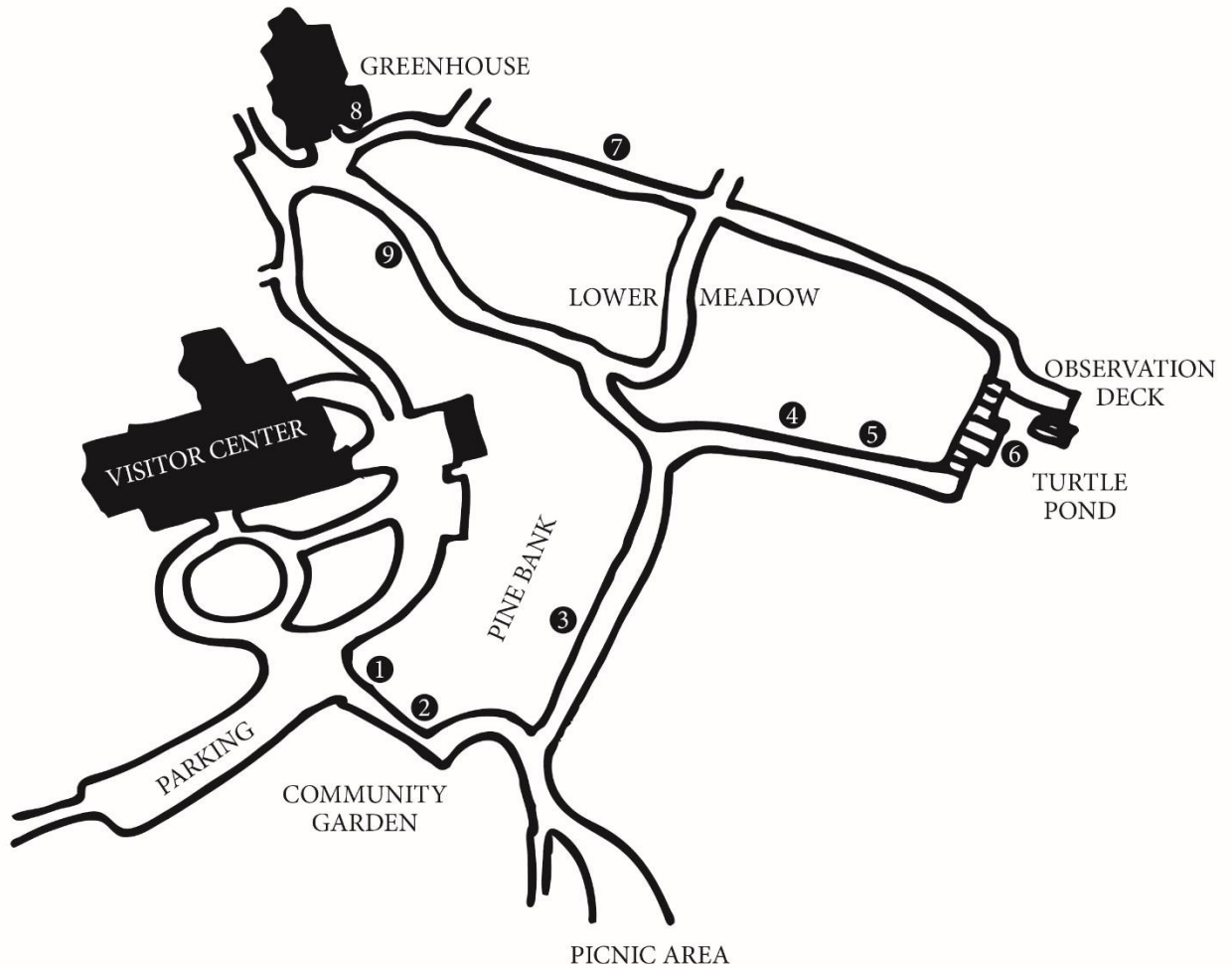


**HABITAT EDUCATION CENTER & WILDLIFE SANCTUARY**

**ALL PERSONS TRAIL**



## **Stop 1: Welcome**

Welcome to Habitat's All Persons Trail. This universally designed accessible nature trail is for everyone's enjoyment. On this trail, you can listen for birds, insects, and frogs, visit various meadow, wetland, and woodland habitats, and learn about the natural and cultural history of this special place.

