

A SECOND BRITISH SITE FOR *CORACUTA OBLIQUATA* (CHASTER 1897) (MOLLUSCA, BIVALVIA) IN THE SOUTHERN NORTH SEA

Coracuta obliquata is a marine bivalve belonging to the family Montacutidae. The species was originally named *Neolepton obliquatum* (Chaster 1897) and remained within this genus until 1996. It was reclassified as *Mysella obliquatum* by Salas (1996) on the basis of comparisons of hinge structure with *Mysella* (now *Kurtiella*) *bidentata* using samples collected from the Southern Iberian Peninsula.

The first live British record of this species was made by Holmes *et al.* (2006) in the Outer Bristol Channel during a National Museum of Wales Marine Habitat Study. During this survey specimens were found in 6 out of a total of 148 grab samples at depths of 50–60 m. Sediments were typically sandy with varying amounts of mud and gravel. Holmes *et al.* (2006) consequently reclassified the genus to *Coracuta* based on hinge line examinations.

Now, a few years later a further site for *C. obliquata* has been identified in the southern

North Sea. In May 2009, an extensive mapping project was carried out for the Humber Regional Environmental Characterisation (REC) project commissioned by the Marine Aggregate Levy Sustainability Fund (MALSF) (Tappin *et al.*, 2011).

A total of 140 samples, across a 11,000 km² survey area, were sampled using a 0.1 m² Hamon grab. Two known tunnel valleys, Silver Pit and Sole Pit, were also targeted where higher densities of samples were taken (Fig. 2).

Twenty individuals of *C. obliquata* were found at five geographically clustered grab stations in the Sole Pit tunnel valley (Fig. 2), at depths ranging from 73 m to 90 m. The number of individuals per grab ranged from 1 to 8. Identification of specimens was verified by Holmes at the National Museum of Wales, Cardiff.

The sediment conditions of Sole Pit, where *C. obliquata* was found, were gravelly, muddy sands, similar in nature to the species habitat in the Outer Bristol Channel. However, the North Sea samples were far deeper than those recorded by Holmes *et al.* (2006) although *C. obliquata* is found in deeper waters (~85 m) in the Mediterranean (Kallonas *et al.*, 1999). Thus, these southern North Sea records extend the known geographical and depth distribution of this species in British waters. However, the lack of finds outside Sole Pit indicates the distribution, as Holmes (2006) suggests, may be somewhat sporadic.

The southern North Sea samples containing *C. obliquata* were dominated by bivalves, especially *Abra alba*, which was present in very high abundance (from 562 to 985 individuals). Also present was the morphologically similar bivalve *Kurtiella bidentata*. Holmes *et al.* (2006) suggest that there may be few records of *C. obliquata* in Britain because it may have been misidentified in the past as juvenile *K. bidentata*.

The family Montacutidae are recognised as having associations with other marine invertebrates; for example *K. bidentata* is often found

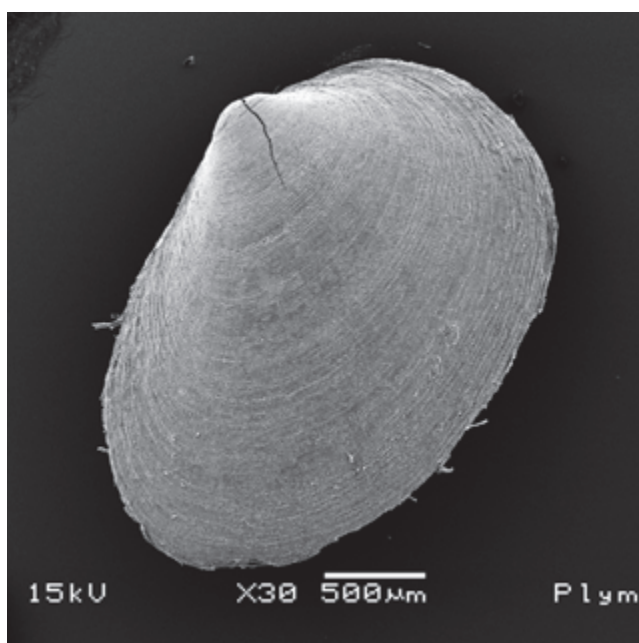


Figure 1 *Coracuta obliquata* left valve with crack damage at the umbo. Specimen collected from gravelly muddy sand in Sole Pit in the southern North Sea.

