

Conservation Officer's Report 2014 (VIII)

IMPORTANT FRESHWATER AREAS

On 23rd April 2014 I attended a workshop in Oxford organised by the Freshwater Habitats Trust (FHT: an organisation that changed its name from 'Pond Conservation' in 2013). This event set out to discuss 'Important Freshwater Areas' (I.F.A.s), with a wide ranging partnership of interested NGOs and governmental bodies.

Background: There is now abundant evidence that freshwater biodiversity is supported by a wide variety of waterbody types (flushes, springs, ponds, lakes, ditches, streams and rivers) and these often lie outside well-designated areas such as WFD (Water Framework Directive) water bodies, SACs (Special Areas of Conservation) or SSSIs (Sites of Special Scientific Interest). Although freshwater species including Mollusca often make use of a wide variety of water bodies, some are restricted to a particular type.

The concept behind IFAs is to bring together, as a single data source, information on the location of all areas in England, which are important for freshwater biodiversity. At present this is often not available for planners and land use managers to (1) develop protection for important freshwater sites and species as well as (2) to work from these to create networks of high quality freshwater habitats across the landscape. The workshop focussed on:

- Which species, habitat and environmental data should be used to identify IFAs?
- How should data be analysed and mapped?
- How should IFAs be geographically defined?

Work on this project is at an early stage and the FHT will be further developing it with partner organisations during 2015. This is an important initiative for the Conchological Society as there are Mollusca in virtually all freshwater bodies; association with this project may have many benefits for us such as:

- Gathering more distributional data on freshwater molluscan assemblages across the wider countryside.
- Allowing us to provide conservation advice where important Mollusca are discovered.
- Giving us contact with a wide range of people who have an interest in freshwater matters who might wish to develop links with the Conchological Society.

I will provide updates on this important initiative as the IFA project develops. To find out more about the FHT visit: www.freshwaterhabitats.org.uk

Fig. 1 Images taken at the workshop

STATE OF NATURE RESPONSE WORKSHOP

In my last Annual Report I wrote about the launch of the State of Nature Report (Mollusc World 35: 30 – 31), which demonstrated that nature is under threat, but left many asking what do we do now? On March 24th 2014 I attended a workshop in London that introduced the 'State of Nature Response Project'. In the words of Pippa Richards, the RSPB Nature Project Officer for this initiative, *"This is a partnership of conservation NGOs are aiming to answer this question by systematically assessing what nature needs in order to thrive. This includes what we are doing well, what we could improve on and, importantly, what we are not yet doing at all. This has been done by asking conservationists from a wide range of backgrounds what they think needs to be done to meet a set of ecological and*

social requirements, the results of which will provide priority actions in each of the UK countries for government, businesses, NGOs and the public sector. Essentially, this project will continue the work carried out with the State of Nature partnership of some 25 conservation organisations and ultimately, it will provide the nature conservation sectors collective view on what society should prioritize to reverse the decline in nature across the UK". Towards the end of 2014 all 25 State of Nature partner organisations (for list see Mollusc World 35:31) were asked to complete a questionnaire; the Society duly responded. This was designed to get a generalised idea about various organisations expertise and 'what is and is not working' in maintaining populations of different groups of organisms. Questionnaire analysis feedback and other actions are expected in 2015.

NEW NON-MARINE MOLLUSCAN STATUS REVIEW FOR GREAT BRITAIN

March 2015 saw the web release of a new status review, the latest 'red list and more' of the entire British non-marine molluscan fauna. The development of this important new publication goes back a few years, but before providing further details a quick recap of British molluscan red list history puts matters into perspective.

The first provisional 'red list' review of UK non-marine Mollusca was released in 1983 with the Invertebrate Site Register No 14 (Foster 1983). This limited circulation 'confidential' report, comprehensively reviewed the British fauna using data gathered by the Conchological Society. The red data criteria applied were adapted from those used for insects and included 23 species assessed as either 'endangered', 'vulnerable' or 'rare' together with 'notable' and regionally notable species with restricted national or regional distributions. Eight years later saw the publication of British Red Data Books 3 (Bratton 1991), the first widely available British molluscan red data list. This included 33 mollusc species: 10 endangered, 7 vulnerable, 13 rare and 3 insufficiently known.

