Conservation Officer's Report 2013

ADVICE & HELP:

1. Roman snails:

Numerous assistance requests were dealt with concerning *Helix pomatia* the Roman snail. These included:

- Assistance with or confirmation of correct Roman snail identification;
- Advice on survey options and guidance and help for those engaged in conservation work to obtain Natural England licences (*H. pomatia* is protected under Schedule 5 of the Wildlife & Countryside Act).
- Suggestions to explain the sudden deaths of Roman snails including for a North Downs population where mortality was noted as to occurring between dawn and dusk. Various suggestions were made for this unusual observation including one from David Heaver of Natural England who suggested, "I would not discount sciomyzids - the adult flies parasitise adult snails and the larvae develop within either the mantle or body of the snail. When the grown larvae leave the snail to pupate, which the evidence often suggests may be overnight, the snail succumbs and will be found in the morning, the larvae having moved off and pupated in litter".

2. Identification issues:

A number of conservation linked identification issues were undertaken. These included clarification of two incorrect identifications of *Pisidium tenuilineatum* from different parts of Sussex, confusion arising from separation of *Valvata piscinalis* and *V. macrostoma*, and several incidents where help was needed to identify large unionid mussels with certainty.

ROMAN SNAILS THREATENED BY DEVELOPMENT PLAN:

A long and sometimes acrimonious planning dispute had been running for at least nine years between some residents of Harpenden, Hertfordshire and Harpenden Town Council (HTC). This concerns a relatively small area of former allotments and adjacent Westfield Recreation Ground known both to local residents and the council to support a population of Roman snails *Helix pomatia*. Potential risks to the snails come from the long-standing desire by HTC to obtain permission to construct an access road, supposedly to allow easier entry for maintenance vehicles. Many local residents consider, however, there to be 'another agenda', with the road being a first step to development of the area. In January 2013 HTC put in a planning application to construct the road. In addition to numerous local objections both the Conchological Society and Buglife also lodged concerns. We believed that the scheme had the potential to cause damage, or possible loss, of the Roman snails due to waste soil being dumped onto areas where they are living. Both organisations suggested that before any planning application could be considered there should have been a licensed ecological study to assess the snail's status on the site to produce mitigation plans to minimise Roman snail losses. It was therefore with surprise that a planning officer for St Albans District Council (SADC) recommended that the road plans be approved at a forthcoming SADC planning committee meeting without any snail survey data. Surprisingly shortly before the planning committee were due to discuss the proposals it was announced (following last minute reminder of the legal protection afforded to the snails) that they had been shelved to allow

further consideration of various matters especially the Roman snails. It would seem that the consequences of approving potentially damaging permissions impacting on a legally protected species led to worries of the negative publicity and legal embarrassment! On 21st February the Herts Advertiser ran an article titled "Wildlife charity claims first victory in battle against Westfield access road'. Alice Farr of Buglife was quoted as saying: "This is a great victory for the Roman snails. They're legally protected. Protecting this population is very significant." It still remains for HTC to organise a licensed Roman snail survey of the site but for the moment it seems that the snails have been saved.

Fig. 1. A Roman snail from the Harpenden site threatened with development

STATE OF NATURE INITIATIVE

In my last annual report (***MW*** 32: 4) I described how a consortium of conservation organisations led by the RSPB had produced a 'state of nature in the UK' report, which had reached a partial draft stage by the end of 2012. Further work by all participant organisations continued into early 2013. The Conch Soc contributed by providing feedback comments and suggestions on a series of drafts together with supplying images of molluscs and habitats for possible inclusion. No mollusc was used in the report in relation to specific numerical decline data but it was nevertheless possible to get pearl mussels *Margaritifera margaritifera* included as a case study example of an endangered and declining species where 'good quality' information was available to demonstrate significant national losses. Specific mention was also made of the glutinous snail *Myxas glutinosa*, a freshwater species that has become virtually extinct in the UK in about the last 100 years and one now restricted to a single UK mainland site.

The State of Nature report was released on 22nd May 2013 with a launch held at the Natural History Museum in London. This included speeches delivered by Sir David Attenborough and a Government minister followed by a carousel of themed talks. The Conchological Society was extremely fortunate to secure the help of Dr Peter Cosgrove, who has undertaken extensive conservation work on freshwater pearl mussels in Scotland. Peter delivering a talk titled "Mollusc of the Glen", an excellent presentation giving a very well received account of the plight of this internationally endangered and iconic species.

