

Habitat Education Center & Wildlife Sanctuary



All Persons Trail

FOR ALL SENSES, ALL PEOPLE

WINTER



Mass Audubon
Protecting the Nature of Massachusetts

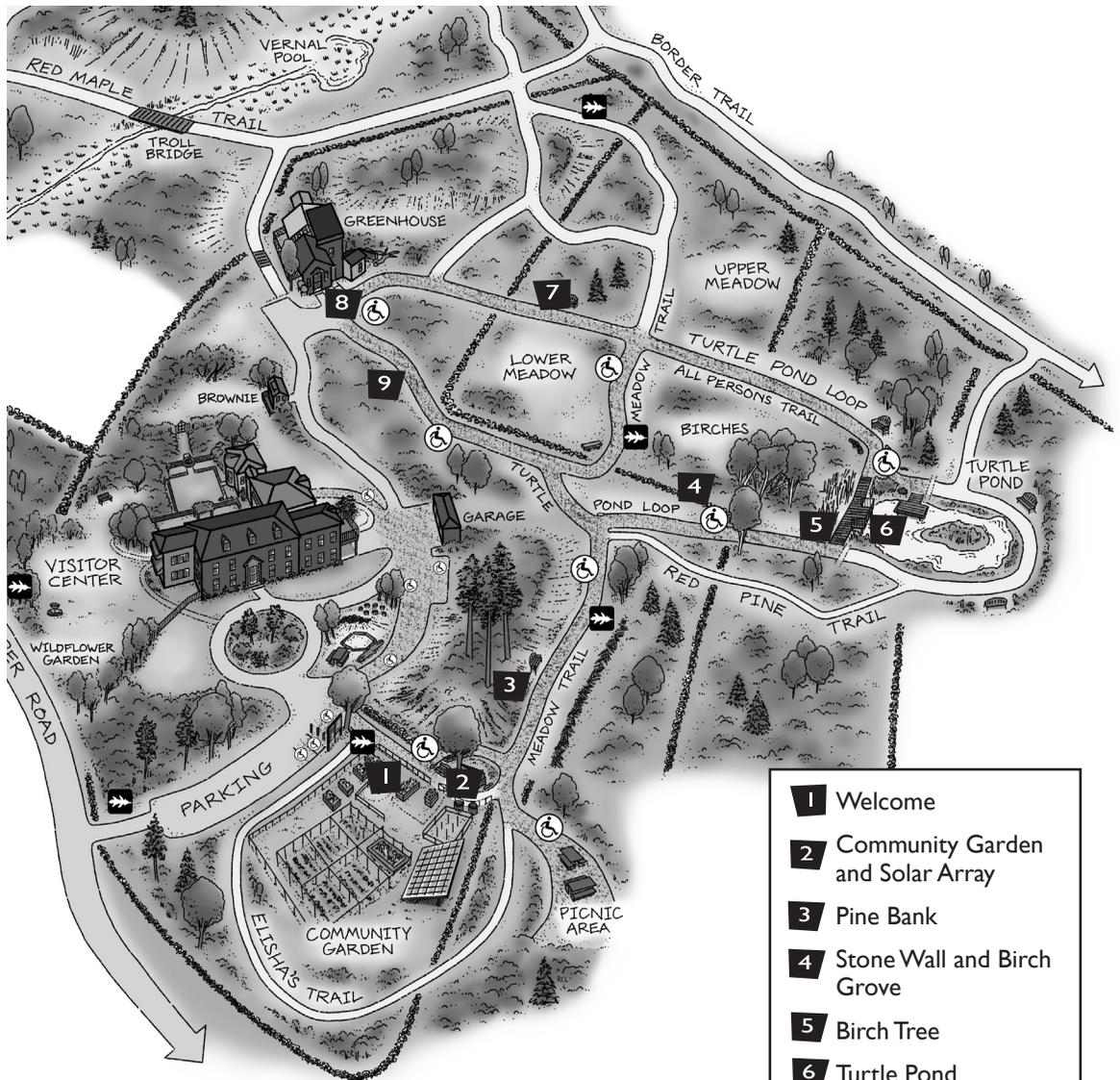
This tour is also available in audio format. You can call 617-449-7520 from April thru December. The audio tour is available year-round at massaudubon.org where you can download it to a personal audio player. The audio tour is also available on audio players that you can borrow during Visitor Center hours.



