

onnections

JANUARY - APRIL 2011

A Newsletter for the Members of Mass Audubon



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www.massaudubon.org/connections



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Going Global for Conservation

by Chris Leahy, Gerard A. Bertrand Chair of Natural History and Field Ornithology at Mass Audubon



n the late 1960s, the world was awakening to an environmental Linsight, which 40-plus years along seems stunningly obvious: the realization that every species and individual on the planet shares a single ecosystem-that the clearing of forests and degradation of oceans affects us all regardless of where in the world we live or how well we're protecting our own backyard. The challenge of trying to protect "Massachusetts birds" within our state boundaries alone is especially evident when over 70 percent of them spend most of their time elsewhere. Many of our breeding birds (including the Baltimore oriole) winter mainly in Mexico, Central America, and the Caribbean Basin.

It was during this period that Mass Audubon launched what may have been the world's first major international natural history travel program with a goal of educating participants about our global ecosystem. But it wasn't until the 1980s that Mass Audubon embraced a limited international conservation agenda to complement its ambitious domestic one.

Flyway to Belize

At a World Wildlife Fund meeting in 1984, Gerard A. Bertrand, then president of Mass Audubon, was asked if we would consider providing financial aid to the Belize Audubon Society (BAS), which had just been handed the daunting task of managing the country's national park system by the newly independent government. Armed with the knowledge that many Massachusetts birds winter in the increasingly scarce tropical habitat and that North Americans therefore had a powerful incentive to support its habitat protection, Mass Audubon and an informal alliance of other independent state Audubon societies funded basic needs for the BAS. Belize Audubon is now the largest conservation nonprofit in the country and effectively manages an increasing number of national parks.

Persuaded that preserving Central American habitats was a viable strategy for protecting migratory birds, Mass Audubon located a parcel of more than 150,000 acres in northwestern Belize, and in the late 1980s formed the Belizean nonprofit Programme for Belize (PfB) to own and manage conservation land. Supported by the World Land

Cooperative Learning Exchange

Fast forward to 2004 when Sanctuary Director Bill Gette and Education Coordinator Dave Larson, of our Joppa Flats Education Center in Newburyport started the International Intern Program. Run in cooperation with the American Birding Association, the program has hosted 13 interns from five countries at Joppa Flats for this annual monthlong cultural exchange and training program.

One of the first interns was Efrain Cocom, the station manager at Hill Bank, a lodge and research station operated by the Programme for Belize. During his internship, Cocom became acquainted with Joppa Flats' successful Birder's Certificate Program, a 12-segment, college-level course covering



Trust of the United Kingdom, The Nature Conservancy, the United States Agency for International Development, and individual donors, the property, named the Rio Bravo Conservation and Management Area, has grown to 265,000 acres of tropical forest, savanna, and wetlands. The Programme for Belize now employs 30 Belizeans, including scientists, teacher-guides, and rangers. As planned from the outset, PfB is operated solely by Belizeans, with Mass Audubon offering occasional technical advice, training, and limited fundraising through its Belize Conservation Fund. all aspects of birdlife. He realized that, with some modifications, the course could be turned into a training manual for ecotourism and birding/naturalist guides, a need he knew was acute and widespread in the developing world.

In addition to cultivating ornithological knowledge, the course would promote professional development and protection of habitat in Belize and elsewhere. Supported by the Wallace Research Foundation and with the cooperation of Belizean partner the Toledo Institute for Development and Environment, Bill and Dave created and have now taught the intensive six-day Certificate Program in Bird Ecology (CPBE) at three different locations in Belize and are considering requests for the program in Brazil and Honduras.

Next Stop: Mongolia

In 2009, I initiated a collaboration partnering Mass Audubon with Nomadic Expeditions, Mongolia's premier travel operator with a strong commitment to promoting sustainable development and protection of nature in one of the last wilderness nations on earth. Spared extensive industrial development to date, Mongolia now faces the challenge of developing its vast mineral wealth without destroying its unspoiled landscapes.

Our goal in a nutshell is to share such tools as education, interpretation, advocacy, land protection, and green building standards that Mass Audubon has developed over the years and for which Mongolians are beginning to realize a strong need. Recognizing that an appropriately adapted version of the CPBE would be a perfect fit for Mongolia, Dave and I set about revising the curriculum. This spring, we will begin teaching it to ecotourism guides and university students in Mongolia's capital, Ulaanbaatar.

