



Mass Audubon
Protecting the Nature of Massachusetts

Connections

JANUARY – APRIL 2013

A NEWSLETTER FOR THE MEMBERS OF MASS AUDUBON



Connecting Everyone

see page 2

Visitors check out new interpretive exhibits at Broad Meadow Brook Wildlife Sanctuary in Worcester.



www.massaudubon.org/connections

Connections is published three times each year in January, May, and September.

Editorial Team:

Heather Cooper, Kristin Foresto, Jennifer E. Madar, Rose Murphy, Michael P. O'Connor, Ann Prince, and Hillary Truslow

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A Message from Our New President

Dear Member,

It's both exciting and humbling to have been chosen as the ninth President of Mass Audubon.

In mid-January, I will join this extraordinary organization—widely regarded as one of the most prominent and influential environmental organizations in the Commonwealth, New England, and, in fact, the entire United States—and I can't wait to get started.

This opportunity is meaningful to me for several reasons. Personally, I am a lifelong birdwatcher, and some of the most memorable experiences of my childhood were spent birding with my family and Mass Audubon staff on the Cape. Professionally, becoming the President of Mass Audubon is a culmination of my 20-plus-year career leading conservation organizations in New York, New Hampshire, and abroad.

Like Mass Audubon, the organizations I've directed have consistently produced impressive and tangible conservation results. During my eight years as the State Director of The Nature Conservancy of New York, we permanently protected 339,000 acres in the Adirondacks and the Tug Hill Plateau—adding tens of thousands of acres of "Forever Wild" land to the Adirondack Forest Preserve while supporting continued sustainable and economically important forestry activity in northern New York State.

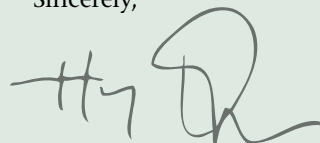
During my four years as the State Director of The Nature Conservancy in New Hampshire, we launched and implemented a highly successful, broad-based initiative to conserve thousands of acres of the Great Bay Estuary and pursued several innovative public-private partnerships to protect rare habitats and species, from the Ossipee Pine Barrens to Manchester Cedar Swamp.

Most recently, in my role as Chief Conservation Officer at Patagonia Sur, I worked with a team from inside and outside the organization to create a practical conservation easement template in Chilean law and to form one of Chile's first independent nonprofit land trusts, called Tierra Austral.

I am drawn to Mass Audubon because of its bold vision; its strong and decisive commitment to action; its dedicated Board of Directors, staff, members, and volunteers; and its passion for connecting people of all ages, backgrounds, and abilities with nature. This organization has exactly the kind of track record in conservation, education, and advocacy that I intend to build upon as President, with your support.

Together, we will continue to achieve great things!

Sincerely,



Henry Tepper, President

A visitor uses the recently installed post-and-rope guide system at Blue Hills Trailside Museum in Milton.

Connecting Everyone with Nature

Universally Accessible Trails Enrich Visitor Experience

by Lucy Gertz, Michael P. O'Connor, and Heather Cooper

Imagine for a moment that you are standing outside on a trail in the sunshine and can hear—but not see—everything in nature that surrounds you. Strange yet inviting noises, such as the soft *tap-tap-tap* of a woodpecker foraging for food, are making their way to your ears. And there is a faint sweet smell in the air; but you aren't quite sure where it's all coming from. Then, as you cue up an audio narration on your MP3 player, things slowly come into focus.

You have arrived at the edge of a meadow. Listen for birds. You may hear the caw caw of crows; the plaintive but insistent mew of a gray catbird; or



Guests explore the nature of Worcester via Broad Meadow Brook's new universally accessible trail.

the chips and whistles of cardinals. In winter, smell the brisk crispness of the frozen ground; in summer, the heat warming the layer of fallen and decomposing leaves. Listen for the breeze rustling the leaves, or the trees squeaking a little as their trunks rub together in the wind.

Continued on next page.

Universally Accessible Trails Now Open

- 2008** ● Stony Brook *Norfolk*
- 2009** ● Broadmoor *Natick*
- 2011** ● Arcadia *Easthampton & Northampton*
Attleboro Springs *Attleboro*
- 2012** ● Blue Hills Trailside Museum *Milton*
Broad Meadow Brook *Worcester*
Wellfleet Bay *Wellfleet*

Coming Soon...

- 2013** ● Boston Nature Center *Mattapan*
Drumlin Farm *Lincoln*
Pleasant Valley *Lenox*

Blazing New Trails

by Michael P. O'Connor

For many people who live with disabilities, finding opportunities to experience the outdoors can be challenging. Accessibility consultant Jerry Berrier is determined to help



Accessibility consultant Jerry Berrier and DCR staffer Gigi Ranno examine a red-tailed hawk wing at Trailside.

