

Swordfish in California



A Brief History of the Fishery
California Department of Fish & Game
U.S. West Coast Swordfish Workshop
May 10 -11, 2011, San Diego, CA

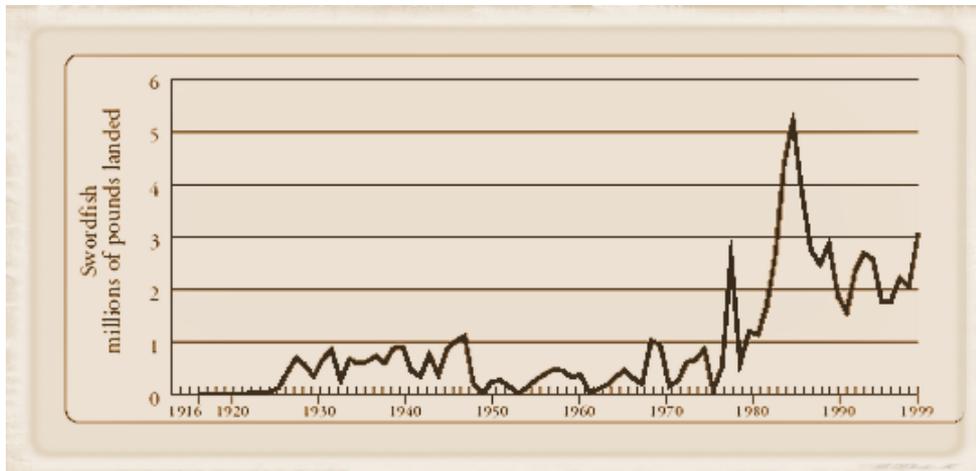
Historical Perspective



Swordfish collected in 1888 in Monterey Bay
(in Harvard University's Comparative Zoology Museum)

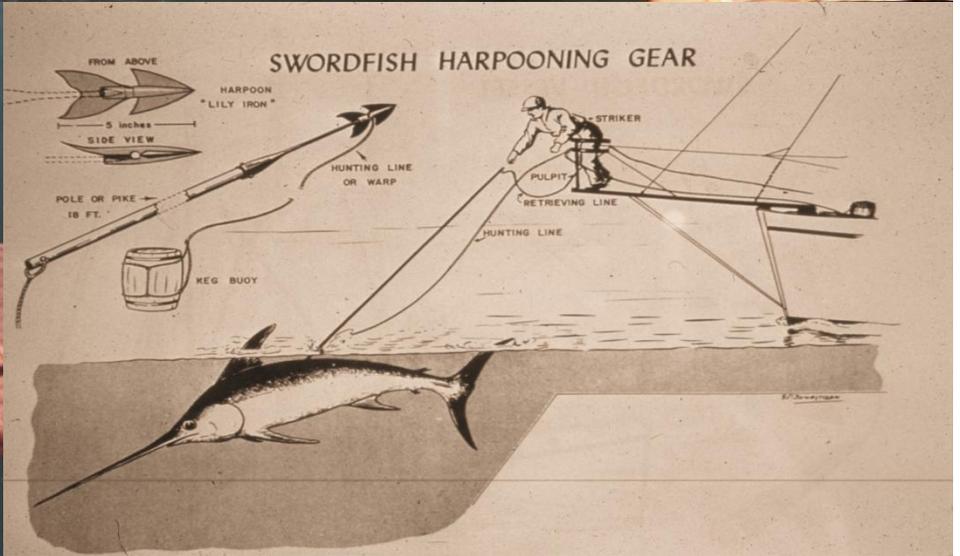
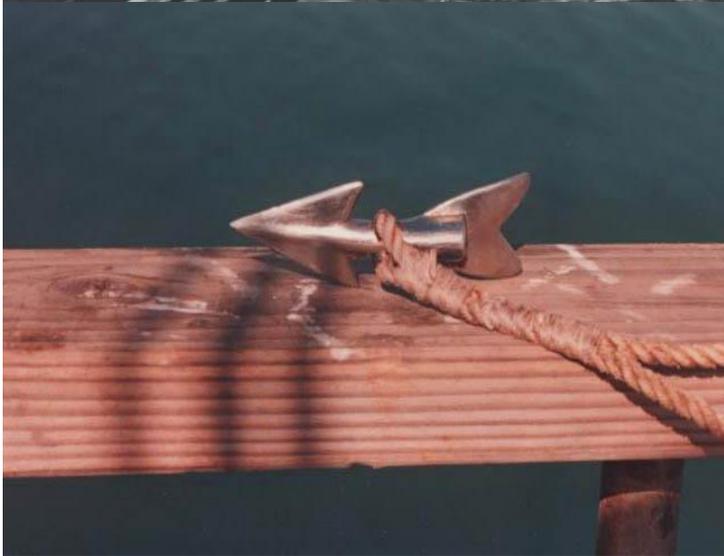
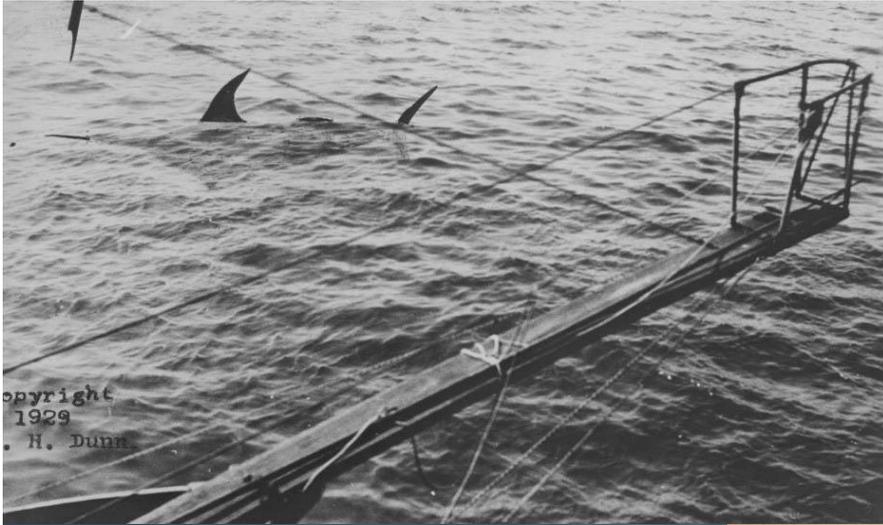


