

# Arcadia Wildlife Sanctuary



## A Sensory Trail

FOR ALL SENSES, ALL PEOPLE

An audio tour is available through your cell phone by calling **413-272-0006**. The recording is also available online at **www.massaudubon.org**, where you can download it on your personal audio player. Individual copies of the trail map are available in printed or tactile formats, and Braille guide is available in the Nature Center.



**Welcome to Arcadia Wildlife Sanctuary.  
This Sensory 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.**

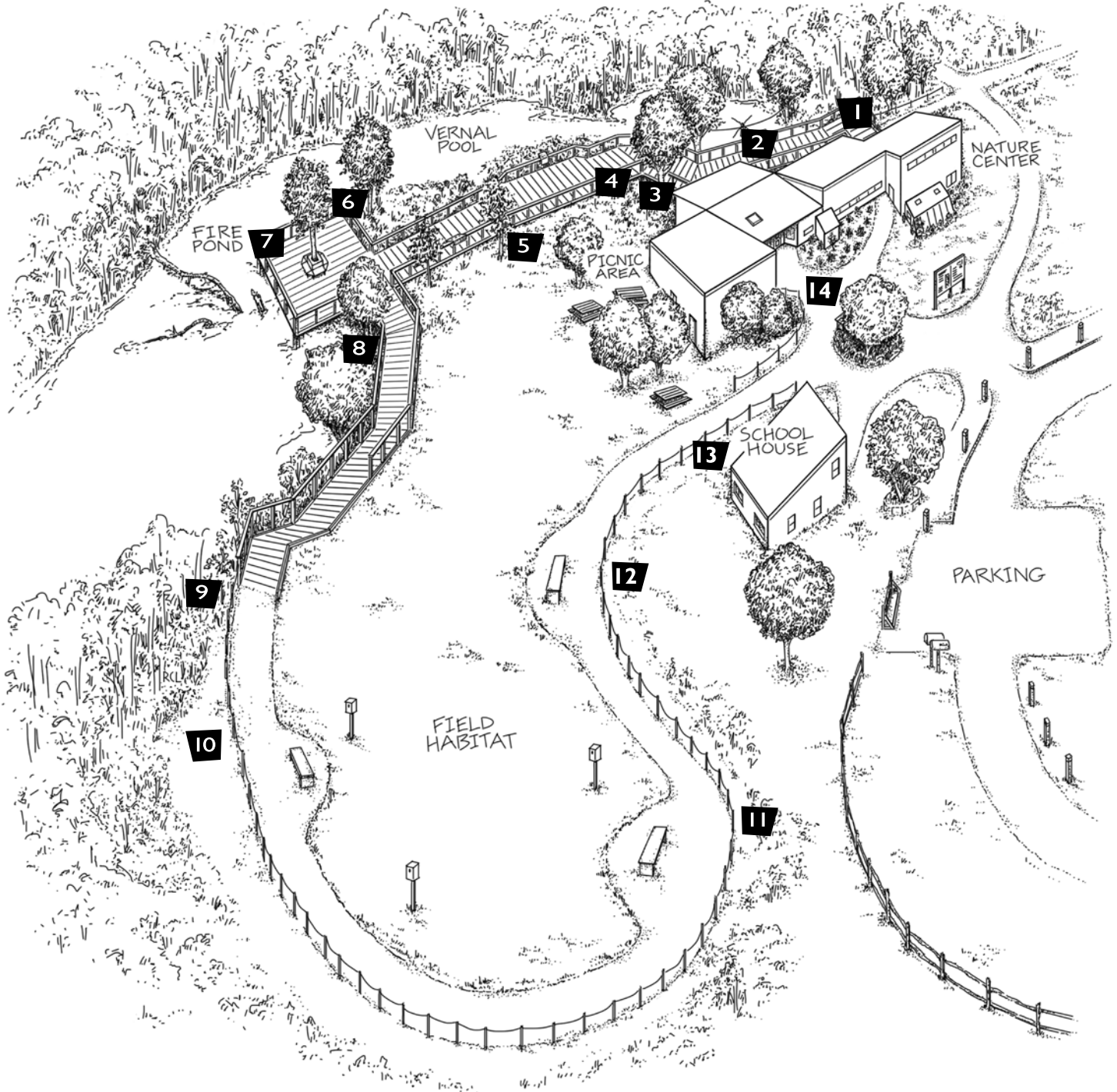
Welcome to the Arcadia Nature Center and Wildlife Sanctuary Sensory Trail. If you were here in the eighteenth century, you would hear horses digging their hooves into the sandy soil on Old Coach Trail as they pulled the stagecoach along this main road from Northampton to Springfield. If you were here in 1890, you might hear the street trolley whistle as it stopped at Marshall's Grove, a pavilion and amusement park just upstream on Mill River. Perhaps you'd also hear an enthusiastic cheer from a ball game as the "city folk" enjoyed an afternoon in the country. Today, you're likely to hear rustling leaves, buzzing insects, frogs calling, birdsongs, chipmunk and squirrel chatter, children in the nature preschool, and even silence. And instead of running to catch the trolley back to town, you're more likely to relax and enjoy your time visiting this peaceful place.