This welcoming, inclusive experience is happening by design (or, more accurately, by “universal design”) at many of our wildlife sanctuaries across the state. What began in 2008 with construction of a pilot sensory trail at Stony Brook in Norfolk and the addition of an audio tour at Broadmoor in Natick in 2009 has today evolved into Mass Audubon’s Accessible Interpretive Trails

Project: a three-year-long initiative to better connect people of all abilities with nature.

Funded by a grant from the U.S. Institute of Museum and Library Services, the project kicked off in 2011 with the addition of two new all-persons trails at Attleboro Springs in Attleboro and Arcadia in Easthampton

and Northampton. Since then, Mass Audubon—with the help of volunteers and local partners, including Lions Clubs—has built three more universally accessible trails

at Broad Meadow Brook in Worcester, Wellfleet Bay in Wellfleet, and Blue Hills Trailside Museum in Milton.

Specially designed with the aid of accessibility consultants, the new trails accommodate visitors who have a range of abilities. Broad, flat paths provide easy access for those with wheelchairs or guide animals, while downloadable audio tours, Braille trail maps and signage, and tactile post-and-rope guide systems present unique ways to explore the outdoors.

Accessibility consultant Jerry Berrier, who worked closely with Mass Audubon to help construct these pathways, is especially cognizant of their potential. “Today, a blind person visiting one of the sanctuaries will find things to listen to, things to touch, things to smell, and things to spark the imagination,” explains Berrier, who is totally blind. “He or she may not experience nature in exactly the same way as sighted folks do, but it will be a rich and exciting experience nonetheless.”

Perhaps most notable is that each wildlife sanctuary offers visitors the freedom to relate to nature a little differently than they would elsewhere.

others overcome this obstacle, one wildlife sanctuary at a time.

Berrier is a trail tester for Mass Audubon’s ongoing Accessible Interpretive Trails Project. In this role, he consults on multiple design aspects, including trail location, placement of guideposts and ropes, and the use of mobile-device technologies to enrich the visitor experience.

“For someone like me, to be out on a trail and able to immerse myself in a contemplative mood and feel safe, most people don’t understand how rare that can be,” says Berrier.

Berrier, also a nature-sound recordist, spoke at the Columbus Day grand



Lions Club representative Dennis Landry leads a tour at the Broad Meadow Brook trail opening.

Continued on next page.

"Today, a blind person visiting one of the sanctuaries will find things to listen to, things to touch, things to smell, and things to spark the imagination..."



Following a downloadable audio tour, visitors learn about their natural surroundings.

At Broad Meadow Brook, accessible interpretation materials reveal the sanctuary's land-use history, as well as the plants and wildlife that make it unique as the site transitions from farm to forest. At Wellfleet Bay, a boardwalk allows visitors to explore a salt marsh ecosystem up close. And at Trailside Museum, a series of stops along a path of live-animal exhibits provides information on birds, insects, mammals, habitats, and human history.

Gigi Ranno, Outreach Coordinator for the Massachusetts Department of Conservation and Recreation's Universal Access Program, attended the all-persons trail grand opening at Trailside. "I think it's vitally important to welcome people of all abilities to nature. It fosters a real sense of community and shows we can all do things together," says Ranno.

"Such integration enriches everyone's life. When everyone has a chance to participate, everybody wins."

With three more trails set to open in October 2013 at the Boston Nature Center in Mattapan, Pleasant Valley in Lenox, and Drumlin Farm in Lincoln, the project is nearing completion. By the end of this year, visitors will be able to enjoy a total of 10 accessible interpretive trails from Cape Cod to the Berkshires, making our sanctuaries even more welcoming places to explore and learn about the nature of Massachusetts. ▲

Lucy Gertz is Statewide Education Projects Manager. Michael P. O'Connor is Public Relations Manager. Heather Cooper is Marketing Communications Coordinator.

▶ www.massaudubon.org/accessibility

Continued from previous page.

opening of the all-persons trail at Blue Hills Trailside Museum, where he engineered the audio tour as well as edited the sound files used in the sanctuary's "sound boxes." These boxes, which accompany natural history displays inside the museum, feature birdsong, insect sounds, and other aural

elements of the natural world that visitors are likely to hear at Trailside.

"By creating universally accessible trails, Mass Audubon demonstrates a care and concern not just for nature but for people of all abilities," Berrier told the crowd. "The statewide project attests that the outdoors belongs to all of us." ▲

Timeless



Leave a legacy for generations to follow.

Remember Mass Audubon in your will or estate planning and make a lasting gift of nature conservation.

