



California Lost Fishing Gear Recovery Project

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MBNMS Advisory Council
April 20, 2007
Watsonville, CA

Derelict (lost) fishing gear

Recreational or commercial fishing gear that has been accidentally lost or abandoned in the marine environment



Photo courtesy of NOAA Pacific Islands Fisheries Science Center

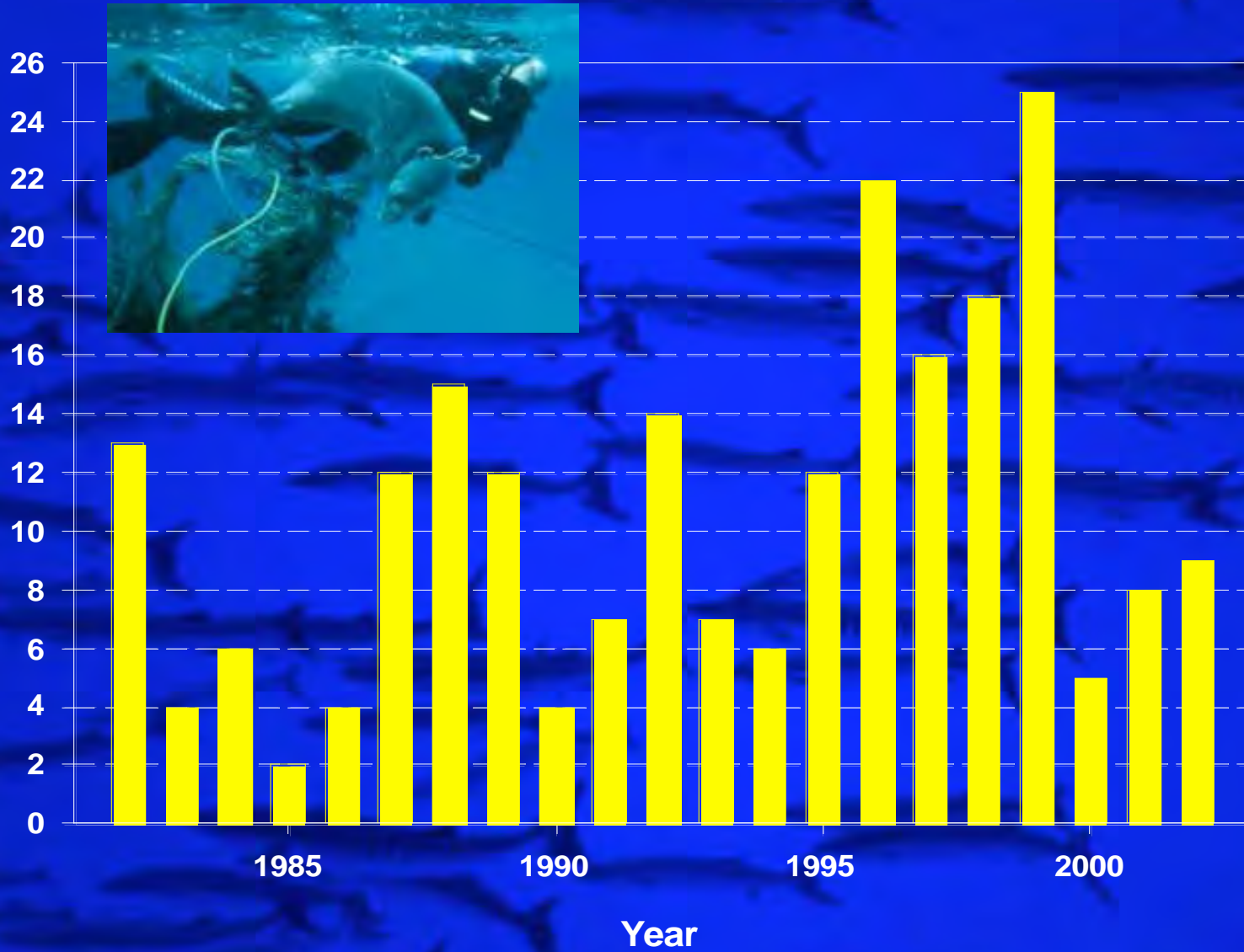
How is lost gear a potential problem?

