

The James River Ecology School is a joint venture between the James River Association (JRA) and the U.S. Fish and Wildlife Service on Presquile National Wildlife Refuge.

Presquile National Wildlife Refuge

The Ecology School is a residential environmental learning program on Presquile National Wildlife Refuge, a 1,329-acre island in the James River approximately 20 miles south of Richmond. Presquile's

diverse and pristine habitats offer an ideal place to explore and enrich scientific study. Groups travel to and from the island aboard the Spirit of the James, JRA's Coast Guard certified 40-foot pontoon boat.

James River Association

The mission of the James River Association (JRA) is to be guardian of the James River. We provide a voice for the river and take action to promote conservation and responsible stewardship of its natural resources. Through JRA's education programs, we strive to inspire the next generation of stewards of the James River. To this end, we conduct field programs to help students understand and enjoy the river while developing a sense of empowered commitment to living as guardians of the environment.

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Our Classroom

During a visit to the Ecology School students will conduct Virginia SOL-correlated investigations while hiking through upland fields and forests, paddling a freshwater tidal creek, and exploring a pristine swamp habitat on our wetland boardwalk. Our outdoor classroom offers a unique place for students to connect with nature and study real-world applications of science and conservation.

Areas of Study

Indicate on your <u>program request form</u> which area of study you would like to complete during your visit to the Ecology School. Specific learning goals and objectives can also be identified on your program request form, helping us to best connect our curriculum to your classroom studies.

Watershed Systems

Students study the natural processes and human interactions that affect watershed systems.

Life Science

Students investigate the interaction between living and nonliving components of terrestrial and aquatic ecosystems and examine affects of human activity on ecological health.

Earth Science

Students investigate how natural resources are influenced by geologic processes and the activities of humans.

Biology

Students investigate living systems from microscopic organisms to population dynamics.

Environmental Science

Students examine past and present environmental challenges on the James River.

Virginia Studies

Students study Virginia Indian culture, Captain John Smith's explorations, and the dramatic colonial and Civil War narratives that made the James River pivotal in the shaping of our Commonwealth and Nation.

For School Groups

Ecology School Overnight Program

A multi-day trip immersing students in the study of local ecosystems

Please indicate your area of study (refer to page 6 of the catalog) on your online <u>Program Request Form</u>.

Day One

Hop aboard the Ecology School Vessel and travel to Presquile NWR. Day one activities will introduce students to the Refuge, wetlands, and the James River.

Day Two

The crux of the program, students conduct a day-long investigation that will have them asking questions, making hypothesis, collecting data, and drawing conclusions about our environment.



Program Length:

Two to Three Day Overnight Program

Number of Participants:

34 maximum

Location:

The James River & Presquile NWR

Fee:

\$3,000* (\$100 a student w/30 students)

Day Three

Students reflect on their experience and declare their own conservation proclamation.

Post-Trip Engagement

Reflection activities and resources are available to keep students engaged after their visit to Presquile.

What to Expect

- Classes will split into two groups during educational instruction. Each group will be led through the day's activities and investigations by an Ecology School educator. Groups will reconnect during meal times and in the morning and evening.
- Classes are responsible for bringing and preparing their own food. Groups will have full use of the commercial kitchen, cookware, and dining hall during meal times. Visit jrava.org for easy-to-prepare menu plans and recommended shopping lists.
- Students will sleep in a green bunkhouse that provides teachable moments in its sustainable design and operation.



• Single-gender dorms in the bunkhouse will be supervised by adult chaperones provided by the school. We ask that at least two adults attend an Overnight Program with each class.

*If you are committed to providing students with quality field-based learning experiences, but are limited by funds, please contact JRA for more information about need-based scholarships for appropriate individuals and schools.

Ecology School Overnight Program FAQs

What are the overnight accommodations?

The bunkhouse has two single-gender dorm rooms with double and triple bunk beds. The bunkhouse can sleep up to 34 youth and adult chaperones at one time. Located between the bunkrooms is a screened-in porch for group gatherings. Enclosed outdoor showers are located below the bunkhouse facility.

The bunkhouse is an example of low-impact, highly energy-efficient design and construction. The composting toilets, rainwater cisterns, bicyclepowered water pump, and grey-water garden all offer teachable moments in conservation practices while providing a warm, comfortable, protected space to rest.



What is the role of adult chaperones?

Each school group is asked to provide two adult chaperones (teachers or parents). Adult chaperones will be paired with a group of students and a JRA staff leader during the day and evening programs. At night, school-provided chaperones will be responsible for supervising youth in the bunkhouse dorm rooms.

What does a typical day look like?

Youth will spend their days outdoors learning in nature's classroom. We will hike through fields, forests and wetlands, paddle canoes through swamps and marshlands, and conduct investigations by boat on the James River. All the while, youth will engage in hands-on learning and real life applications of science and conservation. The evenings will be spent reflecting on the informal and formal lessons of the day around a campfire or when sharing a family-style meal.

What will we eat?

Groups provide and prepare their own meals. Youth will help adult chaperones and Ecology School Staff with cooking, serving, and cleaning up our delicious meals. All meals will be prepared in a conventional kitchen and shared family-style in our dining hall.



Are there other facilities on Presquile?

The Menenak Discovery Center, powered by an on-site solar panel, holds a lab space, dining hall, and kitchen. A wetland boardwalk and canoe-launch provides access to Presquile's wetlands and miles of navigable tidal creeks. The island is equipped with three miles of nature trails. An observation platform offers a bird's eye view of the river and fields.

JRA Education Programs FAQs

How do I Sign up for a Program?

Visit www.jrava.org to fill out a <u>Program Request Form</u> with your contact information, area of study, and group information. JRA will be in touch soon after to schedule a program. Programs must be booked at least one month in advance and are booked on a first-come, first-served basis.

What Does My Program Fee Cover?

As applies to your selected program, fees cover boat transportation, educational activities led by trained and certified staff, use of paddling and research equipment and lodging in a state-of-the-art green facility. Fees are due two weeks prior to the program. Cancellation fees apply.

Seasons of Operation?

Our core seasons for field-based programs are: fall (August-November) and spring (March-June). In classroom presentations can be requested at any time.

Program Length & Locations?

Program lengths are determined by the minimum amount of time needed for a program (starting from the time a group meets JRA at the field site to when the group leaves to travel home.) Ecology School programs are located on Presquile NWR and the James River near Hopewell, VA. River Explorations Paddle Programs take place on the James and its tributaries throughout the watershed. JRA will provide detailed programspecific directions upon registration.



What do I bring?

Unless otherwise specified, groups must bring and prepare their own food. Visit www.jrava.org to view program specific packing lists; including recommended menu ideas and food shopping tips.

How Safe are my Students on the Water?

Very. Safety is our number one priority, and all programming is designed to prevent incident or injury. All JRA staff are trained in First Aid and CPR. The education vessel is operated by a Coast Guard certified captain. Participants are required to wear life jackets whenever they are on the water.

Ready to Sign Up? It's Easy! Visit JRA's website to complete an online Program Request Form

Additional Questions?

Contact the James River Association at (804) 788-8811.