

# *The Rabies Reporter*

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## **Rabies in Ontario** *April to June 2008*

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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; and the Ontario Ministry of Health. 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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Visit: [www.gis.queensu.ca/  
RReporter/](http://www.gis.queensu.ca/RReporter/) or  
[rabies.mnr.gov.on.ca](http://rabies.mnr.gov.on.ca)

Reported rabies cases have decreased slightly from the previous quarter, with 18 cases in the first quarter and 15 cases in the second quarter for a total of 33 cases. The first six months of 2008 seem to be aligning fairly closely with the same period last year which saw 34 cases.

With the onset of warmer weather, it would be expected that the number of reported rabid bats would increase from the previous quarter, but there were only two cases reported in each quarter this year. This is a marked decrease from previous years. By this time in 2006 and 2007 there were 12 and 14 reported cases respectively. The two rabid bats in this quarter were from Wentworth Region and Toronto.

There were nine infected skunks reported in this quarter compared with eight in the previous quarter, for a total of 17. This is up slightly from the 14 reported at the same time last year. However, skunk cases in the first six months of this year have been contained to four counties as opposed to nine counties in 2007. The rabid skunks were located in Wellington (2), Waterloo (3), Perth (2) and Grey (2) counties in western Ontario.

Three rabid livestock were reported in this quarter, compared with five in the previous quarter. This is an increase of three cases from the same period in 2006 and 2007. The livestock comprised one cow and two horses which is intriguing as we have not seen a case of rabies reported in a horse since 2004. Also, the two horses were from different counties (Perth and Wellington) and don't seem to be related to any reported wildlife cases.

There was only one rabid domestic

animal in the second quarter – a cat in Perth County. There has not been a case reported in a cat since 2006.

There were no rabid foxes or raccoons reported in this quarter. Two out of three of Ontario's main vector species are now rarely infected with the disease thanks to our intensive control programs and the collaborative agencies that have contributed to rabies research in Ontario. A map of the 2008 Rabies Research and Development Control Operations is located on page 2.

The RRDU will once again be distributing oral rabies vaccine baits in selected areas of southwestern Ontario to help combat the remaining focus of rabid skunks. In August, approximately 640,000 ultra-lite baits will be dropped at a density of 300 baits per square kilometre covering an area roughly 2100 km<sup>2</sup>, encompassing parts of Perth, Wellington and Waterloo counties. In September, approximately 432,000 ultra-lite baits containing ONRAB and 65,700 Ontario Slim baits containing ERA vaccine will be dropped at a density of 20 baits per square kilometre to target foxes across roughly 26,000 km<sup>2</sup> of southwestern Ontario.

Approximately 14,500 ultra-lite baits containing ONRAB will also be distributed by hand and aircraft on selected islands in the St. Lawrence in response to 11 cases of raccoon strain rabies on neighbouring Wellesley Island in New York state. Ontario has been free of Mid-Atlantic raccoon strain rabies for over 2 years and we'd like to keep it that way. See News Release on page 2.

*Val von Zuben*  
RRDU  
Peterborough, ON

# Ontario Eliminates Raccoon Rabies

## McGuinty Government Protects People and Wildlife

Released April 23, 2008

### NEWS

Raccoon rabies has been eliminated in Ontario.

Since the first case in 1999, Ontario has had 132 cases of raccoon rabies. International standards, set by the [World Organization for Animal Health](#), requires two years without a case of rabies before a jurisdiction can confirm it has eliminated a particular strain of rabies.

The last confirmed case of raccoon strain rabies in Ontario was in September 2005.

The ministry has eliminated the disease through a combination of [rabies vaccine baits](#), [Trap-Vaccinate-Release](#) and [Point of Infection Control](#) programs.

Ontario will continue monitoring for raccoon rabies to ensure early warning of possible new outbreaks.

### QUOTES

"This success wouldn't be possible without my ministry's world-leading efforts in rabies

research and control. We will continue to work tirelessly in protecting the health and safety of all Ontarians, pets and wildlife," said [Natural Resources Minister Donna Cansfield](#).

### QUICK FACTS

Ontario's [rabies control programs](#) are so successful that several states and provinces have adopted the same programs. New Brunswick successfully eliminated raccoon strain rabies using methods pioneered in Ontario. Southern Ontario has approximately 1.1 mil-

lion raccoons. Incidence of fox strain rabies is down 97 per cent since 1989, with only 44 cases in 2007.

