

1.3 BROAD CHARACTER: FISHING

1.3.1 CHARACTER TYPE: FISHING

REGIONAL PERSPECTIVE: EAST ANGLIA

INTRODUCTION: DEFINING/DISTINGUISHING ATTRIBUTES

The North Sea has always been important for its commercial fish stocks and resulting industry. Overall the North Sea holds c. 150 species of fish, 15-20 of which are of commercial value. In this area important commercial fisheries include sole, herring, skate (thornback ray) and sea bass. It is also a major spawning and nursery ground for sole, a spawning ground for mackerel and a nursery ground for sea bass. This is particularly significant in the sheltered estuaries. Other fish landed in East Anglia include cod, roker, and shellfish such as lobster and crab. The estuaries have a slightly different suite of commercial fish including mullet, eel and brown shrimp as well as oysters.

The fishing industry in this region is dominated by boats based in Lowestoft which had 362 registered vessels fishing in 2009 (MMO 2010) a number exceeded only by a handful of ports around the UK. In addition a series of small fleets operate from ports and beaches along the coastline including Great Yarmouth, Pakefield, Dunwich, Sizewell, Thorpeness, Aldeburgh, Orford, Felixstowe Ferry, Harwich, Walton and Clacton. Fishing in this region is usually undertaken on a daily basis, rather than extended periods at sea, therefore fishing grounds are often within 6-12 nm of the shore (Sturt et al 2009, 93)



Boats on Aldeburgh beach

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The success of the industry varies along the coastline but overall is enormously depleted, having once been the mainstay of the economy here. Remarkably only one full time fisherman operated out of Great Yarmouth in 2009 and was reported as having to diversify to survive (ESFJC 2009, 23). Equally, only one boat operated out of Dunwich and Sizewell at times during this period. In Pakefield 16 vessels were on the beach, although few were out at any one time and all were seasonally worked. In the south of the region there were 15 registered fishing vessels in Clacton and surrounding areas, six were full time, four seasonal and five were operated as hobby vessels. Many of the catches of sole, roker, cod and shellfish are sold directly to the public. This industry persists in the region despite adversity and has also become a tourist attraction.

A number of offshore areas are recognised as good fishing grounds, often relating to marine features. These include Aldeburgh Napes, Cutler, Felixstowe Ledge, Gabbard, and in the Wallet and East Swin Channels. Walberswick Bay is notable for herring and the coast around Orford for sole, roker, bass and cod. Crustacean potting is carried out 4-6 miles offshore, often on wrecks.

A variety of different fishing methods are used throughout the offshore region. Trawling dominates, mostly beam trawls, catching mainly demersal species but also pelagic and shellfish. Netting includes drift netting, gillnets and entangling nets, seines and trammel nets. Traps and pots are used frequently, with only one area recording shellfish dredging with a mechanised dredge. Hooks and lines are still frequently used by the commercial industry in this area.

In the estuaries commercial fishing includes small trawlers and nets, although vessels over 15.24 m are not allowed to trawl in inshore areas. Commercial fishing in the Stour and Orwell is generally carried out by the small fleet from Harwich (Suffolk District Council 2004, 31). The estuarine mudflats are significant for shell fisheries (cockles and oysters) and bait digging (English Nature 1997). Shellfish gathering may occur when stock levels are sufficient to support a sustainable fishery.

HISTORICAL PROCESSES; COMPONENTS, FEATURES AND VARIABILITY

Little is known about Prehistoric or Roman fishing activities in the region. In contrast, from the medieval period onwards fishing became a major and well-documented industry in East Anglia.

Some of the earliest evidence of fishing in the region is dated to the Anglo-Saxon period. Wooden structures were found on the foreshore below Sutton Hoo during the Suffolk RCZAS, and these were radiocarbon dated to 450-590 AD. These are likely to be the remains of fishtraps (Good and Plouviez 2007, 62). The survey also identified two probable Anglo-Saxon fish traps and five timber circles in Holbrook Bay on the northern bank of the Stour estuary (ibid). These are very

similar to the fish traps recorded in the Blackwater estuary in Essex which were dated 680-850AD (Everett 2007). The fish traps survive as rows of posts with patches of wattle work constructed in V-shapes. Baskets or nets were placed at the point of the 'V' and fish were funnelled down, to be caught as the tide went out. Wattle walkways along the walls allowed access at low tide to retrieve the fish and repair the walls (ibid). The southern arm of one of the structures was 310 m long, illustrating the size of this undertaking. Possible later reuse or repair to the structures was indicated by later radiocarbon dates in places.

During the Suffolk NMP survey a series of further v-shaped post built fish traps were identified off Stonner point in the Deben intertidal area. These were not dated but could belong to the medieval period (Hegarty and Newsome 2005, 105). In addition, an early medieval reference records the location of 'goys', another type of fish trap on Gunfleet sands. The goys trapped fish when the tide went out, indicating that the sand bank was immediately dry during this period.

