Non-Marine Recorder's Report 2022

2022 saw a number of interesting discoveries and developments in the Society's non-marine dataset. Recording continued in the field and in archives, with data entered from record cards and old reports. Particular attention was paid to records from Ireland (i.e., NI + ROI) this year. Indeed 2022 was unusual in that we received more records from Ireland than from Britain.

We received (and granted) requests to use the Society's dataset from various UK LERCs, the UK Biological Records Centre, and researchers on projects at universities in York, Cardiff, and Brno, Czech Republic. A Conservation & Recording meeting at the Society's Regional Meeting in Liverpool, and a subsequent Council meeting, saw us agree to move towards a CC-BY license on NBN, increasing the accessibility of the Society's data. The history of the Non-marine Recording Scheme was presented in a short talk at the Liverpool meeting, and as part of a session about Citizen Science at the World Congress of Malacology in Munich, Germany.

Last year was again the warmest year on record in both the UK (Met Office) and Ireland (Met Éireann). Many areas experienced a summer drought, or severe winter storms. The latter sadly affected an experimental partnership we tried out with the Natural History Museum, London (NHM) in February. The online project "Slime Search" (https://www.nhm.ac.uk/take-part/citizen-science/slime-search.html) aimed to encourage recording, via iNaturalist, of 10 snail and slug species in UK cities over a set period. These were carefully selected to be likely to be found in urban areas and to be easy to distinguish from photographs, while still being priorities for recording. I thank Imogen Cavadino for helping me fine-tune the list of species and Mags Cousins for helping the NHM and I publicise the project on Twitter. Unfortunately, the "Slime Search" period coincided with the worst storms of the year (with exceptional Red weather warnings) and the response was disappointing. Only 23 records of the target species were received, and 14 of them concerned *Hygromia cinctella*. The project may be revised and tried again in future. iNaturalist lends itself well to such projects, and on the whole was once again a major source of new records. In 2022 the City Nature Challenge, another iNaturalist initiative, resulted in many urban UK mollusc records, 355 of which concerned *Hygromia cinctella*.

New data received

At the time of writing (21 February 2023), over 13,000 new records have been compiled to import into the Society's database. These represented over 150 species and came from 136 VCs throughout Britain & Ireland. 4,372 (32%) of the records originated in iRecord and 4,855 (36%) in iNaturalist (as acquired via iRecord). As usual, thanks go to Chris du Feu for verifying the majority of slug records on these platforms. The remaining 4,100 (31%) of the records were received directly or input by myself.

We also received an additional, exceptionally significant dataset of 27,000 records kindly made available by Roy Anderson. (The true total for the year is therefore over 40,000 records). Roy's records range from the 1970s to the present, and cover all 40 vice-counties in NI & ROI. There is some overlap with data we already have, but Roy's data includes at least 84 new VC records. The data are currently being compiled into the Irish dataset by Evelyn Moorkens, after which the main Recorder 6 database will be updated.

The second largest submission this year was from Andrew Wright, of nearly 2,000 records from the Boyne area of ROI, including another 14 new VC records (see Wright, 2022, and below). Additional

contributors are too numerous to mention, but included Clive Walton (RSPB sites in western Scotland); David Adams (Sussex churchyards); Rosemary Hill (West Midlands); Adrian Brokenshire (Cornwall); Tim Rayner (Ceredigion); and Mags Cousins (Wiltshire and Lincolnshire). Thank you, as always, to everyone who sent in records.

A special effort was made this year to ensure that all the VC occurrences listed in previous Nonmarine Recorder's reports, particularly those from Ireland from 2007 onwards, are substantiated in the Society's Recorder 6 database. On checking through the submission from Andrew Wright it was discovered that some of these had apparently never previously been entered, and were missing from the VC Census table as updated in 2021 (see Rowson, 2022). This has led to errors. For example, in a previous report (Rowson, 2021) I listed *Hygromia cinctella* as new to South Kerry (VCH1) based on a record from 2019. At the time I was unaware that the 2007 report (Norris, 2008) had done the same with a record by Richard Preece from 2004, because this is missing from our databases. I have been trying to resolve this frustrating situation with the help of Evelyn Moorkens and Roy Anderson. All new VC records for Ireland have therefore been re-digitised from the reports between 2007 and 2017, so that we can be certain that all will be present in the Society's database. We also now have the complete dataset from Roy. Evelyn is continuing to compile and update the complete dataset for Ireland to try to eliminate any gaps. Finding and filling these has proven difficult using the Recorder 6 software, which I am looking to replace as soon as a suitable alternative system has been found.

