

# Britain's Endemic Invertebrates



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Horrid Ground-weaver (Nothophantes horridus) © Tom Thomson

This report brings together the information on twenty invertebrate species which are endemic to Great Britain. As such, we have an international responsibility to safeguard these species for future generations.

Worryingly, many of these species are under threat. Two species, the dance fly *Poecilobothrus majesticus* and Ivell's Sea Anemone (Edwardsia ivelli) are already thought to be globally Extinct. Of the remaining endemic species, nine are threatened with global extinction and two are globally Near Threatened.

Terrestrial species appear to be at greater risk of extinction than freshwater species, but urgent action is required across the board to ensure that these endemic species have sustainable populations to reduce their risk of global extinction.

Sites with populations of these endemic species are included in the identification of Important Invertebrate Areas (IIAs) - nationally or internationally significant places for the conservation of invertebrates and the habitats upon which they rely.

Extinction is forever. There is no turning back. The UK has an international responsibility to prevent the extinction of these endemic species. It is vitally important that these species, and the special places that call them home, are protected from harm and managed in the right way to protect and enhance their wildlife riches.



Half of Britain's endemic invertebrate species are threatened with global extinction.



Macadam, C. R. (2023). Britain's Endemic Invertebrates. Buglife - The Invertebrate Conservation Trust, Peterborough.



There are over **40,000** terrestrial and freshwater **invertebrate species** known from Great Britain.

They range in size from tiny nematodes and mites, to much larger creatures like White-clawed Crayfish (Austropotamobius pallipes) and Freshwater Pearl Mussels (Margaritifera margaritifera).

Invertebrates can be found in a huge variety of habitats from coastal lagoons in the East of England to the highest mountain tops in Scotland; from the depths of Loch Ness to sand dunes in Cardigan Bay in Wales.

Some of these species are found nowhere else in the world. These are known as endemic species - and they are the crown jewels of our biodiversity. They are species that we have an international responsibility to look after, to ensure that future generations can enjoy them.

This report presents global Red List assessments for all endemic terrestrial and freshwater invertebrate species known from Great Britain. These assessments highlight the threats and urgent conservation action required to restore sustainable populations of these species to reduce the risk of their global extinction in the future.



Endemic species are the crown jewels of our biodiversity. They are species that we have an international responsibility to look after, to ensure that future generations can enjoy them.

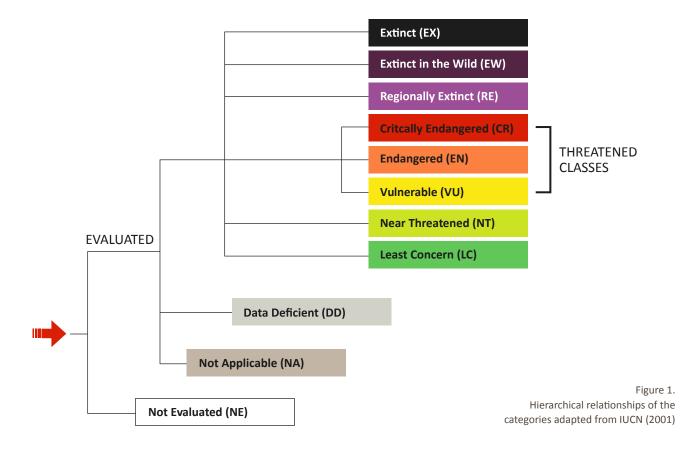
### Methodology

The status assessments presented here were undertaken using the International Union for the Conservation of Nature (IUCN) criteria (IUCN 2012) and the most recent set of guidelines for their application (IUCN 2022).

The initial task was to compile a definitive list of endemic species. In the context of these assessments, endemic species are those that are only found in Great Britain (i.e. England, Scotland and Wales). Previous lists compiled by Natural England (Andy Brown, pers. comm.) were supplemented with information from national experts. This resulted in a list of 20 species (Appendix 1). The reasons for exclusion of species previously considered to be endemic are noted in Appendix 2. Only full species were included - endemic subspecies were not assessed. The caddisfly *Rhyacophila septentrionis* was not assessed. This species has recently been confirmed as a British endemic (Valladolid et al. 2022) however it is not known whether records from the UK refer to this species or R. fasciata (Ian Wallace pers. comm.).

