



MARINE TRASH AND DEBRIS Reduction

Awareness



Elimination

Net Recovery

Photo Courtesy of USCG



BACKGROUND

FACT:

Marine trash and debris:

- ❖ Pose a threat to fish, marine mammals, sea turtles, sea birds, and other wildlife;
- ❖ Cause costly delays and repairs for commercial and recreational boating interests;
- ❖ Detract from the aesthetic quality of recreational shore fronts; and
- ❖ Increase the cost of beach and park maintenance.



Entangled Sperm Whale

Photo Courtesy of Ayhan Dede, Turkey European Cetacean Bycatch Campaign, Turkish Marine Research Foundation



Photo Courtesy of NOAA



Photo Courtesy of Ray Boland, NOAA



WHAT IS MARINE DEBRIS?

Marine debris is any object or fragment of wood, metal, glass, rubber, plastic, cloth, paper or any other man-made item or material that is lost or discarded in the marine environment.



Photo Courtesy of NOAA

Doll found in stomach of stranded Beaked Whale



Photo Courtesy of Mote Marine Lab

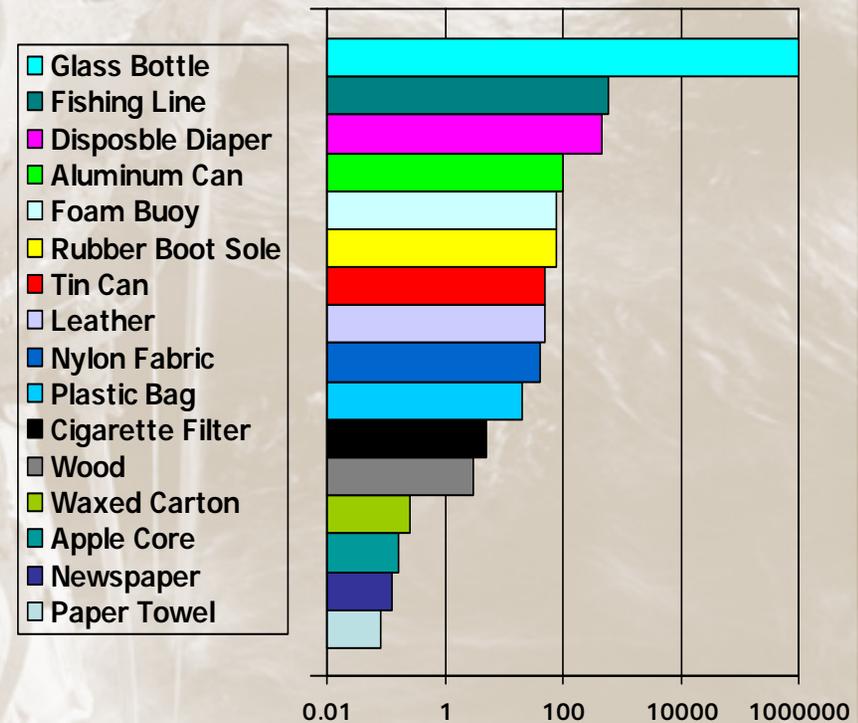
Kemp's Ridley that swallowed balloon with ribbon



DEBRIS PERSISTS

- ❖ Depending upon its composition, marine debris:
 - May sink to the seafloor,
 - Drift in the water column, or
 - Float on the surface of the sea.
- ❖ Certain debris, such as plastics, can persist in the marine environment for hundreds of years.
- ❖ The effect on the visual or ecological environment is significant.

Debris Persistence (Years)



Information Source: NPS, Mote Marine Lab



FOLLOW OCS RULES AND REGULATIONS

- ❖ The disposal and/or discharge of any solid waste in the marine environment is strictly prohibited by U.S. Coast Guard (USCG) and Environmental Protection Agency (EPA) regulations.
- ❖ The disposal of equipment, cables, chains, containers, or other materials into offshore waters is prohibited by the Minerals Management Service (MMS).
- ❖ Regulations on marine trash and debris are also in MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act.



Photo Courtesy of NPS



ADDITIONAL LEGAL REQUIREMENTS

- ❖ Report materials accidentally lost overboard in accordance with regulations.
- ❖ As safe operations allow, recover materials lost overboard.

Photo
Courtesy
of NOAA



Photo Courtesy
of USGS



Entangled Kemp's Ridley



YOUR ACTIONS MAY SUBJECT YOU TO SEVERE LEGAL CONSEQUENCES!



