

## **Lichens or not!**

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Everyone sees them, but maybe doesn't always notice them or know what they are. They are commonly seen throughout our area, on rocks, buildings, sign posts, roofs and tree trunks. They are those spreading, rubbery, dull sea-green patches, often with spots of yellows or oranges. They are lichens!

Just what is a lichen? It's not a moss, or a mold, or a plant. Lichens are unusual creatures. A lichen is not a single organism, but a combination of two organisms—a fungus and an alga-- that live in a symbiotic relationship.

There are many different fungi and algae that can combine to form lichens. The color and size of the lichen is determined by which particular fungus and alga are involved. While most lichens in Wisconsin and Minnesota are green, with occasional yellow, orange and white areas, in some parts of the world lichens are brightly colored and cover large areas.

Most of a lichen's physical structure is made up by the fungus. In exchange for providing the structure, the algae conducts photosynthesis and shares food and nutrients with the fungus.

Lichens will grow on almost any firm surface that receives a reasonable amount of light. While they may absorb tiny amounts of certain minerals from the surface on which they are growing, lichens are generally self-reliant, getting all their food from photosynthesis and the atmosphere.

Lichens growing on trees are not parasites and do not hurt the tree in any manner. It just so happens that tree bark provides a nice place for a lichen to live!

Very few insects or predators feed on lichens, probably because they produce a variety of chemical compounds that discourage feeding. This allows lichens to simply hang around and grow.

And why should you like having lichens hanging around? Because it means you have good air quality! Lichens are very sensitive to toxins in the atmosphere, and will not survive in polluted areas. In fact, scientists have used the presence of lichens as a cost-effective and accurate method of assessing air quality. The presence of lichens has even been used to identify areas contaminated by the Chernobyl nuclear accident.

So if you see those green patches growing on your tree trunks, don't worry about it! They aren't hurting the tree at all. Just take a nice deep breath of your clean air!