Following the release of this second red data list, knowledge of non-marine species distribution and threats increased considerably with work leading up to the publication of the second national non-marine molluscan atlas in 1999 (Kerney 1999). Additionally, from about the mid-1990s, the launch of both UK BAP 'priority species' and the EU Habitat & Species Directive resulted in generous funding directed at certain rare or threatened species.

In 2009 with a clear need for a non-marine molluscan red-list revision, JNCC approached the Conch Soc to suggest that a new review be undertaken. The Society's Conservation and Recording Committee agreed that Mary Seddon and Ian Killeen take the lead on this initiative and by about 2010 an early draft was produced (chiefly using the Conch Soc data base and inputs from a group of interested members with extensive experience of UK non-marine molluscs). Unfortunately JNCC had by then ceased publishing further 'red list reviews'. Following a short hiatus, in early 2012, the Countryside Council for Wales (CCW) helpfully stepped in to take the matters forward. They commissioned M. Seddon (working together with I. Killeen and again further extensive input from a group of Society members) to undertake the completion of a more detailed Species Status Review to provide a conservation assessment for all British non-marine Mollusca. NGOs such as the Conchological Society can be supported by statutory Nature Conservation Agencies (like CCW) to produce either limited focus 'red lists' or, as in this case, full all-species status reviews. A first draft, completed by April 2013, was further refined and expanded throughout the rest of the year by Adrian Fowles (Senior Invertebrate Ecologist with CCW / NRW) in consultation with Ian Killeen, Robert Cameron and myself. The review was finally completed by April 2014 (Seddon *et al* 2014) and uploaded onto the NRW (Natural Resources Wales) website in March 2015. It can now be accessed

at <http://naturalresourceswales.gov.uk/content/docs/pdfs/our-work/Policy-advice-and-guidance/protected-species/species-status-review-of-the-non-marine-mollusca-of-great-britain-report-17.pdf?lang=en>. A link to the report is already posted on the Conchological Society's website. The review covers 215 species including all free-living (including non-natives) non-marine molluscs from the Britain except Northern Ireland, which is included with the rest of Ireland in the Irish Red Data Book (Byrne *et al* 2009). It makes assessments based upon the IUCN criteria applied at a regional level. There are many more categories than in the 1991 Red Data Book. The nineteen species at imminent or possible risk of extinction consist of 4 Critically Endangered, 2 Endangered, 13 Vulnerable and additionally 10 species are classed as Near Threatened. Further categories include 11 Data Deficient (a mix of species newly recognised from Britain and about 4 probable introductions), 152 Least Threat and finally 23 Not Applicable (all non-native introductions). There is not space to undertake a full analysis of the review here, but a more detailed discussion on red lists is planned for a forthcoming Mollusc World. This publication will act both as a benchmark resource and stimulus and focus for further non-marine molluscan work in coming years.

A MEETING TO DISCUSS iRECORD

Fig 2: the iRecord logo

On 29th November several members of Conch Soc met with others from the Sussex Biodiversity Records Centre (SxBRC) at their headquarters in Henfield to discuss the use of iRECORD.

Before summarising the meeting a brief outline of this recording system may be helpful. iRECORD is a free website that is being actively developed on behalf of the National Biodiversity Network (NBN) through HLF funding OPAL and the NERC's Centre for Ecology and Hydrology (CEH). The scheme has additionally received advice from JNCC (Joint Nature Conservation Committee) and Natural England. iRECORD allows users to add biological records for others to see and for experts to check, verify or provide identification help and guidance on. All records for non-sensitive species are shared and can be incorporated (after verification by an iRECORD approved verifier) into National Recording Schemes, Local Record Centres or used by Vice-County Recorders. For a more detailed look visit: www.brc.ac.uk/irecord/about

