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Mass Audubon
Protecting the Nature of Massachusetts

Connections

July–September 2016

A Newsletter for the Members of Mass Audubon

Celebrating 100 years of Wildlife Sanctuaries





Message from the President

“During the spring of 1916, Dr. George W. Field...offered the use of his large estate at Moose Hill, Sharon, as a Bird Sanctuary, it being hoped that it might be developed as a model...”

As we celebrate 100 Years of Wildlife Sanctuaries and our hundred properties this year, the above passage in the first *Bulletin of the Massachusetts Audubon Society* reveals remarkable foresight—though its authors could never have imagined where we stand today as a 21st-century conservation leader.

That original 225-acre estate in Sharon evolved into Moose Hill Wildlife Sanctuary, Mass Audubon's first, which today welcomes visitors to an oasis of almost 2,000 protected acres. Yet Moose Hill is but one bright thread in a tapestry of sanctuaries spreading from the Cape and Islands to the Berkshires.

The terms *wildlife* and *sanctuary* are both evocative words on their own. But in partnership, they serve as a powerful illustration of the sum being greater than its parts. Our foundational commitment was to the protection and promotion of birds and their habitats, and that legacy endures at each and every Mass Audubon wildlife sanctuary.

In 2016, our sanctuaries and nature centers not only support a much fuller concept of species protection and biodiversity, but also serve as hubs for carrying out that work in service to the three core elements of our mission: conservation, education, and advocacy. And just as important, they exist as community-based resources for members and those in the general public eager to forge their own connections to nature through an ever-broader array of programs and activities for all ages, backgrounds, and abilities.

Get up early for a bird walk. Stay out late for a lesson under the stars. Discover “ponding” (hint: kids are key). Explore our growing number of All Persons Trails. These are just a small sampling of experiences to be enjoyed at sanctuaries across the Commonwealth.

Mass Audubon observed this rich heritage with a special “Sanctuaries 100th” celebration, which took place at sanctuaries statewide on Saturday, April 9. Staff welcomed thousands of visitors with a variety of free and fun activities, reminding members why they support this organization and encouraging newcomers to explore the breadth of what our wildlife sanctuaries offer.

Our aim was to engage and inspire visitors, and we intend to keep the momentum going through the year. Our sincere wish is that Mass Audubon members will share that energy by visiting their favorite sanctuaries, participating in programs with families and friends, and spreading the word about how great it is to be a member.

Sincerely,

Gary Clayton, President





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Sanctuary, Nahant

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Connect



massaudubon.org

Coming This Fall!



**A new name and look
for Connections.**

A Timeline of Wildlife Sanctuaries



The Mass Audubon board accepts an offer from Sharon resident George Field to use his Moose Hill property as a bird sanctuary, thus creating the very first wildlife sanctuary.

1916

1929



The Pleasant Valley Bird and Wildlife Flower Sanctuary in Lenox is established.

1960s

Mass Audubon is given an acre of land in Norfolk to build the Stony Brook Nature Center in cooperation with the Massachusetts Department of Natural Resources. Other sanctuaries added in this decade include Habitat Education Center, Felix Neck, and Broadmoor.

