

**Study of the  
Southern Section  
of the  
English East Coast  
Fishing Industry**

---

**Seafish Report No. 372**

---

**August 1990**

	<u>Page No.</u>
5. BOSTON AND FOSDYKE	7
5.1 General	7
5.2 Fleet Size	7
5.3 Production and Marketing	8
5.4 Prospects	9
6. SUTTON BRIDGE, WISBECH AND KING'S LYNN	11
6.1 General	11
6.2 Fleet Size	11
6.3 Production and Marketing	12
6.4 Prospects	14
7. BRANCASTER AND BURNHAM OVERY STAITHE	16
7.1 General	16
7.2 Fleet Size	16
7.3 Production and Marketing	16
7.4 Prospects	17
8. WELLS, BLAKENEY, SHERINGHAM AND CROMER	18
8.1 General	18
8.2 Fleet Size	18
8.3 Production and Marketing	19
8.4 Prospects	20
9. HAPPISBURG, SEA PALLING, WINTERTON & HEMSBY	22
9.1 General	22
9.2 Fleet Size	22
9.3 Production and Marketing	22
9.4 Prospects	23

<b>10. CAISTER, GREAT YARMOUTH, GORLESTON, HOPTON AND CORTON</b>	<b>24</b>
10.1 General	24
10.2 Fleet Size	24
10.3 Production and Marketing	24
10.4 Prospects	26
<b>11. LOWESTOFT</b>	<b>27</b>
11.1 General	27
11.2 Fleet Size	27
11.3 Production and Marketing	28
11.4 Fish Dock	30
11.5 Prospects	32
<b>12. SOUTHWOLD AND WALBERSWICK</b>	<b>33</b>
12.1 General	33
12.2 Fishing Fleet	33
12.3 Production and Marketing	34
12.4 Prospects	35
<b>13. DUNWICH AND ALDEBURGH</b>	<b>36</b>
13.1 General	36
13.2 Fishing Fleet	36
13.3 Production and Marketing	37
13.4 Prospects	38
<b>14. FELIXSTOWE</b>	<b>39</b>
14.1 General	39
14.2 Fishing Fleet	39
14.3 Production and Marketing	40
14.4 Prospects	41

## 2. Statistics

Statistical background to this study was obtained from tables produced by MAFF covering landings of main fish species at lesser ports in England and Wales; from other information published by MAFF and FERU <sup>1</sup> covering landings at Lowestoft; from references and figures about fishing vessels and their crews contained in annual reports published by the Eastern and the Kent & Essex Sea Fisheries Committees and other information from fishing associations and personal observation etc.

Statistical coverage was found to be rather uneven, for example, quite detailed fleet, fishing gear and employment figures are provided in K & ESFC reports but not so clearly in ESFJC reports, on the other hand. Eastern reports contain a lot of information about catches, indeed it is understood that Eastern fishery staff collect some of these figures for MAFF, whereas there are no production figures in any of the Essex reports. It was also discovered that MAFF figures for 1989 were not yet available, so that much of the information quoted has, perforce, related to 1988. As shown in Table 1, total fish production during 1988 for the study area amounted to 32,946 mt, valued at £23,292,500, or 4.4% by weight and 5.8% by value of U.K. national landings (742,008 mt and £402.9 million, according to FERU). The figures would, of course, be much lower if Lowestoft was excluded.

Other Sea Fish Industry Authority regional studies have found considerable variation in accuracy of the published catch data, which in some cases underestimate actual production by as much as 50%. It is concluded that this could also be the case in parts of this study area, particularly so with some of the beach-launched fishing centres where the official figures are very low relative to the numbers of boats involved. On the other hand, fisheries

<sup>1</sup> FERU Fisheries Economics Research Unit (now the Policy and Economics Division of Seafish).

staff in the Wash area consider the published data to be reasonably accurate. It was not possible in the time available, to do more than note the possibility of error, for future reference. In the meantime, the data quoted for each sub-area and as summarised in Table 1 attached, remains as originally published.

### 3. General State of the Fisheries

The study was undertaken during a period of protracted, extremely bad weather, when most of the fleet had remained storm-bound either in port or on the beaches for several weeks and when the fishermen were understandably feeling rather depressed. The true position is probably rather better than they indicated. Nevertheless, there is cause for concern. Stocks of shellfish in the Wash, especially cockles and whelks and to a lesser extent mussels, are very low indeed and will need time to recover, but there are few if any alternative uses for the Boston and King's Lynn fleets meanwhile. With the exception of Lowestoft, which remains as always primarily a flat-fish port, and the Wash shell fishery, all the other fishing centres within the study area depend very heavily on North Sea Cod as the major component of their catch and income. This is very clearly shown in virtually all of the sub-area landings tables.

The parlous state of the cod stocks is well described by C. T. Macer in the Lowestoft Laboratory publication, "Fisheries Spotlight, 1987-88", with the conclusion that only a minimum 15% reduction in fishing effort or an increase in minimum mesh size to 120mm, or both, will halt and reverse the decline. The inshore fishermen in this area are very worried about the effect of any such measures on their livelihood, although most of them do

realise the need for action. The U.K. quota allocation for the North Sea for cod is 46,180 tonnes for 1990. This is a reduction of 18% over 1989.

It is ironic that, at a time when there is need to reduce fishing effort, and despite the virtual cessation of financial assistance for the purchase of fishing vessels, the inshore fleet in the area has continued to increase in number and also in fishing power, because several older vessels have been replaced by larger or more powerful craft. For example, the Essex fleet has expanded from 113 vessels in 1985 to 145 vessels in 1989, which includes an increase of 9 boats in the last year alone. The Lowestoft inshore fleet totalled 60 vessels in 1980 and had increased to 72 by 1987 (ESFJC report), but has seemingly reduced since then to its present 67. The Boston fleet grew by the addition of 4 new vessels during 1989, with a further 2 on order. As one fisherman put it, "It seems strange when it is so necessary to reduce fleet size, as a means to cut fishing effort, that MAFF is prepared to pay 100% compensation for a mad cow, but nothing at all for a mad fisherman, to help ease those who are willing, to leave the industry."

On the contrary the fleet fishing for plaice the only popular species presently underutilised in the North Sea, the Lowestoft beam trawlers is inhibited from further investment owing to the lack of a positive fleet reduction policy which would have to involve decommissioning. Hence the continuing overcapacity of the U.K. fleet and the resultant licensing and financing stalemate.

#### 4. Fishermen's Organisations

Fishermen's Associations and other systems for joint endeavour were encountered in several places, and provided some interesting comparisons. Associations aimed at projecting the opinions of the

local group for consideration at regional and national levels, eg Sea Fisheries Committee, local government, N.F.F.O. and MAFF, were found at Boston, King's Lynn, Wells, Lowestoft, Southwold, Harwich and West Mersea and there may well be others. Some of these associations also attempt to promote group endeavour through self-help schemes to provide facilities or services designed to benefit the group as a whole. West Mersea is an excellent example of this and has succeeded in establishing landing jetties and a chill store for fish, etc. Others have been less successful, eg at Harwich, where the members rarely bother to attend meetings, but could be encouraged towards greater activity. In other places such as Boston and King's Lynn the service role has been separated from the politico/informative role by the formation of cooperatives to establish and operate shellfish purification tanks, or to manage the fish quay, etc., leaving the fishermen's association free to concentrate on lobbying for support and such matters. At Lowestoft the Inshore Fishermens Association, LIFVOA, lobbies forcefully on behalf of its members particularly regarding the fish dock problems and is presenting the case against the extension of aggregate dredging. It is particularly encouraging to note the atmosphere of collaboration with the trawler owners association which has not always existed in the past.

It was very noticeable that in those places where active group organisations do operate effectively, there is a positive feeling to the place, that things are happening despite all the difficulties. This is in marked contrast to other centres where the group is inactive, or where there is no form of association at all, and where everyone seems to be overwhelmed by perceived current or prospective problems.

##### 5. Fish Processing and Marketing

The impression from field visits is that there is no shortage of fish merchants in principal centres, such as Boston, and King's

Lynn although the numbers at Lowestoft are low for a market of that size. Many of these merchants also buy from other lesser landing places, sometimes over considerable distances, so providing an element of competition to the much smaller numbers of merchants who are based in some of the lesser centres. Some fishermen are also prepared to act on their own to obtain better prices, eg Boston fishermen who have their own direct outlets in Nottingham, and Yarmouth men who prefer to truck their cod to Grimsby rather than accept lower prices from nearby Lowestoft. Offshore fishing vessel owners at Lowestoft do land in the Netherlands on occasion claiming that there is insufficient demand at Lowestoft, a situation refuted equally strongly by L.F.M.A. who accuse owners of 'playing' the alternative markets.

Unfortunately there is a great deal of anxiety amongst fishermen and merchants, that problems could arise very shortly when the impact of new European Community hygiene rules starts to become apparent, particularly as regards shellfish capture and processing. Despite some efforts already by the Sea Fish Industry Authority to forewarn the industry, there does seem to be a dearth of accurate and up-to-date information around the fishing centres, which is resulting in the circulation of wild rumours, misinformation and over-reaction in the industry. There is a need for action, and this is best done by the Sea Fish Industry Authority, to provide an appropriate information service to the industry and restore a sense of reality to the situation. For example, the owner of a 30ft Wells shrimp trawler, who currently has to cook his brown shrimp catch on board, needs to know whether his vessel really is to be classed as a "factory trawler" and that he will be required to install special cold storage or be forced to stop fishing. Another case is that of a whelk fisherman whose catch has to be cooked as soon as it is brought ashore, to ensure optimum quality. He needs correct advice as to any necessary changes to his cooking arrangements in order to conform to the new rules.



More seriously, most of the mussel lays around the Wash produce mussels that are contaminated to some extent, and therefore require purification treatment before they can be marketed. It is understood that the maximum permissible E. coli counts proposed hitherto in the draft rules would require virtually the entire Wash production to be placed for a period of time on clean lays, prior to onshore purification. Unfortunately, under existing national regulations, the only designated "clean water" area which could be used for such purposes is a small area in the vicinity of Brancaster and Staithe, which is already in use producing mussels which are not required to undergo purification at present. The rumours also claim that the rules will commence and have to be enforced with effect from January 1992, etc., etc., inference is that under EC rules, the Brancaster product may well have to undergo purification in future, and that because of the lack of any other "clean water" areas, the rest of the Wash mussel fishery will have to be abandoned, or so say the current rumours.

#### 6. Dredging

When discussing problems, fishermen from several areas listed dredging for the extraction of gravel from the sea bed, as being a major cause of anxiety, because of the damage caused to formerly important fishing grounds and adverse effects on stocks of fish and shellfish. This issue is also raised in Eastern and in Kent & Essex Sea Fisheries Committee annual reports, especially for the section of coastline from Southwold southwards. It appears that the volume of gravel extracted is increasing rapidly year by year, and the number of prospecting licences granted by the Crown Commissioners is also increasing, apparently with little or no reference beforehand to fishermen whose livelihood can be badly affected. It is difficult to see what action can be taken other

than to recommend possibly enlarging the powers of Sea Fisheries Committees to either endorse or reject applications prior to their submission to the Crown Commissioners. This would at least ensure that some consideration can be given to the protection of fish spawning or nursery grounds and minimise the impact on fishermen. Quite recently Lowestoft Inshore Fishermens Association reported that some headway has been made in talks with MAFF in support of their genuine concern for the future.

7. Contact with Sea Fish Industry Authority

Another matter raised by several fishermen during the study was the progressive decline in opportunities for contact between Sea Fish Industry Authority regional staff and members of the industry, especially at the levels of individual fishermen or traders. At West Mersea, for instance, the Authority is regarded as having distanced itself so far that it is now seen as being quite remote from fishermen and their problems. This is in sharp contrast to the past when the Authority was almost always the first place to call on for information or advice about anything to do with fish. Nowadays it seems to be the Sea Fisheries Committee fishery officer who is in closest touch with fishermen but of course they have neither the technical staff nor the other necessary resources to be able to respond to most of the needs of the industry.

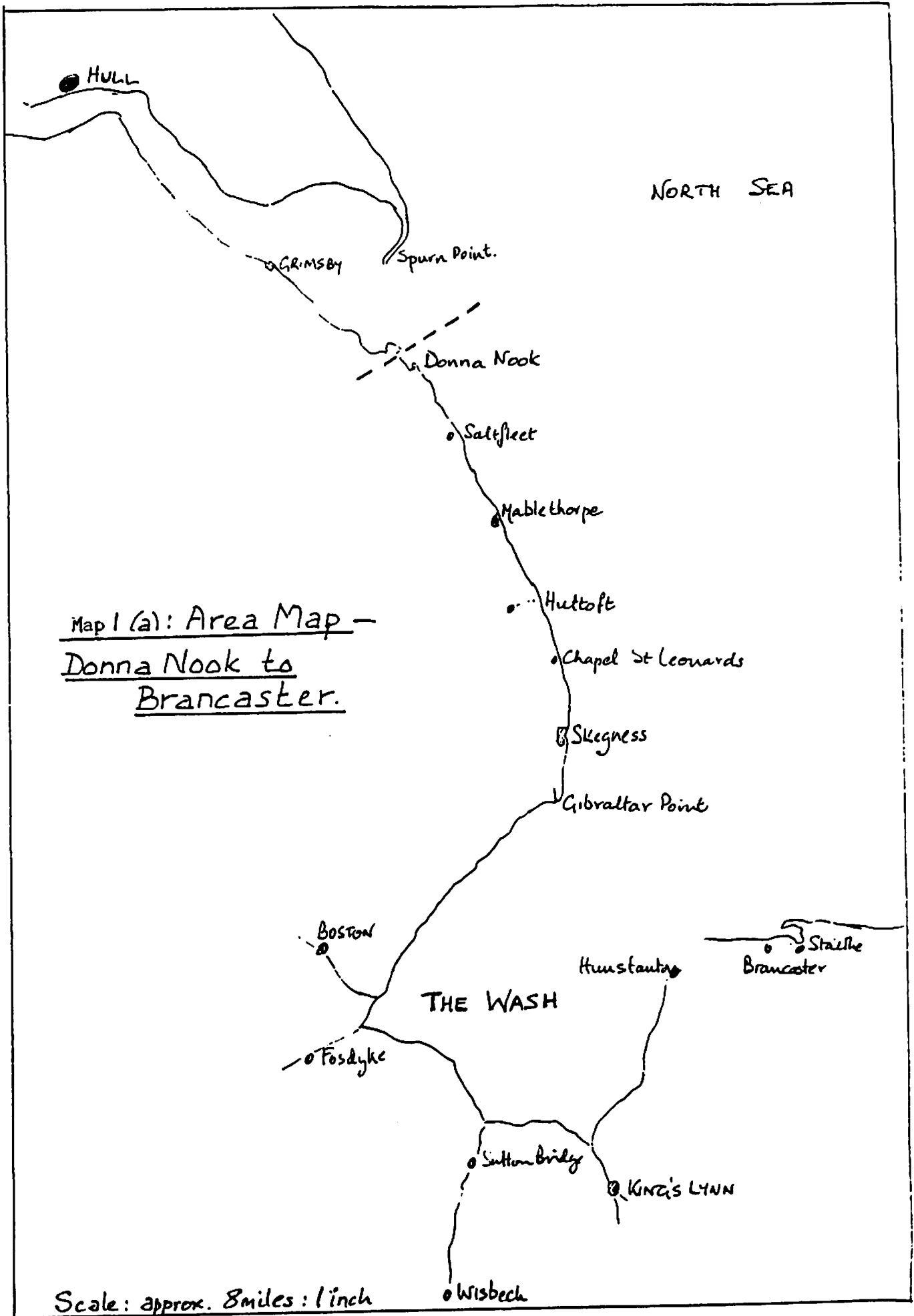
So far as the Authority is concerned, the main contact points of yesteryear such as area staff, grant and loan, marine survey, mobile advisory unit (MAU), IDU fisheries staff, etc., have perforce been greatly reduced if not abolished altogether.