This 850-foot accessible loop begins on a wooden boardwalk with a handrail, continues on a wide, level, crushed stone path with a guide rope, and returns to the main entrance of the Nature Center. The boardwalk portion may be traveled in both directions if you prefer a shorter walk or decide not to continue on the path. There are no stairs or side slopes along the Sensory Trail. There is a maximum slope of 5% over 40 feet.

We hope you will enjoy this experience, take your time, and use all your senses. The guide rope begins on the left side, and can be found just 10 feet along the wall from this stop. As you begin the trail, please be careful. The boardwalk may be slippery when it's wet.

# A Sensory Trail

FOR ALL SENSES, ALL PEOPLE



- |                            |                                     |  |
|----------------------------|-------------------------------------|--|
| <b>1</b> Trail Information | <b>6</b> Wood Duck Box              | <b>11</b> A Field Habitat for Insects            |
| <b>2</b> Vernal Pool       | <b>7</b> Fire Pond                  | <b>12</b> Choices We Make                        |
| <b>3</b> Black Birch       | <b>8</b> Tree Cavities              | <b>13</b> Changes to the Land<br>and Picnic Area |
| <b>4</b> Red Maples        | <b>9</b> Entering the Field         | <b>14</b> Nature Center                          |
| <b>5</b> Eastern Hemlocks  | <b>10</b> A Field Habitat for Birds |  |

## 1 Trail Information

The trail begins at the north side of the nature center.

This trail is an 850-foot accessible loop, beginning on a wooden boardwalk with a hand rail, continuing on a wide, level crushed stone path with a guide rope, and returning to the main entrance of the nature center. Although this trail is a short distance, 850 feet in length, we hope you will enjoy this experience, take your time, and use all your senses. The boardwalk portion may be traveled in both directions if you prefer a shorter walk or decide not to continue on the path.

Here the map, we have placed a round/square set of trail markers so you can become familiar with them. The sign that reads “1. Trail Information” is the first of 14 signs identifying the stops. You will also find two sample wooden beads here. All stops along the trail are marked by a round wooden bead on the hand rail or along the guide rope. Within reach of the round bead, there is a sign with the stop name and number in print and Braille. A square bead indicates that there is seating nearby.

The first four stops are along the boardwalk next to a vernal pool. The next two stops will be on a large deck that intersects the boardwalk from the right and separates the vernal pool from a fire pond, two very different wetland habitats. From the deck, we’ll continue on the boardwalk for two more stops as we transition to a field habitat. The last four stops will be on the path that encircles this managed grassland habitat. At the last stop, you’ll be directed back to this building. On your way back, you might like to stop in the picnic area behind the Nature Center to have lunch or just spend time enjoying the sounds from the field and woods on either side.

We hope you’ll enjoy your visit and that this trail will open your senses in new ways.

## 2 Vernal Pool

The boardwalk enables us to walk above a special type of wetland called a vernal pool. Since vernal pools have no inlets or outlets, you won’t hear the sound of flowing water. Significant water is found here only from early spring until sometime in the summer, hence the name vernal—appearing in spring. During really wet summers, the pool may stay filled longer. During rainy autumns, the pool sometimes temporarily fills again. And since the pool dries up for part of each year, fish cannot survive here.

Why does the vernal pool fill in this exact location each year? Because the topography or shape of the land is a depression—like a shallow bowl in the earth. Can you figure out where the water comes from that fills this pool? If you were standing here or on the hillside across from us on a warm day in spring, you might hear the sounds of dripping snow or a spring shower and the trickling of snowmelt and runoff as it fills the pool. Vernal pools are common in the floodplains of the Connecticut River where they may form as a combination of spring snowmelt and spring flooding. The amount of water will vary from one year to the next depending on weather conditions.

