

**21. Pawpaw:** These small trees have 10 to 20" long smooth-edged leaves, and never attain tree stature. Together with dogwood and spicebush, these trees are referred to as understory species. In the fall, conspicuous fruits can be seen which are first greenish yellow but later turn nearly black in color. These fruits are enjoyed by wildlife.

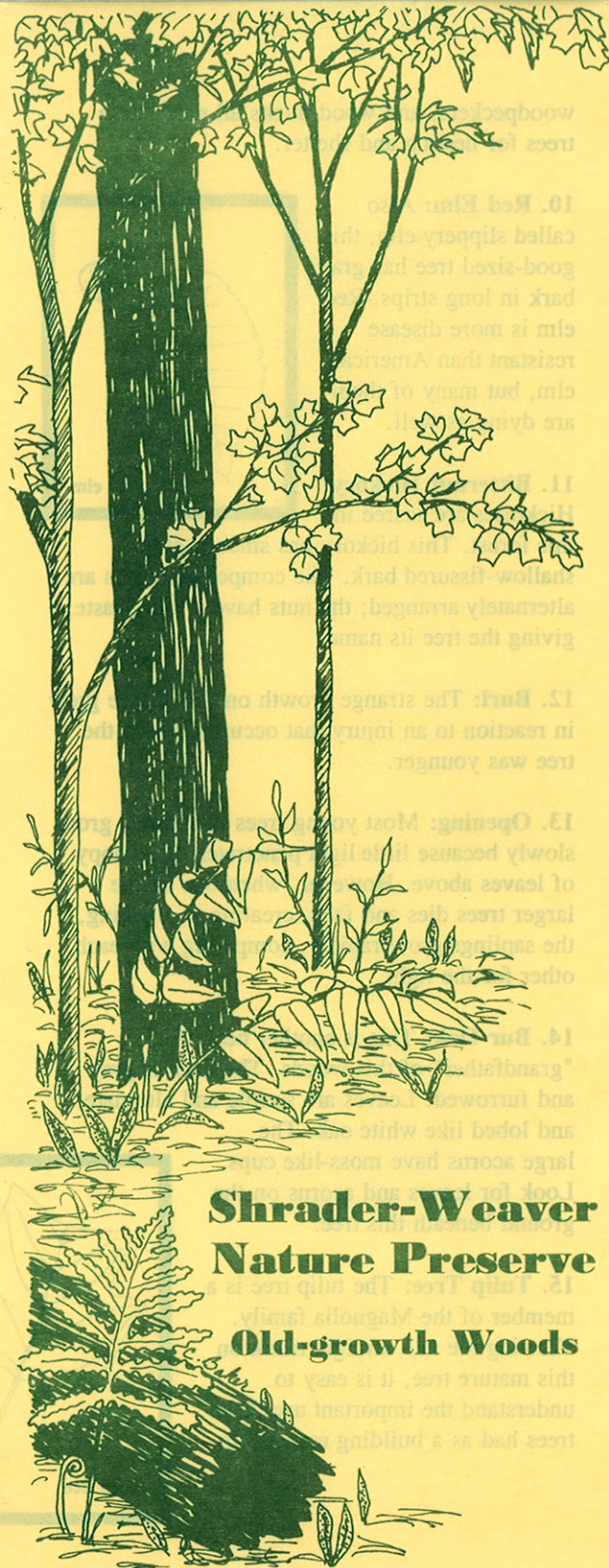
**22. Black Walnut:** Due to the high value of their wood, walnuts of this size are an uncommon sight. This nice sized tree has chocolate-gray, furrowed bark. The stout branches bear alternate, compound leaves. Squirrels relish the walnuts.

This ends the self-guiding trail. We hope you have enjoyed your walk and the beauty of an old-growth forest. Be sure to register before you leave, and visit again.

Directions: From Bentonville go 1 mi east on Co. Rd. 700N, then 1.75 mi south on Co. Rd. 450W to a marked parking lot.