Information for each species was gathered from a variety of sources. Distribution data was obtained from the relevant national recording scheme, national experts and from museum collections. The Extent of Occurrence (EOO) and Area of Occurrence (AOO) were calculated according to the IUCN guidelines. For terrestrial species the EOO and AOO were calculated using the Geospatial Conservation Assessment Tool (GeoCAT) (Bachman et al. 2011) and for freshwater species the IUCN Fresh Water Mapping Application (IUCN, 2019).

The full comprehensive assessments for all species are published on the IUCN Red List (www.iucnredlist.org). These assessments classify each species into a threat category (IUCN 2022). The relationship between these categories is shown in Figure 1.





### Turk's Earth Centipede

Nothogeophilus turki



#### Distribution and habitat

#### Turk's Earth Centipede is recorded only from the Isles of Scilly and the Isle of Wight.

Surveys are needed on the Isles of Scilly at the original sites on St. Mary's and Tresco, to understand the current distribution of the species. Intensive survey work in recent years has failed to find the centipede on the Isle of Wight.

It appears to be a coastal species, but it has been collected up to 500 m inland at one location on St Mary's, Isles of Scilly where it occurred in deciduous woodland along the banks of a stream. Coastal sites have included estuaries and soft rock cliffs. It has been found in soil and leaf litter and under stones.

#### **Threats**

One site at Newport Docks, Isle of Wight was developed as a car park. As a coastal species the habitat of Turk's Earth Centipede is under threat from development and marine pollution events at all locations. Human disturbance resulting from leisure activities, and sea level rise may also damage habitats.

#### **Conservation status**

Endangered (EN)





### British False Flat-backed Millipede

Anthogona britannica



#### Distribution and habitat

#### The British False Flat-backed Millipede is restricted to coastal areas of South Devon.

It was first collected at Slapton Ley and has since been found in just ten further locations across four adjacent hectads in the Dartmouth area. It is known from sea cliffs, grassland, vegetated shingle and deciduous woodland. Most specimens have been found in leaf litter under Ivy and deciduous trees. All adults have been found during winter months and the millipede probably has an annual life cycle.

#### **Threats**

Coastal sites are at risk from human disturbance and new leisure developments. Even protected vegetated shingle habitats such as Slapton Ley are vulnerable to damage from severe weather such as storm surges and marine pollution e.g. oil spills. There are no specific threats known at the locations not directly on the coast but increasing pressure on Local Authorities to identify further land for residential development may affect those sites.

#### **Conservation status**

Near Threatened (NT)





### Celtic Woodlouse

Metatrichoniscoides celticus



#### **Distribution and habitat**

Confirmed records of the Celtic Woodlouse are from South Wales, Anglesey, and Bristol.

It is primarily a coastal animal found just above the supralittoral zone on rocky, calcareous shores. It is usually found under stones deeply embedded in the damp, humus-rich soil of sparsely vegetated erosion banks where it occurs in association with other Trichoniscid woodlice. However, the Celtic Woodlouse has also been recorded from a disused limestone quarry 7 km inland and at an altitude of 170 m. Here the animals were in damp, stony soil.

#### **Threats**

Marine pollution generally, as well as specific pollution events (e.g. oil spills, chemical spills), could potentially threaten the survival of this species. Human disturbance from coastal protection and development projects pose other potentially serious threats. Although some degree of coastal erosion is essential in maintaining habitat, extreme weather events have the potential to destroy large proportions of existing habitat in a very short time.

#### **Conservation status**

Near Threatened (NT)





### a dance-fly

Poecilobothrus majesticus

#### **Distribution and habitat**

The only reported occurrence of this species is from Walton-on-the-Naze, Essex, England in 1907.

In the absence of other records for over 100 years this species is now thought to be extinct.