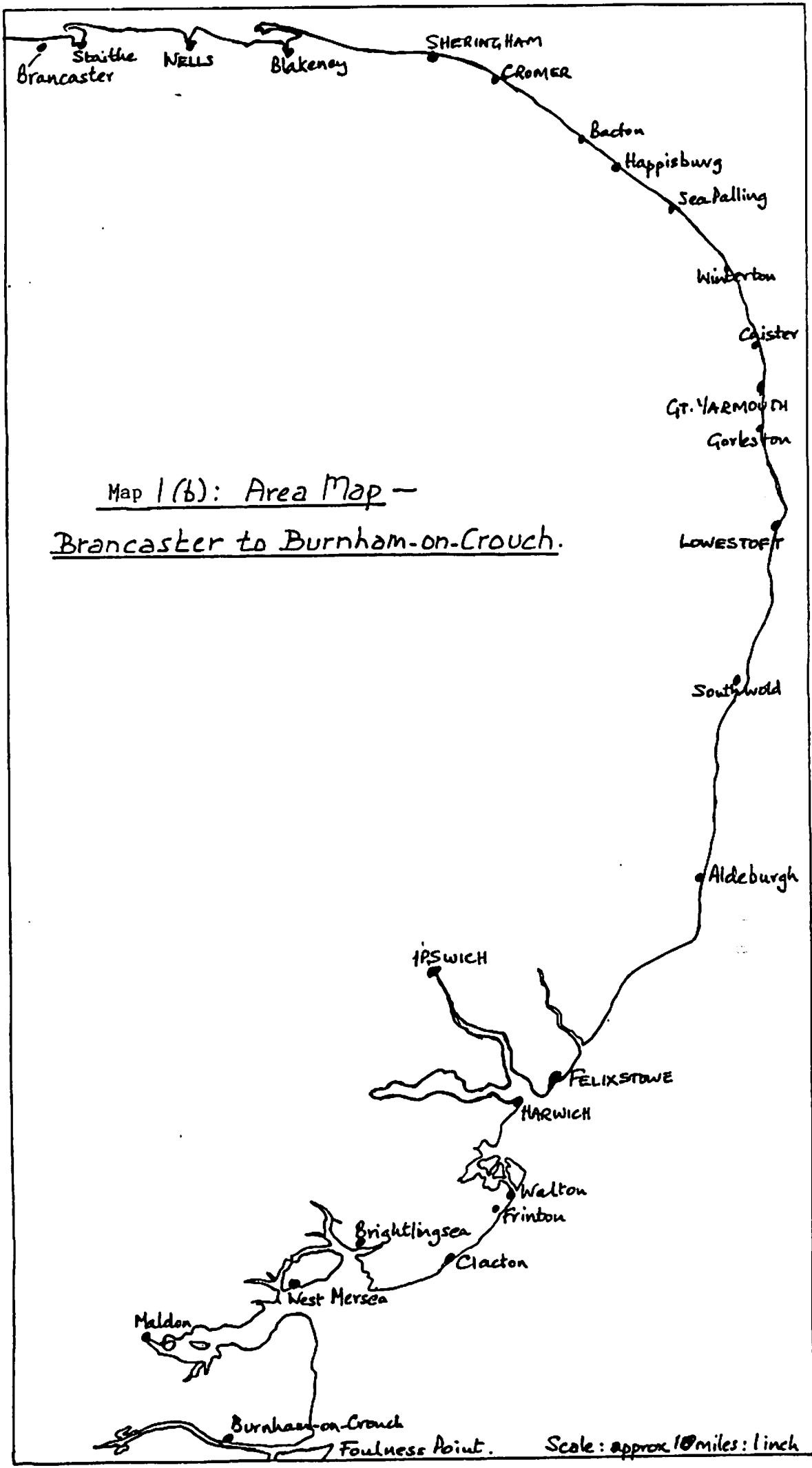
The Authority is endeavouring to replace the contact previously maintained through the Lowestoft office and the mobile advisory unit, by increasing contact by Hull based staff and in particular by arranging a series of coastal seminars.

8. Training

At several centres fishermen stressed how much they appreciated the services of the MAU and expressed the hope that some on-site training will still be possible, even though the old training vehicle is no longer available. There was particular interest at Boston, Wells, Harwich and West Mersea for short (1 to 2 day max.) up-dating courses on hydraulics. Another topic beginning to worry people is the imminent need to replace Decca equipment, and the pros and cons of various alternative substitutes and their use.

West Mersea fishermen are also now using double and triple trawl rigs and would be very interested in witnessing flume tank trials of such gear, if this could be arranged.





Map 1 (b): Area Map -  
Brancaster to Burnham-on-Crouch.

Scale: approx 10 miles: 1 inch

**SEA FISH INDUSTRY AUTHORITY**

**Seafish Technology**

**Seafish Report No. 372**

**August 1990**

**C.E.P. Watson**

**Fisheries Development Consultant**

**STUDY OF THE SOUTHERN SECTION OF THE ENGLISH  
EAST COAST FISHING INDUSTRY**

**1. INTRODUCTION**

The Sea Fish Industry Authority has been undertaking a series of regional studies of the U.K. fisheries, aimed at improving understanding of their problems and opportunities. The study which is the subject of this report, is the latest in this series of investigations and covers part of the English North Sea shoreline, extending from Foulness Island in the south, northwards along the Essex, Suffolk, Norfolk and Lincolnshire coastlines to Donna Nook in the north.

The area covered also coincides with the area for which the Eastern Sea Fisheries Joint Committee is responsible and part of the Kent and Essex Sea Fisheries Committee's area. The advice and assistance rendered by staff of the Committees along with the

comments and other information provided by fishermen, fish traders and others associated with the industry, is greatly appreciated.

Field work for the study was carried out during February 1990.

2.        SOURCES OF INFORMATION

In addition to the various individuals and fishery organisations consulted during the study, particular reference has been made to Sea Fisheries Committee annual reports, MAFF landings and value statistics, archival material from the IDU library and North Sea fish resource information published by the MAFF Fisheries Research Laboratory at Lowestoft.

3.        AREA SITUATION REPORTS

In the sections which follow, and working southwards from Donna Nook in Lincolnshire to Burnham-on-Crouch in Essex, (see the area maps, Figs. 1(a) and 1(b), each sub-division of the southern English East Coast is described. As far as available information permits, each has also been analysed in terms of fleet size, employment, fish production and earnings etc. A commentary has been provided in each case, as to future prospects and any particular problems experienced.



4. DONNA NOOK TO GIBRALTAR POINT (Photographs 1,2,3,4  
and 5)

4.1 General

This section of Lincolnshire/North Sea coastline is generally low-lying, drained fenland, which is protected from the sea by a high sand-dune ridge forming a dyke through which drainage water can be discharged into the sea via sluices at low tide. Donna Nook effectively marks the southern limit of the Humber Estuary and Gibraltar Point is the northern boundary of the mouth of the Wash.

Along most of its length the beach shelves very gently, thus exposing a wide inter-tidal zone of sandy silt at low water. The coast is exposed to the North and East with virtually no headlands or inlets to provide shelter. Most of the fishing fleet therefore comprises small open or half-decked boats, which have to be launched from and land back onto the beach. However, there are tidal creeks at Saltfleet, Chapel St Leonards and at Gibraltar Point, which penetrate inland through gaps in the dune ridge and thus provide sheltered moorings for a limited number of larger craft.

4.2 Fleet Size

There appears to be no official published data on fleet size in this area. The following figures are therefore estimates based on observations and Eastern Sea Fisheries Joint Committee (ESFJC) reports.

<u>Category</u>	<u>Vessels</u>	<u>Fishermen</u>
Full-time	13	25
Part-time/Seasonal	27	30

The largest vessels seen was "CHALLENGE" (WY 133), a combination stern-gantry trawler/potter of about 28 ft. length. The remainder were all 20 ft. or less, many being little more than dinghies.

#### 4.3 Fishing Centres

Although many of the beach-boats could operate from almost anywhere along the coast, the main centres of fishing activity are:-

##### Saltfleet Creek

Which is the base for 4 or 5 small potter/liners, some capable of shrimp trawling. At the head of the creek there is a small depot, clearly intended for the processing and sale of local fishermen's production. (See Figure 5).

##### Mablethorpe Beach

Where it was reported that 5 beach boats long-line for cod and crab-pots in season.

##### Huttoft and Chapel St. Leonards

Have the largest concentration of effort with some 28-30 beach-launched craft working long-lines and pots, when the weather allows or seasonally. The boats are kept inland, towed to the beach by landrover/trailer and launched at early ebb, returning ashore after the tide turns.

##### Gibraltar Point

With its creek and sheltered mooring, is the fishing centre serving nearby Skegness, although only 2 full time vessels and 5-6 seasonally used craft were seen there. As far as is known there are no beach-launched boats operating in the more immediate vicinity of Skegness. Fishing gear in use includes beam and otter

trawls, pots and long-lines. Gibraltar Point is also a designated wildlife sanctuary, which limits any future prospect of expanding the fleet or shore facilities.

#### 4.4 Production and Marketing

There are no official catch or value data published separately for this section of the coast. Much of the fish caught is sold locally by the fishermen direct to consumers or via local shopkeepers. Any surplus is taken to Grimsby fish market and would therefore be included in Grimsby's landing figures. However, from information contained in ESFJC annual reports it is deduced that overall landings during 1989, amounted to about 30 tonnes of demersal fish, 7 tonnes of crab and a few lobsters, estimated to be worth in total around £35,000 to the fishermen. Prices during 1989 averaged £7.50 per stone for cod, £3.00 for skate and £7.00 per stone for crabs.

#### 4.5 Prospects

Unless the catch and value figures are greatly underestimated, with average catches and earnings per boat apparently little more than one tonne and £1,200 during the year, it is clear that the fishermen must earn the major part of their livelihood from other activities. Fishing, even for the so-called full-timers, is thus little more than a lucrative hobby with few problems other than the weather and the occasional loss of static gear caused by trawlers. There appears to be little or no demand or potential for development, at least for the foreseeable future.

5. BOSTON AND FOSDYKE (Photograph 7)

5.1 General

Boston is the second largest fishing port serving the Wash fishery and although it lies about five miles inland, vessels have access to and from the sea via a canalised section of the River Witham, known as The Haven. Some boats also use a channel formed by the Rivers Welland and Whaplode, adjacent to Fosdyke.

Fishermen in Boston are well organised, having an active Fishermen's Association, plus a Co-operative which operates mussel purification tanks for its members, and a separate committee responsible for managing the Fish Quay, which because it is open to the public gaze and close to the centre of the town, needs to be kept reasonably tidy.

5.2 Fleet Size

The fleet comprised 40 vessels in January 1989, rising to 53 by the end of the year, with two more on order. By mid-February 1990 however, a number of these vessels were reported to be laid up and only about 30 were said to be in full commission. This figure probably includes at least some of the 12 shrimp trawlers now operating in the Humber area, whilst the remainder are cockle/mussel dredgers, several now using hydraulic suction dredges. Shellfish dominate the Wash fishery but a few boats also trawl for sprats during the winter season, December to February. The number of fishermen employed is variable but will be at least 100.

### 5.3 Production and Marketing

The mussel fishing season extends from September 1st until April and is complemented by the cockle season from April to September 30th. Mussel production is also limited by quota, namely 1190kg per man/day, with a maximum of four men allowed per boat (i.e. 4760 kg per boat/day). Cockles are also limited to 2000kg per man/day and four men per boat under ESFJC Bye-Laws.

#### 1988 Catches (Boston and Fosdyke)

<u>Species</u>	<u>Weight (mt)</u>	<u>Value £'000</u>
Cod	52	57.2
Skate	36	25.2
Pelagic spp	Nil	-
Crab	31	27.8
Cockles	4797	610.2
Mussels	2665	280.6
Shrimps	76	67.5
<hr/>		
Total	7650	1072.9

Source: MAFF Lesser Ports landings data, figures for 1989 are not yet available.

There are five recognised buyers in Boston, namely J. & J. Williamson., Boston Sea Foods Limited., S. Lovelace & Co. Ltd., J. Van Smirren and East Lincolnshire Sea Foods. With the exception of Van Smirren, these firms purchase live mussels locally for cleansing in their own premises prior to resale, and also have approved cockle processing facilities. Van Smirren apparently

purchases his supplies elsewhere, rather than from Boston fishermen. However, as they now have the benefit of the use of co-operatively owned mussel purification tanks, several of the fishermen undertake their own direct sales of live mussels to markets in the Midlands and Nottingham areas. It was reported that the Co-operative charges £2 per 20kg bag for purification and the Nottingham outlet pays £7 to £10 per bag, whereas the local buyers offer only £4.

#### 5.4 Prospects

Fishermen at Boston predicted a rather gloomy future for the industry, based on a virtual collapse of the crucial cockle fishery during 1989 and coloured, no doubt, by the exceptionally prolonged period of bad weather, which, at the time of interview had effectively prevented any fishing for nearly a month. Although MAFF catch data for 1989 are not yet available, ESFJC figures for their whole area and published in their annual reports, show that from 6649 mt of cockles in 1986, catches peaked at 8313 mt in 1988 and collapsed to 1007 tonnes in 1989, but from only 13 boats compared to 37 boats in 1988. Fishermen pointed out that several of the boats had had to be laid up because of poor fishing and blamed the recently introduced continuous delivery suction dredging technique for the decline in cockle stocks. ESFJC staff were more optimistic because a widespread cockle spatfall during 1989 has apparently survived well even on heavily worked grounds. Indications are that there should be a recovery of cockle stocks within the next 18 months.

Stocks of mussels on traditionally fished grounds have also been heavily exploited in recent years, such that current levels of production cannot be maintained from the wild stocks alone.

