















# Fungi & Lichens of Carl Schurz Park

### **FACTS**

Fungi and Lichens serve vital functions that help sustain the natural world.

**Fungi and Lichens are essential components of the Park ecosystem.** They help water enter the soil, clean the air of dangerous chemicals, and foster protective underground communications between trees. Their ecological significance is often overlooked because they are usually small and well hidden.

Fungi are nature's recyclers, breaking down dead wood and leaves that enrich the soil. They:

- take many forms, some living as parasites of living plants, some being carnivorous, and some living in a symbiotic relationship with trees.
- function as messengers linking trees together underground.
- store carbon, thereby reducing the carbon emissions so damaging to our world.

Lichens are a keystone species in many environments, essential to the health and well-being of an entire ecosystem. They:

- are a mixture of two or more different organisms in one, part fungus and part alga.
- grow in many different environments, from rainforests and ice-free polar areas to deserts.
- serve as a food source or microhabitat for many animals.
- can grow on brickwork, rock and stone, tree trunks, concrete, and even the surface of the earth.
- protect trees and rocks from extreme elements such as rain, wind and snow.
- have been used by humans as food, medicine and for the dyeing of cloth, such as Harris Tweed.

Lichens also absorb pollution. An increase in the number of lichen species present in an area indicates an improvement in air pollution levels.



The Park is home to over 68 kinds of Fungi and over 6 species of Lichens. The following examples are all found within Carl Schurz Park.



Turkey Tail is a common and attractive species of fungus which is found growing out of logs and tree stumps. It has bands of different colors, reminiscent of Wild Turkey plumage.



## SPINDLETREE POWDERY MILDEW Erysiphe euonymicola

Spindletree Powdery Mildew is a fungus that can live on a wide variety of euonymus plants. When it is present, it looks as if the plant has been sprinkled with talcum powder. This species is very common, especially when the plant is growing in partial shade. The fungus does not really do much damage, but some people may consider it unsightly.



### LICHENS CANDLEFLAME LICHEN

Candelaria concolor

This brightly colored yellow lichen is one of the easiest of all lichens to notice and to recognize. In New York City it is quite common both on walls and on tree trunks.



This greenish-grey lichen is another very common species in New York City. It is often found on tree trunks.



Urban density, habitat loss, climate change, and species decline are all threats to the future of the Park.

With urgent global challenges at the forefront, we have shifted our focus to restore native habitatto create the most resiliant and functional ecosystem possible. By looking at the Park in this manner we will ensure its health and viability for future generations.



Fungi and Lichens may be the most important organisms for establishing new ecosystems, providing food for animals, preventing soil erosion and even monitoring pollution levels. We are losing these essential life forms due to urbanization and the resulting pollution.

**FUTURE** 

#### To address this challenge the Conservancy:

- Increases the types of habitats where Fungi and Lichens are most likely to thrive, such as rotting logs and twigs, rocky outcroppings, and undisturbed soil.
- Maintains healthy plants to counteract pollution.
- Increases use of native plants that both protect and benefit from Fungi and Lichens.

#### Steps you can take to join in the effort:

- Leave dead branches, leaves, and stumps in garden areas
- Increase native plantings in your green spaces