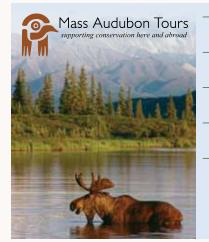
With so many environmental issues vying for attention here in the Commonwealth, how can Mass Audubon justify using precious staff time and resources in faraway places? It's a fair question, one that I imagine was asked in some form of our Founding Mothers when they set out to save egrets in southern swamps in the United States. I would answer it this way: Mass Audubon is one of the oldest and most effective conservation organizations in the world. And, while there is no doubt that our main focus should be protecting the nature of Massachusetts, we also have a tradition of promoting conservation beyond the borders of our home state.

Like a venerable scholar or artisan, we are called upon to use our knowledge and skills to leverage the conservation of biodiversity in other parts of the



world, when we can make a significant difference. This is why when I walk into an office of The Nature Conservancy in Lima or Nairobi or Ulaanbaatar, the director is likely to greet me with a nod of recognition and respect and say something like, "Oh, Mass Audubon; you started the Programme for Belize."

Learn more about these projects and other Mass Audubon international conservation efforts at www.massaudubon.org/global.



Texas Important Bird Areas with Wayne Petersen March 18–28

Cuba Bird Survey with Christine Turnbull April 4–15

Mongolia's Natural Wonders with Chris Leahy May 28-June 13

Ultimate Alaska with Wayne Petersen June 15–28

Tanzania Birding with Wayne Petersen February 2–20, 2012

www.massaudubon.org/travel 800-289-9504 | travel@massaudubon.org

Why Count Local Bird Populations?

by Wayne R. Petersen, Director, Important Bird Areas (IBA) Program

Birding Beyond the Backyard

Bird surveys reveal that some species are "making it in Massachusetts" while others are not faring as well. The wood duck, hooded merganser (pictured), and great blue heron are effectively exploiting ponds created by the Commonwealth's

> burgeoning beaver population. And southern species such as the turkey vulture, red-bellied woodpecker, fish crow, tufted titmouse, Carolina wren, and blue-gray gnatcatcher are unquestionably more numerous in Massachusetts than they were half a century ago.

Data suggests that these increases may be linked to our steadily warming climate. Alternatively, species including the American black duck, blue-winged teal, northern bobwhite, American kestrel, common nighthawk, cliff swallow, vesper sparrow, and eastern meadowlark are losing ground as a result of loss or alteration of habitat.

Despite the high visibility of birds, detecting changes in their populations is not easy. Thanks to hundreds of citizen scientists, however, information is being generated

that scientifically documents some of the long-term changes taking place. Among the more important bird surveys right here in Massachusetts are the U.S. Fish and Wildlife Service Breeding Bird Survey (BBS), National Audubon's Christmas Bird Count (CBC), and state-level breeding bird projects, such as Mass Audubon's Breeding Bird Atlas 2 (BBA2).

Although the protocol for each of these surveys is different and their scientific rigor varies, all are steeped in tradition. The CBC, initiated in 1900, enlists observers around the nation to survey populations of wintering species inside 15-mile-in-diameter circles on a single day—with all circles surveyed within a three-week period around Christmas. With the BBS (begun in 1966), observers throughout North America survey roadside breeding birds by making 50, three-minute stops along preset 24.5-mile auto routes during one morning in June. Our own BBA2 project has enlisted more than 600 dedicated volunteers to confirm the nesting status of birds throughout the Commonwealth. When BBA2 is completed this year, the information derived from it will provide a valuable picture of the state's nesting birds, which can be compared with data previously gathered in the 1970s.

These survey data make it possible to effectively prioritize and direct conservation dollars and habitat management activities. While bald eagle and peregrine falcon survey data collected in the 1950s and 1960s alerted scientists to the pernicious impacts of DDT, the documented northward expansion of southern bird species and changes in wintering populations are bellwethers for climate change. We need to pay attention to what survey data is telling us. Much like the familiar canary in the coal mine analogy, an environment that is healthy for birds is also good for people.

Calling Citizen Scientists!