New vice-county records

A total of 112 new VC records were recognised this year, as listed below, 98 of which are from Ireland. These are listed below, by VC rather than species name. Records received via iRecord are marked with *, and those received via iNaturalist with **.

I emphasise that these are all newly recognized VC occurrences (even the ones with pre-2022 dates). This list does not include the other records re-digitised from past Non-marine Recorder's reports, as explained above.

West Cornwall with Scilly (VC1): Ambigolimax parvipenis, Tuckingmill, 22/4/2001, G. A. & D. T. Holyoak (conf. D. T. Holyoak, 2022).

East Cornwall (VC2): *Ambigolimax parvipenis,* Pentireglaze, 2001, G. A. & D. T. Holyoak (conf. D. T. Holyoak, 2022).

North Somerset (VC6): Sphaerium nucleus, Moorlinch SSSI, 28/7/2017, Mags Cousins (conf. M. J. Willing)*. South Hampshire (VC11): Cipangopaludina chinensis, Southampton Common, 23/4/2021, "gman122"**. (The species was again recorded from this site on 26/1/2022, by "euryepomus"**).

North Wiltshire (VC7): Selenochlamys ybsryda, Corsham, 14/3/2022, Ann-Marie Ricketts.

West Kent (VC16): Heleobia charruana, Woolwich, 1/6/2003; Environment Agency (conf. Tim Worsfold).

Surrey (VC17): *Heleobia charruana,* South Bank Centre, 1/9/2004; Environment Agency (conf. Tim Worsfold); *Arion* sp. "Davies", Shere Road, West Clandon, 17/5/2022, I. Cavadino & FSC course participants.

South Essex (VC18): *Heleobia charruana,* Barking Creek, 23/6/2005; Environment Agency (conf. Tim Worsfold); *Corbicula fluminea,* Barking Creek, 23/6/2022, W. George (conf. S. Taylor).

Middlesex (VC21): Heleobia charruana, South Dock, 9/11/2005; Environment Agency (conf. Tim Worsfold). East Suffolk (VC25): Ambigolimax parvipenis, Pakefield Church, 1/6/1987, D. C. Long (conf. A. Norris, cited by Killeen, 1992 and Rowson et al. 2014, now accepted as the first record of this species in Britain; see below, and Hutchinson et al., 2022).

Shropshire (VC40): *Sphaerium nucleus*, Old River Bed SSSI (VC40), 14/3/2019, Mags Cousins (conf. M. J. Willing)*.

Carmarthenshire (VC44): Helix lucorum, Aberglasney Gardens, 12/6/2022, Jessica Perry*.

Cumberland (VC70): Assiminea grayana, RSPB Campfield Marsh, Cumberland (VC70), 21/9/2022, Clive Walton.

