

*Science, Service, Stewardship*



# Status of Bycatch Mitigation Measures in the Atlantic Pelagic Longline Fishery for Highly Migratory Species

Randy Blankinship

Joseph Desfosse, PhD

Craig Cockrell

Atlantic Highly Migratory Species Mgmt. Division

**NOAA  
FISHERIES  
SERVICE**



## The Problem with Bycatch

- Death or injury to the discarded animal
- Can slow the rebuilding of overfished stocks
- Can increase direct and indirect costs of fishing operations
- Bycatch concerns apply to populations of protected species such as marine mammals, sea turtles, seabirds, and other components of ecosystems



## Regulatory Framework Related to Bycatch and Bycatch Mortality

- Magnuson-Stevens Fishery Conservation and Management Act
  - National Standard 9: Fishery conservation and management measures shall, to the extent practicable, minimize bycatch and minimize the mortality of bycatch that cannot be avoided.
  - National Standard 9 guidelines (50 CFR 600.350)
- National Bycatch Strategy (2003) and “Managing the Nation’s Bycatch” (1998)
- Bycatch management also influenced by:
  - Marine Mammal Protection Act
  - Endangered Species Act



## Some Examples of Bycatch or Incidentally Caught Fish in HMS Fisheries

- Marlin, undersized swordfish, and bluefin tuna caught and released by commercial fishing gear
- Undersized swordfish and tunas in recreational hook and line fisheries
- Species for which there is little or no market such as blue sharks
- Species caught and released in excess of a bag limit
- A recreational catch and release program for billfish and white sharks



## Atlantic HMS Bycatch Program

- Evaluation of current data collection programs
- Implementation of bycatch reduction measures such as gear modification and time/area closures and gear restricted areas
- Continued support of data collection and bycatch research
- Standardized Bycatch Reporting Methodology - Magnuson-Stevens Act Section 303(a)(11); “Evaluating Bycatch” (2004); National Bycatch Report (2011); National Standard 9 guidelines
  - Mandatory logbook systems
  - At-sea fisheries observers
  - Recreational fisheries surveys
- Atlantic HMS Bycatch Implementation Plan 2010-11



## Bycatch Reduction – HMS Pelagic Longline Fishery

Bycatch Species: bluefin tuna; billfishes; undersized target species; marine mammals; sea turtles; seabirds; non-target finfish; prohibited shark species; sharks after closures

MMPA Category I: Pelagic Longline Take Reduction Plan requirements

ESA Requirements: reinitiation of consultation underway; jeopardy finding for leatherback sea turtles; 2004 BiOp established reasonable and prudent alternative; incidental take statement; terms and conditions; reasonable and prudent measures; complying with all during current consultation

