

# MARY JO BARKASZI

## EDUCATION

Florida Institute of Technology, M.S. Biological Oceanography 1990  
Wittenberg University, B.A. Biology, Minor in Secondary Education, 1986

## EXPERIENCE

**January 2010 – Present** **Independent Consultant / ECOES Consulting, Inc.**

*Protected species specialist for the energy and marine industries*

- Co-Investigator / marine mammal & turtle specialist for: Bureau of Ocean Energy's (BOE) pilot study of aerial high-definition surveys for seabirds, marine mammals, and sea turtles on the Atlantic OCS - Contract Number M10PS00157
- Principle investigator for 6 year compilation study of protected species observer data collected during offshore seismic surveys in the Gulf of Mexico. MMS Contract # M08PC20051
- Development of services for traditional and alternative energy industries to address issues of permitting, risk assessment and impact assessment for protected species. Review of environmental protocols and environmental permits for clarification and compliance.
- Assistance in field surveys and desktop studies concerning protected marine species in the US and throughout the world.

**April 2008 – January 2010** **RPS Energy**

*Vice President of Protected Species Compliance and Global MMO Coordinator*

- Successfully grew the O&G observer programs of GeoCet, LLC until its purchase by RPS Energy in April of 2007 at which time my responsibilities shifted entirely to RPS Energy.
- Development of web-based conservation and compliance modules for an interactive data base designed to formulate best practices methodologies for O&G exploration in developing countries and under-represented oceans.
- Responsible for visual and acoustic protected species observer programs throughout the US and global regions covered by RPS Energy that included Canada, Africa, and SE Asia. Coordinated closely with other RPS observer offices in England and Australia to develop global pool (200+) of trained protected species observers.

**January 2003 – April 2008** **GeoCet, LLC**

*Founder, Co-Owner and Protected Species Manager*

- Grew the offshore O&G division of ECOES and established a separate corporation, GeoCet LLC, designed strictly to meet the needs of oil and gas exploration federal compliance requirements using personnel within ECOES.
- Responsible for protected species observer programs in federal US waters working on seismic vessels, pile driving, wind farm construction, explosive removals and MMS lease surveys throughout US.
- Supervised and coordinated marine protected species compliance personnel for oil and gas operations throughout the US and its territories. Responsible for approximately 100 personnel.
- Offshore migratory bird census for oil and gas structures throughout the Gulf of Mexico
- Development of passive acoustic monitoring (PAM) techniques for marine mammals in the Gulf of

Mexico.

## **January 2003 – April 2008**

## **ECOES Consulting, Inc**

### ***Founder, Owner and Ecologist***

While maintaining project management for ECOES during this time period, the focus was the establishment and growth of the GeoCet branch for O&G offshore industries. ECOES-specific projects managed during this time period include:

- Project Manager, Protected Species Program. Northeast Gateway LNG deepwater port construction and early-alert auto acoustic buoy test program
- Marine mammal / turtle specialist for biological characterization of borrow sites offshore East Florida and West Florida Coasts. MMS Contract # 1435-01005-CT-39054
- Project Manager, Protected Species Program. Various explosive severance projects in deep water Gulf of Mexico. Included aerial, platform and acoustic monitoring
- Project Manager, Protected Species Program. US Army Corps of Engineers Miami Harbor Deepening
- Project Manager, Protected Species Program, Massachusetts Hubline Construction Project

## **1996 – 2003**

## **ECOES Consulting, Inc**

### ***Founder, Owner and Ecologist***

Founded ecology-based consulting firm focusing on listed and imperiled species assessment and protection. Grew company as a woman-owned small business working closely with agencies and clients to reconcile practical needs with rigorous environmental protection. Specific projects include:

- Development, implementation and coordination of aerial and boat observers for the protected marine species watch plan for the film industry using regulated waters in the Miami area.
- Development, implementation and coordination of all observer activities for protected marine species during sub aqueous blasting in Boston Harbor HubLine per specifications under the Northeast Region of the NMFS.
- Project manager and primary (aerial) observer for listed species protection program, and provided all observers for the protected marine species watch plan (marine mammals, turtles and anadromous fish) for 2-year USACOE expansion project in the Cape Fear River estuary, Wilmington, NC
- Development, implementation and coordination of all observer activities for protected marine species during bridge demolition using explosives: USACE Palm Valley Bridge Project, Florida DOT Fuller-Warren Bridge and Georgia DOT Sydney-Lanier Bridge Projects.
- Migratory bird nesting surveys for USACE Jacksonville District construction and dredging operations
- Wrote and produced education plan and educational materials for US Army Corps of Engineers to be used during construction and dredging activities that could potentially impact gopher tortoises and Eastern indigo snakes. The education plan and materials have become part of the Corp's specifications on selected projects.
- Project manager for St. Johns River Water Management District public education contract for a 5-County, 4-Basin area project concerning watershed issues
- Lead ecologist for Florida Communities Trust faunal surveys for sites in Cocoa Beach and Cape Canaveral and Thousand Islands.
- Project manager and primary observer for listed species protection program, and provided all observers for the protected marine species watch plan (marine mammals, turtles and anadromous