Learn how you can help us help birds. It can be as easy as reporting a bird sighting online. www.massaudubon.org/birds

Owl Locator: Report your owl sightings through our online Owl Reporter tool.

Focus on Feeders (February 5–6, 2011): Help keep tabs on winter feeder birds by reporting your results online. Submit photos of birds at your backyard bird feeder and you could win a prize.

Birds to Watch program: Citizen scientists can help gather research on Baltimore orioles, whip-poor-wills, and American kestrels.

Breeding Bird Atlas 2: This spring, we begin the last season of data collection for this five-year project, which will document changes in the state's breeding bird population over the last 30 years. For preliminary results, visit our website.

Save the Date! 19th Annual Birders Meeting March 5, 2011 Bentley University, Waltham www.massaudubon.org/birdersmeeting



grave illness brought Manhattanbased artist Catherine Hamilton back to birding. Known internationally for her contemporary oil paintings, Hamilton taught at the Rhode Island School of Design for seven years until she developed a chemical sensitivity.

"Having to quit painting and teaching was traumatic," says the artist, who birded as a child with her father. "Mass Audubon and Audubon Society of Rhode Island provided calming refuges for me when I was so sick, and I got seriously back into birding." She also began sketching nature and wildlife that she observed. This month, Hamilton's art will be featured at the Visual Arts Center (VAC) in Canton along with artwork chosen by her from the Mass Audubon art collection. Hamilton became familiar with our 2,000 works of art, primarily from the last two centuries, while an artist-in-residence at the VAC in 2007.

The daughter of two scientists, she finds the nineteenth-century practices of identification and collection fascinating. "My own work in the exhibit will be ink and watercolor observational bird studies, which, combined with historical art chosen from the Mass Audubon collection [including drawings by renowned bird artist Louis Agassiz Fuertes (1874-1927)] will offer a bridge across the centuries."

And Hamilton's extending that bridge into the twenty-first century by SOCIAL NETWORK: CONNECTING BIRDERS AND ARTISTS

incorporating video, photos, and reflective writing about the exhibit into her blog, which she says allows her to go beyond putting up static work on a gallery wall. "This exhibit is a high point in a yearlong journey that I began last November to visit wildlife refuges, attend birding festivals, and meet with fellow birders across the US," she explains. "I hope that people will share their impressions on my blog."

This exhibition will have a strong personal voice, with Hamilton taking the roles of both artist and curator, according to VAC director Amy Montague. "Catherine's corresponding blog and a photo album of images in the exhibit posted on the Visual Arts Center Facebook page will introduce a new way to interact with our museum setting," she says, "and I hope visitors, both on-site and online, will respond to her bold art and ideas." *Share your comments, and follow Hamilton's birding and art road trip adventure at* http://mydogoscar.com/birdspot.

Ink, Internet, & Identification: Catherine Hamilton as Artist & Curator January 16-May 15

Meet the artist at the opening reception on January 16, from 1 to 5 pm. Hamilton will teach a workshop on drawing birds for artists of all levels at the VAC on Saturday, January 22. www.massaudubon.org/visualarts

🔺 Jan Kruse

Did you know?

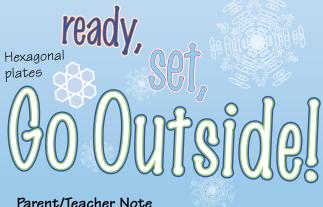
Spatial dendrites A snowflake is created as molecules of water from clouds condense on a speck of dust.

As water molecules accumulate, they form ice crystals, which become larger and then fall to the ground.

Snow usually forms when air temperatures are from -40 to 32 degrees Fahrenheit.

Snow Science

Playing in snow is super fun, but it's really cool to be a snow scientist. Try these activities and experiments.



Parent/Teacher Note

Skills Learned:

Observation and comparison: weather, light, color, and shapes

Experimentation: measurement, physical properties of water, forming and testing hypotheses, comparing results

Creative expression: vocabulary, creating new words, imagery, and imagination

Critical thinking: problem solving

ONLINE BONUS!

Check out the following activities at www.massaudubon.org/go

- snow scavenger hunt
- using a snow compass
- measuring storm depths

Capped

columns

A Snowy World

Stellar

crystals

North American Inuit peoples have dozens of different words for snow and places where snow is found. Make up your own words for snow and snowy places.

