

**Supporting Statement for Paperwork Reduction Act Submission
OMB Control Number 1018-0127**

Horseshoe Crab Tagging Program

FWS Forms 3-2310 and 3-2311

October 18, 2005

Specific Instructions

A. Justification

1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

The Fish and Wildlife Act of 1956 (16 U.S.C. 742f) requires the Department of the Interior to take steps "required for the development, advancement, management, conservation, and protection of fishery resources." In addition, the Endangered Species Act of 1973 (16 U.S.C. 1531-1544), the Wildlife Coordination Act (16 U.S.C. 661-666c), and the Anadromous Fish Conservation Act (16 U.S.C. 757a – 757g) each authorize the Department of the Interior to enter into cooperative agreements with stakeholders to protect and conserve fishery resources.

Horseshoe crabs play a vital role commercially, biomedically, and ecologically along the Atlantic coast. Horseshoe crabs are commercially harvested and used as bait in eel and conch fisheries. Biomedical companies along the coast also collect and bleed horseshoe crabs at their facilities. *Limulus Amoebocyte Lysate* is derived from crab blood, which has no synthetic substitute, and is used by pharmaceutical companies to test sterility of products. Finally, migratory shorebirds also depend on the eggs of horseshoe crabs to refuel on their migrations from South America to the Arctic. One bird in particular, the red knot, feeds primarily on horseshoe crab eggs during its stopover. That bird is under a status review for listing under the Endangered Species Act.

Horseshoe crab management has come under intense scrutiny, as crab populations appear to be on the decline, particularly in Delaware Bay. Horseshoe crabs are managed by State agencies along the Atlantic coast under the coordination of the Atlantic States Marine Fisheries Commission. The Commission was formed in 1942 by the 15 Atlantic coast States (Maine through Florida, including Pennsylvania) to assist in managing and conserving their shared coastal fishery resources. The Commission's responsibility is to develop management plans "to promote the better utilization of the fisheries, marine, shell, and anadromous, of the Atlantic seaboard by the development of a joint program for the promotion and protections of such fisheries."

In 1998, the Commission released the first fishery management plan for horseshoe crabs (Fishery Management Report No. 32). Under the monitoring programs that the fishery management plan supports, Component E requires biomedical companies to participate in a coordinated tagging program to evaluate post-bleeding mortality of crabs. In 1999, the Commission released the Horseshoe Crab Stock Assessment Report (Stock Assessment Report No. 98-01), which

recommends that a long-term tagging program be developed to define management units. Tagging studies can also be used to address some of the research and data needs in the fishery management plan, including determining beach fidelity, spawning frequency, timing of migrations, and population size in Delaware Bay. Both of the above reports are available online at <http://www.asmfc.org>.

The Commission asked the Fish and Wildlife Service to coordinate a coastwide tagging program for horseshoe crabs to ensure that the program is standardized across States and research programs and to relieve individual States of the burden of coordinating a program that crosses State boundaries.

2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection. [Be specific. If this collection is a form or a questionnaire, every question needs to be justified.]

Over the past 5 years, the tagging program has provided essential information to fishery managers about the life history and population size of horseshoe crabs on the Atlantic coast. State and Federal fishery managers use the information to more effectively manage crab populations to sustain the dependent resources, including the commercial fishery, biomedical industry, and ecologically dependent bird species. Researchers also use tagging information to describe important life history characteristics of horseshoe crabs.

Members of the general public use the Horseshoe Crab Recapture Report (FWS Form 3-2310) to report tagged crabs and will provide the following information:

- Circular white tag (this is the primary tag placed on each crab):
 - presence or absence of tag (for tag retention evaluation)
 - tag number (to determine information on an individual crab)
 - whether or not tag was removed (so we know whether the animal is still at large or if the tag has been removed so that the crab will no longer be recognizable by that number)
- Other tag (some crabs have a secondary tag):
 - presence or absence of tag (for tag retention evaluation)
 - tag number (to determine information on an individual crab)
 - whether or not tag was removed (so we know whether the animal is still at large or if the tag has been removed so that the crab will no longer be recognizable by that number)
- Crab condition: Whether crab was alive or dead when found or if tag was found without crab (used to determine mortality and tag retention)
- Date captured or found: (timing of recapture important in determining timing of migrations and spawning frequency for individuals)
- Crab fate: Whether crab was kept or released (to determine commercial harvest impacts on crab populations)

- Reporter type: Beach comber, commercial fishermen, biomedical company or some sort of researcher (important to know which user groups are encountering tagged crabs)
- Capture method: Hand collection or collection in some kind of fishing gear (need to know which types of fishing gears that crabs are most susceptible to for better population protection)
- Capture location: Body of water, beach or location and nearest city (so we can determine migratory patterns and coastal population structure of crabs)
- Reporter information: Name, address, and phone number (this information is used to send the reward package out to a reporter who provides information about a tagged horseshoe crab, the phone number is collected in the event that we have questions about the data provided by the individual so that we can contact them at a later date to clarify answers given in a tag report)
- Comments: Miscellaneous information provided by reporter

