

**1 Supporting Statement A for
Paperwork Reduction Act Submission**

**Horseshoe Crab Tagging Program
OMB Control Number 1018-0127**

Terms of Clearance. None.

1. Explain the circumstances that make the collection of information necessary.

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 listed as threatened under the Endangered Species Act (effective January 12, 2015).

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). This tagging study has been 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 boundaries along the Atlantic Coast to determine management units.

The Commission asked the Fish and Wildlife Service (we, 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.

Since 1999, the tagging program has provided essential information to fishery managers about the life history, population size, and migratory patterns 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 provide the following information:

- Circular white tag (this is the primary tag placed on each crab):
 - tag number (to determine information on an individual crab)
 - whether or not tag was removed or found detached

We collect the above information so that 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 a tag was found without a crab. We use this information to determine mortality and tag retention.
- Date captured or found. Timing of recapture is important in determining timing of migrations and spawning frequency for individuals.
- Crab fate: Whether crab was kept or released. This information will help us determine commercial harvest impacts on crab populations.
- Reporter type: Beach comber, commercial fishermen, biomedical company or some sort of researcher. It is important to know what groups are encountering tagged crabs.
- Capture method: Hand collection or collection in some kind of fishing gear. To better protect the crab population, we need to know to which types of fishing gear crabs are most susceptible.
- Capture location: Body of water, beach or location and nearest city. We need this information so that we can determine migratory patterns and coastal population structure of crabs.
- Reporter information: Name, mailing address, and email address. We use this information to send the reward package to the person providing information about a tagged horseshoe crab.
- Comments. Miscellaneous information provided by reporter.

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

- Organization Name. Identifies which organization released the crabs so that we can provide them with related recapture information at a later date.

- Contact person name. Allows us to contact the individual responsible for providing the data to clarify information if necessary.
- Tag #: Unique number assigned to each crab, preprinted on tag.
- Sex. Necessary to determine differences between sexes in mortality, migration, etc.
- PW(mm). We use the prosomal width (width of the crab at the widest point) to determine differences in sizes of crabs along their range.
- Capture site.
- Latitude (optional).
- Longitude (optional).
- Waterbody.
- State.

We use information on the capture site, latitude, longitude, waterbody, and State to determine migratory patterns.

- Date. We use the tagging date 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].

Tags distributed before 2014 were printed with a toll-free phone number and a mailing address. Tags distributed starting in 2014 are printed with only a web address. The public may report found tags by completing an online form at the Maryland Fishery Resources Office (MRFO) website. We will advertise the availability of the online form at beaches where tagged crabs are frequently encountered and also in reward package mailings to the public. We estimate that 85 percent of the public who find older tagged crabs will report via the toll free number. We estimate that 100 percent of the public who find newer tagged crabs will report via the web page. We expect 80 percent of the tagging agencies to submit electronic files of tagging data by email and 20 percent to send completed paper datasheets to the MRFO. At this time, the results of the information collection are not available to the public on the internet. There are no immediate plans to make the information available to the public on the internet, however cooperating individuals and agencies receive information about the program. Summary reports can be provided to individuals with a request to the tagging program coordinator. Individuals who provide information on a horseshoe crab tag are sent a package containing information on the individual crab they found. Agencies that supply tagging data are sent recapture data annually from the tags that they had released.

4. Describe efforts to identify duplication.

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 Service tags in order to have a coordinated coastwide tagging effort. At this time, we are not aware of any horseshoe crab tagging programs occurring in our core area of the Atlantic coast from Georgia to Massachusetts. We encourage new tagging programs to participate in the 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, describe the methods used to minimize burden.

The collection does not significantly impact small entities.

6. Describe the consequence to Federal program or policy activities if the collection were 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. Since the program is conducted on an occasional level with optional reporting, it is not possible to conduct it less frequently.

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.

There are no circumstances that require us to collect the information in a manner inconsistent with OMB guidelines.

8. If applicable, provide 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 (or in response to a PRA statement) and describe actions taken by the agency in response to these comments.

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.

On February 10, 2015, we published in the *Federal Register* (80 FR 7490) a notice of our intent to request that OMB renew approval for this information collection. In that notice, we solicited comments for 60 days, ending on April 13, 2015. We did not receive any comments in response to that notice.

Nine individuals were contacted via email and asked the following questions:

- 1) Do you feel the collection of horseshoe crab information is necessary and will have practical utility?
- 2) How long does it take you to report information about a horseshoe tag to us?
- 3) Do you have any ideas about how we could improve the quality, utility, or clarity of the information collected about horseshoe crab tags?
- 4) Do you have any ideas about how we could minimize the burden of reporting on people reporting horseshoe crab tags?

Responses were received from four individuals:

John Christoffersen, provo352@gmail.com, responded as follows:

1. Yes
2. 11 minutes
3. Possibly change the tag color to bright orange. I almost missed seeing the white one.
4. No. It was quite simple.

Joe Ager, joeager65@gmail.com, responded as follows:

1. Yes. I have been fascinated by horseshoe crabs since I was a kid. I know that collection of their blood is useful in medical testing and research. I think it is important to maintain and research their population and migration patterns.
2. 3 to 4 minutes
3. I have no doubt that you are the experts in this area and are doing the best job possible. The tags are clearly visible with easy information and instructions.
4. I don't really feel it is a burden to report the tags. The program seems fine the way it is.