#### **Conservation status**

Extinct (EX)





### an anthomyzid fly

Reliquantha variipes



#### **Distribution and habitat**

Reliquantha variipes has been recorded from three locations: Oxwich Woods, Wales; Dagnam Park, and Oxford, England.

It has been collected from woodland habitats however the precise habitat preferences are unknown.

#### **Conservation status**

Data Deficient (DD)





### Fonseca's Seed Fly

Botanophila fonsecai



#### Distribution and habitat

Fonseca's Seed Fly is believed to be restricted to four localities along the north east coast of Scotland.

It occurs from Dornoch Point on the north shore of the Dornoch Firth northwards to as far as Coul Links, an extensive dune area to the south of Loch Fleet. It is known for certain to occur along 8.1 km of coastline. It is thought to be closely associated with Common Ragwort (Senecio jacobaea), sow-thistles (Sonchus spp.) and the sand dune systems found in this area.

#### **Threats**

The type locality at Dornoch Sands is under pressure from trampling caused by recreational activity in the dune grasslands. The north of its range at Coul Links is currently threatened by development for a golf course and associated infrastructure. The nature of this coastline means that the habitat of this species is under threat from storm events causing erosion of the dunes and loss of habitat for this species.

#### **Conservation status**

Endangered (EN)





### a cranefly

Molophilus pusillus

#### **Distribution and habitat**

Molophilus pusillus has a widespread distribution across England, Scotland and Wales, where it can be found beside sandy streams and rivers.

#### **Conservation status**





### a fungus gnat

Creagdhubhia mallochorum



#### Distribution and habitat

This species is only known from two areas in the Scottish Highlands: Creag Dhubh, near Newtonmore, Easterness and two sites on the Mar Lodge Estate, Aberdeenshire (Dubh Ghleann and Upper Quoich).

These sites are all located in Caledonian pine forest and the original discovery was from under loose Scots Pine (Pinus sylvestris) bark.

#### **Threats**

The clearance of native woodland for intensive forestry or agriculture is likely to threaten this species. Removal of dead wood and old or decayed trees which may support suitable fungi would also be detrimental to this species. Woodlands should be maintained in a natural state, retaining any old trees and dead wood, ensuring the continuity of these habitats in the future. Over-grazing by deer should be avoided.

#### **Conservation status**

Vulnerable (V)





### Horrid Ground-weaver

Nothophantes horridus



#### Distribution and habitat

The Horrid Ground-weaver is a money spider which has been found in or adjacent to limestone quarries. It is known from four sites, all within a small area of Plymouth, in South West England.

One of the four known sites has been lost to development, another has recently been threatened by an application to build houses on the site, and a third was threatened by the construction of a cycle way.

This spider is the only member of the genus Nothophantes and the species was only recently described (Merrett & Stevens, 1995). With so few known sites to look at it is difficult to define its exact habitat requirements. From information gathered so far it appears to favour rocks or leaf litter lying on sparsely vegetated or bare ground in shaded and open areas. All sites have a generally southerly aspect which may be of importance for this winter active species (Walters, 2017)

#### **Threats**

The location of the known sites for this species mean that it is under threat from urban development.

#### **Conservation status**





### Newbery's Rove Beetle

Thinobius newberyi

#### Distribution and habitat

Newbery's Rove Beetle has a localised distribution in northern and western Britain.

This species lives on shingle bars that contain a significant element of sand or fine gravel along high-energy rivers.

#### **Threats**

Flow regulation can lead to the moderation of flow events resulting in less sediment movement. Whilst flood events will redistribute some of these riverine sediments, exposed features such as bars and beaches are becoming less mobile, and becoming more vegetated, resulting in a decline in suitable habitat for Newbery's Rove Beetle. Trampling by livestock, in particular cattle, can also reduce the suitability of the habitat for this species. Removal of sediments, whether as part of flood alleviation works, or for aggregate supply, could further lead to declines in suitable habitat. Finally, non-native species such as Himalayan Balsam (Impatiens glandulifera) alter the vegetation along riverbanks, and can lead to siltation, and shading of exposed sediments where this beetle lives.

