 1697 | Thomas Browne | | | | | 1 | Sadler | 46.13.2 |
| Pltn | 1705 | Richard Fisher | | | | | 1 | Yeoman | 19.15.6 |
| Thornton | 1669 | Robert Tinkler | | 1 | | V V(W) | | Mariner | 224.8.10 |
| Thornton | 1669 | John Hodgson | | 1 | | V | | Yeoman | 152.16.8 |
| | | | 12 | 7 | 3 | 16 | 9 | | |

| FURNESS | | | Total salt pans | Salt coat Gear/sand | Salt coats | Vessels | Salt other | Status | Inv total |
|---------------|------|----------------------|-----------------|---------------------|------------|---------|------------|------------|--------------------------|
| Lindale | 1652 | Richard Taylor | 9 | | 🏠 | | 1 | - | 86.10.4 |
| Lindale | 1660 | Christopher Brittain | 1 | | | | | - | 117.18.8 |
| Scales | 1668 | William Gardner | 1 | | | | | - | 71.2.10 |
| Dragleybeck | 1669 | Robert Cowherd | 2 | | | | | - | 167.12.2 |
| Ulv Steps | 1669 | John Benson | 2 | 1 | 🏠 | | | Husb'n | 31.14.8 |
| Ulverston | 1670 | George Scales | 2 | 1 | | | | - | 4.10.6 |
| Dragleybeck | 1673 | William Benson | 1 | 1 | | | | - | 177.11.3 |
| Ulverston | 1680 | Andrew Fell | 2 | | | | | Mercer | 904.14.4 |
| Ulverston | 1680 | William Clegge | | | 🏠🏠 | | | - | sc as bequest 10.4.7 |
| Ulverston | 1680 | John Ashburner | 2 | | | | | Blacksmith | 78.17.6 |
| Ulverston | 1681 | William Ellithorne | | | 🏠 | | | Husb'n | sc as bequest 17.14.0 |
| Ulverston | 1714 | John Ellithorne | 4 | | | | | Yeoman | 83.11.6 |
| Dragleybeck | 1716 | John Ashburner | | 1 | 🏠 | | | - | sc as bequest 19.17.6 |
| | | | 26 | 4 | 6 | 0 | 1 | | |
| Total overall | | | 191.5 | 55 | 55 | 23 | 15 | | |
| | | | | | | | | | |
| S RIBBLE | | | | | | | | | |
| Hesketh | 1661 | Lawrence Ball | | 1 | | | | - | 165.14.7 |
| Hesketh Bank | 1661 | Thomas Horsker | 1 | 1 | | | | Husb'n | 93.16.2 |
| N Meols | 1661 | Richard Bound | | | 🏠 | | | Husb'n | sc as bequest 62.9.4 |
| Hesketh Bank | 1676 | John Wignall | 2 | | | | | Husb'n | 42.15.6 |
| Hesketh Bank | 1681 | Richard Wignall | 1 | | | | | Husb'n | 62.19.6 |
| Banks | 1692 | John Abram | 2 | 1 | | | | - | 81.11.11 |
| | | | 6 | 3 | 1 | 0 | 0 | | |

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Jonathan Cass BA (Hons)
Lytham
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