

Massachusetts Leatherback Sea Turtle Research and Disentanglement Program



Background

- Leatherbacks seasonal visitors to Massachusetts waters (June – Oct)
- Feed on gelatinous zooplankton
- Interact with certain fisheries:

Most Frequent

Lobster pot – recreational and commercial
Fish/Whelk pot

Rare

Weir (pound net)



Massachusetts
Sea Turtle Disentanglement Network



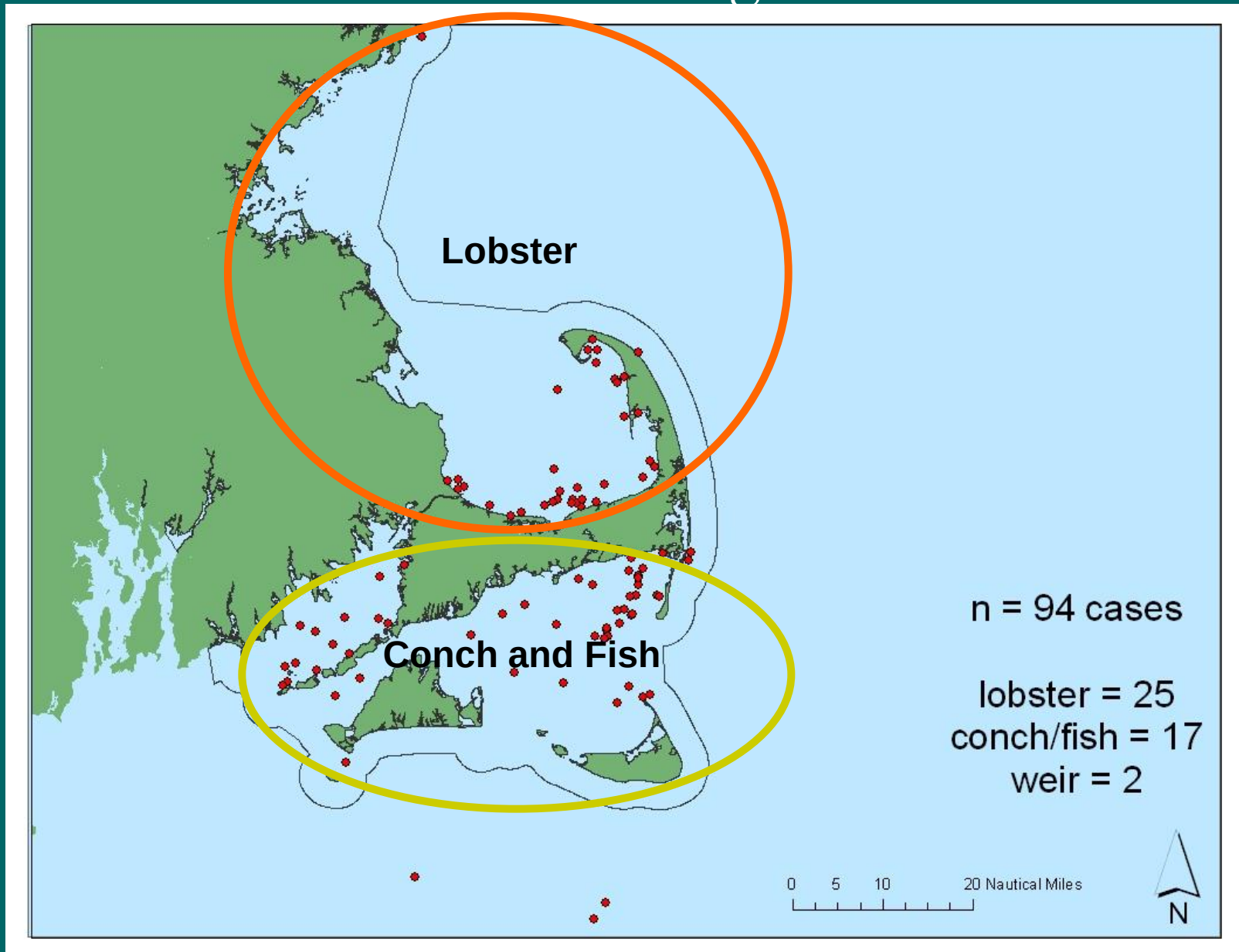
DMF has partnered with
Provincetown Center for Coastal
Studies since 2006 on
disentanglement program

Operated from 2006-2009 on
25K/yr in Section 6 funds

Tagging with UNH
Health assessment with NEAq
Outreach and training



Confirmed leatherback entanglements 2001 - 2010



What we've learned so far...

