The Rabies Reporter

August 1997 | Volume 8, Number 2 | ISSN 1186-8961

In this issue:

BAIT DROPS SCHEDULED FOR SEPTEMBER 1997

An Air Service Twin Otter will begin the fall bait program on 10 September, with a trip to the Kapuskasing - Cochrane area. A strip of baits will be laid on each side of highway 11 from just west of Kapuskasing to south of Cochrane. Additional farming areas around Kapuskasing and Cochrane will also be treated. Then, on 12 September, two aircraft will leave for Dunkirk, New York, to begin the third year of cooperative baiting in New York State. The three baiting areas are shown in fig. 1. The first, in Chautauqua County, is designed to stop westward spread of raccoon rabies along the Lake Erie shore. The second area, Niagara County, plus Grand island in Eire County, is designed to reduce the threat of raccoon rabies crossing the Niagara River into Ontario. The third area, in Jefferson, Lewis and St. Lawrence Counties will help to prevent raccoon rabies from crossing the St. Lawrence River into Ontario, and to prevent further eastward movement along the south bank of that river, into Quebec. The funding for the New York operation is reduced this year, so the treated areas will be smaller, with most of the reduction coming from the southern part of Jefferson County.

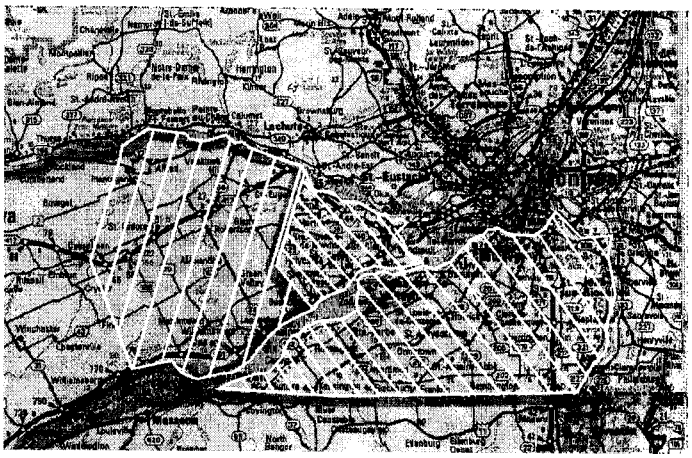


Figure 2. Areas of Quebec and eastern Ontario due to receive baits in late September 1997.