During the medieval period fishing along the East Anglian coast became an industry of international significance. Domesday Book recorded the importance of the herring fishery in the area in 1086, with prosperous ports at Dunwich and Southwold. In some places tax was paid in herrings, with 3000 per annum for Blythburgh, 10,000 from Kessingland, 25,000 from Southwold and as many as 60,000 from the large port of Dunwich (Williamson 2005, 134).

Herring was important in the medieval and post medieval periods for a number of reasons. Although the fish must be cured within 24 hours or it will turn rancid, once cured it has excellent keeping properties and can be exported widely (Sear et al 2009, 6). The fish could be eaten during lent or holy days and is a high protein food, once important in the diet of the lower classes.

The herring fishery was strong in the 10th and 11th century and persisted until the early 20th century. Herring swims in vast shoals off the East Anglian coast, passing every autumn, and was fished all along the coastline. The lack of natural coastal harbours in much of the area meant that fishing boats were dependent on river approaches although these were subject to silting therefore most fishing fleets continued to launch small boats off the beach up to the 19th century (Hegarty and Newsome 2005, 10). Maps from 1588 show fishing equipment and boats on the beach at Aldeburgh (Wheatley 1990, 68) which still had the largest fishing fleet of any beach landing in East Anglia in 1883 (Edwards 1991, 85).

It was the development of the herring fishery at Great Yarmouth that was to become internationally significant, creating a major industry. By the 12th century the herring fair was held in Yarmouth between September 29th and November 11th every year. Traditionally the fishing was open to all, although this caused major political rifts. The industry underwent a number of periods of decline, although in 1463 the Dunwich MP still took his pay in herring (Sear et al 2009, 6).

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In the 15th century East Anglian fishermen entered into the Icelandic cod fishing industry, possibly partially due to Dutch interest in the herring fishery (Jones 2006, 6). This was also to become a major industry following the Anglo-Danish treaty of 1490, which eased restrictions on fishing. In 1528 149 ships sailed to Iceland, nearly all from Norfolk or Suffolk (ibid, 4) including Southwold, Dunwich, Walberswick, Aldeburgh and Harwich in Essex. This industry declined during the 1530s as a result of politics, and by the 1550s the fleet was reduced to 43 ships. However, an enquiry into the defence of Harwich in 1585 noted the majority of able-bodied men were away between February and June, fishing off Iceland and the Shetlands (Essex County Council, nd).

Full recovery in the Icelandic fishery was not seen until the early 17th century; in 1614 125 ships sailed and in 1628 160 ships were recorded as being 'ready to sail' (Jones 2006, 5). The industry was rocked by the Civil War but built up again until its complete decline by the 18th century, mainly due to the extortionate tax on salt, needed to preserve the fish (ibid, 6). In 1533 22 ships sailed from Dunwich, whereas in 1640 only one was sent (Sear et al 2009). The last Iceland fishery ships left Harwich in 1713.

Significantly ships sailed to Iceland in March, returning to East Anglia in August or early September, thereafter herring fishing continued on some scale during September-December. Herring also continued to dominate Great Yarmouth and to a lesser extent Lowestoft. The rivalry between the two ports leading to them taking different sides in the civil war. In 1722 Daniel Defoe visited Great Yarmouth and recorded that the locals claimed to have cured 40,000 barrels of herring in one season (<http://www.maritimeheritageeast.org.uk/>).

Southwold also had a thriving herring fishery, as recorded in Domesday, and in 1750 the Free British Herring Fishery headquarters were established in the town in an attempt to reclaim the industry from the Dutch. This threat was ultimately removed by the Napoleonic Wars during which the Dutch suffered significantly but their place was immediately taken by the Scots who were prominent by the 1830s. Herring was still processed in Great Yarmouth and in 1880 there were more than 60 curing houses in the town (ibid). Seasonal workers including women to gut the fish would come from Scotland, swelling the population of the town by 10000 in 1907 when the industry was at its peak.

Smaller fishing industries also existed during this time including whaling by boats from Ipswich in the Arctic and cod fishing to Norwegian waters and the Faroe Islands from Aldeburgh and Harwich (Edwards 1991, 85-90).

The East Anglian fishing industry as a whole began to decline in the 19th and 20th centuries. White's Directory of Essex 1848 records that 78 fishing vessels were based in Harwich in 1778 but only 10 in 1883. This was partly due to depletion of the herring stock caused by more efficient fishing methods and natural silting of ports such as Southwold and Aldeburgh. The industry was badly damaged by both World Wars.

Following the decline of Great Yarmouth, Lowestoft became the fishing centre for East Anglia, building a harbour in 1832. The Albert Close fishing chart of 1953 does record a number of good fishing grounds in the region however the industry would never reach its previous levels and remains suppressed by environmental, economic and political factors.

VALUES AND PERCEPTIONS

Commercial fishing has long been important to this region and the industry remains a distinctive element of the East Anglian coastal character. At sea drift net fishing for herring remains the most characteristic East Anglian fishery although it is significantly smaller than in previous centuries. Fishing boats still remain on the beaches all along the coastline, although some have now been abandoned as the industry struggles.

