Ipswich River
Wildlife Sanctuary

PreK-Grade 12
School Programs

2016 - 2017

Environmental Education Programs supporting the Massachusetts Science and Technology/Engineering Standards
Welcome to the Ipswich River Wildlife Sanctuary!

The 1,954-acre Ipswich River Wildlife Sanctuary is one of Mass Audubon's largest properties. More than 12 miles of interconnecting trails invite exploration of forests, meadows, wetlands, islands, and vernal pools. Eight miles of the Ipswich River meander through the property, creating a diverse terrain, and making this an important place for many organisms year-round. See the inside back cover for more information.

Educational Programs

Over the years, our staff has provided thousands of environmental education programs for pre-K, elementary, middle, and high school students on the North Shore of Massachusetts. Under the guidance of our education staff and field teachers, students investigate, explore, and marvel at the wonders of the natural world while gaining valuable knowledge in the life and earth sciences. We offer programming at the sanctuary or at your school, as well as a Naturalist in Residency program and teacher workshops. Our programs cultivate an appreciation for and an understanding of the environment and our interrelationships with the natural world. It is also our goal to develop thoughtful, conservation-minded citizens for the future.

Massachusetts Science, Technology and Engineering Standards

We provide a wide range of programs which are specially designed to support state standards. See our program descriptions to select programs to help you meet specific standards. Please note that our programs can also be adapted to meet your specific criteria. For more details, search our school catalog online.

This brochure is available online: massaudubon.org/ipswichriver. Just click on School & Group Programs for the PDF file. Stay up-to-date on upcoming programs and events at the sanctuary through our e-newsletter, Ipswich River Meanderings. To subscribe, visit massaudubon.org/ipswichriver.
Program Pricing and Registration Information

At the Sanctuary:

<table>
<thead>
<tr>
<th>Duration</th>
<th>Rate</th>
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<tbody>
<tr>
<td>1 hour</td>
<td>$8.50/person</td>
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<tr>
<td>1.5 hours</td>
<td>$9.00/person</td>
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<tr>
<td>2 hours</td>
<td>$9.50/person</td>
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<tr>
<td>2.5 hours</td>
<td>$10.00/person</td>
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<tr>
<td>3 hours</td>
<td>$11.00/person</td>
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<tr>
<td>River Ecology</td>
<td>$26.00/person</td>
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10 participants or fewer, 1.5 hours: $11.50/person
10 participants or fewer, 2 hours: $13.50/person

One adult per field group of students may attend at no charge.*
*This does not apply to the maple sugaring programs.

At your School: $135 classroom (18-25 students), plus mileage. Pre-site visit (optional): $30.

To design a custom program, or to review the curriculum, please contact:
Kim LoGrasso, Youth Education Manager
978-887-9264 x 7706 or email: klograsso@massaudubon.org

To schedule a program, please contact:
Stina MacDougall, School Programs Administrator
978-887-9264 x 7705 or email: smacdougall@massaudubon.org
FAX: 978-887-0875

Registration Details

Registrations are processed on a first-come, first-served basis, and must be accompanied by a $50 deposit. A confirmation letter, invoice, and directions will be sent upon receipt of the deposit. The balance is due upon arrival. To receive a refund of the balance paid, you must notify us of your withdrawal at least two weeks prior to the program. A refund will be issued only if a program is canceled and we are unable to reschedule. Programs will be canceled if schools are canceled in Topsfield, or your town, due to snow. No rebates will be given for incomplete attendance. We look forward to your visit.
Signs of the Season  
**Pre-K & K**

Enjoy a guided sensory walk through the woods and fields. Each class observes the changes in plant and animal life along the trail, throughout the changing seasons. Choose from fall, winter, or spring or register for all three. 1 or 1.5 hours.


**Insects and their Relatives**  
**Pre-K—Grade 1**

Investigate decomposing logs and the sanctuary fields in search of critters that live in our backyard. 1 or 1.5 hours.


**Pond Life**  
**K & Grade 1**

This program allows students to explore life in and around a pond. Using simple sampling tools we will examine aquatic invertebrates, observe wetland plants, and look for signs of animals. 2 hours.

