



Key Findings of the MRIP For-Hire Electronic Reporting Pilot Study

Final report available at: <u>www.countmyfish.noaa.gov</u> Look under "latest news"





YOUR TRUSTED SOURCE FOR FISHING DATA





Charter vessels with Federal Permits: Northwest FL: ~350 vessels Corpus Christi, TX: 60 vessels

Study Design

- Authority to require weekly reporting for permit renewal
 - Fishing week = Mon Sun
 - Deadline = following Sunday
- Stakeholder input
- Self-Reported Data

 Validated and "validatable"
- Keep it simple!





Reporting Compliance and Timeliness



Sept. 2010 ----- August, 2011

- Measure accuracy of reporting
- Relied on three separate methods



1. Vessel activity (effort)





- 2. Dockside Validation of Catch
- Directly observe harvest
- Interview vessel operators
 - Discards
 - Number of anglers
 - Hours fished



- Individual dockside validations and logbook reports did not closely match
- On average, dockside validations and logbook reports were similar
 - Due to some over-reporting and some under-reporting



- 3. At-Sea Validation of Catch
- Random vessel selection
- Directly observe discards



- At-sea validation of discards
 - Fewer sampled trips
 - Differences between logbooks and validations
 - Proportion of trips where a species was observed and that species was not reported as a discard on logbook:
 - 20-50% for some managed sp.



Key Findings and Recommendations



Reporting Compliance and Timeliness

- Early stakeholder input
- Early outreach
- Plan for quick response if early compliance is low
- Must have methods to quickly ID missing/late reports with timely follow-up procedures
 - Multi-tiered approach
 - Continuous effort required to maintain compliance/timeliness

Reporting Compliance and Timeliness

Key Findings:

- Not a complete census
- Compliance would have continued to improve
- Would still have to account for misreporting
- Report inactivity/activity each day in a reporting week to help identify missing reports

Reporting Frequency

Key Findings:

- Daily reporting not necessary to produce good catch and effort statistics
 - Effort/cost required to maintain compliance with timely follow-up procedures would be much greater
 - Cost would be greater if certifying accuracy at individual vessel level
- Decreased reporting frequency (bi-weekly, monthly) would increase recall bias, not recommended



Reporting Frequency

- Reporting frequency and reporting accuracy should be considered both in terms of cost and necessity for management/ assessment before implementing a region-wide logbook reporting program
- Weekly reporting frequency combined with a daily reporting requirement is recommended as the most feasible both in terms of cost and minimizing recall bias for a census

Reporting Tools

Key Findings:

- Paper and electronic reporting options without quality controls require more error checking and follow-up
- At-sea data recording options would give more flexibility, reduce recall bias

- Require electronic reporting
- Must have built-in quality controls
- Should allow for data entry at-sea



Enforcement

Key Findings:

- Current legal authority to enforce reporting requirement is inadequate for receiving timely reports
- Delinquent vessels may continue to fish until their permit is up for renewal
- Permit holders allowed to submit all of their delinquent reports at time of expiration and then renew for another year

Enforcement

- Timely reporting should be required and requirement should be enforceable
 - could include permit
 suspension, permit
 termination and civil penalties



Validation and Estimation

Key Findings:

- Logbook reporting resulted in high coverage (~70% of validated trips were reported)
- Self-reporting is subject to recall bias and inaccuracies
- Aggregated logbook data potentially useful for estimating total effort, CPUE, and total harvest on a regional scale
- Monthly and bi-monthly estimates are feasible Recommendations:
- Work with a statistician to develop estimators
- Further research to account for sampling bias needed

Field Validation

Key Findings:

- Logbooks and field validations were not closely matched
- Small validation monitoring program will not be sufficient



- Effort validation is least costly method
- Dockside validation of catch is intermediate cost, but not effective for validation of discarded catch
- Demonstrated feasibility for at-sea validation
 - More costly, but provides high quality data
 - May be used to develop independent estimators for discards

Field Validation

- Validation methods need to measure and account for incomplete reporting
- For harvested catch, use combination of dockside and atsea validation methods
- For released catch, incorporate some type of at-sea validation methodology



Feasibility for Regional Implementation

Key Findings:

- Given adequate resources and long-term funding commitments, logbook reporting would be feasible for a large geographic area
- May not be feasible for small states with small number of vessels
- Regional implementation would also have to consider whether to include vessels without federal permits
 - Consider authority to require reporting
 - Guide vessels may be difficult to validate

Feasibility for Regional Implementation

Recommendations:

 Large scale implementation should be phased in so adequate resources can be focused on up-front efforts for outreach and follow-up with non-respondents



Summary

- Did not achieve a complete census
- Could be improved with better enforcement authority, but would still have to account for incomplete or inaccurate reporting.
- Estimating cpue and effort from logbook data is feasible
 - 70% reporting rate
 - good agreement between aggregated logbook values and validation samples
- Implementation requires long-term investments
 - Maintain reporting compliance/timeliness
 - Validation sampling program

Next Steps

- MRIP consultant demonstrated use of logbook data for estimating effort and catch
 - Report provided to MRIP
 - Favorable peer review
- If estimation is desired direction for MRIP, more work needed to develop methods

Thanks





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