

The occurrence of *Symphodus bailloni* on the south coast of England

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A total of 89 Baillon's wrasse, *Symphodus (Crenilabrus) bailloni*, were collected during a trawl survey of the Solent (south coast of England) between 11 and 15 September 2002. Specimens ranged between 3 and 16 cm total length, with clear modes at 6 and 15 cm, and were found throughout the survey area. *Symphodus bailloni* is reported to be a Lusitanian species that is rare in the English Channel, but was the most common species of wrasse captured during this survey.

Baillon's wrasse, *Symphodus (Crenilabrus) bailloni* (Valenciennes, 1839), is a relatively poorly known species that is distributed in the coastal waters of the eastern Atlantic from the southern North Sea to Mauritania, and off the coast of Spain and the Balearic Islands in the Mediterranean (Sayer & Treasurer, 1996). In the English Channel, *S. bailloni* is believed to be close to the northern limit of its range, and an uncommon or rare species. Wheeler & Clark (1984) described records of occurrence of the species around the British Isles, which are, briefly, near the Channel Islands in 1979 (1 specimen) and 1981 (2 specimens), on Swarte Bank in the southern North Sea in 1967 (1 specimen), off the Dutch coast (1 specimen each in 1967, 1968, 1972 and 1973), and off the coast of Galway, Ireland in 1982 (1 specimen). Although Wheeler & Clark (1984) postulated that *S. bailloni* may occur on the south and south-western coasts of Britain, this report appears to be the first actual record of the species on the south coast of England.

Symphodus bailloni were captured during a Centre for Environment, Fisheries and Aquaculture Science (CEFAS) trawl survey of the Solent and adjacent harbours between the 11 and 15 September 2002, carried out as part of the bass, *Dicentrarchus labrax* (L.), monitoring programme (Pickett et al., 2002). The CEFAS bass trawl was towed once, for 4–12 min (mode 9 min), at each of 39 fishing stations. Surface water temperature was recorded once during each tow, and varied between 17.1°C and 18.9°C, and water depth recorded at the start and end of each tow, varying between 2.93 m and 10.46 m overall. Substrate type and bottom cover were not sampled. All fish caught were identified to species (except for small gobies and clupeids which were identified to genus), counted, and measured for total length (L_t) to the nearest full cm below. Wrasse species were identified using Wheeler (1969), and Quignard & Pras (1986). For field identification, we found that three anal spines, a serrated preoperculum (which was less prominent on the ventral section compared to Corkwing wrasse, *Symphodus (Crenilabrus) melops* (L.)), and single dark marks at the beginning of the soft part of the dorsal fin, across the base of the pectoral fin, and on the caudal peduncle, were characteristic features for *S. bailloni*.

A total of 89 specimens of *S. bailloni* was measured, ranging between 3 and 16 cm L_t (Figure 1). Clear modes in the length distribution were present at 6 and 15 cm L_t , and could indicate separate cohorts. Specimens were found throughout the survey area, occurring in water depths between 3.18 m and 9.67 m, and

in surface water temperatures between 17.3°C and 18.9°C. The highest catch rates were found near the entrances of Southampton Water and Chichester Harbour, but there was no clear difference between the spatial distribution of small (<10 cm L_t) and large (>10 cm L_t) specimens (Figure 2). A total of 29 *S. melops* and 37 Ballan wrasse, *Labrus bergylta* (Ascanius, 1767) was also caught during the survey.

The habitat preferences of *S. bailloni* are poorly known. It has been found at depths of 1–50 m mainly over rocks, sea grass beds and maerl (Wheeler & Clark, 1984; Quignard & Pras, 1986). Although details of the habitat types were not recorded during this survey, the trawl was not towed over rocky ground. However, the Solent estuaries do include a particularly wide variety of habitat types, including sea grass (*Zostera* spp.) beds, tidal mud flats, saline lagoons, saltmarsh, reedbeds and shingle beaches (Anon., 1980). Whilst the upper reaches experience relatively high variations in salinity and temperature, the lower reaches, where *S. bailloni* was most prevalent, are less variable, and almost fully marine. As it was the most common wrasse caught during this survey, it is reasonable to suppose the habitat of the Solent may be favourable for the species.

