

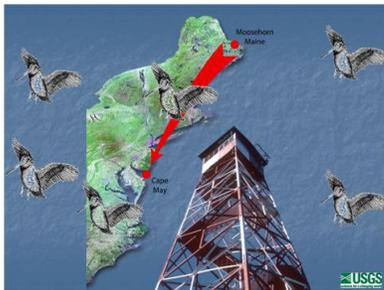
Patuxent Wildlife Research Center

Survival of American Woodcock During Fall Migration



The Challenge: Research goals of this project are to: determine survival rates of American woodcock (*Scolopax minor*) during fall migration; determine survival in relation to weather along the migration route; determine age and sex-specific timing of migration and passage of woodcock through the Mid-Atlantic States. Analyses are ongoing to determine timing of passage of birds across Cape May, NJ. The ultimate goal is to provide information to be included in specific management models for declining migratory bird populations.

The Science: The American woodcock is a popular game bird in much of eastern North America. The woodcock population declined between 1968-2000 at an annual rate of 2.3% in the Eastern region and 1.6% in the Central region. Estimated annual survival of woodcock banded in the Eastern region was estimated to be 0.354 for the period 1967-74. Estimates for the migration period, a period when substantial mortality could occur are unknown. Few woodcock are banded annually. The annual migration of woodcock from the breeding grounds to their wintering areas has been of interest to biologists and hunters. Migration corridors along the Atlantic coast, such as, Cape May, NJ and Cape Charles, VA are well known. However, there is little specific information on how long migration takes. Radio telemetry is being used to determine how long local birds remain on breeding areas, relate weather variables to the timing of migration, and estimate survival of woodcock during migration from the Northeast to the Mid-Atlantic States. Woodcocks will be radio-marked on three sites in Maine: Moosehorn National Wildlife Refuge (USFWS), the Gene Letourneau Wildlife Management Area (Maine Department of Inland Fisheries and Wildlife) and on commercial timberland owned by International Paper Co. Passage of birds will be monitored from 3 tower sites along the Delaware Bay shore of New Jersey, an inland site in Pennsylvania, and on the Eastern Shore of Virginia.



The Future: During 2001 and 2002, 240 woodcock were equipped with transmitters. Data on timing of departures from breeding areas and weather information has been collated. Data from tapes collected at monitoring towers along Delaware Bay have been digitized and analyzed by a computer program. After data are verified they will be summarized and analyzed. Recording systems were maintained through December each year and woodcock migration passage recorded. By furthering the body of scientific knowledge of woodcock migration behavior, the results provide critical data for management of an important species of federal and state concern.