

1. SNA details

SNA name:	East Devon Pebblebed Heaths
SNA unique number:	368
SNA area (ha):	3352.22



2. Summary of nature conservation interest

Priority BAP habitats:

Main Regional Nature Map habitat:	Lowland Heath
Other Regional Nature Map habitat(s):	
Other UK BAP habitats:	Lowland mixed deciduous woodland, wet woodland, lowland dry acid grassland, maritime cliff and slope, fens, hedges, rivers, ponds

This is a large SNA, stretching from the East Devon Pebblebed Heaths, to the coast. The SNA is mostly within the East Devon AONB, and contains the largest block of lowland heath in Devon. The East Devon Pebblebed Heaths have been designated a Special Area of Protection (SPA) and Site of Special Scientific Interest (SSSI) and are a nationally important representative of the inland Atlantic-climate, lowland heathlands of Britain and north-west Europe. The SSSI covers a variety of habitats, including dry heath, wet heath, valley mires and mineral-rich flushes, and supports over 70 breeding bird species and 21 breeding dragonfly species.

The SPA covers over 30% of the SNA, and also includes the SSSI, two Devon Wildlife Trust nature reserves and a Royal Society for the Protection of Birds (RSPB) nature reserve. Most of the SSSI is Common Land. Outside the protected areas, there are a couple of ancient semi-natural woodlands, secondary woodland and wet woodland, with some unimproved acidic, neutral and marshy grassland. Otherwise the land is mainly arable, with conifer and broadleaved plantations, golf courses and a working quarry. The southern end of the SNA overlaps with SNA 1182 (maritime cliff and slope) and ends in a steep cliff where the land meets the sea.

There has been a lot of wildlife recording, especially on the two DWT nature reserves, so there are a lot of records, especially of fungi, butterflies and moths, dragonflies, birds and plants.

Important species or species assemblage	Status
Long-Leaved Sundew, Black Bog-Rush, Green-Winged Orchid, Lesser Butterfly-Orchid, Hairy Bird's-Foot-Trefoil, Ivy Broomrape, Pale Heath Violet	Devon Notable Species UKBAP (Lesser Butterfly-Orchid) Nationally scarce (Hairy Bird's-Foot-Trefoil, Ivy Broomrape, Pale Heath Violet)
Primrose	DBAP
70 breeding species of birds including Hobby, Nightjar, Dartford Warbler Barn Owl, Hen Harrier, Reed Bunting, Woodlark are also present	S.41 (Reed Bunting, Cirl Bunting, Woodlark, Nightjar) DBAP (Barn Owl, Nightjar, Cirl Bunting) Red (Hen Harrier) Amber (Reed Bunting, Woodlark, Dartford Warbler)
Over 20 UKBAP moths & butterflies including Small Pearl-Bordered Fritillary, Silver-	S.41 DBAP (Pearl-bordered Fritillary)

Important species or species assemblage	Status
Studded Blue, Grizzled Skipper, High Brown Fritillary, Pearl-bordered Fritillary, Wood White	
21 breeding species of dragonfly including Southern Damselfly, Downy Emerald, Hairy Dragonfly, Small Red Damselfly, White-Legged Damselfly, Keeled Skimmer	Internationally Important, S.41, DBAP (Southern Damselfly) Nationally Important & Nationally Notable B (Downy Emerald, Hairy Dragonfly, Small Red Damselfly, White-Legged Damselfly, Keeled Skimmer)
Nationally Notable invertebrates including Small Grass Emerald and Wood Cricket, Purple Emperor	Nationally Notable A Nationally Notable B (Purple Emperor)
Otter, Common Dormouse, Harvest Mouse, Greater Horseshoe Bat, Lesser Horseshoe Bat, Brown Long-Eared Bat	S.41 DBAP (Otter, Dormouse, Greater horseshoe bat)
Reptiles and amphibians e.g. Adder, Slow-Worm, Grass Snake, Viviparous Lizard Common Toad	S.41

See Appendix 1 for further species recorded in SNA 368.

Nature conservation designations

Please refer to a site's formal citation for a complete consideration of the reasons for its designation.