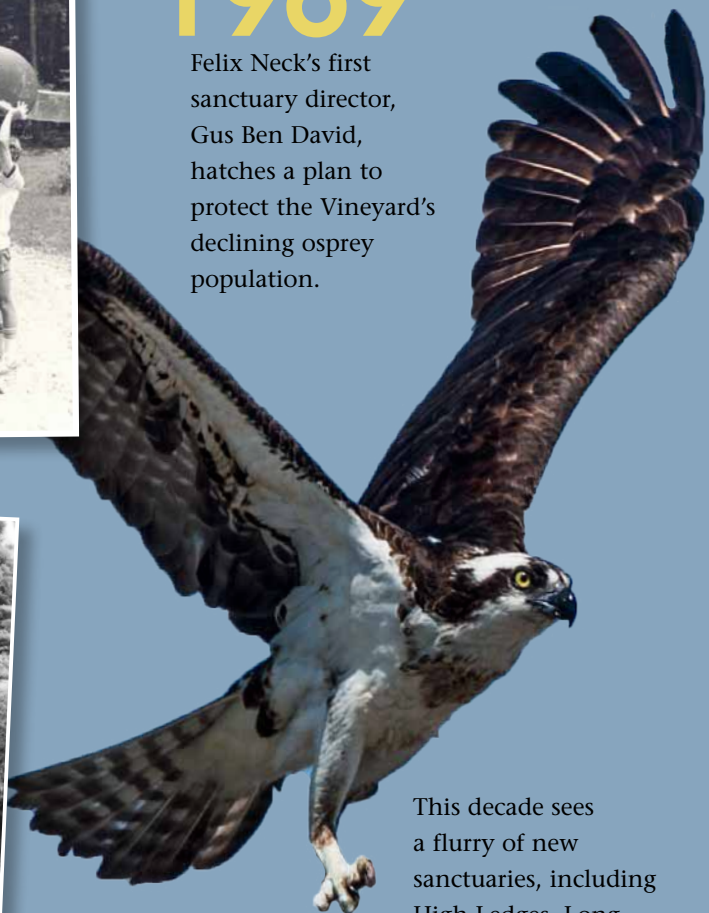


1949

Wildwood, Mass Audubon's nature-oriented overnight camp for boys and girls, kicks off its first season.

1969

Felix Neck's first sanctuary director, Gus Ben David, hatches a plan to protect the Vineyard's declining osprey population.



This decade sees a flurry of new sanctuaries, including High Ledges, Long Pasture, Blue Hills Trailside Museum, Canoe Meadows, and North River.



Mass Audubon purchases 2,000 acres in Topsfield to form Ipswich River Wildlife Sanctuary in 1951. This decade also welcomes Wachusett Meadow, Wellfleet Bay, and Drumlin Farm.

1950s

1970s





1971

The first conservation restriction in Massachusetts is put into effect when the development rights of 250 acres of shoreline property in South Dartmouth and Westport (adjacent to what is now Allens Pond) are transferred to Mass Audubon.

1976

The Arcadia Nature Preschool rings its bell for the first time, marking the first nature preschool in Massachusetts (and one of the first in the country).



A year before President Jimmy Carter installs solar panels at the White House, Mass Audubon installs a solar heating system as a model project at Drumlin Farm.

1978

1980s

The first Farm Day takes place in 1980 to fundraise for the creation of the Daniel Webster Wildlife Sanctuary. Joppa Flats and Allens Pond join the fold.



1981

Norman Smith, Sanctuary Director at Blue Hills Trailside Museum in Milton, begins researching snowy owls.



1990s

Mass Audubon expands its sanctuary network to three urban centers: Broad Meadow Brook in Worcester, Oak Knoll in Attleboro, and Boston Nature Center in Mattapan.

1998

Joppa Flats Education Center establishes its Bird Banding Station within Parker River National Wildlife Refuge to monitor migratory passerines (songbirds) during spring and fall migrations.

2008

The first All Persons Trail, universally designed for all visitors including those with functional limitations in vision or mobility, opens at Stony Brook.

2014

Wellfleet Bay's 30-year-old sea turtle rescue program experiences a record-breaking season. More than 1,100 stranded sea turtles wash ashore, compared to the previous record of 413.



TODAY

Mass Audubon has 56 wildlife sanctuaries with 160 miles of trails open for the public to explore. These sanctuaries provide school, camp, and other education resources to 225,000 children and adults and welcome 500,000 people annually. Have you visited them all? There's no better time than the present. See you on the trails!

100 Excuses to Explore

Mass Audubon's Wildlife Sanctuaries

By Heather Demick Cooper

In honor of 100 years of wildlife sanctuaries, check out 100 fun and fascinating ways you can enjoy and explore. Whether it's visiting a butterfly garden or hiking to a summit (or anything in between), you're invited to join the celebration!



1-7

See for Miles

Get a bird's-eye view of the Massachusetts landscape by hiking to a summit or climbing an observation tower.

Summits

Bluff Trail at Moose Hill • Summit Trail at Pleasant Valley • Brown Hill Summit at Wachusett Meadow • Dutch and Mary Barnard Trail at High Ledges

Towers

Arcadia • Ipswich River (pictured) • Chickatawbut Hill, Blue Hills Trailside Museum (via a program only)



8-11

Camp Out

Spend the night in the great outdoors, either in a cozy cabin or at a campground. Wake up to the salty ocean air, enjoy a paddle on a pond, or just relish the solitude of a sanctuary all to yourself.

Cabins

Ipswich River • Pierpont Meadow (pictured)

Campgrounds

Wellfleet Bay • Ipswich River/Perkins Island



12-33

Play Outside

Hit the trails with seasonal Nature Bingo, go on a Quest, or stop by a Nature Play Area for unstructured play on stump jumps and in wigwams.

