

Protect...

Turkey Tail Fungus, Christmas Fern, and Lichen!

Turkey Tail Fungus

Trametes versicolor

Identification Features:

- The fungus is called turkey tail for its resemblance to the semi-circular, banded tails of wild turkeys
- The “turkey tail” is the part that you see. Most of the fungus is inside the bark of the tree or log.
- It is a bracket fungus which means that it grows on the sides of logs and trees.
- It is a saprophytic fungus which means that it feeds on decaying wood. Grows on dead or dying hardwood trees, especially oaks.
- Turkey tail has a velvety and leathery feel when touched.
- The fungus does not have a stalk, only a cap. Caps are cup-shaped and 1-4 inches wide. Caps will often overlap each other. Caps are often in rosettes, semicircular, fan or kidney shaped.
- Caps are very colorful with sharply contrasting zones of color. Colors range from brown, white, tan, orange, red, purple or all of these colors at once.
- The tails have a white pore surface underneath.



Habitat:

- NATIVE to Pennsylvania
- One of the most common funguses in North American woods found anywhere there are dead hardwood logs and stumps.

Wildlife Value and Ecological Importance:

- Turkey tails help break down old, dead logs and tree trunks, so that nutrients can return to the soil to be used again by other organisms.
- Eastern gray squirrels and box turtles use the tail as a food source.
- Several species of insects will find shelter in the cap.

Human Value:

- Turkey tails are one of the most intensively studied medicinal mushrooms in the world. Recently, this mushroom has earned a lot of attention for its anti-tumor properties.
- Turkey Tails are very decorative. They can be used in making jewelry, wreaths and other household decorations.



Christmas Fern

Polystichum acrostichoides

Identification Features:

- So named because the fern remains green throughout the year and thus is green at Christmas time. Also, each leaflet is stocking shaped and resembles Santa's boot.
- Christmas fern FRONDS (leaves) are EVERGREEN and up to 3 feet long. There are 20 – 40 leaflets on each frond.
- Leaflets are leathery, dark green, LANCE-shaped and finely-TOOTHED.
- Most of the leaflets are arranged alternately along the stem.
- Christmas fern can form colonies but frequently grows singly or in clusters twos or threes.
- New fern growth happens in Spring. These young ferns are coiled and are called fiddleheads. Fiddleheads are scaly and gray. The fiddlehead uncurls and forms a new Christmas fern.



Santa's Boot

Habitat:

- NATIVE to Pennsylvania.
- Found in moist wooded slopes and moist banks near streams.
- It requires cool, moist, well-drained soil in the shade.

Wildlife Value & Ecological Importance:

- Christmas fern is important in soil conservation. The growing fronds along with the old, dead fronds form a dense mass covering the soil surface. This mass helps to stabilize the underlying soil and prevent or lessen erosion.
- Christmas ferns provide a protective and concealing habitat for a number of ground feeding birds.
- Christmas fern provides a protective and concealing nesting site for ground nesting bird species such as the wild turkey.
- The evergreen fronds provide food for White-tailed deer during Winter months.
- Young fronds are food for gamebirds such as the ruffed grouse.



Fiddleheads

Human Value:

- Used in Christmas decorations
- Christmas fern was used medicinally by several Native American tribes to treat a variety of ailments such as fevers, pneumonia, stomach aches.

Lichen

Identification Features:

- Lichens are a type of **symbiotic relationship** of two separate organisms, a fungus and an algae. This type of symbiotic relationship is one where both organisms benefit from living together.
- The fungus gives the lichen most of its characteristics, like its structure and shape. The fungus protects the algae from drying out, so lichens can live and grow in extremely dry areas.
- The algae provide food for the fungus through photosynthesis, so it can grow and spread.
- Lichens do not have root stems or leaves. They hold fast to substrates using rhizines (rootlike structures).
- There are 3 main types of lichen:
 - **Crustose Lichens** – Form a crust over surfaces such as rocks.
 - **Foliose Lichens** – Flat, leaf-like, or full of ridges and bumps.
 - **Fruticose Lichens** – Hairlike, upright, and shrubby.
- Colors range from gray-green to bright orange-red.
- There are thousands of species of lichens with new ones discovered every year.



Crustose Lichens

Habitat:

- NATIVE to Pennsylvania.
- Found all over the world in a variety of habitats and climates including deserts, rainforests, and the arctic tundra.
- Need clean air to survive. Typically, not found in large cities with high sources of air pollution like factories, highways, etc.
- Substrates can be trees, rocks, soil, houses, tombstones, cars, old farm equipment and more. The most common natural substrates are trees, rocks, and soil.



Foliose Lichens

Wildlife Value & Ecological Importance:

- Lichen allows algae to grow everywhere, not just in water habitats. This is important because algae produce a significant amount of the oxygen we breathe through the process of photosynthesis.
- Lichens are good indicators of air quality. They absorb pollutants from the atmosphere and provide scientists with valuable information about air quality.
- Lichen is an important food source for animals including elk and white tail deer, especially in winter when other food sources are scarce.
- Lichen provides shelter for small animals and insects. Some insects and spiders have adapted their appearance to look like lichen or camouflage itself against lichens.
- Lichen is used as building material for animals such as birds. Ruby-throated hummingbirds use lichen to build their nests.



Fruticose Lichens

Human Value:

- One of the most obvious values is that lichens are beautiful to look at.
- Having lichens growing on your rocks, trees, and ground around your property is a good thing. That means the air you are breathing is healthy and clean.
- Humans use lichens for dyes for clothing or baskets.
- Lichens are used in the development of various medicines.
- Lichens are used in deodorant, toothpaste, salves, extracts, and perfumes.
- Lichens are used for decoration.
- Native Americans would eat lichen during times of hardship. Not all lichens are edible though, some are poisonous.



**Ruby-throated hummingbird
on nest made of lichen**



Spiny leaf insect