



CHIKAMING OPEN LANDS

Robinson Woods Trail Guide



***Thanks to Chikaming Open Lands Stewardship Committee members
Bob Tatina and Buffy Dunham for preparing this guide!***

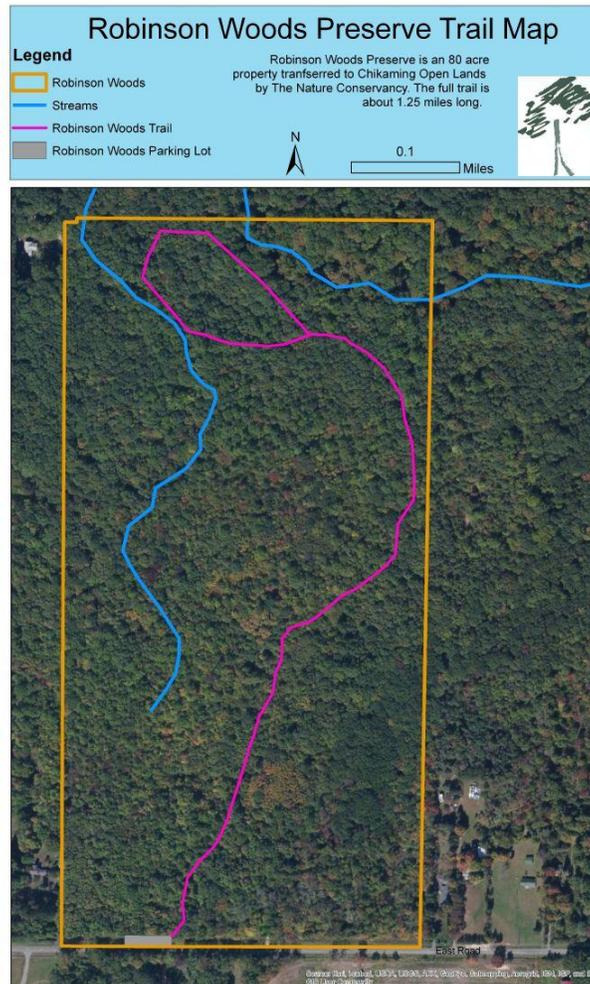
This guide follows the markers you will see along the trail. The symbol next to each entry will correspond to the symbol on each marker.

If you have a smartphone, you may scan the QR codes on each marker to see these entries on your device.

Please return this guide to the kiosk for other hikers to use. Thank you.



Welcome to Robinson Woods Preserve



The 80-acre property you are now entering was purchased in 1966 by Jean C. and William S. Robinson, who built a small cabin at the northern end just west of the path. Two years later they donated the southern 65 acres to The Nature Conservancy (TNC), and in 1973, the Robinsons donated the remaining northern 15 acres to TNC. In 2009 the entire 80 acres were transferred from TNC to Chikaming Open Lands. The path you will be walking was once the road that the Robinsons used to drive back and forth to their cabin.

△ *Cultural History*



The 80 acres that is now Robinson Woods Preserve was settled in the mid to late 1800's and was farmed by Ed Tatreault who had a log house and well slightly up hill from here. The well still exists east of an elevation with a crater-like depression in which the log house was located. Behind you as you face this marker, Tatreault had a granary and a barn.

Mr. Tatreault turned much of the property to orchards and row crops. His operation included an apple orchard in the southwestern corner and the north-central part and a peach orchard in places along the north-south road that winds through the property. He planted corn in the southeastern portion. Sometime after World War I, drainage ditches were dug and an attempt was made to place tiles, but the tiling project was aborted before completion and the farm abandoned.

You can see other evidence of Mr. Tatreault's farming practices on this land in the ridges and rises along the trail that are signs of his row cropping.

Φ **Poison Ivy** (*Toxicodendron radicans*)



Be aware of poison ivy! Beyond this sign is a large patch of poison ivy. It has stems that trail along the ground as well as stems that anchor to the bark of trees allowing the plant to grow up the side of trees. Poison ivy can be identified by its alternate leaves comprised of three coarse-toothed leaflets.

This plant produces a chemical (urushiol) which can cause skin rashes, itchy blisters and in rare, serious cases, anaphylactic shock in sensitive persons. All parts of the plant (roots, stems leaves, flowers, fruits) are poisonous to sensitive individuals.

If you contact poison ivy, the FDA recommends the following: within 10 minutes, clean the area with rubbing alcohol. Then wash the area with soap and water. Also remember that if you have walked through it, your shoes will have urushiol on them, so handle them with care.

