



IVEY TRAIL SIGN 11 – WELCOME!

Welcome to Joany’s Woods

Joany’s Woods is a 148 ha (365 acre) gem which includes woodlands, wetlands, meadows, plantations and shrub thickets. It was purchased by the Thames Talbot Land Trust in 2007 from the estate of Thomas Doherty and is recognized for its significant natural features. The name “Joany” honours the memory of the daughter of Thomas Doherty.

Joany’s Woods is nestled in the Ausable River Area of Natural and Scientific Interest. The Ausable River winds along the west edge of Joany’s Woods and the creeks in Joany’s Woods feed into the river. The condition of rivers and watersheds of the region depend on large natural areas like Joany’s Woods.

More broadly, Joany’s Woods is part of Canada’s Carolinian region, which lies south of a line roughly between Toronto and Grand Bend. The name *Carolinian* comes from the presence of animals, and plants such as Tulip Trees and Sassafras that are more common in areas to the south, including the Carolinas.

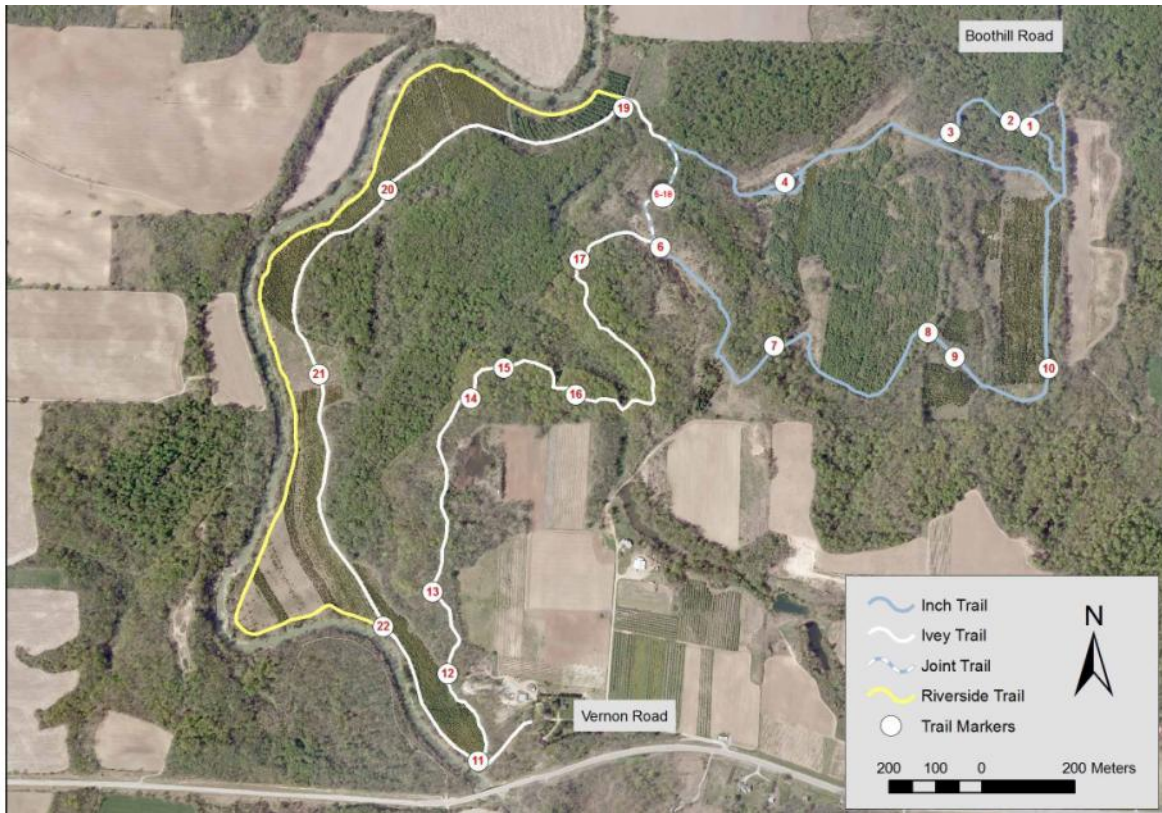
The Thames Talbot Land Trust invites you to enjoy Joany’s Woods on three trails. We manage this significant area for conservation, public education, hiking and appreciation of its beauty and its many species.

