



Policy and Legislation Summary

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SPECIES STATUS: LISTS OF INVERTEBRATE SPECIES COVERED BY POLICY AND LEGISLATION IN THE UK

The following tables list the invertebrate species covered by the UK's domestic wildlife legislation, national biodiversity policies and relevant international statutes. Most of these measures aim to protect vulnerable species, but some invasive alien species are also covered by legislation.

The tables are as follows:

1. UK invertebrate species protected by international statutes
- 2A. Invertebrate species listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) for England and Wales and the Nature Conservation (Scotland) Act 2004.
- 2B. Invertebrate species protected under the Wildlife (Northern Ireland) Order 1985 (as amended)
- 3A. Invertebrate species listed under Section 41 of the Natural Environment and Rural Communities Act for England and under Section 42 for Wales
- 3B. Invertebrate species of principal importance for the conservation of biodiversity in Scotland
4. Invertebrate species endangered by trade and listed under the EU CITES Regulations
- 5A. Invertebrate species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended)
- 5B. Invertebrate species listed on Schedule 9 of the Wildlife (Northern Ireland) Order (as amended)

Further information

- For up to date information on UK legislation visit <http://www.legislation.gov.uk>.
- For a spread sheet of taxon designations for animals and plants, visit the Joint Nature Conservation Committee web site at www.jncc.defra.gov.uk.
- The UK Biodiversity Action Plan web site, www.ukbap.org.uk, gives information on species and habitats covered under the UK's contribution to the Convention on Biological Diversity.
- Information on CITES is available on the UK CITES web site: <https://www.gov.uk/cites-controls-import-and-export-of-protected-species>.
- A useful leaflet, Scotland's Wildlife: The Law and You, published by Scottish Natural Heritage and revised in 2009, is available at www.snh.org.uk.
- There are provisions for activities restricted by legislation to be carried out under licence in certain

circumstances (e.g. for collecting protected species for research). Licences are issued by relevant Government Departments and by Natural England, Natural Resources Wales and Scottish Natural Heritage.

- See also Buglife's Position Statement on the [collection of invertebrates](#) on the website

Note. Every effort has been made to ensure that the information provided here is accurate and up to date (as from 2014), but Buglife can accept no responsibility for actions resulting from the use of this material.

1. Internationally protected invertebrate species

Information on three international statutes is included in Table 1. One is a European directive the other two are global conventions. Table 1 covers only those species that occur in the UK.

Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive)

This Directive is implemented in the whole of the UK through **The Conservation (Natural Habitats &c.) Regulations 1994** and **The Conservation of Habitats and Species Regulations 2010**. Three annexes in the Directive list species for which different types of protection are required. The annexes that include invertebrates are:

Annex IIa - designation of protected areas required within the natural range of the animal species listed

Annex IVa - special protection required for the native animal species listed

Annex Va - exploitation of listed animal species to be subject to management if necessary in order to maintain their favourable conservation status.

Schedule 2 of the Conservation of Habitats and Species Regulations lists those species of animals included in Annex IV(a) to the Habitats Directive that have a natural range that includes any area in Great Britain.

It is illegal to trade in any of the species (or any part of the species) listed in Annex IVa of the Directive, whether or not they live in the UK.

Council of Europe Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)

The Bern Convention was the forerunner of the Habitats Directive. It contains lists of animal and plant species requiring protection, including:

Appendix II - special protection required for listed animal species and their habitats

Appendix III - exploitation of listed animal species to be subject to regulation through 'appropriate and necessary legislative and administrative measures'.

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

See notes to Table 4.

Table 1 also includes a column showing which of the internationally listed species are also included in schedules of the Wildlife and Countryside Act 1981 (as amended) (WCA) and the Wildlife (Northern Ireland) Order 1985 (as amended) (WNIO). See Tables 2A, 2B, 5A and 5B for more information on these schedules. Geographical coverage of this legislation is indicated as follows:

E = England

W = Wales

S = Scotland

NI = Northern Ireland

Table 1. UK INVERTEBRATE SPECIES PROTECTED BY INTERNATIONAL STATUTES

<i>Scientific name</i>	<i>English name</i>	<i>Habitats Directive</i>	<i>Bern Conv. Appendix</i>	<i>CITES Appendix</i>	<i>WCA & WNIO</i>
Native resident species					
<i>Anisus vorticulus</i>	Little whirlpool ram's-horn snail	Ila, IVa	-	-	-
<i>Austropotamobius pallipes</i>	White-clawed crayfish	Ila, Va	III	-	Partial protection (E, W, S, NI)
<i>Coenagrion mercuriale</i>	Southern damselfly	Ila	II	-	Full protection (E, W, S)
<i>Euphydryas (Eurodryas) aurinia</i>	Marsh fritillary butterfly	Ila	II	-	Full protection (E, W, S, NI)
<i>Euplagia quadripunctaria (Callimorpha quadripunctata)</i>	Jersey tiger moth	Ila (priority)	-	-	-
<i>Gortyna borelii lunata</i>	Fisher's estuarine moth	Ila, IVa	-	-	Partial protection (E, W), Full protection (S)
<i>Helix pomatia</i>	Roman snail	Va	III	-	Partial protection (E & W only)
<i>Hirudo medicinalis</i>	Medicinal leech	Va	III	II	Full protection (E, W, S)
<i>Limoniscus violaceus</i>	Violet click beetle	Ila	-	-	Full protection (E, W, S)
<i>Lucanus cervus</i>	Stag beetle	Ila	III	-	Sale only (E, W, S)
<i>Maculinea arion</i>	Large blue butterfly	IVa	II	-	Partial protection (E & W only)
<i>Margaritifera margaritifera</i>	Freshwater pearl mussel	Ila, Va	III	-	Full protection (E, W, S, NI)
<i>Vertigo angustior</i>	Narrow-mouthed whorl snail	Ila	-	-	-
<i>Vertigo genesii</i>	Round-mouthed whorl snail	Ila	-	-	-
<i>Vertigo geyeri</i>	Geyer's whorl snail	Ila	-	-	-
<i>Vertigo moulinsiana</i>	Desmoulin's whorl snail	Ila	-	-	-

Extinct species					
<i>Cerambyx cerdo</i>	a longhorn beetle	Ila, IVa	II	-	-
<i>Graphoderus bilineatus</i>	a water beetle	Ila, IVa	II	-	-
<i>Lycaena dispar</i>	Large copper butterfly	Ila, IVa	II	-	Full protection (E, W, S)
<i>Margaritifera auricularia</i>	Spengler's freshwater mussel	IVa	II	-	-
<i>Oxygastra curtisii</i>	Orange-spotted emerald dragonfly	Ila, IVa	II	-	-
Vagrant species					
<i>Parnassius apollo</i>	Apollo butterfly	IVa	II	II	-
<i>Prosperinus prosperina</i>	Curzon's sphinx moth	IVa	II	-	-
Introduced species					
<i>Astacus astacus</i>	Noble crayfish	Va	III	-	Schedule 9 (E, W, NI). Keeping etc. prohibited (S)

2. Invertebrate species protected in the UK under the Wildlife and Countryside Act 1981, the Nature Conservation (Scotland) Act 2004 and the Wildlife (Northern Ireland) Order 1985

The original British legislation dealing with species protection was the Conservation of Wild Creatures and Wild Plants Act 1975. This was replaced by the **Wildlife and Countryside Act 1981**. Under Section 9 of this Act, wild animal species listed on Schedule 5 may be protected under one, some or all of these parts:

Part 1 – intentional killing, injuring, taking

Part 2 - possession or control (live or dead animal, part or derivative)

Part 4 (a) - intentional damage to or destruction of any structure or place used by a scheduled animal for shelter or protection

Part 4 (b) - intentional disturbance of animal occupying such a structure or place

Part 4 (c) - obstruction of access to any structure or place used for shelter or protection

Part 5 (a) - selling, offering for sale, possessing or transporting for the purpose of sale (live or dead animal, part or derivative)

Part 5 (b) - advertising for buying or selling live or dead animal, part or derivative

As required by the legislation, Schedule 5 is subjected to a regular review every five years. However, the Minister can make piecemeal changes to it at any time.

The Wildlife and Countryside Act is implemented in Scotland through the **Nature Conservation (Scotland) Act 2004**. Section 9 Part 4 (c) - obstruction of access to any structure or place used by Schedule 5 species for shelter or protection - has not been in force in Scotland since 2007. **Note that the changes to Schedule 5 that took effect in England and Wales in 2011 had not by January 2014 been implemented in Scotland.**

Invertebrate species protected in England, Wales and Scotland through listing on Schedule 5 of the Wildlife and Countryside Act (as amended) are listed in Table 2A.

In Northern Ireland, the Wildlife and Countryside Act is transposed by the **Wildlife (Northern Ireland) Order 1985**. With regard to the protection of species, this is very similar to the Wildlife and Countryside Act. Under Section 10 of the Order, species listed on Schedule 5 are protected against killing, injuring, taking, possession, damage to or destruction of place of shelter or protection, damage to or destruction of anything that conceals or protects such a place, and disturbance while occupying it. Under Section 13, species listed on Schedule 7 are protected against sale, dead or alive. The 1985 Order has been amended by the **Wildlife and Natural Environment Act (Northern Ireland) 2011** (the WANE Act) and a number of invertebrate species have been added to Schedules 5 and 7. Invertebrate species protected in Northern Ireland through listing on Schedules 5 and 7 are given in Table 2B.

Table 2A. INVERTEBRATE SPECIES LISTED ON SCHEDULE 5 OF THE WILDLIFE AND COUNTRYSIDE ACT 1981 (AS AMENDED) FOR ENGLAND AND WALES AND THE NATURE CONSERVATION (SCOTLAND) ACT 2004

<i>Scientific name</i>	<i>English name</i>	<i>Sections of WCA Act in force and year enacted</i>
Beetles		
<i>Chrysolina cerealis</i>	Rainbow leaf beetle	Full protection. 1981
<i>Curimopsis nigrata</i>	Mire pill beetle	Damage to/destruction of place of shelter only S.9(4)(a). 1992
<i>Graphoderus zonatus</i>	Spangled water beetle	Full protection. 1992
<i>Hydrochara caraboides</i>	Lesser silver water beetle	Full protection. 1992
<i>Hypebaeus flavipes</i>	Moccas beetle	Full protection. 1992
<i>Limoniscus violaceus</i>	Violet click beetle	Full protection. 1988
<i>Lucanus cervus</i>	Stag beetle	Sale only S. 9(5). 1998
<i>Paracymus aeneus</i>	Bembridge water beetle	Full protection. 1992
Bryozoans (sea-mats)		
<i>Victorella pavida</i>	Trembling sea-mat	Full protection. 1988
Bugs (Hemiptera)		
<i>Cicadetta montana</i>	New Forest cicada	Full protection. 1988
Butterflies		
<i>Apatura iris</i>	Purple emperor	Sale only S. 9 (5). 1989
<i>Argynnis adippe</i>	High brown fritillary	Sale only S. 9(5). 1989 Full protection. 1992
<i>Arícia artaxerxes</i>	Northern brown argus	Sale only S. 9(5). 1989
<i>Boloria euphrosyne</i>	Pearl-bordered fritillary	Sale only S. 9(5). 1989
<i>Carterocephalus palaemon</i>	Chequered skipper	Full protection. 1981 Removed from Schedule. 1988 Sale only S. 9(5). 1989
<i>Coenonympha tullia</i>	Large heath	Sale only S. 9(5). 1989
<i>Cupido minimus</i>	Small blue	Sale only S. 9(5). 1989
<i>Erebia epiphron</i>	Mountain ringlet	Sale only S. 9(5). 1989
<i>Euphydryas (Eurodryas) aurinia</i>	Marsh fritillary	Sale only S. 9(5). 1989 Full protection. 1998
<i>Hamearis lucina</i>	Duke of Burgundy fritillary	Sale only S. 9(5). 1980
<i>Hesperia comma</i>	Silver-spotted skipper	Sale only S. 9(5). 1989
<i>Leptidea sinapis</i>	Wood white	Sale only S. 9(5). 1989
<i>Lycaena dispar</i>	Large copper	Sale only S. 9(5). 1989 Full protection. 1998
<i>Lysandra bellargus</i>	Adonis blue	Sale only S. 9(5). 1989
<i>Lysandra coridon</i>	Chalkhill blue	Sale only S. 9(5). 1989

