

Welcome!

Agenda

10:00am to 1:00pm – Welcome and Sign-in

Opening Remarks—Sunny Isles PD, FWCC, MARS, DEP

1st Presentation: Overview of marine mammal protection laws, what law enforcement needs to know for effective interagency coordination, and more—Pamela Sweeney, MARS/DEP

Break—5 minutes

2nd Presentation: Fish and Wildlife Conservation Commission's Manatee Rescue and Carcass Salvage Program—John Cassady, FWCC

1:00pm to 1:30pm— LUNCH—provided by MARS

1:30pm to 5:00pm—On-the-water “mock” manatee rescue (for attendees either participating or observing)

- Safety training
- Load law enforcement vessels with participants and/or observers
- Run 4-5 trials, 8 participants each trial on the FWCC Rescue Boat
- 8 attendees participate at a time while others observe how it's done; 8 at a time offload from law enforcement vessel and onto the FWCC Rescue Boat, swapping places

Marine Mammal Protection and Response Basics

Pamela Sweeney—DEP Biscayne Bay Aquatic Preserve, Marine Animal Rescue Society



NOAA Fisheries
John H. Prescott
Grant Program



Agenda

1. Review of Materials--in hand and on the way
2. What is the U.S. Stranding Network?
3. Definitions, Local resources, Stranding Stats & History
4. What role do you & your agency play?
5. Learn Single & Mass Stranding Basics
6. What tools will you leave with today?



What is the U.S. Stranding Network?



Laws

- Marine Mammal Protection Act
- Endangered Species Act
- Florida Manatee Sanctuary Act

Marine Mammal Protection Act of 1972

- Congress signs into law the MMPA in 1972. This gave the federal gov't jurisdiction over all marine mammals in U.S. waters
- Created national moratorium of the “take” of all marine mammals
 - “Take” defined *under the MMPA* as "harass, hunt, capture, kill or collect, or attempt to harass, hunt, capture, kill or collect."
 - “Take” *under the ESA* as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect..." or to attempt to engage in any such conduct.
- Powerful and most important tool we have to study, protect and conserve marine mammal populations
- Only Federal officers can cite the MMPA unless cross-deputized



Marine Mammal Protection Act-- Amended

- Congress – 1994 Title IV MMPA established Marine Mammal Health and Stranding Response Program
 - Stranding Response Agreements
 - Unusual Mortality Event Response and Funding
 - Collection of scientific data
 - Establishment of Release Guidelines
 - Establishment of Tissue Bank
 - Establishment of Prescott Grant Program

History of the U.S. Stranding Network

Once MMPA is amended to include Title IV:

- It created framework for stranding network. 6 regions, each governed by a Regional Stranding Coordinator
 - MARS est. 1996 as a federally recognized not-for-profit with necessary permits from NOAA and USFWS
 - Member of the U.S. stranding network w/ specific coverage area from Miami-Dade County through Martin County (250 miles of coastline)
 - MMPA - NOAA/NMFS has authority for all cetaceans and pinnipeds
 - USFWS—authority for manatees



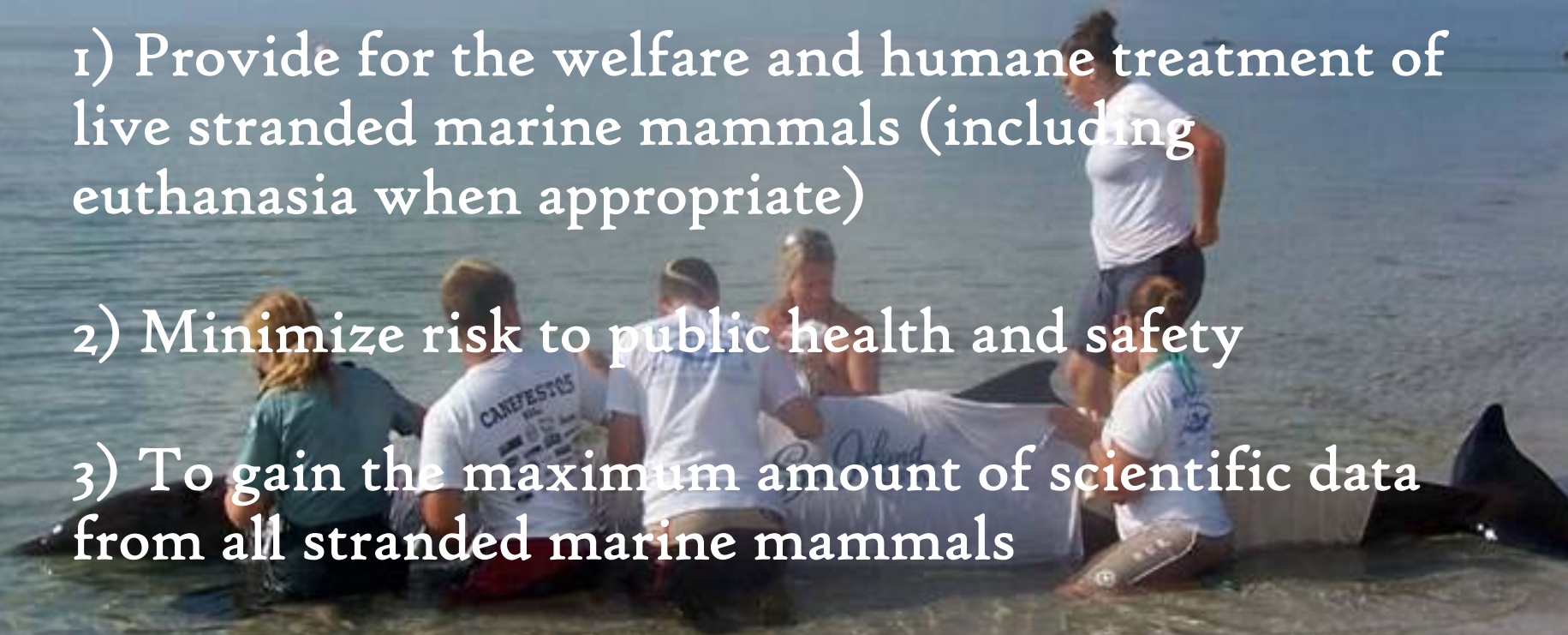
Gov't Agencies: Upholding the MMPA

- National Oceanic and Atmospheric Administration (NOAA Fisheries): Cetaceans and all pinnipeds
- U.S. Fish and Wildlife Service (manatees, walrus, sea otters)
- Florida Fish and Wildlife Conservation Commission

888-404-FWCC !!!!!!!

Objectives of the U.S. Marine Mammal Stranding Network

- 1) Provide for the welfare and humane treatment of live stranded marine mammals (including euthanasia when appropriate)
- 2) Minimize risk to public health and safety
- 3) To gain the maximum amount of scientific data from all stranded marine mammals
- 4) Advance public education

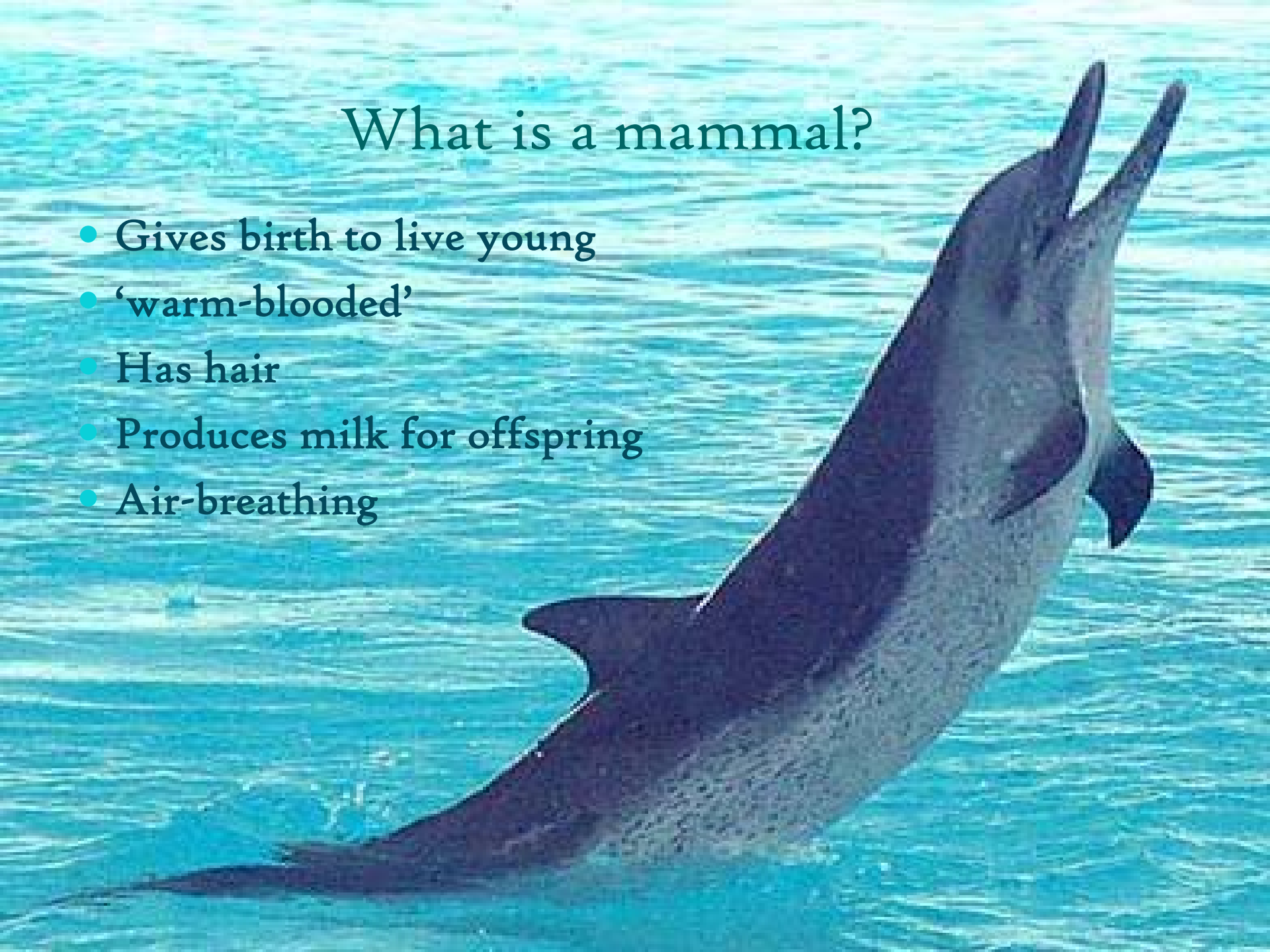




Definitions, Local Stranding Stats, and History

What is a mammal?