Imagine living where snow covers the ground most of the year.

What would you do for fun?



How would you get to school each day?

Seven Sorts of Snowflakes

Find seven types of snowflake (or crystal) on this page.

Needles

When outside, catch falling snowflakes on your jacket or a dark piece of paper.

Which of the seven types of crystals are falling?

Have a Meltdown

Fill a coffee can to the rim with snow and bring it inside. When the snow melts, mark the water level. Bring the can outside and let the water refreeze.

How does the appearance and volume of the ice compare to the snow originally in the can?

How many cans of melted snow do you think it would take to get one canful of water?

Fill a second can full of snow, and bring both cans inside. Compare whether the refrozen water (ice) or the snow melts faster.

Let the water evaporate (this could take several days).

Use a magnifying glass: Are there specks of dust left behind?

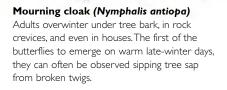


Irregular crystals

EXPLORING THE NATURE OF MASSACHUSETTS

by Lucy Gertz, Visitor Education Coordinator

Sleeping In



New England wildlife must have strategies to survive winter. Some species stay active, relying on fur, fat, camouflage, and a change in diet. Some migrate, instinctively navigating to warmer climes with suitable and available resources. Others avoid the work of coldweather survival and travel by hunkering down for a long winter sleep. Dormancy may seem like the easiest approach, but successfully sleeping through winter requires some preparation, remarkable physiological adaptations, and luck.

The first task is to find or create a hibernaculum, a safe place that provides



These familiar reptiles overwinter in groups. They need holes, rock crevices, and even house foundations located below the frost line or in protected areas to avoid freezing to death.



Woodchuck (Marmota monax) One of the few animals that truly hibernate; they greatly reduce their metabolic rate and drop their body temperature to just above freezing.

protection from the hazards of winter icy temperatures, wetness, wind, and hungry predators. Woodchucks, aka groundhogs, retreat under the frost line to the deepest sections of their winter burrows where temperatures consistently remain above freezing. Viceroy butterflies make their own sleeping bags, overwintering as larvae in rolled-up leaves. Some winter sleepers, including snakes and bats, seek out rock crevices or caves.

There are also some incredible adaptations for avoiding death in subfreezing temperatures. Mourning cloak butterflies undergo cryopreservation by secreting their own form of antifreeze sugars to prevent formation of ice crystals in the body. Woodchucks gain

Cecropia moth (Hyalophora cecropia)

After a summer of eating, the caterpillars spin cocoons of brown silk, wrapped in the leaves of their favorite food plants. They remain in the weatherproof cocoons all winter, and the adult moths emerge in spring.

extra body fat, which supplies crucial nutrients during their winter-long fast. Wood frogs are freeze tolerant; they winter under leaf litter on the forest floor, literally freezing until spring when they thaw out, physiologically intact.

Animals that successfully find winter shelter, and employ these extraordinary adaptations, also depend on camouflage and other defenses to ward off hungry predators all winter. With good fortune, they survive to winter's end, continuing to add to the rich and diverse nature of Massachusetts.

Bullfrog (Rana catesbeiana)

By settling into the leaf litter on the bottom of a pond, this amphibian avoids freezing conditions.



Illustrations by Barry Van Dusen©

If you're not hibernating this winter, visit a Mass Audubon wildlife sanctuary.

Arcadia, Easthampton—Along Fern Trail, very large shagbark hickory trees grow in the floodplain. This is a lovely time to view these locally abundant but unusual trees. Mourning cloaks are likely overwintering under the bark.

Broadmoor, Natick—Look closely on cherry twigs for odd little shiny cases, about three-quarter inches long, resembling Styrofoam. These hold the eggs that hatch into eastern tent caterpillars. In early spring, the caterpillars form dense, protective webs where they can safely eat cherry leaves.

Broad Meadow Brook, Worcester—Exploring the Holdredge Trail, look down the hillside for the trunks of fallen ash trees. Here, mourning cloaks and other insects spend winter inside, waiting for spring. **Ipswich River, Topsfield**—Garter snakes gather in groups under the visitor center porch, a protective winter home that stays above freezing.

www.massaudubon.org/sanctuaries

Spreading the Good Word on Religious Lands Efforts



Protecting Land and Habitat

by Bob Wilber, Director of Land Protection

Religious institutions own some of the most significant unprotected land remaining in Massachusetts, and conserving it represents a great opportunity for land conservationists. Yet, there have often been missed opportunities because dialogue between these two groups was sporadic and in the meantime valuable land was lost to development.

