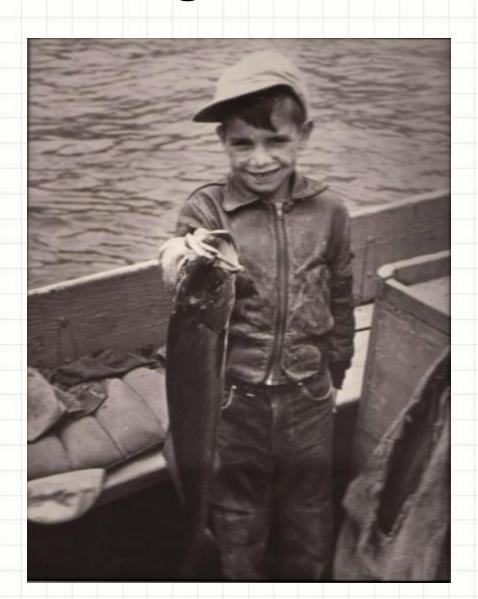
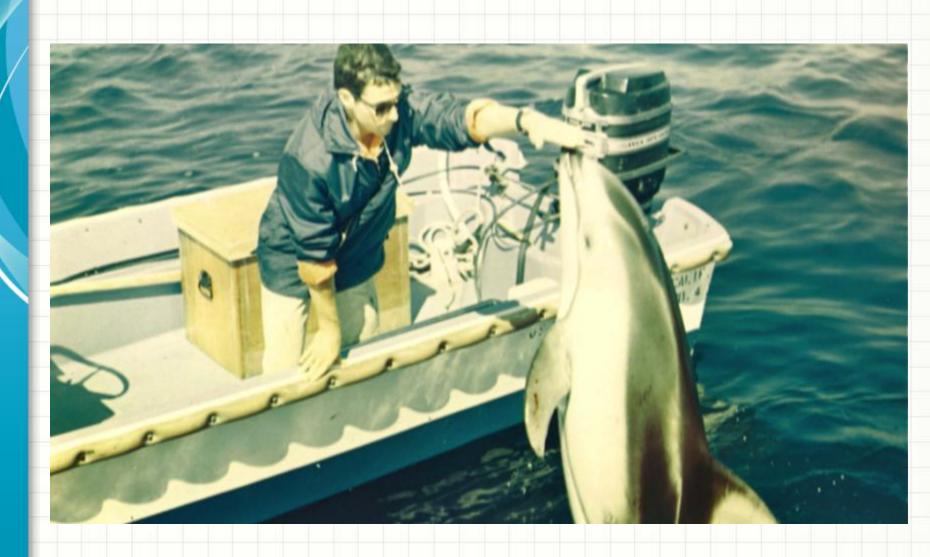


## Pelagic Fishing - Mexico 1948



## Marine Mammals – Pt. Mugu, CA 1967



## Zephyr – Hawaii 2010



## Pelagic Longline Fishery Challenges In Hawaii

#### Pelagic Target Species

- Bigeye tuna quotas
- Yellowfin tuna quotas

### Management Agencies

- National
  - NMFS / FWS
  - WPRFMC
- International RFMO's
  - Eastern Pacific IATTC
  - Western/Central Pacific WCPFC

# Longline Interactions with Protected Species in Hawaii

#### Sea Birds

Primarily black-footed & Laysan albatrosses

#### Sea Turtles

Loggerhead, leatherback & olive Ridley

#### Marine Mammals

 False killer whales, pilot whales, Risso's dolphins

 Gear Modifications, training captains and owners, modifying fishing techniques

#### Sea Birds

 Interaction rates reduced about 87% since 2000

#### Sea Turtles

 Shallow set – 100% observer coverage, no observed mortalities since 2004

#### Marine Mammals

- TRT convened early 2010
- TRP finished July 2010 and implemented December 28, 2012
- Gear modification rules implemented
   February 28, 2013

#### Marine Mammals

- Increase releases, decrease MSI by making hooks the weakest part of the terminal gear
- Use of circle hooks only, 4.5 mm wire diameter or less
- Branch line monofilament, >2.0mm
- Handling and release training

- Marine Mammals
  - Results after 8 months:
    - One observed FKW interaction
      - 1 non-MSI, hook opened, animal released, outside US EEZ
  - Compared to 2009 with 9 observed
     MSI interactions with FKW

## **Progress and Next Steps**

 Continue to fine tune the gear and training program until we are confident we have a workable solution.