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 Division of Nature Preserves  
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## Shradler-Weaver Nature Preserve Old-growth Woods

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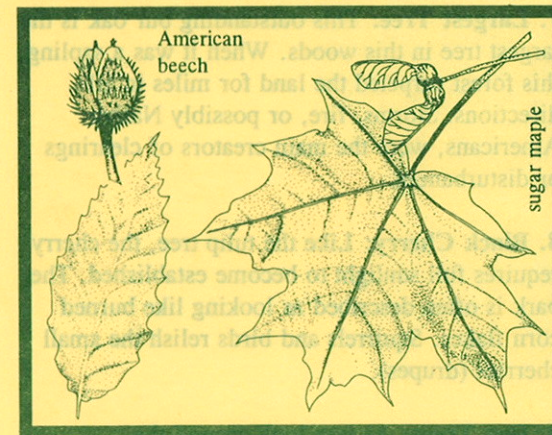
Shradler-Weaver Nature Preserve was given to the people of Indiana by Laz and Edith Weaver. This 108-acre property was originally deeded to The Nature Conservancy, a private preservation organization, then transferred to the State of Indiana. This nature preserve is established for the purpose of preserving the area in its natural state. It is open for walking and observing only. Please be considerate of other people who will follow and do not pick flowers, leaves, or remove any objects.

This trail is in the 28-acre old-growth woods portion of the Preserve. Another trail is located in the open field to the west. This trail is 1/2 mile long, beginning at the registration box and proceeding clockwise, around a loop that ends back at the box.

Please help us protect the natural values by:

1. remaining on the trail,
2. protecting all plants and animals,
3. keeping the area free of litter, and
4. observing the ban on hunting, fires, cutting, picnicking, camping, horses and vehicular use.

### Trail Stations



**1. Sugar Maple:** This is a common tree in this old-growth forest. The gray bark is furrowed, the simple leaf is cut by 5 lobes, and the seeds are winged.

**2. American Beech:** This tree and the sugar maple are the dominant species here. With their dense spreading crowns, they determine the rest of the forest communities' composition by greatly limiting the available light for the young trees and other plants growing in their shade.

The beech is distinguished by its smooth gray bark which often becomes rough at the base. Leaves are alternate and simple, with prominent parallel veins. The nut is an important food to many forest dwellers. It was

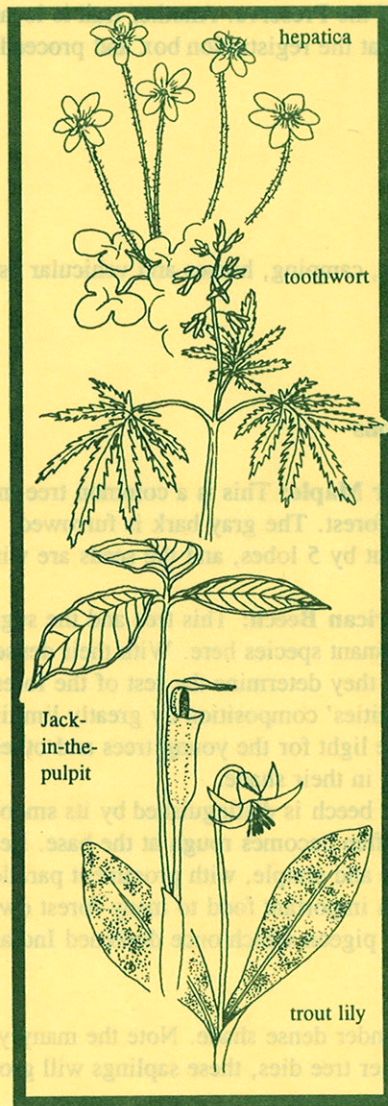
a main component in the diet of the now extinct passenger pigeon which once darkened Indiana skies with its numbers.

**3. Shade-tolerance:** Some trees can reproduce and grow under dense shade. Note the many young sugar maples and red elms growing around the area. When a larger tree dies, these saplings will grow rapidly, competing for the sun and dominance of the opening.



**4. Chinquapin Oak:** Chinquapin is the Native American name for the chestnut tree. The leaves of this oak resemble the American chestnut, and like the chestnut bears edible fruit. It was known to pioneers as the "sweet oak", or sometimes "pigeon oak" for the masses of passenger pigeons which gathered to greedily gobble the small acorns of this tree.

