

THE CENTRE FOR ENVIRONMENT, FISHERIES AND AQUACULTURE SCIENCE  
LOWESTOFT LABORATORY, LOWESTOFT, SUFFOLK, NR33 0HT.

2002 CHARTER CRUISE PROGRAMME

REPORT: YOUNG FISH SURVEY 2002

(PROVISIONAL: not to be quoted without prior reference to the author)

STAFF:	Team 1 - South Coast	John Dann Kevin Sullivan
	Team 2 - Thames	Terry Watson Gary Burt
	Team 3 - NE Coast	Tom Woods Dave Brown
	Team 4 - Morecambe Bay	Michael Easey (pt1) Phil Welsby Nigel Godden (pt2)

DURATION: 30<sup>th</sup> August - 17<sup>th</sup> September 2002

LOCATION: Flamborough Head - Eastbourne and Morecambe Bay

AIM: To carry out an inshore beam trawl survey of parts of the North Sea, English Channel and Morecambe Bay for juvenile flatfish year class size estimation and collect data on young demersal fish in relation to the environment.

METHODS:

Teams of two staff working on charter vessels carried out the Young Fish Survey. The areas worked in the survey (Figure 1) were as last year. The gear used was a 2-metre wooden beam trawl with a 3mm-mesh liner. Tows of 10-minute duration were carried out and the distance trawled recorded using GPS. At each station all the fish were identified and measured, shrimp catch was estimated volumetrically and benthic species were recorded. Observations of temperature, salinity and sediment type were also collected.

TEAM: 1

LOCATION: Dungeness Bay to Eastbourne (survey areas 16 to 17)

DATES: 31<sup>st</sup> August– 12<sup>th</sup> September 2002

NARRATIVE:

Staff travelled to Folkestone on 31<sup>st</sup> August. Adverse onshore winds prevented work commencing on the 1<sup>st</sup> of September. Continuing bad weather on the 2<sup>nd</sup> meant it was still not possible to start the survey therefore staff travelled to Hastings, where there was more shelter from the prevailing winds, and commenced fishing there on 3<sup>rd</sup>. Fishing continued without interruption until the 6<sup>th</sup> September when the Hastings survey was completed. No fishing was possible on the 7<sup>th</sup>

owing to due to bad weather. The survey resumed on 8<sup>th</sup> at Eastbourne and a total of 12 stations were completed that day. The team travelled to Folkestone on 9<sup>th</sup> to commence the survey. However adverse weather conditions prevailed and the team travelled back to Lowestoft returning to commence fishing again on the 10<sup>th</sup>. The remainder of the survey was completed on the 11<sup>th</sup> and 12<sup>th</sup> September. The survey comprised 4 days fishing at Hastings on the FV "St Richard", 2 at Folkestone on the FV "Lady Patricia" and 1 at Eastbourne on the FV "Anna Louise". No gear damage was encountered. Staff travelled home on the afternoon of the 12<sup>th</sup> September.

#### RESULTS:

A total of 86 valid tows were completed successfully. Samples of plaice and sole, from 7 - 26 cm were collected for ageing. Catch rates for sole and plaice were noticeably higher in Dungeness bay than in the stations fished off Hastings and Rye with 1 group fish predominating.

TEAM: 2

LOCATION: Thames Estuary (survey areas 13 to 15)

DATES: 30<sup>th</sup> August - 7<sup>th</sup> September 2002

NARRATIVE:

Staff travelled to Whitstable on the 30<sup>th</sup> August and began the survey on the FV "Ticino" the following morning. The next 3 days were spent trawling in the south and upper Thames areas completing this section of the survey by the late afternoon on the 2<sup>nd</sup> September.

The following day the team travelled to West Mersea to prepare for working from the FV "Fisher Lassie". Work on surveying the northern Thames commenced on the 4<sup>th</sup> but was curtailed on the 5<sup>th</sup> when the vessel's gearbox developed a severe fault. The vessel had to be towed back to port. With inclement weather forecast for the next day the staff travelled back to Lowestoft. By the afternoon of the 5<sup>th</sup> a good forecast had been received for the following day and the repairs to the gearbox were complete. Staff then returned to West Mersea and completed the survey.

#### RESULTS:

A total of 81 valid tows were completed successfully. Samples of sole and plaice, from 7 - 26 cm were preserved for otolith studies. Catch rates of flatfish were below average, however a total of 80 juvenile sole were tagged for migration studies.

