10 Nutrient Recycling

As they slowly decay, fallen trees will return organic matter and nutrients to the soil. Aiding in this process of decomposition are a variety of insects, fungi, and other microscopic organisms. Look for fungi and slime molds growing on the log's surface, especially in warm wet weather.

Thank you for visiting Scout Ridge Nature Preserve. We hope you enjoyed your walk. If you have any questions or comments contact the offices below.

Division of Nature Preserves
402 W. Washington St. Rm W267
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(317) 232-4052

Morgan-Monroe State Forest
6220 Forest Road
Martinsville, IN 46151
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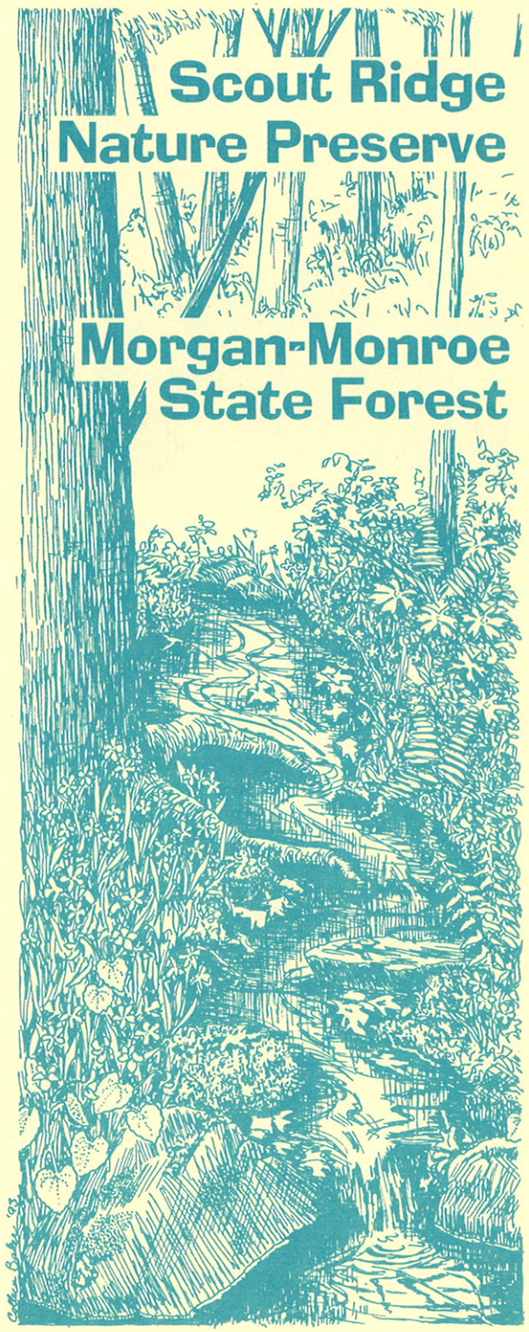
DNP/FOR printing.99



Welcome

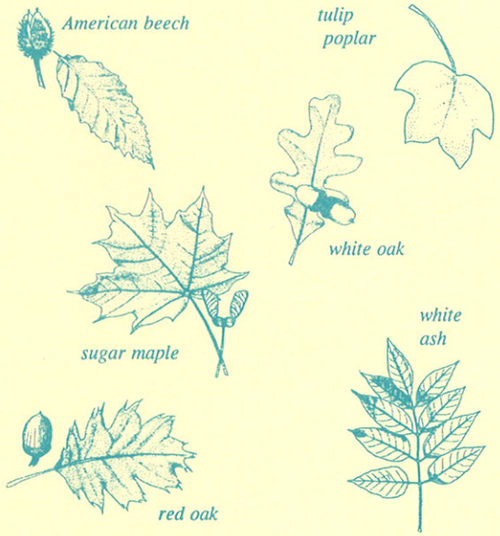
This 1/2 mile long self-guiding trail winds through the 15-acre Scout Ridge Nature Preserve. Before beginning, please sign in at this registration box. Follow the trail to your left, where you will find 10 marked stations. Each station features an ecological principle, plant association, or geological formation, and its relationship with the environment. The trail starts and ends at this site.

Enjoy your walk. At the end, if you do not wish to keep this brochure, please return it to the registration box.

The nature preserve is established for the purpose of protecting and preserving the area in its natural state. It is open for walking and observing only. Everything is protected so that you and persons who follow may enjoy it.

Please help us protect the natural values by:

1. Remaing on the trail,
2. Protecting all plants and animals,
3. Keeping the area free of litter,
4. Observing the ban on hunting, fire building, horseback riding, picnicking, camping, and vehicular use.



Trail Stations

1 Forest communities

Beech-maple is the dominant forest type on much of the preserve. The east slope of the area tends towards mixed mesophytic, meaning a mix of many tree species which prefer moist sites. Some examples are poplar, ash, white and red oak. This old growth site is an excellent example of both forest types.

2 Downbursts

On May 16, 1990, strong thunderstorms swept through the Morgan-Monroe State Forest area. Downburst winds struck the nature preserve and blew down or damaged a large number of trees. Downbursts are strong downward-directed winds that precede a thunderstorm. These winds can be as strong as those produced by tornados.

