



Mass Audubon West

School Programs

GRADES PRE-K-12

2022 | 2023

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 West

Mass Audubon West stretches from the Berkshires to the Connecticut River Valley in Massachusetts.

More than 11,800 acres of protected land across 19 sanctuaries provide essential wildlife and plant habitat and endless possibilities for connecting and learning in nature.

Sanctuaries frequently visited by school groups include:

Arcadia, Easthampton & Northampton
Laughing Brook, Hampden
Canoe Meadows, Pittsfield
Pleasant Valley, Lenox

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

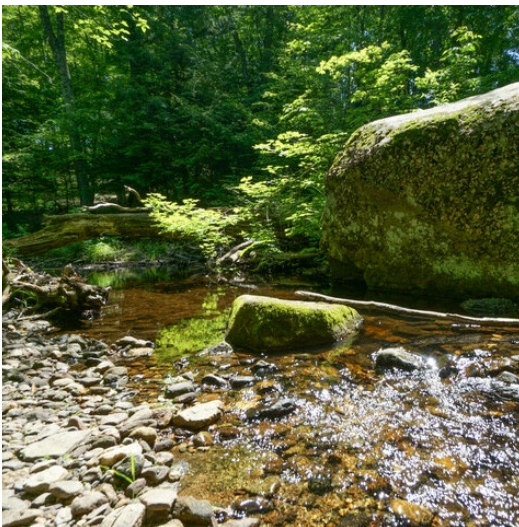
Mass Audubon is committed to providing engaging, exciting, meaningful, and enduring educational programs, field trips, and learning activities for students with a broad range of physical, sensory, and learning needs.

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.



Arcadia, Northampton & Easthampton



Laughing Brook, Hampden



Pleasant Valley, Lenox

Our Wildlife Sanctuaries

Arcadia Wildlife Sanctuary, Easthampton & Northampton

Arcadia's diverse terrain of forest, meadow, marsh, and wetlands attracts an extraordinary variety of wildlife. You'll also find a thriving population of wildflowers thanks to its rich, loamy soil—a characteristic of the Connecticut River floodplain. Many relatively level trails wind through this welcoming sanctuary, including an easy and accessible trail leading to a huge vernal pool. Accessible trails and restrooms are available at this site.

Canoe Meadows Wildlife Sanctuary, Pittsfield

Located just one mile from the center of Pittsfield, Canoe Meadows Wildlife Sanctuary brings wildness into the heart of Berkshire County's largest city, attracting warblers, turtles, ospreys, otters, and even bears, bobcats, and coyotes. Relatively level trails wind through the sanctuary's scenic woods, fields, and wetlands, and along the edge of the Housatonic River.

Laughing Brook Wildlife Sanctuary, Hampden

Laughing Brook, the former home of children's author Thornton Burgess, is a hidden gem just outside of Springfield that encompasses 366 primarily forested acres. A beautiful brook, small pond, and several vernal pools are great places to look for frogs, salamanders, dragonflies, swallows, and evidence of beavers and other night active mammals. Four miles of trails, ranging from gentle to more strenuous, pass interesting sanctuary features like East Brook and Split Rock.

Pleasant Valley Wildlife Sanctuary, Lenox

Set amidst more than 1,400 lush acres in Lenox, Pleasant Valley's varied trails wind through forests, meadows, beaver ponds, and wetlands. While exploring, there's a good chance you will see evidence of the sanctuary's most visible wildlife resident—the beaver—via dams, lodges, and feeding areas they create. Trails range from gentle and accessible pond views to steep and challenging ascents to inspiring views. Accessible trails and restrooms are available at this site.



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 4 for more details.



Additional Programs

Nature Through the Seasons Grades K-1 | fall, winter, and spring Three Field Trips: 2 hours each

Explore the question “What makes each season unique and how do different living things respond to dramatic and subtle changes?” Observe and compare changes in plants, animals, and weather at a wildlife sanctuary near you or your schoolyard, during the seasons of fall, winter, and spring.

Locations: Field experience may take place at your schoolyard or any Mass Audubon West wildlife sanctuary

What Is Wild?

Grade 2 | fall, winter, or spring
Classroom: 2-4 one-hour sessions | Field Trip: 2 hours

In this introduction to wildlife, we explore the meanings of “wild” and “wildlife” through classroom activities comparing domestic, tame, and wild animals; nature mysteries; schoolyard explorations; and a sanctuary field trip.