Increasing effort has been directed at collecting seed mussels especially from overpopulated deeper beds and relaying them onto designated and privately controlled "lays". Further expansion of this relaying programme provides the best means of increasing and sustaining mussel production in future.

6. SUTTON BRIDGE, WISBECH AND KING'S LYNN (Photograph 6  
and 8)

6.1 General

Sutton Bridge and Wisbech both have access to the Wash via the River Nene but notwithstanding new port facilities at Sutton Bridge, the river appears to be of only minor fisheries significance and is used by only one full-time general purpose fishing vessel. A number of part-time and longshore fishermen also operate with small open boats or from the beach but their catches are not recorded.

King's Lynn, in contrast, is the largest fishing centre serving the Wash fisheries. The port is located near the mouth of the River Great Ouse and is well served by major road and rail connections. There are six recognised shellfish merchants in the town, who process and distribute catches from the large and powerful fishing fleet.

6.2 Fleet Size

The fishing fleet in King's Lynn totals about 69 vessels, of which 26 are equipped for double beam shrimp trawling. 20-25% of the fleet is owned by the larger shellfish processing companies. The fleet has been substantially modernised during the last few years, with several new vessels and a number of larger and more powerful secondhand replacements for existing older units. Two ex-German beam trawlers which have just been acquired to replace older King's Lynn vessels were seen whilst fitting out in Grimsby Fish Dock following re-registration (Figure 8). Other local vessels have been modified and re-equipped for double beam shrimp trawling giving rise to anxiety in some cases, as to the effect on vessel safety, because vessels under 12m registered length are not required to meet Department of Transport stability and safety



criteria. There are no official figures for the number of fishermen employed, but one company having nine fishing boats, employs 30 crew, so for the whole fleet the number will be at least 200 men.

The increase in average vessel size and power represents a significant overall increase in fishing effort and pressure on shellfish stocks, which is being viewed with dismay by other fishermen from smaller harbours, such as Brancaster and Wells, who fear that they may become progressively less competitive and eventually be squeezed out. In addition there is opposition to the double rigged shrimping system from Humber fishermen who use otter trawls and are concerned about the more efficient fishing method being used on the Humber.

### **6.3 Production and Marketing**

There are six recognised shellfish merchants in King's Lynn who handle catches from local boats, including in some cases catches from their own company owned vessels, and who also provide market outlets for production from other smaller harbours around the Wash. In addition, the King's Lynn Fishing Industry Co-operative Limited which was established in 1988, now represents most of the fleet and has made progress towards setting up mussel purification facilities for use by its membership. The mussel fishing quota limit of 1190kg per man day and 2000kg of cockles per man/day, up to four men per boat, mentioned earlier in the section about Boston, also applies to the King's Lynn fleet.

Mussel fishing which started during September 1988 continued throughout the season until it closed on 30th April. Market demand was high, with good prices and landings were higher than

for several years past. Unfortunately the mussel stocks appear to have been overfished in the process, to the detriment of the 1989/90 season. In consequence, increased effort has been directed at transplanting small mussels onto lays to encourage stock recovery and increased future production.

The 1990 season has been closed early this year, on 31st March, owing to concern about stocks.

1988 Catches King's Lynn

<u>Species</u>	<u>Weight (mt)</u>	<u>Value £'000</u>
Cod	-	0.5
Dogfish	-	0.1
Skate	10	4.8
Pelagics	Nil	
Cockles	2740	304.6
Lobsters	1	2.8
Mussels	2055	257.0
Shrimps	839	941.5
<b>Total</b>	<b>5646</b>	<b>1515.2</b>

1988 Wisbech

<u>Species</u>	<u>Weight (mt)</u>	<u>Value £'000</u>
Shrimps	1	0.8

Source: MAFF Lesser Ports Fishing Landing Data

It is apparent that there has been considerable new investment into shellfish processing facilities in the Wash area and especially at King's Lynn where the new premises of Heiploeg & Lynn Shrimpers, with its separate areas for handling mussels, cockles and shrimps, is particularly impressive. A worrying feature was that the factory was far from fully utilised at the time of visit, in February 1990, with only 20% of its mussel purification capacity in operation. In part this was the result of prolonged bad weather keeping most of the fleet in harbour, but also it stems from stock depletion since the bumper harvest of 1988/89. It is to be hoped that these enterprises can survive during the period needed for the stocks of mussels and also cockles to recover.

The bright feature seems to be the shrimp fishery for which about 40% of the King's Lynn fleet has now been equipped with double beam trawls. Unfortunately, there is a dearth of information about the state of shrimp stocks or their potential. It is also doubtful if the above production figure covers all the shrimp produced by King's Lynn boats because many of them fish around the Humber Estuary and land into Grimsby. It is understood that most of the brown shrimp landed into King's Lynn is marketed in France.

In addition to Heiploeg & Lynn Shrimpers., the other shellfish merchants operating in the town are, A. Balls (King's Lynn) Ltd., Beachcomer Shellfish Ltd., Cole's of King's Lynn, J. & J. Shellfish and J. A. Lake & Co.

#### 6.4 Prospects

King's Lynn and the Wash fishery as a whole is heavily dependant on shellfish and lacks any alternative options to compensate for periods when the mainstay mussel and cockle fisheries decline. The area appears to be a nursery ground for a range of fish species but is clearly not attractive to mature fish in any quantity. Skate and dogfish are caught

on occasion, and there is a short sprat season during the winter but at very low prices which do not encourage fishermen to divert much effort away from mussel production. Future expansion must therefore depend on developing such additional resources as do exist, such as razor clams and marketable sea-weeds which have not been exploited hitherto, by means of an appropriate R & D programme which should also address the need for improved understanding and management of the main resources of mussels and cockles.

A major cause for concern at present is the possible effect on the Wash fishery and its supporting on-shore processing and marketing enterprises, of the proposed European Community hygiene regulations. Despite a number of meetings and much discussion, it is clear that there is still a great deal of uncertainty about the nature and content of the proposals and about the likely date and manner of their implementation. Such uncertainty is having a demoralising effect on all concerned.

## 7. BRANCASTER AND BURNHAM OVERY STAITHE

### 7.1 General

Both centres benefit from tidal creeks opening into quite sizeable sheltered lagoons and in the past supported modest fleets of full-time vessels working the nearby offshore whelk and mussel grounds. Since the decline in whelk production of recent years, attention has turned more to the cultivation of mussel and oysters. The centres are fortunate in this respect because there are no nearby sources of pollution. Their mussel production lays are located within a designated "clean water" area and therefore the shellfish can be marketed without any need for purification.

### 7.2 Fleet Size

At one time Brancaster supported a fleet of five whelkers, of which only two now remain, the others having been converted to fish for shrimps. Burnham Overy Staithe harbour is now used only by 2 small part-time crab potters. Full-time crew for the two shrimpers will be no more than six men, but a further 25 people are employed in operating the mussel lays.

### 7.3 Production and Marketing

Hitherto the lays contained within the areas covered by local Several Orders, had to be seeded with stock collected from the Wash but the discovery of a natural settlement at Brancaster harbour entrance has enabled both areas to be restocked with good quality seed mussel. One other set of lays off Burnham was used mainly as cleansing beds for mussel harvested from the Wash. Pacific oysters are grown in trays over part of the Brancaster mussel lays.

1988 Production Brancaster & Burnham Staithe

<u>Species</u>	<u>Weight (mt)</u>	<u>Value f'000</u>
Cod	1	1.4
Crab	2	1.9
Mussel	279	65.4
Shrimp	23	31.0
Whelks	-	0.1
Oyster	5	9.2
<hr/>		
Total	310	109.1

(Source: MAFF Lesser Ports Catch Data)

No particular effort is required on marketing because buyers from King's Lynn and elsewhere are accustomed to collecting their purchases from Brancaster. The average price is understood now to be £5 per 20 kg bag.

**7.4 Prospects**

So long as the area can be maintained as designated "clean water" and the lays continue to operate without need for purification, the situation will remain largely as it now is and subject to the possibility that the area of lays can be increased. No other developments seem likely at this stage.

8. WELLS, BLAKENEY, SHERINGHAM AND CROMER (Photographs 9,10,11 and 12)

8.1 General

Wells harbour offers good shelter at the head of a tidal inlet and is used by coasting cargo vessels as well as by the resident fishing fleet. The terrain consists of rising ground, separated from the sea by a wide belt of partially drained salt-marsh, the seaward edge of which is protected by a sand-dune ridge. In addition to the commercial wharf, Wells harbour has a fish quay which has recently been extended to accommodate the increasing number of fishing vessels in the fleet.

Blakeney harbour lies about six miles east of Wells and is one of the main yachting centres in North Norfolk. Unfortunately, the harbour is very shallow and is only used seasonally by three crab boats. Further East again, Sheringham and Cromer have no harbour so that fishing boats have to be launched from the beach. The Sheringham area includes beaches at Cley, Weybourne, West and East Runton, whilst Cromer also includes Overstrand, Mundesley and Bacton.

8.2 Fleet Size

At Wells the fleet was said to comprise three whelk potters, eight crab potters and four shrimp trawlers although it seems probable that some interchange of gear is likely to take place, at least seasonally. In addition, the three seasonal crab potters based at Blakeney would prefer to use Wells but are unable to do so because of congestion.

There are 22 beach launched boats in the Sheringham area working about 4,000 crab and lobster pots and a similar number of beach boats and gear in the Cromer area. Positive information is lacking but possibly half of the Sheringham/Cromer fleet, i.e. 22 boats plus the Wells fleet, could be regarded as being worked by full-time crews and the rest on a part-time basis. On that assumption it is estimated that there are about

74 full-time fishermen and 25 part-timers in the Wells to Cromer area. Interestingly, there was no suggestion in the reports on Sheringham and Cromer of any line or net fishing for finfish but it would be surprising if this did not happen and in fact, some gill-nets were seen on the beach at Cromer during the field visits.

### 8.3 Production and Marketing

As noted earlier, MAFF Lesser Ports catch data for 1989 are not yet available. The figures for production from Wells, Sheringham and Cromer for 1988 are as follows:-

<u>Species</u>	<u>Weight (mt)</u>	<u>Value £'000</u>
Cod	17	20.2
Dogfish	1	0.9
Skate	2	1.9
Herring	22	9.0
Crab	835	814.8
Cockles	23	2.2
Lobster	26	160.8
Shrimp	75	109.3
Whelks	629	195.4
<b>Total</b>	<b>1631</b>	<b>1316.9</b>

According to ESFJC reports, Sheringham fishermen landed 275 tonnes of crab and 13.6 tonnes of lobster during 1989. The figures for Cromer were 366 tonnes of crab and 13 tonnes of lobster. Separate data for Wells are not available but would be expected to show a steep decline in whelk production compensated by an increase in the catch of crab. The explanation, according to Wells fishermen is that whelks were overfished allowing space for crabs to move in. The fishermen believe that the two



species cannot co-exist on the same grounds and that it is, therefore not likely that the whelk fishery will recover. It is by no means certain that there is any scientific basis for this idea, and the drop in whelk fishing effort and production may also be due, at least in part, to a drop in the price offered by merchants and possibly to environmental or climatic changes.

There is usually no difficulty in selling catches and the buyers collect their purchases regularly, but there is frequently some dissatisfaction with the prices offered. However, the main worry expressed during the interviews at Wells especially, was continuing uncertainty about the effect of proposed EC hygiene rules on present systems for cooking brown shrimp on board small boats, and on whelk cooking and preparation ashore. In both cases there is an urgent need for the fishermen to be given proper advice.

At Sheringham there is one fishmonger, Abbs Bros. and two firms, Maritime Seafoods and Norfolk Shellfish Ltd., who purchase and process crabs, whilst at Cromer there is another crab processor, Messrs. Parkin & Williams, together with Icefresh Foods Limited which inter-alia imports squid rings.

#### 8.4 Prospects

Provided that the hygiene rules when they are finalised, are not imposed in too drastic fashion, and that they do not demand changes that small-scale inshore fishermen cannot comply with, then the present industry should be able to continue. It has proved itself able to adapt to modest changes in circumstances, e.g. the transfer from whelk to crab fishing and will no doubt prove equally adaptable in future should the necessity arise.

One means which might be open to the Wells fishermen, along the lines already demonstrated at Boston and King's Lynn, would be to form a cooperative enterprise aimed at undertaking onshore processing on behalf of its membership. This would enable them, as a group to meet the costs involved and to conform to stricter hygiene standards than would be possible for the individual and should also give them greater bargaining power with fish merchants as regards prices for their produce.

9. HAPPISBURG, SEA PALLING, WINTERTON & HEMSBY

9.1 General

This group of small coastal Norfolk villages, in common with those further north, also lack sheltered moorings and therefore have to depend on beach-launched operations. The terrain is low lying and subject to coastal erosion so necessitating sea-defence works especially along the Happisburg to Sea Palling sector. There are several caravan parks and camping sites along this coast, which indicates a substantial increase seasonally in population, especially during the summer months.

9.2 Fleet Size

Twelve beach-launched boats operate from these villages on a regular basis, weather permitting, and in addition there are a further 15-20 part-time/seasonal craft. According to ESFJC reports the fleet size has remained fairly stable during recent years.

9.3 Production and Marketing

Detailed catch data for these villages are not available but the ESFJC fishery officer reports small landings of herring, mackerel, crab and skate which are mostly sold locally, totalling 199 tonnes worth £73,376 during 1988 but declining to only 51 tonnes and £36,070 during 1989. It is also noted that a previously important whelk fishery along parts of this coast virtually disappeared during 1988/89, concurrently with a large increase in numbers of crab in the same areas. This is a similar experience to that in the Wells area, the reason for which remains unclear.

MAFF Lesser Ports Landings tables show the Winterton area catches lumped together with those for Great Yarmouth. It seems likely that fish sold for local consumption in the villages will not have been included in the MAFF data.

#### 9.4 Prospects

The stability in fleet size noted above, coupled with good local demand, especially during the summer months, and relatively easy access to market outlets in Great Yarmouth for any surplus production, makes it likely that this village based fishery will survive without too much difficulty. However, although there is no obvious demand or need for future development, problems could arise if the whelk stocks should ever stage a comeback, in conforming to the forthcoming EC hygiene rules.

10. CAISTER, GREAT YARMOUTH, GORLESTON, HOPTON AND CORTON

10.1 General

The coastal terrain from Corton northwards through Caister, in common with the Winterton sector, is flat and only a few feet above sea level. It effectively forms a belt of land between the sea and the Norfolk Broads which drain via the Bure and Yare Rivers into the sea at Great Yarmouth, thereby creating the important cargo, ferry and fishing port. Yarmouth is probably the third largest town in Norfolk, with a growing industry and resident population, despite which it still retains its attraction as a seaside resort for summer visitors.

