



Cape Cod

School Programs

GRADES PRE-K-12

2023 | 2024

massaudubon.org/schools



Mass Audubon School Programs

Through field studies and classroom explorations, Mass Audubon provides hands-on, inquiry based experiences with science content and practices. Our educators enhance students' scientific understanding of species and habitats; ecological concepts such as food webs, cycles, systems, adaptation, and evolution; climate change; and interrelationships between people and nature.

About Mass Audubon Cape Cod

Mass Audubon Cape Cod encompasses six wildlife sanctuaries, including two with nature centers and laboratory classrooms at Long Pasture and Wellfleet Bay. Our sanctuaries are home to a variety of coastal habitats including salt marsh, sandy beach, and tidal flats, as well as forest and freshwater wetlands, vernal pools, and ponds.

Wellfleet Bay, Wellfleet

Long Pasture, Barnstable

Ashumet Holly, East Falmouth

Barnstable Great Marsh, Barnstable

Skunknett River, Barnstable

Sampsons Island, Barnstable (*not currently used for school programs*)

CONTACT INFORMATION

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We Meet You Where You Are

Programs at your school, at our wildlife sanctuaries, or wherever nature is most accessible for you.

Whether you want to bring nature into the classroom or take lessons outside, our programs offer insight into New England habitats and native species and enrich natural history and science lessons while strengthening students' connections to the environment.

Accessible Programs

Mass Audubon is committed to providing engaging, exciting, meaningful, and enduring educational programs, field trips, and learning activities for students with a broad range of physical, sensory, and learning needs.

Our educators strive to design and deliver adaptive programs that align to educational best practices and meet the needs of all students. The award-winning, ADA-compliant, interpretive All Persons Trails at many of our wildlife sanctuaries are open for all visiting school groups, providing access to wetland boardwalks, wildlife viewing areas, and gardens for birds, butterflies, and more.

We will gladly work with you to meet the needs of your classroom. For more information, please contact your local sanctuary.



Wellfleet Bay



Long Pasture



Ashumet Holly

Our Wildlife Sanctuaries

Wellfleet Bay Wildlife Sanctuary, Wellfleet

Wellfleet Bay comprises 1,183 acres overlooking Wellfleet Harbor. Five miles of trails—including a universally accessible All Persons Trail—take you through a variety of habitats, including salt marsh, sandy barrier beach, and pine woodlands, each attracting a wide array of wildlife. The LEED Platinum-rated “green” nature center features an exhibit hall, fresh and salt water aquaria, and a laboratory classroom.

Long Pasture Wildlife Sanctuary, Barnstable

Long Pasture is a 110-acre sanctuary on Cape Cod Bay, featuring 2.5 miles of trails through woods, salt marsh, fields, freshwater wetlands including vernal pools and ponds, and sandy beach habitats. The brand-new Discovery Center offers exhibits and scenic views of Barnstable Harbor and Sandy Neck Barrier Beach.

Ashumet Holly Wildlife Sanctuary, East Falmouth

At the heart of Ashumet Holly is an eight-acre coastal plain pond, considered a globally rare natural community, attracting over 30 species of dragonflies and hosting rare pond shore wildflowers. The sanctuary is also known for its 1,000 holly trees of 65 varieties.

Barnstable Great Marsh Wildlife Sanctuary, Barnstable

Barnstable Great Marsh is an integral part of the ecologically significant 3,800-acre Sandy Neck salt marsh and barrier beach system. Along with expansive salt marsh views, the sanctuary features two open ponds, shady oak woodlands, and numerous wildlife. Three species of owls commonly inhabit the sanctuary in winter, and five species of turtles nest there in summer.

Skunknett River Wildlife Sanctuary, Barnstable

Walking the tree-lined trails at Skunknett River, you can witness nature reclaiming former mill sites and explore a fragrant Atlantic White Cedar swamp. The name Skunknett comes from an Algonquin word that means a fishing place for eel. Indeed, American Eels may be seen in the sanctuary’s waterways.



Early Childhood & Elementary

Our Early Childhood and Elementary programs combine standards-aligned science content with the joy and excitement of learning about nature. We can bring the natural world to you through programs in your classroom, connect students to the ecology of their own schoolyard, or facilitate scientific exploration on a field trip at one of our wildlife sanctuaries.