Photo Courtesy of NPS

Despite improvements to date, oil and gas operations in the Gulf of Mexico can contribute to this problem. Offshore operating regulations **prohibit deliberately discharging** containers and other similar materials (i.e. trash and debris) into the marine environment, and require durable identification markings on equipment, tools, containers (especially drums), and other material.



MARINE DEBRIS MAY CAUSE SEVERE ECOLOGICAL DAMAGE

- ❖ Marine debris discarded or lost may injure or kill fish, marine mammals, sea turtles, seabirds, and other wildlife.
- ❖ Unknown numbers of marine animals die each year from:
 - Entanglement in discarded fishing line, strapping bands, ropes, nets, and plastic six-pack rings, and
 - Internal injury, intestinal blockage, and starvation from ingesting marine debris.



Photo
Courtesy
of NOAA

Green Turtle trapped in netting



Photo
Courtesy of
Sea Turtle
Survival
League

Loggerhead with partially ingested plastic bag



MARINE DEBRIS MAY PUT LIVES AT RISK!



Photo Courtesy of NOAA

Marine debris fouls boat propellers and clogs water intake ports on engines - **endangering the safety** of fishermen and boaters.



MARINE DEBRIS MAY RESULT IN ENVIRONMENTAL DAMAGE

Marine debris takes away from the natural beauty of recreational beaches and shorelines and increases the cost of park and beach maintenance. The beaches are here for us to enjoy and sustain.



Photo Courtesy of USGS



OIL & GAS FACILITIES/VESSELS



Entangled Loggerhead

Photo
Courtesy
of Thomas
Delinger,
NOAA



Entangled Right Whale

Photo
Courtesy
of NOAA

- ❖ Industry efforts to date have reduced, if not eliminated, trash intentionally jettisoned into the Gulf of Mexico. However, there is still a concern about accidental losses from structures and vessels.
- ❖ As oil and gas industry activities expand into deeper waters, the number of species of protected marine mammals exposed to our activities has increased. Sightings of sperm whales, endangered species, and some threatened species of sea turtles are not uncommon. We need to ensure a chance meeting of these animals with lost materials or debris from our operations does not occur.



TOP ITEMS LOST FROM OIL & GAS FACILITIES*

1. Hard Hats
2. Five Gallon Containers
3. Other Items
 - Pallets
 - Scaffold Boards
 - Plastic Sheeting
 - Life Jackets
 - Hand Tools
 - Handrails
 - Fire Extinguishers



** Results from an OOC survey conducted in 2004 for 2003 operations*



PREVENTING MARINE DEBRIS

Marine debris can be prevented. Below are some best practices for preventing marine debris from oil & gas facilities:

- ❖ Tie it down / Secure it / Stow it to avoid items from being lost overboard.
- ❖ Use hardhat chinstraps/tethers.
- ❖ Dispose of items properly.
- ❖ Cover bins/trash cans/baskets.



Photo
Courtesy
of NOAA



Photo
Courtesy
of USGS



PREVENTING MARINE DEBRIS

Additional Best Practices:

- ❖ Practice good housekeeping.
- ❖ Observe placards. / Follow marine debris training guidelines.
- ❖ Use pre-slung packaging. / Store loose items in baskets/lockers.
- ❖ Provide butt buckets in smoke areas.
- ❖ Reduce the use of pallets. / Use pallet boxes or alternative bulk containers.
- ❖ Conduct survey/hazard hunts to identify potential sources of marine debris.

Photo Courtesy of USGS





PREVENTING MARINE DEBRIS

Additional Best Practices:

- ❖ Include prevention discussions in pre-job hazard assessment meetings and behavior-based safety programs.
- ❖ Increase focus on preventing marine debris, especially in adverse environmental conditions like high winds, high seas, transfer operations, etc.
- ❖ If an item is lost overboard, review/discuss in facility safety meetings and share learnings.
- ❖ Use OOC marine debris slidepacks as environmental moments in facility meetings.



BE PART OF THE SOLUTION AT WORK OR AT PLAY

Whatever the source, marine debris is a direct result of human activities on land and at sea. At work or play, we need to do our part to not contribute to the problem.



- ❖ Be an advocate on the marine debris issue.
- ❖ Do your part.
- ❖ Educate others.
- ❖ **What else can we do?**