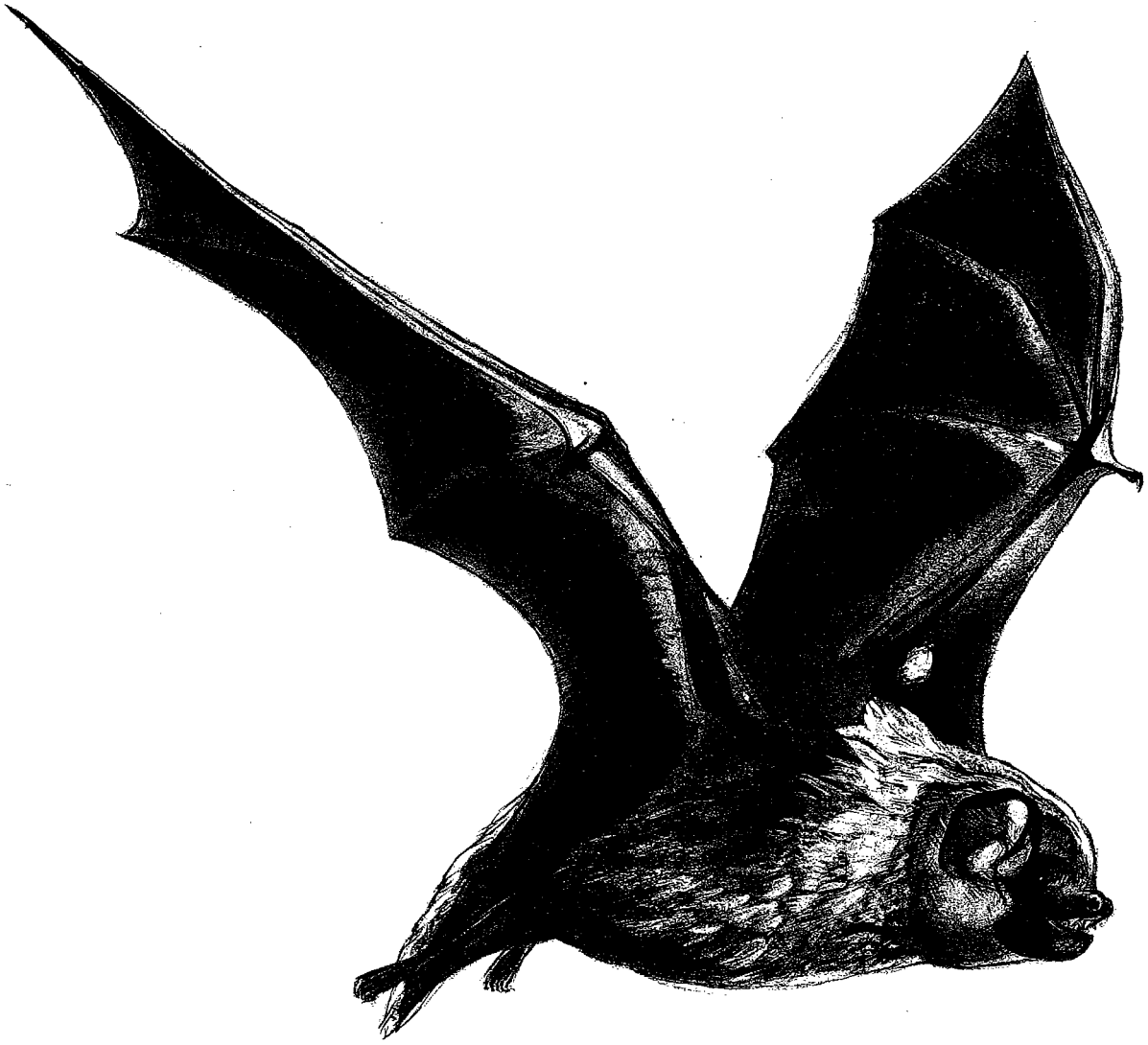
Bats

Chiroptera

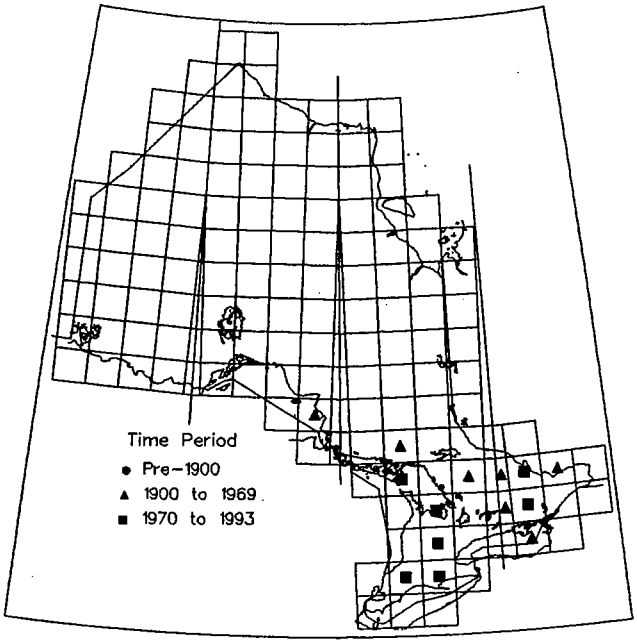


Hoary Bat: Linda Shaw

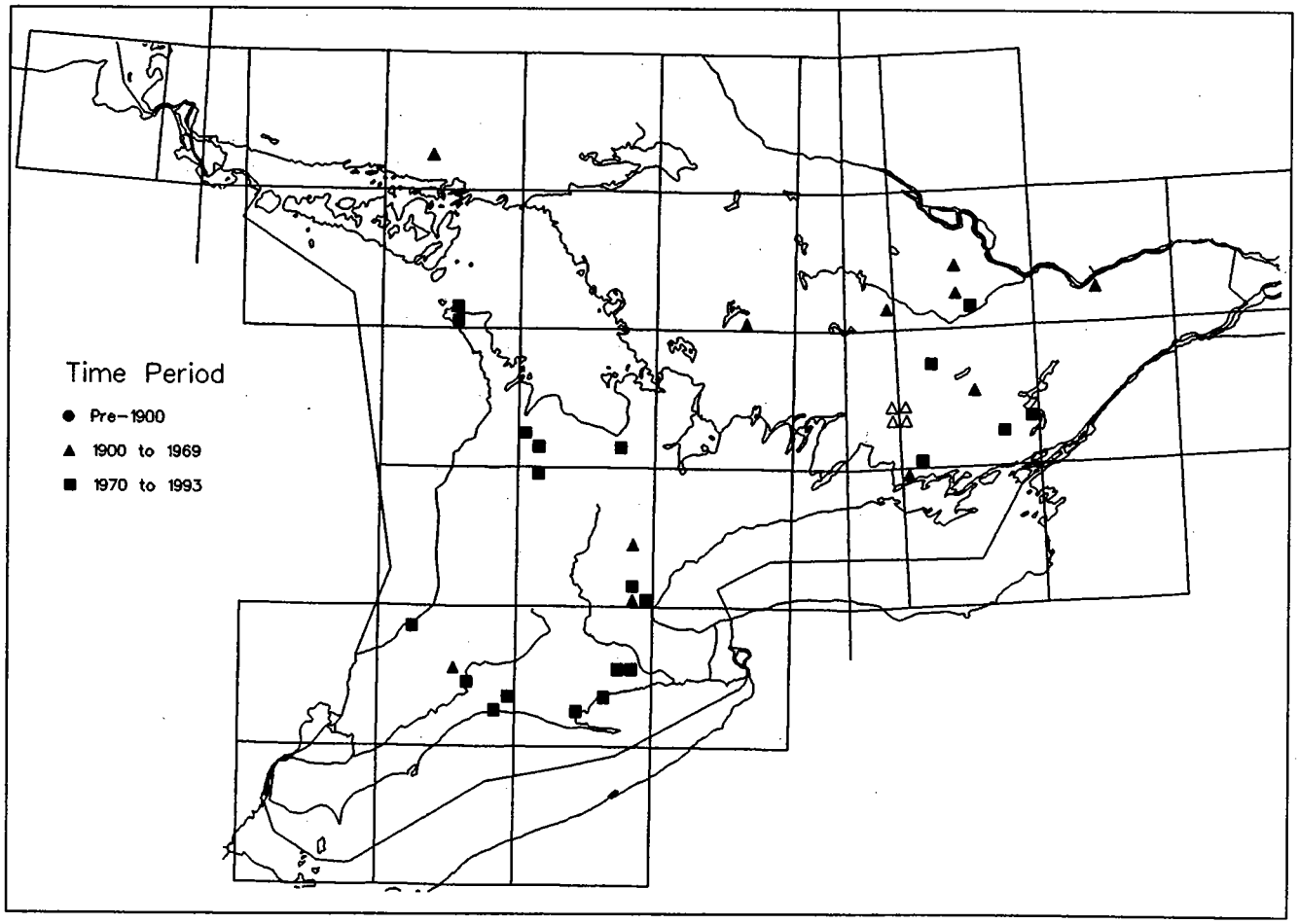
Eastern Small-footed Bat

Myotis leibii

The Eastern Small-footed Bat is the smallest bat in Ontario. It also has one of the smallest overall distributions (Peterson 1966). Geographically it is limited to the northeastern US, southern Ontario and a very small portion of southwestern Quebec. In Ontario, the Eastern Small-footed Bat has been reported almost exclusively in the southern part of the province and most commonly from areas south of the north shore of Georgian Bay. The most northern record for this species is from Agawa Bay on Lake Superior (Peterson 1966).



Most of the Ontario data for this species were provided by museums and researchers who observed bats at hibernation sites. Identification of this bat is based on forearm and hind foot lengths; the forearm measures less than 34 mm and the hind foot less than 9 mm. On a bat detector tuned to 40 kHz, the Eastern Small-footed Bat produces "ticking" pulses similar to those produced by other Myotis species.

