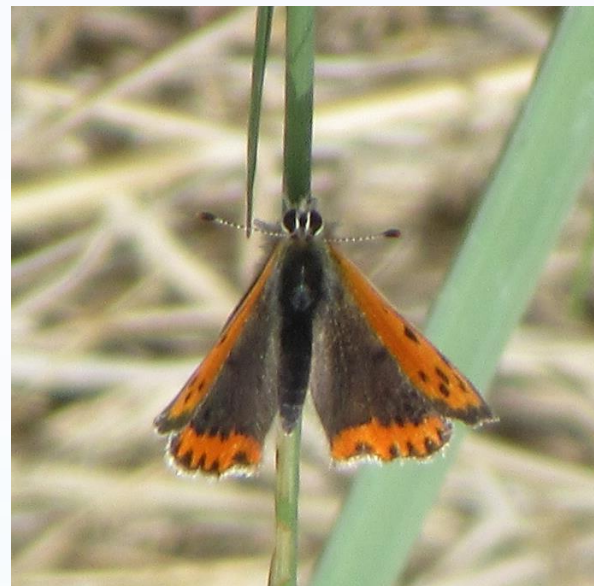


Species Report



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Front cover photo credits:

Sea Holly © A Fryer

Shield Bug instars © S Colgate

Common Toad © D Muscat

Small Copper © L Baker

Introduction

Cumbria Biodiversity Data Centre (CBDC) has been collecting wildlife records since 1902.

The Solway is renowned for its birdlife and thanks to the Cumbria Bird Club CBDC has extensive information about the status of birds in the area. The creation of the Cumbria Moth Atlas published in 2017 challenged moth recorders to visit unrecorded areas and this resulted in a substantial number of moth records. Populations of rare species such as the Natterjack Toad and Small Blue Butterfly are continuously monitored, whilst other wildlife recorders focus their efforts on the National Nature Reserves in the Northern part of the area. This leaves a considerable amount of the Solway Coast area under recorded and CBDC receives fewer records from this area than other parts of the county.

The purpose of the Solway Nature Networks (SNN) project was to encourage more volunteers to record in this area and to fill some gaps in our knowledge of the biodiversity of the area.

Overview

The SNN volunteers collected 1,067 biological records. This has doubled the number of records received for the area in 2018 and 2019 (excluding birds and protected species records). The project organised events along the coast from Crosscanonby to Northside, Workington.

The introduction sessions familiarised the volunteers to a range of species such as algae, molluscs, insects, etc. After this the volunteers chose to study plants and as a result almost 60% of the records are plants.

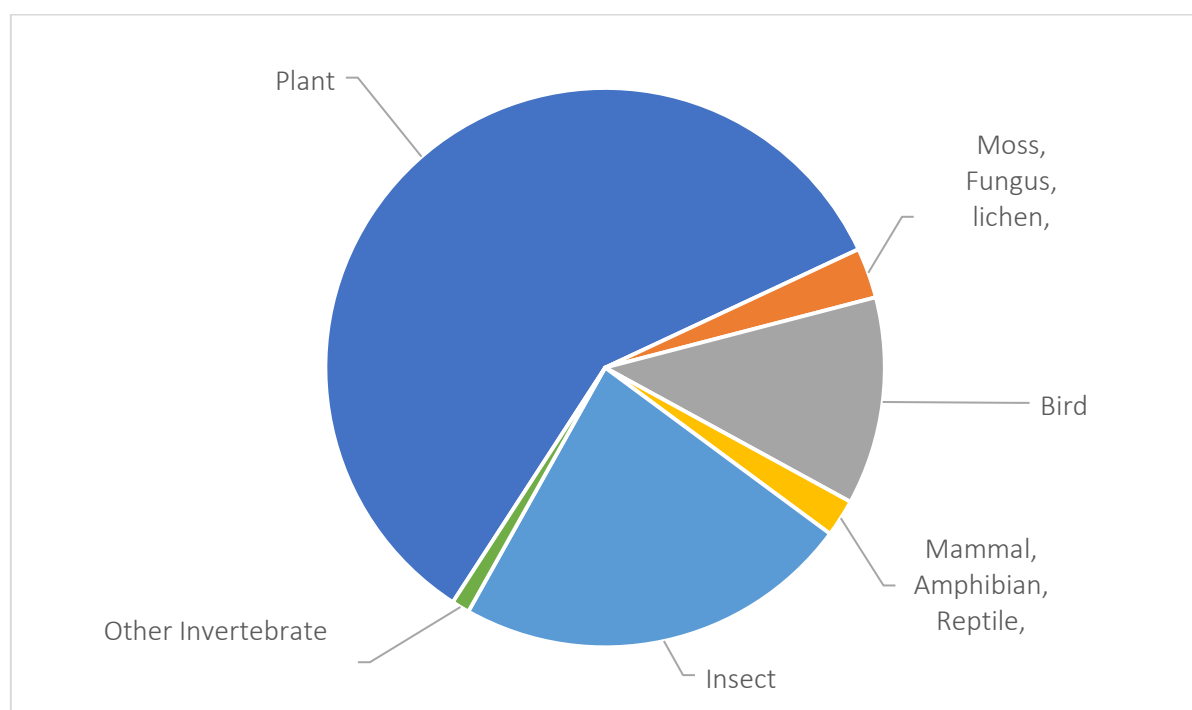


Fig. 1. A chart showing the percentage of records for different types of plants and animals recorded during the project.

Plants

A total of 624 records of flowers, trees and ferns were made of 270 species. To develop their skills and record a wide range of species the group visited different habitats in the area, eg grasslands, dune slacks and brown field sites.

The SNN volunteers identified 21 species which are rare and protected. Species like Corn Spurrey and Field Woundwort are declining nationally as they are considered agricultural pests and weeds, but both are still features of the Solway's field edges.

YARROW BROOMRAPE - OROBANCHE PURPUREA



© D Muscat

This national rarity is a parasitic plant of Yarrow Broomrape, It is found in several locations in Maryport, the only places to see it in Cumbria.

MUDWORT - LIMOSELLA AQUATICA



© D Muscat

Mudwort needs ponds that dry up annually. There are 5 sites in Cumbria, 4 of these are in the project area.

RARE AND PROTECTED PLANTS FOUND

Bloody Crane's-bill
Bluebell
Clustered Bellflower
Common Spotted-orchid
Common Valerian
Corn Spurrey
Crosswort
Early-purple Orchid
Field Scabious
Field Woundwort
Goldenrod
Harebell
Ling heather
Mudwort
Rock Samphire
Sea Spurge
Sea-Holly
Seaside Pansy
Snowdrop
White Ramping-fumitory
Yarrow Broomrape

SEA KALE - CRAMBE MARITIMA



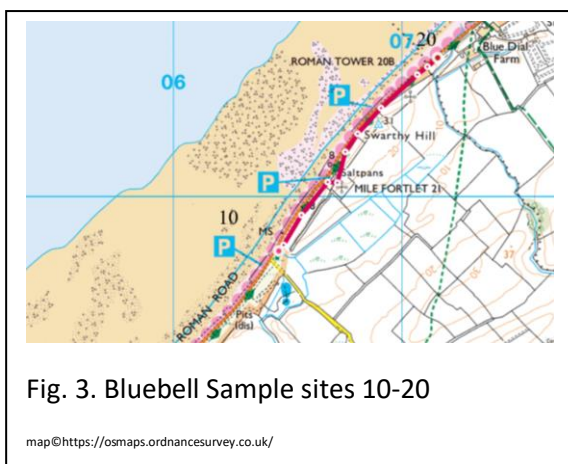
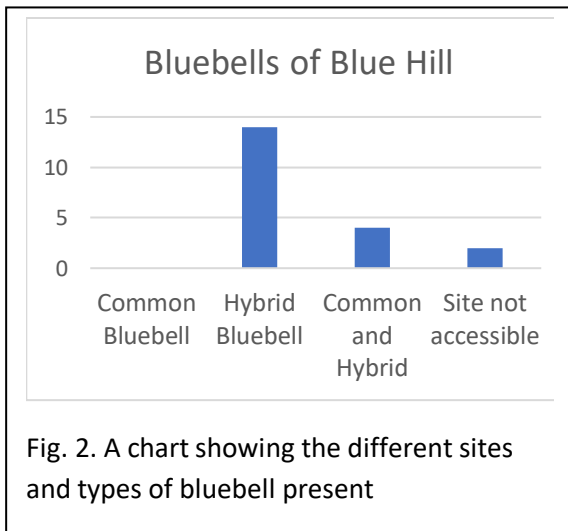
© S Colgate

This highly edible, fleshy member of the cabbage family is common along the Solway coast.

