

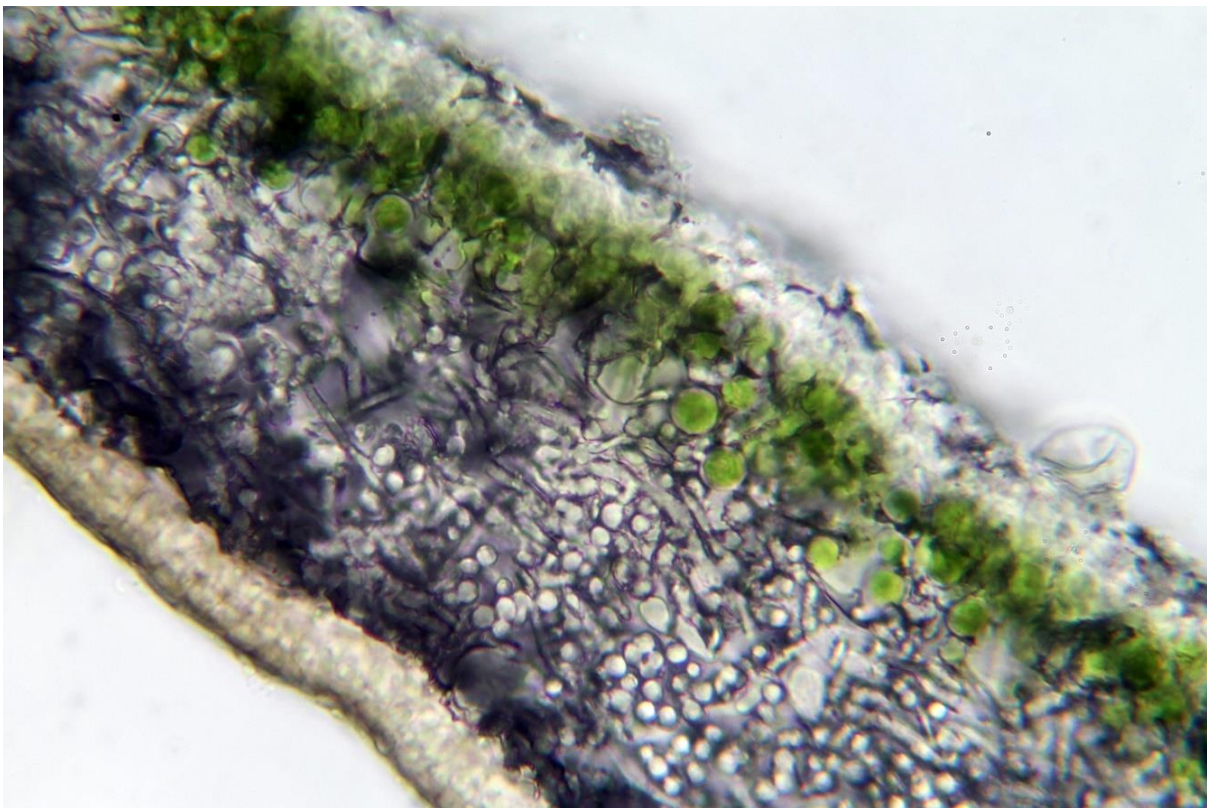
**Linslade Wood, Leighton Buzzard**  
**Lichen Survey**  
**Grid reference SP9026**  
**August 2023**

This report is intended as a brief introduction to the world of lichens and to provide a record of the 56 species of lichen and 5 species of lichenicolous fungi that were noted in Linslade Wood during a survey undertaken by Paula Shipway and Andrew Harris. These records will provide a useful baseline for any surveys undertaken in the future and so help with our understanding of how environmental changes are affecting lichens.

**An Introduction to the Lichens recorded during the survey**

Before the year 2016 lichens were believed to be an association of two organisms, a fungus with at least one alga or cyanobacterium but then a lichenologist called Toby Spribille discovered that there is also yeast within this fascinating partnership. The alga photosynthesises sunlight and produces the sugars that are needed to sustain the lichen while the fungus provides a protected habitat where the alga can thrive.

Lichens come in many forms including numerous leaf-like (foliose) species.



**Photo 1** - Green algal cells and fungal hyphae are visible in this x 600 micrograph of a section taken from the lobe of a foliose species, *Parmotrema perlatum*.



**Photo 2** – *Parmotrema perlatum*

With practice most species can be identified on sight through a x10 hand lens. This foliose species has tiny dark hairs (cilia) around the outside edge of some of the more central lobes and help to confirm identification.



