

## Supplement to the Marine Flora and Fauna of the Medina Estuary (III)

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This third supplement of the marine flora and fauna of the Medina Estuary provides additional information and species records to those presented in earlier publications; the original survey (Withers, 1979) and previous two supplements (Herbert, 1995, 2001). Most of these new records, unless otherwise specifically stated, have been obtained during survey work by students from the University of Southampton. Remarkably, this is the first major subtidal survey of the estuary and has yielded 46 new species for the study area between Newport Quay and Kingston Power Station. These species are marked with an asterisk\*.

Trawling, using a 2m beam trawl with a ¾ inch prawn net, took place twice a month between April and August 2002 at the sites listed below.

**Site 1, Cowes.** 50° 45.359'N 1°17.510'W to 50° 45.033'N 1°17.583'W

3 trawls of 500m in mid-channel from the fuel pontoon on the west side of the river, south of the chain ferry to Victory Yard on the west bank. Average depth 4m. Habitat consisted of mud, shell (mostly *Ostrea* and *Crepidula*), stones and algae. This site also yielded most rubbish. Live oysters ranged from large to very small specimens indicating a breeding population. Spiny spider crabs (*Maja squinado*) were recorded in August.

**Site 2, North of Folly Inn.** 50° 44.354'N 1°17.248'W to 50° 44.102'N 1°17.023'W

3 trawls of 500m slightly west of mid-river, along the line of pontoon moorings from 'A' to visitors pontoon south of 'D'. Average depth 2.5m. The catch was dominated by many large specimens of the sponges *Suberites ficus*, *Halichondria ?bowerbanki* and *Esperiopsis fucorum* with slipper limpets, *Crepidula fornicata*, and ascidians. A single American hard shelled clam, *Mercenaria mercenaria* and the hydroid *Sertularia cupressina* were found. A small moulting aggregation of the spiny spider crab *Maja squinado* centred on this site in July. The impact of trawling on this unusually rich sponge habitat was assessed with a diver operated video across the trawled section. Results did not show excessive damage and suggested that sponges extended beyond the trawled area, mainly on the eastern side of mid-channel.

**Site 3, South of Folly Inn.** 50° 43.030'N 1°17.179'W to 50° 43.512'N 1°17.935'W

3 trawls of 500m mid river from the pylon and No.1 port can buoy, south of the Folly Inn to the *Ryde Queen* paddle steamer. Average depth 3m.

River bed habitat consisted of mud and shell (mainly cockles) plus bits of wood and leaves. Sponges and ascidians with shore crabs, *Carcinus maenas*, were characteristic of the site. The nudibranch *Aeolidiella alderi* was frequent here.

**Site 4, Newport Harbour.** 50° 42.359'N 1°17.494'W to 50° 42.211'N 1°17.440'W

3 trawls of 300m from Riverside Centre north to first red can buoy. Average depth 2.5m. The river bed consisted of black anaerobic mud, wood debris and plastic rubbish. Fragments of green algae (*Ulva lactuca* and *Enteromorpha* sp.) were found in the trawl. This site was generally of low biodiversity although gobies were numerous. There were a few shrimps, shore crabs and juvenile bass and sprats in August.

## ALGAE

<b>Rhodophycota (red algae)</b>	<b>Sites</b>
<i>Callophyllis</i> sp.	1
<i>Ceramium</i> sp.	1
<i>Cryptopleura ramosa</i> *	1,2,3
<i>Gracilaria bursa-pastoris</i> *	1,3
<i>Griffithsia devoniensis</i> *	2
<i>Halurus flosculosus</i>	1,2,3
<i>Heterosiphonia plumosa</i>	1
<i>Palmaria palmata</i>	1
<i>Plocamium cartilagineum</i>	1
<b>Chromophycota (brown algae)</b>	
<i>Ascophyllum nodosum</i>	1,3,4
<i>Colpomenia peregrina</i>	1
<i>Desmarestia ligulata</i> *	4
<i>Dictyota dichotoma</i> *	1,2
<i>Fucus serratus</i>	1,2
<i>Fucus vesiculosus</i>	1,3,4
<i>Halidrys siliquosa</i>	1
<i>Laminaria saccharina</i>	1
<i>Undaria pinnatifida</i>	1,2,3
<i>Sargassum muticum</i>	1
<b>Chlorophycota (green algae)</b>	
<i>Cladophora</i> sp.*	1,4
<i>Enteromorpha</i> sp.	1,2,3,4
<i>Ulva</i> sp.	1,2,3,4
<b>FAUNA</b>	
<b>Porifera (sponges)</b>	
<i>Cliona celata</i> *	2
<i>Halichondria ?bowerbanki</i> *	1,2,3
<i>Haliclona</i> sp.*	1,2
<i>Haliclona oculata</i> *	2
<i>Esperiopsis fucorum</i> *	1,2,3
<i>Scypha ciliata</i> *	1,2,3
<i>Suberites ficus</i> *	1,2,3
<i>Suberites massa</i> *	2
<b>Cnidaria:scyphomedusae (jellies)</b>	
<i>Aurelia aurita</i> *	4
<i>Pleurobrachia pileus</i>	2,3,4
<b>Cnidaria:hydrozoa (hydroids)</b>	
<i>Amphisbetia operculata</i>	1
<i>Halecium halecinum</i>	1
<i>Hartlaubella gelatinosa</i> *	4

