

ISLE OF WIGHT MARINE BIOLOGICAL REPORT FOR 2003 AND 2004

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The following report includes records of algae, invertebrates and fish obtained from inshore waters around the Isle of Wight during 2003 & 2004. Details of marine mammal records are found elsewhere in *Proceedings*.

Report for 2003

Algae

The peacocks tail seaweed *Padina pavonica* was exceptionally luxuriant just south of the lifeboat station at Bembridge in June and July. This perennial appears to be tolerant to the shifting sands of the locality and its annual success is likely to be dependent on the depth of sand prevailing during the summer months. The brown alga *Cystoseira baccata*, not recorded for some years, was found in moderate quantities at Hanover Point in flowing channels near low water springs. A specimen has been retained by the British Museum (NH).

Invertebrates & Fish

Of almost equal interest to the sightings of new or unusual species is the unseasonable appearance and abundance of familiar species. A large specimen of the jellyfish *Rhizostoma octopus* was found washed up on the beach at East Cowes at the end of January. This species is normally found in midsummer and earliest strandings previously recorded have been in March and April.

A single valve of the bivalve mollusc *Arctica islandica* was found at Yaverland by Mr M.Munt. Although generally common off the British coast the only record we have from Island shores since 1980 is from near Seaview (Light, 1990).

There have been large numbers of the razor shell *Solen marginatus* washed up on Solent shores and in Sandown Bay. The recent recovery of this species has been remarkable. It has taken 35-40 years to regain abundances similar to those prior to the severe winter 1962-3, when populations were killed. Local fishermen have now applied for appropriate licenses to collect razorfish for the seafood market and have had specimens tested for human consumption.

In early April a large specimen of the spiny lobster (or crawfish) *Palinurus vulgaris* was caught in a lobster pot 1.5 miles off Brook at 10m depth, and taken to the marine aquarium at Fort Victoria. Apparently another specimen was caught during 2002 but escaped from a holding pot. This is a very rare species from Island shores: according to Frank Morey (1909) specimens were *very occasionally* taken in Sandown Bay. To my knowledge, there have been no subsequent records from the Island's coast.

The Medina Valley Centre, and other partner organisations, commenced a project to gain more information on the biology and local distribution of the mantis shrimp *Rissoides desmaresti*. The species is regarded as rare in UK waters, being found in fewer than eight 10 x 10 km grid squares (0.5%) within 3 miles of the shore (MarLin 2004). The project has involved some dredging and trawling of the seabed in previously known localities between Cowes and Ryde and a recording scheme for oyster fishermen during the winter season between November 2003 and March 2004. Up until 18th December 2003, 32 individuals were caught by fishermen between Wootton and Ryde with others found in Stanswood Bay at the entrance to Southampton Water and off Freshwater Bay, a new locality. Yet no mantis shrimps were caught during four day-long expeditions from a single boat towing two oyster dredges between April and September. However notable observations of 'bycatch' included the following:

May 1st

Between Norris and Wootton Creek just off the eel grass beds:

Ophiothrix fragilis.

This brittlestar caught off Kings Quay is rarely recorded from the Solent.

Ebalia tumefacta

This small crab has not previously been recorded off the Islands coast, although a specimen has been obtained from Southampton Water (J. Mallinson *pers com*).

Sepiola atlantica

The Little Cuttlefish. A single specimen was caught off Kings Quay, together with common cuttlefish *Sepia officinalis*.

9th September

Off the Shrape, just outside East Cowes breakwater in 3m of water at LWS. Several individuals of each of the following species:

Pollack, *Pollachius pollachius*. Large number of juveniles.

