

Finns and Flukes



A newsletter of the Hubbs-SeaWorld Research Institute Marine Mammal Stranding Program

Spring 2015

Mission: "to return to the sea some measure of the benefits derived from it"



A Tale of Two Dolphins

On October 20, 2014 the HSWRI Marine Mammal Stranding Team received photographs from the Harbor Branch Oceanographic photo-ID team of a dolphin with a possible embedded entanglement around its lower jaw. It was apparent that the animal could be in trouble and we needed to further document the entanglement and monitor the animal's condition. On November 11, our scientists scoured the Mosquito Lagoon in search of the dolphin (named "Torn"). We were successfully able to locate the animal and gathered photographs and video to document his condition. Throughout nearly two hours of observation, Torn was engaging in social behavior with 2-3 dolphins and, while he was somewhat underweight, he was very active and appeared to be doing well. Torn raised his head above water numerous times and we were able to photograph the lateral sides of the jaw, where it appeared an entanglement was encircling the mandible.

Unfortunately, that same morning, we sighted an entangled dolphin calf in Edgewater. The fishing gear was looped around and cutting into the leading and trailing edges of its dorsal fin and extending towards the flukes. The entanglement appeared to be life threatening. In coordination with our stranding network partners and coordinators at NOAA Fisheries, a decision was made to stage an intervention to evaluate and disentangle both animals the following week.

On November 20, we were able to locate and evaluate both Torn and the entangled calf, named "Blue," in the Mosquito Lagoon. Scout boats were on the water at sunrise and were able to locate both animals. The female calf was disentangled, evaluated by veterinarians, Dr. Craig Pelton (University of Florida) and Dr. Michelle Davis (SeaWorld), and released back to her mother on-site. The prognosis for Blue was good as the entanglement injuries involved only the dorsal fin and she appeared to be in good body condition. Shortly after Blue's rescue we were able to capture and evaluate Torn for a possible mandibular entanglement. Fortunately, he had previously shed the entanglement and had completely healed from his injuries. Blood samples were collected and he was released on-site.

We are so grateful for our stranding network partners that assisted with these interventions including: SeaWorld Orlando, Harbor Branch Oceanographic Institute, Canaveral National Seashore, Chicago Zoological Society, Georgia Aquarium's Dolphin Conservation Field Station, Florida Fish and Wildlife Conservation Commission, NOAA Fisheries, the University of Florida and Volusia County Environmental Management. We are also fortunate to have had assistance from HSWRI volunteers Carlmarie Velez, Jenny White, Heidi Hartley, Lydia Moreland and Leo Cross! Because the veterinary prognosis for each of these animals was good, post-release monitoring was not warranted and radio-transmitters or other tracking devices were not applied. Since the disentangling we have been able to relocate Blue who appears to be doing well. We are hopeful that we will encounter both animals during our on-going photo-ID surveys and that we will continue to see them thrive!



Deep impressions from a past embedded entanglement were present on both sides of the lower jaw of this dolphin, named "Torn".



Entangled calf ("Blue") sighted in the Mosquito Lagoon.



This dolphin calf, named "Blue," was disentangled from fishing line, evaluated and returned to its mother who was swimming nearby.



Ongoing Bottlenose Dolphin “Unusual Mortality Event”

In July 2013, the northeast region of the Marine Mammal Stranding Network began experiencing elevated numbers of stranded bottlenose dolphins. As time progressed, the increase in mortality spread further south and an Unusual Mortality Event (UME) was declared. The UME has affected several different coastal populations of bottlenose dolphins from New York to the Florida Keys. The findings and the results of viral testing to date indicate that the tentative cause of the Mid-Atlantic Bottlenose Dolphin UME is a cetacean morbillivirus; a contagious viral infection which has the ability to spread among whales and dolphins in close proximity. To date, more than 1500 dolphins have stranded in association with this event and most of the dolphins tested were confirmed positive or suspect positive for morbillivirus.



