Marine Recorder's Report 2016

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The winter of 2015/16 followed the recent trend with some considerable storms crossing the Atlantic, bringing with them a stream of flotsam items which were often colonised by so-called rafting species. Details of such have featured in the reports of the previous two years (Taylor, 2015) (Taylor, 2016) but the variety of species and number of specimens grew yet again in early 2016.

Inevitably the western coasts experience the greater share of this bounty and again David Fenwick was at the forefront. Particularly noticeable was a find of a specimen of *Martesia* in a piece of an American fishing buoy washed up in Cornwall, the buoy also housing specimens of *Isognomon bicolor* (C. B. Adams, 1845) to further confirm its Gulf of Mexico/SE USA provenance. Close examination of the specimen suggested it was not the "expected" species *Martesia striata* L., 1758 but instead the rather less well-known *Martesia fragilis* Verrill & Bush, 1898 which, although it has been reported as a vagrant on our shores before, is usually associated with coconuts which have made the transatlantic drift. Indeed some revisiting of previous *Martesia* records prompted by this work has suggested there may have been some misidentification at species level in the past.

Other "new" vagrant species encountered in Cornwall in early 2016 were: Anomia simplex d'Orbigny, 1853; Mytilus trossulus Gould, 1850; and Brachidontes exustus (Linnaeus, 1758). There were also further Cornish reports of Chama congregata Conrad, 1833 and Cornish and Dorset records, respectively reported by Tracey Williams and Helen Stanko, of Stramonita floridana (Conrad, 1837), which is considered a valid species nowadays and so differentiated from Stramonita haemastoma (L., 1767).

A further interesting vagrant on an American commercial fishing float was *Crassostrea gigas* (Thunberg, 1793). Of course this species is already firmly established in some of our coastal regions following commercial introduction, indeed it is a serious pest in places, and continues to spread. During the summer of 2015 a sudden settlement of very young oysters was noticed on intertidal rocks in Mount's Bay, Cornwall. Their small size made initial identification a little uncertain, with the suggestion from their habit that they may be the south Pacific species *Ostrea chilensis* Philippi, 1844 [= *Tiostrea lutaria* (Hutton, 1873)], which is farmed commercially in parts of the UK, but they were subsequently confirmed as *C. gigas*. This is of some concern due to the detrimental effect dense populations of the species can have on the amenity value of shores and because it has the potential to form dense reefs which could impact on the wealth of native biodiversity in the area.

Two interesting additions were made to the British and Irish nudibranch fauna in 2016 by taxonomists. One came as no great surprise as workers in the field had for some time been separately recording the two colour morphs of *Diaphorodoris luteocincta* (M. Sars, 1870), that without the dorsal reddish markings being noted as "form *alba*", sometimes in the face of academic suggestion that this may be mere intraspecific variation. Detailed work by Furfaro et al. (2016) has demonstrated genetic and morphological (radular) differences confirming specific distinction, confirming Diaphorodoris alba Portmann & Sandmeier as valid for the unmarked specimens and D. luteocincta s.str for those with the reddish dorsal markings. ***

Given the recent consistent recording of the two colour morphs, this does not cause too much of a problem for the Society's dataset. The second new addition does however. Again, there has long been suspicion that the slugs referred to as *Aeolidia papillosa* (L., 1761), with a wide geographical range, actually represent a group of closely related species. Work by Kienberger et al. (2016) has supported this and suggested that in Britain (and possibly Ireland) there are two sympatric species: *A. papillosa* s.str and *A. filomenae* sp.nov. While the species can be readily determined by dissection, the external characteristics appear more subtle, with the newly described species having comparatively paler, more flattened and slightly hooked cerata. The authors admit further work is

required but the presence of two very similar species in our region rather implies that all old records must be related to "agg." status and distribution maps for the newly defined species have to begin from scratch, hence anybody encountering "*A. papillosa* agg." is urged to note and submit the record with detailed photographs and even to preserve voucher specimens for possible internal diagnosis.

A further nudibranch species (indeed a new Genus) was added to the British list in the traditional way when Bernard Picton photographed something that even he did not recognise when with a group of divers in Scilly in September. The NE Atlantic Nudibranchs group on Facebook again quickly proved its usefulness and within days the sighting was accepted as *Thordisa azmanii* Cervera & García-Gómez, 1989. This is another species apparently expanding the northern limits of its range, having only previously been recorded from off northern Iberia. *** This pattern was further reflected by new records of *Trapaina tartanella* (Ihering, 1886) and *Pruvotfolia pselliotes* (Labbe, 1923) *** observed and photographed by Terry Griffiths at Shoalstaone, South Devon and yet further records of *Discodoris* [*Rostanga*] rosi Ortea, 1979 on southwest shores.

These nudibranch records were made by SCUBA divers, the Society having numerous contacts amongst the diving/sublittoral surveying community. Many of these divers are connected with the excellent pan-specific recording efforts of Seasearch (www.seasearch.org.uk) and certain of their ranks have been assisting the society by collecting sublittoral substrate samples to be processed for microscopic shelled species. In May 2016 they carried out an exploratory survey of the Channel Islands and as well as recording many nudibranch species via their usual photographic methods - notably including *Doris sticta* (Iredale & O'Donoghue, 1923), *Okenia elegans* (Leuckart, 1828) and *Tritonia nilsodhneri* Marcus Ev., 1983 – they supplied the Society with 7 sediment samples from a variety of substrate types, localities and depths which, when analysed, elicited nearly 300 records representing over 100 different taxa including *Pyrgiscus [Turbonilla]jeffreysii* (Jeffreys, 1848) and *Turbonilla pusilla* (Philippi, 1844). Further samples from Scilly are also currently being processed.

