

CALDERDALE SPECIES INVENTORY - 2025

MAMMALS

Mammals, including bats, are often under-recorded in Calderdale, leading to gaps in population data. Other species, such as water shrews and polecats, are also likely to be under-reported, highlighting the need for improved survey efforts and monitoring to accurately assess their populations and distribution.

Common name	Scientific name	National	Regional	Local	Habitat	Ref	Notes
BATS	CHIROPTER						
<i>Vespertilionidae</i>							
Noctule Bat	<i>Nyctalus noctule</i>	PS	WYPS	LPS	BB, DW, H, P, U, VT		
Lesser Noctule	<i>Nyctalus leisleri</i>		WYPS	LPS	BB, DW, H, P, U, VT		
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	PS	WYPS	LPS	BB, DW, H, P, U, VT		
Nathusius' Pipistrelle	<i>Pipistrellus nathusii</i>		WYPS	LPS	BB, DW, H, P, U, VT		
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>		WYPS	LPS	BB, DW, H, P, U, VT		
Daubenton's Bat	<i>Myotis daubentonii</i>		WYPS	LPS	BB, DW, PL, RS, UG		
Brandt's Bat	<i>Myotis brandtii</i>		WYPS	LPS	CW, H, P, U		
Natterer's Bat	<i>Myotis nattereri</i>		WYPS	LPS	DW, H		
Brown Long-eared Bat	<i>Plecotus auritus</i>	PS	WYPS	LPS	BB, DW, H		
Whiskered Bat	<i>Myotis mystacinus</i>		WYPS	LPS	CW, DW, UH		
HARES	LAGAMORPHA						
<i>Leporidae</i>							
Brown hare	<i>Lepus europaeus</i>	PS	WYPS	LPS	A, UG, UH		
Mountain hare	<i>Lepus timidus</i>			LPS	UH		
SHREWS AND HEDGEHOGS	EULIPOTYPHLA						

Soricidae							
Eurasian Water Shrew	Arvicola amphibius			LPS	C, RS		
Erinaceidae							
West European Hedgehog	Erinaceus europaeus	PS	WYPS	LPS	DW, G, H, P, S, UG, U		
RODENTS	OTHER RODENTIA						
Cricetidae							
European Water Vole	Arvicola amphibius	PS		LPS	C, PL, R, RS		
Sciuridae							
Red squirrel	Sciurus vulgaris			LPS	CW, DW, UOW		Extinct in Calderdale since the 1980s, but is a candidate for a feasibility study to consider the possibility of reintroduction.
CARNIVORES	OTHER CARNIVORA						
Mustelidae							
Eurasian Badger	Meles meles			LPS	A, DW, P, UOW, U		
Eurasian Otter	Lutra lutra	PS	WYPS	LPS	RS		
Polecat	Mustela putorius	PS	WYPS	LPS	DW, H		
Weasel	Mustela nivalis			LPS	DW, H, UOW		
European pine marten	Martes martes			LPS	DW, H, S, UOW		There was a verified record in 2023, so has the prospect of recolonisation.

Key:

Priority:

PS UK Priority Species
WYPS West Yorkshire Priority Species
LPS Local Priority Species

Habitat:

A Arable
BB Bat boxes
C Canals
CW Coniferous woodland
DW Deciduous woodland
G Gardens
H Hedgerows and drystone walls
PL Ponds and lakes
P Parkland
R Reedbeds
RS Rivers and streams
S Scrub
UH Upland heathland and blanket bog
UG Unimproved grassland
UOW Upland oakwood
U Urban
VT Veteran trees

(Data on mammals kindly provided by Halifax Scientific Society, the National Trust, Upper Calderdale Wildlife Network and West Yorkshire Ecology Services)

BIRDS

The recording of birds in Calderdale is, on the whole, comprehensive, with many priority species being documented. However, some red and amber-listed birds, such as the cornbunting, are excluded from the priority list if they have not bred locally or aren't a migrant, as local conservation efforts are unlikely to significantly impact these species. Future efforts should focus on monitoring the established priority species to ensure their ongoing conservation and restoration.

Common name	Scientific name	National	Regional	Local	Habitat	Ref	Notes
GREBES	PODICIPEDIFORMES						
<i>Podicipedidae</i>							
Great Crested Grebe	Podiceps cristatus	G		LPS	PL		Wintering broods, though not known to breed. There is a chance if numbers and wetland habitat increase.
WATERFOWL	ANSERIFORMES						
Teal	Anas crecca	A		LPS	PL		
HAWKS	ACCIPITRIFORMES						
<i>Accipitridae</i>							
Hen Harrier	Circus cyaneus	R	WYPS	LPS	UG, UH		
Red kite	Milvus milvus			LPS	A, CW, DW, UOW, U		Starting to move into Calderdale from a neighbouring district, though slow at colonising.

Sparrowhawk	Accipiter nisus	A		LPS	G, DW, P, UOW, U		
FALCONS	FALCONIFORMES						
<i>Falconidae</i>							
Kestrel	Falco tinnunculus	A	WYPS	LPS	UG		
Merlin	Falco columbarius	R	WYPS	LPS	UH		Would benefit from improved habitat management.
Peregrine	Falco peregrinus	G	WYPS	LPS	UH, U		Rare breeding bird in Calderdale, though clear opportunity to boost numbers by installing peregrine boxes.
OTHER RAPTORS:	PANDION						
<i>Pandionidae</i>							
Osprey	Pandion haliaetus	A			PL		Osprey pass through Calderdale, so option to put up platforms.
OWLS	STRIGIFORMES						
<i>Tytonidae</i>							
Barn Owl	Tyto alba	G	WYPS	LPS	A, UG		Would benefit from action to boost numbers and protection of breeding sites.
<i>Strigidae</i>							

Long-eared Owl	<i>Asio otus</i>	G		LPS	CW, UOW		Would benefit from action to boost numbers and protection of breeding sites.
Short-eared Owl	<i>Asio flammeus</i>	A	WYPS	LPS	CW, UH		
Tawny Owl	<i>Strix aluco</i>	A		LPS	DW, UOW		Would benefit from action to boost numbers, including installing boxes, and protection of breeding sites.
Little Owl	<i>Athene noctua</i>			LPS	A, CW, DW, H, UOW		Would benefit from habitat management.
GAMEBIRDS	GALLIFORMES						
Red Grouse	<i>Lagopus lagopus</i>	G, PS	WYPS	LPS	UH		
Grey Partridge	<i>Perdix perdix</i>	R, PS	WYPS	LPS	S, UG		Expand hedgerow and scrub.
RAILS	GRUIFORMES						
Rallidae							
Water Rail	<i>Rallus aquaticus</i>	G		LPS	PL		Rare in Calderdale. Would benefit from more extensive habitat.
SHOREBIRDS AND GULLS	CHARADRIIFORMES						
Haematopodidae							

Oystercatcher	Haematopus ostralegus	A		LPS	A, PL		Has had lots of focus on uplands, but needs renewed focus on farmland and post-industrial habitat.
<i>Charadriidae</i>							
Little Ringed Plover	Charadrius dubius	G		LPS	GB, PL		Rare breeding in Calderdale. Would benefit from habitat management.
Ringed Plover	Charadrius hiaticula	R		LPS	GB, PL		
<i>Scolopacidae</i>							
Common sandpiper	Actitis hypoleucos	A			PL, RS, UH		Migrant breeder
Golden Plover	Pluvialis apricaria	G	WYPS	LPS	UH		Needs focus on foraging habitats (e.g. in-bye land)
Lapwing	Vanellus vanellus	R, PS	WYPS	LPS	A, UG, UH		Has had lots of focus on uplands, but needs renewed focus on farmland and post-industrial habitat.
Dunlin	Calidris alpina	R	WYPS	LPS	UH		Blanket bog restoration would benefit this species