Nature Play Areas

Pleasant Valley • Felix Neck • Oak Knoll • Broad Meadow Brook • North River • Ipswich River • Boston Nature Center • Wachusett Meadow • Drumlin Farm • Museum of American Bird Art • Arcadia

Quests

Long Pasture • Moose Hill • Felix Neck • Arcadia • North River • Broadmoor • Broad Meadow Brook • Daniel Webster • Boston Nature Center • Ipswich River • Wellfleet Bay



34-45

Hit the Water

Embark on a guided paddling program, rent a canoe for self-guided explorations, or set sail on a natural history cruise.

Kayak

Joppa Flats Education Center •
Long Pasture • Felix Neck

Canoe

Arcadia • Broadmoor • Ipswich River •
Pleasant Valley • Wachusett Meadow

Cruises

Joppa Flats Education Center •
Wellfleet Bay • Long Pasture

Stand-up Paddleboard

Long Pasture



46-52

View Art

View paintings, sculptures, and photography from professional and local artists, all inspired by the natural world.

Art Museum

Museum of American Bird Art

Galleries

Broadmoor • Habitat Education Center
• Joppa Flats Education Center •
Wachusett Meadow • Moose Hill •
Broad Meadow Brook



53-64

Use Your Senses

Check out award-winning universally accessible trails across the state. In addition to rope-and-post guiding systems, these All Persons Trails feature audio tours, braille texts, and tactile maps. Varying in length from 850 feet to one mile, All Persons Trails allow for self-guided exploration for people of all ages and abilities.

Accessible Trails

Boston Nature Center • Arcadia •
Pleasant Valley • Attleboro Springs •
Wellfleet Bay • Broad Meadow Brook •
Blue Hills Trailside Museum • Habitat
Education Center • Drumlin Farm •
North River • Broadmoor • Stony Brook



Observe Animals

Find endless opportunities to see birds, bugs, mammals, and more. Plus, watch sheep and goats give tractors a rest as they graze on invasive plants and sustainably manage meadows. Here are just a few ideas.

Aquariums & Touch Tanks

Wellfleet Bay • Joppa Flats Education Center • Oak Knoll

Wildlife Viewing Platforms

Pike's Pond at Pleasant Valley • Beaver Bend Trail at Wachusett Meadow • Boardwalk at Broadmoor • Boardwalk Trail at Wellfleet Bay

Sheep & Goats

Habitat Education Center • Drumlin Farm • Wachusett Meadow

Observation Blinds

Daniel Webster (pictured) • Museum of American Bird Art • Drumlin Farm • Wellfleet Bay • Joppa Flats Education Center • Broad Meadow Brook • Arcadia

Observation Bee Hives

Boston Nature Center • Long Pasture • Stony Brook

See Gardens Grow

Experience the beauty of our native gardens, where pollinating insects and hummingbirds bring to life flowering perennials, and see the fruits of two Community Supported Agriculture (CSA) programs in action.

Bird & Butterfly Gardens

Moose Hill • Allens Pond • Stony Brook
• Museum of American Bird Art •
Ipswich River • Boston Nature Center •
Long Pasture

Vegetable Gardens

Drumlin Farm (CSA) • Moose Hill (CSA)
• Canoe Meadows Community Garden
• Clark Cooper Community Gardens at
Boston Nature Center—the largest and
oldest community gardens in Boston



The Joys of Walking in the Woods...Alone

By Jerry Berrier

I have always liked walking in the woods. As a child I attended summer camp, and as an adult I have often enjoyed strolling with a close friend or relative, taking in the smells and the texture of the ground under my feet, feeling the sun on my face, and listening to the wonderful sounds of birds.

Yet as a person who is totally blind, I find few opportunities to be alone in nature. That is, until Mass Audubon came along. With the creation of their universally accessible All Persons rope-guided trails, I can be alone and experience nature in an entirely new way.

Just as a driver learns a new route more quickly when he or she takes the wheel, I take in more about my surroundings when I walk alone with my cane. No matter how many times I travel the same path with a sighted guide, I cannot learn it well, and I do not experience it fully until I walk it on my own.

When I walk by myself on one of Mass Audubon's All Persons Trails, I hear more, feel more, and take in more with all of my senses. I go at my own speed, stopping when I want to, standing quietly for as long as I choose, and taking in the beauty of nature in my own unique way. The addition of signage with braille, explaining my surroundings, adds to my experience.

Thanks to Mass Audubon, I am free to relish the beauty of nature, daydream, contemplate, or think of nothing if I so choose. For me, it is always a wonderful and liberating experience to spend time alone—truly alone and independent—in nature.