Bluebells of Blue Hill

Almost half of the world's Bluebells *Hyacinthoides non-scripta* are found in the UK. Their numbers have diminished due to habitat destruction and illegal trade in wildflower bulbs. However, they are also under threat from the imported Spanish Bluebell, which readily hybridises with the Common Bluebell, out competing it and reducing the gene pool. Usually associated with woodlands, Bluebells are frequently found on verges across the Solway Plain, but there is no more spectacular display as that of Swarthy Hill (known locally as Blue Hill).

Two of the SNN volunteers independently investigated the bluebells of Blue Hill. They surveyed 20 locations from Sea Brows, West of Maryport to Blue Dial Farm. At each site they established what type of Bluebells were present. The Common Bluebell was only present at 2 sites. The hybrid Bluebell was present at every site visited, which means it is only a matter of time before the Common Bluebell disappears from this site.



BLUEBELL, *HYACINTHOIDES NON-SCRIPTA*



© D Muscat

NATIVE BLUEBELLS HAVE:

- narrow leaves, about 1-1.5cm wide
- deep violet-blue (sometimes white), narrow, tubular-bell flowers, with tips that curl back
- flowers on one side of the stem
- distinctly drooping stems
- a sweet scent
- cream-coloured pollen inside

Fungi

Part of the training included a day spent on Mawbray Banks with Paul Nichol and the Cumbria Fungus Group. The group recorded 27 species in October 2018. The SNN volunteers and the Fungus Group added 5 new species to the area list taking the all time total to 270. The dunes are very important for fungus in Cumbria and the SNN volunteers were treated to some rare finds.

GRISTLY DOMECAP - LYOPHYLLUM LORICATUM



© Strobilomyces

There are less than 130 records of this species in the UK and the only other known Cumbrian location is Whinfell forest.

TURF BELL - GALERINA GRAMINEA



© G Kohler

Found only in Wetheral church and in Borrowdale prior to the SNN project.

Dunes are important for the fungi known as waxcaps. These are often brightly coloured with a waxy or slippery-looking cap and are found in grasslands that are generally poor in nutrients. UK grasslands are amongst the most important in the world for grassland fungi. The latter's preference for ancient pastures and grassland that has not been agriculturally improved, means that many species are rare and declining. Five species of waxcap have been recorded on the dunes during the project. A total of 13 species have been recorded since 2012.

DUNE WAXCAP - HYGROCYBE CONICOIDES



© G Hampshire

A dune specialist growing on the grassier, more consolidated part of a dune system.

GLUTINOUS WAXCAP - HYGROSCYPE GLUTINIPES



© A Kunze

This species had not been seen in this area before.

Insects

The SNN volunteers made 245 records of insects across a number of different groups. CBDC has over 10,500 records of 1,315 species for the area, dating back to 1800's. Yet there were only 126 records made in the 5 years before the Solway Nature Network project. Thus, the SNN records are particularly important.

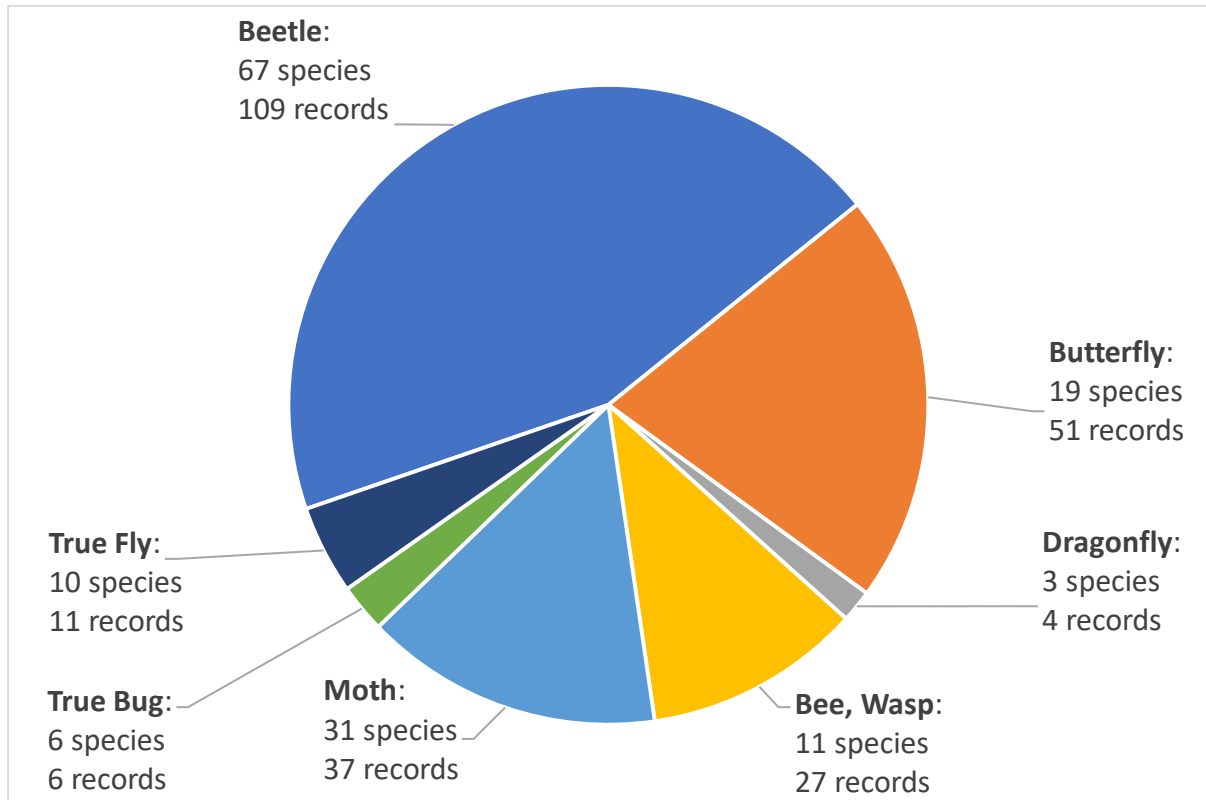


Fig. 4. A chart to show the percentage of records for different types of plants and animals.

Beetles

The number of beetle records is high as the training included a CBDC recording day, attended by Steve Routledge, a Cumbrian water beetle expert. One of the SNN volunteers had undergone training to take part in the UK Dung Beetle mapping scheme just prior to the Solway Nature Networks project and used the project to develop their beetle knowledge further.

The SNN volunteers identified 39 species that had not been recorded in the area before. Of these 11 species were dung beetles. A group of beetles that are often overlooked but are as extremely important to farmers for maintaining healthy pastures and grassland. Seven species of beetle are UK rarities.

RARE AND PROTECTED BEETLES FOUND

- Water Beetle - *Acilius canaliculatus*
- Dung Beetle - *Aphodius conspurcatus*
- Leaf Beetle - *Chrysolina oricalcia*
- Leaf Beetle - *Donacia thalassina*
- Hairy Fungus Beetle - *Mycetophagus piceus*
- Riffle Beetle - *Oulimnius troglodytes*
- Black-headed Soldier Beetle -
Pyrochroa coccinea

A HAIRY FUNGUS BEETLE - *MYCETOPHAGUS PICEA*



© Lymantria

This is the second record for Cumbria. The first was found in 2008 near Penrith.