Those attending this informal meeting from the Conch Soc included Adrian Norris, Bas Payne, Simon Taylor and myself together with SxBRC colleagues Bob Foreman, Penny Green, Charles Roper and additionally David Roy from CEH / BRC visiting for the day. The need for iRECORD clarification arose because the Conch Soc members had, for a variety of reasons, all been increasingly involved with the scheme and it had become clear that we needed to sort out our different understanding of its use. Simon and Adrian had both become national iRECORD verifiers as Society recorders whilst Martin had been encouraged as Sussex county recorder, to become a local verifier by SxBRC. Bas, as a member of NBN's User Group (and something of a Society 'expert' on matters NBN!) was naturally interested in seeing how iRECORD works as a source of NBN input. We felt that there was a need to get together to discuss some of the issues, challenges and opportunities facing Conch Soc in the use of this rapidly developing scheme. Martin's links with SxBRC (a leading iRECORD user organisation) led to their generous offer to host the meeting and provide staff back-up and expertise. There is not space here to fully explore and discuss iRECORD and a more detailed user introduction and discussion will appear in a future Mollusc World. What is clear is that iRECORD is a dynamic and

exciting resource that attracts and engages people from beginners to advanced experts, encouraging them to observe nature and record their observations. iRECORD is still in need of further refinement but, if Conch Soc can positively engage with this scheme, it may help us to engage with a vast network of interested people from across the country who might otherwise not know about us and the exciting possibilities of an active conchological involvement.

FIGS 3: IMAGES TAKEN AT THE WORKSHOP

ADVICE & HELP

Roman Snails (*Helix pomatia*)

1. A student studying a population of *H. pomatia* behaviour in a Cotswolds estate was given advice and ecological information on this species.
2. An ecologist at Suffolk County Council was given assistance in obtaining a NE licence to work on this species and then provided with help and advice in relation to analysis of plans to expand a quarry potentially impacting upon *H. pomatia* populations living in marginal areas. In gratitude for the help the Council made a financial donation to the Conch Soc.

Threat to a chalk grassland site

In early summer I contributed a molluscan survey of an area of old chalk grassland known as Vale Meadows lying on the margins of Ovingdean in East Sussex. The area was subject to plans to develop the area for housing. Unfortunately the site lay just outside the boundaries of the South Downs National Park. Other workers studied the rich chalk flora and diverse insect assemblages. The site is one of few supporting the scarce Red Star-thistle *Centaurea calcitrapa* and the rare Cut-leaved Self-heal *Prunella laciniata* was recorded during the survey, Although the site does not support any major molluscan rarities, a diverse assemblage including abundant *Pupilla muscorum*, *Cochlicella acuta*, *Vallonia* ssp and *Vertigo pygmea* suggested a long period free from scrub intrusion or arable damage.

Post script: In early 2015 it was learnt that the plans had been rejected. The grounds for refusal were landscape, air quality and biodiversity (botanical, entomological and molluscan evidence). The County Ecologist said the applicant had underestimated the ecological value of the site.

FIG 4 Chalk grassland at Vale Meadows

River mussels and RSPB reserves

An RSPB land management advisor (wetlands) was provided with information on the locations of the three freshwater mussels *Pseudanodonta complanata*, *Sphaerium solidum* and *Margaritifera margaritifera* living in or adjacent to various RSPB reserves.

Anisus vorticulus locations highlighted before management work

Natural England (Norfolk team) was provided with information on the distribution of the European Protected *Anisus vorticulus* in ditches at Damgate near Acle in Norfolk in advance of planned ditch management plans.

In early 2014 Natural England released a revamped version of the *Anisus vorticulus* management protocol (Annex B of CL 14) titled 'A management protocol for the maintenance of drainage ditches

and other water-bodies inhabited by the Little Whirlpool Ramshorn Snail, *Anisus vorticulus*': http://www.naturalengland.org.uk/Images/wml-cl14-annex-b_tcm6-35774.pdf). This now gives Conchological Society acknowledgements and society logo.