Welcome to Habitat Education Center and Wildlife Sanctuary. This All Persons Trail is here for your enjoyment. Please take only pictures and leave only footprints. Enjoy your walk today and return to experience the trail in different seasons.

All Persons Trail

FOR ALL SENSES, ALL SEASONS, ALL PEOPLE



- 1** Welcome
- 2** Community Garden and Solar Array
- 3** Pine Bank
- 4** Stone Wall and Birch Grove
- 5** Birch Tree
- 6** Turtle Pond
- 7** Meadow
- 8** Greenhouse
- 9** Turtle Pond Loop Trail and Discovery Boxes



I Welcome

Welcome to Habitat's universally designed, accessible, All Persons Trail. In the winter season it may be quieter as some animals are hibernating or have migrated to warmer climates. But winter gives us a glimpse into survival adaptations of the animals that remain active in winter. Some of the trees have lost their leaves which gives us a good view of the branching pattern and shapes. Listen for the sounds of our winter resident birds as you explore forest, meadow, and wetlands in winter.

If you are facing the Welcome Sign, which is Stop 1, the Visitor Center 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, walk 40 feet until you reach the asphalt driveway. Go around the small circular driveway to your right to find the front entrance to the building. The accessible entrance with accessible restrooms is located around the right side of the building. 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, and 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, 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 trail, there are 9 interpretive stops where you can learn about the natural

and cultural history of Habitat on an hour-long interpretive tour. The audio tour can be downloaded onto your own audio player, on an audio player you can borrow, or by phone or app. Each narrated stop along the trail is marked on a signpost with the stop name and number in block print and Braille.

To get to stop 2, walk 23 feet past the Stop 1 Welcome Sign until you reach a rope-guide. This is the only segment of the trail with a post and rope guide. Proceed down the trail 115 feet, along the rope guide, to the community garden entrance, stop 2.

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 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.

We also invite you to enter the garden area and visit the common gardens. Please be aware that the ground surface may become uneven as you proceed farther 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. Some stems of the plants grown last summer may remain, and they may still provide the fragrances of summer if you smell them.

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, are filled in summer with many beautiful, fragrant flowering herbs. These gardens were created and are cared for by 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.



Finally, there is the “Children’s Garden” where vegetables, flowers, and herbs are tended and used by Habitat educators and children in spring through fall programs.

At the rear of the community garden on the left is a ground mounted solar array. You are welcome to touch the panels and perhaps feel the warmth of the sun on their surface. If there is snow on the panels you can brush it away. Snow usually melts quickly and slides off the glass surface once the sun is shining. An underground cable carries the electricity 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.

To exit the garden, use the same exit through which you entered. Straight ahead is a wooden barrier and behind the barrier is a row of boulders. The All Persons Trail continues to the left of the barrier and boulders along the Meadow Trail. It curves to the left and then straightens out. Stop 3 is 304 feet from Stop 2. Along the way, at 61 feet, is a turnoff to the right, which leads to a picnic area with several picnic tables including an accessible one. Please feel free to enjoy this picnic area, weather permitting, before moving on to stop 3.



3 Pine Bank

The marker for stop 3 is located at the bench on the left edge of the trail. We invite you to use this seating area while you learn about and enjoy this woodland. 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. Notice the soft pine needles underfoot along the edges of the 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 which 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. You may see or hear squirrels and chipmunks moving about the brush piles and around the forest. If there is snow on the ground look for animal tracks around the brush piles.

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. Evergreens are trees that typically shed and re-grow their needle-like leaves gradually throughout the year, instead of all in one season, so they look green year-round.

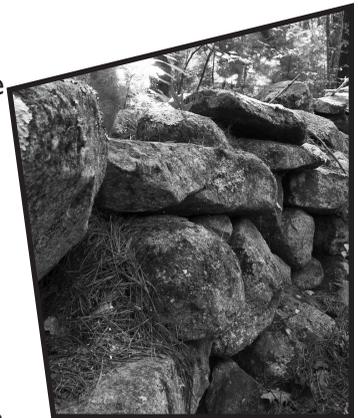
There is an old stone wall at the top of the hill, which runs parallel to the Meadow Trail. You'll get an opportunity to look closely and feel the rocks in this wall at stop 4 ahead.

