

Supporting Statement B for Paperwork Reduction Act Submissions
North American Breeding Bird Survey
OMB Control Number: 1028-0079
Current Expiration Date: 5/31/2008
Terms of Clearance: None

B. Collection of Information Employing Statistical Methods

The agency should be prepared to justify its decision not to use statistical methods in any case where such methods might reduce burden or improve accuracy of results. When Item 17 on the OMB Form 83-I is checked "Yes," the following documentation should be included in the Supporting Statement to the extent that it applies to the methods proposed.

- 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 are to 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 had been conducted previously, include the actual response rate achieved during the last collection.**

Statistical methods are not used in the selection of respondents. Qualified participants (i.e. individuals with the ability to identify all birds in an area by sight and vocalizations) are found via word-of-mouth and limited advertising. In 2006 for example, 2,039 individuals volunteered to participate and 1,621 individuals actually responded. They collected avian population data from 2,510 U.S. BBS routes.

- 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.**

Routes are established in each State using a stratified random design where degree blocks form the basic stratification unit. Within each degree block, route start points and directions are randomly chosen. Survey participants are not randomly chosen; only individuals skilled at vocal and aural bird identification may participate.

Fifty 3-minute point counts are conducted along each Breeding Bird Survey route. All birds seen within a 0.25-mile radius and all birds heard are identified as to species and counted. These counts provide an index of abundance that represents a portion of the individuals present at each stop. These indices are then analyzed to give population trend estimates. Trend estimates are developed using an estimating equation procedure (Link, W.A., and J.R. Sauer. 1994. Estimating equations estimates of trend. Bird Populations 2:23-32).

There can be substantial variation in the identification and counting skills of BBS participants.

Observer bias is controlled for by using observers as co-variables within the analyses (Peterjohn, B.G., J.R. Sauer, and C.S. Robbins. 1995. Population trends from the North American Breeding Bird Survey. 1995. Pp. 3-39, *in Ecology and Management of Neotropical Birds*. Oxford University Press, Inc.).

3. **Describe methods to maximize response rates and to deal with issues of non-response. 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.**

Respondents voluntarily decide to participate and report; response rates remain relatively constant between years in the short run. However participation has increased over the last 30 years and regional population estimates are weighted by route density.

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.**

All new participants in the BBS are required to complete a BBS Methodology training program and successfully complete a 20-question review to help insure consistency in data collection practices. The 20 questions are randomly chosen from a set of 33 possible questions. The test questions are attached (BBS Methodology Training Review Questions). There are four sections to the review. Five questions are asked in each section. The review is pass/fail. Participant may re-take review as necessary. Each new participant is required to pass the review prior to participating. The training and review takes approximately 30 - 40 minutes to complete. Approximately 150 participants complete the training and review each year.

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.**

Individuals involved with the data analysis, collection, and design.

- a. Keith Pardieck, USGS Patuxent Wildlife Research Center, 12100 Beech Forest Road, Laurel, MD 20708-4038; 301-497-5843
- b. John R. Sauer, USGS Patuxent Wildlife Research Center, 12100 Beech Forest Road, Laurel, MD 20708-4038; 301-497-5662
- c. David Ziolkowski, Jr., USGS Patuxent Wildlife Research Center, 12100 Beech Forest Road, Laurel, MD 20708-4038; 301-497-5753
- d. Connie Downes, National Wildlife Research Centre, Canadian Wildlife Service, Ottawa, Ontario, K1A 0H3; 613-998-0490