

History, Mystery and Eco-Systems! An Outer Banks Itinerary for A Student Field Trip

Day One

Afternoon arrival to the Outer Banks of North Carolina

3:30pm Jockey's Ridge State Park

View the tallest living sand dunes on the East Coast. Learn how these shifting sands move with the wind at the visitor's center/museum. There are three self-guided trails in the park that discuss the 3 ecosystems of Jockey's Ridge.

Address: 300 Carolista Drive, Nags Head, 27959; 252.441.7132



Check in to an oceanfront hotel, to be determined

6:00pm Dinner at one of our locally owned student friendly restaurants



Evening activity at the North Carolina Aquarium on Roanoke Island
Visiting the aquarium after hours with your school is a great way to
bring education alive. The NC Aquarium offer several opportunities for
your students to learn more about marine environments after we close
our doors. Programs include a self-guided tour through coastal
freshwaters to see river otters, turtles, American alligators, touch tanks,
the sea turtle assistance and rehab center and the 285,000 "Graveyard
of the Atlantic" tank containing a one-third scale replica of the USS

Monitor. In addition, staff will present a live animal demonstration in the Neptune Theatre. This is a fee based program. Address: 374 Airport Road Manteo, 27954; 252.475.2327



Day Two



9:00 am Jennette's Pier, Nags Head

This new state-of-the-art, LEED certified, 1,000-foot concrete pier features green technologies like wind turbines. The one-of-a-kind educational ocean pier features educational programs such as alternative energy demonstrations, plankton investigations, creatures of the night, fishing instructions, and how ROVs are used in underwater exploration.

Current Programs offered at Pier:

- Wonders of Wind: In this program students learn how to harness energy from the wind, advantages and
 disadvantages of wind energy, the importance of clean wind and ideal locations to install wind turbines to
 maximize energy output. Through construction of their own "turbine" and discussions about alternative
 energy, participants in this program gain an understanding of how this technology works and its
 importance for future energy generation.
- **Solar Science:** Discover and discuss solar power as an energy resource. Students design, build and evaluate a solar device and discover how solar panels maximize efficiency.
- **Intertidal Explorations:** Students discover all the various types of animals that call the intertidal zone home.
- **Plankton Investigations:** Students learn how to use scientific instruments and discover the microscopic organisms that are vital to the marine food chain.
- **Ocean Currents and Upwellings:** Students discover how convection currents work and why they are important in a marine ecosystem.
- Pier Fishing 101: Learn the basic skills necessary to catch a fish.

Pier Address: 7223 S. Virginia Dare Trail, MP 16.5 Beach Road, Nags Head, 27959; Jennette's Pier Education Coordinator: Christin Brown, 252.255.1501

11:30am Have Boxed lunches delivered to Jennette's Pier

1:00pm Bodie Island Lighthouse, Completed in 1872, this Lighthouse sits on the north side of Oregon Inlet near the northern border of the Cape Hatteras National Seashore. The familiar black and white horizontal striped structure was partly built of materials leftover from the construction of the newest Cape Hatteras Lighthouse. Standing 156 feet tall and equipped with a first-order Fresnel lens, it flashes its 160,000 candlepower beacon 19 miles over the ocean. Free admission to the grounds; minimal fee to climb. Address: 8210 Bodie Island Lighthouse Road Nags Head, 27959, 252.441.5711





3:00pm Wright Brothers National Memorial See where on a cold day in December, 1903 Wilbur and Orville Wright changed the world forever as their powered airplane, the "Wright Flyer", skimmed over the sands of the Outer Banks for 12 seconds before returning to the ground. New Welcome Center with interactive exhibits recently opened in late Fall of 2018. Click here for the student waiver form.

Address: 1000 N. Croatan Hwy, MP 7.5 HWY 158, Kill Devil Hills, 27948; 252.441.7430

6:00pm Dinner at one of our locally owned student friendly restaurants

7:30pm Return to your hotel for a DJ and Dance or check out OBX Bowling Center.

OBX Bowling Center in invites you to all the fun and excitement our Nags Head bowling alley has to offer. The recently updated arcade and cafe are stocked with goodies like everyone's favorite...Pizza! For more information on availability and pricing visit www.obxbowlingcenter.com

Day Three



8:45am Fort Raleigh National Historic Site

See Sir Walter Raleigh's explorers and colonists attempted to found settlements here on the north end of Roanoke Island in 1585. Also located here is the Roanoke Island Freedman's Colony. The *Freedman's Colony* is recognized as an historic National Underground Railroad Network to Freedom site. Newly renovated on-site visitor center, interpretive programs, nature trail.