A LEAF BEETLE - *CHRYSOLINA ORICALCIA*



© DMuscat

This beetle is found on Cow Parsley in verges near Edderside. It is the only known site for this beetle in Cumbria.

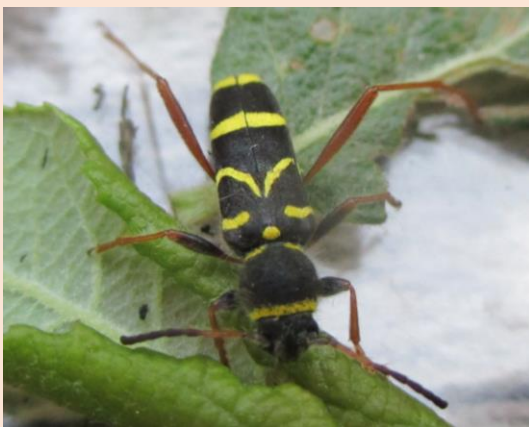
GREEN TIGER BEETLE - *CICINDELA CAMPESTRIS*



© S Colgate

The Green Tiger Beetle is frequently found on the Solway Moss Nature Reserves but had not been found before on the Mawbray dunes.

THE WASP BEETLE - *CLYTUS ARIETIS*



© DMuscat

This harmless wasp mimic beetle is the first record for the project area, although there are records near Cockermouth and Port Carlisle.

BRASSY WILLOW BEETLE - *PHRATORA VITELLINAE*



©anneke1998

The last record in the Solway area of the Brassy Willow Beetle was in 1925 at Kelswick.

Butterflies and Moths

Four species of nationally protected butterfly were found, Dingy Skipper, Small Heath, Small Blue and the Wall. All of these are considered vulnerable to extinction. The increasing loss of habitat from human activities for butterflies and other insects is having a significant impact on their populations. These records indicate the Solway coast is important to the county and the UK.

DINGY SKIPPER - ERYNNIS TAGES



©Kevan Baker

CBDC receives few records of Dingy Skippers butterflies for the Solway area. The species is considered “Vulnerable to becoming extinct in the next 100 years”.

WALL BUTTERFLY - LASIOMMATA MEGERA



©Guy Broome

This species rarely occurs in large numbers but is regularly seen on the Solway Coast and Plain. Faring better than Dingy Skipper, the Wall has the lower extinction rating of “Near Threatened”.

Pollinators

A range of insects act as pollinators, moths, bees, flies, wasps, beetles and even earwigs. The SNN volunteers made 138 records of pollinators of 75 different species. As CBDC was involved in developing the Get Cumbria Buzzing Project, SNN volunteers were encouraged to join a Cumbria Wildlife Trust Pollinator training day in Seaton, Workington and thus have a follow on project to take part in and put their new skills to the test.

SIX-SPOT BURNET - ZYGAENA FILIPENDULAE



©S Colgate

The caterpillar of this moth feeds on Bird’s-foot Trefoil and is common on the coastal grasslands along the Solway.

HUMMINGBIRD HAWK MOTH
– MACROGLOSSUM STELLATARUM



©Charles J Sharp

A summer visitor from Southern European and North Africa. There are a few sightings each year in the SNN project area.

Vertebrates

Many of the vertebrate species, eg birds, mammals, reptile, etc are conspicuous and easy to identify. No specific survey was carried out for these groups of animals but the SNN recorders did note them down when they come across them. A significant proportion have special protected status.

	<u>SPECIES RECORDED</u>	<u>PROTECTED SPECIES</u>	<u>RECORDS MADE</u>
AMPHIBIAN	4	4	5
REPTILE	1	1	2
BIRD	67	63	128
MAMMAL	10	5	15
FISH	1	0	1
TOTAL	83	74	151

Amphibians and Reptiles

As a group, amphibians are extremely vulnerable to extinction due to habitat loss and climate change. The Common Frog, Common Toad, Smooth Newt and Palmate Newt were all recorded during the project. All four species of amphibian are protected under the Wildlife and Countryside Act 1981. Sadly, the rarer dune dwelling Natterjack Toad was not seen by the volunteers. The only reptile recorded was the Common Lizard.

Birds

Until relatively recently the Solway Plain has been traditionally farmed, with a mix of arable and grazing. It has retained most of its hedge lines. These provide food, roosting and nesting sites for farmland birds, which are disappearing in other parts of the UK. The coastal strip is renowned for waders and seabirds and is well recorded. However, the fact that even the casual observer will see many farmland birds considered worthy of protected status indicates the importance of the whole area.

COMMON LIZARD – ZOOTOCA VIVIPARA



© Bablestone

Lizards are frequently seen on the boardwalks on Mawbray dunes.

SKYLARK – ALAUDA ARVENSIS



© I Shah

Although globally threatened with extinction the Skylark is still widespread in the Solway area and Cumbria.

Mammals

The volunteers recorded 10 species of mammal. Five of these are legally protected primarily due to hunting and persecution: Badger, Brown Hare, European Hedgehog, Roe Deer and Stoat.

RARE AND PROTECTED MAMMALS FOUND

Brown Hare – *Lepus europaeus*
Eurasian Badger – *Meles meles*
European Mole – *Talpa europea*
European Rabbit – *Oryctolagus cuniculus*
Roe Deer – *Capreolus capreolus*
Shrew - *Soricidae*
Stoat – *Mustela erminea*
West European Hedgehog –
erinaceus erupaeus
Wood Mouse - *Apodemus sylvaticus*

HEDGEHOG – ERINACEUS EUROPAEUS



©Gaudete

Dead hedgehogs found on roads account for 44% of CBDC hedgehog records for the previous 5 years.

Fish

Fish, both marine and freshwater are under recorded across Cumbria, with most records received at CBDC coming from the Environment Agency. This project did not address this issue and it may be something to consider for a future project.

However, whilst looking for water beetles one recorder did find a single Goldfish in Harrington Nature Reserve. The fish was removed to a local garden pond as the species can carry bacteria that infects frogs, eat tadpoles and other important aquatic wildlife, eg dragonfly larvae.

GOLDFISH – CARASSIUS AURATUS



©S Cammish

This is the second CBDC record of a Goldfish found in a wild situation in Cumbria.

Conclusion

The Solway Nature Network volunteers began the project with a range of skills. Through the training sessions and practice they all improved their species identification across a number of groups, in particular plants.

The number of records and scope of the data they collected has filled gaps in our knowledge of the area, particularly the information about beetles. It has also indicated that further recording needs to be carried out in the area, to establish the invertebrate importance of the area.