- Outer Hebrides (VC110): Ambigolimax valentianus, Eochar, South Uist, 15/4/2022, Robin Sutton*.
- Orkney (VC111): Ambigolimax valentianus, Mayfield, Westray, 3/1/2022, A. Phillips & S. Dudley.
- Shetland (VC112): Limacus maculatus, Schoolton, Fair Isle, 7/3/2015, N. J. Riddiford (conf. from old photo, previously identified as Lehmannia marginata); Cornu aspersum, Lerwick, 22/10/2022, "account120"**.
- North Kerry (VCH2): Testacella maugei, Ballybunion, 10/3/2022, Chris Gleed-Owen.
- West Cork (VCH3): Daudebardia rufa, Ballycommane House, 13/7/2021, Julia Cooper (conf. R. Anderson).
- **East Cork (VCH5):** *Arion rufus*, Rostellan, 4 km SW of Cloyne, 1/9/2011; *Balea heydeni*, Fota Wildlife Park, Foaty Island, 13/4/2011; both R. Anderson.
- **Waterford (VCH6):** *Physella acuta*, Annestown, 9/6/2009; *Arion rufus*, Pickardstown Fen, 28/7/2009; *Ambigolimax valentianus*, Data Centre, Cariganore, 25/7/2009; *Euconulus alderi*, Ballyshunnock Reservoir, 29/7/2009; *Euconulus fulvus*, Annestown, 9/6/2009; all R. Anderson.
- **South Tipperary (VCH7):** *Arion flagellus*, Glengarra Wood, 31/7/2005; *A. rufus*, Cahir Castle, Cahir, 16/4/2013; *A. hortensis*, Cahir Castle, Cahir, 16/4/2013; all R. Anderson.
- **Limerick (VCH8):** *Stagnicola fuscus*, Massy's Bridge, Barnakyle River, 21/8/2001; *Physella acuta*, Bunlicky Bridge, Ballincurra Creek, 2/10/2008; both R. Anderson.
- Clare (VCH9): Balea perversa, Slievecarran NR, Burren, 3/6/2018, R. Anderson; Euconulus alderi, Slievecarran NR, Burren, 10/8/2018; Euconulus fulvus, Slievecarran NR, Burren, 10/8/2018; both A. Mantell (conf. R. Anderson).
- North Tipperary (VCH10): Viviparus viviparus, Terryglass, 16/10/2021; Arion flagellus, Garrykennedy, 17/10/2021; A. rufus, Gortmungo Wood, 16/10/2021; A. circumscriptus silvaticus, Garrykennedy, 17/10/2021; A. owenii, Garrykennedy, 17/10/2021; Euconulus fulvus, Gortmungo Wood, 16/10/2021; all R. Anderson.
- **Kilkenny (VCH11):** *Stagnicola fuscus*, Rosbercon, River Barrow, 6/8/2001, G. A. Holyoak (conf. R. Anderson); *Arion distinctus*, Kilkenny Castle Grounds, 19/4/2021; *A. hortensis*, Kilkenny Castle Grounds, 19/4/2021; both R. Anderson.
- **Wexford (VCH12):** *Arion rufus,* Tintern Abbey, 13/7/2013; *A. circumscriptus circumscriptus,* Johnstown Castle, 10/7/2011; both R. Anderson.
- **Carlow (VCH13):** *Physella acuta*, Milford Bridge, River Barrow, 18/4/2014; *Ambigolimax valentianus*, Oak Park, 17/4/2014; *Arion circumscriptus circumscriptus*, Johnstown Castle, 10/7/2011; *A. distinctus*, Oak Park, 17/4/2014; *A. hortensis*, Oak Park, 17/4/2014; all R. Anderson.
- **Leix (Queen's County) (VCH14):** Ambigolimax valentianus, Heywod Gardens, Ballinakill, 14/3/2012; A. rufus, Bishop's Wood, SW of Durrow, 26/11/2008; A. circumscriptus circumscriptus, Emo Park, 16/4/2013; A. c. silvaticus, Emo Park, 16/4/2013; A. distinctus, Bishop's Wood, SW of Durrow, 26/11/2008; A. hortensis, Emo Park, 16/4/2013; all R. Anderson.
- **South-east Galway (VCH15):** *Arion flagellus*, Portumna Abbey, 25/9/2007; *A. rufus*, Coole Park/Estate, 5/9/2001; *Boettgerilla pallens*, Coole Park/Estate, 5/9/2001; all R. Anderson.
- **West Galway (VCH16):** *Arion flagellus,* White Strand, Salthill, 6/9/2011; *A. rufus,* An Spideal Lair, Spiddle, 6/9/2011; both R. Anderson.
- **Offaly (King's County) (VCH18):** *Ambigolimax valentianus*, Birr Castle, 10/10/2021; *Euconulus alderi*, Killaun NR, 10/10/2021; both R. Anderson.
- Wicklow (VCH20): Physella acuta, National Irish Garden Centre Exhibition, 11/7/2010, R. Anderson.
- **Dublin (VCH21):** *Arion circumscriptus circumscriptus,* Luttrellstown House, 26/9/1981; *Euconulus alderi*, Bog of the Ring, Balrothery, 13/2/2010; both R. Anderson.
- Meath (VCH22): Physella acuta, Beauparc, 7/5/2019, A. Wright; Arion flagellus, Kells, 12/8/2008, A. Norris (conf. R. Anderson); Arion hortensis, Duleek, 5/4/2017; A. circumscriptus circumscriptus, Mosney, 22/7/2019; Boettgerilla pallens, Ardmulchan, 15/11/2018; Euconulus cf. fulvus, Oldbridge, 28/10/2018; Balea sarsii, Duleek, 22/4/2017; Acanthinula aculeata, Bellewstown, 17/7/2018; Vertigo angustior, Ardmulchan, 2/4/2019 (conf. BR, but shell only); Ashfordia granulata, Slane, 24/3/2019; Hygromia cinctella, Navan, 2/4/2019; all A. Wright.
- **Westmeath (VCH23):** *Arion distinctus*, Belvedere House, Mullingar, 12/9/2013; *A. hortensis*, Belvedere House, Mullingar, 12/9/2013; both R. Anderson.
- **East Mayo (VCH26):** *Bithynia leachii*, Caher Pier, SW of Caher, 21/5/2003, R. Anderson; *Vertigo lilljeborgi*, Knockmore Bay, Lough Conn, 17/5/2003, G. A. Holyoak (conf. R. Anderson).
- Sligo (VCH28): Stagnicola fuscus, Carrownagh, Slish Wood, 18/7/2008, R. Anderson.
- Leitrim (VCH29): Stagnicola fuscus, Greenaun, Inisfree, Lough Gill, 4/8/2000, G. A. Holyoak (conf. R. Anderson).