Agencies that tag and release horseshoe crabs complete the Horseshoe Crab Tagging Release Form (FWS Form 3-2311) and provide the following data:

- Organization Name: (identify which crabs were released by an organization in order to provide them with related recapture information at a later date)
- Contact person name: (allows us to contact the individual responsible for providing that portion of data to clarify any information necessary)
- Tag #: (unique number assigned to each crab, preprinted on tag)
- Sex: (necessary to determine differences between sexes in mortality, migration, etc.)
- PW(mm): prosomal width (width of the crab at the widest point) used to determine differences in sizes of crabs along its range
- Capture site: site where crab was captured, tagged and released (used to determine migratory patterns)
- Latitude: (used to determine migratory patterns, optional data field)
- Longitude: (used to determine migratory patterns, optional data field)
- Waterbody: (used to determine migratory patterns)
- State: (used to determine migratory patterns)
- Date: (used to determine timing of migration, longevity, and spawning frequency)

3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden [and specifically how this collection meets GPEA requirements].

All tags are printed with a toll-free phone number and a mailing address. The public may report finding tagged crabs using either of those methods or by completing an online form at the Maryland Fishery Resources Office (MRFO) website. The availability of the online form will be advertised at beaches where tagged crabs are frequently encountered and also in reward package mailings to the public. We estimate that 80 percent of the public who find tagged crabs will report via the toll free number, 20 percent via online form, and less than 1 percent via mail.

Tagging agencies may submit electronic files of tagging data by email (80 percent), complete a form online (10 percent), or send completed paper datasheets to the office (10 percent).

4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes described in Item 2 above.

Atlantic coast States manage horseshoe crabs under the Atlantic States Marine Fisheries Commission fishery management plan for horseshoe crabs. The Commission encourages all States to use our tags in order to have a coordinated coastwide tagging effort. A private organization has sponsored tagging efforts in the past. However, it has nearly eliminated its tagging program and is encouraging tagging organizations to participate in the Fish and Wildlife Service sponsored program to eliminate any duplication of effort and to increase coastwide coordination.

5. If the collection of information impacts small businesses or other small entities (Item 5 of OMB Form 83-I), describe any methods used to minimize burden.

The collection does not significantly impact small entities. All tagging and tag reporting efforts are voluntary.

6. Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.

If the tagging program were not conducted, the State fishery managers would have less basic life history information available to them to manage horseshoe crab populations. Horseshoe crab eggs are an important food source for migratory shorebirds. If horseshoe crabs are over-harvested, shorebird populations may be impacted adversely. Reduced availability of horseshoe crab eggs may adversely affect the red knot (a shorebird), which is currently under a status review by the Fish and Wildlife Service to be considered for listing under the Endangered Species Act. Biomedical companies also use horseshoe crab blood to derive Limulus Amoebocyte Lysate, an important pharmaceutical product that currently has no synthetic substitute. Mismanagement of the crab populations could also impact human health if Lysate could no longer be collected.

7. Explain any special circumstances that would cause an information collection to be conducted in a manner:

- * requiring respondents to report information to the agency more often than quarterly;**
- * requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;**
- * requiring respondents to submit more than an original and two copies of any document;**
- * requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records, for more than three years;**
- * in connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;**
- * requiring the use of a statistical data classification that has not been reviewed and approved by OMB;**
- * that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or**
- * requiring respondents to submit proprietary trade secrets, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.**

The usefulness of this data would be compromised if the collection of recapture information did not occur on a continual basis. It would be impossible to track trends in crab movement and stock definitions. In addition, if members of the public did not report recapture data at the time they found the crab, response rates would be adversely affected. There are no other circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines.

8. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice [and in response to the PRA statement associated with the collection over the past three years] and describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported. [Please list the names, titles, addresses, and phone numbers of persons contacted.]

Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every 3 years — even if the collection of information activity is the same as in prior periods. There may be circumstances that may preclude consultation in a specific situation. These circumstances should be explained.

On August 3, 2005, we published in the Federal Register (70 FR 44677) a notice of our intent to request information collection authority from OMB. In that notice, we solicited comments for 60 days, ending on October 3, 2005. We received comments from one individual. The commenter did not address the necessity, clarity, or accuracy of the information collection, but did oppose the use of horseshoe crabs by biomedical companies and proposed a ban on the use of horseshoe crabs for any purpose. We have not made any changes to our information collection as a result of the comment.

State representatives who were on the Horseshoe Crab Technical Committee of the Atlantic States Marine Fisheries Commission in 1999 decided what data we needed to collect for tagged crabs. Individuals involved in the original data collection decision included:

Tom O'Connell, Maryland Department of Natural Resources, toconnell@dnr.state.md.us
Stewart Michels, Delaware Department of Fish and Wildlife, stewart.michels@state.de.us
Mark Thompson, South Carolina Department of Natural Resources

Yearly contact is made with individuals/organizations who tag crabs. We contacted the following individuals to verify that tagging instructions are easy to understand. Both agreed that our estimate of time burden was accurate and instructions were straightforward.