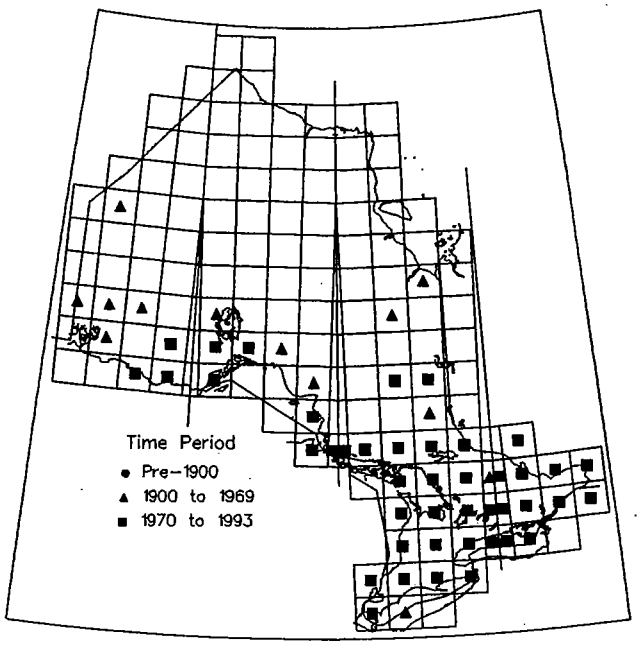


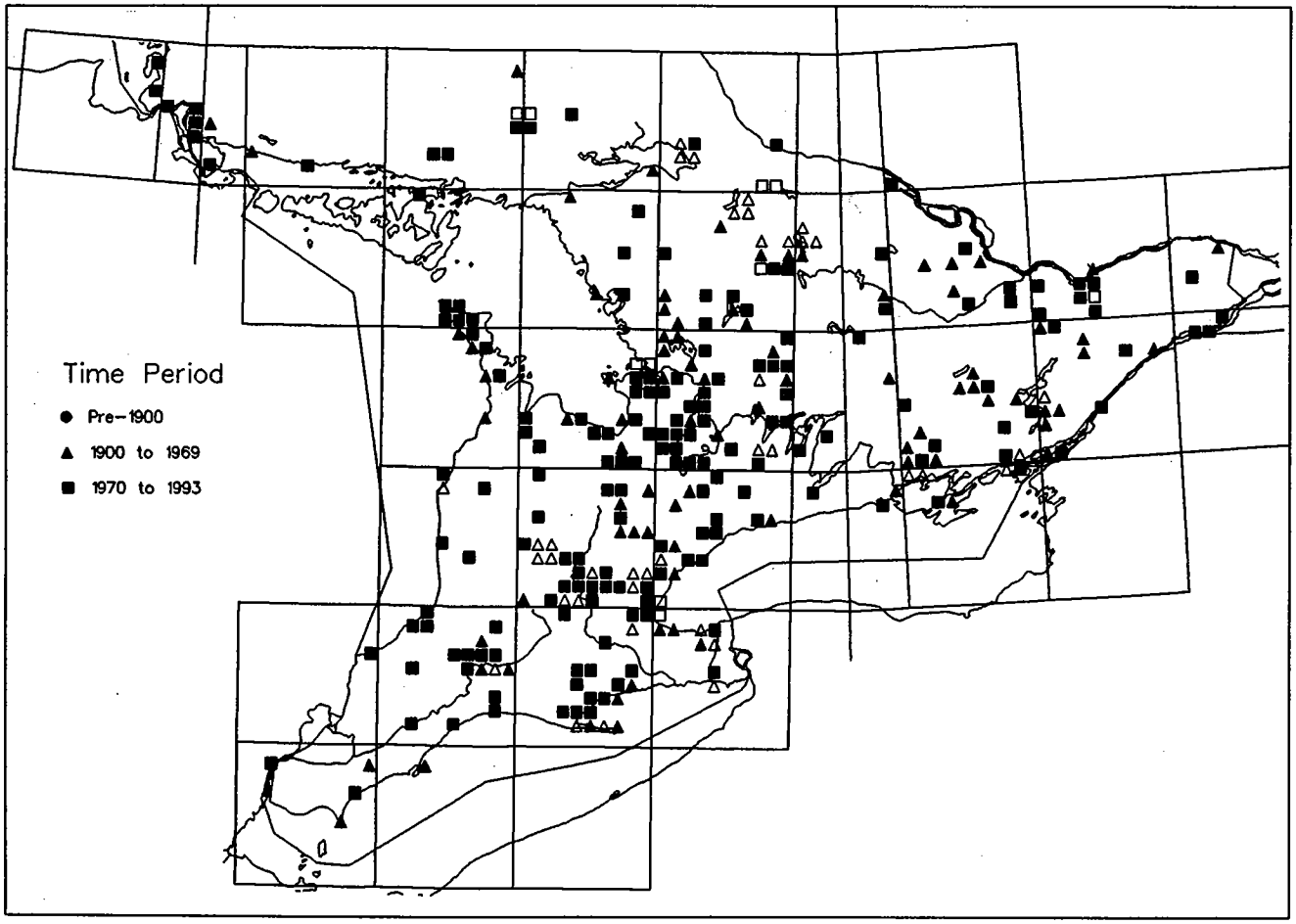
Little Brown Bat

Myotis lucifuga

The Little Brown Bat is the most common bat in Ontario (van Zyll de Jong 1985). It is found throughout the US and Canada, north to the tree line. In Ontario, there are records for the Little Brown Bat north to Favourable Lake and Moose Factory.

Little Brown Bats are a part of the difficult-to-identify *Myotis* complex. The complex comprises three species which are not easily distinguishable using a bat detector because they all produce a similar "ticking" noise on a detector tuned to 40 kHz. Identification must be based on morphological characteristics. Consequently, despite the abundance of this bat in Ontario, difficulties in identification meant few records were contributed by volunteers. Most records were obtained from museums and researchers who have conducted bat surveys in Ontario. Little Brown Bats and Big Brown Bats are the only two species in Ontario that regularly make use of buildings for their maternity colonies.