- Gives birth to live young
- 'warm-blooded'
- Has hair
- Produces milk for offspring
- Air-breathing



What is a stranding?

Under MMPA Sec. 409.3:

(A) Marine mammal is dead and is:

- i) On beach or shore of US;
- ii) In waters under US jurisdiction

(B) Marine mammal is alive and is:

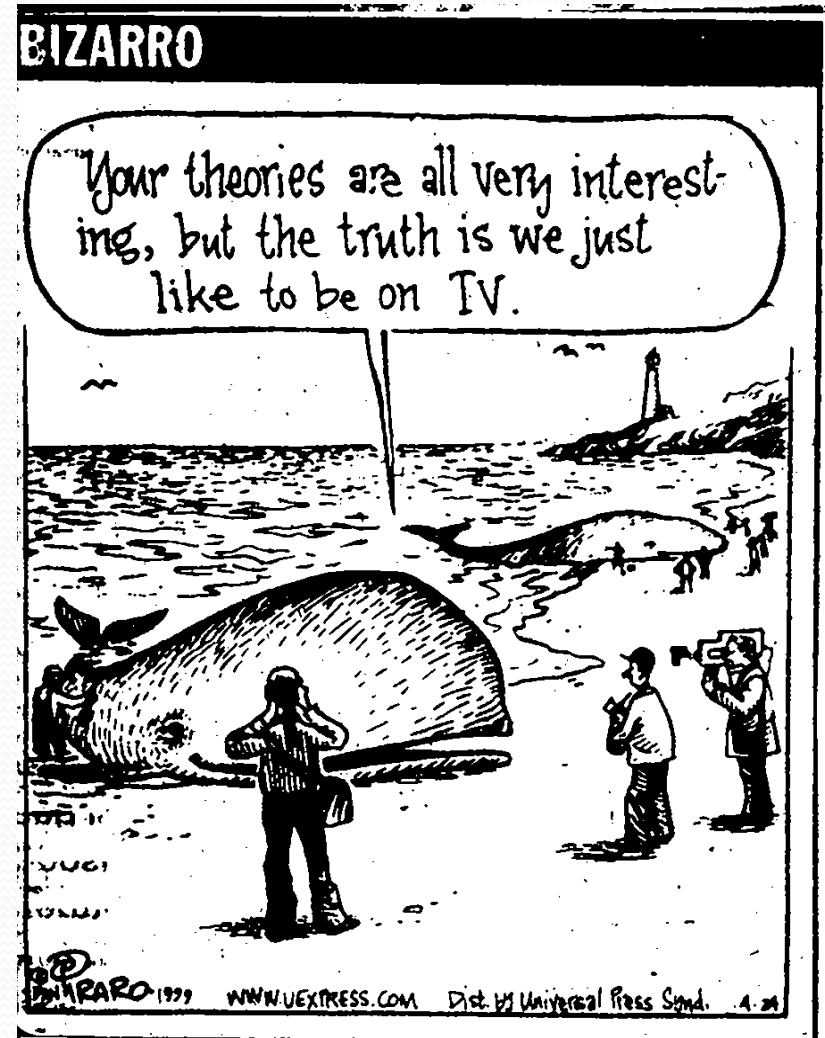
- i) *On beach or shore and* unable to return to h2o
- ii) “ can return to water but needs med. Attn
- iii) In US water but unable to return to own habitat without assistance

MARS 0505

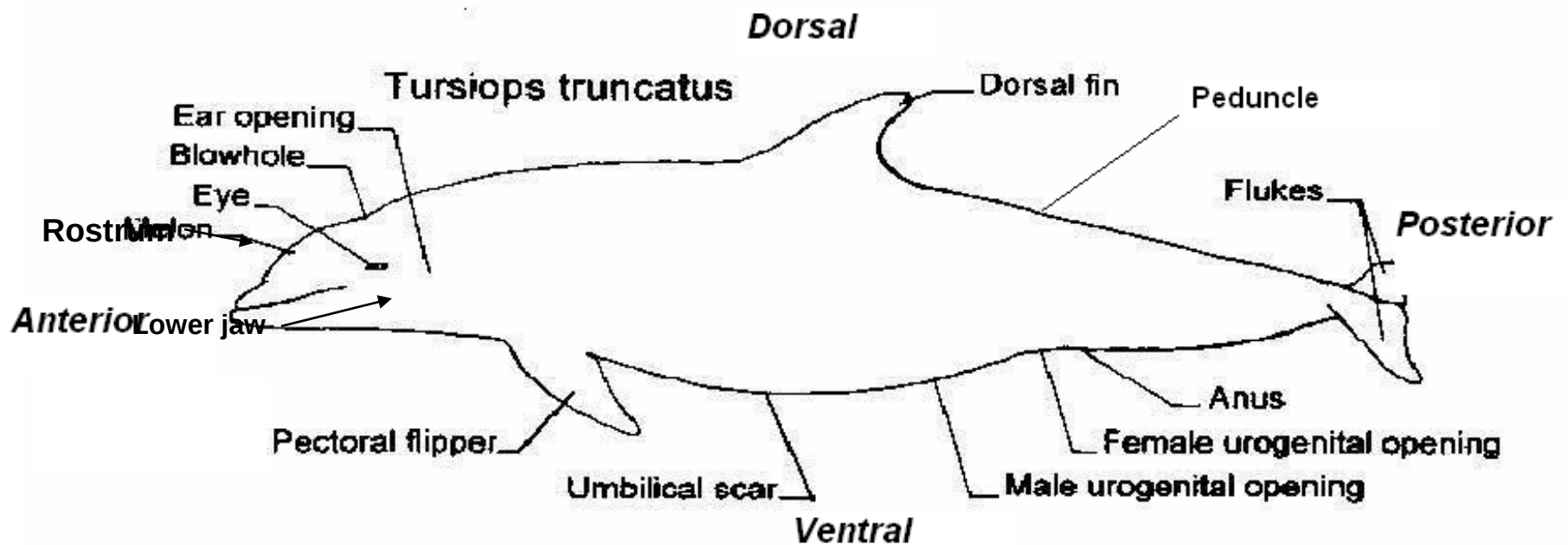


Causes of Strandings

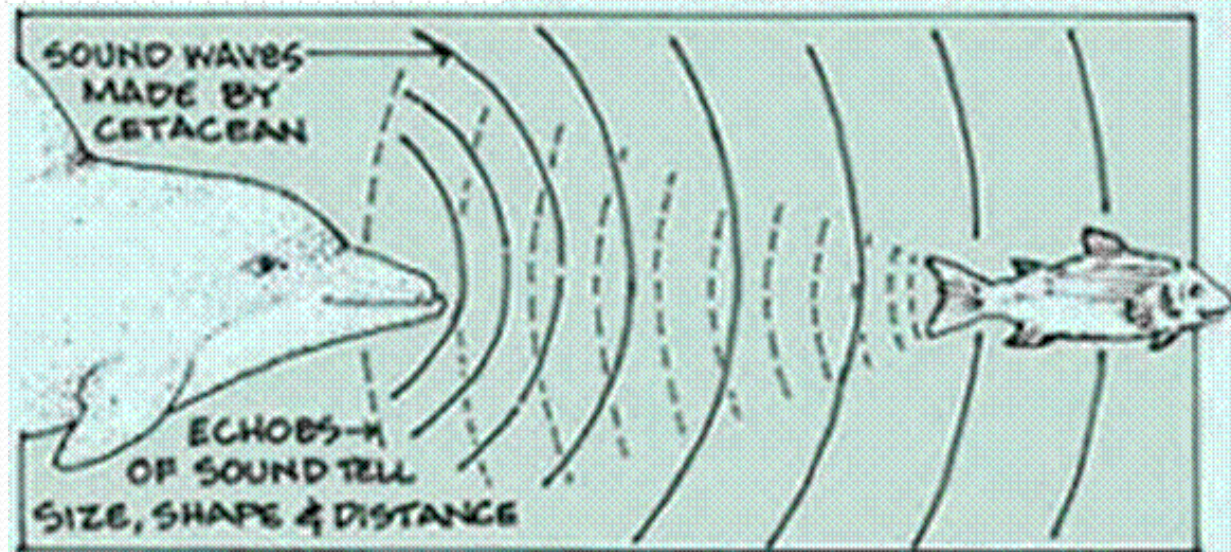
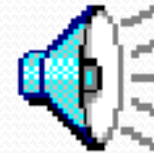
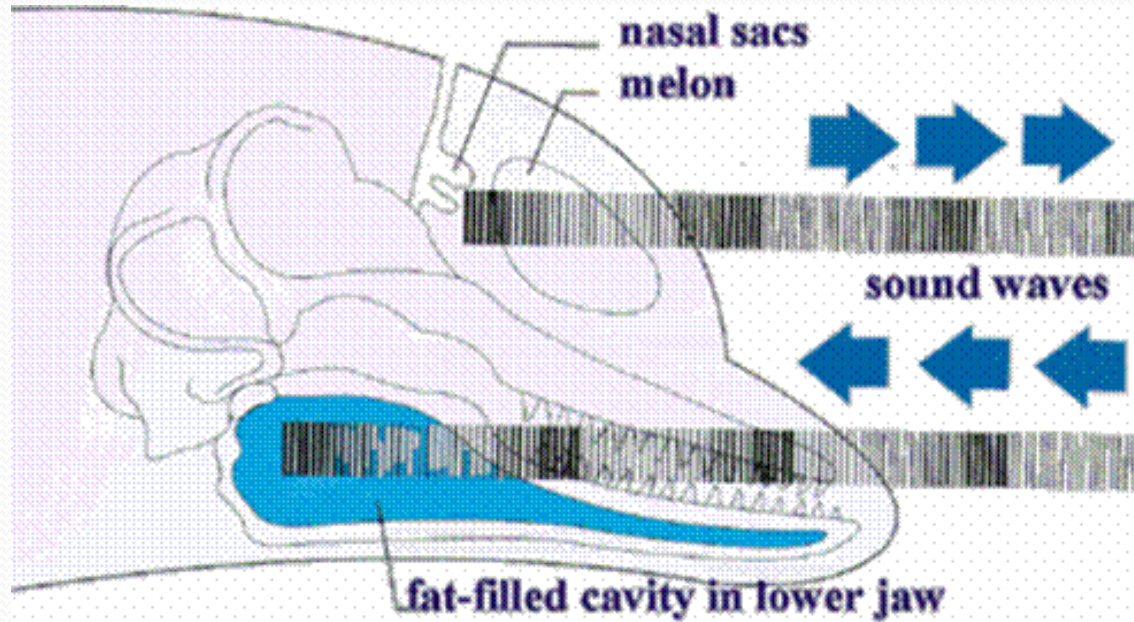
- Weather
- Disease
- Social cohesion
- Following prey inshore
- Human related
- Out of habitat