Sharing What We've Learned

With support from the U.S. Institute of Museum and Library Services, Mass Audubon has created a comprehensive guidelines manual for developing and sustaining accessible All Persons Trails and associated visitor materials for use by a wide variety of people with a full range of functional abilities. To get a copy of the manual, visit massaudubon.org/accessibility.

Jerry Berrier, who works at Perkins School for the Blind, is an Access Technology Consultant and a birder. He has helped develop Mass Audubon's 11 All Persons Trails. Hear him speak about his experience at massaudubon.org/accessibility.



Attend a Fest

Join in on some summer fun with other people who enjoy the outdoors as much as you do.

Special Events

Broad Meadow Brook Butterfly Festival (August) • Allens Pond Duck Derby (August) • Long Pasture Summer Soirée (August) • Stony Brook Fall Fest and Wood Duck Derby (September) • Boston Nature Center's Rockin' with Raptors (September)

Need Another Excuse?

Get details on all of these and find countless more reasons to visit at massaudubon.org/sanctuaries.

Sam Jaffe's Metamorphosis

By Michael P. O'Connor

Long before he was the “Caterpillar Guy,” Sam Jaffe was a bug kid. And Jaffe largely credits Mass Audubon’s wildlife sanctuaries for his boyhood interest in insects, which has burgeoned into a successful career as a nature educator and ambassador for the outdoors.

“The sanctuaries provided context and background for so much of what I do,” says Jaffe, creator of The Caterpillar Lab, which encourages people, particularly youth, to connect with nature in their communities through live caterpillar educational programs and research initiatives.

As a child, his parents took him to Drumlin Farm in Lincoln. By the time he was 11 or 12, he was attending Wildwood overnight camp (then located in Gardner, MA).

“We would take a van from Wildwood to Lake Wampanoag Wildlife Sanctuary, where there was this huge field full of milkweed. That’s where I saw my first mantis fly, which resembles a mix of a praying mantis and a wasp,” recalls Jaffe, now 33. “It’s also where I met other people my age who were really curious about nature and invested in a similar way.”

Nowadays, Jaffe can also be found exploring Wachusett Meadow in Princeton. And he especially enjoys those sanctuaries where he conducts his programs, including the Museum of American Bird Art in Canton, which earlier this year hosted his “Life on the Leaf Edge” photography exhibit of astounding caterpillar images.

“To this day, I credit Mass Audubon for much of my growth,” says Jaffe. “Initially as a naturalist, but perhaps more important, as an educator aiming to engage other young people.”



The Path to Leadership in Lowell

While our wildlife sanctuaries have physical borders, the work each one does often extends far beyond those boundaries. Drumlin Farm’s outreach in Lowell is a good example.

In 2005 Drumlin Farm and the Lowell Parks & Conservation Trust joined forces to offer after-school environmental programming in Lowell. As the partnership developed, our educators were able to reach more Lowell youth through a variety of programs including Spindle City Corps (SCC) summer program. Among the participants was Bora Poun.

Bora, whose family came to Lowell from Cambodia, always enjoyed being outside but knew little about conservation. “When they first brought us together, they asked ‘What does it mean to conserve?’” Bora told a group at the 2014 Land Trust Rally. “As a kid, I thought it meant going around hugging and watering trees.”

His involvement in SCC led to his becoming an inaugural member of the Lowell Leaders in Stewardship (LLS), a year-round after-school environmental education program that formed in 2014 thanks to funding from the Lowell Public Schools and the Massachusetts Cultural Council’s Youthreach Initiative.

As part of SCC and LLS, Bora often took the lead in the removal of non-native species, planting of flowers for

pollinators, and river stewardship.

“Bora has always been a hard-working team member,” says Sally Farrow, Drumlin Farm’s Outreach Coordinator. “These programs provided Bora with the opportunity to develop his confidence and leadership skills, which enabled him to become an excellent teacher and role model for young students in Lowell.”

Today, Bora attends UMass Lowell and works for Lowell Parks & Conservation Trust as an after-school teacher and mentor to the next generation.

Bora concluded his speech at the Rally by saying: “Now when I am asked ‘What does it mean to conserve?’ I can finally say it’s about finding that fine balance between humans and nature and learning to get along.”

Thanks to Bora, more young students are following in his footsteps, serving to protect Lowell’s river and green spaces for future generations.



More Online!

Learn more about Drumlin Farm’s work in Lowell, and hear the LLS students speak at massaudubon.org/drumlin.