fish) in the Cape Fear River estuary, Wilmington, NC

- Manatee expert GIS-based decision support system for manatee protection in Volusia County, FL
- Project manager for Phase 1 assessment and gopher tortoise and scrub jay protection plan and reserve design for Center for Drug Free Living, Orlando, FL
- Project manager for Florida Fish and Wildlife Conservation Commission's Florida Advisory Council on Environmental Education (FACEE) Grant involving public education about non-point source pollution, seagrass, and the manatee in Brevard County, FL
- Environmental services including Phase 1 assessment, protected species surveys, land management plans, cultural resource surveys, hydrological analysis and technical writing for the City of Cocoa, Mud Lake Restoration Project.
- NMFS-approved protected species protection program coordinator and observer coordinator for blasting & dredging operations in San Juan Harbor, San Juan, Puerto Rico
- DEP Endangered species watch coordinator and primary (aerial) protected species observer for Volusia County Mosquito Control District impoundment restoration
- Lead biologist for SFWMD natural areas inventory of the upper lakes basin.
- Biologist / Technical lead for Volusia County land management contract.
- DEP Endangered species watch coordinator and primary (aerial) protected species observer for blasting activities at Atlantic Dry Dock, Jacksonville, FL
- Ecologist for Port Canaveral Environmental Services
- Ecologist for listed species surveys and wetland delineation for Buccaneer Gas Pipeline

## 1990 – 1995

## NASA Life Sciences Contract

### *Conservation Biologist*

### *Bionetics Corporation & Dynamac Corporation*

Conservation biologist for the NASA life sciences support contract on John. F. Kennedy Space Center (KSC). Responsibilities include collection, monitoring, and interpretation of wildlife data for utilization in environmental assessments, long term monitoring, and management activities. Operate GIS (ArcInfo) software to implement conservation planning and to monitor threatened and endangered species habitat. Produced educational programs for all class levels as well as for teachers. Conducted extensive field work and data analysis concerning state and federally listed species. Specific projects include:

- Multiple biological assessments (BA) and environmental impact statements (EIS), and environmental Assessments (EA) for NASA operations.
- Radio telemetry studies of home range and habitat use for the Eastern Indigo Snake
- Production of a conservation index to identify environmentally sensitive communities on KSC using GIS spatial analyses.
- Long term demographic studies of the Florida scrub jay including banding, nest monitoring, modeling and population viability analysis using GIS software.
- Radio telemetry and habitat analysis for the gopher tortoise.
- Aerial surveys for manatee population and wading bird population / nesting studies
- Development of a PC-based decision support system to aid in the environmental permitting and management of KSC lands.
- Marine turtle netting for long term population monitoring in Mosquito Lagoon, FL
- Designed and implemented educational lectures and training for all levels and interests.
- Nest site selection analysis and nest monitoring for least terns and black skimmers
- Wintering shorebird and colonial waterbird surveys
- Long-term seagrass monitoring & mapping

- Road mortality studies for wildlife on KSC
- Conducted high school, college, and visiting scientist educational programs
- Coordinated with outside agencies to improve awareness of KSCs ecological resources.
- Nest and hatchling inventories and lighting disorientation assessments for marine turtles
- Capture and marking diamondback terrapins and gopher tortoises for long term monitoring
- Woodpecker abatement for shuttle launch complexes
- Bat colony management plan for bridges and other manmade structures on KSC
- Southern Bald Eagle historical nesting habitat mapping
- Production of GIS archaeological map and cultural resource database
- Identification and management of non-listed species requiring special consideration for protection on KSC lands.
- Aerial photo and satellite image interpretation and mapping for habitat management

**1987 – 1990**

**Florida Institute of Technology**

***Graduate Research Assistant***

- Performed research and teaching duties in the Oceanography / Ocean Engineering / Environmental Sciences Department.
- Masters Thesis: Comparisons in macrofaunal habitat use between the seagrass, *Halodule wrightii* and the macroalga, *Caulerpa prolifera*.
- Chief Scientist (1989) for research and teaching duties for baseline oceanographic data collection throughout continental shelf, Gulf Stream and Bahaman Bank ecosystems for ocean-going research cruises.
- Coordinator for the marine mammal stranding network, east-central Florida region. Provided extensive assistance to studies involving the use of oil ash blocks as artificial reefs and manatee scar pattern recognition studies at winter refugia.

