

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD
FISHERIES LABORATORY, LOWESTOFT, SUFFOLK NR33 0HT, ENGLAND

1989 CHARTER VESSEL PROGRAMME

REPORT: ANGELLE MARIE 1/89

STAFF: G Pickett
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DURATION: 17-22 September 1989

LOCATION: Solent and Southampton Water

- AIMS: 1. To carry out the routine survey of pre-recruit bass using a standard high-headline trawl with cod-end liner.
2. To assess the effectiveness of a 7 fathom sand-eel trawl for sampling '0' and '1' group bass.
3. To tag juvenile bass (25-36 cm total length) in the harbours (prospective nursery areas) adjoining the Solent.

NARRATIVE: Staff travelled to Portsmouth on 16 September and loaded sampling equipment aboard the charter vessel that afternoon. The survey commenced off Lee-on-Solent on the morning of 17 September and stations off the Isle of Wight and Fawley were also worked that day. Remaining stations in Southampton Water were completed working out of Warsash (R Hamble) on 18 September, after which the vessel returned to Camber Docks. Stations in the Eastern Solent and Langstone Harbour were worked with both trawls on 19 and 20 September respectively after which the survey was completed working from a marina in Chichester Harbour (for Chichester Harbour and Hayling Bay stations). Staff returned to Lowestoft from Hayling Island on the evening of 22 September.

RESULTS: 1. 32 stations were worked with the standard high-headline trawl but a further three on the bass survey grid were not attempted due to weather and local marine engineering projects. A total of 675 bass mainly in the 16-30 cm range ('1' group and '2' group), were caught in the standard trawl plus 42 '0' groups (6-14 cm).

2. 16 stations were worked with the sand-eel trawl replicating positions covered with the standard trawl. These were mainly in Langstone and Chichester Harbours. 855 bass were caught, 646 of which were '1' group (1988 year class), 141 were '0' group and the remainder, bar one were '2' group. This trawl was more effective than the standard trawl for catching '0' and '1' group but less effective for '2' group and older in September.

3. 302 bass were tagged, using mini-Howitt bridle tags. These were released at three locations:- Southampton Water (122 fish), Langstone Harbour (78 fish) and Chichester Harbour (102 fish).

The survey was notable for the near absence of the 1984-86 year-classes of bass, supporting conclusions drawn from surveys in the 3 previous years. By contrast the Solent area has received moderate-good recruitment from 1987 to 1989.