Tuna Club of Avalon lists the first sport caught record of a swordfish in 1909



Commercial Landings of Swordfish 1916-1999
(California's Living Marine Resources: A Status Report, 2001)

Harpoon

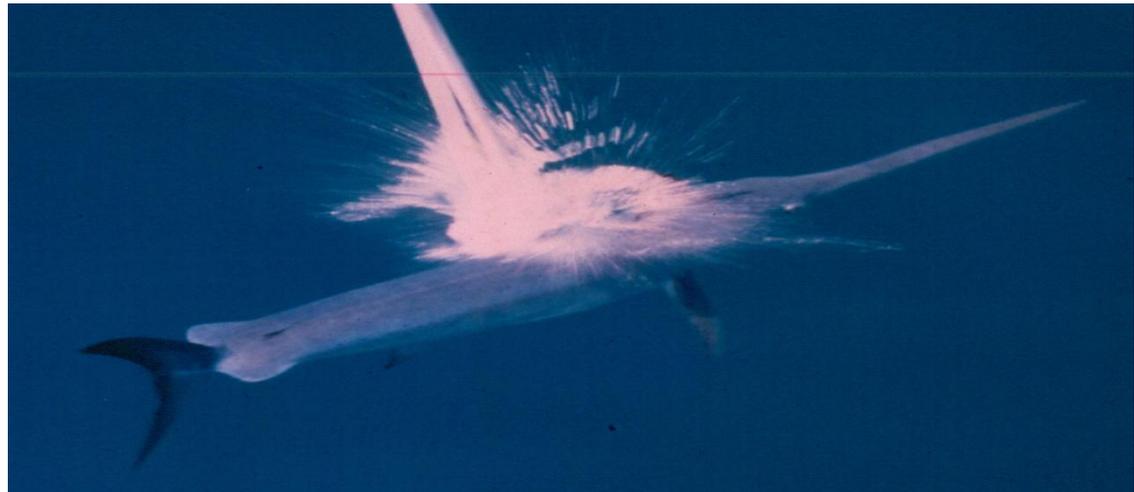
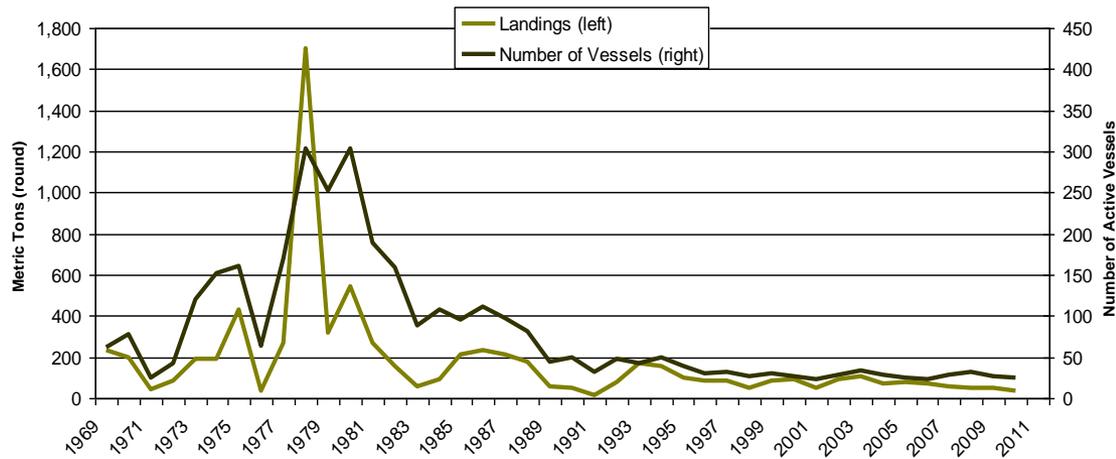


