

STRANDINGS

NEWSLETTER OF THE SOUTHEAST UNITED STATES MARINE MAMMAL HEALTH AND STRANDING NETWORK
– SUMMER/FALL 2005

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THE LONG, SAD STORY OF RIGHT WHALE MORTALITY AND ENTANGLEMENTS IN 2004 AND 2005

BY AMY KNOWLTON (NEW ENGLAND AQUARIUM)

The past two years have been unsettlingly bad for right whales. 2003 was a comparatively quiet year with only one documented mortality (a ship struck female in the Bay of Fundy in October), and 3 newly entangled animals. However, in a two year period, a total of 8 mortalities, 3 serious entanglements, and one serious vessel strike have been documented along the eastern seaboard of the United States and Canada.

A live stranded calf (the first live right whale stranding since 1989) was found by a beach walker on February 3rd, 2004 on Amelia Island, FL. Despite collaborative efforts to keep it alive and transport it to a pool for possible rehabilitation, the animal died during transport, approximately 9 hours after it was found on the beach. Although aerial survey effort was conducted that day in hopes of finding his mother, no animal was found in the general area. A thorough necropsy conducted by the University of Florida in Gainesville suggests that the animal was less than 2 days old and had not ingested milk from the mother. It is not clear whether the calf was abandoned by its mother or if it suffered from some other complications.

Only a week after this event on February 9th, a dead whale was reported floating off of Virginia Beach by a whale watch boat captain. Sue Barco from the Virginia Aquarium and Marine Science Center (VAMSC) was able to respond immediately to this sighting. She confirmed it as a right whale in the late afternoon. As she and her team were assessing and photographing the carcass, the carcass erupted spewing intestines as well as a fully formed fetus through the mouth! Since her vessel (a Boston Whaler) was not suitable for towing, she attached a buoy to a flipper and contacted the Coast Guard to initiate a tow to shore. Unfortunately the Coast Guard vessel broke down enroute to the carcass, night fell, and it was two days before the carcass could be relocated. By that time it had drifted southward and was found off of North Carolina where it was towed ashore and with Herculean efforts coordinated by Sue Barco of VAMSC, the animal known to us as Stumpy, was pulled up the beach. It took five pieces of heavy machinery and a cutting off of the head to accomplish that feat. Michael Moore of Woods Hole Oceanographic Institution (WHOI) and Bill McLellan of University of North Carolina in Wilmington (UNCW) carried out the necropsy with assistance from the VAMSC, NOAA Beaufort Lab and others. Stumpy was at least 30 years old and was pregnant with her sixth calf. The cause of death was a broken vomer and severed intraoral rete resulting from a vessel strike.

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COORDINATOR'S CORNER

Strandings and Partnerships (and the big picture)

As I read the publications section of this newsletter, I am impressed by the amount of quality science generated by the Stranding Network. For the past decade, I've noticed a significant increase in the amount of data that are analyzed, as well as an increase in the credibility of scientific data generated from stranding events. One could argue this fact a decade ago when it was hard to get a responder to an animal on the beach let alone collect quality data. Now there are well-established protocols, a professionally trained network of responders, and collaborations between scientists. There is always room for improvement, but times have definitely changed. That being said, it is vital to acknowledge the importance of all the layers involved in a single stranding event from the initial stranding response and data collection to the analytical facility and finally to the scientific report or publication. With so many people involved, work on all levels should be recognized and appreciated. We strongly value our partnership with the Stranding Network. Many individuals and organizations make significant personal sacrifices while contributing to this partnership effort and this does not go unnoticed. While the day-to-day demands of our lives may cause us to lose sight of why we initially got involved in the Stranding Network, I would encourage you to reflect on how far the SEUS Stranding Network has progressed and grown in a relatively short time, and how each of us fits into the big picture. In addition, it is important to look beyond our individual contributions and recognize the contributions of others, the value of establishing and maintaining partnerships, and how building partnerships will help reach our collective goal of providing effective, humane response and increasing our understanding of the health of marine mammal populations in the wild. Building and nurturing relationships, enhancing public and private partnerships enable us to educate and move our communities toward the greater good. Let us continue to give thanks for those relationships we have and attempt to do better with partnerships in the near future.

