

The Rabies Reporter

MNR Publication 51709

Volume 16, Number 2

ISSN 1705-2106



Inside this issue:

Rabies in Ontario during the
Second Quarter of 2005

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The Rabies Reporter, a scientific newsletter about current issues in rabies research and control, is a joint effort of the Rabies Research Unit of the Ontario Ministry of Natural Resources; the Rabies Laboratory at the Ottawa Laboratory (Fallowfield) of the Canadian Food Inspection Agency; the Ontario Ministry of Health; and the Geographic Information Systems Laboratory at Queens University, Kingston. Articles for future issues will be welcomed by the editor. The Rabies Reporter is not refereed, and should not be cited in papers intended for refereed journals. Send contributions, letters and inquiries to:

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RReporter/](http://www.gis.queensu.ca/RReporter/) or
rabies.mnr.gov.on.ca

Rabies in Ontario During the Second Quarter

The number of confirmed rabies cases for the second quarter (18) is down five from the first quarter, giving a total of 41 cases to the end of June 2005. Interestingly, this is exactly the same number of cases as this time in 2004.

This is only the fifth time since 1958 that Ontario has had less than 50 reported cases of rabies at the end of the second quarter. The only other instances when rabies cases were this low was immediately prior to raccoon rabies entering Ontario; there were 36 cases in 1997, 29 in 1998, and 32 in 1999 to the end of June.

Figure 1 illustrates that there is a very close association between the number of cases at the end of June to the total number of cases for the year. Although terrestrial cases tend to be higher during the first quarter of the year as a result of increased transmission rates during the breeding season, bat cases tend to be highest during the third quarter which helps to balance the numbers.

As in the previous quarter, most reported cases came from the western region (8) and adjacent areas in central Ontario (6). All cases occurred in the traditional rabies vectors (bat, fox, raccoon, and skunk) and there were no reported cases from northern Ontario.

There have still been no reported cases of raccoon strain rabies during the first half of 2005. Last year, upon discovering the four cases near Mallorytown (approximately 20 minutes west of Brockville) in August and September, the Rabies Research and Development Unit immediately implemented an enhanced Trap-Vaccinate-Release program in the area surrounding the cases. For the time being, this control measure seems to have accomplished its intended goal of slowing the spread of raccoon rabies in eastern Ontario. There have only been five confirmed cases

of raccoon strain rabies since the end of June 2003. As a result of the low incidence of cases in the past two years, the High Risk Area in eastern Ontario was reduced by approximately 65% on July 1. Visit <http://rabies.mnr.gov.on.ca/rabiesmaps.cfm> to view the current boundaries of the High Risk Area and the locations of the most recent cases.

In the second quarter, there were 10 reported cases of rabid bats from across all regions of the province, with the exception of northern Ontario. This is twice as many cases as reported in the first quarter, and five cases (or 50%) higher than this time last

| Year | 2nd Quarter | Annual Total |
|------|-------------|--------------|
| 1990 | 9 | 25 |
| 1991 | 8 | 43 |
| 1992 | 5 | 21 |
| 1993 | 6 | 24 |
| 1994 | 1 | 16 |
| 1995 | 0 | 16 |
| 1996 | 7 | 24 |
| 1997 | 4 | 25 |
| 1998 | 6 | 30 |
| 1999 | 3 | 18 |
| 2000 | 7 | 34 |
| 2001 | 13 | 54 |
| 2002 | 11 | 72 |
| 2003 | 19 | 72 |
| 2004 | 10 | 51 |
| 2005 | 15 | N/A |

Table 1. Number of rabid bats in Ontario for the past fifteen years.

