SERC is open to the public Monday through Saturday from 9:30 a.m. to 4:30 p.m. Your last boat should be pulled out by 4:00 p.m.

Rules and Regulations for Launching

Cances and Kayaks at SERC

I. Motorized boats are not allowed to be launched from the SERC docks.

2. All launches must occur at the Gazebo stairs to the left of the SERC dock.

3. All children 15 and younger must be accompanied by an adult.

4. PFDs **must** be worn on the water, and by all group members, at all times.

5. SERC is not responsible for your personal safety, vehicle, or damage to you, your boat, or personal property.

6. No firearms or fireworks.

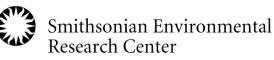
7. No alcohol or drugs.

8. Our shorelines are fragile ecosystems; NO landing on SERC property except the launch site.

9. Collection or removal of any objects, including artifacts or plant materials, without written permission is prohibited.

10. Unsafe behavior or actions can result in your visitor privileges being revoked, and possibly legal recourse.

SERC offers a wide variety of educational programs for individuals, families and groups, including guided canoe excursions. Our guides can lead you through natural ecosystems to see wildlife and explain research conducted at SERC. For more information call (443) 482.2388



Canoe/Kayak Trail Guide



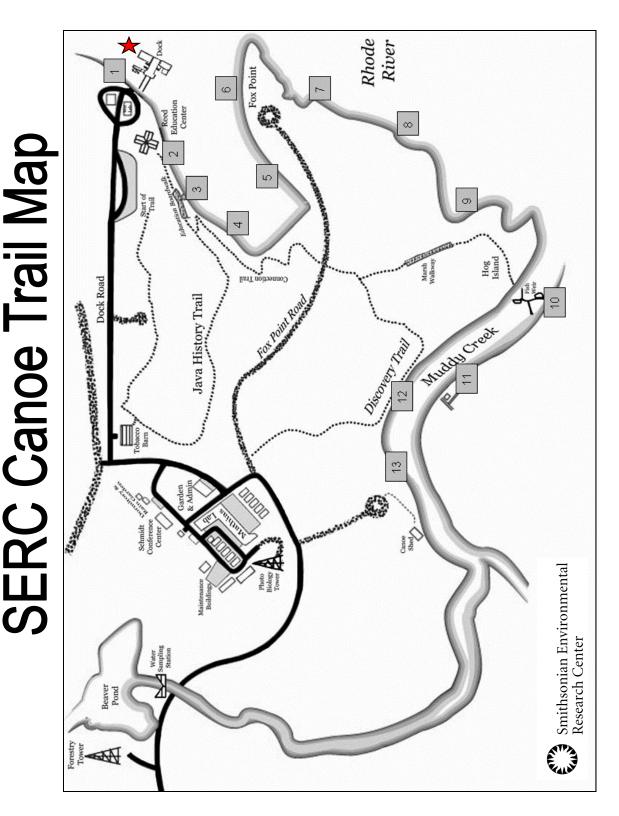
WELCOME to SERC! Please **register** at the Reed Education Center before launching.

This specially designed trail will lead you along the shoreline from the Reed Education Center. Launch your canoe or kayak using the steps next to the Gazebo or the boat ramp. After launching, please be sure to move your car and park in the Reed Education Center's parking lot.

Trail marker #1 is on the Gazebo. The remaining trail markers will continue to #13. The trail runs along the shoreline to the right of the dock, around Fox Point, and up into Muddy Creek. The trail is approximately 3 miles round trip.

Do not land your boats on SERC property other than at this designated canoe/kayak launch site.

647 Contees Wharf Rd. Edgewater, MD 21037 (443) 482-2388

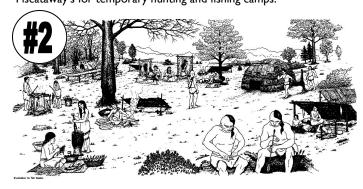


SERC Canoe Trail Guide

#I. Reed Education Center and Dock

The Smithsonian Environmental Research Center has approximately 3,000 acres of land and 14 miles of shoreline that is both a research campus and wildlife preserve. There are 18 research laboratories at SERC studying topics ranging from forest canopy structure to native orchids, blue crabs, water quality, plankton/red tides, mercury, and more. You can learn more about our laboratories at <u>www.serc.si.edu</u>. The dock area, by the Reed Education Center, houses our research and education vessels. Dock space is also reserved for cooperative research studies by NOAA and the Department of Natural Resources. This dock is also used by SERC's education staff, seeing over 8,000 school children a year for programs about the Chesapeake Bay and its watershed. Refer to the Canoe Trail map and proceed to marker #2.