Thank You

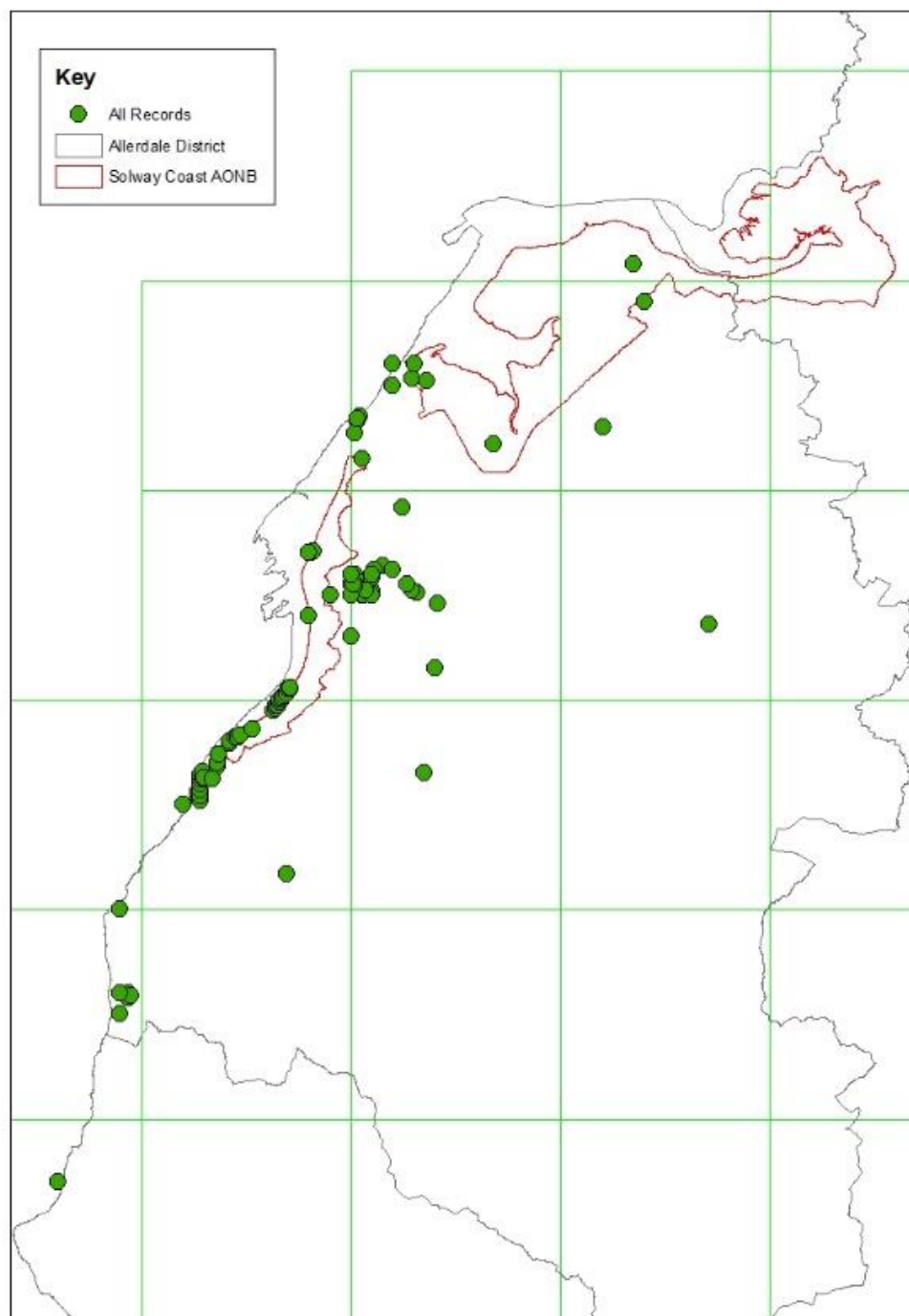
CBDC and the Solway Nature Network Volunteers would like to say thank you to:



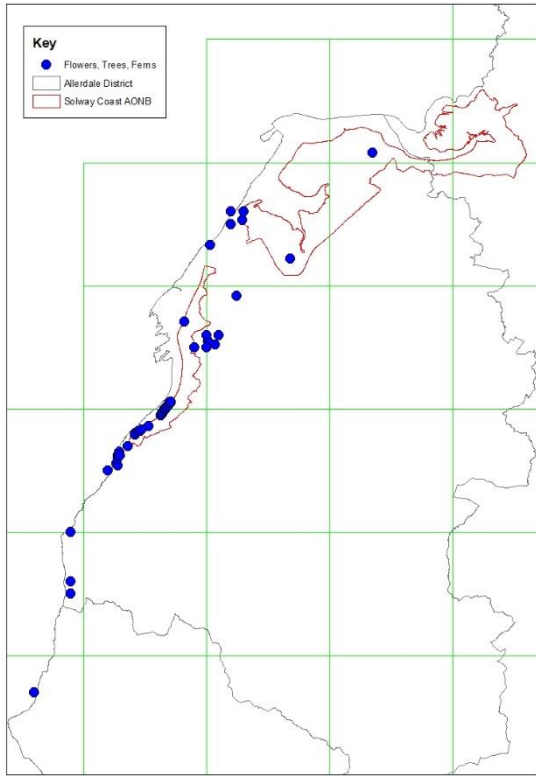
Cumbria Community Foundation who supported the training programme through the Robin Rigg Community Fund.

Hadfield Trust, whose grant was used to purchase identification field guides for the trainees to use.

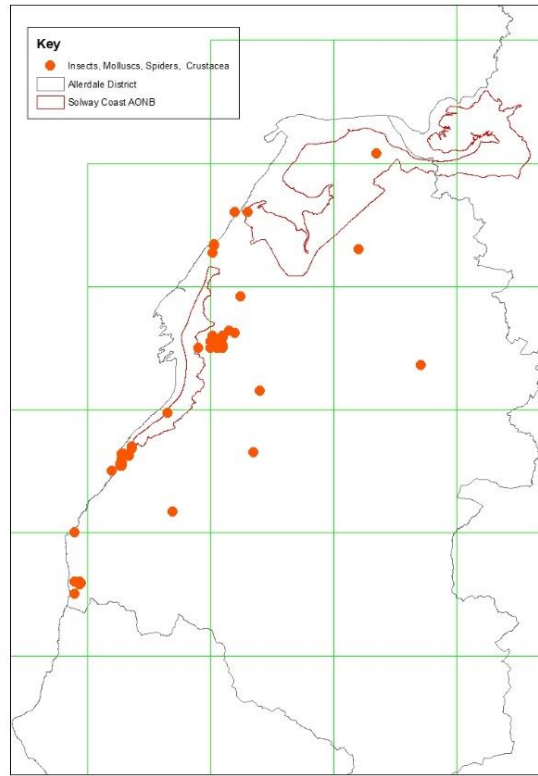
Record Distribution Maps



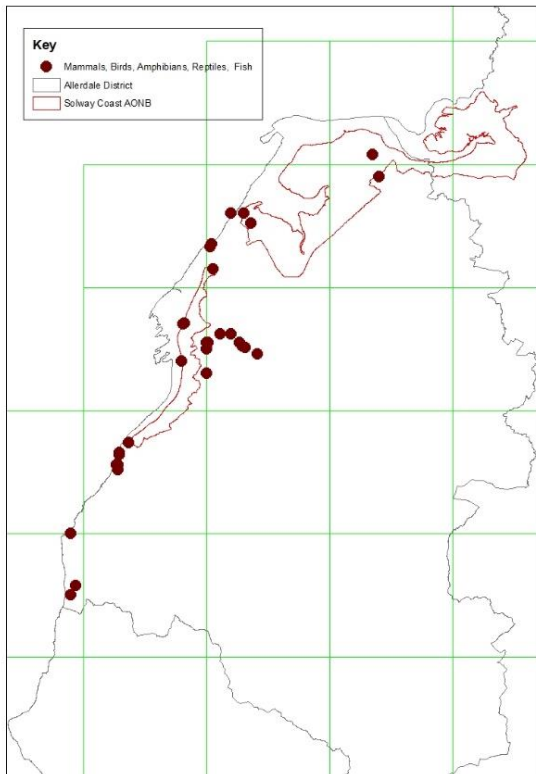
Map 1. A map showing where SNN records were collected.



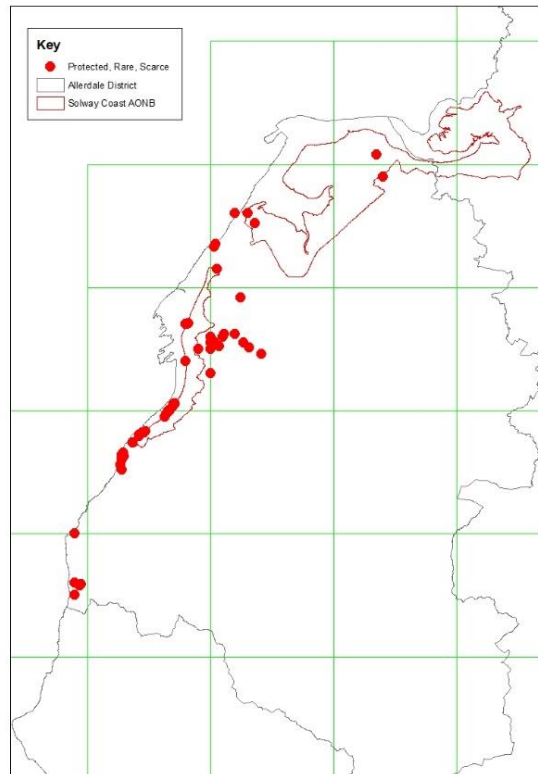
Map 2. All plant records.



