

Lichens List for Cree Valley Woodlands (2007)

	Status	Glentroot oak woods	Stroan	Knockman	Garlies
<i>Arthonia elegans</i>	Western	√			
<i>Bacidia incompta</i>					√
<i>Biatorrella monasteriensis</i>					√
<i>Calicium viride</i>				√	
<i>C. glaucellum</i>				√	
<i>Catinarina grossa</i>			√		
<i>Cetrelia cetrarioides</i>			√	√	
<i>C. olivetorum</i>		√			
<i>Chaenotheca brunneola</i>				√	
<i>Cladonia caespiticia</i>		√			
<i>C. chlorophaea s.lat</i>		√			
<i>C. luteoalba</i>				√	
<i>C. polydactyla var. polydactyla</i>		√			
<i>C. portentosa</i>		√			
<i>C. pyxidata</i>		√			
<i>C. squamosa var.squamosa</i>		√			
<i>C. squamosa var. subsquamosa</i>		√			
<i>Collema flaccidum</i>			√		
<i>Dermatocarpon fluviatile</i>					√
<i>D. luridum</i>		√			
<i>Dimerella lutea</i>	Western		√		
<i>Evernia prunastri</i>		√			√
<i>Flavoparmelia caperata</i>		√			
<i>Graphis elegans</i>		√			
<i>Graphis scripta</i>		√			
<i>Haematomma ventosum</i>				√	
<i>Hypogymnia phsodes</i>		√			
<i>H. tubulosa</i>		√			
<i>Hypotrachyna laeviggata</i>		√			
<i>H. revoluta</i>		√			
<i>H. sinuosa</i>		√			
<i>H. taylorensis</i>		√			
<i>Lecanora chlarotera</i>		√			
<i>L. expallens</i>		√			
<i>L. jamesii</i>			√		
<i>Lecidea friessii</i>				√	
<i>L. leucophaea</i>		√			
<i>L. sanguineoatra</i>	Nat. scarce	√			
<i>L. templetonii</i>			√		
<i>Lepraria sp.</i>		√			
<i>Lobaria pulmonaria</i>	anc.wdInd.ind				√
<i>Melanelia exasperata</i>		√			
<i>M. fuliuginosa</i>		√			
<i>M. subaurifera</i>		√			
<i>Menegazzia terebrata</i>		√			
<i>Micarea chrysopthalma</i>				√	
<i>Mycoblastus caesius</i>		√			
<i>M. sanguinarius</i>		√		√	
<i>Nephroma laevigatum</i>	anc.wdInd.ind				√
<i>N. parile</i>	Lob.assn	√	√		√
<i>Normandina pulchella</i>		√	√		
<i>Ochrolechia androgyna</i>		√			

O. frigida				√	
O. inversa				√	
O. tartarea		√	√		
Pachyphiale carneola		√			
Pannaria pityrea			√		
Parmelia arnoldii					√
P. chinense		√			
P. crinitum		√	√		√
P. laevigata	Eu-Atlantic sp		√	√	√
P. laperatum					√
P. saxatilis		√			
P. sinuosa		√	√		
P. sulcata		√			
P. taylorensis			√		
P. tiliacea		√			
Parmeliella corallinoides			√		
P. parvula					√
P. testacea	oceanic		√		
P. laperata horzonalis		√			√
Parmeliopsis aleurites				√	
Peltigera collina	sub-oceanic		√		√
P. hymenina		√			
P. membranacea					√
Pertusaria albescens var. albescens		√			
P. amara		√			
P. hymenea		√			
P. leioplaca		√			
P. pertusa		√			
Phlyctis argena		√			
Platismatia glauca		√			√
Pseudevernia furfuracea var.furfuracea		√			
Punctelia subrudecta		√			
Ramalina farinacea		√			
Sphaerophorous globosus		√		√	
Stenocybe septata	anc.holly	√			
Sticta fuliginosa		√	√		√
S. limbata		√	√		√
S.sylvatica	sub-oceanic		√		√
Thelotrema lepadinum		√			
Usnea subfloridana					√

Lichens are an amazing example of symbiosis - two organisms living together in partnership for mutual benefit. A lichen consists of a fungus and a photosynthetic partner, algae or cyanobacteria.

