

FINAL REPORT

LONG LIFE TO THE CORAL REEF

NOAA Award No. NA05NMF46331042

Twenty (20) Puerto Rico Extension educators and staff were trained in Coral reef ecosystems and marine life zones by Dr. Juan Gonzales Lagoa; oceanographer from the University of Mayaguez, UPR and collaborator of the project.

These extension educators provided this knowledge and activities to 4H participants in different (20) counties around Puerto Rico:

1. Jobos Bay; National Investigation Reserve (10) 4H groups.
2. Las Cabezas de San Juan; Natural Reserve Fajardo Country;
(1) 4H group.
3. Tortuguero Lagoon; (2) 4H groups
4. Vega Baja Beach; (1) group Vega Baja Country
5. Piñones Coastal Forest and Natural Reserve; Loiza County;
(1) 4H group
6. PR Conservation Trust facilities; (1) 4H group
7. La Esperanza Beach and Natural Reserve; Vieques Island
Vieques County; (2) 4H groups
8. Maguëyes Island and Natural Reserve, Lajas County; (4) 4H groups

Before field trips 4H participants are immersed in educational activities related to marine ecosystems and aquatic life zones, function and importance of better conservation management and what can they do to protect this diverse environment.

Participants learn the importance and diversity of reef population and organisms and interaction on the reef ecosystem. They learn about the influences of human activities (direct and indirect) among the reefs life. Themes such as global warming, sedimentation and erosion, on appropriate agricultural practices house hold pesticides, industrial contamination among others are discussed.

Participants are involved in educational activities, games and decision making situations to solve problems which affect the marine life ecosystems and above all our reefs.

Activities involved the marine organisms such as use of senses to interact with soft coral, brain corals, branching corals, sand and other organisms.

They saw and on some cases touched marine organisms such as sea urchins, algae, sponges, snails, crabs, sea turtles, jellyfish, anemones, starfish and sea birds.

Important basic questions were explained:

1. What is a coral reef system
2. Where are they in our shore
3. Why are they important to humans
4. How can we protect them

An Achievement and Recognition day was celebrated for participants, volunteers and staff to acknowledge their work, interest and environmental stewardship.

During this activity participants assisted with their parents, school teachers and other guests where they shared their experiences, and developed different activities for visitors and guests (exhibitions, plays, photo albums, others).

PRAES staff shared experiences during activities development with their different 4H groups.

- a. Participation of 4H participants in 2007 Earth Week activities through exhibitions and educational materials, handouts on marine conservation.
- b. Participation of 4H groups in schools with information centers during the National Tree Day.
- c. 4H Groups participated on environmental conferences and activities offered by other resources.
- d. 4H youth participated on county and government activities on recycling solid waste
- e. 4H youth participated and visited fairs, agricultural exhibits and environmental fair and educational conferences.
- f. Farm visits to learn about adequate agricultural practices and conservation practices
- g. Participants gave lectures in schools on environmental conservation for reefs.
- h. Participants enjoyed beach recreation and activities
- i. A drawing contest was celebrated on environmental themes in a school in Jayuya County.
- j. Teachers on school reported increase in science academic achievement with students participating in the project in Guayama County.
- k. Participants learn to identify eco-friendly household products.
- l. Twelve (12) 4H youth exhibits photos of the Long Life to the Coral reef project in the First Caribbean coral reef Symposium and assist to some conferences.
- m. Fourteen (14) youths participates in an environmental protection in Aguada County.

Six hundred and twenty nine 4H members participated on these activities also in an achievement day. Parents and volunteers also participated supporting the project.

During the 4H national week a second grade group participated in the play: "The Coral Reef". This play shows how solid waste management impacts life in the reef. The characters represents marine species as: sea turtles, sea horse, crab, clam, hammer head shark, butterfly fish, starfish, sea urchin and others like the children Sebastian and Coral main characters of "Long Life to the Coral Reef" DVD movie. The use of costumes to represents marine organisms and the message of conservation motivates audience to ask for more information about what they can do to protect them.

The Long Life to the Coral Reef project was presented to an audience of to more than a five hundred (500) persons in the First Puerto Rico and the Caribbean Coral Reef Symposium. It also shared the experiences with more than sixty (6) educators in an Environmental Education Training.

An evaluation meeting was conducted with the 20 Puerto Rico Agricultural Extension educators. They all agree in continue offering education on "Long Life to the Coral Reef" during next year in their counties. As import results we consider the practices that are going to be supported by the kinder to six grade (k-6) participants and educators of the Long Life project.

Some adopted practices reported: never touch or stand on coral unless danger;
Don't remove any organisms from the reef area;
Avoid buy animals taken from the reef;
Volunteer to help cleaning the beach, reef, school or community areas; volunteer to help Replant trees into damaged area;
Recognized bad practices related with activities like snorkeling, scuba diving and Boating that can damage the reef;
Identified chemical products as pesticides fertilizers and household products that imparts corals, recycling products and reduce waste

As success story is the motivation of other Extension Educators to teach about "Long Life to the Coral Reef" as a result of the positive experience offered by this talented group of twenty educators.

The Puerto Rico Extension Educators (PRAES) indicated some difficulties in public school class period. For next time they considered to offered project during elective time or after school. Educators also recommended to create another evaluation instrument with pre and post test. They recommended to create a handbook for participants between the k-3 and 4-6 grades as part of the Long Life to the Coral Reef DVD lessons.

The Extension Educators concludes that the Long Life to the Coral Reef was an excellent learning experience for educators, children, youths, volunteers, teachers and parents.

Frances Ventura
Project Director