Snipe	<i>Gallinago gallinago</i>	A		LPS	UH, UG		
Woodcock	<i>Scolopax rusticola</i>	R		LPS	UOW, S, UH		Under-recorded in Calderdale. Would benefit from scrubland
Curlew	<i>Numenius arquata</i>	R, PS	WYPS	LPS	A, UH, UG		Has had lots of focus on uplands, but needs renewed focus on farmland and post-industrial habitat.
Redshank	<i>Tringa tetanus</i>	A		LPS	UH, PL		Low numbers breeding in Calderdale.
<i>Laridae</i>							
Black-headed Gull	<i>Chroicocephalus ridibundus</i>	A		LPS	PL, RS		
Common gull	<i>Larus canus</i>	A			PL, RS		
Herring Gull	<i>Larus argentatus</i>	R, PS			PL, RS		
Lesser Black-backed Gull	<i>Larus fuscus</i>	A			PL, RS		Migrant, come in for the winter
Common tern	<i>Sterna hirundo</i>	A			PL, RS		Would benefit from platforms or islands to breed on and around wetlands.
<i>PIGEONS AND DOVES</i>	<i>COLUMBIIFORMES</i>						
Stock Dove	<i>Columba oenas</i>	A		LPS	DW		

CUCKOOS	CUCULIDAE					
Cuckoo	<i>Cuculus canorus</i>	R, PS	WYPS	LPS	DW, S	
WOODPECKERS	PICIFORMES					
Lesser Spotted Woodpecker	<i>Dryobates minor</i>	R		LPS	DW	
PASSERINES	PASSERIFORME					
<i>Alaudidae</i>						
Skylark	<i>Alauda arvensis</i>	R, PS	WYPS	LPS	UH, UG	
<i>Hirundinidae</i>						
Sand Martin	<i>Riparia riparia</i>	G		LPS	RS, PL	
House Martin	<i>Delichon urbicum</i>	R		LPS	U	
Swift	<i>Apus apus</i>	R	WYPS	LPS	U	
<i>Accentors</i>						
Dunnock	<i>Prunella modularis</i>	A, PS	WYPS	LPS	H	
<i>Motacillidae</i>						
Tree Pipit	<i>Anthus trivialis</i>	R, PS	WYPS	LPS	DW, S	
Meadow Pipit	<i>Anthus pratensis</i>	A		LPS	S, UH, UG	
Grey Wagtail	<i>Motacilla cinerea</i>	A		LPS	PL, RS	
<i>Turdidae</i>						
Song Thrush	<i>Turdus philomelos</i>	A, PS	WYPS	LPS	DW, S	
Mistle Thrush	<i>Turdus viscivorus</i>	A		LPS	G, DW, S	
Ring Ouzel	<i>Turdus torquatus</i>	R, PS	WYPS	LPS	UH	
<i>Troglodytidae</i>						
Wren	<i>Troglodytes troglodytes</i>	A			G, DW, H, S, UH, UG	

Sylviidae							
Garden warbler	<i>Sylvia borin</i>	A			DW, S		Migrant breeder
Grasshopper Warbler	<i>Locustella naevia</i>	R, PS	WYPS	LPS	F, RS		
Sedge Warbler	<i>Acrocephalus schoenobaenus</i>	A			PL		Resident breeder
Wood Warbler	<i>Phylloscopus sibilatrix</i>	R, PS	WYPS	LPS	DW, S		
Willow Warbler	<i>Phylloscopus trochilus</i>	A		LPS	DW, S, WW		
Lesser Whitethroat	<i>Curruca curruca</i>	A		LPS	S, UG		
Whitethroat	<i>Curruca communis</i>	A			H, S, UG		
Muscicapidae							
Spotted Flycatcher	<i>Muscicapa striata</i>	R, PS	WYPS	LPS	DW, S, UOW		
Pied Flycatcher	<i>Ficedula hypoleuca</i>	A		LPS	G, DW, P, S, UOW		Would benefit from nest boxes installed in areas which have been surveyed for suitability.
Redstart	<i>Phoenicurus phoenicurus</i>	A		LPS	H, DW, S, UOW		
Wheatear	<i>Oenanthe Oenanthe</i>	A		LPS	UH		
Whinchat	<i>Saxicola rubetra</i>	R		LPS	UH, UG		
Paridae							
Willow Tit	<i>Poecile montanus</i>	R, PS		LPS	C, S, WW		
Corvidae							
Raven	<i>Corvus corax</i>	G		LPS	DW, UOW		
Rook	<i>Corvus frugilegus</i>			LPS	A, DW, UG, U		Have been declining

							considerably in Calderdale
Sturnidae							
Starling	<i>Sturnus vulgaris</i>	R, PS	WYPS	LPS	G, P, U, UG		
Passeridae							
House Sparrow	<i>Passer domesticus</i>	R, PS	WYPS	LPS	A, U,		
Tree Sparrow	<i>Passer montanus</i>	R, PS	WYPS	LPS	A, DW, H		
Fringillidae							
Linnet	<i>Linaria cannabina</i>	R		LPS	UG, H, A		
Redpoll	<i>Acanthis flammea</i>	R		LPS	LMDW, H		Would benefit from habitat management.
Twite	<i>Linaria flavirostris</i>	R		LPS	UH, UG		
Bullfinch	<i>Pyrrhula pyrrhula</i>	A, PS	WYPS	LPS	DW, H		
Greenfinch	<i>Chloris chloris</i>	R		LPS	A, P, U		
Yellowhammer	<i>Emberiza citrinella</i>	R, PS	WYPS	LPS	UG, H, A		
Reed Bunting	<i>Emberiza schoeniclus</i>	A, PS	WYPS	LPS	F, RS, A		
Siskin	<i>Spinus spinus</i>	G		LPS	CW, DW		Would benefit from habitat management.
Carduelidae							
Crossbill	<i>Loxia curvirostra</i>	G		LPS	CW, UH		Benefit from the retention of conifer plantations.
Cinclidae							
Dipper	<i>Cinclus cinclus</i>	A		LPS	UH, RS		

NIGHTJARS	CAPRIMULGIFORMES						
Nightjar	Caprimulgus europaeus	A, PS	WYPS		UH, CW		

Key:

Priority:

A – Birds of Conservation Concern Amber List

R – Birds of Conservation Concern Red List

PS – UK Priority Species

WYPS – West Yorkshire Priority Species

LPS – Local Priority Species

Habitat:

- A Arable
- BB Bat boxes
- C Canals
- CW Coniferous woodland
- DW Deciduous woodland
- G Gardens
- GB Gravel Beds
- F Fens
- H Hedgerows and drystone walls
- P Parkland
- PL Ponds and lakes
- R Reedbeds
- RS Rivers and streams
- S Scrub
- UH Upland heathland and blanket bog
- UG Unimproved grassland
- UOW Upland oakwood
- U Urban
- VT Veteran trees
- WW Wet Woodland

(Data on birds kindly provided by Calderdale Bird Conservation Group, Halifax Scientific Society, Upper Calderdale Wildlife Network and West Yorkshire Ecology Services)

REPTILES AND AMPHIBIANS

Calderdale has a number of nationally significant amphibians and reptiles and some that are considered as regional priority species due to their local rarity, endangered status or declining populations. The key threats to these species is habitat loss from development, unsustainable land use and climate change. Some of these species, such as adders, are also likely to be under-reported, highlighting the need for improved survey efforts and monitoring to accurately assess their populations and distribution.

