

JUNIOR MARINERS PROGRAM FOR GRADES 3-5

Beach



Beach Seine

Students explore the high energy surf zone using seine nets to sift and sort organisms. They will learn about functions of producers, consumers, and decomposers.

3.E.2.1
4.L.1.1
5.L.2.1, 5.L.2.2



Cool Crabs

Students collect data using thermometers to examine how ectotherms, such as Ghost Crabs, regulate their body temperature by moving to different environments.

Science as Inquiry: 3rd – 5th grade



Maritime Forest Scavenger Hunt

Students learn about plant communities on a barrier island and investigate plant adaptations for living in sandy, salty conditions.

3.L.2.2, 3.L.2.4
4.L.1.1
5.L.2.1



Seashore Discovery Walk

Students walk the tidelines in search of “treasures” washed up on shore and discuss their role in the marine ecosystem.

3.E.2.1
4.L.1.1
5.L.2.1, 5.L.2.2



Turtle Talks

Students build life-size sea turtles in the sand, as they learn about the biology and behavior of sea turtles around the world.

4.L.1.1, 4.L.1.2
5.L.2.1

Marsh



Blue Crabs

Students learn about the anatomy and behavior of the Atlantic Blue Crab and its importance to our salt marsh ecosystem while trying to catch a few of their own.

3.E.2.1
4.L.1.1, 4.L.1.2
5.L.2.1, 5.L.2.2



Dock Discoveries Field

Students use nets and buckets to investigate fouling communities created by man-made structures such as Caswell's floating dock.

3.E.2.1
4.L.1.1
5.L.2.1, 5.L.2.2, 5.L.2.3



Dock Discoveries Lab

Students will use microscopes to observe and investigate the fouling community organisms found under Caswell's dock.

3.E.2.1
4.L.1.1
5.L.2.1, 5.L.2.2, 5.L.2.3



Downstream Drift

By conducting a flood event using a miniature model of a watershed, students learn how people influence and are affected by pollution in a watershed and how salt marshes can help.

4.L.1.3
Science as Inquiry: 3rd & 5th grade



Estuary Exploration

Students will explore our salt marsh using a scavenger hunt guide and will discuss the interconnectedness of this estuarine community.

Science as Inquiry: 3rd grade
4.L.1.1
5.L.2.1, 5.L.2.3



Fiddle Facts

Students learn about Fiddler Crab behavior and learn how populations of organisms are scientifically estimated.

Science as Inquiry: 5th grade

Marsh



Marsh Seine

Students assist staff naturalists with sieves and seines to discover the flora and fauna that abound in North Carolina estuaries and why they are called the “nursery ground of the sea”.

3.E.2.1
4.L.1.1
5.L.2.1, 5.L.2.2



Plankton Ecology Field

Students use nets to collect some of the smallest members of the marine community: plankton.

5.L.2.1, 5.L.2.2



Plankton Ecology Lab

Students use microscopes and lab equipment to view some of the smallest members of the marine community: plankton.

Science as Inquiry: 3rd & 4th grade
5.L.2.1, 5.L.2.2



“The program at Fort Caswell really reinforced the lessons from the classroom. The students were engaged and had a blast.”

– Fletcher Academy

Multiple Locations

(Pair with beach or marsh activities)



Fort Caswell Tour

Students take a walking tour of old Fort Caswell to learn the history of the pre-Civil War fort and other significant places, people, and events in North Carolina's history.

3.H.1.1, 3.H.2.1
4.H.1.1, 4.H.1.4
5.H.1.3



History Hayride

Students explore the grounds of Fort Caswell by wagon while learning about early settlements in the Cape Fear region and historical uses of the fort throughout the last century and a half. *Will have an opportunity to go inside the Fort.

3.H.1.1, 3.H.2.1
4.H.1.1, 4.H.1.4
5.H.1.3



Hooks and Ladders

Students simulate the life cycle of anadromous fish, like the Striped Bass, and learn about limiting factors that impact their survival as they journey between their freshwater spawning grounds and the ocean.

5.G.1.2



Squid Dissection

Students learn about marine mollusks and investigate the taxonomy and anatomy of the squid through conducting a dissection.

Science as Inquiry: 3rd-5th grade

Indoor Alternative



Bravo, Charlie

Students play games with maritime flags to learn how sailors communicated at sea before the days of modern technology.

4.G.1.4



Estuary Keeper

Students play a card game to learn about the many factors, both man-made and natural, that affect fish populations in the estuary.

4.L.1.3
5.L.2.3



Fish Forms

Students put their creative skills to use as they learn about adaptations that help fish survive in their aquatic habitats.

3.E.2.1
4.L.1.1
5.L.2.1



Incredible Journey

Students become a water droplet and take an incredible journey through the water cycle while making a memento to remind them of their trip.

3.P.2.2, 3.P.2.3
Science as Inquiry: 4th grade
5.P.2.1



Marsh Munchers

Students discover the dynamics of survival in a salt marsh by becoming part of an estuarine food web.

3.E.2.1
4.L.1.1,
5.L.2.1, 5.L.2.2, 5.L.2.3