THE CENTRE FOR ENVIRONMENT, FISHERIES AND AQUACULTURE SCIENCE LOWESTOFT LABORATORY, LOWESTOFT, SUFFOLK NR33 0HT

2007 CHARTER SURVEY PROGRAMME

REPORT: ANGELLE MARIE 1/2007

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

STAFF:	M J Brown D Brown R A Bush
DURATION:	20 May – 24 May 2007
LOCATION:	The Solent, Southampton Water, Chichester and Langstone Harbours
AIMS:	 To carry out the annual spring trawl survey for pre-recruit bass in the Solent area. To determine the relative abundance and distribution of juvenile bass and other species in the Solent and associated harbours.

NARRATIVE:

Staff travelled to Portsmouth on 19 May. The survey gear was unloaded at Whale Island, Portsmouth that evening. The survey commenced at 08.15 BST on 20 May using a Cefas bass trawl of standard design. Three stations outside and 6 stations inside Langstone Harbour were completed. The following day 9 tows in the western Solent and off Ryde, Isle of Wight were fished. The first tow of the day (East Lepe to Beaulieu) was moved further offshore to avoid static gear on the standard tow. On 22 May one tow in Bracklesham Bay and eight tows in Chichester Harbour were completed. With very little weed being caught, the decision was made to swap to the net that was used last autumn after the third tow of the day. This had no discernable effect on catches of weed and the fish species usually associated with it. On the fourth day the stations in Southampton water were successfully completed. On the last day the three of the four remaining tows outside Chichester Harbour were fished, but the fourth station (Outer Ski buoy to Inner Ski buoy) had to be abandoned due to the high levels of static gear on the tow an alternative tow (extension of the Inner Ski Buov to the funfair along the coast off Hayling Island) was fished instead. The fishing gear was unloaded at Whale Island, Portsmouth and staff returned to Lowestoft that day.

RESULTS:

37 valid tows on 34 core stations were fished (Figure 1). Two core stations were repeated as usual to ensure fishing over different states of the tide. An additional tow along the coast of Hayling Island was fished but not included in the recruit index calculations.

A total of 827 bass (*Dicentrarchus labrax*) were caught, 716 within the harbours and 111 outside.

A total of 322 bass scale samples were taken and read during the survey, allowing an age length distribution to be produced before returning to the laboratory. The results indicate that 25.1% of the fish caught throughout the survey area were 2 year olds (the 2005 year class), 33.2% were 3 year olds (the 2004 year class) and 31.1% were 4 year olds (the 2003 year class) with modal lengths at 20 cm, 26 cm, and 30 cm respectively (figure 2). Forty-nine (5.9%) of the bass caught were above 36cm. No one year olds (the 2006 year class) were caught. Bass were the most abundant species caught on the survey.

Catch rates of bass were 3.55/minute towing in the harbours and 0.67/minute outside (2.25/minute overall). This overall value is below the mean for the spring surveys, and below the figure for last year (6.44/minute).

It was notable that there was very little weed compared with other spring surveys. A variety of other species were caught, the most abundant apart from bass being starry smooth hound *Mustelus asterias* (67 fish), smooth hounds Mustelus *mustelus* (48 fish). Eight gilthead bream *Sparus aurata* were caught across the survey area.

CEFAS would like to thank the skipper and crew of the Angelle Marie for their help in the successful completion of this year's survey.

> M J Brown 25 June, 2007

INITIALLED:

DISTRIBUTION:

Basic list + M J Brown R Bush D Brown S Walmsley Mr D Baldacchino, Skipper FV Angelle Marie Mr A Radford, DFO Sussex Mr T Dapling, CFO Sussex SFC Mr I Carrier, CFO Southern SFC



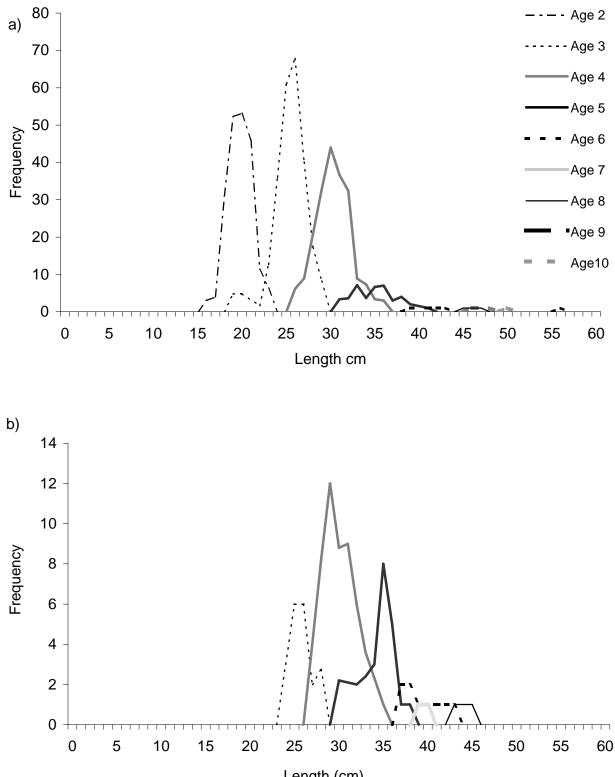


Figure 2. Length frequency distributions at age of bass caught a) Inside harbours, b) Outside harbours during the Angelle Marie survey in May 2007

Length (cm)