#### **Conservation status**

Vulnerable (V)





### a rove beetle

Halobrecta princeps

#### **Distribution and habitat**

There are historical records of this species from Cornwall and the Isle of Wight.

The only modern record is from near Faversham in Kent. This species has been recorded from coastal areas where it has been found in seaweed on the shore, under large stones lying on shingle, and in crevices at the base of coastal cliffs

#### **Threats**

It is likely to be threatened by cliff stabilisation schemes and coastal developments such as sea defences.

#### **Conservation status**





### **Lundy Cabbage** Flea Beetle

Psylliodes luridipennis



#### **Distribution and habitat**

This leaf beetle is endemic to Lundy Island in the South West of England where it is found on maritime cliffs, rocky habitats and coastal shingle associated with Lundy Cabbage (Coincya wrightii) (also a Lundy Island endemic).

It is thought that larvae probably occur during the winter on or mining the roots of the foodplant and develop in petioles, midribs and stems. Adults feed on the leaves of the same plant and have been recorded in April and from June to August.

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#### **Threats**

The sole food plant is threatened by grazing (rabbits and possibly goats, sheep and deer), tourist pressure (e.g. trampling and erosion), and invasive Rhododendron ponticum.

#### **Conservation status**





### Caledonian Planthopper

Cixius caledonicus

#### **Distribution and habitat**

The Caledonian Planthopper is known from only two locations: Heriot Water and Edinburgh, both in Scotland.

There have been no confirmed records for at least 70 years suggesting that this species may be extinct. However, there is a possibility that further survey work may discover an unknown population of this species.

#### **Conservation status**





### Ivell's Sea Anemone

Edwardsia ivelli



#### **Distribution and habitat**

Ivell's Sea Anemone is a non-migratory burrowing anemone which lives in brackish water lagoons. It is known from a single location, Widewater Lagoon, Sussex.

Historically, water quality was poor in the lagoon where this species occurred, however, it is now much improved. Nevertheless, there are no records after 1983 suggesting that this species may be extinct. However, there is a possibility that future survey work may discover a surviving population of this species.

#### **Conservation status**





### Manx Shearwater Flea

Ceratophyllus fionnus



#### **Distribution and habitat**

The Manx Shearwater Flea is associated with nest burrows of the Manx Shearwater (Puffinus puffinus) on the island of Rum, Scotland.

This island holds one of the largest colonies of Manx Shearwater in the world, estimated to be one fifth of the world population, however the population on Rum is thought to be in decline and, as an ecto-parasite, this means that the population of the Manx Shearwater Flea will also be in decline.

The Manx Shearwater Flea is known from a single high-altitude site in Manx Shearwater nest burrows on the mountain of Hallival. As an ecto-parasite this species is dependent on a continued population of its host species.

#### **Threats**

The Manx Shearwater on Rum is threatened by predation of eggs and chicks by non-native Brown Rats (Rattus norvegicus).

#### **Conservation status**





### **British Cave Shrimp**

Niphargellus glenniei



#### **Distribution and habitat**

The British Cave Shrimp is an eyeless freshwater shrimp known only from subterranean habitats in Devon and Cornwall.

The species is found in groundwater aquifers ranging in character from Devonian limestone to the acidic granites of Dartmoor and West Cornwall, with other records in igneous tuff (Ilfracombe area) and to a lesser extent, slate and other strata.

#### **Threats**

There are no immediate threats to this species, however, over-abstraction or pollution of the groundwater is likely to be detrimental.

#### **Conservation status**





## Orange-striped Stonefly

Perlodes mortoni

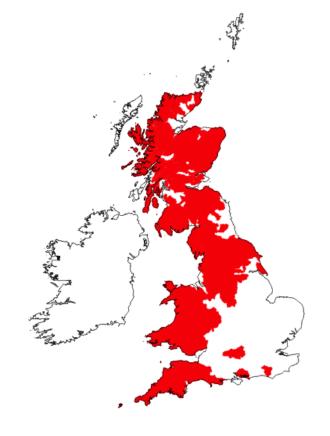


#### **Distribution and habitat**

The Orange-striped Stonefly is a widespread species found in clean, fast-flowing rivers and streams throughout Great Britain.