Mass Audubon’s Signature Program: Science of Massachusetts



Science of Massachusetts A Mass Audubon Education Program

Science of Massachusetts is a multi-week curriculum for grades K-8 that will engage your students in exciting, hands-on, nature-based science right in their own schoolyard.

See page 5 for more details.



Pre-K Programs

Explore Nature Through the Seasons

Pre-K | winter and spring

Two 30-minute classroom visits (Animals in Winter and Signs of Spring), followed by one one-hour field experience (Habitat Hike)

Learn about Massachusetts habitats and wildlife while investigating the impact of weather on living things. Explore and discuss how people, plants, and animals meet their needs through seasonal changes. Join us for a hike to look for signs of the season.

Location: Field experience may take place at Long Pasture, Wellfleet Bay, or a community greenspace.

Explore Nature With Your Senses

Pre-K | fall, winter, or spring

Two 30-minute classroom visits (Animals of the Coast and Nocturnal Animals), followed by one one-hour field experience (Sensory Hike)

Use your senses to explore the nature of Massachusetts. Search for camouflaged creatures, listen for noises made by animals, and feel the texture of feathers, fur, and shells. Discover some of the ways animals use their senses to meet their needs where they live by asking questions about senses, like “Do snails have eyes?” or “How does an owl navigate in the dark?”

Location: Field experience may take place at Long Pasture, Wellfleet Bay, or a community greenspace.

Early Childhood & Elementary

Programs for Kindergarten–Grade 2

Birds of Cape Cod

Grades K–2 | fall, winter, or spring

Two 45-minute classroom visits (choice of two topics: *Backyard Birds*, *Bird Beaks*, *Owls*, or *Shorebirds*), followed by one two-hour field experience (*Bird Investigation*)

How are birds different from other animals? Explore familiar groups of birds, their habitats, and their adaptations through hands-on investigations of feathers, feet, and models of beaks, nests, and eggs. Listen to bird songs and calls, act like a bird building a nest, and make observations to notice similarities and differences between birds in a variety of habitats. Discuss how we can help to protect habitats that are essential to birds and take a hike to look and listen for birds and the clues they leave behind.

Location: Field experience may take place at Long Pasture, Wellfleet Bay, or a community greenspace.

Habitats

Grades K–2 | fall, winter, or spring

Two 45-minute classroom visits (choice of two topics: *Forest*, *Meadow*, *Pond*, *Saltmarsh*, or *Tidal Flats*), followed by one two-hour field experience (*Habitat Hike*)

Explore Cape Cod habitats and discover how familiar plants and animals meet their needs where they live. Study animal life cycles and food webs through interactive games and activities and go for a hike to explore forests, meadows, ponds, and coastal habitats.

Location: Field experience may take place at Long Pasture, Wellfleet Bay, or a community greenspace.

Wildlife of Cape Cod

Grades K–2 | fall, winter, or spring

Two 45-minute classroom visits (choice of two topics: *Amphibians*, *Birds*, *Fish*, *Insects*, or *Reptiles*), followed by one two-hour field experience (*Wildlife Hike*)

Compare and contrast characteristics of different groups of animals that inhabit Cape Cod forests, meadows, ponds, salt marshes, and tidal flats. Search for local wildlife and the tracks and other clues they leave behind, practice making careful observations, and study adaptations and life cycles.

Location: Field experience may take place at Long Pasture, Wellfleet Bay, or a community greenspace.



A Year-long Program to Discover and Protect Your Local Watershed

In the Rivers to Sea program, students and teachers partner with Mass Audubon educators to explore, research, and take action in their local watershed, learning to recognize the importance and interconnectedness of watershed systems, from rivers to sea.

Units available for grades 5–12. Learn more on page 7.



Early Childhood & Elementary

Programs for Grades 3–5

Turtles of Cape Cod

Grades 3–5 | fall and spring

Two 45-minute classroom visits (choice of two topics: Turtle Adaptations, Sea Turtles, or Salt Marsh & Diamondback Terrapin Turtles), followed by one two-hour field experience (choice of: Sea Turtle Stranding Walk or Turtle Habitat Hike)

From the endangered Kemp's Ridley Sea Turtle to the elusive Eastern Box Turtle, explore the wide variety of turtle species found around Cape Cod. Learn about turtle habitats, adaptations, life cycles, and Mass Audubon's conservation work to help protect turtle populations. We will assist with pairing classroom visit topics with your selection for a field experience.

