

THE CENTRE FOR ENVIRONMENT, FISHERIES AND AQUACULTURE SCIENCE LOWESTOFT
LABORATORY, LOWESTOFT, SUFFOLK NR33 OHT

2006 CHARTER PROGRAMME

REPORT: INA-K 1/2006

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

STAFF:

S Warne

P Welsby (10th – 12th Nov)

M Etherton (14th – 21st Nov)

DURATION:

0300 h 10th November

2000 h 21st November

LOCALITY:

Thames Estuary

AIMS:

1. To assess the distribution and abundance of herring in the Thames Estuary using a mid-water trawl.
2. To obtain an independent estimate of the age structure and maturity of the Thames spring spawning herring stock.
3. To collect CTD data on selected stations over the estuary.
4. To collect length distributions of bass for S Walmsley.
5. To collect juvenile herring samples for C. Fox for daily growth studies.
6. To collect bass for stomach content analysis.

NARRATIVE:

The scientific staff travelled to Leigh-on-Sea on 9th November and joined INA-K at 0300 h the next day.

For the first 5 days of the survey INA-K worked out of Leigh-on-Sea and, from there, surveyed Margate Roads, the Barrows, Princes Channel, the Kentish Flats and the Oaze. After putting the scientific staff ashore at Leigh-on-Sea on the evening of the 14th, K. Knapp took the INA-K around to dock in Wallasea Marina on the River Crouch. The INA-K then proceeded to work out of Wallasea for the following two days surveying in the River Blackwater, the Middle Deeps, Swire Hole, the River Crouch and the River Roach. The INA-K returned to Leigh-on-sea on the evening of the 17th and worked out of here for the remaining four days of the survey. During these final four days Blyth sands, The Warp, the Nore, The Swin, West Barrows and Stangate Creek were surveyed. The survey finished on the evening of the 11th day, with poor weather conditions expected for the following morning.

RESULTS:

AIM 1. A total of 34 valid hauls of varying length were made with the Larsen sprat trawl (figure 1). The length distribution of all the herring caught during the survey is given in figure 2. Two further hauls were also carried out on the same station in Barrow Deep but these were both classed as invalid due to gear damage being sustained.

AIM 2. A total of 540 herring were sampled for length and maturity and otolithed for age structure to facilitate stock analysis.

AIM 3. A total of 20 CTD samples were taken on pre-selected trawl stations.

AIM 4. A total of 122 bass were caught and measured.

AIM 5. Samples of '0' group herring were collected for daily growth studies.

AIM 6. A total of 16 bass were collected for stomach content analysis.

Catches of herring were back up to more normal levels this year, after the very low numbers encountered on last year's survey. Peaks in the recorded length distribution were at 7.5cm and 26cm. A record catch of 2500kg of herring was taken on Station 26, the Warps and another very large catch of 1000kg was taken on the last station of the survey in the West Swin. Higher than average numbers of '1' year old cod were encountered with 69 being caught on station 23 alone. A considerably lower number of bass (112) was caught in comparison to last year's survey (426). Four sea trout were caught on the third day, a survey first. The water was observed to be unusually clear throughout the duration of the survey.

I would like to record my thanks to Ken Knapp, the owner of INA-K, and the crew (David and Nate), for their hard work and dedication towards the smooth running and success of the survey.

S Warne
22 November 2006

INITIALLED:

DISTRIBUTION:

Basic List+
B Roel
P A Large
M E Etherton
S Warne
Mr K Knapp
N. Mynard, DEFRA Fisheries Office, Harwich

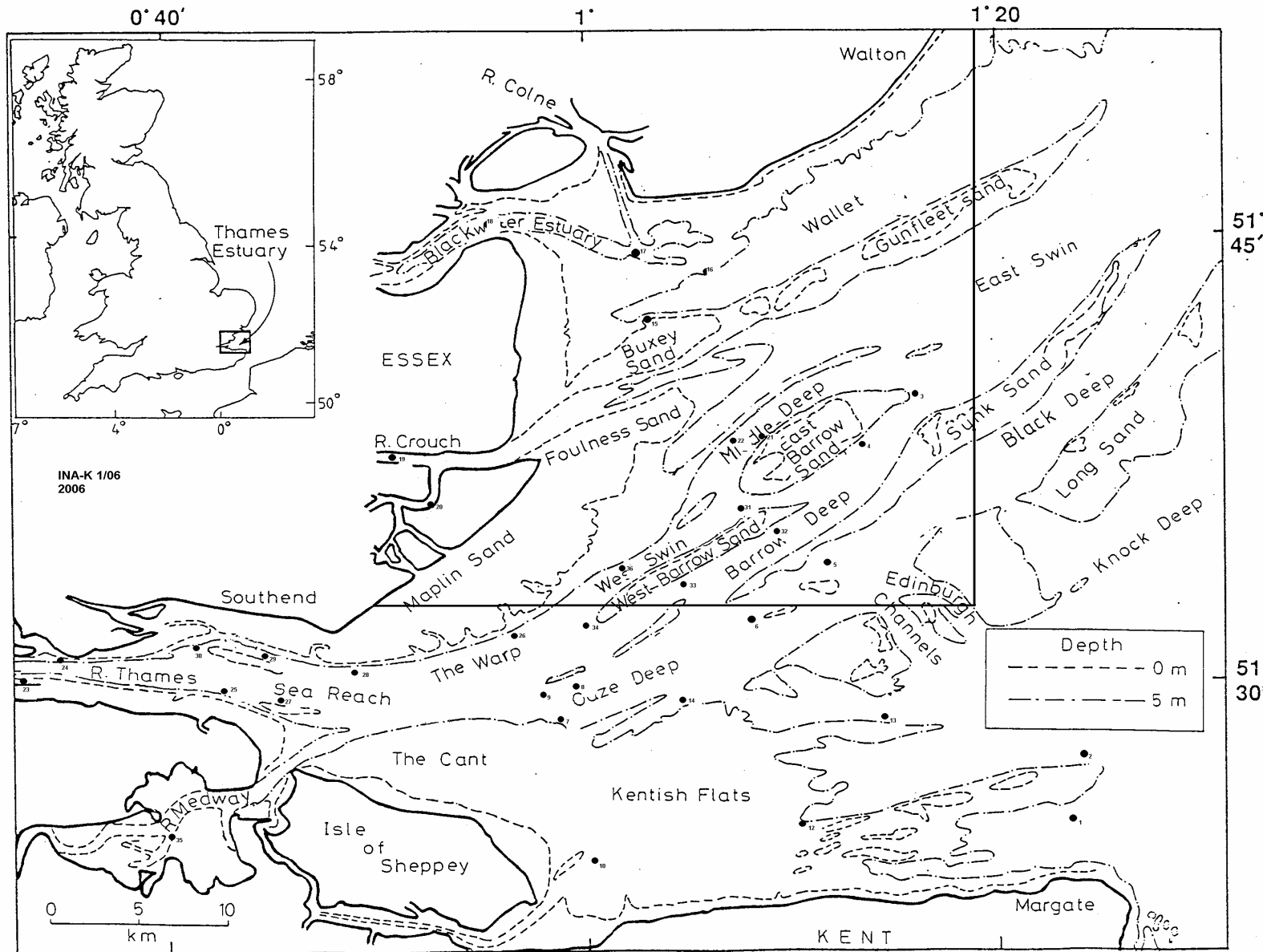


Figure 2: Blackwater herring Ina-K 1/2006
Total numbers (stations standardised to 60 mins)