Bycatch Data Collection: logbooks and observers



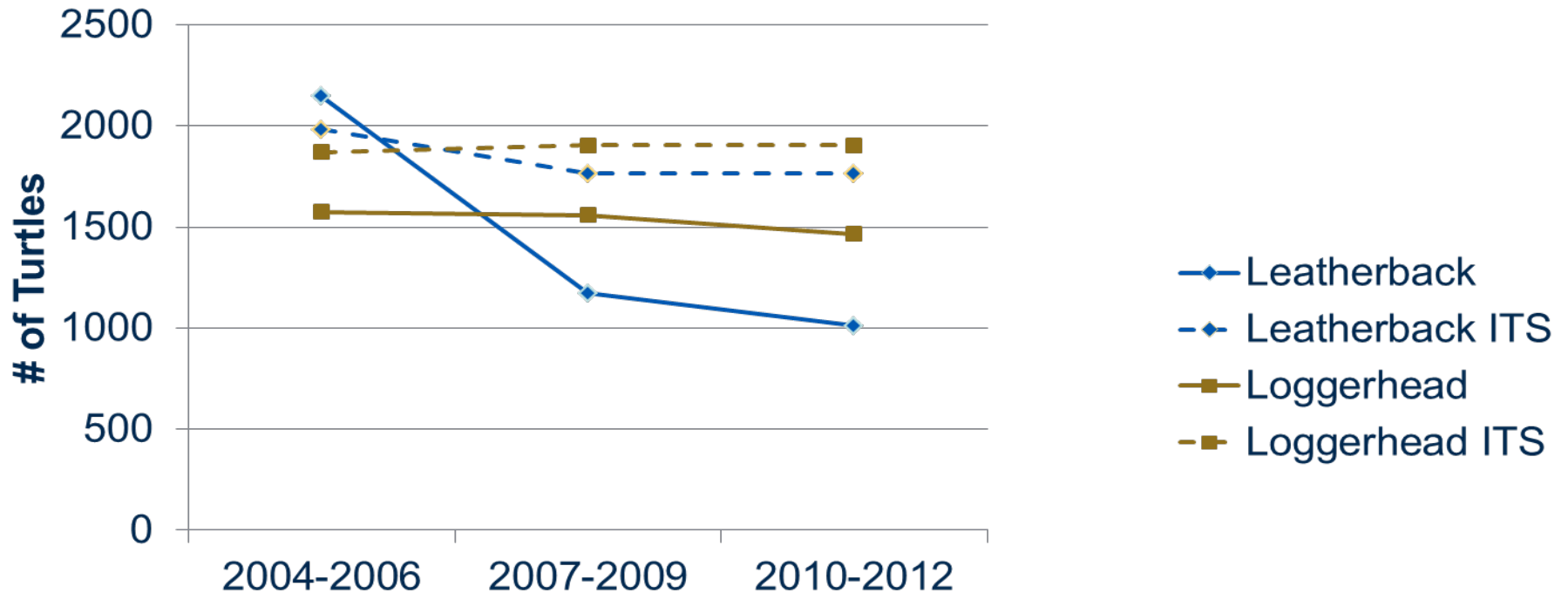
## Bycatch Reduction - Pelagic Longline Fishery

### Current Management Measures:

- Bluefin tuna target catch requirements and quotas
  - Amendment 7 – proposed individual bluefin tuna quotas and other measures (final rule anticipated this fall)
- Prohibition of billfish possession
- Time/area closures (VMS utilized), gear restricted areas
- Limited access
- Move 1-nm after interaction with marine mammals
- Weak circle hooks, hook size and bait requirements, gangion length, corrodible hooks, limited mainline length
- Safe handling and release equipment, mandatory workshops, and guidelines



