

# STRANDINGS

Newsletter of the Southeast United States Marine Mammal Health And Stranding Network  
Winter, Spring, Summer, Fall 2007

Strandings is a publication of the National Marine Fisheries Service Southeast Regional Office and the Southeast Fisheries Science Center

## TABLE OF CONTENTS

|                             |      |
|-----------------------------|------|
| Travels with Betty:         | 1-4  |
| Recent News                 | 4    |
| Southeast Stranding Summary | 5    |
| Update: MMHSRP Nat'l        | 6    |
| Environmental Policy Review |      |
| Network Member Spotlight    | 6    |
| Southeast Regional News     | 7-10 |
| Prescott Corner             | 11   |
| Recent Publications         | 12   |



Randy Wells: Mote Marine Laboratory

## Travels with Betty: A Risso's Dolphin's Tour of the Gulf of Mexico

Randy S. Wells<sup>1</sup>, Charles A. Manire<sup>2</sup>, Janet Whaley<sup>3</sup>

<sup>1</sup>Sarasota Dolphin Research Program, Chicago Zoological Society, c/o Mote Marine Laboratory, <sup>2</sup>Dolphin and Whale Hospital, Mote Laboratory and Aquarium, and <sup>3</sup>NOAA/NMFS Marine Mammal Health and Stranding Response Program

Risso's dolphins (*Grampus griseus*) are fairly abundant in warm temperate and tropical waters around the world. However, because they typically are found seaward of the continental shelf and over the upper continental slope, there has been little opportunity to study them except where deep water comes near shore. Based on National Marine Fisheries Service (NMFS) surveys, *Grampus* is the 4<sup>th</sup> most abundant cetacean in the Gulf of Mexico, but off Florida the 200-km-wide continental shelf has precluded focused research on this species. Stranded animals can provide windows into the lives of difficult-to-study species when they can be rehabilitated, released, and monitored. In 2007, an opportunity arose to learn about *Grampus* in the Gulf of Mexico by tagging and tracking a rehabilitated adult female stranded near Bonita Beach, Florida, and released near the edge of the continental shelf off southwest Florida five months later.

Two mother-calf pairs of Risso's dolphins stranded together on 5 May 2007 on a barrier island near Bonita Beach, Florida. In the middle of the night, Dr. Janet Whaley (NMFS National Stranding Coordinator and veterinarian), Dr. Laurie Gage (USDA Big Cat Specialist and veterinarian), and



**Travels with Betty:  
a Risso's Dolphin's Tour of the Gulf of Mexico; Continued**

Denise Boyd (Florida Fish and Wildlife Conservation Commission) responded to a report of a pilot whale mass stranding off Bonita Beach. Around 1:00 am, the team met up with FWC Law Enforcement and traveled to the barrier island. Upon arrival, rescuers determined it was four Risso's dolphins attended by a group of responsible citizens who had been on scene for several hours.

The animals were calm and Drs. Whaley and Gage assessed the health of the animals and determined that they were stable enough to transport back to the boat ramp. The dolphins were transported by boat to the boat ramp where the Mote Marine Laboratory ambulance and medical staff were staged.

All four dolphins were transported to Mote Aquarium's Dolphin and Whale Hospital. One mother-calf pair did not survive in spite of treatment, but the other, mother Betty and son Big Al, were treated successfully over the next five months. Upon admission, Betty was 282 cm long and weighed 230 kg. Her newborn calf, believed to be only a few weeks old upon admission, was about 125 cm long and weighed 32 kg. Betty was admitted with bacteremia caused by a very drug-resistant *E. coli* organism, the same bacteremia that had killed the other mother-calf pair. In addition, she was thought to have several internal abscesses and received quite a long course of treatment with a variety of antibiotics and an antifungal medication. Initially, Big Al appeared healthy, but he soon developed an elevated white blood cell count and was placed on antibiotics.

The mother-calf pair, housed in a 10-m-diameter pool with a water level of about 2 m for most of the rehabilitation, was very active, behaviorally (Figure 1 used on first page). They engaged in frequent and occasionally intensive social interactions, exemplifying the strongly social nature of this species. Nursing involved frequent short bouts averaging about 8 seconds in length. The calf exhibited a great deal of aerial behavior, increasing in coordination over time, developing porpoising and other aerial behaviors and interactions with environmental enrichment devices. Typical dive durations were short, likely due to the shallow depth of the water, with the calf rarely over one minute and Betty rarely over three minutes. The animals were heard to make occasional vocalizations