Basic Cetacean Anatomy

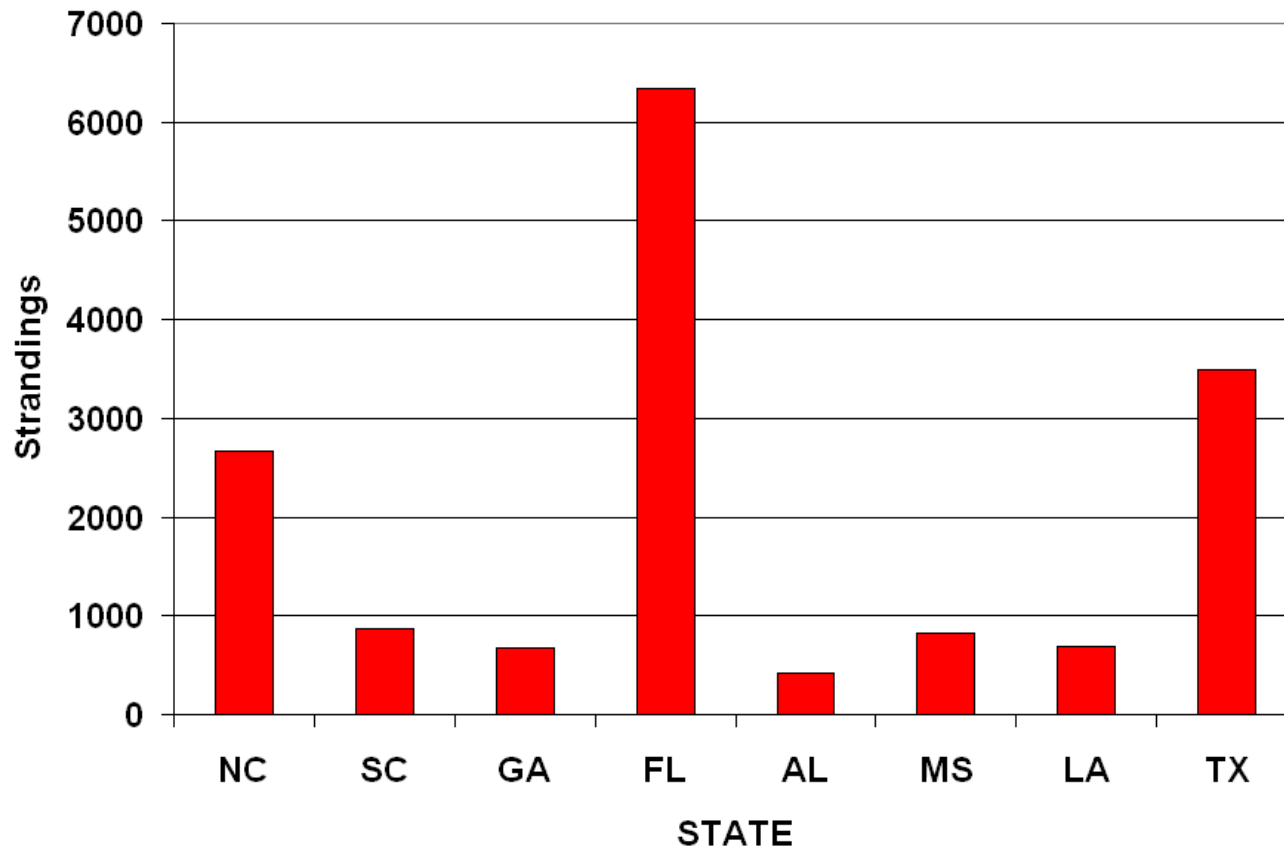


Echolocation



Cetacean Stranding Totals Southeastern United States

1978-2006



Florida stranding summaries: 1978-2006

AO County	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Nassau	0	1	11	7	10	4	11	4	5	3	5	6	9	10	5	4	9	7	6	8	3	3
Duval	0	1	10	8	8	7	19	16	19	60	13	16	8	10	7	11	5	9	8	8	7	22
St. Johns	6	5	17	26	23	9	10	16	28	9	13	11	24	8	11	4	4	7	8	8	7	9
Flagler	0	1	10	12	2	8	4	8	9	5	5	3	4	11	4	1	6	2	11	6	1	6
Volusia	5	15	21	37	13	18	14	13	13	23	10	14	15	18	14	12	13	14	13	16	14	10
Brevard	18	18	28	73	29	24	33	31	54	55	49	64	64	59	44	54	69	47	46	42	28	46
Indian River	1	4	7	13	4	4	4	7	3	6	7	4	7	7	4	8	11	10	11	2	3	2
St. Lucie	0	8	8	15	11	12	4	4	2	10	5	5	2	8	3	7	5	6	6	39	1	0
Martin	3	2	3	11	4	5	6	3	4	1	4	1	2	4	4	7	5	2	7	3	6	7
Palm Beach	2	4	1	1	2	2	3	1	5	4	1	0	0	4	2	2	3	3	2	4	1	4
Broward	1	0	2	2	1	2	1	4	1	1	3	3	1	0	0	1	1	1	3	2	1	0
Miami-Dade	2	2	2	3	1	2	1	5	2	2	3	3	5	0	4	3	3	2	5	1	3	3
Monroe	7	10	10	3	5	11	33	49	12	8	21	18	4	4	2	27	11	7	12	6	56	6

277 310

Mass Stranding Data

Year	Genus	Species	County	Number of Animals
2000	Stenella	attenuata	Monroe	150
2002	Globicephala	macrorhynchus	Monroe	27
2004	Steno	bredanensis	Martin	42
2005	Steno	bredanensis	Monroe	70

Year	MARS ID	County	Common Name	Alive or Dead
1998	MARS 9801	Monroe	Beaked whale	dead
	MARS 9802	Palm Bch	Pygmy sperm whale	fresh dead
	MARS 9803	Monroe	Bottlenose dolphin	?
	MARS 9804	Palm Bch	Pygmy sperm whale	?
	MARS 9805	Monroe	Bottlenose dolphin	dead
1999	MARS 9901	Palm Bch	Pygmy sperm whale	alive
	MARS 9902	Martin	Bottlenose dolphin	dead
	MARS 9903	Palm Bch	Spotted dolphin	dead
	MARS 9904	Monroe	Bottlenose dolphin	alive
	MARS 9905	Dade	Pygmy sperm whale-cow	alive
	MARS 9906	Dade	Pygmy sperm whale-calf	alive
	MARS 9907	Monroe	Bottlenose dolphin	?
2000*	MARS 0001	Monroe	Bottlenose dolphin	???
	MARS 0025	Monroe	Bottlenose dolphin	???
2001	MARS 0101	Monroe	Bottlenose dolphin	fresh dead
	MARS 0102	Dade	Pygmy sperm whale	alive
	MARS 0103	Dade	Pygmy sperm whale	alive
	MARS 0104	Monroe	Bottlenose dolphin	alive
2002	MARS 0201	Monroe	Pygmy sperm ?	?
	MARS 0202	Palm Bch	Sperm whale	?
2003	MARS 0301	Monroe	??	??

2003	MARS 0301	Monroe	??	??
	MARS 0302	Monroe	Spotted dolphin	alive
	MARS 0303	Broward	Risso's dolphin	alive
	MARS 0304	Monroe ?	Sperm whale	?
	MARS 0305	Palm Bch	Pygmy sperm whale	alive
2004	MARS 0401	Palm Bch	Fraser's dolphin	fresh dead
	MARS 0402	Palm Bch	Dwarf sperm whale	alive
	MARS 0403	Palm Bch	Dwarf sperm whale	alive
	MARS 0404	Palm Bch	Bottlenose dolphin	dead
	MARS 0405	Hillsborough	Bottlenose dolphin	alive
* = mass stranding				

Year	MARS ID	County	Common Name	Alive or Dead
2005	MARS 0501	Dade	Bottlenose dolphin	fresh dead
	MARS 0502	Monroe	Rough-tooth dolphin	alive
	MARS 0503	Monroe	Rough-tooth dolphin	alive
	MARS 0504	Palm Bch	Pygmy sperm whale	dead
	MARS 0505	Sperm whale	Palm Bch	alive

Local Issues

- Entanglements and marine debris
- Vessel or PWC strikes
- Vessels blowing the speed zones
- Inadequate manatee signage
- Courts not upholding your citations

Fisheries Interactions

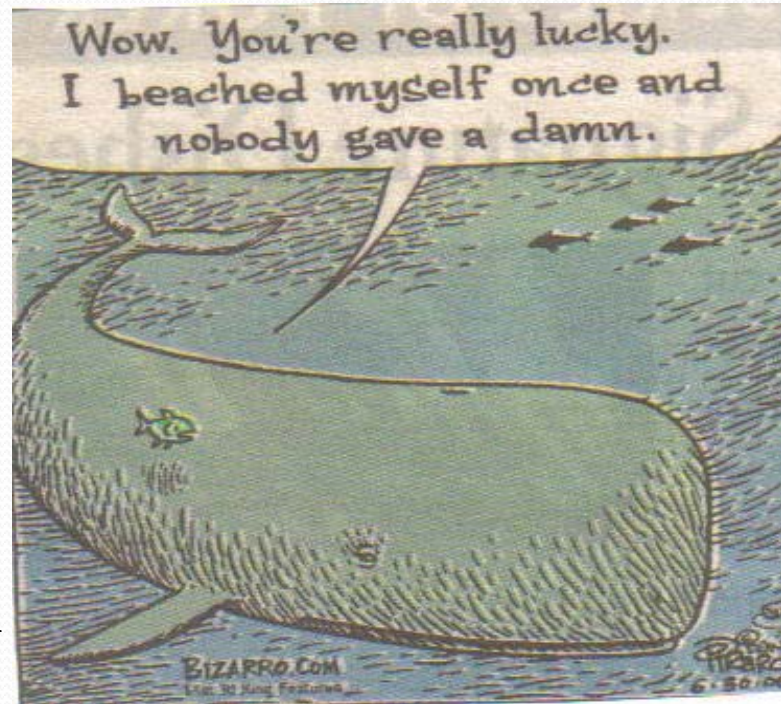


What role do you & your agency play
in marine mammal strandings?