10.2 Fleet Size

According to the ESFJC fishery officer, there are 64 ostensibly full-time fishing vessels operating in this area, of which about 31 are based on Yarmouth fish-quay. The Yarmouth fleet comprises 12 long-liners fishing for cod, skate and dogfish, 8 shrimp-trawlers, one vessel equipped with jigging machines primarily for cod, and about 10 vessels which concentrate on sea-angling charter work. The remaining 30-33 vessels are beach boats many of which operate from Caister where there is a sizeable herring season. All told there are above 140 fishermen crewing the Yarmouth area fleet.

10.3 Production and Marketing

The long line fishery for cod extends from October to April each year, after which attention turns more to skate and dogfish from May to September. Experience with the one vessel using jigging machines, is that cod fishing could be extended into the summer months by this method. Line bait nowadays is mostly frozen squid, imported from Spain and only a few vessels still use lugworm.

Catch statistics for 1989 are not yet available from MAFF, but the figures for 1988 in which landings at Winterton and Great Yarmouth are amalgamated, are as follows:-

<u>Species</u>	<u>Weight (mt)</u>	<u>Value £'000</u>
Cod	292	136.4
Dogfish	137	88.5
Plaice	3	2.6
Whiting	4	2.2
Skate	67	56.2
Herring	68	39.2
Mackerel	18	14.6
Sprat	2	1.0
Crab	2	2.0
Shrimps	60	54.7
Whelks	48	11.2
<b>Total</b>	<b>701</b>	<b>£614,100</b>

Note: Figures quoted in the ESFJC annual report for 1989 show total catch and value for Winterton and Yarmouth combined, during 1988 to be 735.5 mt worth £565,400. The catch declined during 1989 by nearly 30% to 503 mt worth £504,800.

There do not appear to be any recognised fish merchants in Great Yarmouth, no doubt because of the close proximity of the large market at Lowestoft. It is interesting to note therefore that most of the fish from Yarmouth, and especially the best quality jigged and line caught cod, was sent by road to Grimsby rather than Lowestoft where the prices were much lower.

#### **10.4    Prospects**

Relocation of the Yarmouth fleet to a new quay in the Gorleston area appears to have had beneficial results and the industry does not seem to be in need of any particular assistance. It should be able to continue, at least up to current levels of effort and production, subject to the impact of future quota restrictions.

11. LOWESTOFT (Photograph 13)

11.1 General

Lowestoft has long been the principal fishing port along the East Anglian sea-board with a long history of fluctuating fortunes. The port is partly natural where it is formed by the mouth of the Waveney River and partly artificial, where the Waveney and Hamilton Docks were excavated. Ownership and management of the port has devolved upon Associated British Ports (ABP), an organisation which appears much more strictly oriented towards commercial profitability than some of its predecessors. Lowestoft's importance as a fishing port has been enhanced during the past 4-5 years since the introduction of large beam trawlers into the "offshore" fleet in place of the earlier stern-trawlers. The consequent increase in landings has been such that since 1986, in terms of catch value from landings by U.K. vessels, Lowestoft has been the leading port in England and Wales. These figures do not, of course, include landings by Lowestoft vessels into Dutch ports. A particular feature of this summer.

A new fish market and associated quayside work was completed during 1987, in place of the very dilapidated former market structure on the West and North Quays, but the questions of operating costs and debt repayment for the new market are still causes for concern.

11.2 Fleet Size

The offshore fishing fleet based on Lowestoft, which in earlier years had numbered in excess of 100 vessels, by 1980 had diminished to 45, including about 12 modern stern-trawlers the rest being side-trawlers, all working conventional otter/flat-fish trawls. By 1987 this fleet had further reduced to only 3 but in addition there were 20 modern Dutch type beam-trawlers which have a catching capacity equivalent to more than twice their number of the earlier vessel types. Currently there are 23 beam trawlers plus 4 others comprising the Offshore Fleet.



LFVOA member companies would like to invest in further beam trawlers to prosecute the underfished U.K. North Sea plaice quota, but are inhibited from obtaining new licenses owing to the perceived overall excess catching capacity of the U.K. fleet and the resultant limitations imposed by MAFF adhering to EC policy. Unlike other E.C. countries, U.K. Government has not agreed to participate in a decommissioning scheme. Therefore, there is no incentive to owners to scrap old tonnage. A vessel purchased for its licence would be of virtually no real value if placed on the market. It is the contention of owners that fishing vessels of no further viability should be scrapped, also that Seafish/FEOGA grants should be automatically available for replacements.

The inshore fleet which numbered some 60 vessels of 35 to 80 ft in length during 1980, currently totals 67 such vessels of which 14 operate as trawlers and 53 as long-liners.

It is estimated that there are about 220 fishermen employed aboard the offshore fleet plus a further 400 people directly employed onshore, and about 170 fishermen on the inshore fleet. The Owners' Association state that there are some 2,000 people in total employed in fishing related industry within the town. The offshore fleet is owned by three companies and three individuals and is represented by the Lowestoft Fishing Vessel Owners' Association (LFVOA). The inshore fleet is represented by the Lowestoft Inshore Fishing Vessel Owners' Association (LIFVOA), where each vessel is effectively owned by a different individual or group of people.

### 11.3 Production and Marketing

Provisional landings data compiled by MAFF for Lowestoft, 1989, are as follows:-

<u>Species</u>	<u>Weight (mt)</u>	<u>Value £'000</u>
Cod	2079	2,441.3
Plaice	9373	8,651.9
Other fish and shellfish	1534	2,938.7
<b>Total</b>	<b>12986</b>	<b>14,031.9</b>

In common with other East Anglian fishing ports, 1989 results for Lowestoft appear to show a decline in catch and value compared with 1988 when the port produced 14,225 mt of fish worth £15,916,000. As noted above, Lowestoft was ranked first amongst the fishing ports of England and Wales, during 1988, and 1989, in terms of both catch weight and value and fourth in Great Britain after Peterhead, Aberdeen and Ullapool in terms of value only. This achievement stems very largely from higher catch rates since the offshore beam-trawlers were introduced, but must also be partly due to the declining importance of Hull and Grimsby. It is of interest to note the figures for 1978 when Lowestoft produced 27,000 mt valued at £13.9 million and Lowestoft ranked fifth after Peterhead, Grimsby, Aberdeen and Hull.

According to LIFVOA, the inshore fleet grosses about 33% of total catch value, or between £5 million to £6 million at current prices. A typical 40 ft liner would have achieved about 45 weekly settlements last year, each of 2 x 2 day trips, and would have grossed over £100,000. The inshore trawlers would have earned around £80,000 for a similar total number of days at sea.

The 27 offshore vessels averaged a daily grossing per sea-day of about £2,070 during 1989 and nearly 40% of the fleet grossed more than £500,000 each during the year, according to LFVOA.

73 fish marketing firms are registered as fish merchant members of the LFMA. 25 of these firms are, however, very small firms.

#### 11.4 Fish Dock

Major problems now confront the industry and Lowestoft Port Management with no indication that the various parties involved are nearing agreement.

- a) The annual surcharge on landings to cover the extra costs of the new fish market has been falling into serious arrears, as the total burden falls upon members of the Inshore Association LIFVOA. The inshore fleet pays port dues amounting to £18 per ton, of which £10 accrues to the surcharge account. Offshore vessels pay only £8 per ton, all of which accrues to ABP general revenue. A further anomaly is that a few visiting offshore craft sell their catches through BFP and pay the full £18, but apparently none of that accrues to the market surcharge account. The merchants organisation pay a levy towards the provision of the new processing premises.
  
- b) With some justification, LIFVOA regard themselves as being unfairly treated. LVFOA point out however that they made it quite clear to ABP in advance of construction of the market that they were at the time in no position to contribute. The offshore fleet had dwindled to 15 vessels and the offshore support fleet had left LFVOA to form their own organisation. They also point out that they alone had contributed substantially to the previous South Market development and in the circumstances were prepared to continue to use that relatively new facility for their reduced fleet. ABP complains that the port is losing money even after a 60% grant towards the development, but is accused by vessel owners of refusing to provide statements of account to prove their case. There is no doubt that there is an atmosphere of mutual distrust between landlord and tenants.

- c) The North Quay in Waveney Dock is in a dangerous state and has had to be closed to all vessels. Decisions are still awaited as to the best means of reducing the swell which now affects Waveney Dock since the removal of a wave deflector wall some years ago to facilitate movement of barges and provide land for an offshore construction business. MAFF grant was provided for sea defence repairs for the fishing industry. This grant assisted this development. ABP is unlikely to incur the necessary remedial expenditure failing a solution to the fish market financial problem.
- d) ABP Management are understood to be giving serious consideration to filling in all or part of Hamilton Dock for redevelopment, as a way of capitalising on at least part of their assets in Lowestoft. The problem of finding alternative safe moorings for the inshore fleet remains however. There is however an agreement in existence prepared by the British Transport Docks Board in 1981/82 which acknowledges the problem of the lack of safe berthage for the inshore fleet, should Hamilton Dock be filled in. The inference of this agreement is that works would be carried out to ensure the provision of alternative berthage for inshore vessels suitably screened from wave action. However, ABP Management has gone on record with statements which have undermined the confidence of the fishing community in the long term dock plans as far as the maintenance of fishery facilities is concerned.
- e) There is concern about the effect of proposed EC hygiene rules and the cost of work which may have to be carried out in compliance. So far as the new market is concerned there should not be very much to do but the older South Market which incorporates merchants premises with serious drainage problems is a different matter, as is the old Ross Building alongside the Trawl Basin, in which fish processing also takes place, Even in the unlikely event of these buildings being demolished there would still be the difficulty of where and how to relocate the affected fish merchants.

LIFVOA have lobbied with some evidence of success to encourage MAFF to challenge the continued extension of aggregate dredging areas. Despite the concern of inshore boat owners, expressed through LIFVOA, about the dock charges there is an encouraging degree of co-operation between LIFVOA and LFVOA on the overall problem of the maintenance of adequate berthage facilities particularly for the inshore fleet.

- f) It is understood that there is some dispute within LIFVOA the nature of which is not known, but which may result in the formation of another smaller association.

#### 11.5 Prospects

No doubt and by one means or another, Lowestoft will find a way out of these difficulties, as it has managed to do in the past. It is an outcome most earnestly to be desired because of the fact that the Lowestoft market dominates the fishing industry for long distances both north and south of the port. There does seem to be need for an arbiter or honest broker to encourage better communication between the various parties and it is hard to see who this could be other than Seafish Industry Authority.

The quotas issue is common to all the East Coast fishing centres, but is particularly severe on cod and haddock. The former is of vital interest to Lowestoft, the latter of lesser interest. Even with the new beamers, the fleet still takes quantities of small plaice, which are a wasteful use of valuable resources and difficult to market, mainly due to the closure in the difficult times of the large processors such as Birds Eye and Ross Group. The sole quota is underfished and there is a risk that Lowestoft could lose its sole quota. The sole fishery has historically been an 'inshore fishery' from Lowestoft as opposed to the 'offshore fishery' for plaice. Although offshore sole catches have not been sufficient to provide an equivalent voyage 'grossing' to plaice catches there are positive signs emerging from stock analysis which could make a shift to directed sole fishing worthwhile for the offshore fleet.

There is frustration within the LFVOA with regard to Government policy as regards decommissioning. Lowestoft unlike other ports has extra quotas to fish but is unable to invest in new vessels, as viable propositions due to the combined effects of licensing and of the lack of a U.K. decommissioning policy.

12. SOUTHWOLD AND WALBERSWICK (Photograph 14)

12.1 General

Southwold lies on the north bank and Walberswick on the south bank of the River Blyth, about 10 miles south of Lowestoft. The river has been canalised at its seaward end and its banks have been partly piled and infilled to reduce erosion and silting of its mouth, but much of this work has been poorly maintained and is now in need of major repairs. Nevertheless, the river provides safe moorings for a large fleet of full-time commercial and part-time fishing vessels up to about 35 ft l.o.a., together with many private yachts and other pleasure craft. The number of boats of all types seen during the visits was estimated to be in excess of 100.

The local District Council maintains a summer caravan park adjacent to the river, together with public toilet facilities and an access road which is also in need of attention. The council also employs a harbour master. Mixed in with all this is a modest boat repair yard, a lifeboat station and a yacht club.

12.2 Fishing Fleet

The full-time fishing fleet was reported to comprise 25 to 30 vessels of between 20 ft to 35 ft in length operating a variety of trawls, long-lines and drift nets. Most of these craft were seen during the visit, together with some of the 60 smaller and mostly open boats which work on a part-time/seasonal basis.

Mooring fees payable to the council, have been £60 per year for some time past, but an attempt was made during 1989 to increase them to over £400 per boat/year. After much protest it is understood that a compromise agreement has been reached. At least some of the negotiations on behalf of fishermen were conducted by the Suffolk Coastal Longshore Association,

which has 27 members at Southwold, 6 at Dunwich, 1 at Sizewell and 16 at Aldeburgh. The Association aims particularly to represent the interests of beach-launched and other small boat owners. It is estimated that there are about 50 full-time fishermen and up to 100 part-timers working out of this harbour.

### 12.3 Production and Marketing

According to MAFF Lesser Ports landings data for 1988, fish production at Southwold was as follows:-

<u>Species</u>	<u>Weight (mt)</u>	<u>Value £'000</u>
Cod	121	133.9
Dogfish	2	1.7
Plaice	6	6.2
Whiting	5	2.6
Skate	1	1.4
Herring	4	3.9
Others	10	28.9
<b>Total</b>	<b>149</b>	<b>178.6</b>

These figures appear to be rather low, in that even if the whole catch was taken only by the 30 full-time boats, they would have grossed no more than £6,000 each. ESFJC reports show the Southwold catch for 1988 to have been 221.4 mt worth £267,165 but also indicate a sharp drop for 1989 to 129.2 mt worth £175,861.

Although much of the Southwold catch will be sold locally, especially during the summer, there are no recognised fish merchants at the port. Any quantities surplus to local demand are delivered to Lowestoft for sale, sometimes by auction or directly to merchants.



#### 12.4 Prospects

It is to be hoped that harbour revenue will be sufficient in future for the council to undertake badly needed repairs to the river banks and access road to the moorings, otherwise there is a risk that the river mouth will become silted up and diminish access to this very busy little harbour. The cumulative impact and continued increase of offshore dredging is regarded by the fishermen as a major issue because of the damage it may be causing to the fish stocks.

Southwold has in the past been something of a centre for smuggling activities related to drugs and illegal immigrants, a factor which no doubt impedes the free movement of fishermen at times, into and out of the port. A further problem affecting Southwold together with other centres along this coastline, is the frequent unwanted capture of wartime mines.