Common name	Scientific name	National	Regional	Local	Habitat	Ref	Notes
REPTILES	REPTILIA						
Colubridae							
Grass snake	<i>Natrix natrix</i>	PS		LPS	UG, UH, RS		
Vipera							
Adder	<i>Vipera berus</i>	PS	WYPS	LPS	UH		
Zootoca							
Common Lizard	<i>Zootoca vivipara</i>	PS		LPS	H, UH		
AMPHIBIANS	AMPHIBIA						
Bufonidae							
Common Toad	<i>Bufo bufo</i>	PS	WYPS	LPS	G, PL, S		
Salamandridae							
Great Crested Newt	<i>Triturus cristatus</i>	PS	WYPS	LPS	G, PL		
Smooth Newt	<i>Lissotriton vulgaris</i>			LPS	G, PL		
Palmate Newt	<i>Lissotriton helveticus</i>			LPS	G, PL		

Key:

Priority:

PS – UK Priority Species

WYPS – West Yorkshire Priority Species

LPS – Local Priority Species

Habitat:

G	Gardens
H	Hedgerows and drystone walls
PL	Ponds and lakes
RS	Rivers and streams
S	Scrub
UH	Upland heathland and blanket bog
UG	Unimproved grassland

(Data on reptiles and amphibians kindly provided by West Yorkshire Ecology Services)

FISH

Fish populations in Calderdale's rivers and waterways are monitored semi-regularly by the Environment Agency and local partners to assess their health and distribution. A number of species are present or ought to be present, but challenges like habitat degradation and fragmentation and pollution continue to impact their populations.

Common name	Scientific name	National	Regional	Local	Habitat	Ref	Notes
Eel	ANGUILLIFORMES						
European Eel	Anguilla Anguilla	CE, PS	WYPS	LPS	R		
SALMONOIDS	SALMONIFORMES						
Atlantic salmon	Salmo salar	PS		LPS	RS		
Brown trout	Salmo trutta	PS	WYPS	LPS	RS		
Grayling	Thymallus thymallus			LPS	RS		
MAIL-CHEEKED FISHES	SCORPAENIFORMES						
European bullhead	Cottus gobio			LPS	RS		
LAMPREY	PETROMYZONTIFORMES						
Lamprey	Petromyzontiformes			LPS	RS		

Key:

Priority:

CE - IUCN Critically Endangered

PS – UK Priority Species

WYPS – West Yorkshire Priority Species

LPS – Local Priority Species

Habitats:

RS Rivers and streams

(Data on fish kindly provided by the Environment Agency)

BUTTERFLIES AND MOTHS

Butterflies and moths in Calderdale are fairly well monitored, with new species regularly being added to the list through ongoing recording. These records help track trends in abundance and distribution, offering valuable insights into the local health of these important pollinators.

Common name	Scientific name	National	Regional	Local	Habitat	Ref	Notes
MOTHS	LEPIDOTERA						
Swift moths	Hepialidae						
Ghost Moth	<i>Hepialis humili</i>	PS	WYPS	LPS	UG		
Silk moths	Saturniidae						
Emperor Moth	<i>Saturnia pavonia</i>			LPS	UH		
Eggar moths	Lasiocampidae						
Oak Eggar	<i>Lasiocampa quercus</i>			LPS			
Drinker	<i>Euthrix potatoria</i>						
Hook-tip moths	Drepanidae						
Oak Hook-tip	<i>Watsonalla binaria</i>		WYPS	LPS	DW, P, UOW		
Pebble Hook-tip	<i>Drepana falcataria</i>		WYPS	LPS			
Geometer moths	Geometridae						
Red Carpet	<i>Xanthorhoe decoloraria</i>	PS		LPS	UG, UH		
Dark-barred Twin-spot Carpet	<i>Xanthorhoe ferrugata</i>	PS	WYPS	LPS	DW, F, G, H, UG		
Shaded Broad-bar	<i>Scotopteryx chenopodiata</i>	PS	WYPS	LPS			
Galium Carpet	<i>Epirrhoë galiata</i>	PS	WYPS	LPS	UG, UH		
Grey Mountain Carpet	<i>Entephria caesiata</i>	PS	WYPS	LPS	UH		

Dark Spinach	<i>Pelurga comitata</i>	PS	WYPS	LPS	U		
Spinach	<i>Eulithis mellinata</i>	PS	WYPS	LPS	DW, G, P, S, U		
Small Phoenix	<i>Ecliptopera silaceata</i>	PS	WYPS	LPS			
Streak	<i>Chesias legatella</i>	PS	WYPS	LPS			
Latticed Heath	<i>Chiasmia clathrate</i>	PS	WYPS	LPS			
V-moth	<i>Macaria wauaria</i>	PS	WYPS	LPS	G, H, P, S, DW		
August Thorn	<i>Ennomos quercinaria</i>	PS	WYPS	LPS			
Dusky Thorn	<i>Ennomos fuscantaria</i>	PS	WYPS	LPS	DW, U		
September Thorn	<i>Ennomos erosaria</i>	PS	WYPS	LPS	DW		
Brindled Beauty	<i>Lycia hirtaria</i>	PS	WYPS	LPS	DW, U		
Grey Scalloped Bar	<i>Dyscia fagaria</i>			LPS	UH		
Tissue	<i>Triphosa dubitata</i>						
<i>Erebidae</i>	<i>Erebidae</i>						
White Ermine	<i>Spilosoma lubricipeda</i>	PS	WYPS	LPS			
Buff Ermine	<i>Spilosoma lutea</i>	PS		LPS			
The Cinnabar	<i>Tyria jacobaeae</i>	PS	WYPS	LPS			
Wood Tiger	<i>Parasemia plantaginis</i>				UG		
<i>Owlet moths</i>	<i>Noctuidae</i>						
White-line Dart	<i>Euxoa tritici</i>	PS		LPS	UG, UH		
Double Dart	<i>Graphiphora augur</i>	PS	WYPS	LPS	DW, UG		
Autumnal Rustic	<i>Eugnorisma glareosa</i>	PS	WYPS	LPS	UG, UH, S, DW		
Small Square-spot	<i>Diarsia rubi</i>	PS	WYPS	LPS			
Neglected Rustic	<i>Xestia castanea</i>	PS	WYPS	LPS			

Heath Rustic	<i>Xestia agathina</i>	PS	WYPS	LPS			
Dot Moth	<i>Melanchra persicariae</i>	PS	WYPS	LPS			
Broom Moth	<i>Ceramica pisi</i>			LPS	UH		
Feathered Gothic	<i>Tholera decimalis</i>	PS	WYPS	LPS			
Powdered Quaker	<i>Orthosia gracilis</i>	PS	WYPS	LPS			
Shoulder-striped Wainscot	<i>Leucania comma</i>			LPS – ditto			
Red Sword-grass	<i>Xylena vetusta</i>			LPS – ditto	UH		
Green-brindled Crescent	<i>Allophyes oxyacanthalae</i>	PS	WYPS	LPS			
Flounced Chestnut	<i>Anchoscelis helvola</i>			LPS - ditto	UH		
Beaded Chestnut	<i>Agrochola lychnidis</i>	PS	WYPS		DW, G, H, S, UG, UH, U		
Centre-barred Sallow	<i>Atethmia centrago</i>	PS	WYPS	LPS			
Sallow	<i>Cirrhia icteritia</i>	PS		LPS	DW, UH, WW		
Dusky-lemon Sallow	<i>Cirrhia gilvago</i>	PS		LPS	G, H, P, DW		
Grey Dagger	<i>Acronicta Psi</i>	PS	WYPS	LPS			
Mouse Moth	<i>Amphipyra tragopoginis</i>	PS	WYPS	LPS	F, G, UH, U		
Dusky Brocade	<i>Apamea remissa</i>	PS	WYPS	LPS			
Rosy Minor	<i>Litoligia literosa</i>			LPS	UG		
Ear Moth	<i>Amphipoea oculaea</i>	PS	WYPS	LPS			
Butterbur	<i>Hydraecia petasitis</i>			LPS – ditto	C, RS		
Haworth's Minor	<i>Celaena haworthii</i>	PS	WYPS	LPS			
Rustic	<i>Hoplodrina blanda</i>	PS	WYPS	LPS			
Mottled Rustic	<i>Caradrina Morpheus</i>	PS	WYPS	LPS			
Anomalous	<i>Stilbia anomala</i>	PS			UH, UG		
Confused	<i>Apamea furva</i>						
Rosy Rustic	<i>Hydraecia micacea</i>	PS					

