

2001- Award Summaries:

A total of \$268,049.00 was distributed for the 2001 Protect Wild Dolphins Competition. Seven (7) awards were made; 27 proposals were received. Research and educational projects will involve a total of 28 investigators from 13 facilities for periods of 1-2 years.

2001-02

Principal Investigators and Co-PI's: *John Reynolds* reynolds@mote.org (MML), *Dana Wetzel* (MML),
Randall Wells (DBRI)

Consultants, Subcontracts and Others: *N/A*

Award (\$50,000, October 1, 2001– September 30, 2003) to Mote Marine Laboratory

Title: Use of Fatty Acid Signature Analysis to Assess Feeding Ecology of Bottlenose Dolphin (*Tursiops truncatus*): Employing Picolinyl Esters to Achieve Optimal Resolution.

Summary: Food preferences of bottlenose dolphin (*Tursiops truncatus*) will be investigated by identifying the occurrence of rare, long chain fatty acids in the tissues of dolphin and in the fauna they consume. This information will be compared to field observations of feeding by dolphin. Work will concentrate on dolphin populations that occur in Sarasota Bay, Florida.

2001-05

Principal Investigators and Co-PI's: *Randall Wells*, rwells@mote.org (MML), *Patricia E. Rosel*
(NMFS, Charleston, SC)

Consultants, Subcontracts and Others: *Karen Martien* (SEFSC), *Barbara Taylor* (SWFSC, La Jolla, CA), *Marthajane Caldwell* (UM), *Debbie Duffield* (PSU), *Anna Sellas* (MML), *Steven Swartz* (NMFS, Miami, FL)

Award (\$44,274.00, October 1, 2001 – September 30, 2003) to Mote Marine Laboratory (Sarasota, FL)

Title: Analysis of Gulf of Mexico Bottlenose Dolphin Stock Structure

Summary: mtDNA haplotype frequencies will be studied with a new statistical technique that clusters genetically similar individuals. Previously collected skin samples of dolphin from Sarasota Bay as well as new material from four other sites (Tampa Bay, Charlotte Harbor, Matagorda Bay and coastal waters off Texas) will be analyzed. These geographic investigations will provide a basis to compare genetic estimates of dispersal against assessments of dolphin movements obtained from long-term photographic identification

2001-12

Principal Investigators and Co-PI's: *John Reynolds*, reynolds@mote.org (MML), *Randall Wells*
(MML)

Consultants, Subcontracts and Others: TBD (for photography/artwork)

Award (\$12,100, October 1, 2001 – May 31, 2002) to Mote Marine Laboratory (Sarasota, FL)

Title: Development of a Book Entitled "Dolphins, Whales, and Manatees of Florida: A Guide to Sharing Their World"

Summary: This project will serve to educate the public about how human activities can impact Florida's marine mammals. Specifically, the book will address practices that can minimize the adverse effects people may inadvertently exert on protected and/or endangered species. The overall objective is to present information about the natural history and general biology of dolphin,

manatees and whales in ways that will indicate how people can contribute to long-term conservation practices.

2001-22

Principal Investigators and Co-PI's: *Ruth Ewing, DVM, Ruth.Ewing@noaa.gov (NMFS– SEFSC, Miami, FL), Julia Zaias, DVM (NMFS)*

Consultants, Subcontracts and Others: N/A

Award (\$25,000, October 1, 2001 – September 30, 2002) to NOAA Fisheries, Southeast Fisheries Science Center, (Miami, FL)

Title: Histopathologic Analysis of Necropsy Specimens Collected from Stranded Cetaceans along the Coasts of Florida.

Summary: Dolphin continue to strand sporadically on Florida beaches. This project will support necropsies and histopathologic evaluations of stranded dolphin in an effort to characterize the incidence of pathologic processes affecting wild populations. Such surveillance of diseases among free-ranging dolphin, especially disease related to anthropogenic factors, will provide much needed information for implementation of appropriate management and conservation decisions.