Designation	Site Name	Description
SPA	East Devon Pebblebed Heaths	Lowland heath
SSSI	East Devon Pebblebed Heaths	Lowland heath

In addition the SNA includes 12 County Wildlife Sites covering habitats including: Ancient semi-natural woodland, secondary broadleaved woodland, wet woodland, unimproved acidic, neutral and marshy grassland, heathland, coastal scrub and ponds.

There is also one Regionally Important Geological Site and two Devon Wildlife Trust nature reserves.

3. UK BAP Priority habitat maintenance and restoration

targets for SNA no 368 (the measurement unit is hectare unless stated otherwise and is rounded up/down)

Maintenance targets (current extent of habitat) – 100 % favourable condition
(based on NBN habitat layers)

UK BAP priority habitat	Maritime Cliff and Slope	Lowland mixed deciduous woodland	Wet Woodland	Woodland TOTAL	Lowland Dry Acid Grassland	Lowland Heathland	Fens ¹	TOTAL
Minimum area *	0.25	2	5	7.25		36		43.25
Maximum area #	40	169	5	214	58	905	292	1469

* current extent of habitat = a + b

a) sum of all the areas of criterion 1 polygons (*Definitely is*)

b) number of criterion 2 polygons multiplied by the minimum mappable unit for that habitat (*Definitely present within polygon but not mappable*)

[criterion 3 polygons not included] (*Probably the Priority Habitat but some uncertainty of interpretation*)

current extent of habitat = criterion 1 + criterion 2 + criterion 3

¹Fens: The NBN habitat layer has a large area in this SNA mapped as 'lowland fen' however there is some doubt over the accuracy of this. Little reference could be found to fen habitat in survey data relating to this area and there is often confusion over the definition of fen and how it overlaps with mire, swamp and bog.

Theoretical restoration/creation targets using Rebuilding Biodiversity (RB) methodology:

The Rebuilding Biodiversity in the South West Technical Manual, November 2005 suggests the following restoration/creation targets for a Strategic Nature Area profile where the priority habitat is lowland heathland:

- 60% cover of priority habitat
- 0% cover of other semi-natural habitat
- 40% cover of other land uses.

This SNA profile will be further developed as follows:

4. Opportunities for habitat restoration and creation in the SNA

This is an optional but desirable section to be completed by local experts and which would outline the practical opportunities for habitat restoration and creation on the ground. This may include emphasising the importance of an SNA for habitats additional to the primary one for which it was identified or, indeed, for particular species.

This section can also be used to develop more realistic habitat restoration targets, which could then be used to refine the theoretical targets listed above.

5. Constraints to habitat restoration and creation in the SNA

As above, but in this case outlining the constraints to habitat restoration and creation in the SNA.

