

California Driftnet Fishery: The True Costs of a 20th Century Fishery in the 21st Century



The Deadly Impact of the California Driftnet Fishery on Marine Mammals

Turtle Island Restoration Network
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SeaTurtles.Org
2016



ABOUT TURTLE ISLAND



Turtle Island Restoration Network is a leading advocate for the world's oceans and marine wildlife.

Our work is based on science, fueled by people who care, and effective at catalyzing long-lasting positive change that protects the likes of green sea turtles, whale sharks, and coho salmon.

By working with people and communities, we preserve and restore critical habitats like the redwood forested creek banks of California to the full-of-marine-life waters of the Galapagos Islands.

We accomplish our mission through grassroots empowerment, consumer action, strategic litigation, hands-on restoration, environmental education, and by promoting sustainable local, national, and international marine policies.

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Terminology

The driftnets in use in the California swordfish fishery are referred to as “drift gill nets” in state and federal technical regulatory documents. In this report, we use the term “driftnet” for these same nets.

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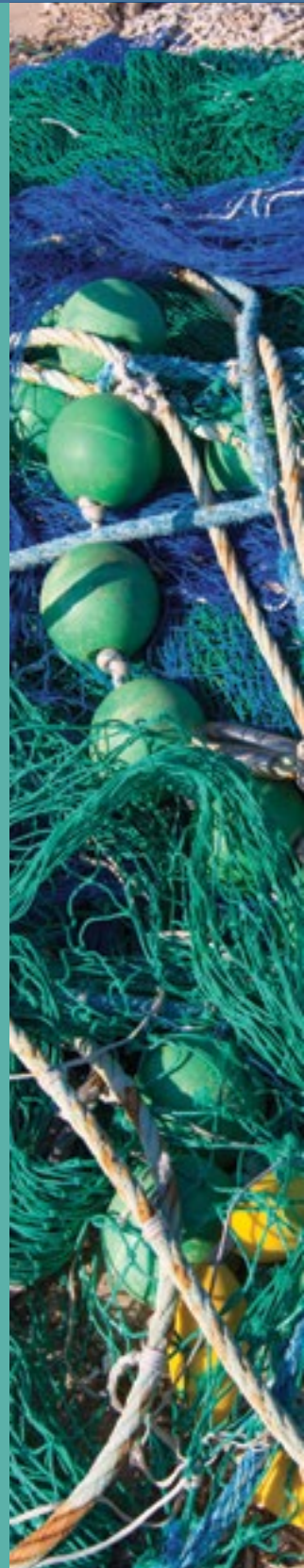
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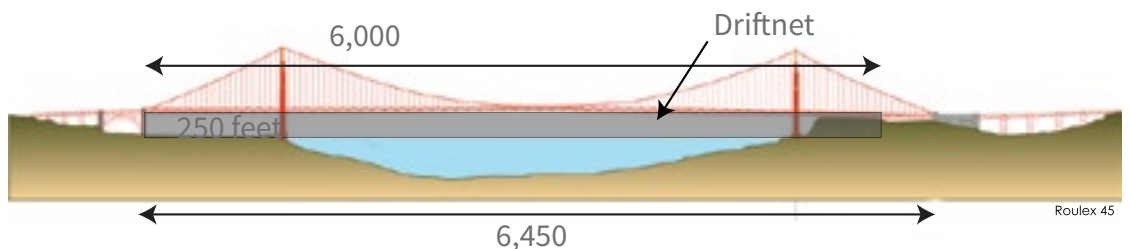




INTRODUCTION

As scientists warn that our ocean ecosystems are on the verge of collapse, leaders are taking action to rein in the world's worst industrial fisheries.

Astonishingly, one of those worst offenders is California's driftnet fishery (also known as the CA Drift Gillnet fishery). Currently, the fishery consists of a small fleet of roughly 20 active boats that set nets the size of the Golden Gate Bridge to drift unattended through our oceans.



While the primary targeted commercial species for this fishery are swordfish and shark, these nets entangle everything in their mile-wide path, resulting in high levels of bycatch.

