

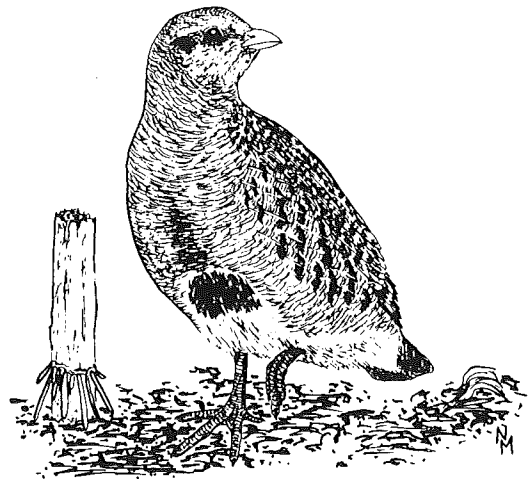
## Gray Partridge

*Perdix perdix*

The Gray (formerly called the Hungarian) Partridge is perhaps the only non-native gamebird occurring in Vermont that successfully withstands even the severest of the state's winters. There is no open season on the species in the state, since the existing population is believed to be too small to support an annual harvest. A native of Europe and eastern Russia, the Gray Partridge was introduced to Vermont before 1893 without success, and disappeared following the severe winter of 1904-5 (Foote 1946). The species was introduced in large numbers in New York around 1930 (Wilson 1959) and gradually spread via the St. Lawrence River valley to the northern portion of the Champlain Valley, where it found the mosaic of flat, open grasslands and grainfields that it prefers. This spread may have been hastened by local releases by sportsmen anxious to establish a gamebird in agricultural areas too barren to support grouse. Today the "Hun" can be found locally throughout the northern U.S. and southern Canada, although the center of its abundance is the grainfields of the Great Plains.

Gray Partridge prefer large grainfields and permanent grassfields. The species requires relatively little shelter from the cold. Stubble provides all the protection necessary under all but the most austere conditions, when the Gray Partridge will utilize snow roosts, as does Vermont's native Ruffed Grouse. Heavy snowfall seldom causes significant mortality since barren fields are generally windswept; but ice and sleet storms that deprive the birds of food and shelter have been implicated in periodic population declines in New York (Bull 1974).

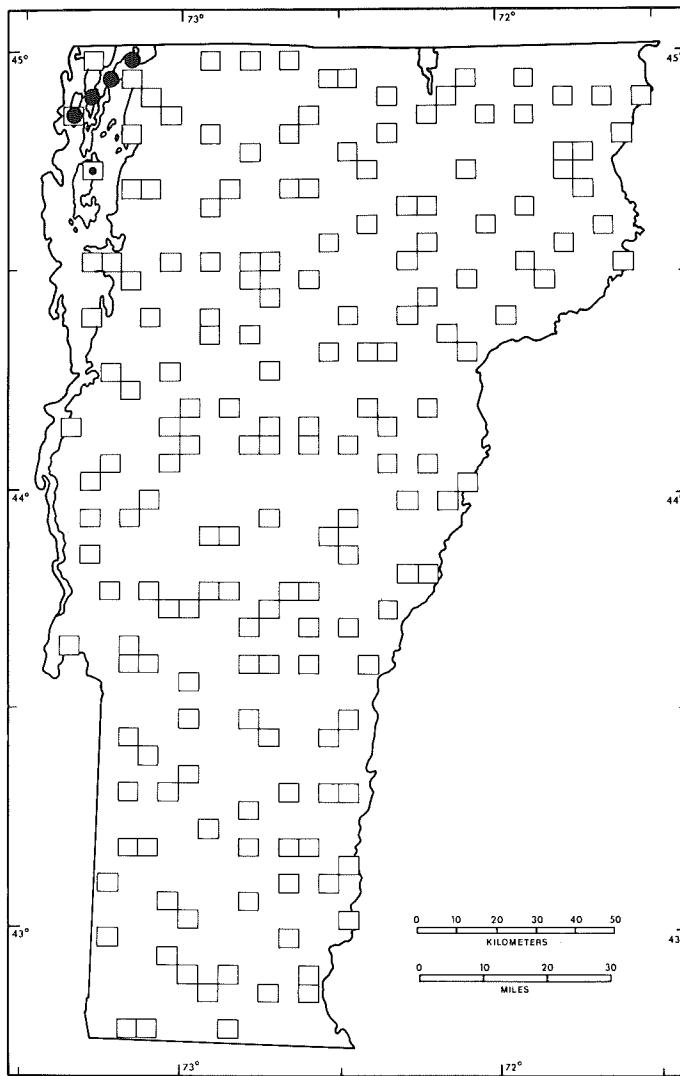
Although established in Vermont for more than 30 years (J. D. Stewart, pers. comm.), the Gray Partridge appears to be restricted in its distribution to the northern portion of the Champlain Valley. Most sightings come from Grand Isle and the vicinity



of Missisquoi National Wildlife Refuge. The species' apparent failure to colonize similar habitats farther south in the Champlain Valley is inexplicable, since land-use patterns and topography appear to be similar.

Because of its secretive nature and proclivity for barren grasslands and grainfields, the Gray Partridge frequently eludes detection even in areas where it is relatively common. Birds are most conspicuous in winter when they concentrate in coveys on wind-swept knolls or manured croplands at times of limited food. During the spring, coveys break up into pairs that remain together throughout the breeding season. Pairs studied in South Dakota (Smith et al. 1982) occupied relatively small home ranges in spring—9.7-17 ha (24-42 a)—compared to the larger range—96 ha (237 a)—utilized during the rest of the year when the birds travel in coveys.

Pairing starts several months before actual nesting (Cramp and Simmons 1977; Weigand 1980). Calling activity before nesting may be used to locate pairs, and is usually heard before sunrise. Hayfields are preferred nesting areas, followed by field borders and roadsides. The nest, constructed by the female, consists of a shallow hollow lined with stems and grasses, with a fine inner lining of leaves, grass, and feathers (Edminster 1954). Fifteen eggs constitute an average clutch (the range is 5 to 20), which



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

TOTAL 2 (1%)

Possible breeding: 1 (50% of total)

Probable breeding: 0 (0% of total)

Confirmed breeding: 1 (50% of total)

**Physiographic regions in which recorded**

	no. of priority blocks	% of region's priority blocks	% of species' total priority blocks
Champlain Lowlands	2	6	100
Green Mountains	0	0	0
North Central	0	0	0
Northeast Highlands	0	0	0
East Central	0	0	0
Taconic Mountains	0	0	0
Eastern Foothills	0	0	0

is incubated, mostly by the female, for 24 to 25 days (Gates 1973; Johnsgard 1973). A hen with 16 young was reported from North Hero (ASR, D. McNair). Renesting may occur if the first clutch of eggs fail to hatch, but second clutches are smaller (the average is 9 eggs). A brood of 6 found August 12 at West Swanton (G. O'Shea, pers. observ.), estimated to be 5 days old, probably represented a renesting effort. The precocial young leave the nest site shortly after hatching under the guardianship of both parents. Adults exhibit crippled-bird displays if their brood is disturbed, and may be easily confirmed as breeders during this pe-

riod. Young begin to fly in 2 weeks, but the family unit may stay together through the following winter. As is true of many ground-nesting species, nest and juvenile losses are high; mowing and wet weather are the principal factors responsible for the high mortality rate.

Although extremely local in its distribution, the Gray Partridge may be more common within its limited Vermont range than most observers realize. The species is unobtrusive and seldom crosses paths with most bird watchers, since it occurs in large, open agricultural fields.

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