<i>Maculinea arion</i>	Large blue	Full protection in 1981. Protection in England and Wales reduced to S. 9(4)(b) & (c) and sale S. 9(5). 2007 Removed from Schedule 5 for Scotland. 2007
<i>Melitaea (Melicta) athalia</i>	Heath fritillary	Full protection. 1981
<i>Melitaea cinxia</i>	Glanville fritillary	Sale only S. 9(5). 1989
<i>Nymphalis polychloros</i>	Large tortoiseshell	Sale only S. 9(5). 1989
<i>Papilio machaon</i>	Swallowtail	Full protection. 1981
<i>Plebejus argus</i>	Silver-studded blue	Sale only S. 9(5). 1989
<i>Satyrrium (Strymonidia) pruni</i>	Black hairstreak	Sale only S. 9(5). 1989
<i>Satyrrium (Strymonidia) w-album</i>	White-letter hairstreak	Sale only S. 9(5). 1989
<i>Thecia betulae</i>	Brown hairstreak	Sale only S. 9(5). 1989
<i>Thymelicus acteon</i>	Lulworth skipper	Sale only S. 9(5). 1989
Cnidarians (Coelenterates)		
<i>Clavopsella navis</i>	a marine hydroid	Full protection. 1998
<i>Edwardsia ivelli</i>	Ivell's sea anemone	Full protection. 1988
<i>Eunicella verrucosa</i>	Pink sea-fan	Killing, injuring & taking S. 9(1), possession S. 9(2), sale S. 9(5). 1992
<i>Nematostella vectensis</i>	Starlet sea anemone	Full protection. 1988
<i>Pachycordyle (Clavopsella) navis</i>	Brackish hydroid	Full protection. 1998
Crickets and grasshoppers		
<i>Decticus verrucivorus</i>	Wart-biter	Full protection. 1981
<i>Gryllus campestris</i>	Field cricket	Full protection. 1981
<i>Gryllotalpa gryllotalpa</i>	Mole cricket	Full protection. 1981
Crustaceans		
<i>Austropotamobius pallipes</i>	White-clawed (Atlantic stream) crayfish	Taking S. 9(1) (part), sale S. 9(5). 1988
<i>Chirocephalus diaphanus</i>	Fairy shrimp	Full protection. 1988
<i>Gammarus insensibilis</i>	Lagoon sand shrimp	S. 9(4)(a) only – amended 2011, in England Wales
<i>Triops cancriformis</i>	Tadpole shrimp	Full protection. 1988
Dragonflies and damselflies		
<i>Aeshna isosceles</i>	Norfolk hawker	Full protection. 1981
<i>Coenagrion mercuriale</i>	Southern damselfly	Full protection. 1998
Molluscs		
<i>Atrina fragilis</i>	Fan mussel	Killing, injuring & taking S. 9(1), possession S. 9(2), sale S 9(5). 1998
<i>Caecum amoricum</i>	De Folin's lagoon snail	Full protection. 1992

<i>Catinella (Quickella) arenaria</i>	Sandbowl snail	Full protection. 1981
<i>Helix pomatia</i>	Roman snail	Killing, injuring & taking S. 9(1), possession S. 9(2), sale S. 9(5) in England and Wales only. 2008
<i>Margaritifera margaritifera</i>	Freshwater pearl mussel	Killing and injuring S. 9(1). 1991. Full protection. 1998
<i>Monacha cartusiana</i>	Carthusian snail	Full protection. 1981. Removed from Schedule. 1988
<i>Myxas glutinosa</i>	Glutinous snail	Full protection. 1981
<i>Paludinella littorina</i>	Lagoon snail	Full protection in 1992. Removed from Schedule for England and Wales. 2011
<i>Tenellia adspersa</i>	Lagoon sea slug	Full protection. 1992
<i>Thyasira gouldi</i>	Northern hatchet-shell	Full protection. 1992
Moths		
<i>Acosmetia caliginosa</i>	Reddish buff	Full protection. 1981
<i>Bembecia chrysidiformis</i>	Fiery clearwing	Full protection. 1998
<i>Gortyna borelii</i>	Fisher's estuarine	England and Wales: full protection in 1998, reduced to protection under S. 9(4)(b) & (c) and S. 9(5) only in 2008. Full protection in Scotland
<i>Hadena irregularis</i>	Viper's bugloss	Full protection in 1988. Removed from Schedule (presumed extinct). 1998
<i>Pareulype berberata</i>	Barberry carpet	Full protection. 1981
<i>Pyropteron chrysidiformis</i>	Fiery clearwing	Full protection. 1998
<i>Siona lineata</i>	Black-veined	Full protection. 1981
<i>Thalera fimbrialis</i>	Sussex emerald	Full protection. 1992
<i>Thetidia smaragdaria</i>	Essex emerald	Full protection in 1981. Removed from Schedule for England and Wales. 2011
<i>Zygaena lonicera ssp. jocelynae</i>	Talisker burnet	Sale only S. 9(5) in England and Wales. 2011
<i>Zygaena loti ssp. scotica</i>	Slender Scotch burnet	Sale only S. 9(5) in England and Wales. 2011
<i>Zygaena viciae</i>	New Forest burnet	Full protection. 1981
Spiders		
<i>Dolomedes plantarius</i>	Fen raft spider	Full protection. 1981
<i>Eresus sandaliatus (niger)</i>	Ladybird spider	Full protection. 1981

Worms (Annelida)		
<i>Alkmaria romijni</i>	Tentacled lagoon-worm	S. 9(4)(a) only – amended 2011, in England Wales
<i>Armandia cirrhosa</i>	Lagoon sandworm	Full protection. 1988
<i>Hirudo medicinalis</i>	Medicinal leech	Full protection. 1988

Table 2B. INVERTEBRATE SPECIES PROTECTED UNDER THE WILDLIFE (NORTHERN IRELAND) ORDER 1985 (AS AMENDED)

<i>Scientific name</i>	<i>English name</i>	<i>Sections of Order in force and year scheduled</i>
Butterflies		
<i>Celastrina argiolus</i>	Holly blue	Full protection S. 5, S. 7. 1985
<i>Coenonympha tullia</i>	Large heath	Full protection S. 5, S. 7. 1985
<i>Cupido minimus</i>	Small blue	Full protection S. 5, S. 7. 1985
<i>Erynnis tages</i>	Dingy skipper	Full protection S. 5, S. 7. 1985
<i>Eurodryas (Euphydryas) aurinia</i>	Marsh fritillary	Full protection S. 5, S. 7. 1985
<i>Gonepteryx rhamni</i>	Brimstone	Full protection S. 5, S. 7. 1985
<i>Leptidea reali</i>	Real's wood white	Full protection S. 5, S. 7, 2011
<i>Quercusia quercus</i>	Purple hairstreak	Full protection S. 5, S. 7. 1985
Crustaceans		
<i>Austropotamobius pallipes</i>	White-clawed (Atlantic stream) crayfish	Full protection S. 5, S. 7, 2011
<i>Palinurus elephas</i>	Spiny lobster	Full protection S. 5, S. 7. 2011
Damselflies		
<i>Coenagrion lunatum</i>	Irish damselfly	Full protection S. 5, S. 7. 2011
Molluscs		
<i>Atrina fragilis</i>	Fan mussel	Full protection S. 5, S. 7. 2011
<i>Margaritifera margaritifera</i>	Freshwater pearl mussel	Full protection S. 5, S. 7. 2007

3. Invertebrate species of principal importance for the conservation of biodiversity in the UK

To comply with the 1992 Convention on Biological Diversity, the UK drew up a Biodiversity Action Plan. This has been revised and now includes 65 habitats and 1,150 species of animals and plants that are considered priorities for conservation. The JNCC web site (www.jncc.gov.uk/page-5705) gives information on these habitats and species.

The Natural Environment and Rural Communities (NERC) Act, covering England and Wales, came into force in 2006. This took into account the priority lists in the Biodiversity Action Plan. Sections 41 and 42 of the NERC Act require the Secretary of State to publish lists of habitats and species of principal importance for the conservation of biodiversity in England and Wales. The lists have been drawn up in consultation with Natural England and Natural Resources Wales, as required by the Act. These lists are used to guide public authorities such as ministers, local authorities and statutory undertakers, in implementing their duty under Section 40 of the NERC Act: *to have regard to the conservation of biodiversity* in England and Wales, when carrying out their normal functions.

Table 3A gives the invertebrate species listed under Section 41 of the NERC Act for England and under Section 42 for Wales. The complete Section 41 list can be found on the JNCC web site: www.jncc.gov.uk/page-5705.

Similar measures are in place in Scotland, under the **Nature Conservation Act (Scotland) 2004**. Under Section 1 of this Act, public bodies and office-holders, in exercising any functions, have a duty *to further the conservation of biodiversity*, so far as this is consistent with the proper exercise of those functions. Under Section 2 of the Act, Scottish Ministers were required to publish lists of species and habitats considered to be of principal importance for the conservation of biodiversity. Table 3B gives the invertebrate species in this list, abstracted from *Production of the list of species and habitats considered to be of principal importance for the purpose of conservation of biodiversity in Scotland. (The Scottish Biodiversity List). Part 2. Technical report* (2005). This can be found on the Scottish Natural Heritage web site, www.snh.gov.uk

Under Section 3 of the **Wildlife and Natural Environment Act (Northern Ireland) 2011**, the Department of the Environment must publish a list of species and habitat types which, in the opinion of the Department, are of principal importance for the purpose of conserving biodiversity in Northern Ireland. Public bodies must take steps (that appear to the bodies to be reasonably practical) *to further the conservation of the species and habitats in these lists*. The invertebrates included in this biodiversity list (abstracted from the taxon designations spread sheet at www.jncc.gov.uk/page-5705) are given as Table 3C.

