Attleboro Springs Wildlife Sanctuary at La Salette



Reflection Trail

FOR ALL SEASONS, ALL SENSES, ALL PEOPLE





Welcome to Attleboro Springs
Wildlife Sanctuary at La Salette.
This Reflection 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.

If you were here 100 years ago, you may have seen the workings of a sanitarium, a healing center. Fruits and vegetables grew in the orchards and fields, patients and caregivers walked the trails in quiet contemplation, benefiting from the healing powers of the natural world—the sound of a trickling spring, the touch of a velvety leaf, the sight of a bird in flight, the fragrance of a blooming flower. Today you're likely to observe these same things. Listen carefully, and you may also hear rustling leaves, buzzing insects, frogs calling, birdsongs, chipmunk and squirrel chatter, startled turtles plopping into the pond, and even the natural quiet of the woods.

Mass Audubon created this self-guided, fully accessible nature trail so everyone could experience the very special nature of Attleboro Springs. This project is made possible by a grant from the U.S. Institute of Museum and Library Services.

By creating this Reflection Trail, we continue the legacy of using this historic land for spiritual renewal and improved health by connecting people with nature.

This half-mile, fully accessible loop follows a wide, level, crushed stone path, enhanced with bridges, boardwalks, and an observation deck. There is a guide rope on the left, occasionally replaced by a handrail, for the entire length of the trail. There are no stairs or side slopes along the Reflection Trail.

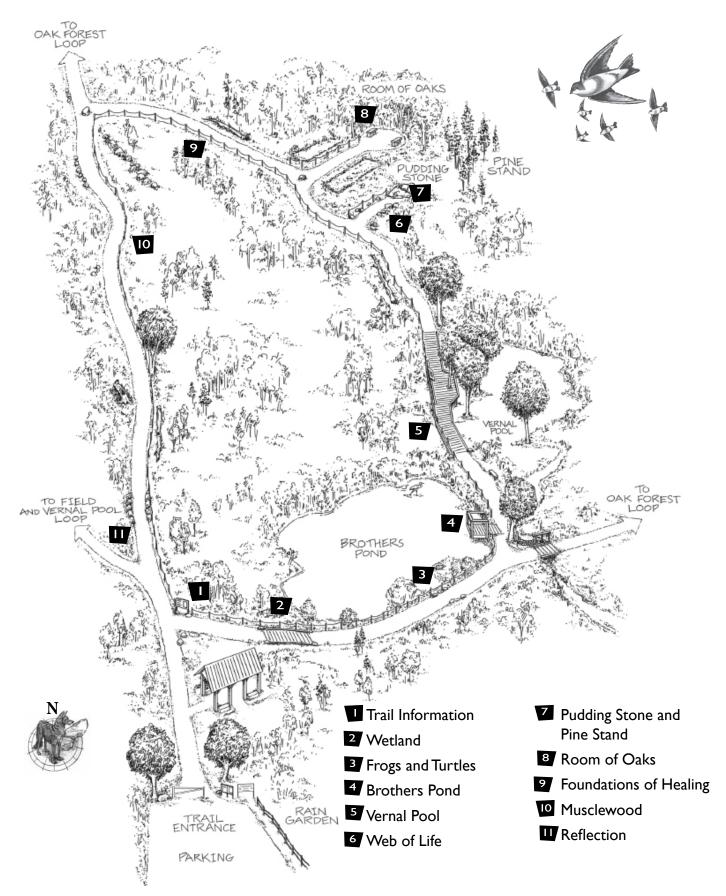
An audio tour is available by calling 508-441-3160. The tour is also available online at **www.massaudubon.org** where you can download it to your personal audio device. Individual copies of the trail map are available in printed or tactile formats, and copies of a printed or Braille guide are available at Oak Knoll Wildlife Sanctuary just up the road at 1417 Park Street and at the **La Salette Shrine Welcome Center** at 947 Park Street.

All narrated stops along the trail are marked by a round bead in the guide rope. Within reach of the bead, there will be a signpost with the stop name and number in print and Braille. A square bead in the rope indicates that there is a bench or other seating nearby.

On this trail, you can listen for songbirds and frogs, visit various wetland and woodland habitats, explore a pudding stone outcrop, and learn about the natural and cultural history of this special place. We hope you'll enjoy your visit and that this trail will enrich your senses in new ways.