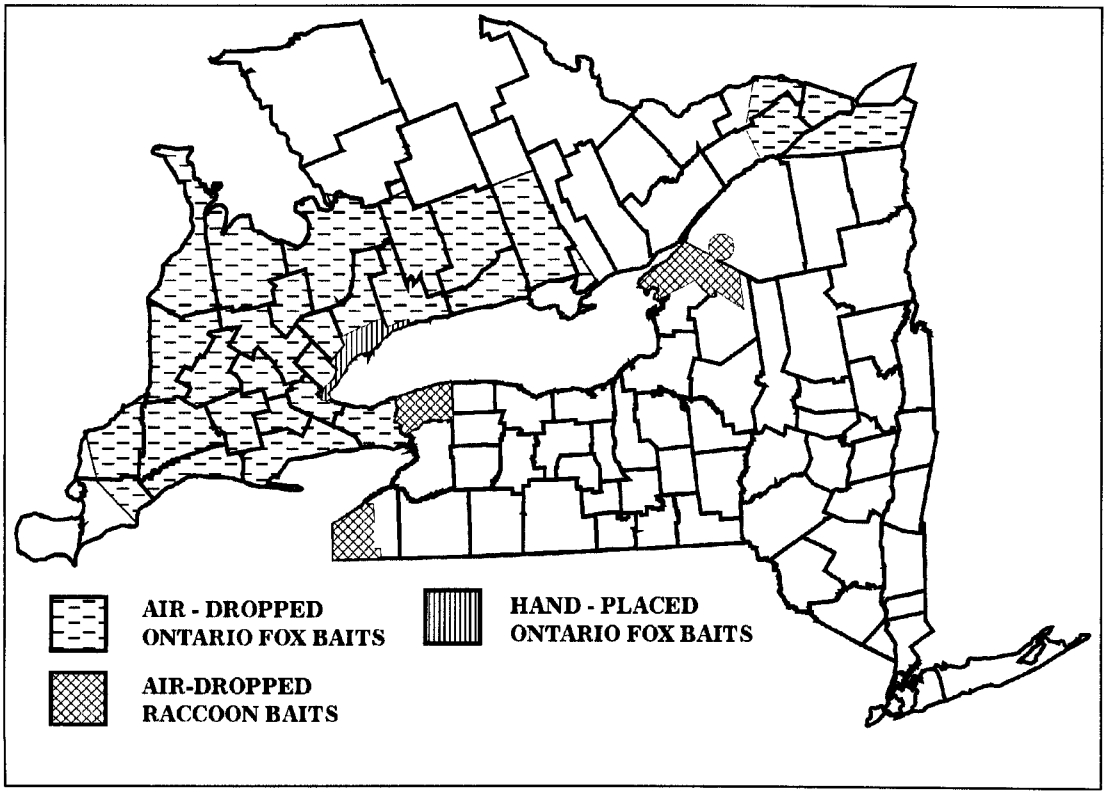


Figure 1. Locations where OMNR aircraft will drop baits during September

The main effort in Ontario will begin 20 September, when three Twin Otters, and a large Rabies Unit contingent will meet at Stratford airport to begin dropping 1.25 million baits. From Stratford we will bait all the area west of Toronto, as shown in fig. 1. After that is done, we will move to Peterborough, to complete the major baiting area in southern Ontario. Finally, we will end up spending a day baiting extreme eastern Ontario, and a piece of Quebec south of the St. Lawrence, shown in fig. 2. This last effort is in response to a cluster of

rabid animals east of Montreal, shown in fig. 3.. The movement of this outbreak seems to be westward, so there is a risk that rabies might re-enter eastern Ontario. We want to establish a wall of vaccinated foxes to reduce the risk of repeat the Vermont baiting this fall. When baits are dropped in the spring, an additional program should take place in the fall, to vaccinate young-of-the-year which were not old enough to vaccinate during the spring campaign. The

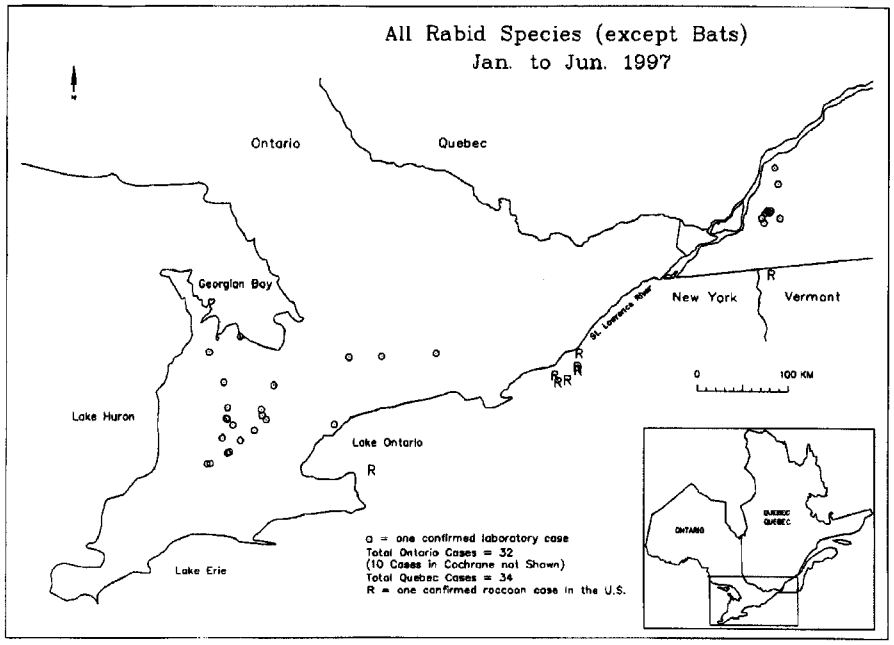


Figure 3. Map of recent rabies cases of interest to rabies control in southern Ontario. Note the number of fox rabies cases east of Montreal, and the locations of rabid raccoons (marked as R) close to the Ontario

that.

Also shown in fig. 3 are the locations of rabid raccoons close to the Ontario and Quebec borders during the past few months. If you match the cluster in fig. 3 along the St. Lawrence just across from Gananoque with the baiting area in fig. 1, you will see that we are covering these close cases with baits.

There was a rabid raccoon during July in North Hero Island State Park in Vermont, about 11.5 km from the Quebec border. This was within the zone which was baited on 7 May. However, when you see it on the map (fig. 3), it certainly is close to a land border with Canada!

So far the Cornell group have been unable to raise funds to Rabies Unit crew have left it open: if baits can be found for the Vermont area, we will have aircraft almost there, baiting in Quebec, about 30 September, and we will be ready to go to Burlington if needed.

Charlie MacInnes
Rabies Unit
Stouffville

RABIES IN A SILVER-HAIRED BAT

On August 8, 1997 a family of six were at their summer residence near Kenora, Ontario. While sitting in the screened porch one family member was attacked by a bat and bitten on the arm. After the attack the bat fell to the floor and began twitching violently. The gentleman's son immediately stepped on the bat, killing it, and then contacted the Lake of the Woods District Hospital, Emergency Department, who immediately referred the call to the Team Leader, Healthy Environments, at the Northwestern Health Unit.

