

this species' ecological distribution should be re-evaluated. Rather than being restricted primarily to boreal habitats characteristic of the Canadian zone, the Rock Voles also occupy sites in northern hardwood forests where appropriate microhabitat components are present, specifically rocks, flowing water, mosses, ferns, and forbs.

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Eastern Limit of the five-lined Skink, *Eumeces fasciatus*, in Ontario

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New records are reported for the Five-lined Skink, *Eumeces fasciatus*, from Frontenac County (Palmerston Lake; 2.4 km W of Snow Road; and 1.6 km SE of Snow Road Station), Lanark County (Robertson Lake), and Leeds and Grenville (Landon Bay) County. The similarities between the eastern range limit in Ontario of the skink and those of the Northern Ribbon Snake and Black Rat Snake are discussed; the adjacent more poorly-drained lowlands are suggested as a distribution barrier.

Based on collections reported by Patch (1934), Logier and Toner (1961, p. 59) cited Arden and Mountain Grove in Frontenac County as the most eastern localities at which the Five-lined Skink, *Eumeces fasciatus*, had been taken in Canada. Records accumulated since this publication allow a better definition of the eastern limit of its distribution.

On 30 August 1961, seven skinks were found by Cook and M. Gordon Foster 1.5 mi (2.4 km*) W of Highway 509 at Snow Road, Frontenac County (these are now in the National Museums of Canada,

Collection Number 5618). They were inhabiting a rocky outcropping in the vicinity of a deserted hillside farmsite. One individual was discovered under a board at the farmsite; the others were under generally flat rocks in the adjacent woods and hillside. The woods were primarily White Pine (*Pinus strobus*) but a mixture of deciduous trees was also present. A thick layer of pine needles covered most of the ground in the wooded area. Old lumber piles and scattered loose boards were prevalent at the farm site, and loose rocks were common in the woods and on the hillside.

Additional records in this region include a single

individual taken by D. Scobie on 31 July 1960 from near Palmerston Lake, about 2 mi (3.2 km*) up the lake from Ompah (NMC 5110); one specimen collected on 10 August 1961 by A. G. Walker 1 mi (1.6 km*) SE of Snow Road Station, Palmerston Township, Frontenac County (Carleton University Museum of Zoology; D. A. Smith, personal communication); and one specimen collected by F. C. Zufeldt in May 1962 from Robertson Lake (NE of Lavant), Lanark County (NMC 6507). The map in Conant (1975) is based on the National Museum of Natural Sciences records, but individual localities have not been previously published.

Luciuk and McCabe (1971) noted that the species is reported to occur at "3rd Depot Lake" and at Perth Road Bay near Chaffey's Locks. The latter locality is about midway between Snow Road Station and Gananoque.

On 22 August 1973 at the Landon Bay Campsite on the north shore of the St. Lawrence River, Ussher observed a single individual. The locality was a bare patch of Precambrian rock, some 30 m above the water of Landon Bay, 8.5 km E of Gananoque in Leeds and Lansdowne Township, Leeds and Grenville County. This sighting is the only one from the area by Ussher, although he became a resident of Leeds and Grenville County in 1970, and visited this locality and similar ones on many occasions.

East of these records, in the Ottawa District, (a 48-km radius around the National Capital) where herpetofaunal surveys have been undertaken by the National Museum of Natural Sciences for several decades, and near Bishop's Mills in Leeds and Grenville County, where Cook has resided since 1970, there have been neither sightings nor reports of skinks.

Of interest is the roughly similar eastern limit of two other Ontario reptiles, the Black Rat Snake, *Elaphe obsoleta obsoleta*, which is known to occur from just south of Smith's Falls to Mallorytown (NMNS files including personal communications from R. V. Lindsay, John Woods, Roger E. Roy, Harold Parsons, and Al MacDonald), and the Northern Ribbon Snake, *Thamnophis sauritus septentrionalis*, which reaches the "Horseback Mountains" near Pakenham (Cook 1968) and slightly beyond (Tony Tobias, personal communication) and Mallorytown Landing (Woods and Cook 1976). In his review of the herpetofauna of the Thousand Islands Region, New York, Werner (1959) reported both the Black Rat Snake and the Ribbon Snake, but not the Five-lined Skink.

None of these three species have been reported from east of the rough and relatively well-drained elevated terrain of the Precambrian Shield topography, onto

the adjacent low-lying, and relatively more poorly-drained area which was covered by the postglacial Champlain Sea of the Ottawa and St. Lawrence valleys. Nor have any been reported on the eastern side of this presumed barrier, in the Precambrian of the Gatineau and Laurentian regions between Ottawa and Montreal.