Enter the Religious Lands Conservancy (RLC), a cooperative endeavor of the Massachusetts Land Trust Coalition and the Crystal Spring Center for Earth Learning. The RLC has become an essential link between religious landowners and the land trust community in this state, and Mass Audubon has become a go-to organization for faith-based landowners seeking to initiate *a conversation about conservation*. In fact, there is good news to share about two religious land protection projects described in *Connections* nearly four years ago.

Preserving a Natural Treasure

If you visit the tip of Great Neck in Wareham, you will find nearly 300 contiguous acres of special habitat fronting on Buzzards Bay composed of salt marsh, freshwater wetlands, vernal pools, and unusual coastal forest. Also hundreds of plant and animal species, including the rare eastern box turtle, call this land home. And it is a priceless cultural treasure, a place where the native Wampanoag have resided. Unfortunately, this landscape

was threatened by development. Fortunately, the Sacred Heart Spirituality Center and generous conservation-minded neighbors collaborated with Mass Audubon, the Wareham Land Trust, the town of Wareham, and the state Department of Conservation and Recreation to protect it forever.

And the public is now welcome to explore this area by visiting the **Great Neck Wildlife Sanctuary**—Mass Audubon's fiftieth wildlife sanctuary. A 2.5-mile trail system winds through the varied habitat. Depending on time of year, you may see wintering ducks, ospreys, or wading shorebirds while overlooking salt marsh; or catch a whiff of sweet pepperbush by former pastureland.

Protecting an Urban Oasis

At the La Salette Shrine in Attleboro, 117 acres of land are now permanently conserved as Mass Audubon's Attleboro Springs Wildlife Sanctuary at La Salette, which was dedicated in a ribbon-cutting ceremony last fall. Members of the National Shrine of Our Lady of La Salette protected this land as part of their call to faith. The Attleboro Land Trust, the city of Attleboro, the Commonwealth, and Mass Audubon rounded out the partnership that brought this complex project to fruition.



The sanctuary contains upland oak woods, red maple swamps, streams, vernal pools, a field, and Brothers Pond. Notable wildlife includes the spotted turtle, several species of dragonflies and damselflies, a variety of amphibians, and forest birds such as the wood thrush and ovenbird. Several public trails, including a half-mile all-person's trail, wind through the property and allow exploration of natural and historical features.

"It's important to have the wisdom to preserve land because once it's gone we don't get it back," says Father Ron Beauchemin MS, Superior of the Attleboro La Salette Shrine. "And we also want to teach adults and children to become stewards of the land so Mass Audubon's expertise in both areas made it an essential partner."

Looking Ahead

Before the dust settled from these two successful land protection efforts, Mass Audubon became involved in another religious land project on the North Shore. Still in its early stages, this conservation vision could include sustainable agriculture, lowimpact energy-efficient structures, and extensive conserved areas reflecting the land ethic of the owners. We're optimistic that once again a successful partnership will come together to protect 100 or more acres of valuable habitat.

Mass Audubon is proud to partner with the religious lands community, planting land conservation seeds across Massachusetts that are bearing fruit for all to enjoy.

New! Read our land protection blog at www.massaudubon.org/gainingground.

Learn more about Attleboro Springs and Great Neck sanctuaries at www.massaudubon.org/sanctuaries.

Warm your winter,



Whether you're staying close to home or vacationing in Massachusetts, Mass Audubon has a summer camp nearby. Reserve a spot for your camper in one of our 16 day camps, or Wildwood, our overnight camp.

Summer 2011 information: www.massaudubon.org/camp



Leave a legacy for generations to follow. Remember Mass Audubon in your will or estate planning and make a lasting gift for nature conservation.

For more information, contact Henrietta Yelle at hyelle@massaudubon.org, or call 781-259-2239.