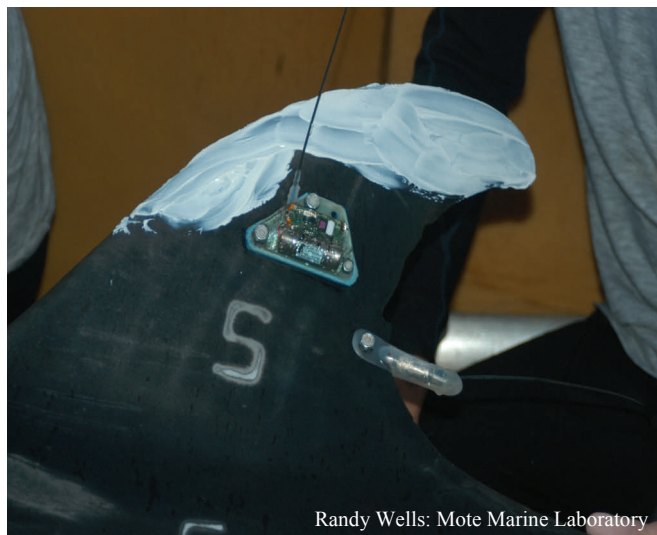


Figure 2. Tags and marks on Risso's dolphin Betty. The satellite-linked Splash tag is mounted in the center of the fin, and the VHF tag is affixed to the trailing edge of the fin. Freezebrand "S" is visible on the fin and body. The white ointment was for temporary protection during transport.

and echolocation clicks, and hearing tests by Dr. David Mann of the University of South Florida indicated that neither animal was impaired. Betty ate about 41 kg of squid each day. Big Al concentrated on milk from mom, although he was taking some squid by the time of release.

By late August, it was clear that the dolphins would be good release candidates, and plans were developed for their tagging, release and follow-up monitoring. Their medical issues had resolved. Betty had gained 12 kg since admission. Big Al had grown an amazing 44% to 185 cm, and nearly tripled his body weight, to 90 kg. The dolphins were both tested for morbillivirus at least twice, two weeks apart. The calf was consistently negative and the adult was variably positive for some or all viruses tested. Polymerase Chain Reaction (PCR's) were performed at two different labs on both eye swabs and blood from Betty, and all were negative.

In preparation for release, both dolphins were freeze-branded on both sides of the body below the dorsal fin and both sides of the dorsal fin with 2"-high brands. Betty was fitted with a satellite-linked Splash transmitter (Wildlife Computers) to record and transmit both location and dive data. The Splash tag was attached to the side of the dorsal fin with 3 delrin pins and secured on the opposite side of the fin with padded washers and corrosible nuts (Figure 2).

**Travels with Betty:  
A Risso's Dolphin's Tour of the Gulf of Mexico; Continued**

Because of concerns regarding the physicality of the calf, its rapid growth, and reports of Risso's dolphins removing tags from one another, we did not attach a Splash tag to the calf. Both dolphins were fitted with a small VHF transmitter (ATS) attached via a "bullet" tag by a single delrin pin with corrosible nuts through the trailing edge of the dorsal fin (Figure 2). The VHF tags were very helpful during the observation period immediately following release.

The dolphins were tagged during the 172 km trip out to the release site, southwest of Venice, Florida, on 27 September 2007. They rode comfortably on pads on the afterdeck of a 25 m yacht, the *Tomcat*, moving at about 20 kts. The dolphins were released just after daybreak, by sliding them over the gunwale into waters 143 m deep. Initially, Betty circled several hundred meters away from the boat, but Big Al remained near the fiberglass hull of the boat, making small, shallow circles and occasionally vocalizing. His attachment to the boat was interesting in light of the fact that he had spent most of his short life to date in a small fiberglass pool with associated pump and machinery noise. We tried to back away from the calf, but it followed the boat. We then shut down the engines and generator. Gradually, the calf moved his circles farther from the boat (up to 30 m), and began making longer and deeper dives (to a few m). Betty slowly moved closer, and then made a quick approach to the calf underwater, as evidenced by converging fluke prints, but this was not enough to get the calf away from the proximity to the boat. The calf porpoised repeatedly, and moved to more than 50 m from the boat. Mom made repeated flipper slaps at about 100 m from the boat. We backed the boat off several hundred meters, and the calf did not follow us this time. VHF signals became synchronous on occasion, and the dolphins were observed near one another within an hour of release.

Remote tracking via signals to satellites continued for 106 days, through 10 January 2008. During this time Betty covered much of the Gulf of Mexico, mostly following the 1,000-m contour of the continental shelf edge, but on occasion crossing over deep sections of the middle of the Gulf (Figure 3).

She initially moved southward toward Yucatan before turning west and entering the Bahia de Campeche. After circling Bahia de Campeche, she headed north to the shelf edge off Texas and Louisiana, crossed back to the shelf edge off northern Yucatan, then crossed to the edge of the west Florida shelf once again, completing her circuit. Betty moved south along the shelf edge to a point west of Key West, where she remained for the final six weeks of the tracking period.