Locations: Field experience may take place at your schoolyard or any Mass Audubon West wildlife sanctuary

Early Childhood & Elementary

Additional Programs

Wonders of Water

Grade 2 | fall or spring

Classroom: 4 one-hour lessons | Field Trip: 2 hours

How does water shape the earth and what lives in different kinds of water? Watch water move through different materials, observe the life in pond water, become a water creature, and investigate a body of water.

Locations: Field experience may take place at your schoolyard or any Mass Audubon West wildlife sanctuary

Habitat Is Where It's At

Grade 3 | fall, winter, or spring

Classroom: 4-8 one-hour lessons | Field Trip: 2 hours

Explore the habitat needs of local animals and plants in natural areas such as vernal pools, rivers, fields, and forests. Unravel the fascinating life cycles and food webs connected to diverse land and water ecosystems. Visit different habitats with hands-on learning stations to observe life cycles, food webs, and adaptations, and explore the importance of protecting these natural areas.

Locations: Field experience may take place at your schoolyard or any Mass Audubon West wildlife sanctuary

Adaptations and Survival Strategies

Grade 4 | fall, winter, or spring

Classroom: 4 one-hour lessons | Field Trip: 2 hours

Examine flowers, leaves, feathers, fur, and even bones to explore the characteristics that help animals and plants survive. Discover how internal and external structures support survival, growth, behavior, and reproduction of living things. Become an outdoor detective searching for evidence of adaptations and survival strategies in any season.

Locations: Field experience may take place at your schoolyard or any Mass Audubon West wildlife sanctuary

Earth Movers

Grade 4 | fall, winter, or spring

Classroom: 4 one-hour lessons | Field Trip: 2 hours

Explore the geological processes that shape Earth's surface and form soil from solid rock. Abstract concepts become visible as they use hand lenses to view rock minerals, soil core sampling tools and graduated sieves to examine soil composition, and stream tables to model stream dynamics.

Locations: Field experience may take place at your schoolyard or any Mass Audubon West wildlife sanctuary

The Changing Forest

Grade 5 | fall, winter, or spring

Classroom: 4 one-hour lessons | Field Trip: 2 hours

Explore how forests grow and change through photosynthesis, forest succession, seasonal changes, and decomposition. Follow the path of the sun's energy and nutrients from producers to consumers and decomposers. Visit a forest to search for evidence of the food web and the never-ending story of change in a forest. Observe organisms big and small from enormous trees to tiny fungi and see how the countless parts of a forest are interconnected and so important to protect, for people and wildlife.

Locations: Field experience may take place at your schoolyard or any Mass Audubon West wildlife sanctuary

Water Keepers and Caretakers

Grade 5 | fall, winter, or spring

Classroom: 4-8 one-hour lessons | Field Trip: 2 hours

Discover the wonders of water while becoming part of the water cycle and mapping your place in the watershed. Investigate what lives in local streams and rivers by using nets, magnifiers, and microscopes and learn to measure water quality with scientific tools. Explore the challenge of keeping water clean, and learn dozens of simple ways to help protect our rivers and streams.

Locations: Field experience may take place at your schoolyard or any Mass Audubon West wildlife sanctuary



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 8.



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.



Science of Massachusetts

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.



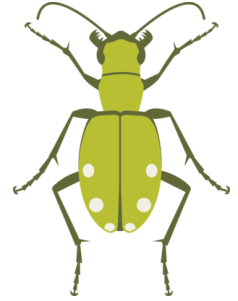
Support is available for districts with financial challenges, and our curriculum is designed to be accessible to all learners. Training is available to support teachers implementing the curriculum for the first time.

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.

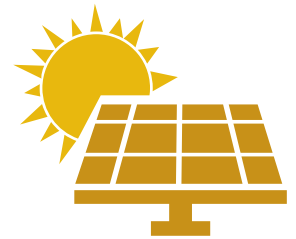


Grades 3–5

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.



► Learn more about Science of Massachusetts at massaudubon.org/SOM.