The investigation revealed that the bat had also walked across a lady's face during her sleep, a few nights earlier in the same cottage.

The regional federal veterinarian was contac ted on the same day, and arrangements were made for a rabies examination of the bat. The bat was sent to the Animal Disease Research Institute, Lethbridge, Alberta. The bat was identified as a silver-haired bat (*Lasionycteris noctivagans*) and was found to be "roaring" with rabies

Two of the summer residents were treated with rabies immune globulin and vaccine at the Lake of the Woods District Hospital, Emergency Department. The series could not be completed at the hospital because the couple had to return to their home in the southern U.S.A.. The last of the series for human diploid cell vaccine was given to the individuals for their family physician to administer.

The other four family members did not receive rabies vaccine in Kenora, even though they were advised to by the Medical Officer of Health and the Team Leader, Healthy Environments. These four family members finally decided to receive treatment at a clinic in Duluth, Minnesota. while on their way home.

Silver-haired bats are migratory and travel great distances during the spring and fall. It has been documented that silver-haired bats will travel summer range in Alaska and Canada to winter quarters in the southern states (Arizona and New Mexico) and South America. Although

these bats are common to northwestern Ontario and other parts of the province, they are not found in great numbers like the little brown bat (*Myotis lucifugus*). Silver-haired bats do not live in large colonies like the little brown bat. These bats are "loners", typically found in dense wooded areas near lakes, streams and ponds.

It is recommended that, if people are sleeping or residing in the same room as a silver-haired bat, they should be treated for rabies. The person does not necessarily have to be bitten by the bat to receive treatment. Airborne transmission of the rabies virus has been known to occur. When conducting a rabies risk assessment , silver-haired bats should be considered at high risk of carrying and transmitting the rabies virus.

References:

C. G. van Zyll de Jong, 1985. Handbook of Canadian Mammals National Museums of Canada.

R. W. Barbour & W.H. Davis, 1969. Bats of North America. The University of Kentucky Press.

Bill Limerick and Lyle Wiebe
Northwestern Health Unit
21 Wolseley Street
Kenora, Ontario P9N 3W7
Phone: (807) 468-3147
FAX: (807) 468-4970

Thank you very much for the above. The Rabies Reporter would like many more articles like this one!

RABIES IN ONTARIO SECOND QUARTER 1997

There was one rabid fox in all southern Ontario during the quarter. It was the first rabid fox since November 1996. Is there any poetic significance to the fact that it was found near the Stratford airport, which is the base for our baiting?

In northern Ontario there were 7 rabid foxes this quarter, mostly along highway 11 from west of Kapuskasing east toward Cochrane.

As happened in eastern Ontario in 1994-95, the number of rabid skunks dropping fast now that there are so few rabid foxes. There was one cluster, 3 cases in southern Dufferin County, and the four other cases were scattered, with on in Metro toronto (Scarborough).

Although the spring and summer quarters are the time that almost all rabid bats are encountered, only 3 rabid bats were found this quarter.

Last year to the end of June there had been 65 rabies cases in southern Ontario, about half of what there had been the previous year. This year there have been only 26.

Charlie MacInnes
Rabies Unit
Stouffville

RABIES IN THE AMERICAS CONFERENCE 1997

Current Issues in Rabies and Rabies Control in the Americas

November 3-7, Kingston Ontario

Agenda:

Sunday November 2, 1997

Workshop: GIS Techniques in Rabies Research

Convenor: R. Tinline
GIS Laboratory, Queens University

Content: hands-on computer techniques in GIS, disease spread, modelling

Aircraft Demonstrations

Convenor: C.D. MacInnes and N. Ayers
Ontario Ministry Of Natural Resources

Content: Ontario has led the way in the development of large scale bait distribution methodologies. Participants are offered the opportunity to view in-flight demonstrations of Ontario baiting technology

Monday November 3, 1997

Morning

Opening Session

Welcoming speeches and opening business

Plenary Session: Rabies Control in the Modern World

Convenor: C.D. MacInnes
Ontario Ministry Of Natural Resources

Content: A series of talks highlighting session content to be presented over the course of the conference

Afternoon

Mobilizing Public Support

Convenor: Laura Bigler
Zoonotic Disease Section, College of Veterinary Medicine, Cornell University

Content: Rabies vaccination programs have been implemented by varying institutions and levels of government. This session will review strategies that have been used to enlist public support and assistance for rabies control efforts

Tuesday November 4, 1997

Morning

Rabies Control Projects and Methodologies

Convenor: D. H. Johnston

Content: Presentations will include details of system parameters, current status and costs, and an evaluation of the results obtained in a rabies control project

