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Biology of offshore bottlenose dolphins from east Florida.
[\$24,900]

PROJECT SUMMARY - Dolphin inhabiting shallow coastal and deeper offshore waters differ in overall size, morphology, food habits, parasitic load, hematology and genetic characteristics. This project will investigate the poorly known deepwater populations occurring off the east coast of Florida. Specifically, the age and growth, reproductive condition, food habits, morphology and morphometrics, parasites, as well as the spatial and temporal distribution of 40 strandings will be studied.

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Historical synthesis of bottlenose dolphin stranding data in the Indian River Lagoon system, Florida, from 1977-2000: A GIS spatial analysis.
[\$24,120]

PROJECT SUMMARY –A Geographical Information System (GIS) will be developed to collate, organize and disseminate 23 years (1977-2000) of dolphin stranding data from the Indian River lagoon. This project represents the first comprehensive effort to broaden the availability and accessibility of historical records for future research, conservation and dolphin education programs. Currently, these data are archived by NMFS and the SouthEastern United States (SEUS) Stranding Coordinator (D. Odell). The PI's for this project represent a multi-disciplinary team of individuals from partnering organizations and are uniquely qualified to conduct the proposed research.

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Validation of paternity in a wild bottlenose dolphin population.
[\$4,500]

PROJECT SUMMARY - DNA microsatellites and chromosome heteromorphism will be used to determine the paternity of 61 dolphin calves in an ongoing study. The confirmation of paternity in these calves will make it possible to characterize the mating and social systems of a resident wild bottlenose dolphin population at a level of understanding that, because of its combined behavioral and genetic information, is unique among field studies of wild cetaceans.

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Identifying Optimal *Tursiops truncatus* habitat via Geographic Information Systems
[\$24,400]

PROJECT SUMMARY - Geographic Information Systems (GIS) will be used to construct a multivariate model to identify various parameters that characterize bottlenose dolphin habitats in the Jacksonville, Florida region. Habitat characteristics, such as vegetation type, water depth, water chemistry and bottom composition, will be incorporated as independent coverages in a GIS map of the study area. Dolphin distribution patterns will be overlaid on these coverages to determine what habitat variables are correlated with dolphin abundance and distribution. This modeling effort will provide a basis for defining testable hypotheses in areas where suitable dolphin habitats need protection from Florida's expanding human population.

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Rehabilitation of Florida dolphins at the Dolphin and Whale Hospital.
[\$25,000]

PROJECT SUMMARY – This project supports the purchase of equipment, supplies, and drugs that are needed to rehabilitate sick and injured dolphins that strand along the eastern coast of Florida. The goal with each stranding will be to relieve the suffering of the animal, and to return it to the wild, if possible. An aggressive suite of treatments using state-of-the-art technologies will be applied by well-qualified veterinary staff.

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Don't Feed or Harass Dolphins - Educational Campaign
[\$10,000]

PROJECT SUMMARY – This project seeks to improve public education in Florida about conservation problems and dangers associated with dolphin-human interactions. An outreach video for tourists will be produced and distributed to hotels for their local channels and other tourist-directed enterprises. The video will allow information about wild dolphins and their needs to be disseminated to a group with high and seasonal turnover throughout Florida, but especially in Panama City, Key West, Sarasota, and St. Petersburg/Clearwater.

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Southeast Florida Stranding Network Enhancement Project.
[\$25,000]

PROJECT SUMMARY - This project creates a network of shared resources and experience among three existing organizations, Marine Animal Rescue Society (MARS), Wildlife Rescue of the Florida Keys (WRFK), and the Harbor Branch Oceanographic Institution (HBOI) in order to provide coverage of strandings from Key West to Vero Beach, Florida. The partnership will enhance the level of care necessary to continue adequate rescue and rehabilitation of dolphin and other marine mammals, improve existing facilities, and support mobile stranding units. In addition, the project provides for more comprehensive training of both volunteers and local authorities, especially in regard to initial response and care protocols

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Use of Chemical Analysis of Tissues to Enhance Understanding of Bottlenose Dolphin (*Tursiops truncatus*) Feeding Ecology and Trophic Relationships.
[\$25,000]

PROJECT SUMMARY – This project will compare the validity of two controversial techniques, fatty acid analysis and stable isotope ratios, with the more traditional methods of observation and stomach content analyses, to clarify and quantify the feeding ecology of dolphin in Sarasota Bay, Florida. The first method will determine and build a "library" of fatty acid signatures of dolphin prey, and subsequently examine dolphin blubber or milk to assess what dolphins have consumed. Fatty acid signature analysis permits an assessment and quantification of long-term feeding habits by individual dolphins of a range of ages, reproductive states, and of both sexes. Stable isotope (carbon and nitrogen) analysis will determine the trophic level of the consumer and the relative dependence upon various primary producers from the same area (e.g., seagrasses, mangroves, phytoplankton). The isotope work will be based on teeth taken from dead dolphins.