Lucy Berry, lueber60@gmail.com, responded as follows:

1. Yes
2. Approximately 3 minutes
3. No
4. Not a burden

Julie McCall, jumccall@gmail.com, responded as follows:

I don't know exactly what information the tagging program set out to collect, but it is certainly interesting to find a tag and find out where the tag was put on the crab. I have not had any problem reporting the tags I have found. I think it is easier to just phone in the information than to use the

website, but that may be just because I'm a pretty low-tech person! If I call and leave a message, I usually get a return call within a couple of days. I have never felt that it was a burden to report the tags. Most of the people I know think that it is exciting to find a tag. I am the crab surveyor for Broadkill Beach, DE, which is where I live, and I do crab tagging each year. I think it would be great if there were a place that we could find out more information about the tagged crabs that have been found from year to year.

Based on these comments, we increased the completion time for the recapture report to 10 minutes to allow time for gathering the information and entering it online. Recaptures reported via telephone may take less time.

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. It is distributed only to first time reporters.

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

We do not provide any assurance of confidentiality.

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.

We do not ask questions of a sensitive nature.

12. Provide estimates of the hour burden of the collection of information.

We estimate that we will receive 2,768 responses totaling 2,168 annual burden hours associated with this information collection:

Activity	Number of Respondents	Number of annual responses	Average time required per response	Total annual burden hours
FWS Form 3-2310 – Resighting Form	1,160	2,750	10 minutes	458
FWS Form 3-2311 – tagging report	18	18	95 hours*	1,710
Totals	1,178	2,768		2,168

*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.

We estimate the dollar value of the annual burden hours to be \$73,311 (rounded). We used Bureau of Labor Statistics News Release USDL-15-036, March 11, 2015 to estimate wages and calculate benefits as follows:

- Individuals. Table 1 lists the average wage for all workers as \$22.70. We multiplied this rate by 1.4 to account for benefits, resulting in an hourly cost factor of \$31.78.
- Private sector. Table 5 lists the hourly wage for all workers as \$21.72. We multiplied this rate by 1.4 to account for benefits (\$30.41).
- States/tribal/local governments. Table 3 lists the hourly rate for all State workers as \$28.17. We multiplied this rate by 1.5 to account for benefits (\$42.26).

Respondent	No of Responses	Time per response	Total Annual Burden Hours*	\$ Value of Burden Hours	Total \$ Value of Annual Burden Hours
Individuals (Form 3-2310)	2,750	10 min	458	\$31.78	\$ 14,555.24
Private sector (Form 3-2311)	12	95 hrs	1,140	\$30.41	34,667.40
State/Local/Tribal Govts (Form 3-2311)	6	95 hrs	570	\$42.26	24,088.20
Total	2,768		2,168		\$73,310.84

13. Provide an estimate of the total annual [nonhour] cost burden to respondents or recordkeepers resulting from the collection of information.

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.

14. Provide estimates of annualized costs to the Federal Government.

We estimate the total annual cost to the Federal Government to be \$42,096 as outlined below.

Salary Costs

Federal Staff	Activity	Hourly Rate	Hourly Rate (including Benefits)*	Hours	Total Cost
GS-11/7 Fishery Biologist	<ul style="list-style-type: none"> • Coordinate with tagging agencies • Send out tagging materials • Key punch paper tagging data and recapture reports and format electronic data • Collect recapture reports via telephone • Assemble reward packages • Computer programming • Data management • Provide data to tagging agencies 	\$36.64	\$54.96	300	\$16,488
GS-12/1 Biological Technician	<ul style="list-style-type: none"> • Collect recapture reports via telephone • Key punch paper tagging data and recapture reports and format electronic data 	\$12.15	\$18.23	480	8,750
					\$25,238

*For salary costs, we used the Office of Personnel Management Salary Table 2015-DCB to determine the hourly wage and multiplied by 1.5 to account for benefits. We calculated benefits in accordance with BLS news release USDL-14-2208.

Nonsalary Costs

Activity	Cost*
Tags	\$ 4,270
Printing reward packages	900
Reward Incentive (pewter crab pin)	5,500

Mail costs, postage	\$ 6,188
TOTAL	\$ 16,858

*rounded

We have limited the distribution of pewter reward pins to recapturers to one per household. If recapturers prefer, certificates can be emailed instead of postal mailing. These cost saving measures have reduced the amount of funding necessary for tags, rewards, and mailing costs.

15. Explain the reasons for any program changes or adjustments in hour or cost burden.

We are reporting 2,768 annual responses totaling 2,168 annual burden hours for this information collection. This is an adjustment net increase of 500 annual responses and 270 burden hours from our last submission. Demand for horseshoe crabs increased dramatically from 2008 to 2013. In 2013, we, in cooperation with ASMFC, capped the number of tags distributed at 22,000 per year. .

16. For collections of information whose results will be published, outline plans for tabulation and publication.

We do not publish information regarding the horseshoe crab tagging program. Upon request, we release data 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.

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 OMB control number and expiration date on the forms.

18. Explain each exception to the certification statement.

There are no exceptions to the certification statement.