

The Rabies Reporter

December 1992

Volume 3, Number 3

ISSN 1186-8961

In This Issue

First Bait Drop in Northern Ontario
Eastern Ontario Bait Drop - 1992
We Missed Larry Zinn

First Bait Drop

in Northern Ontario

The Bait drop out of Kirkland Lake Airport began on 21 September. There were 107,000 baits to be dropped, over three areas (Figure 1). These areas were chosen because they had the highest concentrations of farmland, and were, therefore, thought to be the best fox habitat.

Most of the Rabies Unit reached Kirkland Lake during Sunday evening, September 20. The aircraft, C-GOGC, with pilots Roy Vinall and Eldon Germain, and engineer Marc Benoit, arrived from Sudbury on Monday morning.

Unfortunately, mechanical problems with the bait machine delayed take-off until after 14:00, and then the operation had to be suspended for the day because of LORAN problems. It turned out, next day, that the LORAN difficulties were due to weak radio signals. The other 'disaster' was failure of the freezer unit on the truck transporting the baits. However, since we know that baits are good in the field for at least five weeks, and the weather was cool, this did not require panic.

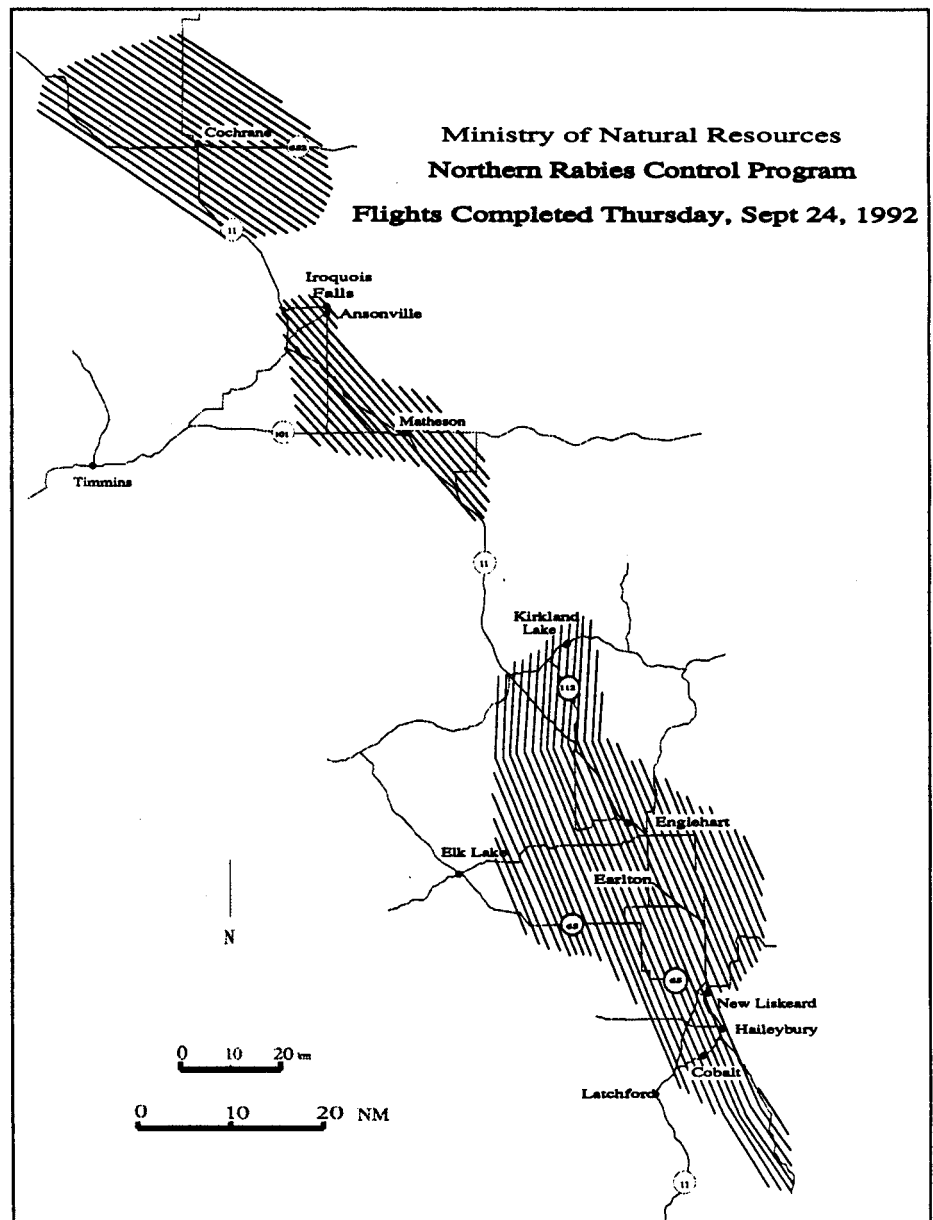
After the slow start, everything went extremely well. Seven bait flights were completed by Thursday afternoon, two on Tuesday, three