This can be a noisy place in early spring. Visitors sometimes hear the quacking of wood frogs as far away as the parking lot! These are the seasonal calls of wood frogs, golden brown frogs with dark markings like a mask across the eyes. In early spring, hundreds of these small frogs congregate to breed and lay their eggs here.

Adult wood frogs spend only a few days in the vernal pool and then head back to the woods, leaving their eggs to mature without protection. In the nutrient-rich water, free from fish predators, wood frog tadpoles quickly grow into adults and soon leave the water to live on land, hopefully before the pool dries up. Some people see vernal pools as nuisance wet areas in the springtime. However, wood frogs, along with spotted salamanders and fairy shrimp, would not exist without these pools for breeding.

Some amphibians and invertebrates that are capable of breeding in other wetlands may also breed in vernal pools. Spring peepers, thumbnail size tree frogs, may come to this pool to breed. Like wood frogs, they return to the woods and leave their tadpoles to mature quickly into adults and move onto land. Occasionally you may hear the resonant “jug-o-rum” of a bullfrog or the call of a green frog, sometimes compared to the twang of a banjo string. Their tadpoles may share the vernal pool with the other frogs, but they mature much more slowly and need deeper water, so they will swim to the adjacent fire pond as they grow.

As you walk to the next stop, listen for any frogs that might be calling today.

### 3 Black Birch

Across from you, on the opposite side of the boardwalk, a large black birch tree is growing over the railing.

Black birch is also known as sweet birch. Reach out and feel the trunk. A young birch would have smooth, shiny bark, but this trunk has the scaly plates of a mature birch. Can you feel soft little bumps? These spongy dots or lines are called lenticels and they allow gas exchange in the rubbery cork tissue of the bark. Tree bark is made of many layers. If an insect drilled from the outside in, it would have to eat through several layers of cork and cambium—all that stuff we call bark—before even getting to the wood. As you walk along this trail, compare the feel of this bark to the bark of other types of trees growing here.

Native Americans once used black birch twigs as flavored toothbrushes. The wood contains the chemical methyl salicylate, commonly called oil of wintergreen. In the late 19th century, this oil was used as a flavoring in chewing gum, gelatins, and candies. Here at Arcadia, black birch buds and seeds provide food for ruffed grouse, while the twigs are browsed by deer and rabbits. Birch leaves are the preferred food for dozens of native caterpillars.

You might notice a rope attached a few feet up on the right side of the trunk. We hang bird feeders for wintering songbirds on a high wire between the trees in an attempt to keep squirrels from eating the birdseed. The rope allows us to lower the feeders for filling. Despite our best designs, squirrels are clever and determined aerial acrobats who can usually outmaneuver our best attempts to thwart them.



Do you hear any chattering or branches crashing? Gray squirrels announce how they react to our intrusion into their territory with loud chattering. It's fairly easy to know a squirrel is nearby. Listen for the loud crashing of branches as they travel through the underbrush or boldly leap from branch to branch in the trees overhead. Squirrels are active year-round. In fall they gather nuts for winter, burying them in shallow caches. In winter they will dig up the nuts when they're hungry.

Do you hear another birdlike chipping sound in these woods or a rustling in the leaves? Chipmunks make a continual, loud chipping. The woods are filled with chipmunk chatter, particularly in the fall when they are gathering acorns and other nuts and seeds for winter, filling their cheek pouches until they bulge. Chipmunks

#### 4

### Red Maples

How does this bark texture differ from the bark of the black birch? Can you feel the lenticels on this red maple? Probably not, because this outer bark is much thicker and bumpier. The best way to describe the bark of red maple is "variable." The bark of red maples is the most variable of any of the New England trees, ranging from very smooth to extremely rough to the touch. The texture of the bark is somewhat dependent on age but often varies from tree to tree. Feel the trunks of the labeled red maples to compare the variability in bark textures.

It seems that no tree can have just one name! Red maples are also known as swamp maples because here in the northern states, they often grow on the border of freshwater marshes, atop hummocks in bogs, and in low wetland or river floodplains. Like other wetland plants, red maples can thrive with wet roots. But don't be fooled. Some wetland plants can grow only in wet habitats, but the ubiquitous red maple can be found growing in uplands as well.