The algae produce sugars by fixing carbon dioxide from the atmosphere, which provides energy for the fungus. The fungus in return provides minerals and a protective environment for the photosynthetic organisms.

There are approximately 1,700 lichenized fungi in the United Kingdom, the majority are ascomycete fungi. Glentool oak woods has been the most intensively surveyed site within the Cree Valley.

Rose and James carried out a brief survey of lichens in the Cree Valley woodlands in 1976. Coppins visited the Glentool Oakwoods SSSI in 1981 and 1989.

A site visit was carried out in October 2004 by Joe Hope to record data to satisfy indirect monitoring of habitat condition and direct monitoring of selected habitats containing notable species.

Within the SSSI at Caldons Wood, Hope recorded a *Lobaria pulmonaria* community on a triple-stemmed oak in the north east corner adjacent the former campsite. The Lobarian species were *Pachyphiale carneola*, *Parmotrema crinitum*, *Sticta fuliginosa* and *S. limbata*.

The lichen communities within these woodlands are generally small in area but in good condition. In 2008, Hopkins recorded *S. fuliginosa* on a number of mature oak and hazel trees scattered throughout Caldons and the Holm Wood. Old holly trees support *Stenocybe septata* and *Thelotrema lepadinum*. Hope had the general impression of more species being found in previous surveys.

The low number of notable species found may reflect the short duration of the visit and the small size of some of the species. Within the SSSI at the Buchan Wood, Hope reported that the Crustose cover was generally low (<10%) and generally non-diverse with 95% cover comprising *Ochrolechia androgyna* and *Lepraria* spp. No Lobaria lichens were found on any substrate.

Within the SSSI at Glenhead, the sessile oaks are mature and well spaced but again, Crustose cover is low even on the edge trees (<10%) and generally non-diverse with 95% of cover comprising *Ochrolechia androgyna* and *Lepraria* sp. At the eastern end of Glenhead a large ash tree supports *Sticta fuliginosa* and *S. limbata* as well as *Nephroma parile*. The Lobaria lichens are scarce both within the Glentool oak woodland SSSI and elsewhere in the Cree Valley woodlands.

These upland woodlands are often in exposed positions, at Glentool the recent removal of the conifer plantations has probably affected the micro-climate of the upland oak woodland. The scarcity of Lobaria lichens and the presence of acidophilous species on the basic bark of ash and rowan probably indicate the impact of past acid deposition. The *Sticta* lichens are particularly abundant further west in the Holm Wood and at Stroan Wood. Similarly,

Garlies Wood further south in the Cree Valley is a regionally important lichen site that contains *Lobaria pulmonaria*.

The Wood of Cree SSSI which has a history of coppice management has a poor lichen community. Glentool oak woodlands SSSI consists of three discrete areas: 1. Caldons, 2. Buchan and 3. Glenhead. Caldons in the west has a number of compartments, it was heavily coppiced in the early 19th century and contains a number of open areas. Glentool woodlands was surrounded by conifer afforestation until recently but recent felling has left the woodlands exposed to wind. Caldons is the richest of the three woodlands lichenologically, it has an abundance of *Sticta* sp. but the site overall, in common with the Cree Valley, has a scarcity of Lobaria lichens. Buchan and Glenhead contains mature canopy trees; a large ash tree at Glenhead supports large quantities of *Sticta fuliginosa* and *S. limbata* with *Nephroma parile*. A three pronged oak, in the east of Caldons, supports the Lobaria community of *Pachyphiale carneola*, *Sticta fuliginosa* and *S. limbata*. All the specimens are healthy but the communities are small, a common feature of the woodlands. The lack of a range of Lobaria lichens may be attributable to acid deposition. The occasional goats that enter the woodlands graze the bryophytes and lichen communities at the base *pulmonaria* are Garlies Wood

The only sites, at present, known to support *Lobaria pulmonaria* are Garlies Wood and a stand of mature hazel at the Newton Stewart golf course.