Large Wainscot	Rhizedra lutosa	PS					
Knot Grass	Acronicta rumicis	PS	WYPS	LPS			
<i>Ermine moths</i>	<i>Yponomeutidae</i>						
Ash Bud Moth	Prays fraxinella			LPS			
<i>Tortrix moths</i>	<i>Tortricidae</i>						
Northern Crescent	Grapholita lunulana						Nationally scarce
Acorn Piercer	Pammene fasciana			LPS			
Northern Marble	Phiaris palustrana						Nationally scarce
Northern Heath Twist	Philedonides lunana						Nationally scarce
Tansy Moth	Dichrorampha aeratana						Nationally scarce
Mottled Grey Tortrix	Gypsonoma opressana						Nationally scarce
Cowberry Marble	Stictea mygindiana						Nationally scarce
<i>Case-bearer moths</i>	<i>Coleophoridae</i>						
Heather Case-bearer	Coleophora pyrrhulipennella			LPS			
Red Clover Case - bearer	Coleophora frischella						Nationally scarce
Narrow lichen Case -bearer	Dahlica triquetrella						Nationally scarce
Lichen Case-bearer	Dahlica lichenella						Nationally scarce
<i>Grass-miner moths</i>	<i>Elachistidae</i>						

Woodland Grass-miner	<i>Elachista obliquella</i>						Nationally scarce
Sweet-grass Miner	<i>Elachista poae</i>						Nationally scarce
Moorland sedge miner	<i>Elachista kilmunella</i>						
Fungus moths	Tineidae						
Gold-speckled Fungus Moth	<i>Nemaxera betulinella</i>						Nationally scarce
Life-miner moths	Gracillariidae						
Cowberry Leaf-miner	<i>Phyllonorycter junoniella</i>						Nationally scarce
Goat Willow Leaf-miner	<i>Phyllonorycter dubitella</i>						Nationally scarce
Norway Maple Leaf-miner	<i>Phyllonorycter joannisi</i>						Nationally scarce
Momphidae	Momphidae						
Buff-headed Mompha	<i>Mompha lacteella</i>						Nationally scarce
Choreutidae	Choreutidae						
Alder Signaller	<i>Stathmopoda pedella</i>						Nationally scarce
Plume moths	Pterophoridae						
Saxifrage Plume	<i>Stenoptilia millieridactyla</i>			LPS			
Wood-sage Plume	<i>Capperia britanniodactylus</i>						Nationally scarce
Snout moths	Pyralidae						

Cacao Moth	<i>Ephestia elutella</i>						Nationally scarce
Miscellaneous moths							
Garden Dart	<i>Euxoa nigricans</i>	PS	WYPS	LPS			
Chimney Sweep	<i>Odezia atrata</i>			LPS	UG		Benefits from meadow restoration
Bilberry Dot	<i>Stigmella myrtillella</i>			LPS			
Lotus Pygmy	<i>Trifurcula cryptella</i>						Nationally scarce
Sycamore-seed Dot	<i>Etania decentella</i>						Nationally scarce
Northern Conciliar	<i>Denisia similella</i>						Nationally scarce
Heath Concealer	<i>Denisia subaquilea</i>						Added as precautionary measure, needs more information.
Yellow-spotted Drab	<i>Phauleris fulviguttella</i>						Nationally scarce
Water Plantain Straw	<i>Gynnidiomorpha alismana</i>						Nationally scarce
Brown Alder Roller	<i>Epinotia sordidana</i>						Nationally scarce
Phiaris schulziana	<i>Phiaris schulziana</i>						
BUTTERFLIES	PAPILIONEM						
Brush-footed butterflies	Nymphalidae						
White-letter Hairstreak	<i>Satyrium w-album</i>	PS	WYPS		H, UG, DW		Found in anywhere with elm trees

Wall	Lasiommata megera	PS	WYPS	LPS	UG, RW		
Small Heath	Coenonympha pamphilus	PS	WYPS	LPS	UG, UH, U		
Dark Green Fritillary	Argynnis aglaja			LPS			Very rare, but planting Common Dog Violet and Marsh Violet can benefit this species.
Skippers	<i>Erynnis tages</i>						
Dingy Skipper	Erynnis tages	PS			S, U		
Whites and Yellows	Pieridae						
Green-veined White	Pieris napi			LPS			
Blues and Coppers	Lycaenidae						
Green Hairstreak	Callophrys rubi						
Purple Hairstreak	Favonius quercus						
Small Copper	Lycaena phlaeas						
Common Blue	Polyommatus icarus						
Holly Blue	Celastrina argiolus						

Key:

Priority:

PS – UK Priority Species

WYPS – West Yorkshire Priority Species

LPS – Local Priority Species

Habitat:

C	Canals
DW	Deciduous woodland
G	Gardens
F	Fens
H	Hedgerows and drystone walls
P	Parkland
RS	Rivers and streams
S	Scrub
UH	Upland heathland and blanket bog
UG	Unimproved grassland
UOW	Upland oakwood
U	Urban
WW	Wet Woodland

(Data on butterflies and moths kindly provided by Halifax Scientific Society, Upper Calderdale Wildlife Network and West Yorkshire Ecology Services)

BEETLES

Beetles in Calderdale are generally under-recorded and understudied, with little known about these species. More research is needed to better understand local invertebrate populations and the challenges they face from climate change and habitat loss.

Common name	Scientific name	National	Regional	Local	Habitat	Ref	Notes
Diving beetles	Dytiscidae						
Stictonectes lepidus	Stictonectes lepidus			LPS	C, PL		
Agabus arcticus	Agabus arcticus			LPS	C, PL		
Rhantus bistriatus	Rhantus bistriatus			LPS	C, PL		
Ground beetles	Carabidae						
Notiophilus quadripunctatus	Notiophilus quadripunctatus			LPS	UH, UG		
Trechus discus	Blemus discus			LPS	UG, RS		Found in wet grassland areas near rivers and waterways
Trechus rubens	Trechus rubens			LPS			
Bembidion (Diplocampa) clarkii	Bembidion clarkii			LPS	RS		Found in damp sites near to water
Bembidion fumigatum	Bembidion fumigatum			LPS			
Bembidion gilvipes	Bembidion gilvipes			LPS	DW, WW		
Bembidion obliquum	Bembidion obliquum			LPS	PL		Found at the edges of freshwater on acid soils.
Bembidion geniculatum	Bembidion geniculatum				C, PL, RS		Likes damp, sandy areas or clay on the edge of standing or running water.