Things to Do This Summer

Join us for a program at a wildlife sanctuary. Be sure to register early to ensure a spot.

massaudubon.org/programs

Wednesday Morning Birding

Every Wednesday, 9:30 am–12:30 pm
Joppa Flats Education Center,
Newburyport
Enjoy excellent summer birding in the
Newburyport/Plum Island area. *Adults*

Marine Life Cruises

Every Wednesday, July 6–August 31,
6:00–8:00 pm
Sponsored by Wellfleet Bay, Wellfleet
Cruise from Sesuit Harbor in Dennis
into Cape Cod Bay to check out the
local marine life. *Families*

Aquatic Explorations Cruises

Every Thursday, July 7–September 1,
1:30–3:30 pm
Sponsored by Long Pasture, Barnstable
Learn about marine science and discover
creatures that live in Cape Cod waters,
from glowing comb jellies to small
sharks. *All ages*

Kettle Island Heron Paddle

July 7, 6:00–9:45 pm
Ipswich River, Topsfield
On this ocean kayaking adventure,
witness the return of herons, egrets, and
ibises as they fly back to their coastal
nesting rookery. *Adults*

Ice Cream and...

July 8, 22, and August 5, 7:30–9:00 pm
Broadmoor, Natick
Search for flashing fireflies, listen for the
songs of frogs and katydids, use a “bat
detector” to find bats, and eat ice cream,
of course. *Families*

Bedrock to Birds in the Berkshires

July 9, 10:00 am–4:00 pm
Pleasant Valley, Lenox
Explore the connections between
Pleasant Valley’s geological features using
tools and models for understanding
natural history. *Adults*

Open Hearts | Open Skies: A Weekend Wellness Retreat

July 9–10
Sponsored by Allens Pond, Dartmouth/
Westport, and Yoga On Union
Embark on an overnight wellness retreat
that blends nature, yoga, music, and
peace. *Adults*

Hawley Bog

July 10, 9:00–11:30 am
Sponsored by Arcadia, Easthampton/
Northampton
Explore this pristine peatland, which is
situated at 1,800 feet and full of insect-
eating plants, birds, and aquatic insects.
Adults

Night Fliers

July 12, 7:30–9:00 pm
Habitat Education Center, Belmont
Get a glimpse into the secret, nocturnal
world of bats and moths. *Families*

Moonrise Kayak Tours

July 19 and 20, August 17 and 18,
September 15 and 16, sunset
Felix Neck, Edgartown
Kayak Sengekontacket Pond with a guide
as the sun sets, the stars twinkle, and the
moon rises. *Adults*

Moonlight Hike and Campfire for Families

July 23, 7:00–9:30 pm
Wachusett Meadow, Princeton
On this evening hike, listen for owls
and coyotes, look for beavers, and walk
among fireflies. Enjoy s’mores around the
campfire afterward. *Families*

Family Camp Out

July 23–24, 6:00 pm–9:00 am
Moose Hill, Sharon
Spend the night at Moose Hill. Bring
your own tent, dinner, and breakfast;
we’ve got the campfire and s’mores
covered. *All ages*

Connecting with Nature: Identification and Uses of Local Plants

July 24, 1:00–4:00 pm
Broad Meadow Brook, Worcester
Discover the secrets and surprises
of our diverse flora. This month, we
focus on the many uses of cattail.
Adults

Printmaking with Nature

July 29 and July 30
Museum of American Bird Art, Canton
Attend an illustrated lecture by
acclaimed printmaker Sherrie York on
July 29, or learn about her process at
her printmaking workshop on July 30.
Adults

Summer Tree ID

July 31, 10:30 am–noon
Boston Nature Center, Mattapan
Learn how to tell a maple from an oak
and a black locust from a birch during a
morning walk through the forest. *Adults*

Stars, S’mores, and Meteors (Perseid Edition)

August 12, 8:00–9:30 pm
Blue Hills Trailside Museum, Milton
Stargaze, learn about falling stars,
and toast marshmallows around the
campfire atop Chickatawbut Hill. *All ages*

Sunset Hayride and Fire

August 20, 6:00–7:30 pm
Daniel Webster, Marshfield
Enjoy a tractor-drawn hayride, then
gather round the fire and listen to
stories of the season. *Families*

Exploring the Landscape for Clues to our Past

August 21, 2:00–3:30 pm
Stony Brook, Norfolk
Learn and practice forest investigation
skills while searching for clues to past
land use. *Adults*

Fermentation 101

August 26, 7:00–9:00 pm
Drumlin Farm, Lincoln
Learn the basics of pickling as we make
our own pickles and sample a variety of
Drumlin Farm pickled produce. *Adults*