Please note: The turtle species that each program focuses on is determined by season and chosen field experience.

Location: Field experience may take place at Long Pasture or Wellfleet Bay for a Turtle Habitat Hike, or a bayside beach for a Sea Turtle Stranding Walk.

Coastal Ecosystems

Grades 3–5 | fall and spring

Two 45-minute classroom visits (choice of two topics: Tidal Flats & Salt Marshes, Horseshoe Crabs, Shorebirds, Eels, Marine Invertebrates, or Migratory Mapping), followed by one two-hour field experience (Salt Marsh Tidal Flats Hike)

Horseshoe crabs and shorebirds and mollusks, oh my! Investigate our coastal ecosystems to discover how a

wide variety of creatures are able to survive in these ever-changing habitats. Program focuses on adaptations, life cycles, migration, and food webs. Some topics also provide an opportunity to learn about human impacts on wildlife and ecosystems and introduce students to some of the ways those impacts can be mitigated.

Location: Field experience may take place at Long Pasture, Wellfleet Bay, or a community greenspace such as a beach.

Freshwater Wetlands

Grades 3–5 | fall and spring

Two 45-minute classroom visits (Freshwater Habitats and Freshwater Food Webs), followed by one two-hour field experience (Choice of: Vernal Pool Exploration or Pond Exploration)

There is a lot going on below the surface of our wetlands! Learn about the different freshwater habitats found on Cape Cod, and discover what creatures depend on them to complete their life cycle. Learn how these creatures fit into a freshwater habitat food web, then head outside and sift through the bottom "muck" of either a pond or vernal pool to practice identification skills and learn how some of these organisms can be indicators of water quality.

Location: Field experience may take place at Long Pasture, Wellfleet Bay, or a community greenspace with access to a wetland.





Science of Massachusetts

Science of Massachusetts (SOM) is a multi-week curriculum for grades K-8 that will engage your students in exciting, hands-on, nature-based science right in their own schoolyard. This is a wonderful way to help your students get outside for a healthy dose of nature, even when field trips are not possible.

Curriculum Overview

Tightly aligned to the Massachusetts Science Curriculum Frameworks, SOM takes K-8 students on a deep dive into science concepts through inquiry-based, outdoor learning. Students will complete field journaling assignments and investigations that help them develop important science practices and be invited to find their place in nature and impact their world, whether they live in an urban, suburban, or rural community.



This program is offered in a unique format. Each unit is designed as a series, with one lesson completed over the course of a week. Each lesson includes:



An engaging, short **video** that introduces the lesson topic and can be viewed in the classroom or as homework.



An outdoor **field journaling** assignment led by the classroom teacher, inviting students to connect with nature through place-based, hands-on science learning,



A Mass Audubon-led **sensemaking session**, which allows time for students to deepen their understanding of science concepts and engage in science practices together.



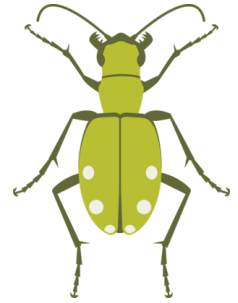
Support is available for districts with financial challenges, and our curriculum is designed to be accessible to all learners. Training is available to support teachers implementing the curriculum for the first time.

Grades K–2

Soil Science: Where the Minibeasts Are

5-week series

In this unit, we will explore different types of “minibeasts” or invertebrates, like worms, pill bugs, and millipedes. Students will engage in outdoor investigations to find out where the best place is for a minibeast to live, then document their observations in field journals and use evidence to explain how different schoolyard habitats may or may not support the needs of invertebrates. Finally, students will expand their investigation to understand how humans can learn from minibeasts to protect their local environment.



Rooted in Science: Trees!

7-week series

Trees provide much more than shade or pretty additions to city streets and neighborhood parks. This unit explores habitats, adaptations, and life cycles, with trees as a unifying theme. With accessibility to all learners as a priority, lessons highlight the diversity of trees across various Massachusetts habitats, including suburban, urban, and rural areas.