Harpoon Regulations

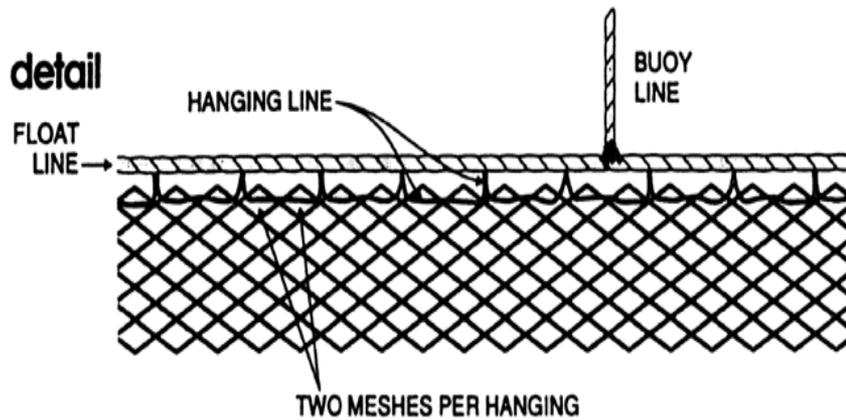
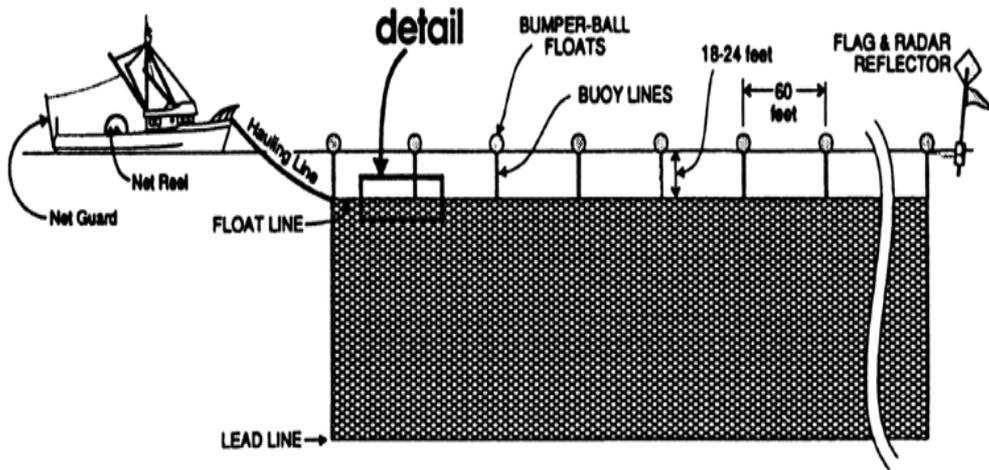
- 1931 – Licenses required, harpoon only
- Only allowed gear until 1970
- Spotter planes:
 - 1970 – allowed
 - 1976 –banned, then allowed limited use
 - 1984 - allowed full time again
- Permits:
 - Max – 310 in 1979
 - Min – 25 in 2001

Harpoon

CA Harpoon Vessels landing Swordfish



Drift Gillnet



Design of typical net in California drift gill net fishery.