We first began to see an increase in oceanside dolphin strandings in our area with findings consistent with morbillivirus including emaciation, respiratory pathologies, neurological abnormalities (in live stranded dolphins) and ulcerated skin lesions in November 2013. Stranding events continued and we were deeply saddened when we first learned that the virus had spread into the northern Indian River Lagoon. This was extremely bad news as this dolphin population was recently subjected to a separate UME in 2013 (cause currently under investigation), which resulted in the mortality of 78 dolphins. To date a total of 9 confirmed cases of morbillivirus have been documented in the lagoon, the majority of which have occurred in the Mosquito Lagoon (8 animals) and included all age classes as well as a known mom/calf pair. In addition to these animals, a known Mosquito Lagoon dolphin, named Goofy, stranded in Cape Canaveral (Dec 2014) and also tested positive for morbillivirus. While we continue to occasionally respond to dolphins that exhibit findings that are consistent with morbillivirus, we are hopeful that the event is slowing in our response area. Furthermore, we continue to monitor free-swimming dolphins in the Halifax River and Mosquito Lagoon for indications of illness but remain cautiously optimistic that these animals will continue to be somewhat resilient to the virus.

Dolphin Calf Disentangled from Fishing Line in Ft. Pierce

In late January a dolphin calf was spotted and photographed from a tour boat in north Vero Beach, Indian River, with a suspected entanglement around its rostrum. Harbor Branch Oceanographic Institute (HBOI, lead responders for strandings in that region) coordinated with NOAA fisheries and other network members to plan an intervention to evaluate and disentangle the one-year-old calf who was still with its mother. The photo-ID team at HBOI did a great job relocating the animal and further documenting its condition. The mother is a known animal from HBOI's photo-ID database with an extensive sighting history (CHIC). Unfavorable weather caused a delay but the network was finally able to mount a rescue effort on March 5th. Although we had several boats on the water, we were unable to locate the pair until mid-afternoon when increasing winds made it difficult to keep eyes on the animals. A decision was made to try again the following morning. Fortunately, the mother and calf were quickly located very close to HBOI where the rescue team was staging. The dolphins were followed for a short time



Veterinarians carefully removed the monofilament fishing line which was embedded around the calf's upper jaw.

until they swam into shallow water where they were quickly encircled in a net and captured by the team. Multiple veterinarians worked diligently to disentangle and evaluate the calf. The mother was held in the water close-by so that the pair could see and communicate with each other. The calf was found to have multiple strands of monofilament fishing line embedded around its upper jaw, penetrating through soft tissue to the bone. Veterinarians removed the line and cleaned the wounds. Due to the severity of the calf's entanglement injuries, a VHF radio-transmitter was placed on the mother's dorsal fin to allow the pair to be relocated and the stranding team at HBOI to monitor the calf's condition. After less than an hour, the pair was released together and quickly swam out of sight. Multiple agencies were involved in this large scale rescue including: HBOI, Georgia Aquarium's Dolphin Conservation Field Station (at Marineland, FL), HSWRI, Clearwater Marine Aquarium, NOAA Fisheries, FWCC, UF Aquatic Animal Health and SeaWorld Orlando. A special thank you to HSWRI volunteers Lynn, Carla and Leo who assisted with the rescue. We are hopeful that despite his injuries, the calf will be able to heal and go on to lead a long and healthy life.



A VHF radio-transmitter was attached to the trailing edge of the mother's dorsal fin to allow the team to relocate and monitor the animal's condition.

Sperm Whale Calf Strands on Daytona Beach

On October 11, 2014 we received a call about a small whale thrashing in the surf on Daytona Beach Shores. HSWRI's Marine Mammal Stranding Program and Volusia County Environmental Management responded immediately. Upon arrival it was determined that the whale was a sperm whale calf (*Physeter macrocephalus*). Unfortunately the 12 ft (370 cm) male calf died on the beach shortly after stranding. The whale was likely a newborn as the teeth had not erupted through the gum line and fetal folds were present along the body. The animal was transported to the Marine Discovery Center for post-mortem examination (necropsy) to be conducted the following morning. We are hopeful that our detailed and thorough examination will help to determine why the animal stranded and died.



It is highly unusual for this species to strand along our coastline. In fact, this is the first time a sperm whale has stranded in our response area in the history of our program (nearly 20 years). These whales are difficult to study because they spend most of their time off shore in open water. They can dive to over 3000 feet where they prey on giant squid. Sperm whales have huge heads (40% of the body length) and possess the largest brain of any creature that has ever lived on earth. They can be found in all oceans from equator to polar regions and can grow to 60 feet long (18.3 m). Calves are 12-13 feet long at birth. Females nurse their young for two years or longer. Sperm whales are considered endangered according to the U.S. Endangered Species Act. They were hunted commercially in the 18th and 19th centuries for their oil, blubber and meat.