You are now on the Ivey trail. This trail is approximately 4.4 km (2.7 miles) long and takes you on some steep slopes, to explore a lovely Carolinian forest and to stroll along the Ausable River floodplain. The Ivey trail takes about 2–2.5 hours to complete if you allow some time to stop and enjoy your surroundings. Please be careful, some sections of the trail are rough.

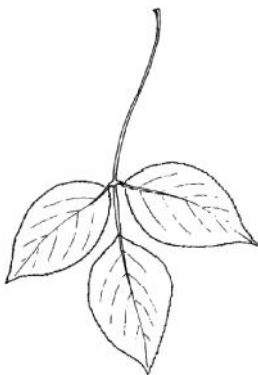
About halfway along the Ivey trail you will overlap with the Inch trail. The Inch trail loop is approximately 3.2 km (2 miles) and will lead you through forests, meadows, plantations, shrub thickets and swamps. The loop takes about 1.5 to hours to complete and loops north towards Boothill Road.

Development of this trail guide funded in part by:





IVEY TRAIL SIGN 12 – RATTLES



Look for Bladdernut (*Staphylea trifolia*) shrubs in front of you. They have leaves divided into three leaflets with finely toothed edges. The curious name comes from the strange-looking inflated, three-lobed, hanging fruit that are produced in late August. At first they are bright pale green and hidden in the foliage. During the fall, they ripen to brown and can hang on the shrub for more than a year. As the fruit ripens, the hard-coated seeds, the size of small peas, become loose inside and rattle around like a make-shift musical



instrument. The natives of the Meskwaki Nation use the seeds in gourd rattles for dream and medicine dances.

Bladdernut is a typical shrub of floodplain woods of the Carolinian region of southwest Ontario. It can be found in Joany's Woods between the base of the valley slope and the river. In spring look for clusters of small, delicate white to pale pink, bell-shaped hanging flowers that are visited by a large number of different insects. Bladdernut makes an attractive garden shrub, useful in border plantings and is



said to be left alone by browsing White-tailed Deer.

IVEY TRAIL SIGN 13 - FOREST STRUCTURE

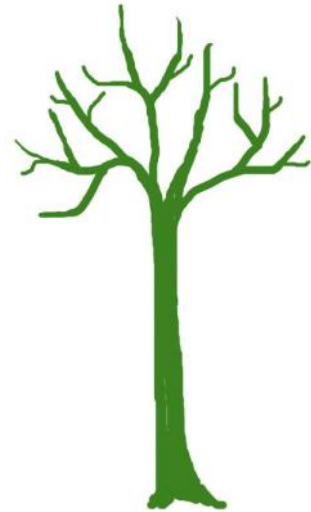
Take a moment to get an overall impression of the forest here. There is much that you can read from a forest stand that will tell you about its condition and history. You will see that among the many smaller trees are large individuals with low spreading



branches. The form of these larger trees is known as “open grown”. It indicates that as young trees they grew up in the open, unimpeded by the shade of surrounding neighbours.

The thick, stocky trunks and low branches show that the trees had plenty of space to spread their crowns. In contrast, forest trees that are crowded together grow tall and straight with few spreading limbs. We can tell from the shape and size of

these inhabitants that until perhaps the late 1960s this site was open with a few scattered trees. Most likely it was a pasture with shade trees for livestock. The younger trees grew later, probably seeding in from the adjacent forest on the valley slope, perhaps after cattle were no longer pastured here. The younger trees here will develop a “forest grown” form as they mature because they are close together and have to grow upwards fast to compete for sunlight.