**Photo 3** – Cilia on *Parmotrema perlatum*



**Photo 4 – *Xanthoria parietina***

This is now a very common foliose lichen in the region due to the increasing levels of atmospheric nitrogen pollution and the 'jam tart' fruiting bodies of the fungal partner are clearly visible. When this lichen grows in full sunshine it produces a chemical sunblock which also gives the species its distinctive yellow colour. However, when it grows on the underside of a branch the lobes are a dull green grey colour. The other lichen visible in the photograph is one of the grey ciliate *Physcia* species although it is not possible to be certain of the exact species as it is a young specimen but is also abundant in the region due to the high levels of atmospheric nitrogen pollution.



**Photo 5 – *Hypogymnia physodes***  
A foliose species with inflated lobes

Two species of pin lichen were recorded on Ash trees in the ancient woodland area. The fruiting bodies on these lichens resemble pins and the spores are produced in the head. The 'pins' are very small, standing around 1mm high and hidden in crevices in bark.



**Photo 6** – *Chaenotheca brachypoda*

A distinctive pin lichen with yellow pruina on the stalk and the head of the 'pin'.

Lichens have two common methods of reproduction, one where the fungal partner produces spores which may or may not meet up with an appropriate alga when they have been released. The other method is when 'ready to go' tiny bundles of fungal hyphae mixed with algal cells are produced. These little propagules (soredia) are dispersed in rain or by the wind. Some species are formed entirely of soredia and an interesting example of these leprose species was recorded on a moribund Larch tree in the 1990s planted area.



**Photo 6 – *Chrysothrix candelaris***

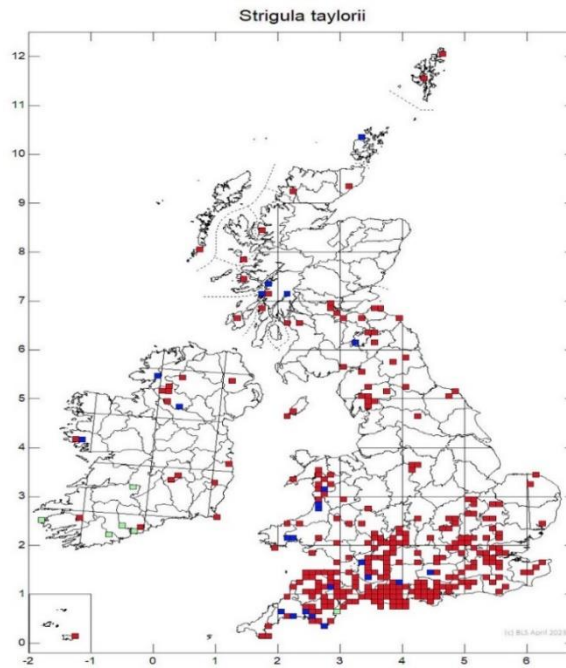
This leprose lichen consists entirely of soredia and is easily recognised due of its bright yellow colour.

Crustose species are very firmly attached to the substrate and difficult to remove. One such species, *Strigula taylori*, can easily be mistaken for a dark stain as seen on the left-hand side of this Sycamore trunk.



**Photo 7 – *Strigula taylori***

This species has colonised quickly in southern England during the last 23 years as shown by the distribution map below copied from the British Lichen Society's website.



The red squares on this map show the records that have been made since 2000.

The most significant record from the Wood was also a crustose species and on an Ash trunk just inside the ancient woodland area. *Pyrenula chlorospila* is one of the 'ancient woodland' species and rare in Buckinghamshire.



**Photo 8 – *Pyrenula chlorospila***

This species has a thick slightly greasy looking thallus with white flecks.



**Photo 9** – A habitat photograph for *Pyrenula chorospila* which was recorded on the young Ash on the right-hand side of the path.

### Lichens and Lichenicolous fungi recorded in Linslade Woods

British Lichen Society Number	Taxa		Evaluation	Substrate
0069	<i>Arthonia radiata</i>		LC	Cort
1540	<i>Arthopyrenia analepta</i>	{F}	LC	Cort
1542	<i>Arthopyrenia punctiformis</i>	{F}	LC	Cort
0144	<i>Bacidia delicata</i>		LC	Cort
0242	<i>Caloplaca cerinella</i>		LC	Cort
0297	<i>Candelariella reflexa</i>		LC	Cort
0316	<i>Catillaria nigroclavata</i>		LC NS	Cort
0354	<i>Chrysothrix candelaris</i>		LC	Cort
0489	<i>Dimerella pineti</i>		LC	Cort
2108	<i>Erythrimum aurantiacum</i>	{LF}	LC	Lic
0511	<i>Evernia prunastri</i>		LC	Cort
0521	<i>Fuscidea lightfootii</i>		LC	Cort
2240	<i>Heterocephalacria physciacearum</i>	{LF}	LC NS	Lic
0582	<i>Hypogymnia physodes</i>		LC	Cort
2468	<i>Hypotrachyna afrorevoluta</i>		LC	Cort