Contact Nora Frank at
nfrank@massaudubon.org
or (781) 259-2125

Winter Fun at Our Sanctuaries

by Heather Cooper

Has winter given you a bad case of cabin fever? Luckily, we offer a cure—and preventative care—at our network of wildlife sanctuaries across the state. Whether you're looking to venture out with the family, get some fresh air with friends, take up a new cold-weather hobby, or any combination thereof, we've got you covered.

So bundle up and join us for some fun activities this winter. You'll be glad you did!



Snowshoeing

What better way to explore a sparkling winter landscape than with footwear that allows you to virtually float atop the fluffy stuff.

Join us for an expert-guided daytime or moonlight hike among trees, along the coast, or up a mountain. We'll search for signs of wildlife, learn how to identify trees without their leaves, and take in stunning views of the natural landscape. (Bonus: Some outings wrap up with hot cocoa and coffee!)





Wildlife Tracking

If you're curious as to what's been leaving those "footprints" in your yard, our naturalists can help solve the mystery.

At one time, being able to read tracks was vital for survival. Today, identifying signs of wildlife can teach us a lot about the animals that live in our area. We'll head outside to learn how to distinguish the markings of deer, porcupines, fishers, foxes, bears, moose, and more. Before you know it, our naturalists will have you on your way to becoming a tracking expert.



Winter Birding

Many birds make this season special. Walk with us along the sandy beaches of Plum Island or Duxbury to glimpse winter waterbirds (think: sea ducks and purple sandpipers) and other seasonal visitors such as snowy owls. Or visit the vast and tranquil Quabbin Reservoir to observe magnificent bald eagles in their natural habitat. We'll fill you in on unique adaptations that enable these amazing creatures to survive harsh New England winters.

Want to try birding at night? Tag along on one of our "owl prowls" and listen for the whinnies and hoots of eastern screech-owls and great horned owls.



High Ground by Robert Verity Clem



Photography Workshops

Winter landscapes offer some of the most stunning photo ops: rolling hills blanketed in snow; moonlit trees lining stone walls; and shimmering seaside sunsets.

If you own a digital camera, but feel like you're not taking full advantage of its features, we can get you started with the basics as well as impart some techniques for taking better photos—including how to experiment with lighting, focus, depth of field, and composition. Afterwards, we'll head out to capture the beauty of local landscapes and wildlife.



Adventures in Art

If appreciating the natural world from the comfort of the indoors is more your thing, you'll want to check out the Museum of American Bird Art at Mass Audubon (formerly the Visual Arts Center)—home to works by John James Audubon, Charley Harper, Andy Warhol, Frank W. Benson, Alexander Wilson, and others.

Here you can connect with the outdoors through our collection of nature-inspired fine art, which includes folk art, pop art, Impressionism, and illustration. ▲



www.massaudubon.org/winter-fun





Stewarding Spring Street Woodlands

Bordering our North River Wildlife Sanctuary in Marshfield, the Spring Street Woodlands carry the headwaters of the Hannah Eames Brook.

by Sue MacCallum and Heather Cooper

As we tour his 31-acre Marshfield property, longtime South Shore resident Peter Hale recalls how he and his siblings helped their father harvest firewood to heat the family home each winter. Purchased by Robert and Alice Hale in 1940, this woodland landscape—a mixture of maple, pine, and hemlock—was also the site of countless afternoon explorations for the Hale children and friends.

Today, it is permitted for construction of a single-family home. But, rather than cede this land to development, Mass Audubon has begun the Spring Street Woodlands Campaign to help protect it.

With the population of Marshfield having increased by three percent from 2000 to 2010, much of the town's previously undeveloped wildland has been replaced by houses and lawns. If Mass Audubon is successful in our efforts to acquire this property, North River will grow to encompass more than 225 acres and include connections to other land currently protected by local and regional land trusts.

And, since the property shares a half-mile border with our North River Wildlife

This property represents a chance to protect extensive forest habitat for several native species.

Sanctuary, it represents a chance to protect an extensive forest habitat for several native species. Cooper's hawks, wood thrushes, wild turkeys, and white-tailed deer are known to live here in an understory filled with beautiful native plants, such as highbush blueberry, witch hazel, and flowering viburnum.

As we venture deeper into the woods, we reach a shaded, mossy glen that is part of the headwaters of the Hannah Eames Brook. The brook flows through woodland and marshland to the North River—a federally designated National Natural Landmark with unique ecological features, as well as a source of public drinking water for Marshfield and surrounding towns.

"Stewarding this land has been a high priority for us for many years," says South Shore Sanctuaries Director Sue



Mass Audubon South Shore Sanctuaries Director Sue MacCallum with Spring Street Woodlands property owner Peter Hale.

MacCallum. "In addition to protecting the Hannah Eames Brook, it would provide a link between the North River Wildlife Sanctuary and other nearby protected lands."