Blair Mase
Southeast Regional Stranding Coordinator

SOUTHEAST REGION STRANDING SUMMARY

MAY TO OCTOBER - 2005

Species	AL	FL	GA	LA	MS	NC	SC	TX	Total
<i>Globicephala macrorhynchus</i>	0	0	0	0	0	2	0	0	2
<i>Grampus griseus</i>	0	5	0	0	0	2	0	1	8
<i>Kogia breviceps</i>	0	2	3	0	0	3	8	2	18
<i>Kogia sima</i>	0	1	2	0	0	1	0	0	4
<i>Mesoplodon densirostris</i>	0	0	0	0	0	1	0	0	1
<i>Mesoplodon europaeus</i>	0	0	0	0	0	1	0	0	1
<i>Mesoplodon sp.</i>	0	1	0	0	0	0	0	0	1
<i>Phocoena phocoena</i>	0	0	0	0	0	2	0	0	2
<i>Physeter catodon (macrocephalus)</i>	0	1	0	0	0	0	0	0	1
<i>Stenella coeruleoalba</i>	0	0	0	0	0	13	0	0	13
<i>Stenella frontalis</i>	0	1	0	0	0	0	0	0	1
<i>Steno bredanensis</i>	0	1	0	0	0	0	0	0	1
<i>Tursiops truncatus</i>	8	94	8	6	4	41	19	16	196
Unknown delphinid	0	1	0	0	0	6	0	0	7
Totals	8	107	13	6	4	72	27	19	256

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The next crisis that faced the right whale community was an entangled right whale found off Florida on March 17th. The animal had gear wrapped around both flippers and across the body with buoys and a hi-flyer attached. It was determined to be a yearling and if it could not be disentangled, it would most certainly not survive as the wrapped gear would cut into the animal as it grew. After an arduous week-long effort by the Center for Coastal Studies team with support from the Coast Guard, UNCW, NOAA Beaufort Lab and aerial survey teams, the disentanglement crew was able to cut the lines wrapping across the back and made some cuts on lines wrapped around one of the flippers. But then the whale started booking north and its progress was followed after a satellite telemetry buoy was attached to the trailing gear. A fishing vessel inadvertently ran over the trailing line cutting the buoy off from the whale. The fisherman realized what had happened and fortunately brought the buoy to shore and immediately called CCS. The whale, nicknamed Kingfisher after the assisting Coast Guard (CG) vessel, was not seen again and



“Kingfisher” – New England Aquarium

was considered to be a goner until...on January 11th, 2005, he was miraculously resighted in the SEUS! He still has gear wrapped around one flipper but his general condition seems to be fair.

After a relatively quiet summer with some limited efforts to disentangle previously entangled animals, things got extremely busy again starting at Thanksgiving. The day before Thanksgiving, a dead right whale came ashore on the northern outer banks of North Carolina at Ocean Sands Beach. Bill McLellan of UNCW and Sue Barco of VAMSC spent their holiday necropsying this animal which turned out to be a 16 year old female (#1909) pregnant with her first known calf. Her flukes were severed and her rostrum was sliced by propeller cuts. This animal had been struck by a 900 foot Navy Amphibious Assault vessel one week prior (fortunately the Navy reported the strike).

On December 9th, a floating right whale was documented by a Coast Guard overflight approximately 74 nm SE of Nantucket. The carcass was in poor condition and despite efforts by the New England Aquarium, NMFS, and WHOI to relocate and tow it ashore, the carcass apparently sank within days of the first sighting. The identification and cause of death of this animal was not able to be determined.

On December 21st, a severely entangled 2 year old was sighted in the SEUS calving ground. A rapid response by FMRI and Georgia DNR was initiated that same day and they attached a satellite telemetry buoy to the trailing gear. With logistical support from UNCW and the Coast Guard, the Center for Coastal Studies sent a team down and they were able to remove all the gear from this animal on December 31st.

On January 9th, 2005, a Coast Guard flight found another dead right whale carcass 65 nm east of Nantucket. The NMFS aerial survey crew photographed the animal the next day and we were able to confirm its ID as #1160, ‘Bolo’, an adult female who had produced at least six calves since 1981. A Coast Guard vessel was able to assist by

collecting a skin sample for genetics and attaching a buoy to the flipper to provide constant GPS positions of the carcass. Unfortunately, the buoy stopped transmitting after two days but the CG continued to conduct overflights with a NMFS observer onboard and relocated the carcass on two occasions. Winter weather in the North Atlantic is notoriously poor and this proved to be the case for the entire week that we attempted to mount an effort to tow her ashore. A CG flight on January 18th was unable to locate the carcass and so the effort was abandoned.