This is a deciduous woodland, meaning most of the trees are broad-leaved and will lose their leaves each autumn. Here in this deciduous woodland, there is always something going on in every season. In spring the sap is running and the tree buds are swelling, getting ready to burst open with this year's new leaves, flowers, and twigs. Red maples sport beautiful red flowers in spring. In summer, these hardy trees are visited by songbirds who seek shelter among the branches. As its name implies, the fall foliage of the red maple is sometimes red or scarlet, but some years this name is misleading and the tree is dressed for fall in brilliant yellow or orange. Throughout the fall, these colorful leaves float down from overhead, gently carpeting this boardwalk. Red maples are adapted to winter by going dormant. Taking the season off helps them retain valuable water, store precious sugars, and perhaps suffer less damage from heavy snows and drying winds. In winter, more than in any other season, we are able to see a tree's graceful form whole, observe its distinctive branching pattern, and notice details such as bark texture.

Now take a moment to inhale deeply. What do you smell? If you are visiting in early spring, you might catch a familiar scent and wonder if a skunk is nearby. Don't worry—it's just the aptly named skunk cabbage growing on the other side of the vernal pool. If you're visiting in summer, you might smell flowering shrubs and other woodland plants that are attempting

to attract pollinating bees and bats with their enticing fragrances. In fall, after the vernal pool has dried up, you might catch the scent of organic matter decaying. The build up of dead leaves and other organic matter will provide nutrients for the vernal pool inhabitants next spring. In winter, while your nose tingles from the cold air, you might smell the fragrant needles of the nearby evergreen trees or the leaves of the hardy sweet fern.

As you travel to the next stop, enjoy the many smells and textures that can be found along this trail. On your way to stop #5, there will be a bark texture display on the left-hand rail. Here there will be several types of bark to touch, smell, and compare. Can you tell which is shagbark hickory, maple, black birch, and oak bark?

## **5** Eastern Hemlocks

Hemlock forests are cool... literally. Hemlock trees thrive in shade. The height of these magnificent trees enables them to reach high up into the tree canopy to capture sunlight, even if they happen to be growing in very shady woodlands.

If you reach, you'll feel the needles from the low branches on this tall hemlock tree. The texture of the needles is waxy, which helps the hemlock shed winter snow and maintain moisture year-round. Conifers are cone-bearing trees that have needles. The needles turn brown and drop like the leaves of deciduous trees (trees like the maple and black birch which drop all their leaves in the autumn), but hemlock needles are not shed all at one time so the trees always look "evergreen." Hemlocks also have small cones containing seeds which are relished by many wintering birds.

Take time now to listen for some of our year-round resident birds. Although you might hear birds singing most in spring when they are breeding, these birdsongs can be heard in any season.

## **6** Wood Duck Box

Here on the corner of the deck rail is a Wood Duck box. Arcadia is ideal habitat for Wood Ducks and we encourage their nesting. Wood ducks have distinct sounds. In the wild, wood ducks nest in the cavities of old trees near water. People can help provide wood duck housing by putting up wood duck boxes such as this one which simulates a tree cavity. In their cavity nests, or nesting boxes, wood ducks will raise a brood of ducklings. On the left side of the box is an extended entrance tube that keeps predators such as raccoons from reaching the hatchlings. Once they are ready, the hatchlings will jump, one at a time, out of the opening, dropping into the water below, for their first swimming lesson. Wood Ducks don't use this demonstration box because of its proximity to people and the plexiglass viewing panel on the side, but they will use similar boxes in other wetland areas of the sanctuary.

Here below the deck, the vernal pool joins a fire pond. This fire pond is a deeper body of water that was once built and maintained in case of fire on the property. It doesn't dry up in the summer, so it provides a habitat for those species that need an aquatic environment year-

round. We don't stock this deeper pond with fish because they would alter the vernal pool habitat by eating large quantities of frog and salamander eggs in the spring.

Now is a good time to stop and learn more about the wetland residents that inhabit the pond. The bench around the maple tree in the center of the deck is a great place to take a break and listen to this next stop.



## 7 Fire Pond

Did you hear any of our resident turtles plop into the water as you walked around the deck? These reptiles spend sunny days soaking up heat by basking in the sun atop logs and tree trunks. Like the green frogs and bullfrogs, painted turtles, and an occasional snapping turtle, may be found in the vernal pool in spring but they move to the deeper fire pond as the vernal pool dries up.

The painted turtle has a dark carapace or shell, brightly marked with red along the edges, and yellow markings on its head. Adults usually range in size from 4 ½ to 6 inches, roughly the size of a small dessert plate. Sometimes they have grown as large as 10" here at Arcadia! Snapping turtles are the largest freshwater turtles in Massachusetts and as adults, range in size from 8 to 20 inches, small dinner plates to large platters! The largest ever found in the Massachusetts weighed 76 pounds! Unlike the painted turtles that can retreat into their shells though not close them completely, snapping turtles rely on retreating into the mud at the bottom of ponds. They snap only when they have no choice and use this defense primarily when cornered on land or battling other snappers for territory.