<i>Bembidion monticola</i>	<i>Bembidion monticola</i>				RS		Likes bare or sparsely vegetated, fine sand on wooded, upland streambanks. The protection of undisturbed streambanks is essential for this species.
<i>Bembidion nigricorne</i>	<i>Bembidion nigricorne</i>				UH		
<i>Bembidion prasinum</i>	<i>Bembidion prasinum</i>				PL		Lives in wetland margins
<i>Bembidion stephensi</i>	<i>Bembidion stephensi</i>				PL		A generally rare wetland species
<i>Bradyceillus caucasicus</i>	<i>Bradyceillus collaris</i>				UH		
<i>Carabus nitens</i>	<i>Carabus nitens</i>				UH		
<i>Philorhizus sigma</i>	<i>Philorhizus sigma</i>			LPS	F		
Crucifix Ground Beetle	<i>Panagaeus cruxmajor</i>				F		
<i>Anthracus consputus</i>	<i>Acupalpus consputus</i>				GB, PL, RS		
<i>Acupalpus flavidollis</i>	<i>Acupalpus flavidollis</i>				RS		Lives near fresh, often running water on fine, moist sand
Weevils	<i>Curculionidae</i>						
<i>Barynotus squamosus</i>	<i>Barynotus squamosus</i>			LPS	DW		
<i>Grypus equiseti</i>	Horsetail Weevil			LPS			
<i>Notaris bimaculatus</i>	<i>Tournotaris bimaculatus</i>			LPS			
<i>Notaris scirpi</i>	<i>Notaris scirpi</i>			LPS			

<i>Cneorhinus plumbeus</i>	Attactagenus plumbeus			LPS	UG		Found in fields, meadows and roadsides
Water scavenger beetles	<i>Hydrophilidae</i>						
<i>Cercyon convexiusculus</i>	<i>Cercyon convexiusculus</i>			LPS	PL		
<i>Cercyon lugubris</i>	<i>Cercyon obsoletus</i>			LPS	PL		
<i>Laccobius sinuatus</i>	<i>Laccobius sinuatus</i>			LPS	PL		
Rove beetles	<i>Staphylinidae</i>						
<i>Anotylus mutator</i>	<i>Anotylus mutator</i>			LPS			
<i>Stenus europaeus</i>	<i>Stenus europaeus</i>			LPS			
<i>Stenus niveus</i>	<i>Stenus niveus</i>			LPS			
<i>Gabrius bishop</i>	<i>Gabrius bishop</i>			LPS			
<i>Ocyphus fuscatus</i>	<i>Ocyphus fuscatus</i> (<i>Staphylinus fuscatus</i>)			LPS	UG		
<i>Atheta aquatilis</i>	<i>Atheta aquatilis</i>			LPS			
<i>Leptusa norvegica</i>	<i>Leptusa norvegica</i>			LPS			
<i>Bolitochara mulsanti</i>	<i>Bolitochara mulsanti</i>			LPS			
<i>Quedius balticus</i>	<i>Quedius molochinus</i>				UH, UG		
Click beetles	<i>Elateridae</i>						
<i>Melasis buprestoides</i>	<i>Melasis buprestoides</i>			LPS	DW		
<i>Elateroides dermestoides</i>	<i>Hylecoetus dermestoides</i>			LPS	DW		Found in dead timber and root stumps
Soldier beetles	<i>Cantharidae</i>						
Blue Soldier Beetle	<i>Ancistronycha abdominalis</i>			LPS	DW		Found in open areas of woodland and

							on the woodland edge
Malthodes pumilus	Malthodes pumilus				DW		
Root-eating beetles	Rhizophagidae						
Rhizophagus nitidulus	Rhizophagus nitidulus			LPS			
Minute brown scavenger beetles	Latridiidae						
Enicmus fungicola	Enicmus fungicola			LPS	DW, G		Found in compost and leaf litter
Ladybirds	Coccinellidae						
Lady bird	Hyperaspis pseudopustulata			LPS	UG		
Nephus quadrimaculatus	Nephus quadrimaculatus				DW, G		
Leaf beetles	Chrysomelidae						
Alder Leaf Beetle	Agelastica alni				PL, RS		Found in open, sunny areas in wetlands
Psylliodes chalcomera	Psylliodes chalcomera			LPS	S		Found in thistle buds and shoots, in scrubby areas
Psylliodes cuprea	Psylliodes cuprea						
Bromius obscurus	Bromius obscurus						
Cassida sanguinosa	Cassida sanguinosa						
Mantura rustica	Mantura rustica			LPS			
Scarab beetles	Scarabaeidae						
Northern Dung Beetle	Agoliinus lapporum			LPS	DW, UH		

<i>Plagiogonus arenarius</i>	<i>Aphodius (Plagiogonus) arenarius</i>						
<i>Death-watch and spider beetles</i>	<i>Ptinidae</i>						
<i>Dorcatoma flavicornis</i>	<i>Dorcatoma flavicornis</i>						
<i>Marsh beetles</i>	<i>Scirtidae</i>						
<i>Elodes Pseudominutus</i>	<i>Elodes Pseudominuta</i>						
<i>Whitligig beetles</i>	<i>Gyrinidae</i>						
<i>Gyrinus natator</i>	<i>Gyrinus natator</i>				PL, RS		Found in moving streams, ponds and marshes
<i>Water beetles</i>	<i>Helophoridae</i>						
<i>Helophorus longitarsis</i>	<i>Helophorus longitarsis</i>						
<i>Bark beetles</i>	<i>Scolytidae</i>						
<i>Dryocoetus alni</i>	<i>Dryocoetes alni</i>			LPS	DW, P		Found in open, deciduous woodland and wooded parkland

Key:

Priority:

PS – Priority Species

WYPS – West Yorkshire Priority Species

LPS – Local Priority Species

Habitat:

C Canals
DW Deciduous woodland
G Gardens
GB Gravel Beds
F Fens
P Parkland
PL Ponds and lakes
R Reedbeds
RS Rivers and streams
S Scrub
UH Upland heathland and blanket bog
UG Unimproved grassland
UOW Upland oakwood
WW Wet Woodland

CRUSTACEA

White-clawed crayfish have been identified in one area of Calderdale, but they are under significant pressure from invasive, non-native Signal crayfish. Further surveys are needed to assess the current population size and explore the potential for reintroductions.

Common name	Scientific name	National	Regional	Local	Habitat	Ref	Notes
White-clawed Crayfish	<i>Austropotamobius pallipes</i>	PS	WYPS	LPS	C, PL, RS		Prefer calcareous waters, so upland streams generally not suitable for reintroductions.

Key:

Priority:

PS – Priority Species

WYPS – West Yorkshire Priority Species

LPS – Local Priority Species

Habitat:

C Canals

PL Ponds and lakes

RS Rivers and streams

OTHER INVERTEBRATES

Other invertebrates in Calderdale are generally under-recorded and understudied, with little known about these species. More research is needed to better understand local invertebrate populations and the challenges they face from climate change and habitat loss.

