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MINISTRY OF AGRICULTURE, FISHERIES AND FOOD
FISHERIES LABORATORY, LOWESTOFT, SUFFOLK, ENGLAND

1993 CHARTER VESSEL CRUISE PROGRAMME

REPORT: INA-K: CRUISE 1
(PROVISIONAL: Not to be quoted without prior reference to the author)

STAFF

T J Hulme
S Warnes

DURATION

0230h, 17 November
1600h, 28 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 of the Thames spring spawning herring stock.

NARRATIVE

The scientific staff travelled to Leigh-on-Sea on 16 November and joined INA-K at 0245h the next day.

For the duration of the survey INA-K worked out of Leigh-on-Sea and, from there, surveyed different parts of the river and estuary making the best use of tides and prevailing weather conditions to cover as big an area as possible. Unfortunately, the survey was dogged by a period of SE and NE winds which not only kept the fish from shoaling-up but brought severe wintry conditions. There were only two days when the wind was from a westerly direction, and these produced marked increases in the number of fish traces and catches. The scientific staff travelled back to Lowestoft on 29 November.

RESULTS

Aim 1: A total of 28 hauls of varying lengths were made with the Larsen sprat trawl, two in the R Thames and the others at the positions shown on the attached chart. Herring were

present on every haul, and the length distribution of all the herring caught during the survey is given on the attached figure.

Aim 2: 332 fish were biologically examined and otolithed for stock analysis. The majority of the fish of commercial size were of an unusually high quality with large fat reserved in the body cavity. Large spent fish were again present in the catches, but not so many as last year, as these were mixed with a surprising number of large (>26cm) early filling fish.

Sprats were present on 26 of the 28 hauls but no large catches were made and the fish were mainly 0-groups. The length distribution of all the sprats caught during the survey is given on the attached chart.

Bass were found across the survey area in unusually high numbers with 67 out of the 108 fish caught being 0-groups.

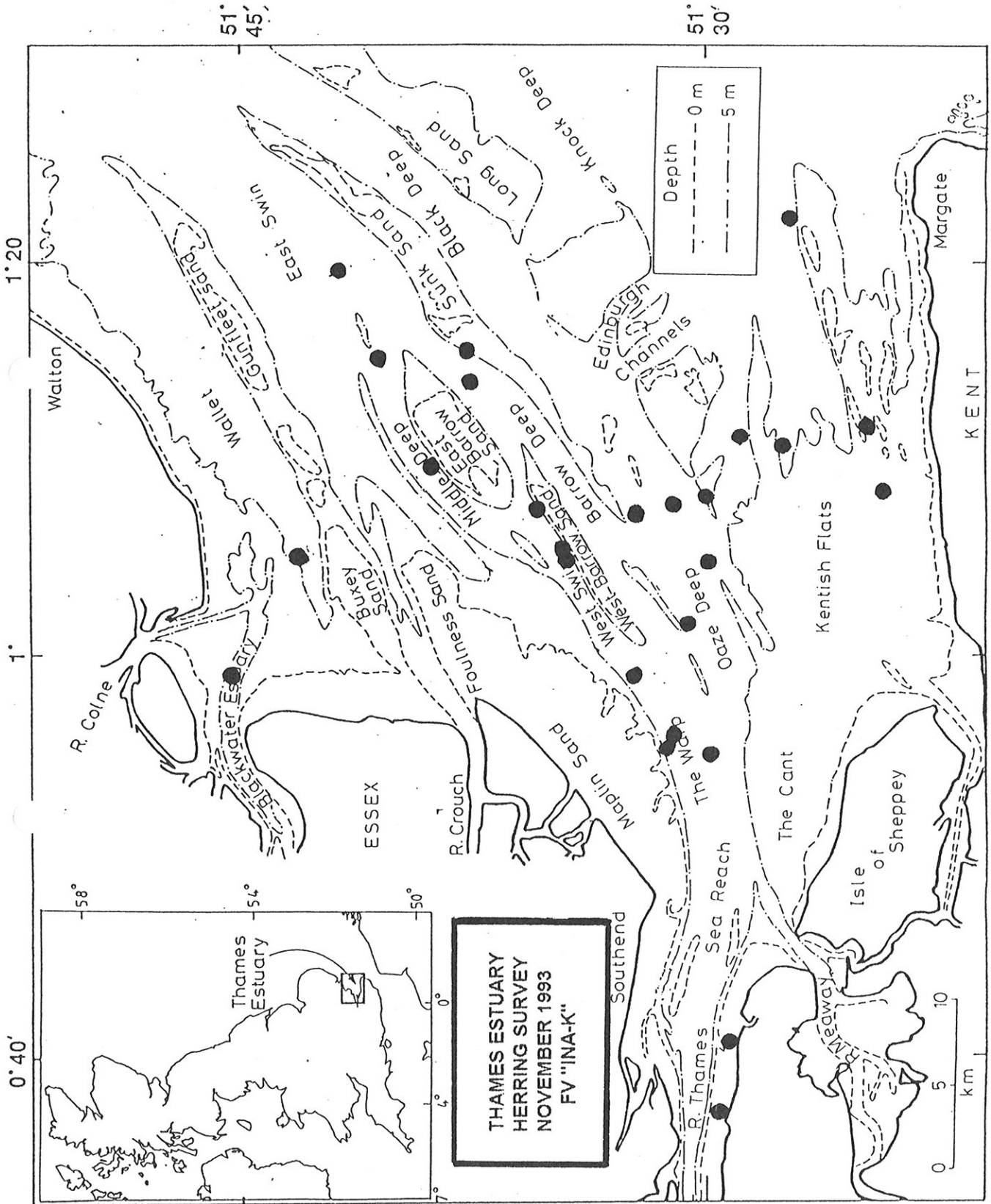
I would like to record my thanks to Messrs Colin and Ken Knapp, owners and crew of the INA-K, for their considerable contribution to the smooth running and success of the survey.