If you haven't already been to the Visitor Center, it is located directly behind you on the opposite side of the driveway circle. To get there, you will need to go around the circular drive. With your back to the welcome sign, travel 40ft feet on the gravel path, and then go around the small circular driveway to find the building. To get to the accessible entrance, you will need to continue going to the right side of the building. In addition to the restrooms, which are located just inside the accessible entrance, the Visitor Center has a small book shop and monthly art shows. Trail tour materials, including audio players, booklets in large print and Braille, and a tactile map, are available at the Visitor Center office.

This half-mile, fully accessible loop follows a wide, level crushed stone path, enhanced with seating areas, boardwalks, and an observation deck. There are no stairs or side slopes along the Trail. The trail's elevation changes, width, and surfacing are compliant with ADA standards.

Please note that along this trail, there are several intersections with other trail segments that are not universally accessible. We invite you to explore these trails, if you would like to, but please be aware that there are roots, rocks, elevation changes, and surfaces that do not meet ADA compliance and may be difficult for some visitors to navigate.

Along the All Persons Trail, there are 9 interpretive stops, highlighting Habitat's natural and cultural history. This hour-long interpretive tour is available in multiple formats. In addition to this audio tour, printed booklets are available in regular print, large print, and Braille. This audio tour can be downloaded on to your own audio player, on an audio player you can borrow, or by phone/app. All narrated stops along the trail are marked on a signpost with the stop name and number in block print and Braille.

Just past the first stop on the All Persons Trail, there is a rope-guide. This is the only segment of the All Persons Trail with a post and rope guide. Proceed down the trail 115 feet, along the rope guide to the garden entrance, stop 2.

## **Stop 2: Community Garden and Solar Array**

Here on the right is our community garden, a fenced in area with many small garden plots and a solar array. Most of the plots are rented to Mass Audubon members who grow an assortment of vegetables, flowers, herbs, and berries for themselves and their families and friends.

We invite you to use the wooden benches located just outside from the garden gate. These benches were designed and built by a local eagle scout. The tree trunk bases are from a pine tree that came down in a storm, at Habitat.

We also invite you to come into the garden area and visit the common gardens. Please be aware that the ground surface may get uneven as you proceed further into the garden area.

You will immediately encounter two raised planting boxes: one at a comfortable height for someone using a wheelchair and one at a height for someone more comfortable standing. In the planting boxes are some herbs that you may touch and smell. We suggest you look or listen for bees before you reach into these planting boxes, and touch the plants carefully so you do not disturb any bees busily pollinating the garden plants.

Nearby are the Moon and Sun herb gardens, which we invite you to visit. The sun garden, on the left and the moon garden, on the right, have many beautiful flowering plants, many of which are fragrant. These gardens were created and are cared for by an intergenerational group of women, part of the Habitat Intergenerational Program (HIP). The herbs are used for tasting, touching, and teaching. The bench in the Moon garden is available for anyone who wants to rest and enjoy this beautiful setting. The moon garden has mainly plants with pink, blue and purple flowers, while the sun garden has contains plants with red, yellow, pink and orange flowers.

Finally, there is Habitat's "Children's Garden" used by Habitat teachers for children's programs, where vegetables, flowers, and herbs are tended and used by educators and children.

At the rear of the community garden on the left is a ground mounted solar array. You are welcome to touch the panels and feel the warmth of the sun on their surface. An underground cable carries the electricity produced by the array to Habitat's Visitor Center. The solar array provides about 30% of this sanctuary's electricity needs. Mass Audubon is committed to reducing its reliance on fossil fuels. All Mass Audubon staffed sanctuaries produce at least some of their own electricity and offset the remainder of their demand with purchases of renewal energy credits.

Leave the garden by way of the gate you came in through. Straight ahead is a wooden barrier and behind the barrier is a row of boulders. The trail continues to the left of the barrier and boulders. You will quickly come to a turnoff to the right.

The turnoff leads to a picnic area with several picnic tables including an accessible one. Please feel free to enjoy this picnic area before moving on to the third stop.

If you do not take the turnoff but continue on the trail, the Meadow Trail, you will come to stop 3. Stop 3 is 228 from the turnoff to the picnic area. There is a bank of tall pine trees will be on your left along the Meadow Trail.

### **Stop 3: Pine Bank**

The marker for stop 3 is located next to a bench. We invite you to use this seating area while you learn about and enjoy the pine bank behind the bench and the forest across the trail from the bench. By the way the bench is made from 100 % recycled plastic as are many of the benches along this trail.

