

Lichen Survey of Henrietta Park 3 April 2019

| Lichens found | Notes |
|----------------------------------|--|
| Prunus | At approx. ST7537865276 Mainly on twigs and branches |
| <i>Xanthoria parietina</i> | |
| <i>Punctelia jeckeri</i> | |
| <i>Flavoparmelia caperata</i> | |
| <i>Physcia tenella</i> | |
| <i>Parmelia sulcata</i> | |
| <i>Lecidella elaeochroma</i> | |
| <i>Melanelixia subaurifera</i> | |
| <i>Candelaria concolor</i> | |
| <i>Candelariella reflexa</i> | |
| <i>Lecanora chlarotera</i> | |
| <i>Arthonia radiata</i> | |
| <i>Hypotrachyna revoluta</i> | |
| <i>Melanohalea laciniatula</i> | |
| <i>Catillaria nigroclavata</i> | |
| <i>Punctelia subrudecta</i> | |
| <i>Parmotrema perlatum</i> | |
| <i>Pyrrhospora quernea</i> | |
| <i>Hypotrachyna afrorevoluta</i> | |
| <i>Flavoparmelia soledians</i> | |
| <i>Ramalina farinacea</i> | |
| <i>Fuscidea lightfootii</i> | |
| <i>Amandinea punctata</i> | |
| <i>Hyperphyscia adglutinata</i> | |
| <i>Hypogymnia tubulosa</i> | |
| <i>Phaeographis smithii</i> | Nice to find this in a city |
| <i>Diploicia canescens</i> | |
| <i>Physcia adscendens</i> | |
| <i>Opegrapha vulgata</i> | |
| <i>Evernia prunastri</i> | |
| | |
| Sycamores | |
| trunks | |
| <i>Opegrapha vermicellifera</i> | |
| <i>Pyrrhospora quernea</i> | |
| <i>Hyperphyscia adglutinata</i> | |
| <i>Physconia grisea</i> | |
| <i>Opegrapha rufescens</i> | |
| <i>Porina aenea</i> | |
| <i>Strigula taylorii</i> | |
| <i>Lecanora chlarotera</i> | |
| branches | |

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|---------------------------------|---|
| <i>Xanthoria parietina</i> | |
| <i>Ramalina fastigiata</i> | |
| <i>Parmelia sulcata</i> | |
| <i>Melanohalea laciniatula</i> | |
| <i>Punctelia subrudecta</i> | |
| <i>Physcia tenella</i> | |
| <i>Physcia adscendens</i> | |
| | |
| Horse Chestnuts | I could not reach the branches that has the most lichens on |
| <i>Candelaria concolor</i> | |
| <i>Xanthoria parietina</i> | |
| <i>Physcia adscendens</i> | |
| <i>Physconia grisea</i> | |
| <i>Porina aenea</i> | |
| <i>Punctelia borreri</i> | |
| <i>Hyperphyscia adglutinata</i> | |
| <i>Melanohalea elegantula</i> | |
| <i>Lecanora compallens</i> | |
| <i>Lecanora expallens</i> | |
| | |
| Ash | Single ash tree – trunk only |
| <i>Melanelixia glabratula</i> | |
| <i>Xanthoria parietina</i> | |
| <i>Physconia grisea</i> | |
| <i>Punctelia jeckeri</i> | |
| <i>Flavoparmelia caperata</i> | |
| <i>Candelaria concolor</i> | |
| <i>Ramalina fastigiata</i> | |
| <i>Melanohalea laciniatula</i> | |
| <i>Lecanora chlorotera</i> | |
| <i>Lecidella elaeochroma</i> | |
| | |
| Other records | |
| <i>Lecanora carpinea</i> | One thallus |
| <i>Opegrapha niveoatra</i> | |
| <i>Lecania naegelii</i> | |
| <i>Caloplaca cerinella</i> | One thallus |
| <i>Opegrapha vulgata</i> | |
| <i>Opegrapha varia</i> | |
| <i>Caloplaca ulcerosa</i> | Tiny bit |
| <i>Strigula taylorii</i> | |
| <i>Phaeophyscia orbicularis</i> | |

Comment

There are no rare species and few species of particular note. But as a list for the city centre location and small size of the site this is quite a species rich Park with 47 species. I think I was struck by the presence of pairs of species (which may be closely related but sometimes not) and can cause confusion for the beginner. This site could be good for demonstrating these lichens for learning identification. The one *Prunus* tree (location approximately ST7537865276) was particularly rich had over half (61%) of the species recorded for the whole park. All I have listed are the species I recorded and there will be others that I missed or did not see in my sampling. Further survey will no doubt add to those species I did find.