on Wednesday and two on Thursday. In addition to rabies unit staff and volunteer helpers, four people from the MNR Kirkland Lake area office and two from Agriculture Canada in North Bay helped with the flights.

Public relations efforts by Kirkland Lake, Cochrane and other districts clearly paid off. The local media arrived in force on Monday, and there was a story in the Northern Daily News on Tuesday.

More important, however, was the great awareness of rabies and the bait drop among people around Kirkland Lake. All staff reported that, when they said why they were in Kirkland Lake, the people they were talking to knew about the program and were very much in favor of it.

The objective of this northern operation is to try to hasten the end of the northern outbreak. By good fortune the timing of the drop was



excellent. The number of rabies cases fell off sharply after May. As you can see from this issue of the Reporter, the outbreak is almost over, for now at least. Computer simulation suggests that vaccination will have the greatest effect when foxes are scarce, and rabies transmission has slowed as a result. Further inhibition of rabies spread as a result of vaccination stands a high probability of knocking rabies out altogether.

When rabies last passed through the Little Clay Belt, it stayed in the area for 17 years (1955-72). The hope is that one or two bait programs can wipe it out more promptly this time. Close monitoring of rabies case records will guide the decision, to be made next summer, of whether the northern program should be repeated in 1993.

In late June, there were many rabies cases being reported in the Cocjrane are. There were cases west and north of Smooth Rock Falls. Kapuskasing was braced for invasion, but that invasion never came, at least to the end of October.

Eastern Ontario Bait Drop 1992 Edition

What do you get when the weather cooperates? The answer, in this year of no summer, was a record pace for completing the eastern Ontario bait drop. The planes arrived on Monday, September 28. That was set-up day, but one plane managed two flights, while the other was grounded to get its baiting machine working just right.

Tuesday morning started early - breakfast at 06:00, and both aircraft on their way by 08:00. Wednesday was even better - both planes were

off the ground by 07:30, and finished their three flights for the day by 17:30. Thursday beat even that, and after only four days, 20 of 38 flights had been completed. Things got even better after that. The weather warmed up, so the wing covers were no longer necessary to keep frost off the wings at night.

Pilots for the 1992 marathon were Neil Ayers, Ted Bekkers, John Harding and Bill Turcotte, supported by engineers Dave Russell and Chuck Brown. There were several volunteer baiters from Sir Sandford Fleming College, from the New York Department of Environmental Conservation and from Agriculture Canada. Don Aldridge from IBM and Mick McKillop and Terry Thompson from AutoCAD also helped out, and saw the important niches their products filled in the operation.

As always, Harold Lyon, Suzanne O'Brien, Dan Hertindy and Lana Vanness kept us well fed and housed at the Machesney Lake Junior Ranger Camp. Anyone who has ever been on the operation pays tribute to the huge contribution this happy camp makes to the smooth running of the whole show.