Map 3. All Insect and other invertebrate records.



Map 4. All mammal, bird, reptile, amphibian and fish records



Map 5. All Protected and rare species records

Species Records

Plants, Fungi and Lichen

Flowering Plant	<i>Acer pseudoplatanus</i>	Sycamore
	<i>Achillea millefolium</i>	Yarrow
	<i>Aegopodium podagraria</i>	Ground-elder
	<i>Aethusa cynapium</i>	Fool's Parsley
	<i>Agrostis capillaris</i>	Common Bent
	<i>Agrostis stolonifera</i>	Creeping Bent
	<i>Ajuga reptans</i>	Bugle
	<i>Alchemilla mollis</i>	Garden Lady's-mantle
	<i>Alliaria petiolata</i>	Garlic Mustard
	<i>Allium scorodoprasum</i>	Sand Leek
	<i>Allium vineale</i>	Wild Onion
	<i>Alnus glutinosa</i>	Alder
	<i>Alopecurus geniculatus</i>	Marsh Foxtail
	<i>Alopecurus pratensis</i>	Meadow Foxtail
	<i>Ammophila arenaria</i>	Marram
	<i>Angelica sylvestris</i>	Wild Angelica
	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass
	<i>Anthriscus sylvestris</i>	Cow Parsley
	<i>Anthyllis vulneraria</i>	Kidney Vetch
	<i>Aphanes australis</i>	Slender Parsley-piert
	<i>Aquilegia</i>	Columbine
	<i>Arctium</i>	Burdock
	<i>Arctium minus</i>	Lesser Burdock
	<i>Armeria maritima</i>	Sea Pink
	<i>Arrhenatherum elatius</i>	False Oat-grass
	<i>Aster tripolium</i>	Sea Aster
	<i>Athyrium filix-femina</i>	Lady-fern
	<i>Atriplex</i>	Orache
	<i>Atriplex portulacoides</i>	Sea-purslane
	<i>Atriplex prostrata</i>	Spear-leaved Orache
	<i>Bellis perennis</i>	Daisy
	<i>Berberis</i>	Berberis
	<i>Betula</i>	Birch
	<i>Brachypodium sylvaticum</i>	False-brome
	<i>Bromus hordeaceus</i>	Lesser Soft-Brome
	<i>Cakile maritima</i>	Sea Rocket
	<i>Calluna vulgaris</i>	Heather
	<i>Campanula glomerata</i>	Clustered Bellflower
	<i>Campanula rotundifolia</i>	Harebell
	<i>Capsella bursa-pastoris</i>	Shepherd's-purse
	<i>Cardamine flexuosa</i>	Wavy Bitter-cress
	<i>Cardamine pratensis</i>	Cuckooflower
	<i>Carex arenaria</i>	Sand Sedge
	<i>Carex distans</i>	Distant Sedge
	<i>Carex flacca</i>	Glaucous Sedge
	<i>Carex hirta</i>	Hairy Sedge
	<i>Carex otrubae</i>	False Fox-sedge

<i>Carex remota</i>	Remote Sedge
<i>Centaurea montana</i>	Perennial Cornflower
<i>Centaurea nigra</i> sens. lat. (=nigra/debauxii)	Common Knapweed
<i>Centaureum erythraea</i>	Common Centaury
<i>Cerastium fontanum</i>	Common Mouse-ear
<i>Chaerophyllum temulum</i>	Rough Chervil
<i>Chamerion angustifolium</i>	Rosebay Willowherb
<i>Cirsium arvense</i>	Creeping Thistle
<i>Cirsium vulgare</i>	Spear Thistle
<i>Cochlearia officinalis</i>	Common Scurvygrass
<i>Coincya monensis</i>	Cabbage
<i>Conium maculatum</i>	Hemlock
<i>Conopodium majus</i>	Pignut
<i>Convolvulus arvensis</i>	Field Bindweed
<i>Corylus avellana</i>	Hazel
<i>Crambe maritima</i>	Sea-kale
<i>Crataegus laevigata</i>	Midland Hawthorn
<i>Crataegus monogyna</i>	Hawthorn
<i>Crepis capillaris</i>	Smooth Hawk's-beard
<i>Crithmum maritimum</i>	Rock Samphire
<i>Cruciata laevipes</i>	Crosswort
<i>Cynosurus cristatus</i>	Crested Dog's-tail
<i>Cytisus scoparius</i>	Broom
<i>Dactylis glomerata</i>	Cock's-foot
<i>Dactylorhiza fuchsii</i>	Common Spotted-orchid
<i>Daucus carota</i>	Carrot
<i>Deschampsia cespitosa</i>	Tufted Hair-Grass
<i>Digitalis purpurea</i>	Foxglove
<i>Dipsacus fullonum</i>	Wild Teasel
<i>Dryopteris filix-mas</i>	Male-fern
<i>Elymus caninus</i>	Bearded Couch
<i>Elytrigia atherica</i>	Sea Couch
<i>Elytrigia repens</i>	Common Couch
<i>Epilobium montanum</i>	Broad-leaved Willowherb
<i>Epilobium obscurum</i>	Short-fruited Willowherb
<i>Epilobium palustre</i>	Marsh Willowherb
<i>Epilobium tetragonum</i>	Square-stalked Willowherb
<i>Equisetum</i>	Horsetail
<i>Equisetum arvense</i>	Field Horsetail
<i>Eriophorum vaginatum</i>	Hare's-tail Cottongrass
<i>Erodium cicutarium</i>	Common Stork's-bill
<i>Eryngium maritimum</i>	Sea-holly
<i>Euphorbia paralias</i>	Sea Spurge
<i>Fagus sylvatica</i>	Beech
<i>Festuca arundinacea</i>	Tall Fescue
<i>Festuca pratensis</i>	Meadow Fescue
<i>Festuca rubra</i>	Red Fescue
<i>Filipendula ulmaria</i>	Meadowsweet
<i>Foeniculum vulgare</i>	Fennel
<i>Fraxinus excelsior</i>	Ash
<i>Fumaria capreolata</i>	White Ramping-fumitory
<i>Fumaria muralis</i>	Common Ramping-fumitory
<i>Galanthus nivalis</i>	Snowdrop