IVEY TRAIL 14 – VINES

The thick twisted stem lying here is not a fallen tree or a root, but the vine of a Riverbank Grape (*Vitis riparia*). Such vines will climb trees and wind their way through the tree canopy, tangling with the tree’s branches. By climbing on trees, vines such as grape, Virginia Creeper and even Poison Ivy can save energy by relying on other species to provide the “scaffolding” on which they grow.



Amazingly, up in the tree canopy high above your head, the crown of the grape vine may be as large as that of the support tree. It may even kill its host by blocking all the

light or being so heavy that it causes branches to break. The fruits of the wild grape, like those of its domesticated cousins, are edible and provide an important food source for a number of wildlife species. Even foxes and coyotes will enjoy a vegetarian feast of wild grapes if they can reach them. In fall look for tell-tale purple stains and masses of grape seeds in the droppings of birds and beasts. Jams and jellies are human uses for the fruit of this vine, and the young leaves can be used to wrap food.



If you look about 12 m to your right you will see another important fruit tree. Black Cherry (*Prunus serotina*) has a dark flaky bark that looks a bit like burnt cornflakes. Like the wild grapes, the wild black cherries are much smaller than the fruit of the domestic varieties. Young Black Cherry trees need plenty of light; they grow best in gaps in the forest canopy. For this reason, the species, although widespread in the forest of southern Ontario, is usually more abundant in sites with a history of logging that has created openings.

IVEY TRAIL SIGN 15 - CLIMAX FOREST

Most of the trees in this area are Sugar Maple (*Acer saccharum*) and American Beech (*Fagus grandifolia*). Both species are shade-tolerant, and often grow together to dominate mature “Beech-Maple” forests in southern and central Ontario. Some forest trees like ash, oak and cherry are shade-intolerant and need openings in the canopy in order to establish, but the young recruits of both Sugar Maple and Beech can grow under the shade created by other species. A “Beech-Maple” forest is sometimes referred to as a “climax” forest. It develops only after the shade-intolerant pioneers have created a closed canopy forest. Once the shade-intolerant trees have matured and died [a process of many decades] they are replaced by the shade-tolerant Sugar Maples and American Beech. These two species replace each other in the canopy generation after generation until something like fire, ice, wind or logging open up the forest for other trees and the process starts all over again.



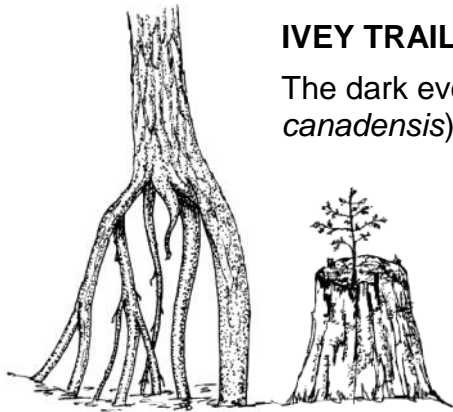
Often in woodlots in southern Ontario the American Beech trees are removed in favour of Sugar Maple to increase maple sugar production, and also because beech wood is generally less valuable than that of maples. The beech trees can be recognized by their smooth grey bark. Young beech are unusual in that they keep some of their leaves through the winter, even after they have died and turned light brown.

IVEY TRAIL 16 – DON’T DRINK THE BEER

The tree here with a thick, dark, blocky bark is Sassafras (*Sassafras albidum*). Sassafras is a good example of a Carolinian tree, one that is abundant in the deciduous forest of eastern North America [including the Carolinas]. It reaches the northern limits of its range in the extreme south of Canada. Sassafras is also known as “mitten tree” because of the distinctive shape of the leaves. They come in three distinct shapes, all found on the same tree. They may be plain oval or egg-shaped; they may have a small lobe on one side like the thumb on a mitten; or they may have two smaller lobes, one on each side of the main leaf.

The roots of Sassafras smell like root beer and were the original commercial flavouring for carbonated “Root Beer” in the soft drink industry. Some people still drink Sassafras tea, but high levels of sassafras extract have been found to cause cancer in laboratory animals. The sale of all products containing sassafras extract has been banned in Canada. This is one case where synthetic flavouring is a better choice!

