

## NORTHERN WATERTHRUSH

*Seiurus noveboracensis*



A distinctively boreal bird, the Northern Waterthrush nears the southern limits of its breeding range in Pennsylvania. It breeds in forested Alaska and Canada, entering the northern United States in moist highland forests and shrubby wetlands (AOU 1983).

The bird's cheery song contrasts sharply with the mood of the damp bogs and swampy thickets it inhabits. It prefers wet vegetation—mossy bogs, streamside thickets, lake shores, or shrubby swamps (Todd 1940; Bent 1953; Hall 1983). Hemlock, rhododendron, alder, willow, and, occasionally, spruce predominate in the poorly drained areas that the species calls home. Sometimes Northern and the Louisiana waterthrushes both nest near slow-moving streams. Where they overlap, the two species are not mutually territorial (Craig 1984). The Northern Waterthrush usually lives near stagnant, not fast-moving, water (Bent 1953).

Hard to flush, the female is very difficult to find when incubating (Todd 1940; Harrison 1975). She hides the nest on or near the ground in tree roots, a decaying stump, or a moist bank. Almost all nests found in the Pocono swamps were in the tangled roots of upturned trees (Bent 1953; Harrison 1975).

Older references characterized the Northern Waterthrush as a "Canadian Life Zone" bird, rarely far from its swampy haunts (Todd 1940; Poole 1964). It was reported from the mountains as far south as Maryland and West Virginia but was most common in Pennsylvania's northeast and north-

west. The species was particularly well documented in the Pocono wetlands, where it was locally common (Burleigh 1927; Poole unpub. ms.). In the northwestern counties, it was found in some wetlands with the Louisiana Waterthrush; the Northern preferred swamp and the Louisiana chose feeder streams (Todd 1940). As a direct result of the logging of large virgin conifers early this century, the species disappeared from Bear Meadows and apparently was replaced by the Louisiana Waterthrush (Todd 1940).

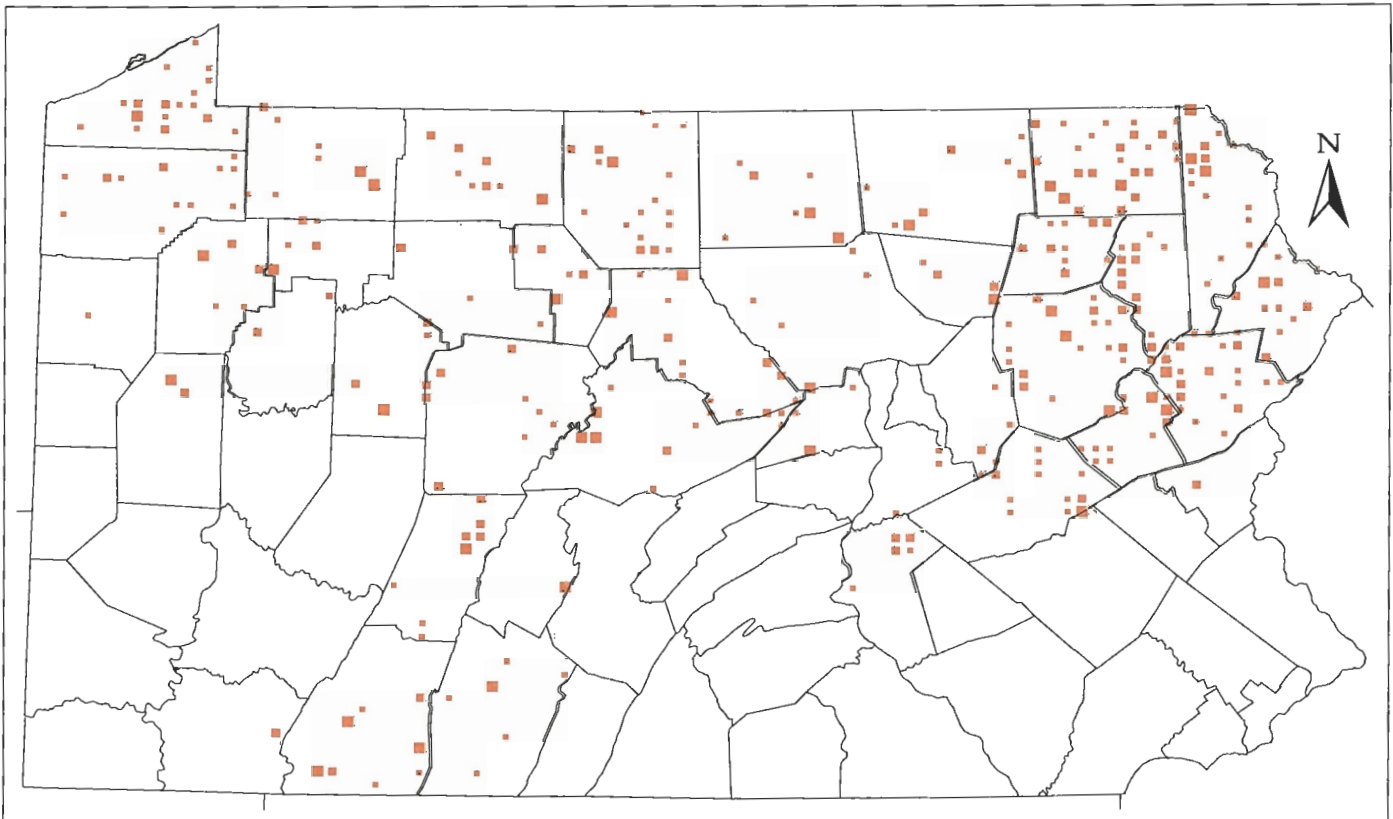
In Pennsylvania, the Northern Waterthrush's breeding range narrows from north to south into the Appalachian Mountains of western Maryland. The southern extent of its breeding range is Cranberry Glades, West Virginia (AOU 1983; Hall 1983). It also is found in wetlands of adjacent northeastern New Jersey (Leck 1984), northwestern Ohio (Thomson 1983), and much of New York (Eaton 1988d).