- Cavan (VCH30): *Bithynia leachii*, Lough Sheelin, 2/7/2020, A. Wright; *Ambigolimax valentianus*, Owendoon or Jampa Ling Buddhist Centre, 23/10/2010, R. Anderson; *Arion circumscriptus circumscriptus*, Legvaeagh south of Blacklion, 19/8/2001; G. A. Holyoak (conf. R. Anderson).
- Louth (VCH31): Bithynia leachii, Oldbridge, 11/4/2019, A. Wright; Arion rufus, Soldiers Point, Dundalk, 30/5/2013, R. Anderson; A. circumscriptus silvaticus, Townley Hall, 21/9/2018; Euconulus cf. fulvus, Townley Hall, 21/9/2018; Columella edentula, Townley Hall, 21/9/2018; Zenobiellina subrufescens, Ravensdale Forest, 22/1/2019; all A. Wright.
- **Monaghan (VCH32):** *Arion rufus*, Castle Leslie, Glaslough, 18/7/2009; *A. hortensis*, Castle Leslie, Glaslough, 18/7/2009; *Ambigolimax valentianus*, Castle Leslie, Glaslough, 18/7/2009; all R. Anderson.
- **Fermanagh (VCH33):** *Ambigolimax valentianus*, Colebrooke Park, 25/5/2013; *Balea perversa*, Tully Castle, 1/9/2020; both R. Anderson.
- **East Donegal (VCH34):** *Arion flagellus*, Cloghan, 30/5/1976, R. Anderson; *Tandonia sowerbyi*, SE of Clonmany, 19/5/2002; G. A. Holyoak (conf. R. Anderson).
- Tyrone (VCH36): Ambigolimax valentianus, Washing Bay, Lough Neagh, 31/1/2013, R. Anderson.
- **Armagh (VCH37):** *Cochlodina laminata,* Loughgall Country Park, 27/11/2012; *Vallonia pulchella,* Lower Kiltubbrid Lough B, 15/11/2015, both R. Anderson.
- **Down (VCH38):** Ferrissia californica, Lough Brickland, 18/7/2018; Daudebardia rufa, Mount Stewart House and Gardens, 17/4/2022; Ambigolimax parvipenis, Stormont Estate, 10/6/2019; Xeroplexa intersecta, 15/10/2015; Hygromia cinctella, Rowallane (National Trust), 11/2/2019; Vertigo moulinsiana, Corbally Ponds Fen, 14/9/2018; all R. Anderson.
- Antrim (VCH39): Viviparus viviparus, Ballyginniff Milltown, Lough Neagh, 12/8/2019; Stagnicola fuscus, Crumlin Waterfood, Lennymore Bay, Lough Neagh, 1/2/1974; Physella acuta, Tropical Ravine, Belfast Botanical Gardens, 29/3/2000; Ambigolimax parvipenis, Tropical Ravine, Belfast Botanical Gardens, 19/4/2013; Arion circumscriptus circumscriptus, Belfast Castle Gardens/Grounds, 28/10/1973; all R. Anderson.