Table 3A. INVERTEBRATE SPECIES LISTED UNDER SECTION 41 OF THE NERC ACT FOR ENGLAND (E) AND SECTION 42 FOR WALES (W)

<i>Scientific name</i>	<i>English name</i>	<i>Country</i>
Ants		
<i>Anergates atratulus</i>	Dark guest ant	E
<i>Formica exsecta</i>	Narrow-headed ant	E
<i>Formica pratensis</i>	Black-backed meadow ant	E
<i>Formica rufibarbis</i>	Red barbed ant	E
<i>Formicoxenus nitidulus</i>	Shining guest ant	E W
<i>Tapinoma erraticum</i>	Erratic ant	E
<i>Temnothorax interruptus</i>	Long-spined ant	E
Bees		
<i>Andrena ferox</i>	Oak mining bee	E
<i>Andrena tarsata</i>	Tormentil mining bee	E W
<i>Anthophora retusa</i>	Potter flower bee	E
<i>Bombus humilis</i>	Brown-banded carder bee	E W
<i>Bombus muscorum</i>	Moss carder bee	E W
<i>Bombus ruderarius</i>	Red-shanked carder-bee	E W
<i>Bombus ruderatus</i>	Large garden bumblebee	E W
<i>Bombus subterraneus</i>	Short-haired bumblebee	E
<i>Bombus sylvarum</i>	Shrill carder bee	E W
<i>Colletes floralis</i>	Northern colletes	E
<i>Colletes halophilus</i>	Sea-aster colletes	E
<i>Eucera longicornis</i>	Long-horned bee	E W
<i>Lasioglossum angusticeps</i>	a solitary bee	E
<i>Nomada armata</i>	Scabious cuckoo bee	E
<i>Nomada errans</i>	a cuckoo bee	E
<i>Osmia parietina</i>	Wall mason bee	E W
<i>Osmia xanthomelana</i>	Large mason bee	E W
Beetles		
<i>Agabus brunneus</i>	Sharp's diving beetle	E
<i>Agonum scitulum</i>	a ground beetle	E W
<i>Amara famelica</i>	Early sunshiner	E
<i>Amara fusca</i>	Wormwood moonshiner	E
<i>Ampedus rufipennis</i>	Red-horned cardinal click beetle	E
<i>Anisodactylus nemorivagus</i>	Heath short-spur	E
<i>Anisodactylus poeciloides</i>	Saltmarsh short-spur	E
<i>Anostirus castaneus</i>	Chestnut coloured click beetle	E
<i>Bagous nodulosus</i>	Flowering rush weevil	E
<i>Bembidion humerale</i>	Thorne pin-palp	E
<i>Bembidion quadripustulatum</i>	Scarce four-dot pin-palp	E W
<i>Bembidion testaceum</i>	Pale pin-palp	E W
<i>Bidessus minutissimus</i>	a diving beetle	W
<i>Bidessus unistriatus</i>	One-grooved diving beetle	E
<i>Brachinus sclopeta</i>	Streaked bombardier beetle	E
<i>Bracteon argenteolum</i>	Silt silver-spot	E
<i>Byctiscus populi</i>	Poplar leaf-rolling weevil	E
<i>Calosoma inquisitor</i>	Caterpillar-hunter	E W
<i>Carabus intricatus</i>	Blue ground beetle	E
<i>Carabus monilis</i>	a ground beetle	E W

<i>Chlaenius tristis</i>	Black night-runner	E W
<i>Chrysolina graminis</i>	Tansy beetle	E
<i>Cicindela hybrida</i>	Northern dune tiger beetle	E W
<i>Cicindela sylvatica</i>	Heath tiger beetle	E
<i>Cryptocephalus coryli</i>	Hazel pot beetle	E
<i>Cryptocephalus decemmaculatus</i>	Ten-spotted pot beetle	E W
<i>Cryptocephalus exiguus</i>	Pashford pot beetle	E
<i>Cryptocephalus nitidulus</i>	Shining pot beetle	E
<i>Cryptocephalus primarius</i>	Rock-rose pot beetle	E
<i>Cryptocephalus punctiger</i>	Blue pepper-pot beetle	E
<i>Cryptocephalus sexpunctatus</i>	Six-spotted pot beetle	E
<i>Curimopsis nigrita</i>	Mire pill-beetle	E
<i>Cylindera germanica</i>	Cliff tiger beetle	E W
<i>Donacia aquatica</i>	Zircon reed beetle	E W
<i>Donacia bicolora</i>	Two-tone reed beetle	E W
<i>Exapion genistae</i>	Petty whin weevil	E
<i>Gnorimus nobilis</i>	Noble chafer	E
<i>Gnorimus variabilis</i>	Variable chafer	E
<i>Graphoderus zonatus</i>	Spangled water beetle	E
<i>Harpalus froelichii</i>	Brush-thighed seed-eater	E
<i>Harpalus honestus</i>	St. Bees seed-eater	E
<i>Harpalus melancholicus</i>	a seed-eater ground beetle	E W
<i>Helophorus laticollis</i>	New Forest mud beetle	E
<i>Hydrochara caraboides</i>	Lesser silver water beetle	W
<i>Hydrochus nitidicollis</i>	Gravel water beetle	E
<i>Hydroporus necopinatus subsp. roni</i>	Ron's diving beetle	E
<i>Hydroporus rufifrons</i>	Oxbow diving beetle	E W
<i>Laccophilus poecilus</i>	Sussex diving beetle	E
<i>Lacon querceus</i>	Oak click beetle	E
<i>Lebia cyanocephala</i>	Blue plunderer	E
<i>Limoniscus violaceus</i>	Violet click beetle	E
<i>Lucanus cervus</i>	Stag beetle	E W
<i>Malachius aeneus</i>	Scarlet malachite beetle	E
<i>Megapenthes lugens</i>	Queens executioner	E
<i>Melanapion minimum</i>	Sallow guest weevil	E
<i>Melandrya barbata</i>	Bearded false darkling beetle	E
<i>Melanotus punctolineatus</i>	Sandwich click beetle	E
<i>Meloe proscarabaeus</i>	Black oil beetle	E W
<i>Meloe rugosus</i>	Rough oil beetle	E W
<i>Meloe violaceus</i>	Violet oil beetle	E W
<i>Meotica anglica</i>	a river shingle beetle	E W
<i>Oberea oculata</i>	Eyed longhorn beetle	E
<i>Ochthebius poweri</i>	Rockface beetle	E W
<i>Ophonus laticollis</i>	Set-aside downy-back	E
<i>Ophonus melletii</i>	Mellet's downy-back	E
<i>Ophonus puncticollis</i>	a downy-back ground beetle	E
<i>Ophonus stictus</i>	Oolite downy-back	E
<i>Orchestes testaceus</i>	Alder flea Weevil	E
<i>Panagaeus cruxmajor</i>	Crucifix ground beetle	E W
<i>Philorhizus quadrisignatus</i>	Mab's lantern	E
<i>Philorhizus vectensis</i>	a ground beetle	E
<i>Platycis cosnardi</i>	Cosnard's net-winged beetle	E

<i>Poecilus kugelanni</i>	Kugelann's green clock	E
<i>Pogonus luridipennis</i>	Yellow pogonus	E
<i>Psylliodes luridipennis</i>	Lundy cabbage flea beetle	E
<i>Stenus longitarsis</i>	Skeetle	E
<i>Synaptus filiformis</i>	Hairy click beetle	E W
<i>Thinobius newberyi</i>	a rove beetle	W
Bryozoans (sea mats)		
<i>Lophopus crystallinus</i>	Crystal moss animal	E W
<i>Victorella pavidia</i>	Trembling sea-mat	E
Bugs (Hemiptera)		
<i>Chlorita viridula</i>	a Leafhopper	E
<i>Cicadetta montana</i>	New Forest cicada	E
<i>Doratura impudica</i>	Large dune leafhopper	E
<i>Eurya douglasi</i>	Chalk planthopper	E
<i>Euscelis venosus</i>	Carlisle thistle leafhopper	E
<i>Hydrometra gracilentia</i>	Lesser water measurer	E
<i>Macrosteles cyane</i>	Pondweed leafhopper	E
<i>Physatocheila smreczynskii</i>	Apple lace-bug	E
<i>Ribautodelphax imitans</i>	Tall fescue planthopper	E
<i>Saldula setulosa</i>	Hairy shore-bug	E
Butterflies		
<i>Argynnis adippe</i>	High brown fritillary	E W
<i>Aricia artaxerxes</i>	Northern brown argus	E
<i>Boloria euphrosyne</i>	Pearl-bordered fritillary	E W
<i>Boloria selene</i>	Small pearl-bordered fritillary	E W
<i>Coenonympha pamphilus</i>	Small heath	E W
<i>Coenonympha tullia</i>	Large heath	E W
<i>Cupido minimus</i>	Small blue	E W
<i>Erebia epiphron</i>	Mountain ringlet	E
<i>Erynnis tages</i>	Dingy skipper	E W
<i>Euphydryas aurinia</i>	Marsh fritillary	E W
<i>Hamearis lucina</i>	Duke of Burgundy	E
<i>Hipparchia semele</i>	Grayling	E W
<i>Lasiommata megera</i>	Wall	E W
<i>Leptidea sinapis</i>	Wood white	E W
<i>Limenitis camilla</i>	White admiral	E W
<i>Maculinea arion</i>	Large blue butterfly	E
<i>Melitaea athalia</i>	Heath fritillary	E
<i>Melitaea cinxia</i>	Glanville fritillary	E
<i>Plebejus argus</i>	Silver-studded blue	E W
<i>Pyrgus malvae</i>	Grizzled skipper	E W
<i>Satyrion w-album</i>	White letter hairstreak	E W
<i>Thecla betulae</i>	Brown hairstreak	E W
<i>Thymelicus acteon</i>	Lulworth skipper	E
Caddisflies		
<i>Glossosoma intermedium</i>	Small grey sedge	E
<i>Hagenella clathrata</i>	Window winged sedge	E W
<i>Hydropsyche bulgaromanorum</i>	Scarce grey flag	E
<i>Ironoquia dubia</i>	Scarce brown sedge	E
Centipedes		
<i>Nothogeophilus turki</i>	Turk's earth-centipede	E
Cnidarians		
<i>Amphianthus dohrnii</i>	Sea-fan anemone	E