- Single pots
- Wraps around neck and shoulders
- Usually anchored
- Upper portion of BL
- Geographic hotspots?
- Sightings affected by patterns of rec boating and fishing
- Risk a function of # of turtles and # of BL
 - Few BL but many turtles in Nantucket Sound
 - Lots of BL but fewer turtles in Cape Cod Bay



Upcoming Research and Collaborations

DMF awarded Section 6 funds (2010-2013) for leatherback research and disentanglement

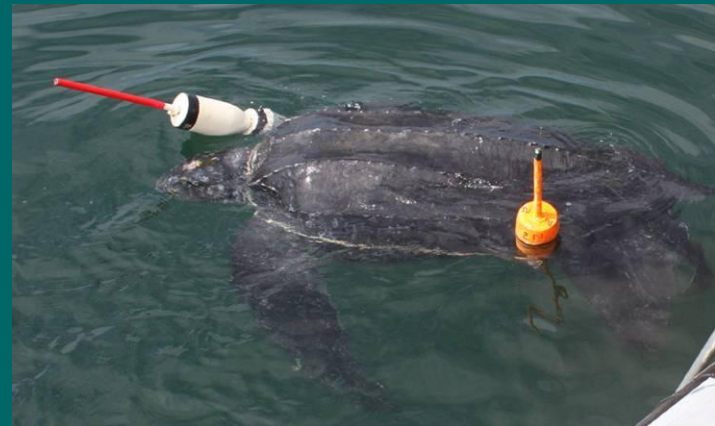
Partnership with CCS, UMASS, and NEAq

1. Tagging (satellite and suction cup)
2. Disentanglement
3. Gear analysis and research
4. Entanglement mitigation through outreach and fisheries management
5. Health assessment



Challenges

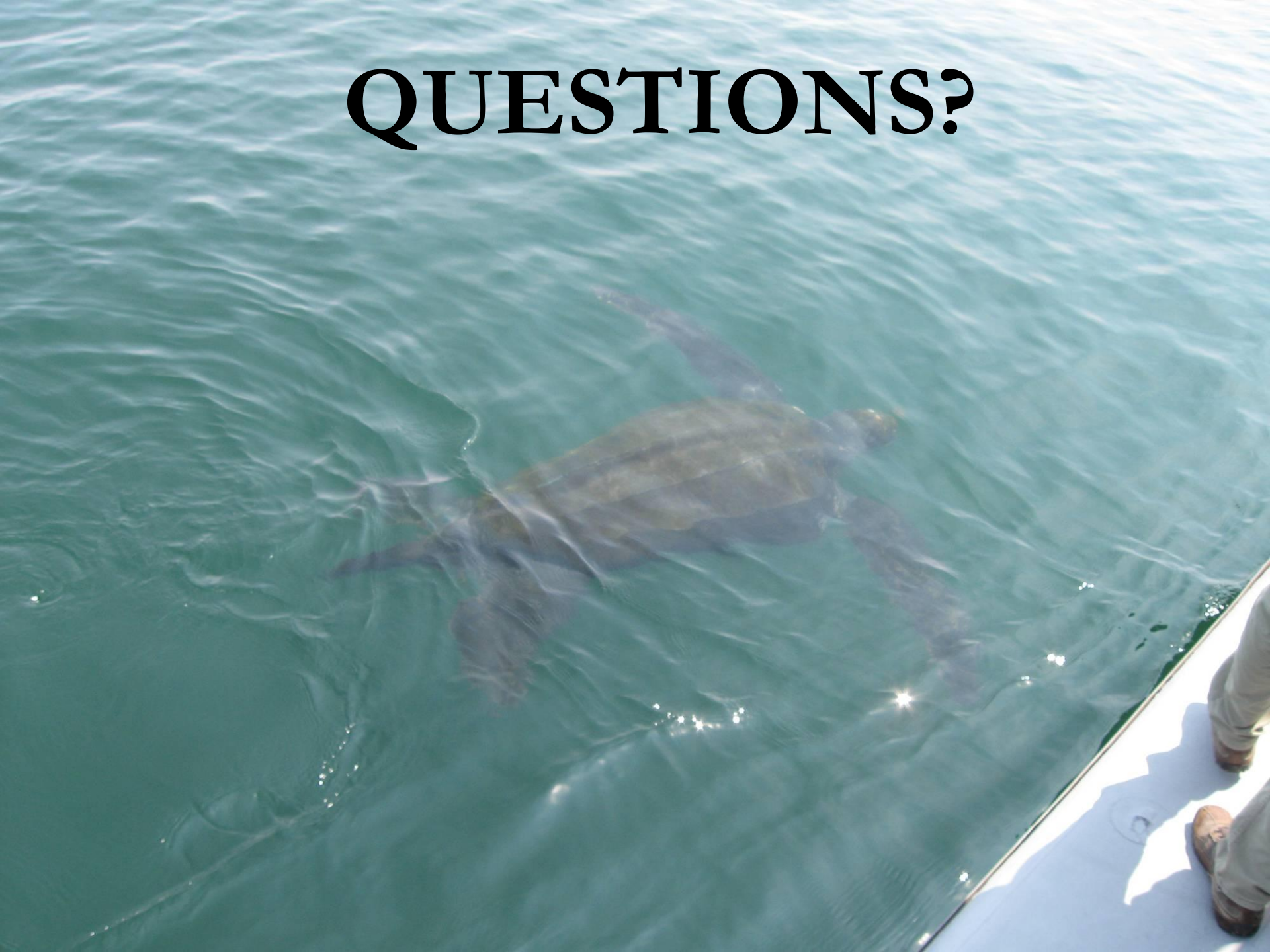
- Commercial pot fishermen routinely unwrap turtles from gear and do not report
- Most entanglement sightings come from recreational boaters and fishermen
- Survival rate after disentanglement?
- Litigation