Afternoon

Rabies Diagnosis and Laboratory Science

Convenor: Charles V. Trimarchi
State of New York Department of Health

Content: Techniques and problem solving in the diagnosis of rabies in humans and animals, and strategies for rabies surveillance. Topics will include: immunofluorescence and immunohistochemistry; in vitro virus isolation; RT-PCR and molecular analysis; in vitro neutralizing antibody assays; antemortem diagnosis; proficiency testing programs; design of surveillance programs

Evening
Poster Session/Reception

An opportunity to view poster presentations and meet the authors in a relaxed social setting. Posters on all aspects of rabies and rabies control will be presented

Wednesday November 5, 1997
Morning
Legal, Political and Economic Aspects of Rabies Control Programs

Convenor: Christopher Nunan
Ontario Ministry Of Natural Resources

Content: Rabies control programs are being evaluated in terms other than those concerned with their scientific and operational aspects. This session will discuss planning, implementation, and evaluation of rabies control efforts within a broader societal context

Afternoon
Bats: Rabies Control and Conservation: Finding Compatibility

Convenor: Stephen Frantz
State of New York Department of Health

Content: This session will contrast the increasing awareness of bat rabies with conservation efforts. Integrating the two concepts for the benefit of both public health and conservation of bats presents a challenge to achieve an acceptable ecologically sound balance without hysteria from the extremes

Thursday November 6, 1997
Morning
Rabies Pathobiology

Convenor: Charles Rupprecht
Rabies Section
Center for Disease Control, Atlanta

Content: A summary and discussion of those factors associated with rabies pathogenesis and techniques at the molecular, cellular, host, or population level which permit a greater understanding of the natural history to public health aspects of lyssaviruses

Afternoon
Closing Session

Important concepts presented during the conference will be highlighted, as well as discussions of participant comments on session content. Business items regarding this and future conferences will be presented

Evening
Closing Banquet

MORE ABOUT THE CONFERENCE

The major method of advertizing the conference has been the internet. That decision was designed to save a lot of money and time. one direct result of downsizing is that secretaries are nonexistent to the conference organizers, while MNR has had considerable success with wide distribution of information via the net.

Our corporate web site is http://www.mnr.gov.on.ca/MNR/index.html . From there, it should be easy to find your way. An alternate route is via http:\\www.gis.queensu.ca, and follow the steps for the rabies Reporter homepage. That wuill lead you to the conference agenda

The deadline for abstracts is 19.09.97, but there is likely to be some leeway. However, we will begin selecting speakers shortly after that date, so if you get an abstract in later, you may miss out. Whenever possible, abstracts should be submitted via the internet, this saves us having to retype them. The address is nunanc@govonca2.gov.on.ca.

Chris Nunan
Rabies Unit
300 Water Street
Peterborough, ONT
705-755-1554

RABIES UNIT STILL IN LIMBO

The new offices and labs at Trent University are still not ready. Estimated completion date is now November. We will believe them after we move in!!

The Rabies Reporter, a scientific newsletter about current issues in rabies research and control, is a joint effort of the Rabies Research Unit, Ontario Ministry of Natural Resources; the Food Production and Inspection Branch of Agriculture Canada; The Ontario Ministry of Health and the Department of Geography, Queens University, Kingston.. Articles for future issues will be welcomed by the editor. Comments, letters, submissions and enquiries should be sent to:
The Rabies Reporter
Rabies Research Unit,
Ontario Ministry of Natural Resources
P.O. Box 7000,
300 Water Street
Peterborough, Ontario
Telephone: (905) 640-6832
Fax: (905) 640-4713
e-mail: macinnch@netrover.com
Also, visit our home page on the internet, at
http://www.gis.queensu.ca/RReporter/mm.html

Animal Rabies Report: April to June 1997

Animal Type	Fox			Skunk			Other Wildlife			Dog			Cat			Livestock			Total		
County or Area	#	Cumulative		#	Cumulative		#	Cumulative		#	Cumulative		#	Cumulative		#	Cumulative		#	Cumulative	
		97	96		97	96		97	96		97	96		97	96		97	96		97	96
Western																					
Peel																			0	0	0
Halton						2													0	0	2
Dufferin				3	3	1									1	1	1	1	4	4	3
Wellington			1		1	1					1						2		0	4	2
Waterloo					2	3											1	2	0	3	5
Perth	1	1			2								1	1				2	2	4	2
Grey			1	1	3	3												4	1	3	8
Bruce						3									1				0	0	4
Huron			1			3	1	1											1	1	4
Southern																					
Wentworth																			0	0	0
Haldimand - Norfolk																			0	0	0
Brant																			0	0	0
Niagara						2													0	0	2
Elgin																			0	0	0
Oxford			1			1						1						1	0	0	4
Middlesex			1			4	1	1	1										1	1	6
Lambton																			0	0	0
Kent									1										0	0	1
Essex																			0	0	0
Northern																					
Muskoka																			0	0	0
Parry Sound																			0	0	0
Nippissing																			0	0	0
Sudbury																			0	0	0
Cochrane	7	10	9																7	10	9
Timiskiming																			0	0	0
Algoma																			0	0	0