Many entries on this list have arisen thanks to Roy's recording work around Ireland over the last five decades (the earliest new VC record being from 1973!). The spread of non-natives is evident, including the Irish debut of *Daudebardia rufa*, which Roy confirmed from both West Cork (VCH3, 2021) and Down (VCH38, 2022). There can now be no doubt that this little semi-slug, first noted in Britain in 2016 and 2020 (see Rowson, 2021) is a recent import from the continent rather than an overlooked native. Andrew Wright's work in the Boyne Valley has filled several "gaps" in the lists for Meath (VCH22) and Co. Louth (VCH31) with some of the *Vertigo* species worthy of further investigation (Wright, 2022).

The Uruguayan Spire Snail *Heleobia charruana* (Fig. 1) is represented by four new VC records from the London docks and the Thames estuary, using data from van Haaren et al. (2021) with further details from Conch Soc member Tim Worsfold. Their discovery and identification of this unexpected import was announced just in time to be squeezed into the FSC freshwater snails guide (Rowson et al., 2021), but was not included in my 2021 report. It might be established in other docklands and estuaries around Britain & Ireland. *Heleobia charruana* looks very much like a pale *Peringia ulvae*, without dark tentacle tips, and is abundant at some of the London sites where it has lived since at least 2003. Its whitish shells are a little thinner and more straight-sided than those of *P. ulvae*, and with a more attached peristome, but the distinction is very subtle. As with the other rarer hydrobioids, specimens or good photos of live individuals will be needed to confirm any new *H. charruana* sites.

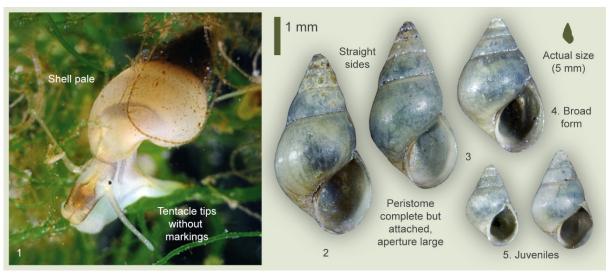


Fig. 1. *Heleobia charruana* (d'Orbigny, 1841). 1, Nordzeekanal, The Netherlands (photo by R. Offermans); 2-5, Albert Dock Island, London, South Essex (VC18). Reproduced from Rowson et al. (2021).

At the other end of the size scale, new VC records for three of our biggest snails were found in 2022, all via iRecord and iNaturalist. Having grumbled about the preponderance of large species on iNaturalist, I am still happy to accept interesting records that arise this way! To my surprise, *Cornu aspersum* appears not to have been recorded from Shetland (VC112) until this year. Shetland still has the shortest list of species of any VC, but this now totals 69 species thanks to the confirmation of *Limacus maculatus* (from an old photo) by Nick Riddiford. The new record makes *Cornu aspersum* the 30th mollusc species to have been recorded from every VC in Britain & Ireland. Having been introduced in Romano-British times, it has taken roughly 2,000 years to reach them all! One could contrast this with *Potamopyrgus antipodarum*, which has nearly managed the same in only 200 years. *Potamopyrgus* would be the only modern introduction to make the "every VC" list, if it were not for a lack of verified records from the Clyde Islands (VC100). This is perhaps an easy target for any snailers recording on the Isle of Arran. Other runners-up, i.e. species missing from just one or two VCs, include *Vertigo pygmaea*, *Deroceras invadens*, and *Euglesa casertanum*.

The other two "giant" snails were from much further south (Fig. 2). Jessica Perry's record of *Helix lucorum* was made when visiting Aberglasney Gardens, Carmarthenshire (VC44) and was submitted under the name *H. pomatia*. I contacted her via iRecord, and quickly invited myself to Aberglasney, where the snail had been found among potted plants for sale at the gift shop. In the days before my visit, the staff kindly apprehended the snail. It was kept in a tightly sealed box, *H. lucorum* being very good at escaping (the species is the "Cool Hand Luc" of the snail world). I spent the day thoroughly searching the site, but found no evidence of any other *Helix* or their eggs and have not heard any more since then. It seems likely that the individual spotted by Jessica was the only one present, and that it arrived (perhaps already fully grown) directly through the potted plant supply chain. Like Buglife and others, our Society has been raising awareness about how potential pests can be spread in this way.