Family Nature Hike

September 3, 10:00–11:00 am
Oak Knoll, Attleboro
Bring the whole family on a guided hike
to learn about local flora and fauna.
Families





21

SANCTUARIES

5 MONTHS

1 MOTHER-DAUGHTER DUO

1 PASSPORT TO NATURE



Last spring, Erica Tworog-Dube and her then three-year-old daughter, Ariana, had a mission: to complete the Passport to Nature booklet, a fun way to explore 21 of Mass Audubon's wildlife sanctuaries. They not only succeeded, but also did so in an impressive five months. Here's their story:

My daughter loves nature, animals, hiking, and exploring new places. She and I have always enjoyed doing day trips, and the Passport to Nature program provided the perfect guidance for new places to check out. Prior to starting, we had been relatively frequent visitors to Broadmoor in Natick, Drumlin Farm in Lincoln, and Broad Meadow Brook in Worcester. But as much as we loved these places, we were excited to expand our exploration.

If Ariana and I found ourselves with nice weather, we'd simply open our Passport and choose a destination. The Passport also inspired family adventures, such as kayaking the Ipswich River in Topsfield for Mother's Day and taking a ferry to the Vineyard to visit Felix Neck.

We enjoyed many highlights on our treks, but a particularly memorable one for me involved observing a family of beavers that went fearlessly about their work mere feet from where we stood. There was also the time we found ourselves face-to-face with a red-tailed hawk as we rounded a bend at Arcadia in Easthampton. And we couldn't believe the number of tadpoles we saw in a vernal pool at Moose Hill in Sharon!

Ariana's favorite experiences last spring included witnessing the births of two lambs at Drumlin Farm (she still talks about it a year later), and our visit to Wellfleet Bay on the Cape during peak horseshoe crab mating season. On that

trip, we enjoyed an incredible glimpse into these prehistoric creatures' "personalities" as they curiously approached us and followed us along the shoreline.

Along with the wildlife, we also observed a great deal of beautiful plant life. Ariana loves her visits to Broadmoor because there's a tiny pine tree whose growth she's been excitedly tracking for years. But it was watching Ariana's attempt to wrap her arms around several massive trees that accentuated the kind of natural history that Mass Audubon is helping to preserve.

Ultimately, however, it's the biodiversity represented across the entire network of sanctuaries that has left the strongest impression. Exploring a cross-section of Mass Audubon's acres of mountains, meadows, wetlands, woodlands, ponds, and coastline, along with all of the animals and plants protected within, has left us in complete awe of the scope and significance of the

organization's work.

Conservation has always been extremely important to my husband and me, and we've found that Ariana instinctively shares that same passion. The Passport experience helped to personalize what we're seeking to preserve, and it reinforced why we put so much emphasis on trying to be good "Earth helpers" by recycling, reducing electricity usage, etc. Having the opportunity to complete the Passport with my enthusiastic, innocent, intrinsically curious daughter by my side underscored how crucial these environmental preservation efforts are for future generations.

Get More Details!

See more photos from Erica and Ariana's adventures, find out what lessons Erica learned, and get her top tips for Passporting with kids at massaudubon.org/passport.





Outdoor Almanac

By Ann Prince

JULY

- 3** Daylilies are in bloom. Each individual flower opens for a single day.
- 9** Those “chirping birds” we sometimes hear on a sultry afternoon may actually be a chorus of tiny gray tree frogs.



- 19** Full moon, or the Buck Moon (Native American). The origin of this name refers to the annual shedding and regrowth of a buck's antlers, which have once again reached their full size by this time of year.



- 20** Blackberries ripen. Unhindered by the thorny brambles, robins, catbirds, orioles, and mockingbirds forage for the fruit.
- 28** Look for the muted pink of common milkweed, the brilliant orange of butterfly weed, and the light to darkish purple of swamp milkweed.

AUGUST

- 2** The sweet, strong scent of white-flowered swamp azalea emanates from freshwater wetlands.
- 5** After dark, look for luna moths near porch lights and other illuminated locations. Only existing in its adult phase for a week, this species is conspicuous with its four-and-a-half-inch wingspan and striking light-green color.
- 13** Peak of the Perseids meteor shower. After midnight, shooting stars, as many as 60 per hour, flare through the darkened sky.

AUGUST (continued)

- 16** After sundown, watch for Mercury low in the western sky. The best viewing occurs now because the planet is at its highest point on the horizon today.



- 18** Full moon, or the Dog Days Moon (Colonial American). This refers to the hottest time of year.