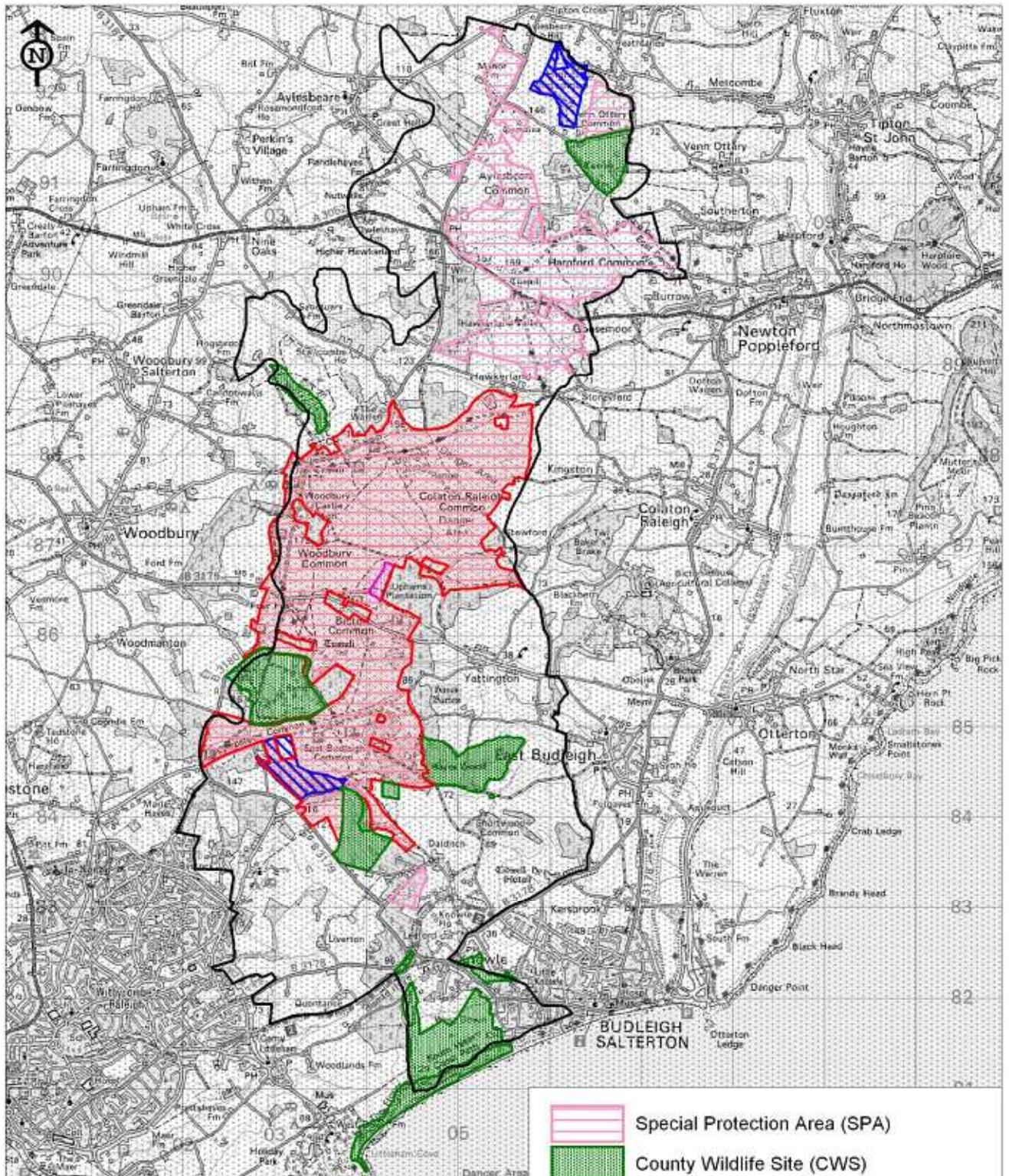
6. Other information

This is another optional section reliant upon local knowledge of the SNA. This section can be used for any other information that might be useful. It may be particularly useful for those SNAs within which there current projects or for which projects are planned.

Contents could include:

- Restoration targets for BAP habitats additional to the main nature map habitat.
- Maps detailing areas for restoration
- Nature conservation objectives
- And so on.

Designated Sites within SNA 368 (2009)