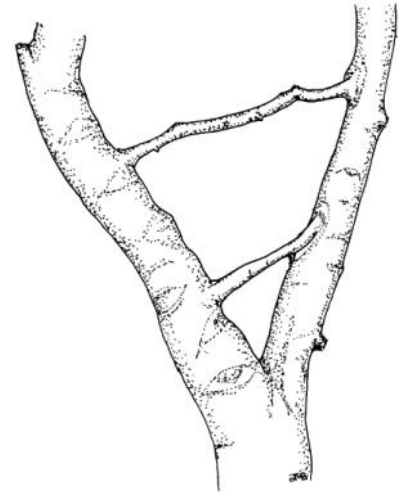
Look behind you and you will see Tulip Tree (*Liriodendron tulipifera*), another iconic Carolinian tree species.



IVEY TRAIL 17 – NURSE LOGS, STILTS AND CROSS BEAMS

The dark evergreen trees in this stand are Eastern Hemlock (*Tsuga canadensis*). In the mainly deciduous Carolinian forests, hemlocks are almost always found in sites with slightly cooler-than-normal microclimates such as on north facing slopes that receive less sun, in deep shaded ravines and near cool wetlands and streams. This slope is facing north. Hemlock seeds germinate best in decayed organic matter

and can tolerate deep shade. The “perched” tree here originally grew on a rotting stump. You can still see traces of the stump but most of it has rotted away, leaving the hemlock roots exposed like stilts. Rotting stumps and logs that host young trees are known as “nurse logs”. In death these logs nurture and support new life.



Look behind you to see another strange growth form in the American Beech tree. Where the trunk has divided, two branches from one trunk have grown into the other trunk creating two crossbeams. This event presumably happened naturally over time when the young branches grew across and encountered the other stem. Both stem and branch were damaged and the scar tissue allowed the two limbs to fuse. This phenomenon is used in the horticultural practice of grafting, where branches from one tree can be fused with the stem of a different tree.

IVEY TRAIL 18 – CONTRASTS

This steep hill slope offers you a view of both a well drained upland slope and a bottomland swamp. Because of the steep slope, the division between the two contrasting ecosystems is quite sharp, with almost no intermediate transition.

The swamp below you holds water late into the year because the drainage is impeded by fine soils that contrast with the sandy soils of this slope. Water from snow-melt and spring run-off cannot soak downwards because of the fine soils, and the lie of the land means that it cannot easily drain away above the surface. This ability of swamps and other wetlands to hold water on the land is important to the viability of ecosystems. Wetlands provide a buffer that helps prevent flooding caused by rapid run-off during spring melt and storm events, and the standing water and wet soils help to alleviate the effects of summer drought.

Many of the residents of Joany’s Woods rely on these wetlands. Listen for frogs in the spring and try and spot the Wood Ducks (*Aix sponsa*) that breed in hollow trees here.

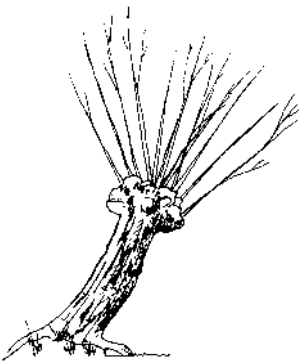
IVEY TRAIL 19 – WHAT A LARCH!

At one time, this site was in agricultural production. When Thomas Doherty bought this property in 1986 he began planting trees on this farmland. The trees here are European Larches (*Larix decidua*), related to the Tamaracks (*L. laricina*) of northern forests in Canada. These cone-bearing trees or conifers are so named because they produce their seeds in cones. Most conifers, like hemlocks, cedars, spruce and pine are evergreens. Larches are deciduous conifers and lose their needle-like leaves each fall.

About 3,000 larches were planted here for an original cost of about \$750. The same number of native hardwood trees would have cost over \$3,600. Cost is a major factor in the choice of non-native trees used for forest plantings. These larch trees will help prepare the site for a native forest to grow. They will reduce the cover of grasses and allow native trees, shrubs and herbs from the adjacent forest to establish themselves here over time. Eventually the larches will die, or be cut down as part of Joany's Woods management plan. When your descendants are walking this trail, they will see a forest of native species growing here.