Potential Gear and Fisheries Management Solutions

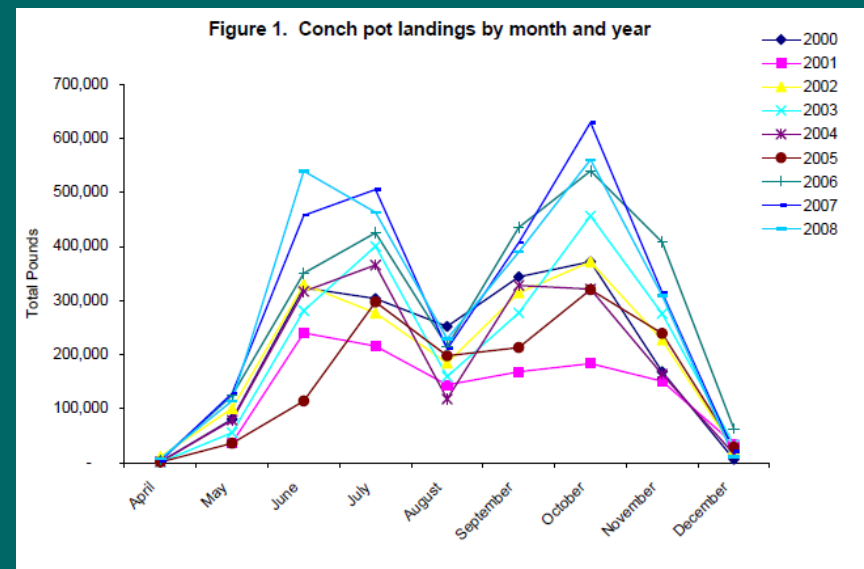
- Investigate possibility of Section 10 permit
- Collect data on buoyline density
- Prohibit single pots in certain areas
- Get rid of antiquated regulation around Gosnold which bans trawls
- Close loop hole in scup/sea bass pot fishery
- Low-tech gear modifications (e.g. stiff portion of BL)

QUESTIONS?



Fish Pot & Whelk Pot Fisheries

- Target Species: Scup, Black Sea bass, Channel Whelk
- Waters South of Cape Cod and Buzzards Bay
- Fishery active May–October except when scup or BSB quotas close.
- Cross-over fishery for lobstermen
- 200 pot limit for scup/bas
- 200 conch, 50 scup



Weir (Pound net)

- Four companies fish 15-20 weirs
- Mainly south shore of Cape Cod
- Subject to local and state control
- Target species: squid, scup, mackeral
- Expected mortality: Minimal as animals are routinely released alive

Summer Flounder Trawl

- South of Cape Cod in Nantucket & Vineyard Sound during summer months
- Quota starved fishery: About 25 small trawlers fish 2-3 tows just 1-hour long to reach daily trip limit of 300 lbs.
- State observers occasionally observe turtles (loggerheads?)...all reportedly released alive
- Federally observed trips may provide more insights and coverage

Lobster Trap Fisheries

- Commercial Lobster Trap Fishery
 - 1,000 active fishermen.
 - Fishery studied since 1981 by 80-100 DMF sea sampling trips/yr from RI to NH border (May-Nov).
 - Observer focus: biological characteristics of catch
- Recreational Lobster Fishery
 - 6,000 permit holders fishing 1-10 traps, nearshore, small-scale
 - NO sea sampling
 - Annual reporting inadequate to target regions