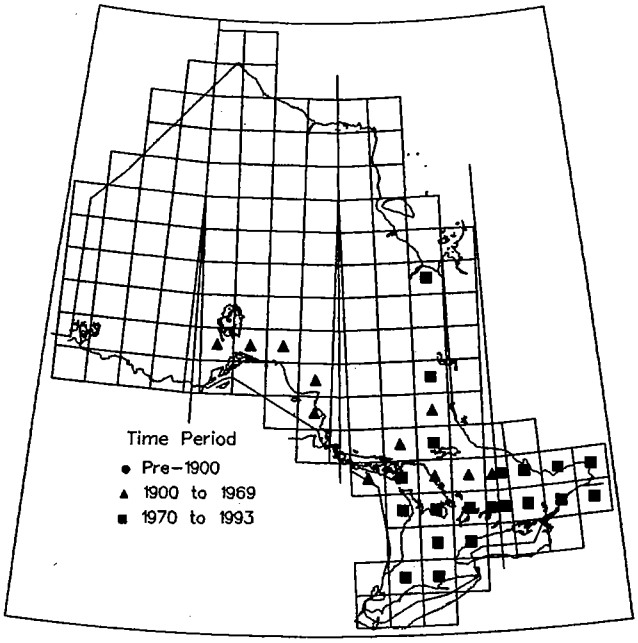


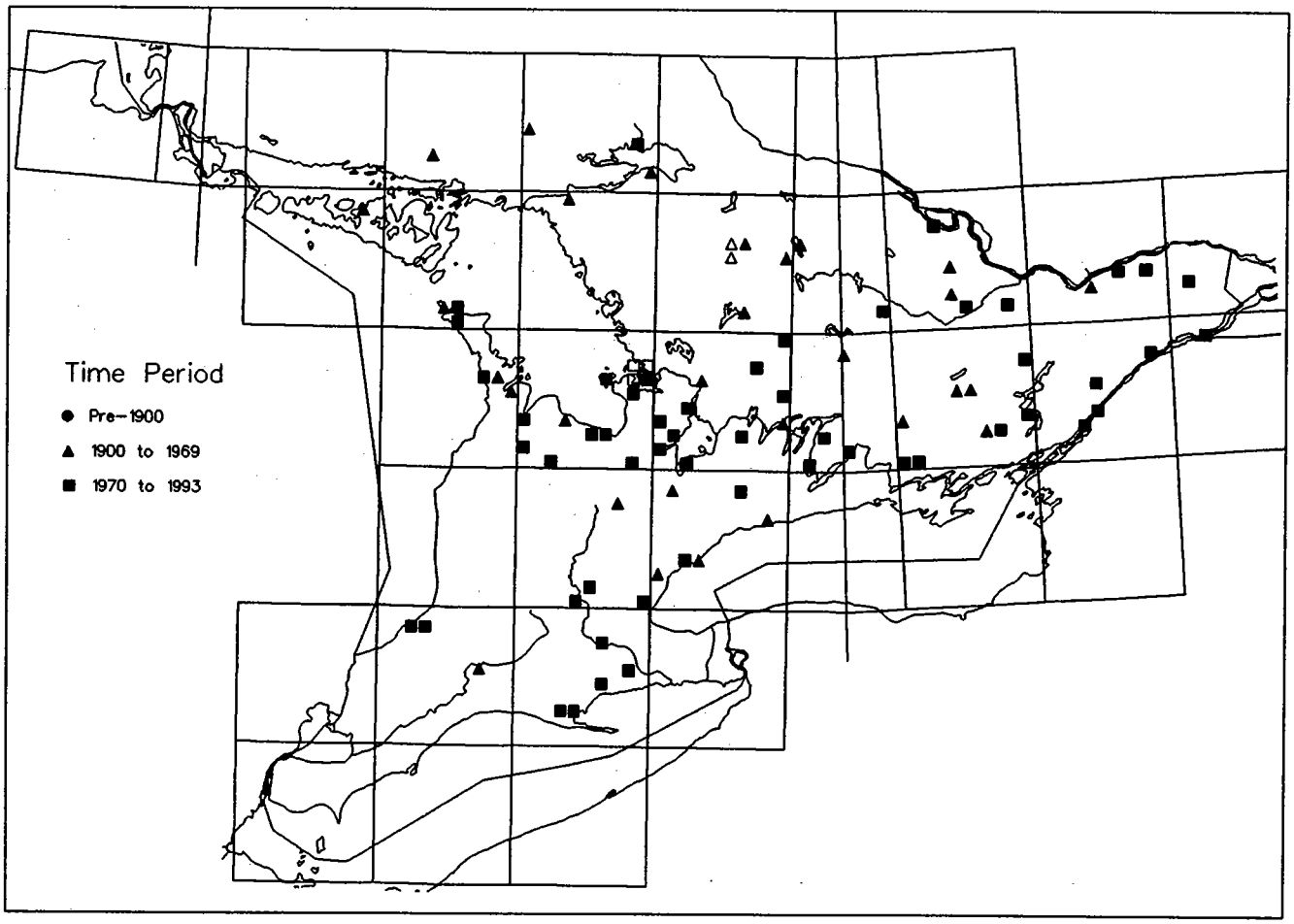
Northern Long-eared Bat

Myotis septentrionalis

The Northern Long-eared Bat was once considered to be the same species as Keen's Long-eared Bat *(Myotis keenii)*. They were separated by range and morphological differences. The Northern Long-eared Bat is found throughout eastern North America and west into British Columbia, whereas Keen's Long-eared Bat is found only on the west coast (van Zyll de Jong 1985). In Ontario, there are records of the Northern Long-eared Bat throughout the southern part of the province and along the north shores of lakes Huron and Superior. There are also occasional records from further north, including one from Moosonee.

As with other bats from the genus *Myotis*, identification is based on morphological characteristics. Identification to species cannot be made using a bat detector as the "ticking" pulses produced on a detector tuned to 40 kHz are similar to those produced by other *Myotis* species.