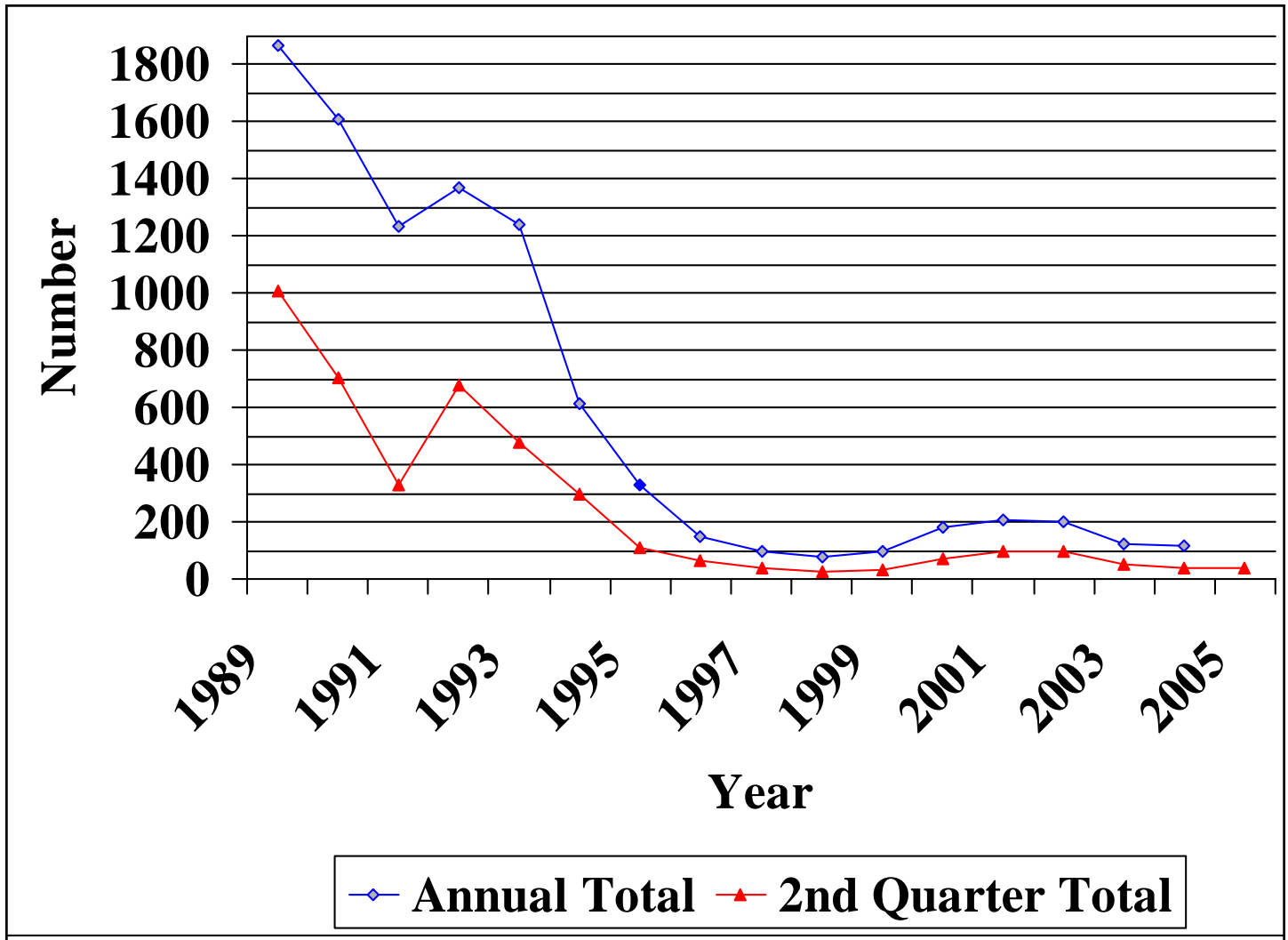


Figure 1. Comparison of the total number of rabies cases per year to the number of cases at the end of the second quarter since aerial baiting began in the fall of 1989.

year. In 2003, there were 19 rabid bats at the end of the second quarter which was the highest number ever recorded in Ontario (Table 1). 2003 was also one of the two years which had the highest total number of rabid bats (72).

Since 2000, there has been a dramatic increase in the number of confirmed rabid bats. This is probably a result of increased media coverage and public awareness and does not necessarily indicate that rabies is on the rise in bats. There are still only about 2% of bats submitted which are positive for rabies. This percentage has remained fairly constant over the years.

Since 2002, rabid bats have been responsible for approximately 45% of

all confirmed cases of rabies in Ontario. At present, there is no method available to control rabies in insect-eating bats.

There were no rabid foxes, dogs or livestock reported in this quarter which is a very good sign. Since aerial baiting began in 1989, arctic fox strain rabies cases have decreased by approximately 97% and the number of rabid foxes has decreased by 99%.

There were a total of 8 rabid skunks reported in Simcoe, Wellington, Huron and Grey Counties in the second quarter, which is 3 more than this period last year and 2 more than in the previous quarter. Until a vaccine becomes available which is effective at

immunising skunks against rabies, these cases will persist.

