

1991 CHARTER VESSEL PROGRAMME

REPORT: ANGELLE MARIE 2/91

STAFF:

G D Pickett
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DURATION:

8-17 September 1991

LOCATION:

Solent, Southampton Water, Langstone and Chichester harbours, Poole Harbour and Hampshire and Dorset ports

AIMS:

1. To carry out a survey of pre-recruit bass in the Solent area using a standard high-headline trawl with cod-end liner fitted.
2. To tag juvenile/pre-recruit bass in nursery areas.
3. To sample commercial catches of bass as available by visiting merchants and dealers on West Sussex and Hants coast.
4. To carry out a census of bass fishing effort in the above areas.

NARRATIVE:

Staff travelled to Portsmouth on Sunday 8 September and attempted to sample locally landed bass that evening. Fishing commenced on the morning of 9 September, working from the Hamble River and covering the sampling grid in Southampton water. A fastener resulted in trawl damage and the loss of over 2 hours fishing time that day. Over the next three days stations in the Eastern Solent, Langstone and Chichester harbours were worked using the standard survey trawl. On Friday 13 September, 5 additional stations were worked in and near Chichester Harbour using a commercial 10 metre headline sand-eel trawl in an attempt to catch a larger sample of '0' and '1' group bass.

Sampling of commercial catches was carried out on 14 and 15 September at local merchants and at Poole and effort census as far west as Weymouth was carried out over the same days. This represented a departure from the programme in which it was intended to carry out sampling eastwards after completion of the charter survey. An arrangement had been made at short notice to tag bass in Poole Harbour from a local charter angling vessel. This task was completed on 16 September and as severe weather had made further sampling of commercial catches impractical, staff returned to Lowestoft on 17 September.

RESULTS:

1. Thirty-three trawl stations covering the main survey area were completed in 4 days and these produced 295 bass in the length range 13-40 cm. Juvenile bass, all under 34 cm, were concentrated in the Southampton Water and Chichester Harbour Nursery areas. Only 3 bass above the 36 cm MLS were caught, all outside the nursery areas. Langstone Harbour was notable for producing few fish of any species and only one bass.

The commercial sand-eel trawl caught 749 juvenile bass in the length range 14-31 cm and 750 recently recruited '0' group bass in the 2.5-5.5 cm length range. The bulk of the juvenile catch

taken in the whole survey (95%), consisted of the 1989 year-class. These fish appear to have made little growth since the May survey (range then 13-24 cm, modal length 17.5 cm) with a length range of 17-27 cm and a modal length of 19.5 cm.

Overall catch rates for bass with the standard trawl were 0.6/minute, compared with 1.2/minute in May. The tows with the commercial sand-eel trawl produced a catch rate of 9.5/minute (excluding '0' groups). This compares with 10.2/minute and 5.7/minute in September 1990 and May 1991 respectively.

A total of only 28 bass (16 & 12 in the standard and sand-eel trawls respectively) of the large 1990 year-class, were taken, size range 13-16 cm. This suggests either poor local recruitment/survival or inaccessibility to the fishing gear.

2. Three hundred and seven bass from the trawl survey were tagged and released in nursery areas, mainly Southampton Water and Chichester Harbour using Hallprint 'T-bar' anchor tags. An additional 44 bass captured on rod and line were similarly tagged and released in the Poole Harbour nursery area.

3. Commercial bass catches were sampled at Portsmouth (3) and Poole (2). Landings had been light and samples were small, totalling 42 measurements and 29 scale samples. Some of the catches, however, included large fish with two specimens over 80 cm total length.

4. Effort census and fishing activity sampling were carried out by interviewing fishermen and 'correspondents' at Hamble, Poole, Swanage and Weymouth and by observation at sea, including within nursery areas.

In general the number of vessels engaged in bass fishing has declined in recent years and there is a continuing move from netting to lining methods. Some vessels still appear to be engaged in rod and lining for small bass both outside and inside nursery areas.

G D Pickett
27 September 1991

INITIALLED:

DISTRIBUTION:

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