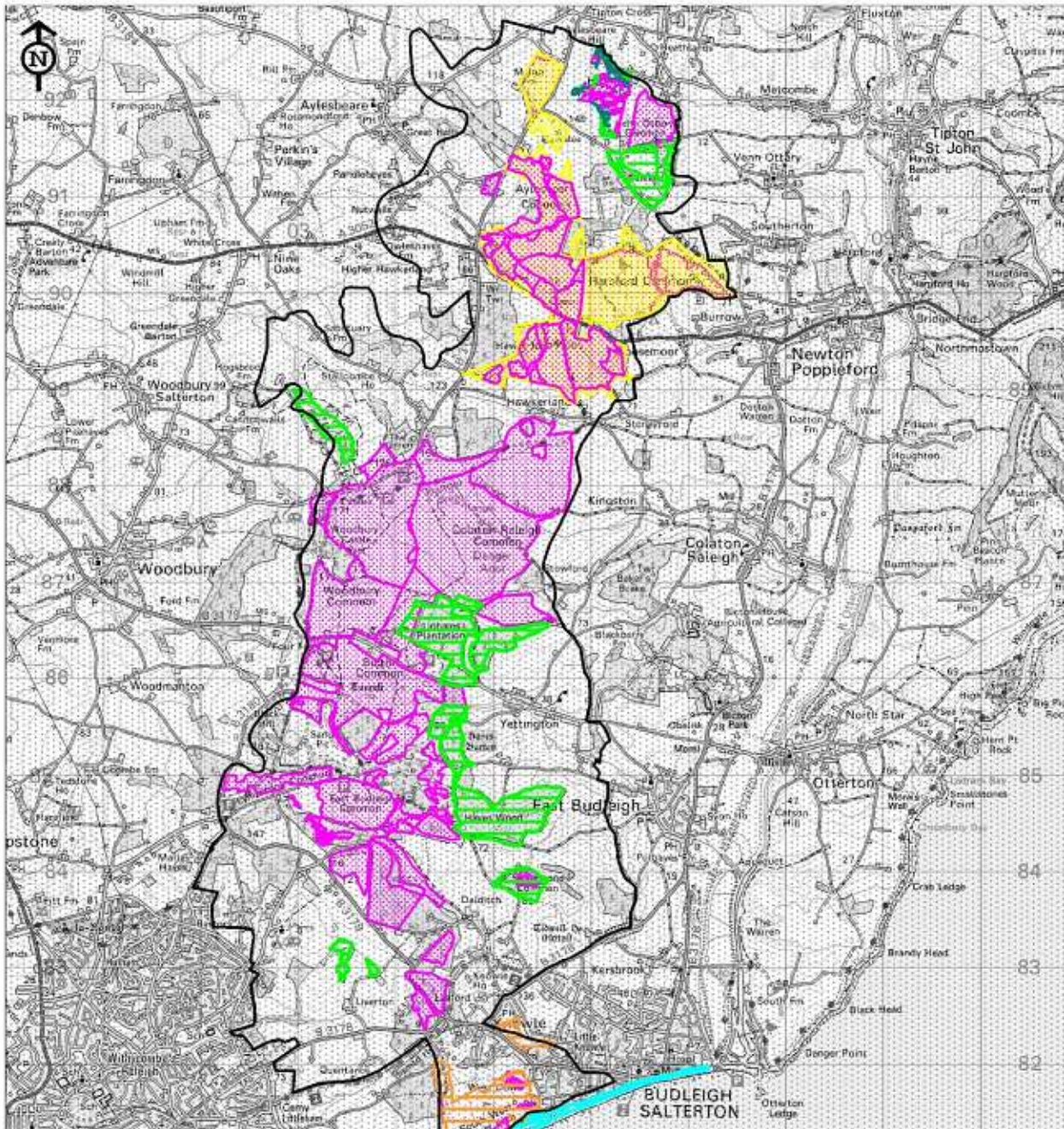
-  Special Protection Area (SPA)
-  County Wildlife Site (CWS)
-  Regionally Important Geological Site (RIGS)
-  Devon Wildlife Trust Nature Reserve
-  Site of Special Scientific Interest (SSSI)

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Selected UKBAP Priority Habitats within SNA 368 (2009)



-  Lowland Heathland
-  Maritime Cliff and Slope
-  Lowland Mixed Deciduous Woodland
-  Wet Woodland
-  Fen
-  Lowland Dry Acid Grassland

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Appendix 1: Legally protected and notable species found within SNA 368

