Year 3 of Project
Partners

• Cordell Bank NMS
• UC Davis’ SeaDoc Society
• CSU Monterey Bay
• CA Department of Fish & Game
• Southwest Fisheries Science Center
• Monterey Peninsula College MATE Program
• Marine Applied Research & Exploration
• California Academy of Sciences
• Steinhart Aquarium
Purpose

- Document the abundance & types of gear in water up to 1000 ft
- Refine deepwater ROV retrieval procedures
- Reduce impacts such as navigational hazards
- Conduct site surveys & characterization in unexplored locations
- Provide outreach through HD images & video
- Provide technical experience for staff
Background

• Funded through federal settlement
• Collaborative project with many partners
• Identified as priority in management plan
Impacts

• Long lines, gill & trawl nets, & crab & fish traps can serve as long term entrapment mechanisms
  • Physical damage to habitat
  • Hazards & nuisance to navigation
Vessel Platforms

F/V Donna Kathleen & R/V Fulmar
Methods

Phantom HD2 ROV – owned and operated by the West Coast Sanctuaries
Methods

ROV manipulator clips onto net or trap
Methods

Fishing Gear Targets are provided by:

Southwest Fisheries Science Center (Delta Sub)
Department of Fish and Game
Fishermen
Six Main Study Areas

Año Nuevo
Inner Monterey Bay (north & south)
Soquel Canyon
Portuguese Ledge
Carmel Bay/Point Lobos
Point Sur Shelf
Deepwater Lost Fishing Gear Project

Monterey Bay National Marine Sanctuary
Deepwater Lost Fishing Gear Cruises 2009, 2010 and 2011

Legend

Marine Protected Areas
- State Marine Reserve (SMR)
- State Marine Conservation Area (SMCA)

Targets
- Gear found, not recovered
- Gear found, recovered
- No gear found
- Study Areas
Deepwater Lost Fishing Gear Removal Project

Methods: Gear Types
Deepwater Lost Fishing Gear Removal Project
Methods: Processing Gear & Specimens
Research Component:
Preserved & Live Specimen Collections
Retrieved to date:

Over 1000 ft of rockfish gillnet, a variety of crab and spot prawn traps & 700 lbs of clump weight lead
What Else?
The Eonfusion Visualization Project
Outreach Products

- Mission logs on Facebook
- Articles & TV segments
- YouTube videos
- One-pager & web page
- Cruise & summary reports
- Eonfusion project & PSA
- Fish & Invert ID

LFG web page: [http://montereybay.noaa.gov/resourcepro/resmanissues/lostgear.html](http://montereybay.noaa.gov/resourcepro/resmanissues/lostgear.html)
Now What?

Removing the trawl net is a priority (if funding is available)

Continue to collect target information from fishermen & researchers

Further develop Eonfusion visualization technology

Continue CSUMB & MATE Center Internships
Deepwater Lost Fishing Gear Removal Project

The Team

Science Party
Karen Grimmer, MBNMS – PI & Cruise Leader
Lisa de Marignac, MBNMS – Project Coordinator
Sophie de Beukelaer, MBNMS – Navigator
Michael Carver, CBNMS – Marine Technician
Andy Lauermann, MARE – ROV Pilot
CSU Monterey Bay Staff – Deck Support
MPC Community College – Deck Support

Crew of the Vessels
Captain Tim Maricich
Mate Donna Maricich
Mate Tyler Maricich
Captain Dave Minard
Mate Hans Bruning

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