In recent years, *S. bailloni* have occasionally been captured during the CEFAS beam trawl survey of the eastern English Channel, but only 1–2 individuals at a time, and in French waters (J. Ellis, personal communication). Therefore, the

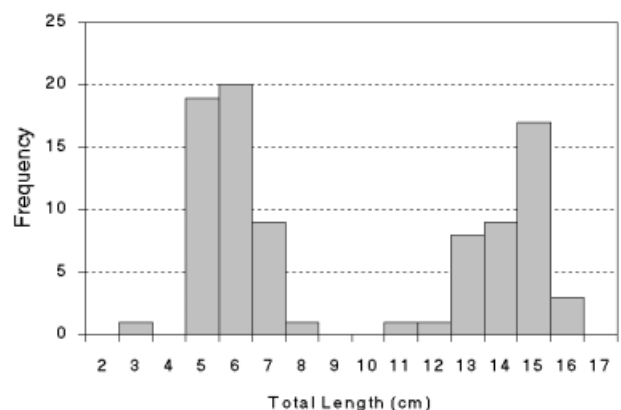


Figure 1. Total length–frequency distribution of *Symphodus bailloni*.

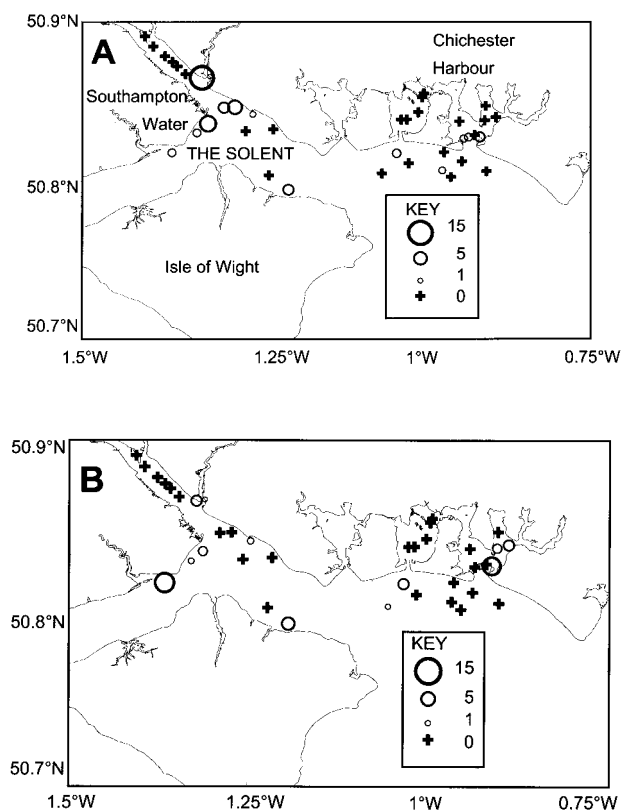


Figure 2. Catch rate (number of fish per 10 min tow) at each fishing station of *Symphodus bailloni* (A) < 10 cm L_t , and (B) > 10 cm L_t .

occurrence of relatively high numbers of *S. bailloni* on the south coast of England is noteworthy. The observations could be an artefact caused by the species being previously unavailable for capture, or previously mis-identified/confused with *S. melops*, as suggested by Wheeler & Clark (1984). It could, however, be that *S. bailloni* is increasing in abundance and distribution in the eastern English Channel, in association with the warmer sea temperatures and the regime shift described for the North Sea circa 1988 (Reid et al., 2001).

Whereas the occasional capture of *S. bailloni* could be based on vagrant specimens, the capture of numerous specimens, likely to include both juveniles and adults, may indicate a resident population. The CEFAS survey will be repeated in September 2003, and should then be able to confirm the occurrence and relative abundance of *S. bailloni* in the Solent.

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