**1986 - 1987**

**Mote Marine Laboratory**

***Biological Technician***

Field collection and data analysis for the following projects: zooplankton and ichthyoplankton entrainment studies for fine mesh screen instrumentation at the Tampa Electric Company (TECO); submerged aquatic vegetation (SAV) mapping at Crystal River power plant and Myakka River estuary; marine mammal aerial surveys and stranding response; benthic fauna sorting and identification; and Snook /Redfish capture and captive breeding stock maintenance.

<b>PEMITS AND CERTIFICATIONS</b>
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- Trainer for MMS NTL 2007-G07 observer candidates
- FWC Level 4 / aerial observer and trainer
- NMFS unconditional permit for implementing protected species plans during underwater blasting, dredging, and construction
- NMFS letter of authorization for marine mammal stranding response
- USFWS Florida Scrub Jay banding permit
- FWC gopher tortoise relocation permit
- USFWS indigo snake handling permit (expired research permit)
- Passive Acoustic Monitoring – course completion and co-trainer
- Capture, tagging and DNA sampling for Shortnosed Sturgeon

- Handling and DNA sampling of marine turtles for preemptive trawling & relocation

## SELECTED PUBLICATIONS

Barkaszi, M.J. and D. Epperson. 2009. Six-year compilation of cetacean sighting data collected during commercial seismic survey mitigation observations throughout the Gulf of Mexico, USA. Poster presentation to Society for Marine Mammalogy annual conference. Quebec, Canada.

Barkaszi, M.J. and M. Smith. 2009. BHP Billiton Multi-Vessel Survey: A case study for the commercial application of Passive Acoustic Monitoring (PAM) for regulatory compliance in the Gulf of Mexico, USA In Workshop on the Status and Applications of Acoustic Mitigation and Monitoring Systems for Marine Mammals. (<http://www.acousticmonitoring.org/materials/index.html>)

Barkaszi, M.J. 2008. Northeast Gateway Construction Marine Mammal Sightings and Take Summary Report In: Request for the Taking of Marine Mammals Incidental to the Operation of Northeast Gateway Deepwater Port and Algonquin Pipeline Lateral. Petition to NMFS for Incidental Harassment Authorization (IHA) pursuant to Section 101(a)(5) of the Marine Mammal Protection Act.

Zarillo, G., J. Reidenauer, K. Zarillo, T. Shinskey, E. Reyier, M. Barkaszi, J. Shenker, M. Verdugo, and N. Hodges, 2008. Biological characterization/numerical wave model analysis within borrow sites offshore West Florida Coast. MMS 2008-005. (BP)

Zarillo, G., J. Reidenauer, K. Zarillo, T. Shinskey, E. Reyier, M. Barkaszi, J. Shenker, M. Verdugo, and N. Hodges, 2008. Biological characterization/numerical wave model analysis within borrow sites offshore West Florida Coast: Volume II Appendices A-C. MMS 2008-005. (BP)

Barkaszi, M.J. 2004 Marine Mammal Mitigation. In Hutchinson, D.R. and P. E Hart. 2004. Cruise Report for G1-03-GM USGS Gas Hydrates Cruise, R/V Gyre, 1-14 May 2003, Northern Gulf of Mexico. US Geological Survey Open-File Report OF 03-474, 103p.

Barkaszi, M.J. 2004. A whale of a tale: results from the first year of mitigation with the marine mammal observer program during seismic acquisition in the Gulf of Mexico. SEG Expanded Abstracts 23, 61 (2004): doi: 10.1190/1.1842415.

Barkaszi, M.J., S. Tyson, and E. Bouthiller. 1999. Final Report for the Endangered Species Watch Program for Blasting Activities at Atlantic Dry Dock, Duval County, Jacksonville, Florida. FDEP Division of Protected Species, Tallahassee, FL.

Breining, D.R., M.J. Barkaszi, R.B. Smith, D.M. Oddy, and J.A. Provanca. 1997. Prioritizing wildlife taxa for biological diversity conservation at the local scale. Environmental Management

Breining, D.R., V.L. Larson, R.B. Smith, D.M. Oddy, and M.J. Barkaszi. 1997. Florida scrub jay demography in periodically burned scrub on Merritt Island. Auk

Smith, R.B., M.J. Barkaszi, D.R. Breining, and T.M. Burke. 1994. Florida scrub jay study at Playalinda Beach access road crossing: final report. Submitted to Nation Park Service Headquarters, Boulder, CO.

Hinkle, C.R. B. Engle, M.J. Barkaszi, C.R. Hall, W.M. Knott III, and B.R. Summerfield. 1994. Mapping analysis and planning system for John F. Kennedy Space Center, FL. Technology 2004.