Fifteen spined stickleback, *Spinachia spinachia*

Broad-snouted pipefish, *Syngnathus typhle*

Greater pipefish, *Syngnathus acus*

Worm pipefish, *Nerophis lumbriciformis*

Corkwing wrasse, *Symphodes (Crenilabrus) melops*

Off Kings Quay, just outside of the beds of eel grass *Zostera marina*:

Plaice, *Pleuronectes platessa*

Red Mullet, *Mullus surmuletus* (a single juvenile)

Long-spined sea scorpion, *Taurulus bubalis*

Pouting, *Trisopterus luscus*

The By-the-wind-sailor *Verella vellella* was seen in high numbers during the early summer months, unusually for the second consecutive year. On 21st July, a number of interesting observations were made during a brief dredging survey of the Medina Estuary carried out as part of a *Marine Champions* day, organised by the Wildlife Trusts partnership SE Marine Programme. A large number of the saccoglossan sea slug *Haminoea navicula*, of mixed sizes, were found in hauls from the west side of the Folly Lake just south of the pile moorings. This species is nationally uncommon and on the Isle of Wight there is only a single published record of specimens found at Newtown in 1987 (Herbert, 1989). A single live specimen of the fanworm *Sabella pavonica* was found in a haul between the Folly and Kingston power station; this species has been found in surprisingly few locations around the island. A Sole (*Solea solea*) was also caught here in the dredge. A plankton sample taken from the same location yielded large numbers of zoea larvae of porcelain crabs and shore crab *Carcinus maenas*. A single specimen of the asexual larvae of the polychaete genus *Atylus* was observed with eggs. A juvenile Starry Smoothhound (*Mustelus asterias*) and a Gilthead Bream (*Sparus aurata*) were also caught in the estuary during the year.

Undoubtedly the most extraordinary observation of 2003 was that of a long-snouted seahorse *Hippocampus guttulatus* found washed up on the beach at Bembridge Point on October 5th by Mrs J.Janes. Remarkably, it was still alive and revived further at Fort Victoria marine aquarium. The specimen was a young female 6cm in length. This is the first authenticated record from the Island's shores. Percy Wadham (in Morey, 1909) refers to the seahorse as being rare off the Hampshire coast, yet not found off the Island's coast. Subsequent to an article and photograph of the seahorse published in the *Isle of Wight County Press* (31st October 2003) Mr. K. Clapcott sent me details of an observation of *Hippocampus* sp. on 28th July 1990 while diving in 4-5m near an eel grass bed off the old lifeboat station at Totland. There have also been 'rumours' of their presence off the north-east coast between East Cowes and Wootton Creek. Enquiries at the National Marine Aquarium at Plymouth and Seahorse

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Trust yielded a record of a short-snouted seahorse *Hippocampus hippocampus* caught in shallow water over a muddy substrate between Cowes and Southampton in November 2002. The Bembridge specimen was returned alive to an eel grass bed in the vicinity, which the species is known to favour. It is probable that a small population has existed at Bembridge for some time, although it is possible that the species may be increasing its range as a result of climate change. In the past decade there have been several records of both species inshore off the Dorset coast between Weymouth and Poole Bay.

IOW NFSA new weight records for 2003

Shore Caught:

| Species | Date | Location | Weight |
|---------------------------------------|---------|---------------|------------|
| Sole (<i>Solea solea</i>) | 13/9/03 | Yarmouth Pier | 3 lbs 14oz |
| Undulate Ray (<i>Raja undulata</i>) | 3/10/03 | Chale Beach | 16lbs 13oz |

Boat Caught:

| Species | Date | Location | Weight |
|--------------------------------------|----------|-------------|-----------|
| Mackerel (<i>Scomber scombrus</i>) | 12/11/03 | Off Needles | 3lbs 13oz |

In September 2002, a trawl survey of the Solent undertaken by CEFAS (Centre for Environment, Fisheries and Aquaculture Science) yielded a large number of Baillon's Wrasse (*Symphodus bailloni*). This poorly known species, very similar to the familiar Corkwing Wrasse (*Symphodes (Crenilabrus) melops*), is thought to reach its northern limits in the English Channel and has not previously been recorded off the south coast of England (Dunn & Brown, 2003). Off the Isle of Wight, both juvenile and larger fish (>10cm length) were caught between Wootton Creek and Ryde. A total of 89 individuals were caught during the survey and, remarkably, this was the most common species of wrasse caught. The observations are symptomatic of the warmer seas and associated shift in fish communities reported elsewhere (Beare *et al* 2003; Hawkins *et al* 2003).