FEBRUARY 8-27

MEMBERS RECEIVE A DOUBLE DISCOUNT (20% OFF) ON BIRDHOUSES, POLES, AND ACCESSORIES*



AUDUBON SHOP AT DRUMLIN FARM TUESDAY-SUNDAY AND MONDAY HOLIDAYS, 10 AM-5 PM 781-259-2214

*SALE ITEMS EXCLUDED

WINTER PROGRAM SAMPLER

A snapshot of programs from among hundreds that Mass Audubon offers this season at our wildlife sanctuaries

Junior Bird Club Monthly Meeting

February 7 & March 7: 6-7 pm ALLENS POND, Dartmouth, 508-636-2437

Eagles at Quabbin Reservoir

February 13: 8:30 am-4 pm BERKSHIRE SANCTUARIES, Lenox, 413-637-0320

Maple Sugaring Days

March 12 & 13: 10 am-4 pm (held at Brookwood Farm) BLUE HILLS, Milton, 617-333-0690

Trail Detectives

January 29: 1-2:30 pm BOSTON NATURE CENTER, Mattapan, 617-983-8500

Birds of Prey

February 19: 1-2 pm BROAD MEADOW BROOK, Worcester, 508-753-6087

Owl Festival

February 5: 3-5:30 pm; preregistration required BROADMOOR, Natick, 508-655-2296

Big Night Family Program

March 26: 5:30-8:30 pm CONNECTICUT RIVER VALLEY SANCTUARIES, Northampton, 413-584-3009

Woolapalooza

March 26: 10 am-4 pm DRUMLIN FARM, Lincoln, 781-259-2206

Starstruck: Stargazing at Felix Neck

February 13: 7-9 pm FELIX NECK, Edgartown, 508-627-4850

Sugaring Celebration

March 12: 1-3 pm HABITAT, Belmont, 617-489-5050

February Syrup Flapjack Fling

February 26 Breakfast: 8:15, 9, 10:30, & 11:15 am Sugaring tours: 9, 10, 11 am, & noon IPSWICH RIVER, Topsfield, 978-887-9264

Superbowl of Birding VIII

January 29, 5 am-5 pm; preregistration required JOPPA FLATS, Newburyport, 978-462-9998

Come to the Otter Side: Otter and Owl Outing

February 25: 4-5:30 pm LONG PASTURE, Barnstable, 508-362-7475

Maple Sugaring Festival

March 13, 19, & 20: 11 am-3 pm MOOSE HILL, Sharon, 781-784-5691

A Valentine for the Birds

February 5: 10 am-noon OAK KNOLL, Attleboro, 508-223-3060

Snowy Owl Prowl on Duxbury Beach

January 22: 8-11 am SOUTH SHORE SANCTUARIES, Marshfield, 781-837-9400

Turtle Trekkers (ages 3-6 years with adult)

January 15: 10:30 am–noon STONY BROOK, Norfolk, 508-528-3140

Drawing Birds with Catherine Hamilton

January 22: 9 am-3 pm VISUAL ARTS CENTER, Canton, 781-821-8853

Winter Open House

January 22: I-4 pm WACHUSETT MEADOW, Princeton, 978-464-2712

Cape Cod Natural History Conference

March 12:9 am-4 pm WELLFLEET BAY, Wellfleet, 508-349-2615

All Hands on Deck

Norfolk, Mass.—Visitors to **Stony Brook Wildlife Sanctuary** can easily take a walk on the wild side, thanks to a major overhaul of the boardwalk that overlooks Kingfisher Pond



and Teal Marsh. Crew members from the Student Conservation Association worked with Mass Audubon and the Department of Conservation and Recreation staff to complete the boardwalk's first major renovation

since it was built about two decades ago. The project included replacing the decking and railings, as well as reinforcement of its supporting beams.

Winter is a great season to observe blue herons and river otters, as well as tracks of foxes, coyotes, and other mammals at Stony Brook. For a cool adventure, call 508-528-3140 or email stonybrook@massaudubon.org to sign up for the low-cost Spontaneous Snowshoe program. When snow falls, you'll be invited via email to join a naturalist-led snowshoe hike along the boardwalk.

