

**Draft Pelagic Longline Seabird Mitigation Research Plan (outline)**

**1. Need for a Plan**

- Independent efforts yielding limited science to ID “best practice mitigation”
- 17 years and little progress in pelagic vs. demersal

**2. Elements of Experimental Design**

- Controlled Experiments (pros, cons and limitations)
- Mitigation specifications and performance standards
- Essential variables (bird CPUE, Fish CPUE, etc)
- Other variables
  - Behavioral (attack rate/abundance/proxies for CPUE?)
  - Temporal and spatial
  - Physical and environmental variables (wind speed and direction, etc)
  - Operational variables (safety, tangles, cost, labor, etc.)
- Optimal sample size (focus on fish or birds)
- Scope (number of vessels)

**3. Goals of Mitigation Research**

- Pilot
  - Preliminary testing (practicality and variability)
- Definitive quantitative comparisons
  - Effective at reducing seabird mortality by ?%
  - Effect on target species
  - Effect on the catch of other non-target organisms
- Demonstration
  - Repeating definitive work in a new location with new fishers
  - Focus on implementation

**4. Pelagic Fishery Characterization (bracket the range)**

- Vessel Classes
- Gear variations by target species
- ID Worst-Case (highest priority) fisheries

**5. ID Key Experiments**

- Review of Hobart Workshops outcomes
- Priorities to specific experiments
  - PI and collaborators to specific experiments w/ timelines
  - Synergies among programs

**6. Host Locations**

- Prioritize “worst-case” locations in space (where exactly) and time (months)
- Link to locations with local support (industry, scientific and logistical)
- Link to “worst –case” fisheries

**7. Potential Funding Sources** IAATO, RFMOs, NGOs, Governments, Benefactors, other