Behind the bench is a hillside of large white pines. Most of these trees are about 80 years old. They were planted after another pine bank, in the same location, was destroyed during the historic hurricane of 1938, which devastated southern New England.

This pine bank offers a rich sensory experience. Listen to the whispering pines swaying in the upper forest canopy. Feel the temperature difference in this shaded woodland. Notice the soft pine needles underfoot off the edges of the All Persons Trail. And smell that distinctive pine woods smell. Sometimes, an owl or hawk can be seen perching, or heard calling, hunting for small prey here in this quiet woodland.

In front of you just off the Meadow Trail is a row of brush piles we have collected from other parts of the sanctuary. Much of the plant material in the brush piles is undesirable invasive plants that we have removed. It's an effort to manage the sanctuary so these exotic invasive plants don't crowd out our native species. The brush piles make excellent homes for a variety of wildlife including mice, chipmunks, and voles. These animals are prey for the foxes, coyotes, owls, and hawks that live at Habitat. If you listen carefully, you may hear the sounds of squirrels and chipmunks moving about the brush piles and around the forest.

There is a small hill beyond the brush piles that is populated by a mixed deciduous-evergreen forest. Deciduous trees are those that typically lose their broad, flat leaves each fall and evergreens are trees that typically shed their needle-like leaves throughout the year instead of in one season.

There is an old stone wall at the top of the hill, which runs parallel to the Meadow Trail. New England has many old stone walls dating to the 18<sup>th</sup> and 19<sup>th</sup> centuries. When farmers cleared the land for agriculture they piled the rocks they had dug up, onto the edges of the fields. The wall in the distance is about one rock thick, indicating that in the past this land was used as a pasture. We know this because in order to create a pasture a farmer fells the trees and clears the land once. If land is used for row crops like corn or vegetables a farmer would clear the land each year, for planting, uncovering more and more rocks which are then piled onto the stone walls. New England stone walls around row crop fields are sometimes four or five feet wide from years of plowing and rock clearing. You will have the opportunity to see and feel this particular stone wall, in a short distance along this walk, between stops 3 and 4.

On the way to stop 4, feel the bark of the first tree you encounter on the left. It is 43 feet from the bench. Feel the rough bark of this white pine tree. Put your arms around the trunk. The circumference of this tree is 65 inches. From the white pine walk 28 feet and feel the bark of the tree on the left. Note there is another tree half way between the white pine and this tree. Its bark is also fairly rough, but it feels quite different than the pine. This tree is an oak. Measure the circumference of the trunk with your arms. It is 57 inches around.

Now proceed 100 feet to the end of this trail, where it will form a T junction. There will be barrier straight ahead of you. You have now reached the end of Meadow Trail. Turn

right on to the Turtle Pond Loop Trail. Walk 57 feet until you encounter stop 4 next to a bench on the right side of the trail.

#### **Stop 4: Stone Wall and Birch Grove**

Across from the bench is the same historic stone wall we observed in the distance at the prior stop. It has likely been here for 150 years or more. Feel the rocks, which may feel cool, if they are shaded from the sun, and smooth. Notice that the width of this stone wall is a single rock thick, again indicating pasture as the past agricultural land use. Many of the rocks in this stone wall are covered with light green lichen which is not very easy to feel because it is so tightly bound to the rock surface. There is also some darker green moss that is feels soft and fuzzy. Lichens are a really interesting type of association between organisms called a mutualism in which both species benefit. A fungus provides a surface on which a blue-green algae can take hold and grow. The algae produces sugars through photosynthesis, which provides the fungus with nutrition. There are other types of associations between organisms in which one species benefits while the other is harmed. Parasites are an example. There are also associations where one species benefits and the other neither benefits nor is harmed. Can you think of an example? Hint: where do many birds lay their eggs and raise their young? If you guessed a bird's nest situated in a tree, you are correct! Some birds will nest high in a tree for safety, but the tree is not harmed and does not benefit by the presence of a nest.

Behind the stone wall is a grove of white and grey birch that was planted here many years ago.

Continuing on toward stop 5, go 43 feet and notice that the trail passes through the stone wall. From that point go another 130 feet to a large tree on the left, Stop 5

#### **Stop 5 Birch Tree**

Reach out and touch the bark of this tree. It is much smoother than the bark of the pine and oak trees we have explored. Some of the bark on this tree naturally peels away, but please do not peel this bark, as this will damage the tree. This is a white birch, named,

because of the white chalk color of the bark. This type of tree is also called a paper birch because it is a favorite tree of the paper making industry. Large white birches were hollowed out by Native Americans and used as canoes. Measure the circumference of the birch. It is 44 inches around.