- **Persists** in the marine environment
- **Entangles** and traps invertebrates, fish, birds, mammals
- **Degrades** marine ecosystems and sensitive habitats
- **Damages** propellers and rudders, snags other fishing gear
- **Endangers** divers and swimmers
- **Impacts** livelihoods of fishermen



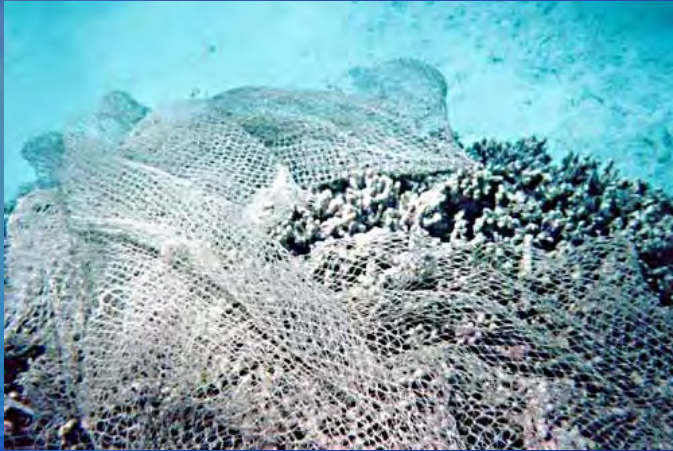


Monk Seal Entanglements



Slide courtesy of NOAA Pacific Islands Fisheries Science Center

Derelict fishing gear removal: Model programs



Hawaii:

- NMFS + partners, started 1998
- NW Hawaiian Islands
- > 500 tons of gear removed

Washington:

- NW Straits Commission and WA Dept Fish and Wildlife, started 2002
- >1000 nets, pots and traps removed to date

Photos courtesy of NOAA Pacific Islands Fisheries Science Center (upper) and Natural Resources Consultants, Inc. (lower)



California Lost Fishing Gear Recovery Project

- Initiative of the UCD Wildlife Health Center's **SeaDoc Society**
- Seed funding from the **Laurel Foundation**; pilot year funding from **State Coastal Conservancy/Ocean Protection Council, NOAA Marine Debris Program**: \$450K, plus \$45K in-kind from **Northwest Straits Commission**
- Pilot sites: Humboldt, Monterey, San Luis Obispo, and Los Angeles Counties; CINMS added mid-year

Pilot project objectives

- Permits
- Technical Advisory Committee
- *Policies and Procedures* manual
- Outreach
- Contract negotiations
- Trial field operations

Permits:

Sanctuaries
CDFG
US Army Corps
Channel Islands NP

TAC:

Mary Bergen
Paul Dayton
Henry Fastenau
Jeff June
Ed Saade
Sheila Semans

Public Outreach

- Posters and information cards to **>600** recipients in March 2006.
- Toll-free reporting line: **1-888-491-GEAR**
- Website: www.lostfishinggear.org

**Derelict Fishing Gear
in California**

It takes decades
to disintegrate...

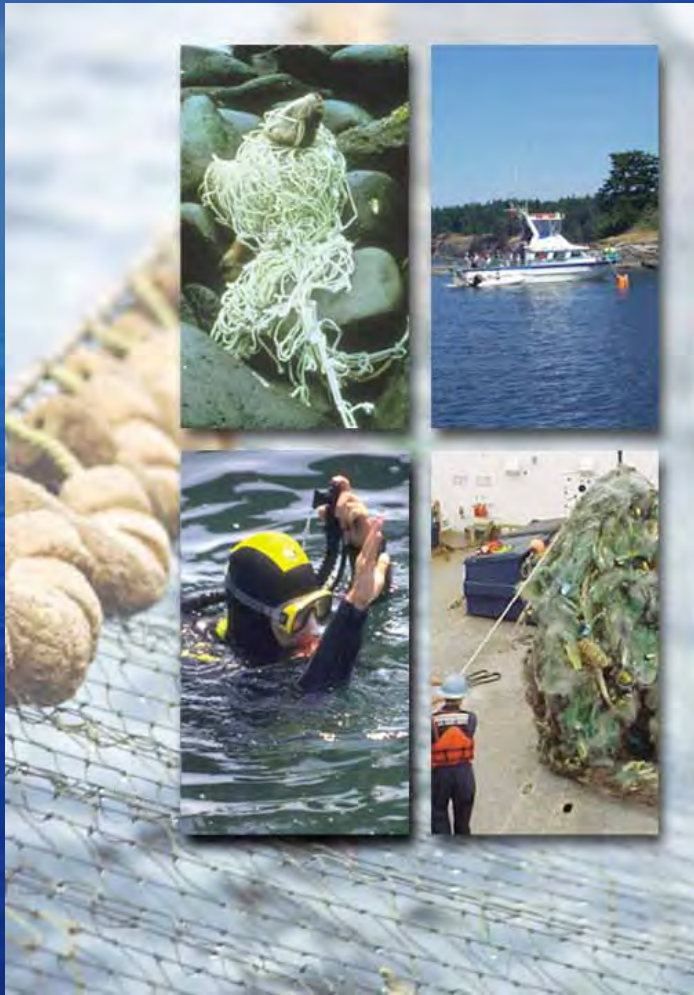


...but only minutes
to report.