Many wild-flowers can be viewed along the trail at various times during the season. Earliest flowers are salt and pepper, and hepatica. Others soon follow, including spring beauty, toothwort, trout-lily, blue and yellow violets, jack-in-the-pulpit, waterleaf, Gleason's trillium, toadshade, sweet cicely, Solomon's-seal, and false Solomon's-seal. Stinging nettle becomes dominant in summer.



**5. Red Oak:** Notice the shiny light ridges (more pronounced in the upper trunk) running up the dark gray bark. The acorn saucer is shallow and does not cover more than ¼ of the acorn.



**6. Tulip Tree Grove:** Note the abundance of tulip trees (sometimes called tulip poplars) at this station. These trees do not grow in the deep shade of the forest canopy, so their presence here indicates that there was a forest opening in the past which allowed more light to reach the woodland floor. Such openings are created when one of the large overstory trees dies and falls.

**7. Largest Tree:** This outstanding bur oak is the largest tree in this woods. When it was a sapling, this forest carpeted the land for miles in all directions. Storms, fire, or possibly Native Americans, were the main creators of clearings or disturbances.

**8. Black Cherry:** Like the tulip tree, the cherry requires full sunlight to become established. The bark is often described as looking like burned corn flakes. Squirrels and birds relish the small cherries (drupes).

**9. Den Trees:** As you look around the surrounding forest, you may see something very characteristic of old-growth woods—the presence of wind-damaged, hollow, and dead standing trees. These provide a multitude of habitats for many forest dwellers. Flying squirrels, barred, screech, and great-horned owls, red-headed

woodpeckers, and wood ducks all need these trees for nesting and shelter.

**10. Red Elm:** Also called slippery elm, this good-sized tree has gray bark in long strips. Red elm is more disease resistant than American elm, but many of them are dying as well.



**11. Bitternut Hickory:** Hickories are scarce in this forest. This hickory has smooth gray, shallow-fissured bark. The compound leaves are alternately arranged; the nuts have a bitter taste, giving the tree its name.

**12. Burl:** The strange growth on this maple grew in reaction to an injury that occurred when the tree was younger.

**13. Opening:** Most young trees in a forest grow slowly because little light penetrates the canopy of leaves above. However, when one of the larger trees dies and falls, creating an opening, the saplings grow rapidly, competing with each other for the light.

**14. Bur Oak:** This is another beautiful "grandfather" of this woods. The bark is gray and furrowed. Leaves are simple and alternate, and lobed like white oak. The large acorns have moss-like cups. Look for leaves and acorns on the ground beneath this tree.

**15. Tulip Tree:** The tulip tree is a member of the Magnolia family. Viewing the tall, straight trunk on this mature tree, it is easy to understand the important use these trees had as a building material to



the early pioneers, thus securing its place as the State Tree of Indiana.

**16. Leaves and Twigs:** Trees may be identified by their leaves and twigs. Look for the blue ash, two feet to the left of the post. It has winged twigs and opposite, compound leaves with 5 to 7 leaflets per leaf. Three feet to the right is a red elm, with simple, alternate leaves and brown hairy twigs. To your left is a sugar maple sapling with opposite, simple, 5-lobed leaves.

**17. Drainage:** This natural channel carries runoff from the adjoining fields. In the spring there are dense stands of wildflowers here, dominated in May by appendaged waterleaf, sweet cicely, recurved trillium, Dutchman's breeches, false Solomon's-seal, and later by stinging nettles.

**18. White Ash:** This good-sized tree has gray bark with rough longitudinal furrows and opposite, compound leaves. Note the stout, opposite branches in the top of the canopy.

**19. Geology and Soils:** Glacial boulders can be seen in the stream bed. This part of Indiana was subjected to three glacial periods which occurred over several hundred thousands of years. The last (Wisconsin) Glacial Period began around 70,000 years ago and ended 12,000 years ago. Note the soil profile along the bank of the stream. Russell silt loam has grayish brown topsoil and the subsoil is lighter colored.

**20. Ironwood:** This small tree grows in the understory and has gray, shreddy bark. It is often confused with musclewood which has similar leaves, but very different bark.