Special thanks to our partners who assisted with the triage, recovery and necropsy. This was a huge effort that went quite smoothly because of the expertise and steadfast determination of everyone involved. A special thank you to Chad Truxall and the Marine Discovery Center for allowing us to use their facilities.

Stranding Summary

2014 was another busy year for the HSWRI Marine Mammal Stranding Program. In total, we responded to 99 strandings including 6 live animals and 93 dead animals. Sixty strandings occurred in Brevard County and 39 strandings occurred in Volusia County. In 2014, our program responded to:

- 94 bottlenose dolphins (*Tursiops truncatus*) (89 dead, 5 live)
- 1 pygmy sperm whale (*Kogia breviceps*) (dead)
- 1 humpback whale (*Megaptera novaeangliae*) (dead)
- 1 sperm whale (*Physeter macrocephalus*) (live)
- 2 unknown cetacean species (dead)

To date in 2015 we have responded to 14 strandings including 13 bottlenose dolphins (*Tursiops truncatus*) (12 dead, 1 alive) and one melon-headed whale (*Peponocephala electra*) (alive). Eleven strandings occurred in Brevard County and 3 strandings occurred in Volusia County.



What can you do to help a stranded whale or dolphin?

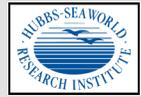


To report an injured or dead marine mammal, please call:
1-888-404-3922

- **Please do not push the animal back into the water.** Stranded animals are typically very sick, injured or orphaned and will beach themselves again.
- **Keep people and pets away from the animal.** Limit the number of people to the minimum needed to hold the animal upright. Petting stranded marine mammals should be avoided because it may cause stress to the animal.
- **Keep the animal upright** and relieve pressure from the flippers by digging pits under them in the sand.
- **Keep the animal cool and wet** by pouring water on the skin or applying wet towels and shading the animal (avoid getting water in or blocking the blowhole).
- **Avoid the tail area** and let go of the animal if it thrashes. Stranded whales and dolphins can be dangerous.



Welcome Dr. Rossman!



Dr. Sam Rossman has joined the HSWRI Marine Mammal Stranding Research Team as a half-time Postdoctoral Research Associate in Marine and Estuarine Biology. Sam also has a half-time fellowship appointment at Michigan State University, and he will be splitting his time between Michigan and the HSWRI laboratory in Melbourne Beach, Florida. Dr. Rossman received his Ph.D. in Zoology and Ecology, Evolutionary Biology, and Behavior, from Michigan State, in 2014. His dissertation research focused on the foraging habits of bottlenose dolphins, incorporating tools such as stable isotope analysis. He will work with the team in Florida to evaluate ecosystem disturbance in the Indian River Lagoon and the response of dolphins and other aquatic animals to that disturbance.



Wendy Noke Durden and Megan Stolen welcome new Post-doctoral Research Associate Sam Rossman to Hubbs-SeaWorld Research Institute. Dr. Rossman will work with the marine mammal stranding research team on studies of bottlenose dolphins in the Indian River Lagoon and along the Atlantic coast of east central Florida.

UP & RUNNING FITNESS FUNDRAISER
 Beneficiary: Hubbs-SeaWorld Research Institute's Marine Mammal Stranding Program

Save the Date! - Run the Tide Beach 5k

When: Sunday, July 25, 2015, 8:00 a.m.
Where: Paradise Beach, Howard E Futch Memorial Park, 2301 N Hwy A1A, Indialantic, FL 32903
Cost: \$20 through July 11th, \$25 beginning July 12th

Visit <http://uprunningracemanagement.com/run-the-tide-beach-5k/>




HSWRI Volunteer Highlight

We would like to recognize HSWRI volunteers Casie and Delaney Farrell, and Paul and Anne Lins, for going above and beyond over the past year and taking on new roles as education and outreach ambassadors for our program! They have represented HSWRI at several events including: the Ocean-Reef-Beach Festival in Satellite Beach, the 3Rs & Beyond Family Festival, presented by Recycle Brevard, Science Night at Harbor City Elementary and a special presentation at the Barrier Island Center highlighting our work (and collected a large amount of wish list items too)!