Dr. David Hata
Virginia Polytechnic Institute
540-231-7683

C. Elliott Workman
Abbott's Mill Nature Center
302-422-0847

We also solicited comments from individuals who reported tagged crabs. Each stated that the questions were easy to understand and agreed that our estimates of time burden were accurate.

Capt. George Kumor
P.O. Box 163
166 Glade Rd.
Heislerville, NJ 08324
856-785-2706

Patricia Miller
153 S. Sandpiper Dr.
Dover, DE 19901
302-734-7638

Eli Richter
210 N. New St.
Smyrna, DE 19977
302-653-8373

9. Explain any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.

Individuals who report information about previously tagged horseshoe crabs receive a reward package for each crab they report. The reward package contains a letter explaining the tagging program, a certificate that lists the individual's name, information regarding the crab reported, educational fact sheets on shorebirds and horseshoe crabs, and a pewter lapel pin in the shape of a horseshoe crab. The lapel pin is an inexpensive item (\$2.50 each) that we use as incentive for individuals to report tagged crabs.

10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.

We do not release any personal information from individual tag reporters to tagging agencies or the public. The confidentiality of this information is protected by the Privacy Act of 1974.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.

The forms contain no questions of a sensitive nature.

12. Provide estimates of the hour burden of the collection of information. The statement should:

*** Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless directed to do so, agencies should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices.**

*** If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens in Item 13 of OMB Form 83-I.**

*** Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories. The cost of contracting out or paying outside parties for information collection activities should not be included here. Instead, this cost should be included in Item 14.**

Form	Number of Respondents	Number of responses annually	Average time required per response	Total annual burden hours	Total annual dollar value of burden hours
3-2310	500	1,500 (avg 1 to 40 per respondent)	10 minutes	250 hours	\$2,000 (@ \$8.00/hour)
3-2311	10	10	73 hours*	730	\$10,950 (@ \$15.00/hour)

*Average time required per response is dependent on the number of tags applied by an agency in 1 year. Agencies tag between 25 and 9,000 horseshoe crabs annually, taking between 2 to 5 minutes per crab to tag. Each agency determines the number of tags it will apply.

13. Provide an estimate of the total annual [non-hour] cost burden to respondents or recordkeepers resulting from the collection of information. (Do not include the cost of any hour burden shown in Items 12 and 14).

*** The cost estimate should be split into two components: (a) a total capital and start-up cost component (annualized over its expected useful life) and (b) a total operation and maintenance and purchase of services component. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information [including filing fees paid]. Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.**

*** If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and explain the reasons for the variance. The cost of purchasing or contracting out information collection services should be a part of this cost burden estimate. In developing cost burden estimates, agencies may consult with a sample of respondents (fewer than 10), utilize the 60-day pre-OMB submission public comment process and use existing economic or regulatory impact analysis associated with the rulemaking containing the information collection, as appropriate.**

*** Generally, estimates should not include purchases of equipment or services, or portions thereof, made: (1) prior to October 1, 1995, (2) to achieve regulatory compliance with requirements not associated with the information collection, (3) for reasons other than to provide information or keep records for the government, or (4) as part of customary and usual business or private practices.**

There is no nonhour cost burden for individuals. They can report tags via a toll-free phone number or online at the MFRO website. We provide tags to agencies that use less than 500 annually. Tagging does result in some costs to participants, depending on the number of tagged crabs they release. However, agencies would tag crabs and have the same costs if the Service did not coordinate the program.

14. Provide estimates of annualized cost to the Federal government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), and any other expense that would not have been incurred without this collection of information. Agencies also may aggregate cost estimates from Items 12, 13, and 14 in a single table.

The estimated annualized cost to the Federal Government is \$8,075 as outlined below.

Activity	Hours Required	Total Cost of Activity
Tags	0	\$700
Coordination with tagging agencies	8	\$200
Sending out tagging materials	5	\$125
Key punching paper tagging data and formatting electronic data	10	\$250
Collecting recapture reports via telephone	70	\$1,050

Key punching recapture reports and formatting electronic data	35	\$875
Printing reward packages	0	\$100
Reward Incentive (pewter crab pin)	0	\$2,750
Assembling reward packages	5	\$100
Mail costs, postage	0	\$1,500
Computer programming	12	\$300
Providing data to tagging agencies	5	\$125
TOTAL	150	\$8,075

15. Explain the reasons for any program changes or adjustments reported in Items 13 or 14 of the OMB Form 83-I.

There are no changes in Items 13 or 14.

16. For collections of information whose results will be published, outline plans for tabulation and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.

The Fish and Wildlife Service does not publish information regarding the horseshoe crab tagging program. Data are released by request to tagging agencies and fishery management agencies. The respective tagging agencies may publish portions of the tagging and recapture data to address specific research questions. We do not release any personal information from individual tag reporters to tagging agencies or the public.

17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.

We will display the expiration date for OMB approval on the forms.

18. Explain each exception to the certification statement identified in Item 19, "Certification for Paperwork Reduction Act Submissions," of OMB Form 83-I.

There are no exceptions to the certification statement.

B. Collections of Information Employing Statistical Methods

This collection does not employ statistical methods.