Only 3 days after Bolo's carcass was seen, a whale named Lucky was found floating 12 miles east of Amelia Island on January 12th and was surrounded by sharks. We had named her after she survived a serious ship strike as a calf in the calving grounds which left 5 deep cuts in her left flank. As she was being towed to shore in Jacksonville, the shark-eaten tail pulled apart from the towline and she ended up on a relatively inaccessible beach at Little Talbot Island. This made the necropsy effort incredibly difficult but Bill McLellan of UNCW, Sue Barco of VAMSC and Teri Rowles of NMFS along with many others were able to carry it out. And once again, a fetus was found, Lucky's first. In a sad twist of fate, the wounds acquired as a calf apparently ended up being Lucky's demise these 14 years later. The initial finding suggests that the pregnancy caused one of the wounds to reopen which led to infection and ultimately, her death.

On March 3, 2005, a right whale carcass was sighted from a US Coast Guard helicopter on Ship Shoal Island, VA, a remote, sandy island. The animal had line in the mouth, little skin, and was partially buried. Michael Moore of Woods Hole Oceanographic Institution was able to get to the carcass with a small team and collect images and conduct a limited necropsy. The animal was confirmed as #2301, a reproductive female who had been first documented as entangled on September 6, 2004 off of Nova Scotia. At that time, her left flipper was white as a result of tight wraps and her condition was poor. A disentanglement was

attempted however poor weather conditions, her offshore location, and the difficulty in cutting flipper wraps prevented a full disentanglement. She suffered for 6 more months before her death.

On March 10, 2005, a 43 foot vessel struck and seriously injured an 11 year old female, #2425, when transiting off the coast of Georgia. The twin propellers cut across her peduncle and the left fluke lobe nearly severing approximately 4 feet of the outer fluke tip. With a mangled fluke, she and another female that was traveling with her started heading up the coast. She was not seen for many months until September 2nd when she was spotted by an aerial observer off the coast of Massachusetts. She was ghostly white and covered in orange cyamids. Veterinarians who reviewed the images felt she would likely die within weeks. She has not been seen since.

On April 29, 2005, a dead right whale, #2617, a nine year old female, was found on Monomoy Island on Cape Cod, another remote and sandy island. Michael Moore from WHOI again led a team by boat and a long hike to conduct a partial necropsy. They found broken vertebra and other signs indicating she had died from a ship strike.

And lastly, on June 8th, 2005, an adult male right whale was observed entangled in the Gulf of Maine with line trailing and likely wrapped around at least one flipper. It was unable to be relocated for a disentanglement attempt. He was resighted on September 6 off the Nova Scotia coast but the line was not visible from the vessel and weather conditions precluded any disentanglement attempt. Though it is not clear that he is still entangled, his condition had deteriorated suggesting that he may still be entangled and will likely continue a slow decline.

The litany of tragedies described above is unfortunately not uncommon for this population. This beleaguered species has remained on the

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brink of extinction despite protection from whaling in 1935 and with each passing year and event we document, we further understand that this population's failure to thrive is a direct result of our own activities – shipping and fishing. Clearly, the death of right whales is an unintended consequence of these industries but this consequence must be addressed immediately if this species is going to recover. The population cannot sustain this level of mortality and serious injury, especially within the reproductive female pool.

Many stakeholder meetings have taken place over the past decade to tackle these ever-growing issues that face right whales. Between the Large Whale Take Reduction Team and the Ship Strike Committee, some

valuable and potentially effective ideas have been developed and are now in a rulemaking process. If these proposed regulations are able to survive the onslaught of criticism from affected stakeholders and be implemented, I believe there may be a fighting chance for right whale survival. But time is of the essence. This is a crisis that cannot continue unless we as a society are willing to accept our role in the extinction of this species. I, for one, am not willing to accept this as their fate.

For each of the above events, a myriad of organizations and people are typically involved. I could not name them all here as the list is so long but many thanks to all those folks who devote a huge amount of time and energy to ensuring that these efforts are carried out as thoroughly and successfully as possible.

Opinions or assertions presented are the private views of the authors and are not to be construed as the official position of the Department of Commerce.



Right whale mom and calf – New England Aquarium

SOUTHEAST REGIONAL NEWS



Alabama

There were eight *Tursiops truncatus* strandings in Alabama between May and October, bringing the total for the calendar year to 20. Two of the strandings were found during Prescott-funded airboat surveys; strandings that would not have been discovered by any other method. Although there was no damage to their building from the tropical storms and hurricanes, preparing for and restoring conditions after the storms was time-consuming. Floating debris and damage to ramps cut back the number of airboat surveys that had been planned.

Once more Gerald T. Regan, chief scientist of Marterra Foundation Inc., has been engaged to teach the 2006 course on dolphins and whales offered by the Alabama Marine Environmental Sciences Consortium, a course for advanced college undergraduates. He has taught that course once a year for the past 13 years.