Help us tackle California's derelict fishing gear!
Report sightings of derelict recreational and commercial fishing gear
Report lost recreational and commercial fishing gear
Anonymous reports accepted
Call 1-888-491-GEAR or report online:
www.derelictfishinggear.org



Lost Fishing Gear Removal: How it works

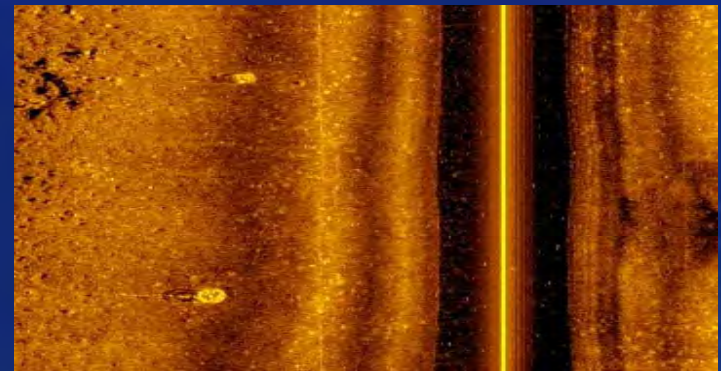


- **Location**
- **Removal**
- **Disposal**

Graphic courtesy of Northwest Straits Commission, Mt. Vernon, WA

Gear Location

- Diver surveys
- Sidescan sonar for pots/traps in select habitats
- Reports from individuals (fishermen, divers, boat operators, etc.) online and via toll free hotline



Gear Removal



- Excel files with GPS-referenced location data linked to Nobeltec™ navigation software
- SCUBA divers
- Float bags, on-board winch, cutting tools
- Observations recorded (gear location, type, condition, presence of organisms)

Gear Disposal

- Repatriate gear identifiable to owner:
 - ✓ > 100 lobster traps returned to date, \$5-10,000 savings to fishermen
- Recycle if possible
- Dispose at landfills



Santa Catalina Island May 2006



- 220 targets removed (102 lobster traps)
- Lobster present in 23 retrieved traps
- Traps in good condition were returned to fishermen

Channel Islands NMS

September 2006



- 3 weeks of operations
- 326 targets removed off Santa Cruz Island and Anacapa Islands
- 142 (44%) were lobster traps (*none intact*); remaining gear was frames, ropes, recreational gear





Channel Islands NMS

October 2006



- First net removal operation
- Purse seine net off eastern end of Santa Rosa Island, in 75-100' of water
- 3,760 lbs



Pilot year highlights

- Removal of nearly **10 tons** of derelict fishing gear from Southern California
- Collaborations with fishermen: contract with urchin divers; repatriation of gear to fishermen
- Cooperation from agencies: CINMS, CDFG, CINP