13. DUNWICH AND ALDEBURGH (Photograph 15)

13.1 General

The Dunwich sector, which includes Sizewell and Thorpeness, resembles the coastline north of Yarmouth in that there are no inlets to provide sheltered moorings and fishing has to be based, therefore, on beach launched operations. Construction of the Sizewell power station has hindered fishing in that area, but the fishermen concerned have received reasonable compensation.

The Aldeburgh sector includes Orford and Butley and, whilst Aldeburgh itself is a beach-launching centre, the other two villages are located inland, on the Ore and Alde Rivers which combine to form a channel running parallel with the coast for a distance of some eight miles and provide sheltered access.

13.2 Fishing Fleet

There are reported to be 16 semi-full time beach boats divided between the villages in the Dunwich sector, which fish long-lines primarily for cod, and drift nets, often to catch their own long-line bait. In addition a number of seasonal fishermen work crab and lobster pots during the summer months, especially from Thorpeness.

The fishing fleet in the Aldeburgh sector totals about 50 vessels, half of which are 18-20 ft potters/liners working off the shingle beach at Aldeburgh town, and the remainder including at least one new "under 10 metre" vessel, operate out of the Ore/Alde River based on Orford. The number of effectively full time fishermen in the whole area is about 130.

### 13.3 Production and Marketing

MAFF fish landings data for lesser ports during 1988 show that production at Dunwich totalled 38 mt valued at £40,445, excluding the production of farmed Pacific Oysters (*C. gigas*) from Blythburgh. The greater part of these landings consisted of cod (31 mt) and only small amounts of a range of other fish species. ESFJC production figures, which do include oysters, show Dunwich landings for 1988 as 39.14 mt valued at £44,528, reducing to only 21.94 mt worth £27,300 in 1989.

Aldeburgh landings for 1988 are shown by MAFF to be as follows :-

<u>Species</u>	<u>Weight (mt)</u>	<u>Value £'000</u>
Cod	146	134.7
Dogfish	3	2.5
Plaice	7	10.5
Whiting	6	4.2
Skate	6	7.6
Herring	1	0.2
Crab	5	8.8
Lobster	1	14.2
Other fish	16	62.1
<hr/>		
Total	191	244.8

ESFJC landings statistics show 1988 production at Aldeburgh to have been 214.2 mt valued at £270,223, reducing to 156.75 mt worth £242,186 during 1989. However these data will include production from a small mussel fishery at Orford and *C. gigas* oysters from the Butley Creek Oyster Farm which has an average annual output of 100,000 oysters.

Although there are no registered fish merchants at Aldeburgh, there is at least one retail sales kiosk beside the beach, equipped with a cold store and freezer chests, from where it appears that locally caught fish, crabs and other shellfish are prepared and sold to the public. Aldeburgh is an ancient and rather attractive small town which attracts a lot of summer trade from which the fishermen will benefit, but although it could not be confirmed during the visit, it is likely that part of the catch will be transported to Lowestoft for sale.

#### 13.4 Prospects

The well established fishery at Aldeburgh does not appear to have any particular development needs, although it is probable that some advice may be sought on how best to adapt their handling and sales kiosk to comply with the new EC rules, in due course. The fishery clearly depends very heavily on cod, so that it is vulnerable to any future quota restrictions.

## 14. FELIXSTOWE

### 14.1 General

In addition to the principal landing site at Felixstowe Ferry on the south bank of the River Deben, the Felixstowe area includes Shotley Point at the confluence of the Rivers Orwell and Stour, and upstream of the River Stour as far as Ipswich. The terrain changes south of Orford, with much higher ground, sloping quite steeply down to the sea and inlets. The Stour is navigable by cargo vessels up to Ipswich and both Felixstowe and Harwich are major container cargo and ferry ports with frequent shipping movements into and out of port. Problems occur from time to time when fishing vessels are accused of causing navigational interference with commercial shipping.

### 14.2 Fishing Fleet

About 18 full time fishing vessels are based at Felixstowe Ferry, fishing mainly around the Shipwash and Hollesley Bay areas, trawling and lining. A further 67 boats mostly much smaller, are used on a part-time basis from the Shotley and Ipswich areas and fishing a variety of gear, including summer trawling in the rivers Stour and Orwell. Unfortunately, it did not prove possible to visit the Felixstowe Ferry landing site, so that the fleet size could not be verified nor was it possible to ascertain whether there were particular development needs. It is believed, however, that the vessels have to anchor off because of the lack of a useable jetty, and in consequence have to refuel and unload by means of a dinghy. The numbers depending either mainly or partially on fishing for their livelihood in the Felixstowe area is about 40 full time and up to 100 part time fishermen.

### 14.3 Production and Marketing

Fish landing statistics shown in the ESFJC annual report for Felixstowe are as follows:-

<u>Year</u>	<u>Weight (mt)</u>	<u>Value (£)</u>
1986	177.50	193,662
1987	314.65	343,921
1988	442.80	448,012
1989	312.00	366,583

The more detailed figures from MAFF's lesser ports production tables for 1988 differ slightly in total from the above, as follows :-

<u>Species</u>	<u>Weight (mt)</u>	<u>Value £'000</u>
Cod	352	335.2
Dogfish	45	24.4
Plaice	3	1.7
Whiting	7	2.9
Skate	17	14.9
Herring	6	3.8
Lobster	3	16.9
Other Spp	24	64.9
<hr/>		
Total	457	464.7

The figures once again demonstrate the crucial importance of cod to all of these small fishing communities up and down the coast and their vulnerability to quota restrictions. Vessels fishing in the rivers especially during the summer, catch lesser quantities of bass, grey mullet, soles and the odd lobster. It is understood that virtually all of the fish caught will be sold locally, or to Ipswich and other East Anglian centres.

#### 14.4 Prospects

Although small inshore vessels, such as the "under 10 m" class may fish for pressure stock species with a minimum of restriction, they remain vulnerable in the event that national quotas may be filled early by the rest of the national fleet, and a stoppage ordered on all fishing for that stock. That apart, the Felixstowe fleet appears healthy, but a further visit is recommended to confirm its status and any requirements.

15. HARWICH (Photograph 16)

15.1 General

Harwich is situated south of Felixstowe on the southern bank of the Stour/Orwell Estuary. It is a major passenger and ro-ro cargo ferry terminal and is connected by good road and rail links, through Colchester to London. The countryside is generally undulating and slopes quite steeply down to the sea and river valleys. The Harwich area includes the coastal villages of Walton and Frinton and the larger summer resort town of Clacton which is about 12 miles south of Harwich. The River Stour marks the boundary between Suffolk and Essex and the line where responsibility for controlling inshore fishing changes from the Eastern Sea Fisheries Joint Committee to the Kent and Essex Sea Fisheries Committee (K & ESFC).

15.2 Fishing Fleet

There are 17 full time fishing vessels based at Harwich town, consisting of two 45 ft trawlers, five 35 ft combination trawling/potting/lining vessels and ten potting/lining boats of 25 ft or less in length. A further 19 mainly potting/lining boats of around 30 ft and less, operate from Walton and Frinton. As far as is known, there are no full-time fishing boats operating from Clacton, however, the Kent and Essex Sea Fisheries Committee annual report notes that there are an additional 30 fishing craft worked by 32 part time/seasonal fishermen within the whole of this area. The Harwich town fleet employs 36 full time fishermen and a further 20 men work the Walton/Frinton fleet.

Fishing gear in use includes long-lines for cod and skate, flat-fish trawls, round-fish trawls, gill, trammel and tangle nets, lobster pots and whelk pots. A particular problem at Harwich



is the lack of a suitable landing jetty or quay for the fishing fleet, for use when landing catches, refuelling and when overhauling gear. Currently vessels have to land across a council owned sea wall/promenade which is a constant cause of difficulty.

### 15.3 Production and Marketing

MAFF's Lesser Ports Landings Data for 1988 show production from the Harwich area, as follows :-

<u>Species</u>	<u>Weight (mt)</u>	<u>Value £'000</u>
Cod	560	555.3
Dogfish	7	4.8
Plaice	7	3.1
Whiting	22	7.7
Skate	53	47.9
Herring	7	4.1
Crab	4	1.7
Lobster	21	141.4
Other Spp	41	143.3
<b>Total</b>	<b>722</b>	<b>909.3</b>

Fishermen at Harwich said that 1988 was a very good year especially for cod, but 1989 and 1990 to date were below average, with catches only about 25% of 1988 levels. Unfortunately, MAFF data for 1989 is not available as yet.

There is one registered fish merchant at Harwich, Mr. V. Good, and another at Clacton, R. Craven & Co. Ltd., it is understood that after satisfying the relatively small local demand, the remaining catches are delivered direct to one of the Lowestoft merchants.

In the past Harwich fish was sold on the Lowestoft auction, but irrespective of time it was placed as "last in market" and obtained generally poor prices. The present direct sale arrangement yields more stable returns. Lobsters are sold direct to local hotels when seasonal demand is high and otherwise are sent to Colchester Oysters Limited for onward sale in London.

#### 15.4 Prospects

Harwich fishermen appeared somewhat pessimistic about prospects, possibly as a consequence of poor results during 1989 and the dreadful weather so far this year. They were particularly anxious about increased amounts of gravel extraction and expanded prospecting activity on important fishing grounds. The feeling is that this is part of the general lack of support for fishing nowadays, of which a perceived worsening lack of contact with Sea Fish Industry Authority is also a part. The fishermen have an Association, currently under the chairmanship of Mr. Good, who is a vessel owner as well as a fishmonger. Association membership is 23, including 4 from Shotley, but it is not very active and meetings were said to be poorly attended.

If there were a proper fish quay it could serve as a focus for Association activities, as well as enable more effective use of the fleet, and so help resolve some of the current apathy.

## 16. BRIGHTLINGSEA

### 16.1 General

Brightlingsea is situated beside a creek leading off the River Colne, which although shallow and tidal forms a reasonably sheltered natural harbour. Higher ground inland slopes gently to a flat coastal strip, with extensive marshy areas at intervals. The Brightlingsea area is taken to include Wivenhoe and Colchester, located further up the River Colne, where there is a seasonal sprat fishery in addition to oyster farming.

Low tide at Brightlingsea creek exposes a very wide belt of mud between the shore and the central deep-water channel where most of the boats have to anchor. In the absence of any form of jetty or quay, ship to shore access for off-loading catches and refuelling, etc has to be by dinghy. There is a boatyard with slipway, but along with other port facilities, it appeared generally run down.

### 16.2 Fishing Fleet

Thirty full time fishing vessels operate in the Brightlingsea area, ranging in length from around 45 ft down to 20 ft. Sections of the fleet transfer seasonally between Brightlingsea and Wivenhoe and there are a further 24 vessels which are worked on a part-time/seasonal basis. The full time fleet comprises 16 trawlers, working a variety of beam, otter and pair trawls at different times of the year, for cod, skate, soles, sprats and shrimp; 18 long-line/gill-netters are also fishing for cod, skate and sole, along with bass and other varieties including herring fished with drift nets during the winter/early spring season.

The remaining two vessels are oyster dredgers. Fyke netting for eels is practised during the summer.

According to K & ESFC reports there are 46 full time fishermen and 30 part timers within the Brightlingsea area. The local fishermen's association did not appear to be particularly active and may therefore be in need of some encouragement.

### 16.3 Production and Marketing

MAFF catch statistics for 1988 show separate details for Brightlingsea and Wivenhoe/Colchester, as follows :-

#### Brightlingsea

Cod	45	40.5
Plaice	5	1.8
Whiting	7	2.2
Skate	10	8.1
Herring	17	7.1
Sprat	1	-
Other Spp	17	41.1
<hr/>		
Total	102	100.8

#### Wivenhoe/Colchester

<u>Species</u>	<u>Weight (mt)</u>	<u>Value £'000</u>
Cod	53	48.9
Plaice	5	1.7
Whiting	5	1.7
Skate	9	7.7
Herring	1	0.4
Sprat	102	3.3
Other Spp	22	52.8
<hr/>		
Total	197	116.5

As noted earlier, 1989 figures are not yet available, and unlike ESFJC, K & ESFC reports do not include any catch data so it is difficult to make comparisons. Nevertheless, from comments made during the visits and in the K & ESFC report covering 1989, it does seem that the crucial cod fishery was disappointing and that results were about average for other species. Oyster cultivation in the River Colne area appears to be relatively inactive at present and although some were laid on the beds for fattening during the summer of 1988, and were harvested and sold during that autumn and winter, very little restocking took place during 1989.

Mr. K. Green at Wivenhoe is the only recognised fish merchant in this area and it is understood that he handles a large part of the catch which is surplus to immediate local requirements. However, fishermen are always seeking alternative markets and, for instance, it was reported that part of the sprat catch was sold to a Dutch freezer ship moored in the River Colne. It is also possible that some of the prime fish may be purchased by Mr. R. Howard, fish merchant of East Mersea, who is known to buy such fish from a wide area, in order to build up full container loads for export to France.

#### 16.4 Prospects

Brightlingsea has a favourable strategic location vis a vis access to major market outlets relatively close to hand, and a good natural harbour, albeit one which is underdeveloped in terms of facilities to service a fishing fleet. It is felt that a stronger local Association could promote an effective "self-help" development programme, along the lines that are being demonstrated at West Mersea, but some external assistance and "pump-priming" may be necessary to get things moving. The fishermen need to be stronger to be able to resist growing pressure from yachting interests seeking to take over more of the limited mooring space that is available.

17. WEST MERSEA AND TOLLESBURY (Photographs 17 and 18)

17.1 General

West Mersea is the largest village and principal fishing centre around the Blackwater Estuary, an extensive complex of tidal channels, islets and mud-flats. The village is located on Mersea Island, access to which from the mainland is via a causeway which becomes impassable for some time either side of high tide. West Mersea harbour is at one end of the channel separating the island from the rest of Great Britain, and provides good shelter, secure moorings and permanent deep water for vessels unable to sit on the bottom at low tide. For this reason, West Mersea is also a major yachting centre, with a clubhouse, boat repair yards and hundreds of leisure craft afloat and parked onshore, of all shapes and sizes.

Despite the very large numbers of visitors attracted by the yachting centre and other recreational facilities, especially during the summer, it was very apparent that the resident Mersea islanders do maintain a close knit sense of community, and that this has an influence on the organisation of their fishing as well as on other occupations.

The West Mersea area includes Tollesbury, a small village on another inlet off the north shore of the Blackwater, and also Maldon, Heybridge and Bradwell. Maldon is a more substantial settlement near the head of the Blackwater Estuary. Bradwell is on the south shore of the Estuary and is the site of a major power station.

## 17.2 Fishing Fleet

It is understood that the local area maximum vessel length rule for inshore fishing is 17 metres. Currently there are 28 full time fishing craft based at West Mersea, of which six are 40 ft to 56 ft trawlers, a further nine vessels of 30 ft to 40 ft also operate as trawlers and the remaining craft, mostly of about 25 ft length, work a combination of drift and set nets and long-lines. Four of these boats also use oyster dredges. The West Mersea fleet is manned by 48 full time fishermen, but there are also a further 18 boats operated by 24 part-time/seasonal fishermen.

