

## USGS Breeding Bird Survey (BBS)

**Reporting Office: Seney NWR**

**Species: Many**

### JUSTIFICATION AND OBJECTIVES

The Breeding Bird Survey (BBS) is a long-term, large-scale, international avian monitoring program initiated in 1966 to track the status and trends of North American bird populations. The USGS Patuxent Wildlife Research Center and the Canadian Wildlife Service, National Wildlife Research Center jointly coordinate the BBS program.

### How are BBS data used?

1. The U.S. Fish and Wildlife Service, Canadian Wildlife Service, and Partners in Flight all use BBS trends along with other indicators to assess bird conservation priorities.
  2. BBS data were instrumental in focusing research and management action on neotropical migrant species in the late 1980s, and on grassland species in the mid-1990s.
  3. State Natural Heritage programs and Breeding Bird Atlas projects often utilize BBS data to enrich their databases.
  4. Educators often use BBS data as a tool to teach biological, statistical and GIS concepts.
  5. More than 450 scientific publications have relied heavily, if not entirely, on BBS data.
- The entire BBS bibliography is viewable in PDF format or in field-searchable web format.

This survey (Route #49-906) has been run at Seney NWR since 1992. Route 49-906 (Seney NWR) is a non-randomly established BBS route. A refuge representative contacted the BBS office and asked to establish a BBS route within the refuge boundaries. Normally, a stratified random process is used to establish routes throughout a state, the stratification unit being a one-degree lat/long block.

### STATISTICAL CONSIDERATIONS

See USGS site for more information: <https://www.pwrc.usgs.gov/bbs/about/>

### DATA COLLECTION PROCEDURES

**Data forms and instructions arrive each year at the refuge well before the survey**, which is usually conducted in early June. Each survey route is 24.5 miles long with stops at 0.5-mile intervals. At each stop, a 3-minute point count is conducted. During the count, every bird seen or heard within a 0.25-mile radius is recorded. Surveys start one-half hour before local sunrise and take about 5 hours to complete.

**DATA ANALYSIS AND REPORTING**

Once analyzed, BBS data provide an index of population abundance that can be used to estimate population trends and relative abundances at various geographic scales. Trend estimates for more than 420 bird species and all raw data are currently available via the BBS web site.

**MANAGEMENT ACTION THRESHOLDS**

None.

**DATA STORAGE PROCEDURES**

The USGS maintain the overall database, which can be queried for Seney NWR.

**SPECIAL CONSIDERATION**

See instruction packet from USGS re: safety, reporting, etc.

**LITERATURE CITED**

See: <https://www.pwrc.usgs.gov/bbs/index.cfm?CFID=9902019&CFTOKEN=20448893>

**EFFORT AND COSTS**

This 1-day survey takes approximately 6 hr per person to collect data and a total of 4 hr to prepare and report data = 10 hr. Fuel costs are approximately \$50.