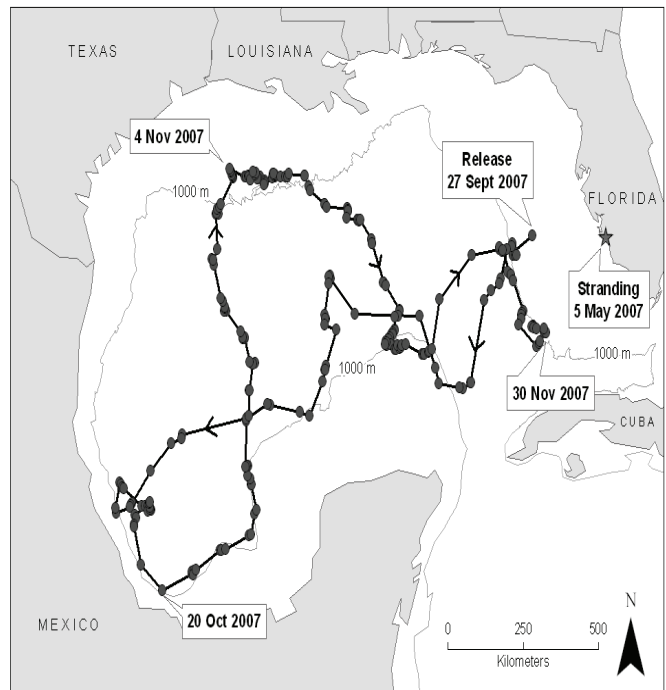


Figure 3. Betty's travels through the Gulf of Mexico, 27 September – 30 November 2007. The 30 November position is near where she spent the next six weeks.

As was the case for an adult male Risso's dolphin rehabilitated by Mote, released, and tracked during 2006 (Clyde), Betty concentrated most of her activities in the top 50 m of the water column. Preliminary analyses indicate that about 86% of her dives were to depths of 50 m or less, even though most of her positions were in waters much deeper than this. Only about 1% of her dives were to depths greater than 400 m. Dives to more than 600 m did not occur until she returned to the west Florida shelf edge, two months post-release.



**Travels with Betty:  
A Risso's Dolphin's Tour of the Gulf of Mexico; Continued**

Betty's deepest dives were to 800-1,000 m, as compared to Clyde's single deepest dive to 400-500 m. All of Betty's deepest dives occurred during the 6-hour time period categorized as dusk. Similarly, Clyde made more deep dives at dawn and dusk, possibly following a crepuscular pattern exhibited by many marine predators. Most of Betty's dives lasted less than 3-4 minutes, but a few (less than about 0.1%) lasted 11-15 minutes. This pattern was comparable to that of Clyde, whose longest dives were 9-10 minutes.

By all indications, the rehabilitation of Betty was successful. She was still alive more than 3.5 months post-release. Although she was no longer covering long distances around the Gulf of Mexico after the first two months, she was demonstrating through her dive patterns that she was likely in good physical condition through the remainder of the tracking period. Her deepest and longest dives occurred after she had settled into moving back and forth through the small area west of Key West off the west Florida shelf. Transmission data suggest either tag or tag attachment failure rather than a problem with Betty herself; the tag exceeded our expectations in terms of attachment time and total number of transmissions. Unfortunately, no information is available on the fate of Big Al after he re-joined Betty on the day of release.

Interpreting Betty's patterns is challenging given how little we know about this species in the wild. Betty moved through areas where *Grampus* has been reported from NMFS surveys, and her emphasis on the shelf edge is consistent with characteristics previously described for this species. Her general dive patterns were consistent with those of rehabilitated *Grampus* Clyde, especially in terms of primarily using the top 50 m of the water column, and exhibiting possible crepuscular patterns. Rehabilitation and release of difficult-to-study species provide unique and important opportunities to incrementally increase our knowledge about these animals.

**Recent News****Marine Mammal Stranding Regulations Advanced Notice of Proposed Rulemaking (ANPR).**

The public comment period for the Marine Mammal Stranding Regulations ANPR has been extended until April 30, 2008. The Marine Mammal and Sea Turtle Conservation Division, Office of Protected Resources, NMFS, is considering proposing changes to its implementing regulations governing the taking of stranded marine mammals under section 109(h), section 112(c), and Title IV of the Marine Mammal Protection Act (MMPA). NMFS has published an ANPR in the *Federal Register* and are soliciting review and comment to better inform the process. The ANPR and MMPA implementing regulations (50 CFR part 216) can be found at [http://www.nmfs.noaa.gov/pr/health/mmpa\\_anpr.htm](http://www.nmfs.noaa.gov/pr/health/mmpa_anpr.htm). The ANPR will be followed by a proposed rulemaking once comments are received and reviewed. Please provide comments by the close of the comment period (April 30, 2008). Comments may be submitted as follows: By mail to: Chief, Marine Mammal and Sea Turtle Conservation Division Attn: Stranding Regulations ANPR Office of Protected Resources, NMFS 1315 East-West Highway Room 13635 Silver Spring, MD 20910. By facsimile at (301) 427-2525; electronic submissions: Submit via the Federal eRulemaking Portal <http://www.regulations.gov>. For further information please contact Sarah Howlett ([Sarah.Howlett@noaa.gov](mailto:Sarah.Howlett@noaa.gov)) or David Cottingham ([David.Cottingham@noaa.gov](mailto:David.Cottingham@noaa.gov)) by email.