To permanently protect and care for this land, Mass Audubon must raise \$180,000. For more information or to learn how you can help us reach this goal, visit www.massaudubon.org/springstreetwoodlands. ▲

Sue MacCallum is South Shore Sanctuaries Director.



www.massaudubon.org/springstreetwoodlands

EXPLORING THE NATURE OF MASSACHUSETTS

by Lucy Gertz



Sugar Maple

(*Acer Saccharum*) All maple trees produce sap, but sugar maples provide

the sweetest sap of all. When buds first appear on a tree, it's time to remove the taps. The winter firefly (*Ellychnia corrusca*) often can be seen on maple trunks during this time. Actually a beetle, this insect flies during the day and thus does not light up.

Maple Sugaring



"Sapsicles"

"Sapsicles," which form on the ends of broken twigs, provide sustenance for red squirrels (*Tamiasciurus hudsonicus*) as well as sweet treats for young naturalists (*Homo sapiens*) on cold days.



Late winter is nature's sweetest season: When nighttime temperatures dip below freezing and daytime temperatures rise above 35 degrees Fahrenheit, the maple sap begins to flow. Like all things in nature, this phenomenon is part of a cycle that is part biology and part magic.

When preparing for the chill of winter, maple trees store starch in their trunks and roots prior to going dormant. Before spring, this starch gets converted to sugar for nourishment and rises up inside the tree along with water being transported to the developing buds.

One Iroquois legend recounts that the activity of sugaring was discovered by accident when a tribal leader threw his tomahawk into a tree trunk and sap began to flow. When the tomahawk was removed, the sap was

Traditional Sugaring Configuration The basic setup of sugaring has not changed in centuries. All that's needed is a tap (or spile), a bucket, a filter, and a means to boil the sap into syrup. During a good season, one tap can produce approximately 10 gallons of sap, which yields about one quart of syrup.

An Age-Old Tradition This familiar and endearing late-winter scene appears along roadways in towns throughout much of the Commonwealth. Some maple plantings in central and western Massachusetts are 300 years old.



collected and used to boil dinner meat, giving it a wonderful sweet taste.

Centuries later, we still tap sugar maples for their sap, and the process of making syrup remains largely unchanged: nothing is added, and only water is removed during the boiling process. To produce one gallon of maple syrup requires approximately 40 gallons of sap because sap is about 98 percent water.

But maple syrup production depends on the weather. Research indicates that sugar maples are showing effects that coincide with regional climate change, such as reduced sap production. By caring for the nature of Massachusetts, we can help protect these beautiful trees and the time-honored traditions they provide. ▲

Illustrations by Barry Van Dusen

Maple sugaring activities at these and other wildlife sanctuaries

Blue Hills Trailside Museum, Milton – Sunning themselves on the maple trees scattered around the Blue Hills are non-luminescent winter fireflies.

Drumlin Farm, Lincoln – Our farmers fire up the evaporator as the weather and sap flow allow. If you see our "Maple Sugaring in Progress" sign when you visit, follow your nose to the evaporator to learn about the art and science of sugaring.

Ipswich River, Topsfield – The Ipswich River Trail leads to a "sugar bush" comprised of dozens of sugar maples. From mid-February through mid-March, buckets are hung to collect sweet maple sap (visitors can even rent their own). On warm days, listen carefully to the concert of drips falling into the collection buckets.

Moose Hill, Sharon – Visit our sugarhouse during your next winter visit to see if we are boiling sap

into syrup. Moose Hill taps nearly 100 trees during the sugaring season. Along the Billings Trail, you can peek into buckets to see if the sap is running.

Audubon Shop, Lincoln – Find maple sugaring guidebooks, buckets, and spiles at the Audubon Shop, located at our Drumlin Farm Wildlife Sanctuary in Lincoln.



www.massaudubon.org/maple-sugaring

Rescuing Mr. Whooo

by Michael P. O'Connor

When Lura Provost arrived home in Westwood in the frigid dusk of January 2011, she was annoyed to see a paper bag littering the snowbank along her driveway. "But then I saw it wasn't a paper bag—and so I pulled forward very slowly," she recalls. "He didn't move at all."

"He" was an injured eastern screech-owl—a small raptor that averages six to seven inches in length and weighs a mere one-third of a pound. Provost, a Mass Audubon member for decades, didn't miss a beat; she secured the owl in her garage and called for advice.

Provost was referred to wildlife rehabilitator Alison Webber and immediately contacted her. Webber was willing to examine the owl, so Provost carefully wrapped the bird in a towel, placed it on the front seat beside her, and headed back out for a 20-mile drive through the icy darkness to Webber's home in Wayland.

The rehabilitator's first observation was that the injured bird looked as though it was in shock. "Its right eye was swollen shut, and

"Then whoosh!—
he was gone..."