## Pelagic Longline – Sea Turtle Incidental Takes

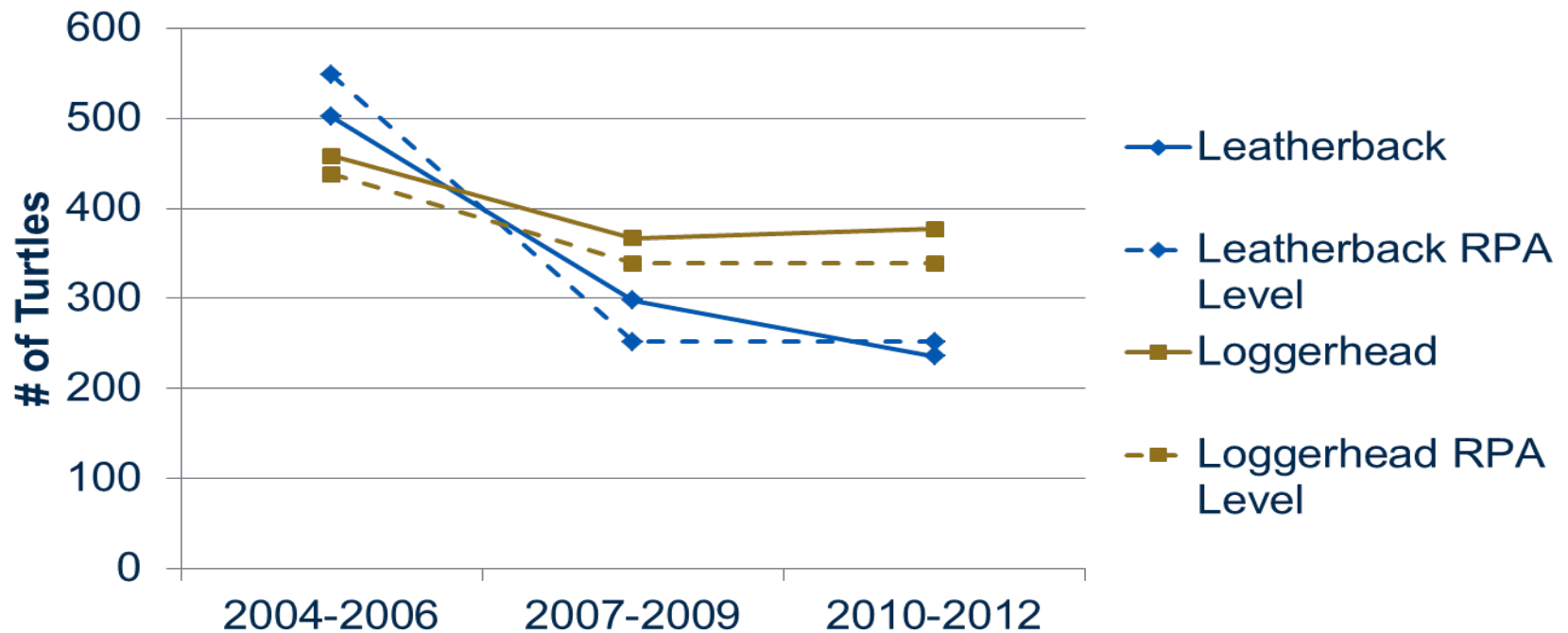


The fishery has remained below the ITS limits following initial implementation period





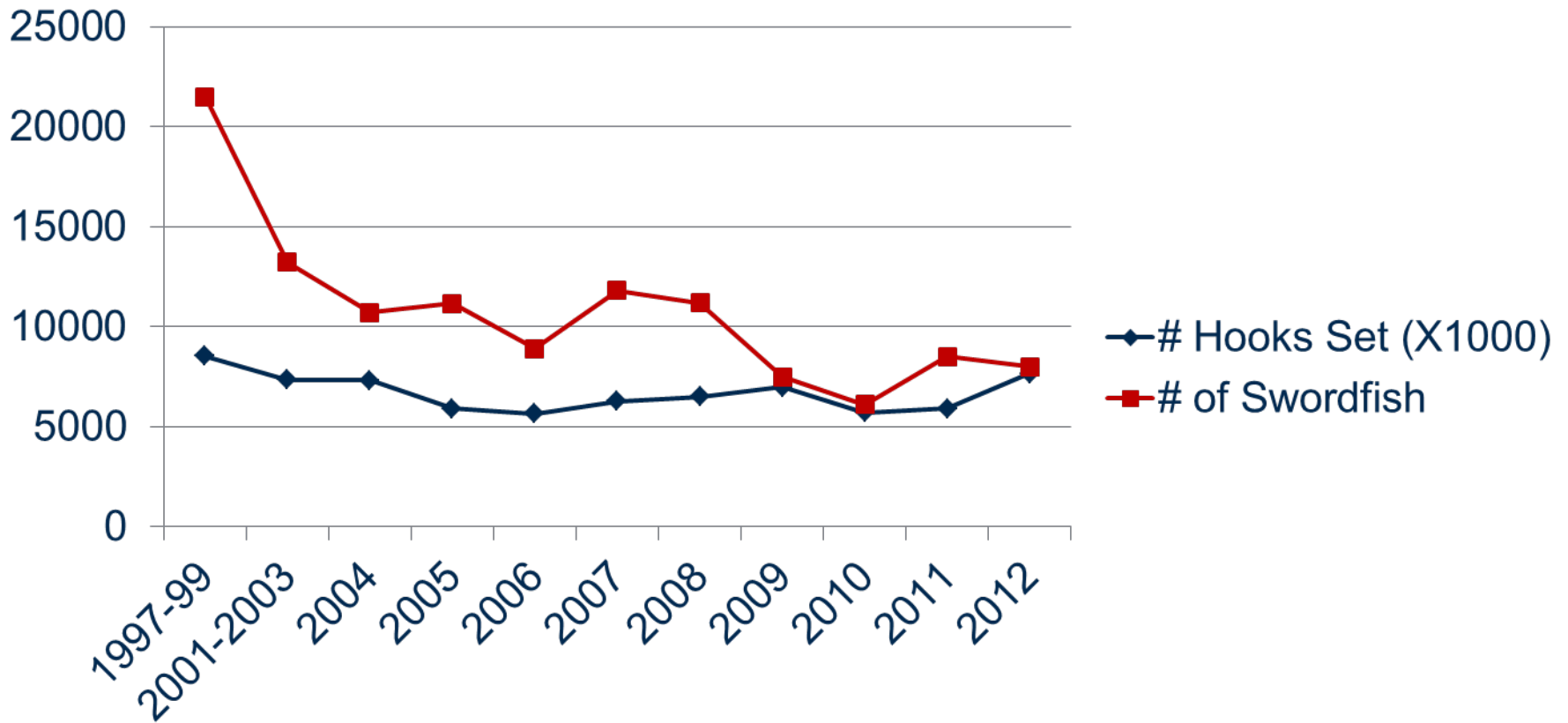
## Pelagic Longline – Sea Turtle Total Mortality