1-LS1-1a, 1-LS1-1b / K-LS1-1, K-LS1-2

**Birds**  
**K & Grade 1**

Find out what makes a bird a bird with hands-on station activities and study mounts. Learn how to use binoculars, and discuss adaptation and behaviors before exploring the trails to identify our common birds through sight and sound. 1.5 or 2 hours.

K-LS1-1, K-LS1-2 / 1-LS1-1a, 1-LS1-2

**Frogs and Toads**  
**K & Grade 1**

How do you tell a frog from a toad? Students will learn about life cycles and characteristics through games and hands-on discoveries as we explore the wetlands, vernal pools, and fields of the sanctuary. *Spring only.* 1.5 or 2 hours.

K-LS1-1, K-LS1-2 / 1-LS11-1a

**Plants Around Us**  
**K—Grade 2**

Students visit different ecosystems to carefully investigate the plants they find. Through hands-on activities, students will observe the parts of a plant, learn what plants need to survive, and how they compete with each other. 1.5 or 2 hours.

K-LS1-1, K-LS1-2 / 1-LS1-1b / 2-LS4-1, 2-LS2-3

www.massaudubon.org/ipswichriver
### Trees
**K—Grade 2**
Students will learn how a tree functions and changes with the seasons by studying conifers and broad-leaved trees and identifying some trees by leaf shape. We will observe the life cycle of trees from maturity to decay while we discover which animals rely on trees for their survival. 1.5 or 2 hours.

K-LS1-1, K-LS1-2 / 1-LS1-1b / 2-LS4-la, 2-LS4-1b

### Comparing Ecosystems
**Grade 2**
Explore plant life and search for evidence of animal life inhabiting our sanctuary by investigating three different ecosystems and comparing what makes these plants and animals unique. 2 or 2.5 hours.

2-LS4

### Wetland Communities
**Grade 3**
Students will explore our freshwater habitats to observe and sample the varied organisms within. We will describe different life cycles of these organisms and gather data on their adaptations.

2 hours.

3-LS1-1, 3-LS4-2, 3-LS4-3, 3-LS4-4, 3-LS4-5

### Landscapes & Landforms
**Grade 4**
Our sanctuary is a dynamic landscape with glacier-made observable landforms. We will study these formations and collect data on the effects of weathering, erosion, and deposition in our local ecosystems. 2 hours.

4-ESS1-1, 4-ESS2-1, 4-ESS2-2

### Survival in Ecosystems
**Grade 4**
Students will investigate three different ecosystems found on our sanctuary. We will observe field, forest, and pond organisms and gather data on the physical structures that allow them to survive and thrive. 2 or 2.5 hours.

4-LS1-1
### Energy Flow in Ecosystems \textbf{Grade 5}

Students will explore the living and nonliving factors that make up our local ecosystems. We will sample and observe organisms and gather data to model the flow of energy and the cycling of matter. 2 or 2.5 hours.

<table>
<thead>
<tr>
<th>Grades</th>
<th>Description</th>
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<tbody>
<tr>
<td>5-ESS2-1, 5-LS1-1, 5-LS2-1, 5PS3-1</td>
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### Energy Flow in Wetlands \textbf{Grades 6-8}

Take an in-depth look at the producers, consumers, and decomposers found in a wetland. Identify local wetland plants, collect water samples, and catch aquatic creatures in order to discover how matter is recycled and energy flows through these important and fascinating ecosystems. We’ll also discuss human impacts on our water over time and how we can all help protect our wetlands. 3 hours.

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<tr>
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<tbody>
<tr>
<td>6-MS-LS1-3 / 7-MS-ESS2-4, 7-MS-ESS3-4, 7-MS-LS2-2, 7-MS-LS2-3 / 8-MS-PS1-4</td>
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### River Ecology \textbf{Grades 6-12}

The many stories and lessons our rivers hold can often be best experienced from a canoe. Paddle with us down the Ipswich River to learn about its rich history, ecology, and wildlife. Participate in activities like water quality testing, aquatic macroinvertebrate sampling, and reading the landscape for clues of the past, present, and future of this dynamic ecosystem. Delve deeper into the adaptations of aquatic organisms, natural and human influences on the watershed, and how we can protect the river’s resources. 3.5 hours.