- 22** On rainy days in wooded areas look for red terrestrial juvenile newts, or efts as they're known, on roots and rocks.



- 27** When evening falls, watch for the dramatic pairing of Venus and Jupiter in the western sky as it darkens. The planets appear extremely close together.

SEPTEMBER

- 4** Common loons arrive for the winter. Watch for them floating on open water.
- 9** Red admiral butterflies linger near nectar on autumn wildflowers.
- 16** Full moon, or the Singing Moon (Celtic).
- 20** Last of the ruby-throated hummingbirds should be on their way to southern climes.
- 22** Autumnal equinox. Fall begins. Days and nights are equal length.
- 30** Some lingering shorebirds can still be sighted on the beach.



Mass Audubon Photo Contest

Picture This:
Your Great Outdoors



We're seeking photographs of people in nature and those that highlight the beauty of Massachusetts wildlife and landscapes.

Deadline: September 30, 2016

Enter your photos today at massaudubon.org/picturethis.



Located at Drumlin Farm
Wildlife Sanctuary
Lincoln, MA 01773
781-259-2214

SANCTUARIES **100th**

Posters • Hats
Shirts • Mugs

shop.massaudubon.org

MILKWEED: The Ultimate Sanctuary



Visit a wildlife sanctuary and there's a good chance you will spot milkweed. This native plant is like its own tiny wildlife sanctuary. The flowers provide a safe place for small animals to seek food, water, and shelter. Some animals can only find the food they need on milkweed. The next time you're around some milkweed, take a closer look and see which of these creatures you can find.

Monarch Butterfly

Monarch butterfly caterpillars only eat milkweed leaves. Although the plant is poisonous to most creatures, these caterpillars aren't harmed by the poison and will store it in their bodies. Predators who are foolish enough to try to eat one of these caterpillars will get sick and will probably leave the other monarch caterpillars alone.



Bumblebees

The bumblebee is one of few insects big and strong enough to carry milkweed pollen. The plant makes a lot of sweet nectar in return for the bee's hard work. Look carefully at the bumblebees you see on the flowers. Do they all look the same? Probably not—there are at least seven different species that can be found just in and around Boston!

Eastern Milkweed Bugs

This insect has a mouth that looks and works like a long straw. Poking its mouth into a milkweed seed, the bug slurps up the liquid like a milkweed-flavored milkshake. Look for these bugs on the milkweed's seed pods in late summer.



Crab Spiders

These spiders, which look like crabs, can change color to match the part of the flower they're using as a hiding place. This comes in handy when hunting for bees, their meal of choice.



Red Milkweed Beetles

These funny-looking beetles grow up underground eating milkweed roots. Once they become adults, they come up out of the ground and eat the plant's leaves and flowers. If you carefully pick up a milkweed beetle and hold it to your ear, you'll hear it make a soft, mechanical squeaking sound. It makes this sound when it's upset, so put the little bug back gently!



Ready, Set, Go Outside!

Go to massaudubon.org/go and download our **Milkweed Sanctuary Checklist**. See how many species you can find!

Sanctuaries as Outdoor Laboratories

By Joshua Wrigley

In addition to being wonderful places to explore, Mass Audubon's wildlife sanctuaries are also home to innovative research and conservation. From raising endangered blanding's turtles at Oak Knoll in Attleboro to putting up decoys with audio to attract the declining eastern meadowlark at Daniel Webster in Marshfield, we protect wildlife and also teach visitors about the importance of these initiatives.

The Eastern Spadefoot Toad Project on Cape Cod is a prime example. Starting back in 2010, Ian Ives, Sanctuary Director at Long Pasture, set out to save the spadefoot. This intriguing amphibian, which has yellow eyes, spends most of its life underground, and makes a sheep-like baa-ing sound, was once widespread on the Cape. It's now a state-listed endangered species and somewhat of a rarity on the Cape due to the destruction of its native habitat.

Phase one involved restoring nine breeding vernal pools within the scrubby woodlands and formerly cultivated land at Ashumet Holly and Long Pasture wildlife sanctuaries. This restoration was done in partnership with The Center for Stream and Wetland Restoration, The U.S. Fish and Wildlife Service's Partners for Wildlife Program, and Grassroots Wildlife Conservation. In the second phase, the team shared what it learned through annual wetlands workshops for professionals.

More recently, Ives has set out to create living labs for area students. Working with the Falmouth Academy and Monomoy Middle School, Ives and participating students began wetland construction this spring on each school's property in an effort to create vernal pools. Once the students have completed the pools, they will monitor their biodiversity levels while raising spadefoot tadpoles indoors (also known as headstarting) for eventual release.