Breining, D.R., M.J. Barkaszi, R.B. Smith, D.M. Oddy and J.A. Provanca. 1994. Endangered and potentially endangered wildlife on John F. Kennedy Space Center and faunal integrity as a goal for

maintaining biological diversity. NASA Technical Memorandum 109204.

Breininger, D.R., R.B. Smith and M.J. Barkaszi. 1993. Florida scrub jay study at Playalinda Beach access road crossing: recommendations for habitat management. Submitted to National Park Service Headquarters, Boulder, Colorado

#### **NASA Technical Publications**

Barkaszi, M.J., R.B. Smith, J.A. Provancha, C.R. Hall, D.M. Oddy, R. Schaub, V.L. Larson and R.A. Reddick. 1993. Biological assessment for the Banana River dredging spoil sites on John F. Kennedy Space Center.

Barkaszi, M.J. and R.A. Reddick. 1993. Biological assessment for the components refurbishment facility on John F. Kennedy Space Center.

Barkaszi, M.J. 1992. Biological assessment for the non-hazardous waste storage facility on John F. Kennedy Space Center.

Barkaszi, M.J. and R. Schaub. 1992. Biological assessment for the proposed landfill at Schwartz Rd. John F. Kennedy Space Center.

Kehl, M.J. and R.B. Smith. 1991. Biological assessment for a payload spin test facility on John F. Kennedy Space Center

Breininger, D.R., M.J. Kehl, and D.M. Oddy. 1990. Florida scrub jay study at Titan launch complexes 40 and 41 on Cape Canaveral Air Force Station.

#### **Professional Meeting Oral Presentations**

Barkaszi, M.J., V.L. Larson, R.A. Reddick, and B.A. Engel. 1995. Beyond launching rockets: merging environmental management and conservation priorities on John F. Kennedy Space Center. Abstract and presentation to Society for Conservation Biology, Ft. Collins, CO.

Barkaszi, M.J., R.B. Smith and D.R. Breininger. 1995. Home range characteristics of the eastern indigo snake (*Drymarchon corais couperi*) on John F. Kennedy Space Center, FL. Abstract and presentation to the Society for the Study of Amphibians and Reptiles. Boone, NC.

Barkaszi, M.J., V.L. Larson and R.A. Reddick. 1994. Mapping analysis and planning system: a conservation strategy regarding space. Abstract and presentation to the Natural Areas Association Conference, Palm Beach, FL.

Barkaszi, M.J. 1993. Wildlife Research on John F. Kennedy Space Center, FL. Abstract and presentation to the American Association for Laboratory Animal Science, Florida Branch. Melbourne, FL.

Breininger, D.R., M.J. Barkaszi, R.B. Smith, D.M. Oddy, J.A. Provancha and V.L. Larson. 1992. Identification of species considerations for the maintenance of biological diversity along the Atlantic coast of Florida. Abstract and Presentation to the Ecological Society of America, Honolulu, Hawaii.

Breininger, D.R., P.A. Schmalzer, V.L. Larson, R.B. Smith, M.J. Barkaszi, and D.M. Oddy. 1992. The spatial distribution of habitat and species of conservation concern in scrub dominated landscapes on Kennedy Space Center and its surroundings. Abstract and paper presented at Archbold Biological Station Florida Scrub Workshop.

Kehl, M.J., R.B. Smith, and D.R. Breininger. 1991. Using Geographic Information Systems (GIS) as a research tool in the conservation of the eastern indigo snake, (*Drymarchon corais couperi*) on John F.

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Kennedy Space Center, Florida. Abstract and poster presentation for the Society for Conservation Biology, Madison, WI.

Kehl, M.J., R.B. Smith, and D.R. Breininger. 1991. Radiotelemetry studies of eastern indigo snakes (*Drymarchon corais couperi*). Abstract and presentation to the American Society of Ichthyology and Herpetology, New York, NY.

Breininger, D.R., R.B. Smith and M.J. Kehl. 1991. Methods used for monitoring and environmental impact assessment involving the Florida scrub jay on John F. Kennedy Space Center. Abstract and presentation to the Society for Conservation Biology, Gainesville, FL.

Kehl, M.J. 1989. Comparisons in macrofaunal habitat use between the seagrass *Halodule wrightii* and the macroalga *Caulerpa prolifera* in the Banana River, Florida. Abstract and presentation to the Florida Academy of Sciences, St. Petersburg, FL.

Kehl, M.J. 1987. Patterns in bottlenose dolphin (*Tursiops truncatus*) abundance during aerial surveys of Tampa Bay and Sarasota Bay, Florida, 1984-1987. Abstract and presentation to the Florida Academy of Sciences, Tampa, FL.