Title: Life of a Coral Reef Fish

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Grade Suitability: 5, 6, 7, 8

Scope: Earth and Environmental Sciences

Sequence: This is done as a closing activity after studying coral reefs, the fish that use them as a habitat, the conservation issues facing coral reefs, the marine ornamental fish trade, and marine ornamental fish farming or culturing techniques.

Length: 2-3 days

Background:
Coral reefs are under stress worldwide, predominately in areas heavily populated. The cumulative threats of overexploitation (fishing), land-use changes building (condos, marinas, hotels), agriculture, pollution, development projects (deforestation/sedimentation), and global warming are constant. These changes cause loss of coral reef habitat. The $2.4 billion aquarium and live reef fish industry causes stress not only to the reef but to the fish themselves. They are harvested for aquarium use or for food in specialty restaurants in Asian cities. The methods used to harvest them include blasting and cyanide to stun the fish, causing irreparable damage to the reef. Attempts are being made to culture ornamental reef fish in an attempt to ease the overfishing on coral reefs.

Objectives:

Students will:

1. Describe the structures and habitat requirements of corals.
2. Identify some of the organisms that use a reef as a habitat.
3. Write a paper in first person narrative.

Materials:
Access to computer lab and paper

Setting:
Computer Lab

Activity Description:
Students are to write an essay in first person narrative as if they are one of the organisms using a coral reef as a habitat. In the paper they are to incorporate facts about overfishing,
deforestation/sedimentation, cyanide, culturing, nutrient rich water, and loss of habitat due to bleaching. They are to use their imaginations to “become” that organism.

Extensions:

- Take a virtual field trip to an ornamental fish farm.
- Take a field trip to a pet store to see the ornamental aquarium fish.
- Write to their congressmen about concerns over coral loss along the Florida Keys.

Evaluation:
Grade each essay using this rubric discussed before the paper was started and insure that the points noted were addressed.

Ocean Science Literacy Standards:
8, 11, 23, 25, 26, 27, 28, 33, 34, 35, 36, 38

National Science Education Standards:
1, 2, 3, 4, 5, 7, 8

References:

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