The list is characteristic of sites which are quite heavily polluted with nitrogen. In cities this mainly comes from traffic (as NO_x) whilst in the countryside it mainly comes from farms (as ammonia).

In terms of management, there is nothing specific I can recommend. The *Prunus* tree will have its own life and once it ceases to be of value as a park tree, its lichen flora will very likely be of less value than it is now. One the crown of the tree dies, the lichens follow suit in a matter of months. The other trees (trunks especially) need light and lack of disturbance generally. The old horse chestnuts have very few lichens on their trunks probably because of the lasting effect of past pollution with smoke and sulphur dioxide.

| Species | Similar less common species | comment |
|--|--------------------------------|--|
| <i>Flavoparmelia caperata</i> | <i>F. soledians</i> | Easily separated by chemical spot test with 10% KOH |
| <i>Porina aenea</i> | <i>Strigula taylorii</i> | Microscopically quite different |
| <i>Opegrapha vulgata</i> | <i>O. niveoatra</i> | Microscopical examination of conidia (shorter in <i>O.niveoatra</i>) |
| <i>Punctelia subrudecta</i> and <i>P. jeckeri</i> | <i>P. borrieri</i> | Giz. <i>P. borrieri</i> black underneath |
| <i>Amandinea punctata</i> | <i>Catillaria nigroclavata</i> | Microscopically quite different |
| <i>Malanohalea laciniatula</i> and <i>Melanelixia glabratula</i> | <i>Melanohalea elegantula</i> | Isidia different – branched in <i>M. elegantula</i> |
| <i>Lecanora expallens</i> | <i>Lecanora compallens</i> | Chemical test. <i>L. compallens</i> has a slightly bluish tinge compared with <i>L. expallens</i> green. Poss also UV test after sport test with 10% KOH |

Alphabetical list of species

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|--------------------------------|
| <i>Amandinea punctata</i> |
| <i>Arthonia radiate</i> |
| <i>Caloplaca cerinella</i> |
| <i>Caloplaca ulcerosa</i> |
| <i>Candelaria concolor</i> |
| <i>Candelariella reflexa</i> |
| <i>Catillaria nigroclavata</i> |
| <i>Diploicia canescens</i> |
| <i>Evernia prunastri</i> |

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|----------------------------------|
| <i>Flavoparmelia caperata</i> |
| <i>Flavoparmelia soledians</i> |
| <i>Fuscidea lightfootii</i> |
| <i>Hyperphyscia adglutinata</i> |
| <i>Hypogymnia tubulosa</i> |
| <i>Hypotrachyna afrorevoluta</i> |
| <i>Hypotrachyna revoluta</i> |
| <i>Lecania naegelii</i> |
| <i>Lecanora carpinea</i> |
| <i>Lecanora chlorofera</i> |
| <i>Lecanora compallens</i> |
| <i>Lecanora expallens</i> |
| <i>Lecidella elaeochroma</i> |
| <i>Melanelixia glabrata</i> |
| <i>Melanelixia subaurifera</i> |
| <i>Melanohalea elegantula</i> |
| <i>Melanohalea laciniatula</i> |
| <i>Opegrapha niveoatra</i> |
| <i>Opegrapha rufescens</i> |
| <i>Opegrapha varia</i> |
| <i>Opegrapha vermicellifera</i> |
| <i>Opegrapha vulgata</i> |
| <i>Parmelia sulcata</i> |
| <i>Parmotrema perlatum</i> |
| <i>Phaeographis smithii</i> |
| <i>Phaeophyscia orbicularis</i> |
| <i>Physcia adscendens</i> |
| <i>Physcia tenella</i> |
| <i>Physconia grisea</i> |
| <i>Porina aenea</i> |
| <i>Punctelia borreri</i> |
| <i>Punctelia jeckeri</i> |
| <i>Punctelia subrudecta</i> |
| <i>Pyrrhospora quernea</i> |
| <i>Ramalina farinacea</i> |
| <i>Ramalina fastigiata</i> |
| <i>Strigula taylorii</i> |
| <i>Xanthoria parietina</i> |

For more information on these species in Somerset see P A Wolseley, B J Coppins and A M Coppins (2018) Somerset Lichens and Lichenicolous Fungi. *Proceedings of the Somerset Archaeological and Natural History Society*. **161**, 235-311.

David Hill 4 April 2019