In addition, the Southeast Regions Marine Mammal Stranding Network (SER MMSN) has completed the 2008 network member directory. The SER MMSN directory is intended to be an information resource and serves primarily as a phone book to facilitate communication among network organizations. The directory was distributed electronically on the SEMMSN list serve in March 2008. A limited supply of hard copies will be printed when funds become available. To request an electronic copy via email please contact Calusa Horn at [Calusa.Horn@noaa.gov](mailto:Calusa.Horn@noaa.gov)

**Southeast Region Stranding Summary**  
December 1st, 2006 Through November 30th, 2007

| Species                        | AL | FL  | GA | LA | MS | NC  | SC | TX  | PR | Total |
|--------------------------------|----|-----|----|----|----|-----|----|-----|----|-------|
| <i>Erignathus barbatus</i>     | 0  | 1   | 0  | 0  | 0  | 0   | 0  | 0   | 0  | 1     |
| <i>Trichechus manatus</i>      | 0  | 0   | 0  | 0  | 0  | 0   | 0  | 1   | 0  | 1     |
| <i>Eubalaena glacialis</i>     | 0  | 1   | 1  | 0  | 0  | 1   | 0  | 0   | 0  | 3     |
| <i>Feresa attenuata</i>        | 0  | 0   | 0  | 0  | 0  | 0   | 3  | 0   | 0  | 3     |
| <i>Grampus griseus</i>         | 0  | 7   | 0  | 0  | 0  | 0   | 0  | 0   | 0  | 7     |
| <i>Halichoerus grypus</i>      | 0  | 0   | 0  | 0  | 0  | 2   | 0  | 0   | 0  | 2     |
| <i>Kogia breviceps</i>         | 0  | 5   | 1  | 0  | 0  | 5   | 3  | 1   | 0  | 15    |
| <i>Kogia sima</i>              | 0  | 3   | 0  | 0  | 0  | 8   | 1  | 1   | 0  | 13    |
| <i>Kogia sp.</i>               | 0  | 1   | 0  | 0  | 0  | 0   | 0  | 0   | 0  | 1     |
| <i>Mesoplodon densirostris</i> | 0  | 0   | 0  | 0  | 0  | 1   | 1  | 0   | 0  | 2     |
| <i>Lagenorhynchus acutus</i>   | 0  | 0   | 0  | 0  | 0  | 1   | 0  | 0   | 0  | 1     |
| <i>Megaptera novaeangliae</i>  | 0  | 2   | 1  | 0  | 0  | 2   | 0  | 0   | 1  | 6     |
| <i>Peponocephala electra</i>   | 0  | 0   | 0  | 0  | 0  | 0   | 0  | 1   | 0  | 1     |
| <i>Phoca groenlandica</i>      | 0  | 0   | 0  | 0  | 0  | 0   | 0  | 0   | 0  | 0     |
| <i>Phoca vitulina</i>          | 0  | 0   | 0  | 0  | 0  | 2   | 0  | 0   | 0  | 2     |
| <i>Phocoena phocoena</i>       | 0  | 0   | 0  | 0  | 0  | 20  | 0  | 0   | 0  | 20    |
| <i>Physeter macrocephalus</i>  | 0  | 1   | 0  | 0  | 0  | 0   | 0  | 1   | 0  | 2     |
| <i>Stenella coeruleoalba</i>   | 0  | 0   | 0  | 0  | 0  | 3   | 0  | 0   | 1  | 4     |
| <i>Stenella frontalis</i>      | 1  | 9   | 1  | 0  | 0  | 0   | 0  | 0   | 0  | 11    |
| <i>Stenella sp.</i>            | 0  | 1   | 0  | 0  | 0  | 2   | 0  | 0   | 0  | 3     |
| <i>Steno bredanensis</i>       | 0  | 1   | 0  | 0  | 0  | 0   | 0  | 0   | 0  | 1     |
| <i>Tursiops truncatus</i>      | 6  | 163 | 14 | 12 | 8  | 73  | 42 | 122 | 2  | 442   |
| <i>Ziphius cavirostris</i>     | 0  | 2   | 0  | 0  | 0  | 0   | 1  | 0   | 0  | 3     |
| <i>Unknown cetacean</i>        | 0  | 0   | 0  | 0  | 0  | 0   | 0  | 2   | 0  | 2     |
| <i>Unknown delphinid</i>       | 0  | 16  | 0  | 0  | 0  | 0   | 1  | 2   | 0  | 19    |
| <i>Unknown mesoplodon</i>      | 0  | 0   | 0  | 0  | 0  | 1   | 0  | 0   | 0  | 1     |
| <i>Unknown spp.</i>            | 0  | 0   | 0  | 0  | 0  | 0   | 0  | 0   | 0  | 0     |
| <i>Unknown Odontocete</i>      | 0  | 0   | 0  | 0  | 0  | 0   | 0  | 0   | 0  | 0     |
| <b>Total</b>                   | 7  | 213 | 18 | 12 | 8  | 121 | 52 | 131 | 4  | 566   |

## Update: MMHSRP National Environmental Policy Act review, including the finalization and issuance of the Policies and Best Practices.

The Notice of Availability for the Draft Programmatic Environmental Impact Statement (PEIS) for the Marine Mammal Health and Stranding Response Program (MMHSRP) was published in the *Federal Register* on March 16, 2007 (72 FR 12610) and the Final PEIS is anticipated in early 2008. As part of this process, a standardized national template for the format of Stranding Agreements (SA) was developed. This national template was based very heavily on the current NMFS Southeast Region (SER) Stranding Agreement. NMFS also developed a list of minimum criteria for organizations wishing to obtain a SA and participate in the stranding network. These criteria differ based on the level of involvement of the participant (response only; response and transport; rehabilitation; etc.) and differ slightly from the previous evaluation criteria used by the NMFS SER. NMFS SER began using the new national SA template and evaluation criteria for all new SA proposals and renewals on March 1, 2008. For a copy of the SA evaluation criteria or, for any questions and information related to Stranding Agreements, please contact Erin Fougères, NMFS Southeast Region Marine Mammal Stranding Program Administrator, at (727) 824-5323 or [erin.fougeres@noaa.gov](mailto:erin.fougeres@noaa.gov).