IVEY TRAIL 20 – GENTLE GIANT



The huge tree here is a Hybrid Crack Willow (*Salix X rubens*). It is not a native plant, but a hybrid of two European species that has become widely established in North America. Crack Willows are so named because the twigs and branches bend easily and then break with a snap or crack. You will often see Crack Willow trees with branches that have grown heavy, bent outwards and then split away from the trunk. Crack Willows are very common along stream banks. They are spread when broken twigs fall in the water and are deposited in a new location where they are able to take root like a natural cutting. Willows can grow very fast and this giant may not be quite as old as its size and gnarled

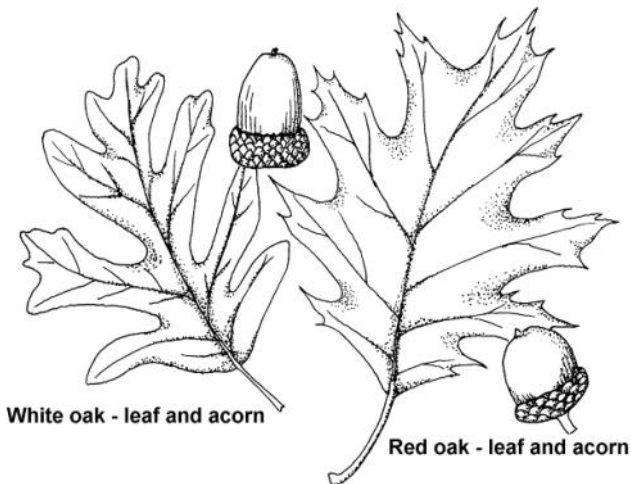
form might lead you to believe.

Willows have many uses. The straight young branches that grow rapidly from a cut stump are supple enough that they can be used in weaving. In Europe riverside willows were pruned and maintained specifically to provide a regular crop of branches, a process known as pollarding. You can see the distinctive shape of the pollarded willows in old painting and photographs. Many woven items from baskets and fish traps to walls and fences can be made from willow twigs. The inner bark of willow contains an effective pain killer, and has been used for thousands of years to treat pain and reduce inflammation. The active ingredient, salicin, gave rise to the world's first synthetic drug acetylsalicylic acid (ASA). Millions of doses are still sold every year under brand names

like Aspirin.



area when they were brought in as pasture grasses. They do very well in southern Ontario and behave as if they belong, reproducing quite happily in the wild. Mixed among the grasses are a variety of broad-leaves herbs. Asters, goldenrods and Common Milkweed (*Asclepias syriaca*) are native, but the Wild Carrots (*Daucus carrota*) are another introduced species.



White oak - leaf and acorn

Red oak - leaf and acorn

conditions are right for trees like Basswood, Black Cherry, oaks and maples to find a home. This process of change is known as succession. Under natural conditions it can take several to many decades to convert an old field to a forest. Here you will notice that succession has been given a jump start. Oak and White Pine trees are already present, planted among the other vegetation. Mixed planting of White Pine and deciduous hardwood trees is one way to encourage reforestation. The pines grow faster and will provide shelter and protection for the other species. Compare these plantings with others along this section of the Ivey Trail. Reforestation is always a balance between planting native trees in a more natural setting and establishing plantations that are monocultures of a single

IVEY TRAIL 21 – OAKS AND PINE

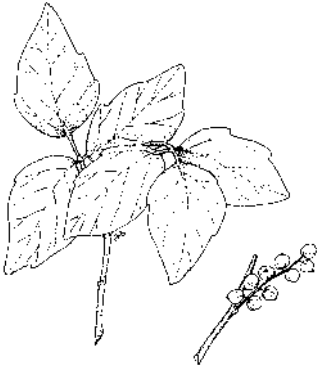
The vegetation here is typical of what is known as “old field”, but with one important difference. Old field vegetation establishes on abandoned agricultural land. The dominant plants in the ground layer are grasses, almost none of which are native to Canada. Most arrived in the