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 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 & High School

Available Programs

Biodiversity

Grade 6 | fall, winter, or spring

Classroom: 4 one-hour lessons | Field Trip: 2 hours

Explore the impact of climate change, habitat loss, invasive species, pollution, human population growth, and overharvesting on wildlife around the world. Examine the scope of the problem by defining biodiversity through role-playing of natural and human impacts on wildlife populations. Participate in a mini Bio-Blitz at a sanctuary or your schoolyard and investigate the diversity of organisms in an aquatic or terrestrial ecosystems (e.g. pond, stream, forest, or field) near you.

Field Trip Locations: Your schoolyard or any Mass Audubon West wildlife sanctuary

Disturbances and Flooding

Grade 7 | fall, winter, or spring

Classroom: 4 one-hour lessons | Field Trip: 2 hours

Explore local climate change impacts through the lenses of hydrology, ecosystem dynamics, and environmental justice; analyzing data to provide evidence that disruptions can impact humans and other living things. Then, role-play different points of view to learn how people can support native biodiversity and propose community adaptation strategies.

Field Trip Locations: Your schoolyard or any Mass Audubon West wildlife sanctuary

Climate Change and Forest Carbon

Grade 8 | fall, winter, or spring

Classroom: 4 one-hour lessons | Field Trip: 2 hours

Healthy trees and forests are an important climate change solution and powerful tools for supporting environmental justice. Visualize the critical role of forests in controlling climate change impacts by exploring publicly available GIS tools and maps of carbon storage and aquatic buffer zones. Visit a sanctuary or schoolyard to calculate the carbon stored in a single tree and then a whole forest. Analyze and synthesize data and

measurements to formulate recommendations for forest protection in your community.

Field Trip Locations: Your schoolyard or any Mass Audubon West wildlife sanctuary

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 4-5 for more information.



Middle & High School

Available Programs (continued)

Community Science

Grades 9–12 | fall, winter, or spring

Classroom: 4 one-hour lessons | Field Trip: 2 hours

Scientists need our help to understand human impacts on nature (like climate change) in order to protect it. Students will explore several community science projects that contribute to national and international conservation databases. Then, we'll head to a wildlife sanctuary or your schoolyard to collect our own data. Recent projects include: Nest Watch, iNaturalist, eBird, Frog Watch, Firefly Watch, Project Bud Burst, and Nature's Notebook.

Field Trip Locations: Your schoolyard or any Mass Audubon West wildlife sanctuary

Growing Carbon: Climate Change and Resilient Landscapes

Grades 9–12 | fall, winter, or spring

Classroom: 4 one-hour lessons | Field Trip: 2 hours

Explore the connection between land management and the ability of forests, wetlands, or agricultural lands to store carbon in vegetation and soil. Evaluate how resilient landscapes are better able to survive climate change impacts like drought, flooding, and storms.

Survey your schoolyard or a wildlife sanctuary to answer the question, "Is this landscape resilient?" Then, take action locally to help your environment and community become more climate change resilient, with projects such as open space protection and invasive species management. AP students perform a full tree stand forest analysis using professional forestry methods.

Field Trip Locations: Your schoolyard or any Mass Audubon West wildlife sanctuary

Specialty Programming

Canoe Adventures

Grades 6–12 | fall, winter, or spring

Field Trip: 2 hours

Explore an aquatic ecosystem by canoe, observing wildlife and assessing water quality. Evaluate the role of beavers and their impact on people and other wildlife. Explore nature from a whole new perspective, going with the flow in a place where wildlife thrives and people are less-frequent visitors.

Note: Canoe trips have limited capacity and are weather-dependent.

Locations: Any Mass Audubon West wildlife sanctuary or local body of water.





Additional Programs

Afterschool Programs

Enrich your afterschool program with a nature-based option that will get students outdoors to explore, have fun, and practice age-appropriate science skills in their own schoolyard. Whether you have access to asphalt and a few trees, a school garden, or a full forest, we will help your students connect with the diversity and wonder of the natural world.

Environmental Explorers

Available for grades K–8

Designed for groups of 12–15 students, Environmental Explorers is a weekly afterschool offering that connects students in grades K–8 to nature wherever they are.

Each week, students dig into a new topic while building science practices and naturalist skills. When possible, lessons will bring students outside and use whatever environment is readily available.

Environmental Leaders Club

Available for grades 6–12

This year-long, project-based afterschool program engages youth in learning about environmental issues affecting their own community and developing solutions that will make an impact.

