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

## 2006 CHARTER SURVEY PROGRAMME

**REPORT: ANGELLE MARIE 2/2006** 

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

**STAFF:** M J Brown

R Mitchell

**DURATION:** 11 September – 15 September 2006

**LOCATION:** The Solent, Southampton Water, Chichester and Langstone

Harbours

**AIMS:** 1. To carry out the annual spring trawl survey for pre-recruit

bass in the Solent area.

2. 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 10 September. The survey gear was unloaded at Whale Island, Portsmouth on the 11 September and the survey commenced at 08.49 BST using a Cefas bass trawl of standard design. Five stations outside and 8 stations inside Chichester Harbour were completed. The following day 5 tows inside and 3 outside Langstone Harbour were fished without incident. On 13 September two pilot whales and a porpoise were sighted in Ryde Middle during the steam to the western end of the survey. Eight of the 9 tows in the western Solent and off Ryde, Isle of Wight were fished. The East Brambles tow, outside Southampton water had to be dropped as static gear had been laid on the tow. On the fourth day the stations in Southampton water were completed. The net was then replaced with a new one made up this year. A tow between Meon and Lee slip was repeated, along with 3 tows outside Langstone Harbour on the last day in order to ensure consistency between nets in future surveys. The fishing gear was unloaded at Whale Island, Portsmouth and staff returned to Lowestoft on the 23 September.

#### **RESULTS:**

38 valid tows on 34 core stations were fished (Figure 1). Four core stations were repeated using a newly made bass trawl in order to ensure it fished in a similar manner to the usual survey net. Catch compositions were similar.

A total of 2074 bass (*Dicentrarchus labrax*) were caught, 1571 within the harbours and 503 outside.

A total of 377 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 39.4% of the fish caught throughout the survey area were 1 year olds (the 2005 year class), 23.1% were 2 year olds (the 2004 year class) and 23.5% were 3 year olds (the 2003 year class) with modal lengths at 17 cm, 24 cm, and 28 cm respectively (figure 2). Ninety (4.3%) of the bass caught were above 36cm. Bass were the most abundant species caught on the survey.

Catch rates of bass were 10.01/minute towing in the harbours and 2.49/minute outside (4.50/minute overall). This overall value is above the mean for the autumn surveys, and above the figure for last year (3.79/minute).

A wide variety of other species were caught, the most abundant apart from bass being black sea bream *Spondyliosoma cantharus* (241 fish), sand-smelt *Atherina presbyter* (170 fish) and corkwing wrasse *Crenilabrus melops* (102 fish). Thirty three wrasse identified as baillon's wrasse *Symphodus bailloni* and two gilthead bream *Sparus aurata* were caught. An undulate skate *Raja undulata* was caught outside Chichester Harbour.

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 3 October, 2006

#### **INITIALLED:**

## **DISTRIBUTION:**

Basic list +
M J Brown
R Mitchell
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 September 2006