Florida

It's been a busy time for Florida with 107 strandings. Ninety-four *T. truncatus*, five *Grampus griseus*, two *Kogia breviceps*, and one each *K. sima*, *Physeter macrocephalus*, *Stenella frontalis*, *Steno bredanensis*, *Mesoplodon sp.*, and "unknown delphinid."

On July 16, 2005 a mass stranding of Risso's

dolphins (*G. griseus*) occurred on Marco Island in Collier county. Five animals were reported to the stranding network. One animal died before network members could arrive, with the other four animals still free-swimming. Two adult animals stranded shortly afterwards at the site of the original report, and the remaining two animals, sub-adults, stranded approximately one mile away. The sub-adults were towed to the original site by Fish and Wildlife Conservation Commission (FWCC) Law Enforcement and Florida Marine Mammal Stranding Network (FMMSN) volunteers. The two adults were euthanized and the sub-adults, one male and one female ("Bonnie" and "Clyde"), were transported to Mote Marine Lab in Sarasota for rehabilitation. The prognosis for the animals in rehab is good, and they will likely be released in the next month.



"Bonnie" and "Clyde" - FMMSN

On April 20th, May 3rd and September 12th, a total of eleven *S. bredanensis* from a mass stranding on March 2nd were released. The animals were freeze-branded and satellite tagged, tracked by Mote Marine Lab. An incredible amount of time, personal and institutional resources and the proverbial blood, sweat and tears went into this incredible effort. A much-deserved round of applause goes out to all involved.

An unusually high number of bottlenose dolphin mortalities on the west coast of Florida drove

stakeholders to consult with the Working Group on Marine Mammal Unusual Mortality Events (WGMMUME). Evidence was compiled on dolphin mortalities in the area along with data on seabird and turtle mortalities. The WGMMUME was asked to consider declaring a dolphin Unusual Mortality Event (UME) and adding it to the current manatee UME in the same area. Many thanks to all who contributed their valuable time and energy toward the effort of compiling a considerable amount of data for the WGMMUME. [Ed. note: The multi-species UME was declared for the west coast of FL on November 10, 2005.]

Georgia

Georgia had a total of thirteen strandings; eight *T. truncatus*, three *K. breviceps* and two *K. sima*. Two bottlenose dolphins were successfully disentangled in Brunswick and Savannah waters. Both were entangled in commercial crab pot float lines. The gear was retained in both cases and in both cases the animals swam away freely. Disentanglement training and gear such as grapples and pole knives were very useful in both responses.

Louisiana

Louisiana had a total of six stranded *T. truncatus*. Hurricane Rita disabled the Louisiana response team, making the Texas Marine Mammal Stranding Network (TMMSN) invaluable in responding in LA. Five days after Hurricane Rita struck the western coastline of Louisiana, TMMSN received a report from an on-site news crew of a dolphin trapped in a shallow water-filled ditch approximately 3 miles inland from the Gulf in Cameron, Louisiana. Because the area was inaccessible by boat or car, the Coast Guard agreed to assist the TMMSN along with NOAA representatives in airlifting the large male out by helicopter.

He was released into the Gulf of Mexico where he was observed joining up with a local pod of dolphins. Throughout September and October TMMSN responded to 5 more similar calls where

animals that had been washed two to four miles inland were trapped in canals or other shallow bodies of water. Unfortunately one of the animals was severely emaciated and died before network members arrived; but all in all the TMMSN along with numerous other individuals and agencies responded to and released five hurricane-displaced dolphins. Heidi Watts of TMMSN says, "It was nice to see everyone join together to help these animals in the midst of all the destruction that had happened to the local area, and it could not have been done without them."



Cameron, LA rescue - TMMSN

Mississippi

Four *T. truncatus* stranded in Mississippi. One of the four was found at the Casino Magic Golf Course in a shallow pond on the 9th hole. The young female was washed inland by storm surge from Hurricane Katrina and trapped in the pond as the waters receded. Jeff Foster, contracting for the NMFS Pascagoula lab, along with staff from Gulf World Marine Park was able to capture the animal and bring it to Gulf World for rehab. At press time, "Magic" was stable at Gulf World.

North Carolina

There were a total of 72 strandings in North Carolina. On August 22 the UNCW first response team arrived at North Topsail Island to find 12 adult striped dolphins (*S. coeruleoalba*), all dead. Abrasions on flukes and flippers led the team to believe that the animals had stranded in the middle of the night, but were not reported until an early

morning jogger spotted them at about 0600.