TEAM: 3

LOCATION: North East Coast (survey areas 8 to 11)

DATES: 3<sup>rd</sup> - 12<sup>th</sup> and 14<sup>th</sup>-16<sup>th</sup> September 2002

NARRATIVE:

Staff travelled to Gibraltar Point, Skegness and loaded gear aboard the FV "Challenge" on 3<sup>rd</sup> September. Sampling commenced off Mablethorpe on 4<sup>th</sup> before the vessel proceeded to the Humber. Problems were immediately encountered with the oxygen meter (data required by EA) therefore no oxygen readings were possible. A total of 10 stations were sampled before heading into Grimsby for the night. During the next two days 18 stations in the Humber were completed before the vessel proceeded to Skegness. Challenge sailed again at 06:30 on the 7<sup>th</sup> and steamed to North Norfolk, where 12 stations were sampled before docking in Wells for the night. The following day 11 stations were worked in the Wash after which bad weather curtailed fishing for a day. Work recommenced on the 10<sup>th</sup> and 16 stations were worked on that and the following day before strong winds prevented further fishing. Staff returned to Lowestoft on the 12<sup>th</sup> returning to Boston on the night of the 14<sup>th</sup> to complete the remaining 13 stations the following day.

RESULTS:

A total of 81 valid tows were completed. Samples were collected for Hull University from 15 locations in the Humber. Sole and plaice were preserved for age determination.

TEAM: 4

LOCATION: Morecambe Bay

DATES: 31<sup>st</sup> August - 5<sup>th</sup> September and 14<sup>th</sup> - 17<sup>th</sup> September 2002

NARRATIVE:

Due to unfavourable weather conditions the survey took place over two separate trips. Staff travelled to Morecambe on 30<sup>th</sup> August and fishing commenced at Morecambe using FV "Hope". Good weather ensured work was completed with no problems. Staff then proceeded to Fleetwood and one days work was completed successfully on FV "Albion" before southwesterly winds enforced a break in the survey. When the weather improved staff returned and completed the remaining two days of the survey. This was the first time FV "Albion" had been used for this survey and it proved to be well suited for the task.

One station was missed from both the Morecambe and Fleetwood parts of the survey. This was due to changes in the ground making them no longer fishable. One beam was broken one the first station out of Fleetwood but this tow was reworked successfully. The high level of commitment by the crews of both vessels towards the survey ensured that no other problems were encountered.

RESULTS:

A total of 61 valid tows were completed successfully, catch rates of sole were low with a maximum of 8 taken for a 10-minute tow. Those for plaice were slightly better with 46 being the highest number caught on a tow.

ACKNOWLEDGEMENT:

CEFAS would like to thank the skippers and crews of the participating vessels for their help in the successful completion of this year's survey.

J Dann  
29<sup>th</sup> October 2002

Initialled:

