

Minimizing Angler/Dolphin Impacts



Researchers with Mote Marine Lab's Sarasota Dolphin Research Program have documented increased incidents of dolphins depredating (stealing) bait and catch from fishermen on boats and piers in recent years.

The change in behavior is thought to have been reinforced by human behavior such as feeding dolphins, an illegal activity under the federal Marine Mammal Protection Act, and releasing catch, sometimes unavoidably, in the vicinity of dolphins. A consequence of these actions has been a rising number of dolphins injured or killed by ingestion of gear, active entanglement in lines and discarded fishing gear. In 2006 it was discovered that nearly 2% of Sarasota Bay's resident dolphin community died due to ingestion of fishing line or lures and hooks. Modeling efforts discovered these losses, in addition to natural mortality, were unsustainable to the local population.

Since the summer of 2007, the SDRP has been investigating this issue by examining fishing efforts, life history and social traits of dolphins that depredate from anglers versus those that do not. Although the study is focusing on dolphin communities in the Sarasota region, researchers hope their methods can serve as a template for evaluating and mitigating depredation issues in other coastal communities. Ultimately, researchers hope their efforts will reduce the number of dolphin deaths that result from entanglement or ingestion of fishing gear, and improve the quality of anglers' experiences.

Bottlenose dolphins (*Tursiops truncatus*) are a common inhabitant of our bays, inlets, and estuaries. The social nature and behavior of these mammals make the chances of seeing one very likely while out on the water. While seeing dolphins can enhance the quality of a trip, increased encounters between dolphins and anglers can create a negative experience for both groups.

The Sarasota Dolphin Research Program (SDRP), a collaboration between the Chicago Zoological Society and Mote Marine Laboratory, has been studying bottlenose dolphins along southwest Florida's coastline for 38 years. The SDRP has observed that many of the dolphins that inhabit our coastal waters are long-term, year-round residents. In recent years, the SDRP has documented increased incidents of dolphins stalking fishing boats, waiting for released fish, and depredating (*stealing bait or catch*) from fishing lines near piers and boats. In addition, SDRP has received numerous reports and feedback from local charter guides, anglers and eco-tour operators about increased incidences of dolphins approaching fishing boats. In particular, several areas including Gordon Pass, the Naples Pier and Marco River have been identified as trouble spots in Collier County.



A consequence of increased interactions between dolphins and anglers has been a rising number of dolphins injured or killed by ingestion of gear, active entanglement in lines, and discarded fishing gear (Image courtesy of SDRP)

How Can Anglers Help?

Angler take several actions to minimize negative interactions between themselves and dolphins.

1) **Never feed wild dolphins.** Not only is it harmful, it is illegal under the Marine Mammal Protection Act. Feeding dolphins, whether intentional or not, teaches them to beg for food and draws them dangerously close to fishing gear and boat propellers.

2) **Reuse or share leftover bait.** If possible freeze leftover bait for later or give it to your fellow angler. Dumping leftover bait in the presence of dolphins can attract dolphins to fishing areas to beg or steal bait and catch.

3) **Reel in your line if dolphins appear.** Reel in and wait for dolphins to pass to avoid losing your bait or catch and prevent potential harm to dolphins. Never cast toward dolphins.

4) **Change locations if dolphins show interest in bait or catch.** If possible, move away from dolphins to avoid unintentionally hooking one and prevent damage/ loss of gear or catch.

5) **Release catch quietly away from dolphins when and where it is possible to do so without violating any state or federal fishing regulations.**

6) **Check gear and terminal tackle to avoid unwanted line breaks.** Even small amounts of gear in the water can be harmful to wildlife if entangled or ingested. Loss of terminal tackle also gets expensive.

7) **Use non stainless circle hooks when using live/cut bait*.** Circle hooks help reduce injuries to fish, dolphins, and sea turtles and non-stainless hooks will eventually dissolve. (* As of June 1st, 2008, non stainless circle hooks are required by law when using live/cut bait when targeting reef fish from a vessel in state and federal waters in the Gulf of Mexico.)

8) **Stay at least 50 yards away from wild dolphins.** This may not always be practical depending on your location, but make every attempt to maximize the distance between you and the dolphin.



Increased interactions between anglers and dolphins are thought to be reinforced by human behavior such as feeding dolphins, an illegal activity under the federal Marine Mammal Protection Act.(Image courtesy of SDRP)

9) **Recycle fishing line.** If recycling bins aren't available, place used fishing line that has been cut into pieces in a tightly lidded trash can so scavengers cannot get to it and return the line to the environment. To learn more about fishing line recycling visit:

<http://www.fishinglinerecycling.org/index.asp>

10) **Stash your trash.** Take it home or place in a tightly lidded trash can so that it doesn't get into the environment.



A personal-sized fishing line recycling bins is an easy way to keep discarded line secured on your boat while fishing. To obtain a bin, contact the County Sea Grant Extension Agent.

Anglers can also assist researchers by documenting occurrences of dolphin depredation. They should provide the date, time and general location of where the incident occurred, GPS coordinates, number and size of dolphins (*i.e. single adult or mother with calf*), the dolphin's actions (*i.e. approached and/or stalked boat, stole bait/catch etc*), and any physical descriptions that will help researchers identify it (*unusual marks or notches and/or dorsal fin shape*). Anglers can email their information to fluech@ufl.edu.



To report feeding or harassment of wild dolphins, call the NOAA Fisheries Southeast Enforcement Division at 1-800- 853-1964. To report an injured or entangled dolphin, or other wildlife, call the Florida Fish and Wildlife Conservation Commission at 1-888-404-3922. For more information on dolphins and interactions with anglers visit www.sarasotadolphin.org or www.mote.org

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