There is no evidence of any decline in the range of this species.

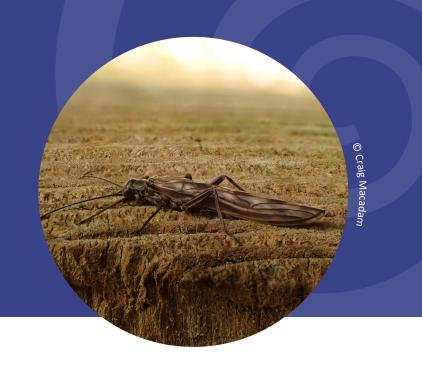
#### **Conservation status**





### Northern February **Red Stonefly**

Brachyptera putata



#### Distribution and habitat

The Northern February Red Stonefly has its stronghold in Scotland, particularly North East Scotland and the Highlands, where it lives in larger fast-flowing rivers.

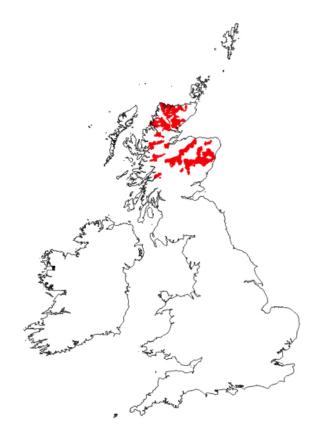
Outside of Scotland, this species has only ever been found in two areas - the River Usk in Wales and the Wye near Hereford; however, there are no modern records from these rivers.

#### **Threats**

Any operations that affect the bed material such as dredging, channel modifications or gravel removal could damage the habitat and should be avoided. Recent adverse weather leading to extensive flooding in the Spey and Dee catchments has caused significant disturbance to the habitat of this species. Further work is required to understand the impact of these events on this species.

In lowland areas the riverbanks are sometimes unprotected from livestock on more heavily grazed pasture. The resulting disturbance of the riverbed, together with the potential eutrophication or pollution of the water, may lead to a deterioration of the habitat. Water pollution from waste water treatment works, agriculture and industry, together with abstraction of water for industrial or domestic water supply could also be detrimental to this species.

#### **Conservation status**





### Chater's Bristletail

Dilta chateri



#### **Distribution and habitat**

Chater's Bristletail is common and widespread in Mid and South Wales, and has also been recorded in Somerset, England.

There is no evidence of decline in the range of this species.

#### **Conservation status**





### a dung beetle

Psammoporus insularis

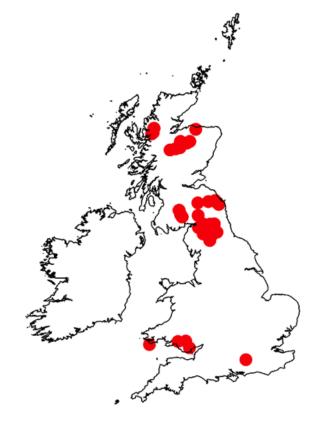


#### **Distribution and habitat**

The dung beetle *Psammoporus insularis* is a widespread species found on exposed riverine sediments (ERS) in England, Wales and Scotland.

Whilst the extent of ERS in the UK is thought to be declining there is no evidence of decline in the range of this species.

#### **Conservation status**





Dornoch Sands © Craig Macadam

#### The preparation of these assessments and this report would not have been possible without the assistance of the following people.

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### References

Adler, P.H. (2021). World blackflies (Diptera: Simuliidae): a comprehensive revision of the taxonomic and geographical inventory [2021]. Department of Plant and Environmental Sciences, Clemson University, Clemson, SC, USA. 144 pp.

Assing, V. and Vogel, J. (2019). The mother of synonyms: on the Meotica species of the Palaearctic Region (Coleoptera, Staphylinidae, Aleocharinae, Oxypodini). Linzer biol. Beitr. 51(2): 731-772.