Report for 2004

Algae

In September, there was an exceptional abundance of the green alga *Bryopsis plumosa* in rock pools at Bembridge, just south of the lifeboat station. This very attractive species has been recorded from the area (Collins *et al*, 1990) but not observed in such profusion.

Invertebrates

In total, 41 specimens of the mantis shrimp *Rissoides desmaresti* were recorded in local waters over the winter 2003-2004. Most of these were dredged up from muddy-gravel substrate by oyster fishermen between Christchurch Ledge and the eastern Solent although a single individual was also caught off Freshwater Bay. The largest specimen was 82mm in length and smallest 41mm. Only 26% of the animals caught were males. This ratio of males to females is consistent with work on the sparer mantis shrimp *Squilla empusa* from the Gulf of Mexico (Wortham-Neal, 2002).

A survey of the benthic fauna on the sea bed off Sturbridge, between Ryde and Portsmouth, on 7th May did not yield any mantis shrimps. However notable records were a single slit limpet *Emarginula fissura* attached to a small cobble and two specimens of the pistol shrimp *Alpheus macrocheles* that were living in holes within a small boulder. Both species are first known records from the Solent. Researchers in the physics department at Southampton University have made sound

recordings of the pistol shrimp. As a southern species, this again could be a relatively recent colonist of the region.

Fish

According to local anglers, this summer was an exceptional year for red mullet *Mullus surmuletus* particularly in the Solent. Two specimens of the beautiful butterfly blenny *Blennius ocellaris* were caught while undertaking survey work in the vicinity of Sturbridge shoal between Portsmouth and Ryde. In May, a specimen was found in an old bottle and another from the same location caught in September was seen in a hole within a small boulder. These are the first known records of this species from the Solent.

Further to the first Island record of the seahorse *Hippocampus guttulatus* (see 2003 Report), a dead specimen of the short-snouted seahorse *Hippocampus hippocampus* was found washed up on the beach at Yaverland on 30th October. There had been south-easterly gales in the previous few days and there was a large amount of seaweed and flotsam debris, including bottles and wood with goose barnacles attached. The specimen had a piece of eel grass *Zostera marina* wrapped around its body suggesting that there might be a local colony, although the nearest known eel grass beds are off Bembridge. The animal was bright red in colour and a photograph was sent to the Seahorse Trust. A reply from the Trust director, Neil Garrick-Maidment, stated that it was a female 2-3 years old and in good condition, albeit dead. Speculation that there might be a local colony of seahorses in Sandown Bay was heightened further following a report from Mr. K.Batchelor who had caught one in August while potting a few hundred metres off the end of Sandown Pier, although the species was not determined. In late October a seahorse, species not determined, was reported within the stomach contents of a Cod caught by an angler off the Nab Tower.

Perhaps the most remarkable fish record of the year was the capture of a giant Eagle Ray, *Myliobatis aquila*, weighing an astonishing 102 lbs caught south east of the Nab Tower. This superseded the previous NFSA national boat-caught record for the species by just over 40lbs! The previous boat-caught Isle of Wight record was 52lbs 8oz for a fish landed at Bembridge in 1972, yet probably caught off the Nab.

IOW NFSA new weight records for 2004

Shore Caught:

| Species | Date | Location | Weight |
|--|---------|------------------|----------|
| Golden Grey Mullet, <i>Liza aurata</i> | 19/7/04 | Yarmouth Harbour | 2lbs 8oz |
| Ballan Wrasse, <i>Labrus bergylta</i> | 4/9/04 | South Wight | 6lbs 3oz |

Boat Caught:

| Species | Date | Location | Weight |
|--|---------|-----------------|----------|
| Golden Grey Mullet <i>Liza aurata</i> | 25/4/04 | R.Medina | 2lbs 2oz |
| Eagle Ray, <i>Myliobatis aquila</i> | 9/8/04 | SE of Nab Tower | 102lbs * |
| Trigger Fish, <i>Balistes carolinensis</i> | 15/8/04 | Off Needles | 3lbs 8oz |

* New National Record

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