2577	<i>Hypotrachyna revoluta s. str.</i>		LC	Cort
2071	<i>Illosporopsis christiansenii</i>	{LF}	LC NS	Lic
0613	<i>Lecania cyrtella</i>		LC	Cort
0159	<i>Lecania naegelii</i>		LC	Cort
0685	<i>Lecanora argentata</i>		LC NS	Cort
0636	<i>Lecanora carpinea</i>		LC	Cort
0641	<i>Lecanora confusa</i>		LC	Cort
0649	<i>Lecanora expallens</i>		LC	Cort
2506	<i>Lecanora hybocarpa</i>		NE NR	Cort
0797	<i>Lecidella elaeochroma f. elaeochroma</i>		LC	Cort
1020	<i>Melanelixia subaurifera</i>		LC	Cort
0954	<i>Opegrapha ochrocheila</i>		LC	Cort
0958	<i>Opegrapha rufescens</i>		LC	Cort
1022	<i>Parmelia sulcata</i>		LC	Cort
1008	<i>Parmotrema perlatum</i>		LC	Cort
1079	<i>Pertusaria leioplaca</i>		LC	Cort
1107	<i>Phaeophyscia orbicularis</i>		LC	Cort
1112	<i>Physcia adscendens</i>		LC	Cort
1113	<i>Physcia aipolia</i>		LC	Cort
1120	<i>Physcia tenella</i>		LC	Cort
1168	<i>Porina aenea</i>		LC	Cort
1630	<i>Psoroglaena stigonemoides</i>		LC	Bry
1989	<i>Punctelia jeckeri</i>		LC	Cort
1021	<i>Punctelia subrudecta s. lat.</i>			Cort
1234	<i>Ramalina farinacea</i>		LC	Cort
1235	<i>Ramalina fastigiata</i>		LC	Cort
1320	<i>Scoliciosporum chlorococcum</i>		LC	Cort
1375	<i>Strigula jamesii</i>		LC NS	Cort
2068	<i>Teloggalla olivieri</i>	{LF}	NE NR	Lic
2260	<i>Unguiculariopsis thallophila</i>	{LF}	LC NS	Lic
1471	<i>Usnea subfloridana</i>		LC	Cort
1530	<i>Xanthoria parietina</i>		LC	Cort
1531	<i>Xanthoria polycarpa</i>		LC	Cort
0049	<i>Anisomeridium polypori</i>		LC	Cort
0070	<i>Arthonia spadicea</i>		LC	Cort
0470	<i>Chaenotheca brachypoda</i>		LC	Cort
0349	<i>Chaenotheca trichialis</i>		LC	Cort
0375	<i>Cladonia coniocraea</i>		LC	Lig
0504	<i>Enterographa crassa</i>		LC	Cort
0533	<i>Graphis scripta</i>		LC	Cort
1629	<i>Lepraria finkii</i>		LC	Bry
0820	<i>Lepraria incana s. lat.</i>			Cort
0964	<i>Opegrapha varia</i>		LC	Cort
1110	<i>Phlyctis argena</i>		LC	Cort
1221	<i>Pyrenula chlorospila</i>		LC	Cort
1378	<i>Strigula taylorii</i>		LC NS Sc IR	Cort

## Key

LC - Least Concern

NS - Nationally scarce

NR - Nationally rare

F - Fungus

LF - Lichenicolous fungus

Cort - Corticolous (growing on trees)

Lig – Lignicolous (growing on wood)

Bry – Bryophilous (growing on mosses and liverworts)

## Notes

- 1 A lichenicolous fungus is one that is parasitic on a lichen.
- 2 A few fungi have been adopted by lichenologists and given British Lichen Society Numbers because their interaction with alga is tentative.
- 3 A few anomalies on the spreadsheet are explained through under-recording.

## References

Smith C. W., Aptroot A., Coppins B. J., Fletcher A, Gilbert O. L., James P. J. & Wolseley P. A., (editors) 2009, **The Lichens of Great Britain and Ireland**, London, British Lichen Society

Woods R. G. & Coppins B. J., 2012, **A Conservation Evaluation of British Lichens and Lichenicolous Fungi**, Species Status 13. Joint Nature Conservation Committee, Peterborough

Frank S. Dobson, 2011 Edition, **Lichens, An illustrated Guide to the British and Irish Species**. Published by the Richmond Publishing Co. Ltd.

<https://britishlichensociety.org.uk>

<https://fungi.myspecies.info>

