

#### **Environmental Education**



## Marine and Aquatic Projects

#### **Objectives**

4-H'ers will learn to:

- demonstrate increased knowledge of ecological systems.
- demonstrate increased knowledge of biological principles of living organisms.

#### **Project Manuals & Other Resources**

#### Marine Science (Ages 5-18)

Teaching you about aquatic and marine ecosystems is what this experiential learning curriculum is all about. Through it you will learn about dolphins, manatees, seals and sea lions, penguins, treasures from the sea, Caribbean / Atlantic coast tide pool, and coral reefs.



ME1 A

Life in the Sea Project Life in the Sea Record Book Life in the Sea Helper's Guide

#### Aquarium Projects (Ages 5-18)

These manuals introduces you to basic concepts about fish through the use of an aquarium and selected activities and experiments.

ME2 A Marine Aquariums
ME2 B Freshwater Aquariums



#### Fisheries and Aquaculture (Ages 5-18)

Thought provoking activities encourage you to explore how fish swim, discuss the sensory features and abilities of fish, and learn about special adaptations of fish to water. Also, you will learn what is aquaculture and why it is so important.

ME3 1 Fishy Science (Ages 5-11)
ME3 2 Fins and Scales (Ages 10-18)



#### Wetlands (Ages 5-18)

Through this project you will learn what is a "wetland" and the different types of wetlands along with their importance.

ME4 A Project Manual ME4 R Record Book



#### Sports Fishing (Ages 8-18)

Let's Go Fishing! The 4-H Sport fishing materials will

help you improve your angling skills, create your own tackle, rig a rod, fix a reel, identify what you catch, handle and even cook it!

SF 1	Take the Bait
SF 2	Reel in the Fun
SF 3	Cast into the Future
SF H	Helper's Guide

### **Supporting Events & Activities**

#### Competitive Contests:

### County, District, State or National Levels Demonstration and Illustrated Talks

Part of the "Natural Resources" division, this area includes all presentations focusing on marine and aquatic environments. These might deal with topics on wetlands, reefs, coasts, bays, estuaries, rivers, lakes, ponds, and aquaculture as they relate to conservation, preservation, and enhancement.

#### 4-H State Marine Ecology Event

The Marine Ecology Event (MEE) is an annual competitive event promoting awareness and appreciation of Florida's marine habitats and organisms. The event is open to Junior, Intermediate, and Senior 4-H members. The main goal of the event is to encourage 4-Hers to acquire knowledge about a variety of marine topics, demonstrate this knowledge, and then be recognized for their achievement. It is usually held in early November. For more information, study materials, guidelines, and registration forms visit <a href="http://florida4h.org">http://florida4h.org</a> and go to "events and activities" then state events in environmental education. Please see the back of this brochure for additional requirements and information.

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#### 4-H State Marine and Aquatic Photography Contest

This annual event provides a showcase for 4-H members' photographic accomplishments. The focus is on marine and aquatic environments with the intent of increasing the public's awareness and appreciation for the natural resources found within each. This event is held in conjunction with the State Marine Ecology Event. More information, guidelines, and registration forms are available at <a href="http://florida4h.org">http://florida4h.org</a> under Events and Activities, state events in environmental education. Please see the back of this brochure for additional requirements and information.

#### **Public Speaking Contests**

Public Speaking Contests offer 4-H'ers opportunities to gain experience in the preparation and delivery of a 4-H related speech. The General Public Speaking Contest requires 4-H'ers to recognize, organize, and present information on a given topic. For further information and requirements, please visit <a href="https://florida4h.org/events">https://florida4h.org/events</a>.

#### Poster Art Program

The Poster Art Program gives 4-H members an opportunity to use the visual medium of poster art to promote public understanding and support of the 4-H program. Program goals encourage 4-H Club members to develop an awareness of visual imagery and its power to express thoughts and ideas. For more information and requirements, please visit <a href="http://florida4h.org/events">http://florida4h.org/events</a>.

#### Non-Competitive Events:

#### Florida 4-H Marine Camp

State Marine Camp is a summer residential camping program that offers youth closer encounters with the marine world. Outdoor Ed-Venture Camps provide youth with additional aquatic and outdoor adventures. Camping programs in 4-H offer youth opportunities to learn about aquatic and marine organisms. Sportfishing camps offer youth opportunities to learn about aquatic life, fishing, and fishing related skills such as casting, tackle crafting, and more. Check with your County Extension office for local opportunities to learn about aquatic and/or marine life. For more information and requirements, please visit <a href="https://florida4h.org/events">https://florida4h.org/events</a>.

