



**W**elcome to the Jackson Creek Trail, a self-guiding, 1.5 mile hiking trail in Yellowwood State Forest. This trail takes you through a variety of habitat types, including marsh, pine forests and central hardwood forest. There are 23 stations marked along the trail, each featuring a particular plant or plant association or a geological characteristic. Some of the stations show examples of man's direct involvement with the forest, including some of the many ways in which we derive benefits from the forest. A short list of these benefits includes watershed protection, air purification, wildlife habitat, recreation areas and over 6,000 useful items made from wood. We hope that as you hike the trail you will be able to appreciate some of these benefits.

#### Wheelchair Accessibility

The first 1,500 feet of this trail was improved in 1996 to provide wheelchair access. If you are a wheelchair user and have suggestions for improvement of this portion, please contact the forest office.

#### Recent History

The forest you will be walking through is a part of the Central Hardwood Forest and was settled by European immigrants and their descendants in the early 1800s. Much of the forest you will see was occupied by homesteaders and cleared for farming. Most of the ground was unsuitable for farming and was abandoned in the early 1900s. Although vacated many years ago, it is still possible to find evidence of the farms and dwellings that dotted the area. The locations of old home sites are often indicated by the remaining shade trees and ornamental plants and sometimes the house foundation or a well. The land was acquired by the public in the 1930s and the cleared areas have either been planted to pine trees or allowed to reforest naturally.

*Please remember that the trail is for hiking and wheelchairs only; use of horses, bicycles or motorized vehicles is prohibited.*

#### OUR MISSION

The Indiana Department of Natural Resources' Division of Forestry promotes and practices good stewardship of natural, recreational and cultural resources on Indiana's public and private forest lands. This stewardship produces continuing benefits, both tangible and intangible, for present and future generations.

The DNR prohibits discrimination on the basis of race, national origin, sex, or disability. If you believe you have been discriminated against in any program, activity, or facility as described above, or if you desire further information, please write to:

Department of Natural Resources  
Executive Office  
402 West Washington St., Rm W256  
Indianapolis, IN 46204  
317-232-4020

# The JACKSON CREEK TRAIL

A 1.5 mile foot trail developed by the Youth Conservation Corps and the Indiana Division of Forestry.



1

**Exotic Plants** There are several plants in our area that are referred to as *exotic* because they are not native to this region. Some of these are considered to be 'invasive' exotics because of their ability to displace native plants. Many of these were planted intentionally for their beneficial qualities only to become problems because their aggressive nature allows them to successfully compete with and displace native species. As you walk the trail you will see several examples of invasive exotics, including Japanese honeysuckle and the marsh plant, purple loosestrife.

2

**Marsh** This marsh provides habitat components for many kinds of wildlife, including muskrat, bullfrogs, painted water turtles, wood ducks, bass, snakes and wading birds. The marsh was created in 1939 when Jackson Creek was dammed to form Yellowwood Lake. As you walk the trail you will likely spot a common marsh resident, the red-winged black-bird. Some common marsh plants include cattails, black willow and the exotic purple loosestrife.

3

**Bald Cypress** The bald cypress tree is one of the few 'deciduous' conifers; that is, it loses its leaves in fall. Cypress are native to southwestern Indiana but have been planted widely throughout the state. The conical projections rising from the roots of the trees are called 'cypress knees'. The function of the knees is not known for certain, but popular theories include support of the tree and oxygen exchange.

4

**Virginia Pine** This stand of Virginia pine was planted in 1960 to reforest this old farm field. Pine trees of various types have been planted extensively to stop soil erosion on abandoned fields. The understory has been colonized by native and exotic trees, shrubs and vines.

5

**Eastern White Pine** One of Indiana's few native pine trees, the white pine is often called the monarch of eastern forests. The age of these pines can be determined by counting the branch 'whorls'. The whorls are indicated by circles of branch stubs on the trunk and as layers of branches in the crown. For trees this size you should allow for two or three whorls that you can't see at the bottom and top.

6

**White Oak** This grandfather of the forest is a white oak tree, estimated to be over 200 years old. At 50 inches in diameter, it is hard to find a larger tree nearby. This tree probably provided shade for the farming inhabitants here over 100 years ago.

#### The Wheelchair Accessible Trail Ends Here

7

**Plant Succession** The area to the west of the station marker is an abandoned field that was not planted to pines like the area shown in #1. Before it returns to its native cover of hardwoods, it will go through a series of plant cover stages. Each stage is a plant community that creates conditions that favor a different

'succeeding' community. Typically, the first plants to move into a site like an abandoned farm field are plants that require full sunlight to thrive. These are known as 'shade intolerant' plants. The intolerant plants usually create shade, favoring plants that are 'shade tolerant'. One of the first trees to colonize an abandoned field in our region is Eastern red cedar, like the one behind the marker. In the absence of further disturbance this site will eventually succeed to shade tolerant hardwoods. You will see examples of plant succession along the trail.

8

**Bottomland Plants** This bottomland supports varieties of plants, both woody and herbaceous, that are very different from those found on the hillsides along the trail. The array of herbaceous species is quite large and includes green dragon, Jacob's ladder, wingstem, jewel weed and stinging nettles.

9

**Black Walnut** Black walnut is Indiana's most prized tree species and is a common bottomland species on Yellowwood State Forest. The beautiful wood of this tree is favored for furniture, veneers and decorative uses. The nuts are favored for their excellent flavor by squirrels and humans alike. In the foreground is a black walnut plantation which was planted by the Civilian Conservation Corps in the 1930s.