Bachman, S., Moat, J., Hill, A.W., de la Torre, J. and Scott, B. (2011). Supporting Red List threat assessments with GeoCAT: geospatial conservation assessment tool. Zookeys, 150: 117-126.

Benick, G. (1970) Revision der Untergattung Anopleta Mulsant Rey (Genus Atheta Staphyl.).: Entomologische Blätter für Biologie und Systematik der Käfer, 66(2): 83-110.

Brunke, A.J., Pentinsaari, M. and Klimaszewski, J. (2021). Integrative taxonomy of Nearctic and Palaearctic Aleocharinae: new species, synonymies, and records (Coleoptera, Staphylinidae). Zookeys 1041: 27-99.

Calder, D.R. (2012). On a collection of hydroids (Cnidaria, Hydrozoa, Hydroidolina) from the west coast of Sweden, with a checklist of species from the region. Zootaxa 3171: 1-7.

Grootaert, P., Pollet, M. and Maes, D. (1997). A Red Data Book of empidid flies of Flanders (northern Belgium) (Diptera, Empididae s.l.): Constraints and possible use in nature conservation. Journal of Insect Conservation 5: 117–129.

Huemer, P. and Hebert, P.D.N. (2015). DNA-Barcoding der Schmetterlinge (Lepidoptera) Vorarlbergs (Österreich). inatura – Forschung online Nr. 15: 36 S.

IUCN. (2012). IUCN Red List Categories and Criteria: Version 3.1. Second edition. Gland, Switzerland and Cambridge, UK: IUCN. iv + 32pp.

IUCN. (2019). IUCN Freshwater Mapping Application (FWMA) Help Manual. Version 2.1. Gland, Switzerland and Cambridge, UK: IUCN. 40pp.

IUCN. (2022). Guidelines for Using the IUCN Red List Categories and Criteria. Version 15.1. Prepared by the Standards and Petitions Committee. Downloadable from

https://www.iucnredlist.org/documents/RedListGuidelines.pdf

Makarov, K.V., Gusarov, V.I. and Makarova, O.L. (2018). The first data on beetles (Coleoptera) of the High Arctic Shokalsky Island (Kara Sea). Russian Entomol. J. 27(4): 387-398.

Merrett, P. and Stevens, R.A. (1995) A new genus and species of linyphiid spider from south-west England (Araneae, Linyphiidae). *Bulletin of the British Arachnological Society*, **10** (3) 118-120.

Quigg, S.M., Lowe, C.N., Butt, K.R., Mitcham, T. and Iyengar, A. (2020). A re-examination of the taxonomic status of *Prostoma jenningsi* - a Freshwater Nemertean. Zootaxa. 13: 4722(2).

Valledolid, M., Arauzo, M., Chertoprud, M.V., Chvojka, P., Czachorowski, S., Dorda, B.A., Hinić, J., Ibrahimi, H., Karaouzas, I., Krpač, V., Kučinič, M., Lodovici, O., Salokannel, J., Stamenković, V.S., Stojanović, K., Wallace, I. and Rey, I. (2021). The *Rhyacophila fasciata* Group in Europe: *Rhyacophila fasciata* Hagen 1859 and formerly synonymized species (Trichoptera: Rhyacophilaee), with new description of *Rhyacophila fasciata* and *Rhyacophila septentrionis* McLachlan 1865 (stat. prom.). Zootaxa, 4975(1).

Walters, J. (2017) The ecology of the Horrid Ground-weaver Spider (Nothophantes horridus). Buglife, Peterborough.

