Cambridge Lichen Group meeting in Cambridge (TL45J)
14th December 2014

The overall impression was of rather impoverished lichen communities in this western side of the city. Just as we were giving up on finding any decent corticolous communities we came across some mature ash trees on the Observatory site and here we found *Candelaria pacifica*, a lichen species new to VC 29 (Cambridgeshire). While rich sites are a treat to visit, recording mediocre sites is certainly not wasted effort. For instance, the dearth of foliicolous lichens at Adams Road Sanctuary is the reality now; the situation may change in future decades with differing climatic and pollution regimes.

Adams Road Sanctuary (TL437.587)

Evergreen leaves (mainly ivy and holly) are present in quantity and humid sites generally tend to produce richer foliicolous lichen communities than dry ones. Nevertheless, such lichens are still rather rare in Eastern England, so it is not a great surprise that the only example we found was *Phylloblastia inexpectata*.

Elder bushes were scrutinized for the tiny species which are sometimes found on their shaded trunks. Our searching was rewarded with the discovery of the minute orange fruits of *Piccolia ochrophora*. Smith *et al*. (2009) state that it is 'rare' and give its distribution as: "S.W. British Isles, with some eastern occurrences, local." Our recording in the region has shown that *P. ochrophora* is fairly frequent but requires careful searching to find it.

In the last three decades the lichenological landscape has changed beyond recognition. As recently as the 1970s the "pollution lichen" (*Lecanora conizaeoides*) dominated tree bark and siliceous stonework across lowland England (including Cambridgeshire); now it clings on in small quantity on weathered fences and sandstone headstones, having all but disappeared from trees. A small colony of *L. conizaeoides* was found on a wooden bench seat in Adams Road Sanctuary. The sulphur dioxide pollution which favoured *L. conizaeoides* was toxic to most other species of lichen. The decline of sulphur dioxide levels over recent decades has allowed a spectacular re-colonisation by successive waves of lichen species. Some of the species appearing in our eutrophicated landscape are the "new" species, not newly evolved, but formerly so rare that no trace of them was detected before the 1980s. Around the turn of the Millennium there was a flurry of papers in *The Lichenologist* describing these species as new to science. Several of these lichens are now familiar members of our local lichen communities. One example is *Lecanora barkmaniana* which is present on a wooden bench seat in the Sanctuary.

Species recorded at Adams Road Sanctuary:

49	*Anisomeridium polypori*	LC	Cort	CSm
69	*Arthonia radiata*	LC	Cort	CQ
297	*Candelariella reflexa*	LC	Lig	LWT
298	*Candelariella vitellina f. vitellina*	LC	Lig	LWT
613	*Lecania cyrtella*	LC	Cort	CSm
627	*Lecanora albescens*	LC	Sax	SCo
2121	*Lecanora barkmaniana*	DD NR	Lig	LWT
635	*Lecanora campestris subsp. campestris*	LC	Sax	SCo
639	*Lecanora chlarotera*	LC	Cort	
643	*Lecanora conizaeoides f. conizaeoides*	LC	Lig	LWT
646	*Lecanora dispersa*	LC	Lig	LWT
649	*Lecanora expallens*	LC	Lig	LWT
661	*Lecanora muralis*	LC	Lig	LWT

675	*Lecanora saligna*	LC	Lig	LWT
688	*Lecanora symmicta*	LC	Lig	LWT
621	*Lecanora umbrina* (*hagenii*)	NE	Cort	CFx
797	*Lecidella elaeochroma f. elaeochroma*	LC	Cort	CFx
1020	*Melanelixia subaurifera*	LC	Lig	LWT
938	*Opegrapha atra*	LC	Cort	CAp
953	*Opegrapha niveoatra*	LC	Cort	
1022	*Parmelia sulcata*	LC	Cort	
2464	*Phylloblastia inexpectata*		Fol	
1120	*Physcia tenella subsp. tenella*	LC	Cort	CFx
1168	*Porina aenea*	LC	Cort	
2070	*Punctelia subrudecta s.str.*	LC	Lig	LWT
1289	*Rinodina gennarii*	LC	Lig	LWT
1373	*Piccolia ochrophora*	LC	Cort	CSm
1871	*Verrucaria elaeina*	LC NS	Met	
1530	*Xanthoria parietina*	LC	Lig	LWT
	Cladonia cf. fimbriata	#N/A	Lig	LWT

Cambridge Observatory (TL431.594)

The limestone walls and windowsills of the old Observatory building support a range of common calcicoles. *Verrucaria ochrostoma* is present in various places and is particularly well developed on a windowsill on the east side of the building where it grows mixed with *Verrucaria nigrescens*. *Verrucaria ochrostoma* is one of the most overlooked of British lichens. Up until September 2013 this species had only been recorded in eight British hectads (NBN Gateway) and is classed as Nationally Rare. Brian Coppins (pers. comm. October 2013) has the following to say: “Funny how some things “take off" and others don't in terms of being recorded. For decades, I was concerned about *V. ochrostoma* (or rather my and others inability to recognize it), it being described so long ago and with such confidence by Borrer! I guess the same was true with *V. elaeina* - Borrer was clearly way ahead of his time.” [William Borrer (13 June 1781 – 10 January 1862), was an English botanist noted for his extensive and accurate knowledge of the plants of the British Islands. In 1813 he commenced, in conjunction with the late Dawson Turner, a work on British lichens which was finally published in 1839]. *Verrucaria ochrostoma* is rather common on calcareous substrata (including concrete), at least in Eastern England. A small area of undisturbed gravel close to the old Observatory building supports a good population of *Collema tenax*, while *Bacidia egenula* was collected as the dominant species on one of the small pebbles. Some of the thalline granules were very pale and gave the impression of white pycnidia. Pycnidia were found to be present on this specimen but were buried in the granules and had dark pigment around the ostioles. Smith *et al.* (2009) state that the pycnidia of this species are “rare, ± immersed, white.”