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and
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Animal Rabies Report: April to June 2005

| Animal Type | Fox | | Raccoon | | Skunk | | Other Wildlife | | Bat | | Dog | | Cat | | Livestock | | Totals | | | | |
|------------------------------|-----|------------|---------|------------|-------|------------|----------------|------------|-----|------------|-----|------------|-----|------------|-----------|------------|--------|------------|----|----|----|
| County or Region | # | Cumulative | # | Cumulative | # | Cumulative | # | Cumulative | # | Cumulative | # | Cumulative | # | Cumulative | # | Cumulative | # | Cumulative | | | |
| | | 05 | 04 | | 05 | 04 | | 05 | 04 | | 05 | 04 | | 05 | 04 | | 05 | 04 | 05 | 04 | |
| Eastern | | | | | | | | | | | | | | | | | | | | | |
| Stormont, Dundas & Glengarry | | | | | | | | | | 1 | 2 | | | | | | | | 1 | 2 | 0 |
| Prescott-Russell | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 |
| Ottawa-Carleton | | | | | | | | | | | 1 | 3 | | | | | | | 0 | 1 | 3 |
| Renfrew | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 |
| Lanark | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 |
| Leeds and Grenville | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 |
| Frontenac | | | | | | | | | | | | 1 | | | | | | | 0 | 0 | 1 |
| Lennox & Addington | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 |
| Central | | | | | | | | | | | | | | | | | | | | | |
| Hastings | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 |
| Prince Edward | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 |
| Northumberland | | | | | | | | | | 1 | 1 | | | | | | | | 1 | 1 | 0 |
| Victoria | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 |
| Haliburton | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 |
| Peterborough | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 |
| Durham | | | | | | | | | | | | 1 | | | | | | | 0 | 0 | 1 |
| York Region | | | | | | | | | | 1 | 1 | 1 | | | | | | | 1 | 1 | 1 |
| Toronto | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 |
| Simcoe | | | | | 2 | 7 | 3 | | | 2 | 2 | | | | | | 11 | | 4 | 9 | 14 |
| Western | | | | | | | | | | | | | | | | | | | | | |
| Peel | | | | | | | | | | | 1 | | | | | | 3 | | 0 | 4 | 0 |
| Halton | | | | | | | | | | | | 2 | | | | | | | 0 | 0 | 2 |
| Dufferin | | 1 | | | | | 1 | | | | | | 1 | | | | 6 | | 0 | 8 | 1 |
| Wellington | | | | | 1 | 2 | | | | 1 | 1 | | | | | 1 | | 2 | 3 | 1 | |
| Waterloo | | | | 1 | | | | | | | | | | | | | | | 0 | 1 | 0 |
| Perth | | | 1 | | | | | | | | 1 | | | | | | | | 0 | 1 | 1 |
| Grey | | | | | 1 | 3 | 3 | 2 | | | | | | | | | 6 | | 3 | 3 | 9 |
| Bruce | | | | | | | | 3 | | | | | | | | | 2 | | 0 | 0 | 5 |
| Huron | | | | | 2 | 2 | | | | 1 | 1 | | | | | | | | 3 | 3 | 0 |

