



SAIL WITH US!

We invite you to bring your students on a very special field trip – a school sail aboard the gundalow PISCATAQUA on the tidal waters of New Hampshire and southern Maine. Our sailing season begins mid-May and runs through October, with sails offered mornings and afternoons Monday through Friday.

For 30 years the nonprofit Gundalow Company used the replica gundalow CAPTAIN EDWARD H. ADAMS to provide dockside programs throughout the Piscataqua Region. Recognizing the educational value of taking students out on the water to connect with their environment and heritage, a new, Coast Guard-certified gundalow was launched in 2011 that now serves as a unique floating classroom and lab.

During school sails on the PISCATAQUA, students are engaged at customized learning stations related to exploration of the waterways and the operation of the gundalow, and work with the crew to set the sail, steer, and navigate.

Activities are hands-on and place-based, combining concepts from social studies, science, math, art, and language arts. Critical thinking skills, decision making, and working as a team are all incorporated into the experience.

Our standard 2.5 hour program is typically based in Portsmouth and can accommodate up to 27 students (with four adults). A 4-hour trip is also available, for a deeper experience, and a 3.5 hour floating lab is offered collaboration with the UNH Marine Docents. If two classes share a bus, gundalow staff will help plan a shore-based activity for students when they're not out on the boat.

Each season the PISCATAQUA visits one or two towns "up river" or in Great Bay, and we're happy to arrange programs in other towns when possible.

Our programs and activities are correlated with state frameworks and closely aligned with principles of both estuarine and ocean literacy. Gundalow crew will work with you to customize the trip and guarantee your class a meaningful educational experience.

To book a trip or speak with a member of our education staff, please contact us at 603.433.9505 or e-mail education@gundalow.org. Program materials can be viewed at www.gundalow.org

We look forward to seeing you on board the PISCATAQUA!

SAILING ON THE PISCATAQUA

Please plan to arrive at the dock 15 minutes before your scheduled trip. This will allow for a brief welcome before boarding, as well as bathroom stops (bathrooms are available in Prescott Park; while there is a marine head onboard, we do rely on a holding tank).

We recommend that the bus drop you and your students off by the flagpole in Prescott Park on Marcy Street, across from Strawberry Banke. Free bus parking is available on Peirce Island, just across the bridge from the park.

It is important to board on time, and quickly, to ensure as much time on the water as possible. If you arrive late we'll do our best to adapt the planned activities to your shortened time. Please understand that we must return to the dock on schedule.

You'll be greeted at the top of the ramp by the onboard educator who will collect permission forms and pass out the nametags we provide. Students will board in three groups (divided by you ahead of time), assisted by our crew.

The captain will give an orientation and safety talk once your class is on the gundalow. Lifejackets are required up to grade 6, and are available to all passengers upon request.

Chaperones are welcome and will be expected to help with safety and conduct of the students. We do ask that chaperones not assist students with their work unless asked to do so by the crew. Up to four adults are appropriate for each class trip.

Once the captain and onboard educators have prepared your class the PISCATAQUA will head out on the Piscataqua River and your students will help set the sail. The tide, wind, and weather will determine how far and in which direction you travel.

While the trip will be customized for your class, a **sample agenda** follows. Please note that the times are approximate and are based on your arrival.

9:00	Safety talk and orientation	12:00
9:15	First watch (set the sail)	12:15
9:30	First learning station	12:30
10:00	Off watch (chantey or observation)	1:00
10:15	Second learning station	1:15
10:45	Last watch (chantey or observation)	1:45
11:00	Third learning station	2:00

There will be time for students to observe, ask questions, and participate in guided discussions. Please let the onboard educator know if you would like to take an active role in any of these.

Your class will sail rain or shine so be sure students dress appropriately.

The trip will be canceled by the captain only in severe conditions *

LEARNING ONBOARD THE PISCATAQUA

Taking students out on the water is a transforming experience. The integrated program on PISCATAQUA will provide exciting opportunities for your class to explore our maritime heritage and make connections to their natural environment.

The cultural and natural history of the area will come alive as your students join the gundalow crew - setting the sail, steering the boat, and engaging in active learning and teamwork throughout the trip.

Students will board as a group and then rotate through an established program as the PISCATAQUA leaves the dock and travels down river. They'll work as a team to set or lower the sail, help the captain steer the boat, and learn simple navigation.

All students will participate in three education stations, where they'll be engaged with analyzing water, collecting data, studying charts, discovering human impact, observing the weather, exploring ecosystems, and learning boat handling skills. Concepts from science, math, social studies and language arts will be woven into the activities.

An expanded STEM-based sail is also available for grades six and up. Building upon the success of our original program, these new sails are designed to incorporate more technology, engineering and math into the learning stations.

Please divide your class into **THREE groups** before you arrive; these small groups allow for more hands-on opportunities. Gundalow crew will provide color-coded nametags when you arrive. During your sail, several learning periods will be offered:

First watch:	Boat handling: setting the sail as a group
Station 1:	First learning session
Off watch:	All students gather on deck, for singing or observing
Station 2:	Second learning session
Last watch:	All students gather on deck, for singing or observing
Station 3:	Third learning session

"Watch time" is set aside for quiet observation and reflection, and the crew may lead a chantey or two. Literature, art, or music can be incorporated so please let us know if you'd like to develop and lead something for your class.

The theme of the environmental science station on deck will have been determined in advance, with a choice of sampling the water quality or towing for plankton. Both will include an introduction using live animals or plants, and parts of both can be combined.

At other stations students explore human impact over time with a 3-D watershed model, establish a sense of place using charts, maps and compasses, calculate the cargo-carrying capacity of a gundalow, or determine how and why engineering is used onboard.

All program content is easily adapted to any watershed. Please speak with the educators about additional content you'd like included during your program so we can help you plan the best experience possible.