<i>Edwardsia ivelli</i>	Ivell's sea anemone	E
<i>Edwardsia timida</i>	Timid burrowing anemone	E
<i>Eunicella verrucosa</i>	Pink sea-fan	E
<i>Funiculina quadrangularis</i>	Tall sea pen	E
<i>Halicystus auricula</i>	Kaleidoscope jellyfish	E
<i>Leptopsammia pruvoti</i>	Sunset cup coral	E
<i>Lucernariopsis campanulata</i>	a stalked jellyfish	E
<i>Lucernariopsis cruxmelitensis</i>	St John's jellyfish	E
<i>Nematostella vectensis</i>	Starlet sea anemone	E
<i>Pachycordyle navis</i>	Brackish hydroid	E
Crickets and grasshoppers		
<i>Decticus verrucivorus</i>	Wart-biter bush cricket	E
<i>Gryllotalpa gryllotalpa</i>	Mole cricket	E W
<i>Gryllus campestris</i>	Field cricket	E
<i>Stethophyma grossum</i>	Large marsh grasshopper	E
Crustaceans		
<i>Austropotamobius pallipes</i>	White-clawed crayfish	E W
<i>Gammarus insensibilis</i>	Lagoon sand shrimp	E
<i>Mitella pollicipes</i>	Gooseneck barnacle	E
<i>Niphargus glenniei</i>	British cave shrimp	E
<i>Palinurus elephas</i>	Crayfish, Crawfish or Spiny lobster	E
<i>Triops cancriformis</i>	Tadpole shrimp	E
Dragonflies & damselflies		
<i>Aeshna isosceles</i>	Norfolk hawk	E
<i>Coenagrion mercuriale</i>	Southern damselfly	E W
Flies (Diptera)		
<i>Amiota variegata</i>	Variegated fruit-fly	E
<i>Asilus crabroniformis</i>	Hornet robberfly	E W
<i>Asindulum nigrum</i>	Black fungus gnat	E
<i>Bombylius minor</i>	Heath bee-fly	E
<i>Callicera spinolae</i>	Golden hoverfly	E
<i>Campsicneme magus</i>	Fancy-legged fly	E
<i>Chrysotoxum octomaculatum</i>	Broken-banded wasp-hoverfly	E
<i>Clorismia rustica</i>	Southern silver stiletto-fly	E W
<i>Dolichopus laticola</i>	Broads long-legged fly	E
<i>Dolichopus nigripes</i>	Bure long-legged fly	E
<i>Doros profuges</i>	Phantom hoverfly	E
<i>Dorycera graminum</i>	Phoenix fly	E
<i>Dorylomorpha clavifemora</i>	Clubbed big-headed fly	E
<i>Empis limata</i>	English assassin fly	E W
<i>Eristalis cryptarum</i>	Bog hoverfly	E
<i>Gnophomyia elsneri</i>	Royal splinter crane-fly	E
<i>Idiocera sexguttata</i>	Six-spotted crane-fly	E W
<i>Lipara similis</i>	Cigarillo gall-fly	E
<i>Lipsothrix errans</i>	Northern yellow splinter	E W
<i>Lipsothrix nervosa</i>	Southern yellow splinter	E W
<i>Lipsothrix nigristigma</i>	Scarce yellow splinter	E W
<i>Myolepta potens</i>	Western wood-vase hoverfly	E
<i>Neoempheria lineola</i>	a fungus-gnat	E
<i>Odontomyia hydroleon</i>	Barred green colonel	E W
<i>Phaonia jaroschewskii</i>	Hairy canary	E
<i>Rhabdomastix japonica</i>	River-shore crane-fly	E W

<i>Salicella fasciata</i>	Dune snail-killing fly	E
<i>Thyridanthrax fenestratus</i>	Mottled bee-fly	E
Mayflies		
<i>Nigrobaetis niger</i>	Iron bue mayfly	E W
<i>Potamanthus luteus</i>	Yellow mayfly	W
Millipedes		
<i>Metaiulus pratensis</i>	Kentish snake millipede	E
<i>Polyzonium germanicum</i>	Boring millipede	E
<i>Trachysphaera lobata</i>	Sand pill-millipede	E
Molluscs		
<i>Anisus vorticulus</i>	Little whirlpool ram`s-horn snail	E
<i>Atrina fragilis</i>	Fan mussel	E
<i>Gyraulus acronicus</i>	Thames ram`s-horn snail	E
<i>Heleobia stagnorum</i>	Lagoon spire snail	E
<i>Margaritifera margaritifera</i>	Freshwater pearl mussel	E W
<i>Mercuria similis</i>	Swollen spire snail	E
<i>Myxas glutinosa</i>	Glutinous snail	W
<i>Omphiscola glabra</i>	Mud snail	E W
<i>Ostrea edulis</i>	Native oyster	E
<i>Pisidium tenuilineatum</i>	Fine-lined pea mussel	E W
<i>Pseudanodonta complanata</i>	Depressed river mussel	E W
<i>Quickella arenaria</i>	Sandbowl snail	E
<i>Segmentina nitida</i>	The shining ram`s-horn snail	E
<i>Sphaerium solidum</i>	Witham orb mussel	E
<i>Tenellia adspersa</i>	Lagoon sea slug	E
<i>Truncatellina cylindrica</i>	Cylindrical whorl snail	E
<i>Valvata macrostoma</i>	Large-mouthed valve snail	E
<i>Vertigo angustior</i>	Narrow-mouthed whorl snail	E W
<i>Vertigo genesii</i>	Round-mouthed whorl snail	E
<i>Vertigo geyeri</i>	Geyer's whorl snail	E W
<i>Vertigo moulinsiana</i>	Desmoulin's whorl snail	E W
Moths		
<i>Acosmetia caliginosa</i>	Reddish buff	E
<i>Acronicta psi</i>	Grey dagger	E W
<i>Acronicta rumicis</i>	Knot grass	E W
<i>Adscita statices</i>	The forester	E W
<i>Agonopterix atomella</i>	Greenweed flat-body moth	E W
<i>Agonopterix capreolella</i>	Fuscou flat-body moth	E
<i>Agrochola helvola</i>	Flounced chestnut	E W
<i>Agrochola litura</i>	Brown-spot pinion	E W
<i>Agrochola lychnidis</i>	Beaded chestnut	E W
<i>Agrotera nemoralis</i>	Beautiful pearl	E
<i>Aleucis distinctata</i>	Sloe carpet	E
<i>Allophytes oxyacanthae</i>	Green-brindled crescent	E W
<i>Amphipoea oculea</i>	Ear moth	E W
<i>Amphipyra tragopoginis</i>	Mouse moth	E W
<i>Anania funebris</i>	White-spotted sable moth	E W
<i>Apamea anceps</i>	Large nutmeg	E W
<i>Apamea remissa</i>	Dusky brocade	E W
<i>Aplasta ononaria</i>	Rest harrow	E
<i>Aplota palpella</i>	Scarce brown streak	E
<i>Aporophyla lutulenta</i>	Deep-brown dart	E W
<i>Archanara neurica</i>	White-mantled wainscot	E

<i>Arctia caja</i>	Garden tiger	E W
<i>Aspitates gilvaria subsp. gilvaria</i>	Straw belle	E
<i>Asteroscopus sphinx</i>	Sprawler	E W
<i>Atethmia centrago</i>	Centre-barred sawfly	E W
<i>Athetis pallustris</i>	Marsh moth	E
<i>Blepharita adusta</i>	Dark brocade	E W
<i>Brachylomia viminalis</i>	Minor shoulder knot	E W
<i>Brachyptera putata</i>	Northern February red	W
<i>Caradrina morpheus</i>	Mottled rustic	E W
<i>Catocala promissa</i>	Light crimson underwing	E
<i>Catocala sponsa</i>	Dark crimson underwing	E
<i>Celaena haworthii</i>	Haworth's minor	E W
<i>Celaena leucostigma</i>	Crescent	E W
<i>Celypha woodiana</i>	Mistletoe marble	E
<i>Chesias legatella</i>	Streak	E W
<i>Chesias rufata</i>	Broom-tip	E W
<i>Chiasmia clathrata</i>	Latticed heath	E W
<i>Chortodes brevilinea</i>	Fenn's wainscot	E
<i>Chortodes extrema</i>	The concolorous	E
<i>Coleophora hydrolapathella</i>	Water-dock case-bearer	E
<i>Coleophora tricolor</i>	Basil-thyme case-bearer	E
<i>Coleophora vibicella</i>	Large gold case-bearer	E
<i>Coleophora wockeella</i>	Betony case-bearer	E
<i>Coscinia cribraria subsp. bivittata</i>	Speckled footman	E
<i>Cosmia diffinis</i>	White-spotted pinion	E W
<i>Cossus cossus</i>	Goat moth	E W
<i>Cyclophora pendularia</i>	Dingy mocha	E W
<i>Cyclophora porata</i>	False mocha	E
<i>Cymatophorima diluta</i>	Oak lutestring	E W
<i>Dasypolia templi</i>	Brindled ochre	E W
<i>Diarsia rubi</i>	Small square-spot	E W
<i>Dicycla oo</i>	Heart moth	E
<i>Diloba caeruleocephala</i>	Figure of eight	E W
<i>Ecliptopera silaceata</i>	Small pheonix	E W
<i>Ennomos erosaria</i>	September thorn	E W
<i>Ennomos fuscantaria</i>	Dusky thorn	E W
<i>Ennomos quercinaria</i>	August thorn	E W
<i>Entephria caesiata</i>	Grey mountain carpet	E W
<i>Epermenia insecurella</i>	Chalk-hill lance-wing	E
<i>Epione vespertaria</i>	Dark bordered beauty	E
<i>Epirrhoe galiata</i>	Galium carpet	E W
<i>Eriopygodes imbecilia</i>	The Silurian	W
<i>Eudarcia richardsoni</i>	Dorset tineid moth	E
<i>Eugnorisma glareosa</i>	Autumnal rustic	E W
<i>Eulithis mellinata</i>	Spinach	E W
<i>Eupithecia extensaria subsp. occidua</i>	Scarce pug	E
<i>Eustroma reticulatum</i>	Netted carpet	E W
<i>Euxoa nigricans</i>	Garden dart	E W
<i>Euxoa tritici</i>	White-line dart	E W
<i>Graphiphora augur</i>	Double dart	E W
<i>Grapholita pallifrontana</i>	Liquorice piercer	E
<i>Hadena albimacula</i>	White spot	E

<i>Heliophobus reticulata</i>	Bordered gothic	E W
<i>Heliothis maritima</i>	Shoulder-striped clover	E
<i>Hemaris tityus</i>	Narrow-bordered bee hawk-moth	E W
<i>Hemistola chrysoprasaria</i>	Small emerald	E W
<i>Hepialus humuli</i>	Ghost moth	E W
<i>Hoplodrina blanda</i>	Rustic	E W
<i>Hydraecia micacea</i>	Rosy rustic	E W
<i>Hydraecia osseola subsp. hucherardi</i>	Marsh mallow moth	E
<i>Idea contiguarua</i>	Weaver's wave	W
<i>Idaea dilutaria</i>	Silky wave	E W
<i>Idaea ochrata subsp. cantiata</i>	Bright wave	E
<i>Jodia croceago</i>	Orange upperwing	E W
<i>Lampronia capitella</i>	Currant-shoot borer	E W
<i>Lithostege griseata</i>	Grey carpet	E
<i>Luperina nickerlii subsp. leechi</i>	Sandhill rustic	E
<i>Lycia hirtaria</i>	Brindled beauty	E W
<i>Lycia zonaria subsp. britannica</i>	Belted beauty	E W
<i>Macaria wauaria</i>	V-moth	E W
<i>Malacosoma neustria</i>	Lackey	E W
<i>Melanchra persicariae</i>	Dot moth	E W
<i>Melanchra pisi</i>	Broom moth	E W
<i>Melanthia procellata</i>	Pretty chalk carpet	E W
<i>Mesoligia literosa</i>	Rosy minor	E W
<i>Minoa murinata</i>	Drab looper	E W
<i>Mythimna comma</i>	Shoulder-striped wainscot	E W
<i>Nemapogon picarella</i>	a micro-moth	W
<i>Nematopogon magna</i>	a micro-moth	W
<i>Nemophora fasciella</i>	Horehound long-horn moth	E
<i>Noctua orbona</i>	Lunar yellow underwing	E W
<i>Orgyia recens</i>	Scarce vapourer	E
<i>Oria musculosa</i>	Brighton wainscot	E
<i>Orthonama vittata</i>	Oblique carpet	E W
<i>Orthosia gracilis</i>	Powdered quaker	E W
<i>Paracolax tristalis</i>	Clay fan-foot	E
<i>Pareulype berberata</i>	Barberry carpet	E
<i>Pechipogo strigilata</i>	Common fan-foot	E
<i>Pelurga comitata</i>	Dark spinach	E W
<i>Perizoma albulata subsp. albulata</i>	Grass rivulet	E W
<i>Phyllonorycter sagitella</i>	Scarce aspen midget moth	E W
<i>Phyllonorycter scabiosella</i>	Surrey midget moth	E
<i>Polia bombycina</i>	Pale shining brown	E W
<i>Pyrausta sanguinalis</i>	a pyralid moth	W
<i>Pyropteron chrysidiformis</i>	Fiery clearwing	E
<i>Rheumaptera hastata</i>	Argent and sable	E W
<i>Rhizedra lutosa</i>	Large wainscot	E W
<i>Sabra harpagula</i>	Scarce hook-tip	W
<i>Sciota hostilis</i>	Scarce aspen knot-horn	E
<i>Scopula marginepunctata</i>	Mullein wave	E W
<i>Scotopteryx bipunctaria</i>	Chalk carpet	E W
<i>Scotopteryx chenopodiata</i>	Shaded broad-bar	E W
<i>Scythris siccella</i>	Least owlet	E
<i>Shargacucullia lychnitis</i>	Striped lychnis	E