To get to stop 6, proceed 52 feet and turn left onto a wooden boardwalk. 22 feet on the right is a bump-out overlooking Turtle Pond. The marker for stop 6 is located on this deck, which has a chest-high fence. The entire boardwalk, which is 80 feet long, has a raised 5-inch safety edge. The boardwalk is constructed of locally-sourced black locust wood which is highly resistant to decay.

### **Stop 6 Turtle Pond**

Before you is a small pond surrounded by a variety of shrubs, trees, and ferns. The pond is a little larger than a baseball diamond and has a small island in the middle. The island and the shoreline have many shrubs and trees which provide shade. Beyond the pond is a row of tall white pine trees and beyond that the sports fields of the Belmont Hill School. If the students are out on the fields you may hear them playing field sports.

The pond is the habitat for many aquatic creatures including painted turtles, green frogs and bull frogs, small fish called shiners, and many invertebrates like crayfish and dragonfly nymphs. On your right, attached to the railing, is a tactile sculpture of the turtles and frogs which live here at Turtle Pond. Sometimes in the spring a pair of ducks or geese will build and nest on the island and hatch young. In the spring and summer there may be ducks and or geese swimming in Turtle Pond. You may be able to hear their vocalizations or their splashing. You may be able to observe turtles sunning atop logs, or you may hear turtles or frogs as they plop into the water, alarmed as you approach. If you wait patiently, a bullfrog may let out a deep-throated “jug-a-rum” croak or you may hear the vocalization of a green frog which sounds like a plucked banjo string. A dragonfly may land near you. The pond is very attractive to birds including robins, grackles, warblers, blue jays and sometimes great blue and little green herons.

We'll now continue on to Stop 7. But, before you do, there is a special option. At the end of the boardwalk, about 57 feet from the end of the bump out, there is an intersection. You can take a left to continue on the tour to Stop 7, or you can take a right to go on a

brief spur trail that leads to a very lovely spot. If you proceed to the right, in 69 feet there is a bench where you are welcome to sit and listen to the sounds of Turtle Pond. 70 feet from the bench, at the end of a switchback, is a wooden observation platform that extends over the pond. This platform has just 5 inch safety edge all around the sides over the water. You are welcome to spend time on the platform and let your senses experience the perspective of being over the water. There is a trail here that goes all the way around the pond. You are welcome to explore this trail, but please be aware that this trail around the pond is very uneven and not ADA compliant.

If you went to the shoreline bench and viewing platform, go back to where you left the All Persons Trail at the end of the boardwalk. To get to stop 7, proceed along the trail 309 feet. As you travel away from the pond you will pass through a deciduous and evergreen forest then into a meadow. If it is warm notice the difference in temperature as you pass through the cool shaded forest into the sun-filled meadow. The marker for stop 7 is located up ahead, at a bench along the trail in the middle of the meadow. As you head that way, through the forest, you may notice an owl box up on a tree on the left. We were hoping to attract a pair of owls to use this box for their nest but so far no luck.

The presence of bare red cedar trees in this section of forest tells us that this area used to be more open; a part of the meadow. The cedars are now being shaded out by large oaks and maple trees. As you enter the meadow there is an interesting tree on the right – the sassafras. It has three types of leaves on a one tree! Also here in this section of the meadow you may encounter many birds flitting about in the brush along the edges of the trail and some bat boxes. Both the birds and the bats are here for the same reasons – for shelter and to find insects to eat. Notice that in the “upper meadow” to the right the red cedars in the meadow are full with green foliage. Compare these to the relatively bare cedars in the shaded forest. Red cedar trees thrive in open sunlit habitats.

Before you get to the bench, and stop 7, you will cross the main trail intersection in this meadow. Go straight to get to stop 7 and to continue on the tour. Taking a left will get you back to the parking lot through the pine bank along the Meadow Trail.



## **Stop 7 Meadow**

Meadows like the one before you are open and sunny habitats with grasses, herbs, and small shrubs, but without many large trees. To maintain meadows, in New England, there must be some form of disturbance that prevents trees from taking over and shading out the meadow plants. The disturbance can be fire clearing a forest and letting the sunlight in or farming through plowing or pasturing farm animals.

The family that once owned the Habitat property used this meadow as a vegetable garden and orchard. There are still several old and gnarled apple trees along the path.

