

2004-Award Summaries

A total of \$427,057 will be distributed for the 2004 Protect Wild Dolphin competition. Six (6) awards were made; 28 proposals were received.

Principal Investigators and Co-PI's: Olav Oftedal (oftedalo@nzp.si.edu) Smithsonian National Zoological Park; Randall Wells (rwells@mote.org) Mote Marine Laboratory; Kristi West (kristiwest@earthlink.net) University of Hawaii at Manoa; Regina Eisert (eisertr@nzp.si.edu) Smithsonian National Zoological Park

Award No. 2004-01 (\$68,886, October 1, 2004 to September 30, 2006) to Smithsonian National Zoological Park

Title: Nutritional requirements of Florida Dolphin Calves: Application of a novel technique.

Summary: This project will address the high calf mortality among dolphin in Sarasota Bay, Florida. The nutritional components and caloric value of milk from adult females will be compared with the timing of solid food intake and foraging success of young dolphin in an effort to define the transition from a milk to a fish diet. Novel biomarkers will be developed from feeding experiments with captive dolphins to understand the interplay of life history, foraging and reproductive strategies. This study is likely to serve as a model for similar investigations of other cetaceans.

Principal Investigators and Co-PI's: Douglas Nowacek (nowacek@ocean.fsu.edu) and David Mann (dmann@seas.marine.usf.edu) Florida State University

Subcontractors: Sue Hofmann and Nelio Barros (nbarros@mote.org) Mote Marine Laboratory

Award No. 2004-06 (\$92,535, August 2, 2004 to July 31, 2005) to Florida State University

Title: Distribution, habitat use, foraging ecology and the acoustic environment of Florida Big Bend dolphins: Alligator Harbor to St. Joe Bay.

Summary: The Big Bend region of northwest Florida, from Alligator Point to St. Joe Bay is pristine coastal area. Very little is known about the bottlenose dolphins that inhabit this region. Baseline data about their ecology, behavior, and population structure will be compared to similar information obtained from more urbanized sectors. This project encompasses photo-identification, acoustic and water quality investigations.

Principal Investigators and Co-PI's: Laela Sayigh (siyighl@uncw.edu)
University of North Carolina at Wilmington; Randall Wells (rwells@mote.org)
Mote Marine Laboratory

Award No. 2004-08 (\$89,945, August 2, 2004 to July 31, 2006) to University of North Carolina at Wilmington

Title: Long-term digital database of bottlenose dolphin whistles.

Summary: The sounds produced by bottlenose dolphin of known age, sex and relatedness can be organized to classify individual voices, determine what features of whistles are important for communication, and ascertain whether some outcries signal stress. Data will be drawn from an extensive library of whistle recordings made on captured-and-released individuals in Sarasota Bay.

Principal Investigators and Co-PI's: Patrick Larkin (plarkin@biotech.ufl.org)
EcoArray Incorporated

Collaborator: Gregory Bossart (gbossart@hboi.edu) Harbor Branch
Oceanographic Institution

Award No. 2004-13 (\$79,934, August 2, 2004 to July 31, 2005) to EcoArray Incorporated

Title: Development of genetic assays for health assessment in wild dolphins

Summary: Gene chips are currently used in the medical field to study oncology, infectious disease, cellular biology, toxicology and immunology. This emerging technology will be used to assess the biology, physiology and health of bottlenose dolphin in Florida.

Principal Investigators and Co-PI's: Deborah Fauquier (dfauquier@mote.org),
Spenser Fire (sfire@mote.org), Richard Pierce (rich@mote.org), and Randall
Wells (rwells@mote.org) Mote Marine Laboratory; Leanne Flewelling
(Leanne.Flewelling@fwc.state.fl.us) and Jan Landsberg
(Jan.Landsberg@fwc.state.fl.us) Florida Marine Research Institute

Subcontractors: Michael Kinsel, University of Illinois; Nellio Barros
(nbarros@mote.org) Mote Marine Laboratory; Deborah Duffield
(duffieldd@pdx.edu) Portland State University; Megan Stolen
(mstolen@hswri.org) Hubbs- Sea World Research Institute

Collaborators: Greg Bossart (gbossart@hboi.edu), Harbor Branch
Oceanographic Institution

Award No. 2004-14 (\$48,671, August 2, 2004 to July 31, 2005) to Mote Marine Laboratory

Title: Brevetoxin induced morbidity and mortality in stranded and wild dolphins from central west Florida

Summary: Harmful algal blooms, especially red tide species, are known to kill fishes, birds and manatees in the coastal areas of Florida. The extent that brevetoxin intoxication from these algae may cause morbidity and mortality in dolphins along the central west coast of Florida will be investigated.

Principal Investigators and Co-PI's: Damon Gannon (dgannon@mote.org) and Randall Wells (rwells@mote.org) Mote Marine Laboratory

Award No. 2004-18 (\$47,086, August 2, 2004 to July 31, 2005) to Mote Marine Laboratory

Title: Quantifying habitat quality for bottlenose dolphins in Sarasota Bay: How do prey distribution and abundance influence habitat selection?

Summary: Bottlenose dolphins of Florida inhabit one of the most urbanized coastlines in North America. Despite intense study, little is known about the relationships between these dolphins and their prey in Florida. Therefore, the effects of anthropogenic habitat modifications on dolphins survival cannot be evaluated. This project will focus on the spatial and temporal patterns in the distribution of fish prey of dolphin within Sarasota Bay. Pelagic and demersal species will be sampled from a variety of habitats during summer and winter seasons.
