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SEFSC

# Commercial Electronic Logbook Pilot Project

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September 16, 2014

# Goals and Objectives

## Goal:

- Create on-board electronic logbook program that can accommodate vessels participating in multiple federal fisheries and across regional boundaries

## Objectives:

- Set up volunteer fishers to test electronic logbooks utilizing existing software from various vendors (we supply the tablets or laptops)
- Optimize existing logbook software for use in SE and HMS fisheries utilizing feedback from fishermen participating in the pilot study
- Develop IT infrastructure at SEFSC necessary to accept electronic logbook submissions



Photo Bubba Cochrane

# Background

- Demand for high quality data to ensure sustainable harvest of marine resources is increasing
- SEFSC vessel logbook programs
  - HMS-Pelagic Longline, 1986
  - Gulf of Mexico reef fish, 1990
  - South Atlantic snapper/grouper, 1992
  - Federally managed shark, 1993
  - King and Spanish mackerel, 1998



Photo: SAFMC



# Need

Data collected at finer spatial-temporal resolution will increase understanding

- Improve Single species stock assessment
  - Estimates of discard mortality (depth of discards)
  - Indices of abundance
    - Hot spot and recent fishing effects
    - Environmental effects – assign to each catch-effort observations
  - Age composition - in + away from hot spots
- Improve social + economic assessment
  - Impacts of management on
    - Profitability of the fishery
    - Impacts on fishers and their options
- Support Management
  - Greater variety of management approaches



Photo: NOAA/Collier County Sea Grant Extension



# Need

- Current logbooks are limited in their ability to provide spatially explicit data or reduce errors in variables recorded by fishermen
  - Coastal fisheries logbooks only collect at trip level and require additional forms for discard reporting
  - Pelagic logbooks - need multiple sheets to collect set level data
- Use of electronic logbook (e-log) reporting would be timelier with fewer errors in machine generated variables (date, time, location)



# Project Tasks

## First Stage

- Develop data standards
  - Define formats, fields and definitions of each field to be submitted
  - HMS logbook program, SE logbook program and NE VTR program coordinating on standards
- Recruit software vendors
  - Contact vendors to develop interest in project
  - Deliver standards to vendors
  - Currently communicating about software changes with 3 vendors



An  ecotrust company



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# Project Tasks



Photo: Derke Snodgrass

## Second Stage

- Recruit volunteer fishers to pilot project
  - Utilize council meetings and contacts through each logbook program
    - 5 vessels from Gulf SE fisheries
    - 5 vessels from SA SE fisheries
    - 3 vessels from HMS pelagic fishery
    - Stratify by gear
- Develop infrastructure to receive reports
- Laptops (10) and tablets (3) randomly assigned along with software
  - Vessels record trips and send data for one month
  - Feedback gathered and returned to vendors
  - Updated software tested for one additional month
  - Any additional feedback gathered and sent to vendor for final modifications
  - Total data collection time estimated at 6 months

## Final Stage

- Finalize software changes and modifications to IT infrastructure

# Progress and Timeline

- Standards developed and sent to vendors
  - Working with potential vendors to increase participation
- Recruiting volunteer fishers
- January 1, 2015 tentative start date for commercial e-log reporting by pilot participants
- Finalizing infrastructure and software changes **should** be complete by August 1, 2015



# ACCSP eTRIPS

- eTrips complements SEFSC commercial logbook pilot
  - Provides additional software option for fishermen
  - Mobile version will permit entry at sea and transmission when in cell range
    - Entry on Apple, Android or Windows Tablet
  - Vessels that can't report from sea, can report online once returning to port
  - Lower cost solution than some private sector vendors' software
  - ACCSP could house data and SEFSC would pick up data from ACCSP-simplifies infrastructure for collecting e-reports
  - SEFSC will require data on a finer spatial and temporal scale, which will require modifications to current eTrips software.

# Post-Pilot Implementation

- Work with Councils to determine implementation strategies
  - Voluntary / mandatory
  - Scope for mandatory
    - Kinds of vessels excluded from on-board data recording;
      - Reporting by such vessels
        - Electronically from shore / paper
    - Geographic resolution
  - Timelines for implementation
- Work with partners (ACCSP, GulfFIN, private vendors,...) to deploy software solutions for electronic logbook reporting



# Questions?