Animal Rabies Report: April to June 1997

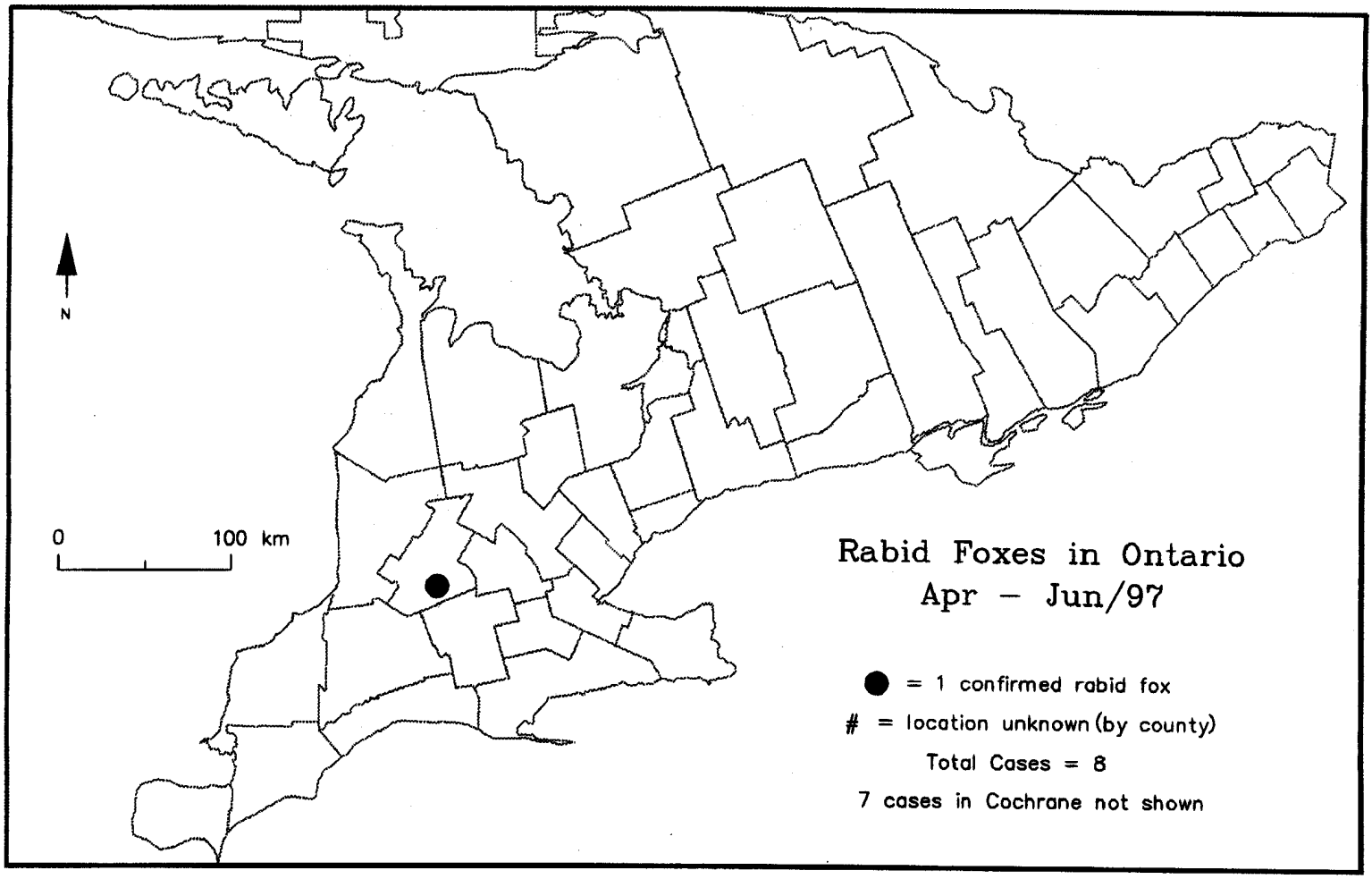
Animal Type	Fox			Skunk			Other Wildlife			Dog			Cat			Livestock			Total		
County or Area	#	Cumulative		#	Cumulative		#	Cumulative		#	Cumulative		#	Cumulative		#	Cumulative		#	Cumulative	
		97	96		97	96		97	96		97	96		97	96		97	96		97	96
Eastern																					
Stormont																			0	0	0
Dundas																			0	0	0
Glengarry																			0	0	0
Prescott																			0	0	0
Russell																			0	0	0
Carleton								1	2										0	1	2
Renfrew																			0	0	0
Lanark																			0	0	0
Grenville																			0	0	0
Leeds																			0	0	0
Frontenac							1	1											1	1	0
Lennox-Addington																			0	0	0
Central																					
Hastings						3			1										0	0	4
Prince Edward																			0	0	0
Northumberland									1										0	0	1
Victoria				1	1	1													1	1	1
Haliburton																			0	0	0
Peterborough			1		1	11			1										0	1	13
Durham				1	1														1	1	0
York Region																			0	0	0
Scarborough				1	1														1	1	0
East York																			0	0	0
City of Toronto																			0	0	0
City of York																			0	0	0
NorthYork																			0	0	0
Etobicoke																			0	0	0
Simcoe									1										0	0	1