On the way to stop 4, feel the bark of the first tree you encounter on the left, 43 feet from the bench. Feel the rough bark of this white pine tree. See if you can reach around this tree with your arms. The circumference of this tree is 65 inches. To calculate the diameter, divide the circumference by 3 and round down. Did you figure out that the diameter of this tree is approximately 21 inches? From the white pine walk 28 feet and feel the bark of the tree you'll find on the left. (Note there is another tree half way between the white pine and this tree.) This tree's bark is also fairly rough, but it feels quite different from that of the white pine. This tree is an oak. Measure the circumference of the trunk with your arms. It is 57 inches around so its diameter is about 19 inches.

Now proceed 100 feet to the end of this trail, where it will form a T junction with another trail. There will be a wooden barrier straight ahead of you. You have now reached the end of Meadow Trail. Turn right onto the Turtle Pond Loop Trail. Walk 57 feet until you encounter stop 4, at the bench on the right side of the trail.

4 Stone Wall and Birch Grove

Across from the bench is the same historic stone wall which we observed in the distance at stop 3. It has likely been here for 150 years or more. Feel the rocks, which may be warm if they are in the sunlight. New England has many old stone walls dating to the 18th and 19th centuries. When farmers cleared the land for agriculture, they piled the rocks they had dug onto the edges of the fields. To create a pasture, a farmer would fell the trees and clear the land just once, creating a rock wall just one or two stones thick. If the land was used for row crops like corn or vegetables a farmer would clear the land each year for planting, uncovering more and more rocks which were then piled onto the stone walls. The wall here is just one or two rocks thick, indicating that in the past this land was used as a pasture. New England stone walls around row crop fields are sometimes four or five feet wide from years of plowing and rock clearing.



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 which feels soft and fuzzy. Lichens are not a single organism. They are actually two organisms living in a very interesting type of association, called a mutualism, in which both species benefit. One of the organisms

is a fungus, which provides a surface on which the other organism, 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 of this. There are also associations where one species benefits and the other neither benefits nor is harmed. Can you think of an example? Here's a 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 trees planted here many years ago.

Continuing on toward stop 5, go 35 feet and notice that the trail passes through the stone wall. From that point go another 102 feet to stop 5 which is located at a large white tree on the left.

5 Birch Tree

Reach out and touch the bark of this white birch 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 leaving an orange colored bark underneath. Because of the peeling bark, this tree is sometimes called a paper birch. Please look and feel but do not peel the bark, as this will damage and possibly kill the tree. Native Americans used white birch trees for containers and canoes. Thus, another common name for this tree is "canoe birch". Other uses for birch include firewood and pulp for making paper, and many people find it simply beautiful. Measure the circumference of the birch. It is 44 inches around or about 14 inches in diameter. Birch trees do best in cool temperatures. Massachusetts is close to the southern edge of its natural range. As the climate warms, we expect white birch to become rarer in our region.



To get to stop 6, proceed 52 feet and turn left onto a wooden boardwalk. 22 feet on the right you will find a wooden bump-out overlooking Turtle Pond. The marker for stop 6 is located on top of the railing on the near side of the bump-out, which has a three-foot-high fence around it. 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 very hard and highly resistant to decay.

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. If it has been cold enough, the pond surface may be frozen in places. Beyond the pond is a row of tall white pine trees, and beyond that are the athletic fields of the Belmont Hill School. If the students are out on the fields you may see or hear them playing sports.

The pond is the habitat for many aquatic creatures including painted turtles, green frogs and bull frogs and many invertebrates like crayfish and dragonfly nymphs. On your right, attached just below the top railing, is a tactile sculpture of the turtles and frogs which live here at Turtle Pond. When the days get short and the temperatures become cold the frogs and turtles burrow into the mud at the bottom of the pond to spend the winter. The trees and shrubs around the pond are very attractive to birds in winter including robins, chickadees, white-breasted nuthatch, tufted titmice, little downy woodpeckers, and blue jays.



We'll now continue to Stop 7. But before you do, you have 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 immediately continue the tour to Stop 7, or you can take a right to go on a short spur trail which leads to a very lovely spot. If you take this option 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 a 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 it is very uneven in places and not ADA compliant.

Now let's continue to stop 7. If you chose to go to the special shoreline bench and viewing platform, go back to where you left the boardwalk. Then, proceed along the trail 319 feet. As you travel away from the pond you will pass through a deciduous and evergreen forest, and then into a meadow. The marker for stop 7 is located up ahead, at a bench on the right along the trail, in the middle of the meadow. But observe the forest first. You may notice an owl box up on a tree to the left. We hope to attract a pair of owls to use this box for their nest. Also note the evergreen Eastern red cedar trees growing amongst taller maples and oaks. They have a reddish shaggy bark. For much of the year these cedars are growing in the shade of the taller trees. Farther along we will see cedars growing in an unshaded meadow habitat.