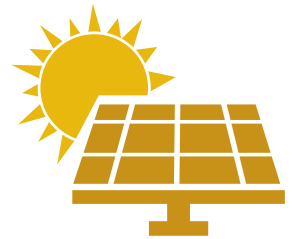


Grades 3–5

Energy on Earth

7-week series

Learn how energy from the sun powers life on Earth, both living processes and the technologies we use to power our communities. Each lesson explores one aspect of the energy cycle within biotic and abiotic systems, including photosynthesis, consumers, decomposers, and renewable and non-renewable energies.



Stronger Storms: Taking Action for Community Resilience

6-week series

In this unit, students will get outside and investigate the ways stronger storms impact their communities, specifically through rain and snow. They will identify places of vulnerability and places of resilience in their schoolyard or neighborhood. As a culminating project, they will design solutions to help reduce the impacts of stronger storms in their area and communicate it with members of their community.



Grades 6–8: Climate of Massachusetts

Rooted in Solutions: Trees & Climate Change

7-week series

Are trees the solution to climate change? Through place-based, inquiry-driven investigation, students will study the role of trees in the carbon cycle. Then, they'll expand their investigation to find out whether forest sequestration (or any single nature-based climate solution) is enough to fight climate change. Finally, students will explore their own role as a changemaker by planning a collective, climate-positive action.





Middle & High School

Our Middle and High School programs make science content relevant and exciting through hands-on, place-based lessons that will support your life and earth science curricula. We offer standards-aligned programs that are based at your school, at our wildlife sanctuaries, or a combination of both.

Mass Audubon's Signature Program: Rivers to Sea



Rivers to Sea

Rivers to Sea is a year-long program in which students and teachers (grades 5-12) partner with Mass Audubon educators to explore, research, and take action in their local watershed.

Through this program, students will learn to recognize the importance and interconnectedness of watershed systems, from rivers to sea. They will also delve into the impact of human activities on watersheds, both positive and negative. At the heart of this STEM-focused program is student involvement in community action projects that will contribute to the improvement of watershed and public health, building their sense of self-efficacy and agency to effect positive change in their local communities.

School educators who participate in Rivers to Sea with their students will work with Mass Audubon educators over the course of a year or more to strengthen their skills and confidence in integrating watershed topics into their curriculum, both in the outdoors and in their classrooms.

Together, we will support student-involved community action projects and help school educators build a support network with their local watershed organizations and other community stakeholders.



Middle School Programs

Bird Research in Action*

Grades 6–8 | fall

Two 45-minute classroom visits (Introduction to Birds and Researching Birds Populations), followed by one two-hour field experience (Bird Banding at Wellfleet Bay)

Visit Wellfleet Bay's bird banding station to find out which bird species are commonly found on Cape Cod year-round and during fall and spring migration. Using data collected from bird banding, notice changes over time and discuss the role of bird banding in research and conservation of birds.

Location: Field experience must take place at Wellfleet Bay.

Vernal Pools

Grade 6–8 | spring

Two 45-minute classroom visits (Introduction to Vernal Pools and Vernal Pool Animal Adaptations), followed by one two-hour field experience (Vernal Pool Field Investigation)

Using identification keys and field guides, identify some of the creatures that are adapted to survive in an ephemeral vernal pool. Collect and record data to begin to understand the important role vernal pools play in sustaining local biodiversity.

Location: Field experience may take place at Long Pasture or Ashumet Holly.

Coastal Ecosystem Exploration

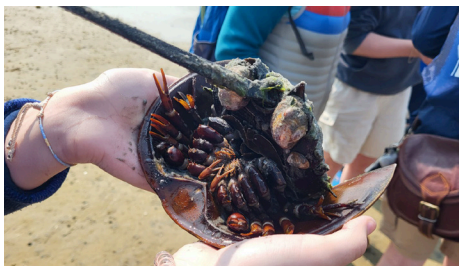
Grades 6–8 | fall or spring

A single, two-hour field experience

Students use dip nets and fish traps to discover the diversity of creatures that inhabit the salt marsh in this in-depth exploration of one of our most important coastal ecosystems. Uncover the dramatic impacts of our changing climate on this ecosystem.

Location: Field experience takes place at Long Pasture or Wellfleet Bay.

**Programs marked with an asterisk are considered "specialty science programs" that utilize specialized Mass Audubon science staff and are priced differently than standard field trip programs. Please see page 10 for detailed pricing information and affordability options for your school.*



The Climate of Massachusetts

A multi-week climate change curriculum based at your school

The Climate of Massachusetts is a multi-week curriculum that gets middle school students outside and exploring the science of climate change. Our inquiry-based units, which are tightly aligned to Massachusetts Science Frameworks, investigate the impacts of climate change and how we can build more equitable and resilient communities.

