WHAT ARE LICHENS?

Lichens are a unique organism composed of two distinct organisms. One part is fungus, one part is alga. Togther this symbiotic relationship enables this perennial to survive on a variety of substrates in many different environments. As you walk through the Preserve you will notice Lichen on rocks, trees, as well as on fallen branches. They appear in full sun,as well as in full shade .

Lichens are one of the oldest plant forms on earth .Over time, lichens can break down rock to form earths topsoil. They can survive the most harsh conditions from Arctic cold to Desert heat.

> Rockefeller State Park Preserve 125 Phelps Way Pleasantville, NY 10570

Lichens of Rockefeller State Preserve



FOLIOSE Growth Form



Common Greenshield Lichen: *Flavoparmelia caperata* The most common form of Lichen found on the Preserve. It grows on bark of a variety of trees, in sun or partial shade



Rough Speckled Shield Lichen:

Punctelia rudecta Grows on all bark and shaded rocks. Greenish gray lobes with tan lower surface

FOLIOSE: Leafy Shield-like

<u>CRUSTOSE</u>: Smear of color that cannot be removed from the surface

In favorable conditions Greenshield lichen can grow as much as 5mm per year. It is the first form of lichen that will return to an area that has total lichen loss due to pollution. The presence of Lichens in general, is a sign of a healthy environment.

Lichen are nitrogen-fixing agents and support the biodiversity of many ecosystems. They provide shelter for invertebrates as mites and termites and lacewings. Vertebrates like moles, lemmings' squirrels, camels and llamas eat lichen as a prime source of minerals. Hummingbirds use Shield Lichens when building their nests for camouflage, while Warblers construct their nests by weaving bearded Lichen throughout

Further reading on Lichens

To find out more about Lichens you can read:

Common Lichens of Northeastern North America by Troy Mullin & Frances Anderson

Photos and brochure by Edie Martimucci 2020

CRUSTOSE Growth Form



Zoned Dust Lichen: *Lepraria neglecta* Grows commonly on shaded Granite rock.Blue grey granular or fuzzy surface that form in distinct rings



*Lepraria neglecta :*Dust Lichen gets their moisture from the humidity in the air. I found this sample around the lake. You will notice much more on the rocks in the lower lying areas and in the shady moist areas of the park.