

Special Session on Marine Invasive Species Issues of Concern in the Caribbean Sea and Gulf of Mexico

The Special Session and Workshop gave GCFI conference attendees a chance to become better informed on region-wide aquatic invasive species issues and, more importantly, provided an opportunity to establish collaborative partnerships and strengthen lines of communication between the Gulf and Caribbean regions. The Special Session, co-chaired by Harriet Perry of the Gulf Coast Research Laboratory and Kathleen Sullivan-Sealy of the University of Miami, covered a range of issues including, vectors, species of concern, current treaties and agreements, and volunteer programs to monitor reef communities. The important points that emerged from the session's presented papers were:

- i) The need for information on the biology and ecology of the invasive species, especially since growth rates and ecological interactions can change for a species in a non-native ecological system,
- ii) The need for countries to develop both a national invasive species response plan as well as regional partners (as the invasions will occur on a regional scale), and
- iii) The importance of understanding oceanographic currents and dispersal patterns to predict patterns of invasions across the region.

The Workshop, facilitated by Kathleen Sullivan-Sealy, began with a presentation prepared by Pam Fuller on the USGS database for invasive species. The USGS presentation pointed out the importance of creating linked datasets for searching occurrence of invasive species by location, species and date. The USGS Invasive Species database (primarily terrestrial and freshwater species) is linked with the Smithsonian Environmental Research Center's NEMESIS dataset (marine and estuarine species) to allow search by location, species, or habitat (hydrological units). The USGS database can be accessed as follows: <http://nas.er.usgs.gov>. Information on the database can be obtained by contacting Pam Fuller: pfuller@usgs.gov. To aid in identification of species, the Aquatic Nuisance Species Taskforce has developed a list of taxonomic experts that can be accessed via their website: <http://www.anstaskforce.gov/experts>. The Smithsonian Environmental Research Center email contact is invasionsweb@si.edu. Both the USGS and NEMESIS datasets have useful species fact sheets with information on diagnostic characters, life history, habitat, and distribution.

The discussion that followed the USGS database presentation focused on four major issues:

- i) Linking existing databases used in the region through a portal to provide synoptic information (there are four existing databases that could be linked together and there is the possibility for a regional system and alert systems,
- ii) Exploring the possibility of expanding U.S. databases to the Caribbean,
- iii) Marine aquarium trade and trade in live rock. There is a need for education, particularly on the appropriateness of certain species for the home aquarium. There is a need to look at restrictions and begin monitoring the imports. Most countries ban the collection of live rock, but the restrictions on import are not known, and
- iv) Early detection and rapid response – both of these topics relate back to the need for a regional database (or portal to linked databases) and an early alert notification network

The workshop participants agreed that a *Regional Statement of Need* should be written and used to solicit funding support and collaboration with U.S. agencies and that future GCFI meetings include a forum for continued discussion of marine invasive species issues.