We Missed Larry Zinn

Larry Zinn, the senior MNR pilot in Thunder Bay, is one of the original pilots on the big bait drops. He has brought C-GOGA south each year since 1989. It was therefore a real blow when we heard this year that Larry was already south - in hospital in London for major surgery. His operation occurred on the second day of the Kirkland Lake flights, and we heard by the next week that he was doing well. All the rabies crew, including the many volunteers who have met Larry over the years,

join in wishing him all the best for a speedy recovery.

See you next year, Larry!

Rabies in the Cambridge Area

As you can see from this quarter's map, there is a fairly hot rabies outbreak in Elgin and Oxford counties. That is heading for the Cambridge Study Area, where cooperating trappers have hand-distributed baits for the past three years. It was therefore of interest to see if the baited area is protected. When we looked at the map in detail, however, it became clear that most cases are still to the west of the baited area, so it was impossible to say whether the area had been protected by vaccination, or whether the outbreak has not quite moved in yet. Stay tuned!

***MARRY CHRISTMAS
AND
HAPPY NEW YEAR***

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.. Article for future issues will be welcomed by the editor. Comments, letters, submissions and enquiries should be sent to:

The Rabies Reporter
Rabies Research Unit,
Wildlife Research
Ontario Ministry of Natural Resources
P.O. Box 5000,
Maple, Ontario L6A-1S9

Telephone: (416) 832-7110

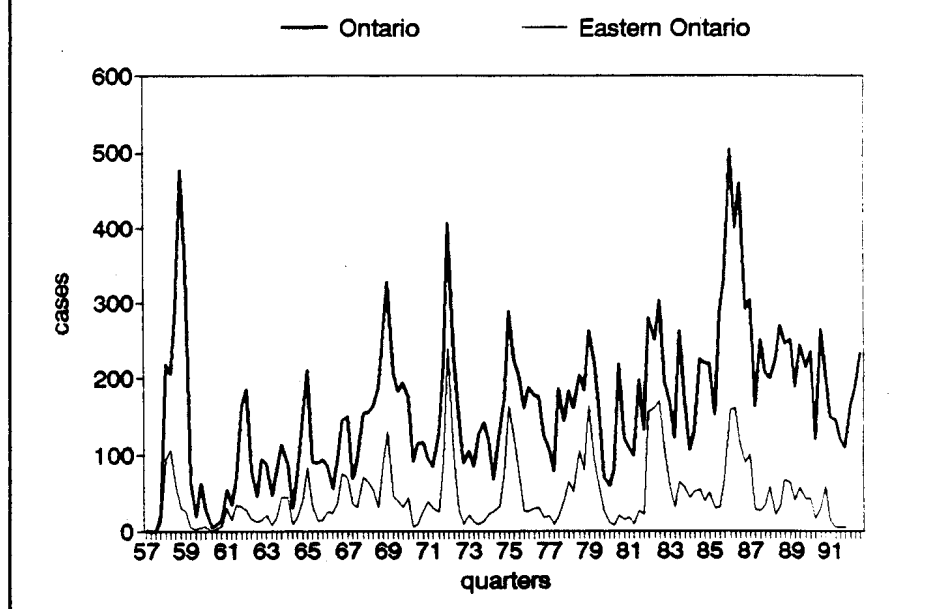
Fax: (416) 832-7149

Fox and Skunk Rabies Predictions for January-June 1993.

Fox and Skunk Rabies Predictions for January-June 1993.

Until this summer, the overall trend in fox and skunk rabies incidence has been downward despite the severe outbreak in Temiskaming. That downward trend reflects, in part, the rapid drop in incidence in the control area of eastern Ontario. Since this summer, however, fox and skunk incidence has been increasing in southwestern and central Ontario and we expect those areas to have high incidence for the next six months. Figure 1 shows the beginning of that increase and the continuing decline in eastern Ontario. Map 1, on the inside back page, shows how the spatial patterns of rabies incidence will develop over six months.