<u>#2. Early History of SERC</u>: Along this shoreline you will find empty oyster shells exposed by the tide. These are mounds of refuse, also called midden mounds, which are leftovers from the days of the early Piscataway Native Americans. They once used the Rhode River as rich source of fish and shellfish. The lands now used by SERC were used by the Piscataway's for temporary hunting and fishing camps.



<u>#4. Wild Fowl Cove:</u> This cove is shallow and well protected. In winter it is a favorite stop-over of water fowl as they migrate, but it is also used year round by residents such as the great blue heron, green heron, and kingfisher. Winter fowl you might see include ruddy ducks, canvasback ducks, scaup, golden eyes, and bufflehead ducks.



#5. Marsh Grasses: Here you see the common reed, a native marsh grass found on the Bay. Marshes slow erosion and filter the water coming off the land. Marshes also provide nursery habitat for juvenile crabs and fish. When marsh plants die they provide food for young crabs and fish, which are in turn fed upon by larger animals up on the food chain.

<u>#6. Fox Point:</u> Fox Point is a spit of land that was once the summer residence of Robert Foster, the owner of the Java Dairy Farm. From 1916 to 1925 this farm supplied all the milk for the Navel Academy in Annapolis. Milk was taken by horse and buggy and later by truck. The main research campus of SERC is built upon the footprint of the old Java Farm.

#3. Education Boardwalk

This boardwalk is accessible from the Java History Trail, one of SERC's two public trails. Here, native grasses provide habitat and food for crabs and fish. Wetlands, like the kidneys of your body, are the filters of the Earth. They pick up sediment and clean the water before it reaches the Bay. Notice the dead snags along the shore. Our researchers have found that 100% of juvenile male blue crabs use woody debris like this to hide in as they grow and molt. You can encourage blue crabs in your area by leaving downed snags and trees.



#7. Fox Point Stairs: After rounding Fox Point, continue along the shoreline until you see a staircase. From this point, look toward the middle of the river to see an old sampling station once used by SERC researchers for water quality studies. It remains as a nesting location for our native osprey. Osprey mate for life and return each year to the same nest to raise young. Behind the osprey station, where you see the dock, is an island owned by SERC called Corn Island. **Do not beach or access the stairs to Fox Point; this area is closed to the public.**





<u>#8. CO₂</u> Study Site: SERC has the longest running CO₂ (carbon dioxide) study site in the world, studying the effects of CO₂ on marsh grasses and biomass/plant growth. Looking across the water to the left, you will see the white pipes of the biogeochemistry lab site sticking up above the tall grasses; you may also see the white chambers that house their current study plots.

#9. Hog Island: You are now looking at Hog Island, which is a spit of land that is accessible by hiking along the Discovery Trail. It is not a true island, but it is surrounded by marsh on three sides. This is one of the few places at SERC untouched by development from either the Java Dairy Farm or the early plantation days. It has unique old growth trees and forest. You are now approaching the mouth of Muddy Creek.

#10. Fish Weir: A fish weir is a fence that funnels organisms through an opening that can be gated. This gate is closed once a week and fish, crabs, and other organisms are funneled into two nets that are placed in the water. These nets are then raised and the organisms are counted and measured. Scientists look at patterns of migration in blue crabs and fish moving from Muddy Creek into the Rhode River. This weir study has been running since 1983. To continue upstream, look for the open gate in the weir. If the gate is closed, do not open it; you will have to complete the remainder of the trail another day.

<u>#11. Water Sampling Station:</u> This is an old water sampling station used by scientists over 20 years ago. The metal tracks you see were used to transport equipment on small carts, from the shore to the station. This track system was needed because, true to its name, Muddy Creek has 18 feet of mud below its waters.



#12. Remains of a Different Marsh: If you look to your left, you will see the remains of a once prosperous cattail marsh. Cattails were once the predominant plants found along Muddy Creek, although this is the northern most part of their geographic range. Hungry muskrats came in and devoured the cattails, devastating the population, which is now dominated by common reeds and grasses. Cattails can be eaten by humans; their young shoots are good in salads because their roots are slightly sweet and tasty. They also can be pounded into flour for cooking.



#13. Education Canoe Ramp: You are now close to the SERC Education canoe launch site (*Please do not land at this location; it may be in use by groups*). SERC offers a wide variety of public education programs, including canoe trips, night hikes, and evening lectures. If you liked this trail, and would like to learn more about guided canoe trips, or SERC, please visit our website <u>www.serc.si.edu</u>. Now, enjoy your return trip to the Reed Center launch site (**#**1).