### Network Member Spotlight

#### Michele Kelley Aububon Aquarium of Americas



Michele Kelley is a Marine Mammal Trainer at the Audubon Aquarium of the Americas and Senior Stranding Coordinator for the state of Louisiana. Born in Mobile, AL and raised across the country from California to Florida, Michele graduated with a degree in Marine Biology from the University of South Alabama. During this time, she attended Dauphin Island SEA LAB during the summers and volunteered with Gerald T. Regan with the Alabama Stranding Network.

Michele was a volunteer for the sea otter department at the Audubon Nature Institute beginning in 2002 and was employed as a full time sea otter trainer in 2004. She was also involved with the LA stranding program that operated out of the Aquarium. After Hurricane Katrina in 2005, the stranding program was discontinued until Michele made Senior Stranding Coordinator. She began to rebuild the program, reestablished communication with state and federal agencies, and set new guidelines for data collecting in the Louisiana area. Since 2005, Louisiana Marine Mammal and Sea Turtle Rescue Program has made great strides in not only rebuilding the stranding program but improving it as well.

When asked what she likes most about working with the Stranding Network and Audubon Aquarium, Michele said she is “extremely fortunate for the opportunities that not only Audubon has given me but also the National Marine Fisheries Service’s Marine Mammal Stranding Network. I am very proud to be a part of the conservation of marine mammals in the great state of Louisiana. We can only conserve and protect that which we know and understand.”

## Southeast Regional News

2007018SC fetus *K. breviceps* Beaufort, SC.

### North Carolina

Thirteen species of marine mammals stranded in North Carolina between December 1, 2006 and November 30, 2007. Of these, there were three large whales, including two humpback whales and one right whale. The right whale was reported floating off Cape Hatteras, NC on March 31<sup>st</sup>, 2007. The whale was towed to shore late on April 1<sup>st</sup> and a complete necropsy was performed on April 2<sup>nd</sup>, 2007, as part of a multi-agency response effort including National Marine Fisheries Service (Beaufort Laboratory, NE Regional Office, and Headquarters), the University of North Carolina Wilmington, Virginia Aquarium and Marine Science Center Stranding Team, NC State Vet School, Duke University Marine Lab, US Coast Guard, and National Park Service Cape Hatteras. The whale was a young male (772cm total length), likely a young of the year. It was moderately decomposed, but appeared robust. Necropsy findings included lesions consistent with an entanglement around the left flipper, with some form of gear likely trailing towards the flukes, causing deep abrasions through the epidermis. The mandible was also dislocated on the right side, and both mandibles were fractured. With the absence of most internal organs, a conclusive cause of death could not be determined from gross observations. However, given color changes noted in the tissues deep to the flipper wraps, the entanglement was most likely associated with the whale's demise.

### South Carolina

A total of 52 marine mammal strandings were recorded from December 1, 2006 – November 30, 2007 in South Carolina. Forty two of these stranded animals were bottlenose dolphins. One of these dolphins was a known individual from the NOS Photo-Id catalogue, "Mutt", who died of placentitis from a uterine rupture with a decomposed near-term fetus. Three pygmy sperm whales and one Cuvier's beaked whale also stranded during this

time period. One of the pygmy sperm whales died of a gastric obstruction (plastic wrapper) and was also carrying a near-term fetus (see photo). All three pygmy sperm whales had low levels of domoic acid present in feces or urine, but this was not believed to be significant enough to cause mortality.

South Carolina also experienced a mass stranding of three Pygmy killer whales in August and a Blainville's beaked whale in September which showed signs of emaciation and entanglement.

In addition:

- On May 1, 2007 oil spill training for the SE region was held at NOS/CCEHBR in Charleston.
- SEAMAMMS were held in Charleston March 28-29, 2008.
- NOS/CCEHBR would like to congratulate Leslie Burdett on her acceptance into the Epidemiology program at MUSC and thank her for the 6+ years she has given to the Marine Mammal Stranding Network. NOS/CCEHBR would also like to welcome Michelle Pate into the stranding and life history program.

### Georgia

From December 1, 2006 – November 30, 2007 there was total of 18 strandings in Georgia. On December 30, 2006 the Georgia Department of Natural Resources (GDNR)/ Wildlife Trust right whale survey team found a dead right whale 20 miles off Jeckyll Island. The whale was towed to Amelia Island, Florida, where Dr. Michael Moore of Woods Hole Oceanographic Institution led a necropsy on Dec. 31 and Jan. 1. Staff and volunteers from many (continued page 8)



organizations including Florida Fish and Wildlife Commission, GDNR, New England Aquarium, NOAA fisheries, St. Catherine's Island Foundation, United States Geological Survey, Virginia Aquarium and Marine Science Center, and the Wildlife Trust assisted with the necropsy. The final necropsy report is pending peer review but concluded that the 41 ft, 15 ton male right whale died from a vessel collision (see photo).



