



**School Program Name:** Salt Marsh  
**Name of Sanctuary:** Long Pasture Wildlife Sanctuary  
**Grade Level:** 3-5  
**Location Options:** In classroom & at Long Pasture  
**Time:** 4 hours  
**For more info:** [longpasture@massaudubon.org](mailto:longpasture@massaudubon.org) or  
(508) 362- 7475 x9355

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### Program Description

Students will focus on the role of the salt marsh as a nursery for ocean dwelling creatures. They will also learn about the natural history of the Diamondback terrapin and the horseshoe crab. They realize that though these creatures are quite different, they share common evolutionary traits, such as being ancient, having a carapace, slow growth, laying eggs in sand and living in the marsh. In the field, teams will use transect lines and quadrats to observe the salt marsh. Finally, students measure, weigh and sketch Horseshoe Crab molts and Diamondback Terrapins.

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### Massachusetts Curriculum Frameworks

**Framework:** Science and Technology  
**Strand:** Life Science  
**Topic:** Characteristics of Plants and Animals

### Learning Standards

#### Characteristics of Plants and Animals

3-5 Life Science #1: Classify plants and animals according to the physical characteristics that they share.

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### Massachusetts Curriculum Frameworks

**Framework:** Science and Technology  
**Strand:** Life Science  
**Topic:** Structures and Functions

### Learning Standards

#### Structures and Functions

3-5 Life Science #2: Identify the structures in plants (leaves, roots, flowers, stem, bark, wood) that are responsible for food production, support, water transport, reproduction, growth, and protection.





- 3-5 Life Science #3: Recognize that plants and animals go through predictable life cycles that include birth, growth, development, reproduction, and death.
- 3-5 Life Science #4: Describe the major stages that characterize life cycles

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## Lesson Objectives

What will students know and be able to do? These objectives must be observable and measurable.

Students will know and be able to:

- Understand how a salt marsh forms and the role of cordgrass.
- Learn about the salt marsh food chains and food web.
- See why creatures must adapt to living in the marsh with its changing tides.
- Realize the role of salt marshes in filtering pollution and controlling flood waters.

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## Vocabulary

Salt marsh                      quadrats                      *Spartina*                      tide                      peat                      panne                      wrackline

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## Assessments

How will you know that the students have met the standards?

- Sensing the Salt Marsh Observation Sheet will be full and students will be able to discuss what they've recorded
- Transect Study Sheet will generate discussions regarding what and how things are found
- Students will be observed discussing mussels

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## Summarizer

How will the Mass Audubon Educator close the lesson to see if students met the objectives?

- In the field, students will gather and discuss their Observation sheet.



## Mass Audubon School Programs

At Mass Audubon we strive to create learning experiences that are enriching, innovative, meaningful, and engaging. All our school programs are aligned with Massachusetts Curriculum Frameworks. Our network of wildlife sanctuaries and nature centers located in urban, suburban, and rural communities around the state enable us to have strong relationships with local schools.

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## Our Education Foundations

- Place-based education is an educational philosophy that connects learning to what is local for an individual. We help build conservation communities, working with students and teachers in cities and towns to develop place-based environmental education that is linked directly to their home community.
  - Inquiry-based learning is focused on teamwork, being learner-centered, questioning ourselves and the world around us, providing a more focused, time-intensive exploration, promoting lifelong learning, communication, and learning as fun.
  - We are fully committed to creating a positive and supportive environment for all learners.
  - We strive to be culturally sensitive, recognizing and embracing cultural differences.
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## Differentiated Instruction

- We strive to create a positive learning environment that is inclusive, supportive to all learners, and sensitive to cultural diversity.
  - Outdoor classroom experiences are structured to meet the needs of the particular learners.
  - Students work in small groups using hands-on materials.
  - A variety of educational media are used, including colorful illustrations.
  - With advance notice, efforts will be made to accommodate all learning styles and physical needs.
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## Notes

- Nature exploration is dependent upon the weather and other conditions. A class might observe different wildlife than they expected to see. An outdoor lesson can sometimes provide unexpected, but enriching teachable moments on a natural history topic that was not planned.
- Mass Audubon nature centers each have a unique landscape and will customize programs to work best at their particular site.
- Our lessons can be adapted to incorporate a classroom teacher's needs.