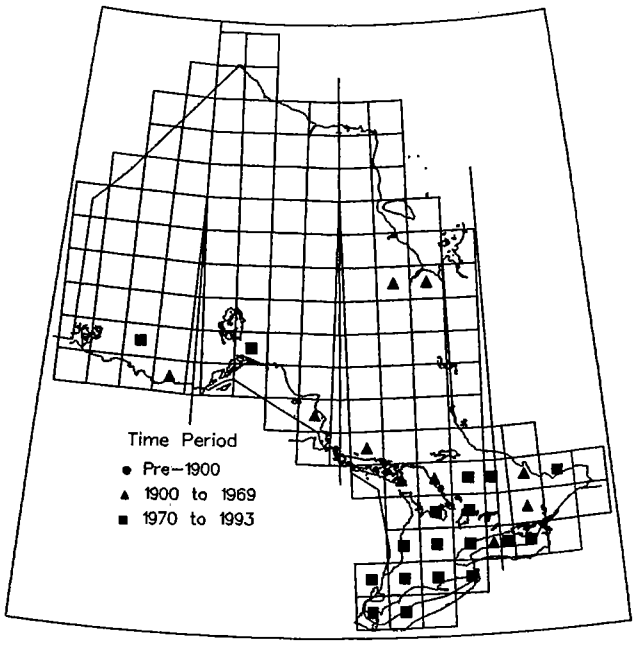




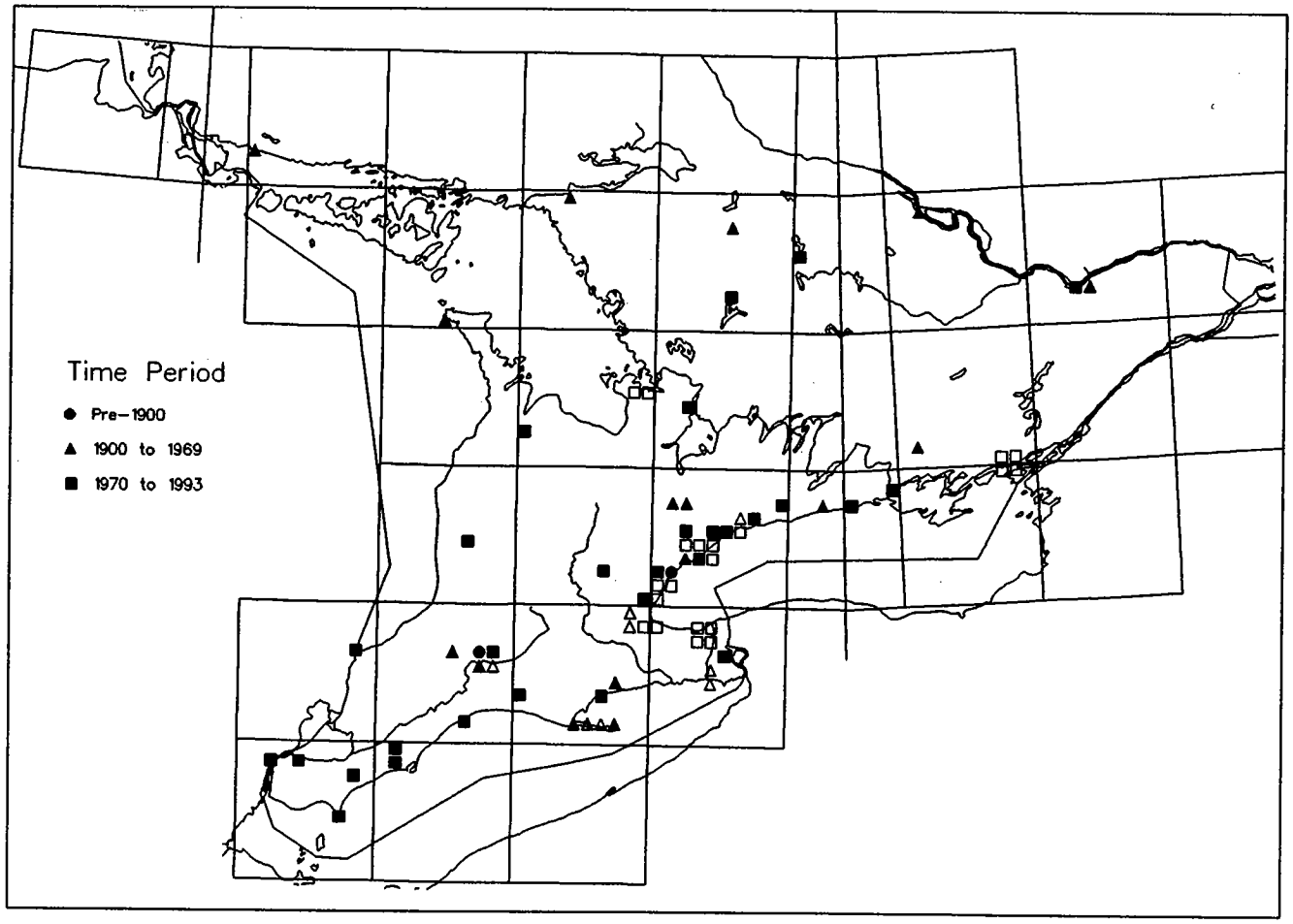
Silver-haired Bat

Lasionycteris noctivagans

The Silver-haired Bat is not well-documented in Ontario. The accepted range for this bat includes most of the US, southern Canada as far north as James Bay and northern British Columbia. In Ontario, there are several dozen southern records but only a few in the north. Mammal Atlas records indicate that this species can be found at least as far north as Nipigon in the west and James Bay in the east.



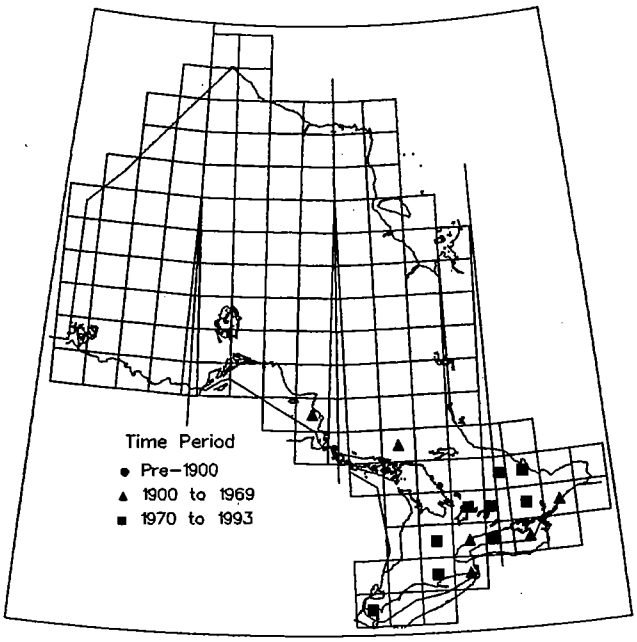
Although Silver-haired Bats are relatively easy to identify "in hand", they are not often seen. They form small maternity colonies, often in hollow trees, and don't generally make use of buildings or caves (van Zyll de Jong 1985). As well, they are not easily surveyed using bat detectors because they are heard at the same frequency as Big Brown Bats (30 kHz). Distinguishing between Silver-haired and Big Brown bats with a detector is based on the slightly faster pulse rate and more "chirp"-like sound of the Silver-haired Bat.