Drift Gillnet Regulations

- ❑ **1980 - Drift gillnet gear allowed with restrictions:**
 - Monthly quotas for swordfish and marlin
 - Limited entry permit system
 - Logbooks
 - Observer program
- ❑ **1982 – Amendment**
 - Quotas repealed
 - Seasonal closure February 1-April 30 around Channel Islands to protect pinnipeds and avoid gear conflicts

Drift Gillnet Regulations

- 1985 – Closures
 - Thresher sharks: no fishing within 75 miles of the coast from June 1 – August 14,
 - Grey whales: no fishing within 25 miles of the coast from December 15 – January 31
- 1989 – Thresher shark closure shifted to May 1 – July 14,
- 1992 – Thresher shark closure extended from May 1 – August 14



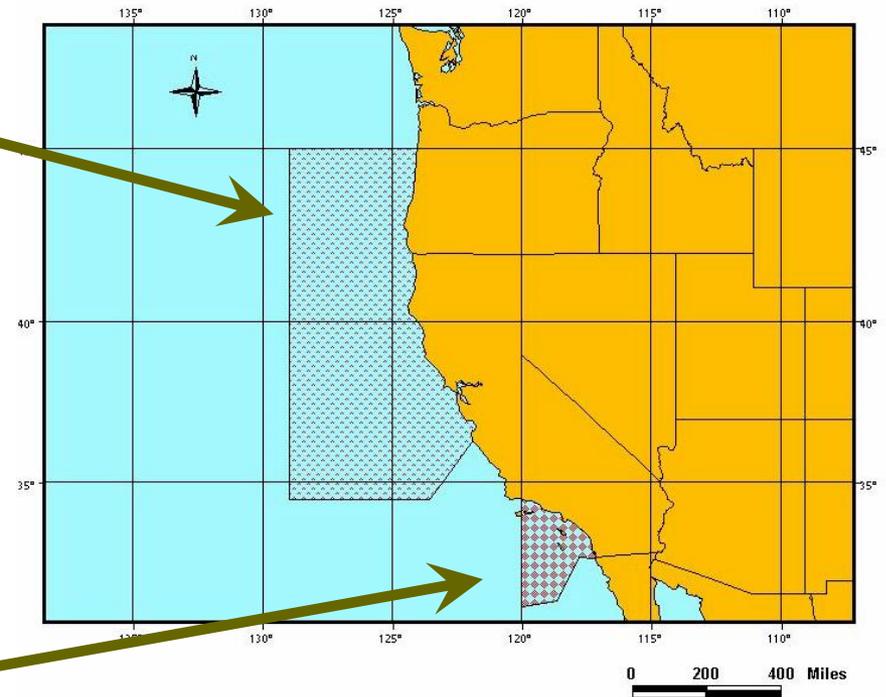
Drift Gillnet Regulations

- 2001 – federal regulations established the Leatherback Conservation Area



- 2003 – federal regulations established the Loggerhead seasonal closure in El Niño years