The life cycle of the painted and snapping turtles is opposite that of the spring peepers and wood frogs. These turtle eggs would not survive in water, so females must walk on land to find a safe (and usually sandy) place to dig a hole and lay their eggs. The females return to the water as, except when egg-laying, they are almost totally aquatic. Unlike frogs they have no larval stage, and the eggs hatch into tiny turtles which are totally on their own. Both types of turtles will spend the winter protected in the mud on the bottom of this pond.

Bullfrogs are the largest of North American frogs, and some of the best jumpers in the world. The tadpoles eat mostly aquatic plants, but the adults are predators that could pose a danger to the vernal pool species if their numbers were to increase. The tadpoles develop slowly, taking one to three years to reach adulthood. They survive the winter by burying themselves in the mud of the pond or building small cave-like structures in the mud.

The young of the green frog, a much smaller frog, mature faster than bullfrogs and some may reach adulthood before their first winter. Others will go into hibernation and wait until spring to transform into a frog. They can produce as many as six different calls, so what you hear now is just a small sample of their repertoire. Green and bullfrogs overwinter in similar ways in the sediment at the bottom of ponds.



There's a whole array of other creatures that live in the fire pond and vernal pool. Some, such as water fleas, water beetles, and isopods spend their entire life in the pond. Others spend their larval lives in the pond or vernal pool before becoming adults. These include insects like dragonflies and mosquitoes. You may have already heard the familiar buzz of mosquitoes around your ears and even the whirr of dragonfly wings as they attempt to capture them. As much as we may dislike mosquitoes, their larvae provide food for the larvae and young of many other species that live here and the adults are food for other insects, bats, and many birds.

One such bird, the phoebe, can be heard at Arcadia in spring and summer. These small birds enjoy wetlands and field edges where they can sit on a dead tree branch and "hawk" a mosquito or other insect by flying out from the branch and grabbing it in midair. Maybe you'll hear a phoebe as you continue along the boardwalk and around the field.



Do you smell something here? If you detect a pungent and unpleasant odor here right now, then you are witnessing the hard work of microbes. They are decomposing carbon and sulfur into methane here along the debris at the edge of the fire pond.

## 8 Tree Cavities

There is an interesting tree on your right. This dead tree is still standing, and others nearby are actually lying in the pond. Why do we leave dead trees around? We're letting nature recycle itself. These old trees are great homes for small mammals, birds, and insects. As you already learned, our painted turtles use them to "bask" in the sun. As the trees decay they become food for insects which in turn become food for birds and other insects. Eventually fungi, lichens, and bacteria will completely recycle these dead trees into soil which will nourish other trees.

Can you find the hole in this tree? How might this hole have been made? What does it provide? Many birds (nuthatch, chickadee, woodpecker, and bluebirds) are cavity nesters and depend on these natural cavities for their homes. Can you feel mosses and lichens growing on the bark? Decaying trees provide many of the nutrients that enable other organisms to survive.

## 9 Entering the Field

While stopped here near the end of the boardwalk, take some time to close your eyes and feel the breeze or sun on your face. Let yourself become a sensory barometer to measure wind and sun. Also, you can be a human compass and figure out the direction you are traveling by noting where you feel the sun on your face and what time of day it is. Ready? First, turn and be sure that you are facing the field, with the boardwalk behind you. Next, lift your face slightly to the sky. In the morning, the sun is in the east; it will shine warmest

on your left side. By midday and early afternoon, the sun will appear in the south so that you will feel it on your entire face. From the west, later in the afternoon, the sun will feel warmest on the right side of your face. Okay, feel that sun. In which direction are you heading? You are facing south. A bird flying over you right now would see Mt. Tom to the south or straight ahead of you, the Mill River and the Connecticut River Oxbow to the east or to your left, and the vernal pool and Arcadia woodlands behind you, to the north.

Now feel the wind on your face. From what direction is the breeze blowing? Another way to test wind direction is to lick your finger, then hold it up to the breeze. Your wet finger will feel coolest when facing the oncoming breeze.

Finally, what is the general “feel” of the habitat you are now entering? Does it feel cooler or warmer? Does it feel shady or sunny? Do you feel exposed to the wind or sheltered from it? Can you sense the trees behind you and the openness ahead?

Listen to some of the sounds. Is this new habitat noisy and bustling or calm and quiet? Are there different insects “singing”? Can you hear different birds from the ones you heard earlier?