More alarmingly, the Chinese Mystery Snail *Cipangopaludina chinensis* has been discovered at a site in South Hampshire (VC11), far from the first known population at Pevensey in East Sussex (VC14). Early in 2022 I noticed a record on iNaturalist showing *C. chinensis* shells from the artificial Boating Lake at Southampton Common. I contacted Martin Willing, who with Evan Jones, Gavin Measures of

Natural England, and others has been working on eradicating this species in Pevensey. Martin contacted Gavin who arranged a NE survey of Southampton Common in August. This confirmed empty *C. chinensis* shells in and around the Boating Lake, and around 50 live adults and half-grown snails in the Ornamental Lake nearby. While the Boating Lake is drained in winter (partly to help Great Crested Newts), the Ornamental Lake is permanent and has shallow, vegetated margins. It is not clear how the snails arrived at Southampton Common, but this population may well result from a separate release of this edible/aquarium species into the wild. The likelihood of the snails being spread out of this popular recreation area is also a cause for concern.



Fig. 2. Left, *Helix lucorum* Linnaeus, 1758, Aberglasney Gardens, Carmarthenshire (VC44) (photo by Jessica Perry on iRecord). Right. Chinese Mystery Snail *Cipangopaludina chinensis* (Gray, 1833), Southampton Common, South Hampshire (VC11) (photo by "eurypomus" on iNaturalist, CC-BY-NC).

As usual we also received several new VC records of slugs, including *Testacella maugei* from North Kerry (VCH2), found by Chris Gleed-Owen. Adrian Norris and Terry Crawford published a useful article on the rarer slugs of Yorkshire in *The Naturalist* (Norris & Crawford, 2022). This includes details on *Arion* sp. "Davies", a mysterious slug similar to *A. vulgaris*. Records for this species are still scarce, but are gradually accumulating. In May 2022, the first site in Surrey (VC17) was found by Imogen Cavadino and students attending her FSC slugs course, and confirmed by dissection. So far, all records of *A.* sp. "Davies" are from the eastern half of England.

Hothouse species and adventives

Working through the collections of the National Museums Scotland (NMS), Edinburgh, Adrian Sumner discovered a set of 30 shells of the North American lymnaeid *Pseudosuccinea*. He and Tom Walker have looked into their story. *Pseudosuccinea* is relatively characteristic due to its microscopic spiral sculpture and very *Succinea*-like shell (although unlike *Succinea*, it is an aquatic snail). The

species *P. columella*, which the Edinburgh shells appear to represent, was included in the FSC freshwater snails guide as "a potential future arrival" (Rowson et al., 2021). So once again, I spoke too soon! The three shells at the Museum were collected on 15 May 1935 at the Aroid House in the Royal Botanical Garden, Edinburgh by A. R. Waterston, then a curator at NMS. Waterston was also the Society's Non-marine Recorder between 1938 and 1943 or so (when he left to serve with the armed forces). Tom managed to find a published reference to *P. columella* in the 7th edition of the VC Census (Anon., 1951). The Census was compiled by A. E. Ellis, who succeeded Waterston as Recorder in 1948. It includes lists of greenhouse and adventive species, with brief notes on previous occurrences. *Pseudosuccinea columella* is listed from Edinburgh, but the supporting reference in the Census (Meeuse & Hubert, 1949) says only that Meeuse collected it in 1948 "in the houses of the Botanical Gardens, Edinburgh". It does not refer to Waterston's specimens. However, their existence implies that the population survived at the Gardens for at least 13 years.

Not for the first time, this raises the problem of how to record adventive and indoor species in a mapping scheme. The records by Waterston and Meeuse should have earned *P. columella* a place among the other greenhouse species on British & Irish lists, or even in Macan's identification key (1969), but did not. The non-marine mollusc checklist was updated in 1976, with one list for terrestrial species (Waldén, 1976) and another for fresh and brackish-water species (Kerney, 1976). While the terrestrial list included greenhouse aliens, the freshwater list specifically omitted them. Neither checklist included adventive species. The records of *P. columella*, and several other species listed in the 7th Census (Anon., 1951) have therefore slipped through a crack. *Pseudosuccinea* did not feature in the 8th and final edition of the VC Census (Kerney, 1982), or subsequent checklists (Anderson, 2005; 2008; Anderson & Rowson, 2020). Ideally a list of adventive species recorded in Britain & Ireland will be included in a future version of the checklist.