<i>Galanthus nivalis</i> forma <i>pleniflorus</i>	Snowdrop
<i>Galium aparine</i>	Cleavers
<i>Galium mollugo</i> subsp. <i>erectum</i>	Upright Hedge Bedstraw
<i>Geranium dissectum</i>	Cut-leaved Crane's-bill
<i>Geranium lucidum</i>	Shining Crane's-bill
<i>Geranium molle</i>	Dove's-foot Crane's-bill
<i>Geranium pratense</i>	Meadow Crane's-bill
<i>Geranium robertianum</i>	Herb-Robert
<i>Geranium sanguineum</i>	Bloody Crane's-bill
<i>Geum urbanum</i>	Wood Avens
<i>Glaux maritima</i>	Sea-milkwort
<i>Glechoma hederacea</i>	Ground-ivy
<i>Glyceria fluitans</i>	Floating Sweet-grass
<i>Gnaphalium uliginosum</i>	Marsh Cudweed
<i>Hedera helix</i>	Ivy
<i>Heracleum sphondylium</i>	Hogweed
<i>Hieracium</i>	Hawkweed
<i>Holcus lanatus</i>	Yorkshire-fog
<i>Honckenya peploides</i>	Sea Sandwort
<i>Hordeum vulgare</i>	Six-rowed Barley
<i>Hyacinthoides</i>	Hyacinthoides
<i>Hyacinthoides non-scripta</i>	Bluebell
<i>Hyacinthoides non-scripta</i> x <i>hispanica</i> = <i>H. x massartiana</i>	Bluebell
<i>Hypericum</i>	St. John's-Wort
<i>Hypochaeris radicata</i>	Cat's-ear
<i>Ilex aquifolium</i>	Holly
<i>Impatiens glandulifera</i>	Indian Balsam
<i>Iris pseudacorus</i>	Yellow Iris
<i>Juncus bufonius</i>	Toad Rush
<i>Juncus conglomeratus</i>	Compact Rush
<i>Juncus effusus</i>	Soft-rush
<i>Juncus gerardii</i>	Saltmarsh Rush
<i>Knautia arvensis</i>	Field Scabious
<i>Lamium album</i>	White Dead-nettle
<i>Lamium purpureum</i>	Red Dead-nettle
<i>Lapsana communis</i>	Nipplewort
<i>Lathyrus latifolius</i>	Broad-leaved Everlasting-pea
<i>Lathyrus pratensis</i>	Meadow Vetchling
<i>Leucanthemum vulgare</i>	Oxeye Daisy
<i>Leymus arenarius</i>	Lyme-grass
<i>Limosella aquatica</i>	Mudwort
<i>Lolium perenne</i>	Perennial Rye-grass
<i>Lotus corniculatus</i>	Common Bird's-foot-trefoil
<i>Lotus pedunculatus</i>	Greater Bird's-foot-trefoil
<i>Luzula campestris</i>	Field Wood-rush
<i>Luzula multiflora</i> subsp. <i>congesta</i>	Heath Wood-Rush
<i>Luzula multiflora</i> subsp. <i>multiflora</i>	Heath Wood-Rush
<i>Lycopus europaeus</i>	Gypsywort
<i>Lysimachia vulgaris</i>	Yellow Loosestrife
<i>Malus pumila</i>	Apple
<i>Matricaria discoidea</i>	Pineappleweed
<i>Medicago lupulina</i>	Black Medick
<i>Mentha aquatica</i>	Water Mint

Muscari	Grape Hyacinth
Myosotis arvensis	Field Forget-me-not
Narthecium ossifragum	Bog Asphodel
Oenanthe crocata	Hemlock Water-dropwort
Ononis repens	Common Restharrow
Orchis mascula	Early-purple Orchid
Ornithogalum angustifolium	Star-of-Bethlehem
Orobanche purpurea	Yarrow Broomrape
Papaver somniferum	Opium Poppy
Pastinaca sativa	Wild Parsnip
Pentaglottis sempervirens	Green Alkanet
Persicaria maculosa	Redshank
Petasites hybridus	Butterbur
Phragmites australis	Common Reed
Phyllitis scolopendrium	Hart's-tongue
Picea abies	Norway Spruce
Pilosella officinarum	Mouse-ear-hawkweed
Plantago coronopus	Buck's-horn Plantain
Plantago lanceolata	Ribwort Plantain
Plantago major	Greater Plantain
Plantago maritima	Sea Plantain
Poa annua	Annual Meadow-grass
Poa pratensis	Smooth Meadow-grass
Poa trivialis	Rough Meadow-grass
Polygonatum multiflorum x odoratum = P. x hybridum	Garden Solomon's-seal
Polygonum aviculare	Knotgrass
Polypodium vulgare	Polypody
Potamogeton berchtoldii	Small Pondweed
Potentilla anserina	Silverweed
Potentilla reptans	Creeping Cinquefoil
Prunella vulgaris	Selfheal
Prunus	Flowering Cherry
Prunus avium	Wild Cherry
Prunus spinosa	Blackthorn
Pteridium aquilinum	Bracken
Puccinellia	Saltmarsh-Grass
Puccinellia maritima	Common Saltmarsh-grass
Pulicaria dysenterica	Common Fleabane
Quercus	Oak
Quercus robur	Pedunculate Oak
Quercus rubra	Red Oak
Ranunculus acris	Meadow Buttercup
Ranunculus bulbosus	Bulbous Buttercup
Ranunculus ficaria	Lesser Celandine
Ranunculus repens	Creeping Buttercup
Raphanus raphanistrum subsp. maritimus	Sea Radish
Reseda lutea	Wild Mignonette
Rhamnus cathartica	Buckthorn
Ribes sanguineum	Flowering Currant
Ribes uva-crispa	Gooseberry
Rosa	Rose
Rosa canina	Dog-rose
Rosa rugosa	Japanese Rose

<i>Rosa spinosissima</i>	Burnet Rose
<i>Rubus fruticosus</i> agg.	Bramble
<i>Rumex acetosa</i>	Common Sorrel
<i>Rumex acetosella</i>	Sheep's Sorrel
<i>Rumex crispus</i>	Curled Dock
<i>Rumex obtusifolius</i>	Broad-leaved Dock
<i>Salicornia</i>	Glasswort
<i>Salix caprea</i>	Goat Willow
<i>Salix cinerea</i>	Common Sallow
<i>Salix viminalis</i>	Osier
<i>Sambucus nigra</i>	Elder
<i>Sanguisorba officinalis</i>	Great Burnet
<i>Scorzoneroides autumnalis</i>	Autumn Hawkbit
<i>Sedum</i>	Sedum
<i>Sedum anglicum</i>	English Stonecrop
<i>Senecio jacobaea</i>	Common Ragwort
<i>Senecio viscosus</i>	Sticky Groundsel
<i>Senecio vulgaris</i>	Groundsel
<i>Silene dioica</i>	Red Campion
<i>Silene latifolia</i>	White Campion
<i>Silene uniflora</i>	Sea Campion
<i>Sisymbrium officinale</i>	Hedge Mustard
<i>Solanum dulcamara</i>	Bittersweet
<i>Solidago virgaurea</i>	Goldenrod
<i>Sonchus arvensis</i>	Perennial Sow-thistle
<i>Sonchus asper</i>	Prickly Sow-thistle
<i>Sonchus oleraceus</i>	Smooth Sow-thistle
<i>Sorbus aria</i> agg.	Whitebeam
<i>Sorbus aucuparia</i>	Rowan
<i>Sparganium erectum</i>	Branched Bur-reed
<i>Spergula arvensis</i>	Corn Spurrey
<i>Stachys arvensis</i>	Field Woundwort
<i>Stachys palustris</i>	Marsh Woundwort
<i>Stachys sylvatica</i>	Hedge Woundwort
<i>Stellaria holostea</i>	Greater Stitchwort
<i>Stellaria media</i>	Common Chickweed
<i>Suaeda maritima</i>	Annual Sea-blite
<i>Tanacetum vulgare</i>	Tansy
<i>Taraxacum officinale</i> agg.	Dandelion
<i>Teucrium scorodonia</i>	Wood Sage
<i>Torilis japonica</i>	Upright Hedge-parsley
<i>Tragopogon pratensis</i>	Goat's-beard
<i>Trifolium dubium</i>	Lesser Trefoil
<i>Trifolium pratense</i>	Red Clover
<i>Trifolium repens</i>	White Clover
<i>Tripleurospermum inodorum</i>	Scentless Mayweed
<i>Tripleurospermum maritimum</i>	Sea Mayweed
<i>Triticum</i>	Wheat
<i>Tussilago farfara</i>	Colt's-foot
<i>Typha latifolia</i>	Bulrush
<i>Ulex europaeus</i>	Gorse
<i>Urtica dioica</i>	Common Nettle
<i>Vaccinium oxycoccos</i>	Cranberry