What you bring to the table...

- Experience in crowd control on land and vessel control in water (limiting access to stranding site)
- Experience in natural resource management & ability to enforce the law (so you must be well versed in the law)
- Vehicles and vessels available (boats to transport animals, vehicles for transport or escort), possibly air transport
- Communication technology (ability to talk w/ multiple agencies immediately and also with neighboring vessels via VHF radio, cell phones, dispatch, etc)
- You are not authorized to make medical care decisions under any circumstances, transport any animal live or dead or administer care beyond triage *without consultation*



MMPA Sec. 109 (h) ...says you're in charge

- Federal Cooperation With States: 16 U.S.C. 1379 109. (h)
[TAKING OF MARINE MAMMALS AS PART OF OFFICIAL DUTIES.] —
 - (1) *Nothing in this title or title IV shall prevent a Federal, State, or local government official or employee or a person designated under section 112(c) from taking, in the course of his or her duties as an official, employee, or designee, a marine mammal in a humane manner (including euthanasia) if such taking is for—*
 - (A) *the protection or welfare of the mammal,*
 - (B) *the protection of the public health and welfare, or*
 - (C) *the nonlethal removal of nuisance animals.*
 - (2) not applicable
 - (3) In any case in which it is feasible to return to its natural habitat a marine mammal taken or imported under circumstances described in this subsection, steps to achieve that result shall be taken...

Citations

- Florida Statutes: issued by local and state LE
 - 370.12: Marine animal regulations
 - 370.12(2): Protection of Manatees
 - 370.12(3): Protection of Mammalian Dolphins (porpoises)
- MMPA and ESA: issued by Federal LE, cross-deputized local and state LE
- Increased fines
- “Enhanced Penalties” by FWC

Florida Natural Resource Law

STATE Wildlife Regulations **Contact FWC Law Enforcement**

The Florida Fish and Wildlife Conservation Commission (FWC) is a constitutional body empowered to make and enforce regulations concerning wildlife, including freshwater and marine species (Art. IV, Sec. 9, Fla. Const.)

FWC's primary statutes include Chapters 370 and 372, Florida Statutes (F.S.). FWC's rules are codified in Title 68, Florida Administrative Code (F.A.C.).

View the FWC Law and Code Manual at <http://myfwc.com/codebook/>

Critical Provisions of Ch. 370, F.S.

§370.12(1): "Marine Turtle Protection Act"

- Applies to Atlantic loggerhead turtle, Atlantic green turtle, Leatherback turtle, Atlantic hawksbill turtle and Atlantic Ridley turtle.
- No person may take, possess, disturb, mutilate, destroy, cause to be destroyed, sell, offer for sale, transfer, molest, or harass any marine turtle or its nest or eggs at any time. "Take" means an act which actually kills or injures marine turtles, and includes significant habitat modification or degradation that kills or injures marine turtles by significantly impairing essential behavioral patterns, such as breeding, feeding, or sheltering.

§370.12(2): "Florida Manatee Sanctuary Act"

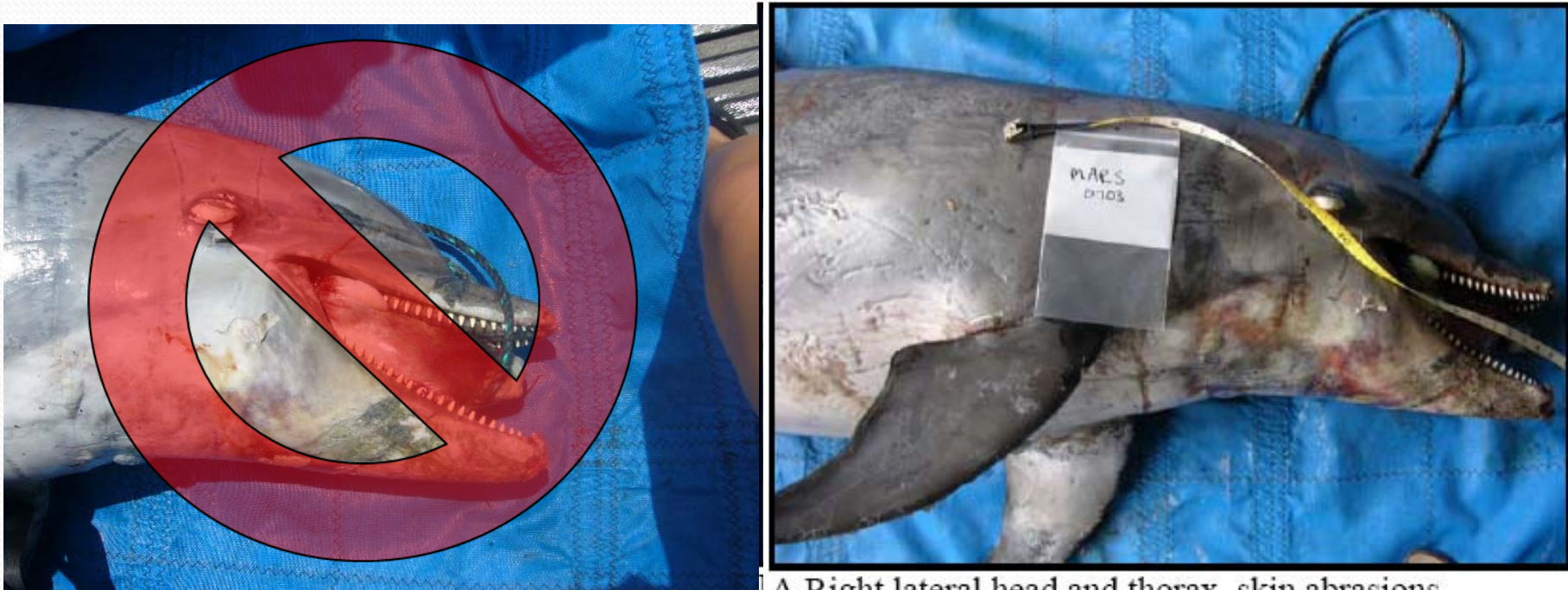
- Declares that the State of Florida is a refuge and sanctuary for the manatee, the "Florida state marine mammal."
- Makes it unlawful for any person at any time, by any means, or in any manner intentionally or negligently to annoy, molest, harass, or disturb or attempt to molest, harass, or disturb any manatee; injure or harm or attempt to injure or harm any manatee; capture or collect or attempt to capture or collect any manatee; pursue, hunt, wound, or kill or attempt to pursue, hunt, wound, or kill any manatee or possess, literally or constructively, any manatee or any part of any manatee.

370.12(3) PROTECTION OF MAMMALIAN DOLPHINS (PORPOISES).--It is unlawful to catch, attempt to catch, molest, injure, kill, or annoy, or otherwise interfere with the normal activity and well-being of, mammalian dolphins (porpoises), except as may be authorized by a federal permit.

How to take Photos

Credit Woods Hole Oceanographic Institution

- Include a scale in each frame—a ruler/tape measure
- Arrange camera perpendicular to the surface of interest
- When photographing specific lesions, get a frame of the entire area to reference the location of the lesion on the body
- Try to take a full body shot, capturing both sides of the animal



A. Right lateral head and thorax, skin abrasions.



Single & Mass Stranding Basics

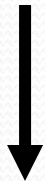
Stranding Response...

Individual/Agency



FWCC

888-404-FWCC



NOAA Fisheries



SA holder for
given coverage
area

Stranding Coor./Volunteer Coor.
Mobilize people, resources



Move out to stranding
scene—Decisions made
with vet



Mass Stranding:



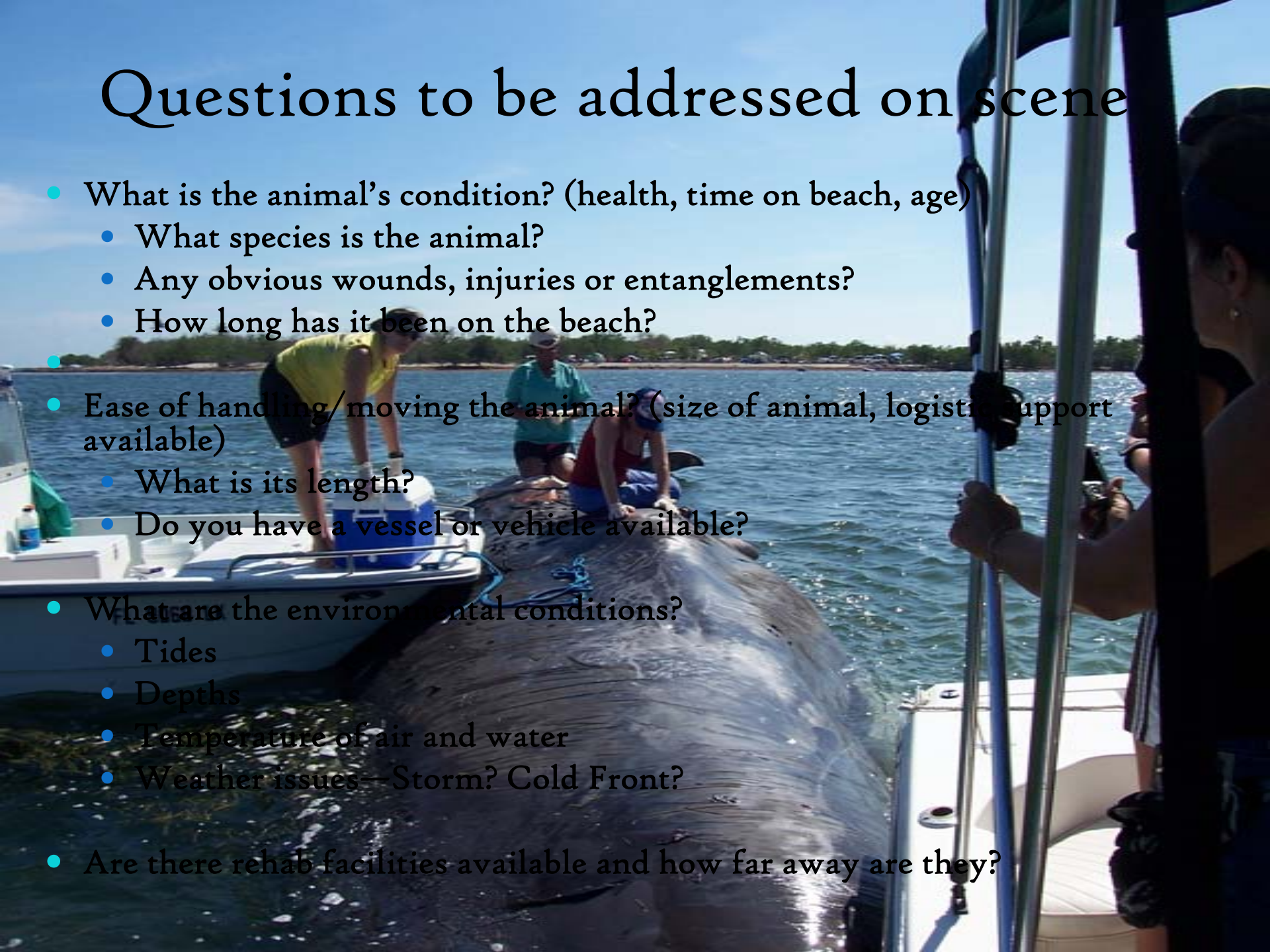
Single Stranding:



