

*Queen Conch  
Fisheries Management  
and Marine Reserves*

*It will require several fisheries management strategies to aid in the reduction of the overexploitation of the queen conch, and to protect the wild queen conch populations.*

*One management strategy that appears to be extremely successful, are marine protected areas.*

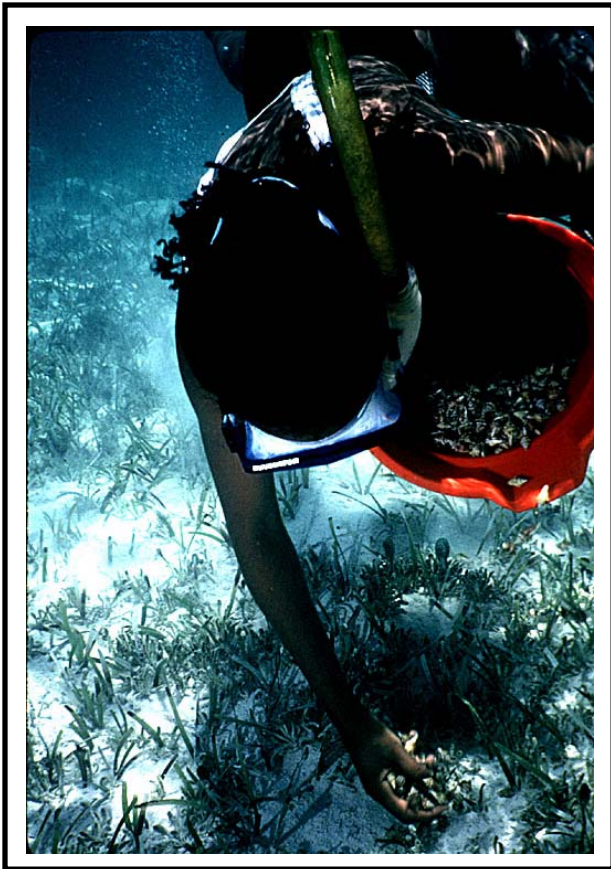
## ***What is a Marine Protected Area (MPA) and a Marine Reserve?***

***The definition from the World Conservation Union is “any area of the intertidal or subtidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment“.***

***The official government definition in the Marine Protected Areas Executive Order 13158 defines an MPA as "any area of the marine environment that has been reserved by Federal, State, territorial, tribal or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein" .***

- *There are 200 MPA's in Central America and the Caribbean.*
- *In the United States, MPAs can include national marine sanctuaries, fishery management zones, national seashores, national parks, national monuments, critical habitats, national wildlife refuges, national estuarine research reserves, state conservation areas, state reserves, and many others.*  
([www.mpa.gov](http://www.mpa.gov))
- *MPAs can be designed for different levels of use including no access areas, permitted areas, seasonally closed areas, and fishing gear restricted areas.*

***Researchers of the Florida Fish and Wildlife Conservation Commission in Marathon, FL are examining other fishery management strategies in the Florida Keys:***



- 1. Establishing criteria for restocking.  
They have determined that it is optimal to release juvenile conch at night during the new moon, and in nursery grounds where queen conch already live. This helps to ensure the survival of the animal.***

Andy Dalton



Megan Davis

***2. The researchers are transplanting adult queen conch from the nearshore waters to the offshore waters in the Florida Keys in an attempt to enhance spawning activity. They have found that adult queen conch that reside in inshore waters, are losing their ability to reproduce.***

***3. The researchers are also conducting studies to determine if the Florida Keys' queen conch larvae come from local spawns or recruitment is reliant upon upstream sources.***



Megan Davis

# ***Lesson Plan***

- 1. Find out what your community is doing to protect the queen conch.***
- 2. Have your students draw a map of marine protected areas in your country.***
- 3. List other fisheries that may benefit from the discussed fisheries management strategies.***