

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

1993 CHARTER VESSEL PROGRAMME

REPORT: ANGELLE MARIE 1/93

STAFF:

D Eaton
G Howlett

DURATION:

22-30 May 1993

LOCATION:

The Solent, Southampton Water, Chichester and Langstone Harbours.

AIMS:

1. To carry out a trawl survey for pre-recruit bass in the Solent area.
2. To sample commercial bass landings in the area to augment the biological sampling programme.
3. To tag adolescent and older bass.

NARRATIVE:

Staff travelled to the survey area on 22 May and rendezvoused with the Angelle Marie in Chichester Harbour. After loading equipment aboard the boat commercial bass catches were then sampled at a merchant's premises at Selsey. The fishing survey commenced the following day and continued without mishap or interruption for weather until 27 May. Further sampling of commercial landings was carried out at Poole, Portsmouth and Selsey over the next two days, and the opportunity was taken to meet with the SFI staff at Poole. Staff returned to Lowestoft the next day, 30 May.

RESULTS:

1. A total of forty-five tows was completed during the standard survey yielding 2713 bass, length range 14-41 cm. Only 8 fish were at or above the MLS (36 cm). Included among the tows were five new tows near the heads of creeks in Langstone and Chichester Harbours which had been found by the charter skipper during winter fishing operations. These tows were used to try and capture samples of 1992 year class bass which were more likely to be found in these areas. Although smaller fish were caught these all proved to be 2 year old fish and as in the September 1992 survey the 1992 year class were absent from the catches. A further 1163 bass were caught for sampling and tagging purposes during two non-standard tows in the Solent.

The overall survey catch rate was 1.9 bass/min (corrected value for comparison with the old trawl) which is an average value comparable with recent years. The catch rate was much higher in the harbours than outside in the Solent (4.0/min against 0.4/min), but much of this difference can probably be explained by the continuing dominance of the 1989 year class in the catch, and the fact that the growth of this year class (and subsequent ones to date) is most certainly depressed.

The smaller fish are known to more often frequent the more shallow, sheltered waters of harbours and estuaries before moving to the open sea and further off-shore as they approach the size of first maturity (approx 36-40 cm). This is shown in the length and age/length distribution figures given at the end of this report. It can be seen that the fish caught outside of the harbours are not only generally larger, but the 1989 (4 year old) bass are also smaller at age inside the harbours than outside as the faster growing component of this cohort has tended to move further off-shore. Because of the very slow growth rate of the 1989 year class, confident predictions last year that these fish would significantly contribute to the (legal) fishery in 1993 will probably have to be revised, and it is now more likely that they will not be greatly represented in the catches for at least another two years.

2. 122 bass from nine landings were sampled at fish merchants. Landings of bass in the area had been very light in the fortnight preceding the survey, and the condition of the fish, especially the smaller bass between approx 36 and 50 cm, had been poor leading to suppressed market demand and lower prices at first sale.

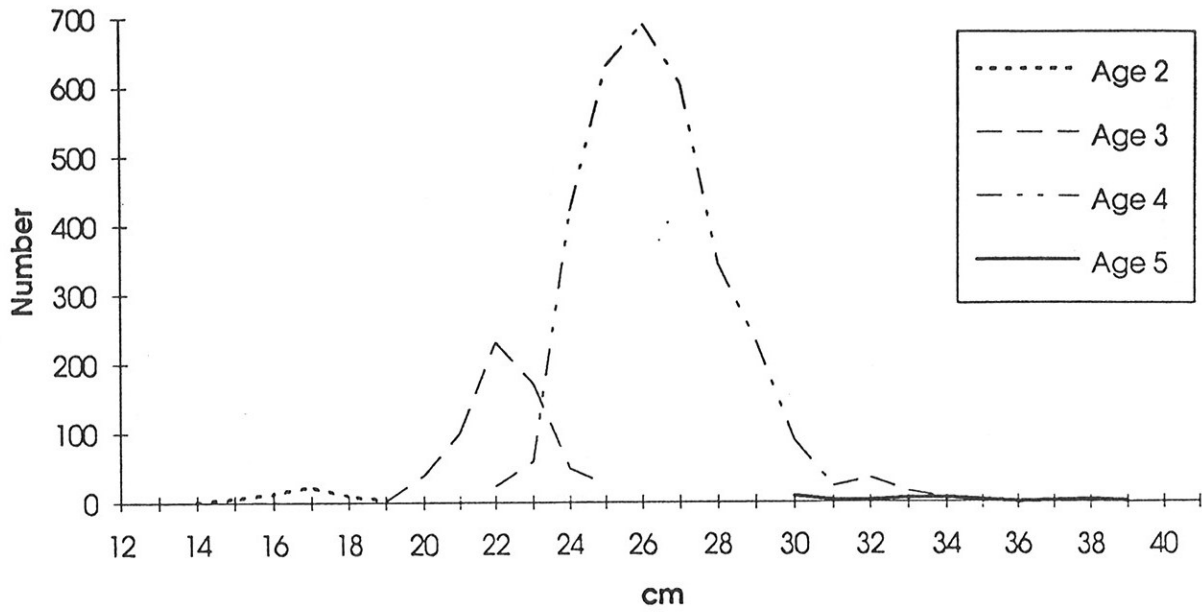
3. 75 bass between 30 and 39 cm were tagged using Hallprint medium internal/external "T"-bar tags. Nine recaptured bass tagged with T-bars were brought back from the Poole office for examination.

