

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

1992 CHARTER VESSEL PROGRAMME

REPORT: ANGELLE MARIE 1/92

LOCATION: The Solent, Southampton Water, Chichester and Langstone Harbours, and visits to ports in western Hampshire and Dorset.

AIMS:

1. To carry out trawl surveys for pre-recruit bass in the area using a standard high-headline trawl fitted with a cod-end liner, and a commercial sand-eel trawl.
2. To carry out comparative fishing trials using a new trawl bought to replace the standard survey trawl.
3. To sample commercial landings of bass whenever possible to augment the lab's biological sampling programme.
4. To obtain estimates of the bass fishing effort in the above areas, and to distribute further bass logbooks.
5. To tag bass at 30 cm or larger.
6. To liaise with Fawley aquatic research laboratories Ltd (FarL) and provide assistance with setting up a study on the effects of oil prospecting surveys on the local populations of, and fishery for, bass in the Christchurch and Poole Bay area.

NARRATIVE:

Staff (DE and KR) travelled to Portsmouth on 9 May, the opportunity being taken to deliver samples of frozen mullet from South Wales to R Abrahams (MSc student) *en route*. The bass fishery and effort from the ports of Lymington, Keyhaven, Mudeford and on the Isle of Wight was censused during the next two days, as well as biological sampling wherever possible. Meetings were held with staff from Fawley and the local (Portsmouth) SFI on 12 May, and the gear prepared and put aboard the Angelle Marie in readiness for the start of fishing operations the next day.

Chichester and Langstone Harbours were fished using the commercial sand-eel trawl on 13-14 May, and the standard bass survey tows in the harbours and Eastern Solent were completed without trouble during 15-16 May, staff being exchanged on the afternoon of 15 May at a pre-arranged rendezvous (GH for KR). The rest of the survey was completed in the Western Solent and Southampton Water area over the period 17-20 May, working out of Warsash, River Hamble. The proposed comparison of the old and replacement survey gears was not possible due to the new gear not being delivered in time. However, the opportunity was taken to repeat several of the more productive survey tows at differing states of the tide, and to train FarL staff in bass tagging techniques prior to the commencement of the Christchurch Bay study.

Further effort census and biological sampling visits were carried out at ports between Lymington and Portland on 21 and 22 May, and a meeting was held with SFI and Southern SFC staff at Poole. Staff returned to Lowestoft on 23 May.

## RESULTS:

1. Fifty-nine valid tows were completed during the survey and 820 bass were caught. The catch rate was higher in the harbours than in the Solent, but overall it was low at 0.6 bass/min, the same as that in the last survey in September 1991. The catch rates prior to then were 1.4/min, 4.9/min and 1.2/min in 1989, 1990 and May 1991 respectively. The length range of the catch in this survey was 14-44 cm with the great majority of the fish (89%) being from the huge 1989 year class. The length range of this cohort was 18-31 cm with a mode at 22.5 cm. The same cohort showed modal groups at 17.5 cm in May 1991 and 19.5 cm in September of that year, and appears to be slow growing compared with bass growth rates seen over the last 10 years. Of the remainder of this survey's catch, 8% were from the 1988 year class and only 13 fish of legal landable size were caught, all outside the bass nursery areas. The bass age/length and length distributions for the survey are shown in the attached figures.

Fishing with the commercial sand-eel trawl in and around the harbours caught 530 bass, all from the 1989 year class bar two (1990). There was no evidence of the 1991 year class being present even though 750 of these had been caught in September of that year. Catch rates this year were well down compared with the same survey in 1991 - 1.5/min against 5.7/min.

2. This aim could not be met due to non-delivery of the new trawl by the net-maker.
3. There were only very light landings of bass in the area during the period of the visit and consequently only 11 samples of commercially caught fish were scaled and measured totalling 92 bass.
4. Estimates of the fishing effort for bass were obtained for ports between Selsey and Lyme Regis, including the Isle of Wight, to be used for updating the effort information in the bass log-book scheme. A further 7 log-books were distributed; 2 each at Poole and Lymington and 3 on the Isle of Wight.