#### Florida 4-H Sport fishing Camp

These five day residential programs allow participants to learn important fishing skills such as casting, tackle crafting, aquatic ecology, resource stewardship, and how to have fun catching fish! This camp may be held in conjunction with a Shooting Sports Camp or a State Marine Camp. For more information and requirements, please visit <a href="http://florida4h.org/events">http://florida4h.org/events</a>.

#### **Award & Recognition Opportunities**

#### Ribbons and Awards for Competitive Events

Blue, Red, and White ribbons are awarded based on quality of performance during a competitive event using a standard scoring system. In addition to ribbons, youth may receive additional recognition for excellence, such as trophies, at the district, state and national levels.

#### 4-H Project Reports

Certificates, pins and other county determined awards are available to youth who complete their project records annually at the county level. The project report forms are available for each age group (Junior, Intermediate, Senior). For copies of these materials, please visit our website <a href="http://florida4h.org">http://florida4h.org</a>.

#### 4-H Portfolios

Senior 4-H'ers (ages 14 and up) are eligible to complete and submit a 4-H Portfolio of their 4-H experiences and activities. Youth in this project area may compete in one of the following categories:

- Environmental Education (predominantly focused solely on entomological experiences)
- Citizenship (if activities have been significantly focused on community and helping others)
- Achievement (if 4-H activities include a broad spectrum of 4-H projects)
- Leadership (if 4-H experiences have centered on leadership provided to other youth or teaching and leading project activities)

The award for 4-H Portfolio is a partially expense paid trip to National 4-H Congress.

#### College Scholarships

Graduating Seniors in 4-H are eligible to compete for a variety of educational scholarships.

Contact your local 4-H office for these and other supporting project events, activities and award opportunities.

# Florida 4-H State Marine Ecology Event

This state competition supports the 4-H marine education program. Participants identify selected organisms (i.e., vertebrates, invertebrates, plants) found in marine habitats and demonstrate their knowledge of concepts related to marine ecology and marine ecosystems. Rules, guidelines, and study materials can be obtained through the 4-H web site.

When: Late October or November Where: Locations may vary

#### Participation Criteria:

- Junior 4-H'ers must be 8-10 years old as of September 1 of the current program year.
- Intermediate 4-H'ers must be 11-13 years old as of September 1 of the current program year.
- Senior 4-H'ers must be 14-18 years old as of September 1 of the current program year.

#### Participation Procedures:

- Each county may submit two teams (consisting of 3-4 members each) and two individuals per age category. The three highest individual scores will be figured into the team's total score.
- Pre-registration materials must be received approximately two weeks prior to the actual event, and all teams must be present at the beginning of the event.
- 1<sup>st</sup> Place Seniors will be eligible to compete again in following years. Once a senior participant has won 1<sup>st</sup> place twice, they will no longer be eligible to compete as an individual or as a team member.

#### Awards:

• Trophies, medals or plaques will be distributed to winners according to their placing. Certificates of Participation will be awarded to all participants.

## Florida 4-H State Marine Photography Contest

This state competition supports the 4-H marine education program and is held in conjunction with the State Marine Ecology Event. This contest is open to all 4-H members, regardless of age. The photo categories participants may enter include 1) marine habitats and ecosystems (i.e., coral reefs, mangroves, salt marshes, etc.), 2) marine life (fish, crabs, shells, seaweed, etc.) and 3) people and the marine/aquatic world (photos of people interacting with or impacting the marine/aquatic world (diving, swimming, boating, surfing, fishing, etc.), 4) aquatic habitats (scenes of ponds, lakes, rivers, etc.), and 5) aquatic life (photos of pond turtles, fish, insects, etc.).

When: Late October or November during the State Marine Ecology Event

Where: Locations Vary

#### Participation Criteria:

Open to individual 4-H members from 5-18 years old.
 Members must be within this age range by September 1 of the current program year. Cloverbuds (5-7 year olds) may submit photos on a non-competitive basis and will receive certificates of participation.

#### Participation Procedures:

- Individual participants may enter up to three mounted photos in the contest and in any category.
- A total of 15 photos from any one county may be entered.
- Photos must be sent to the State 4-H Office no later than one week before the event occurs.
- Participants need not be present to win an award.
- More information on contest rules, guidelines, and county entry forms may be obtained from the 4-H website.

#### Awards:

- Ribbons will be awarded for first, second, and third place winners in each category.
- Certificates of participation will be given to all who enter.