Miami Beach Lifeguards ☺

Questions to be addressed on scene

- What is the animal's condition? (health, time on beach, age)
 - What species is the animal?
 - Any obvious wounds, injuries or entanglements?
 - How long has it been on the beach?
- Ease of handling/moving the animal? (size of animal, logistical support available)
 - What is its length?
 - Do you have a vessel or vehicle available?
- What are the environmental conditions?
 - Tides
 - Depths
 - Temperature of air and water
 - Weather issues—Storm? Cold Front?
- Are there rehab facilities available and how far away are they?



Your Beach Rescue Basics

- OPTION1: **Call 888-404-3922**
- OPTION 2: Call the NOAA pager **877-433-8299** to reach Regional Stranding Coordinator, Blair Mase-Guthrie in Miami and/or her staff.
- OPTION 3: Call MARS **305-546-1111**

PUBLIC SAFETY:

- DO NOT PUSH ANIMAL BACK OUT– demand this of others!
- If an animal is entangled, DO NOT TOUCH the entanglement but note color, size of line, buoy attached, etc. If it's life or death, take pictures and use your judgement—but call for help first
- Control crowd
 - DO NOT allow pedestrians to approach the animal.
 - Set up a perimeter/police line, keeping crowd at least 25 yards away

YOUR SAFETY:

- DO NOT step over the animal. Kneel along side the animal and slowly move in on it, avoiding fluke, peduncle area, head region.
- Dig holes for pec fins in sand
- Hold or set up shade over animal (towel, sheet, umbrella, etc)
- Keep body wet: sponges, wet towels (AVOID blowhole)
- Keep log: breath rate, note any marks/wounds, fishing gear if possible



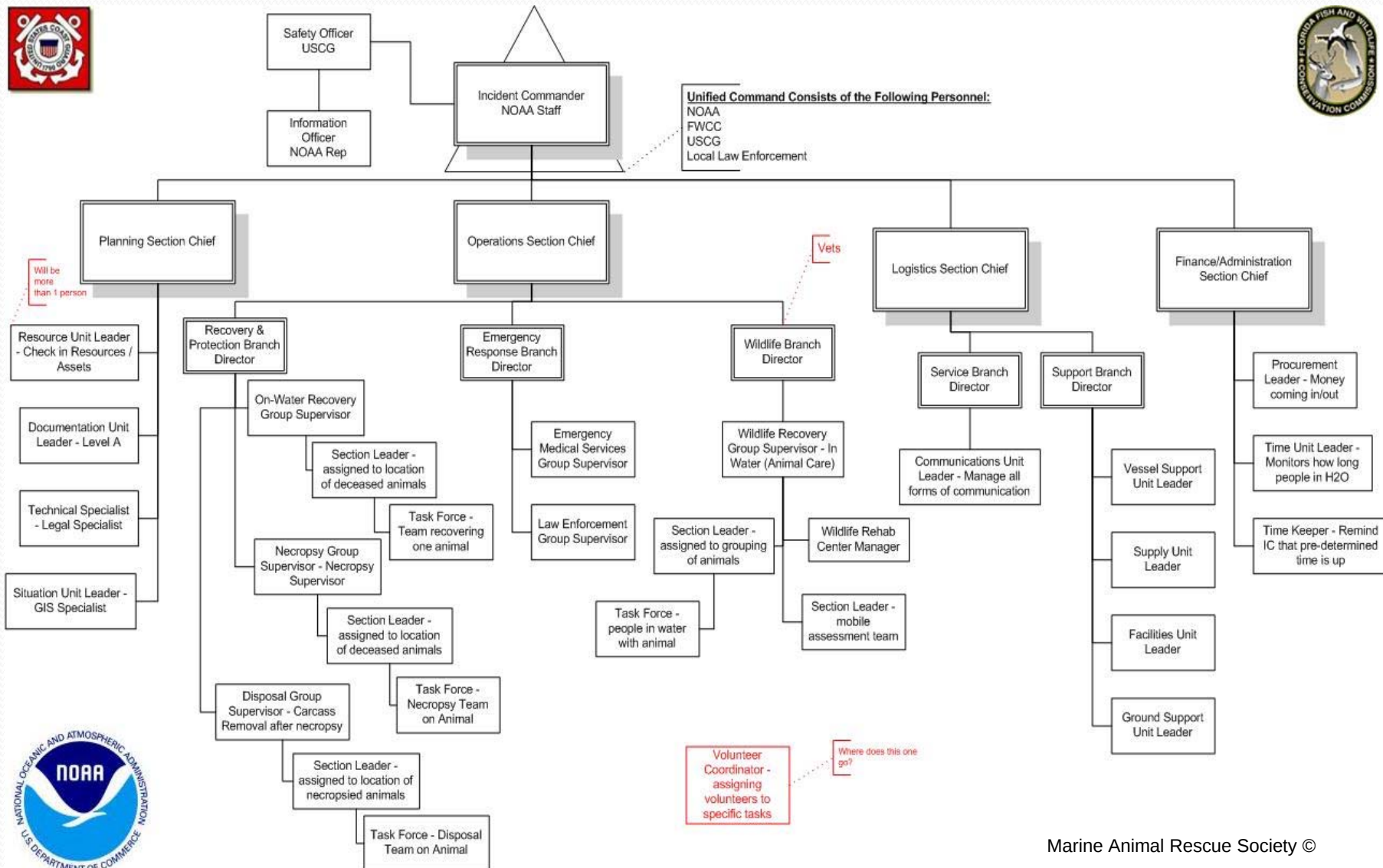
Early Warnings of a Mass Stranding

- Unusual behavior of animals still in the water or pelagic species, such as sperm whales or pilot whales, milling close to shore
- NMFS Stranding coordinator will notify local stranding network participants and arrange for an aerial survey
- A decision may be made to attempt to avert the stranding using visual barriers or acoustic deterrents

News Footage of Mass Stranding



ICS Structure & Your Response



Scenario



Volunteers have ID

- Over 18 years old
- Taken Basic Rehabilitation Training
- Has authorization from this org to be there

Name:

Trained MARS Volunteer

Above said person is authorized by MARS to gain access to stranding event. MARS holds an LOA from NOAA Fisheries
Stranding Network Member

Marine Animal Rescue Society
Questions? Call 305-546-1111
or 786-222-8673



These are wild animals...



Animals that Commonly Strand in South FL



- Bottlenose dolphin
- Rough-tooth dolphin
- Pygmy Sperm whale
- Pilot whales
- Spinner/Spotted Dolphins
- Sperm whale
- Manatees



Rough-tooth dolphins—

“Notch” and “Naia,” our most recent patients..

> 70 Rough-tooth dolphins initially stranded off of Marathon Key in canals and along mangroves

*2 dolphins = MARS

4 dolphins = FKMMRT

26 dolphins = MMC



M: MARS 0502

F: MARS 0503

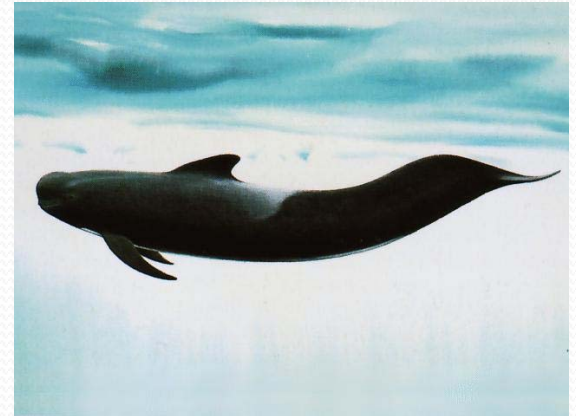
Bottlenose dolphin



Pygmy Sperm Whale



Pilot Whale

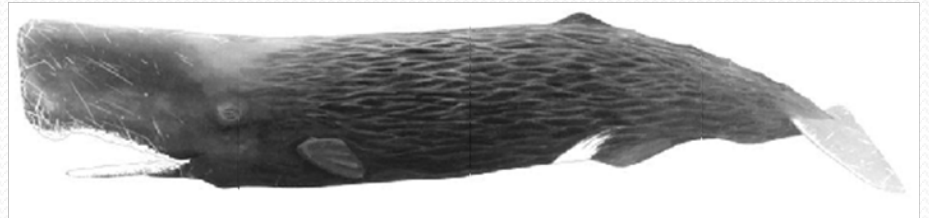


Pantropical Spotted dolphin

Moonshine (MARS 0301). May 2003 (then and now)