Common name	Scientific name	Status
45 Khz Pipistrelle	<i>Pipistrellus pipistrellus</i> 45kHz	WCA
a Bat	Chiroptera	WCA
A Long-eared bat	Plecotus	WCA
Adder	<i>Vipera berus</i>	WCA; S.41
American Blue-Eyed-Grass	<i>Sisyrinchium montanum</i>	DN1
Annual Knawel	<i>Scleranthus annuus</i>	S.41; DN1
Badger	<i>Meles meles</i>	WCA
Barn Owl	<i>Tyto alba</i>	WCA; DBAP; Amber
Beaded Chestnut	<i>Agrochola lychnidis</i>	S.41
Black Bog-Rush	<i>Schoenus nigricans</i>	DN2
Black-Headed Gull	<i>Larus ridibundus</i>	Amber
Bluebell	<i>Hyacinthoides non-scripta</i>	WCA
Brambling	<i>Fringilla montifringilla</i>	WCA
Brown Argus	<i>Aricia agestis</i>	Decline
Brown Long-Eared Bat	<i>Plecotus auritus</i>	WCA; S.41
Buff Ermine	<i>Spilosoma luteum</i>	S.41
Bullfinch	<i>Pyrrhula pyrrhula</i>	UKBAP(P); Amber
Bulrush	<i>Schoenoplectus lacustris</i>	DN1
Chalk-hill Blue	<i>Lysandra coridon</i>	WCA; Decline
Cinnabar	<i>Tyria jacobaeae</i>	S.41
Cirl Bunting	<i>Emberiza cirlus</i>	WCA; S.41; DBAP; Red
Cloaked Carpet	<i>Euphyia biangulata</i>	Nb
Common Chamomile	<i>Chamaemelum nobile</i>	S.41; NS; DN3
Common Dormouse	<i>Muscardinus avellanarius</i>	WCA; S.41; DBAP
Common Frog	<i>Rana temporaria</i>	WCA
Common Gull	<i>Larus canus</i>	Amber
Common Shrew	<i>Sorex araneus</i>	WCA
Common Toad	<i>Bufo bufo</i>	WCA; S.41
Corky-Fruited Water-Dropwort	<i>Oenanthe pimpinelloides</i>	DN3
Cormorant	<i>Phalacrocorax carbo</i>	Amber
Corncrake	<i>Crex crex</i>	WCA; S.41; Red
Cowslip	<i>Primula veris</i>	DN3
Crescent Dart	<i>Agrotis trux lunigera</i>	Nb
Crossbill	<i>Loxia curvirostra</i>	WCA
Cuckoo	<i>Cuculus canorus</i>	S.41; Red
Curlew	<i>Numenius arquata</i>	S.41; DBAP; Amber
Dark Green Fritillary	<i>Argynnis aglaja</i>	Decline
Dartford Warbler	<i>Sylvia undata</i>	WCA; Amber
Dingy Skipper	<i>Erynnis tages</i>	S.41; Decline
Dotted-Border Wave	<i>Idea sylvestraria</i>	Nb
Downy Emerald	<i>Cordulia aenea</i>	Nb; KeyD (N)
Dunnock	<i>Prunella modularis</i>	Amber
Essex Skipper	<i>Thymelicus lineola</i>	Decline
Fallow Deer	<i>Dama dama</i>	DA
Few-Flowered Spike-Rush	<i>Eleocharis quinqueflora</i>	DN1; DR
Fieldfare	<i>Turdus pilaris</i>	WCA; Red
Fine-Leaved Sheep's-Fescue	<i>Festuca filiformis</i>	DN1
Firecrest	<i>Regulus ignicapillus</i>	WCA; Amber
Floating Spike-Rush	<i>Eleogiton fluitans</i>	DN2
Fringed Water-Lily	<i>Nymphoides peltata</i>	NS; DN1; DR
Fritillary	<i>Fritillaria meleagris</i>	NS
Garden Tiger	<i>Arctia caja</i>	S.41
Goldcrest	<i>Regulus regulus</i>	Amber
Golden Oriole	<i>Oriolus oriolus</i>	WCA; Red
Golden Plover	<i>Pluvialis apricaria</i>	Amber