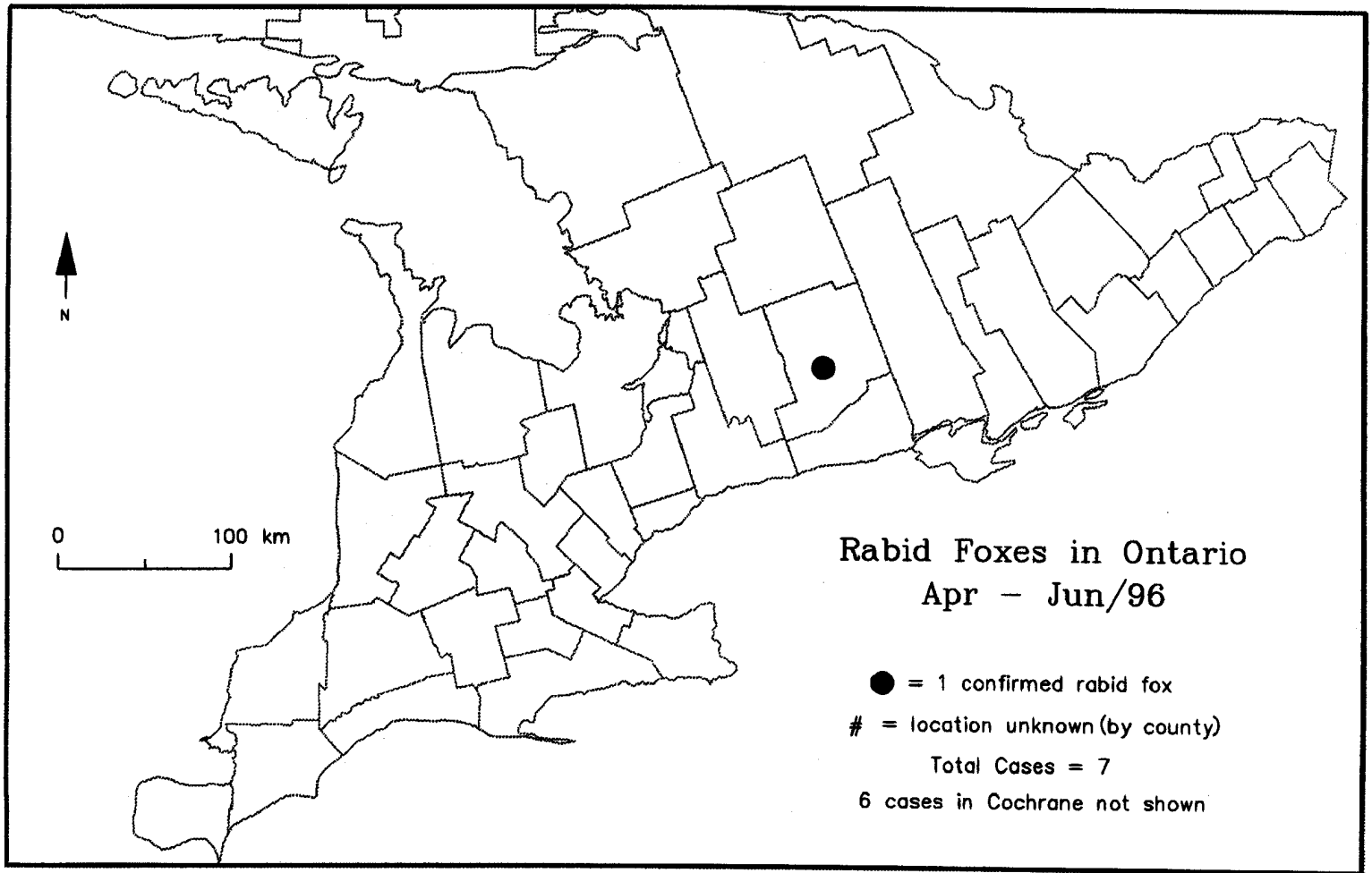
Animal Rabies Report: April to June 1997