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Trail Information

Here at the trailhead, take some time to get familiar with this setting. Close your eyes and feel the breeze or sun on your face. Let yourself become a sensory barometer to measure wind and sun. Become 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, 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?

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 cool or warm? Shady or sunny? Moist or dry? Do you feel exposed to the wind or sheltered from it? Can you sense what type of setting is up ahead – an open habitat or a woodland?

Listen to some of the sounds. Is this area noisy and bustling or calm and quiet? Are there different insects "singing"? Can you hear any birds?



2

Wetland

You are now crossing over a wetland boardwalk. Attleboro Springs has several wetland habitats, depending on the season, each may be flooded or may appear practically dry. The water level within a wetland fluctuates seasonally.

Wetlands provide a nutrient rich home for many species. Plants adapted to the oxygen free, or anaerobic soils, found here provide food and shelter for the many creatures that live or pass through the area. Many fish, amphibians, reptiles, insects, birds, and mammals live in and around this wetland, from the dragonflies darting

for a mosquito to the fox who quietly sips a drink of water at the shoreline.

Wetlands reduce the intensity and duration of floods and act as natural filters of pollution.

Historically, wetlands were drained for agriculture or development. By 1993, half of the world's wetlands had been drained. The biodiversity, practical function, and historic endangerment of wetlands make them a priority for conservation. From an economic perspective, a well-functioning wetland system is valuable for

the environmental services it naturally provides, such as flood control and water filtration.

Here at Attleboro Springs, we appreciate the intrinsic value of wetlands. We are

thankful to have the opportunity to protect these important habitats and to teach others about them.



Frogs and Turtles

You are now approaching Brothers Pond. This pond is shaped like an oval, with the approximate dimensions of a hockey rink.



And that's exactly what it was. The Priests and Brothers of the La Salette Seminary constructed this pond for playing ice hockey each winter, and it made a cool spot for a swim in the summer time.

Today, Brothers Pond is a thriving wetland habitat, home to ducks, frogs, turtles, and songbirds. If you are visiting on a warm day, you may hear lots of wildlife nearby.

Along the shoreline, you may hear, and possibly see, large bullfrog tadpoles splashing, swimming, and feeding. The tadpoles eat mostly aquatic plants, developing slowly and taking one to three years to reach adulthood. They overwinter by partially burying themselves in the mud of this pond. Bullfrogs are our largest of North American frogs, and some of the best jumpers in the world. Their deep, resonant "jug-o-rum" can be heard both day and night.

As you walk along the shoreline of the pond, listen for the sound of our resident turtles as they "plop" into the water. These are Painted Turtles, the most widespread turtle in North America. These brightly decorated turtles are easily observed basking in groups, sometimes piled upon each other atop floating logs, but they will quickly drop into the water if they are startled. The painted turtle has a dark carapace or shell, and earned its name from the bright red and yellow markings on their head and neck. You'll see or hear turtles between March and November, since they spend most of the winter buried in mud or soil.

The birds make use of this pond for drinking water, for sheltering in the abundant shoreline plants, for feasting on nearby seeds and berries, or stalking fish or insects at the surface.

Next, we'll walk along the shoreline of the pond. Remember to watch for tadpoles and listen for the "plops" of those startled turtles.

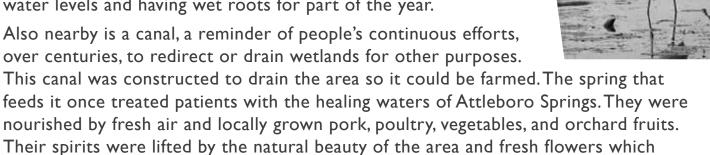
Brothers Pond

There are many sights, sounds, and smells to observe here at the observation deck over Brothers Pond. Listen for a moment.

You might hear the sound of the stream behind you. Depending on the season, it could sound like a gentle trickle or a fasterflowing stream. Fragrant wetland plants line the streambed and the shoreline of this pond, well-adapted to extreme changes in water levels and having wet roots for part of the year.

Also nearby is a canal, a reminder of people's continuous efforts, over centuries, to redirect or drain wetlands for other purposes.

were grown in the fields and in nearby greenhouses.