2001-23

Principal Investigators and Co-PI's: *Wayne McFee, Wayne.McFee@noaa.gov (NOAA, NOS, Charleston, SC), Pat Fair (NOAA), Eric Zolman (NOAA, NOS, Charleston, SC), Laura Engleby (DEP), Lori Schwacke (NOAA)*

Consultants, Subcontracts and Others: *Joseph Contillo (NMFS, SEFSC, Miami, FL), Ray Snow (NPS), Patricia Rosel (NMFS, Charleston, SC)*

Award (\$36,675,- January 1, 2002 – December 31, 2002) to Center for Coastal Environmental Health and Biomolecular Research, National Ocean Service (Charleston, SC)

Title: Assessment of Contaminate Concentrations in Tissues of Bottlenose Dolphins

Summary: Anthropogenic alterations of nearshore landscape, such as agricultural and real estate development, can change natural water flow patterns and increase the runoff of nutrients and contaminants. This project will determine the concentrations of organochlorine contaminants in the fatty tissues of wild dolphin in Florida Bay. Such data will provide benchmarks for comparison with threshold levels that may affect their immune and reproductive systems. Such risk assessment information will be used to monitor relationships between dolphin health and environmental degradation.

2001-24

Principal Investigators and Co-PI's: *Megan Stolen, Mstolen@hswri.org (HSW), Wendy Noke (HSW), Daniel Odell (HSW), Graham Worthy (HSW), Ann Spellman (FWC), Jamison Smith (FWC), Eric Stolen (DC).*

Consultants, Subcontracts and Others: N/A

Award (\$50,000, August 1 - July 31, 2003) to Hubbs-Sea World Research Institute (Orlando, FL)

Title: Abundance, Distribution and Group Composition of the Indian River Lagoon Bottlenose Dolphin, *Tursiops truncatus*, Population Using an Aerial Survey.

Summary: Management and conservation efforts depend on accurate assessments of population size and habitat use. Bi-weekly, aerial surveys will be conducted to assess the stock size, social structure and habitat preference of bottlenose dolphin throughout the Indian River Lagoon (IRL). These data may also indicate the extent of seasonal movement of dolphin between the IRL and the open ocean. Further, estimates of dolphin densities from this study will be compared to historical records in an effort to distinguish natural and human-caused mortality.

2001-27

Principal Investigators and Co-PI's: *Carlos Romero DVM, Ph.D.*, RomeroC@mail.vetmed.ufl.edu
(UF), *Rebecca Brudek (UF)*, *Ruth Ewing (NMFS– SEFSC, Miami, FL)*

Consultants, Subcontracts and Others: N/A

Award (\$50,000, August 1, 2001 – July 31, 2002) to University of Florida (Gainesville, FL)

Title: Isolation and Molecular Identification of Viruses Infecting Dolphin Stranded Along the Florida Coasts.

Summary: Stranding of dolphin can result from many factors. One contributing cause of mortality may be pathogenic viruses. The prevalence and disease impact of most of these viruses remains unknown. This project will standardize virological, molecular and serological techniques to identify pathogenic microorganisms such as morbilliviruses and caliciviruses. The occurrence of viral infections in stranded dolphin, both dead and live, will be documented. Viral diagnosis of live-stranded animals may help animal care staff in rehabilitation centers with treatment and quarantine procedures.

Abbreviations:

DBRI:	Dolphin Biology Research Institute
DC:	Dynamac Corporation
DEP:	Dolphin Ecology Project
FWC:	Florida Fish and Wildlife Conservation Commission
HSW:	Hubbs-Sea World
MML:	Mote Marine Laboratory
NOAA:	National Oceanic and Atmospheric Administration
NMFS:	National Marine Fisheries Service
NOS:	National Ocean Service
NPS:	National Park Service
PSU:	Portland State University
SEFSC:	Southeast Fisheries Science Center
SWFSC:	Southwest Fisheries Science Center
UF:	University of Florida
UM:	University of Miami