FIG. 1 Rabies incidence in Ontario and Eastern Ontario 1957-92



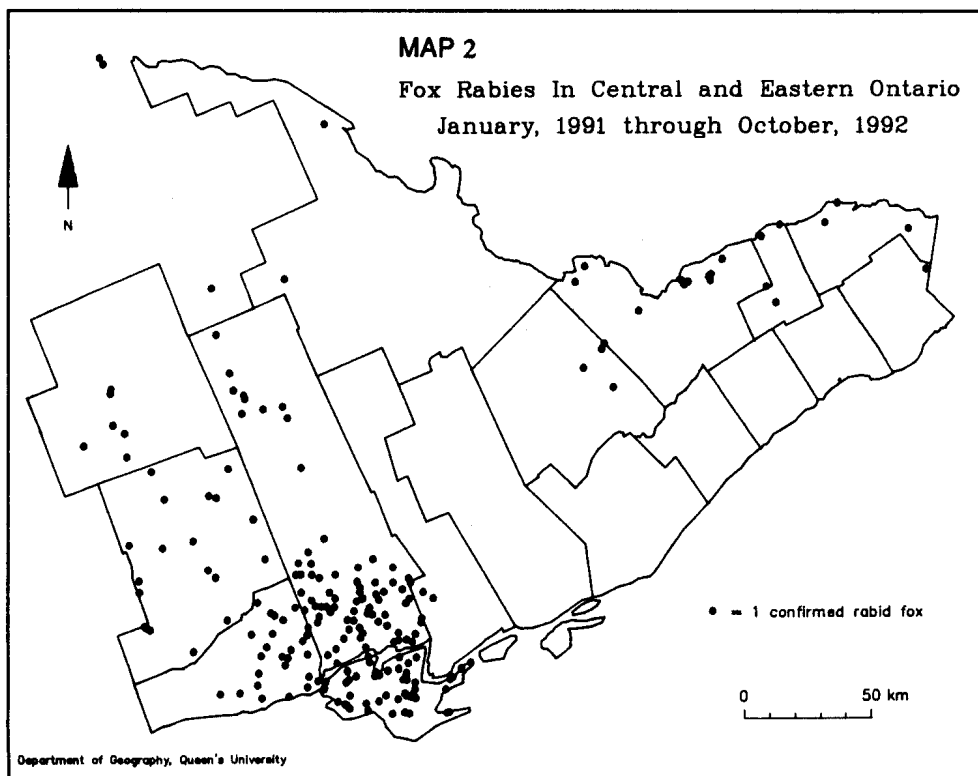
The control program is working and incidence in eastern Ontario will remain low. We anticipate a few isolated outbreaks in foxes resulting because of long distance fox dispersals bringing rabies from the high incidence areas in Quebec and northern New York (Map 2).

In the north, incidence in Temiskaming is dropping and will continue to drop. Although we expected this decline, Temiskaming was baited in late September 1992 to ensure that rabies would die out quickly and to prevent reintroduction from the high incidence area just to the east in Noranda-Rouyn. We expect the baited area to act as a "wall" against rabies from Quebec just as the baited area of Lennox and Addington County has done to prevent the spread of rabies from Hastings County (see below). Incidence across the remainder of northern Ontario will remain low.

The eastward spread of outbreak centered in Hastings, Prince Edward and Northumberland counties has stopped at the western boundary of the eastern Ontario control area. Map 2 shows how effective the baiting program has been. Contrast the high incidence in Hastings County with the low incidence in the adjacent areas of Lennox and Addington. Lennox and Addington has been baited for four years, Hastings County has not. Rabies, however, is now spreading west through the remainder of central Ontario. Incidence in Hastings, Prince Edward, and Northumberland counties will decline but incidence in Durham and Victoria will increase this winter.