Distribution

Basic List +

K Sullivan

P Welsby

M Easey

T Watson

T Woods

D Brown

J Dann

S Rogers

G Burt

T Boon

N Godden

North Eastern Sea Fisheries Committee

Eastern Sea Fisheries Committee

Kent and Essex Sea Fisheries Committee

Sussex Sea Fisheries Committee

Southern Sea Fisheries Committee

Lancs and Western Sea Fisheries Committee

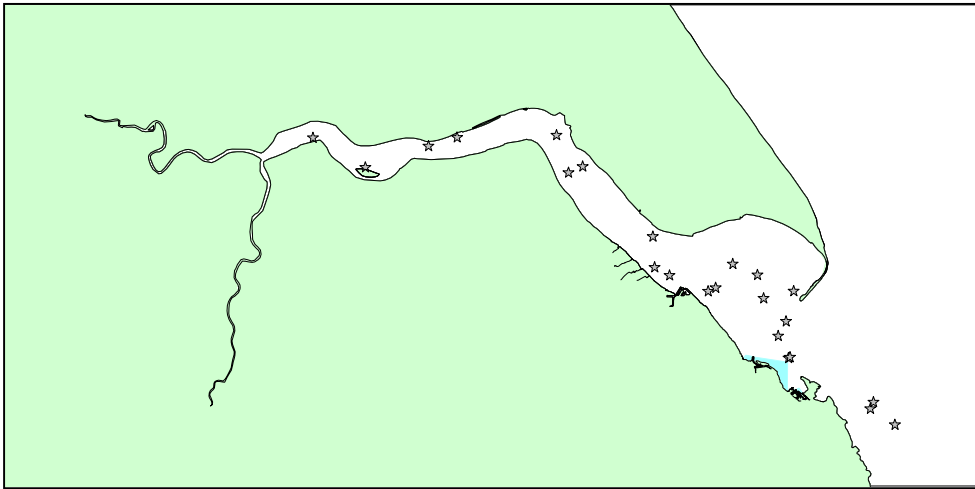
H Gudmundsson - Environment Agency

M Elliot - University of Hull

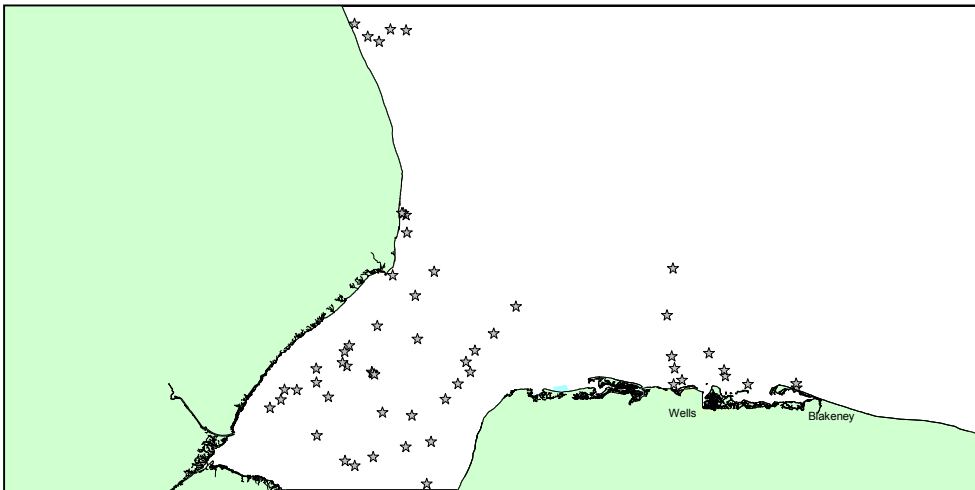
FLR 8825

Participating skippers

Figure 1  
Humber Estuary



Wash



Thames Estuary

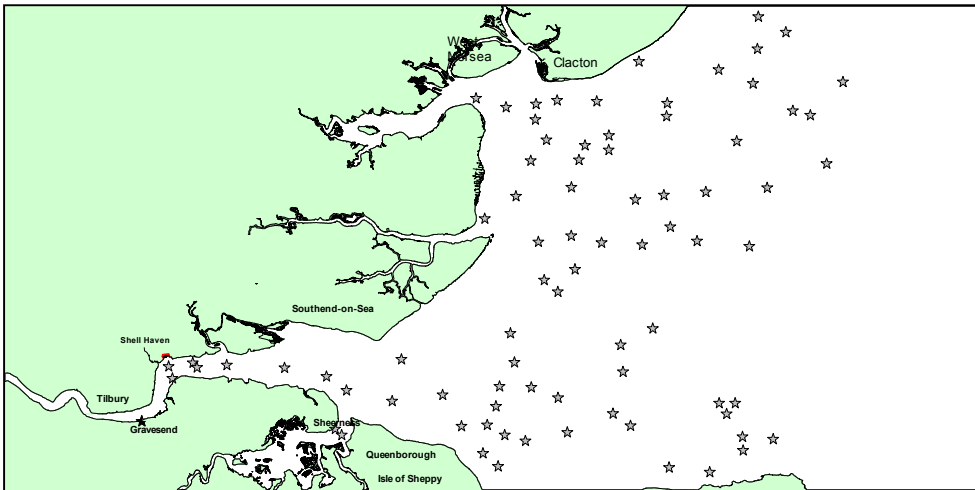
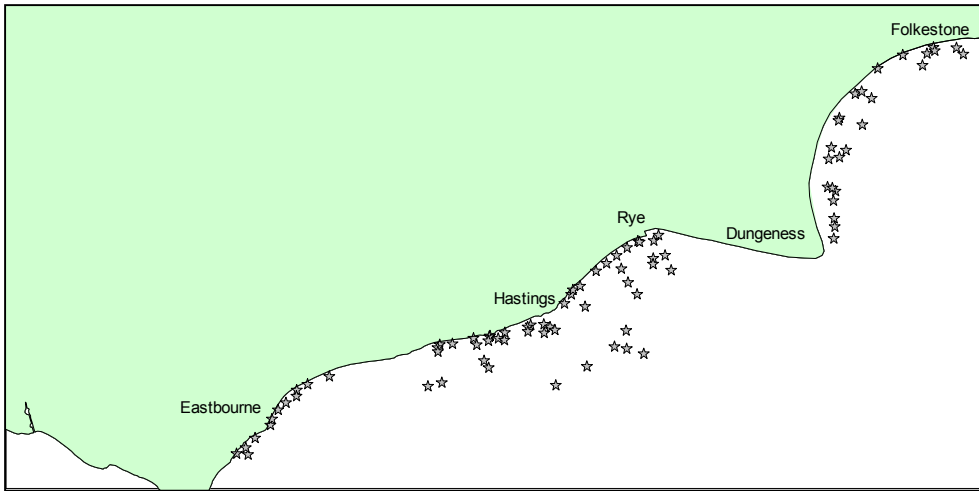


Figure 1 continued  
Eastern Channel



Morecambe Bay