<b>Cnidaria:hydrozoa (hydroids) contd.</b>	<b>Sites</b>
<i>Hydractinia echinata*</i>	1,2
<i>Hydrallmania falcata*</i>	1,2,4
<i>Sertularia argentea*</i>	2
<i>Sertularia cupressina*</i>	2
<b>Cnidaria:anthozoa (sea anemones)</b>	
<i>Anemonia viridis*</i>	2,3,4: also intertidal LWS at Folly Inn
<b>Annelida:Polychaeta (worms)</b>	
<i>Anaitides mucosa*</i>	South of Folly Inn (Herbert, 2002)
<i>Cossura longocirrata*</i>	South of Folly Inn (Herbert <i>et al</i> 2003)
<i>Ficopomatus enigmaticus</i>	3 (tubes)
? <i>Harmothoe</i> sp.*	1,2,3
<i>Lumbrineris tetraura*</i>	South of Folly Inn (Herbert <i>et al</i> 2003)
<i>Mediomastus fragilis*</i>	South of Folly Inn (Herbert <i>et al</i> 2003)
Nereididae sp.	4
<i>Pomatoceros</i> sp.	1,3
<i>Sabella ?pavonina*</i>	1,2,3
<b>Crustacea:amphipoda</b>	
<i>Gammarus locusta*</i>	1,2,3
<b>Crustacea:decapoda (crabs,shrimps)</b>	
<i>Cancer pagurus</i>	1
<i>Carcinus maenas</i>	1,2,3,4
<i>Crangon crangon</i>	1,2,3,4
<i>Galathea ?squamifera*</i>	1,2
<i>Inachus phalangium*</i>	2
<i>Macropodia rostrata*</i>	1,2,3,4
<i>Maja squinado*</i>	1,2,3
<i>Pagurus bernhardus</i>	1,2,3
<i>Pagurus cuanensis*</i>	1,2
<i>Palaemon longirostris*</i>	4
<i>Palaemon ?serratus</i>	1,2,3
<i>Pilumnus hirtellus</i>	1
<i>Pisidia longicornis</i>	1,2,3,4
<b>Crustacea:cirripedia (barnacles)</b>	
<i>Balanus ?improvisus</i>	1
<i>Balanus</i> sp.	1,3
<i>Elminius modestus</i>	1,3,4
<i>Sacculina carcini*</i>	1,2
<b>Pycnogonida (sea spiders)</b>	
<i>Achelia ?laevis*</i>	2
<b>Mollusca (sea slugs)</b>	
<i>Aeolidiella alderi</i>	3

<b>Mollusca:gastropoda (snails)</b>	<b>Sites</b>
<i>Buccinum undatum</i>	1
<i>Calliostoma zizyphinum</i>	1
<i>Crepidula fornicata</i>	1,2,3
<i>Gibbula cineraria</i>	1
<i>Hinia reticulata</i>	1,2
<i>Littorina littorea</i>	3
<i>Polyplacophora</i> sp.	3
<i>Rissoidea</i> sp.*	3
<b>Mollusca:bivalvia</b>	
<i>Cerastoderma edule</i>	1,2,3,4
<i>Macoma balthica</i>	3
<i>Mercenaria mercenaria</i>	2
<i>Mya arenaria</i>	3
<i>Mytilus edulis</i>	3
<i>Ostrea edulis</i>	1,2,3
<b>Mollusca:cephalopoda (cuttlefish)</b>	
<i>Sepia officinalis</i>	1,2
<i>Sepioloatlantica</i>	1
<b>Tunicata (sea squirts)</b>	
<i>Ascidia aspersa</i>	1,2,3
<i>Botrylloides leachi</i> *	1,2
<i>Botryllus schlosseri</i>	1,2
<i>Ciona intestinalis</i>	1,2,3
<i>Dendrodoa grossularia</i> *	1,2
<i>Didemnum ?maculosum</i> *	2
<i>Molgula ?manhattensis</i>	2,3
? <i>Molgula</i> sp.	3
? <i>Sidnyum</i> sp*.	2
<i>Styela clava</i>	1,2,3
<b>Bryozoa (sea mats)</b>	
<i>Alcyonidium ?diaphanum</i>	1
<i>Amathia lendigera</i>	1
<i>Bicellariella ciliata</i> *	1,3
<i>Bugula ?neritina</i> *	2
<i>Electra pilosa</i>	1
<i>Flustra foliacea</i>	1
<i>Scrupocellaria ?reptans</i> *	1,2,4
<i>Scrupocellaria scruposa</i> *	1,2,3
<b>Pisces (fish)</b>	
<i>Anguilla anguilla</i> (common eel)	1,3,4
<i>Aphia minuta</i> (transparent goby)*	1,2,4
<i>Atherina presbyter</i> (sand smelt)	2,3
<i>Callionymus lyra</i> (dragonet)	1

<b>Pisces (fish) contd.</b>	<b>Sites</b>
<i>Dicentrarchus labrax</i> (bass)	1,2,3,4
<i>Gobius niger</i> (black goby)	1,2,3,4
<i>Labrus bergylta</i> (ballan wrasse)	1
<i>Mustelus asterias</i> (starry smooth hound)*	off east bank of Folly September 2002
<i>Pholis gunnellus</i> (butterfish)	1
<i>Platichthys flesus</i> (flounder)	2,3,4
<i>Pleuronectes platessa</i> (plaice)	1,2
<i>Pomatoschistus ?microps</i> (common goby)	1,2,3
<i>Pomatoschistus minutus</i> (sand goby)	1,2,3,4
<i>Scomber scombrus</i> (mackerel)*	Folly area, summer 2002
<i>Solea solea</i> (dover sole)	1,3,4
<i>Spondyliosoma cantharus</i> (black bream)	1
<i>Sprattus sprattus</i> (sprat)	1,3,4
<i>Syngnathus acus</i> (greater pipefish)	1,2,3
<i>Taurulus bubalis</i> (long-spined sea scorpion)	1

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