Common name	Scientific name	Status
Goldilocks Buttercup	Ranunculus auricomus	DN2
Goshawk	Accipiter gentilis	WCA; Amber
Grass Snake	Natrix natrix	WCA; S.41
Grass Vetchling	Lathyrus nissolia	DN1
Grass Wave	Perconia strigillaria	Nb
Grasshopper Warbler	Locustella naevia	S.41; Red
Grayling	Hipparchia semele	S.41
Great Black-Backed Gull	Larus marinus	Amber
Great Pond-Sedge	Carex riparia	DN2
Greater Horseshoe Bat	Rhinolophus ferrumequinum	WCA; S.41; DBAP
Green Figwort	Scrophularia umbrosa	Nb
Green Hairstreak	Callophrys rubi	Decline
Green Sandpiper	Tringa ochropus	WCA; Amber
Green Woodpecker	Picus viridis	Amber
Greenshank	Tringa nebularia	WCA
Green-Winged Orchid	Orchis morio	DN1
Grey Partridge	Perdix perdix	S.41; Red
Grey Wagtail	Motacilla cinerea	Amber
Greylag Goose	Anser anser	Amber
Grizzled Skipper	Pyrgus malvae	S.41; Decline
Hairy Bird's-Foot-Trefoil	Lotus subbiflorus	NS; DN1
Hairy Dragonfly	Brachytron pratense	Nb; KeyD (N)
Hairy Rock-Cress	Arabis hirsuta	DN1
Harebell	Campanula rotundifolia	DN1
Harvest Mouse	Micromys minutus	S.41
Hawfinch	Coccothraustes coccothraustes	S.41; Red
Hay-Scented Buckler-Fern	Dryopteris aemula	DN3
Heath Pearlwort	Sagina subulata	DN3
Hedgehog	Erinaceus europaeus	WCA; S.41
Hen Harrier	Circus cyaneus	WCA; Red
Herring Gull	Larus argentatus	Red
High Brown Fritillary	Argynnis adippe	WCA; S.41
Hobby	Falco subbuteo	WCA
Honey Buzzard	Pernis apivorus	WCA; Amber
Horse Chestnut	Pachycnemia hippocastanaria	Nb
House Martin	Delichon urbica	Amber
House Sparrow	Passer domesticus	S.41; Red
Indet. Deer	Cervidae	DA
Ivy Broomrape	Orobanche hederæ	NS; DN2
Jack Snipe	Lymnocyptes minimus	Amber
Japanese Knotweed	Fallopia japonica	WCA
Keeled Skimmer	Orthetrum coerulescens	KeyD (N)
Kestrel	Falco tinnunculus	Amber
Kingfisher	Alcedo atthis	WCA; Amber
Knotgrass	Acronicta rumicis	S.41
Lapwing	Vanellus vanellus	S.41; Red
Lesser Black-Backed Gull	Larus fuscus	Amber
Lesser Butterfly-Orchid	Platanthera bifolia	S.41; DN3
Lesser Horseshoe Bat	Rhinolophus hipposideros	WCA; S.41
Lesser Spotted Woodpecker	Dendrocopos minor	Red
Linnet	Carduelis cannabina	S.41; Red
Little Gull	Larus minutus	WCA
Long-Leaved Sundew	Drosera intermedia	DN2
Mallard	Anas platyrhynchos	Amber
Marsh Tit	Parus palustris	Red
Meadow Pipit	Anthus pratensis	Amber
Merlin	Falco columbarius	WCA; Amber

