

1 Supporting Statement B for Paperwork Reduction Act Submission

American Woodcock Singing Ground Survey OMB Control Number 1018-0019

- 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 government units, households, or persons) in the universe covered by the collection and in the corresponding sample must be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection has been conducted previously, include the actual response rate achieved.**

The respondent universe is the number of 10' blocks in the northeastern United States and South-Eastern Canada. From 1965-1970, these blocks were enumerated and a random sample of 1,500 were selected from the woodcock range in the northeastern United States and southeastern Canada. A roadside survey route was placed in each selected 10' block and each route represents roughly 750 mi² of land area. The expected response rate is approximately 80 percent because different circumstances (e.g., weather and staffing shortages at State agencies) prevent all requested routes from being run each year. Actual response rates the past couple years have been about 89 percent. To improve efficiency of the survey, "constant-zero" routes, routes where woodcock have not been heard for 2 consecutive years, are run once every 5 years instead of every year. Each year, for the past 3 years, about 33% of the routes have been in a constant-zero status.

- 2. Describe the procedures for the collection of information including:**
 - * Statistical methodology for stratification and sample selection,**
 - * Estimation procedure,**
 - * Degree of accuracy needed for the purpose described in the justification,**
 - * Unusual problems requiring specialized sampling procedures, and**
 - * Any use of periodic (less frequent than annual) data collection cycles to reduce burden.**

For descriptions of survey design and statistical methods for analyzing data, see:

- Cooper, T.R., and R.D. Rau. 2014. American woodcock population status, 2014. U.S. Fish and Wildlife Service, Laurel, Maryland. 16 pp. Available on-line at: <http://www.fws.gov/migratorybirds/NewReportsPublications/PopulationStatus.html>
- Sauer, J.R., W.A. Link, W.L. Kendall, J.R. Kelley, and D.K. Niven. 2008. A hierarchical model for estimating change in American woodcock populations. *Journal of Wildlife Management*, 72 (1):204-214.

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

We use phone and email contacts and a system of State and Provincial coordinators to maximize timely response. In addition, we develop formal and nonformal participation assessment reports, followup with coordinators as well as individual observers, and include concise directions and checklists for observers that accompany FWS Form 3-156. Our intention is to establish a snapshot of current participation levels, that will enable the Singing Ground Survey (SGS) coordination team to identify the strengths and weaknesses of survey coordination, identify challenges and obstacles to survey participation, and efficiently allocate resources to strengthen survey participation. The foundation of the survey is the strength of our relationships with cooperators.

- 4. Describe any tests of procedures or methods to be undertaken. Testing is encouraged as an effective means of refining collections of information to minimize burden and improve utility. Tests must be approved if they call for answers to identical questions from 10 or more respondents. A proposed test or set of tests may be submitted for approval separately or in combination with the main collection of information.**

We have improved and refined the Singing Ground Survey methodology and analytical techniques over the last 46 years. We are constantly evaluating methods used to analyze survey data. While some improvements in precision, accuracy, and general results are expected, it is unlikely that the improvements will be substantial enough to allow a reduction in survey coverage since the current sample size maximizes precision in the data. In the future, the value of the SGS may extend beyond the existing population indices derived from the survey. Additional research has begun to estimate detection probabilities, from methods such as repeated counts and distance sampling, which might allow for the estimation of population size from SGS count data. Population estimates could then be incorporated into the framework for developing a transparent harvest strategy for woodcock, used to develop improved habitat conservation goals, and for other purposes not yet envisioned.

- 5. Provide the name and telephone number of individuals consulted on 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.**

Statistical consultants:

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Persons collecting and analyzing data:

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