Michael Moore leading necropsy of right whale GA2007025.

On May 1, 2007 a neonate bottlenose dolphin was found dead with an advanced case of suspected viral dermatitis. Dr. David Rotstein processed the samples and a polymerase chain reaction is pending. Dr. Dan Odell led the necropsy at the University of Georgia College of Veterinary Medicine in conjunction with a marine mammal seminar. Significant gross findings included extensive lungworm infestation. In addition, Dr. Odell led instructional necropsies on a bottlenose and Atlantic spotted dolphin for veterinary and ecology students at the University of Georgia College of Veterinary Medicine in Athens on May 30.

## Florida

There were 213 strandings on the coast of Florida between December 1, 2006 and November 30, 2007. Two juvenile humpback whales were stranded off the east coast, one on January 13<sup>th</sup> at Cocoa Beach in Brevard County and another on January 18<sup>th</sup> at Daytona Beach in Volusia County. Although the Hubbs-SeaWorld Research Institute (HSWRI) Marine Mammal Stranding Program (MMSP) collected numerous tissue samples and stomach contents, neither the causes of death nor their possible relation to an Unusual Mortality Event for humpback whales occurring in

the northeast have yet to be determined. HSWRI also responded to two pygmy sperm whales, a dwarf sperm whale, and two bottlenose dolphin strandings in 2007, all of which were alive upon stranding but either had to be euthanized or died shortly thereafter.

In addition, on May 3<sup>rd</sup> a juvenile male bearded seal was sighted in the Indian River Lagoon near the St. Lucie inlet. Concerns for his health led to his capture by the Harbor Branch Oceanographic Institute. The seal was transported to SeaWorld Orlando, where efforts were made to save him, but the seal died 4 days later. The necropsy showed him to be in poor health with only leaves and trash in his stomach.

A female bottlenose dolphin calf was brought to Mote Marine Laboratory on January 30, 2007. Named "Filly", she had monofilament fishing line wrapped around her tail stock that had cut to the bone and required two surgical procedures for removal. Because she regurgitated several pieces of plastic following her capture, biologists performed thermography and gastroscopy. Fully recovered, "Filly" was tagged with a VHF transmitter and tracked by the Sarasota Dolphin Research Program following her release into Roberts Bay on March 28<sup>th</sup>. On May 1, 2007 line was seen attached to the transmitter tag, and problems developed with the VHF transmitter. On May 2, 2008 "Filly" transmitted her last radio signals. Searches were conducted from the waters of Stumps Pass to the northern tip of Anna Maria Island (well beyond her normal range) in an effort to relocate her. Searches recovered nothing. She has not been sighted since May 1, 2007 and is currently presumed dead.

On March 24<sup>th</sup>, a juvenile rough toothed dolphin was found stranded on Egmont Key at the mouth of Tampa Bay. Named "Dancer" she had a very high white blood cell count, gastric and intestinal problems, and superficial wounds. A gastroscopy performed on March 25<sup>th</sup>, during which marine sponges were removed from her stomach, revealed gastric ulcers. After the procedure, "Dancer's" condition improved and she was deemed non-releasable and sent to Gulf World, a permanent facility in Panama City. On May 4<sup>th</sup>, four Risso's dolphins (two female adults, a male calf, and a female calf) stranded as a group near Bonita Beach in Lee County. See featured article for complete story.



## Louisiana

There were a total of 12 strandings in Louisiana, all of which were bottlenose dolphins. An albino bottlenose dolphin calf was also reported on July 24, 2007 swimming among a pod of 5 dolphins in Calcasieu Lake, Louisiana. Photographs were taken of the albino calf and widely circulated on the Internet. These photos continue to be circulated due to the rare occurrence of albinism in dolphins. The albino calf had been sighted on several occasions throughout September, October, and December 2007 along the Louisiana coastline. There have been no confirmed sightings of the calf since December 5, 2007, when it was photographed by a Louisiana Department of Wildlife and Fisheries (LDWF) biologist swimming among its pod in the Calcasieu Ship Channel. For a fact sheet on the albino dolphin visit: <http://sero.nmfs.noaa.gov/pr/pr.htm>



The Louisiana Marine Mammal and Sea Turtle Program (MMSTRP) conducted aerial surveys over Lake Pontchartrain to track the movement of any marine mammals in the area. On the first flight surveyors spotted many manatees in the area. They continued to conduct aerial surveys and monitor the manatees until they migrated out of the lake in October 2007.

During surveys, MMSTRP were also able to check in on the group of dolphins which have occupied Lake Pontchartrain since February 2007. Although it is not unusual to see dolphins in Lake Pontchartrain (the water is actually brackish), dolphins have never been observed to stay in this area for such an extended period of time. In April of 2007, calls were received by the Institute of Marine Mammal Studies (IMMS) in Mississippi regarding this pod of dolphins and two dead, stranded dolphins. IMMS responded for MMSTRP, as they were unable to do so. On initial inspection of the group, their skin showed signs of fresh water marks and there was some concern regarding the animals.