You’re on the edge of the wetland/woodland habitats and the beginning of a grassland habitat. An edge environment, where one habitat meets another, is a habitat in and of itself. This transition region can be sudden or gradual and is an area of importance to those animals that benefit from the combination of food and shelter provided by two different habitats within a short distance of each other. The combination of different vegetation offers wildlife a greater assortment of food and shelter. Can you think of animals that might find this woodland, wetland, field edge a perfect home? How might a rabbit or fox benefit from “living on the edge”?



## **10** A Field Habitat for Birds

You have now entered a field. There is a bench nearby in case you want to sit and enjoy this setting. Take a moment to experience the sounds of this new habitat. Listen to the variety of sounds and try to figure out which come from the field and which are from the nearby woodland. What are they? Where are they coming from?

Birds, including bluebirds and tree swallows, often fly over the grassland to pluck insects from the air. Red-tailed hawks, which actually do have bright russet tails, swoop down to grab mice and other small mammals with their strong talons. Cardinals, goldfinches, sparrows are also commonly heard, and seen, feeding in this grassland.

Nest boxes, like the one in this field, have resulted in an amazing recovery of bluebirds and tree swallows, both cavity nesters who lose nesting sites to starlings and house sparrows, both invasive species that were introduced into the U.S.

## III A Field Habitat for Insects

Did you know that insects outnumber birds 100 to 1? It sure seems true in the summertime when the grassland insect chorus is in full swing. As the summer progresses, bird songs are replaced by the sounds of insects, many of which increase singing in late summer. Listen for their sounds: some musical, some droning, some mechanical, some percussive, often rhythmic. Their methods for producing these sounds are as varied as the sounds themselves. Crickets rub their wings together. Some grasshoppers rub a hind leg against another body part while others snap their hind wings as they fly. Male cicadas make their loud sounds by contracting muscles on either side of their abdomen while females make their sounds with wing flicks. Some insects sing more during the day and some at night, temperature influencing their rate of sound. On mid-summer days you'll hear the rising drone of cicadas in the trees as the temperature gets hotter. The katydid sings later in the summer, often at night and the frequency of its call decreases with falling evening temperatures. Did you know you can estimate the air temperature based on the speed of cricket sounds? Here's how it works. Count the number of "chirps" you hear coming from one single cricket in 15 seconds. Add that number to 37, and the total should be close to the current air temperature measured in Fahrenheit. Do you want to try it?

Listen for the buzz of bees gathering nectar from grassland wildflowers. Although most bees can sting, they seldom do unless defending their hives, which are not located in the field. They're not normally aggressive and will move away from you if you move slowly and don't swat at them. Bumblebees make a deep rumble, so they are easy to locate and identify. Honeybee buzzes are harder to discriminate from the many other different types of small bees in the fields.

As you walk along the grasses and other field plants, you might find ants and beetles searching for food or the sticky web of a tiny spider. A small green baby grasshopper might hop on your pant leg or land on your shirt. If you're here in summer, you may notice a moist, foamy substance on some plant stems. This is the home of a spittle bug. The "spit" helps to protect the insect as it sucks juice from the stem and leaves. In fall, if you find a ball shaped thickening in a plant stem, you've probably found a goldenrod plant. The thickening is a goldenrod ball gall, a growth that forms in the plant in response to the feeding of a larva of the parasitic goldenrod gall fly. It will exit as an adult the following spring.

You may be able to feel a rather tall flowering plant with a sturdy stem and large oval leaves. This is a milkweed and it has several interesting features. Can you feel any holes in the leaves? These might be made by a black, yellow, and white striped Monarch caterpillar which feeds exclusively on milkweed leaves. When cut, the leaf veins exude a white sticky latex toxin which has no effect on the caterpillar or the butterfly it becomes, but is distasteful to



Richard Johnson

birds which therefore avoid eating Monarchs. The milkweed flower resembles a large airy ball which actually is made up of dozens of tiny florets. Each of these is loaded with sweet nectar that attracts bees, butterflies, and several beetle species in the late summer and autumn, the milkweed plant produces large rough oval pods. These are filled with flat brown seeds attached to a “parachute” of silky filaments. If the pod cracks open, you may find these seeds which, carried by the wind, are dispersed by their parachutes to other areas.

