

American Woodcock

Scolopax minor

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DESCRIPTION

Taxonomy and Basic Description

The commonly accepted scientific name of the American woodcock is *Scolopax minor* (ITIS 2001) as described by Gmelin in 1789. Common names for woodcock include timberdoodle, bogsucker and wood snipe. They are alternately characterized as marsh birds, shore birds or upland ground birds.



The woodcock is a mottled brown bird, weighing from 125 to 240 grams (4.4 to 8.5 oz.) (Owen and Krohn 1973) and averaging approximately 28 cm (11 inches) in total length (eNature 2004). The unusual physical appearance of the woodcock is characterized by the bird's buff-colored body, long beak, bulging eyes, and short wings. The diet of woodcock consists primarily of earthworms, although other invertebrates and some vegetative matter are also consumed. Woodcock foraging for earthworms is aided by a prehensile beak, which allows woodcock to grasp earthworms and extract them from below the soil surface (Krementz and Jackson 1999).

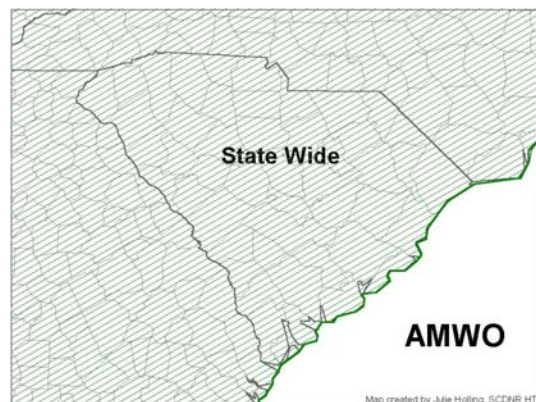
Status

The U.S. Shorebird Conservation Plan (USSCP) lists woodcock as a Species of High Concern and as a species known or thought to be declining (Brown et al. 2004). Woodcock are listed by the U.S. Fish and Wildlife Service as a Game Bird Below Desired Condition (USFWS 2004). They are listed on the Audubon Watchlist "yellow list" of those species that are in slow decline and of national conservation concern (National Audubon Society 2004). Woodcock are identified as secure (G5) globally and apparently secure (S4) in South Carolina (NatureServe 2005).

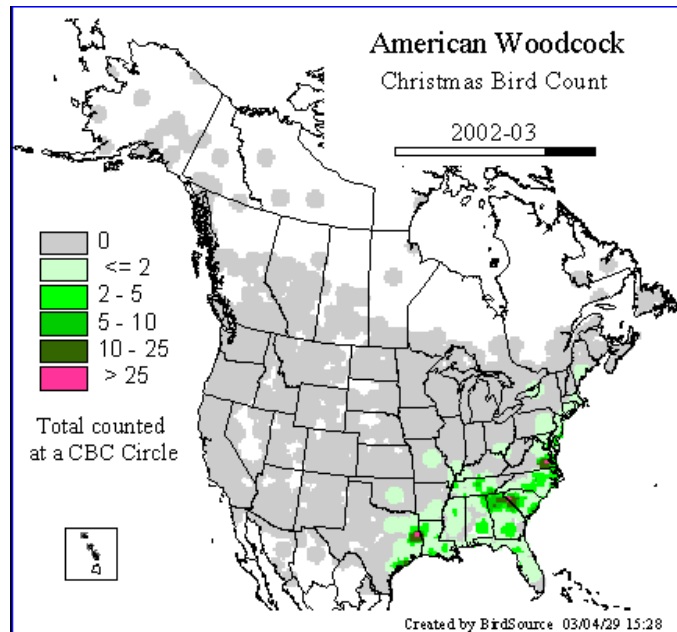
POPULATION DISTRIBUTION AND SIZE

Woodcock are managed on the basis of two regions or populations, eastern and central, as recommended by Owen et al. (1977). Singing ground surveys from the U.S. Fish and Wildlife Service indicate a significant long-term decline of 2.1 percent annually for woodcock in the eastern region (Kelley 2004).

The range of American woodcock extends from the Maritime Provinces in southern Canada westward to southeastern Manitoba and southward into eastern Texas. All states east of this line are within the



species' range. The principal breeding range includes New England and the Lake States, although limited breeding occurs throughout almost the entire range (Roberts 1989). The estimated population of woodcock in North America is approximately 5 million individuals (Brown et al. 2004). North American Breeding Bird Survey (BBS) data indicate a 6.8 percent annual declining trend in the U.S. between the years 1980 and 2003 (Sauer et al. 2004). Christmas Bird Count data indicate no significant declining trend for South Carolina and North America (National Audubon Society 2004a). Christmas Bird Count data also reveal higher wintering populations of woodcock in the lower coastal plain and piedmont than in the upper coastal plain of the state. Wintering woodcock numbers peak between mid-December and mid-February in South Carolina coastal plain habitats (Pace and Wood 1979).