<i>Siona lineata</i>	Black-veined moth	E
<i>Spilosoma lubricipeda</i>	White ermine	E W
<i>Spilosoma luteum</i>	Buff ermine	E W
<i>Stigmella zelleriella</i>	Sandhill pigmy moth	E
<i>Stilbia anomala</i>	Anomalous	E W
<i>Synanthedon scoliaeformis</i>	Welsh clearwing	W
<i>Syncopacma albipalpella</i>	Slate sober moth	E
<i>Syncopacma suecicella</i>	Western sober moth	E
<i>Thalera fimbrialis</i>	Sussex emerald	E
<i>Tholera cespitis</i>	Hedge rustic	E W
<i>Tholera decimalis</i>	Feathered gothic	E W
<i>Timandra comae</i>	Blood vein	E W
<i>Trichiura crataegi</i>	Pale eggar	E W
<i>Trichopteryx polycommata</i>	Barred tooth-striped	E
<i>Trisateles emortualis</i>	Olive crescent	E
<i>Tyria jacobaeae</i>	Cinnabar	E W
<i>Tyta luctuosa</i>	Four-spotted moth	E
<i>Watsonalla binaria</i>	Oak hook-tip	E W
<i>Xanthia gilvago</i>	Dusky lemon sawfly	E W
<i>Xanthia icteritia</i>	Sallow	E W
<i>Xanthorhoe decoloraria</i>	Red carpet	E W
<i>Xanthorhoe ferrugata</i>	Dark-barred twin-spot carpet	E W
<i>Xestia agathina</i>	Heath rustic	E W
<i>Xestia ashworthii</i>	Ashworth's rustic	W
<i>Xestia alpicola subsp. alpina</i>	Northern dart	E
<i>Xestia castanea</i>	Neglected rustic	E W
<i>Xestia exsoleta</i>	Sword-grass	W
Spiders		
<i>Agroeca cuprea</i>	Golden lantern-spider	E
<i>Alopecosa fabrilis</i>	Great fox-spider	E
<i>Altella lucida</i>	Dorset mesh-weaver	E
<i>Arctosa fulvolineata</i>	Yellow-striped bear-spider	E
<i>Baryphyma duffeyi</i>	a money spider	E
<i>Centromerus serratus</i>	a money spider	E
<i>Clubiona rosseae</i>	Rosser's sac-spider	E
<i>Dictyna pusilla</i>	Small mesh-weaver	E
<i>Dipoena inornata</i>	Silky sawfly-spider (a comb-footed spider)	E W
<i>Dolomedes plantarius</i>	Fen raft spider	E W
<i>Eresus sandaliatus</i>	Ladybird spider	E
<i>Erigone welchi</i>	Welch's money-spider	E W
<i>Glyphesis cottonae</i>	Cotton's amazon spider	E
<i>Haplodrassus dalmatensis</i>	Heath grasper	E W
<i>Mecopisthes peusi</i>	Peus's long-back spider	E W
<i>Meioneta mollis</i>	Thin weblet	E W
<i>Midia midas</i>	Midas tree-weaver	E
<i>Monocephalus castaneipes</i>	Broad groove-head spider	E W
<i>Nothopantes horridus</i>	Horrid ground-weaver	E
<i>Notioscopus sarcinatus</i>	Swamp lookout spider	E W
<i>Ozyptila nigrita</i>	Southern crablet	E
<i>Philodromus fallax</i>	Sand running-spider	E W
<i>Philodromus margaritatus</i>	Lichen running-spider	E

<i>Pseudeuophrys obsoleta</i>	Whelk-shell jumper	E
<i>Saaristoa firma</i>	Triangle hammock-spider	E W
<i>Semljicola caliginosus</i>	Cloud-living spider	E
<i>Silometopus incurvatus</i>	Bend-bearing blunt-brow spider	E
<i>Sitticus caricis</i>	Sedge jumper	E W
<i>Sitticus distinguendus</i>	Distinguished jumper	E
<i>Tapinocyba mitis</i>	Gentle groove-head spider	E
<i>Walckenaeria corniculans</i>	Small-horned walckenaer	E
Stoneflies		
<i>Brachyptera putata</i>	a stonefly	E
<i>Isogenus nubecula</i>	a stonefly	W
Wasps		
<i>Cerceris quadricincta</i>	Four-banded weevil wasp	E
<i>Cerceris quinquefasciata</i>	Five-banded weevil wasp	E
<i>Chrysis fulgida</i>	Shimmering ruby-tail wasp	E W
<i>Homonotus sanguinolentus</i>	Bloody spider-hunting wasp	E
<i>Odynerus melanocephalus</i>	Black-headed mason wasp	E W
<i>Odynerus simillimus</i>	Fen mason-wasp	E
<i>Pseudepipona herrichii</i>	Purbeck mason wasp	E
Worms		
<i>Armandia cirrhosa</i>	Lagoon sandworm	E
<i>Prostoma jenningsi</i>	Jennings's ribbon-worm	E

Table 3B. INVERTEBRATE SPECIES OF PRINCIPAL IMPORTANCE FOR THE CONSERVATION OF BIODIVERSITY IN SCOTLAND

1. Terrestrial and freshwater species

Ants, bees and wasps (Hymenoptera)

<i>Ammophila sabulosa</i>	Red banded sand wasp
<i>Ancistrocerus parietum</i>	Wall mason wasp
<i>Andrena cineraria</i>	Grey mining bee
<i>Andrena helvola</i>	
<i>Andrena marginata</i>	
<i>Andrena nitida</i>	
<i>Andrena ruficrus</i>	
<i>Anoplius concinnus</i>	
<i>Anthidium manicatum</i>	Wool-carder bee
<i>Anthophora furcata</i>	Fork tailed flower bee
<i>Astata pinguis</i>	
<i>Bombus distinguendus</i>	Great yellow bumble bee
<i>Bombus monticola</i>	Mountain bumble bee
<i>Bombus muscorum</i>	
<i>Bombus ruderarius</i>	Red-tailed carder bee
<i>Ceropales maculata</i>	
<i>Chrysura hirsuta</i>	a cuckoo wasp
<i>Colletes daviesanus</i>	
<i>Colletes floralis</i>	Northern colletes
<i>Colletes fodiens</i>	
<i>Crabro peltarius</i>	
<i>Crossocerus megacephalus</i>	
<i>Crossocerus quadrimaculatus</i>	4-spotted digger wasp
<i>Diodontus tristis</i>	Melancholy black wasp
<i>Dipogon subintermedius</i>	
<i>Dipogon variegatus</i>	
<i>Ectemnius cephalotes</i>	
<i>Ectemnius continuus</i>	
<i>Embolemus ruddii</i>	
<i>Epeolus variegatus</i>	
<i>Evagetes crassicornis</i>	
<i>Formica aquilonia</i>	Scottish wood ant
<i>Formica exsecta</i>	Narrow-headed ant
<i>Formica fusca</i>	Negro ant
<i>Formica lugubris</i>	Northern wood ant
<i>Formicoxenus nitidulus</i>	Shining guest ant
<i>Gorytes tumidus</i>	
<i>Hedychridium ardens</i>	
<i>Hylaeus brevicornis</i>	Short horned yellow-face bee
<i>Lasioglossum fulvicorne</i>	
<i>Lasioglossum smeathmanellum</i>	
<i>Lasioglossum villosulum</i>	
<i>Lindenius albilabris</i>	
<i>Mutilla europaea</i>	Large velvet ant
<i>Nomada fabriciana</i>	Fabricius' nomad bee
<i>Nomada leucophthalma</i>	
<i>Nomada obtusifrons</i>	
<i>Nomada robertjeotiana</i>	

<i>Omalus auratus</i>	
<i>Osmia aurulenta</i>	Gold-fringed mason bee
<i>Osmia coerulescens</i>	Blue mason bee
<i>Osmia inermis</i>	a mason bee
<i>Osmia parietina</i>	Wall mason bee
<i>Osmia rufa</i>	Red mason bee
<i>Osmia uncinata</i>	a mason bee
<i>Oxybelus uniglumis</i>	Common spiny digger wasp
<i>Pompilus cinereus</i>	Leaden spider wasp
<i>Priocnemis schioedtei</i>	
<i>Psen dahlbomi</i>	
<i>Sphecodes gibbus</i>	
<i>Stelis punctulatissima</i>	
<i>Symmorphus mutinensis</i>	
<i>Tachysphex pompiliformis</i>	

Beetles

<i>Agabus uliginosus</i>	
<i>Anacaena limbata</i>	
<i>Bagous collignensis</i>	
<i>Bagous lutulentus</i>	
<i>Berosus luridus</i>	
<i>Bidessus minutissimus</i>	a diving beetle
<i>Cercyon alpinus</i>	
<i>Cercyon atricapillus</i>	
<i>Cercyon convexiusculus</i>	
<i>Cercyon depressus</i>	
<i>Cercyon melanocephalus</i>	
<i>Cercyon quisquilius</i>	
<i>Cercyon terminatus</i>	
<i>Chrysanthia nigricornis</i>	
<i>Copelatus haemorrhoidalis</i>	
<i>Cryptocephalus sexpunctatus</i>	6-Spotted pot beetle
<i>Cryptopleurum minutum</i>	
<i>Cyphon kongsbergensis</i>	
<i>Cyphon ochraceus</i>	
<i>Cyphon pubescens</i>	
<i>Cyphon punctipennis</i>	
<i>Donacia aquatica</i>	a reed beetle
<i>Donacia cinerea</i>	
<i>Donacia crassipes</i>	Water-lily reed beetle
<i>Donacia impressa</i>	
<i>Donacia marginata</i>	
<i>Donacia obscura</i>	
<i>Donacia sparganii</i>	
<i>Donacia thalassina</i>	
<i>Donacia vulgaris</i>	
<i>Dryops nitidulus</i>	
<i>Dryops similaris</i>	
<i>Elodes minuta</i>	
<i>Elodes pseudominuta</i>	
<i>Enochrus quadripunctatus</i>	
<i>Enochrus testaceus</i>	
<i>Eubrychius velutus</i>	
<i>Gyrinus distinctus</i>	