Much useful information of a general nature pertaining to the bass fishery in the area was obtained from meetings with SFI staff in Poole and Portsmouth, the Chief Fisheries Officer of the Southern Sea Fisheries Committee and the chairman of the Southern Commercial Fishermen's Association. The opinion was generally expressed that there was still much illegal fishing for bass still being carried out in nursery areas and that the MLS was being widely ignored, especially by part-time fishermen. Concern was also voiced about the apparent inability of MAFF to bring successful prosecutions against offenders, even when presented with "open and shut cases". This was bringing the SFI and SFC into disrepute and undermining their authority in the area.

5. The scarcity of bass of the required size meant that only 24 were tagged (length range 31-44 cm) during the survey using Hallprint T-bar internal/external tags. A further 7 bass (length range 26-28 cm) were tagged to demonstrate the technique to staff from FarL.

6. Discussions were held with staff from FarL on the setting up of a tagging and fishing effort study on bass in the Christchurch/Poole Bay area, and 4 members of their staff were given instruction at sea on the tagging technique used on bass.

A sample of small herring from Southampton Water was collected for studies of ichthyophonus disease at Weymouth, and a small *Sparid* caught in Langstone harbour and provisionally identified as a Gilthead (*Sparus aurata*), was returned to the lab for positive identification.

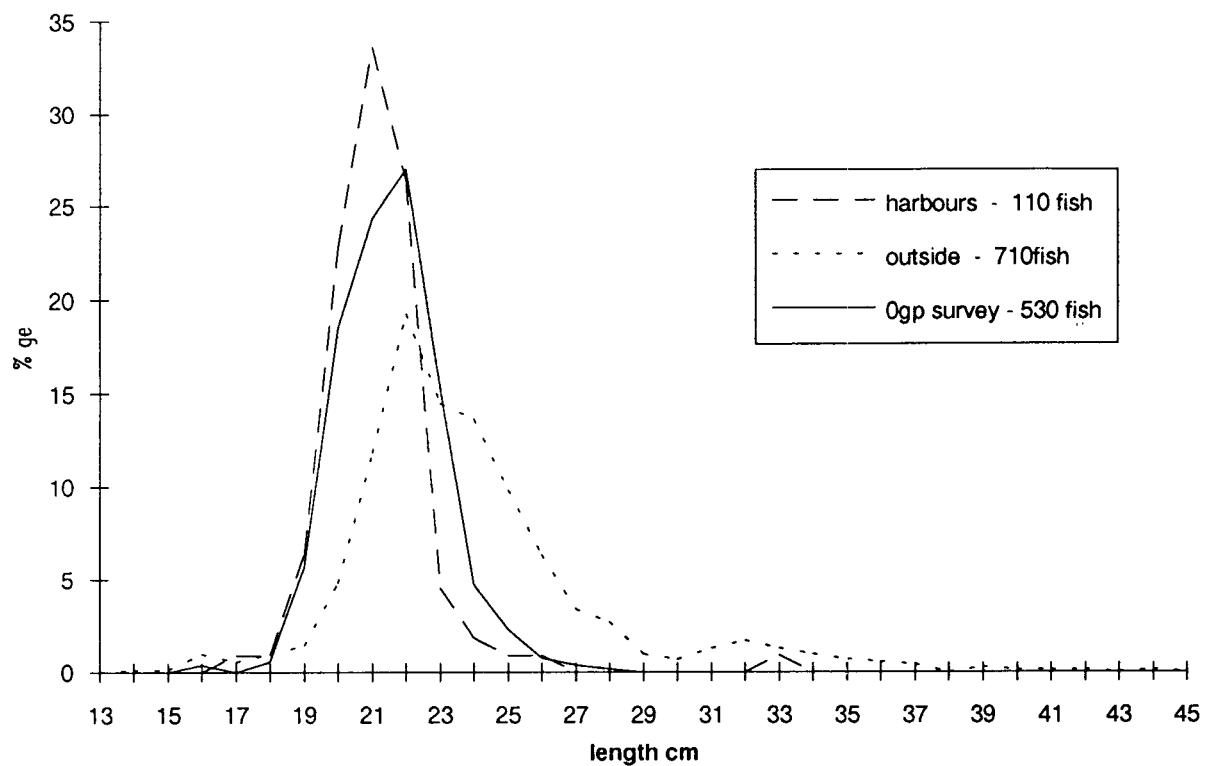
D Eaton  
10 June 1992

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Solent survey May 1992 - Bass %ge LD's



Solent Bass survey, May 1992. ALD

