

SUPPORTING STATEMENT
U.S. Department of Commerce
National Oceanic & Atmospheric Administration
Highly Migratory Species Vessel Logbooks and Cost-Earnings Reports
OMB Control No. 0648-0371

1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g. establishments, State and local governmental units, households, or persons) in the universe and the corresponding sample are to be provided in tabular form. The tabulation must also include expected response rates for the collection as a whole. If the collection has been conducted before, provide the actual response rate achieved.

This collection of information will employ statistical sampling methods to reduce the respondent burden and the data processing cost to the government. As indicated in the response to Question 12 in Part A, all fisheries would be subject to a census for trip-level catch reporting while a sample drawn at random would be required to provide additional cost-earnings data.

The selection rates that apply both to the logbook in general (set forms and trip forms) and to the cost-earnings form (attached to trip summary forms) are shown in Table B1. The number of permit holders in 2022 (7,268) to be included in this data collection was 3,159 permitted vessels fewer than the number of permits included in 2021 (10,427) that were used to calculate the number of respondents in the 2022 renewal of this information collection. This difference was largely due to the decision to exclude Dolphin/Wahoo permit holders from this ICR as their reporting requirements are also covered under OMB Control No. 0648-0016, and their inclusion here was determined to be redundant. The number of respondents to this information collection has also been modified to reflect the current number of active permits being issued in each of the remaining categories. The 7,268 permit holders eligible for selection to report include 225 active Atlantic Tunas, Shark, and Swordfish Limited Entry permit holders; 4,259 HMS Charter/Headboat; and 2,784 Atlantic Tunas General and Harpoon categories and Swordfish General Commercial permit holders that will be selected at the rate of 100 percent for reporting.

Table B1. Breakdown of the respondent universe and selection rate for the HMS Logbook and Cost-Earnings reporting.

	Active Tunas, Shark, & Swordfish Limited Entry	Atlantic Tunas General	Swordfish General Commercial	HMS Charter/Headboats	Total
Number of permit holders	225	2,114	670	4,259	7,268
Selection rate for logbooks	100%	100%	100%	100%	

# of Respondents	225	2,114	670	4,259	7,268
Selection rate for cost-earnings reporting ¹	20%	20%	20%	20%	
# of Respondents	45	423	134	852	1,454

¹ Selection rate for Annual Expenditure Form only for open access permit categories (Atlantic Tunas General, Swordfish General Commercial, and HMS Charter/Headboat)

NMFS would continue the 20 percent selection rate for the annual expenditures forms for all permit types. Limited Entry permit holders will continue to be sub-sampled for trip-level cost earnings reporting at the 20 percent selection rate; however, sub-sampling will not be used for the open access permit categories as they will be asked an abbreviated list of cost-earnings questions for each trip. These rates provide NMFS with a representative sample of the HMS fishery as a whole.

Table B1 indicates the affected universe. Out of 7,268 permit holders required to submit logbooks under this program, 1,454 would be required to submit the annual expenditure forms. For trip-level cost-earnings reporting, 20 percent of limited access permit holders (45) would be selected to provide detailed trip-level cost-earnings data. Conversely, for the open access permit categories (HMS Charter/Headboat, Atlantic Tunas, and Swordfish General Commercial), a more limited number of cost-earnings data fields are built into their trip level reports, which all permit holders would be required to complete. To ensure the cost-earnings data collected for the limited access commercial fishery is the most useful possible for management, stratification of cost-earnings sample selection is done at the primary gear-type level rather than the permit level for permit—types that authorize the use of multiple gear types. Fisheries are managed and regulated based on their gear-type, and vessel operating procedures and costs are heavily influenced by their selected gear-type. For shark and swordfish limited entry permits, a number of gear-types are authorized, including pelagic longline, bottom longline, gillnet, and handgear, which can have very different operating costs. For these permit-types, logbook selection is stratified by assigning permitted vessels to the four gear-type categories listed above based on the gear-type they reported using on the majority of trips the previous year, and a sample of 20 percent is randomly selected from each stratum.

Compliance with the catch reports or logbooks and cost-earnings reports is high for the Shark and Swordfish Limited Entry Permits because they are linked to permit renewal. That is, permits cannot be renewed until logbooks are submitted for the year. Often, logbooks are not submitted in a timely manner but are submitted prior to renewing the permit. In 2016, 75.1 percent of initial applications for permit renewal had satisfied logbook requirements. Once informed of the deficiency, only 1.29 percent of all permit applicants did not fulfill the logbook requirements, ultimately abandoning their permit renewal. Therefore, we expect a final response rate of approximately 99 percent for logbook reporting. However, logbook compliance has not been linked to permit renewal for the open access HMS Charter/Headboat, Atlantic Tunas General and Harpoon categories, and Swordfish General Commercial permits. Previous logbook data

collections of these permit holders in recent years have generated response rates ranging from 57 to 62 percent, so we estimate an expected response rate of 60 percent. Under the proposed logbook program for these open access permits, NMFS may link permit renewal to logbook compliance, consistent with existing authorities.

Table B2. Expected response rates and anticipated number of respondents by permit groups.