HABITAT AND NATURAL COMMUNITY REQUIREMENTS

Unlike most other shorebirds and marsh birds, woodcock are a forest-dwelling species. Woodcock are often associated with forested wetlands. In the southeast, alluvial floodplains with a brushy forest understory are apparently a preferred habitat type. Swamp privet (*Forestiera acuminata*), holly (*Ilex* spp.), switch cane (*Arundinaria gigantea*), honeysuckle (*Lonicera japonica*), peppervine (*Ampelopsis arborea*), trumpet creeper (*Campsis radicans*), greenbriar (*Smilax* spp.) and grapes (*Vitis* spp.) have been identified as important understory species (Owen et al. 1977; Roberts 1989). The composition of the tree overstory appears unimportant (Owen et al. 1977).

Old fields, croplands, pasturelands, wet seeps and damp thickets also provide important habitat for woodcock on wintering grounds. Old fields and other early successional habitat types are often used as nocturnal habitat, and should be located within 230 m (251 yards) of diurnal habitats (Berdeen and Kremetz 1998). While a high density of plant stems is preferred by woodcock, open ground underneath the canopy is a necessity to provide easy access to worms and other invertebrates in the ground litter (Roberts 1989; Kremetz and Jackson 1999).

CHALLENGES

Declines in woodcock populations are currently unexplained, but may be linked to natural forest succession within the breeding range of the species. Bottomland hardwood loss due to reservoir construction, drainage and clearing for agricultural uses and urbanization has negatively impacted the availability of winter habitat for woodcock in the southeast (Straw et al. 1994; Kremetz and Jackson 1999).

CONSERVATION ACCOMPLISHMENTS

Although little research on woodcock has been conducted in the past 20 years in South Carolina, research projects have been completed on woodcock habitat selection, food habitat and migration chronology. Woodcock hunter surveys were conducted in 1983 and 1985 to provide information on hunter effort, harvest and woodcock age ratios. The Harvest Information Program (HIP) has been fully implemented nationwide and allows a better assessment of woodcock hunter numbers and harvest in South Carolina. Comprehensive hunter harvest surveys were conducted for all species in South Carolina, including woodcock, in 2000 and 2003. Since 1997, woodcock flushing rates and harvest by South Carolina quail hunters have been tracked through annual quail and rabbit hunter surveys.

Forestry Best Management Practices (BMPs) now strongly encourage the conservation of Streamside Management Zones (SMZs), which persist as woodcock wintering habitat following logging operations. Additionally, recent land acquisitions, notably Wee Tee State Forest and Bonneau Ferry Wildlife Management Area, have preserved significant acreages of prime woodcock wintering areas in South Carolina. Finally, an American Woodcock Management Plan was completed by the U.S. Fish and Wildlife Service in 1990, and a revision is due in the near future.

CONSERVATION RECOMMENDATIONS

- Focus habitat protection efforts (acquisition and easements) on significant tracts of bottomland hardwoods and isolated forested wetlands to preserve woodcock wintering areas in South Carolina.
- Implement management practices that promote habitat diversity, like timber harvest and prescribed burning on SCDNR lands with high potential to provide wintering habitat for woodcock.
- Maintain early successional upland habitat associated with wetlands conservation efforts (acquisition, easements) to provide roosting habitat for woodcock. Early successional habitats can be maintained through prescribed burning.
- Using remote imagery, identify potential areas of woodcock wintering habitat to guide habitat conservation efforts.
- Identify winter microhabitat requirements for woodcock in South Carolina.
- Assess population densities of woodcock on wintering grounds in South Carolina and the state's contribution to range-wide wintering populations.
- Increase the number of yearly Christmas Bird Count (CBC) routes.
- Monitor habitat loss through mapping of landscape-level habitat changes.
- Continue hunter surveys as an assessment of woodcock hunting effort and harvest.
- Insure that upland buffers are included in the Wetlands Reserve Program (WRP) and similar programs, and that proper management practices are recommended and implemented to provide quality woodcock habitat.
- Provide woodcock habitat recommendations to natural resource agencies with management responsibility for extensive acreages of woodcock habitat.

- Provide woodcock habitat recommendations to private landowners through on-site technical assistance, fact sheets and management bulletins.
- Work with USFWS to identify woodcock hunters in South Carolina and increase hunter participation in the woodcock parts collection survey.
- Partner with other agencies and organizations such as the US Forest Service, US Fish and Wildlife Service, Clemson University and National Audubon Society (South Carolina Chapter) in order to survey for woodcock

MEASURES OF SUCCESS

Following identification of woodcock winter habitat requirements in South Carolina, experimental habitat manipulations should be conducted to test habitat models. Woodcock flushing rates by rabbit hunters and quail hunters should continue to be monitored through the statewide Rabbit Hunter Survey and Quail Hunter Survey. Christmas Bird Count data should be utilized as a statewide index of wintering woodcock populations and trends evaluated periodically to determine changes in winter population status. As opportunities arise, directed research should examine changes in wintering woodcock densities, which occur as a result of incidental or intentional habitat manipulation. Woodcock winter habitat changes should be monitored through remote imagery and mapping.

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