However, their behavior indicated that they were fine. It has now been a year and the animals are doing fine. Their skin has cleared up and they are performing complex social behaviors, feeding, and sending scouts out as well. They are not interacting with boats, which is a great relief. Also, no other mortalities have taken place. MMSTRP will continue to observe and monitor these animals by boat and by air with assistance from LDWF for any changes in their condition or behavior.

In August and October 2007, MMSTRP participated in two large outreach programs - SEA labration hosted by Audubon Nature Institute and Ocean Commotion hosted by Louisiana Sea Grant. Between the Pontchartrain surveys, MMSTRP and LDWF have been working together to gather data from marine mammal strandings along the Louisiana coastline.

## Mississippi

There were a total of 8 strandings in Mississippi between December 1, 2006 and November 30, 2007; all bottlenose dolphins. In late fall 2006, IMMS rescued a stranded juvenile male bottlenose dolphin in Grand Terre, Louisiana (see photo). The dolphin "Cajun" was taken to IMMS for rehabilitation where he was diagnosed with a urinary tract infection, a gastrointestinal infection, and inflammation that became a recurrent problem. In May 2007, "Cajun" was fully recovered. However, due to "Cajun's" young age at the time of stranding (1 year), NMFS deemed him non-releasable and he was transferred to Gulf World Marine Park, in Panama City Beach, Florida.



## Alabama

There were a total of 7 strandings in Alabama, between December 1, 2006 and November 30, 2007; all were bottlenose dolphins.

## Texas

A total of 131 animals stranded in Texas between December 1, 2006 and November 30, 2007. Texas Marine Mammal Stranding Network (TMMSN) saw an increase in strandings during the months of January and February. In only one month's period, there was a recovery of nearly 90 animals, 80 percent of which were in the northeastern region of Galveston and Sabine Pass. These strandings included bottlenose dolphin neonates, calves, and mature adults.



Photo: TMMSN

Reports of deceased bottlenose dolphins became a daily event during the last week of February. On March 20, 2007 the National Marine Fisheries Service deemed the increase in strandings an Unusual Mortality Event (UME). Due to the advanced decomposition of the recovered animals, the cause of the strandings has not been determined. The UME investigation remains open at this time.

In addition to the bottlenose dolphin strandings, TMMSN was notified of a manatee sighted in January at a warm water outflow of the local Citgo plant in Corpus Christi. The adult male manatee was extremely thin and cold stressed. In coordination with US Fish and Wildlife, TMMSN rescued the distressed manatee.

After a week of rehabilitation in Texas, the manatee, dubbed "Tex", was transported to the manatee rehabilitation facility at the Lowry Park Zoo in Tampa, Florida. Tex's condition is currently improving.



## Puerto Rico

Puerto Rico (PR) had four stranded animals between December 1, 2006 and November 30, 2007. One humpback whale, one striped dolphin and two bottlenose dolphins.

On July 1, 2007 the first ever Stranding Workshop for the Veterinary Association of Puerto Rico was offered at the Puerto Rico Zoo. A total of 29 veterinarians from around the island participated in the all-day workshop. The objectives were to provide training on legal issues, agency jurisdictions, permits, anatomy, pathology, and necropsy protocols for marine mammals. Talks were given by Blair Mase (NMFS SEFSC), Alex Costidis (FWCC and UF), Dr. Ruth Ewing (NMFS, DVM) and Nilda Jimenez (PR DNER).



On August 20, 2007 the Administrative Order that created the new PR Marine Mammal Rescue Program was signed by the Department Natural Environmental Resources (DNER) Secretary Mr. Javier Velez Arocho.

On August 22, 2007 the first in a series of training workshops for DNER rangers began. So far, 200 rangers have been trained by Grisel Rodriguez-Ferrer and Nilda Jimenez-Marrero on protocols for managing stranded marine mammals.

Puerto Rico's 26<sup>th</sup> DNER Symposium was held from October 26-27, 2007. Presentations and Abstracts included:

- Jiménez, M.N., L.E. Figueroa, G. Rodríguez-Ferrer, M.V. Seda. 2007. Sea lion on the Puerto Rico coast.
- Jiménez, M.N., and G. Rodríguez-Ferrer. 2007. DNER response to marine mammal strandings.
- Rodriguez-Ferrer, G., M.N. Jimenez., M.V. Seda and



**Prescott Corner**

The John H. Prescott Marine Mammal Rescue Assistance Grant Program is conducted by NOAA to provide Federal Assistance to eligible members of the Stranding Network to:

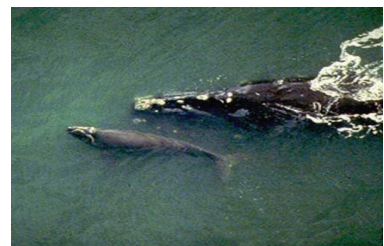
- Support basic needs of organizations for response, treatment, and data collection from living and dead stranded marine mammals;
- Fund scientific research objectives designed to answer questions about marine mammal strandings, health or rehabilitation techniques utilizing data from living and dead stranded marine mammals; and
- Support facility operations directly related to the recovery or treatment of stranded marine mammals and collection of data from living or dead stranded marine mammals.

The following is a list of stranding network organizations and projects that were awarded Prescott funding in 2007.