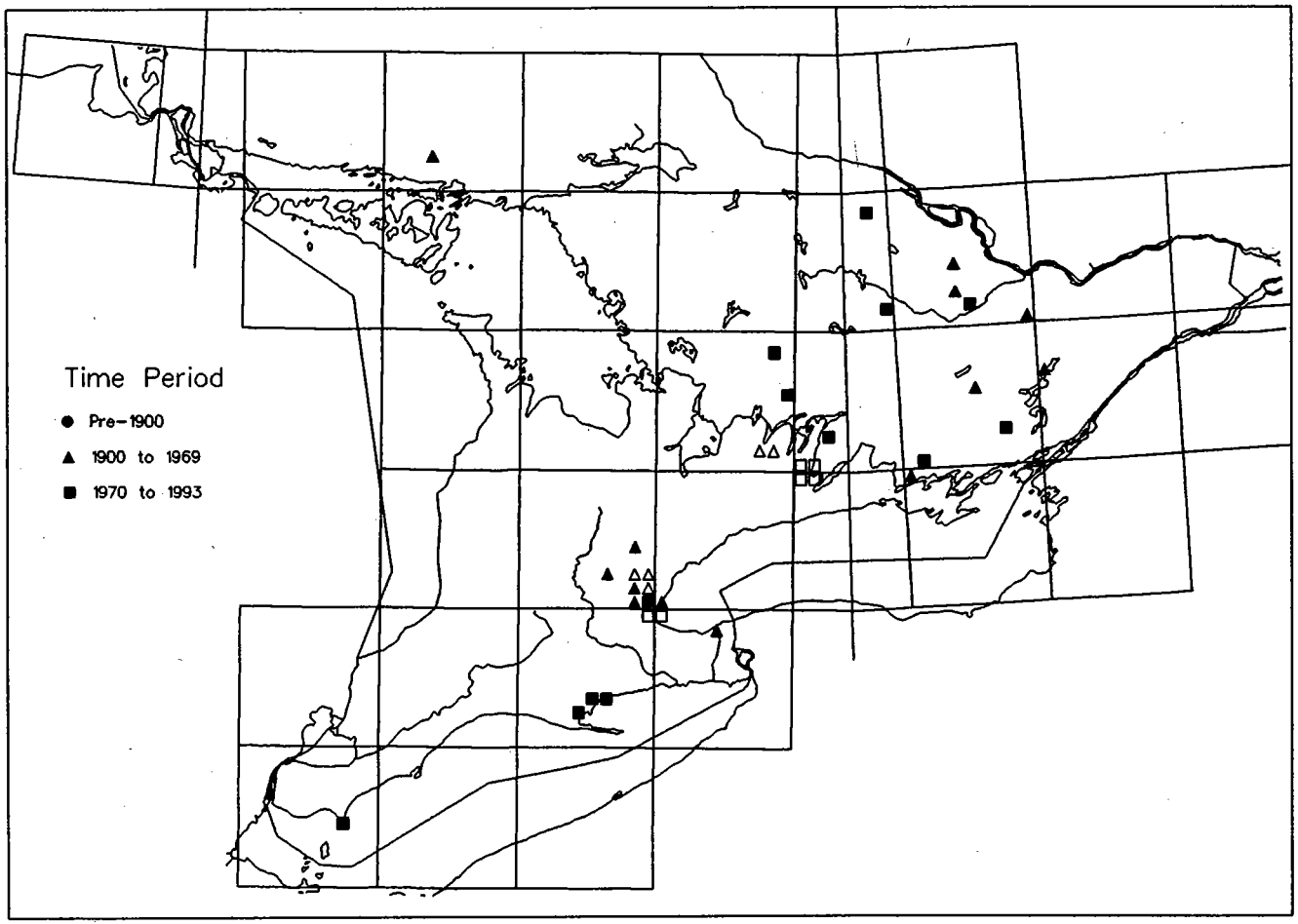
Eastern Pipistrelle

Pipistrellus subflavus

The Eastern Pipistrelle has the southernmost distribution of any bat in Ontario. In North America, it ranges throughout the eastern half of the US, north to the Great Lakes and the St. Lawrence River. In Ontario, the Eastern Pipistrelle is most commonly found along the north shores of lakes Ontario and Erie, and from Kingston to Renfrew in the southeast. The northernmost records for this species were documented at hibernation sites near Espanola and Alona Bay. Southern Ontario is at the northern edge of the Eastern Pipistrelle's North American range, which may explain why there are fewer records for it than for other species of bats (van Zyll de Jong 1985).