The corticolous communities at the Observatory site are generally poor but ash trees towards the western side have a good show of lichens including foliose and fruticose species. Of interest is the presence of *Candelaria pacifica*, a recently recognised species which has previously been included in the concept of *C. concolor*. *C. pacifica* forms smaller and sparser lobes and colonies of it are easily overlooked as *Candelariella reflexa*. The most obvious characteristic feature is the lack of a lower cortex to the lobes and this generally requires scrutiny under a dissecting microscope rather than being reliably observed in the field.

An area of ground, reinforced with plastic mesh, has been capped with sand from Breckland. On this sand was found several thalli of cyanolichen with abundant apothecia and scarcely any lobes. There

was excitement as it bore some resemblance to some members of the genus *Lempholemma* and a specimen was collected with the hope that its spores would be simple. Microscopic examination thwarted this suggestion and the spores were found to be 3-septate (to sub-muriform). We now think that this is simply a form of *Collema tenax* with reduced lobes and emphasises the great variability shown by this species.

Species present at Cambridge Observatory:

0038	*Agonimia tristicula*	LC	Bry	
0212	*Amandinea punctata*	LC	Cort	CMa
0107	*Aspicilia contorta subsp. contorta*	LC	Sax	SCo
0145	*Bacidia egenula*	LC NS	Sax	SPe
2613	*Caloplaca austrocitrina*		Sax	SLm
0249	*Caloplaca crenulatella*	LC NS	Sax	SCo
2443	*Caloplaca dichroa*		Sax	SLm
0259	*Caloplaca flavescens*	LC	Sax	SLm
2461	*Caloplaca oasis*		Sax	SCo
0277	*Caloplaca saxicola*	LC	Sax	SCo
0281	*Caloplaca teicholyta*	LC	Sax	SLm
	Candelaria pacifica		Cort	CFx
0291	*Candelariella aurella f. aurella*	LC	Sax	SLm
0297	*Candelariella reflexa*	LC	Cort	CFx
0460	*Collema tenax var. ceranoides*	LC	Terr	
0491	*Diploicia canescens*	LC	Cort	CFx
0511	*Evernia prunastri*	LC	Cort	CFx
0987	*Flavoparmelia caperata*	LC	Cort	CFx
1018	*Flavoparmelia soredians*	LC	Cort	CFx
1125	*Hyperphyscia adglutinata*	LC	Cort	
2071	*Illosporiopsis christiansenii #*		Lic	
0627	*Lecanora albescens*	LC	Sax	SLm
0646	*Lecanora dispersa*	LC	Sax	SLm
0649	*Lecanora expallens*	LC	Cort	
0610	*Lecanora semipallida*	NE ?	Sax	SCo
0803	*Lecidella stigmatea*	LC	Sax	SLm
1974	*Lepraria incana s. str.*	LC	Cort	CFg
1107	*Phaeophyscia orbicularis*	LC	Cort	CMa
1112	*Physcia adscendens*	LC	Other	OPa
1120	*Physcia tenella subsp. tenella*	LC	Other	OPa
1127	*Physconia grisea*	LC	Cort	CMa
1189	*Protoblastenia rupestris*	LC	Sax	SLm
1989	*Punctelia jeckeri*	LC NS	Cort	CMa
2070	*Punctelia subrudecta s.str.*	LC	Cort	CMa
1234	*Ramalina farinacea*	LC	Cort	CFx
1306	*Sarcogyne regularis*	LC	Sax	SLm
1502	*Verrucaria macrostoma f. macrostoma*	LC	Sax	SLm
2514	*Verrucaria nigrescens f. tectorum*		Sax	SLm
1511	*Verrucaria ochrostoma*	DD NR	Sax	SLm
1518	*Verrucaria viridula*	LC	Sax	SLm
1526	*Xanthoria calcicola*	LC	Sax	SCo

1530	*Xanthoria parietina*	LC	Other	OPa
1531	*Xanthoria polycarpa*	LC	Cort	

Additional general records for TL45J

Caloplaca flavocitrina is present on concrete close to the south end of Wilberforce Road. When the areoles of thallus are reduced this species can be very difficult to separate from *C. austrocitrina* which also has very fine, bright yellow blastidia.

Curb stones of acid rock type are present at the southern end of Wilberforce Road. These are well-covered with inconspicuous crustose lichens including extensive sheets of *Lecidella stigmatea*. There are also occasional thalli of *Lecidella carpathica* recognised by their better-developed thallus with warted areoles.

Wooden fence rails near the south end of Wilberforce Road support a rather limited suite of lichens but including very well-developed examples of *Micarea denigrata*. This species is often reduced to a blackish crust with white-tipped pycnidia. When well-formed, apothecia and a warted thallus are also present as seen here.