<i>Gyrinus paykulli</i>	
<i>Gyrinus suffriani</i>	
<i>Haliphus apicalis</i>	
<i>Helochares punctatus</i>	
<i>Helophorus alternans</i>	
<i>Helophorus griseus</i>	
<i>Helophorus porculus</i>	
<i>Helophorus tuberculatus</i>	
<i>Heterocerus flexuosus</i>	
<i>Heterocerus fossor</i>	
<i>Heterocerus maritimus</i>	
<i>Hydraena pulchella</i>	
<i>Hydraena pygmaea</i>	
<i>Hydrochus angustatus</i>	
<i>Hydrochus brevis</i>	
<i>Hydrochus elongatus</i>	
<i>Hydroporus elongatulus</i>	
<i>Hydroporus glabriusculus</i>	
<i>Hydroporus longulus</i>	
<i>Hydroporus rufifrons</i>	a diving beetle
<i>Hygrotus versicolor</i>	
<i>Ilybius wasastjernae</i>	
<i>Laccobius atratus</i>	
<i>Macrolea appendiculata</i>	
<i>Megasternum obscurum</i>	
<i>Notaris bimaculatus</i>	
<i>Noterus crassicornis</i>	Smaller Noterus
<i>Ochthebius auriculatus</i>	
<i>Ochthebius lenensis</i>	
<i>Ochthebius punctatus</i>	
<i>Ochthebius viridis</i>	
<i>Oreodytes alpinus</i>	
<i>Pelenomus canaliculatus</i>	
<i>Plateumaris rustica</i>	
<i>Poophagus sisymbrii</i>	
<i>Prionocyphon serricornis</i>	
<i>Procas granulicollis</i>	a weevil
<i>Rhantus frontalis</i>	
<i>Rhantus suturalis</i>	
<i>Scirtes hemisphaericus</i>	
<i>Sphaeridium bipustulatum</i>	
<i>Sphaeridium lunatum</i>	
<i>Sphaeridium scarabaeoides</i>	
<i>Thryogenes nereis</i>	

Bugs (Hemiptera)

<i>Aquarius najas</i>	River skater
<i>Gerris gibbifer</i>	
<i>Hebrus ruficeps</i>	Sphagnum bug
<i>Plea minutissima</i>	

Butterflies

<i>Aricia artaxerxes</i>	Northern brown argus
<i>Boloria euphrosyne</i>	Pearl-bordered fritillary
<i>Carterocephalus palaemon</i>	Chequered skipper

<i>Cupido minimus</i>	Small blue
<i>Erynnis tages tages</i>	Dingy skipper
<i>Euphydryas aurinia aurinia</i>	Marsh fritillary

Crickets

<i>Leptophyes punctatissima</i>	Speckled bush cricket
<i>Metrioptera brachyptera</i>	Bog bush cricket

Crustaceans

<i>Austropotamobius pallipes</i>	Freshwater crayfish
<i>Triops cancriformis</i>	Tadpole shrimp

Damselflies

<i>Coenagrion hastulatum</i>	Northern damselfly
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Earwigs

<i>Labia minor</i>	Lesser earwig
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Fleas

Ceratophyllus (Emmareus) fionnus

Flies (Diptera)

Anasimyia transfuga
Beris morrisii
Blera fallax
Bolitophila bimaculata
Brachyopa insensilis
Chamaesyphus caledonicus
Cheilosia chrysocoma
Cheilosia latifrons
Cheilosia sahlbergi
Diadocidia valida
Dicranomyia omissinervis (=Limonia)
Dictenidia bimaculata
Dysmachus trigonus
Hammerschmidtia ferruginea
Heringia pubescens
Hilaria medeteriformis
Laphria flava
Leptarthrus brevirostris
Lipsothrix ecucullata
Lipsothrix errans
Medetera excellens
Melangyna barbifrons
Melangyna ericarum
Mycomya rosalba
Nephrotoma aculeata
Nephrotoma analis
Nephrotoma cornicina
Nephrotoma guestfalica
Nephrotoma lunulicornis
Nephrotoma scurra
Nigrotipula nigra
Oxycera pygmaea
Pamponerus germanicus

Parasyrphus nigrirarsis
Phronia persimilis
Phronia sylvatica
Platycheirus amplus
Prionocera pubescens
Rhabomastix laeta
Rhadiurgus variabilis
Rymosia speyae (=sp. nov. in Falk)
Sphaerophoria loewi
Sphegina sibirica
Spiriverpa lunulata
Stratiomys chamaeleon
Strongylophthalmyia ustulata
Tanyptera atrata
Tanyptera nigricornis
Themira gracilis
Thereva handlirschi
Thereva valida
Tipula bistilata
Tipula cava
Tipula hortorum
Tipula invenusta
Tipula laetabilis
Tipula limbata
Tipula luridorostris
Tipula marginella
Tipula melanoceros
Tipula pabulina
Wiedemannia simplex (=impudica)

Lacewings

Hemerobius perelegans
Megalomus hirtus

Leeches

Hirudo medicinalis

Molluscs

<i>Anodonta cygnea</i>	Swan mussel
<i>Arion hortensis</i>	
<i>Azeca goodalli</i>	Three-toothed moss snail
<i>Candidula gigaxii</i>	
<i>Cecilioides acicula</i>	Blind (or agate) snail
<i>Cochlodina laminata</i>	Plaited door snail
<i>Hydrobia ventrosa</i>	Mud pond snail
<i>Margaritifera margaritifera</i>	Freshwater pearl mussel
<i>Monacha cantiana</i>	Kentish snail
<i>Oxychilus helveticus</i>	Glossy glass snail
<i>Pisidium conventus</i>	
<i>Pisidium henslowanum</i>	
<i>Succinea oblonga</i>	Small amber snail
<i>Theodoxus fluviatilis</i>	River nerite
<i>Truncatellina cylindrica</i>	
<i>Vertigo alpestris</i>	Mountain whorl snail
<i>Vertigo angustior</i>	Narrow-mouthed whorl snail

<i>Vertigo genesii</i>	
<i>Vertigo geyeri</i>	Whorl snail
<i>Vertigo modesta</i>	
Moths	
<i>Adscita statice</i>	Forester
<i>Aethes rutilana</i>	
<i>Anarta cordigera</i>	Small dark yellow underwing
<i>Apotomis infida</i>	
<i>Archinemapogon yildizae</i>	
<i>Callisto coffeella</i>	
<i>Cossus cossus</i>	Goat moth
<i>Endromis versicolora</i>	Kentish glory
<i>Epione vespertaria</i>	Dark bordered beauty
<i>Hadena caesia</i>	
<i>Hemaris tityus</i>	Narrow-bordered bee hawk-moth
<i>Levipalpus hepatariella</i>	
<i>Macaria carbonaria</i>	Netted Mountain moth
<i>Noctua orbona</i>	Lunar yellow underwing
<i>Periclepsis cinctana</i>	
<i>Protolampra sobrina</i>	Cousin German
<i>Rheumaptera hastata</i>	Argent & sable
<i>Swammerdamia passerella</i>	
<i>Synanthedon scoliaeformis</i>	Welsh clearwing
<i>Thumatha senex</i>	Round-winged muslin
<i>Trichopteryx polycommata</i>	Barred tooth-stripe
<i>Xestia alpicola</i>	Northern dart
<i>Xestia rhomboidea</i>	Square-spotted clay
<i>Xylena exsoleta</i>	Sword-grass
<i>Zygaena exulans subochracea</i>	Scotch burnet
<i>Zygaena lonicerae jocelynae</i>	Talisker burnet moth
<i>Zygaena loti scotica</i>	Slender scotch burnet
<i>Zygaena purpuralis caledonensis</i>	Transparent burnet
<i>Zygaena viciae argyllensis</i>	New Forest burnet

Spiders

Centromerus levitarsis
Clubiona subsultans
Dictyna major
Dipoena torva
Haplodrassus soerenseni
Lepthyphantes antroniensis
Mecynargus paetulus
Robertus scoticus

Stoneflies

Brachyptera putata

2. Marine species

Bryozoans (sea mats)

Ammatophora nodulosa
Arachnidium clavatum
Arachnidium fibrosum
Arachnidium hippothooides

Arachnidium simplex
Bowerbankia gracillima
Buskea quincuncialis
Coronopora truncata
Gephyrotes nitidopunctata
Haplota clavata
Hypophorella expansa
Smittina crystallina
Cylindroporella tubulosa

Cnidarians

<i>Actinauge richardi</i>	
<i>Amphianthus dohrnii</i>	Sea-fan anemone
<i>Anthopleura thallia</i>	Glaucus pimplet
<i>Arachnanthus sarsi</i>	
<i>Caryophyllia inornata</i>	Cup coral
<i>Diphasia alata</i>	
<i>Edwardsia timida</i>	
<i>Halcampoides elongatus</i>	Burrowing anemone
<i>Hartlaubella gelatinosa</i>	a hydroid
<i>Octocorallia</i>	
<i>Paraphellia expansa</i>	
<i>Parazoanthus axinellae</i>	
<i>Polyplumaria flabellata</i>	
<i>Tamarisca tamarisca</i>	a hydroid
<i>Ventromma halecioides</i>	

Echinoderms

<i>Ophiopsila annulosa</i>	a brittlestar
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Molluscs

<i>Aeolidiella sanguinea</i>	a sea slug
<i>Aldisa zetlandica</i>	
<i>Amauropsis islandicus</i>	
<i>Atrina fragilis</i>	Fan mussel
<i>Buccinum humphreysianum</i>	
<i>Ceratia proxima</i>	
<i>Devonia perrieri</i>	
<i>Eubranchus doriae</i>	
<i>Facelina annulicornis</i>	
<i>Hancockia uncinata</i>	
<i>Hydrobia neglecta</i>	
<i>Manzonina crassa</i>	
<i>Okenia leachii</i>	
<i>Ostrea edulis</i>	Flat oyster
<i>Otina ovata</i>	
<i>Simnia patula</i>	
<i>Thyasira gouldi</i>	Northern hatchet-Shell
<i>Trapania pallida</i>	a sea slug

Ribbon worms

Amphiporus hastatus
Carinoma armandi
Cerebratulus fuscus
Emplectonema neesii

Ramphogordius sanguineus
Nemertopsis flavida
Procephalothrix filiformis
Psammamphiporus elongatus
Tetrastemma robertianae
Tetrastemma vermiculus
Tubulanus linearis

Sponges

Axinella damicornis
Eurypon clavatum
Macandrewia azorica
Myxilla perspinosa
Quasillina brevis
Spinularia spinularia
Spongionella pulchella
Stryphnus ponderosus

**Table 3C. INVERTEBRATE SPECIES OF PRINCIPAL IMPORTANCE FOR THE
CONSERVATION OF BIODIVERSITY IN NORTHERN IRELAND**

Acorn worms (Hemichordata)