Proceed along the trail into the meadow, until you encounter an intersecting trail. Uphill to the right there are several Eastern red cedars, which have much fuller and greener foliage compared to the cedars in the forest. Eastern red cedars thrive in open sunny habitats. The fact that we saw some cedars in the shady forest tells us that in the past that habitat was open, and part of the meadow.

If you would like to continue the tour go straight to the bench and stop 7. If you would like to take a short cut back to the parking lot and visitor center, take a left at the trail intersection which will lead you back the Meadow Trail and the pine bank.

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. Those disturbances can be fire clearing a forest and letting the sunlight in or farming practices, such as plowing or pasturing farm animals, which keep meadow areas open.

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.

Habitat has a small herd of goats that are sometimes in this meadow during the summer. Their winter accommodations are in the back of the greenhouse at the next stop.

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.



Stop 8 is 411 feet from stop 7. Follow the trail through the meadow and into a small forest. Along the way to stop 8, there is one more type of tree to explore. Look for trees with striped green trunks. These are striped maples, sometimes called

moosewood. In Summer, they have very large leaves with 3 lobes and a heart shaped or rounded base. Striped maple is an understory tree that does well in the shade of larger trees. They are typically found at higher elevations than here, for example in the Berkshire Mountains of Massachusetts. However, 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 ahead at the greenhouse.

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 garden and the house. We do not currently use it for growing plants. However, the rear of the greenhouse has been converted into winter accommodations for our goat herd. You can walk around to the back of the greenhouse to view the goats but be advised that the pathway and grassy area behind the greenhouse are not ADA compliant.

To get to stop 9, turn left from the greenhouse and continue up the paved driveway. About 28 feet from Stop 8 you will have two choices. You can take a left at the Turtle Pond Loop Trail entrance and continue this tour, 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 standards for elevation rise.

If you enter the Turtle Pond Loop Trail the marker for stop 9 is located 54 feet on the right just before a small box near the ground called a discovery box.



Turtle Pond Loop Trail and Discovery Boxes

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. Open the door of the first discovery box and see what is inside. Some boxes have a request, some do not. If you want you can place an object inside for someone else to find. 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 winter food for birds including Cedar waxwings and bluebirds. Eastern red cedar is used for fence posts because it is insect resistant. It is also used to line closets and cedar chests because its odor deters moths. Measure the circumference of this tree with your arms. It is 35 inches around.

The third discovery box is 15 feet from the cedar tree on the left. 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. Let's head back.

In 163 feet, you will reach a fork in the trail. Here you have a choice. If you want to spend a little more time resting and enjoying the sights and sounds of the meadow before you return to the parking area and visitor center, you can take the left fork, which goes downhill. In 64 feet, you will come to a lovely stone bench in a peaceful spot on the right.

To get back to stop 1 take the right fork uphill 58 feet. Turn right onto the Meadow Trail. At the Community Garden go right and follow the rope guide back to the Welcome sign at stop 1. From there you will find the parking area.

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, or call 617-489-5050.



This All Persons Trail project was developed cooperatively between Mass Audubon and the Recreational Trails Program

Habitat Education Center & Wildlife Sanctuary

10 Juniper Road
Belmont, MA 02478
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Visitor Center
Mon-Fri, 8:30 am-4:30 pm
Sat & Sun 10 am-4 pm

Trails: Open every day, dawn to dusk.

Mass Audubon protects 36,500 acres of land throughout Massachusetts, saving birds and other wildlife, and making nature accessible to all. As Massachusetts' largest nature conservation nonprofit, we welcome more than a half million visitors a year to our wildlife sanctuaries and 20 nature centers. From inspiring hilltop views to breathtaking coastal landscapes, serene woods, and working farms, we believe in protecting our state's natural treasures for wildlife and for all people—a vision shared in 1896 by our founders, two extraordinary Boston women. Today, Mass Audubon is a nationally recognized environmental education leader, offering thousands of camp, school, and adult programs that get over 225,000 kids and adults outdoors every year. With more than 125,000 members and supporters, we advocate on Beacon Hill and beyond, and conduct conservation research to preserve the natural heritage of our beautiful state for today's and future generations. We welcome you to explore a nearby sanctuary, find inspiration, and get involved. Learn how at massaudubon.org.