D Eaton
5 July 1993

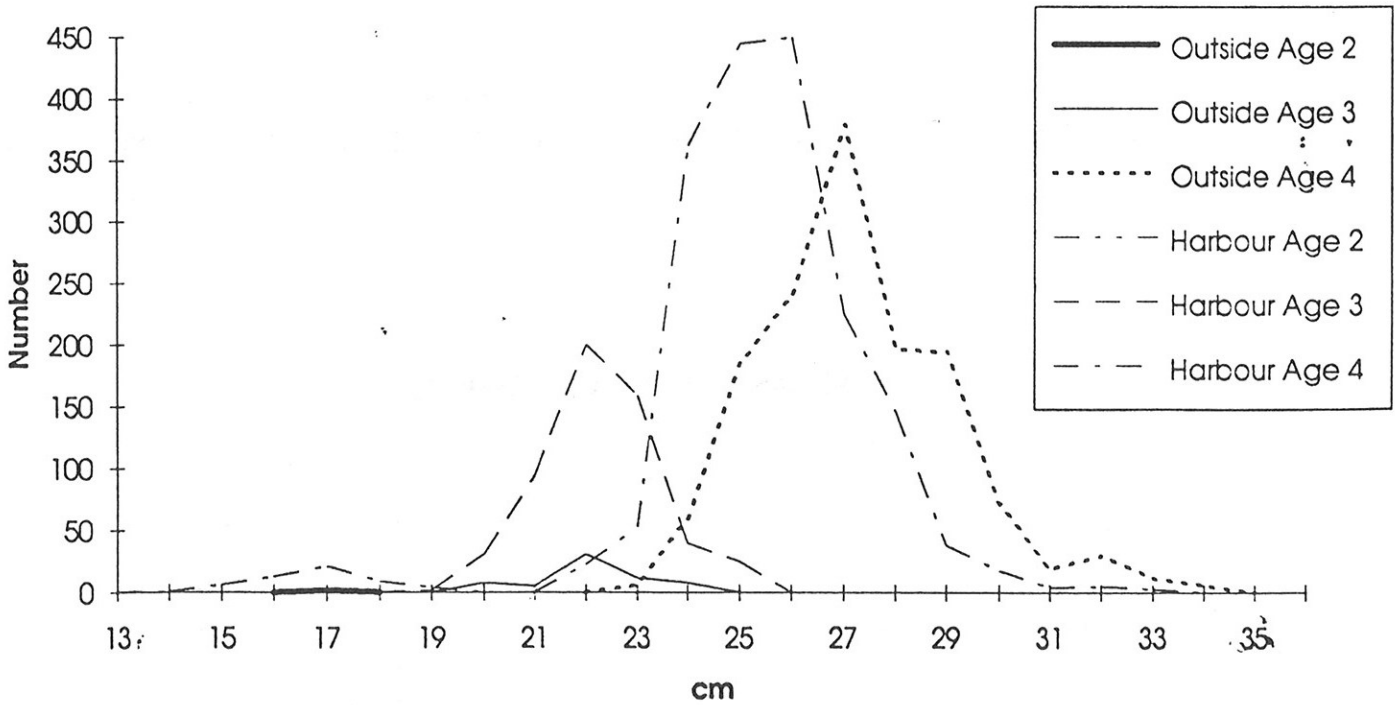
INITIALLED:
G P A

DISTRIBUTION:
Basic List +
D Eaton
G Howlett
Mr D Baldacchino, Skipper FV Angelle Marie
Mr A Radford, DI SE District
Mr R Bushell, FO I Poole
Mr R Hawkinge, FO II Portsmouth
Mr D Jenkins, FO II Chichester
Mr S Holman, CFO Sussex SFC
Mr M Whitley, CFO Southern SFC

