THE CENTRE FOR ENVIRONMENT, FISHERIES & AQUACULTURE SCIENCE,

LOWESTOFT LABORATORY, LOWESTOFT, SUFFOLK, NR33 0HT.

2006 CHARTER SURVEY PROGRAMME

REPORT: YOUNG FISH SURVEY 2006

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

STAFF: Team 1 - South Coast John Dann

Joanne Smith

Team 2 - Thames Gary Burt

Mark Etherton Richard Mitchell

Team 3 - NE Coast Tom Woods

Steven Shaw

LOCATION: Flamborough Head - Eastbourne

AIM:

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

METHODS:

Three teams of two staff working on charter vessels carried out the Young Fish Survey. The standard stations worked in the survey areas (Figure 1) were as last year. The gear used was a 2-metre wooden beam trawl with a 3mm-mesh liner. Tows of ten minute duration were carried out. 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 recorded. Otoliths were collected for ageing purposes from sole and plaice

TEAM: 1

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

DATES: 29th August to 7th September

NARRATIVE:

Staff travelled to Eastbourne on 29th August and the survey commenced the following day using FV Halycon. A total of fourteen valid survey stations were completed without any damage. On completion of the survey from Eastbourne the staff travelled to Hastings where forty-five valid tows were fished successfully over a period of three days between Bexhill and Rye Harbour on FV St. Richard. A further twenty-six valid tows were carried out using FV

Lady Patricia from Folkestone, after which the staff travelled back to Lowestoft on $7^{\rm th}$ September.

RESULTS:

All of the eighty-five core tows were completed successfully. The catch rates for sole and plaice varied between survey locations, with very few fish being taken at the western end of the survey area in Pevensey and Norman's Bays. Numbers of plaice taken in Dungeness Bay were lower than in 2005 and restricted to the western end of the bay; sole 0-group catches were distributed mainly around the entrance to Rye Harbour, off Dungeness power station and close inshore at Hastings Stade.

TEAM: 2

LOCATION: Greater Thames Estuary (survey areas 13 to 15)

DATES: 28th August to 7th September

NARRATIVE:

Staff travelled from Lowestoft to West Mersea to meet the skipper of the FV Fisher Lassie on 28th August and commenced fishing the following day. All of the stations accessible from West Mersea were successfully completed over a four-day period. A starter motor failure delayed proceedings on the second day's fishing but this did not impede the completion of the survey in the allotted time. The sea-state varied between slight and moderate. Following a change of one member of staff during the first part of the survey, staff travelled to Whitstable for the completion of the second half of the survey. After a day's delay due to bad weather, fishing commenced aboard the FV Columbine on the 4th September. A further three day's fishing were successfully completed in fine weather and staff returned to Lowestoft on the 7th September. A total of five nets were damaged during the survey mainly as a consequence of large catches of benthos and shell encountered off the north Kent coast.

RESULTS:

A total of eighty valid tows were completed, forty-four from West Mersea and thirty-six from Whitstable. 1+-group sole were relatively well dispersed throughout the survey with the exception of the stations west of Whitstable along the north Kent coast. Larger congregations were encountered at stations up the River Thames, in particular at Mucking No.1 and the Swatchway. Although present, there were no particularly large catches of 0-group sole when initially compared to some of the recent years. Catches of 0-group and 1+-group plaice remained low throughout the survey but were more abundant along the North Kent coast stations. The catches of 0-group cod appeared to be more than usual. The greater catch rates occurred further up the estuary, in particular at Mucking No.1 and the Swatchway again as well as Medway No.6.

TEAM: 3

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

DATES: 26th August to 7th September

NARRATIVE:

Staff travelled to Gibraltar Point, Skegness on 26th August and loaded gear aboard the FV Challenge. The following day the vessel sailed from Gibraltar Point and steamed south to commence fishing in the Wash. Twenty-one stations were completed in the first two days before bad weather stopped the survey. The survey recommenced on 30th August with FV Challenge sailing from Gibraltar Point and heading north. Twenty-eight stations were completed over the course of three days off north Lincolnshire and in the Humber before deteriorating weather again stopped the survey. Staff travelled back to Lowestoft from Grimsby until the survey recommenced on 4th September, when six stations were completed between Mablethorpe and Gibraltar Point. The remaining twenty-six stations off north Norfolk and south Lincolnshire were completed during the following three days. Staff returned to Lowestoft on 7th September.