10

**Jackson Creek** This is the creek that was dammed to form Yellowwood Lake. Its cool, clear waters are the product of a forested watershed. Forests provide clean water by intercepting and slowing rainfall, thereby reducing erosion. Rainfall moves slowly through forest floor duff to replenish groundwater supplies. Over 90% of the Yellowwood Lake watershed is forested.

11

**Pine Forest Floor** Looking around you will see many of the ways in which the pine forest has impacted this former farm field. The needle cast and fallen logs support a variety of fungal and animal life. The dense, year-round shade creates cooler conditions that are more moist than those found under deciduous hardwood cover. The shade will also favor shade tolerant tree species, which, in the absence of further disturbance, will succeed these pine trees.

12

**Streambank Erosion** In an age-old process of moving uplands to the sea, streams are continuously moving soil and rocks to other locations. Here you can see that the stream is cutting the bank away and depositing the soil and rocks downstream. This cutting action can undermine streamside trees, usually causing them to fall into the stream. On the opposite bank you can see deposits that were dropped here from further upstream.

13

**Central Hardwood Forest** The hillside in front of you is an example of the Central Hardwood Forest which embraces the central portion of the eastern United States. Oaks are the dominant species and they grow in association with hickories, ashes, elms, yellow poplar, maples, gums, walnut and others. A significant feature of the hardwood forest is that the trees are 'deciduous', losing their leaves in autumn. Species visible from here include red, black and white oaks, bitternut and shagbark hickories, Ohio buckeye, sugar maple, sycamore, yellow poplar, black walnut, American beech and black cherry.

14

**American Beech** American beech is one of the most distinctive trees in the forest, easily recognized by its smooth, gray bark. Unfortunately, this bark is also very attractive to vandals with carving tools who often leave their marks on this tree. The hollow beech tree uphill from the marker is typical of many of the older beeches in the forest. The beech tree's ability to live for a long time as a hollow tree makes it a common den tree for wildlife.

15

**Grapevine** The grapevine is a common forest plant. Vigorous grapevines can sometimes grow to the tops of trees and compete with them for sunlight. In some cases, this kills the tree. In managed forests vines are cut from high value trees. You will see many examples of grapevines along the trail.

16

**Yellow Poplar** Indiana's state tree gets the name yellow poplar because of its similarity to some trees in the poplar family. However, this stately tree, also commonly known as tuliptree, is actually a member of the Magnolia family. It is one of the fastest growing trees in the Central Hardwood region and is a very popular hardwood for a variety of uses. Many log cabins in this area have been constructed from yellow poplar. Yellow poplar requires full sunlight to thrive and often sprouts from seed in large numbers following a forest disturbance that allows full sunlight to reach the forest floor. The presence of these yellow poplar trees here tell us that this site was once much more open to sunlight than it is now.

17

**White Ash** Chances are that the wooden baseball bat or tennis racket you have used was made from the wood of this tree. The light, very strong wood of the ash tree is ideal for sporting goods and tool handles. Like the yellow poplar, ash thrives in full sunlight. Ash seedlings can survive in the shaded understory until a disturbance like harvesting or windthrow lets enough light into the forest floor for the tree to grow taller. It achieves its best growth potential on north and east facing slopes which are cooler and wetter than south or west facing slopes.

18

**Sassafras** Sassafras is probably the most famous "medicinal tree" in the Central Hardwood Forest. The bark and roots are the source of tea and oil of sassafras. The oil is used to perfume soaps and flavor medicines. Sassafras is one of the first trees to sprout

after a forest disturbance and often competes with other early sprouters like yellow poplar and ash. These sassafras are infected with Nectria canker which produces 'target-shaped' wounds on the trunk and can kill entire stands of trees. It has killed some of the sassafras trees in this group.

19

**Forest Road** The path you are now on is a forest road that has a long history and many uses. It once was a country road that provided a travel route for the homesteaders and their descendants who lived in these hills until around the 1930s. It now serves as a hiking trail and a forest access road for a variety of uses such as fire control and trail maintenance.

20

**Intermittent Stream** This little stream bed is dry much of the year, but in the spring or after a summer storm it bustles with activity. It carries the runoff from the hills above to Jackson Creek. In the spring it helps support many types of forest life, including amphibians, aquatic insects, crustaceans and many birds and mammals. In the dry summer months, animals will travel further downstream to reach water.

21

**Christmas Fern** What is a walk in the woods without seeing a fern? The Christmas Fern is so named because it retains its summer green color throughout the winter and so has been used for holiday greenery. Ferns are different than most of the other plants in the forest in that they do not produce flowers or seeds. They reproduce by means of spores which can often be seen as small brown dots on the undersides of leaves. There are about 100 types of ferns in our area. As you walk the trail you are likely to see Maidenhair, Grape and New York Ferns.

22

**Multiflora Rose** The dominant plant under this walnut tree is multiflora rose, an invasive exotic. Multiflora rose was widely planted in this region in the 1950s for natural fence rows. Since then its aggressive nature has allowed it to spread to many areas. It is useful to wildlife for cover, but is considered a pest in agricultural areas.

23

**Streambed & Local Geology** This streambed is a good location to stop and study local geology. Most of the rocks you will see are 'Borden Group' siltstone which is the underlying bedrock in most of Brown County. It dates back to over 320 million years ago when a shallow inland sea covered most of southern Indiana. Look for crinoids, small, stem-like stones that are the fossil remains of a creature that inhabited these seas. Though the stem appears to be plant like, it was an animal related to sea urchins and starfish. You may also find some geodes-roundish, irregular, knobby stones. The origin of geodes is unknown but they are thought to have derived in some way from fossils.

*This stop ends the interpretive portion of the Jackson Creek Trail. We hope you enjoyed your hike and will continue to enjoy the recreational opportunities on Yellowwood State Forest.*