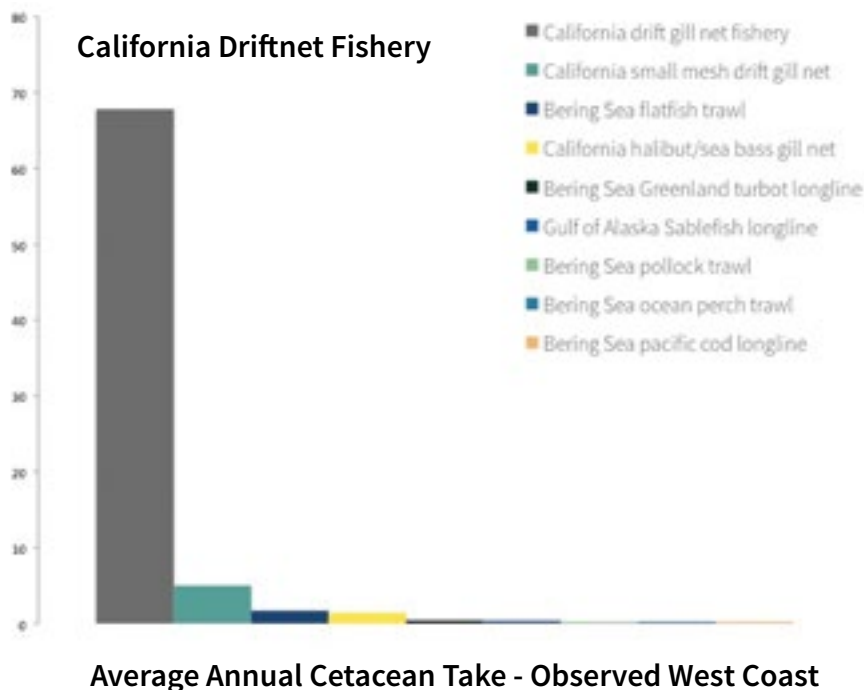
Over the past ten years, hundreds of air-breathing whales, dolphins, and sea turtles have drowned, while thousands of sharks (that depend on constant movement) have suffocated.

The California Driftnet Fishery Accounts for 87 Percent of Whales and Dolphins Caught by Observed West Coast Fisheries

Driftnets are deadly to whales, dolphins and porpoises because this fishing gear entangles and drowns these air-breathing mammals. Since most whales and dolphins, like humans, only produce a few offspring over their entire lives, most species are extremely vulnerable if they cannot maintain sustainable population sizes. For marine mammals, maintaining sustainable population sizes becomes difficult when faced with high levels of mortality from industrial fishing.

Fourteen different species of marine mammals are known to have been killed by the California driftnet fishery. California driftnets caught an estimated 16 endangered sperm whales in 2010 alone, and in a recent years, this fishery has caught an estimated 68 whales and dolphins per year.^{1,2}

In total, an estimated 885 individual marine mammals have been caught by the driftnet fishery in the last ten years. By comparison, the worst non-gillnet fishery caught an average of 1.7 cetaceans per year. The California driftnet fishery remains one of the top two worst fisheries on the West Coast





**Overall Take Based on Observer Data,
Corrected for Coverage Percentage
2004-2015 Estimated Marine Mammal Takes**

Dolphins	464
Bottlenose Dolphin	8
Long-Beaked Common Dolphin	54
Northern Right Whale Dolphin	41
Pacific White-sided Dolphin	57
Risso's Dolphin	13
Short-Beaked Common Dolphin	272
Unidentified Common Dolphin	19
Whales	41
Gray Whale	8
Humpback Whale	5
Minke Whale	6
Shortfin Pilot Whale	6
Sperm Whale	16
Pinnipeds	380
California Sea Lion	368
Northern Elephant Seal	12
TOTAL MARINE MAMMALS	885

IMPACT ON INDIVIDUAL SPECIES

Sperm Whales (Physeter macrocephalus) (Endangered Under ESA)

Endangered sperm whales dive deeper than any marine mammal on earth, feeding on deepwater squid, and are a rare and beautiful sight offshore. The sperm whale is the largest of the toothed whales. It is distinguished by its extremely large head, which takes up to 25 to 35 percent of its total body length. It is the only living cetacean that has a single blowhole asymmetrically situated on the left side of the head near the tip.

Sperm whales are federally listed as endangered, meaning that sperm whales are in immediate peril of going extinct forever. Sperm whales are protected under Appendix I of the Convention on the Trade for Endangered Species (CITES) and are listed as vulnerable on the IUCN Red List.

Over a 10-year period, as indicated in the table above, the California driftnet fishery for swordfish took 16 sperm whales.

However, to understand the impact of this fishery on a living marine creature one must look beyond the numbers. Reports from observers paint a picture of the suffering and painful deaths as a result of driftnet fishing.