MAP 2

Fox Rabies In Central and Eastern Ontario
January, 1991 through October, 1992



Animal Rabies Report: July to September 1992

Animal Type		Fox			Skunk			Other Wildlife			Dog			Cat			Livestock			Total		
County or Area	#	Cumulative		#	Cumulative		#	Cumulative		#	Cumulative		#	Cumulative		#	Cumulative		#	Cumulative		
		92	91		92	91		92	91		92	91		92	91		92	91		92	91	92
Eastern																						
Stormont			1			1				1									0	1	2	
Dundas			2											2				1	0	0	5	
Glengarry		1	1	1		1			2									1	1	2	4	
Prescott		1	2		2	2			1				1				5	1	0	9	7	
Russell			8			1													0	0	9	
Carleton			14	1	3	6	2	4	3			2				1	4	3	8	31		
Renfrew			11			11								2		1	2	0	1	26		
Lanark	1	3			1	1			1							2		1	6	2		
Grenville					1													0	1	0		
Leeds									1									0	0	1		
Frontenac						2			4									0	0	6		
Lennox-Addington		1	1									1				1	1	1	2	2		
Central																						
Hastings	28	53	32	2	5	3	1	6	1	1	3	3	1	5	2	1	6		34	78	41	
Prince Edward		9	27		2	5		2	1		1	1			2		7	3	0	21	39	
Northumberland	2	12	10		2	6	3	8	1	2	2				3	3	5	8	10	29	28	
Victoria	17	36	12	1	9	5	3	3	1	1	1	1				2	11	2	24	60	21	
Haliburton		1	27	1	2	4			2						1			2	1	3	36	
Peterborough	6	15	7	3	7	5			1			1	2	3	4	1	2	3	12	27	21	
Durham	6	11	1	3	10	4	1	2	2		1	2		1	0				10	25	9	
York Region			1			10		1	1				1	1				1	1	2	13	
Scarborough																						
East York																						
City of Toronto																						
City of York																						
North York																						
Etobicoke																						
Simcoe	4	21	42	2	2	21	1	4	4		1	3	1	1	0	2	6	10	10	35	80	

Breakdown not available.

Animal Rabies Report: July to September 1992

Animal Type	Fox			Skunk			Other Wildlife			Dog			Cat			Livestock			Total		
County or Area	#	Cumulative		#	Cumulative		#	Cumulative		#	Cumulative		#	Cumulative		#	Cumulative		#	Cumulative	
		92	91		92	91		92	91		92	91		92	91		92	91		92	91
Northern (continued)																					
Thunder Bay																					
Rainy River																					
Kenora																					
Subtotals																					
Eastern	1	6	40	2	9	23	2	4	13			4	1	6	1	10	9	6	30	95	
Central	63	158	159	12	39	63	9	26	14	4	9	11	5	11	12	7	37	29	100	280	
Western	54	108	95	18	53	90	6	9	12	1	6	2	1	10	5	12	44	44	92	230	
Southern	99	175	65	13	21	27	9	10	13	5	12	4	9	16	7	10	23	35	145	257	
Northern	13	90	85	8	15	19	1	6	7		5	3		4		6	34	7	28	154	
Totals	230	537	444	53	137	222	27	55	59	10	32	24	15	42	30	36	148	124	371	951	

* Statistics for Northern Ontario unavailable at this time

Other Wildlife: This quarter: 14 big brown bat, 1 silver-haired bat, 7 coyote, 5 raccoon

Southwestern Ontario will have a large increase in rabies in two areas this winter. Along Lake Erie, incidence in Elgin, Haldimand, Middlesex, Oxford and Kent counties has increased rapidly. Incidence should decline in Elgin and Haldimand but will remain high in the other counties. Incidence will also increase in the border areas of counties surrounding this outbreak. A second outbreak is beginning in Grey and Bruce counties. Incidence will continue to rise in those counties and we expect increasing incidence in the neighbouring counties of Dufferin and Simcoe.

