## American Woodcock

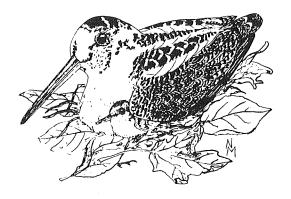
Scolopax minor

The American Woodcock, an eastern Nearctic species, breeds from southern Canada to Florida and as far west as the eastern edge of the Great Plains. Its winter range encompasses southern New Jersey and northern Florida as well as the Gulf Coast states, but avoids high Appalachian Mountain areas. Considered an upland gamebird throughout its range, the American Woodcock has been the subject of innumerable studies (see Dwyer et al. 1979). Woodcock were formerly more numerous in the Northeast than they are now, but extensive hunting and habitat change in the late nineteenth century reduced their numbers drastically by about 1900 (Sheldon 1971). Since then the species has been managed by various federal and state game agencies, though without gaining its former numbers. Censuses indicate that woodcock population densities in Vermont and in the adjoining states of New York and Massachusetts are relatively high, though not as high as those of states and provinces north and east of Vermont (Owen et al. 1977).

The species is widely distributed in Vermont, occurring wherever suitable habitat is present. Belying their status as shorebirds, the American Woodcock breeds in open areas, nests in old fields or pole-stage timber, and feeds wherever there are earthworms and suitable cover. These secretive birds frequently use alder and willow thickets as diurnal cover.

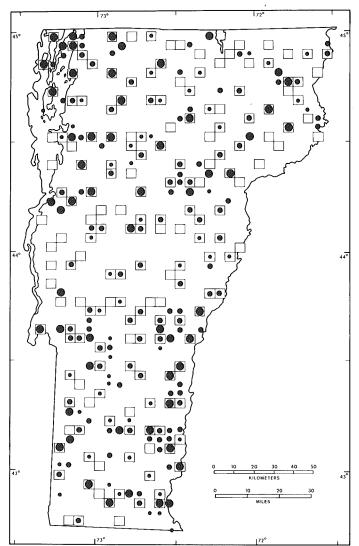
The American Woodcock is an early spring migrant, returning as soon as the spring thaw has progressed enough for the species to obtain its primary food—earthworms—for which it probes with its long prehensile bill. Woodcock generally arrive at lower elevations in mid March (March 7 is an early date) and considerably later at higher elevations, where snow and ice linger.

The males, which arrive first, perform ground and aerial courtship displays on "singing grounds" at dusk and dawn to attract receptive females. The singing ground



may be any opening, o.1 ha (0.25 a) or larger, in which tree cover remains low enough to permit the male to perform his aerial flight. Old farmlands reverting to forest, a common feature in Vermont, are optimum habitat in the Northeast (Owen et al. 1977). The male's courtship displays, which usually last from half an hour to an hour, may go on all night when the moon is full. Males perform individual acrobatic flights of a minute or more, accompanied by wing twittering (produced by the outer primary flight feathers) and chirping; this behavior, in turn, is followed by a ground display during which the male repeatedly utters nasal nighthawk-like *peent* calls (Sheldon 1971). Observation of these displays was the most widely used method of detecting woodcock in Atlas Project blocks.

Females attracted to the males' performance may or may not nest near the singing ground. The nest is a shallow depression in the ground among dead leaves, where the bird's protective coloration provides excellent camouflage. A clutch usually contains 4 eggs, mottled with brown or gray. Nesting takes place in April (frequently before the last snowfall) and early May. The eggs, relatively large considering the size of the bird, are incubated for about 21 days by the tightly sitting female, who may allow observers to advance within inches without flushing. The precocial young leave the nest within a day of hatching, and are indistinguishable in the field from adults by 4 weeks of age (Sheldon 1971). Vermont records for young range from May 15 to July 6 (10 records). Vermont Atlas Project confir-



## No. of priority blocks in which recorded TOTAL 122 (68%)

Possible breeding: 34 (28% of total)
Probable breeding: 53 (43% of total)
Confirmed breeding: 35 (29% of total)

## Physiographic regions in which recorded

	no. of priority blocks	% of region's priority blocks	% of species' total priority blocks
Champlain Lowlands	2.2	71	18.0
Green Mountains	36	67	29.5
North Central	10	53	8,0
Northeast Highlands	8	50	6.5
East Central	13	68	0.11
Taconic Mountains	11	69	9.0
Eastern Foothills	2.2	92	18.0

mations were almost evenly divided between fledglings (40%) and nests with eggs (38%).

Woodcock are crepuscular throughout the year, typically walking or flying from cover to open fields at dusk to feed, roosting in the evening in fields, and feeding in forests during the day (M. Scott, Vt. Fish and Game Dept., pers. comm.). Although extremely hardy, they seldom attempt to overwinter. The last migrants depart from Vermont near the end of October, when the frozen ground prevents them from securing earthworms.

Recent winters have been severe in the southern Atlantic states that provide the main wintering ground of Vermont wood-

cock. Extremely low temperatures and hard, frozen ground are lethal for American Woodcock, and cold, wet springs have hurt birds on the breeding grounds in the Northeast. The U.S. Fish and Wildlife Service's annual singing ground survey of breeding woodcock indicated a 20% decline in 1982 from 1981 levels.

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