Mr. Whooo prepares for takeoff



the expression on its face was that of pure pain," Webber recalls.

In addition to an injured right eye, Webber's examination revealed dehydration and a possible concussion—perhaps from the owl flying into a vehicle on the street in front of Provost's house. Once in a cage, "Mr. Whooo," as she named the male owl, was soon responding to fluids, antibiotics, and cut-up mice.

He recovered swiftly, and Webber expected to release the owl within 10 days. But the weather worsened, and she decided the bird should stay a bit longer—a period that stretched into two months.

On March 12, Mr. Whooo returned to Westwood. His box was set down in Provost's backyard and the door was opened. "He just sat in there, eyes closed, for the longest time as we stood near him," Webber recalls.

The two women tipped the box up, and the little owl stepped back out into the wild. "Then whoosh!—he was gone just like that into the trees," exclaims Provost. "I think we were waiting for him to come back, but of course he never did."

"Now," she muses a bit wistfully, "when I hear a screech-owl in the night, I wonder if maybe it's him." ▲

www.massaudubon.org/about-owls



Mass Audubon



Birders Meeting

Birding: Past, Present, and Future
Challenges and Opportunities

Cohosted by the
Brookline Bird Club

Saturday, March 16, 2013

8 am-4 pm

Bentley University, Waltham

Expert Guest Speakers • Lunch • Vendors
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Visit

www.massaudubon.org/birdersmeeting
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WINTER PROGRAM SAMPLER

A snapshot of seasonal offerings from among hundreds of programs at Mass Audubon wildlife sanctuaries

Family Snowshoe Adventure

January 19: 10:30 am-noon

BOSTON NATURE CENTER, Mattapan
(617) 983-8500

Moonrise Hike at Great Neck

January 26: 5-6:30 pm

GREAT NECK, Wareham
(508) 636-2437

Bald Eagles & Snowy Owls Field Trip

January 26: 8 am-2 pm

HABITAT, Belmont
(617) 489-5050

Full Moon Snowshoe Hike: A Fundraiser

January 26: 6-8:30 pm

PLEASANT VALLEY, Lenox
(413) 637-0320

Owl Festival: Live Show & Owl Prowls

February 2: 3-5:30 pm

BROADMOOR, Natick
(508) 655-2296

Winter Crows at Arcadia

February 3: 2-6 pm

ARCADIA, Easthampton and Northampton
(413) 584-3009

Discover Allens Pond with the Director

February 10: 10 am-noon

ALLENS POND, South Dartmouth
(508) 636-2437

Wild Art: Making Frescoes

February 10: 1-3 pm

MUSEUM OF AMERICAN BIRD ART
AT MASS AUDUBON, Canton
(781) 821-8853

February & April Vacation Adventures

February 18-22: 9 am-2:30 pm

April 15-19: 9 am-2:30 pm

WELLFLEET BAY, Wellfleet
(508) 349-2615

Full Moon Owl Prowl

February 22: 6-7:30 pm

FELIX NECK, Martha's Vineyard
(508) 627-4850

Maple Sugaring Tours

March 2-17 (weekends): 10 am, 12:30 pm, 2:30 pm

IPSWICH RIVER, Topsfield
(978) 887-9264

Maple Sugar Days

March 9 & 10: 10 am-4:30 pm

BLUE HILLS TRAILSIDE MUSEUM, Milton
(617) 333-0690

Maple Sugaring Festival

March 10, 16, 17: 11 am-3 pm

MOOSE HILL, Sharon
(781) 784-5691

Vernal Pool Night Hike

March 15: 6:30-8 pm

ATTLEBORO SPRINGS, Attleboro
(508) 223-3060

Tuesday Birding by Ear

March 19-April 9: 7-8:30 pm

BROAD MEADOW BROOK, Worcester
(508) 753-6087

Woolapalooza

March 30: 10 am-4 pm

DRUMLIN FARM, Lincoln
(781) 259-2200

Sheep Shearing Open House

April 6: 1-4 pm

WACHUSETT MEADOW, Princeton
(978) 464-2712

Wednesday Morning Birding

Weekly: 9:30 am-12:30 pm

JOPPA FLATS, Newburyport
(978) 462-9998

Friday Morning Bird Walks

Weekly: 8:15-11:45 am

NORTH RIVER, Marshfield
(781) 837-9400

Register online!



www.massaudubon.org/programs

Nature Play

Topsfield—Want to explore an enchanted trail? Or build an imaginary city using natural materials? Then visit us at Ipswich River Wildlife Sanctuary, where our new Nature Play Area is becoming a popular destination among families!



