



Jug Bay Wetlands Sanctuary  
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## BREEDING SONGBIRD STUDY (MAPS)

### **Purpose:**

To determine trends in the survivorship of breeding songbirds and to estimate their breeding productivity by capturing birds in mist nets. Our study has three objectives:

- To estimate annual survivorship of adult songbirds through banding with USFWS bands.
- To determine annual post-fledging productivity by calculating the ratio of young to adult birds captured in mist nets.
- To estimate adult population levels by comparing the numbers of adult birds captured each breeding season.

Our data are shared with the Institute for Bird Populations, the research group that coordinates the Monitoring Avian Productivity and Survivorship program (MAPS). MAPS is a continent-wide effort to assess populations trends in breeding songbirds.

### **Background:**

The populations of many North American songbirds are declining due mostly to habitat fragmentation in North America and to forest destruction in the tropics where many spend the winter. Many government agencies and private organizations are examining these declines and are recommending actions to reverse them. The Sanctuary coordinates several studies that gather information about songbirds and their habitats. In 1990, we initiated our "MAPS" study. We use mist nets set in a permanent study plot to capture songbirds which we identify, age, and band. To date, we've banded over 2,500 birds. Special attention is devoted to determining the age and sex of all captured birds. Results from the Jug Bay study are combined with data from other coastal banding stations to determine population trends over a broad region of the Southeast United States. The most abundant species in the Sanctuary are Red-eyed Vireos, Acadian Flycatchers, Wood Thrushes, Ovenbirds, Northern Cardinals, and Carolina Wrens.

### **Methods and Duties:**

14 mist nets are opened from 6:00 until 11:00 a.m. approximately every ten days during the period from late May to early August. Volunteers will learn to remove birds from the nets, make standard measurements, and place a band on the bird's leg. We often need help recording data on banding sheets, holding birds in the hand during processing, and with closing the nets at the end of the day. Volunteers can also help enter raw data onto computerized spreadsheets.

Volunteers should arrive 10 minutes before a net round check, meeting at the bench at the junction of Otter Point Trail and Railroad Bed Trail (do not walk into study area). Net round checks begin at the same location every 50 minutes; 7:00, 7:50, 8:40, 9:30, 10:20, and 11:10. Participants hike from net to net, covering about one mile every time we travel the complete mist net circuit. Volunteers should use the rest room before going into the field! Insect repellent is recommended because biting deer flies are abundant. Check for ticks at the end of the day. Bring a water bottle, binoculars and a field guide.

### **Skills and Interest required:**

- Early risers welcome!
- Strong interest in learning about bird population ecology and identification in the hand.
- Willingness to hike through woods with biting insects.
- Knowledge of common songbird species is helpful but not necessary

### **Training:**

Volunteers participate under the guidance of licensed bird banders.