

# 4-H Marine Science Project





## Are you Into It?

Do you enjoy learning about marine life? In this project you will:

- Learn about all sorts of ocean life including sharks, crabs, corals, sea stars, sea turtles, manatees, dolphins, shore birds, and much more!
- Investigate the different kinds of marine habitats in Florida, such as coral reefs, mangroves, salt marshes, and sandy beaches.
- Learn what marine scientists do and what other careers involve marine science.
- Visit aquariums and nature centers and participate in their education programs.
- Participate in a service learning project and help the environment.

## Here's what you can do all year!

#### Starting Out Basic

- Visit a public aquarium or marine science center to learn more about marine life.
- Help your club plan a trip to a local beach.
- Investigate life on a sandy beach by going beachcombing with your family or club.
- Choose a marine animal to research and share what you learned with others.
- Read a story about a sea animal then share the story with your club.
- Visit a sea turtle center and learn about them.

### Learning More Intermediate

- Investigate how fish are adapted for living in water.
- Investigate how sharks are different from other fish.
- Explore a marine habitat and identify the kinds of animals and plants that live there.
- Use a seine net to collect and identify shoreline animals.
- Visit a seafood market and learn about the fish we eat.
- Go on a sea turtle walk at night with your club and/or family.
- Learn about blue crabs and how to catch, cook, clean, and eat them!

### Expanding Horizons Advanced

- Work with others to design an investigation of a coastal issue, habitat, or marine organism.
- Use the "earbones" of fish to determine their age.
- Use marine science tools to measure changes in an estuary or bay over time.
- Research and produce an action plan to improve a shoreline or coastal habitat.
- Learn how to set up and maintain a marine aquarium.
- Develop a game to teach others about marine life.

### Step It Up!

Pass it on! Share what you learned in the project with others. Here are ideas to get you started!

#### Citizenship/Leadership

- Present an idea for improving a marine habitat or shoreline.
- Help organize or participate in a beach or waterway clean-up with your club.
- Organize an event to get young kids excited about the ocean and through hands on activities.

#### Communication

- Create an educational display on a marine topic for a community event and/or state event.
- Teach others about the ocean in local schools.
- Conduct a demonstration talk at the local, county, and/or state level on a marine topic.

#### **Healthy Living**

- Investigate the nutritional value of different seafood, create an educational display on the info, and present this at a community event.
- Get outside and enjoy nature by going to the beach with your club and learn about marine life first-hand.

#### **Science**

- Conduct your own experiment on a marine science topic and share the results at a local science fair or other county/state event.
- Be a citizen-scientist and help a marine scientist conduct his/her research.





### **Expand Your Experiences in Marine Science!**



- Work with members of your club to prepare for and enter the 4-H State Marine Ecology Event. Study materials and guidelines available at <a href="florida4h.org/mee">florida4h.org/mee</a>.
- Attend State Marine Camp and observe sea life underwater and in the camp's marine aquariums. More information at <u>florida4h.org</u>
- Enter the 4-H State Marine and Aquatic Photography Contest. More info at florida4h.org
- As a senior, attend 4-H University and give a demonstration or talk on a marine science topic, attend workshops, participate in community service events, hear keynotes, compete in contests, have fun, and meet other youth from across Florida who may share common interests. More info at <u>florida4h.org</u>.
- Investigate the kinds of careers that involve marine science and schedule a visit with those departments at the University of Florida ufl.edu/admissions//.

#### **Project Sharing Ideas**

Apply what you have learned in the project by doing an illustrated talk or demonstration at the county, district, or state level. Here are a few ideas:

- Demonstrate how to catch, clean, and cook a blue crab.
- Create a poster and talk on how corals grow and create reefs.
- Create a display about the types of life that live in the deep sea.
- Illustrate how dolphins use echolocation to find their prey.

### Resources

4-H Project Resources

#### **Connections and Events**

#### **Record Keeping**

#### **Awards and Recognition**

Project materials to assist youth in learning may be available through your county 4-H office or can be ordered directly from edis.ifas.ufl.edu.

- Aquatic and Marine Ecosystems – Leaders Guide
- Fins and Scales Project
- Life in the Sea Member Manual
- Wetlands Project
- Starting and Maintaining a Marine Aquarium

Available through National 4-H. Go to www.4-hmall.org.

- There's No New Water
- Science Discovery series

Attending events and taking advantage of opportunities that expand your project learning will help you become the best you can be. Contact your county 4-H office.

Attend these 4-H events:

- State Marine Ecology Event
- State Marine Camp
- State Marine and Aquatic Photography Contest

Check these and other statewide events out at <a href="mailto:florida4h.org">florida4h.org</a>

Apply for a Service Learning in Aquatic and Marine Education and Conservation (SLAMEC) mini-grant. For more info go to florida4h.org/mee.

Learning to take good records of what you do and what you spend for your project is a 4-H life skill.

The following record keeping forms can help you keep a record of your activities. These forms can be found at florida4h.org.

- Junior (ages 8-10)
- Intermediate (ages 11-13)
- Senior (ages 14-18)
- Financial Summary
- Member Portfolio (ages 8-13)

Specific project materials in marine science may have their own record forms, please check edis.ifas.ufl.edu.

Florida's Recognition Program involves feedback through:

Participation Setting Goals Meeting Standards Peer Competition Cooperation

Certificates, pins, ribbons, trophies, trips and/or scholarships are awarded based on quality of performance at the county, district, state and national levels.

To learn more about current recognition opportunities visit the Florida 4-H website at florida4h.org or contact your county 4-H agent.

Learn more at florida4h.org
or contact your local UF/IFAS Extension County Office