Common name	Scientific name	Status
Mistle Thrush	<i>Turdus viscivorus</i>	Amber
Montagu's Harrier	<i>Circus pygargus</i>	WCA; Amber
Mottled Rustic	<i>Caradrina morpheus</i>	S.41
Mouse Moth	<i>Amphipyra tragopoginis</i>	S.41
Mullein Wave	<i>Scopula marginepunctata</i>	S.41
Mute Swan	<i>Cygnus olor</i>	Amber
Neglected Rustic	<i>Xestia castanea</i>	S.41
Nightingale	<i>Luscinia megarhynchos</i>	Amber
Nightjar	<i>Caprimulgus europaeus</i>	S.41; DBAP; Red
Osprey	<i>Pandion haliaetus</i>	WCA; Amber
Otter	<i>Lutra lutra</i>	WCA; S.41; DBAP
Pale Heath Violet	<i>Viola lactea</i>	S.41; NS; DN2
Pale Sedge	<i>Carex pallescens</i>	DN2
Palmate Newt	<i>Triturus helveticus</i>	WCA
Pearl-bordered Fritillary	<i>Boloria euphrosyne</i>	WCA; S.41; DBAP; Nb
Peregrine	<i>Falco peregrinus</i>	WCA; Amber
Pied Flycatcher	<i>Ficedula hypoleuca</i>	Amber
Pipistrelle	<i>Pipistrellus pipistrellus</i>	WCA
Primrose	<i>Primula vulgaris</i>	DBAP
Purple Emperor	<i>Apatura iris</i>	WCA; Nb
Purple Hairstreak	<i>Quercusia quercus</i>	Decline
Pygmy Shrew	<i>Sorex minutus</i>	WCA
Quail	<i>Coturnix coturnix</i>	WCA; Amber
Redpoll	<i>Carduelis flammea</i>	Amber
Redstart	<i>Phoenicurus phoenicurus</i>	Amber
Redwing	<i>Turdus iliacus</i>	WCA; Red
Reed Bunting	<i>Emberiza schoeniclus</i>	S.41; Amber
Ring Ouzel	<i>Turdus torquatus</i>	S.41; Red
Roe Deer	<i>Capreolus capreolus</i>	DA
Round-leaved Crowfoot	<i>Ranunculus omiophyllus</i>	DN1
Ruddy Darter	<i>Sympetrum sanguineum</i>	Nb; KeyD (R)
Rustic	<i>Hoplodrina blanda</i>	S.41
Sand Martin	<i>Riparia riparia</i>	Amber
Sea-Buckthorn	<i>Hippophae rhamnoides</i>	NS; DN1
Serotine	<i>Eptesicus serotinus</i>	WCA
Sharp Rush	<i>Juncus acutus</i>	NS; DN1
Short-Eared Owl	<i>Asio flammeus</i>	Amber
Shoulder-Striped Wainscot	<i>Mythimna comma</i>	S.41
Shoveler	<i>Anas clypeata</i>	Amber
Silver-Studded Blue	<i>Plebejus argus</i>	WCA; S.41; Nb
Skylark	<i>Alauda arvensis</i>	S.41; Red
Slow-Worm	<i>Anguis fragilis</i>	WCA; S.41
Small Cudweed	<i>Filago minima</i>	DN1
Small Grass Emerald	<i>Chlorissa viridata</i>	Na
Small Heath	<i>Coenonympha pamphilus</i>	S.41
Small Pearl-Bordered Fritillary	<i>Boloria selene selene</i>	S.41; Decline
Small Red Damselfly	<i>Ceriagrion tenellum</i>	Nb; KeyD (N)
Small Square-Spot	<i>Diarsia rubi</i>	S.41
Smooth Brome	<i>Bromus racemosus</i>	DN2
Snipe	<i>Gallinago gallinago</i>	Amber
Song Thrush	<i>Turdus philomelos</i>	S.41; Red
Southern Damselfly	<i>Coenagrion mercuriale</i>	WCA; S.41; DBAP; KeyD (I)
Spotted Flycatcher	<i>Muscicapa striata</i>	S.41; Red
Starling	<i>Sturnus vulgaris</i>	Red
Stock Dove	<i>Columba oenas</i>	Amber
Stonechat	<i>Saxicola torquata</i>	Amber
Swallow	<i>Hirundo rustica</i>	Amber

