The Lichens of Orchid Glade, Boulge, Suffolk.

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The site, approximately ten acres, on heavy, originally, arable land and now with the surface compacted, uneven and liable to flooding, runs north south as an approximate rectangle. The outer edge consists of dense woodland, of basically small boled trees, which is dark and devoid of lichens, but which acts as a good shelterbelt and therefore farm sprays and fertilizers are excluded, as evidenced by the lack of much *Xanthorion* elements at the site.

Inside this shelterbelt is a perimeter barbed wire fence with gates at strategic intervals, though the shelterbelt is part of the reserve. Inside the fence, a ride approximately 15 to 20ft wide exists, except at the extreme southern boundary, which is still wooded and easily floods, during periods of heavy rain.

The centre of the reserve, is covered with trees of various ages except for a smallish open area near the centre, where the orchids are situated, though even here a few free standing trees, willow, ash, field maple and three apples are scattered about. Also present is a small water filled hole, surrounded by 1 inch square wooden stakes, colonised with lichens.

Species List for the site.

During the visit to the site, 28 lichens with 1 unidentified, 2 fungi, recorded by lichenologists, as they were once thought to be lichenised and 2 lichenicolous fungi (fungi that live on or in lichens), were seen. The ranking given for each species below, reflects its **presence on site** and *not its abundance in Suffolk* as a whole.

Amandinea punctata Rare, on willows on the western boundary ride; on 6 inch oak bole at the northwest corner of the central open area amongst gorse; also west-facing on tall alders south of pond at edge of wooded area and lignum of the 1 inch worked wood posts around the water hole.

Arthonia pruinata Rare, on shady underside of partially fallen willow in eastern ride.

Arthonia punctiformis Common, a fungus, on the most northerly of the three apples in the central open area.

Arthonia radiata Frequent on young oaks on the eastern ride; common on ash poles on the eastern ride; also on some of the open ash trees outside the wire fence and on young oaks in the central area.

Caloplaca obscurella Very rare, on burr of the southerly of the two massive willows on the western boundary ride and even more rare for Suffolk, as it is fruiting.

Candelariella reflexa Very rare, poorly developed on the northerly and better on burr of the southerly, of the two massive willows on the western boundary ride.

Cliostomum griffithii Uncommon, on boles of bigger oaks on the eastern ride.

Cyrtidula quercus Occasional, a fungus, on sunny non-algalised ¹/₄ inch twigs of oak on the eastern ride and also in the central open area. *C. hippocastani* probably present on hawthorn, but not recorded.

Evernia prunastri Rare, west-facing on an ash pole at the edge of the wood on the eastern ride, but outside the fence; also oak amongst gorse in the central area.

Lecania cyrtella Rare, on a felled ash pole on the eastern ride.

Lecanora carpinea Rare, on the 6 inch oak bole amongst gorse at the northwest corner of the central open area.

Lecanora chlarotera Abundant, on many of the larger oak boles and bigger branches on the eastern ride; also ash poles on the northern east/west woodland ride; on oak amongst gorse in the central area; west-facing on boles of alder; rough barked apple in the central area. Occasionally the fruits of some thalli were found to be pruinose, i.e. with a floury covering.

Lecanora conizaeoides Rare, on lignum of worked 1 inch post surrounding the 18 inch deep water filled hole, near the apples.

Lecanora expallens Rare, on oak on the northern east/west woodland ride; on the northerly of the two massive willows on the western boundary ride, on shady side; also west-facing on tall alders, south of pond at edge of wooded area; on lignum of 1 inch wooden posts around the water hole.

Lecanora hagenii Rare, on west-facing sides of boles of alder south of pond at edge of wooded area.

Lecanora symmicta Rare, on the northern east/west woodland ride; also oak with gorse at the northwest corner of the central area.

Lecidella elaeochroma More abundant than *L chlarotera* and in one instance just pycnidiate, i.e. with propagules, but not fruits. On oak, ash and alder etc.

Leparia incana Rare, on the dry shady western side of a tall willow at back of pond.

Melanelixia subaurifera Frequent, on sunny, relatively large oak branches of trees on the eastern ride; mature oak branches amongst gorse at the northwest central area.

Micarea denigrata Rare, on lignum on the top of one of the worked 1 inch posts around the water hole in the open area.

Parmelia sulcata Rare, on the northern east/west ride, on a single ash pole outside fencing; present on both the two large willows on the western boundary ride. Rare on the northerly one and abundant on the southerly tree.