Through this work and other conservation partnerships, Long Pasture hopes to restore spadefoot populations, while providing students with valuable, hands-on training in unique field settings. Learn more at massaudubon.org/longpasture.

Joshua Wrigley is Public and Group Programs Coordinator at Long Pasture Wildlife Sanctuary.



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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 questions regarding your membership, contact: Mass Audubon Member Services, 208 South Great Road, Lincoln, MA 01773, tel: 781-259-9500 or 800-AUDUBON, or e-mail: membership@massaudubon.org.

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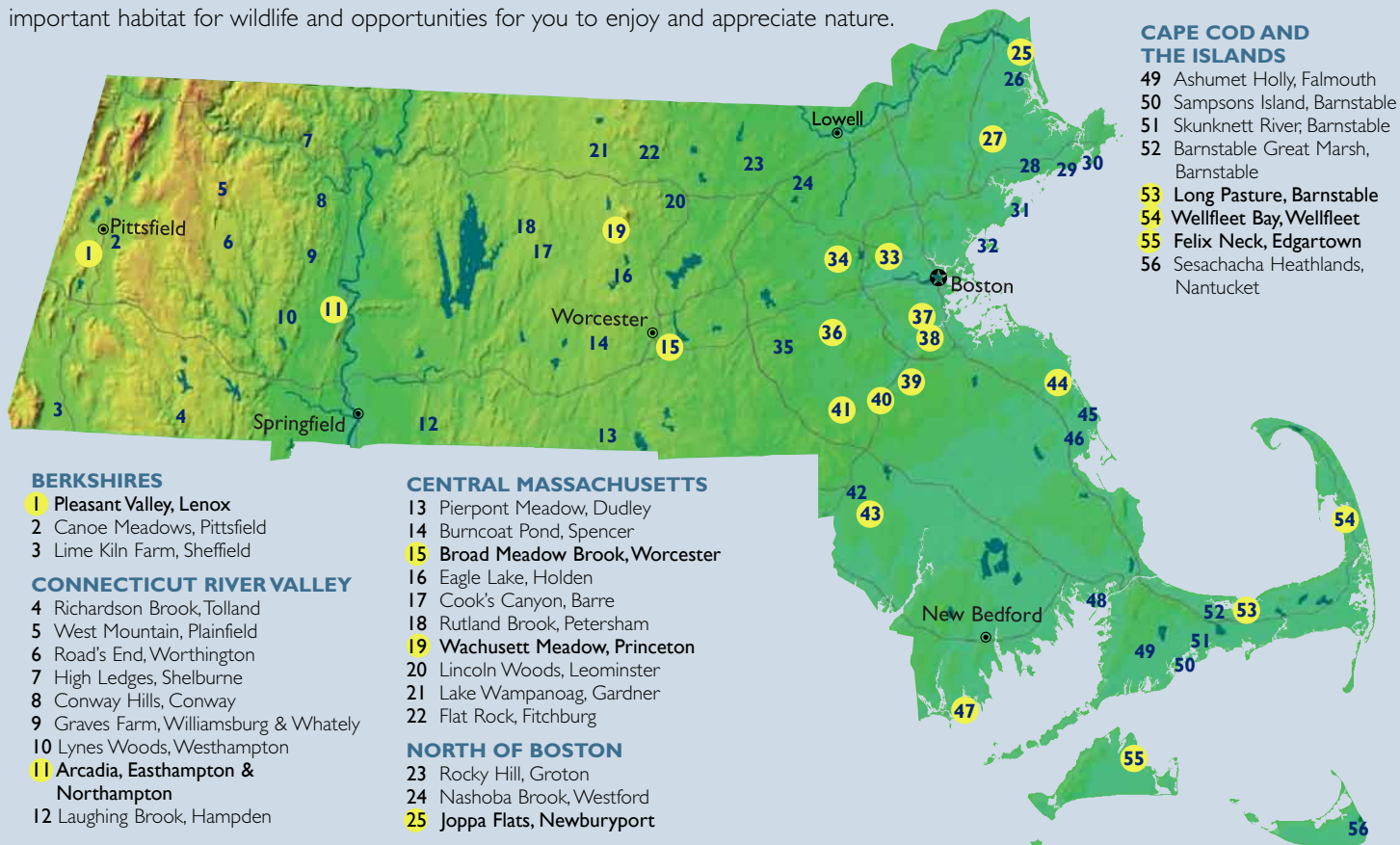
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