Two more vessels are based at Bradwell and another two at Maldon, working drift nets for herring and trammels for skate and other species. These craft are crewed by 5 full time fishermen, and a further 20 part-timers operate an additional 14 vessels using a variety of gear from bases around the southern shore of the Estuary.

Fishing gear used by the trawler fleet include pair trawls both for cod and for sprat, conventional otter trawls for cod and skate, and single, twin and triple otter trawls for soles. Other boats use drift nets, gill, trammel and tangle nets and long-lines. Both fyke netting and trawling are used to catch eels. Some hand gathering of winkles also takes place usually during the autumn, as and when there is demand.

### 17.3 Production and Marketing

In the absence of landings data for 1989, figures provided by MAFF for 1988 for the West Mersea area are as follows :-

<u>Species</u>	<u>Weight (mt)</u>	<u>Value £'000</u>
Cod	125	116.1
Dogfish	5	0.9
Plaice	29	11.8
Whiting	27	9.6
Skate	50	44.0
Herring	130	45.4
Mackerel	2	0.9
Sprat	231	9.4
Crab and Lobster	1	1.8
Oysters	19	79.8
Other Spp	99	292.3
<hr/>		
Total	718	612.0

There are two recognised fish merchants based on Mersea Island neither of whom limit their purchases to local fishermen only. As already noted, Mr. R. Howard purchases quality fish, such as bass, sole and skate, for export by container truck to Brittany. It was stated that he handles catches from up to 90 vessels landing into various Essex ports. The second buyer is Colchester Oyster Fishery Co. which purchases shellfish from as far afield as Wells and other nearer centres, for onward distribution to London and other markets.



#### 17.4 Prospects

The local association, known as the West Mersea Fishermen's Federation, has a forceful and imaginative chairman whose efforts aided by the islanders' strong community spirit, have produced an organisation that is active and highly self-sufficient. The association was able to negotiate financial assistance from MAFF, the local council and other sources, to supplement their own funds in building a floating jetty at the edge of the deep-water channel, connected by a hinged walkway to the shore where a new refrigerated chill-store has been installed. There are plans for an appropriately sized ice plant to be acquired in the near future, plus storage for fishing gear, etc. As yachtsmen are also able to use the new jetty, a climate of co-operation has been established with yachting interests in place of the conflict that could so easily occur. Even so the fishing community will need to exercise vigilance to maintain its right to adequate mooring space, in the face of growing pressure by recreational boating enterprises. Among the problems noted which are giving rise to concern, are the following :-

##### a) Quotas

Uncertainty over the level of future quotas for herring and cod is worrying most fishermen although the West Mersea fleet has not been directly affected hitherto. The Fishermen's Federation chairman claimed that Essex fishermen are given a special allocation of 200 mt of Thames Estuary herring (175 tonnes, according to the K & ESFC annual report). He also said that they would welcome being given a larger share of U.K.'s underutilised sole quota.

b) Dredging

The amount of prospecting for new dredging sites and extraction of marine aggregates from existing licenced sites is escalating rapidly, with apparently little that the inshore fishermen, who are most directly affected, can do to influence decisions. It is thus a cause of frustration, as well as very damaging to important fish breeding and nursery grounds.

c) Bass Conservation Boxes

Mersea is claimed to be the major bass landings port in the UK and fishermen are therefore furious that MAFF has proclaimed these "no fishing" zones without any consultation with fishermen, and in the fishermen's view, has located them in the wrong places. One such box near Bradwell poses no great problem as it is quite small, but another one off Foulness is very large and imposes major restrictions on access to traditional fishing grounds especially when taken together with the dredging problems.

d) Sea Fish Industry Authority Assistance

A comment was made that in recent years Sea Fish Industry Authority has become increasingly remote from fishermen. For whatever reason, the present situation is in sharp contrast to the past, when the Authority was almost always the first point of inquiry for information and advice on organisational matters, finance, gear and equipment, marketing and training etc., usually directed initially through the Lowestoft area office. The services of the MAU were greatly appreciated in the past and they were disappointed that it would no longer be available. Nevertheless, it was hoped that on-site training would still be possible, and if it could be arranged, a 1-2 day hydraulics course would be appreciated. Flume Tank trials of triple trawl rigs, such as they use would also be of interest.

18. BURNHAM-ON-CROUCH

18.1 General

Burnham is situated on the River Crouch, which with the River Roach presents a network of long and relatively narrow tidal river channels and lagoons. The town is reasonably well connected by B-roads to Chelmsford and Brentwood, and by rail services to London. MAFF maintains a research laboratory specialising in shellfish, in Burnham and in support of the one-time major oyster industry now sadly in decline as a consequence of disease.

The area includes the villages of Paglesham, Barling and Wakering, which are located on the River Roach.

18.2 Fishing Fleet

Fishing activity is relatively small in this area, the fishing fleet comprising only six small trawlers manned by 10 full time fishermen. Two of these vessels also work fleets of drift and set-nets, especially during the summer, and one undertakes oyster dredging when required. In addition there are a further 15 vessels operated by 21 part-time fishermen.

18.3 Production and Marketing

Fish landings in the Burnham area during 1988 are shown by MAFF to be as follows :-

<u>Species</u>	<u>Weight (mt)</u>	<u>Value £'000</u>
Cod	1	2.8
Plaice	1	0.5
Skate	1	0.8
Herring	2	0.8
Other Spp	5	7.5
<hr/>		
Total	10	12.4

Most of the trawling, whether for sprat, skate and flat-fish, and drift netting for herring, takes place within the River Crouch. Some gill-netting and beach seining occurs from the Maplin Sands, producing some fair catches of bass and grey mullet. Part of the sprat catch was landed at Colchester where it sold for fish meal. Oyster cultivation remains at a very low level with little re-stocking work being done and only small quantities of oysters being dredged from offshore beds.

Dredging for whiteweed seems to have occupied a substantial part of vessel time during 1988 and 1989, according to K & ESFC reports, and may therefore explain the particularly low fish catch per boat.

As far as is known, there are no registered fish merchants in the Burnham area, although at one time there must have been some dealers in oysters.

#### 18.4 Prospects

It appears that Burnham is somewhat of a back-water so far as fishing is concerned, when compared with the more active centres both to the north and south. If the fishermen are satisfied with this level of performance, there seems no reason why it should not continue as such. A more ambitious approach would be desirable, from the local point of view, but would probably also generate a more adverse reaction from West Mersea and Brightlingsea, where the fishermen would not welcome greater competition on the fishing grounds.

SOUTHERN SECTION, ENGLISH EAST COAST FISHING INDUSTRY

SUMMARY OF STATISTICS, 1988

<u>Area</u>	<u>Vessels</u>		<u>Fishermen</u>		<u>Catches</u>	
	<u>Fulltime</u>	<u>Part-time</u>	<u>Fulltime</u>	<u>Part-time</u>	<u>Weight (mt)</u>	<u>Value (£'000)</u>
Donna Nook/ Gibraltar Point	13	27	25	30	37	35.0
Boston and Fosdyke	49	--	100	--	7650	1072.9
Sutton/King's Lynn	69	--	200	--	5647	1516.0
Brancaaster	2	2	31	2	310	109.1
Wells to Cromer	37	25	74	25	1631	1316.9
Winterton area	12	15	24	20	199	73.4
Yarmouth area	51	10	133	10	701	614.1
Southwold	25	60	50	100	149	178.6
Aldeburgh	66	--	130	---	191	244.8
Felixstowe	18	67	40	100	457	464.7
Harwich	36	30	56	32	722	909.3
Brightlingsea	30	24	46	30	299	217.3
West Mersea	33	32	53	44	718	612.0
Burnham-on-Crouch	6	15	10	21	10	12.4
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Total - Lesser Ports	447	307	972	414	18,721	7,376.5
Lowestoft	94	---	390	---	14,225	15,916.0
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Regional Total	541	307	1362	414	32,946	23,292.5
	===	===	====	===	=====	=====

Sources: MAFF Fish Landings Data, 1988 - (Catches and Values)  
 Eastern and Kent & Essex Sea Fisheries Committee Annual Reports (Fleet and Employment)