Phaeophyscia orbicularis Rare, pale shade form on ash poles on the eastern ride; common and dark on buttress roots of willow on the western boundary ride.

Physcia adscendens Many immature young thalli; rare on young oak on the northeast corner, where it was large enough to allow a determination. Also abundant, on the oak amongst gorse at the northwest corner of the open area.

Physcia tenella Many immature young thalli on ash poles on eastern ride and on young oaks. Abundant on the oak amongst gorse at the northwest corner of the open area. Much more common than *P. adscendens* at this site; part of the Xanthorion elements on the field maple.

Punctelia jeckeri Rare, on the southern large willow on the western boundary ride.

Ramalina farinacea Rare, on young oak, at the northwest corner of the reserve; also on west-facing sides of boles of alder south of pond at edge of wooded area.

Syzygospora physciacearum A lichenicolous fungus on *Physcia* thalli on young oak at northwest corner of the open area. This is the second site for this species in Suffolk.

Xanthoria candelaria On young oak branches on eastern ride.

Xanthoria parietina Fairly sparse, on most of the trees on the reserve. Young oaks on the east ride; ash poles on the east ride and outside the fence; on the two large willows, on the western boundary ride. Here both the parietin + and parietin – form, being present, the latter grey, apart from the outer edge of the thallus, a genetic aberration which as a result, prefer shady conditions. The exception to the status of this species on the reserve could be seen with two free standing willows on the central open area, where the boles were bright yellow due to this lichen and a field maple close by.

Xanthoria polycarpa Rare and scattered over the reserve. On the fallen willow on the eastern ride; branches of the oak amongst gorse at the northwest corner of the central area; west-facing on tall alders, south of pond at edge of wooded area; field maple.

Xanthoriicola physciae A lichenicolous fungus colonising *Xanthoria parietina* on ash pole outside the fencing near the east corner of the reserve.

Virtually none of the species seen at the reserve are very rare in Suffolk, except for the *Syzygospora physciacearum*, which is known from only one other site in the county.

It would be a pity if the extant lichen flora generally, disappeared. The two mature willows on the western boundary ride are interesting lichenoligically, proven by the presence of the fertile material of *Caloplaca obscurella*.

It is thought that the majority of the trees on the reserve are virtually free of *Xanthorion* elements (*Xanthoria* spp. and *Physcia* spp.), because the shelter-belt on the boundary will have undoubtedly provided some protection and that together with the growth of the trees and general shading in the centre, will have prevented much colonisation by *Xanthorias*.

Xanthoria parietina is a species that prefers a lot of nitrogen and does particularly well in that environment, well shown by its exuberance around stock farms, bird perching areas and nowadays with much nitrogen oxide fumes from vehicle exhausts, roadside verge trees. The two large free standing willows and the field maple in the central clear area, particularly due to the nature of the base rich bark, will not have had this protection and have therefore developed an abundant growth of this species.

It is felt that too much general felling might increase the eutrophication of the site and be deleterious to the lichens, though the top hamper of the partially fallen willow in the eastern ride could with advantage be pollarded at 10 - 12 feet above ground level, to prevent further damage and maintain the presence of the *Arthonia pruinata* at the base of the tree, though the other multi trunked tree on the other side of the ride does not support any lichens and could be lost without harm, as could the two large silver birches, similarly, if necessary, due to their shading effect and acid bark.

Felling of the ash poles would not reduce the lichen population, as with their density due to self-seeding, conditions have become too dark for any considerable lichen growth to occur and develop. However the small freestanding ash in the central area, though the top is dead from *Chalara* supports a potentially very interesting lichen, yet to be determined, so the lower living bole should be kept if at all possible.

The status quo should be maintained to prevent erosion of the orchid area

and it would be interesting to consider leaving the cut down timber on site as some of the lichen flora was only seen on this substrate, including *Lecania cyrtella* and a lichenicolous fungus on *Lecanora chlarotera*, yet to be determined.

Dr C. J. B. Hitch July 2nd. 2014



Arthonia radiata on ash pole, with white thallus and black stellate innate fruits.



Lecidella elaeochroma on felled ash pole. Also has a white thallus, but the black fruits are round sessile and with a raised margin.



Lecanora chlarotera on oak, with pale thallus and fruits which have a pale margin and a pale toffee coloured disc.