## **ACCT Science Annual Report 2024-25**

## **Species of note**

**Agabus arcticus** and **labiatus** - At last year's AGM it was decided to keep the locations for these species under review, the idea being that they suffer from climate change but in different ways. It then became apparent that these sites could provide the basis for survey in the future.



Andy Foster has reported separately on *labiatus* in Dorset - see A survey for Agabus *labiatus* (Brahm) in Dorset and the New Forest.

*Nartus grapii* - This is well established on Anglesey, known there since 1915, but the record for Morfa Dinlle, Caernarfon by GNF in 2024 seems to be new for the mainland of North Wales.

Hydroporus necopinatus - Andy Foster has reported separately on recent finds. See Update on surveys for Hydroporus necopinatus roni Fery in Dorset and the New Forest. The date of 28 February 2025 is claimed to be important by Natural England because it marks the first time it is legal to release beavers in England. The first official introduction is on the Purbeck Heaths, and might be expected to improve wetland habitats for necopinatus unless, of course, you are pessimistic about such ventures! See

https://naturalengland.blog.gov.uk/2025/02/28/beaver-wild-release-a-milestone-for-nature-recovery-in-england/

Graptodytes bilineatus and Agabus uliginosus – when searching for Haliplus furcatus at one of its two known sites near Fringford Jeremy Biggs caught G. bilineatus in the main pond, deeply flooded in a very wet spring, and thought to be new for Oxfordshire. However, further investigation located a slip of paper in Balfour-Browne's card index showing that he had found specimens in Oxford University Museum but had later overlooked in publications - see Foster & Biggs 2025. GNF made a few sweeps of a flooded field with a patch of brooklime next to the main pond and took A. uliginosus, a classic example of occupancy of a truly temporary pond.

**Nebrioporus depressus** - a small victory was the rediscovery of this species in Dumfries & Galloway in 2024 - in Loch Urr and Loch Roan in Kirkcudbrightshire. Other sites in the region have been revisited without success. The *elegans/depressus* complex needs reinvestigation in southern Scotland and the remaining sites in England (and Wales?).

Cybister lateralimarginalis - no more sightings after Suffolk in 2022.

**Porhydrus lineatus** is a species that comes and goes, at the moment quite rare, the only British site reported in from 2024 being Chapel Loch, Dumfriesshire.

*Berosus fulvus* - East Suffolk in TM34 in July 2024 by John Pilgrim, identified by Rachel Mackay-Austin and East Kent in TQ97 in May 2024 by Jonty Denton at Sheerness - both updates of old records for these hectads.

**Paracymus aeneus** Fragments of a *Paracymus* were identified in the pellets of Little Egret at Northward Hill, West Kent (TQ77) in 2020-2021 (Wilkinson *et al.* 2024) when *aeneus* was otherwise unknown from the Thames Marshes. Jonty Denton took it at Sheerness (TO97) in 2024.

*Cercyon alpinus* - found on a dead hare at Laikenbuie, East Inverness-shire (NH95) by David Tompkins in April 2024.

*Hydraena pulchella* - Southal Burn, Caithness (ND2453) by Rachel Mackay-Austin in September 2024. This strengthens credibility in the Orkney record.

**Pomatinus substriatus** - In 2024 Alex Pickwell reported it from Denbighshire in two sites on the River Dee. Also subfossil near Carlisle (Smith 2023).

*Augyles maritimus* - as part of the survey of Dumfries & Galloway this species was found in 2024 on the merse in all three vice-counties.

**Donacia aquatica** - this was new for Skye and the North Ebudes at Drumuie, taken by Neil Roberts in June 2024 and communicated by Bruce Philp.

Llyn-y-parc The only known site for *Dytiscus lapponicus* in Wales was visited on 8 April 2024. It was last found there in 1985. Young Dytiscus larvae were taken and identified as those of marginalis using DNA extracted by Alastair Skeffington, communicated by Alan Law.

JNCC Review Further to last year's comments on progress nothing has happened!

Natural England contracted BugLife to provide material for the Species Evidence Base of their Nature Recovery Network. BugLife in turn tracked GNF down but not before NE had got another consultant to comment adversely on their weird choice of candidate species, which still includes Helophorus brevipalpis and Anacaena globulus whilst omitting more obvious candidates. There might be a good reason for such a strange original selection but the impression remains that those in charge now do not know it. Reports were prepared on 96 taxa. Even if this exercise proves a fiasco it has been useful in proving the comparative ease of updating files on the rarer species using the very limited amount of information in online recording schemes, and with Kev Rowley's help. It has also paid the accountant.

Balfour-Browne Club Meetings We caught up with earlier COVID-affected plans and had a meeting in La Sila, Italy, so there was no UK-based meeting as such in 2024.

The Coleopterists' Society held a field meeting in Angus in June 2024. It was interesting to see how much the beavers had changed the pondscape and how the Tamworths were prepared to knock down a dam created by beavers the night before. There is a large number of records of beetles taken by Callum Dunleavy working around Bamff and it is hoped that he will publish them. This gives us reasonable coverage of the often ignored southern approaches to the Highlands mainland into which where several of the most active migrants have penetrated. But also Dytiscus lapponicus near Milton Drimmie (NO161523), well south of the usual Cairngorms sites.