Animal Type	Fox			Skunk			Other Wildlife			Dog			Cat			Livestock			Total		
County or Area	#	Cumulative		#	Cumulative		#	Cumulative		#	Cumulative		#	Cumulative		#	Cumulative		#	Cumulative	
		97	96		97	96		97	96		97	96		97	96		97	96		97	96
Northern (continued)																					
Thunder Bay																			0	0	0
Rainy River																			0	0	0
Kenora																			0	0	0
Subtotals																					
Eastern							1	2	2										1	2	2
Central			1	3	4	15			4										3	4	20
Western	1	1	3	4	11	16	1	1			1		1	1	2	1	4	9	8	19	30
Southern			2			7	1	1	2			1						1	1	1	13
Northern	7	10	9																7	10	9
Totals	8	11	15	7	15	38	3	4	8	0	1	1	1	1	2	1	4	10	**20**	**36**	**74**

Livestock this quarter: 1 cow

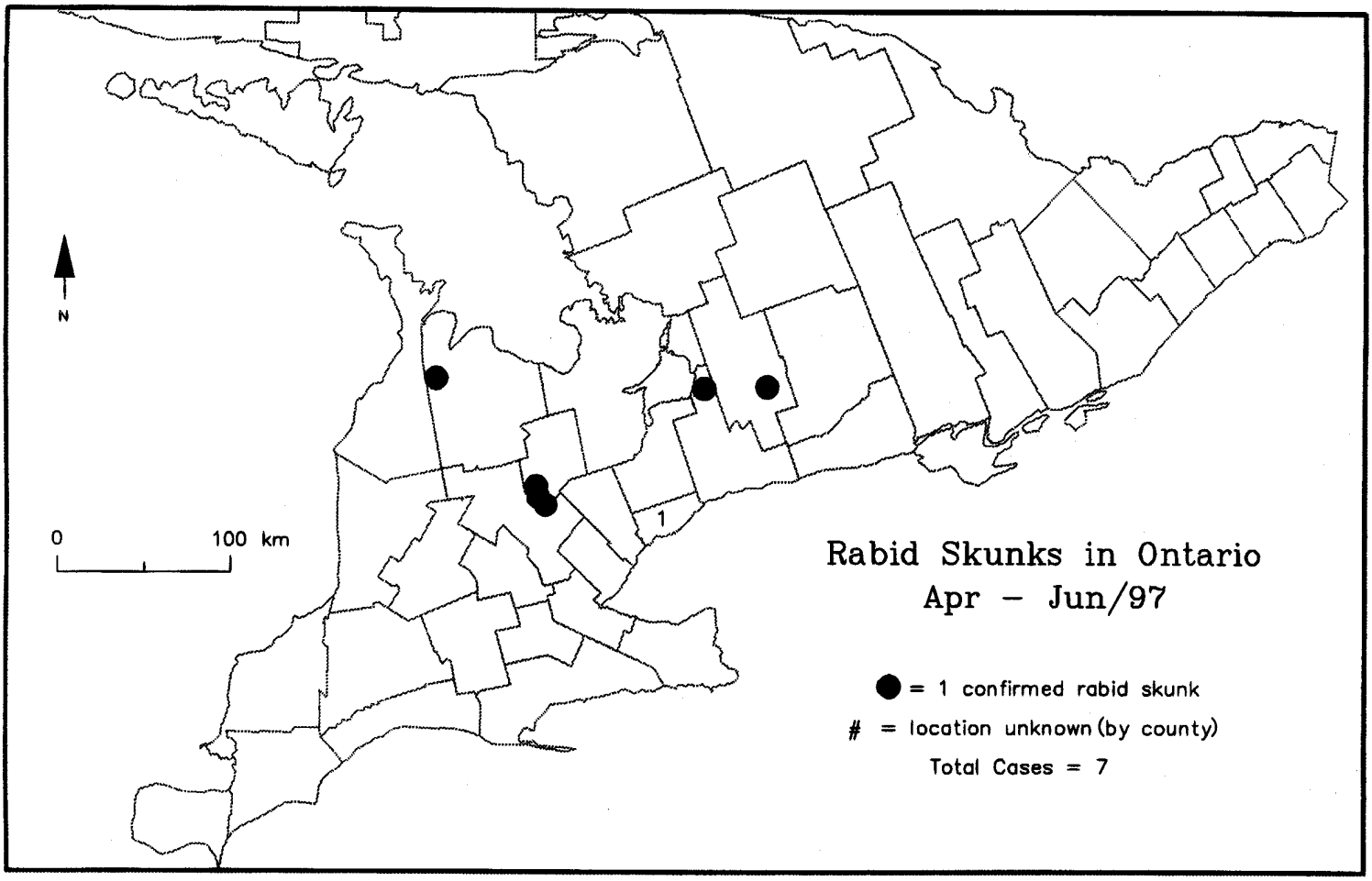
Other wildlife this quarter: 3 big brown bats