$375 per group, or $26 per person for groups larger than 15 participants. Fee includes canoe instruction, personal flotation device (PFD), paddle, and two Mass Audubon naturalists.

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<tr>
<td>6-MS-LS1-3 / 7-MS-ESS2-2, 7-MS-ESS2-4, 7-MS-ESS3-4 / 8-MS-ESS3-5 / HS-LS2-1, HS-LS2-7, HS-LS2-6</td>
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www.massaudubon.org/ipswichriver
### Winter Programs

<table>
<thead>
<tr>
<th>Winter Survival</th>
<th>Grades 1—2</th>
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<tr>
<td>How do animals adapt to our long cold winters? Through indoor and outdoor activities, students will examine the survival strategies of animals in winter and learn basic track identification skills. Students will examine prints and track patterns, learn to move like mammals, and practice their tracking skills along the sanctuary trails. 1 or 1.5 hours.</td>
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<td>1-LS1-1 / 2-LS4-1</td>
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<tr>
<th>Winter Tracking</th>
<th>Grades 3—12</th>
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<tr>
<td>Learn how body shape, leg length, and foot type determine an animal’s track pattern. Make connections to unseen animals by learning and following tracks, looking for other evidence of activity, and practicing your silent stalking. 2 hours.</td>
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<tr>
<td>3-LS4-3 / 4-LS1-1 / 5-LS2-1 / 6.MS-LS1-3 / 7.MS-LS1-4 / HS-LS2-1</td>
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<thead>
<tr>
<th>Maple Sugaring</th>
<th>Pre-K—Grade 8</th>
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<td>Learn about the sap collecting methods and the sap making processes used by Native Americans and modern sugar makers. We will observe trees and wildlife in late winter and taste sap from the buckets. We will end the tour with a visit to our sugar house to see how sap changes to maple syrup, and of course, for a sweet sample of our fresh syrup! 1 hour.</td>
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<td>All programs are $8.50 per person.</td>
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**Preschool: Grade 8**  
**Tuesday through Friday:**  
February 14-17, February 28-March 3, March 7-10, 2017  
**Times:** 9:30-10:30 am, 11:00 am-noon, or 12:30-1:30 pm  

We Come to You
Programs in the Classroom

One-hour programs, available year-round

Nocturnal Animals  
K—Grade 2
Students are introduced to the concept of nocturnal animals through role-play, games, discussion, and a close-up look at animal specimens. Explore animal adaptations for survival, such as food and predator defense.  
Indoors, year-round.


Signs of the Seasons  
Pre-K—Grade 1
Enjoy a guided walk through the woods and fields on your school property or natural space near you. Explore nature’s seasonal changes using the senses of sight, sound, touch, hearing, and smell. Each class observes plant and animal life throughout the changing seasons.  
Outdoors, early fall or spring.


Animal Adaptations  
Grades 7—8
Students will examine real animal artifacts like fur and skulls to discover how living things are adapted to how and where they live. They will play games to see firsthand the connection between an organism’s physical features and survival. Older students will also discuss how natural selection shapes these traits.  
Indoors, year-round.

| 7.MS-LS1-4 / 8.MS-LS4-4 |

Energy Matters  
Grades 5 & 7
Producers, consumers, and decomposers will host a lesson on the flow of energy as it moves through nature in a dynamic cycle.  
Outdoors, fall or spring.

| 5-PS2-1 / 7.MS-LS2-3 |

Owls  
Grades 2—6
Learn about these magnificent silent hunters, their unique adaptations, and their importance in the food chain. Students will examine study mounts of three local owls, then in groups dissect an owl pellet to discover what they eat. $30 materials fee per class.  
Indoors, year-round.

| K-ESS2, K-LS1-2 / 1-LS1-1a, 1-LS3-1 / 2-LS2-3 / 3-LS4-2 / 4-LS1-1 / 5-LS2-1 / 6.MS-LS1-3 |

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Nature Journaling
Reconnect your students to the natural world while bringing out their creative sides through interdisciplinary approaches to nature journaling. Class may take place in the classroom, in the schoolyard, or at the sanctuary. Year-round.

Please specify desired topic and standard.

Tide Pool Exploration
Explore the rocky shore and tide pools at a beach in Marblehead or an appropriate beach near you. Programs are scheduled according to the tide chart. Fall or spring.