Do you hear anything? This is a great birding spot. Watch and listen for Great Blue Herons, skillfully hunting for frogs and fish along the shoreline. You may hear it call as it nabs a bullfrog. You might also hear some of the other birds frequently found here -Scarlet Tanager, Eastern Towhee, Gray Catbird, Mallards, and Red-tailed Hawk.

A pond, whether occurring naturally or created by ice hockey enthusiasts, is a shallow and still body of water with sunlight that reaches to the bottom, enabling plants to grow. Like all ponds, Brothers Pond may change over time. It may become richer in nutrients allowing vegetation to slowly fill in. It may gradually become a marsh, then with the arrival of shrubs and trees, a swamp. This succession is all quite gradual, natural, and healthy. For now, it is one of the 3000 small ponds in Massachusetts, providing habitat to these frogs, turtles, dragonflies, and songbirds.

Up ahead, there is a bench on the right side of the trail, opposite the square bead on the guide rope. The bench is located by a woodland glade where you may see or hear many woodland birds.



Vernal Pool

The boardwalk just ahead enables you to visit a special type of wetland called a vernal pool. Listen carefully. Can you hear water running? Probably not. 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. 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 on a warm day in spring, you might hear the sounds of dripping snow or a spring shower and the trickling of snow-melt and run-off as it fills the pool. 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 this "racket" as far away as the parking lot! Are they ducks? No, these are the seasonal calls of wood frogs, easily identified by their golden brown coloration, their dark masks, and their loud "quacking." In early spring, on rainy nights, hundreds of these small frogs congregate to breed and lay their eggs here.

Many animals are dependent on vernal pools to complete part or even all of their life cycle. Amphibians, such as blue-spotted salamanders and wood frogs, need a place to reproduce where predators (like fish) won't eat their eggs. Others, like the fairy shrimp, complete their whole life cycle in these shallow waters. 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.

Spring peepers, thumbnail size tree frogs may come to this pool to breed, too. You are far more likely to hear the sharp peeping call of these tiny treefrogs, than to actually see one. Though only about an inch in size, their calls carry for a quarter mile. Although not restricted to breeding only in vernal pools, they do thrive in these habitats. 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.

On this boardwalk, you will notice a tree growing through an opening on the right side of the deck. In an effort to minimize our impact to the woodland immediately surrounding the vernal pool, we designed the deck to accommodate this tree. Leaving the tree in

place meant less disturbance to the forest floor. The woodland area immediately surrounding a vernal pool is important habitat for the salamanders and frogs that migrate to the pool each spring to breed. To truly protect a vernal pool habitat, we must also protect the surrounding woodlands where many vernal pool inhabitants spend most of the year living in the forest floor leaf litter.

6 Web of Life

On the left side of the trail, lying on its side, is a large tree that fell in recent years. Further in the woods, there are several more rotting logs, the remains of trees that fell years ago. Why do we leave all these dead trees around? We're letting nature recycle itself. Some might call this a dead tree, but fallen logs have lots of life within them. In fact, a dead tree is its own thriving natural community. Under a rotting log and beneath fallen leaves, recyclers are busy at work. Beetles, pill bugs, earthworms, and microscopic bacteria and fungi consume and digest organic matter. They break down the decaying material repeatedly, leaving behind rich humus and returning nutrients to the soil. Salamanders, toads, snakes, and spiders occupy these microhabitats, opportunistically feeding on worms and other invertebrates.

As you continue to walk along this trail, look for more of these trees. Look for mosses and lichens growing on the bark. Decaying trees provide many of the nutrients that enable these other organisms to survive. You may see several dead trees lying on their sides, and some have decomposed to the point where they are almost gone, having been nourished by this soil as living trees, then as dead trees supporting the lives of other organisms, and now completing the cycle by returning to soil. There are several dead trees, or snags, standing, providing tasty insects and a protected nesting place for many cavity nesting birds such as Wood Ducks and woodpeckers.

7

Pudding Stone and Pine Stand

When you reach the pudding stone, feel its texture, appreciate its size, and take this moment to learn about this large and unusual geologic feature, here in the middle of this woodland. How did it get here?