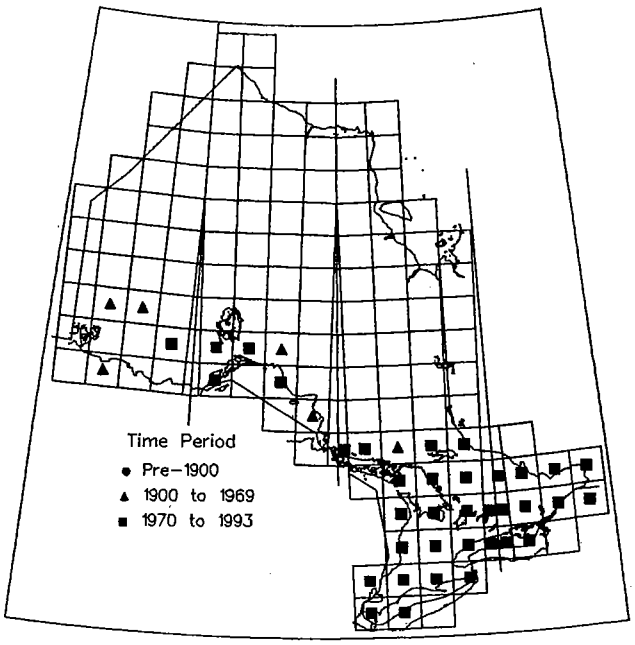
The Eastern Pipistrelle is difficult to distinguish, but can be identified by its uniform coloration and by the presence of tricoloured fur on the bats' back. Identification can also be made using a bat detector by looking for two frequency peaks, one at 40 kHz and the other at 20 kHz (MacDonald *et al.* 1994).



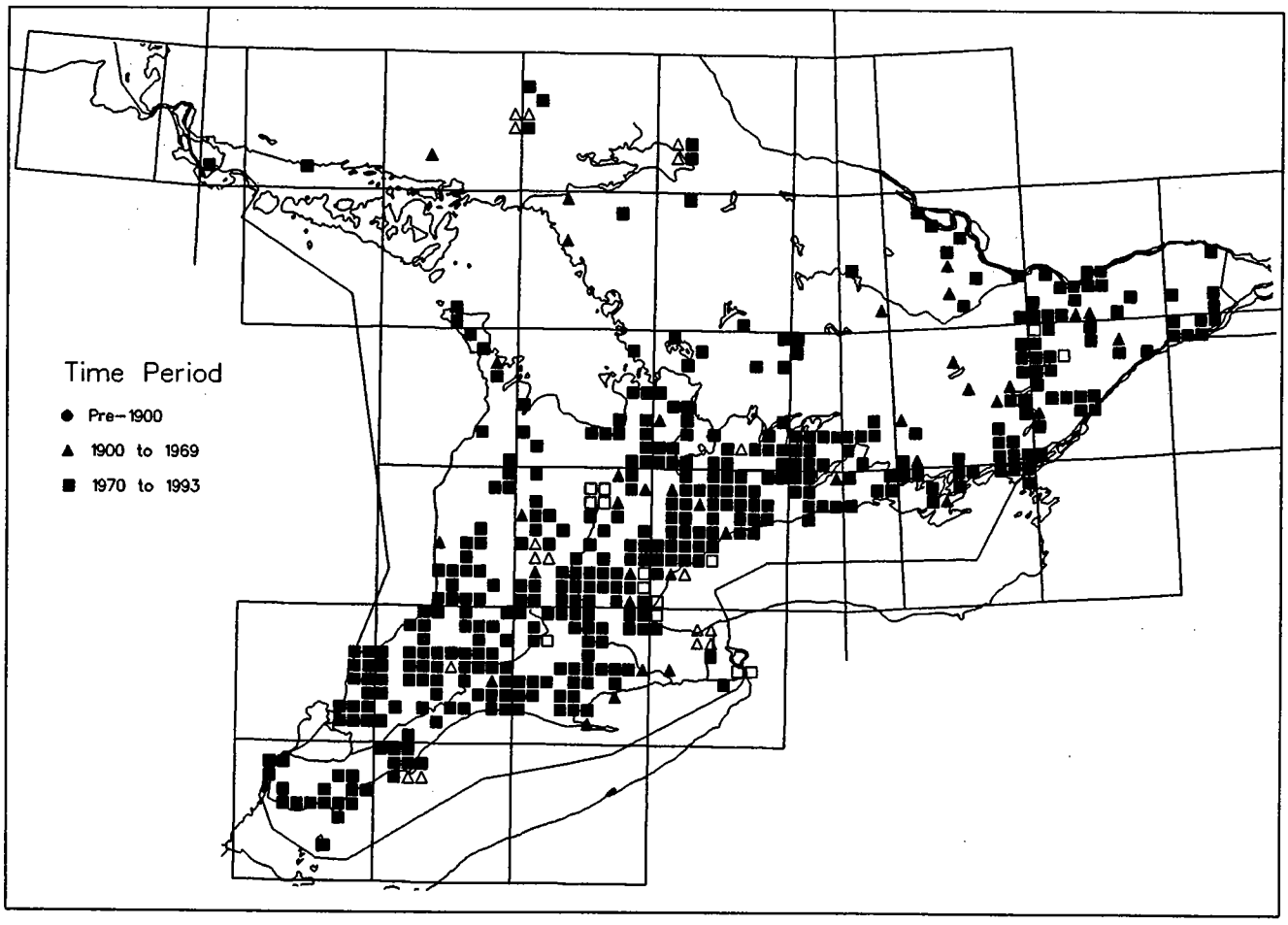
Big Brown Bat

Eptesicus fuscus

The Big Brown Bat ranges throughout the US, western Canadian provinces, and southern areas of eastern and central Canada. In Ontario, the Big Brown Bat is found throughout the southern part of the province, along the Lake Superior shoreline, and west to the Ontario-Manitoba border.