It is a fairly scarce breeder, found in fewer than 7 percent of the blocks. The Appalachian Plateau Province accounts for 66 percent of the reports. The densest concentrations of blocks were in the Pocono Section (31% of the blocks) and the Glaciated Low Plateau Section (16%), where extensive upland wetlands exist. The species also was found at a low density throughout much of the Appalachian Mountain Section of the Valley and Ridge Province, where it inhabits swampy headwaters and streamside thickets (Schweinsberg 1988a; SSRs; pers. obs.). It is absent from the state's southeast and much of the southwest.

The Atlas map fills in the old picture of the bird's Pennsylvania distribution, making it less sympatric with the Louisiana Waterthrush than previously thought. This is particularly true in the extreme northeast and northwest, where many more waterthrushes were reported during the Atlas period than before (Todd 1940; Poole 1964; Stull, Stull, and McWilliams 1985). The Northern Waterthrush's range also is better delineated in the northcentral counties, where it once was reported sparingly (Poole 1964). Nevertheless, this songbird still should be considered fairly rare, with only 0.10 birds per route reported on 26 Pennsylvania Breeding Bird Survey routes conducted from 1966 through 1987 (USFWS unpub. BBS data). There is no significant trend in numbers on these routes (see graph). Volunteers "confirmed" this species in only 12 percent of the blocks in which they found it—most frequently by finding adults carrying food to young (20 blocks) and by discovering fledglings (16 blocks).

This species does not live in the most comfortable or convenient circumstances for observation, so its range may be somewhat underestimated. Furthermore, the Northern Waterthrush is easily confused with the more widespread Louisiana. Consequently, the degree to which they overlap may be underestimated. The dichotomy of their habitat

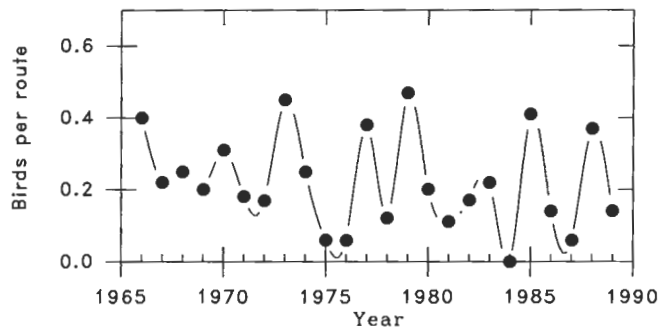
NORTHERN WATERTHRUSH				Physiographic Regions in Which Recorded		
No. of Blocks in Which Recorded	No.	% of Total	Priority Blocks	No.	% of Region	
<ul style="list-style-type: none"> <li>■ Possible</li> <li>■ Probable</li> <li>■ Confirmed</li> </ul>	331	7	8	Appalachian Plateau	218	11
	185	56	54	Pittsburgh Plateau Section	16	2
	105	32	41	Blue Ridge	0	0
	41	12	5	Central Lowland	2	6
				Coastal Plain	0	0
				New England	0	0
				Piedmont	0	0
				Valley and Ridge	95	7



choices also may be somewhat stereotyped and misleading (Craig 1984). One distinction between the species is their breeding season. The Northern Waterthrush nests later than the Louisiana, usually from early May through mid-June (Todd 1940; Poole unpub. ms.). Both species are known to leave for their winter ground very early (Todd 1940).

As a denizen of both mature forests and upland wetlands, the Northern Waterthrush is vulnerable to development and deforestation. Flooding and cutting of forested wetlands and development of Pennsylvania's northern highlands, notably the Poconos, may be very harmful to this uncommon boreal songbird.

—Douglas A. Gross



POPULATION TREND FROM USFWS BREEDING BIRD SURVEY ROUTES IN PENNSYLVANIA