○ **Pin Oak** (*Quercus palustris*)



This tree with the downward arching lower branches that have no leaves is a northern pin oak. It is one of two pin oak species in the region to possess this characteristic, the other being the northern pin oak (*Quercus ellipsoidalis*). Pin oaks are often found on acidic soils that are poorly drained. When planted on alkaline soils, their roots are unable to take up iron and as a result their leaves yellow and the tree eventually dies.

Notice that its leaves end in a point and that they have deeply scalloped edges. Its reddish brown wood is coarse-grained and hard and has been used for furniture, flooring and posts. Its acorns are small and bitter.

◇ **Trail to Large Red Oak Tree** (*Quercus rubra*)



Look at the majority of the canopy trees around you. Notice that they have relatively straight trunks and that their lowest branches are located high on the trunks. This is characteristic of trees that grow in close proximity to other trees, and therefore must compete for sunlight. Occasionally you will see a tree with large low limbs whose crown is large like the red oak tree down this path, which grew in an opening without competition from other trees.

□ ***Blueberry Bushes (Vaccinium)***



This cluster of tall blueberry bushes is probably a remnant of those that were planted at the time when Robinson Woods was an orchard. Because the forest canopy denies them of the abundant sunlight they would need to bear fruit, you will find few berries on these remaining bushes.

● **Hair-Cap Moss** (*Polytricum juniperinum*)



Hair-cap Moss showing leafy plant (green) and spore-containing capsules

Along the path here grow some small, dark green plants whose cylindrical appearance calls to mind a bottle brush. A type of moss, these individual plants grow so close together that they form a mat.

Some of the individuals are male and produce mobile sperm; others are female and produce eggs. You can pick out the female gametophytes because they have a slender stalk emerging from their tops. This stalk bears a capsule at its tip containing numerous spores, which when released and dispersed into the air, germinate to produce the next generation of plant. Before the spores can be released, a whitish covering (the “hair cap” that gives the species its common name) must fall off. After the hair cap comes off, a lid that seals the capsule will open. Next, sets of teeth flex outward in dry conditions to open the capsule, and finally dislodge the spores. In more humid conditions, the teeth absorb moisture which causes them to fold back, sealing the open end of the capsule. The moss favors dry conditions to release its spores (and holds them in wetter weather), because it relies on wind to carry and disperse them.

***Sassafras* (*Sassafras albidum*) with Cankers**



Sassafras tree trunk with Nectria cankers (left). Sassafras seedling (right)

The open patches on the trunk of this sassafras tree are caused by a neo-nectria fungus. The infection starts when spores of the fungus germinate on the bark producing filaments that digest their way into the tree, killing the bark, sapwood and cambium. The tree defends against this infection by walling off the infection with additional bark. The re-infection and walling off produces the cankers that you see. Neo-nectria fungal infections are more common where sassafras trees are growing too close to each other.

Sassafras is an important pioneer tree species, repopulating open areas. If you crumble a leaf between your fingers you will detect a pleasantly sweet fragrance. When dried and ground, sassafras produces gumbo file powder, used in cooking as a seasoning and thickener by Native Americans in the South and later incorporated into Creole cooking.

X *Eastern White Pine (Pinus strobus)*



White pine needles and barred owl

The dark green tree you see ahead of you is a white pine, the state tree of Michigan. You can recognize it easily by counting the number (five) of soft needles bundled together. While not common in Robinson Woods, white pines could once be found in huge stands, and were extensively harvested during the second half of the 19th century. Its wood is light brown and is used in home construction. The tree you see here has been the location for several sightings of barred owls. These are the nocturnal birds that are often heard at night.

Because they require large tracts of forests, the barred owls' existence here depends on the adjacent privately owned woodland tracts.

✦ **Ground Cedar** (*Diphasiastrum complanatum*)



In these woods there are four species of seedless vascular plants that have small leaves. One of these, called ground cedar, is growing at your feet beyond this marker. Because of its shape and flattened leaves, ground cedar plants resemble miniature white cedar trees. Like mosses, ground cedar employs spores to disperse themselves. During early summer, the upright stems produce elongated cones, the bracts of which house the spores. When ripe, the bracts relax exposing the spores to the wind. The spores, which are so tiny that 750 of them lined up end to end equals just one inch, are rich in fats that are a concentrated energy source to be used by the germinating spore.

In the past, the spores were collected and used for medicinal purposes and, believe it or not, as a flash powder in early flash photography! During a photography session, the trough that the photographer or his assistant held up contained these spores, which when vaporized and ignited produced enough of a flash to light an indoor photo.