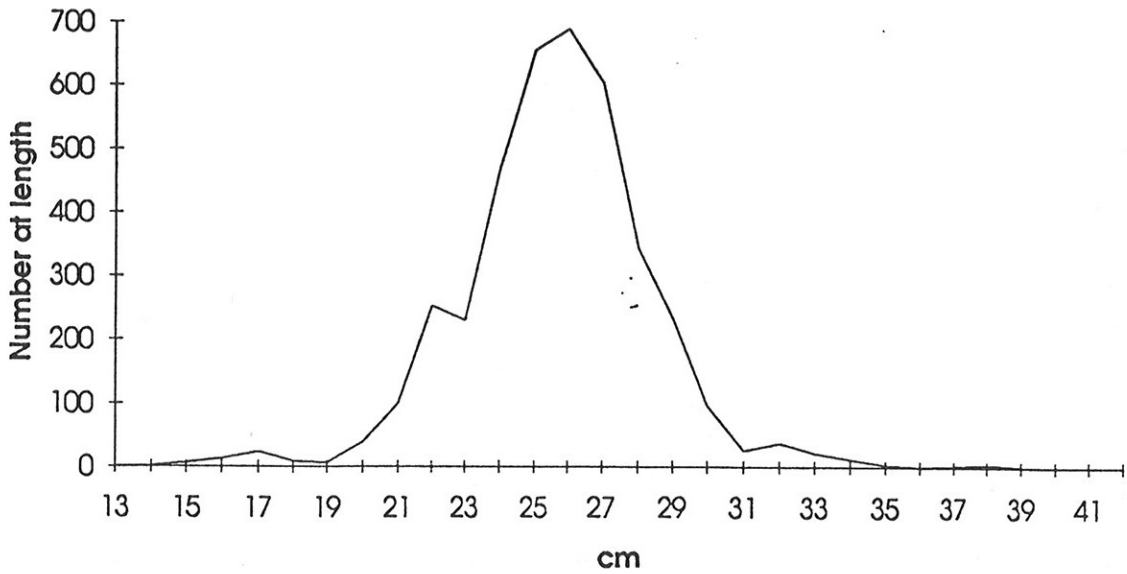
Bass Solent Survey May 1993 Total ALD



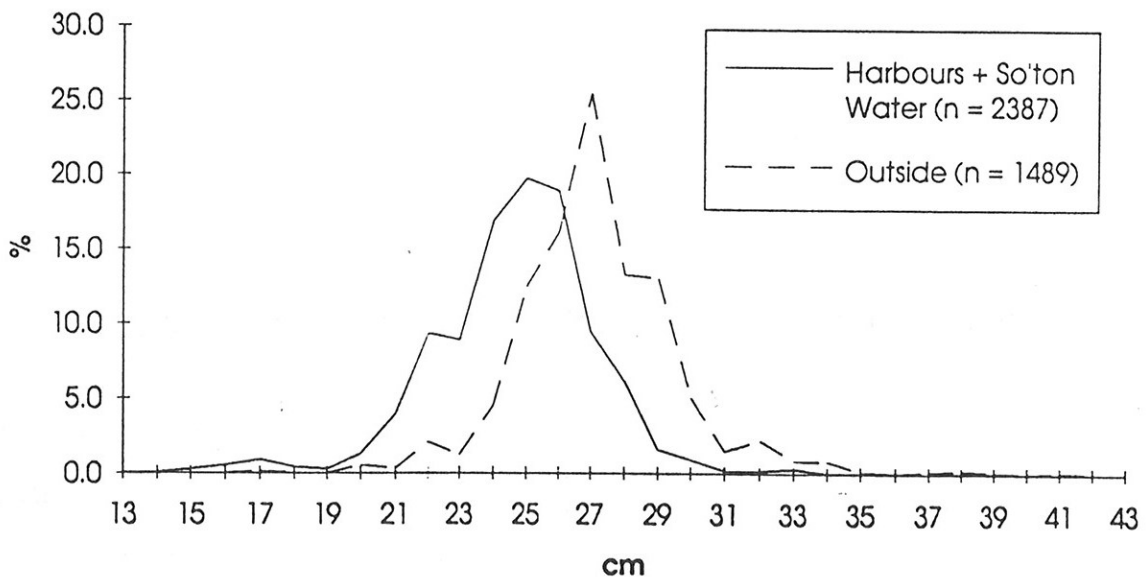
Comparison of Harbour & Outside ALD's, Solent survey, May 1993



SOLENT BASS SURVEY MAY 1993 LD



SOLENT BASS SURVEY MAY 1993 % LD's



SOLENT BASS SURVEY MAY 1992 % LD's

