Promote Conservation Measures

The Council recognizes that effective solutions must encompass a country’s entire life history and address both terrestrial and oceanic aspects. Prioritizing internationally-based conservation measures at varying tiers and creating regional networks will likely provide greater benefits than fishery conservation measures focusing only in the pelagic environment.

Consequently, a number of sea turtle conservation projects have been supported and have implemented since 2000 in Indonesia, Philippine, Papua New Guinea, Japan, and Baja California, Mexico to bolster population recovery of North Pacific loggerheads and West Pacific leatherbacks.

Transfer “Best Practice” Technologies

- International and domestic partnerships among government, industry, and non-governmental organizations are essential to develop effective fishery management solutions.
- Migration resource use not only offers a practical solution, but has costs-effective and provides a way to employ workers constructively and effectively.
- Collaboration provides a forum to document tools and strategies that have been developed and implemented at all stages of the fishery. These approaches can be refined and adapted as necessary for foreign fleets.

Support for bycatch solutions is growing. Longline mitigation projects have been launched to tackle issues in Japan, Indonesia, Philippines, Papua New Guinea, Ecuador, Peru, Colombia, Costa Rica, El Salvador, Guatemala, and Paraguay.

Recognition The Issues

- The continued catch of protected species such as seabirds and sea turtles in pelagic longline fisheries is a growing concern.

- Most longline fishery interactions occur when the line is set outside the boundary of the sea area and 1800m to 18000m (OPRF 2001).

- The global pelagic longline fleet has expanded substantially since the 1970s to meet consumer demand for high-quality pelagic fish. Currently, 28 nations operate approximately 2,000 vessels in the Pacific Ocean (OPBF 2002).

- Although it is not the largest in terms of catch volume, pelagic longlining has become one of the most economically important fisheries in the Pacific (William 2001). Finding cost-effective solutions to reduce interactions is an important priority for both the national and international level.

- Successful mitigation measures must significantly reduce interactions without making fishing operations difficult or unprofitable. These measures can then be “exported” to other fisheries.

Examples of mitigation measures used on West-Pac pelagic longlines:

- Sea turtles:
  - Detachable leaders and safety devices for releasing turtles off hooks.
  - Large circle hooks reduce interaction rates.

- SEABIRDS:
  - Use a line shooter so gear sinks faster and the birds are less likely to see it.
  - Use a line shooter so gear sinks faster (with bird curtain).
  - Conserve boats to use side-setting or hauling to distract birds.

- FISHERY MANAGEMENT COUNCIL

International and domestic partnerships among government, industry, and non-governmental organizations are essential to develop effective fishery management solutions. Migration resource use not only offers a practical solution, but has costs-effective and provides a way to employ workers constructively and effectively.

Collaboration between fishing industry, scientists, and researchers has identified a number of mitigation strategies which can successfully reduce and avoid sea turtle interactions. These efforts have developed cost-effective techniques that reduce interactions without impacting fishing operations.

Recognizing The Issues

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The Council recognizes that effective solutions must encompass a country’s entire life history and address both terrestrial and oceanic aspects. Prioritizing internationally-based conservation measures at varying tiers and creating regional networks will likely provide greater benefits than fishery conservation measures focusing only in the pelagic environment.

Consequently, a number of sea turtle conservation projects have been supported and have implemented since 2000 in Indonesia, Philippine, Papua New Guinea, Japan, and Baja California, Mexico to bolster population recovery of North Pacific loggerheads and West Pacific leatherbacks.

The Western Pacific Regional Fishery Management Council (The Council) is an organization that brings together governments to work towards the sustainable management of fishery resources. The Council, established by the Magnuson Fishery Conservation and Management Act of 1976, is an independent statutory body within the US Department of Labor, US Department of the Interior, and US Department of State.

The Council’s mandate is to conserve and manage fishery resources, sustainably and equitably, for the benefit of all people. To achieve these goals, the Council promotes sustainable fisheries and ensures the continued availability of a viable fishery resource base to future generations. The Council is committed to implementing sustainable fisheries through the development and implementation of science-based fishery management plans and measures.

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Baja California, Mexico, collecting information on foraging habitats utilizing a turtle outfitted with satellite transmitter. Left: Sea Turtle Association of Japan, helping an injured loggerhead nest. Right: Examples of mitigation measures used on Hawaii-based longline boats to reduce interactions. Successful mitigation quickly and/or implemented since 2004 in Indonesia, Papua New Guinea, Japan, and West Pacific leatherbacks.

Baja California, Mexico to bolster population recovery of North Pacific loggerheads and/or implemented since 2004 in Indonesia, Papua New Guinea, Japan, and West Pacific leatherbacks.

Mother and baby leatherback leaving nest, a 70% occurrence. Right: Efforts have developed cost-effective techniques that reduce interactions without impeding fishing operations.

Recognizing The Issues

- The traditional catch of protected species such as sea turtles and sea turtle in pelagic longline fisheries is of primary concern.
- Most longline fisheries interactions occur when the line is set to target shallow-water layers (0-100m) or in the water column in which turtles are most active (Bolten et al. 2004).
- The global pelagic longline fleet has expanded dramatically since the 1950s to meet consumer demand for high-quality pelagic fish. Currently, 150 million tonnes are produced annually in the Pacific Ocean (WPC 2010).

- Although it is not the largest in terms of catch volume, pelagic longlining is one of the most commercially important fisheries in the Pacific (Williams 2004). Reducing longline interactions can reduce bycatch of non-target species, and help in the development of conservation and management strategies.

- Successful mitigation measures most significantly reduce interactions without reducing fishing operations or being affordable. These measures can then be “exported” to other fisheries.

Transfer “Best Practice” Technologies

- International and domestic partnerships among government, industry, and non-governmental organizations are essential to develop effective fishery management strategies.
- Mitigation measures must not only be practical and cost-effective, but fit the specific cultural and social context to ensure long-term success.
- Collaboration provides a forum to discuss tools and techniques that have been developed and implemented in the Western Pacific. These approaches can then be shared and adapted as necessary for foreign fleets.

- Support for research is critical. Longline mitigation projects have been launched in a number of countries, as well as promoting the implementation of international agreements on pelagic longline vessels.

- Promote Conservation Measures

- The Conservation of Essential Habitat: must encompass a complex network of foraging and pupping grounds and address both terrestrial and oceanic impacts.

- Conservation Actions:

Orthogonal direction showing how to scare birds away from hooks.

- Examples of mitigation measures include:

  - Using fish as bait instead of squid provides less of a visual disturbance and can cause birds to move away more quickly.

  - Using circle hooks size 18/0 or smaller to reduce the risk of mortality. Operators of Hawaii-based longline vessels must carry observers on 100% of trips to keep track of the fishery and ensure the exchange of information and build support for conservation efforts.

- Integrated Management for the Conservation of Protected Species in Longline Fisheries

- Collaboration between fishing industry, scientists and resource managers has identified a number of mitigation strategies which can considerably reduce and/or eliminate interactions. Some efforts have developed cost-effective techniques that reduce interactions without impeding fishing operations.

- Successful mitigation quickly and/or implemented since 2004 in Indonesia, Papua New Guinea, Japan, and West Pacific leatherbacks.

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