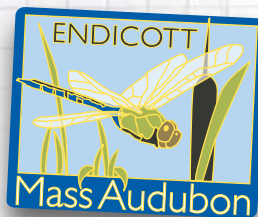
Unlike a traditional playground, this area gives children the opportunity to connect with nature using materials designed to invite free play and exploration. Located near the visitor center and adjacent to the sanctuary's fields and forests, it was created by our own property staff. And, thanks to good old Yankee ingenuity, all materials used in the construction were recycled from the sanctuary property—making the site extra eco-friendly.

We invite you to visit our new Nature Play Area, where you can climb, dig, and otherwise explore to your heart's content!

www.massaudubon.org/ipswichriver

Shaping Tomorrow's Leaders

Wenham—This summer, Mass Audubon's Endicott Wildlife Sanctuary joined forces with the Gulf of Maine Institute (GOMI) to present "Changing Behavior, Changing the Environment," a program aimed at developing future environmental leaders. Over the course of one week, teens and adults joined forces to study issues currently facing the 69,000-square-mile Gulf of Maine watershed that extends from Massachusetts to Nova Scotia.



Mass Audubon Education Coordinator Liz Duff and GOMI alumni Pete Furlong and Charles Nutter worked with more than 50 students to examine concerns such as sea-level rise and pollution, as well as identify day-to-day changes people can make to lessen the impact of climate change.

For one week, team members set a personal intention to reduce water use, reduce waste, conserve energy, educate and motivate, or eat less meat. Participants' solutions ranged from practical to creative and included taking shorter showers, composting, opening windows (instead of using a fan), and inviting friends to "play unplugged," among others.

www.massaudubon.org/endicott

Field Notes

Streamlined Recycling for Boston Public Schools

Mattapan—Until recently, Boston public schools were recycling their paper, cardboard, and polystyrene lunch trays in different amounts and on different days—a cumbersome, inefficient, and costly system. That's why in 2009, officials from the city of Boston,

Boston Public Schools, and Mass Audubon's Boston Nature Center (BNC) formed a committee to change this.

By teaming with principals, custodians, and cafeteria managers, among others, the group was able to implement an optimized, single-stream recycling (SSR) program in September 2012. Today, the program—which synchronizes school and neighborhood recycling schedules and resources—has expanded to include



nearly half of all Boston public schools. Pick up occurs on the same day and recyclables are all placed together, to be sorted later at a SSR facility.

The new system saves money by sending less waste to a landfill or incinerator and reduces the schools' carbon footprint. To complete the project, the committee is working to implement SSR at all Boston public schools by June 2013.

www.massaudubon.org/boston



Mass Audubon

Audubon Shop

Birdhouse Sale!

Members receive 20% off regularly priced birdhouses, poles, and accessories all February.

The Audubon Shop at Drumlin Farm Wildlife Sanctuary
Lincoln, MA 01773 | (781) 259-2214

Volunteer Spotlight: Ridley Rescuers

by Ann Prince



Front, Left to Right: Nancy Rabke, Carolyn Castiglione, Nancy Braun, Jerry Hequembourg

Back, Left to Right: Bill Allan, Ann Vaughan, Janet Drohan, Kelly Sattman, Kathy Herrick, Karen Strauss, Tony Pane, Mike Lach, Diane Silverstein

Every year in late fall and early winter, 50 intrepid Wellfleet Bay volunteers walk miles upon miles along the beaches of Cape Cod, on foggy frigid days and dark icy nights, bundled up to endure the chill. Their goal: to save the lives of sea turtles.

When water temperatures dip

below 50 degrees, tides are high, and onshore winds are blowing, young turtles—mainly endangered Kemp's ridleys—wash ashore, their lowered body temperatures rendering them unable to swim against the current. Caught in the “hook” of Cape Cod Bay, they have no way out.

This combination of conditions alerts the special volunteer corps that it's time to embark on their single-minded search-and-rescue mission. They know the cold-stunned turtles that lie motionless on the shore have only one chance for recovery—to be located, transported, rehabilitated, and released. Rehabilitation occurs at the New England Aquarium facility in Quincy, to which volunteer drivers transport the turtles in cold cars so they won't warm up too fast and die of shock.

While the Kemp's ridley population is in recovery after near extinction, the

species still needs help, so the turtle beachcombers take their task very seriously. “All of these volunteers are emotionally invested,” says Volunteer Coordinator Diane Silverstein.

While volunteer Bill Allan says they average one turtle per 10 walks, some group members have found two within a half-mile, so success pinpointing beached turtles varies greatly. “If I find one, I find three,” says Nancy Braun, who walks the desolate outer Cape beaches many hours through the night.

