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

#### 2003 CHARTER CRUISE PROGRAMME

#### **REPORT: ANGELLE MARIE 1/2003**

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

STAFF:	M Parker-Humphreys B F M Harley
<b>DURATION:</b>	16 May – 20 May 2003
LOCATION:	The Solent, Southampton Water, Chichester and Langstone Harbours
AIMS:	<ol> <li>To carry out the annual May trawl survey for pre-recruit bass in the Solent area.</li> <li>To determine the relative abundance and distribution of juvenile bass and other species in the Solent and associated harbours.</li> </ol>

### **NARRATIVE:**

Staff travelled to Portsmouth on 15 May, where survey gear was loaded onto the Angelle Marie at Warsash Marina, on the River Hamble. The Angelle Marie then moved to Portsmouth harbour and the survey commenced at 0805 on 16 May 2003. With the weather dull, blustery and forecast to worsen, the staff decided to complete all the stations outside the harbours, along with all stations inside Chichester Harbour, completing a total of 16 tows on the first day. On the second day the tows inside Langstone Harbour were completed, with four stations being repeated at a slower towing speed for comparison with the CEFAS Thames bass survey. The Angelle Marie then moved to Warsash Marina in order to start the tows at the western end of the survey area the next day. On the 18<sup>th</sup> with continued unfavourable weather, the staff decided to complete the outside stations. Due to the weather it was not possible to attempt three of them, so the staff towed one station on the way back into Southampton Waters. The three remaining 'outside' tows were picked up early in the morning of the 19<sup>th</sup> May on the low water, before completing the usual tows in Southampton water, some being repeated as usual for comparisons of catch at differing tide state. On the following day three tows in Southampton water were repeated at a slower towing speed, again for comparison with CEFAS Thames bass survey. Once these tows had been completed the fishing gear was unloaded at Warsash Marina and staff drove to Leigh-on-sea, where M. Parker-Humphreys joined other staff to participate on CEFAS Thames bass survey, and B. Harley continued back to Lowestoft.

#### **RESULTS:**

45 valid tows on 35 core stations were fished (Figure 1). Three core stations were repeated as usual to ensure fishing over different states of the tide, and seven other tows were repeated for slower towing speed comparisons. The following results do not include the data obtained from those stations repeated for towing speed comparison.

A total of 506 bass were caught in the survey, 245 in the harbours and 261 outside. No tows yielded 100 or more bass.

A total of 333 bass scales were taken and read during the survey, allowing an age length distribution to be produced before returning to the laboratory. 61% of the fish caught throughout the survey area were 3 or 4 year olds (the 1999 or 2000 year class, Figure 2). These were the dominant year classes in the harbours and have modal lengths of 23cm and 30cm respectively. The bass caught in the outside tows were similarly structured, being mainly 3 and 4 year olds (modal lengths 23cm and 28cm, respectively). 41 (8.1%) of the bass caught were above the minimum landing size (36cm).

Catch rates of bass were 1.37/minute towing in the harbours and 1.71/minute outside (1.52/minute overall). This overall value is much lower than the mean for the May surveys and also well below the figure for May last year (4.17/minute).

A wide variety of other species were caught, notably sand smelts (78), starry smoothounds (62), and sandeels (51). Other points of interest are that 47 of the sandeels were caught from one tow in Langstone harbour, and that a number of '0 group' pollock (59), bib (52), dab (4) and plaice (1) were caught throughout the survey.

32 bass were tagged and released as part of CEFAS's bass tagging programme.

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.