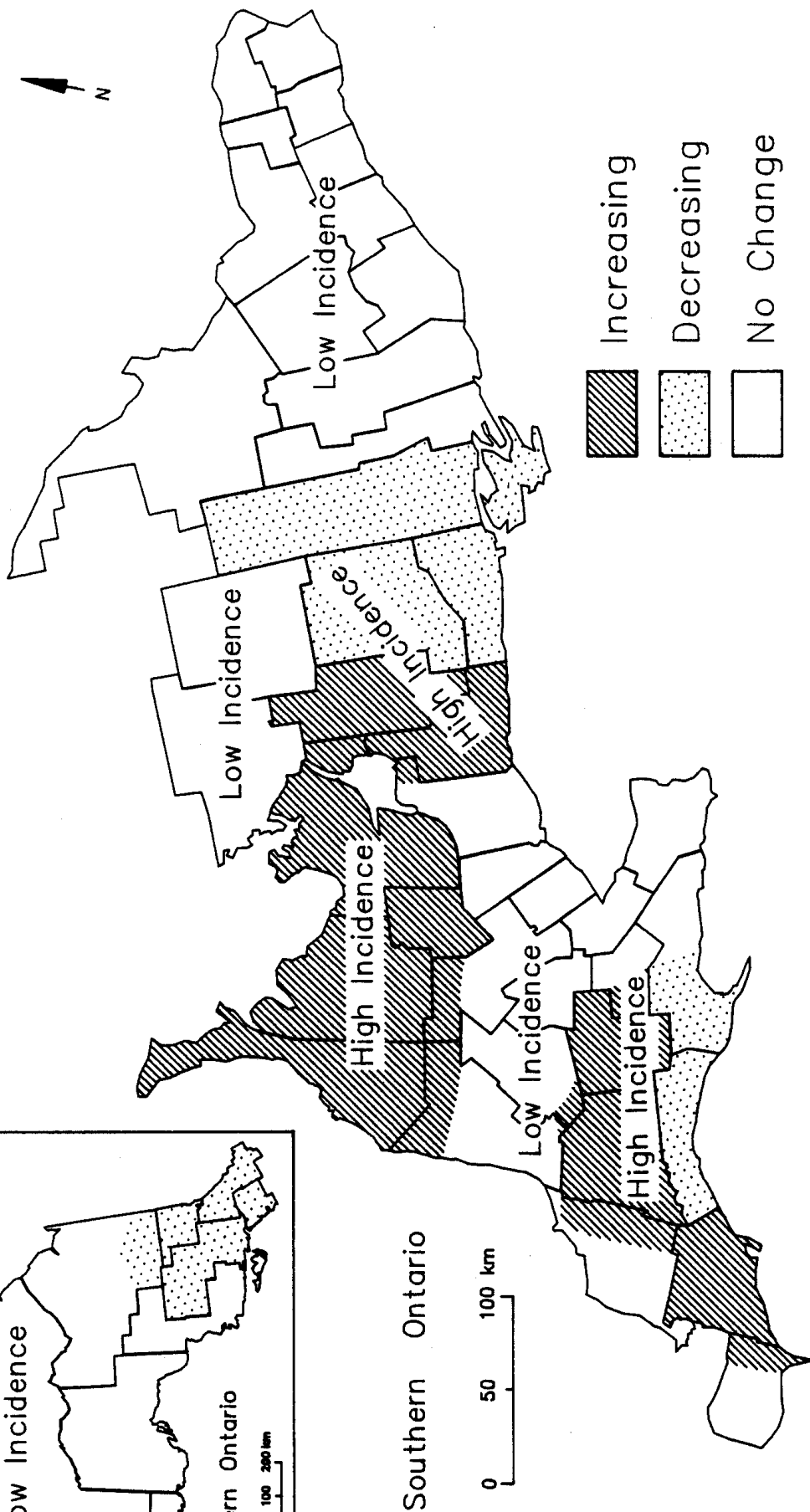
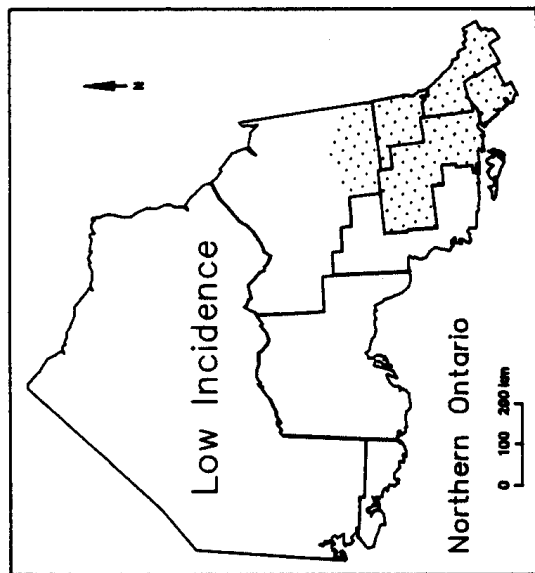
The least predictable and, therefore, the most interesting counties to watch will be those caught between the two foci of infection, i.e. Huron, Perth, Waterloo, Welland, Wellington, and Wentworth. Probably the northern and southern portions of those counties will have some increase in incidence but the major increases should be delayed until the summer and fall of 1993. This band of low incidence will continue east through the lake shore counties of Halton, Peel and York. Those areas are highly urbanized and have had low incidence for many years. If rabies spreads faster than we expect from the two foci in western Ontario, however, we could see a major outbreak in those urbanized counties.