	<i>Valeriana officinalis</i>	Common Valerian
	<i>Valerianella locusta</i>	Common Cornsalad
	<i>Verbascum thapsus</i>	Great Mullein
	<i>Veronica chamaedrys</i>	Germander Speedwell
	<i>Viburnum opulus</i>	Guelder-rose
	<i>Vicia cracca</i>	Tufted Vetch
	<i>Vicia hirsuta</i>	Hairy Tare
	<i>Vicia lathyroides</i>	Spring Vetch
	<i>Vicia sativa</i>	Common Vetch
	<i>Vicia sativa</i> subsp. <i>nigra</i>	Narrow-leaved Vetch
	<i>Vicia sativa</i> subsp. <i>segetalis</i>	Common Vetch
	<i>Vicia sepium</i>	Bush Vetch
	<i>Viola arvensis</i>	Field Pansy
	<i>Viola riviniana</i>	Common Dog-violet
	<i>Viola tricolor</i> subsp. <i>curtisii</i>	Seaside Pansy
	<i>Weigela</i>	Weigela
Moss	<i>Calliergonella cuspidata</i>	Pointed Spear-moss
	<i>Rhytidiadelphus squarrosus</i>	Springy Turf-moss
Lichen	<i>Peltigera</i>	Dog Lichen
Fungus	<i>Bolbitius titubans</i>	Bolbitius titubans
	<i>Bovista nigrescens</i>	Brown Bovist
	<i>Chlorophyllum</i>	Chlorophyllum
	<i>Clitocybe fragrans</i>	Fragrant Funnel
	<i>Clitocybe nebularis</i>	Clouded Agaric
	<i>Conocybe tenera</i>	Brown Cone-Cap
	<i>Coprinus comatus</i>	Shaggy Ink-Cap
	<i>Entoloma sericeum</i>	Silky Nolanea
	<i>Galerina graminea</i>	Turf Bell
	<i>Gymnopilus junonius</i>	Spectacular Rustgill
	<i>Hygrocybe ceracea</i>	Butter Waxcap
	<i>Hygrocybe conica</i>	Blackening Wax-Cap
	<i>Hygrocybe conicoides</i>	Dune Waxcap
	<i>Hygrocybe glutinipes</i>	Hygrocybe glutinipes
	<i>Hygrocybe virginea</i> var. <i>virginea</i>	Snowy Wax-Cap
	<i>Lepista flaccida</i>	Tawny Funnel
	<i>Lepista nuda</i>	Wood Blewit
	<i>Lycoperdon utriforme</i>	Mosaic Puffball
	<i>Lyophyllum loricatum</i>	Gristly Domecap
	<i>Morchella esculenta</i>	Morel
	<i>Mycena aetites</i>	Drab Bonnet
	<i>Mycena flavoalba</i>	Ivory Bonnet
	<i>Mycena galericulata</i>	Bonnet Mycena
	<i>Panaeolus acuminatus</i>	Dewdrop Mottlegill
	<i>Panaeolus fimicola</i>	Turf Mottlegill
	<i>Psathyrella candolleana</i>	Pale Brittlestem
	<i>Ramaria stricta</i>	Upright Coral

Insects and Other Invertebrates

Beetle

Acilius canaliculatus	Acilius canaliculatus
Acilius sulcatus	Acilius sulcatus
Agabus bipustulatus	Agabus bipustulatus
Agabus sturmii	Agabus sturmii
Agrypnus murinus	Agrypnus murinus
Altica lythri	Altica lythri
Anacaena globulus	Anacaena globulus
Anacaena lutescens	Anacaena lutescens
Anaspis maculata	Anaspis maculata
Aphodius ater	Aphodius ater
Aphodius contaminatus	Aphodius contaminatus
Aphodius depressus	Aphodius depressus
Aphodius luridus	Aphodius luridus
Aphodius merdarius	Aphodius merdarius
Aphodius pedellus	Aphodius pedellus
Aphodius rufipes	Aphodius rufipes
Aphodius sphaelatus	Aphodius sphaelatus
Aphodius sticticus	Aphodius sticticus
Blaps mucronata	Churchyard Beetle
Calvia quattuordecimguttata	Cream-spot Ladybird
Cantharis decipiens	Cantharis decipiens
Chrysolina oricalcia	Chrysolina oricalcia
Cicindela campestris	Green Tiger Beetle
Clytus arietis	Wasp Beetle
Coccinella septempunctata	7-spot Ladybird
Coccinella undecimpunctata	11-spot Ladybird
Coelostoma orbiculare	Coelostoma orbiculare
Donacia thalassina	Donacia thalassina
Dryops luridus	Dryops luridus
Dytiscus marginalis	Great Diving Beetle
Epuraea	Epuraea
Exapion ulicis	Gorse Weevil
Gastrophysa viridula	Green Dock Beetle
Geotrupes spiniger	Geotrupes spiniger
Geotrupes stercorarius	Lousy Watchman
Haliphus lineatocollis	Haliphus lineatocollis
Haliphus ruficollis	Haliphus ruficollis
Helophorus aequalis	Helophorus aequalis
Helophorus brevipalpis	Helophorus brevipalpis
Helophorus grandis	Helophorus grandis
Helophorus minutus	Helophorus minutus
Hydrobius fuscipes	Hydrobius fuscipes
Hydroporus palustris	Hydroporus palustris
Hygrotus impressopunctatus	Hygrotus impressopunctatus
Hygrotus inaequalis	Hygrotus inaequalis
Ilybius ater	Ilybius ater
Ilybius fuliginosus	Ilybius fuliginosus
Lochmaea crataegi	Hawthorn Leaf Beetle
Margarinotus ventralis	Margarinotus ventralis
Mycetophagus piceus	Mycetophagus piceus
Nedus quadrimaculatus	Small Nettle Weevil

	<i>Neocoenorrhinus aequatus</i>	Apple Fruit Rhynchites
	<i>Otiorhynchus singularis</i>	Raspberry Weevil
	<i>Oulimnius troglodytes</i>	<i>Oulimnius troglodytes</i>
	<i>Phaedon tumidulus</i>	Celery Leaf Beetle
	<i>Phratora vitellinae</i>	Brassy Willow Beetle
	<i>Phyllobius pomaceus</i>	Green Nettle Weevil
	<i>Phyllobius pyri</i>	Common Leaf Weevil
	<i>Pogonocherus hispidus</i>	<i>Pogonocherus hispidus</i>
	<i>Propylea quattuordecimpunctata</i>	14-spot Ladybird
	<i>Psyllobora vigintiduopunctata</i>	22-spot Ladybird
	<i>Pyrochroa coccinea</i>	Black-headed Cardinal Beetle
	<i>Pyrochroa serraticornis</i>	Red-headed Cardinal Beetle
	<i>Rhagium bifasciatum</i>	<i>Rhagium bifasciatum</i>
	<i>Rhagonycha fulva</i>	Common Red Soldier Beetle
	<i>Sermylassa halensis</i>	<i>Sermylassa halensis</i>
	<i>Silpha atrata</i>	Black Snail Beetle
Butterfly	<i>Aglais io</i>	Peacock
	<i>Aglais urticae</i>	Small Tortoiseshell
	<i>Anthocharis cardamines</i>	Orange-tip
	<i>Aphantopus hyperantus</i>	Ringlet
	<i>Coenonympha pamphilus</i>	Small Heath
	<i>Cupido minimus</i>	Small Blue
	<i>Erynnis tages</i>	Dingy Skipper
	<i>Lasiommata megera</i>	Wall
	<i>Lycaena phlaeas</i>	Small Copper
	<i>Maniola jurtina</i>	Meadow Brown
	<i>Ochlodes sylvanus</i>	Large Skipper
	<i>Pararge aegeria</i>	Speckled Wood
	<i>Pieris brassicae</i>	Large White
	<i>Pieris napi</i>	Green-veined White
	<i>Pieris rapae</i>	Small White
	<i>Polygonia c-album</i>	Comma
	<i>Polyommatus icarus</i>	Common Blue
	<i>Vanessa atalanta</i>	Red Admiral
	<i>Vanessa cardui</i>	Painted Lady
Dragonfly	<i>Cordulegaster boltonii</i>	Golden-ringed Dragonfly
	<i>Ischnura elegans</i>	Common Ischnura
	<i>Pyrrhosoma nymphula</i>	Large Red Damselfly
Bee, Wasp, Ant	<i>Apis mellifera</i>	Western Honey Bee
	<i>Bombus hypnorum</i>	Tree Bumblebee
	<i>Bombus lapidarius</i>	Large Red Tailed Bumble Bee
	<i>Bombus lucorum</i>	White-Tailed Bumble Bee
	<i>Bombus lucorum</i>	<i>Bombus lucorum</i>
	<i>Bombus pascuorum</i>	Common Carder Bee
	<i>Bombus pratorum</i>	Early Bumble Bee
	<i>Bombus terrestris</i>	Buff-Tailed Bumble Bee
	<i>Dolichovespula sylvestris</i>	Tree Wasp
	<i>Osmia bicornis</i>	Red Mason Bee
	<i>Vespula germanica</i>	German Wasp
	<i>Vespula vulgaris</i>	Common Wasp
Moth	<i>Abraxas grossulariata</i>	Magpie
	<i>Agrotis exclamationis</i>	Heart & Dart