Glossobalanus sarniensis

Ants/bees/wasps

Andrena (*Andrena*) *praecox*

Andrena (*Cnemidandrena*) *denticulata*

Andrena (*Cnemidandrena*) *fuscipes*

Andrena (*Melandrena*) *nigroaenea*

Andrena (*Micrandrena*) *semilaevis*

Andrena (*Oreomelissa*) *coitana*

Bombus (*Psithyrus*) *barbutellus*

Bombus (*Psithyrus*) *campestris*

Bombus (*Psithyrus*) *rupestris*

Bombus (*Thoracombus*) *muscorum*

Colletes (*Colletes*) *floralis*

Formica *aquilonia*

Hylaeus (*Prosopis*) *brevicornis*

Hylaeus (*Spatulariella*) *hyalinatus*

Lasioglossum (*Evylaeus*) *nitidiusculum*

Lasioglossum (*Evylaeus*) *rufitarse*

Nomada *goodeniana*

Nomada *striata*

Sphecodes *ferruginatus*

Sphecodes *gibbus*

Sphecodes *pellucidus*

Beetles

Agabus (*Acatodes*) *arcticus*

Agabus (*Acatodes*) *congener*

Agabus (*Gaurodytes*) *conspersus*

Aloconota (*Aloconota*) *planifrons*

Anthicus *flavipes*

Attactagenus *plumbeus*

Bagous (*Abagous*) *lutulentus*

Bagous (*Bagous*) *collignensis*

Bledius (*Hesperophilus*) *erraticus*

Bolitobius *castaneus*

Carabus (*Limnocarabus*) *clathratus*

Cyphon *punctipennis*

Donacia *aquatica*

Donacia *bicolora*

Donacia *cinerea*

Dorcatoma *dresdensis*

Dyschirius (*Dyschirius*) *obscurus*

Dytiscus *lapponicus*

Enicocerus *exsculptus*

Halipus (*Halipinus*) *apicalis*

Halipus (*Liaphus*) *variegatus*

Helophorus (*Atracthelophorus*) *arvernicus*

Helophorus (*Helophorus*) *fulgidicollis*

Hydraena *flavipes*

Hydraena *nigrita*

Hydraena rufipes
Hydrochus brevis
Hydrocyphon deflexicollis
Hydroporus glabriusculus
Hydroporus longicornis
Hydroporus morio
Hygrotus (Coelambus) novemlineatus
Ilybius chalconatus
Ilybius subaeneus
Laccophilus hyalinus
Lebia (Lebia) cruxminor
Melolontha hippocastani
Ochthebius (Asiobates) auriculatus
Ochthebius (Asiobates) bicolon
Oreodytes davisii
Otiorhynchus (Otiorhynchus) auropunctatus
Pelophila borealis
Ptinus subpilosus
Stenus (Stenus) palposus
Stictotarsus multilineatus

Bryozoans (sea mats)

Pentapora fascialis foliacea

Bugs (Hemiptera)

Alydus calcaratus

Butterflies

Coenonympha pamphilus
Coenonympha tullia
Cupido minimus
Erynnis tages
Euphydryas aurinia
Hipparchia semele
Lasiommata megera
Leptidea reali

Cnidarians

Arachnanthus sarsi
Caryophyllia inornata
Diphasia alata
Diphasia nigra
Edwardsia timida
Haliclystus auricula
Lucernariopsis campanulata
Lytocarpia myriophyllum
Parazoanthus axinellae
Polyplumaria flabellata
Virgularia mirabilis

Crustaceans

Arrhis phyllonyx
Atelecyclus rotundatus
Austropotamobius pallipes
Cestopagurus timidus

Inachus leptochirus
Munida rugosa
Mysis salemaai
Palinurus elephas

Damselflies

Coenagrion lunulatum

Echinoderms

Anseropoda placenta
Astropecten irregularis
Labidoplax media
Leptosynapta bergensis
Ocnus planci
Paracucumaria hyndmani
Solaster endeca
Thyonidium drummondii

Flies (Diptera)

Cheilosia ahenea

Moths

Acronicta psi
Acronicta rumicis
Adscita statices
Agonopterix capreolella
Agrochola helvola
Agrochola litura
Agrochola lychnidis
Allophyes oxyacanthae
Amphipoea oculea
Amphipyra tragopoginis
Apamea remissa
Arctia caja
Asteroscopus sphinx
Atethmia centrargo
Blepharita adusta
Brachylomia viminalis
Caradrina morpheus
Celaena haworthii
Celaena leucostigma
Chesias legatella
Chiasmia clathrata
Dasypolia templi
Diarsia rubi
Diloba caeruleocephala
Ecliptopera silaceata
Ennomos quercinaria
Entephria caesiata
Entephria flavicinctata
Epirrhoe galiata
Eriogaster lanestris
Eugnorisma glareosa
Euxoa nigricans
Graphiphora augur

Hemaris tityus
Hepialus humuli
Hoplodrina blanda
Hydraecia micacea
Lycia hirtaria
Melanchra persicariae
Melanchra pisi
Mesoligia literosa
Mythimna comma
Orthonama vittata
Orthosia gracilis
Parasemia plantaginis
Pelurga comitata
Perizoma albulata
Perizoma blandiata
Platyptilia tesseradactyla
Pyrausta sanguinalis
Rheumaptera hastata
Scopula marginepunctata
Scotopteryx chenopodiata
Spilosoma lubricipeda
Spilosoma luteum
Stilbia anomala
Tholera cespitis
Tholera decimalis
Trichiura crataegi
Tyria jacobaeae
Xanthia icteritia
Xanthorhoe decoloraria
Xanthorhoe ferrugata
Xestia agathina
Xestia castanea
Xylena exsoleta

Molluscs

Acicula fusca
Anisus (Disculifer) vortex
Anodonta anatina
Anodonta cygnea
Aplexa hypnorum
Arianta arbustorum
Atrina fragilis
Balea perversa
Cerastoderma glaucum
Chlamys varia
Cochlodina laminata
Cumanotus beaumonti
Erato voluta
Eubbranchus doriae
Gyraulus (Torquis) laevis
Helicella itala
Hydrobia acuta subsp. *neglecta*
Leiostyla anglica
Limax cinereoniger
Margaritifera margaritifera

Merdigera obscura
Modiolus modiolus
Musculium lacustre
Ostrea edulis
Palio dubia
Pisidium lilljeborgii
Pisidium pulchellum
Pupilla muscorum
Radix auricularia
Spermodea lamellata
Succinella oblonga
Tonicella marmorea
Vallonia pulchella
Ventrosia ventrosa
Vertigo antivertigo
Vertigo geyeri
Vertigo lilljeborgi
Vertigo (Vertilla) angustior
Zenobiella subrufescens
Zonitoides excavates

Spiders

Carorita limnaea

Sponges

Antho (Antho) granditoxa
Antho brattegardi
Clathria (Microciona) elliptichela
Clathria barleei
Eurypon coronula
Hymedesmia (Hymedesmia) cohesibacilla
Hymedesmia (Hymedesmia) rathlinia
Hymedesmia (Hymedesmia) stellifera
Hymerhabdia typica
Lissodendoryx (Ectyodoryx) jenjonesae
Mycale (Aegogrophila) contarenii
Spanioplone armaturum
Tethya hibernica

Tunicates (Urochordata)

Pycnoclavella stolonialis
Pyura microcosmus

4. Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

- CITES is the global convention set up to protect animal and plant species endangered by trade. 175 countries are signed up to CITES. Protected species are listed in three appendices. Appendix I comprises species threatened with extinction. Under CITES, trade in these species should be allowed only in exceptional circumstances. Species listed in Appendix II are not necessarily threatened with extinction, but trade in them must be controlled. Appendix III species are protected in at least one country and signatories to CITES are asked to help control international trade in these species.
- CITES is implemented in Europe by the **CITES Regulations (Council Regulation (EC) No. 338/97**, amended in February 2012 by [Commission Regulation \(EU\) No. 101/2012](#). The EC Regulations are in turn implemented in the UK by the **Control of Trade in Endangered Species (Enforcement) Regulations 1997** (COTES).
- Table 4 lists all the invertebrates on the EU CITES Regulations. The EU list is derived from the CITES Convention list, with a few additions. There are four Annexes (A, B, C and D) in the Regulations. Species are listed on Annexes C and D for monitoring purposes only. Almost all the species listed are not native to the UK, Northern medicinal leech *Hirudo medicinalis* in Britain being the notable exception.
- Trade in Annex A species (live or dead specimens or any part of or anything derived from them) between Member States of the European Union is covered by special provisions. The following activities are prohibited except under licence from Defra or another relevant Government Department:
 - sale, offering for sale, selling, keeping for sale, transporting for sale, displaying for commercial purposes, using for commercial gain, acquiring for commercial purposes, offering to purchase, purchasing.
- Provided they have been imported or acquired lawfully, no licence is required for internal EU trade in species listed in Annex B, C or D.
- Permits are required for the import of Annex A and Annex B species to EU countries. Import conditions in the EU are stricter than CITES requirements. Import notifications are required for Annex C and Annex D species.
- One of the conditions for issuing a permit for the import of a live Annex A or Annex B specimen is that the intended accommodation at the destination is adequately equipped to conserve and care for it properly.

Table 4. INVERTEBRATE SPECIES ENDANGERED BY TRADE AND LISTED UNDER THE EU CITES REGULATIONS

(From Commission Regulation (EU) 101/2012)

EU ANNEX A

CITES APPENDIX

Arthropoda Insecta Lepidoptera

Papilionidae (birdwing and swallowtail butterflies)

<i>Ornithoptera alexandrae</i> - Queen Alexandra's birdwing butterfly	I
<i>Papilio chikae</i> - Luzon peacock swallowtail butterfly	I
<i>Papilio homerus</i> - Homerus swallowtail butterfly	I
<i>Papilio hospiton</i> - Corsican swallowtail butterfly	I
<i>Parnassius apollo</i> - Mountain Apollo butterfly	II

Mollusca Bivalvia Unionoida

Unionidae (freshwater mussels and pearly mussels)

<i>Conradilla caelata</i> - Birdwing pearly mussel	I
<i>Dromus dromas</i> - Dromedary pearly mussel	I
<i>Epioblasma curtisii</i> - Curtis' pearly mussel	I
<i>Epioblasma florentina</i> - Yellow-blossom pearly mussel	I
<i>Epioblasma sampsonii</i> - Wabash riffleshell	I
<i>Epioblasma sulcata perobliqua</i> - White catspaw mussel	I
<i>Epioblasma torulosa gubernaculum</i> - Green-blossom pearly mussel	I
<i>Epioblasma torulosa torulosa</i> - Turbercled-blossom pearly mussel	I
<i>Epioblasma turgidula</i> - Turgid-blossom pearly mussel	I
<i>Epioblasma walkeri</i> - Tan riffleshell	I
<i>Fusconaia cuneolus</i> - Fine-rayed pigtoe pearly mussel	I
<i>Fusconaia edgariana</i> - Shiny pigtoe pearly mussel	I
<i>Lampsilis higginsii</i> - Higgins' eye pearly mussel	I
<i>Lampsilis orbiculata orbiculata</i> - Pink mucket pearly mussel	I
<i>Lampsilis satur</i> - Sandback pocketbook mussel	I
<i>Lampsilis virescens</i> - Alabama lamp pearly mussel	I
<i>Plethobasus cicatricosus</i> - White warty-back pearly mussel	I
<i>Plethobasus cooperianus</i> - Orange-footed pimpleback mussel	I
<i>Pleurobema plenum</i> - Rough pigtoe pearly mussel	I
<i>Potamilus capax</i> - Fat pocketbook pearly mussel	I
<i>Quadrula intermedia</i> - Cumberland monkey-face pearly mussel	I
<i>Quadrula sparsa</i> - Appalachian monkey-face pearly mussel	I
<i>Toxolasma cylindrella</i> - Pale lilliput pearly mussel	I
<i>Unio nickliniana</i> - Nicklin's pearly mussel	I
<i>Unio tampicoensis tecomatensis</i> - Tampico pearly mussel	I
<i>Villosa trabalis</i> - Cumberland bean pearly mussel	I