Fig. 2 (two overlapping images) Peter Cosgrove surveying freshwater pearl mussels in Scotland / Peter delivering his presentation at the State of Nature event

The State of Nature was presented by a consortium of 25 UK conservation and research partner organisations[1]. The report is made up of five components. The main report provides a summary overview and also explains how the status of the chosen species have been measured. Population trends for chosen species appear within report sections giving the main habitat for that species: farmland, lowland semi-natural grassland, uplands, woodlands,

[1] Amphibian & Reptile Conservation, Association of British Fungus Groups, Bat Conservation Trust, Biological Records Centre/ Centre for Ecology & Hydrology, Botanical Society of the British Isles, British Bryological Society, British Dragonfly Society, British Lichen Society, British Mycological Society, British Trust for Ornithology, Buglife, Bumblebee Conservation Trust, The Conchological Society of Britain & Ireland, Kew, The Mammal Society, Marine Biological Society, Marine Conservation Society, People's Trust for Endangered Species, Plantlife, Pond Conservation, Rothamsted Research, RSPB, Wildfowl & Wetlands Trust, The Wildlife Trusts.

coastal, freshwater and wetlands, urban, marine and finally British Overseas Territories. Four smaller reports then deal with selected habitats in each of England, Scotland, Wales and Northern Ireland. The State of Nature reports provides analysis and comment on the abundance and distributional data of about 59.000 species (assessing trends over a variety of periods starting in the 1960s) and includes gains as well as losses. Predictably the overall message is one of species decline or even total loss. Causes of species decline are summarised as:

- Loss of semi-natural habitats
- Urbanisation,
- Climate change,
- Afforestation,
- Fishing practices,
- Illegal persecution,
- Agricultural intensification,
- Upland management,
- Introduced, invasive species.

On the plus-side some species recovery has been due to:

- Conservation initiatives (including farming 'stewardship' and other payments),
- Wetland creation,
- Improved water quality

One of the main problems in gaining an objective assessment of the state of nature is the need for reliable data; in short there is a 'knowledge gap'. As the main report states (p 9), *"A recurring theme is that, despite a rich resource of data collected over recent decades, and the existence of data bases holding millions of wildlife records, we are unable to assess population trends for more than a small percentage of species. Birds, butterflies and mammals often steal the limelight, while the many thousands of invertebrates, fungi, lichens and mosses that make up so much of the UK's biodiversity receive less attention".*
It is intended to produce more State of Nature reports in the future and with more analysis time the immense (and rapidly growing!) data sets managed the Conch Soc will hopefully contribute quantitative data to allow us to use selected molluscan species to illustrate the state of some of habitats that they depend upon especially vulnerable and declining ones such as wetlands.

The State of Nature report can be accessed at: www.rspb.org.uk/stateofnature

GOVERNMENT USE OF 'STATE OF NATURE' FINDINGS

On 24th October 2013 Wildlife organisations welcomed the publication of new official statistics charting the state of a range of threatened species in the UK. This DEFRA index uses statistics that largely echo (and partially use) the findings of the State of Nature report and include 210 native species including birds, bats, moths, butterflies, hares and dormice. Many conservationists have described the list as "the FTSE Index for threatened wildlife". Although no molluscs were included, determined action by the Conchological Society was able to influence the contents of the short press release put out by the State of Nature partnership. Thus one sentence in the release reads, "*There is a great deal of wildlife not included in this list including endangered species like the freshwater pearl mussel. We will*

be working with the Government to ensure data for these species are included in future to build a full picture of the state of our wildlife". Clearly the Society may need to assemble data that is suitable to ensure that some molluscan species appear in future lists.
The newly released DEFRA list (C4. Status of threatened species) can be viewed at: http://jncc.defra.gov.uk/page-4238

The 6th QUINQUENNIAL REVIEW OF THE WILDLIFE & COUNTRYSIDE ACT 1981

Invertebrate Link member organisations continued discussions in early 2013 concerning invertebrate responses to the 6th QQR consultation and in March agreed upon a recommendation to be submitted to JNCC (which then processes recommendations before submission to DEFRA who make the final QQR decisions). Molluscan recommendations repeated those forwarded but shelved by the 5th QQR. Thus the molluscan recommendations or actions to be submitted for QQR consideration were:

Species:	6th Quinquennial Review recommendation or other action:
3. De Folin's lagoon snail *Caecum armoricum*	Downgrade from Full Protection to Section 9(4)(a) only*
4. Lagoon sea slug *Tenellia adspersa*	Downgrade from Full Protection to Section 9(4)(a) only*
5. Northern hatchet shell *Thyasira gouldi*	Final decisions are still awaited in relation to QQR5 Scotland. Invertebrate Link participated in the relevant consultation process, submissions to which were published by the Scottish Government in March 2012 and are not repeated here. It is anticipated that any changes arising from this exercise for Scotland would subsequently be reflected by appropriate changes for England and Wales. Thus the removal from Schedule 5 of *Thyasira gouldi* for Scotland (where the species occurs) should eventually be reflected in its removal from Schedule 5 also for England and Wales (where it does not occur).
6. Little Whirlpool Ram's-horn Snail *Anisus vorticulus*	Recommendations to include this species on the WWA were dropped as it is already fully protected by inclusion on EU Article 17 (i.e.it is a 'European Protected Species')

The downgrade of *C. armoricum* and *T. adspersa* to 9(4)a was made because we believe that Full Protection hinders the recording and study of these species; they are not at risk from collection. We do, however consider that these species are at risk of extinction in Great Britain and a significant cause of that risk is the loss of their habitat ('places of shelter etc')

by deliberate or reckless activities, including built development; protection from these risks is covered by Section 9(4)(a).

SAC (SPECIAL AREA OF CONSERVATION) SPECIES SITE INTEGRITY SPREADSHEETS

In August 2013 the Society was able to assist Natural England (NE) by 'peer reviewing' a series of SAC species site integrity spreadsheets. These are to be the foundations for SAC site improvement plans for England's Natura 2000 sites. This EU funded project allowed NE to examine all aspects of site improvement for a range of molluscs requiring SAC designation for England; these include *Anisus vorticulus, Vertigo angustior, V. geyeri, V. genesii,* and *V. moulinsiana*.

Fig. 3 Habitat in an SAC designated for *Vertigo moulinsiana*

BRITISH WILDLIFE

Three molluscan 'wildlife reports' were published during 2013. These were able to cover a range of molluscan issues and to promote the Conchological Society. As such, features included digests and discussion of the marine and non-marine reports and other topical newsworthy items including development of selected items from ***Mollusc World*** and ***Journal of Conchology***. Examples include several reports relating to *Helix pomatia* and *H. lucorum*, many reports relating to slugs and regular reports of new nudibranch finds.

CONSERVATION & LINKS WITH VARIOUS PUBLICATIONS:

- **Going, Going, Gone:** The Society was able to gain a double page entry (including our distinctive Society logo) in the third edition of Going, Going, Gone (Think Publishing, 2013: ISBN 978140818630-5) with a revised entry for the endangered *Anisus vorticulus* the little whirlpool ram's-horn snail. The book invited 100 conservation groups from around the world to nominate one organism that gave them cause for concern, a species possibly under the threat of extinction. The book contains two other threatened molluscs; the freshwater pearl mussel *Margaritifera margaritifera*, nominated by the Freshwater Biological Association and the Blue-grey Taildropper Slug *Prophysaon coeruleum* included by the Habitat Acquisition Trust (a Canadian organisation).

Fig. 4 The little whirlpool ram's-horn snail *Anisus vorticulus*

- **Buglife Species Management Sheet: The Pond Mud Snail *Omphiscola glabra*:** Assistance was given to Buglife in the formulation of this Species Management Sheet, one of a series also including *Segmentina nitida*. The sheet includes details of ecology, life cycle, UK distribution, reasons for decline and habitat management advice (of particular value to land managers and farmers entering various environmental stewardship options. The sheet, which bears the Conchological Society logo, can be accessed at www.buglife.org.uk . There is also a mud snail study group: www.mudsnailstudygroup.org.uk

