



## Cedar Pond All Persons Trail Tour

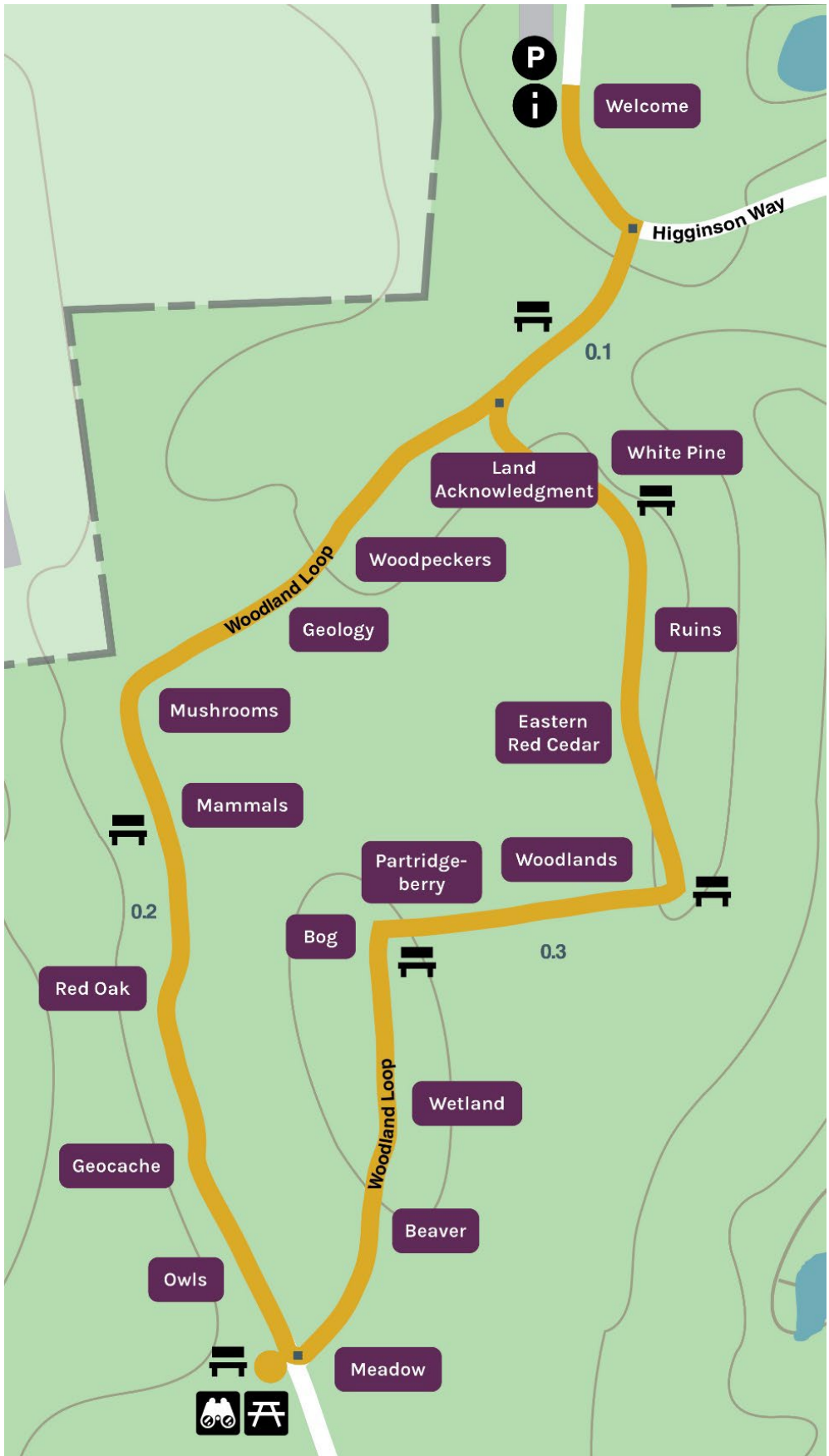


This interpretive tour typically takes 45 minutes to one hour.

We invite you to use this printed booklet to enjoy the trail tour.

Please call ahead for information on trail conditions and to find out what items and materials are available for loan.

We gratefully recognize the commitment and generosity of the donors and the accessibility consultants that have made this project possible.



## **Welcome**

Welcome to the All Persons Trail at Mass Audubon's Cedar Pond Wildlife Sanctuary. This Sensory Trail is here for your enjoyment. Please take only pictures and leave only footprints. Enjoy your visit today and return to experience the diverse nature of our site in different seasons. The trail is 0.9 miles long in its entirety.

