



Coral Ecosystem and Marine Resources Initiative T/E and Sensitive Species

Project # 11-306

Background:

Coral reefs are beautiful, diverse ecosystems providing critical habitat for approximately 25% of marine organisms. Up to 75% of the world's coral reefs are threatened due to continued pressure from a combination of local and global stressors. This web-based database serves as an aid in the identification of sensitive coral reef species and their critical habitats as well as providing the latest information on threats and assessment techniques.

This project successfully combines the three guiding principles of DoD's Natural Resource Conservation Programs; stewardship, leadership and partnership. The project demonstrates DoD's commitment to good stewardship and leadership by assisting in the safeguarding of irreplaceable resources and modeling respectful use of these resources. The project also uses the knowledge and talents outside of DoD through a partnership with Boston University.



A National Park Service diver interacts with a Goliath Grouper (*Epinephalus itajara*). This species was designated critically endangered in 2011. Photo credit: NPS.

Objective:

The goal of this Legacy-funded project is to develop tools for consistent management and conservation of DoD protected marine species and associated benthic/marine habitat (coral reef ecosystems), including endangered, threatened and sensitive resources and habitat. The final product is an updated version of the website based Coral Reef Initiative Database with species specific information on Critically Endangered Species.

Summary of Approach:

The Coral Reef Initiative Database provides resource managers with information on coral reef ecosystems,

Threatened or Endangered coral reef associated species and their critical habitats compiled from the International Union for Conservation of Nature (IUCN) Red List. Resource managers can and search for T/E species by region associated with a specific installation.

Benefit:

DoD benefits from increased marine resource awareness through improved consistency in applying policy and resource protection measures while reducing resource management costs. The database provides resource information for DoD managers aiding compliance with multiple Federal Acts and Executive Orders particularly with regards to the need to inventory biologically or geographically significant or sensitive natural resources. The database provides resource information for use in decision-making regarding on-shore or near-shore activities in order to maintain military readiness with minimal adverse impacts to the marine environment. It serves as a resource for locating underwater resources and identifying potential impacts related to mission needs, operations or development projects. The ultimate goal is for long-term conservation of marine resources under DoD management.

Accomplishments:

This project developed and is improving and expanding a computer based tool that provides installation personnel access to information on coral reef species and associated benthic marine habitats. This update focused on providing information related to the identification, distribution, biology, ecology, critical habitats, and management strategies for critically endangered coral reef associated species. Since conservation status can change, the database maintains a current list of T/E species. This approach provides an easily accessible, up to date and fully documented database that DoD Natural Resource Managers can utilize to identify species of special conservation status and maintain compliance with T/E regulations.

Contact Information:

Phillip Lobel, Ph.D.
Professor of Biology
Biology Department
Boston University
5 Cummington St. Boston, MA 02215
617-358-4586
plobel@bu.edu