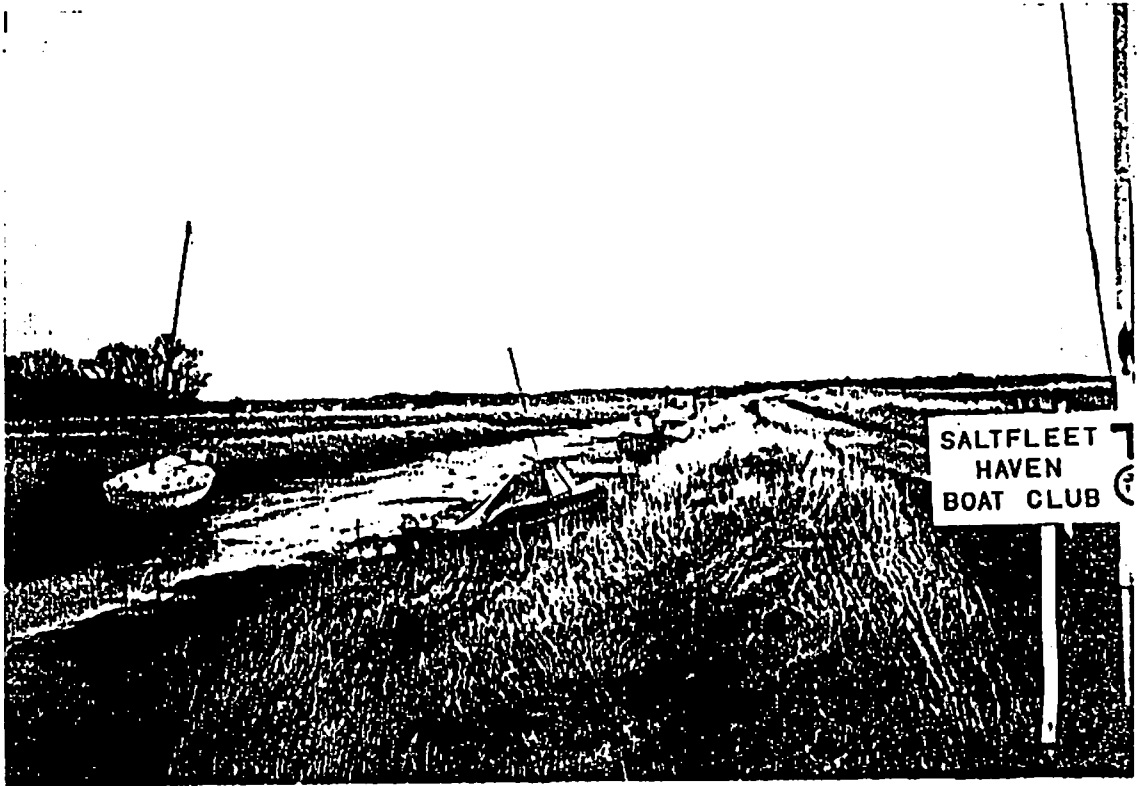


Fig.1 Saltfleet Haven Creek on Lincolnshire Coast

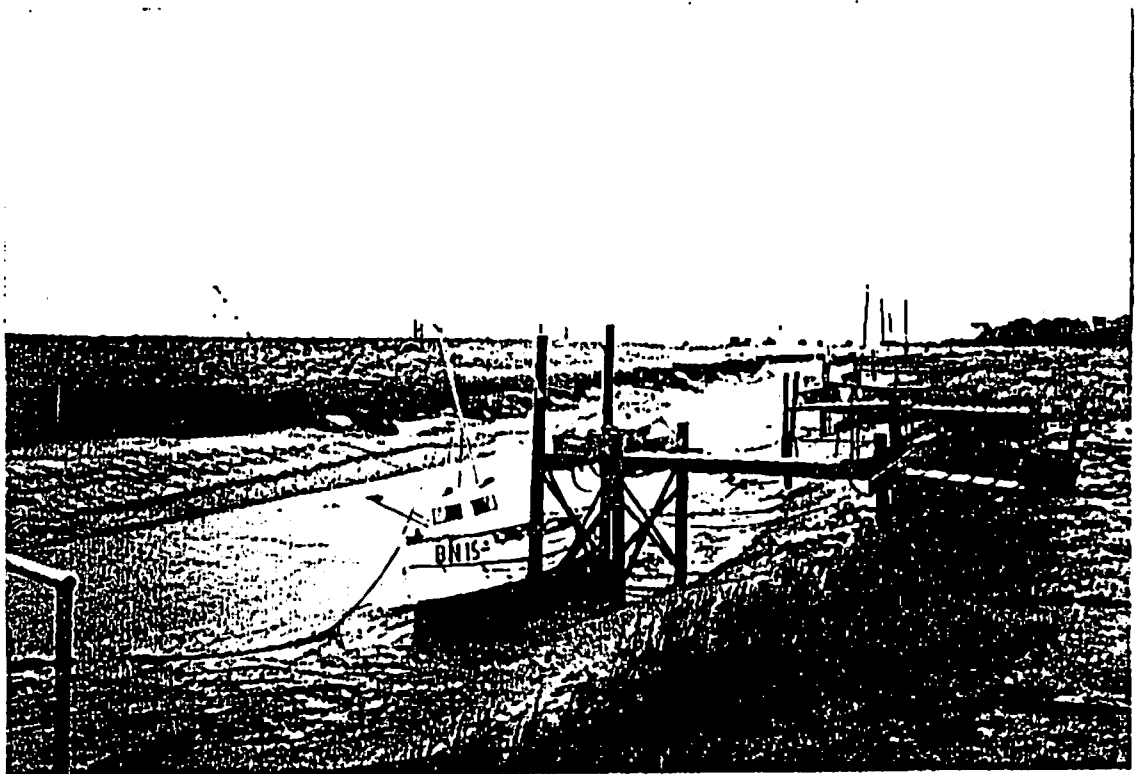


Fig.2 Gibraltar Point, Lincolnshire



Fig.3 Huttoft, Lincolnshire - Boat Towing Vehicles

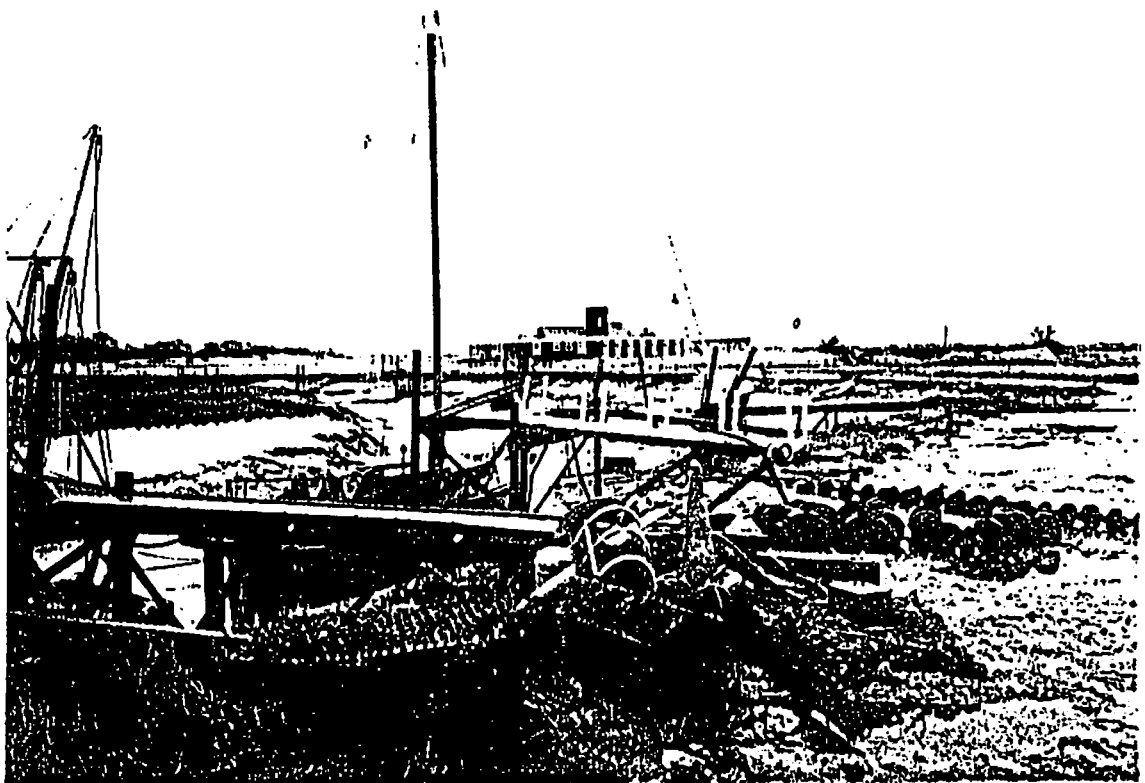


Fig.4 Gibraltar Point, Lincolnshire - Boats and Gear

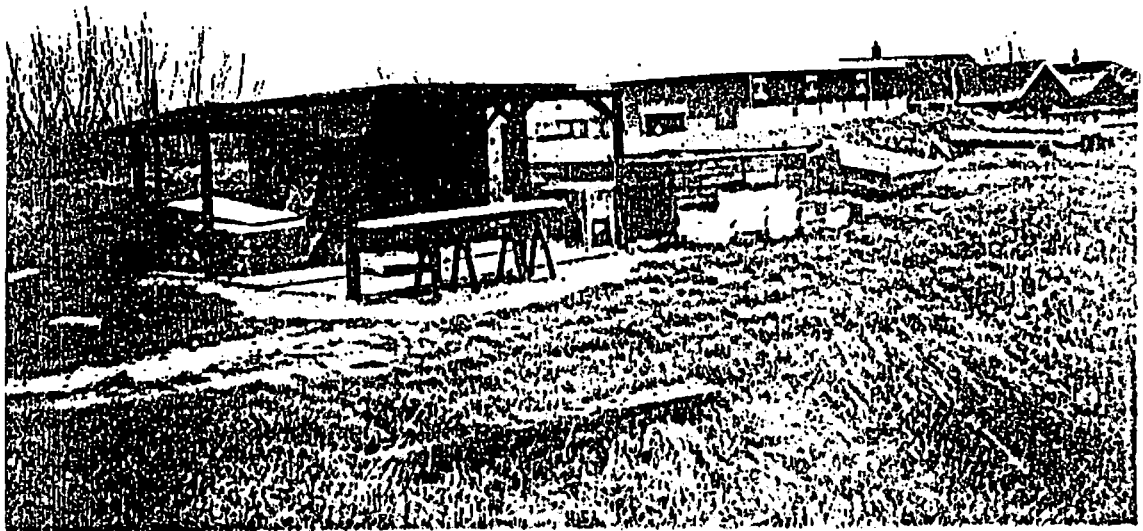


Fig.5 Saltfleet - Crabbers Hut

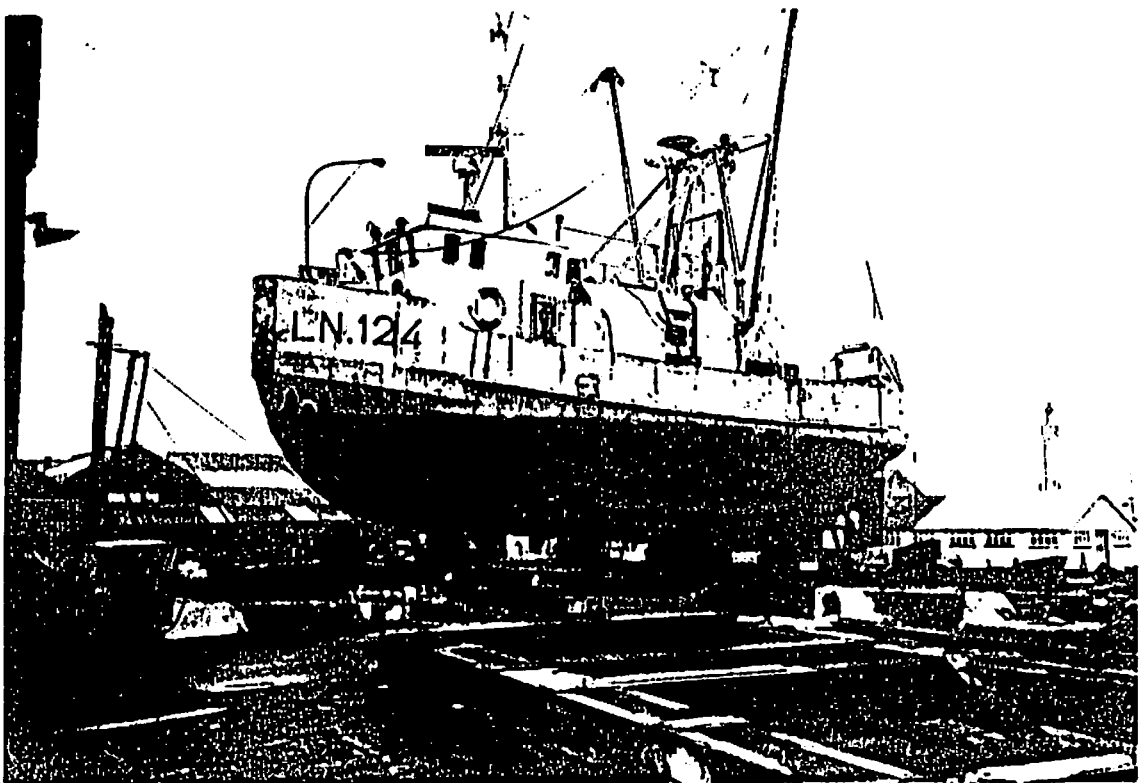


Fig.6 Kings Lynn Cockle Dredger on Grimsby Slip



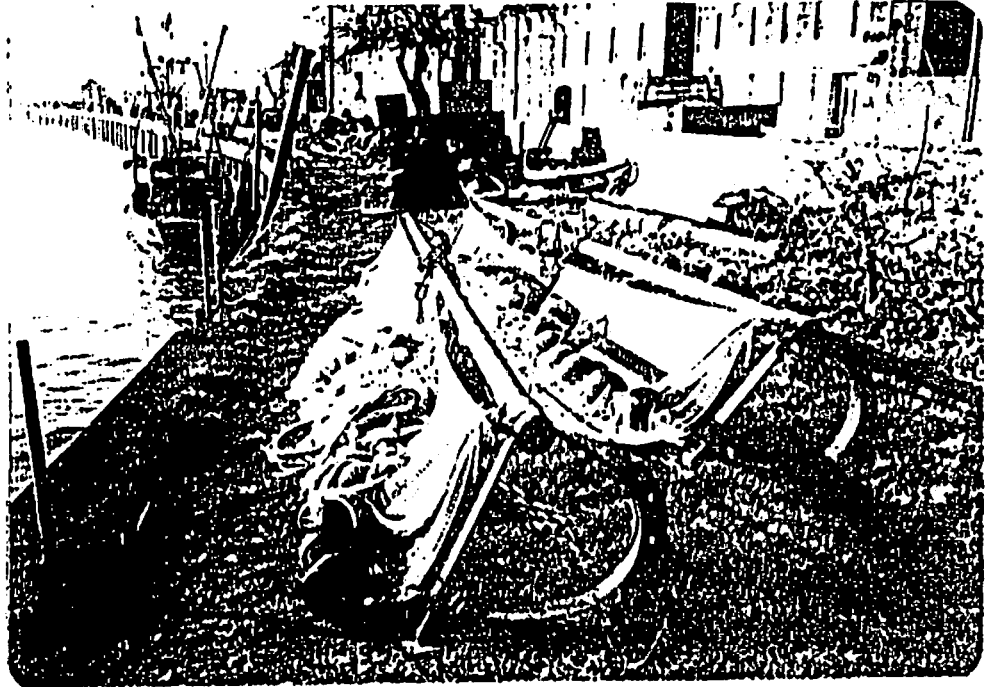


Fig.7 Boston Harbour - Shrimp Trawls



Fig.8 Kings Lynn Beamers at Grimsby

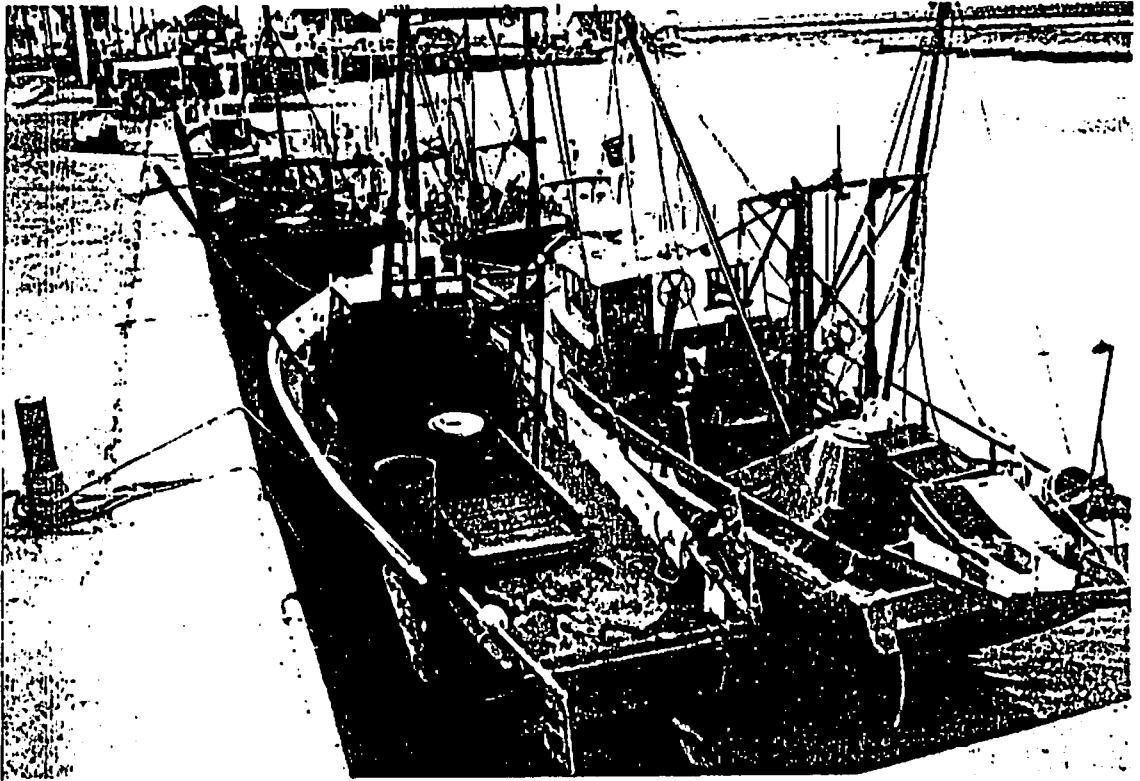