Common name	Scientific name	National	Regional	Local	Habitat	Ref	Notes
FLIES	DIPTERA						
<i>Dance flies</i>	<i>Empididae</i>						
Leptopeza borealis	Leptopeza borealis				RS, PL		
<i>Hoverflies</i>	<i>Syrphidae</i>						
Cheilosia ranunculi	Cheilosia ranunculi				UG, DW		Found in damp meadows and woodland clearings
Cheilosia mutabilis	Cheilosia mutabilis				UH, DW		
Chrysotoxum arcuatum	Chrysotoxum arcuatum			LPS	CW, DW, UG, WW		Found in woodlands and grasslands along streams and poorly drained areas
Heringia verrucula	Heringia verrucula				RS		
Leucozona glaucia	Leucozona glaucia			LPS	DW, RS		Found in woodlands, beside streams
Parasyrphus nigritarsis	Parasyrphus nigritarsis				PL, DW		Found in woodlands and wetlands
<i>Snipe flies</i>	<i>Rhagionidae</i>						
Liverwort snipefly	Spania nigra				RS		
Moorland Snipefly	Symphoromyia crassicornis						

Fungus gnats	Mycetophilidae						
Mycetophila abiecta	Mycetophila abiecta						
Neuratelia nigricornis	Neuratelia nigricornis						
Fungus gnats	Keroplatidae						
Manota unifurcata	Manota unifurcata				UOW		
Crane flies	Limoniidae						
Dicranota exclusa	Dicranota exclusa				UOW		
Dicranomyia chorea	Dicranomyia chorea				G, DW, UOW		Found in leaf litter in gardens and woodlands
Limonia aquosa	Dicranomyia aquosa			LPS	UOW		
Paradelphomyia nielseni	Paradelphomyia nielseni			LPS	UOW		
Pilaria fuscipennis	Pilaria fuscipennis			LPS	UOW		
Scleroprocta sororcula	Scleroprocta sororcula			LPS	UOW		
Tasiocera fuscescens	Tasiocera fuscescens				DW, UOW, WW		Found in wet areas of woodlands
Limnophila trimaculata	Limnophila trimaculata				UOW		
Hairy-eyed craneflies	Pediciidae						
Pedicia occulta	Pedicia occulta				UOW		
Pedicia rivosa	Pedicia rivosa				UOW		
Northern Yellow Splinter	Lipsothrix errans	PS			WW		
STONEFLIES	PLECOPTERA						
Nemouridae							
Amphinemura standfussi	Amphinemura standfussi				UH		

Taeniopterygidae							
Northern February Red	Brachyptera putata	PS			RS, UH, UG		Found in well-oxygenated upland rivers running through heathlands and grasslands
MAYFLIES	EPHEMEROPTERA						
Ameletidae							
Upland Summer Mayfly	Ameletus inopinatus				RS		Found in the cool waters of upland streams
TRUE BUGS	HEMIPTERA						
Water striders	Gerridae						
Aquarius paludum	Aquarius paludum				PL		
Shore bugs	Salidae						
Salda morio	Salda morio				UH		Found in peat bogs at the margin of pools
GRASSHOPPERS AND CRICKETS	ORTHOPTERA						
Grasshoppers	Acrididae						
Woodland Grasshopper	Omocestus rufipes				UH, DW		
WASPS, ANTS AND BEES	HYMENOPTERA						
Wasps	Cynipidae						

Trybliographa cubitalis	Trybliographa cubitalis				UOW		
Ants	Formicidae						
Hairy Wood Ant	Formica lugubris			LPS	UOW		Found in wooded upland areas
Red Wood Ant	Formica rufa			LPS	CW, DW		
Bees	Apidae						
Bilberry Bumblebee	Bombus monticola			LPS	UH		
Moss Carder Bee	Bombus muscorum	PS			UG, UH		Found in bogs and flowery grasslands
Red-shanked Carder Bee	Bombus ruderarius	PS			UG, S		

Key:

Priority:

PS – Priority Species

WYPS – West Yorkshire Priority Species

LPS – Local Priority Species

Habitat:

CW Coniferous woodland

DW Deciduous woodland

PL Ponds and lakes

RS Rivers and streams

S Scrub

UH Upland heathland and blanket bog

UG Unimproved grassland

UOW Upland oakwood

WW Wet Woodland

VASCULAR PLANTS

While Calderdale supports relatively few botanical species of national concern, key species can still be found. Although national conservation priorities are limited, there is a long list of native vascular plants occurring at a number of sites across the borough. Field work is needed to gain a deeper understanding of the species present in Calderdale.

Common name	Scientific name	National	Regional	Local	Habitat	Ref	Notes
FERNS AND ALLIES	PTERIDOPHYTA						
OPHIOGLOSSALES							
<i>Ophioglossaceae</i>							
Adder's Tongue	<i>Ophioglossum vulgatum</i>						
Moonwort	<i>Botrychium lunaria</i>						
POLYPODIALES							
<i>Cystopteridaceae</i>							
Oak fern	<i>Gymnocarpium Dryopteris</i>						In well-lit, rocky woods and upland areas. Often along watercourses and ravines
<i>Hymenophyllaceae</i>							
Killarney fern	<i>Vandenboschia speciosa</i>						
Wilson's filmy fern	<i>Hymenophyllum wilsonii</i>						In very humid places on tree bases, rocks and

							throughout humid river valleys.
<i>Thelypteridaceae</i>							
Beech fern	Phegopteris connectilis						On soils, boulders and wet rock faces.
<i>OSMUNDALES</i>							
<i>Osmundaceae</i>							
Royal fern	Osmunda regalis						
<i>FLOWERING PLANTS</i>	<i>ANGIOSPERMS</i>						
<i>ROSALES</i>							
<i>Rosaceae</i>							
Cloudberry	Rubus chamaemorus						
Stone bramble	Rubus saxatilis			LPS			
Wild strawberry	Fragaria vesca						
Great Burnet	Sanguisorba officinalis						
<i>RANUNCULALES</i>							
<i>Ranunculaceae</i>							
Ivy-leaved Crowfoot	Ranunculus hederaceus						
Greater spearwort	Ranunculus lingua						
Water avens	Geum rivale						
<i>CARYOPHYLLALES</i>							

Caryophyllaceae							
Wood stitchwort	<i>Stellaria nemorum</i>						
Bog stitchwort	<i>Stellaria alsine</i>						
Ragged robin	<i>Lychnis flos-cuculi</i>	NT					Found in damp meadows and along the sides of streams
Amaranthaceae							
Common Cudweed	<i>Filago vulgaris</i>	NT					Rare but a casual of disturbed ground
Polygonaceae							
Tasteless water-pepper	<i>Persicaria mitis</i>	VU					Further investigation, not seen by SH.
POALES							
Cyperaceae							
Flea sedge	<i>Carex pulicaris</i>	NT					
Greater Tussock-sedge	<i>Carex paniculata</i>	VU		LPS	B, M		
Slender Tufted-sedge	<i>Carex acuta</i>	VU					
Star Sedge	<i>Carex echinata</i>	VU					
Poaceae							
Quaking Grass	<i>Briza media</i>	NT					
Wood Barley	<i>Hordelymus europaeus</i>						

Wood Fescue	Festuca altissima							
ASPARAGALES								
Amaryllidaceae								
Wild daffodil	Narcissus pseudonarcissus							
Orchidaceae								
Bee Orchid	Ophrys apifera			LPS	UG			
Broad-leaved Helleborine	Epipactis helleborine							
ERICALES								
Droseraceae								
Round-leaved Sundew	Drosera rotundifolia	VU						
Great sundew	Drosera anglica	EN						
Ericaceae								
Bog rosemary	Andromeda polifolia	NT						
Cowberry	Vaccinium vitis-idaea							
Cross-leaved Heath	Erica tetralix							
Intermediate Wintergreen	Pyrola media	VU		LPS				
Pyrola rotundifolia subsp. Rotundifolia	Pyrola rotundifolia subsp. rotundifolia	NT						
Monotropaceae								
Yellow Bird's-nest	Monotropa hypopitys							

Primulaceae							
Yellow Loosestrife	Lysimachia vulgaris						
FABLES							
Fabaceae							
Petty whin	Genista anglica	VU					
Dyer's greenweed	Genista tinctoria	VU					
GENTIANALES							
Gentianaceae							
Autumn gentian	Gentianella amarella	NT					
Field gentian	Gentianella campestris	EN					
Common Centaury	Centaурium erythraea						
LAMIALES							
Boraginaceae							
Pale Forget-me-not	M. stolonifera			LPS	UH		Distribution not well known and associated habitat not well understood
Lamiaceae							
Wall Germander	Teucrium chamaedrys						
Corn Mint	Mentha arvensis						
Orobanchaceae							