Address: 1401 National Park Drive Manteo, 27954; 252.473.5772

9:30am Elizabethan Gardens Stroll through the majestic Gardens, which were designed as a living memorial to Queen Elizabeth and the Lost Colony. The Gardens include a collection of Renaissance statues and Elizabethan style buildings that let you image you are back in the time of Queen Elizabeth I. A scavenger hunt through the Gardens will keep the students engaged and wanting to know more! Prizes are given to the first team who collects all the items on the hunt. Looking for a refreshing program? Students will enjoy a one-hour "minty" adventure searching for and learning all about mint in The Gardens. Students will make mint rubbings and plant mint to take home as well



as enjoy mint cookies and mint ice cream. Minty program is an add-on for an additional fee.

Address: 1141 National Park Drive, Manteo, 27954; 252.473.3234

Picnic lunch on site at Roanoke Island Festival Park prior to visit.



1:00pm Roanoke Island Festival Park Downtown Historic Manteo Here you will see the Elizabeth II, a 69-foot sailing vessel representative of those sailed to the New World in 1585. Also we will visit the Roanoke Island Adventure Museum and Settlement Site where you can see what life was like for those early explorers as they arrived on Roanoke Island. Address: 1 Festival Park, Manteo, 27954; 252.475.1500

Depart the Outer Banks for your homeport!

The below additional activities and attractions can also be added to the above itineraries:

Coastal Studies Institute, offers a variety of engaging K-12 programs that align with the NC Essential Standards, and also relate to the research of scientists at CSI. These programs are available for any school, and can be scheduled throughout the year. Program contact: David Sybert, SYBERTD@ecu.edu; Address: 850 NC 345, Wanchese, NC 27981, 252.475.5451

Alligator River National Wildlife Refuge, 150,000 acres of wetland habitats and a wide variety of wildlife, ranging from wood ducks and alligators to black bears and red wolves. Plant species, including Atlantic white cedar, bald cypress, wildflowers and shrubs, are abundant. Visitors will find hiking and wildlife trails, observation platforms, fishing areas and kayaking and canoeing routes. Activity: Red Wolf Howlings (only offered on certain days), Guided Tram Tours through the refuge, guide canoe trips. Address: Milltail Road Manns Harbor, 27953, 252.473.1131

Island Farm, living history site interpreting daily life on Roanoke Island in the mid-1800s. Living on the bounty of the surrounding waters while working the land to feed their families, islanders were independent and enterprising. Activity: Children's 19th-Century Toys and Games, Blacksmithing Address: Highway 64 Manteo, 27954, 252.473.6500

Pea Island National Wildlife Refuge, located on the north end of Hatteras Island, the nearly 6,000 acre refuge has a welcome center located seven miles south of Oregon Inlet. Hundreds of species of migrating birds have been spotted within the 13 mile span. From the spring to autumn, a large variety of wading, shore and upland birds can be seen. Activity: Bird Walks, Pea Island Canoe Tour, Birds and Their Adaptations at Pea Island National Wildlife Refuge, Turtle Talk, what's the difference between land and sea turtles Phone: 252. 987.2394; 252.987.1118

Nor'Banks Sailing Center, located just north of Duck, offers group options for stand up paddleboards, kayaking, waverunners, parasailing, sailing competitions. Can also set up friendly competitions as well. Nor'Banks Sailing Center, Address: 1314 Duck Road, Duck, NC 27949, 252.261.2900

Capt. Johnny's Dolphin Watch, See the most respected aquatic mammal in its natural habitat. Breathtaking views are all around you on this tour. Our large viewing areas offer everyone a good spot. Each vessel is covered for sun protection with a restroom on board and Coast Guard inspected. Address: Queen Elizabeth Street Manteo, 27954, 252.480.9151, 252.473.1475, 866.473.1475

Kitty Hawk Kites, offers a wide array of group activities, from Hang Glide over sand dunes, rock wall climbing, free stunt kite lessons, kite making workshops, wild horse tours, 1902 Wright Glider program, kayak eco-tours and rentals, jet ski rentals and tours, parasailing, dolphin jet boat tours, surfing lessons and more. Address: Bypass, across from Jockey's Ridge Nags Head, 27959 252.441.4124, 877.359.8447; group_sales@kittyhawk.com



Currituck Beach Lighthouse at Currituck Heritage Park Visit the only lighthouse in North Carolina that is still housed in its original structure. Built in 1874 this lighthouse stands 158 feet tall. Address: 1101 Corolla Village Road Corolla, 27927, 252.453.8152

Corolla Outback Adventures: On our Outer Banks wild horse tours, ride into our "Outback" area past the road's end, traversing several refuge areas and sanctuary sites like the Wild Horse Estates Conservation easement. Along the way we often see a variety of shore birds and other wildlife and of course our Colonial Spanish Mustangs! Learn the history and local lore discovering what makes this wild part of the Outer Banks unlike any other place on earth, interpreted by Corolla's most experienced guide service. Contact: Jay Bender; 252-453-4484, info@corollaoutback.com