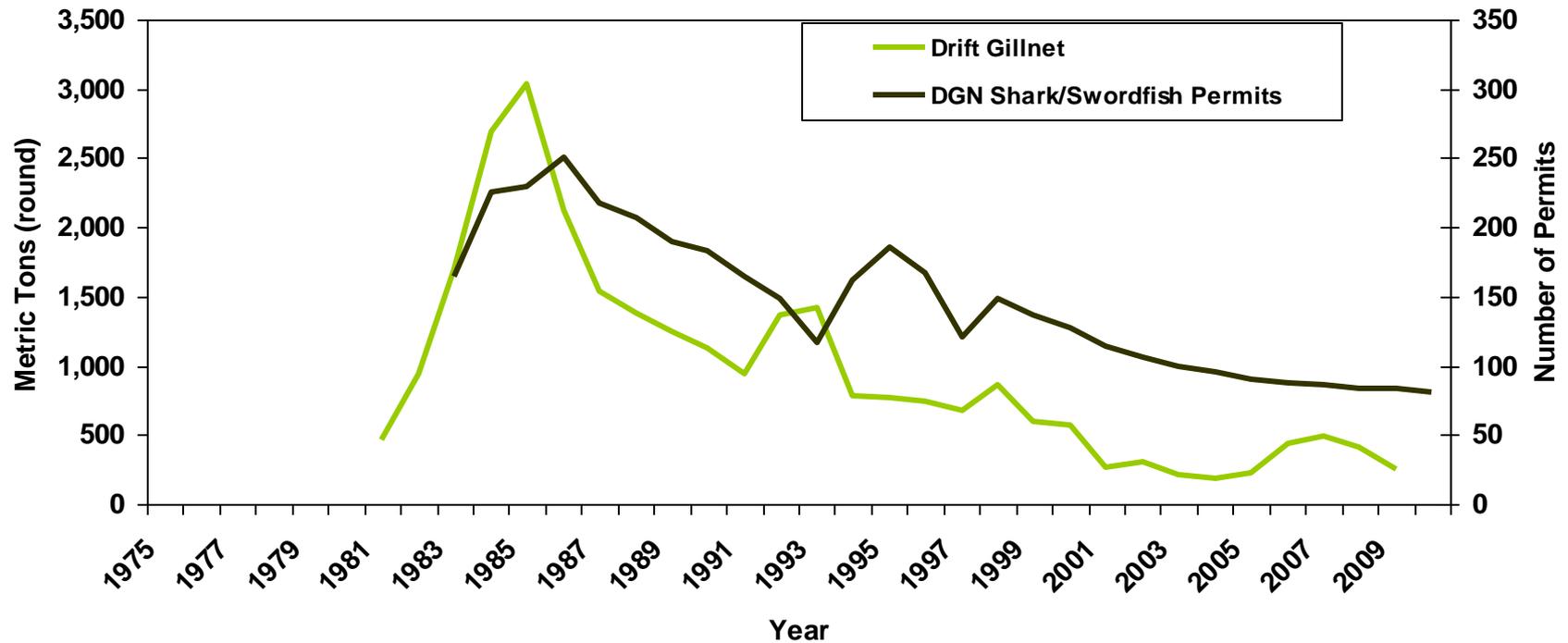
**Pacific Sea Turtle Conservation Areas
Closed to Drift Gillnet Fishing (Mesh Size $\geq 14''$)**



-  Closed August 15 - November 15, Annually
-  Closed June 1 - August 31, During El Niño Events and January
(as determined by NOAA Fisheries)