The Big Brown Bat is a familiar species of semi-open forests, agricultural areas, and even urban centres (van Zyll de Jong 1985). Because of their size, Big Brown Bats are relatively easy to identify. Brown pelage; a short, broad, blunt tragus; and a forearm length over 40 mm will distinguish Big Brown Bats from other species. It is also possible to identify this species using a bat detector tuned to 30 kHz, although Big Brown Bats can be confused with Silver-haired Bats. Distinguishing these species using a detector is based on the faster pulse rate and more "chirp"-like sound produced by the Silver-haired Bat.



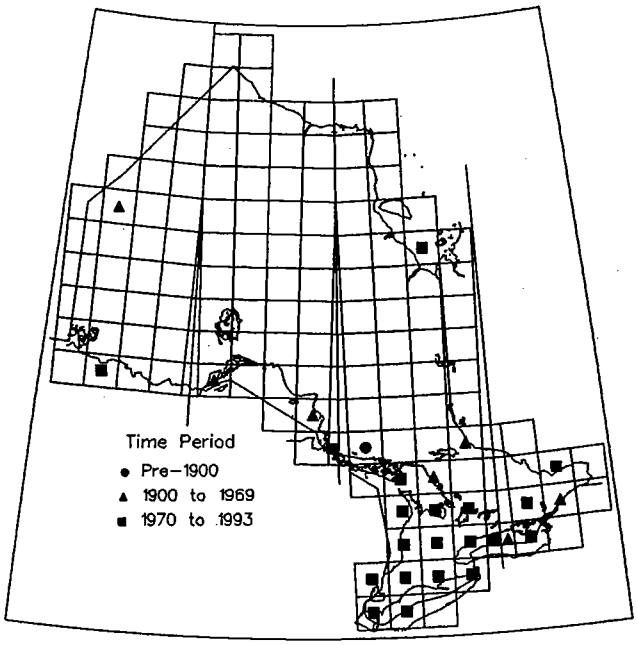
Eastern Red Bat

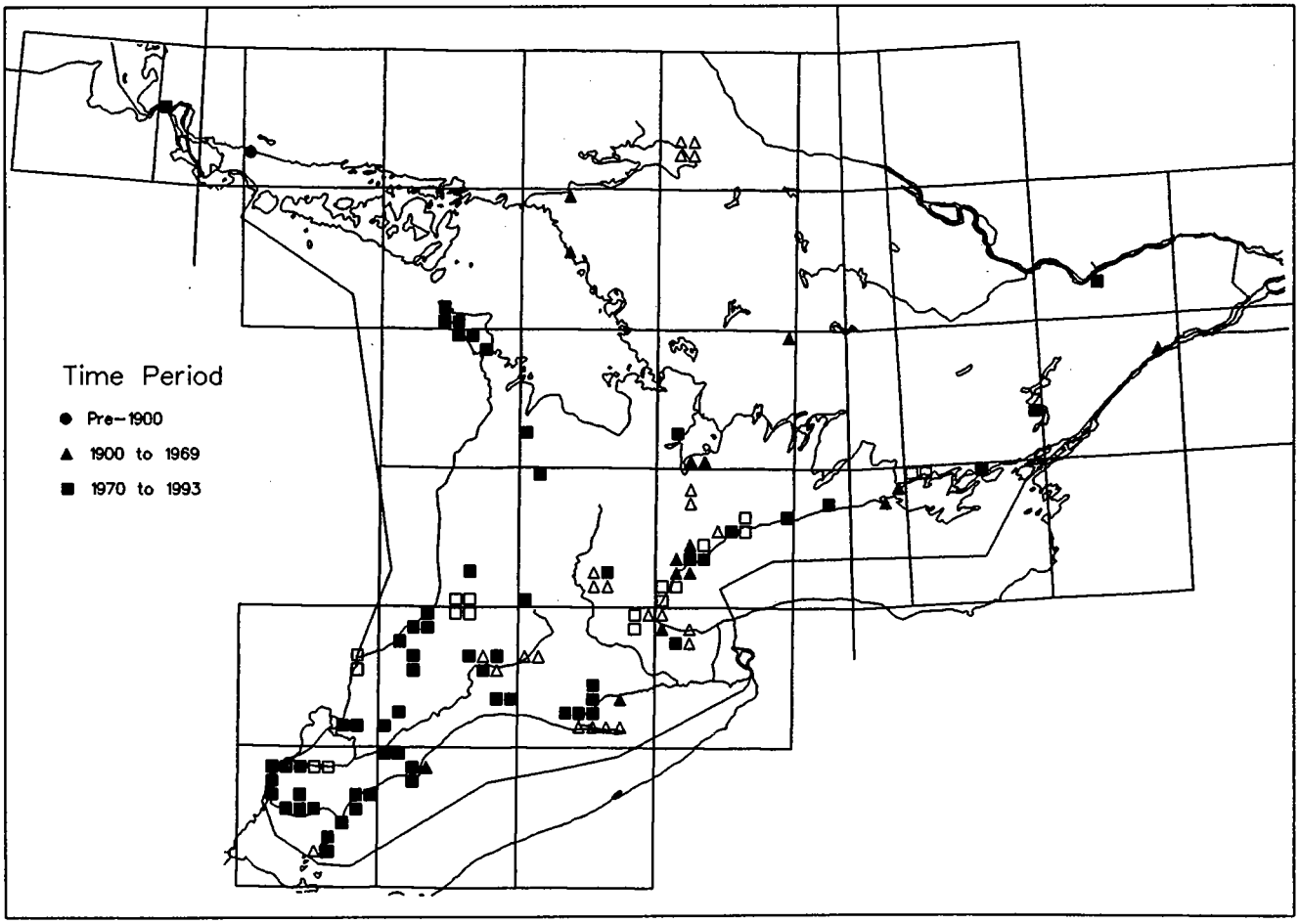
Lasiurus borealis

The Eastern Red Bat is a mid-sized, reddish-brown bat that roosts exclusively in the terminal foliage of trees and migrates south each year prior to hibernation (van Zyll de Jong 1985).

The Eastern Red Bat ranges throughout eastern North America south to South America. In Ontario, the Eastern Red Bat is found throughout the province north to James Bay, but is most common in the lower Great Lakes region.