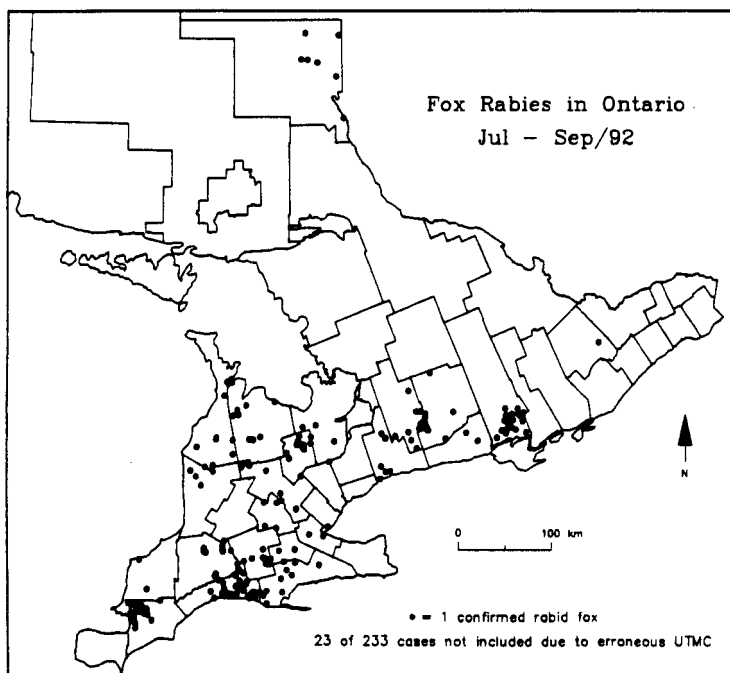
The peninsular areas of southern Ontario, Essex, Niagara and the Bruce Peninsula will remain relatively rabies free for the next six months despite the adjacent high incidence areas. Much will depend on the nature of the winter. If we have a mild winter with little snow cover, the outbreak in Kent may spread faster than expected into Essex County and skunks incidence will be relatively high.