Students will participate in hands-on, nature-based learning; practice communication, leadership, and teamwork skills; meet adults in environmental careers; and give back to their community.

Naturalist-in-Residence

Available for all grade levels (Pre-K–12)

Get students outdoors and exploring the natural world right outside of their school doors. Every visit with your Mass Audubon Naturalist-in-Residence will engage students in a hands-on, inquiry-based science lesson.

Our staff will work alongside school teachers to integrate these lessons into the science, literacy, ELL, arts, or other curriculum for any grade level. Frequency of visits can vary from weekly to monthly.

iPlan: Mapping the Future

iPlan is a free online game that allows learners to construct, investigate, and solve simulated urban and regional planning problems. Using real geospatial, ecological, and economic data, iPlan transforms any location in the contiguous United States into an interactive land-use planning simulation.

Middle and high school students can design and test rezoning plans that address socioeconomic and environmental challenges and their plans are evaluated by virtual stakeholders who advocate for different community priorities.

Learn more and start playing at i-plan.us.





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.

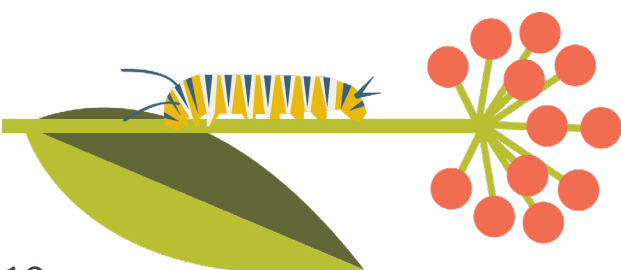
	2 Hours	2.5 Hours	3 Hours	4 Hours
First group (up to 15)	\$180	\$210	\$230	\$280
Additional groups of 15	\$150	\$170	\$200	\$240

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.

	Standard Rate	Specialty Programs*
First hour	\$160	\$205
Each additional hour	\$105	\$155

*Special rates may apply for programs, such as intensive labs or wildlife ambassador visits, that require additional prep time or materials costs.





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 an immersive experience, try one of our professional development Summer Institutes!

Program details, dates and times, registration information, and additional offerings can be found on our website at massaudubon.org/pd.

Summer Institutes

Nature School for Teachers: Schoolyard Habitats

Four in-person, day-long sessions, plus one online follow-up session in November

Nature School for Teachers is an opportunity for K-8 teachers to immerse themselves in science by exploring their local habitat and meaningfully connecting with the science practices embedded in the Massachusetts Science Frameworks.

Participants will practice inquiry-based learning methods through hands-on exploration of local habitats, field research, and an investigation design process they can bring back to their classrooms.

Locations: Either Drumlin Farm Wildlife Sanctuary, Lincoln or Moose Hill Wildlife Sanctuary, Sharon

Virtual Workshops

Teaching Climate Justice

Three online sessions, two hours each

Join educators from across the state and gain the skills, tools, and resources to teach climate change.

In this three-part, virtual workshop series, participants will review the basics of climate change science, learn about local climate impacts through a climate justice lens, and explore how to support students' involvement in meaningful solutions to climate change in their communities.

Location: Online





School & District Workshops

Early Education (Preschool–Grade 2)

Inside & Outside with Nature

With packed schedules and variable access to time outdoors and natural resources, how do you make environmental learning more of a presence in your classroom? In this three-part series, we'll explore where nature can fit into your daily routines (hint: everywhere!) and how to incorporate it seamlessly.

Whether you are an urban, rural, or suburban-based school, the workshops in this series will demonstrate ways to bring nature into learning every day.

Register for the full, three-part series and receive a 25% discount on a site visit at your school, or register for a single workshop. Detailed workshop descriptions are available on our website at massaudubon.org/pd.

Grades K–8

Bringing Learning Outdoors

Make the most of whatever nature surrounds your schoolyard, whether that's a parking lot, a suburban lawn or a forest. In this three-part series, we'll help participants use inquiry-based techniques to incorporate the nature around them into their curriculum, while imparting practical skills to make outdoor learning a realistic, enjoyable, and effective part of the school experience.

Register for the full, three-part series and receive a 15% discount, or register for a single workshop.

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.





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.