In 2022, outdoor records were obtained for two other adventives, both Mediterranean land-snails recorded on previous occasions in the UK (Anon., 1951). These also happen to be new VC records. *Otala punctata* was found at Stopsley, Luton, Bedfordshire (VC24) in June 2022 by David Oakley-Hill and confirmed by Peter Topley. The record of *Eobania vermiculata* from Lewisham Station, West Kent (VC16) in April 2006 by David G. Notton is an older one. It was confirmed by Peter Mordan and published in *Mollusc World* by Notton (2006) but has not previously been included in the database.

Other noteworthy records

The focus so far has been on alien species and their spread. We should not of course overlook our rare native species, for which new records and new sites are inevitably uncommon. Again, Roy's and Andrew's datasets are important in this regard, dealing largely with less well-recorded parts of Ireland. Adrian's travels in southern Scotland included a visit to the only Scottish site for *Clausilia dubia*, a cemetery in Roxburghshire (VC80). Shells were found and confirmed (after a little discussion) by Robert Cameron and I. Adrian also entered a record of *Acicula fusca* from Midlothian (VC83) from the late Barry Colville's recording cards which Adrian digitized at NMS. This is the first record of *A. fusca* from the area since the 1930s. Another large stack of Barry's recording cards is present at the National Museum of Wales (NMW), Cardiff should any volunteers be keen to digitize the records.

Perhaps the most interesting native species record of 2022 is the first record of *Omphiscola glabra* from the Wyre Forest, Staffordshire (VC39) by Brett Westwood, and confirmed by Rosemary Hill and Rosemary Winnall. Whilst not a new VC record, *O. glabra* is rare in Staffordshire (VC39),

Worcestershire (VC37) and Shropshire (VC40), the three VCs that intersect in the Forest, and new sites for this species are rarely found anywhere. That this is the first record from the area is all the more remarkable given that the finders have spent many years recording molluscs throughout the Wyre area. Brett described the *O. glabra* site as an impeded boggy flush, which dries out in summer and is surrounded by sallows and birch. It was found in late April. The only other aquatic snail present was *P. antipodarum*. Just why *O. glabra* is found in such inhospitable sites remains a mystery. Brett says that the pool had been earmarked for "improvement and restoration" by Forest England and Natural England, potentially bad news for the snail, so the recorders alerted them to the presence of *O. glabra* and later had a helpful meeting at the site.



Fig. 4. *Omphiscola glabra* (Muller, 1774) and its habitat at Hawkbatch, Wyre Forest, Staffordshire (VC39) (photos: Brett Westwood).

Changes to species names

Each year a small number of taxonomic or nomenclatural changes affect the names of mollusc species in Britain & Ireland. I recommend MolluscaBase (www.molluscabase.com) as the first port of call for taxonomic queries, and the classification to follow in most circumstances.

Name changes affecting species in Britain & Ireland are dealt with in periodic updates of the checklist, currently Anderson & Rowson (2020). (Earlier versions by Waldén, Kerney, and Anderson have been cited in the Adventives section above). This list is followed by the UK Species Inventory (UKSI) at NHM, and therefore feeds into the (separate) lists used by iRecord, iNaturalist, NBN, NBDC, and Recorder 6. It can take a little time for changes to percolate through all of these systems.

Here I draw attention to just one change, which involves the frequently recorded species Ambigolimax nyctelius. The new name for this species in Britain & Ireland is Ambigolimax parvipenis, a fairly straightforward change for recorders. However the underlying story is far from simple, and I have been asked by some members for a short explanation.

In recent years, two species of *Ambigolimax* (the "Threeband Slugs") have become a common sight in gardens and disturbed areas throughout Britain & Ireland. They can only reliably be distinguished by dissection, although *A. valentiana* is often a little larger, with weaker markings. John Hutchinson and colleagues at the Senckenberg Institute in Görlitz, Germany have studied them in a thorough piece of detective work using museum specimens (Hutchinson et al., 2022). The first species, *A. valentianus*, was first found in Britain in glasshouses in the 1930s. It has been established outdoors

since at least 1981 and is now recorded from 89 VCs in Britain & Ireland. It has a distinctive, blunt appendix on the penis that prevents confusion with any other limacid in Britain or Ireland.

The second species, *A. parvipenis*, has until now been known as "*A. nyctelius*". It is almost as common as *A. valentianus*, to which it is externally almost identical. It was presumed to have had a similar history, originating in glasshouses in the 1930s. It was recorded outdoors in 1987, and is now recorded from 29 VCs. Hutchinson et al. (2022) have convincingly shown, however, that the name "*A. nyctelius*" can no longer be used for this now common species, which they rename *A. parvipenis*. The new name is derived from its penis, which lacks a penial appendix and is very small, even in adults.