Fishing rights are still paramount amongst the local communities and the opposition to EU quotas is ongoing. A real desire still exists here to revive one of its most traditional industries and economic mainstays.

Generally fishing fleets today have distinct fishing grounds, predominantly within 10 km of their home port. As such the local fishermen from each area know their particular area intimately.

From a recreational point of view the traditional fishing industry has now taken on an almost 'quaint' character, a memory of better days. Tourists are attracted to the deteriorating boats and the few traditional fishermen who sail regularly, as a bygone industry. Freshly caught fish remains one of the draws for holidaymakers all along the coast.



The ubiquitous fish and chips

RESEARCH, AMENITY AND EDUCATION

The fishing industry has a great deal of research potential, particularly for the historic environment. Archaeologically fishermen have long been bringing up (and reporting) objects of interest in the wider region. This includes artefacts relating to the drowned landscapes of the North Sea Basin (see palaeolandscape) such as the bones and tools from around Brown Bank (Louwe Kooijmans 1970-1). Fishing can also reveal more recent artefacts lost at sea such as cargoes. Significantly net fastenings - objects upon which fishing nets snag - have long been a relatively reliable form of identifying wreck locations.

The success of the BMAPA/English Heritage 'Protocol for Reporting Finds of Archaeological Interest' (see Extractive Industry), shows how heritage and industry initiatives can be successfully applied and it would be valuable to implement a similar scheme for the fishing industry. Any such scheme could be based upon an equivalent Dutch scheme which has seen fishing vessels report and land their trawled mammoth, woolly rhino, etc, bone at their ports - currently at a rate averaging 10 tonnes per annum.

Historically, the declining fishing industry is crucial to the current character of the area and is remembered in a number of ways along the coastline. In particular, a number of small, local maritime museums tell the story of the great herring and Icelandic fisheries which were so important to the area. This is particularly true in the areas where the industries were key, such as Great Yarmouth (the Time and Tide museum) and the small maritime museum in Lowestoft (see <http://www.maritimeheritageeast.org.uk/museums>). The latter has been enhanced by a 'Maritime Heritage trail' nearby, leading out to Lowestoft Ness. Remnants of the fishing industry are key to this trail.

Another educational aspect of fishing is the current ecological focus into which research is ongoing. This includes over-fishing and over-exploitation and therefore sustainability of fish stocks.



Mincarlow trawler in Lowestoft Harbour,

CONDITION AND FORCES FOR CHANGE

The fishing industry in this area has been undergoing dramatic change since the 19th century, going from a thriving economic mainstay to a scattered and depleted remnant. There are a number of reasons for this steep and ongoing decline including over-fishing and more natural factors affecting the fish stocks in the North Sea, as well as economic and political forces.

The efficiency of modern fishing methods has resulted in the reduction of many fish stocks including herring and cod, once so important to the region. This in turn has led to the implementation of fishing quotas (Total Allowable Catch or TAC) depending on the state of stock as defined by the International Council for the Exploration of the Sea (ICES). These are based on whether stocks are inside or outside Safe Biological Limits (SBL) defined by a minimum safe stock size and maximum exploitation rate.

The main issue affecting fisheries in this area is the sustainability of the North Sea fish stocks and the consequent need to impose a quota system. Boats less than 10 m long, although regarded as a more sustainable form of trawling have just 3% of the UK's catch quota. As outlined above this applies to most of the traditional industry in this region. As such it was reported in April 2010 that the entire fleet was "on the verge of collapse" as smaller operations were filling their Government-designated monthly amounts within days of the start of the month (East Anglian Daily Times April 15th 2010). Fishermen are therefore having to stop fishing for the remainder of the month or risk prosecution. Annual reports for regional fishing bodies indicates that more and more fishermen are having to give up each year.

Other factors include global temperature change and water movement which can affect the distribution of fish. In addition the construction of windfarms and aggregate dredging can cause conflicts and temporarily suspend fishing in some areas. In the case of windfarms fishing is forbidden within a certain distance of the array and in some cases compensation has been given to fishermen. The restrictions can however mean the encouragement of fish stocks in these areas.

Much of this may be subject to further change once the Marine and Coastal Access Act passed in November 2009 comes into its own. This will herald a significant change in



the approach to management of the marine environment off the English Coast (ESFJC 2009). The establishment of a framework to better manage marine activities will include fisheries in an attempt to better protect the marine environment. Current Sea Fisheries Committees (SFCs) will be replaced with Inshore Fisheries and Conservation Authorities (IFCAs) on April 1st 2011.

Fishing boat on Dunwich beach

RARITY AND VULNERABILITY

As outlined above the fishing industry in East Anglia is at substantial risk. Few traditional boats remain in full time service and traditional methods of fishing have been partially replaced by trawling. Although Lowestoft has a large number of boats in the fleet most are below 10 m in length and therefore significantly restricted.

The region is tremendously proud of its fishing heritage which is remembered in numerous small maritime museums and monuments, however there is a real risk of losing the remaining traditional fishermen.

The increase of trawling has also had an effect on the historic environment as bottom trawling effectively destroys past land surfaces and artefacts on the seabed.

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