**Identification service** The number of specimens seen by GNF for identification in 2024 plods along - 4,651 specimens in 44 batches. Potentially misleading photographs continue to come in.



probably an immature semisulcatus



A Dytiscus caught by Nigel Gilligan - Dytiscus marginalis - taken by Richard Vadersteen in North Wales - photographed by Jeff Blincow and sent in by Kev - the posterior yellow band obscured by lighting

## Records

We also seem to be back in business on records coming in, over a 1,000 from many parts of Britain during the Christmas and New Year holidays.

## Output

Relevant publications and reports since the last report

- Allison, E. 2024. Archaeological mitigation works on the route of the Triton Knoll Electrical System between Anderby Creek and Bicker, Lincolnshire. Fen Edge Land Parcel: Insect analysis. *Canterbury Archaeological Trust Report* 2024/5. [cited by Allison, not seen]
- Allison, E. 2024. Insect remains from Buckton Fields, Northamptonshire (Site code BOK18). *Canterbury Archaeological Trust Report* 2024/85.
- Denton, J.S. 2024. Further additions to the Wiltshire Coleoptera list, including nine species new to the county. *The Coleopterist* **33** 95.
- Denton, J.S. 2024. Beetles of Surrey: fourth checklist update. *The Coleopterist* 33 139-341.
- Desjonquères, C., Linke, S., Greenhalgh, J., Rybak, F. & Sueur, J 2024. The potential of acoustic monitoring of aquatic insects for freshwater assessment. *Philosophical Transactions of the Royal Society B* **379** 20230109. doi.org/10.1098/rstb.2023.0109
- Dettner, K., Kovacs, Z., Rewicz, T. & Csabai, Z. 2024. Age-dependent variation of aedeagal morphology in *Agabus uliginosus* and the status of *A. lotti* (Coleoptera, Dytiscidae). *ZooKeys* **1212** 153-177.
- Foster, A.P. & Mylnward, A.F. 2024. Recent Dorset beetle records of interest. *The Coleopterist* **33** 97-100.
- Foster, G.N. 2024. Scottish records of water beetles from the collection of Brian Morrison (1938-2022). *The Coleopterist* **33** 75-77.
- Foster, G.N. 2024. Three species of wetland beetles new for Wigtownshire. *The Coleopterist* **33** 92-93.
- Foster, G.N. & Biggs, J. 2024. *Graptodytes bilineatus* (Sturm) (Dytiscidae) in Oxfordshire. *The Coleopterist* **33** 94-95.
- Hancock, E.G. 2024. Evidence for a remarkable survival of invertebrates from the teaching collection of William MacGillivray (1796-1852), Marischal College, Aberdeen. *Archives of Natural History* **51** 86-94.
- Minoshima, Y. & Watanabe, K. 2024. Morphology of the egg-case and larva of *Paracymus aeneus* (Germar) (Coleoptera: Hydrophilidae). *Zootaxa* **5541** 200-214.
- O'Connor, J.P. 2024. Freshwater parasitic wasps (Hymenoptera: Mymaridae & Trichogrammatidae) from the River Inny, County Cavan, Ireland. *Bulletin of the Irish Biogeographical Society* **47** 211-213.
- Pallares, S., Carbonell, J.A., Picazo, F., Bilton, D.T., Millán, A. & Abellan, P. 2024. Intraspecific variation of thermal tolerance along elevational gradients: the case of a widespread diving beetle (Coleoptera: Dytiscidae). *Insect Science* **0** [sic] 1-13 doi 10.1111/1744.7917.13466
- Smith, D.N. 2023. Appendix 14: Insect remains. From an ancient Eden to a new frontier: an archaeological journey along the Carlisle northern development route. F. Brown, P. Clark, A. Dickson, R. A. Gregory & J. Zant. Lancaster, *Oxford Archaeology*. **30** 1225-1257.
- Tasker, S.J.L., Foggo, A., Scheers, K., van der Loop, J., Giordano, A. & Bilton, D.T. 2024. Nuanced impacts of the invasive aquatic plant *Crassula helmsii* on Northwest European freshwater macroinvertebrate assemblages. *Science of the Total Environment* **913** 169667 pp 13.
- Tasker, S.J.L., Foggo, A. & Bilton, D.T. 2024. Are impacts of the invasive alien plant *Crassula helmsi*i mediated by detritus? A litter experiment in a temperate pond. *Hydrobiologia* doi.org/101007/s10750-024-05571-w
- Telfer, M.G. 2024. *Microon sahlbergi* (Sahlberg, 1834) (Nanophyidae): a native weevil new to Britain. *The Coleopterist* **33** 127-132.

Vainutis, K.S. 2024. Never ending diversity: two new species of the genus *Allocreadium* (Digenea: Allocreadidae) including new keys to the genus. *Journal of Helminthology* doi.org/10.101/S0022149X24000440 pp. 14.

Wilkinson, E., Angus, R.B., Barclay, M.V.L., Booth, R.G., Galsworthy, A.C. & Morritt, D. 2024. An investigation of the insect component in the diet of the Grey Heron *Ardea cinerea* and Little Egret *Egretta garzetta*. *Bird Study* 10.1080/00063657.2024.2386863

GNF 3 February 2025 updated 28 February 2025