*Rowland Tinline
Department of Geography
Queen's University.*

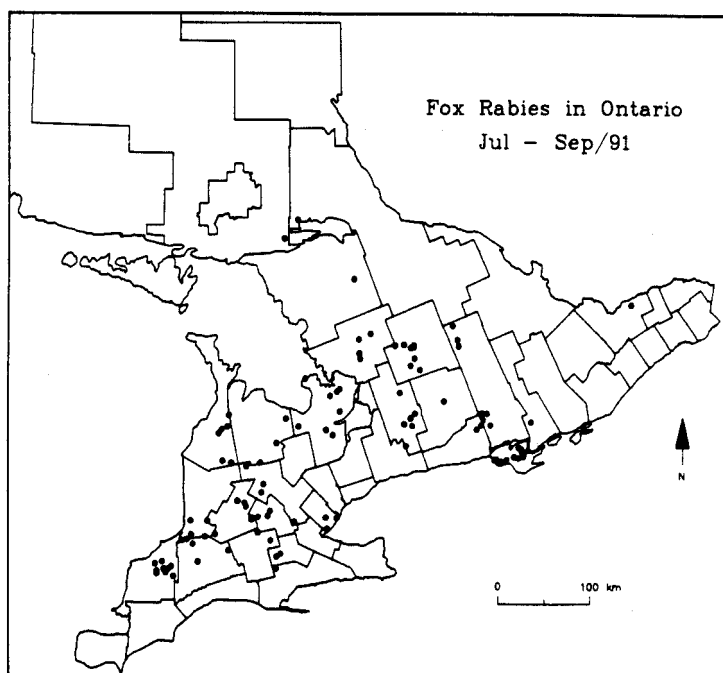
MAP 1

Predicted Change in Fox and Skunk Rabies
January - June, 1993

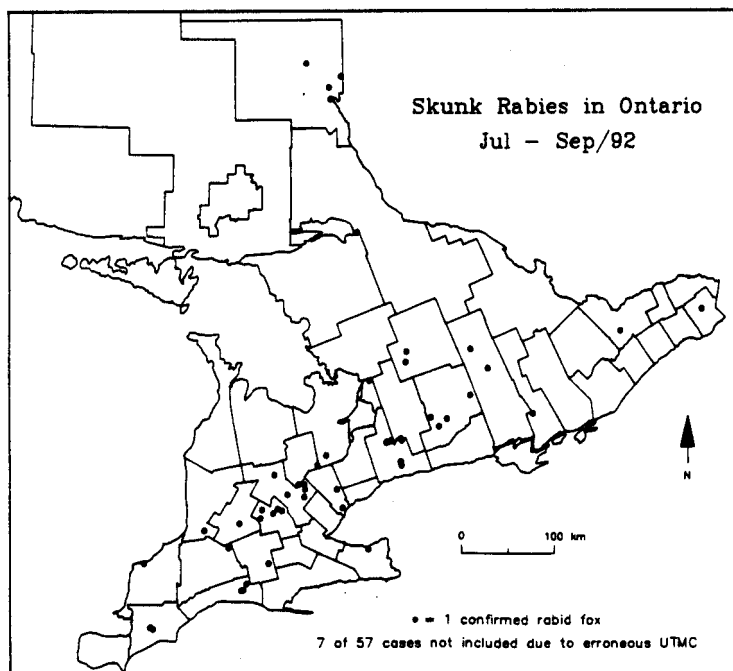




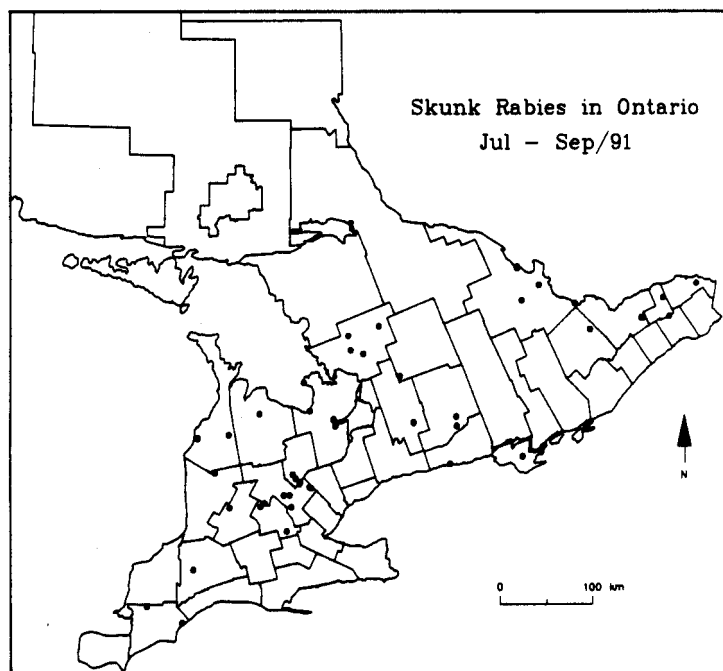
Department of Geography, Queen's University



Department of Geography, Queen's University



Department of Geography, Queen's University



Department of Geography, Queen's University