

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

2006 CHARTER CRUISE PROGRAMME

REPORT: ANGELLE MARIE 1/2006

STAFF: **S Walmsley**
 M Brown

DURATION: 15 May – 19 May 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 14 May 2006 and the survey equipment was unloaded that evening at Whale Island. The survey commenced at 06h30 on Monday 15 May in moderate winds and overcast conditions. Four stations outside and 8 stations inside Chichester harbour were completed, but the fifth outside station was abandoned due to the high levels of static gear on the tow. The following day, 6 stations in the western Solent and 2 outside Langstone Harbour were completed. On the 17 May, due to the poor weather forecast for the rest of the survey, the remaining outside stations (one in the western Solent, two off the Isle of Wight and one Langstone Harbour station) were fished, along with the 5 tows inside Langstone Harbour. The following day, the 5 stations inside Southampton Water were completed. On 19 May, the 3 Southampton Water stations were repeated using a new net. The gear was offloaded and staff travelled back to Lowestoft that afternoon.

RESULTS:

37 valid tows on 34 core stations were fished (Figure 1). Three core stations were repeated using the spare trawl to ensure that changes to the groundrope had not affected the performance of the net.

A total of 1 925 bass *Dicentrarchus labrax* were caught, 1 663 fish inside the harbours and 262 fish outside. Over 1 500 fish were from three tows only – one in Langstone Harbour and two in Southampton Water (Figure 1). Catches were dominated by fish aged 2, 3 & 4 years old (Figure 2). Of the total catch, 12.8 % were 2 year olds, 62.2 % were 3 year olds and 21.8 % were 4 year olds. Only two 1 year olds were sampled and 47 (2.4 %) of the bass caught were above the minimum landing size (36 cm).

Catch rates were 9.84 fish min⁻¹, 2.02 fish min⁻¹ and 6.44 fish min⁻¹ for the outside harbours, inside harbours and all stations combined, respectively. Catch rates were well above those observed during May 2005 (inside harbours = 1.30 fish min⁻¹, outside harbours = 1.49 fish min⁻¹, all stations combined = 1.37 fish min⁻¹).

Mean length at age for fish caught inside and outside the harbours is given in Table 1 below, along with the May 2005 results for comparison.

Table 1: Mean length at age for bass caught inside and outside the harbours during the May 2005 and May 2006 Angelle Marie surveys.

Age	2005		2006	
	Mean Length (cm)	<i>n</i>	Mean Length (cm)	<i>n</i>
Inside harbours				
1	10.7	46	14.5	2
2	17.9	35	19.7	246
3	24.2	163	24.7	1138
4	30.8	31	30.0	252
5	35.1	12	35.7	17
6	40.5	3	38.9	5
7	-		43.5	1
8	48.0	2	-	
10	45.5	1	53.5	1
Outside harbours				
2	21.5	1	25.2	59
3	24.7	66	30.2	168
4	30.0	80	35.3	25
5	34.2	61	38.8	8
6	38.8	14	-	
8	45.2	3	45.5	1
10	53.5	1	-	

A total of 36 fish species were caught. The most abundant species apart from bass was the starry smooth hound *Mustelus asterias* (*n* = 85), pollack *Pollachius pollachius* (*n* = 39) and plaice *Pleuronectes platessa* (*n* = 30).

In 2005, this survey was plagued with large amounts of weed, particularly in tows at the eastern end of the survey grid. This year, although several of the tows on the first day were affected by weed, the problem did not appear to be as great as in 2005.

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.

S Walmsley
25 May, 2006

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S Walmsley

M J Brown

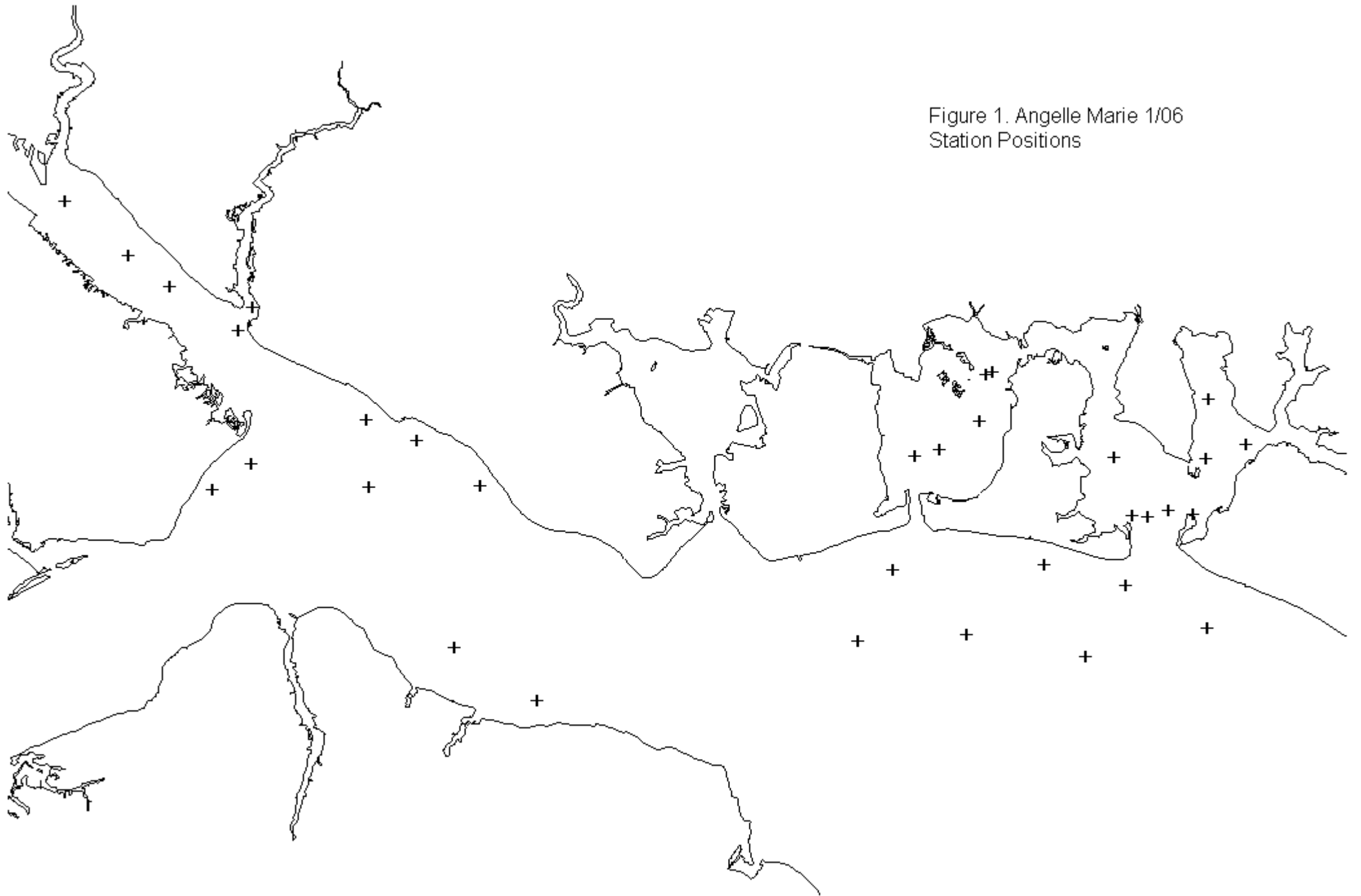
Mr D Baldacchino, Skipper FV Angelle Marie