Throughout this unit, students will complete field journal assignments, collect and interpret data, and meet young people making change in their communities.

Units available for grades 6–8 through the Science of Massachusetts program. See pages 5–6 for more information.



Science of Massachusetts

Middle & High School

High School Programs

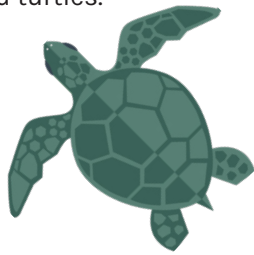
Sea Turtles*

Grades 9–12 | fall

Two 45-minute classroom visits (Introduction to Sea Turtles and Threats to Sea Turtle Populations), followed by one 1-2-hour field experience (Sea Turtle Stranding Hike)

Each fall, sea turtles are found cold-stunned and stranded on Cape Cod Bay beaches. Why does this happen? Learn about sea turtle biology, cold-stunning, and other obstacles facing migratory sea turtle populations, then take a walk along the beach to assist in searching for cold-stunned turtles.

Location: Field experience must take place at a bayside beach between November and mid-December. Exact location is determined based on tides, wind direction, and proximity to your school.



Vernal Pools*

Grades 9–12 | spring

Two 45-minute classroom visits (Conservation of Vernal Pools and Vernal Pool Species), followed by one two-hour field experience (Vernal Pool Field Investigation)

Vernal pools are fragile habitats that are crucial for successful breeding of Eastern Spadefoot Toads on Cape Cod. Learn about the conservation and creation of vernal pools and the role they play in the life history of the spadefoot toad, a threatened species in Massachusetts. Assist Mass Audubon scientists in monitoring vernal pool species in the field.

Location: Field experience may take place at Long Pasture or Ashumet Holly.

Horseshoe Crabs*

Grades 9–12 | spring

A single, two-hour field experience

Explore the tidal flats and search for horseshoe crabs. Learn about the life history of the horseshoe crab and the important role this species plays in a marine food web. Meet a wildlife biologist to learn how increased harvesting threatens horseshoe crab populations and assist in Mass Audubon's ongoing monitoring work to help protect these fascinating animals.

Location: Field experience may take place at Long Pasture or Wellfleet Bay.

Sea Level Rise and Salt Marshes*

Grades 9–12 | Fall

A single, two-hour field experience

Participate in a community science program centered in the conservation of Cape Cod's salt marshes. Practice science skills while following protocols in data collection and learn about an ongoing study of the salt marsh. Investigate salt marsh botany, how ecological patterns are affected by salinity, the effects of human infrastructure on salt marsh habitat, and discuss what we can do to help protect salt marshes.

Location: Field experience may take place at Wellfleet Bay, Long Pasture, or Barnstable Great Marsh

**Programs marked with an asterisk are considered "specialty science programs" that utilize specialized Mass Audubon science staff and are priced differently than standard field trip programs. Please see page 8 for detailed pricing information and affordability options for your school.*





Pricing & Affordability

Mass Audubon is committed to providing inclusive and equitable access to nature. Our school programs are designed to be accessible to as many schools, educators, and children as possible. **If cost is a barrier** for your students or school, please contact us—financial aid is available for schools with a high percentage of low-income students and we offer discounts for multiple visits.

Field Trip Pricing

Field trip programs that take place at Mass Audubon wildlife sanctuaries are priced at an hourly flat rate for groups of 15 or fewer students. Larger groups will be broken into smaller groups of no more than 15 per Mass Audubon educator. Small group sizes enable us to provide each student with a high-quality experience and individualized attention.

Standard Field Trips	1 Hour	1.5 Hours	2 Hours	2.5 Hours	3 Hours	4 Hours
First group (up to 15)	\$135	\$170	\$200	\$230	\$265	\$345
Additional groups of 15	\$110	\$145	\$170	\$200	\$225	\$270
Specialty Field Trips*	1 Hour	1.5 Hours	2 Hours	2.5 Hours	3 Hours	4 Hours
First group (up to 15)	\$185	\$220	\$250	\$280	\$315	\$395
Additional groups of 15	\$140	\$175	\$200	\$230	\$255	\$300

School-based Program Pricing

Programs for which our educators travel to your school are priced at an hourly rate for the entire class, up to 30 students. There is a two-session minimum for booking these programs. The price includes time spent on-site as well as mileage for travel times up to one hour; travel times over one hour incur an additional cost. Special rates may apply for some programs (such as intensive labs or wildlife ambassador visits) that require additional prep time, materials, or specialized staff.