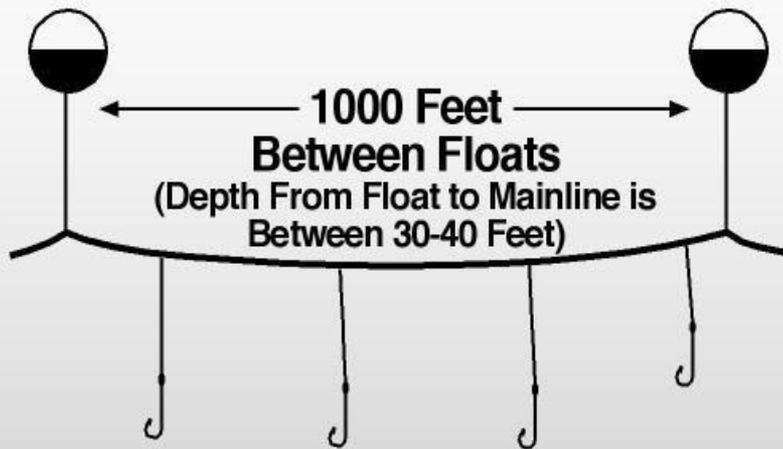
Drift Gillnet

California Swordfish Landings - Drift Gillnet



Longline

Swordfish Set



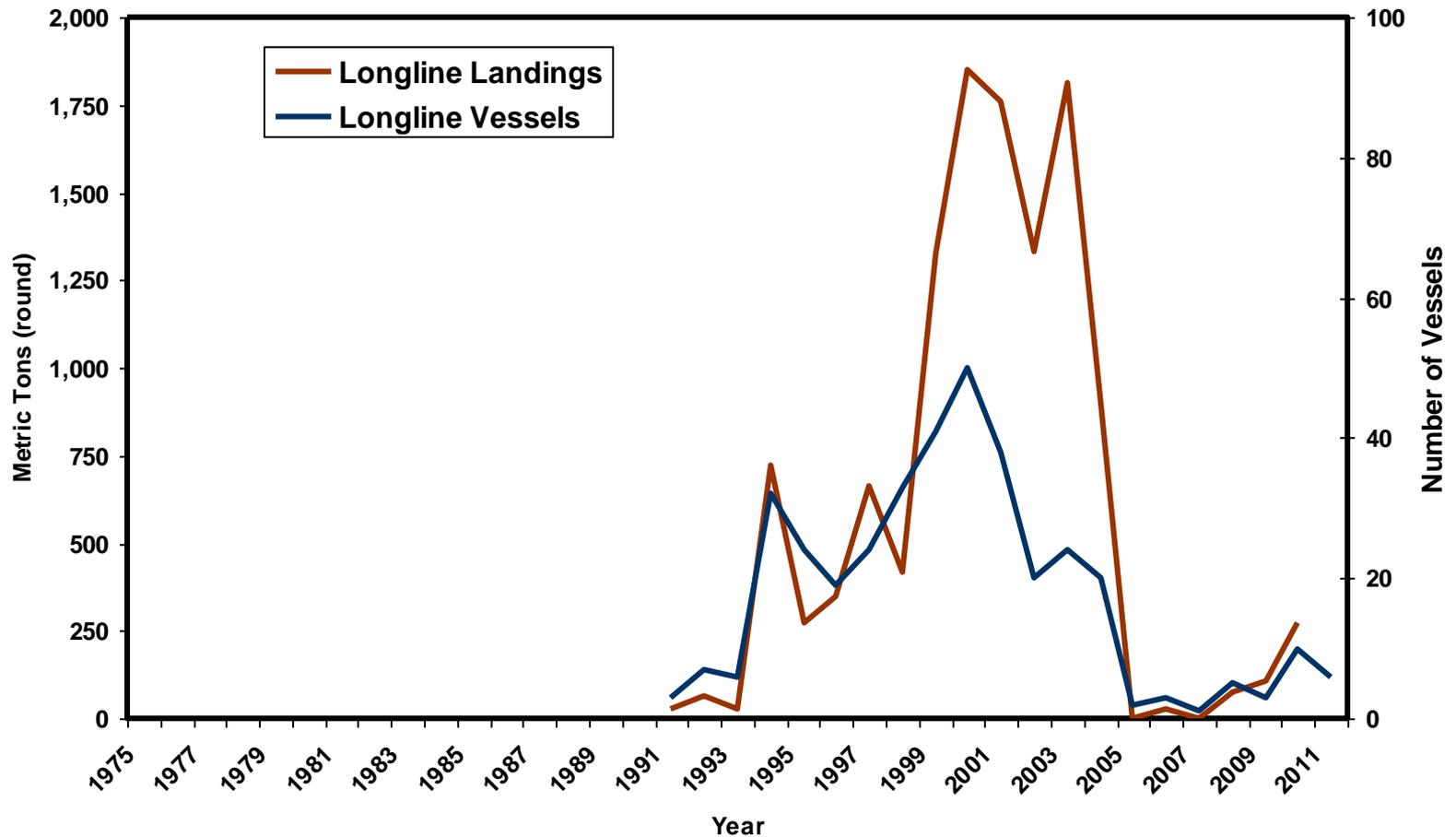
Length of Branchlines: 72-90 Feet

Hooks: Depth of 70' to 100';
4-5 Hooks Between Floats