**Table 1 - Endemic species considered in this report** 

Major Group	English Name	Scientific name	Global Status <sup>1</sup>
Centipedes	Turk's Earth Centipede	Nothogeophilus turki	EN
Cnidarian	Ivells' sea anemone	Edwardsia ivelli	CR (PE)
Crustaceans	British Cave Shrimp	Niphargellus glenniei	LC
Millipedes	British false-flatback millipede	Anthogona britannica	NT
True flies	Fonseca's seed fly	Botanophila fonsecai	EN
True flies	A crane fly	Molophilus pusillus	LC
True flies	A dolichopid fly	Poecilobothrus majesticus	EX
True flies	An anthomyzid fly	Reliquantha variipes	DD
Flea	Manx shearwater flea	Ceratophyllus fionnus	CR
Bugs	Caledonian planthopper	Cixius caledonicus	CR (PE)
Woodlice	Celtic woodlouse	Metatrichoniscoides celticus	NT
Leaf Beetle	Lundy cabbage flea beetle	Psylliodes luridipennis	CR
Rove Beetle	A rove beetle	Halobrecta princeps	CR
Rove Beetle	Newbery's rove beetle	Thinobius newberyi	VU
Spiders	Horrid Ground-weaver	Nothophantes horridus	CR
Stoneflies	Northern February Red	Brachyptera putata	LC
Stoneflies	Orange-striped Stonefly	Perlodes mortoni	LC
True flies	A fungus gnat	Creagdhubhia mallochorum	VU
Bristletails	Chater's bristletail	Dilta chateri	LC
Dung beetles	A dung beetle	Psammoporus insularis	LC

<sup>&</sup>lt;sup>1</sup> Full assessments can be accessed by searching for the species on the IUCN Red List website (www.iucnredlist.org).

### Appendix 2 - UK species previously considered endemic in the UK

Major Group	English Name	Scientific name	Notes	Reference
Cnidarian	Brackish Hydroid	Pachycordyle navis	Found in Widewater Lagoon, Sussex. This species is now synonymised with <i>Pachycordyle michaeli</i>	Calder (2012)
Diptera	A dance fly	Stilpon sublunatus	No longer considered endemic as there are records from Belgium, Germany and Norway	Grootaert et al. (1997)
Hymenoptera	A parasitoid wasp	Earinus transversus	No longer considered endemic as there are records from Hungary and Serbia	G. Broad pers. comm.
Hymenoptera	A parasitoid wasp	Omphale erugata	A parasitoid Chalcid of gall midges, recently described species confined to Britain, but likely to be recorded elsewhere.	G. Broad pers. comm.
Moth	A Gelichelid Moth	Psamathocrita argentella	No longer considered an endemic as there are records from France, Hungary and Italy	S. Palmer pers. comm.
Nemertean	Jenning's Ribbon-worm	Prostoma jenningsi	Known only from a pond at Croxton, Lancashire. No longer considered endemic as conspecific with <i>Prostoma eilhardi</i> and <i>P. graecense</i>	Quigg et al. (2020)
Pseudoscorpion	Kew's Chthonid	Epihippiochthonius kewi	No longer considered endemic as there are records from Denmark	Gerald Legg pers. comm.
Rove Beetle	A rove beetle	Atheta ellimani	No longer considered endemic as conspecific with Atheta corvina	Benick (1970)
Rove Beetle	A rove beetle	Eudectus whitei	No longer considered endemic as there are records from Novaya Zemlya and north west Taimyr, Russia	Makarov et al. (2018)
Rove Beetle	A rove beetle	Meotica anglica	Known to occur widely on river gravels and shingles in western and northern Britain. This species is now synonymised with <i>M. moczarskii</i>	Assing & Vogel (2019)
Rove Beetle	A rove beetle	Thecturota williamsi	Now considered to be a synonym of <i>Thecturota tenuissima</i>	Brunke et al. (2021)
Moth	Heckford's pygmy moth	Ectoedemia heckfordi	No longer considered to be endemic as there are records from Austria	Huemer & Hebert (2015)
Diptera	Winterbourne blackfly	Metacnephia amphora	No longer considered to be endemic as there are records from France	Adler (2021)





Redford Quarry, Plymouth where the Horrid Ground-weaver (Nothophantes horridus) has been found. Left image © Rupert Goddard; Right © John Walters

Front cover photo Orange-striped Stonefly (Perlodes mortoni) © Paul Kennedy