Sperm Whale



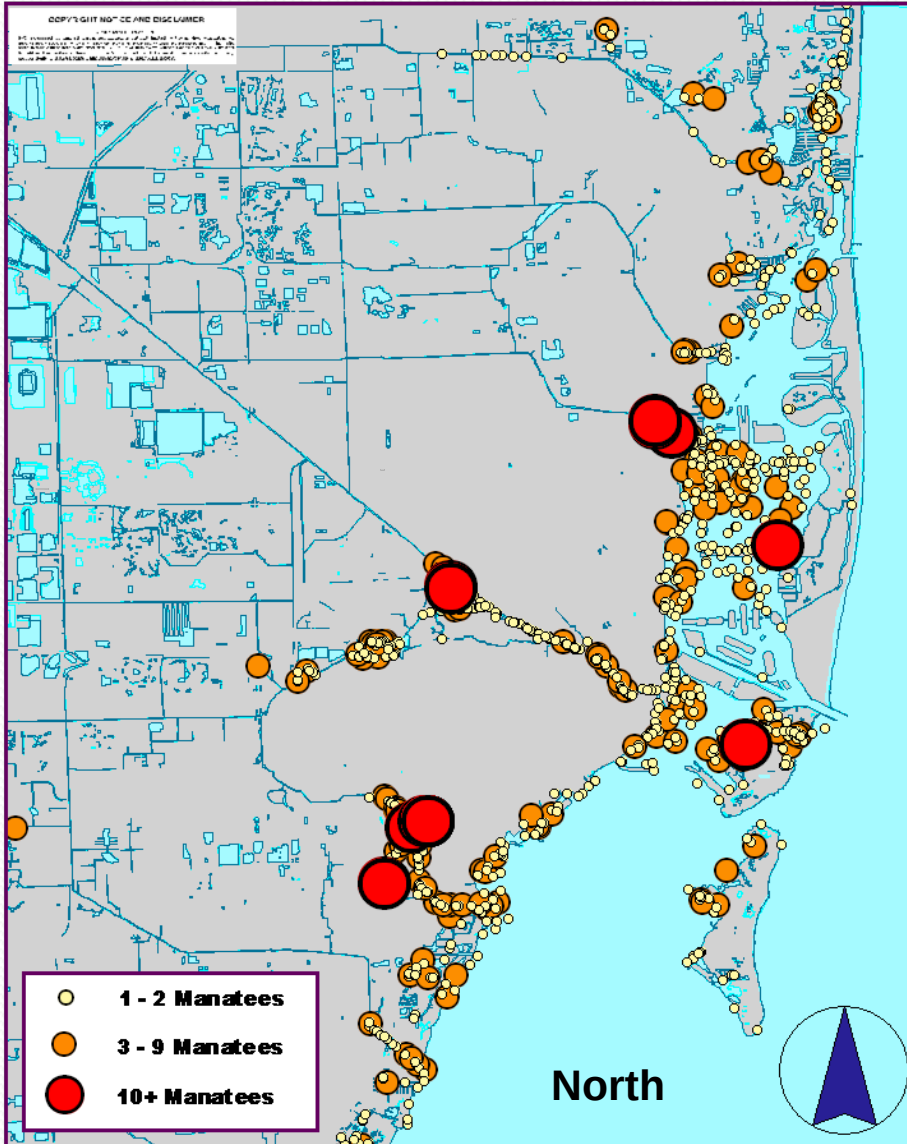
Manatees, boats and humans, oh my!



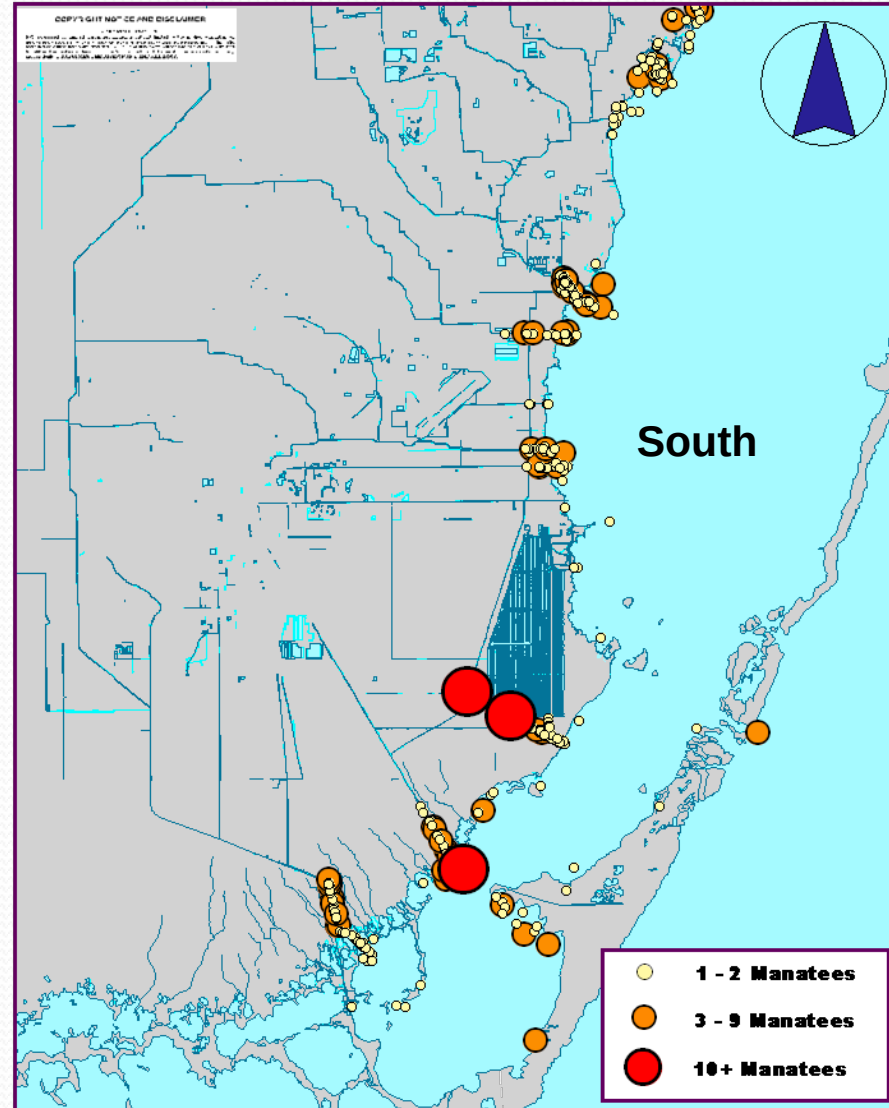
Miami Dade County



Miami-Dade County
Aerial Manatee Sightings (1996-2008)



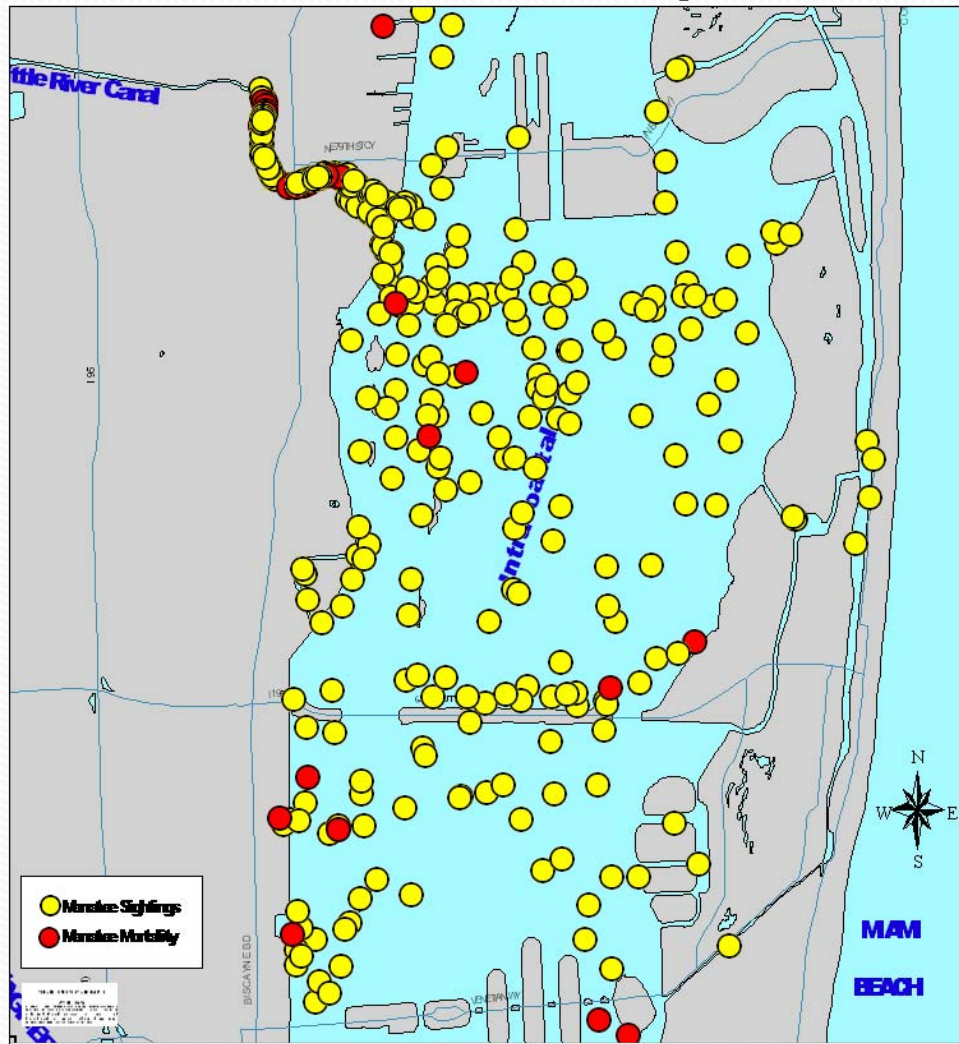
Miami-Dade County
Aerial Manatee Sightings (1996-2008)