3 Windgaps

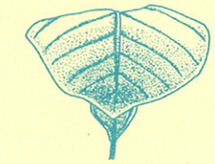
You are standing in a windgap, also referred to as a lightgap. The wind damage which occurred here is a natural element in the forest ecosystem. Although some of the old-growth forest has been lost, newly created openings provide habitat for plants and animals adapted to early successional areas. In time, and without any disturbances, the area will return to a mature forest community.

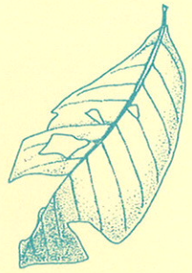
4 Streambed geology

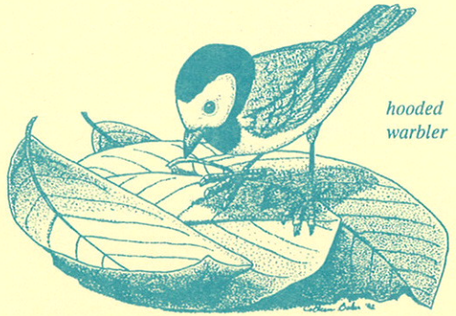
The bedrock of sandstone and shale in the streambed was formed during the Mississipian Period, some 250 million years ago. During the Ice Ages, the Illinoian ice sheet covered all but the south central part of the state, around 120,000 years ago. The glacier did not level off the hills in Morgan-Monroe, but did extend into this valley and others nearby. Note the glacial boulder in the streambed behind you and to your right.

5 Birds of the interior forest, predation and parasitism

Forest interior birds, such as wood thrush and hooded warbler, require extensive areas of uninterupted forest canopy. These species tend to nest on or near the ground. Large openings expose the nesters to predators, such as opossum, skunks, and crows, which destroy eggs and young. Brown-headed cowbirds parasitize other bird's nests by laying their own eggs in them. The parasitized bird then raises the young cowbird as its own. In closed canopy forests the cowbird is less of a factor, as it normally prefers the fragmented edges.



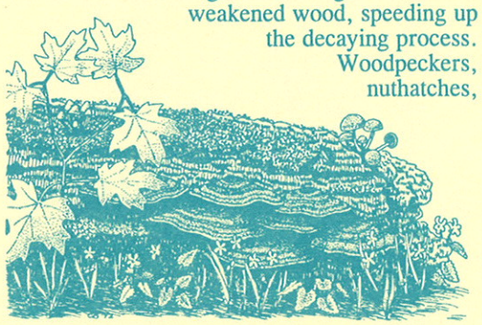




hooded warbler

6 New uses for old wood

Decaying logs and standing tree snags provide food and homes for birds, insects, and some mammals. Insects burrow through, and eat the deteriorating wood. Fungi colonize the weakened wood, speeding up the decaying process. Woodpeckers, nuthatches,



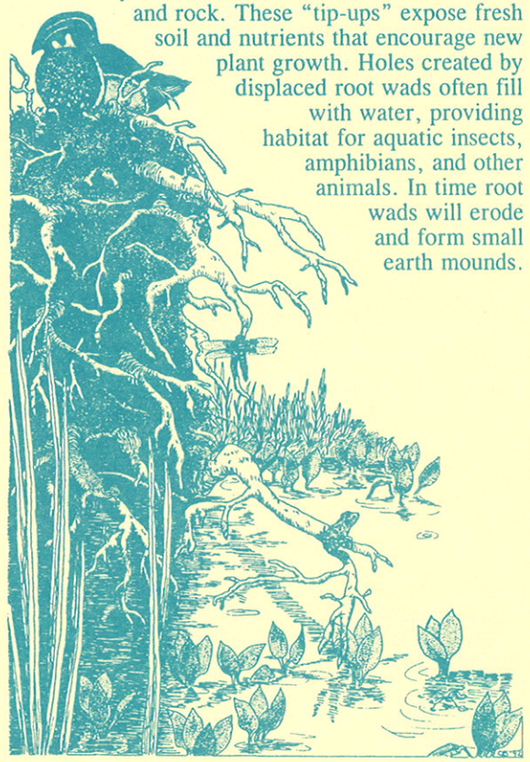
chickadees and other birds eat the insects, and build nests in existing holes or excavate new ones. Raccoons, squirrels, deer mice, and bats may also use standing snags for denning.

7 Herbaceous species changes

Prior to the storms the dense canopy allowed little sunlight to penetrate to the forest floor. Most plant life was either adapted to shade, or completed growth and flowering cycles before the trees leafed out each spring. With abundant sunlight now reaching the soil surface, the composition of understory plants has begun to change. In forest openings, species such as wild ginger, jack-in-the-pulpit, and mayapple are being replaced by pokeweed, raspberries, and other sun-loving plants. In time, as the canopy begins to close, the sun-tolerant plants will again be replaced by species that are adapted to shady conditions.

8 Tip-ups

When large trees fall, their extensive root systems excavate massive amounts of soil and rock. These "tip-ups" expose fresh soil and nutrients that encourage new plant growth. Holes created by displaced root wads often fill with water, providing habitat for aquatic insects, amphibians, and other animals. In time root wads will erode and form small earth mounds.



9 Tree species changes

Under the dense canopy of old-growth forests, shade-tolerant tree seedlings thrive. Conversely, the storm-created openings encourage the growth of trees requiring full sunlight, such as tulip tree, sassafras, elm, and basswood. Eventually, some of these trees will be major components with the canopy.