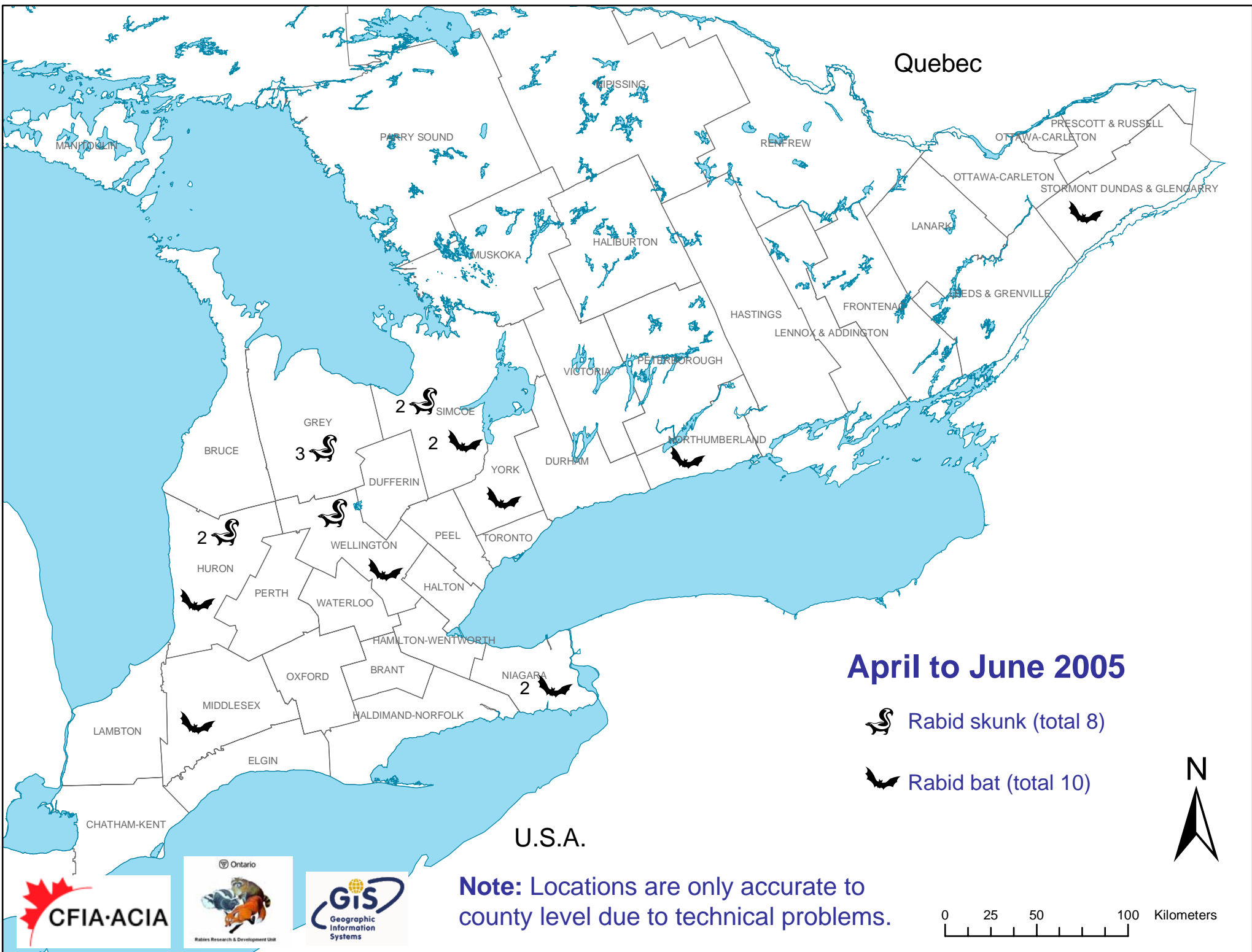
Animal Rabies Report: April to June 2005

| Animal Type | Fox | | Raccoon | | Skunk | | Other Wildlife | | Bat | | Dog | | Cat | | Livestock | | Totals | | | | | | | | | | | | |
|------------------------|----------|------------|----------|----------|------------|----------|----------------|------------|----------|----------|------------|----------|-----------|------------|-----------|----------|------------|----------|----------|------------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|
| County or Region | # | Cumulative | | # | Cumulative | | # | Cumulative | | # | Cumulative | | # | Cumulative | | # | Cumulative | | # | Cumulative | | | | | | | | | |
| | | 05 | 04 | | 05 | 04 | | 05 | 04 | | 05 | 04 | | 05 | 04 | | 05 | 04 | | 05 | 04 | | | | | | | | |
| Southern | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wentworth | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 | | | | | |
| Haldimand-Norfolk | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 | | | | |
| Brant | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 | | | | |
| Niagara | | | | | | | | | | 2 | 2 | | | | | | | | | | | | 2 | 2 | 0 | | | | |
| Elgin | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 | | | | |
| Oxford | | | | | | | | | | | 1 | | | | | | | | | | | | 0 | 1 | 0 | | | | |
| Middlesex | | | | | | | | | | 1 | 1 | 2 | | | | | | | | | | | 1 | 1 | 2 | | | | |
| Lambton | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 | | | | |
| Kent | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 | | | | |
| Essex | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 | | | | |
| Northern | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Muskoka | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 | | | | |
| Parry Sound | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 | | | | |
| Nipissing | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 | | | | |
| Sudbury | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 | | | | |
| Cochrane | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 | | | | |
| Timiskaming | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 | | | | |
| Algoma | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 | | | | |
| Thunder Bay | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 | | | | |
| Rainy River | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 | | | | |
| Kenora | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 | | | | |
| Regional Totals | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eastern | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 4 | | |
| Central | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 7 | 3 | 0 | 0 | 0 | 4 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 6 | 11 | 16 | |
| Western | 0 | 1 | 1 | 0 | 1 | 1 | 6 | 7 | 6 | 0 | 0 | 0 | 2 | 4 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 8 | 23 | 19 |
| Southern | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 2 | | |
| Northern | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Totals | 0 | 1 | 1 | 0 | 1 | 1 | 8 | 14 | 9 | 0 | 0 | 0 | 10 | 15 | 10 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 20 | 18 | 41 | 41 |

Notes for this quarter:

All bats were big brown bats.





U.S.A.

Note: Locations are only accurate to county level due to technical problems.