	Active Tunas, Shark, & Swordfish Limited Entry	Atlantic Tunas General	Swordfish General Commercial	HMS Charter/ Headboats	Total
# Selected for Logbooks	225	2,114	670	4,259	7,268
Anticipated Response Rate	99%	60%	60%	60%	
Anticipated Respondents for Logbooks	222	1,268	402	2,555	4,448
# Selected for Cost-Earnings Reports	45	423	134	852	1,485
Anticipated Response Rate	99%	60%	60%	60%	
Anticipated Respondents for Cost-Earnings	44	254	80	511	890

2. Describe the procedures for the collection, including: the statistical methodology for stratification and sample selection; the estimation procedure; the degree of accuracy needed for the purpose described in the justification; any unusual problems requiring specialized sampling procedures; and any use of periodic (less frequent than annual) data collection cycles to reduce burden.

The respondent universe is the fleet for tuna, shark, swordfish, and charter/headboat permit holders, for which we have the entire population or universe of vessels from the HMS permit data file from which to choose.

The respondent universe for selection from the limited entry HMS commercial fishery is stratified according to the following criteria: (1) state of homeport and (2) level of landings (high-liner vs. not active) before taking a random sample from each strata. The HMS logbook form contains sufficient information to determine whether or not a vessel harvested beyond or within the Exclusive Economic Zone, i.e., U.S. offshore or on the high seas. Sampling designs for other commercial fishery surveys suggests that overall vessel length provides a reliable indicator of whether a vessel is capable of fishing on the high seas. A vessel’s homeport state is recorded in the HMS permit database. The sample size for selection for limited entry commercial vessels is designed to achieve a 95 percent level of precision (significance). For any strata with less than three vessels, the vessel numbers in these strata is increased to three since NMFS’

policy is not to disclose aggregated information for anything less than three vessels. The stratified random sample is determined using the Neyman Allocation Method with a finite population correction. This method is being used in the collection "Economic Surveys of U.S. Commercial Fisheries" (OMB Control Number 0648-0369).

The random sample for the collection of cost-earnings data from the limited entry commercial HMS fleet is selected by stratifying the relevant respondent fisheries according to: (1) the primary type of fishing gear used in the previous year and (2) level of activity (landings versus no landings/held a permit or did not hold a permit). The HMS logbook form contains sufficient information to determine where a vessel was fishing and the level of activity in the previous year. Numerous analyses of logbook data have already designated the statistical areas. These same areas would be used in the random sample. Sample size for selection of these vessels is designed to ensure adequate representation across the fleet and across all areas. For areas where few HMS vessels fish (e.g., Sargasso or Northeast Distant areas), areas would be combined to ensure a large enough sample so that data can be disclosed. Sample fleets for selection of the cost-earnings data would then be averaged to produce information representative of the group. There are not expected to be any unusual problems requiring sampling procedures more specialized than those indicated above.

3. Describe the methods used to maximize response rates and to deal with nonresponse. The accuracy and reliability of the information collected must be shown to be adequate for the intended uses. For collections based on sampling, a special justification must be provided if they will not yield "reliable" data that can be generalized to the universe studied.

In order to maximize the response rate, brochures have been developed and circulated to educate fishermen in various sectors about reporting requirements. NMFS has also published compliance guides to remind fishermen of their obligations to complete the HMS logbook and cost-earnings forms as these are mandatory data collections. In addition, a Small Entity Compliance Guide will be prepared for the current HMS Electronic Reporting rulemaking (RIN 0648-BM23), which would apply to all HMS commercial and charter/headboat fleets, and outreach and training would be planned in conjunction with a final rule. Non-responders are typically contacted first by phone and then are notified by the NMFS Office of Law Enforcement of their delinquency and issued a written warning. If there continues to be no response, citations could be issued. For the censused population, a small percentage of non-responders are not likely to decrease the reliability of the data given the number of vessels and trips. For the sampled population, however, the reliability of the data could suffer if delinquency rates prove to be high. In such a case, data between years could be combined to provide biennial estimates. NMFS has operated under an overall target response rate of 85 percent which would be equal to a delinquency rate of 15 percent. Since making the HMS logbook program mandatory, we have not had problems achieving this response rate target. NMFS uses a multi-factor time series regression model to analyze the costs and earnings of the HMS fleets across years. This model combines cost-earnings data provided by this data collection with vessel characteristic data gathered from permit applications and marine fuel price data.

4. Describe any tests of procedures or methods to be undertaken. Tests are encouraged as effective means to refine collections, but if ten or more test respondents are involved OMB

must give prior approval.

Logbooks have been used in this fishery since the 1980s and have proven an effective method of collecting data when used with observers. Before implementation of mandatory collection, NMFS tested a voluntary program. The voluntary program was ineffective for meeting management needs.

5. Provide the name and telephone number of individuals consulted on the statistical aspects of the design, and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.

NMFS, Highly Migratory Species Management Division (economic sampling design/analysis):
George Silva and Cliff Hutt, 301-427-8503
NMFS, Southeast Fishery Science Center (landings data collection/analysis):
David Gloeckner, 305-361-4257