

Pacific Islands Region Species of Concern FY 2008 Year-End Report

In January of 2008, the National Marine Fisheries Service (NMFS) Pacific Islands Regional Office (PIRO) submitted a proposal to the NMFS Office of Protected Resources recommending that the Hawaiian spinner dolphin (*Stenella longirostris longirostris*) be designated as a Species of Concern (SOC). Although it was determined that listing the Hawaiian spinner dolphin as an SOC is not warranted at this time, NMFS PIRO is continuing to proceed with the Marine Mammal Protection Act rulemaking process to regulate human interactions with Hawaiian spinner dolphins.

In March, the NMFS PIRO SOC regional program coordinator, Krista Graham, was a panel reviewer for the FY 2008 external SOC grant proposals. Three proposals were submitted requesting \$164,504 from the available pot of \$100,000. After some budget modifications, all three proposals were selected to share the total available funding. One of the proposals being funded for \$44,502 is “An assessment of status and habitat specificity of *Cheilinus undulatus* and *Bolbometopon muricatum* in the Southern Islands of the Commonwealth of the Mariana Islands (CNMI)”, submitted by John Starmer of the CNMI Coastal Resources Management Office (Office of the Governor). Project objectives include: (1) produce a quantitative assessment of the abundance and distribution of *Cheilinus undulatus* (humphead wrasse) and *Bolbometopon muricatum* (bumphead parrotfish) in coral reefs and associated habitats on Rota, Tinian, Saipan, and Agijuan; (2) produce a qualitative assessment of recent (1950-present) abundance and habitat preference of *C. undulatus* and *B. muricatum* in the entire CNMI; (3) develop an effective habitat management strategy for *C. undulatus* and *B. muricatum* through correlation of abundance with habitat and potential sources of environmental stress; and (4) improve outreach and education of *C. undulatus* and *B. muricatum* by providing a scientifically valid status data to local government and NGOs to improve ongoing programs. Research for this project begins on October 1, 2008 and ends on September 30, 2009. NMFS PIRO looks forward to receiving the final report as this study will address data gaps in our knowledge of the two fish species. This study will also aid the CNMI Coastal Resources Management Office in project permitting decisions, and determine target areas for habitat restoration programs.

Also in March, the regional program coordinator was a panel reviewer for the FY 2008 internal SOC grant proposals. Eighteen proposals were submitted this year requesting \$500,000 from the available pot of \$300,000. Nine proposals were selected to receive funding, including a proposal submitted by the PIRO regional program coordinator for \$15,707, titled “Population surveys and removal of alien algal threats to two Species of Concern, *Lingula reevii* and *Montipora dilatata*, in Kaneohe Bay, Oahu, Hawaii.” The goal of this contract, conducted by Dr. Cindy Hunter of the University of Hawaii at Manoa (UHM), is to continue the monitoring of these two SOC and provide insight to better inform management strategies to encourage their survival in the wild. Initial qualitative presence/absence surveys of SOC (and other *Montipora* spp.) and alien algae

will be conducted followed by quantitative estimations of population sizes, collection of coral samples, and removal of alien algal threats to the SOC. Funds for this research contract were awarded in June.

Also in June, NMFS PIRO awarded SOC funds for a project titled “Genetic and morphological characterization of a coral Species of Concern, *Montipora dilatata*, in Kaneohe Bay, Oahu, Hawaii.” The goals of this contract, totaling \$33,570 and awarded to Drs. Rob Toonen and Zac Forsman of the UHM/Hawaii Institute of Marine Biology, are to: (1) determine if there are fixed genetic differences between *M. dilatata* and the other congeneric species; (2) develop rapid and inexpensive methods for distinguishing and positively identifying the species (both of which require knowledge of closely-related species); and (3) test the nuclear ribosomal internal transcribed spacer region for fixed differences. A final report is anticipated by March 1, 2009.

Finally, in September the NMFS PIRO SOC regional coordinator attended a “Cooperative Conservation of Marine and Anadromous Species Workshop” held in Silver Spring, MD. Regional SOC representatives met with Federal, State, Tribal, territorial, and non-governmental organizations and programs in order to better understand conservation priorities, challenges, and needs, as well as how to strengthen our conservation efforts through collaboration.

As for feedback from research and conservation efforts on PIR SOC during 2006-2007, NMFS PIRO is pleased to report that through a 2006 contract with the Waikiki Aquarium, *M. dilatata* has continued to be successfully asexually propagated in captivity, providing an abundance of fragments and colonies. Through the same contract, the Waikiki Aquarium has also built a husbandry tank for *L. reevii*. Captive husbandry efforts continue to be successful.

In 2007, NMFS PIRO worked with the national program coordinator to update the SOC fact sheets that were originally developed in 2004. These fact sheets are now more robust in information including status of the species, threats, research and data needs, and conservation actions currently being undertaken. According to web statistics available for FY 2008, there have been well over 7,100 downloads of the fact sheets for all four of the region’s species.

NMFS PIRO continues to work with Waikiki Aquarium as they create an outreach and education research exhibit for both *L. reevii* and *M. dilatata*. The contract was funded in August of 2007 and the goals of the exhibit, with interactive graphics highlighting both species, are to: (1) increase public awareness about these species; (2) discuss the value of establishing protective measures for these species and proactively conserving the population; (3) explain the importance of collecting data on these species so that scientists and resource specialists may better manage them in the wild; and (4) describe the mutually beneficial partnership between the Waikiki Aquarium and NMFS and how both partners have collaborated to promote the conservation of these two SOC. The exhibit is anticipated to be open to the public by fall of 2009.