



Student Estuary Exploration Program Packet



DELAWARE
CENTER FOR THE
INLAND BAYS

preserve • protect • restore

About the Center

The Delaware Center for the Inland Bays (Center) was established by the Delaware General Assembly as a nonprofit organization in 1994. It is also 1 of 28 National Estuary Programs in the country. The Center's mission is to preserve, protect, and restore Delaware's Inland Bays and their watershed. More information about the Center can be found at inlandbays.org.

Education Program Overview

The Center is redefining the classroom by turning the meadows, maritime forests, beaches and salt marshes of the Inland Bays into interactive, outdoor learning resources for students. The Student Estuary Exploration (SEE) environmental education program consists of fun, informative, and hands-on learning opportunities for students of all ages. The goal is to increase student environmental literacy—defined as “an individual's understanding, skills and motivation to make responsible decisions that considers their relationships to natural systems, communities and future generations”—through nature-based learning¹. Environmental education improves academic achievement, encourages environmental stewardship, deepens personal development and wellbeing, and strengthens communities².

Established in 1999, the Center's youth education program has served over 20,000 students. Programs are offered free of charge to all schools and youth groups (e.g., clubs, community youth groups, scout troops, after school centers, etc.). The inquiry-based activities are aligned with Next Generation Science Standards and offer three-dimensional learning instruction that includes disciplinary core ideas, Science, Technology, Engineering, Art, & Math (STEAM) practices, and crosscutting concepts. A fundamental component of the lessons is the incorporation of outdoor science activities offered by the Better Environmental Education, Teaching, Learning & Expertise Sharing project (beetlesproject.org) which is supported by current pedagogy about how people learn.

¹ <https://oelp.oregonstate.edu/oelp-plan/what-environmental-literacy>

² <https://www.neefusa.org/education/benefits>

Program Location & Format Options

SEE programs primarily take place outdoors at the James Farm Ecological Preserve located at 30048 Cedar Neck Road Ocean View, DE 19970. This 150-acre property has seven different habitats including: maritime forest, meadow, freshwater wetlands, salt marsh, tidal flats, beach, and the Indian River Bay. More information about the Preserve and a site map is available online at: inlandbays.org/visit-the-preserve/.

Programs range between 2-6 hours in length. Center environmental educators deliver lessons that encourage students to explore the diverse habitats on site while recording their observations, identifying terrestrial and aquatic species, and generating solutions to reduce negative human impacts on local ecosystems. Prior to departing, students will be guided through an interactive sketchnote activity to review and share lessons learned as a group.

In addition to programming held at the Preserve, the Center offers virtual and off-site learning opportunities to accommodate diverse group needs. All programs may be customized to complement current classroom lessons and/or group interest.



Booking Process

Contact the Center's Manager of Environmental Education (Manager) to schedule a program. Please note that dates are offered on a first come, first serve basis. During this process, you will also work with the Manager to select the appropriate activities that meet your learners' needs. All programs are offered free of charge, but donations are graciously accepted to help offset costs. The lead teacher will also receive electronic pre and post-program questionnaires. Feedback provided through these brief questionnaires is voluntary and will assist the Center in evaluating the success of the SEE program. The pre-program questionnaire also allows teachers to request additional accommodations (e.g., beach wheelchairs, translation services, water shoes, etc.) to help make programming more accessible.

IMPORTANT: Prior to arrival, a parent/guardian of all program participants under the age of 18 are required to sign the Center's waiver.

Inclement Weather & Cancellations

Preserve programs take place outdoors and/or in our 3-season education building. If severe or unsafe weather is forecast (e.g., high winds, heavy rain, lightning, flooding, extreme heat, poor air quality, tornadoes, snow, ice, hail, or temperatures below 45°F), programs will be canceled at least 24 hours in advance to ensure the safety of staff and participants.

Light or intermittent rain will not automatically result in cancellation. In these cases, the Manager and lead teacher will decide whether the program will proceed as planned, with activities adjusted as needed.

If you need to cancel a program for reasons other than weather, please notify the Manager as soon as possible. Whenever feasible, cancellations should be made 48 hours in advance (minimum 24 hours).

Safety & Group Sizes

Safety is always a priority of the Center. Lead educators are CPR/AED & First Aid certified. At the Preserve, educators carry a first aid kit at all times in case of an emergency. Swimming is NOT permitted at any time during programs.

The Center follows the 1:15 adult to child ratio for school-aged children (kindergarten and higher) as outlined in the State of Delaware's DELACARE Regulations for Early Care and Education and School-Age Centers. Please keep this in mind as you are making preparations including chaperones. A maximum group size of 60 students is recommended, but Center staff will do their best to make special arrangements for larger groups if needed.

The Center strives to make programs at the Preserve a positive experience for all participants. Educators will communicate rules and expectations to groups upon arrival and will rely on assistance from teachers and chaperones in regards to student discipline.

What to Expect at the Preserve



Parking

There is ample parking available in the Preserve's main lot. However, in the event that all spaces are taken, overflow parking is located in the field across the street from the main entrance. If you will be traveling by bus, there is a designated bus parking area in the main lot.



Restrooms

The site offers two single-stall, ADA-compliant restrooms.

A large deck and an outdoor amphitheater are available in the campus area for group snack or lunch breaks. Please note that the Preserve follows a carry-in/carry-out policy; all trash must be removed by visiting groups.

No potable water is currently available.



Susie K. Ball Education Center

The Preserve's three-season education building is equipped with laboratory and audiovisual technology, as well as a hand-washing station for students.

The Susie Center may also serve as a shelter in the event of inclement weather.



Terrain & Mobility

Participants will travel along unpaved paths including dirt trails, wooden boardwalks, grassy meadows, marshes, and sandy beaches. While the terrain is predominantly flat, there are tree roots, mud, sand and water present. Groups will walk up to 2 miles during their field trip. If requested in advance, the Center will coordinate wheelchair services. *Note: At this time, wheelchairs are provided by a third party and availability is limited.*



What To Wear

- Dress for the weather - it is typically windier and cooler at the beach than it is at home
- Secure, closed-toe shoes that can get wet and dirty/sandy
- Participants may wade through shin or thigh-deep water. Shoes must stay on. Limited water shoes and chest waders are available upon request.



What to Bring

Each participant is HIGHLY advised to bring:

- Change of clothes & shoes
- Refillable water bottle
- Snacks/lunch
- Sunscreen
- Bug repellent
- Sunhat & sunglasses
- Raincoat (weather dependent)
- Warm hat & gloves (season dependent)



Direct all inquiries to Jackie Knoll, Manager of Environmental Education (jknoll@inlandbays.org; 302-226-8105 ext. 708).