There is a bench on the right where you can sit, relax and listen. Habitat has a small herd of goats that are sometimes in this meadow. They are surrounded by an electrified fence for their protection from predators such as coyotes and dogs. You might hear them vocalizing or chewing as they eat the meadow vegetation. You might also smell them. There is a goat hut in the meadow, where the goats can find shade during the day and shelter at night

In the meadow are several bird boxes on wooden posts. These are used by blue birds, tree swallows, house wrens, and house sparrows as nest boxes from mid-spring to early summer, to lay their eggs and rear their young.

To get to stop 8, proceed 411 feet. Follow the trail through the meadow and into a small forest. Again can you sense a temperature change? Along the way to stop 8, there is one more type of tree to explore. These are striped maples, sometimes called moosewood. They have very large leaves and striped trunks, especially the younger trees. Striped maple is an understory tree because it does well in the shade of larger trees. They typically are found at higher elevation than Habitat, for example, in the Berkshire Mountains of Massachusetts. The family that lived at Habitat planted some striped maples here many years ago and they have done just fine. The marker for stop 8 is located at the greenhouse.

## **Stop 8: Greenhouse**

The small greenhouse on the right was built in the 1930s. It was once used by the estate gardeners to raise plants for the formal gardens and the house. We do not

currently use it for growing plants. However, the rear of the greenhouse has been converted to winter accommodations for our goat herd. There are some interesting plants growing outside the greenhouse as well. You may have seen a label for “stinging nettle” on the ground, on the right, just before you reached the greenhouse entrance. Please don’t touch this plant – touching it may give you a very unpleasant stinging sensation. We leave this plant growing here because it is an important food source for red admiral caterpillars and other species of butterflies that we want to attract. Across the trail are ostrich ferns, named because their long fronds look like ostrich feathers.

To get to stop 9, turn left from the greenhouse and continue up the paved driveway. About 32 feet from the greenhouse, you will have two choices. You can take a left at the Turtle Pond Loop Trail entrance, or you can go straight up the hill to return to the nature center and parking area. If you go straight up the driveway, please be aware that the incline is steep and it exceeds ADA compliance for elevation rise.

### **Stop 9: Turtle Pond Loop Trail and Discovery boxes**

Enter the Turtle Pond Loop Trail. The marker for stop 9 is located 50 feet on the right next to the first discovery box.

Along this trail are four wooden boxes in the shape of simple gable-roofed houses, about two and a half feet from the ground. They are our discovery boxes. Each box has a request or a riddle to answer before opening the box. What does the label on the first box next to stop 9 ask for? Open the door and see what is inside. Go on to the second box which is 43 feet from box 1 also on the right side of the trail.

Twenty-one feet from box 2, on the left of the trail is an Eastern red cedar tree. These trees have shaggy bark that birds and small mammals use to line their nests. Notice how the bark of the cedar feels very different from the white birch bark. Red cedars are in the juniper family and produce blue juniper berries, an important food for birds including Cedar waxwings and bluebirds. Eastern red cedar is used for fence posts because of being insect resistant and to line closets and cedar chests because its odor deters moths. Measure the circumference of this tree. It is 35 inches around.

If it is spring or early summer, on the left side of the trail, on the forest floor, is the May apple, a common woodland plant that flowers in May. In spite of its name, its apple-like

fruit cannot be eaten. You may also see another forest floor plant in flower, trillium, named for the three petals of its flowers.

The third discovery is on the left 15 feet from the cedar tree. And the fourth and last discovery box is on the right, 41 feet from box 3. This is the end of our All Persons Trail tour.

In 200 feet you will reach a fork in the trail. Going right and uphill will lead you back to the Meadow Trail. Turn right onto the Meadow Trail to go back to the community garden. Turn right one more time to return to the welcome stop sign and parking area. If you take the left fork, which goes downhill, in 75 feet, you will come to a lovely stone bench in a peaceful spot on the right. This is a good place to rest and enjoy the sights, sounds, and smells of the meadow before you return to the parking area and visitor center.

If you borrowed any trail materials from the visitor center, please return them now.

Thank you for visiting today. We hope you have enjoyed your visit along this trail and that you've learned some interesting things about Habitat. Please return to enjoy the nature of our All Persons Trail as it changes with the seasons.

If you have any questions or comments about our trail, or your experience at our Sanctuary, please stop by the visitor center, visit [www.massaudubon.org/accessibility](http://www.massaudubon.org/accessibility), or call 617-489-5050.