Turtle Mania

Hampden, Mass.—Why did the turtle cross the road? About 300 third and fourth graders from the Green Meadows Elementary School in Hampden are finding out. Arcadia Wildlife Sanctuary Educator Patti Steinman is working with teachers at the school in a cross-curriculum program, taught within the Massachusetts Frameworks. In addition to having classroom lessons, the students will take a field trip to Laughing Brook Wildlife Sanctuary to explore turtle habitat. The young herpetologists

> will showcase what they've learned in a free townwide Turtle Festival to be held at Laughing Brook Wildlife Sanctuary in May. The seven-month-long

program is supported by a grant from the Community Foundation of Western Massachusetts. And, if you're crazy about turtles or other reptiles, check out the new Herpetological Atlas at **www.massaudubon.org/herpatlas**.

Join Mass Audubon for the



Shining Star

Wellfleet, Mass.—A new 41 kilowatt solar energy system is bringing Wellfleet Bay Wildlife Sanctuary closer to its goal of producing as much power as it uses. Combined with the previous solar array, an estimated 70 percent of the sanctuary's electricity requirements are now met, courtesy of the sun. Other components



of their greening campaign include solar hot water for the campground and dormitory, as well as a study on how small wind turbines affect birds and bats. Wellfleet Bay continues to seek support for this project, which, if carried out, will significantly increase its energy independence. For more information, please contact 508-349-2615 x109 or e-mail Roberta Longley at rlongley@massaudubon.org.

Planting Seeds and Building Community

Volunteer Spotlight

Dennis Arseneau, a Pittsfield native, has been intimately acquainted with Mass Audubon's Berkshire Sanctuaries "from the beginning." An avid hiker, he explored the trails at Pleasant Valley in Lenox as a child, and as a teenager he did his Eagle Scout project at the sanctuary—a precursor of much larger projects and events that he's shepherded there in recent years.



"With his positive can-do attitude, Dennis is a tremendous asset." — Berkshire Sanctuaries Director René Laubach "With his positive can-do attitude, Dennis is a tremendous asset," says Berkshire Sanctuaries Director René Laubach. Whether he's flipping burgers at a special event, helping to plan a lucrative gala fundraiser, or spearheading a major renovation, Dennis is "hardworking, humble, and a great organizer." Thanks to the experience Dennis has garnered over the years at GE, now as regional manager for Corporate Headquarter Operations, he's the ultimate volunteer. "I translate my expertise to building projects and site functions for Mass Audubon," he says.

Currently chair of the Berkshire Sanctuaries Committee, Dennis has a pace that's staggering. "On weekends," says René, "he's the first to show up and the last to leave." And the evidence is everywhere especially a massive renovation he coordinated at Pleasant Valley in 1997, working with several hundred GE volunteers who constructed a maintenance building, renovated a barn, restored the old trailside museum, installed boardwalks, and put up bird boxes.

Dennis was recognized as the 2010 Berkshire Sanctuaries Volunteer of the Year. And, not to rest on his laurels, Dennis has embarked on another impressive project, one that is dear to his heart as a community gardener at Canoe Meadows Wildlife Sanctuary in Pittsfield. "There's a diverse group of over 140 gardeners," says Dennis. The group includes young and old, master gardeners and amateurs, who grow the gamut of vegetables. "It's all about community so we need a place to congregate," he says.

This spring, a magnificent 1,500-square-foot pavilion will be the outcome. There the gardeners will get out of the sun and rain, hold picnics and plant sales, gaze out on October Mountain by day and stars by night, and most of all enjoy each other's company. Dennis is the volunteer general contractor for the pavilion— and as usual he'll roll up his sleeves and provide lots of the labor himself.

Dennis says he's motivated by Mass Audubon's mission as well as its practice of planting seeds for the next generation. His five-year-old grandson is following in his footsteps, already getting to know Berkshire Sanctuaries at summer day camp.

Dennis believes: "You get a thousand more things out of volunteering than you give." Considering his breadth of involvement, a thousandfold is an enormous return.

www.massaudubon.org/volunteer

Ann Prince

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The Anal Inquirer

by John Galluzzo, South Shore Sanctuaries Education Coordinator

Q. Should I Feed Birds?

A. One might think that placing a feeder near your home would

alter the habits of birds, especially if the practice were undertaken on a grand scale. After all, the food being provided is an alternative to naturally foraged sustenance. Why would a bird seek seeds, insects, and berries in the wild if it can visit a feeder on a regular basis? In fact, apparently birds only rely on feeders as a supplementary source of food. When natural foods are particularly abundant, birds may even vacate feeder areas for days.

