

## Pied-billed Grebe

*Podilymbus podiceps*

The Pied-billed Grebe is the most widespread Nearctic breeder in its family, occurring across most of the U.S. and Canada south to temperate South America. It was once considered a fairly common summer resident in Vermont marshes (Perkins and Howe 1901). Today it is relatively rare even in the state's most suitable habitats. This decline has been evident in other portions of the Northeast as well, and the Pied-billed Grebe is currently proposed for Vermont's list of Species of Special Concern. One of the most remarkable findings of the Atlas Project was the dearth of sightings of this species from the vast Lake Champlain and Lake Memphremagog marshes. In fact, the distribution of this species bears virtually no resemblance to that of other marsh dwellers, such as the Least Bittern and Common Moorhen. The scattering of observations from central and southeastern Vermont presumably reflects the grebe's ability to nest successfully in small patches of suitable habitat (e.g., beaver ponds), but an explanation for its apparent scarcity in prime habitats in the Champlain Valley is lacking.

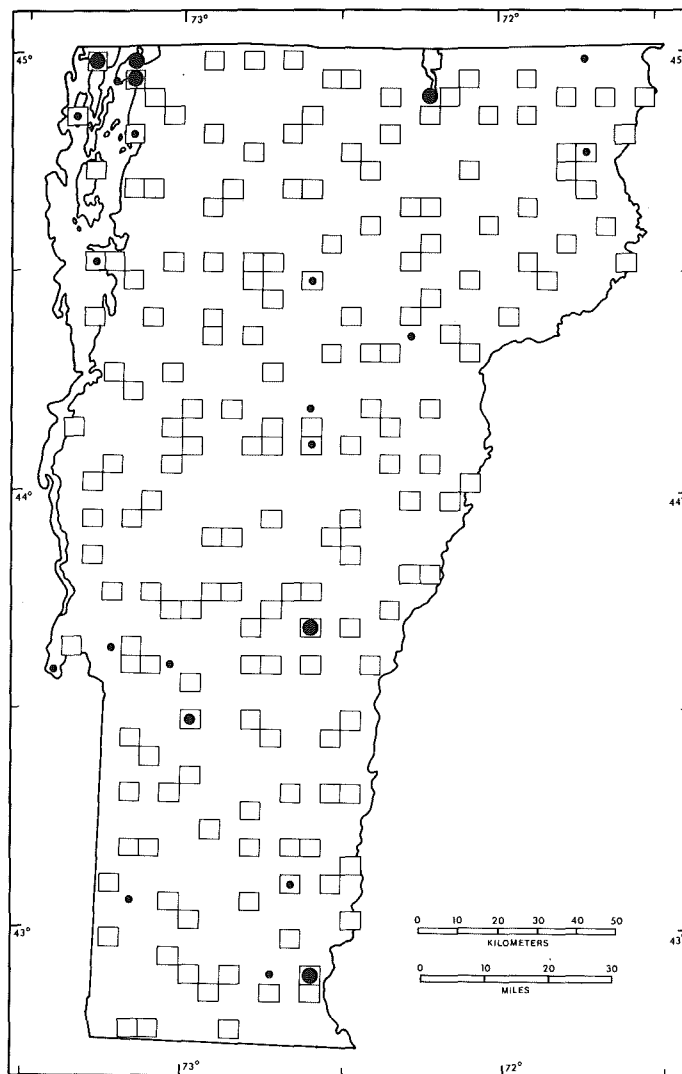
Pied-billed Grebes typically occur on lakes, ponds, and sluggish streams, wherever dense marsh vegetation is available as cover. The birds feed on aquatic insects, crustaceans, and fish, which they obtain by diving. The pairs are secretive, sinking silently beneath the surface at an intrusion and then resurfacing out of sight among reeds or cattails. The loud, disharmonious call, usually given only during the breeding season, can be easily mistaken for, and is sometimes given in response to, a Common Moorhen's. The breeding territory is usually the area within 48 m (150 ft) of the nest; it is defended by the male and sometimes the female against intruders, including American Coots, Common Moorhens, and waterfowl.

Pied-billed Grebes arrive at Vermont breeding grounds in late March, frequently already paired, though courtship displays



(e.g., chasing, circling, diving and chasing, and bill touching) at the breeding grounds may reinforce pair bonds. Nesting probably commences in late April. The nest, constructed of debris by both members of the pair, is placed in dense vegetation near open water so that the birds may approach and leave under water (Palmer 1962). The nest may be floating or anchored in shallow water. Ancillary platforms are also constructed within the territory. Copulation may occur on the nest or in the water. Four to 7 whitish-blue to buff eggs are laid, 1 per day, with incubation starting before completion of the clutch. The male assists to a limited degree in the 23-day incubation. Both birds may add material to the nest during incubation to counteract settling and compression, which otherwise might submerge the nest. Eggs are deliberately covered with debris when both parents are away from the nest.

The young are precocial, readily following the adults onto the water. Boldly banded in a circus pattern of black and white stripes and reddish-brown spots that belie their relationship to their drab parents, the downy young spend a considerable portion of their time riding on one of the parents' backs. The adults occasionally dive below the surface while the young remain nestled under their wings. Insects make up the principal diet of the young, who may even be fed



**No. of priority blocks in which recorded**

TOTAL 12 (7%)

Possible breeding: 7 (58.3% of total)

Probable breeding: 1 (8.3% of total)

Confirmed breeding: 4 (33.3% of total)

**Physiographic regions in which recorded**

	no. of priority blocks	% of region's priority blocks	% of species' total priority blocks
Champlain Lowlands	5	16	41.7
Green Mountains	1	2	8.3
North Central	0	0	0
Northeast Highlands	1	6	8.3
East Central	1	5	8.3
Taconic Mountains	1	6	8.3
Eastern Foothills	3	12	25

while still aboard the parent's back. The young gain independence rapidly, possibly within 3 weeks (Palmer 1962), leaving the parents free to initiate a second clutch. Downy young have been reported in Vermont from June 1 to August 19 (four records). Although second broods are raised regularly in some regions, it is not clear whether this occurs frequently in Vermont or elsewhere in the Northeast.

Once the young hatch, the behavior of the parents becomes less secretive than during incubation, and someone approaching the nest may be treated to a distraction display. The easiest way to confirm breeding is by observing the young, for they remain with

the adults for several weeks and are probably flightless for nearly a month.

Pied-billed Grebes are far less secretive in the nonbreeding seasons. Hardy birds are found wherever quiet open water exists, and frequently can be seen in Vermont until late November. Given the fragmentary historical data, it is uncertain whether any population decline has occurred. Since the species can occupy a wide range of shallow water habitats, there appears to be no major threat to its continued presence in Vermont.

DOUGLAS P. KIBBE