T J Hulme
10 December 1993

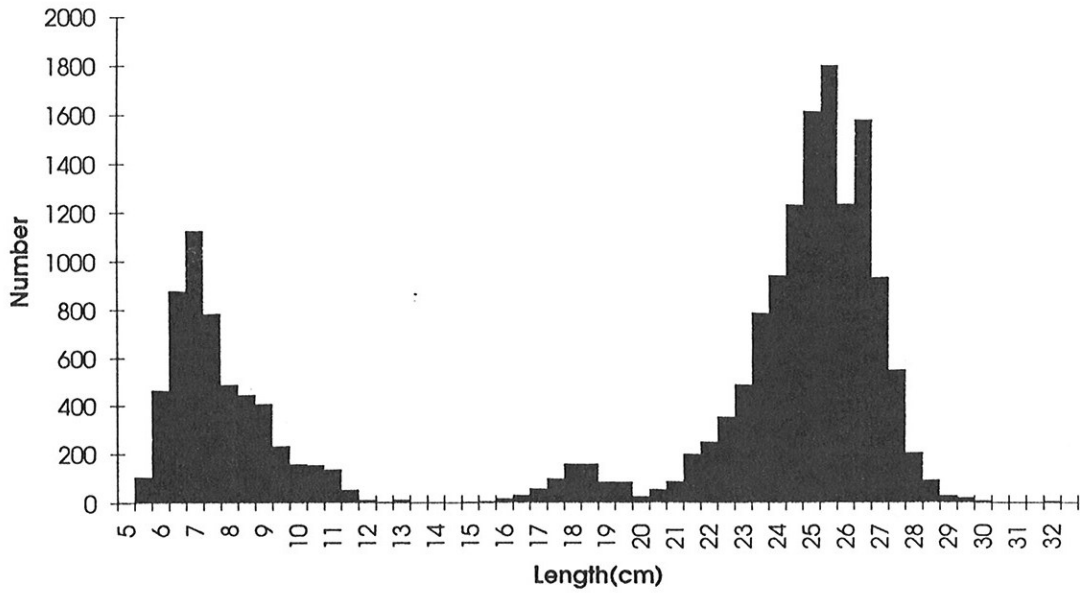
INITIALLED: JWH

DISTRIBUTION:

Basic List +
T J Hulme
S Warnes
Mr Colin Knapp
Eastern Sea Fisheries Committee
Kent and Essex Sea Fisheries Committee



INA-K Survey, Nov. 1993:- Thames Estuary Herring



INA-K Survey, Nov. 1993:- Thames Estuary Sprat