Loch Spynie – Molluscan survey of RSPB reserve

Loch Spynie is one of the largest eutrophic water bodies in northern Scotland. Help was given to a surveyor working for the RSPB and undertaking an assessment of the molluscan community in the loch. Assistance was given with *Pisidium* identifications and feedback provided on a draft survey report.

Fig. 5 Image of Loch Spynie

Askham Bog, York

The Yorkshire Wildlife Trust were given advice on possible records of the two S41 species *Omphiscola glabra* and *Segmentina nitida* reported from or close to Askham Bog, near York. This site was threatened with development and the Trust wanted assistance on the possible use of these species records in planning negotiations. Unfortunately verification of the records was not established as some were old and referee verification unclear. This case demonstrates the need to carefully investigate historic records of rare or 'conservation-significant' species and highlights the value of the carefully scrutinised and often refereed records of the Conchological Society.

S 41 Species survey method sheets *Segmentina nitida*

In early 2014 Natural England required help from a number of invertebrate specialists to write a series of 'Section 41 Species of Principle Importance' (S41 replaced the UK BAP priority lists in 2006) species survey method sheets. Only one mollusc *Segmentina nitida* was chosen. The sheets are designed to allow non-specialists to undertake surveys for the target species on National Nature Reserves and possibly SSSIs. Each sheet contains information on how to select potentially suitable habit and then undertake collection and identification (avoiding confusion with similar species). Finally a standard form of data recording is included using the iRECORD system. Users are invited to contact Coch Soc both to seek additional identification help, but also to provide their survey records. If this sheet proves to be successful then they might form the basis for additional Conchological Society sheets (possibly in partnership with Buglife) for other selected species to encourage wider public participation in our recording activities. The *S. nitida* sheet can be viewed on the Conchological Society website.

Fig. 6: *Segmentina nitida*

CONSERVATION LINKS WITH VARIOUS PUBLICATIONS:

British Wildlife

Three molluscan 'wildlife reports' were published during 2014 (British Wildlife 25:4, 25:6 & 26:2). As in previous years these were able to cover a range of molluscan news, issues and discussions partly drawing upon and discussing the Society's non-marine and marine reports as well as a selection of reports and papers from Mollusc World and The Journal of Conchology. Additionally, during the year I was able to review and therefore publicise two important new publications; the new land snail identification guide (Naggs *et al* 2014) and the Field Studies Council's new British and Irish slug guide (Rowson *et al* 2014).

The Isles of Scilly Bird & Natural History Review: An illustrated report was again published in covering a series of topics (Willing 2014). One was able to draw attention to many very small marine gastropods (e.g. *Rissoa* spp) that abound in the shallow waters around the islands, but are easily overlooked. The article then concentrated on non-marine matters including news of several newly recorded species to the islands and additionally publicised the new FSC slug identification guide.

Fig 7 Images of small marine molluscs collected at Broad Ledge, Tresco

RIVERS TRUSTS - MOLLUSCS IN ACTION

In my last annual report I described the work of Rivers Trusts and a specific example of 'molluscs in action' during a stream modification exercise. 2014 saw a further example of mollusc being used as part of a stream assessment prior to improvement works. In May 2014 I joined two botanists to survey Duncton Stream, a small chalk stream in the grounds of Seaford College, near Petworth. The section of the stream under investigation had been substantially disrupted in the past by fish-farm operations leaving many concrete dams and other obstructions. In advance of plans to restore the water way to a more natural state, the surveys were undertaken to ensure actions would have no significant negative impact on any sensitive plants or molluscs. Although a good molluscan fauna was found no species of conservation importance were located. Later in 2014 work was undertaken and the stream is now restored to a near 'natural state' and already free movement of trout has been observed.

Fig. 8 Images of Duncton stream

ASSOCIATIONS WITH OTHER ORGANISATIONS:

The Conchological Society has active associations with many other conservation organisations. Some examples of particular collaborations with our key partners are given below.