Given time shrubs will gradually establish in old fields, common types are dogwoods, hawthorns Ninebark and Staghorn Sumac (*Rhus typhina*). A few trees like ashes and soft maple may start to seed in. Poplars, aspens, willows and even White Pine (*Pinus strobus*) may also arrive if their seeds can find patches of bare earth; otherwise the dense mat of grasses will keep them out. Once the shrubs are established the grasses begin to die back and



White Pine needles grow in bunches of five

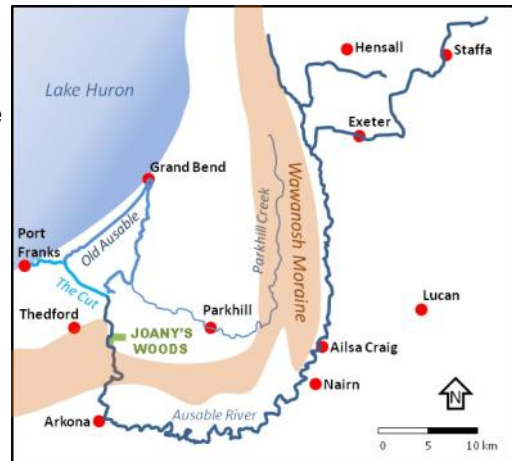
species.



IVEY TRAIL 22 – AUSABLE RIVER

Step over to the edge of the river bank, but watch out for the Poison Ivy! Poison Ivy (*Toxicodendron radicans*) is a common native species in southern Ontario. It can grow as a ground cover, but also as a vine climbing high into trees. Although toxic substances in the leaves can cause painful irritations in susceptible humans, Poison Ivy is a desirable species in a natural area. It provides shelter for wildlife and its white berries are an important source of winter food for many species. The best way to prevent getting a Poison Ivy rash is to learn to recognize the plant and avoid it when you are walking in the woods and fields. Look for the distinctive dark green “leaves in threes”.

The Ausable River here runs between high banks of glacial till. Note that the river is confined in a channel nestled in a much larger valley. The flat land behind you is an old river floodplain terrace, but only very rare flood events reach the old floodplain now. The Ausable River makes a tortuous journey on its way to Lake Huron. It rises about 12 km northeast of Exeter, and almost 50 km to the north and east of here. Between Exeter and Lake Huron is the long ridge of the Wyoming Moraine. This massive pile of glacial debris runs parallel to the Lake Huron shoreline and marks the edge of the Huron Lobe of the ice sheet that covered this area 15,000 yrs ago. The Ausable River meanders southwards on the east side of this moraine, past Ailsa Craig and Nairn. South of Nairn, it turns westward, still following the edge of the moraine as it too curves westward following the Lake Huron shore. Finally at Arkona the river makes a breakthrough! It managed to find a way across the moraine and poured across cutting a deep narrow valley known as a spillway. At this spot, near the south end of Joany’s Woods the river emerges on the other side of the moraine and can make its way to the lake. But it isn’t there yet! The land to the north and west is very flat, part of an old lake bed. Originally the river had to work its way across an extensive area of marshland, later called Thedford Marsh. It wandered all the way north about 18 km to Grand Bend where it used to outlet into Lake Huron, but dune formation along the lake shore blocked its passage. When it could no longer find a way out past the dunes, it turned south through almost 180° (the origin of the name Grand Bend) and worked back south through the Pinery another 14 km to Port Franks, where it finally reached its destination. In 1875 the Canada Company cut a channel from the south end of Thedford Marsh direct to Port Franks. This drained the Thedford Marsh and the rich marsh soils became a prime area for vegetable growing.



WE HOPE YOU ENJOYED YOUR EXPLORATION OF JOANY’S WOODS. PLEASE VISIT OUR WEBSITE AT WWW.TTLT.CA TO VIEW THE INTERACTIVE TRAIL GUIDE AND TO LEARN MORE ABOUT OTHER THAMES TALBOT LAND TRUST PROPERTIES.