The carcasses were transported (in a Prescott-funded trailer!) to the NC State Veterinary School in Raleigh. Preliminary findings showed that the dolphins were old, and male with no evidence of recent feeding. 2 of the animals had gross brain lesions. The UNCW stranding program would like to thank the over 25 volunteers who assisted with the beach response, the vet students and senior pathologists who assisted during the necropsies and Gretchen Lovewell and Emma Jugovich from the NOAA lab in Beaufort. Also in August, the UME Working Group declared the multi-species (Minke, *Kogia*, *Globicephala*) mass stranding in January 2005 an Unusual Mortality Event.



UNCW Marine Mammal Stranding Network

Mammal Stranding Program has their website up and running – visit them at www.uncw.edu/mmsp; and the NOAA Beaufort lab conducted an Outer Banks stranding workshop to recruit new volunteers and as a refresher for their current volunteers.

South Carolina

From May 1st to October 31st, there were 27 stranded cetaceans in South Carolina. Nineteen were *T. truncatus* and 8 were *K. breviceps*.

On July 12th NOS personnel were alerted to a *T. truncatus* calf in a freshwater creek northwest of Georgetown, SC. A decision was made to capture the animal and transport it to the mouth of Winyah

Bay on July 15th. A net was strung across the narrow canal and the 202 cm female was captured by walking the net from the mouth to the dead end at the other side. Blood was drawn and the animal was tagged, then transported by boat and then by truck approximately 12 miles to its destination where it was released. It was sighted later that day with a large group of dolphins, apparently doing well. Many thanks to Coastal Carolina University staff and students, SCDNR Law Enforcement, Dr. Al Segars (SCDNR) and Marco D'ante (Marine Mammal Conservancy).

On May 22nd, a 244 cm female *T. truncatus* was found dead in Beaufort, SC and delivered to NOS for necropsy by Dr. Al Segars (SCDNR). The dolphin was found to have a decomposed near-term fetus with a ruptured uterus and no amniotic fluid. AFIP results confirmed that this was an antemortem uterine eruption supported by serositis in the diaphragm and generalized peritonitis.

On August 24th, a live 305 cm male pygmy sperm whale was found on Sullivan's Island. Dr. John Ohlandt euthanized the animal and a necropsy was performed on the beach. No significant findings were made except for a 0.6 cm diameter genital "papilloma-like" lesion. The lesion was sent to Dr. Dave Rotstein (U Tennessee) where tests could not confirm the etiology but point toward it being viral in nature. Sample results for virology to determine the possible etiology are pending.

National Ocean Service (NOS) staff conducted two necropsy demonstrations, one a pygmy sperm whale calf and the other a bottlenose dolphin calf, on October 17th and October 26th to Dr. Rob Young's (Coastal Carolina University) marine mammal class at the NOS facility. This is the ninth consecutive year necropsy demonstrations have been given to CCU students.

Texas

There were nineteen total strandings for the state of Texas; 16 *T. truncatus*, 2 *K. breviceps* and 1 *G. griseus*.

The Texas coast had a fairly mild last six months for strandings. In June, however, they found themselves the unusual situation of having two *S. bredanensis* in rehabilitation. One an older male that stranded in August of 2004 and the other, a younger male that stranded in April of 2005. Both animals did well and in July of 2005 they were transported to GulfWorld Marine Park in Panama City, FL where they could be placed with a female Steno for further observation and determination of their future. TMMSN thanks the Coast Guard as well as GulfWorld for making the transport possible.



“Astro” in his new home at GulfWorld
- TMMSN

STRANDINGS NETWORK MEMBER PROFILE



Leigh Youngner is a Wildlife Technician for the Georgia Department of Natural Resource’s Nongame and Endangered Wildlife Program. She has been heavily involved with the Georgia Marine Mammal Stranding Network since June of 2002. Born and raised in Brunswick, GA, Leigh graduated from the University of Georgia School of Forest Resources. Leigh earned a Bachelor of Science in Forest Resources with her emphasis on Wildlife Management. Leigh enjoys her work on the Georgia coast because it is her home. Leigh states, “The amount of knowledge I have gained through my experiences with the stranding network is very valuable to me and my career as a biologist. It is an honor for me to work with the dedicated individuals that I have met during my involvement with the stranding network.”

The SER would like to thank Leigh for her commitment and enthusiasm. Not only has she helped address the day-to-day response efforts in the GA area, Leigh has played an integral part of numerous disentanglement efforts, a UME investigation and health assessment projects. Leigh is always willing and able to go the extra mile regarding marine mammal emergencies and she always does it with a smile. Thank you, Leigh.

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