- Leatherback total mortality exceeded the RPA level during one 3-yr period, but remained below the RPA level when considered over all years since 2004
- Continuation of PLL fishery during consultation not expected to reduce population survival or recovery

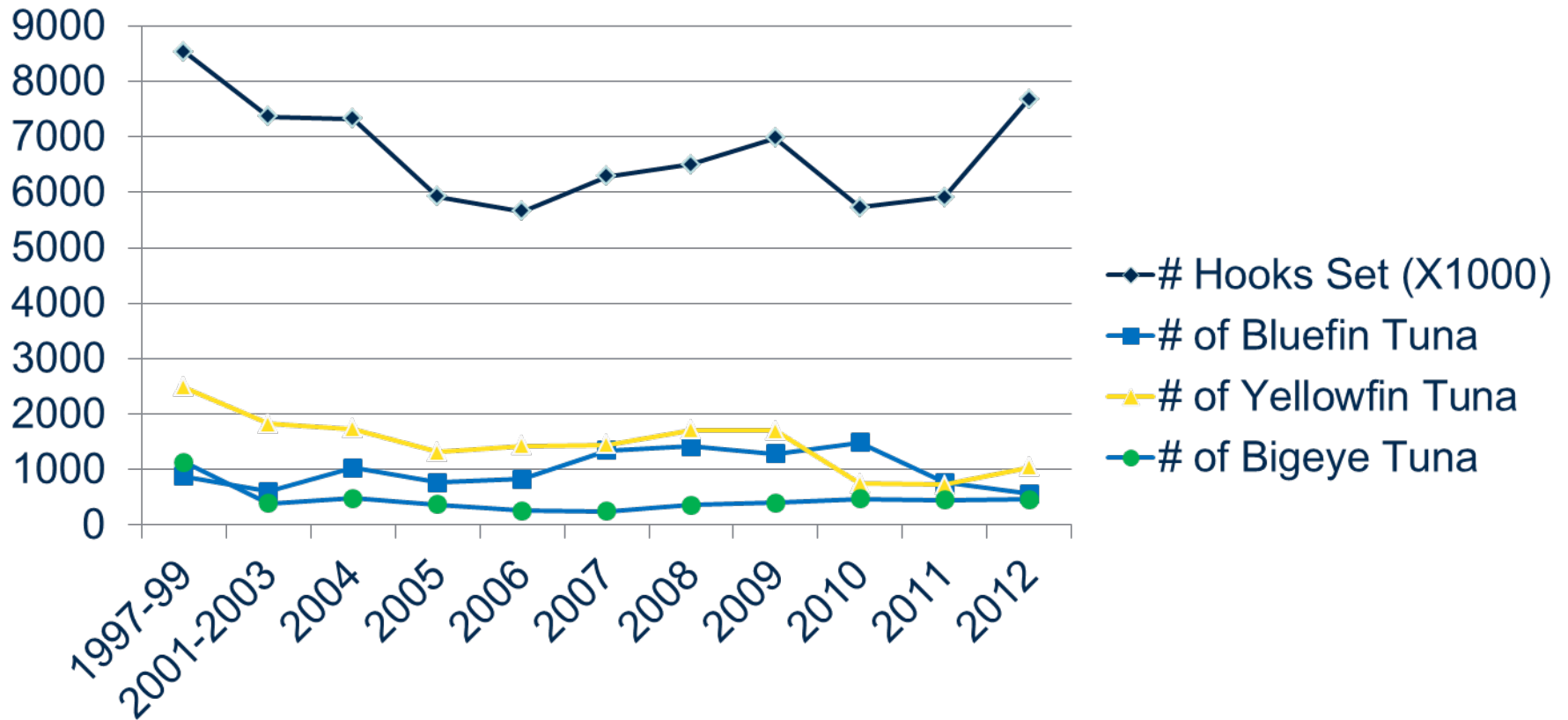