Fig 5 *Omphiscola glabra* the mud snail

- **Isles of Scilly:** An illustrated report was published in The Isles of Scilly Bird & Natural History Review describing molluscan observations made in two different habitats during a week's visit to the islands. The article includes notes on the extreme diversity observed on St Martin's Flats during two day visits coinciding with extremely low tides. By contrast a further section introduces the often over looked supra-littoral specialists that abound on the extreme upper rocky shores that are so well represented on Scilly. The article, which was accompanied by colour figures of the described species, provided an opportunity to advertise the activities of the Society to a wide-ranging natural history audience. (Willing, M.J. 2013. Marine Molluscs and more! Observations from a week on Scilly in September 2012. *Isles of Scilly Bird and Natural History Review 2012*. Isles of Scilly Bird Group. BTO Books)

Fig 6 (two overlapping images) *Paludinella littorina* / supra-littoral habitat on the Isles of Scilly

AN INTRODUCTION TO RIVERS TRUSTS - MOLLUSCS IN ACTION

In 2011 I became a trustee of the Arun and Rother Rivers Trust (ARRT). This is one of many separate trusts each dealing with different catchments throughout the country. Rivers Trusts are charitable organisations that seek to bring together all parties interested in the use and health of a river catchment. This involves farmers, fishermen, conservationists, those seeking recreational pleasure from rivers and streams, people living in communities within the catchment and more! To find out a bit more about Rivers Trusts in general visit http://www.theriverstrust.org/riverstrusts/trust_movement.html

The ARRT objectives pretty much mirrored those of other Trusts. These are:

- Protect, conserve, and enhance the rivers, streams, watercourses and water impoundments in the Arun and Rother catchments.
- Preserve and improve the biodiversity within our catchments.
- Through education increase the knowledge of the public of the need and importance of a healthy river environment.
- Recruit volunteers to assist in the conservation, improvement and monitoring of our catchments habitats.
- Work closely with all interested parties to highlight the need for proper water management.

In ARRT I consider my role as very much one associated with conservation and biodiversity management. It is especially useful to be able to see how malacology (and invertebrate ecology in general) can be used both as a tool and also a source of education, interest and public engagement in a rivers context. It is also extremely useful to try to understand how others view and value the 'services of a river'.

Molluscs were able to play their part in a recent ARRT initiative. As part of the ARRT 'Western Rother Fishery Habitat Enhancement Project', works were undertaken (creation of fish refuges and gravel 'riffle' stretches) at various locations on a stretch of the River Rother and two tributary streams near Shopham Bridge, Petworth. Prior to and following this work various surveys were undertaken to assess biological changes (electro fishing, general

BNWP invertebrate surveys and Mollusca) and in August 2013 led to the unexpected discovery of 'good numbers' of *P. tenuilineatum* at the lower end of the Sutton End Stream. This tiny English BAP priority species had only been recorded once previously in West Sussex, in 1970 by Mchael Kerney from Harting Pond, near South Harting. Repeat surveys there in 2000 failed to relocate specimens; it was believed that pond management work in the mid-1970s had caused its loss and so also the only known population in the county. This discovery reconfirms the presence of *P. tenuilineatum* in West Sussex. The discovery of such a tiny bivalve caused quite a lot of interest and surprise from ARRT members who were previously unaware that our freshwaters supported a whole range of tiny bivalves, each with its own favoured habitat.

Two reports on the ARRT molluscan surveys associated with the Shopham fishery initiative can be found at: http://www.arrt.org.uk

Fig 7 River management work on the River Rother

ASSOCIATIONS WITH OTHER ORGANISATIONS:

The Society has active associations with many other conservation organisations. For example we have worked with Buglife (www.buglife.org.uk/) to assist in the development of species conservation management leaflets, to respond to planning applications with potentially negative impacts on protected molluscs and in developing responses to quinquennial reviews of The Wildlife and Countryside Act. Invertebrate Link (IL) (www.royensoc.co.uk/InvLink/Index.html), which meets biannually, gives us links with representatives from NGOs and governmental conservation bodies and also allows us to advertise our work to these bodies through the distribution of an annual report summarising our recording and conservation activities. Other key partners included the RSPB and the Wildlife Trusts. As a member of the Sussex Wildlife Trust's Conservation Committee 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).

Martin J. Willing - February 2014