The populations of these three species reported in Leeds and Grenville, Frontenac, and Lanark counties may be prevented from colonizing the lowlands at the northeastern edge of their range by a lack of well-drained hibernating sites and the lack of sufficient insulation that is provided by deep accumulations of snow in the hollows of the adjacent broken topography. The moderating effect of the Rideau Lakes system on local microclimates, possibly promoting warm pockets, and the less intensive agriculture on its rough terrain, leaving more of the area in forest, are additional factors that may contribute to the survival of these species in the area. Their eastern limit roughly corresponds to the eastern boundary of Herpetofaunal Section 1 defined by Bleakney (1958), which is based on mean July temperature and the length of the growing season.

A fourth species, the Stinkpot, *Sternotherus odoratus*, reaches its eastern limit in the general area, but it invades the lowlands along the Rideau and Mississippi rivers at least as far as Becketts Landing (NMC 3938) in Leeds and Grenville counties and Innisville (NMC 2157) and Pakenham (NMC 13777) in Lanark County. Perhaps its different overwintering habitat, in these rivers does not place on it the same constraints for hibernation sites that are suggested for the terrestrially hibernating species discussed above.

Additional observations of any of these species at the eastern edge of their range, giving locality, habitat, date, number observed, and observer(s) name(s) would be appreciated by the authors. Information on the status of the Black Rat Snake is also being collected for the Ontario Ministry of Natural Resources by Harold Parsons and Al MacDonald as part of a detailed study of it in the Rideau Lakes region, and by the Federation of Ontario Naturalists in a general survey of its Ontario range. Because sightings of any of these species are often a matter of chance, and because populations may be scattered and fluctuating in abundance from year to year, the cumulative interest and efforts of all observant naturalists is needed further to define their ranges. A more precise discussion of these limiting factors must wait until such observations are available, and should also include comparison with the northern limit of these species. The latter may roughly correspond (with the notable exception of the Black Rat Snake) with the southern boundary of the 300-m contour and a large height of land covering the Haliburton and

*Collectors originally stated distances in whole or half miles.

Algonquin highlands (see map in Weller and Palermo 1976; W. G. Sprules and W. F. Weller, personal communication).

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Barn Owls in Quebec

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David, Normand. 1979. Barn Owls in Quebec. Canadian Field-Naturalist 93(3): 323-324.

An evaluation of Barn Owl records in Quebec shows that there is no conclusive evidence that the species has actually bred within the province.

Key Words: *Tyto alba*, Quebec.

Information from F. Crête, then Director of the Museum of the Deaf and Dumb Institute of Montreal, provided the only suggestion of breeding of the Barn Owl (*Tyto alba*) in Quebec, at Berthierville, Berthier County, in 1931 (Cayouette 1947; Godfrey 1966). The unpublished ornithological notes of the late Victor Gaboriault, however, show that breeding of Barn Owls in Berthierville in 1931 was never substantiated. An evaluation of that record and of other reported occurrences in the province indicates that the Barn Owl is a casual visitor, but gives no indisputable evidence that it breeds here.

Early in 1945, R. Cayouette learned that a "dozen Barn Owls" had been seen in Berthierville around 1931, and he was referred to Crête for further details. Crête indicated that a pair, discovered by A. Paquette, had nested in the church steeple, that from the four young he had received one in the flesh which was mounted by a local taxidermist, and that Paquette had given him a mounted specimen on 29 December 1931. Crête added that he kept the second specimen and gave the first to the museum of Collège de Sainte-Anne-de-la-Pocatière. With his letter Crête included copies of the label and of the accession card of the specimen given to him by Paquette. According to the

label the specimen (No. 31/16) is an adult male captured on 10 November 1931; on the accession card, however, Crête wrote that this bird was killed in November 1931, from a brood of four whose parents had settled in the church steeple.

On 28 March 1946, Gaboriault interviewed Paquette and was told that high winds had been blowing for several days when about 20 Barn Owls appeared in the Berthierville Islands in 1931. After a while they took refuge in the church steeple where Paquette killed eight birds. He mounted one which is at the Deaf and Dumb Institute, and sent the others to various museums. As the steeple floor was covered with droppings, it was evident several birds had been there for some time. Paquette could not give more definite details.

Paquette's recollection is confirmed by a posthumous article (Paquette 1961) which he read in French at the fiftieth meeting of the AOU at Quebec City in 1932 (see The Auk 50, p. 74). Relating his observations on birds of prey in captivity he said that about 15 Barn Owls had settled in Berthierville, and that he kept one bird for a week in order to study its postures before mounting it.

Gaboriault's list of Barn Owl specimens taken in



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