## Pelagic Longline – Fish Discards



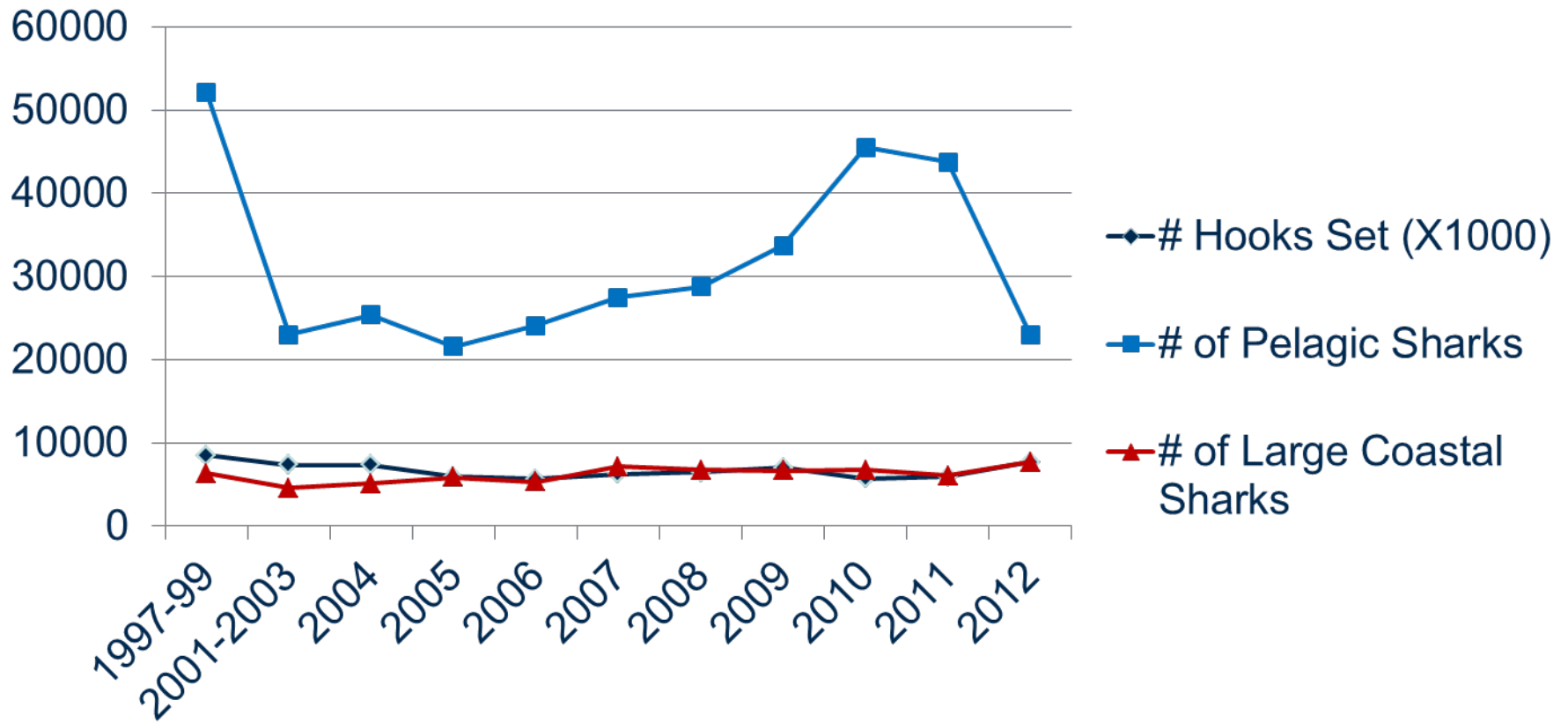


## Pelagic Longline – Fish Discards



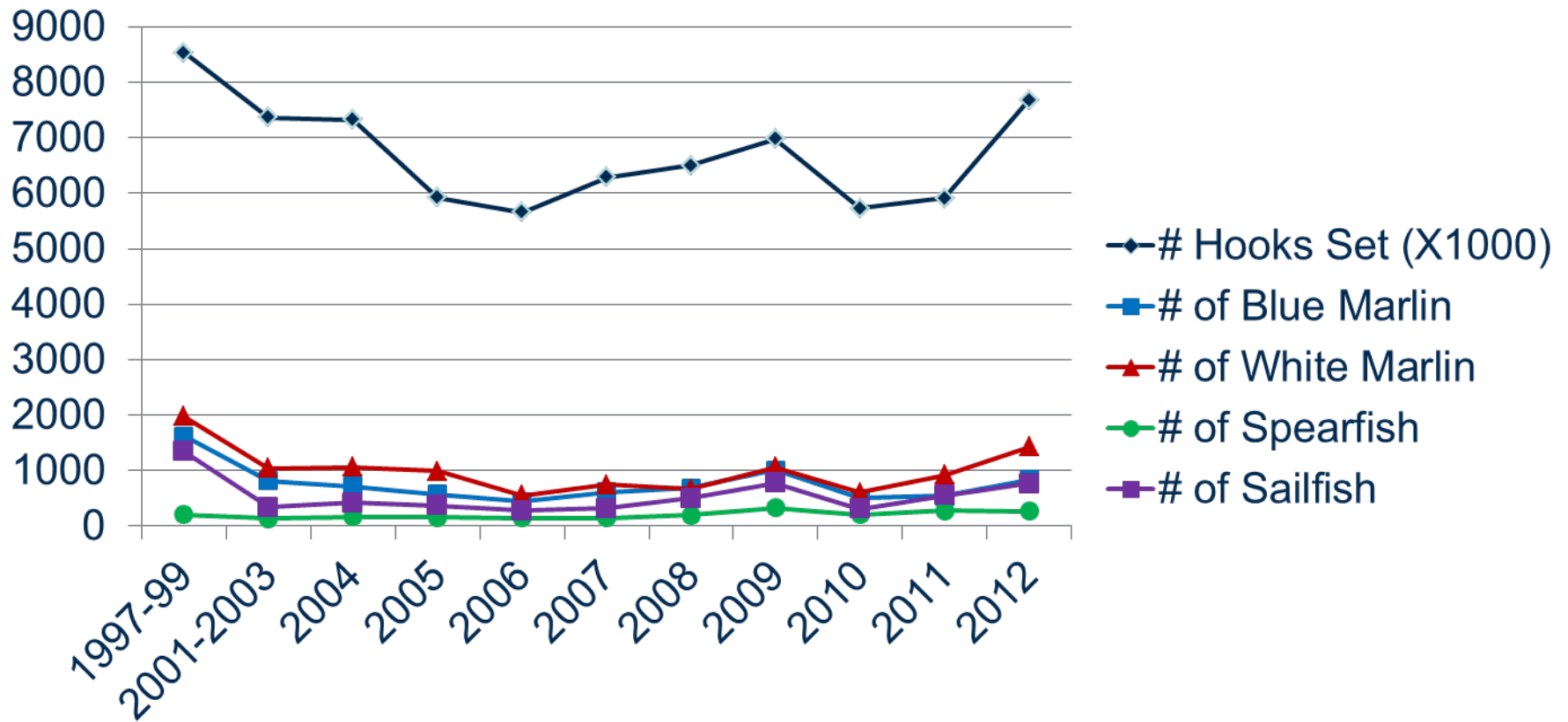


## Pelagic Longline – Fish Discards



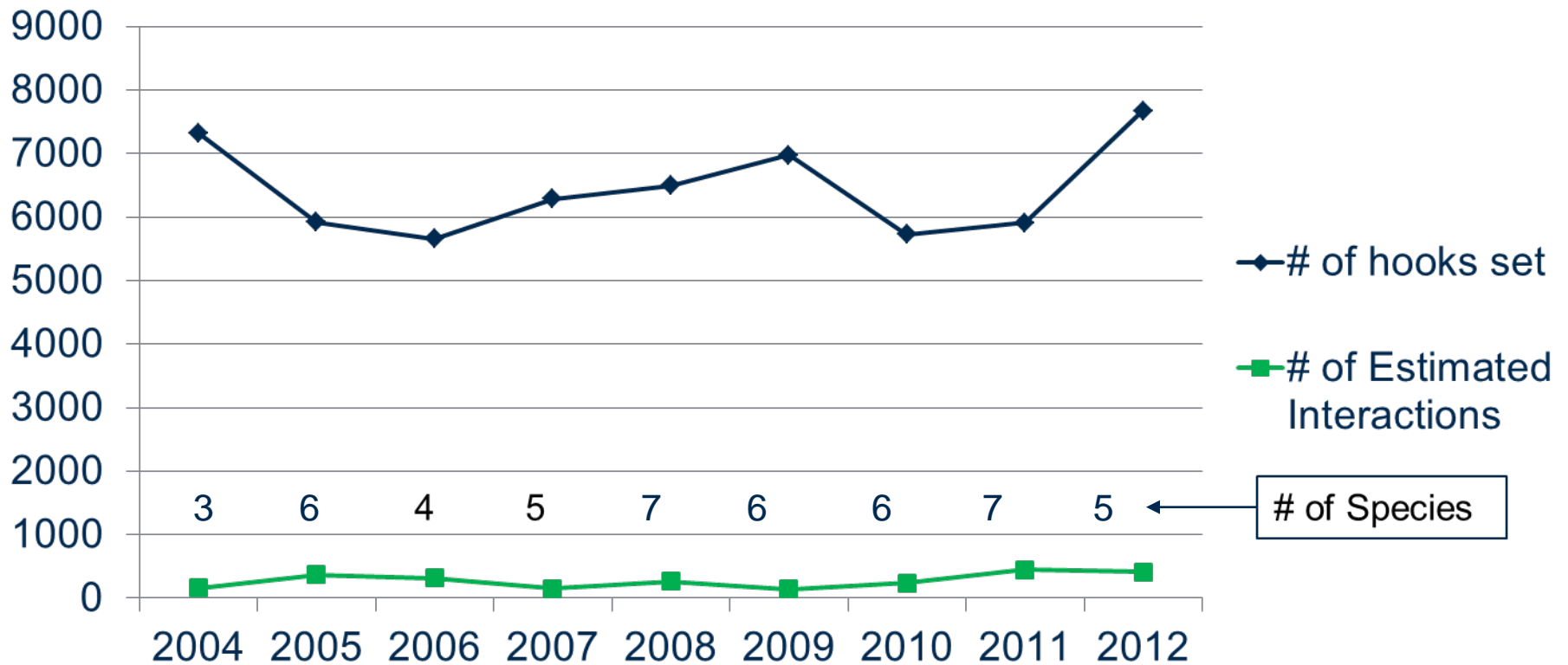


## Pelagic Longline – Fish Discards





# Pelagic Longline – Marine Mammal Interactions (Garrison and Stokes 2013)



Interactions are highly variable. Most interactions are with pilot whales, bottlenose dolphins, Risso’s dolphins, and short-finned pilot whales



## Future of Bycatch Issues in Atlantic HMS Fisheries

- Continue data collection and monitoring of all bycatch
- Work with Regional Fisheries Management Organizations and Councils to share bycatch reduction technology
- Continue Incidental Take Statement and RPA monitoring, and take action as warranted, during Section 7 consultation
- Pursue research on bycatch reduction technology and fishing techniques with lower bycatch
- Finalize and implement Amendment 7
- Promote education and outreach on the need to reduce bycatch