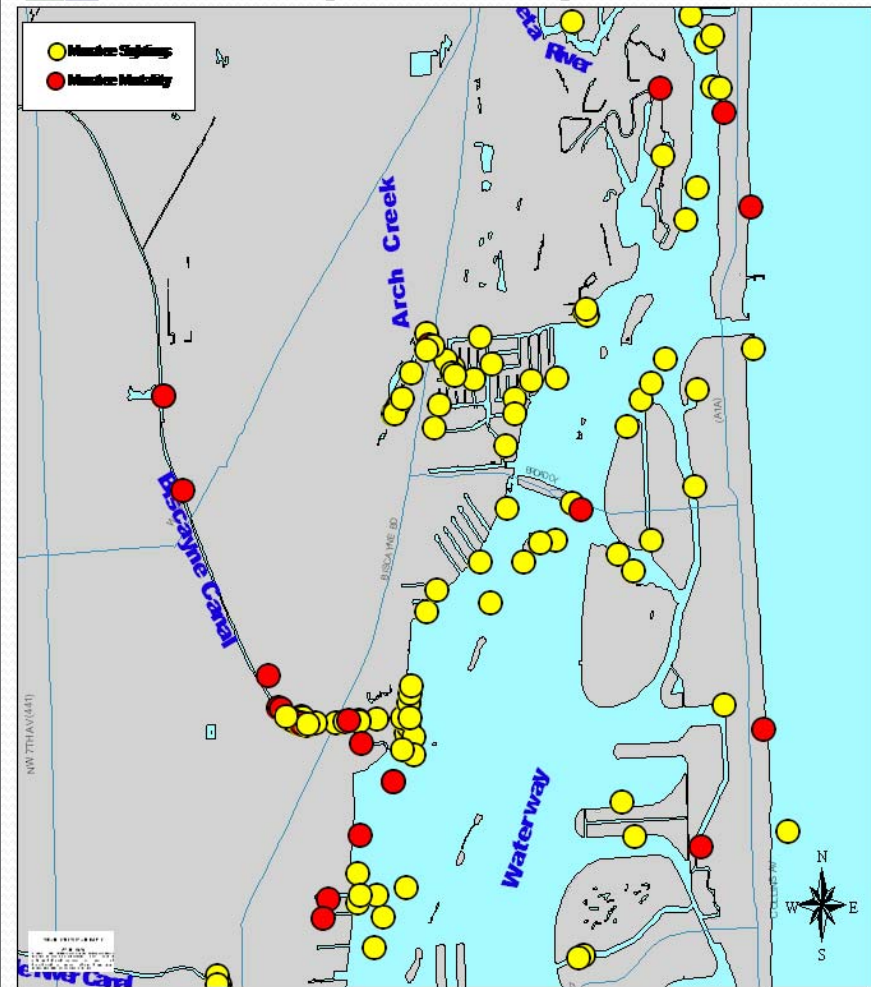
Miami Dade County



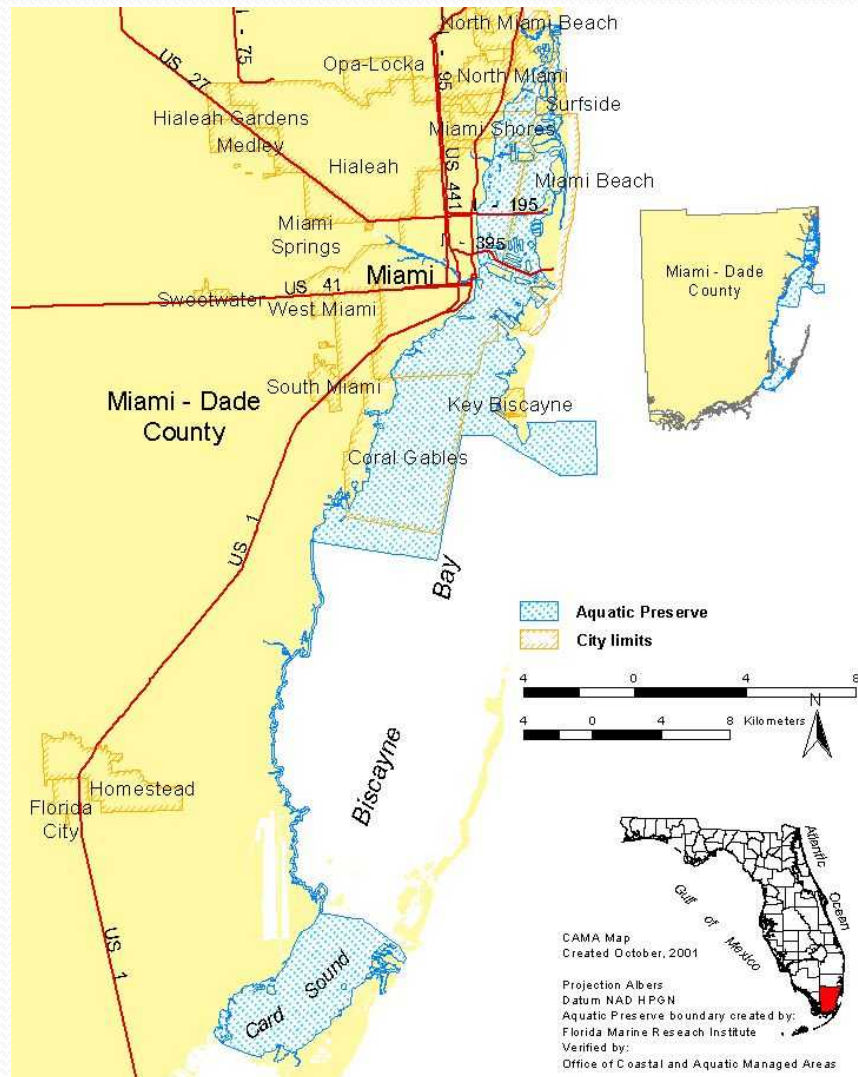
Miami-Dade County Manatee Sightings JFK Little River/JFK/Vandenberg Causeway



Miami-Dade County Manatee Sightings Haulover Bay/Hobbs/Indian Creek/Biscayne Canal/JFK



Miami Dade County



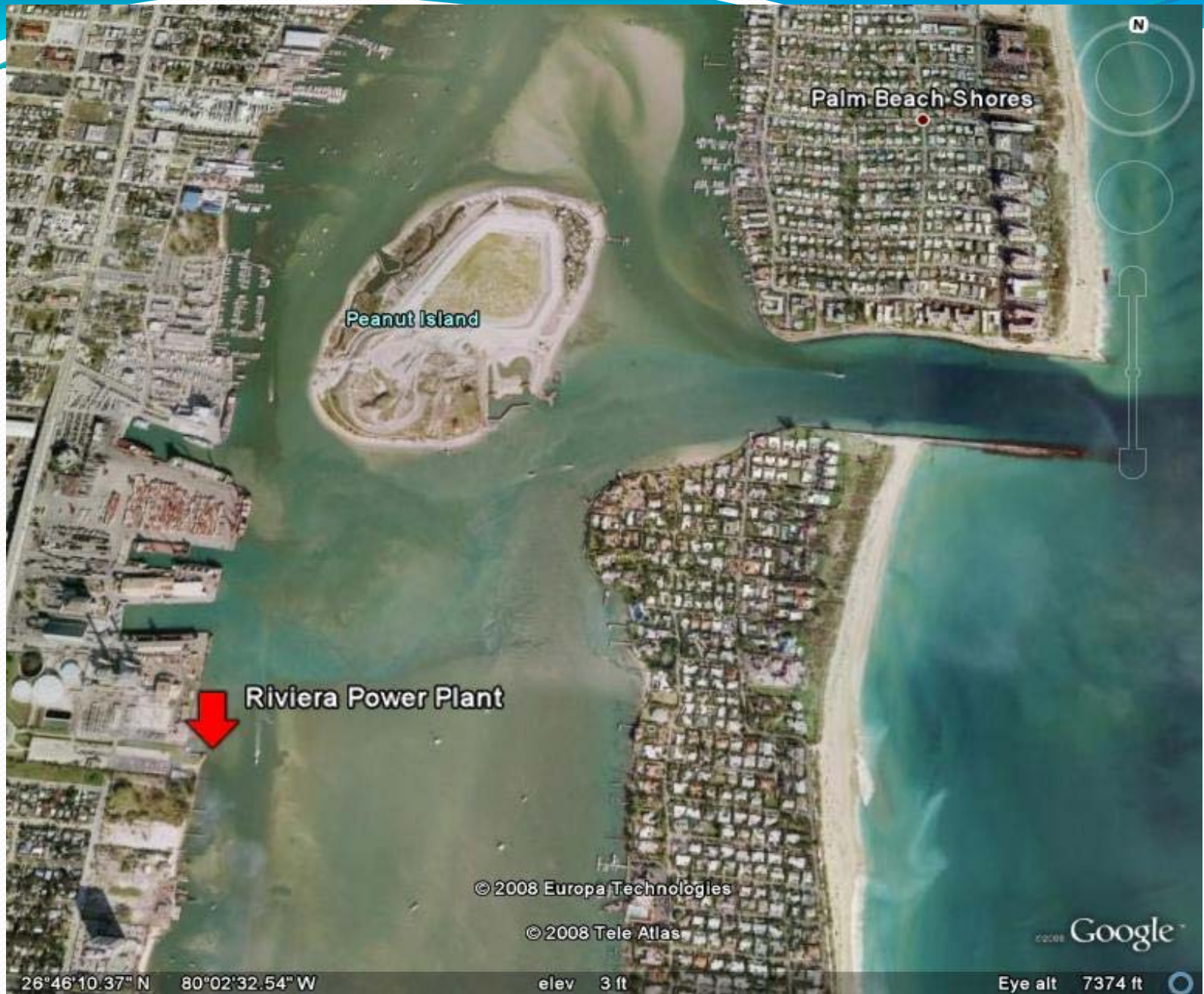
Palm Beach County



Photo: Kathy Vaughn



FPL Riviera Power Plant, January 8, 2006
Photo: FFWCC



Palm Beach Shores

Peanut Island

Riviera Power Plant

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26°46'10.37" N 80°02'32.54" W