Janet Drohan says that she's always motivated to go out patrolling for the dinner-plate-sized juvenile turtles when the forecast predicts turtle strandings. “You know you might be able to save a turtle that day,” she says. “And when you see one recovered and released, you know your effort has been worthwhile.” ▲

Ann Prince is Associate Editor of *Sanctuary magazine*.

www.massaudubon.org/volunteer

7th ANNUAL STATEWIDE VOLUNTEER DAY

WORK FOR WILDLIFE

Saturday April 27, 2013 9 am to noon

Find a participating sanctuary near you:
www.massaudubon.org/workforwildlife

Advocacy Update: Saving Endangered Species

by Heidi Ricci

The eastern box turtle is one of our state's amazing native species. Averaging five and a half inches in length with a dome-shaped shell, it has roamed the woodlands, fields, and thickets of Massachusetts for thousands of years; however, habitat destruction puts it (and other vulnerable species) at risk. Which is why, in 1990, Mass Audubon led the effort to pass the Massachusetts Endangered Species Act (MESA)—one of the most significant pieces of conservation legislation in the Commonwealth's history.

Recently, this law—which protects more than 400 species of native plants and animals—came under attack by opponents who claim that it unreasonably restricts development. In response, Mass Audubon has organized a coalition of 72 conservation and sportsmen's groups, which point to facts showing that MESA enables development to continue while preserving our state's natural heritage.

Mass Audubon will continue to advocate for our most vulnerable species by working to strengthen MESA and defending it in court. ▲

Heidi Ricci is Advocacy Senior Policy Analyst.



www.massaudubon.org/MESA

YOUR BACKYARD IN WINTER

Your backyard can be a special place to explore—especially in winter. Birds and other animals are on the move in search of food, giving us a unique chance to observe them up close!

Welcome birds into your yard with this easy-to-make feeder.

- 1.) Find a clean, open pinecone.
- 2.) Spread peanut butter over the entire cone.
- 3.) Roll the cone in seed. Add nuts and dried fruit for a high-energy snack!
- 4.) Tie string or twine around the stem end of the pinecone.
- 5.) Hang, and watch the birds enjoy a winter snack!

FOR THE BIRDS

Unlike humans, birds can't curl up on the couch on a snow day. In order to survive, they must remain alert and on the go. So, how do they do it?

They fluff up. On brisk days, birds fluff their feathers to keep warm. Feathers have special insulating properties, making them the original down jacket in cold weather.

They keep clean. When water is frozen, many birds take "snow baths" to stay clean. Keeping feathers spotless is critical to maintaining their insulating properties.

They seek protective shelter. In winter, many birds take refuge in dense thickets or tree cavities where they can endure chilling winds and ride out snowstorms.

They stick together. Some birds roost together at night to share body heat. Others such as chickadees can actually lower their body temperature to conserve energy.

They stock up on food. In order to rev their metabolism in cold weather, birds require high-energy foods such as seeds, fatty berries, and suet.



White-tailed Deer



American Crow



Wild Turkey



Gray Squirrel

TRACKING WILDLIFE

Lots of backyard wildlife activity happens while we're asleep, which makes the morning after a fresh snowfall the best time to look for animal tracks. No snow? Look for tracks in muddy areas!

Match the Animal to Its Tracks

ready, set,
Go Outside!

There's more online!

www.massaudubon.org/go

Answers: 1-b, 2-c, 3-d, 4-a

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The Natural Inquirer

by Robert Buchsbaum

Q. Why (and How) Do Snowshoe Hares Change Color?

A. Snowshoe hares, also known as varying hares, are not your ordinary bunny. They are substantially larger than the familiar eastern cottontail of suburban yards and have relatively larger ears and feet. Residents of northern North America (including most of Massachusetts), they have large feet that act as snowshoes in the winter, keeping them afloat on deep snow.



Illustration by Barry Van Dusen

A distinctive feature of snowshoe hares is that the color of their coat changes from brown to white in the winter—hence the name varying hare. This transformation allows the animal to blend in with its surroundings and better evade predators such as foxes, coyotes, hawks, and, in more northern sections, lynxes.

“How does it do this?” you ask.

The pineal gland, an endocrine gland in the brain, responds to changes in day length by sending out a signal that induces the transformation. In autumn, it takes about 10 weeks for a snowshoe hare's brown hair to fall out and be replaced by longer white hair. Then, in spring, the reverse happens as days grow longer.

A warming climate could be detrimental to snowshoe hares by reducing the time that the earth is under snow cover. Studies by the University of Montana have documented increased numbers of “white hares on brown earth” in spring, which the researchers believe leads to increased predation. It remains to be seen whether the hare's response to day length can evolve to better fit with the new timing of snow cover. ▲

Have a question for the Natural Inquirer? E-mail inquirer@massaudubon.org.

Robert Buchsbaum is Southeast and Islands Regional Scientist.