The 2500-foot-long post and rope section of the trail loops around in a circle through forest and meadow landscapes of the Woodland Loop Trail and will return you to this starting point. You can travel this loop in either direction. The stone dust covered trail is generally level with a few areas of very gentle incline and decline. The total length of this section of trail is half a mile and has six benches spaced every 500 feet. Along this loop of trail there are seventeen enrichment stops that will expand upon the natural history of the sanctuary.

While traveling along the trail you may occasionally notice the sounds of different aircraft overhead from nearby Beverly Regional Airport. Cedar Pond Wildlife Sanctuary is also home to mosquitos, deer flies and ticks so wearing long pants and sleeves with bug spray is recommended for your comfort.

Travel beyond this accessible trail on the Woodland Loop trail is possible along an additional mile and a half of the Meadow Pond Trail, Cedar Pond Loop, Esker Trail, and Higginson Way trails however most sections of these other trails are not ADA compliant and can be narrow, rugged, uneven, with some steep inclines and can be very muddy during most of the year. You are welcome to extend your experience if you wish to do so.

*To continue on this tour, go toward the Woodland Loop. Once you reach the post and rope section, take a left and you'll find the rope guide on your right.*

## **Land Acknowledgement**

Mass Audubon acknowledges that Cedar Pond Wildlife Sanctuary is located on the traditional, contemporary, and unceded territories of the Massachuset (Massa-adchu-es-et) Peoples. These lands were taken from the Indigenous people, creating a legacy of trauma that persists to this day.

We acknowledge that Indigenous stewardship of the land we now call Massachusetts kept its ecological communities vibrant, strong, and interconnected for thousands of years, but far from being relics of the past, Indigenous peoples, including the 37,000 individuals who currently reside in Massachusetts, are still at the forefront of environmental protection, ecological stewardship, and climate mitigation.

Mass Audubon deeply values the relationships that we have built with Indigenous people to date, but we also recognize that there is much work still to be done. Acknowledging Indigenous sovereignty and the ongoing trauma of colonialism is only the first step—and an imperfect one at that. Mass Audubon is committed to the work of learning, listening, and evolving so that we may live in the right relationship with the land and the people who have been its rightful stewards for thousands of years. We know this work will take persistence and time.

*To continue on this tour, follow the rope guide which will be on the right, until you reach the next stop.*

## **White Pine**

Shading the Woodland Loop trail are the northeast's largest coniferous tree, the Eastern White Pine. Mature trees can reach heights of over 100 feet. The "evergreen" pine needles grown in bundles of five. The pinecones, like the ones displayed here, can be four to eight inches long, are narrowly cylindrical and are covered with small scales that protect the pine seeds which are dispersed by the wind. The seeds of the White Pine are also a food source for many birds and small mammals. White pines are a successional tree that pioneer disturbed areas and old fields and often grow in multitree stands. The acidity of fallen pine needles makes the soil inhospitable to many plants but over the centuries pine trees will eventually give way to more hardwood trees.

*To continue on this tour, follow the rope guide which will be on the right, until you reach the next stop.*

## **Ruins**

Located on the highest point of the Cedar Pond Wildlife Sanctuary called Moulton Hill are the ruins of the foundation of the Higginson Mansion. Francis L. Higginson, a wealthy Bostonian, built the mansion as a summer residence along with several other structures and roads on the property in the early part of the 20th century. He gifted his estate to Mass Audubon in the early 1970s after which the old mansion was demolished. Moulton Hill is named for James Moulton, an early European colonist who was granted the land on which Cedar Pond Wildlife Sanctuary is now situated in 1639. By the mid-1800s most of the old growth forest in Massachusetts had been cut for lumber or to clear land for farming and grazing animals. The sanctuary's landscape, like much of New England, has been shaped and impacted by the ways that humans have used and lived on this land for the last few centuries.

*To continue on this tour, follow the rope guide which will be on the right, until you reach the next stop.*

## **Eastern Red Cedar**

Haunting the forest beneath the tall canopy of pines are the dead standing tree snags of Eastern Red Cedar. Red Cedar is an early pioneer tree which can quickly take over old, abandoned fields. Trees can grow to fifty feet in height but will be eventually shaded out by the growth of other pines and hardwood trees like white pine and red oak. Eastern Red Cedar berries are a preferred food source of several bird species such as thrushes, American Robins, and Cedar Waxwings all of which help disperse seeds. The cones and wood of the tree have a strong pungent smell which is part of the trees' defense against insects. A slice of Eastern Red Cedar, also called a "tree cookie" is displayed here for you to scratch and sniff.

*To continue on this tour, follow the rope guide which will be on the right, until you reach the next stop.*

## **Woodlands**

The Woodland Loop trail is situated within an Oak-Conifer Forest, a common forest type found throughout eastern Massachusetts. The Woodland Loop Forest is dominated by Eastern White pine trees with Red oak and Red cedar trees. Dense stands of White pine are common in landscapes that were cleared by European colonists in the past and have been

allowed to slowly return to forest. As you enter this woodland, what do you notice? Do you sense differences in the lighting or sounds here?