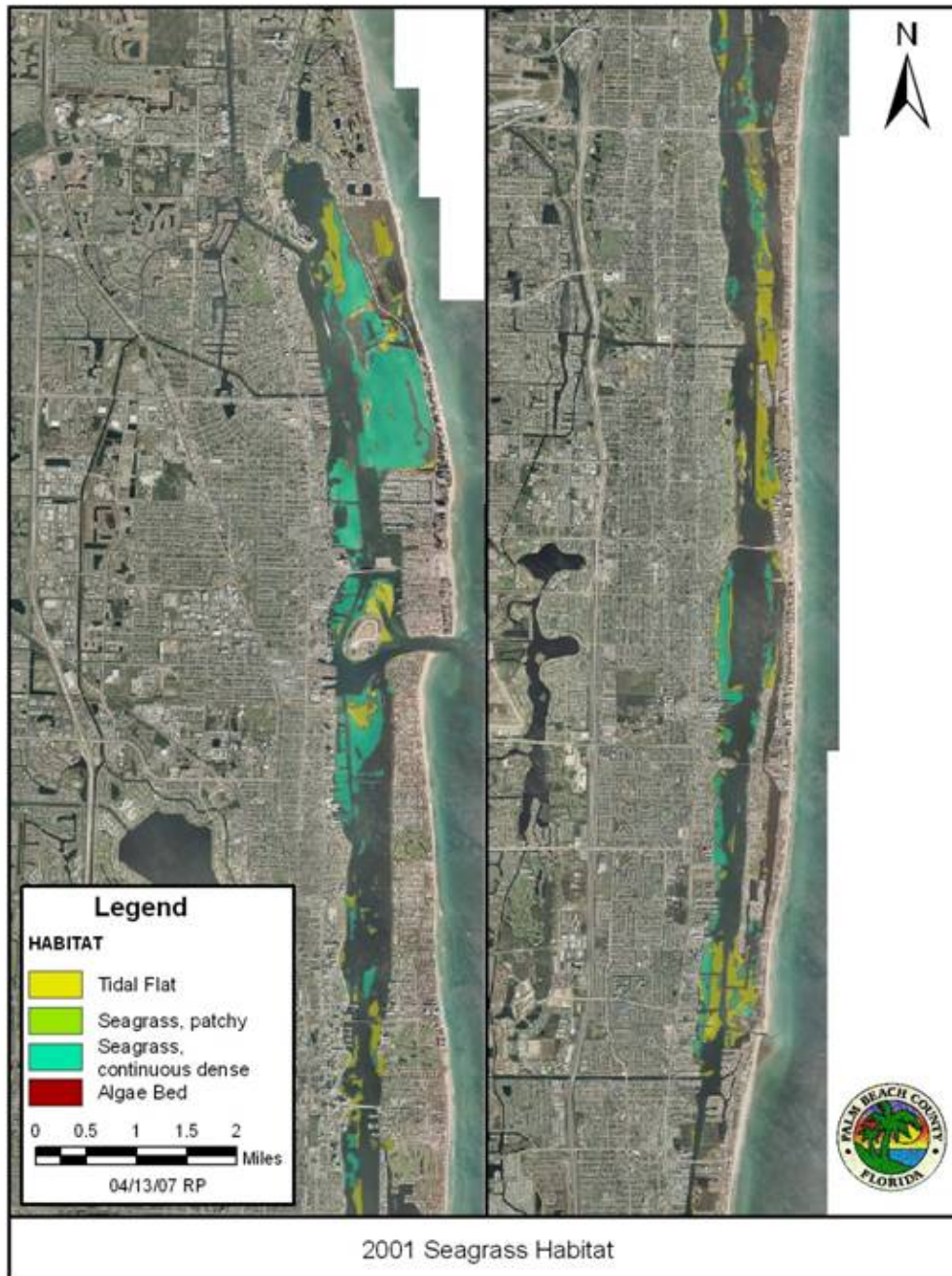
elev 3 ft

Eye alt 7374 ft

Seagrass Habitat

➤ 1,626 acres

➤ Approximately 1,134 in the North Segment





Media Relations

Your policy ...

NO COMMENT...

Refer them to your PIO

Refer them to veterinarians at MARS,
NOAA or FWC

Positive Press Examples

- 11/9/00 Sea Bright, NJ – A team of experts captured a bottlenose dolphin mother and calf. Special assistance was provided today by the U.S. Coast Guard, the Monmouth Beach and Long Branch Police Departments, New Jersey Marine Patrol.
- 4/19/04 Gloucester, Mass. – A tug boat reported it had sighted Helis the beluga whale...recently found swimming in the upper reaches of the Delaware River. Law enforcement agents from the State of New Jersey and NOAA Fisheries Office of Law Enforcement patrolled...to ensure safe distance was kept from Helis.

Gables police aid wounded manatee

Maimed mammal
later dies at SeaWorld

By Sandra Levin

Catching a manatee to save its life proved to be as challenging to police as arresting some crime suspects.

Coral Gables Marine patrol officers worked with the Florida Fish and Wildlife Conservation Commission nearly all day on May 18 to capture the manatee, which had a tail that was nearly severed from its body.

After the mammal was spotted, police caught it in the canal at Alhambra Circle, Riviera Road, and U.S. 1.

Sgt. Michael Prevola, of the police community affairs unit, began receiving calls about the injured manatee on May 16.

Police and the wildlife officials decided to conduct the search on Thursday for the manatee, a member of an endangered species.

Lt. Paul Miyares, who supervises the Marine Patrol and was present at the scene of the rescue, described the rescue as a positive experience because it involved helping an animal in distress.

The Marine Patrol provided the boat and Marine Patrol members Randy Hoff, Billy Barrow and Jerry O'Leary were the main divers. Hoff carried out the last part of the plan to capture the manatee with a net.

Volunteers from the Marine Animal Rescue Society also participated in the rescue.



Florida Fish & Wildlife Manatee Division, Miami Seaquarium staff, Marine Animal Rescue Society staff and volunteers and Coral Gables Marine Patrol rescue the wounded manatee May 18.

One problem in catching the manatee was visibility of the water, which is 5 to 12 feet deep and has much of about two feet at the bottom, as well as debris from hurricanes. Another problem was that the manatee kept trying to swim out from under the net, according to Prevola.

Once the manatee was captured, Wildlife Commission staff put it into the animal and gave it medication.

The manatee was finally rescued and transported to SeaWorld Orlando. Unfortunately, due to the severity of his injuries he died four days later.

You call this working?



Your resources:

				
Common Name	Bottlenose Dolphin	Spotted Dolphin	Risso's Dolphin	Short-Finned Pilot Whale
Scientific Name	<i>Tursiops truncatus</i>	<i>Stenella attenuata</i>	<i>Grampus griseus</i>	<i>Globicephala macrorhynchus</i>
weight / length				
Calf	1.0—1.3m/ 90 kg 3-4.5ft/ 200 lbs	85 cm/ 120 kg 3ft/ 265 lbs	1.5m/ 59 kg 4.0ft/ 129 lbs	1.35—1.45m/ 55kg 4.0ft/ 121lbs
Adult	1.9—3.8m/ 650 kg 6.2— 13.0ft/ 1, 430lbs	1.9—3.8m/ 650 kg 6.2— 13.0ft/ 1, 430lbs	4.3m/ 300-500 kg 14.10ft/ 660-1,100lbs	4.0—6.0m/ 908—816kg 13—20 ft/ 2,000-4,000
Distinctive Characteristics		Demarcated white-tipped beak; curved dorsal fin pointed at the tip; unspotted at birth; adults have varied degrees of spotting on the dark dorsal side	Blunt-headed with no distinct beak; vertical crease on the front of the melon; typically covered with white scratches, spots, and blotches	Blackish skin tone with a light gray anchor shaped patch on chest; bulbous head with dramatically unslapping mouth line

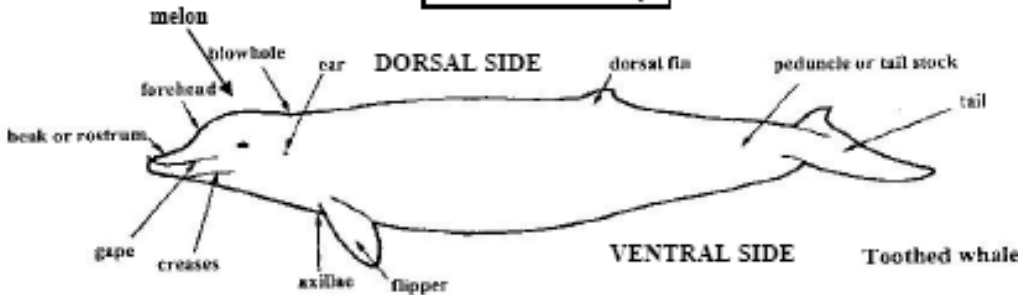
HOW TO HANDLE A MARINE MAMMAL STRANDING:

- If you are the first to spot a stranded animal, immediately call 888-404-FWCC (888-404-3922).
- Be prepared to report on the approximate size and condition of the animal. Do your best to identify the species. If there is more than one animal, offer an estimate of how many animals are stranded. Attempt to provide an exact location (giving GPS coordinates if possible).

HOW TO HANDLE THE PUBLIC:

- Ask onlookers to remain quiet and to not approach the stranded animal until authorities arrive.
- Ensure that no attempts are being made to push the animal out to sea. Do what you can to help based on your training.
- Let the public know they may volunteer their help when authorities arrive.

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				IMPORTANT CONTACT INFORMATION
Common Name <i>Scientific Name</i>	Pygmy Sperm Whale <i>Kogia breviceps</i>	Dwarf Sperm Whale <i>Kogia simus</i>	Florida Manatee <i>Trichechus manatus</i>	<u>To Report a Marine Mammal in Distress Call:</u>
Length/ Weight Calf Adult	1..2m/ 54 kg 4.0ft/ 120 lbs 2.7—3.4m/ 318—408 kg 9—11ft/ 700—900lbs	1..0m/ 45 kg 4.0ft/ 100 lbs 2.2—3.1m/ 136—272 kg 7—9ft/ 300—600lbs	1..0m/ 30-45 kg 4.0ft/ 60-100 lbs 2.2—3.5m/ 455—1590 kg 7—11ft/ 1000—3500lbs	Fish and Wildlife Conservation Commission 888-404-FWCC (888-404-3922) Manatees: 888-404-3922 Dolphin/Whale Pager: 877-433-8299
Distinctive Characteristics			Often have green tinge to their grayish/brownish skin due to algal growth; calves can nurse for several years; vegetarians that feed in shallow water.	Sea Turtles: FWCC Sea Turtle Stranding Pager: 800-241-4653 Then enter pager number 274-4867
General Anatomy 				Birds: Miami Dade: Pelican Harbor 305-751-9840 Broward/Palm Beach: Wildlife Care Center 954-524-4302 MARS 24 hr line: 305-546-1111

+ DVD of Training

What we strive to do with your help:
*Quickly and efficiently respond to marine mammals
in distress*



MAG

- Manatee Awareness Group
- Meets Quarterly
- Brings together enforcement, agencies, NGOs, industry, and educators from Miami-Dade, Broward and Palm Beach Counties

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Got Questions?

