

---

**SHORT COMMUNICATIONS**

---

***GEOPHILUS SEURATI* FROM CORE SAMPLES IN MUDDY SAND FROM THE HAYLE ESTUARY, CORNWALL**Phil Smith<sup>1</sup> & A.D. Barber<sup>2</sup><sup>1</sup> Aquatonics, Searle St., Crediton, Devon EX17 2DB.

E-mail: phil@aquatonics.com

<sup>2</sup> Rathgar, Exeter Road, Ivybridge, Devon PL21 0BD.

E-mail: abarber159@btinternet.com

Eleven specimens (adults and juveniles) of a centipede *Geophilus seurati* Brolemann, 1924 (*G. gracilis* Meinert, 1898) were retrieved from five cores taken by Aquatonics Ltd in July 2010. The site was in Lelant Water (Hayle Estuary) in Cornwall (NGR SW 547369). The sediment was an area of firm muddy sand, overlaid with filamentous green algae (approximately 65% cover). The centipedes were identified by PS as *Geophilus seurati* Brolemann, 1924 (*G. gracilis* Meinert, 1898) and later confirmed by TB. The mean density was approximately 260 per square metre.

The dominant alga on the site was *Ulva torta*, with some *Ulva prolifera* and *Ulva intestinalis* (about 1%) and very small amounts of *Ulva compressa* & *Rhizoclonium riparium* (all these species of *Ulva* were previously placed in *Enteromorpha*). The site was 1.52 m above Ordnance Datum Newlyn, in the mid to upper intertidal. The sediment contained very high level of contamination by metals (especially arsenic, copper and zinc) due to historic mining in the catchment and nearby copper smelting. This may indicate that *Geophilus seurati* is very tolerant of metal contamination.

There are records of this species from along the southern and western coasts of Britain including the Hayle Estuary area (Barber & Keay, 1988; Barber, 2009). Typically it has been found under stones on mud & in similar microsites but this was not the case in the present instance and in fact there were very few stones nearby. The survey looked at a large number of sites in the Hayle estuary complex to record any visible macroinvertebrates, but had not recorded the centipedes whilst sampling. Possibly at this location *Geophilus seurati* hunt under the layer of filamentous algae. They may feed on enchytraeid worms (the only other macrofaunal species at this location) which live under the algae and in the top layers of sediment. Presumably the animals remain on this site throughout the tidal cycle as any terrestrial habitat is 25 m away.

**REFERENCES**

- Barber, A.D. & Keay, A.N. (1988) *Provisional Atlas of the Centipedes of the British Isles*. Huntingdon. NERC.
- Barber, A.D. (2009) *Centipedes*. Linnean Society Synopses of the British Fauna (NS) **58** Shrewsbury, Field Studies Council.
-