Common Cow-wheat	Melampyrum pratense						
Scrophulariaceae							
Water figwort	Scrophularia auriculata						
Muskflower	Erythranthe moschata						
SOLANALES							
Solanaceae							
Deadly Nightshade	Atropa belladonna						
ASTERALES							
Asteraceae							
Rough Hawkbit	Leontodon hispidus						
Marsh Fleawort	Tephroseris palustris	EX (listed as extinct on IUCN GB Red List, but we have records for this in Calderdale for 1981 – 1990 and 2011 - 2023)					Further investigation of this species required, in case of mis-identification.
SCROPHULARIALES							
Plantaginaceae							
Floating Water-plantain	Luronium natans	PS	WYPS	LPS	C		
Lentibulariaceae							

Common Butterwort	Pinguicula vulgaris						
CAPRIFOLIALES							
Caprifoliaceae							
Marsh Valerian	Valeriana dioica		LPS	B, M			
MYRTALES							
Onagraceae							
Bog bean	Menyanthes						
Upland Enchanter's-nightshade	Circaeа lutetiana x alpina = C. x intermedia		LPS			Important species	
VIOLALES							
Violaceae							
Yellow mountain Pansy	Viola lutea						
MALPIGHIALES							
Linaceae							
Fairy Flax	Linum catharticum						
FABALES							
Polygalaceae							
Heath Milkwort	Polygala serpyllifolia	NT					
SAXIFRAGALES							
Haloragaceae							

Alternate Water-milfoil	<i>Myriophyllum alterniflorum</i>			LPS	PL, RS		
Whorled Water-milfoil	<i>Myriophyllum verticillatum</i>	VU					
Saxifragaceae							
Alternate-leaved Golden-saxifrage	<i>Chrysosplenium alternifolium</i>			LPS	WW		
GERANIALES							
Geraniaceae							
Wood Crane's-bill	<i>Geranium sylvaticum</i>			LPS			
ALISMATALES							
Potamogetonacea							
American Pondweed	<i>Potamogeton epihydrus</i>	VU					

Key:

PS – UK Priority Species

WYPS – West Yorkshire Priority Species

LPS – Local Priority Species

CR – Critically Endangered (IUCN GB Red List)

EX – Extinct (IUCN GB Red List)

NT – Near Threatened (IUCN GB Red List)

VU – Vulnerable (IUCN GB Red List)

Habitat:

B Bogs

C Canals

F Fen

M Marsh

N Neutral Grassland

H Hedgerow

PL	Ponds and lakes
RS	Rivers and streams
UG	Unimproved grassland
UH	Upland heathland and blanket bog
UOW	Upland oakwood
WW	Wet woodland
W	Old Walls

(Data on vascular plants kindly provided by Halifax Scientific Society, the National Trust, Upper Calderdale Wildlife Network and West Yorkshire Ecology Services)

MOSSES AND LIVERWORTS

Mosses and liverworts are under-recorded in Calderdale, despite the borough's ideal combination of woodland and peatland habitats and wet weather that supports their growth. Field work is needed to contribute a deeper understanding of the species present in the borough. We are also actively seeking more lichen records to better inform our conservation efforts.

Common name	Scientific name	National	Regional	Local	Habitat	Ref	Notes
MOSSES	BRYOPHYTA						
HOOKERIALES							
<i>Daltoniaceae</i>							
Irish daltonia	Daltonia splachnoides						
DICRANALES	DICRANALES						
<i>Dicranaceae</i>							
Beaked Bow-moss	Dicranodontium denudatum			LPS	DW, UH		Grows on decaying logs and on rocks and stones in old woodlands of conservation importance.
BARTRAMIALES	BARTRAMIALES						
<i>Bartramiaceae</i>							
Straight-leaved Apple-moss	Bartramia ithyphylla			LPS			
SPHAGNUM MOSSES	SPHAGNALES						
<i>Sphagnaceae</i>							
Papillose peatmoss	Sphagnum papillosum				UH		

Sphagnum medium	Sphagnum medium				UH		
Sphagnum capillifolium	Sphagnum capillifolium				UH		
Austin's sphagnum	Sphagnum austini				UH		Absent from Calderdale, but a candidate for reintroduction
HYPNALES	HYPNALES						
Amblystegiaceae							
Flagellate Feather-moss	Hyocomium armoricum						
Rusty Hook-moss	Scorpidium revolvens						
CLUBMOSES	LYCOPODIALES						
Lycopodiaceae							
Fir Clubmoss	Huperzia selago						
Stag's-horn Clubmoss	Lycopodium clavatum						
Alpine Clubmoss	Diphasiastrum alpinum						
LIVERWORTS	MARCHANTIOPHYTA						
JUNGERMANNIALES							
Scapaniaceae							
Grove Earwort	Scapania nemorea			LPS	LMDW, UOW		
Western earwort	Scapania gracilis						Humid rock faces and tree trunks.
Jubulaceae							
Hutchins' hollywort	Jubula hutchinsiae						Ravines, vertical rock faces and boulders in splash zone.

Hutchins' Hollywort	Jubula hutchinsiae			LPS	LMDW, UOW		
Plagiochilaceae							
Spotted featherwort	Plagiochila punctata						Trees and rock faces, usually close to watercourses.
Prickly featherwort	Plagiochila spinulosa						Trees and rock faces, usually close to watercourses.
Adelanthaceae							
Deceptive featherwort	Pseudomarsupidium decipiens (<i>Adelanthus decipiens</i>)						Dry rock faces in humid woods. Occasionally on tree bases or dead wood.
Lepidoziaceae							
Rock fingerwort	Lepidozia cupressina						Rocks, tree bases and decaying wood, often near ravines
PORELLALES							
Scapaniaceae							
Delicate Flapwort	Endogemma caespiticia						

Key:

LPS Local Priority Species

LMDW Lowland Mixed Deciduous woodland

UH Upland heathland and blanket bog

UOW Upland oakwood

FUNGI

Several nationally significant species of fungi are known to occur in Calderdale. However, assessing fungi can be challenging due to their unique ecology, as only the fruiting bodies are recorded. These appear only at specific stages of the lifecycle and some species only fruit once every 10 to 20 years. Survey work is ongoing to document fungi in Calderdale.

Common name	Scientific name	National	Regional	Local	Habitat	Ref	Notes
AGARICALES							
Waxcaps and allies	Hygrophoraceae						
Date Waxcap	Hygrocybe spadicea	PS	WYPS	LPS	UG		
Rosy Woodwax	Hygrophorus pudorinus	PS	WYPS	LPS	UG		
Pink Waxcap	Hygrocybe calyptriformis var. calyptriformis			LPS	UG		
Glistening Waxcap	Gloioxanthomyce				UG		Endangered
Jubilee Waxcap	Gliophorus reginae				UG		Vulnerable
Pinkgills	Entolomataceae						
Big Blue Pinkgill	Entoloma bloxamii	PS			UG		
Entoloma atroramadidum	Entoloma atroramadidum				UG		
Entoloma luteobasis	Entoloma luteobasis				UG		
Entoloma maximum	Entoloma maximum				UG		
Tricholomataceae							
Mealy Meadowcap	Pseudotricholoma metapodium				UG		Endangered
Lyophyllaceae							
Black Magic	Dermoloma magicum				UG		