Mollusca Gastropoda Stylommatophora

Achatinellidae (agate snails, Aohu tree snails)

<i>Achatinella</i> spp. - little agate shells	I
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EU ANNEX B

CITES APPENDIX

Arthropoda Insecta Lepidoptera

Papilionidae (birdwing and swallowtail butterflies)

<i>Atrophaneura jophon</i> - Sri Lankan rose butterfly	II
<i>Atrophaneura palu</i> - Palu swallowtail butterfly	-
<i>Atrophaneura pandiyana</i> - Malabar rose butterfly	II
<i>Bhutanitis</i> spp. - swallowtail butterflies	II
<i>Graphium sandawanum</i> - Apo swallowtail butterfly	-
<i>Graphium stresemanni</i> - Seram swallowtail butterfly	-
<i>Ornithoptera</i> spp. - birdwing butterflies (except <i>O. alexandrae</i> , see Annex A)	II
<i>Papilio benguetus</i> - a swallowtail butterfly	-
<i>Papilio esperanza</i> - a swallowtail butterfly	-
<i>Papilio morondavana</i> - Madagascan emperor swallowtail butterfly	-
<i>Papilio neumoegeni</i> - a swallowtail butterfly	-
<i>Parides ascanius</i> - Fluminense swallowtail butterfly	-
<i>Parides hahneli</i> - Hahnel's Amazonian swallowtail butterfly	-
<i>Teinopalpus</i> spp. - Kaiser-I-Hind butterflies	II
<i>Trogonoptera</i> spp. - birdwing butterflies	II
<i>Troides</i> spp. - birdwing butterflies	II

Arthropoda Insecta Coleoptera

Scarabaeidae (scarab beetles)

<i>Dynastes satanas</i> - Satanas beetle	II
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Arthropoda Arachnida Scorpiones

Scorpionidae (scorpions)

<i>Pandinus dictator</i> - A scorpion	II
<i>Pandinus gambiensis</i> - Giant Senegalese scorpion	II
<i>Pandinus imperator</i> - Emperor scorpion	II

Arthropoda Arachnida Araneae

Theraphosidae (Tarantulas)

<i>Aphonopelma albiceps</i> - Amula red rump tarantula	II
<i>Aphonopelma pallidum</i> - Chihuahua rose-grey tarantula	II
<i>Brachypelma</i> spp. - Central American tarantulas	II

Annelida Hirudinoidea (Leeches) Arhynchobdellae

Hirudinidae

<i>Hirudo medicinalis</i> - Northern medicinal leech	II
<i>Hirudo verbana</i> – Southern medicinal leech	II

Mollusca Bivalvia

Mytiloida Mytilidae (marine mussels)

<i>Lithophaga lithophaga</i> - European date mussel	II
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Veneroida Tridacnidae (giant clams)

Tridacnidae spp. - giant clams	II
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Unionoida Unionidae (freshwater mussels and pearly mussels)

<i>Cyprogenia aberti</i> - Western fanshell mussel	II
<i>Epioblasma torulosa rangiana</i> - Northern riffleshell	II
<i>Pleurobema clava</i> - Clubshell pearly mussel	II

Mollusca Gastropoda**Stylommatophora Camaenidae (green tree snails)***Papustyla pulcherrima* - Manus green tree snail II**Mesogastropoda Strombidae (conches)***Strombus gigas* - Queen conch II**Cnidaria Anthozoa (corals and sea anemones)**

For corals marked * the following are not subject to the provisions of the Regulation:

fossils; coral sand (containing finely crushed fragments of dead coral no larger than 2 mm in diameter);

coral fragments (unconsolidated broken finger-like dead coral and other material between 2 and 30 mm measured in any direction).

Helioporacea Helioporidae**Heliopora coerulea* - Blue ridge coral II**Stolonifera Tubiporidae*** *Tubiporidae* spp. - Organpipe corals II**Antipatharia***Antipatharia* spp. - Black corals II**Scleractinia****Scleractinia* spp. - Stony corals II**Cnidaria Hydrozoa (sea ferns, fire corals and stinging medusas)****Milleporina Milliporidae**

* Milleporidae spp. - Wello fire corals II

Stylasterina Stylasteridae

*Stylasteridae spp. - Lace corals II

EU ANNEX C**Echinodermata Holothuroidea (Sea cucumbers) Aspidochirotida****Stichopodidae***Isostichopus fuscus* - Brown sea cucumber III (Ecuador)**Arthropoda Insecta Lepidoptera****Nymphalidae (Brush-footed butterflies)***Agrias amydon boliviensis* III (Bolivia)*Morpho godartii lachaumei* III (Bolivia)*Prepona praeneste buckleyana* III (Bolivia)**Arthropoda Insecta Coleoptera****Lucanidae (Stag beetles)***Colophon* spp. - Cape stag beetles III (South Africa)**Cnidaria Anthozoa Gorgonaceae**

Coralliidae (Corals)

Corallium elatius III (China)

<i>Corallium japonicum</i>	III (China)
<i>Corallium konjoi</i>	III (China)
<i>Corallium secundum</i>	III (China)

EU ANNEX D

CITES APPENDIX

Arthropoda Insecta Lepidoptera	
Papilionidae (birdwing and swallowtail butterflies)	
<i>Baronia brevicornis</i> - Short-horned baronia butterfly	-
<i>Papilio grosesmithi</i> - a swallowtail butterfly	-
<i>Papilio maraho</i> - Broad-tailed swallowtail	-
Mollusca Gastropoda	
Haliotidae (abalones)	
<i>Haliotis midae</i> - Midas ear abalone	-

5. Invasive non-native invertebrate species

A growing threat to wildlife in the UK comes from the release to the countryside of animals and plants from other parts of the world. Some of these are vigorous competitors or can bring disease that endangers native species. An example of this is the introduction of the American signal crayfish *Pacifastacus leniusculus*, which threatens the survival of the White clawed crayfish. There are measures in the **Wildlife and Countryside Act 1981**, the **Wildlife and Natural Environment (Scotland) Act 2011** and the **Wildlife (Northern Ireland) Order 1985** aimed at preventing damaging introductions.

In England and Wales it is an offence to release or allow to escape to the wild any animal of a kind that is not established in the wild. In addition, in the Wildlife and Countryside Act there is a list (Schedule 9) of animals (mainly from abroad) that are breeding in the wild in the UK, but should not be released without a licence. The invertebrate species included in Schedule 9 (as amended) are listed in Table 5A.

The **Prohibition of Keeping of Live Fish (Crayfish) Order 1996** (amended by the Alien and Locally Absent Species in Aquaculture (England and Wales) Regulations 2011) prohibits the keeping in England and Wales of any species of crayfish other than the native species, *Austropotamobius pallipes*, except under licence. The exception to this prohibition is that the American signal crayfish *Pacifastacus leniusculus* may be kept in parts of England and Wales specified by the Order. Non-native crayfish may be trapped only with written consent from the Environment Agency and the permission of the landowner (the exception being for traps operated within crayfish farms) and they must not subsequently be returned to the wild.

In Scotland, under Section 14 of the Wildlife and Natural Environment (Scotland) Act it is an offence to release or allow to escape from captivity any animal to a place outwith its natural range. Similar regulations apply to any animal of a type that the Scottish Ministers by order specify. Under the **Prohibition of Keeping of Live Fish (Crayfish) (Scotland) Order 1996**, keeping in Scotland of any species of live crayfish is prohibited except under licence.

It is an offence in Scotland under the **Wildlife and Countryside Act 1981** (Keeping and Release **and Notification** Requirements) (Scotland) Amendment Order 2012 for a person to keep or have in their possession or control any freshwater crayfish of the families Astacidae, Cambaridae or Parastacidae, excluding the white-clawed crayfish *Austropotamobius pallipes*.

In Northern Ireland, under Section 15 of the Wildlife (Northern Ireland) Order, it is an offence to release or allow to escape into the wild any animal of a kind that is not ordinarily resident in or a regular visitor to Northern Ireland. It is also an offence to release or allow to escape any animal listed on Schedule 9. The 1985 Order has been amended by the Wildlife and Natural Environment Act (Northern Ireland) 2011 (the WANE Act) and a number of invertebrate species have been added to Schedule 9. The invertebrate species on Schedule 9 are listed in Table 5B.

Table 5A. INVERTEBRATE SPECIES LISTED ON SCHEDULE 9 OF THE WILDLIFE AND COUNTRYSIDE ACT (AS AMENDED)

<i>Scientific name</i>	<i>English name</i>	<i>Year</i>
Crustaceans		
<i>Astacus astacus</i>	Noble crayfish	1992
<i>Astacus leptodactylus</i>	Turkish crayfish	1992
<i>Eriocheir sinensis</i>	Chinese mitten crab	2010
<i>Orconectes limosus</i>	Spiny-cheeked crayfish	2010
<i>Pacifastacus leniusculus</i>	American signal crayfish	1992
<i>Procambarus clarkii</i>	Red swamp crayfish	2010
Molluscs		
<i>Crepidula fornicata</i>	Slipper limpet	2010
<i>Urosalpinx cinerea</i>	Oyster drill	2010
Worms (Flatworms)		
<i>Artiposthia triangulata</i>	New Zealand flatworm	1992
<i>Australoplana sanguinea</i>	A flatworm	2010
<i>Kontikia andersoni</i>	A flatworm	2010
<i>Kontikia ventrolineata</i>	A flatworm	2010

Table 5B. INVERTEBRATE SPECIES LISTED ON SCHEDULE 9 OF THE WILDLIFE (NORTHERN IRELAND) ORDER (AS AMENDED)

<i>Scientific name</i>	<i>English name</i>	<i>Year scheduled</i>
Crustaceans		
<i>Astacus astacus</i>	Noble crayfish	2011
<i>Astacus leptodactylus</i>	Narrow-clawed crayfish	2011
<i>Caprella mutica</i>	Japanese skeleton shrimp	2011
<i>Crangonyx pseudogracilis</i>	A freshwater amphipod	2011
<i>Gammarus pulex</i>	A freshwater shrimp	2011
<i>Gammarus tigrinus</i>	A freshwater shrimp	2011
<i>Orconectes limosus</i>	Spiny-cheeked crayfish	2011
<i>Pacifastacus leniusculus</i>	American signal crayfish	2011
<i>Procambarus</i> sp.	Marbled crayfish	2011
Molluscs		
<i>Crepidula fornicata</i>	Slipper limpet	2011
<i>Dreissena polymorpha</i>	Zebra mussel	2011
Sea squirts		
<i>Didemnum vexillum</i>	A sea squirt	2011
<i>Styela clava</i>	Club sea squirt	2011

Habitat protection

Most threatened animals cannot be properly protected without conservation of their habitats. There are legal provisions for the protection and management of areas where threatened species occur.

- Sites of Special Scientific Interest (SSSIs), National Nature Reserves and Marine Nature Reserves are selected and protected under British law because they are examples of important habitats and often contain rare invertebrates.
- Special Areas of Conservation (SACs) are chosen under the Habitats Directive for other animals and plants needing habitat protection in Europe as a whole. Among these species are the Stag beetle and White clawed crayfish.
- Other areas in the UK are designated under the Ramsar Convention, a world-wide agreement on the conservation of wetlands.

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