Longline

California Swordfish Landings - Longline

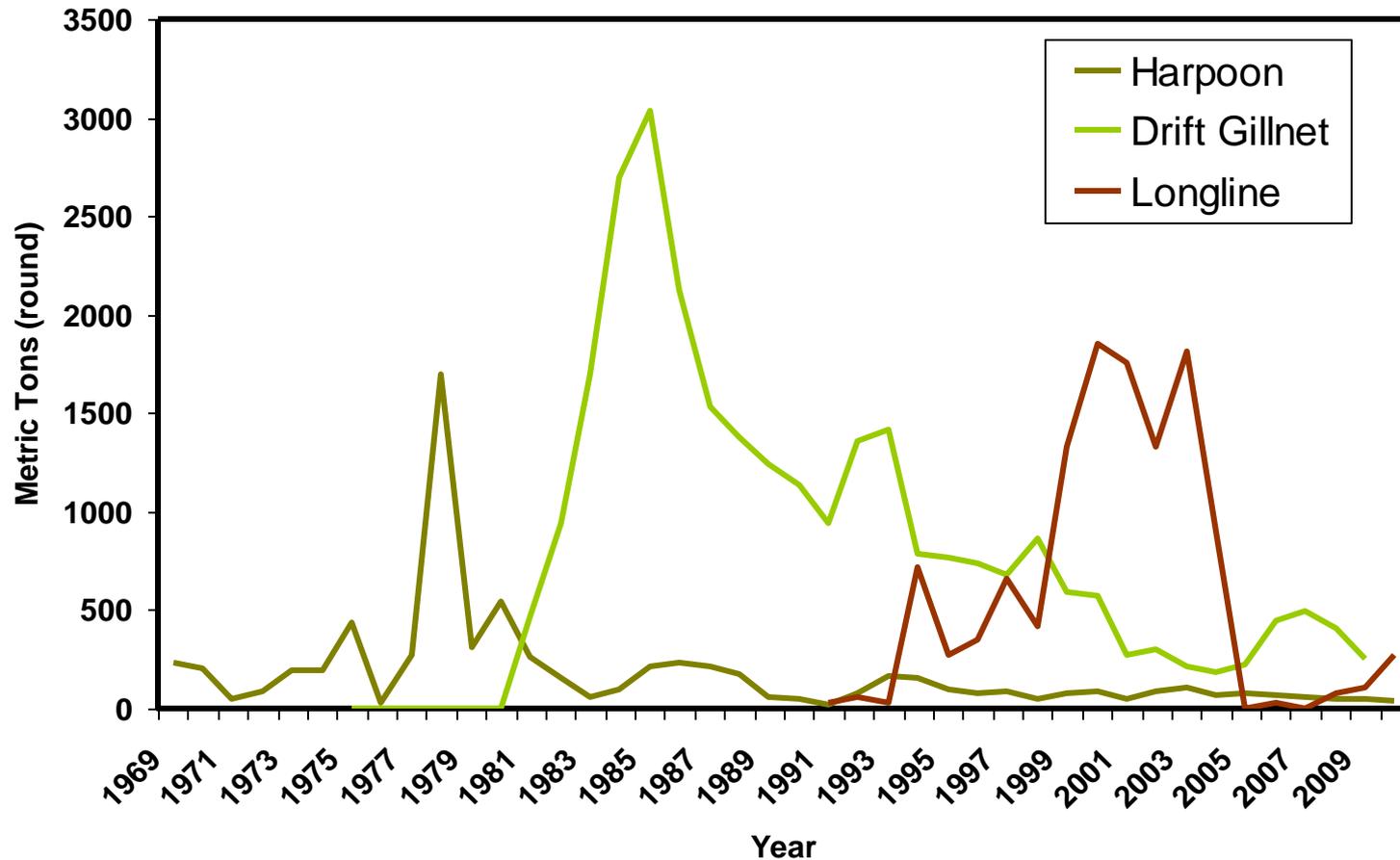


Overview of Entire Commercial Fishery



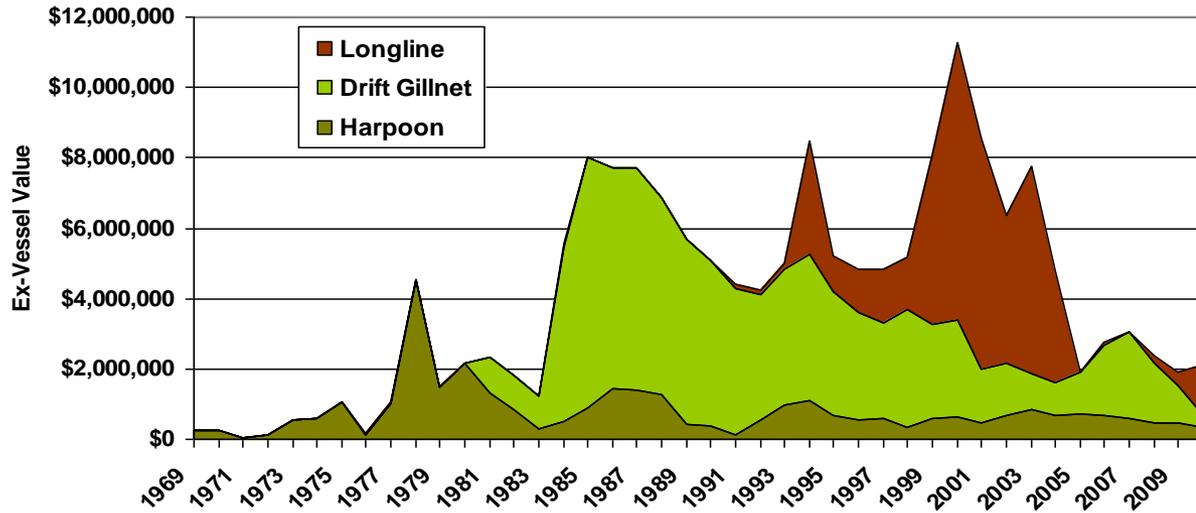
Landings

California Swordfish Landings by Gear Type

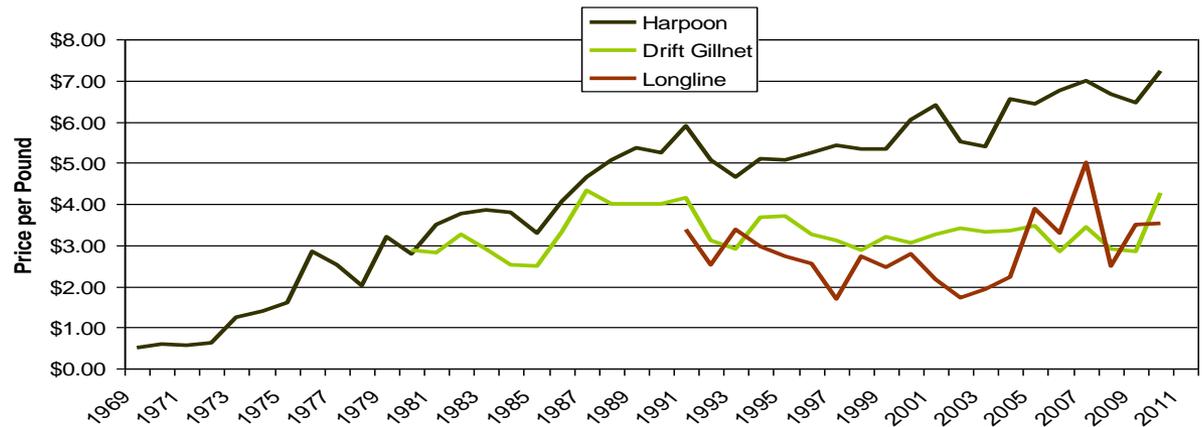


Values

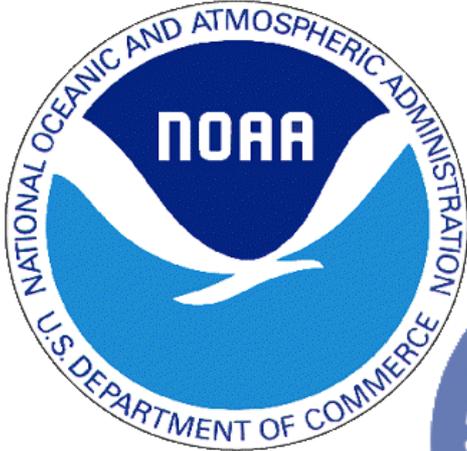
Annual Ex-Vessel Revenue of CA Swordfish by Gear Type



Ex-Vessel Price per Pound for Swordfish



Moving from State to Federal Management



PFMC Highly Migratory
Species Management Team