	<i>Amphipyra pyramidea</i>	Copper Underwing
	<i>Anania hortulata</i>	Small Magpie
	<i>Apamea monoglypha</i>	Dark Arches
	<i>Arctia caja</i>	Garden Tiger
	<i>Autographa gamma</i>	Silver Y
	<i>Bryophila domestica</i>	Marbled Beauty
	<i>Cabera exanthemata</i>	Common Wave
	<i>Cidaria fulvata</i>	Barred Yellow
	<i>Cucullia chamomillae</i>	Chamomile Shark
	<i>Eilema lurideola</i>	Common Footman
	<i>Elachista argentella</i>	Swan-feather Dwarf
	<i>Esperia sulphurella</i>	Sulphur Tubic
	<i>Euclidia mi</i>	Mother Shipton
	<i>Eudonia mercurella</i>	Small Grey
	<i>Euproctis similis</i>	Yellow-tail
	<i>Euthrix potatoria</i>	Drinker
	<i>Gymnoscelis rufifasciata</i>	Double-striped Pug
	<i>Hedya nubiferana</i>	Marbled Orchard Tortrix
	<i>Hypena proboscidalis</i>	Snout
	<i>Idaea aversata</i>	Riband Wave
	<i>Macroglossum stellatarum</i>	Humming-bird Hawk-moth
	<i>Mesapamea secalis</i>	Common Rustic
	<i>Noctua pronuba</i>	Large Yellow Underwing
	<i>Ochropleura plecta</i>	Flame Shoulder
	<i>Odezia atrata</i>	Chimney Sweeper
	<i>Opisthoptis luteolata</i>	Brimstone Moth
	<i>Pasiphila rectangulara</i>	Green Pug
	<i>Peribatodes rhomboidaria</i>	Willow Beauty
	<i>Zygaena filipendulae</i>	Six-spot Burnet
True bug	<i>Acanthosoma haemorrhoidale</i>	Hawthorn Shieldbug
	<i>Gerris (Gerris) lacustris</i>	Common Pondskater
	<i>Hydrometra stagnorum</i>	Water Measurer
	<i>Notonecta (Notonecta) glauca</i>	Common Backswimmer
	<i>Pentatoma rufipes</i>	Red-legged Shieldbug
	<i>Piezodorus lituratus</i>	Gorse Shieldbug
True fly	<i>Beris vallata</i>	Common Orange Legionnaire
	<i>Cheilosia grossa</i>	Cheilosia grossa
	<i>Episyrphus balteatus</i>	Marmalade Hoverfly
	<i>Lucilia caesar</i>	Common Greenbottle
	<i>Mesembrina meridiana</i>	Mesembrina meridiana
	<i>Phaonia</i>	Phaonia
	<i>Phytomyza</i>	Phytomyza
	<i>Rhagio scolopaceus</i>	Downlooker Snipefly
	<i>Sarcophaga</i>	Sarcophaga
	<i>Tanyptera atrata</i>	Tanyptera atrata
Acarine	<i>Trombidium</i>	Red Velvet Mite
Annelid	<i>Lumbricus terrestris</i>	Common Earthworm
Crustacean	<i>Armadillidium vulgare</i>	Common Pill Woodlouse
	<i>Philoscia muscorum</i>	Common Striped Woodlouse
	<i>Porcellio scaber</i>	Common Rough Woodlouse
	<i>Trichoniscus pusillus</i>	Common Pygmy Woodlouse
Mollusc	<i>Cepaea (Cepaea) hortensis</i>	White-lipped Snail

	Cornu aspersum	Common Garden Snail
	Planorbis planorbis	Margined Ramshorn
Spider	Pisaura mirabilis	Nursery-Web Spider

Vetebrates

Amphibian	Bufo bufo	Common Toad
	Lissotriton helveticus	Palmate Newt
	Lissotriton vulgaris	Smooth Newt
	Rana temporaria	Common Frog
Bird	Accipiter nisus	Sparrowhawk
	Aegithalos caudatus	Long-tailed Tit
	Alauda arvensis	Skylark
	Anas clypeata	Shoveler
	Anas crecca	Teal
	Anas penelope	Wigeon
	Anas platyrhynchos	Mallard
	Anser anser	Greylag Goose
	Anthus pratensis	Meadow Pipit
	Ardea cinerea	Grey Heron
	Branta canadensis	Canada Goose
	Branta leucopsis	Barnacle Goose
	Buteo buteo	Buzzard
	Calidris alpina	Dunlin
	Carduelis carduelis	Goldfinch
	Charadrius dubius	Little Ringed Plover
	Charadrius hiaticula	Ringed Plover
	Chloris chloris	Greenfinch
	Chroicocephalus ridibundus	Black-headed Gull
	Columba livia	Feral Pigeon
	Columba palumbus	Woodpigeon
	Corvus corone	Carrion Crow
	Corvus frugilegus	Rook
	Corvus monedula	Jackdaw
	Cyanistes caeruleus	Blue Tit
	Delichon urbicum	House Martin
	Dendrocopos major	Great Spotted Woodpecker
	Egretta garzetta	Little Egret
	Emberiza citrinella	Yellowhammer
	Erithacus rubecula	Robin
	Falco tinnunculus	Kestrel
	Fringilla coelebs	Chaffinch
	Gallinago gallinago	Snipe
	Gallinula chloropus	Moorhen
	Haematopus ostralegus	Oystercatcher
	Hirundo rustica	Swallow
	Larus argentatus	Herring Gull
	Larus fuscus	Lesser Black-backed Gull
	Linaria cannabina	Linnet
	Motacilla alba	White/Pied Wagtail
	Motacilla cinerea	Grey Wagtail
	Numenius arquata	Curlew
	Oenanthe oenanthe	Wheatear
Parus major	Great Tit	
Passer domesticus	House Sparrow	

	Passer montanus	Tree Sparrow
	Perdix perdix	Grey Partridge
	Periparus ater	Coal Tit
	Phalacrocorax carbo	Cormorant
	Phasianus colchicus	Pheasant
	Phylloscopus trochilus	Willow Warbler
	Pica pica	Magpie
	Prunella modularis	Dunnock
	Riparia riparia	Sand Martin
	Saxicola rubicola	Stonechat
	Streptopelia decaocto	Collared Dove
	Strix aluco	Tawny Owl
	Sturnus vulgaris	Starling
	Sylvia atricapilla	Blackcap
	Sylvia borin	Garden Warbler
	Sylvia communis	Whitethroat
	Tadorna tadorna	Shelduck
	Tringa totanus	Redshank
	Troglodytes troglodytes	Wren
	Turdus merula	Blackbird
	Turdus philomelos	Song Thrush
	Tyto alba	Barn Owl
Fish	Carassius auratus	Goldfish
Mammal	Apodemus sylvaticus	Wood Mouse
	Capreolus capreolus	Roe Deer
	Erinaceus europaeus	West European Hedgehog
	Lepus europaeus	Brown Hare
	Meles meles	Eurasian Badger
	Mustela erminea	Stoat
	Neovison vison	American Mink
	Oryctolagus cuniculus	European Rabbit
	Soricidae	Shrew
	Talpa europaea	European Mole
Reptile	Zootoca vivipara	Common Lizard