OUTDOOR
INDIANA

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FILMY FERN
(Vandenboschia boschiana)

Frank Oliver photo

Indiana's filmy fern belongs to a family of tropical plant species. It's the only family member that has managed to survive in the Hoosier state.

State Range: Crawford, Perry and Martin counties.
Habitat: Sandstone overhangs and grottoes.
Appearance: Evergreen leaves, each 2–5 inches long; grows in colonies.
State Status: Threatened, with only eight populations known to occur in Indiana.

By Michael Homoya

There's a signpost up ahead ... what, hey, wait! ... all of a sudden you're in the twilight zone.

But isn't that the place of science fiction, an imaginary dimension of the mind?

Oh no, it's real. At least in nature. And some of the places where it exists are deep, sheltered grottoes beneath over-arching sandstone cliffs. Even during mid-day these grottoes are dimly lit, muted places, homes mostly to cave crickets, millipedes and spiders.

These are generally not favorable places for plants. But in these shadowy, botanical netherworlds you may encounter a little wisp called filmy fern. Not only can it grow in such places, it requires them.

Named for its one-cell-thick leaf blade, filmy fern is fragile. It struggles with the harsh extremes of Indiana weather, especially the occasional sub-zero temperatures. That's because in many ways our filmy fern is a tropical plant growing in a sometimes frigid world.

Indiana's filmy fern belongs to a large family of ferns known, appropriately enough, as the filmy fern family. Most of its more than 650 members are more comfortable in the misty forests of the tropics than here.

So how did a species of a tropical plant family end up in Indiana? One theory says our climate was once warmer and more humid, just right for any number of filmy fern species. As the climate changed to more temperate conditions, most filmy ferns perished, except, that is, our filmy fern.

It somehow found appropriate living quarters in cave-like grottoes. These micro-climates sheltered it from the onslaught of winter cold or summer drought. Think of such places as greenhouses without the glass, the protection that keeps it from perishing.

Looking for filmy fern is not for the faint of heart. First, you must find a site that looks like good habitat, and that's a sandstone overhang, usually one big enough to walk under. Or it could be a cliff with deeply carved grottoes. If sites with known existing populations are any guide, such places should face east or south. This position apparently helps shield the fern from winter blasts of Arctic air. The rock must be sandstone. Filmy fern will not grow on limestone.

The fun part comes when you find a promising site. Because filmy fern is so small, you normally have to belly-crawl underneath the overhang to see them. You might even need a flashlight. Just watch out for creepy, crawly things.

Finding filmy fern may mean you really are in the twilight zone. □

DNR State Botanist Michael Homoya searches southern Indiana's cliffs for filmy fern with a passion. Let him know if you find some, mhomoya@dnr.IN.gov.

SPICEBUSH
(Lindera benzoin)

Frank Oliver photo

Spicebush has been a part of the American landscape since before European settlement. Watch for its lemon-yellow blooms in early spring.

Family: Lauraceae (laurel family).
Distribution: Moist to wet forests throughout much of the state.
Hardiness: Hardy to -30°F
Related Species: Native sassafras, exotic avocado, bay leaf and cinnamon.

By Teresa Clark

We tend to not appreciate the commonplace and plain as much as the rare and spectacular.

Spicebush, aka Benjamin bush, or fever bush, is among the forgotten treasures of our native shrubs.

Its qualities may resemble those of some of our best friends. They are not dramatic but have assets that make them special, and they have remained with us for many years.

Spicebush has been part of the American landscape since before European settlement. Native Americans prized the shrub for its culinary and medicinal qualities that range from helping numerous intestinal maladies to fever relief to inhibiting yeast growth.

This dioecious (i.e., male and female flowers on different plants) shrub thrives in shade and grows up to 15 feet tall in moist-to-wet bottomland woods and near streams. It blooms in early spring, usually in March, showing clusters of lemon-yellow flowers on leafless branches. Seeing it en masse, creating a haze of yellow above most of the still-brown forest, may lift you from any late-winter doldrums.

Its leaves, when they appear later, are 2- to 3-inch long ovals with edges that are slightly wavy, with the outermost leaves being larger.

If you come across a spicebush thicket in the summer, you will find large groupings of non-descript, widely spreading, greenish-tan branches. At this point you can discover one of the reasons behind this shrub's common name. Scratching the bark with your fingernail or crushing a leaf in your hand will yield a pleasant, lemony, allspice scent. Some people use the leaves and twigs to make a tea that is said to have curative properties.

While often out-glitzed in shear brilliance by the deciduous trees in the forest, spicebush gets a short time of glamor in the fall. First, the fruit ripens into bright fire-engine red drupes while its leaves are still green. Then the leaves turn golden-yellow with green veins.

If you can beat the birds to the punch from August through September you will be rewarded with a single large seed per fruit. When dried, these seeds can be used in place of allspice in many recipes that feature other forest fruits and berries of the season.

Another interesting spicebush tidbit is that it is a primary host plant for the spicebush swallowtail. This butterfly is a common black swallowtail but has arguably one of the cutest larval forms of all the butterflies.

Next time you are walking in a moist woods or along a creek, keep your eyes peeled for this jewel that you may have overlooked before. You may find a new best friend. □

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