“The whale rammed the vessel several times hard enough to create deep bleeding wounds on its head. This whale was released with trailing gear and drifted away from the vessel unable to swim or feed due to the gear entanglement.”⁴





“Observer notes indicated that a dead sperm whale approximately 20 ft. in length was cut loose from the net and that no photos of this animal were taken. Photographs of the released whale show an animal on its side with its head underwater. Based on the attitude of this animal, the fact that it was released with netting, and the fact that the associated animal had died, we have determined that the injuries incurred by the released animal were likely to result in death. Thus, the released animal is considered ‘seriously injured.’”⁵

Dolphins (protected under the Marine Mammal Protection Act)

A number of dolphin species make the California coast their habitat. Pods of dolphins are often seen surfacing off our beaches and add incredible value to our coast. Species of dolphins in California waters include Bottlenose, Risso’s and Short-Beaked Common Dolphins.

Unfortunately, the California driftnet fishery has caught half a dozen dolphin species. A total of 464 dolphins were caught over a 10-year period including 272 Short-Beaked Common Dolphins. Observer reports paint a picture of the suffering and death caused by the driftnet fishery:

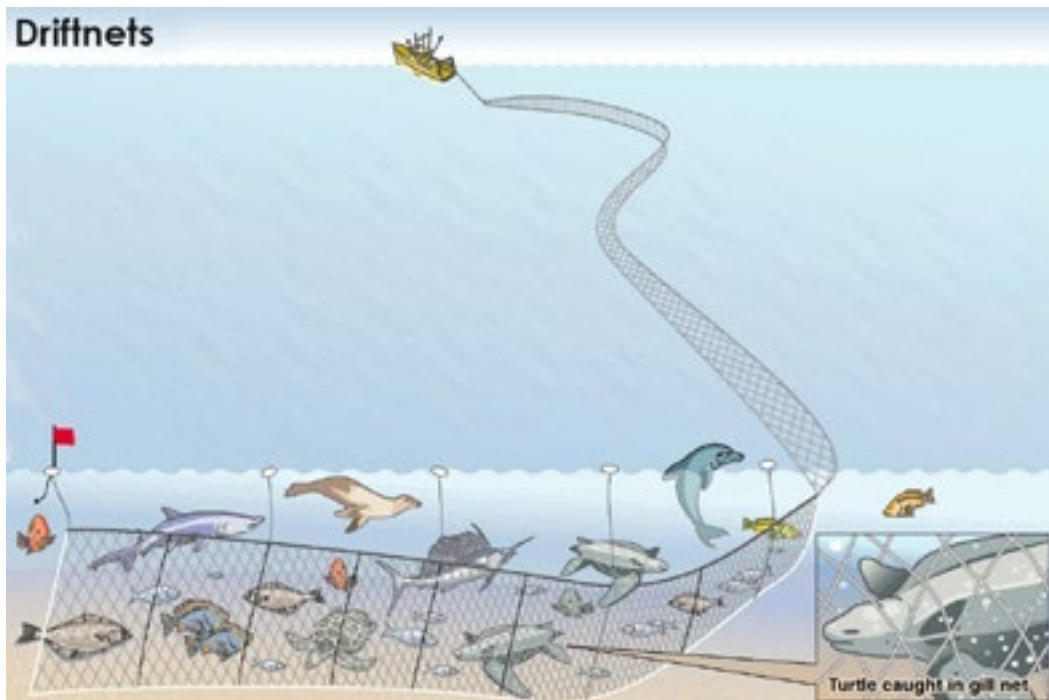
Short-beaked Common Dolphin: The “dolphin remained motionless and was right-side up at the surface.”⁶

Long-beaked Common Dolphin: The “animal was making noises and small movements. This dolphin was released from the net and immediately became entangled again. After a second release, the animal was not seen to surface. Two other long-beaked common dolphins died in this same set.”⁷

The California Driftnet Fishery Undermines the Marine Mammal Protection Act

The Marine Mammal Protection Act sets a standard for all U.S. fisheries that “the incidental mortality or serious injury of marine mammals occurring in the course of commercial fishing operations be reduced to insignificant levels approaching a zero mortality and serious injury rate [by 2008].” Zero mortality means that no more than a negligible number of whales or dolphins would be killed.

Looking at the trajectory of mortality of whales and dolphins, none of the legally required progress toward zero mortality is being made by the California driftnet fishery. In fact, the trend in the number of marine mammals killed per day of fishing is drifting upwards. One could argue that mortality numbers from the California driftnet fishery are directly impeding the goals of the Marine Mammal Protection Act, a federal law.



Source: Pacific Coast Federation of Fisherman's Association, U.S. Geological Survey





Marine Mammals Continue To Die, Despite Regulations to Protect Them

For more than 30 years, California driftnet fishery regulations have been changed to reduce the impact on marine mammals. But despite these changes in policy and fishing practice, the California driftnet fishery continues to catch and kill marine mammals in numbers that dwarf those of other observed West Coast fisheries.