**Southeast Region Prescott Grant Funded Projects for 2007**

| <b>Project</b>  | <b>Organization</b>                               |
|---|---|
| Enhancing tissue collection and health monitoring of stranded marine mammals in North Carolina and Virginia   | UNC Wilmington                                    |
| Implementation of the Puerto Rico Department of Natural and Environmental Resources' Marine Mammal Rescue Network   | Puerto Rico Department of Environmental Resources |
| Response, treatment, and data collection from living and dead marine mammals stranded along the Texas coast   | Texas Marine Mammal Stranding Network             |
| Age, growth, reproduction and feeding ecology of rough-toothed dolphins from single and mass strandings in Florida, with a compilation of voucher materials deposited in various institutions     | Hubbs-SeaWorld Research Institute                 |
| Enhancing live animal response, public outreach and education, and improving the assessments of cetacean health trends and interactions between bottlenose dolphins and recreational fishing gear | Hubbs-Sea World Research Institute                |
| Supporting the operation of the Dolphin and Whale Hospital  | Mote Marine Laboratory                            |
| Cetacean stranding response and training for Lee and Collier counties   | Florida Fish and Wildlife Conservation Commission |

For more information please visit: <http://www.nmfs.noaa.gov/pr/health/prescott>





## Recent Publications

- Bossart, G.D., G. Hensley., J.D. Goldstein., K. Kroell., C.A. Manire., R.H. Defran and J.S. Reif. 2007. Cardiomyopathy and myocardial degeneration in stranded pygmy (*kogia breviceps*) and dwarf (*kogia sima*) sperm whales. *Aquatic Mammals* 33(2): 214-222.
- Bossart, G.D., L. Hansen., J.D. Goldstein., D. Kilpatrick., S. Bechdel., E. Howells., K. Kroell., M. de Sieyes., M.K. Stolen., W.N. Durden., J.S. Reif., R.H. Defran. and S.D. McCulloch. 2007. Pathological findings in a rare mass stranding of melon-headed whales (*Peponocephala electra*) in Florida. *Aquatic Mammals* 33(2): 235-240.
- Bossart, G.D. 2007. Emerging diseases in marine mammals: From dolphins to manatees. *Microbe*. 2(11): 544-549
- Burdett, L.G., J.D. Adams and W.E. McFee. 2007. The use of Geographic Information Systems as a forensics tool to investigate sources of marine mammal entanglement in fisheries. *J. Forensics Sci.* 52(4): 904-908.
- Durden, W.N., M.K. Stolen., D.H. Adams and E.D. Stolen. 2007. Mercury and selenium concentrations in stranded bottlenose dolphins from the Indian River Lagoon system, Florida. *Bulletin of Marine Science* 81(1): 37-54.
- Fire, S.E., D. Fauquier, L.J. Flewelling, M. Henry, J. Naar, R. Pierce and R.S. Wells. 2007. Brevetoxin exposure in bottlenose dolphins associated with *Karenia* blooms in Sarasota Bay, Florida. *Marine Biology* 152: 827-834.
- Greig, T.W., J.A. Bemiss., B.R. Lyon., G.D. Bossart and P.A. Fair. 2007. Prevalence and diversity of antibiotic resistant escherichia coli in bottlenose dolphins (*tursiops truncatus*) from the Indian River Lagoon, Florida, and Charleston Harbor area, South Carolina. *Aquatic Mammals* 33(2): 185-194.
- Rommel, S.A., D.A. Pabst. and W.A. McLellan. 2007. Functional anatomy of the cetacean reproductive system, with comparisons to the domestic dog. In: *Reproductive Biology and Phylogeny of Cetacean: Whale, Dolphins and Porpoises.* (edu. D.L. Miller). Science Publishers, pp. 127-145.
- Starvos, H.W., G.D. Bassart., T.C. Hulsey and P.A. Fair. 2007. Trace elements concentrarions in skin of free-fanging bottlenose dolphins (*Tursiops truncates*) from the southeast Atlantic coast. *Science of the Total Environment.* 388:300-315.
- Stolen, M.K., W.N. Durden and D.K. Odell. 2007. Historical synthesis of bottlenose dolphin (*Tursiops truncatus*) stranding data in the Indian River Lagoon system, Florida, from 1977-2005. *Florida Scientist* 70(1): 45-54.
- McFee, W.E., and L.G. Burdett. 2007. Spatial and temporal analysis of bottlenose dolphin strandings in South Carolina. NOAA Tech. Memo. NOS NCCOS 46. 12 p. + CD RO
- Michael J. Moore., William A. McLellan., Pierre-Yves Daoust., Robert K. Bonde and Amy K. Knowlton. 2007. Right Whale Mor tality: a Message from the Dead to the Living. Chap 15 in *The Urban Whale: North Atlantic Right Whales at the Crossroads.* Kraus, S.A. and Rolland R. editors. Harvard University Press.
- Westgate, A.J., W.A. McLellan., R.S. Wells., M.D. Scott., E.M. Meagher and D.A. Pabst. 2007. A new device to remotely measure heat flux and skin temperature from free-swimming dolphins. *Journal of Experimental Marine Biology and Ecology* 346: 45-5