The most serious observed danger of feeding birds is unclean feeders. It's recommended to clean feeders every other week with a solution of I part bleach to 9 parts hot water. Doing so will help stop the spread of diseases such as mycoplasmal conjunctivitis, which reduced the house finch population in

white-breasted nuthatch

the eastern US in recent years. Free-ranging cats may also harm birds at feeders, so cat owners are encouraged to keep their pets indoors. Backyard bird feeding will not stop birds from migrating nor will it lure them away from their natural habitats and rhythms. It does, however, offer a fine way to appreciate the amazing lives of birds. Get more tips on backyard bird feeding: www.massaudubon.org/feedingbirds

Natural Fact: Winter bird feeder counts by citizen scientists in Massachusetts have helped document the northward expansion of northern cardinals, tufted titmice, and Carolina wrens (see page 5).

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

Illustration: Elizabeth Farnsworth©

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 Baltimore oriole—Tempau & Co©
- pgs. I-2 Gers (yurts) along Eg River in northern Mongolia-Chris Leahy
- p. 3 Bill Gette teaching naturalist guides in Belize—David Larson
- p. 4 Dornod steppe in eastern Mongolia-Chris Leahy; moose in Alaska—Simon Perkins
- p. 5 Hooded merganser-Ronald Bedney©
- p. 6 Catherine Hamilton-@birdingbev©; watercolor of ovenbirds-Catherine Hamilton©
- p. 9 View of Bass Cove from Osprey Overlook Trail at Great Neck sanctuary-Richard Johnson©
- p. 10 Attleboro Springs at La Salette ribbon cutting—Jan Kruse
- p. 11 Happy campers—Mia Kheyfetz
- p. 13 Dennis Arseneau—René Laubach

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.



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Winter Explorations at a Mass Audubon Sanctuary Near You

Mass Audubon has 50 wildlife sanctuaries open to the public 32 Boston Nature Center, **D**rumlin Farm year-round. They provide important habitat for wildlife and Mattapan Looking from the top of the 33 Blue Hills Trailside Museum, opportunities for you to enjoy and appreciate nature. drumlin on a clear day offers a Milton glimpse of Mounts Monadnock and Wachusett. 23 South of Boston 19 20 35 Moose Hill, Sharon 36 Stony Brook, Norfolk 4 18 Pittsfield 76 37 Oak Knoll, Attleboro 17 38 Attleboro Springs, Attleboro 27 28 29 39 North River, Marshfield Boston 40 Daniel Webster, Marshfield 32 41 North Hill Marsh, Duxbury 31 33 17 42 Allens Pond, Dartmouth 30 and Westport 34 43 Great Neck, Wareham 35 36 ingfield 10 = Wildlife sanctuaries with nature centers **Connecticut River Valley** 37 4 Road's End, Worthington 5 High Ledges, Shelburne **Berkshires** 6 Conway Hills, Conway I Pleasant Valley, Lenox 2 Canoe Meadow, Pittsfield 7 Graves Farm, Williamsburg

3 Lime Kiln Farm, Sheffield



Thanks, Shutterbugs! Mass Audubon received over 1,000 submissions for our first statewide photo contest. View a slideshow of the top picks: www.massaudubon.org/picturethis

- and Whately
- 8 Lynes, Westhampton
- 9 Arcadia, Easthampton and Northampton
- 10 Laughing Brook, Hampden

Central Massachusetts

- II Pierpoint 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 Nashoba Brook, Westford
- 22 Joppa Flats, Newburyport 23 Ipswich River, Topsfield
- 24 Endicott, Wenham
- 25 Eastern Point, Gloucester
- 26 Marblehead Neck
- 27 Nahant Thicket, Nahant

Greater Boston

- 28 Habitat, Belmont 29 Drumlin Farm, Lincoln
- 30 Waseeka, Hopkinton
- 31 Broadmoor, Natick

- 34 Visual Arts Center, Canton

Cape Cod and the Islands

49

- 44 Ashumet Holly, Falmouth
- 45 Sampsons Island, Barnstable
- 46 Skunknett River, Barnstable 47 Long Pasture, Barnstable
- 48 Wellfleet Bay, Wellfleet
- 49 Felix Neck, Edgartown
- 50 Sesachacha Heathlands, Nantucket