A 30-year history of regulations that do not reduce mortality suggests that phasing out this fishery is a better strategy mortality.

1982 – California adopts time area closures to protect pinnipeds (Channel Islands) and harpoon and sports fisheries (mainland southern CA)

1984 – Additional closures along California coast (out to 12 miles) and wider around San Francisco

1986 – New time/area closures to protect gray whales

1997 – Marine Mammal regulations require net extenders to lower 36 feet, and pingers

RECOMMENDATIONS

- 1. California Must Phase Out the Use of Driftnets Immediately**
Provide Funding for a Fishery Transition Plan
- 2. Employ Only Highly Selective Gear in the Swordfish Fishery**
Transition Away from Harvest of Mercury-laden Fish
- 3. Keep Protected Areas Closed**
Expand Marine Protected Areas (MPAs) to Better Protect Ocean Biodiversity

ENDNOTES

1. National Bycatch Report Update, 2014, available at <http://www.st.nmfs.noaa.gov/Observer-Home/first-edition-update-1>.
2. Ibid.
3. During the period covered in the most recent National Bycatch Report Update, the California driftnet fishery was estimated to have entangled an annual average of 116.8 marine mammals annually, more than all Alaskan fisheries (33.2 marine mammal takes per year) and northwestern fisheries (47.78 annually) combined. National Bycatch Report Update, 2014, available at <http://www.st.nmfs.noaa.gov/Observer-Home/first-edition-update-1>
4. Carretta and Enriquez 2012. And Carretta, J.V. et al. 2013. U.S. Pacific Marine Mammal Stock Assessments: 2012. U.S. Department of Commerce, NOAA Technical Memorandum, NMFS-SWFSC-504.
5. Carretta, J.V. et al. 2004. Estimates of Marine Mammal, Sea Turtle and Seabird Mortality in the California Drift Gillnet Fishery for Swordfish and Thresher Shark: 1996 - 2002. Marine Fisheries Review, 66 (2).
6. Carretta, J.V. et al. 2004.
7. Carretta, J.V. et al. 2004.

A pilot whale entangled in a driftnet.

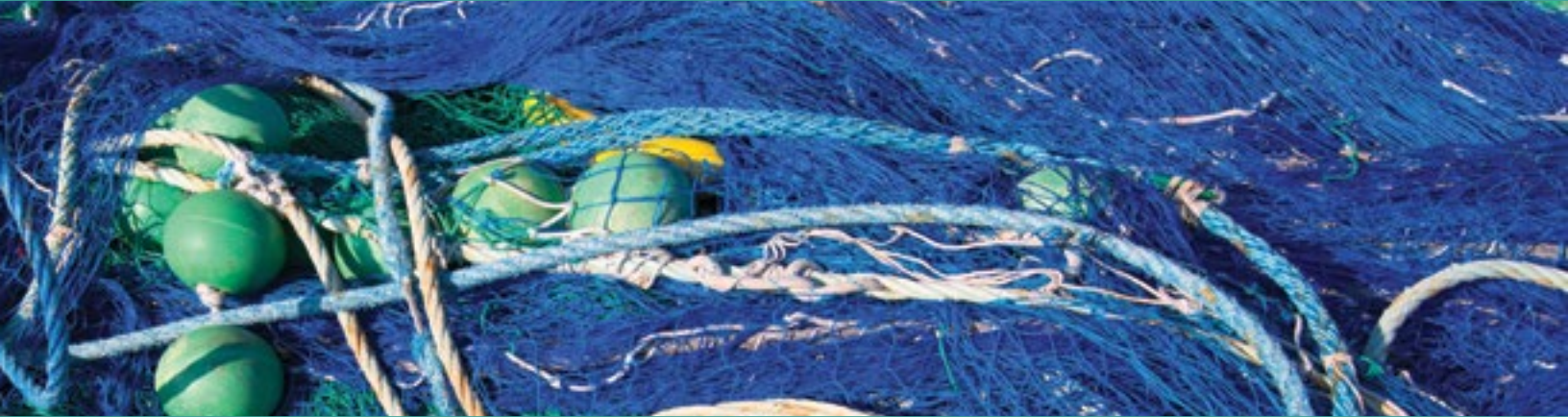


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Published by Turtle Island Restoration Network.
Printed in the United States.

Design: Joanna Nasar, Gloria Dickie
Editors: Cassandra Burdyslaw, Peter Fugazzotto & Joanna Nasar
Cover Photograph: © Shutterstock.

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