Buglife

Buglife are an especially useful associate who are always ready to provide help and advice (Conchological Society is a Buglife member). Three examples:

(1) The Bouchout Declaration: In summer 2014 Buglife consulted all its Member Organisations regarding the Bouchout Declaration (see <http://www.bouchoutdeclaration.org/declaration/>). This Declaration is currently available for signing by organisations to demonstrate their commitment to sharing biodiversity data openly. Following detailed discussions within Council it was decided that, although in principle we support free and open access for information, there are a few situations where this is not desirable. Species where we would not wish to provide precise locations details for include Roman snails *Helix pomatia* and pearl mussels *Margaritifera margaritifera*. Additionally a Council member gave an example of where a population of a scarce snail may have been severely impacted by collecting, something that may not have happened if the precise location had been less easily available. There are other species (such as a number of relatively scarce and 'showy' cockles popular with some collectors) that are considered to be at risk if the precise whereabouts of a number of large, but accessible populations are publicised.

(2) Species at risk of extinction in England by 2020: Buglife have been working with the Natural England Species Taxon Group on a Section 41 species exercise - including risk analysis, reporting progress on actions and developing various species-action strategies. One of their jobs has been in identifying species at greatest risk of extinction in England (not UK) by 2020. In terms of Mollusca eight species were presented for consideration these being: the marine species *Caecum armoricum*, *Paludinella littorina*, *Tenellia adspersa* and *Atrina pectinata*; the brackish species *Heleobia stagnorum* and freshwater taxa *Sphaerium solidum*, *Margaritifera margaritifera* and *Myxas glutinosa*. Advice was given that *M. glutinosa* had already been declared extinct by Natural England in the country in 2010 (although who knows if it isn't hanging on in some over-looked corner!). Of the others the only two that seemed to be at genuine risk of imminent extinction were *H. stagnorum* and *S. solidum*, both occurring in very small restricted populations each faced with a range of serious environmental threats. Both of these species are considered to be 'Critically Endangered' in the new non-marine status review (Seddon *et al* 2014). Additionally a further species was suggested as a candidate for the potential extinction list this being *Marstoniopsis insubrica* a species considered 'Endangered' in the status review is down, in England, to at best, a few small populations all easily lost due to engineering works, dredging, and water pollution.

Fig. 9 Images of *Sphaerium solidum*

(3) Non-marine species English names: Buglife have been working on developing a definitive list of English names for all British non-marine species. Help was given to develop a draft version, which will be further developed in 2015. Many disapprove of the use of vernacular names, preferring to adopt scientific Latin on every occasion. There are, however, many occasions where the use of English names performs a valuable role in informing, publicising and educating those who might otherwise fail to engage. Take for example Roman Snails, Ghost Slugs, Cheese Snails and Depressed River Mussels. In all of these cases the names are frequently used in newspapers and general accounts; the Latin names mean little to the non-specialist.

Invertebrate Link (IL)

IL (www.royensoc.co.uk/InvLink/Index.html) meets biannually and gives us links with representatives from NGOs and governmental conservation bodies. It also allows us to advertise our work to these bodies through the distribution of an annual report summarising our recording and conservation activities. An example of a joint initiative produced by IL members (including the Conch Soc) was a guidance document for field workers to avoid the spread of 'problem' invasive species. "Invertebrate Link (JCCBI) Guidance to Minimise the Accidental Transfer of Organisms Between Sites" has been published appearing in the Dec 2014 issue of BENHS journal Br. J. Ent. Nat. Hist 27(4): 253 – 254.

Sussex Wildlife Trust's Conservation & Biological Recording Committees

I have been able to represent molluscan interests and contribute an annual records report to **Adastra**, the annual review of wildlife recording in the county (www.sxbrc.org.uk). For 2014 this was able to highlight important new finds of populations of *Vertigo moulinsiana* and *Monacha cartusiana* in the county. The 2014 report (Willing 2015) was also as with British Wildlife able to publicise the newly published land snail and slug identification guides (Naggs *et al* 2014; Rowson *et al* 2014).

Fig. 10 Images of *Monacha cartusiana* from Sussex

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