Many of these samples are laboriously processed by Society member John Fisher. John made an interesting find himself in the late summer when holidaying on the Sussex coast. While rummaging around in commercial fishing gear sitting on a harbour he discovered a whelk pot full of sediment. Collecting and inspecting this material revealed a good number of fresh dead *Saxicavella jeffreysi* Winkworth, 1930, a species which cropped up in one of the grab samples from the Society's Lleyn trip in 2015. The species is evidently widespread but is sublittoral and seems to occur very patchily.

There was another potential new species recorded for Britain when Peter Barfield, a postgraduate student with the University of Plymouth, found an unusual bivalve while carrying out coastal site assessments in Hampshire. Although subadult and dead, the valves were still articulated and the specimen is almost certainly an *Acanthocardia pauciocostata* (G. B. Sowerby II, 1834). *** Of course as a dead found specimen, not in situ, the provenance has to remain a mystery but the species is another expanding its range and is established on the other side of the English Channel. Certainly it is something to look out for on the south coast.

The Society's own marine field excursions, primarily those in South Devon and Normandy, produced a very large volume of records with numerous workers on the shores plus weed washing and shell grit samples being taken and processed. There were also two offshore sampling trips in Devon, albeit within the Sounds at Salcombe and Plymouth, which facilitated the testing of what is now the Society's own Van Veen grab sampler. *** The good number of samples taken are still being worked but are producing lots of useful and interesting data and were notable for the relative abundance of *Phaxas pellucidus* (Pennant, 1777) and *Thyasira flexuosa* (Montagu, 1803), plus the occurrence of *Tragula fenestrata* (Jeffreys, 1848), a species being encountered with greater regularity in our

sampling these days as we use a grab rather than a dredge and process muddier samples where they occur. Bas Payne and Adrian Brokenshire have both put in considerable effort to process both onshore and offshore samples collected on the trip. Records from the French trip are still trickling in but it has been pleasing to see ticks against species such as *Haliotis tuberculata* L., 1758 and *Gibbula pennanti* (Philippi, 1846) – the latter not recorded in any of the Seasearch material from the Channel Islands – and weed washings produced good numbers of *Setia pulcherrima* (Jeffreys, 1848), a species at the northern limits of its range on the southern side of the English Channel. Some may question the validity of our Society surveying on the French coast but marine species tend to have little respect for national borders, albeit that the relatively narrow English Channel seems to represent a rather more significant barrier to species than might be expected. Thanks are offered to Bas Payne and Jan Light for organising these excellent trips.

David McKay continues his assiduous marine Mollusca surveying, particularly in Scotland and often far out to sea. There were a number of highlights in 2016, most notable being a second site for the recently described deep-water bivalve *Isorropodon mackayi* Oliver & Drewery, 2014. There were also further records for *Volutopsius scotiae* Fraussen, McKay & Drewery, 2013 building a slightly better picture of the distribution of that species. Another first for David were specimens of the Fissurellid species *Cranopsis asturiana* (P. Fischer, 1882), *** a very nice find from Upper Rockall Bank. Last year's report (Taylor, 2016) noted the puzzling issue of a number of unusual Turrids David had been finding off NW Scotland. 2016 has seen work continuing on these, including a mini workshop organised through the British Shell Collectors' Club with some of their European members and the Turrid specialist Mike Dixon. Although there is still scope for further discussion, it now seems accepted that at least some of David's specimens are *Raphitoma concinna* (Scacchi, 1836).

Finally, the occasional genuine oddity still crops up. There were two of particular note in 2016, both empty shells: a *Lambis* cf. *truncata* (Lightfoot, 1786) found by David Fenwick on the shore in Penzance (very encrusted by native fauna and possibly discarded some years ago by the local shell shop) and, very unusually, a rather fresh looking *Columbella* sp. found by Paul Higson on the shore of South Ronaldsay in Orkney *** the origins of which are a complete mystery.

Thanks are extended on behalf of the Society to all those who take the trouble to report their marine records for inclusion in the Society's marine dataset, including some regular contributors not mentioned above but hugely valued nonetheless. If you do any marine surveying at all, even just beachcombing, then do please feel free to report you finds. Equally, if you are keen on processing grit samples then there is nearly always material available which can be provided for your interest just so long as the records are received by return or, if you are a diver, any offshore substrate samples are always of great interest.

References

Furfaro G., Picton B., Martynov A. & Mariottini P., 2016. *Diaphorodoris alba* Portmann & Sandmeier, 1960 is a valid species: molecular and morphological comparison with *D. luteocincta* (M. Sars, 1870) (Gastropoda: Nudibranchia). Zootaxa **4193** (2): 304-316

Kienberger K., Carmona L., Pola M., Padula V., Gosliner T.M. & Cervera J.L. (2016). *Aeolidia papillosa* (Linnaeus, 1761) (Mollusca: Heterobranchia: Nudibranchia), single species or a cryptic species complex? A morphological and molecular study. *Zoological Journal of the Linnean Society* **177**: 481-506

Taylor S., 2015. Marine Recorder's Report 2014. Mollusc World 38: 21-23

Taylor S., 2016. Marine Recorder's Report 2015. Mollusc World 41: 7-11