Common name	Scientific name	Status
Swift	<i>Apus apus</i>	Amber
Teal	<i>Anas crecca</i>	Amber
Three-lobed water-crowfoot	<i>Ranunculus tripartitus</i>	S.41; DN1
Tree Pipit	<i>Anthus trivialis</i>	S.41; Red
Tree Sparrow	<i>Passer montanus</i>	S.41; Red
Tubular Water-Dropwort	<i>Oenanthe fistulosa</i>	S.41; DN1; DR
Turtle Dove	<i>Streptopelia turtur</i>	S.41; Red
Usnea florida	<i>Usnea florida</i>	S.41
Variable Blue Damselfly	<i>Coenagrion pulchellum</i>	Nb
Viviparous Lizard	<i>Lacerta vivipara</i>	WCA; S.41
Wall Brown	<i>Lasiommata megera</i>	S.41
Water Rail	<i>Rallus aquaticus</i>	Amber
Water Shrew	<i>Neomys fodiens</i>	WCA
Wheatear	<i>Oenanthe oenanthe</i>	Amber
Whimbrel	<i>Numenius phaeopus</i>	WCA; Red
Whinchat	<i>Saxicola rubetra</i>	Amber
White Admiral	<i>Ladoga camilla</i>	Decline
White Beak-Sedge	<i>Rhynchospora alba</i>	DN2
White Ermine	<i>Spilosoma lubricipeda</i>	S.41
White Sedge	<i>Carex curta</i>	DN1; DR
White Water-Lily	<i>Nymphaea alba</i>	DN1
White-Legged Damselfly	<i>Platycnemis pennipes</i>	Nb; KeyD (N)
Whitethroat	<i>Sylvia communis</i>	Amber
Willow Tit	<i>Parus montanus</i>	Red
Willow Warbler	<i>Phylloscopus trochilus</i>	Amber
Wood Cricket	<i>Nemobius sylvestris</i>	Na
Wood Warbler	<i>Phylloscopus sibilatrix</i>	S.41; Red
Wood White	<i>Leptidea sinapis</i>	WCA; S.41; Nb
Woodcock	<i>Scolopax rusticola</i>	Amber
Woodlark	<i>Lullula arborea</i>	WCA; S.41; Amber
Wryneck	<i>Jynx torquilla</i>	WCA; S.41; Red
Yellow Water-Lily	<i>Nuphar lutea</i>	DN1
Yellowhammer	<i>Emberiza citrinella</i>	S.41; Red

WCA **Wildlife and Countryside Act (1981)**

DA **Deer Act 1991:** deer protected under the Deer Act.

S.41 **Species or habitat of principal importance in England (i.e. English BAP priority species / habitat)** – see Section 41 of the Natural Environment and Rural Communities Act (2006).

DBAP **Devon Biodiversity Action Plan species:** these have been identified as species of key conservation concern in Devon.

NS **Nationally Scarce:** 15-100 10km squares in Atlas of British Flora 1962.

Devon Notable Species: species recorded from 2km squares in the Atlas of Devon Flora 1984 (R.B. Ivimey-Cook, Department of Biological Sciences, The University of Exeter).

DN1 **Devon Notable¹:** 1-25 2 km squares in Atlas of Devon Flora 1984.

DN2 **Devon Notable²:** 26-50 2 km squares in Atlas of Devon Flora 1984.

DN3 **Devon Notable³:** Selected species recorded from over 50 2 km squares in Atlas of Devon Flora 1984.

DR	Devon Rarity: native species recorded from 3 or fewer localities within Devon.
Na	Nationally Notable A: known from 30 or fewer 10km squares. Taken from the Invertebrate Site Register.
Nb	Nationally Notable B: known from 100 or fewer 10km squares. Taken from the Invertebrate Site Register.
Decline	Substantial local decline in Devon
Red List	Bird species of high conservation concern, such as those whose population or range is rapidly declining, recently or historically, and those of global conservation concern.
Amber List	Bird species of medium conservation concern, such as those whose population is in moderate decline, rare breeders, internationally important and localised species and those of unfavourable conservation status in Europe.
KeyD (I)	Internationally Important Key Dragonfly Species: those which are rare in Great Britain (RDB3 and found in less than 1% of the 10km squares in Britain) i.e. Southern damselfly (<i>Coenagrion mercuriale</i>).
KeyD (N)	Nationally Important Key Dragonfly Species: those which have been recorded in less than 10% of 10km squares in Britain. Those occurring in Devon are White-legged damselfly (<i>Platynemis pennipes</i>) Scarce blue-tailed damselfly (<i>Ischnura pumilio</i>) Small red damselfly (<i>Ceragrion tenellum</i>) Hairy dragonfly (<i>Brachytron pratense</i>) Downy emerald (<i>Cordulia aenea</i>) and Keeled skimmer (<i>Orthoetrum coerulescens</i>).
KeyD (R)	Regionally Important Key Dragonfly Species: those which have been recorded in 10-20% of the 10km squares in Britain: Red-eyed damselfly (<i>Erythromma najas</i>) and Ruddy darter (<i>Sympetrum sanguineum</i>).