



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

1994 CHARTER VESSEL PROGRAMME

REPORT: ANGELLE MARIE 1/94

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

STAFF: D Eaton  
M Easey  
N Burt  
D Jacobs

DURATION: 4-6 February 1994

LOCATION: Chichester Harbour and Southampton Water

AIMS:

1. To collect live bass to replenish stocks held for experimental purposes at Lowestoft.
2. To investigate the feasibility of using trawl surveys to estimate the abundance of the 1993 year class in the area.

NARRATIVE:

D Eaton and M Easey travelled to Southsea on 4 February, and after meeting with staff at the Portsmouth Sea-life Centre to discuss the tagging and release of large bass surplus to their requirements, met with the Angelle Marie in Chichester Harbour and loaded equipment. The trawl survey was carried out in Chichester Harbour the following day, but because of the lack of small bass for return to the laboratory, and the paucity of bass in general, fishing operations were switched to Southampton Water for the second day of the survey. Live bass were transferred to aerated tanks for transporting back to Lowestoft, and all staff returned on the afternoon of 6 February.

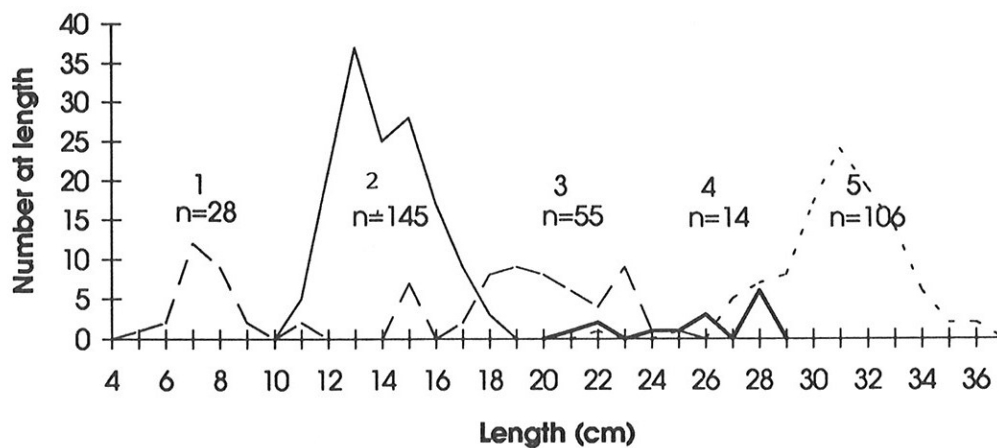
RESULTS:

Six out of eleven tows completed in Chichester Harbour caught bass but the total was only 31 fish in the length range 5-15 cm. One tow undertaken outside the harbour in Hayling Bay for comparative purposes yielded 131 bass, all of them except 4 being > 20 cm. Surface temperature in the harbour was monitored throughout the survey, and varied from 4.9°C at the head of the harbour to 6.0°C at the entrance. Generally the temperature inside the harbour was between 0.5 and 1.0°C lower than the open sea temperature. The temperatures overall were much lower than had been expected. Approximately two weeks previously they had been reported as being between 8 and 9°. This was before the serious flooding which occurred in the area. Enormous amounts of rain water were pumped into the harbour during flood relief operations, as well as the natural run-off. Normally there is not a lot of

fresh-water input into the harbour which is the main reason for its choice as the study area. All bass caught in the harbour were taken in tows near the entrance.

Tows in Southampton Water for live bass caught 249 of which 230 were returned to Lowestoft. To avoid unnecessary damage to the bass they were not measured except for the 19 mortalities, but it was clear that there were very few, if any, of the 1993 year class among them. Subsequent analysis of scale samples taken during the survey and from mortalities at the Lowestoft laboratory showed that the majority (145) of the bass caught were from the 1992 year class followed by the 1989 year class (106) which were still present in the area at a surprisingly small size for their age (22-36 cm). Only 3 sizeable bass were caught during the survey. The age/length distribution from the survey is shown below.

### AGE-LENGTH DISTRIBUTION



D Eaton  
10 May 1994

INITIALED: GPA

DISTRIBUTION:

Basic list +

D Eaton

M Easey

N Burt

D Jacobs

D Baldacchino, Skipper ANGELLE MARIE