Geologically speaking, pudding stones were formed a billion years ago in northeast Canada. Pudding stone first formed in river channels and during the Ice Age they were pushed down through New England by the glaciers. The lighter color is quartz sand which has cemented itself together over millions of years. Mixed with it is a combination of other pebbles and stones of various sizes, shapes and colors. Some may even contain fossils. All this makes pudding stone a conglomerate rock consisting of a mixture of different, irregular sized grains and pebbles that will vary in color from red to brown and pink to purple.

Tightly cemented pudding stone was quarried locally and many of the major Boston buildings built in the early 1900's have puddingstone foundations.

You may be wondering why this is called pudding stone. It is said to be named for the English pudding it closely resembles. Traditionally served on Christmas day since medieval times, this boiled pudding, also called plum pudding or plum duff, contains lots of chunks of dried fruit. If you're wondering what the pudding looks like, just look at this puddingstone!

Behind the pudding stone is the pine stand. This symmetrical stand of pine trees hearkens back to the days when firewood heated the many rooms of the old sanitarium, later called the Provencal House or "castle" at La Salette.

This 5-needle pine growing here is the most common and largest evergreen tree in New England. It was not unusual for early colonists to find trees growing in excess of 150' tall. The White Pine's impressive size was complemented by its importance in our early history. The massive trees were used to make masts for sailing ships. At one point, the King of England decreed ownership of all white pines larger than 24" for His Majesty's Royal Navy. White pine was emblemized on the first flag of the Revolutionary Forces. Although the largest White Pines are long gone, the tree's contribution to the New England landscape has not diminished.

Do you hear a sound like this? Gray squirrels 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 pine 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.

8 Room of Oaks

Again, there is a short side trip off the main trail. If you turn so the rope bead is at your back, the side trail will be in front of you. Be careful, you'll pass by a large but low sitting rock in the center of the trail. On the left side of this side trail will be a guide rope. If you continue for another 65 feet along this spur trail, you will come to two granite benches. Feel free to have a seat and enjoy this peaceful setting to learn about these benches and the Room of Oaks.

These benches are made of granite, but not just any granite. These stones are from the castle that used to stand nearby. Dr. James M. Solomon in the late 19th century, took it upon himself to tame five hundred acres of woodland. Upon this land he built his Sanitarium. This building, with its superior architecture, was three stories high and seventy five by eighty feet. Solomon was known as a profound healer and claimed to cure all cases of cancers without surgery. As you sit here, imagine all the healing and history that went on within the walls of Dr. Solomon's Sanitarium. On your visit, you may happen upon a brick from the Sanitarium. There will be a glossy smooth side which was used as the inside wall of the building. The bricks we occasionally find contain the stamp "Somerset" an old brick company in England.

You may notice there are 6-7 different oak species in this "Room of Oaks." These oaks are reminiscent of the landscape design of Frederick Law Olmsted, Sr. a journalist, political activist, and social critic, in the 19th century. He believed that creating green spaces for the public, regardless of economic status, would improve the condition of life for city and

suburban people alike, and create a more cohesive community. He was equally concerned with protecting areas of pristine natural beauty from the harm of commercial expansion. His parks, such as Boston's Emerald Necklace, are designed to be not only aesthetically pleasing, but also to reduce the claustrophobic stress of the city and to help the suburbs connect with a more rural setting; thus, his style of landscape architecture sought to combine the positive aspects of both suburban and urban life and enhance them for the enjoyment of the community. The oaks were planted between the greenhouses which we will learn about at the next stop.

9

Foundations of Healing

You might have noticed a really long and low stone wall as you approached this stop. Here is a second one. These are the foundations of the greenhouses that once stood here. During your visit today, you're likely to hear rustling leaves, insects, frogs, birds, chipmunks and squirrels, and even the natural quiet of the woods. But if you were standing a hundred years ago, you might hear staff bustling about to tend garden plants to feed the guests of the Sanitarium. Menu selections for the 200-room Sanitarium always included locally grown items from the gardens and greenhouses

For centuries, this property has been protected by people aware of the powers of the natural world. The former medical Sanitarium was dedicated to the relief of suffering humanity. Walking paths, with sunken gardens and rose hedges were created to provide places for contemplation. This history of healing through contact with nature – hearing the sound of the trickle of the spring, touching the unique texture of puddingstone, smelling fragrant plants, and marveling at birds in flight – were all ways to reach people spiritually and to improve their health.