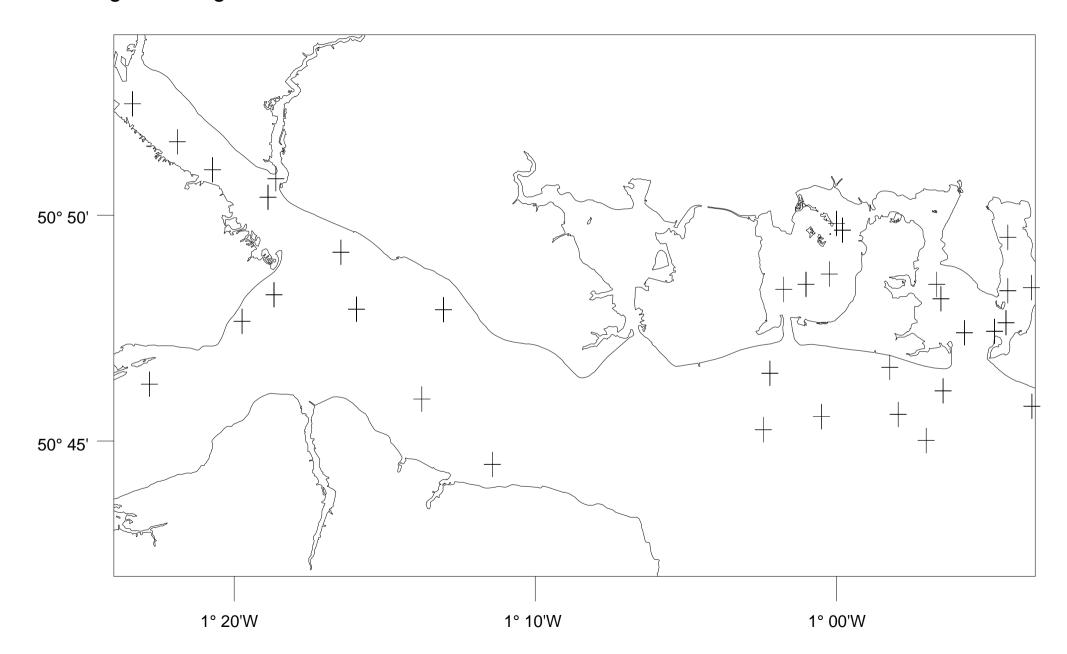
> M Parker-Humphreys 11 June, 2003

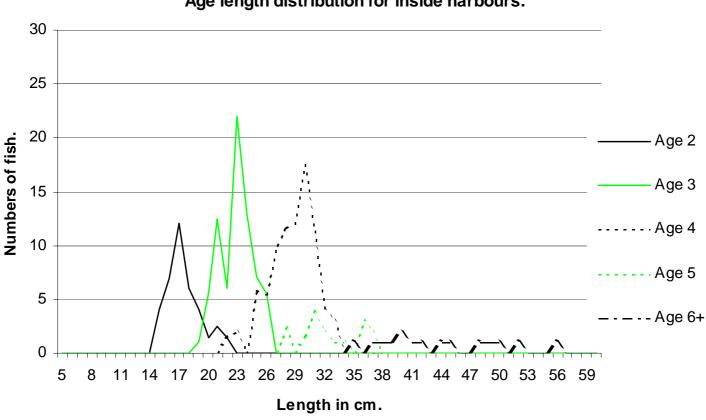
#### **INITIALLED:**

#### **DISTRIBUTION:**

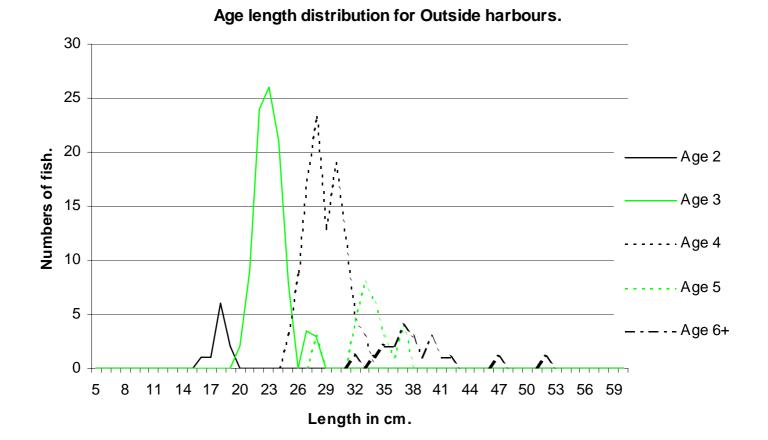
Basic list + B Harley M J Brown M Parker-Humphreys G D Pickett Mr D Baldacchino, Skipper FV Angelle Marie Mr D Jenkins, FOII Portsmouth Mr S Holman, CFO Sussex SFC Mr M Whiteley, CFO Southern SFC

# Figure 1 Angelle Marie 1/2003 Station Positions





#### Figure 2. May 2003 Age length Distributions.



### Age length distribution for inside harbours.