The Final Word

We invite your comments, photographs, and suggestions. Please send correspondence to: Mass Audubon Connections, 208 South Great Road, Lincoln, MA 01773, tel: 781-259-9500, or e-mail: connections@massaudubon.org. For information about becoming a member, or for questions regarding your membership, contact: Member Services, Mass Audubon, 208 South Great Road, Lincoln, MA 01773 tel: 781-259-9500 or 800-AUDUBON, or e-mail: membership@massaudubon.org.

Photography:

Cover: Cycles exhibit—Kristin Steinmetz/
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p 2: Post-and-rope—Kent Harnois
All-persons trail—Kristin
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p 3: Jerry Berrier—Kent Harnois
Lions Club—Kristin Steinmetz/
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p 4: Audio tour—Kristin Steinmetz/
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p 5: Snowshoers—Kristin Steinmetz/
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Winterscape—Roger Wrubel/
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p 6: Moose—Chris Buelow
High Ground—Robert Verity Clem/
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Snowy Owl—Shawn Carey

p 7: Brook—Liz Albert/MassAudubon©
Sue & Peter—Dinah Rowbotham/
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p 9: Eastern screech-owl in tree—Michael Onyon
Mr. Whooo—Alison Webber/MassAudubon©

p 12: Ridley Rescuers—Ann Prince/
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Eastern box turtle—Joy Marzolf/
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Mass Audubon works to protect the nature of Massachusetts for people and wildlife. Together with more than 100,000 members, we care for 35,000 acres of conservation land, provide school, camp, and other educational programs for 225,000 children and adults annually, and advocate for sound environmental policies at local, state, and federal levels. Founded in 1896 by two inspirational women who were committed to the protection of birds, Mass Audubon has grown to become a powerful force for conservation in New England. Today we are respected for our sound science, successful advocacy, and innovative approaches to connecting people and nature. Each year, our statewide network of wildlife sanctuaries welcomes nearly half a million visitors of all ages, abilities, and backgrounds and serves as the base for our work. To support these important efforts, call 800-AUDUBON (800-283-8266) or visit www.massaudubon.org.

Winter Awaits

at a Mass Audubon Sanctuary Near You




Mass Audubon has 53 wildlife sanctuaries open to the public year-round. They provide important habitat for wildlife and opportunities for you to enjoy and appreciate nature.

- 6 Conway Hills, Conway
- 7 Graves Farm, Williamsburg and Whately
- 8 Lynes, Westhampton
- 9 Arcadia, Easthampton and Northampton
- 10 Laughing Brook, Hampden

- 39 Attleboro Springs, Attleboro
- 40 Oak Knoll, Attleboro
- 41 North River, Marshfield
- 42 Daniel Webster, Marshfield
- 43 North Hill Marsh, Duxbury
- 44 Allens Pond, Dartmouth and Westport
- 45 Great Neck, Wareham



 = Wildlife sanctuaries with nature centers

Berkshires

- 1 Pleasant Valley, Lenox
- 2 Canoe Meadows, Pittsfield
- 3 Lime Kiln Farm, Sheffield

Connecticut River Valley

- 4 Road's End, Worthington
- 5 High Ledges, Shelburne

Central Massachusetts

- 11 Pierpont Meadow, Dudley
- 12 Burncoat Pond, Spencer
- 13 Broad Meadow Brook, Worcester
- 14 Eagle Lake, Holden
- 15 Rutland Brook, Petersham
- 16 Cook's Canyon, Barre
- 17 Wachusett Meadow, Princeton
- 18 Lincoln Woods, Leominster
- 19 Lake Wampanoag, Gardner
- 20 Flat Rock, Fitchburg

North of Boston

- 21 Rocky Hill, Groton
- 22 Nashoba Brook, Westford
- 23 Joppa Flats, Newburyport
- 24 Rough Meadows, Rowley
- 25 Ipswich River, Topsfield
- 26 Endicott, Wenham
- 27 Eastern Point, Gloucester
- 28 Marblehead Neck, Marblehead
- 29 Nahant Thicket, Nahant

Greater Boston

- 30 Habitat, Belmont
- 31 Drumlin Farm, Lincoln
- 32 Waseeka, Hopkinton
- 33 Broadmoor, Natick
- 34 Boston Nature Center, Mattapan
- 35 Blue Hills Trailside Museum, Milton
- 36 Visual Arts Center, Canton

South of Boston

- 37 Moose Hill, Sharon
- 38 Stony Brook, Norfolk

Long Pasture

From our visitor center, you can see flocks of eiders, mergansers, and buffleheads on Barnstable Bay. These sea ducks find our waters to be warm—even in wintry weather!

www.massaudubon.org/sanctuaries

Introducing the

Your great outdoors blog

VISIT
massaudubon.org/yourgreatoutdoors
for the latest news, tips, and seasonal highlights.

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