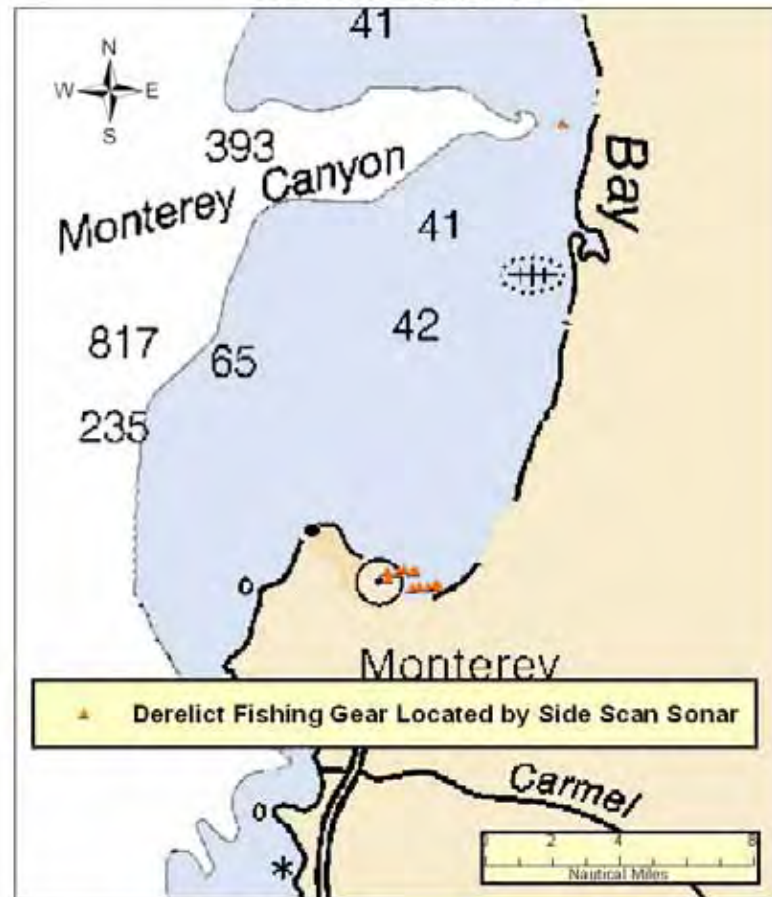


Also in pilot year: MBNMS

- 4 days of sidescan sonar surveys conducted September 17-20, 2005 by Innerspace Exploration, Inc. (W. Crayton Fenn), courtesy of Northwest Straits Commission (Tom Cowan)
- Surveys restricted to 40-100 ft. isobath between Monterey Harbor and Moss Landing
- 14 targets identified: “pot-shaped”, lines/cables, “possible nets” (n=5)

Derelict Fishing Gear Located By Side Scan Sonar in Monterey Bay, September 2005

*A total of 15 pieces of derelict fishing gear were identified for future removal.

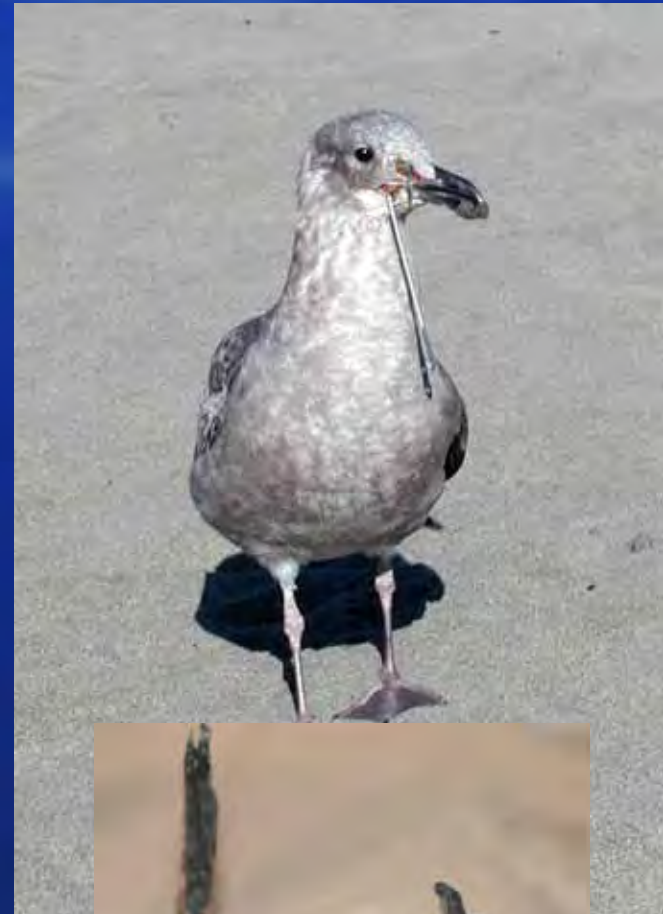


Techniques for recovering lost gear from deep water (> 100 ft)

- In collaboration with Cordell Bank NMS
- Feasibility, cost/benefit, advantages/disadvantages of divers vs. ROV vs. manned submersibles for recovering gear
- Information to be included in revision of *Policies and Procedures* manual.
- Potential for 10 days of deep water gear recovery with US Navy divers in 2008

Recreational gear removal and recycling

- Clean up under 16 public-access fishing piers, Pacifica - Imperial Beach, with volunteer divers
- Installation of fishing line recycling bins on 12 piers, working with local NGOs for bin maintenance
- Monitoring efficacy by measuring quantity of line in bins, repeating clean-ups under piers in 6 months, and comparisons of coastal wildlife injury rates before/after prevention program
- Significant coverage in print and broadcast media



Photos courtesy of Grant Peterson (above) and Melissa Miller, CDFG (below)



Policy picture is changing...

Resolution of the California Ocean Protection Council
on Reducing and Preventing Marine Debris
(adopted February 8, 2007)

“Remove derelict fishing gear.... propose a plan for achieving target reductions of derelict fishing gear...not later than 2015.”

- Marine Debris Steering Committee established
- Legislation?

California Lost Fishing Gear Recovery Project: Looking Ahead



- Regionally-based projects aimed at sustainability.
- Incentive, compensation and cost-recovery strategies.
- Gain expertise in removal of all types of derelict fishing gear.
- Develop gear loss prevention strategies.
- Raise public awareness.

www.lostfishinggear.org



THANKS to the crew!
Jennifer Renzullo, Kenny Hill, Mike Neil, and Mark Brubaker