Mr A Radford, DFO Sussex

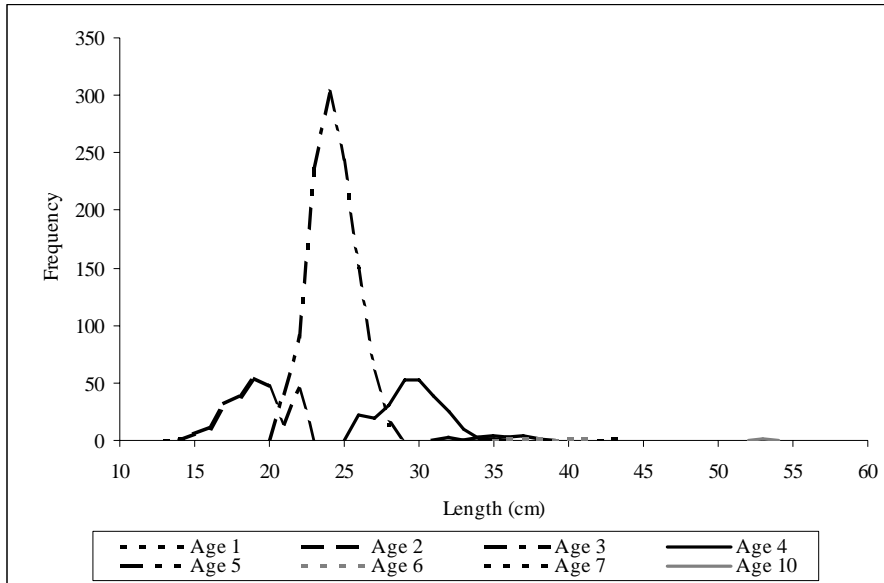
Mr T Dapling, CFO Sussex SFC

Mr I Carrier, CFO Southern SFC

Figure 1. Angelle Marie 1/06
Station Positions



a)



b)

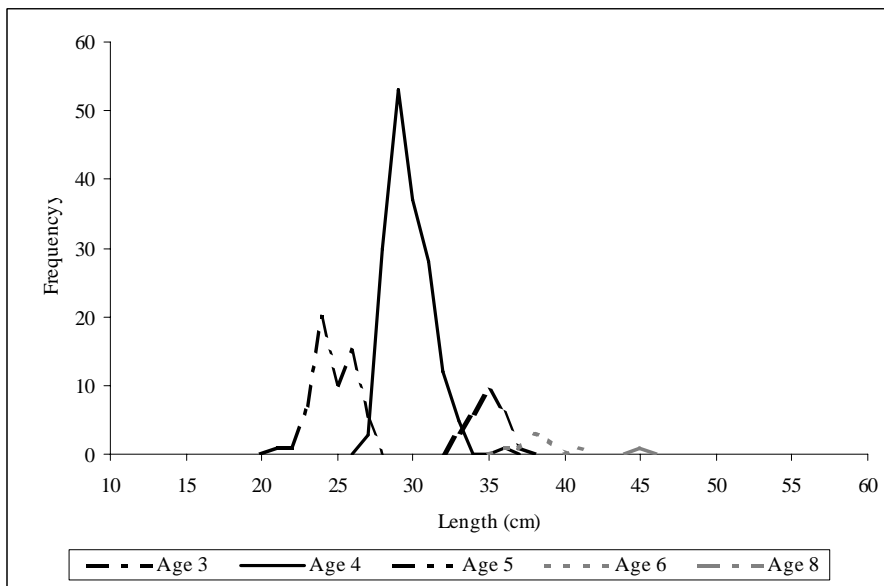


Figure 2: Length frequency distributions at age of bass caught a) inside harbours and b) outside harbours during the Angelle Marie survey in May 2006.