



## Patuxent Wildlife Research Center North American Breeding Bird Survey (BBS)

*In the mid-twentieth century, the success of DDT as a pesticide ushered in a new era of synthetic chemical pest control. As pesticide use grew, concerns about their effects on wildlife began to surface, as epitomized by Rachel Carson in *SILENT SPRING*. Local studies had attributed some bird kills to pesticides, but it was unclear how, or if, bird populations were being affected at regional or national levels. In 1965, responding to this concern, Chandler Robbins and colleagues at the Patuxent Wildlife Research Center developed the North American Breeding Bird Survey to monitor bird populations over large geographic areas.*

### What is the BBS?

The BBS is a long-term, continental avian monitoring program designed to track the status and trends of North American bird populations. The USGS Patuxent Wildlife Research Center and Canadian Wildlife Service jointly coordinate the BBS.



### How does the BBS work?

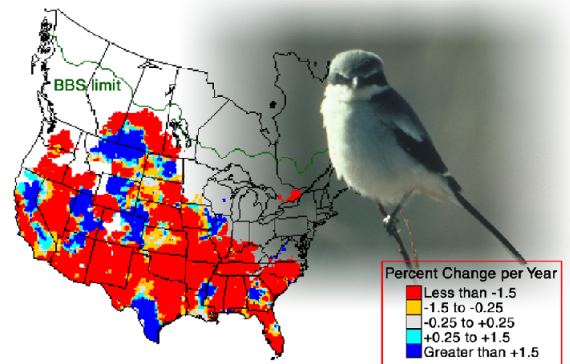
Each year during the height of the avian breeding season (in June for most of the U.S. and Canada), participants skilled in avian identification collect bird population data along roadside survey routes.

- 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 within a 0.25-mile radius or heard is recorded.
- Surveys start one-half hour before local sunrise and take about 5 hours to complete.
- Over 4100 survey routes are located across continental U.S. and southern Canada.

### How are the data used?

BBS data provide an index of population abundance, that can be used to estimate population trends and relative abundances at various geographic scales. Declining population trends act as an early warning system to galvanize research and management action to determine causes of avian declines and reverse them before populations reach critically low levels.

- Trend estimates provided for over 420 bird species via web.
- Raw and summarized data provided for over 650 bird species via web.
- The U.S. Fish and Wildlife Service and Partners in Flight use BBS trends along with other indicators to assess species management priorities.
- 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.
- More than 270 scientific publications have relied heavily on BBS data.
- Breeding Bird Atlas projects and State Natural Heritage programs utilize BBS data to enrich their species databases.



Loggerhead Shrike trend map, 1966 - 1996

### Breakfast with the birds – participants needed!

Dedicating a morning, or two, each year to the BBS is a great way to give a little back to the birds by insuring that wildlife managers and researchers have the information needed to manage bird populations effectively. The BBS is always looking for highly skilled birders to join the team:

- We provide the data sheets, maps, and instructions.
- You provide the vehicle, birding skills, and time.
- Submit your findings via the BBS website.
- National and local coordinators available to address questions.