	30–45 minutes	50–65 minutes	70–90 minutes
First classroom	\$170	\$190	\$235
Each additional classroom	\$100	\$120	\$140



Professional Development

Mass Audubon’s Professional Development programs are designed to increase content knowledge, provide teachers with hands-on, STEM-focused learning experiences, and offer resources for teaching engaging, inquiry-based science lessons in the schoolyard or classroom. In-person and virtual workshops are available, along with consulting and site visits.

For more information, visit massaudubon.org/pd or contact education@massaudubon.org.

Early Education Workshops

Time spent in nature with young children is time well-spent: Research from the Children & Nature Network demonstrates that having regular opportunities to learn outdoors in early childhood has lasting benefits for children’s physical, emotional, and academic growth.

Mass Audubon’s professional development workshops are designed to help early educators build skills and confidence for teaching all curriculum areas outdoors! Both in-person and virtual options are available.

Workshop topics include:

- Nature and Social-Emotional Learning
- Art and Music Outdoors
- Nature-Inspired Language and Literacy
- Early Science Literacy
- Math in Nature
- Fine and Gross Motor Development
- Bringing Nature Inside
- Safety Management and Weather
- Farm to School (Cooking and Gardening)

To book an Early Education professional development workshop or series, contact earlyed@massaudubon.org.

SEEDS

Seasonal Early Education Discovery & Science

Mass Audubon’s year-long Seasonal Early Education Discovery and Science (SEEDS) program is designed to build school-wide capacity for introducing students to the natural world.

Using a modeling-coaching-mentoring model, we partner with schools to create rich, nature-based learning opportunities that fit smoothly within the existing curriculum of the school. At the end of a year, teachers will have the skills to make nature a regular part of their daily curriculum and will be excited for leading effective lessons outdoors.

Visit massaudubon.org/earlyed to learn more.



Kindergarten–Grade 12 Workshops

Mass Audubon’s professional development programs for K-12 educators are designed to increase content knowledge, provide teachers with hands-on, STEM-focused learning experiences, and offer resources for teaching engaging, inquiry-based science lessons in the schoolyard or classroom. Both in-person and virtual options are available.

Workshop topics include:

- Bringing Learning Outdoors
- Field Journaling
- Inquiry-based Schoolyard Science
- Teaching Climate Change
- Climate Justice in your Community
- Watershed Science

To book a K-12 professional development workshop or series, contact education@massaudubon.org.

Summer Institute Nature School for Teachers

In this week-long intensive, K-8 science teachers will immerse themselves in local habitats and meaningfully connect with the science practices embedded in the Massachusetts Science Frameworks.

Practice inquiry-based learning methods through hands-on exploration of local habitats, field research, and an investigation design process you can bring back to your classroom.

Additional Support Services

Consulting

Mass Audubon will support you in designing nature-based activities that fit into your existing curriculum. Consulting can be done in-person or virtually. Contact us to learn more about how we can support you with individualized curriculum support or custom professional development.

Site Visits

Our teacher naturalists will help you make the most of your outdoor schoolyard for learning, whether it’s in an urban, suburban or rural setting. After the visit we will produce a report with suggestions and ideas for topics and activities that will work well in your space. Each visit includes a complete write-up with notes.

Contact education@massaudubon.org to learn more.





Find Your Sanctuary

Find a place to explore at:
massaudubon.org

Mass Audubon Mass Audubon is the largest nature-based conservation organization in New England. Founded in 1896 by two women who fought for the protection of birds, Mass Audubon carries on their legacy by focusing on the greatest challenges facing the environment today: the loss of biodiversity, inequitable access to nature, and climate change.

With the help of our 160,000 members and supporters, we protect wildlife, conserve and restore resilient land, advocate for impactful environmental policies, offer nationally recognized education programs for adults and children, and provide endless opportunities to experience the outdoors at our wildlife sanctuaries. Explore, find inspiration, and take action at massaudubon.org.