We are so fortunate to have these amazing volunteers by our side. Whether it's a live animal on the beach, a large whale, late night stranding calls, cleaning up the lab or representing HSWRI in the community, they are always there for the Stranding Team and our work wouldn't be possible without them! Thanks Casie, Delaney, Anne and Paul!



Casie shows the students at Harbor City Elementary school the difference between teeth and baleen.



“Fins and Flukes” Members

We extend a sincere thank you for your support of our program and for your comments about Fins and Flukes! Your contributions directly help our response to live and dead whales and dolphins.

Dr. & Mrs. Charles Baird	Sandra Shore & Alfred Hurtado
George Banghart	Trudie & Anthony Infantini
Kent Bradley	Lois Naylor
Linda Bradley	Lilla Nelson
Judy Buse	The Ogburn Family
Alda & John Butler	Jolene Poole
Deborah & Donald Charnasky	Col. & Mrs. Jim Ridenour
Richard Chatellier	Pamela Salacka
Cheyenne Evans	Jacie & Jim Stivers
Debra & David Graves	John Way
Michael Halpern	David Wuest
Susan Helms	Mary Zoleski
Holy Name of Jesus Catholic School	

A special thanks to our Florida Hubbs Society members for their support of Hubbs-SeaWorld Research Institute and our Marine Mammal Stranding Program:

Alice & Brad Andrews	Carol Shedd McCarren
Jennine & Jim Antrim	Jackie & Craig Meyer
Elli & James Atchison	Barbara & Michael Morton
Jane & Bill Bieberbach	Shayla & Terry Prather
The Boeing Company	The John H. Prescott Marine Mammal Rescue Assistance Grant Program
Dr. Ann Bowles	John Reilly
Rose & Dan Brown	Rockwell Collins
Central Florida Foundation	Dixie & Jerry Sansom
Community Foundation for Brevard	SeaWorld & Busch Gardens Conservation Fund
Dan Decker	SeaWorld Parks & Entertainment
Nancy & John Dwyer	SeaWorld San Diego
Jan & John Driscoll	Jill & Bill Shedd
Albert E. & Birdie W. Einstein Fund	Peggie R. Shedd Marine Education & Enhancement Trust
Julie & Pete Ensor	Terri & Steve Shedd
Anne & Bob Fletcher	Teri & Mark Snell
Florida's Space Coast Office of Tourism	Laurilee Thompson
Sally & Hal Furman, II	U.S. Scuba Center
Carolyn & Dave Gardner, Sr.	W. Kelly Smith
Todd & Mari Gutschow Family Foundation	Drs. Pamela Yochem & Brent Stewart
Victoria & Murray Hutchison	Gerri Ann Warnke
Claudia & Keith Kasen	Gordie & Louie Zimm
Bob Kelly	
Cara & Don Kent	

Note: These listings are comprised of donors who have supported our Stranding Program from April 2014 through March 2015. Though we take every possible step to ensure its accuracy, with a list of this nature it is possible that an oversight has occurred. If your name has been omitted or there is an error in the listing, we apologize and ask that you contact us at 619-226-3871 or solutions@hswri.org.

We would like to express our gratitude to the veterinary and animal care staff at SeaWorld Orlando for their constant support and assistance.



You can support our efforts by purchasing a Discover Florida's Oceans License Plate!
DiscoverFloridasOceans.org

WISH LIST

Our current wish list is now available through Amazon.com! Click on “Wish List” and search for HSWRI and you will find our Marine Mammal Stranding Program Wish List. Thank you for your support! As an added bonus, if you purchase through Amazon Smile (smile.amazon.com), and choose HSWRI as your charitable organization, a portion of your purchase price will also be donated to HSWRI!



Corporate and Foundation Partners

Our ability to respond to marine mammal strandings and save dolphins along Florida's east central coast is possible with the dedicated support of our local partners.