Fig.9 Shrimp Boats at Wells with Boilers on Deck

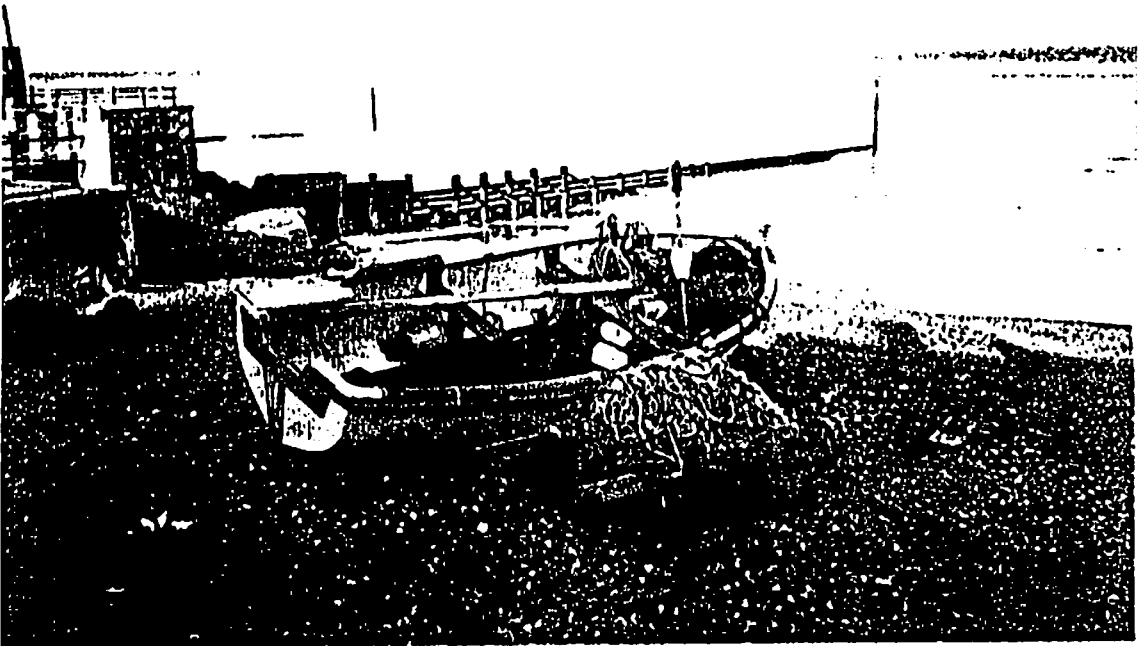


Fig.10 Sheringham - Beach Boat

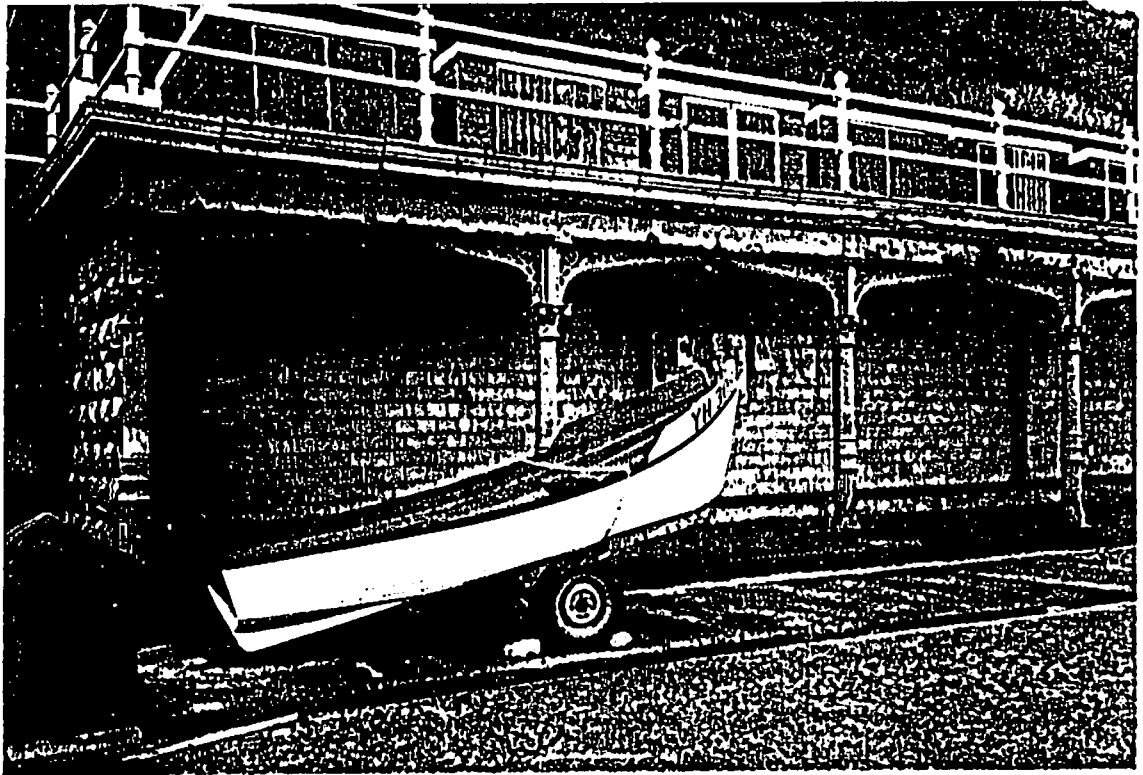


Fig.11 Cromer - Beach Boat



Fig.12 Blakeney Harbour

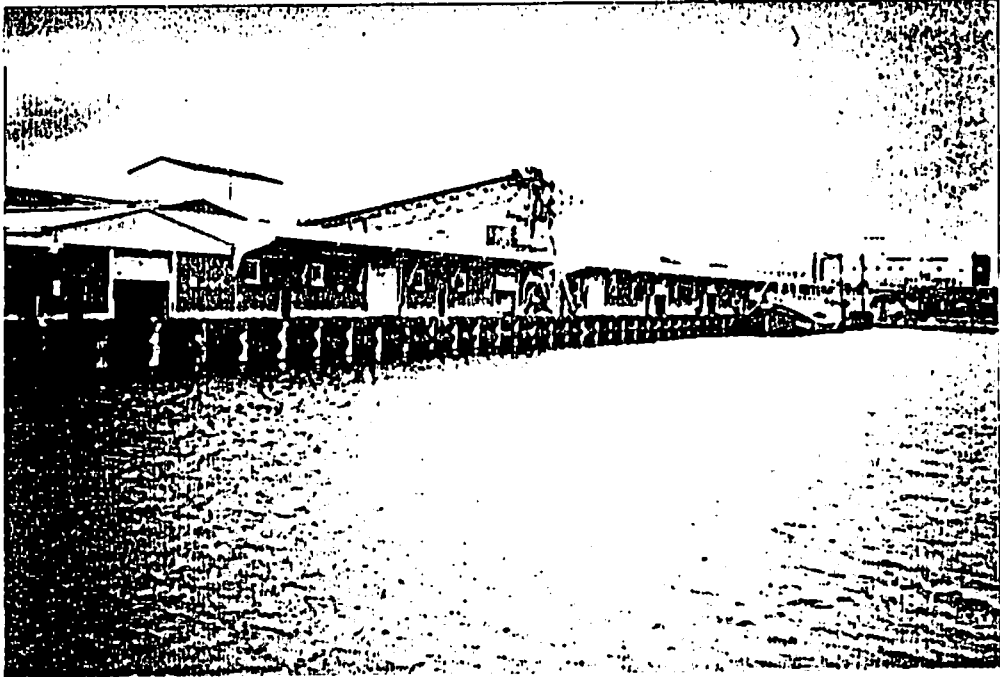


Fig.13 Lowestoft - New Fish Market



Fig.14 Southwold Moorings

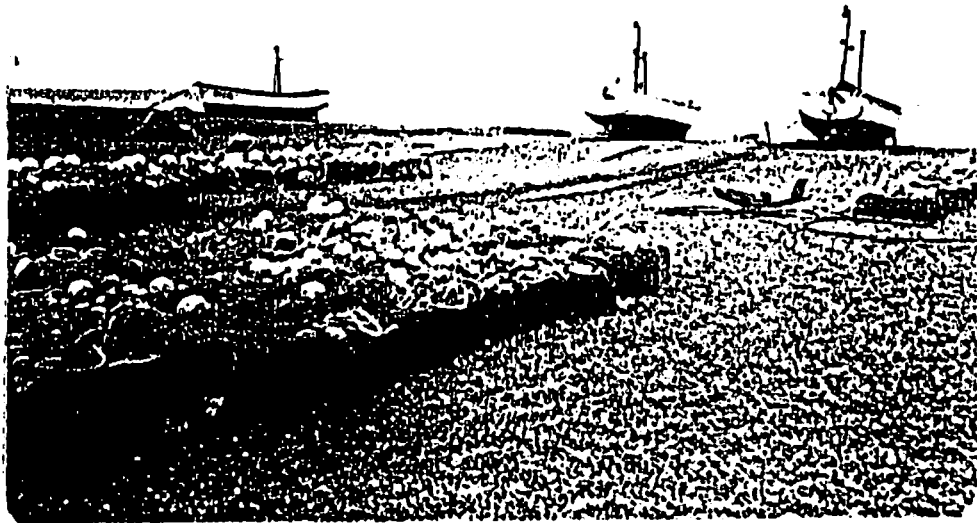


Fig.15 Aldeburgh - Boats and Pots

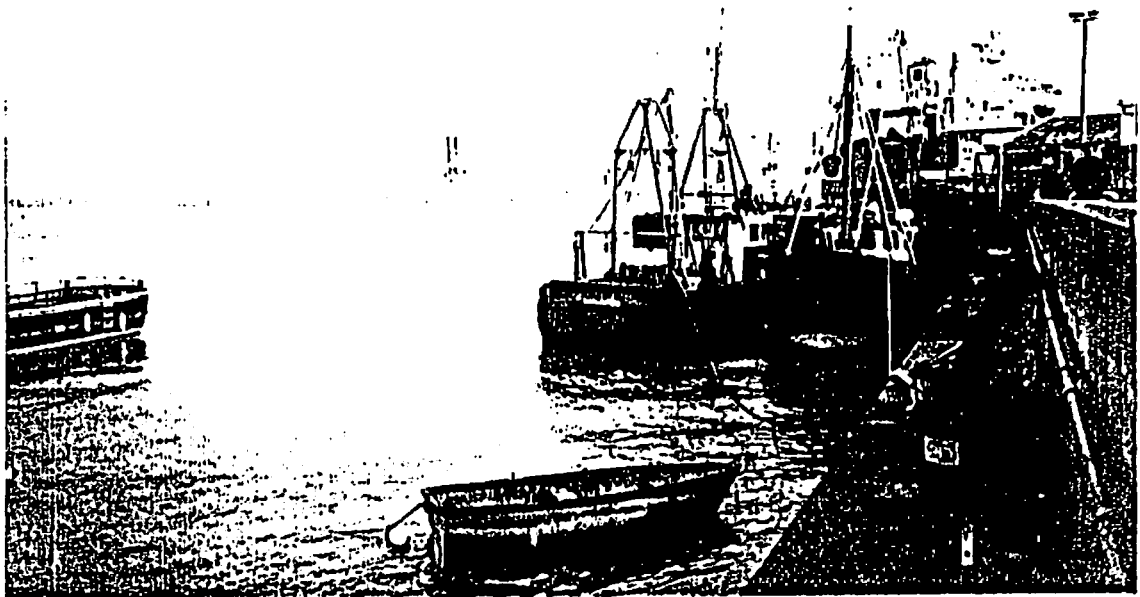


Fig.16 Harwich Fish Landing

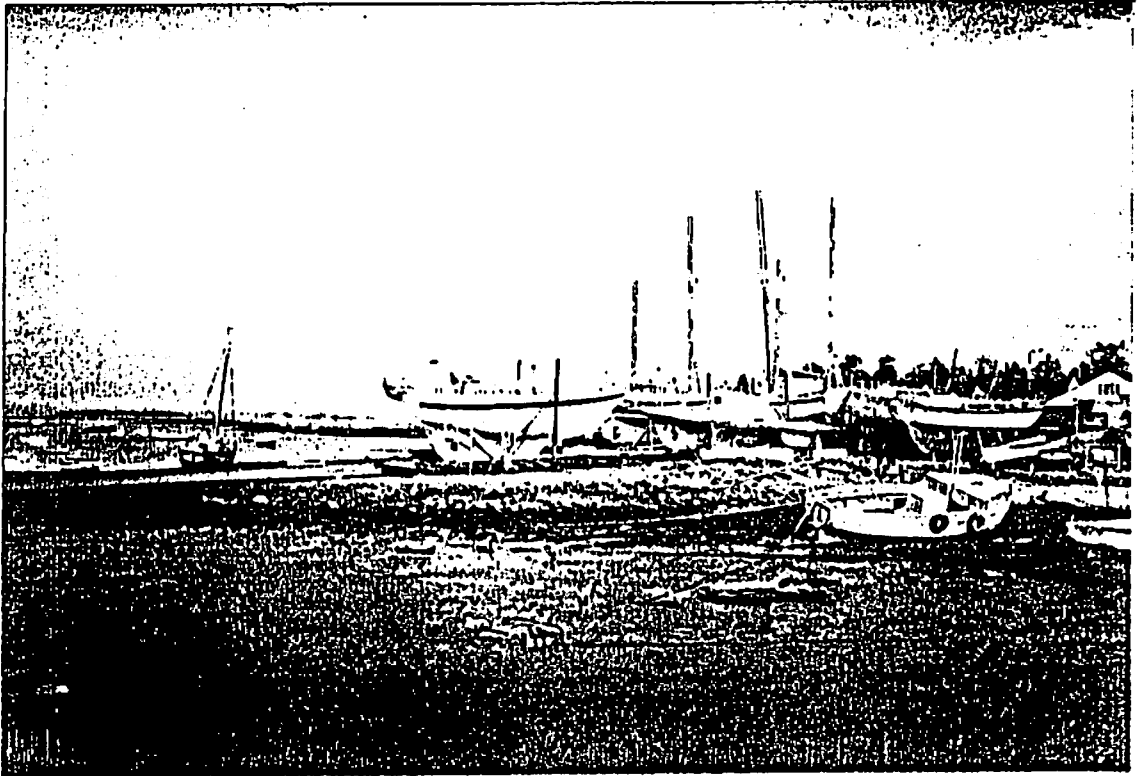


Fig.17 West Mersea Slip

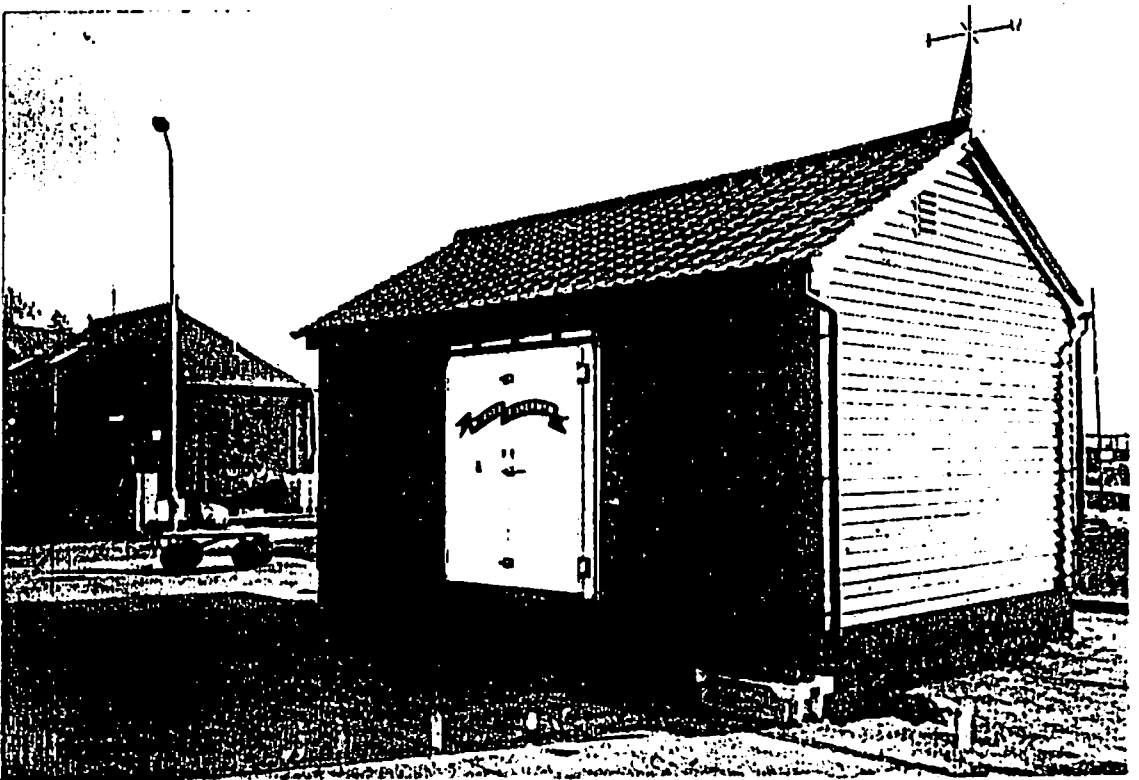


Fig.18 West Mersea Cold Store