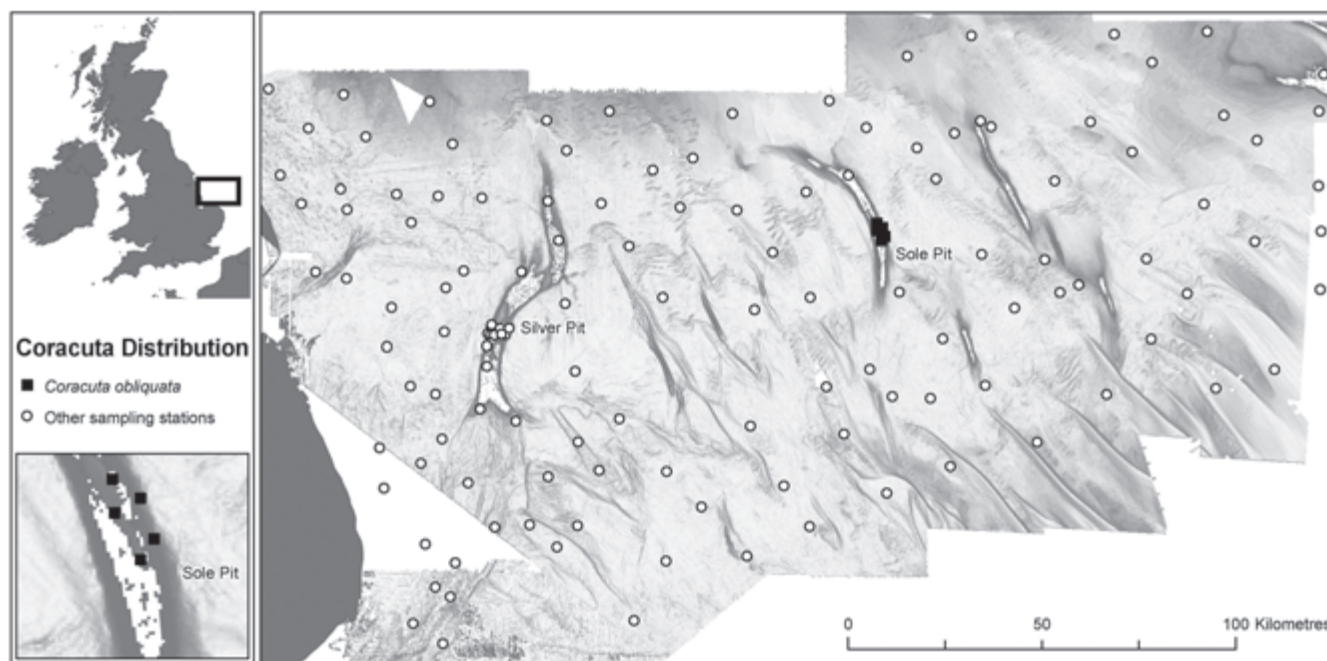


Figure 2 Grab sample locations across the Humber REC area: specimens of *Coracuta* found at stations in Sole Pit only (closed squares). Background shows side-scan sonar data of the area.

in association with echinoderms, frequently ophiuroids (Gofas & Salas, 2008). Although there is no evidence from the Humber survey to suggest a particular association, it is interesting to note that the brittlestar *Amphiura filiformis* was found in significant numbers in four of the five samples containing *C. obliquata*.

These additional observations of *C. obliquata* in the southern North Sea support Holmes' suggestion that the species is under-recorded in British waters. However, the low proportion of samples containing this bivalve, both in this study and the outer Bristol Channel suggests it has a fairly sporadic distribution and may not be especially abundant.

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