RESULTS:

A total of eighty-one valid stations from a total of eighty-four were completed. Dissolved oxygen readings were taken at Environment Agency stations in the Humber. Salinity samples were collected at alternate stations. Initial observations suggest that catch rates of 0-group and 1+-group plaice and sole were consistently higher throughout the survey area compared with recent years, with catch numbers exceeding three hundred and twenty fish for each species at one off Mablethorpe.

G J Burt 6th October 2006

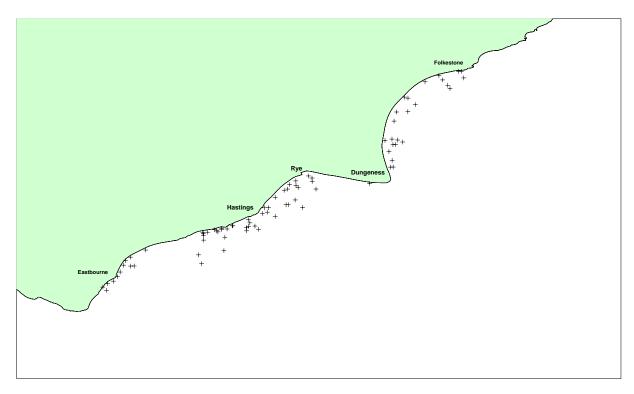
Initialled:

DISTRIBUTION:

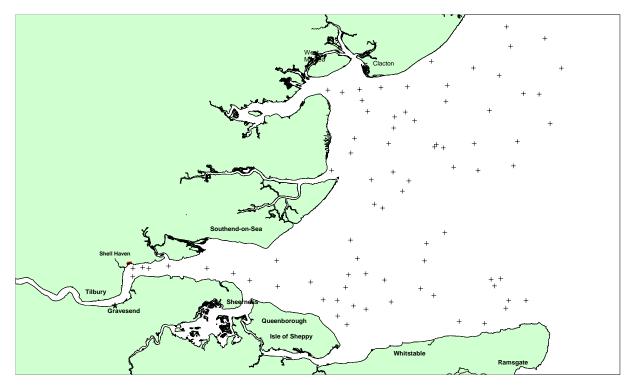
Basic list +
Staff on cruise
Rob Blyth-Skyrme - English Nature
North Eastern Sea Fisheries Committee
Eastern Sea Fisheries Committee
Kent and Essex Sea Fisheries Committee
Sussex Sea Fisheries Committee
Southern Sea Fisheries Committee
Lancs and Western Sea Fisheries Committee
H Gudmundsson - Environment Agency
S Colclough - Environment Agency
Participating skippers
FLR9641

Figure 1. Shot positions 2006 YFS

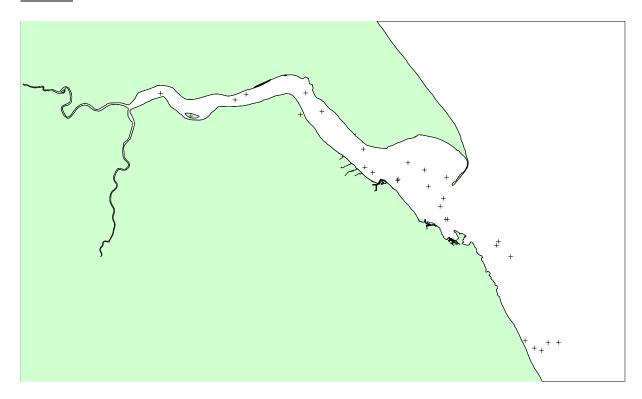
Dungeness Bay to Eastbourne



Greater Thames Estuary



<u>Humber</u>



Wash