## 12 Choices We Make

This grassland ecosystem is dynamic and would soon turn to woodland if we allowed woody vegetation to grow in. All these birds, insects, and plants are here because we intentionally maintain this grassland habitat. At Arcadia, we manage nearly 200 acres of grassland habitat to maintain grasses that provide food for many invertebrate and small mammal species. These in turn provide food for many species of owls, hawks, and grassland birds and mammals, which includes endangered and threatened species. Currently, several bird groups, plants, butterflies, and dragonflies are being monitored. We let the grasses and other field plants grow, flower, and produce seeds each year. We erect nesting boxes, so that bluebirds and tree swallows have suitable cavity nests for raising their young. We mow the fields periodically, removing encroaching saplings and shrubby growth. And we teach about grassland ecology so that others will understand this wonderful, ecologically important, and fragile habitat.

The outer edge of this habitat is filled with seeds and berries. Providing food for wildlife is a worthy goal, but we discriminate in plantings. The current best practice highlights native plants over exotic species, and plantings are natural to encourage natural foraging behaviors. We remove invasive plants like buckthorn and bittersweet and make room for native plants of more food value such as silky dogwood and wild grape.

As you stop here you may hear a new sound. Nearby, off to the right, there is a “nature play area” where the sounds of delighted children can often be heard. Here at Arcadia, and at several other Mass Audubon wildlife sanctuaries, we have created nature play areas so that young children and their companions can have fun natural places to be physically active, creative, adventurous, and imaginative. It is our hope that by encouraging outdoor play, these children will be healthier and happier, and have a stronger connection to this sanctuary and other natural areas.



### 13 Changes to the Land/Picnic Area

You are now at Arcadia's picnic area. We hope you enjoyed learning more about the natural history of this wildlife sanctuary. Please relax in our picnic area while we tell you about the cultural history of this land, and the changes that have occurred over the past 300+ years.

If you were to look up the word "Arcadia" in the dictionary, you might find the definition to say "an imagined place of rural bliss, a place in which people are imagined or believed to enjoy a perfect life of rustic simplicity." Arcadia has long been such a place, where people and nature have come together.

Arcadia was originally named "Nonotuck," meaning in the middle of the river. These meadows and floodplain forests rimmed the Connecticut River as it flowed through the middle of a basalt ridge, forming a water gap between the Mount Holyoke range to the east and Mount Tom range to the south. Arcadia is halfway between source and sound--in the middle of the river. That makes Arcadia prone to seasonal flooding, an annual reminder that life in a flood plain can bring great seasonal changes.

Better hurry up Old Coach Trail to catch your trolley! During colonial times, between 1710 and 1740, our Old Coach Trail was the main stage road from Northampton to Springfield. Horse hooves dug easily into the sandy soils, hollowing out the trail in places. If you were here in 1890 you might hear the street trolley whistle as it stopped at Marshall's Grove, a pavilion and amusement park just upstream on the Mill River. Perhaps you'd also hear an enthusiastic cheer from a ball game as the "city folk" enjoyed an afternoon in the country. Today you're likely to hear rustling leaves, insects, frogs, birds, chipmunks and squirrels, children in the nature preschool, and even silence. And instead of running to catch the trolley back to town, you're more likely to relax and enjoy your time visiting this peaceful place.



Like all river floodplains, Arcadia's meadows and grasslands are prime agricultural land. The old rapeseed field at our entrance was returned to production in 2010, yielding squash in its first season of caretaking by Mountain View Farm. Today, the sounds of farm machinery echo the agricultural past of this, and almost all, New England lands.

You are now at Arcadia's picnic area. We hope you enjoyed learning more about the natural history of this wildlife sanctuary. Please relax in our picnic area while we tell you about the cultural history of this land, and the changes that have occurred over the past 300+ years.

If you were to look up the word "Arcadia" in the dictionary, you might find the definition to say "an imagined place of rural bliss, a place in which people are imagined or believed to enjoy a perfect life of rustic simplicity." Arcadia has long been such a place, where people and nature have come together.

Arcadia was originally named “Nonotuck,” meaning in the middle of the river. These meadows and floodplain forests rimmed the Connecticut River as it flowed through the middle of a basalt ridge, forming a water gap between the Mount Holyoke range to the east and Mount Tom range to the south. Arcadia is halfway between source and sound--in the middle of the river. That makes Arcadia prone to seasonal flooding, an annual reminder that life in a flood plain can bring great seasonal changes.