Hutchinson et al. (2022) also looked at the "A. nyctelius" collected in the 1930s from glasshouses at the Royal Botanical Garden, Edinburgh by A. R. Waterston. Like the *Pseudosuccinea* collected by Waterston, these specimens are in the collections at NMS. On closer examination the researchers discovered that they actually belong to a third *Ambigolimax* species, which they have named *A. waterstoni* after its original collector. Like *A. parvipenis*, it lacks a penial appendix, but has a much longer penis. So far, additional populations of *A. waterstoni* have not yet been found in Britain or Ireland, and it has not been found at Edinburgh in recent years.

The exact geographical origin of the different *Ambigolimax* species remains uncertain, partly because they have each been introduced to numerous places, and partly due to the confusion of "A. *nyctelius*" with other species. The original "A. *nyctelius*", described by Bourguignat from North Africa, is now considered by Hutchinson et al. (2022) to refer to a species in the family Arionidae! The name "A. *nyctelius*" has been applied to other species elsewhere in Europe. In our field guide (Rowson et al., 2014) we referred to A. *valentianus* as the "Iberian Threeband Slug" and "A. *nyctelius*" as the "Balkan Threeband Slug". These English names are thus no longer particularly appropriate, so (as usual) it is best to use the scientific names. Please do keep those eyes peeled and consider dissecting any well-grown *Ambigolimax* found.

References

- Anderson, R. 2005. Annotated list of the non-marine Mollusca of Britain and Ireland. *Journal of Conchology* **38** (6): 607-637.
- Anderson, R. 2008. Annotated list of the non-marine Mollusca of Britain and Ireland.
 Available online at: https://www.conchsoc.org
- Anderson, R. & Rowson, B. 2020. *Annotated list of the non-marine Mollusca of Britain and Ireland*. Available online at: https://www.conchsoc.org
- Anon [Ellis, A. E.]. 1951. Census of the distribution of British non-marine Mollusca. *Journal of Conchology* **23**: 13-244.
- van Haaren, T., Worsfold, T. M., Stelbrink, B., Collado, G. A., Gonçalves, I. C. B., Serra, W. S., Scarabino, F., Gittenberger, A., & Gittenberger, E. 2021. *Heleobia charruana* (Gastropoda, Truncatelloidea, Cochliopidae), a South American brackish water snail in northwest European estuaries. *Basteria* 85: 82-91.
- Hutchinson, J. M. C., Reise, H., & Schlitt, B. 2022. Will the real *Limax nyctelius* please step forward: *Lehmannia*, *Ambigolimax*, or *Malacolimax*? No, *Letourneuxia*! *Archiv für Molluskenkunde* 151: 19–41.
- Kerney, M. P. 1976. A list of the fresh and brackish-water Mollusca of the British Isles. *Journal of Conchology* **29**: 26-28.

- Macan, T. T. 1969. A key to the British fresh- and brackish-water gastropods (3rd edition). Freshwater Biological Association Scientific Publication No. 13.
- Meeuse, A. D. J., & Hubert, B. 1949. The mollusc fauna of glasshouses in the Netherlands. Basteria 13: 1-44.
- Notton, D. G. 2006. Eobania vermiculata in the UK. Mollusc World 11: 6
- Norris, A. 2008. Non-Marine Recording Activity and Highlights 2007. Mollusc World 17: 33-34.
- Norris, A. & Crawford, T. J. 2022. Notes on Yorkshire Mollusca 15: New and rare slugs in Yorkshire. *The Naturalist* **147**: 132-135.
- Rowson, B. 2021. Non-marine Recorder's Report 2020. *Mollusc World* **56**: 6-10.
- Rowson, B. 2022. Non-marine Recorder's Report 2021. Mollusc World 59: 6-9.
- Rowson, B., Powell, H. A., Willing, M. J., Dobson, M., & Shaw, H. 2021. Freshwater snails of Britain and Ireland. Field Studies Council, Shropshire.
- Waldén, H. W. 1976. A nomenclatural list of the land Mollusca of the British Isles. *Journal of Conchology* **29**: 21-25.
- Wright, A. 2022. Molluscs of the Boyne Valley. Mollusc World 60: 6-11.

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