There are no longer greenhouses standing here, but today, La Salette Shrine continues to invite people from all over the world to come for interfaith experiences, spiritual renewal, and respite in this beautiful, quiet, and peaceful sanctuary. The greenhouse foundations provide another kind of nourishment now; their stone wall foundations provide shelter for snakes, insects, spiders, and small mammals which feed, rest, and den in the crevices.



10 Musclewood

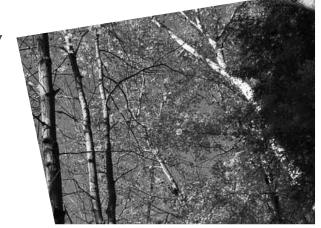
To your left is a Musclewood. Reach out and touch the trunk. How does it feel? Aptly named, the smooth gray bark over irregular trunk ridges feels like a muscled limb. Can you feel the ropey and sinewy texture? Musclewood is sometimes considered to be a shrub, but more often it grows like a small tree. Even though it is also known as hornbeam, Musclewood is probably the best name because the muscled appearance of the bark is unique. Musclewood is often found growing on the banks of streams.

The bark of the musclewood is certainly unique, but the bark of every tree is made of the same 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 getting to the wood.

On your right is a large tree where the bark has opened up, showing a hollow center. We call this tree the "Fox Den Tree" because this would be an ideal spot for a fox to find shelter. Hollow trees offer shelter to bats, owls, and larger woodland mammals in their nooks, crannies and cavities. Many birds (nuthatches, chickadees, and woodpeckers) are cavity nesters and need to find old trees with natural cavities for nesting sites.

Here in this deciduous woodland, where most of the trees lose their leaves each autumn, 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. In summer, this woodland is visited by songbirds seeking 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. Deciduous trees 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, we are able to see the graceful forms of many trees, observe their distinctive branching pattern, and notice details such as bark texture.



Reflection

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

One of the easiest songs to recognize is the "chickadeedeedee" of the Black-capped Chickadee, our state bird. In winter, chickadees often travel in mixed flocks with other small birds, including Tufted Titmice and White-breasted Nuthatches. The titmouse has a "cheeva cheeva cheeva" and the nuthatch has a nasal "yank yank". Some of the larger birds you will hear include the bright red Cardinal and the Blue Jay. They, too, have distinctive calls.

Do you hear another bird-like chipping sound in these woods? Do you know who makes this loud chipping? The same animal makes a rustling noise in the dry leaves. Many people assume it is one of the woodland birds, but it is really a chipmunk. 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 expandable cheek pouches until they bulge. Their cheeks can hold up to two tablespoons of small seeds, allowing them to take fewer trips out of their burrows, and minimizing their encounters with predators. With their cinnamon brown fur, and white and black side stripes, chipmunks are masters of camouflage. They blend into the forest floor and woody vegetation when they aren't moving, so they are often heard before they are seen. You can recognize their chips or hear them skittering through the brush when they move. As you walk, try to distinguish chipmunk calls from bird calls.

We are now coming to the end of the Reflection Trail. We hope you have enjoyed your visit and have learned some new things about this special wildlife sanctuary. The rope guide will lead you back to the start of the trail, just beyond the parking area.



If you borrowed any of our publications, binoculars, or adaptive equipment, please return these items to Oak Knoll Nature Center.

THANK YOU Jerry Berrier

Perkins School for the Blind

Massachusetts Dept. of Conservation and Recreation, Universal Access Program

Attleboro Land Trust

Molly Beck Ferguson

National Shrine of Our Lady of La Salette

City of Attleboro Conservation Commission

www.cityofattleboro.us/conservation 508-223-2222

Molly Skaltsis

Marsha Salett

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



Attleboro Springs Wildlife Sanctuary at La Salette

947 Park Street
Attleboro, MA
508-223-3060
www.massaudubon.org/attleborosprings

Trails: Open every day, dawn to dusk.

Visit our Nature Center just a mile away at:
Oak Knoll Wildlife Sanctuary
1417 Park Street
Attleboro, MA
www.massaudubon.org/oakknoll

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 200,000 children and adults annually, and advocate for sound environmental policies at the 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 welcomes visitors of all ages and serves as the base for our conservation, education, and advocacy work. To support these important efforts, call 800-AUDUBON (283-8266) or visit www.massaudubon.org.