K-ESS2, K-LS1-1, K-LS1-2, K-PS3-1 / 1-LS1-1 / 2-ESS2-3, 2-LS2-3, 2-LS4-1a / 3-LS4-2, 3-LS4-4 / 4-LS1-1 / 5-ESS2-1, 5-LS2-1 / 6-MS-LS1-3 / 7-MS-LS1-4 / 8-MS-ESS1-2

Naturalist in Residency Program
Could your school benefit from a continued relationship with a skilled naturalist from Ipswich River Wildlife Sanctuary? We offer a unique opportunity designed to help schools develop a connection to the natural world outside on their own school grounds and within the classroom.

- Enrich your life science curriculum
- Explore with hands-on, standards-based activities
- Participate in teacher workshops
- Have direct contact with a sanctuary naturalist for all your natural history questions
Homeschool Programs

Fall and Spring Programs

Our homeschool program introduces students to basic ecology while nurturing an appreciation for and understanding of the natural world. Students will become familiar with the plants and animals of our area through hands-on discoveries. Each class will begin with a short introduction indoors, followed by outdoor exploration.

**Grades 1-8, 2 hours**
Series of six or eight Wednesday mornings OR afternoons.

For additional information please contact:

Cori Brauer, Education Coordinator
978-887-9264 x 7704 or email: cbrauer@massaudubon.org

Teacher Workshops

Let us design a workshop suited to your school’s needs. Our programs will incorporate life science concepts from the state education standards into activities to use with your students.

Come Visit the
Ipswich River Wildlife Sanctuary in Topsfield

Directions:

**From the south:** Take Rt. I-95 north to exit 50 and follow Rt. 1 north. At the junction of Rt. 1 and Rt. 97, turn right onto Rt. 97 south (toward Beverly and Danvers.) Follow Rt. 97 south and take the third left onto Perkins Row. Follow Perkins Row for 1 mile, and the sanctuary is on the right.

**From the north:** Take Rt. I-95 south to exit 53A and follow Rt. 97 south. At the junction of Rt. 1 and Rt. 97 in Topsfield, stay on Rt. 97 south and take the third left onto Perkins Row. Follow Perkins Row for 1 mile, and the sanctuary is on the right.

www.massaudubon.org/ipswichriver
Mass Audubon protects 36,500 acres of land throughout Massachusetts, saving birds and other wildlife, and making nature accessible to all. As Massachusetts' largest nature conservation nonprofit, we welcome more than a half million visitors a year to our wildlife sanctuaries and 20 nature centers. From inspiring hilltop views to breathtaking coastal landscapes, serene woods, and working farms, we believe in protecting our state’s natural treasures for wildlife and for all people—a vision shared in 1896 by our founders, two extraordinary Boston women. Today, Mass Audubon is a nationally recognized environmental education leader, offering thousands of camp, school, and adult programs that get over 225,000 kids and adults outdoors every year. With more than 125,000 members and supporters, we advocate on Beacon Hill and beyond, and conduct conservation research to preserve the natural heritage of our beautiful state for today’s and future generations. We welcome you to explore a nearby sanctuary, find inspiration, and get involved. Learn how at massaudubon.org.

There’s More to Discover at the Ipswich River Wildlife Sanctuary

Take advantage of our membership benefits and rent a canoe for a paddle along the Ipswich River, spend a night in the Innermost House, or camp out on Perkins Island. Join us for one or all of our special events, including: Maple Sugaring in March, It’s a Big Night in April (vernal pools and salamanders), Audubon Nature Festival in June (with live animal presentations), Halloween Happenings in October, and the Big Woods Hike in November.

Our educators offer natural history programs for children, families, and adults year-round. Children have fun in nature at our summer day camp programs along with vacation programs each February and April. Celebrate your child’s birthday with a naturalist-led program and party time. Brochures are available with descriptions of all programs. Call the sanctuary, and we will be happy to mail you one, or check out our website: massaudubon.org/ipswichriver.

We hope to see you at the Ipswich River Wildlife Sanctuary!
Why Choose Ipswich River Wildlife Sanctuary?

- Massachusetts Standard-based curriculum
- On-site life science programs
- In-class and school ground programs
- Teacher Workshops