Better hurry up Old Coach Trail to catch your trolley! During colonial times, between 1710 and 1740, our Old Coach Trail was the main stage road from Northampton to Springfield. Horse hooves dug easily into the sandy soils, hollowing out the trail in places. If you were here in 1890 you might hear the street trolley whistle as it stopped at Marshall’s Grove, a pavilion and amusement park just upstream on the Mill River. Perhaps you’d also hear an enthusiastic cheer from a ball game as the “city folk” enjoyed an afternoon in the country. Today you’re likely to hear rustling leaves, insects, frogs, birds, chipmunks and squirrels, children in the nature preschool, and even silence. And instead of running to catch the trolley back to town, you’re more likely to relax and enjoy your time visiting this peaceful place.

Like all river floodplains, Arcadia’s meadows and grasslands are prime agricultural land. The old rapeseed field at our entrance was returned to production in 2010, yielding squash in its first season of caretaking by Mountain View Farm. Today, the sounds of farm machinery echo the agricultural past of this, and almost all, New England lands.

In the past, people have found floodplains easy to develop and often built cities on them. Arcadia was a bit too wet and flood-prone for large-scale development. Nevertheless, 92 mills operated at one time or another upstream of Arcadia on the Mill River, which was one of the most heavily-used rivers of its size in the world. In 1874, an earthen dam gave way after heavy March rains, breaching a reservoir and causing the Mill River Disaster, in which 139 people died. After that disaster, many riverside industries moved to the new city of Holyoke on the Connecticut River at one of New England’s best water power sites.

Left to the natural cycles of seasonal flooding, Arcadia has remained “in the middle of the river.” The multiple wetlands made this an appropriate setting for a muskrat farm. In 1944, the Chaffee family donated the original 44 acres of this wildlife sanctuary, in memory of their son Robert Searlie who loved roaming the woods during summer visits. Other habitat added to the core includes grasslands, shrub lands, and floodplain forest. Today, Arcadia manages nearly 200 acres of grasslands on this 755-acre wildlife sanctuary.

What will the future bring? More change, we can be certain. The grasslands and marshes are ever-changing, impacted by periodic flooding, and more recently being redefined by beaver dams and great blue heron rookeries. Ecological management practices also change, as we continue learning how best to manage the special habitats of “Nonotuck.”

## 14 Nature Center

You have visited just a small part of this 755-acre wildlife sanctuary, with 5 miles of trails along the Mill River, where you can participate in canoe programs, take a walk or a drive through the grasslands, enjoy the nature play area, picnic in the meadow, attend adult, family, scout programs, or send your child to our nature preschool and day camp for elementary school children.

We would appreciate your feedback on how this trail worked for you. Please spend a few minutes answering some questions now or after you get home. To provide feedback now, you can talk with one of our staff or volunteers or fill out a written questionnaire. To provide feedback at home, you can take home a questionnaire and return it at your convenience or visit us at [www.massaudubon.org](http://www.massaudubon.org) to complete the questionnaire online.

Thank you for visiting. Please go inside the nature center to get information on other activities at Arcadia, other Mass Audubon accessible trails, and how to provide feedback online.



If you borrowed any of our publications, binoculars, or adaptive equipment, please return these items to the Arcadia Wildlife Sanctuary Nature Center.

*We are proud to be the recipient of the Stavros Center for Independent Living's Paul Winske Award*

### THANK YOU

Jerry Berrier

Perkins School for the Blind

This project is made possible by a grant from the U.S. Institute of Museum and Library Services.

Anne Groth and Carla Wirburger

and the Arcadia Field Walk Leaders

Massachusetts Dept. of Conservation and Recreation, Universal Access Program

Lions Clubs of Easthampton and Williamsburg

Marsha Salette

Springfield Naturalists Club

Generous contributions from Mass Audubon members

# Arcadia Wildlife Sanctuary

127 Combs Road  
Easthampton, MA 01027  
413-584-3009  
800-710-4550  
arcadia@massaudubon.org

## Visitor Center

Monday-Thursday 9 am – noon  
Friday and Saturday 9 am – 3:30pm  
Sunday noon – 3:30pm

## Trails and Rest Rooms

Open every day, dawn to dusk.

---

Mass Audubon works to protect the nature of Massachusetts for people and wildlife. Together with more than 100,000 members, we care for 34,000 acres of conservation land, provide educational programs for 225,000 children and adults annually, and advocate for sound environmental policies at local, state, and federal levels. Mass Audubon's mission and actions have expanded since our beginning in 1896 when our founders set out to stop the slaughter of birds for use on women's fashions. Today we are the largest conservation organization in New England. Our statewide network of wildlife sanctuaries, in 90 Massachusetts communities, welcomes visitors of all ages and serves as the base for our work. To support these important efforts, call 800-AUDUBON (283-8266) or visit [www.massaudubon.org](http://www.massaudubon.org).