SEAWORLD PARKS & ENTERTAINMENT



*The John H. Prescott
Marine Mammal Rescue
Assistance Grant Program*

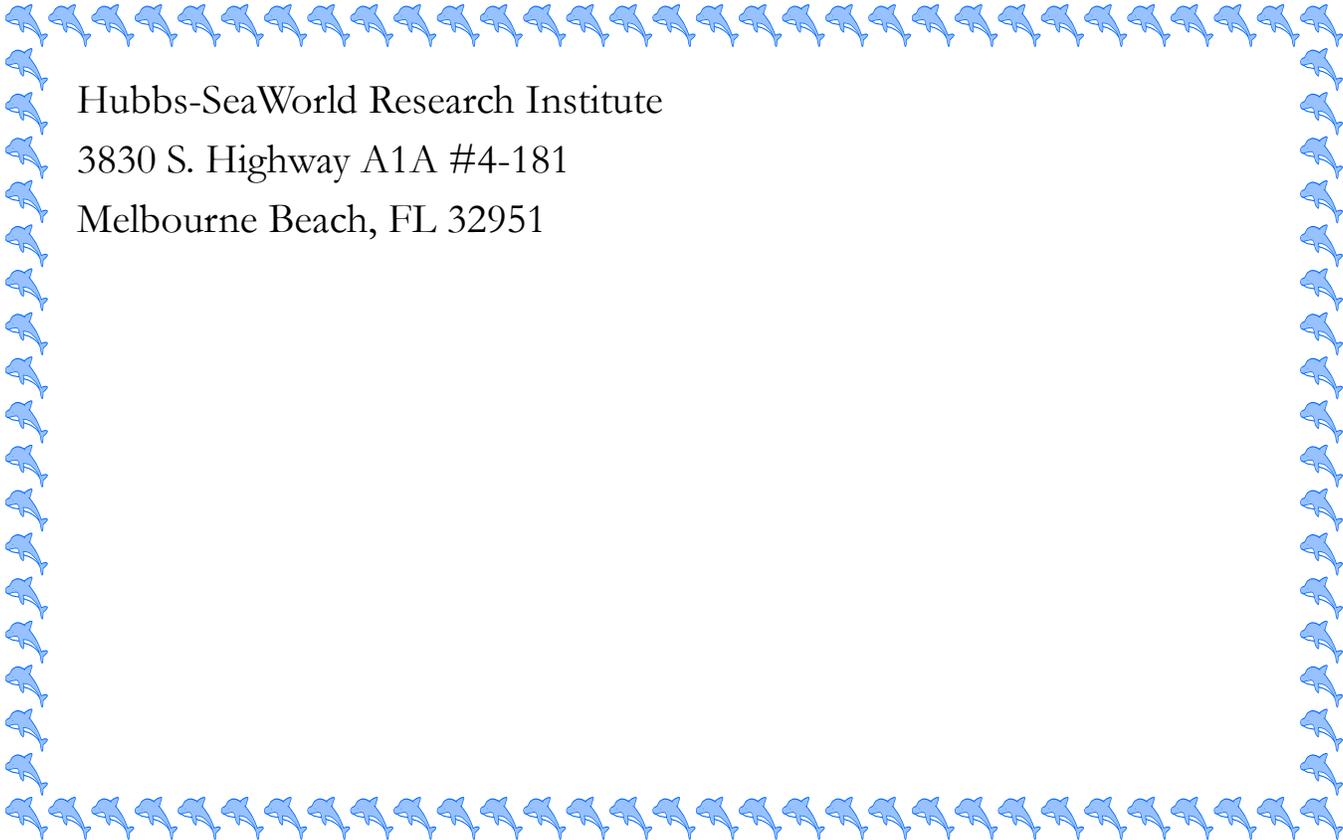
The ORCA Fund at the
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Hubbs-SeaWorld Research Institute

3830 S. Highway A1A #4-181

Melbourne Beach, FL 32951



Become a "Fins and Flukes" Member :



- Individual/Family \$25/year
- Researcher \$100/year
- Captain \$500/year

- Explorer \$50/year
- Navigator \$250/year
- Society Member* \$1000/year

*All Society members will receive the HSWRI Marine Mammal Stranding Program "Fins and Flukes" newsletter and be invited to special HSWRI events.

Donations may also be made online at hswri.org/donate-now/ or by credit card at 619-226-3871.

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Please mail donation to: _____

Hubbs-SeaWorld Research Institute
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 Melbourne Beach, FL 32951

**A copy of the official registration (#CH-102-00) and financial information may be obtained from the division of consumer services by calling toll-free 1-800-435-7352 within the state. Registration does not imply endorsement, approval, or recommendation by the state.