Red Bats can be identified using a bat detector tuned to 40 kHz, at which frequency they generate a heavy, raindrop-like pulse in contrast to the metallic "ticking" pulses produced by bats of the *Myotis* complex.





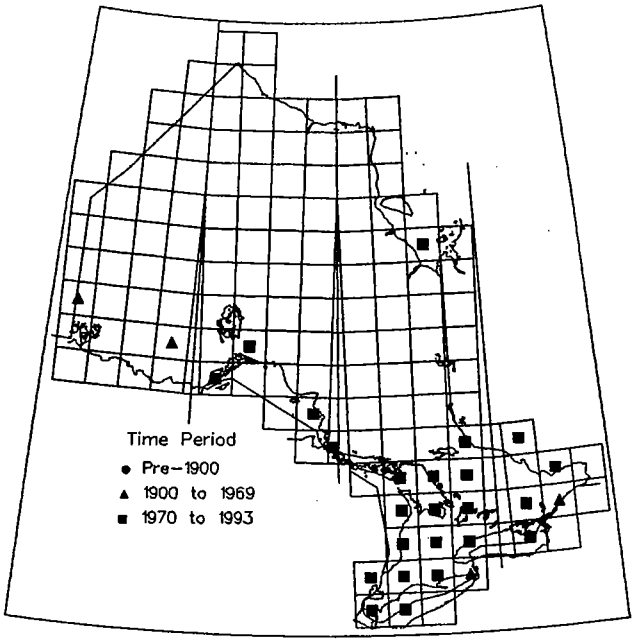
Hoary Bat

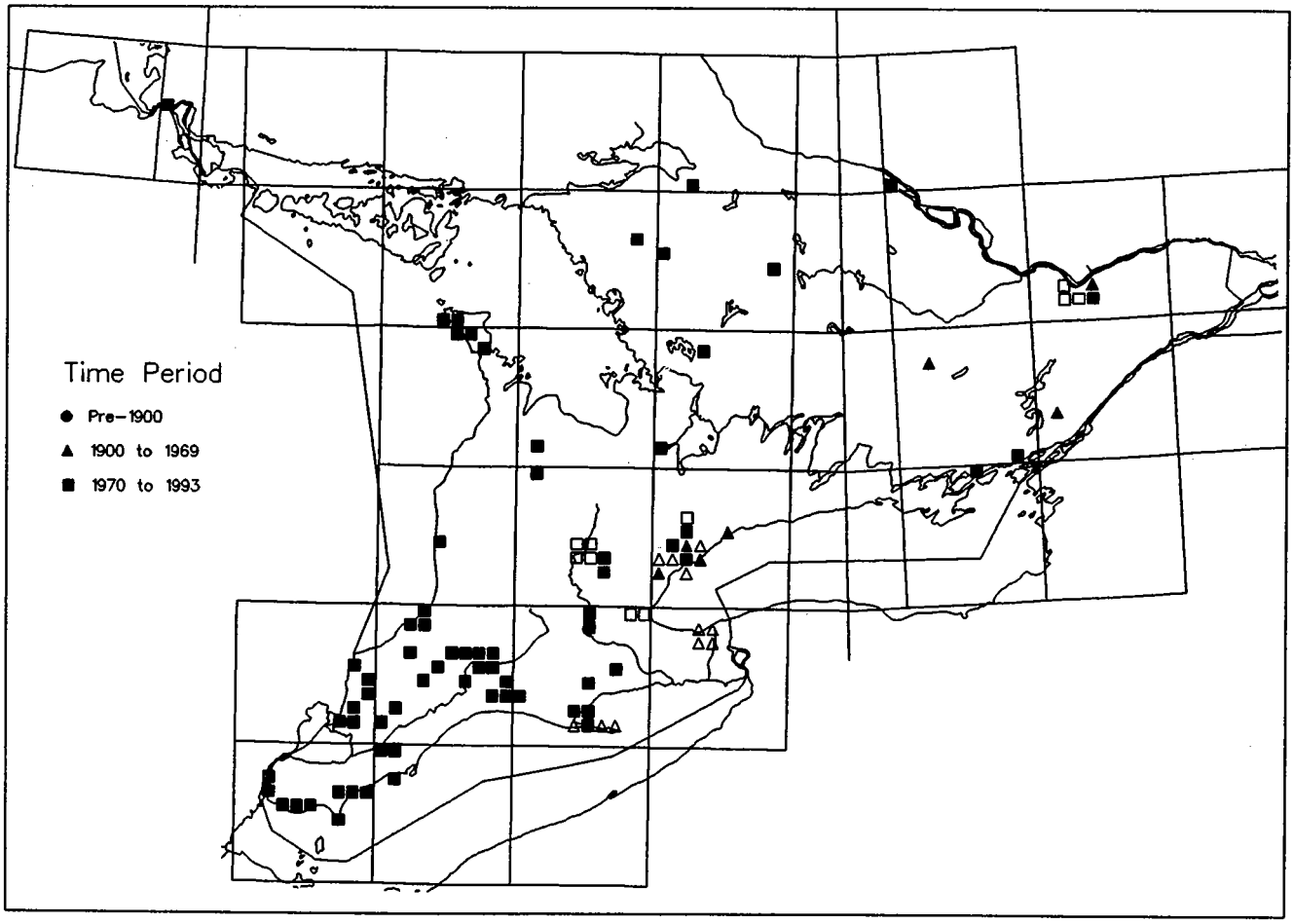
Lasiurus cinereus

The Hoary Bat is the largest bat in Ontario. It is a solitary mammal and roosts in the terminal foliage of trees (van Zyll de Jong 1985). It is distributed across the US, as well as through parts of Alberta, Saskatchewan, and southeastern Canada. In Ontario, the Hoary Bat can be found as far north as James Bay in the east and Lake of the Woods in the west.

The echolocation calls of the Hoary Bat are unique and easily distinguishable from other species with the help of a bat detector tuned to 20 kHz. At this frequency, Hoary Bats produce strong, heavy beats on the detector's speaker, allowing volunteers to compile accurate and useful data on the distribution of this mammal.

Hoary Bats are one of three Ontario species of bats (including the Eastern Red and Silver-haired bats) that migrate south to the US each winter prior to hibernation.





Evening Bat

Nycticeius humeralis

The Evening Bat is not considered a resident species of Ontario. It is included in the list of mammals for the province because one specimen was collected in Ontario at Point Pelee in May 1911.

The Evening Bat is a southern bat, occupying most of the eastern portion of the US north to Michigan. Because the northern populations of Evening Bats are migratory (van Zyll de Jong 1985), it is likely that the Point Pelee specimen was collected after the bat overshot its migratory destination.