*To continue on this tour, follow the rope guide which will be on the right, until you reach the next stop.*

### **Partridge-berry**

Peeking out along the forest floor through winter and into the early spring are the fruit of the Partridge-berry plant. This native evergreen plant vines along and covers sections of the forest floor. In spring and summer are pairs of tiny, bright-white, four petaled flowers bloom are pollinated by insects. The flower fuse to become one small scarlet red berry with two bright spots. The flavorless berries are winter food for many animals including songbirds, wild turkeys, foxes, racoons, deer, squirrels, and mice. Here you can explore the tactile display of a Partridge-berry plant.

*To continue on this tour, follow the rope guide which will be on the right, until you reach the next stop.*

### **Bog**

In addition to forests and meadows, Cedar Pond Wildlife Sanctuary is home to a fascinating and rare bog ecosystem. Bogs are peat-filled wetlands dominated by spongy mats of Sphagnum Moss. Bogs are a clue to the glacial past of New England. In some cases, depressions in the landscape left behind by the melting ice of a glacier will be unable to drain properly. Soils are so acidic, nutrient-poor that bacteria cannot thrive, and natural decomposition is very slow. Layers of moss build up to form deepening soils that form the foundation for unique communities of animals and plants such as the Sundew and Pitcher-plant which compensate for the lack of nutrients in the soil with the amazing adaptation of being carnivorous, absorbing the nutrients from captured insects.

*To continue on this tour, follow the rope guide which will be on the right, until you reach the next stop.*

### **Wetland**

Wetlands are crucial and biodiverse ecosystems found throughout Massachusetts. Cedar Pond Wildlife Sanctuary's wetland borders the sanctuary's bog. There are many different types of wetland habitats, and they support amazing species of insects and amphibians, such as butterflies, dragonflies, frogs, and salamanders. Several rare Atlantic White Cedar grow around the edge of the wetland and only the luckiest visitors may have the opportunity to notice the Hessel's hairstreak butterfly whose adults spend most of their lives in the tops of cedars and caterpillars who feed exclusively on the Atlantic White Cedar needles. During certain times of the year, you might hear frogs chorusing or see dragonflies darting through the air.

*To continue on this tour, follow the rope guide which will be on the right, until you reach the next stop.*

### **Beaver**

The American Beaver is the largest member of the rodent family in North America. Famous for their engineering abilities, Beaver can alter landscapes with their dam building to expand

and create new areas of wetland, which in turn creates habitat for other living things. This is why Beaver are considered a keystone species whose presence and activity are crucial to the flourishing of the community of plants and animals. Beavers fell trees for food and building material which leaves tell-tale chew marks on trunks and branches. Displayed here is a beaver-chewed piece of a tree for you to explore.

*To continue on this tour, follow the rope guide which will be on the right, until you reach the next stop.*

## **Meadow**

Meadows are open fields usually dominated by herbaceous grasses and wildflowers that become dormant as winter approaches and grow back in the spring and summer. Over centuries, pioneer shrubs and trees will take advantage of the available sunlight and lack of competition and begin to occupy abandoned old agricultural fields and meadows. Red Cedar trees stand as little islands throughout the meadow. The border between two ecosystems, like the one here between the woodland and the meadow, is called an ecotone and is an excellent spot to observe the sights, sounds and smells of the wildlife. Ecotones are very biologically diverse, and the accessible picnic table in the meadow outlook area offers a wonderful spot to sit quietly in nature.

*To continue on this tour, follow the rope guide which will be on the right, until you reach the next stop.*

## **Owls**

A small mammal, frog, or salamander may forage on the forest floor in the twilight oblivious to the silent hunter that stalks them from air until it is too late. Owls are common birds of prey in Massachusetts with several adaptations that allow species to hunt prey without being detected. Next to this sign marker is a model of a Barred Owl's skull for you to explore. In the Barred Owl's skull, the right ear is higher than the left. This difference in placement allows the owl to determine the direction of a sound's source effectively allowing the owl to accurately pinpoint the location of prey, even under a layer of leaves or snow. Many owls famously "hoot", but owls also make a wide range of different vocalizations. Barred Owls are hard to spot roosting in high trees but be sure to listen for its distinctive call that resembles the phrase, "Who cooks for you? Who cooks for you all?"