CANTHARELLALES							
Club and Coral Fungi	Clavariaceae						
Straw Club	<i>Clavaria straminea</i>			LPS	UG		
PEZIZALES							
Discinaceae							
False Morel	<i>Gyromitra esculenta</i>			LPS	CW, DW		Grows on sandy soil in temperate coniferous forest and occasionally deciduous woodland
BOLETALES							
Boletes	Boletaceae						
Old Man Of The Woods	<i>Strobilomyces strobilaceus</i>			LPS	DW, UOW		
Ghost Bolete	<i>Leccinum holopus</i>			LPS	WW		Found beneath birch, mainly on wet heathland, woodland edges and scrub
Dusky Bolete	<i>Porphyrellus porphyrosporus</i>			LPS	CW, WW		
HELOTIALES							
Earthtongues	Geoglossaceae						
Olive Earthtongue	<i>Microglossum olivaceum</i>	PS			WW		

AGARICOMYCETES							
Squamanita							
Powdercap strangler	Dissoderma paradoxum				UG		

(Data on fungi kindly provided by the National Trust and West Yorkshire Ecology Services)

Key:

PS – UK Priority Species

WYPS – West Yorkshire Priority Species

LPS – Local Priority Species

Habitats:

CW Coniferous woodland

DW Deciduous woodland

UG Unimproved grassland

UOW Upland oakwood

WW Wet Woodland

LICHENS

Lichens are under-recorded in Calderdale, despite the borough's ideal combination of woodland habitats and wet weather that supports their growth. Field work is needed to contribute a deeper understanding of the species present in the borough. We are also actively seeking more lichen records to better inform our conservation efforts.

Common name	Scientific name	National	Regional	Local	Habitat	Ref	Notes
ACAROSPORALES							
<i>Acarosporales</i>							
Acarospora veronensis	Acarospora veronensis						
CALICIALES							
<i>Physciacaea</i>							
Buellia pulvrea	Buellia pulvrea						
VERRUCARIALES							
<i>Verrucariaceae</i>							
Verrucaria funckii	Verrucaria funckii						
LECIDIALES							
<i>Lecideaceae</i>							
Lecidea fuliginosa	Lecidea fuliginosa						
PELTIGERALES							
<i>Collemataceae</i>							
'Cushion jelly' or 'Octopus suckers'	Gabura fascicularis (Collema fascicularis)				Ash, hazel, willow, elm and old oak		Base-rich bark and rock but particularly old, undisturbed hazel.

'Blobby' jelly-skin lichen	<i>Leptogium brebissonii</i>				Ash, hazel, willow, elm and old oak		On base-rich bark and mossy, base-rich rocks.
Frilly-fruited jelly-skin lichen	<i>Leptogium burgessii</i>				Ash, hazel, willow, elm and old oak		On base-rich bark and mossy, base-rich rocks.
Blue jelly-skin lichen	<i>Leptogium cyanescens</i>				Ash, hazel, willow, elm and old oak		On mossy, base-rich trees and rocks, usually near watercourses.
<i>Lobariaceae</i>							
Tree lungwort	<i>Lobaria pulmonaria</i>				Ash, hazel, willow, elm and old oak		On base-rich bark and rock
Lob scrob	<i>Lobarina scrobiculata</i> (<i>Lobaria scrobiculata</i>)				Ash, hazel, willow, elm and old oak		Mainly on old base-rich trees, occasionally rocks
Parchment lichen	<i>Ricasolia amplissima</i> (<i>Lobaria amplissima</i>)				Ash, hazel, willow, elm and old oak		Mainly on old base-rich trees, occasionally rocks
Green satin lichen	<i>Ricasolia virens</i> (<i>Lobaria virens</i>)				Ash, hazel, willow, elm and old oak		On base-rich bark and rock. More shade-tolerant than other <i>Lobaria</i> species.
<i>Nephromataceae</i>							
A kidney lichen	<i>Nephroma laevigatum</i>				Ash, hazel, willow, elm and old oak		On base-rich bark and rock.

Powdery kidney lichen	Nephroma parile				Ash, hazel, willow, elm and old oak		On base-rich bark and rock.
<i>Pannariaceae</i>							
Brown-shingle lichen	Nevesia sampaiana (Fuscopannaria sampaiana)				Ash, hazel, willow, elm and old oak		Base-rich bark on old trees.
Mealy-rimmed shingle lichen	Pannaria conoplea				Ash, hazel, willow, elm and old oak		On mossy, base-rich trees
Red-eyed shingle lichen	Pannaria rubiginosa				Ash, hazel, willow, elm and old oak		On mossy, base-rich trees and rocks.
Black-bordered shingle lichen	Parmeliella triptophylla				Ash, hazel, willow, elm and old oak		On shaded, mossy base-rich trees and rocks
<i>Peltigeraceae</i>							
Floury dog lichen	Peltigera collina				Ash, hazel, willow, elm and old oak		On mossy, base-rich trees and rocks
A dog lichen	Peltigera collina				Ash, hazel, willow, elm and old oak		On mossy, base-rich trees and rocks
<i>Pseudocyphellariaceae</i>							
Yellow specklebelly	Pseudocyphellaria citrina (Psuedocyphellaria crocata)				Ash, hazel, willow, elm and old oak		In sheltered woods on mossy, base-rich trees and rocks
Norwegian specklebelly	Pseudocyphellaria norvegica				Ash, hazel, willow, elm and old oak		In sheltered woods on mossy, base-rich trees and rocks.

Stictaceae							
A stinky Sticta	<i>Sticta fuliginosa</i> s. lat.				Ash, hazel, willow, elm and old oak		On mossy, base-rich trees and rocks.
Floury Sticta	<i>Sticta limbata</i>				Ash, hazel, willow, elm and old oak		On mossy, base-rich trees and rocks
A stinky Sticta	<i>Sticta sylvatica</i>				Ash, hazel, willow, elm and old oak		On mossy, base-rich trees and rocks
LECANORALES							
Parmeliaceae							
Horsehair lichen	<i>Bryoria fuscescens</i>				Oak, birch and alder		On acid bark trees and rock - very sensitive to air pollution.
Black-eyed Susan	<i>Bunodophoron melanocarpum</i>				Oak, birch and alder		On mossy, acidic rock
Speckled sea-storm lichen	<i>Ceterelia olivetorum</i> s. lat.				Oak, birch and alder		On mossy acid-bark trees, rarely on rock.
Smooth loop lichen	<i>Hypotrachyna laevigata</i>				Oak, birch and alder		On mossy acid-bark trees and acid rock
Green loop lichen	<i>Hypotrachyna sinuosa</i>				Oak, birch and alder		On well-lit acid-bark trees and rocks e.g. woodland edges, wood pasture.
Tailed loop lichen	<i>Hypotrachyna taylorensis</i>				Oak, birch and alder		On mossy acid-bark trees and acid rocks.
Tree flute	<i>Menegazzia terebrata</i>				Oak, birch and alder		On shaded acid bark, including

							heather stems, and acidic rocks.
Hairy-spined shield lichen	<i>Parmelinopsis horrescens</i>				Oak, birch and alder		On acid to neutral bark.
Desperate Dan	<i>Parmotrema crinitum</i>				Oak, birch and alder		On well-lit, mossy, acid- bark trees and rock
MYCOBLASTALES							
<i>Mycoblastaceae</i>							
Bloody-heart lichen	<i>Mycoblastus sanguinarius</i>				Oak, birch and alder		On acid bark and rock, also on lignum.
PERTUSARIALES							
<i>Ochrolechiaceae</i>							
A cudbear lichen	<i>Ochrolechia tartarea</i>				Oak, birch and alder		On acid bark and rock.
SPHAEROPHORACEAE							
<i>Sphaerophoraceae</i>							
A coral lichen	<i>Sphaerophorus globosus</i>				Oak, birch and alder		On well-lit mossy acid- bark trees and rock. Also directly on peaty soils.