∞ *American Beech* (*Fagus grandifolia*)



American beech tree with lower leafy branches (left) and leaves (right)

The American beech tree seen here shows a feature of this species that is not shared by others in this forest. Even as a sapling it has long lateral leafy branches, which allow it to capture the energy of the smallest of sun flecks and to thrive in the shade of canopy trees.

This large tree is recognizable by its thin, grey bark. The hard, whitish wood is quite durable and is used for furniture and flooring. Its leaves are a shiny, yellow-green with very straight veins, each one ending in a pointed tooth. At intervals of three to five years, American beech trees produce a crop of nuts enclosed in a bristly husk; the meat of the triangular, reddish seed is sweet and edible.

Ravine



Creek at the bottom of the ravine

The ravine below you has a creek at the bottom that flows into Cherry Creek, which empties into Lake Michigan at Cherry Beach. It probably had its origin approximately 13,000 years ago when the glacier that covered this area began to retreat. As it did so, it dropped the load of ground up rocks and sediment that it carried. These became some of the parent material for the soil that is at your feet. In addition, the melt water from the glacier began to flow toward Lake Michigan, cutting a channel along the way. That channel is the ravine that you see. Its floodplain provides a cool, shaded habitat for plants that thrive on stream banks and the animals that feed on them.

New Loop Trail



Robinson Woods stewards finish building the New Loop Trail, April 2013

The trail that branches to your left was created by a team of volunteers working with the Stewardship Committee of Chikaming Open Lands in the spring of 2013. Stewardship volunteers are the heart and soul of the stewardship program. They give generously of their time to tackle a myriad of tasks, from stocking the brochures at the kiosk, to cutting invasive plants, to maintaining and even building trails.

If you are enjoying your time here, consider joining the Chikaming Open Lands stewardship group. You can see we are a fun bunch of folks of all ages! Contact the office at (269) 469-2330 for more information.



Pileated Woodpecker Holes on Sassafras



Pileated Woodpecker

Pileated woodpeckers (*Dryocopus pileatus*) are large, non-migratory birds about the size of a crow (the pileated woodpecker was used as the model for Woody Woodpecker of cartoon and comic book fame). Pileated woodpeckers feed mainly on insects that live under the bark and in the wood of trees. To get at these the bird uses its head as a jackhammer and its sharp bill as a chisel to cut elongated pieces of bark and wood as its forms a large (3" X 6") rectangular hole, several of which are evident on this downed sassafras log. Although it is thought to prefer carpenter ants and beetle grubs, it will also eat fleshy fruits and nuts.

Pairs of pileateds mate for life and cut nest cavities in dead standing tree trunks. Clutches are of three to five eggs. The pair takes turns incubating the eggs and rearing their brood. Because each pair requires a territory of 300 to 500 acres of mature forest, we need to preserve large forest tracts like this one to ensure continued presence of these magnificent birds.

Ω *Tulip Poplar* (*Liriodendron tulipifera*)



Tulip Poplar tree with two trunks (left); leaves and flower (upper right)

The pair of trees that are attached at their base illustrate a feature of tulip poplar trees. The fast growing trees often produce sprouts from near their base when injured. The sprouts may remain attached and develop in place, which is probably what happened here. It is nearly impossible to determine which trunk grew from the root sprout of the other. Tulip trees are known for their tall trunks unencumbered by limbs. Even young trees often have no limbs that a human could reach. How high is the first limb you see on these trees?

Σ *Robinsons' Summer Cabin*

In 1966 Jean C. and William S. Robinson purchased the 80 acres that make up Robinson Woods Preserve and built a cabin here using the road (main path) to drive to and from their cabin. Can you imagine how quiet and calming it would have been to spend time in the cabin surrounded by this beautiful woods and ravine? The Robinsons knew this was a special place and they wanted to make sure it would stay that way, so they donated the land to The Nature Conservancy, ensuring this forest would be protected in perpetuity. In 2009, the land was transferred from The Nature Conservancy to Chikaming Open Lands, who has been protecting and managing the Preserve ever since. Thanks to the Robinsons' generosity and foresight, we can be assured that this magical place they enjoyed will be enjoyed by you and many others for generations to come.

If you would like to join Chikaming Open Lands in caring for Robinson Woods Preserve, please consider becoming a Land Steward. Contact us at (269) 469-2330 or visit our website, www.chikamingopenlands.org for more information.

Thank you for your visit!