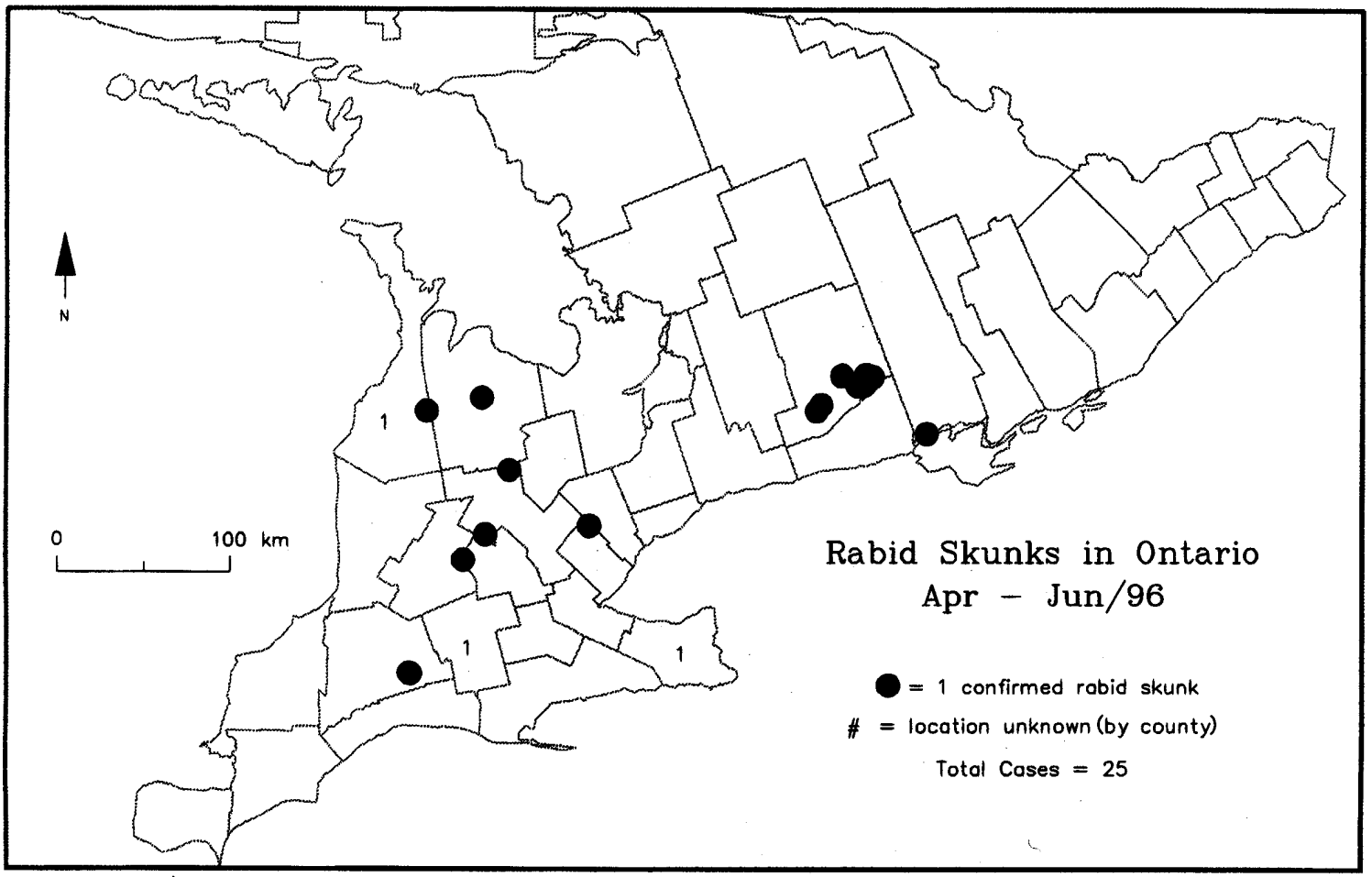




GIS Lab, Queen's University

Data Source: Animal Diseases Research Institute, Nepean, Ontario





GIS Lab, Queen's University

Data Source: Animal Diseases Research Institute, Nepean, Ontario