*To continue on this tour, follow the rope guide which will be on the right, until you reach the next stop.*

## **Geocache**

While visiting Cedar Pond Wildlife Sanctuary you might observe more than just animals in the woods, you may notice modern day treasure-hunters. Geocaching is a popular outdoor activity that combines hiking and treasure hunting aided by GPS, smartphone apps, maps, and clues. The sanctuary has a number of geocaches located in the woods. The value of a geocache's treasure is the fun of the hunt and discovery as they are often camouflaged and challenging to find. A geocache usually contains a logbook that one can sign and small, fun items which may be exchanged for placing something new inside. We have placed a geocache here with objects you can exchange. Remember to leave a geocache as you found it and don't give the secret away!

*To continue on this tour, follow the rope guide which will be on the right, until you reach the next stop.*

## **Red Oak**

Northern Red Oak trees are important to animals living in woodland habitats. Deer and rabbits browse on leaves and young seedlings and their roughly inch-long, egg-shaped acorns are eaten by many birds and mammals such as woodpeckers, Blue Jays, Wild Turkeys, nuthatch, and chickadees, mice, and Gray, Red, and Flying squirrels. Red Oaks can grow to be 60-90 feet tall with a rounded crown of branches. Dull green in summer, their leaves turn brown to dark red in autumn. We invite you to reach into this box and feel some Red Oak leaves, twigs, and acorns.

*To continue on this tour, follow the rope guide which will be on the right, until you reach the next stop.*

## **Mammals**

Along the trails and paths of Cedar Pond you may find more than just the footprints of human visitors. A variety of other mammals regularly forage, hunt, and make their home in the many habitats that surround you. Mammals all share a variety of characteristics such as producing milk for their offspring, the ability to regulate their body temperature, and the presence of hair or fur on their bodies. Many mammals are cryptic, having different adaptations in their appearance and behavior that help them avoid predators and hide from prey. The best way to discover these crafty individuals is to notice their signs and signals such as their cries, odors, and tracks. Common mammal tracks found along the trails are those belonging to White-tailed deer, coyote, racoon, squirrel, and even bobcat. A tactile display is available here for you to explore some of these tracks.

*To continue on this tour, follow the rope guide which will be on the right, until you reach the next stop.*

## **Mushrooms**

Neither plants nor animals, fungi are an often-overlooked splendor. Fungus is a decomposer and consumes nutrients from other organisms as they decay. The presence of diverse species of fungus are a sign that an ecological community is healthy and recovering from disturbance, both human and natural. In addition to the more well-known mushroom-cap mushrooms dotting the forest floor, slime molds and polypore fungus also abound. Polypore fungus come in many shapes and sizes and grow like small shelves perpendicular to the trunks and branches of trees. Artist Bracket or Artist Conk is a common polypore that is woody in texture and can grow in large, layered shelf formations, found on the trunks of decaying trees such as maples and oaks. Displayed here is a sample of a polypore fungus which you can touch.

*To continue on this tour, follow the rope guide which will be on the right, until you reach the next stop.*

## **Geology**

Imagine yourself transported back in time 18,000 years ago. If you had been standing on this spot, then you'd be underneath nearly one mile of glacial ice. With the growing impacts of a

warming planet and climate change it's shocking to realize that we are in fact still living in an inter-glacial period of an ice age that began almost 3 million years ago. Around 10,000 years ago, when the last large ice sheet began to retreat and melt away it left the soil scraped away and the landscape reshaped with new landforms that would determine the different ecosystem and wildlife communities that would follow. Glacial hills such as round moraines and long and steep eskers stand out as islands of upland forest while glacial kettle holes eventually would fill with water and become lakes, ponds, and vernal pools. There is a tactile model of this landscape, from a bird's eye view.

*To continue on this tour, follow the rope guide which will be on the right, until you reach the next stop.*

## **Woodpeckers**

Spend enough time in the woodland and you are bound to notice the loud, distinctive drumming and vibration of woodpeckers. Woodpeckers probe woodland trees for the presence of insects and larvae living just under the bark. The largest woodpecker in Massachusetts is the Piliated Woodpecker, "piliated" meaning "cap" and referring to the prominent red crest on its head. Piliated Woodpeckers eat primarily carpenter ants and beetle larvae but will also feed on fruits, nuts, and berries. Drumming is most common during courtship and to proclaim territory. Displayed here is a section of a tree bark which has been worked on by a smaller woodpecker called the Yellow-bellied Sapsucker.

*To return to the parking area where you started, follow the rope guide which will be on the right. When the rope guide ends, follow the access road back to the parking area.*

## **Thank you for visiting this All Persons Trail.**

If you borrowed any trail materials, please return them to the Ipswich River Wildlife Sanctuary Visitor Center.

We hope you enjoyed your visit and learned about this Wildlife Sanctuary. We invite you to return in other seasons, and also to visit some of Mass Audubon's other All Persons Trails. For more information on our All Persons Trails, our commitment to accessibility, or to provide feedback about your visit to this trail, please visit [www.massaudubon.org/accessibility](http://www.massaudubon.org/accessibility).