### For More Information

[ontario.ca/natural-resources-news](http://ontario.ca/natural-resources-news)

### Media Enquiries

David Bauer, Minister's Office, 416-314-2212

Jolanta Kowalski, Communications Services Branch, 416-314-2106

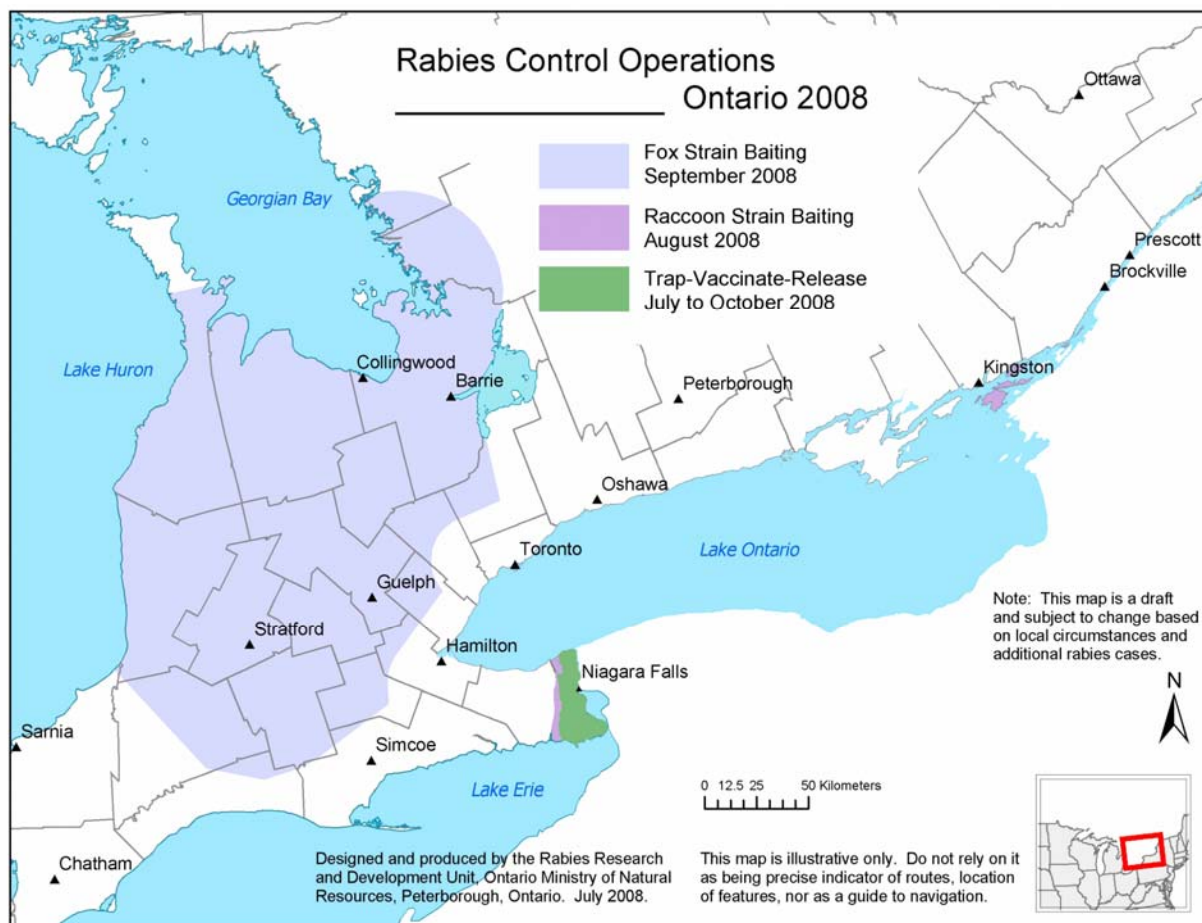


Figure 1. Rabies control operations planned for the summer of 2008.

## Texas Oral Rabies Vaccination Program 1995—2007

Two rabies epizootics (epidemics in animals) began in Texas in 1988, one involving coyotes and dogs in South Texas and the other in gray foxes in West-Central Texas. The South Texas epizootic resulted in two human deaths and lead to several thousand people receiving post-exposure rabies treatment. In 1994 the public health threat created by these two expanding epizootics prompted the governor to declare rabies a public health emergency in Texas. The two epizootics expanded to involve a total of 69 Texas counties by 1996.

In February 1995, the Texas Department of State Health Services (DSHS) initiated the Oral Rabies Vaccination Program (ORVP) as a multiyear program to create zones of vaccinated coyotes and gray foxes along the leading edges of the epizootics to halt the spread of the virus. The ORVP is a cooperative program involving DSHS; Texas Cooperative Extension Wildlife Services; U.S. Department of Agriculture Wildlife Services; Texas National Guard; U.S. Centers for Disease Control and Prevention; Merial Ltd.; Dynamic Aviation Group; U.S. Army Veterinary Laboratory at Fort Sam Houston, San Antonio; Texas A&M University System; and other local, state and federal agencies.

The 2008 aerial distribution of vaccine involves about 250 separate flights by five King Air aircraft from the Dynamic Aviation Group. Each year, the distribution of vaccine results in a total flight distance equaling approximately four times around the world. Since 1995, the program has been responsible for distributing almost 31.23 million individual doses of oral rabies vaccine over more than 420,500 square miles of Texas.

Results from the surveillance program conducted after the 2007 bait drop show 93 percent of coyotes tested were positive for the biomarker that indicates bait acceptance. Of the coyotes tested from the primary surveillance area, 49 percent developed an immune response to the vaccine. Canine rabies cases in South Texas have declined from 122 reported in 1994 (before the first year of the program) and 142 in 1995 to 20 in 1996, 6 in 1997, 5 in 1998, 10 in 1999, none in 2000, 1 in 2001, none in 2002 or 2003, 1 in 2004, none in 2005, 2006 or 2007, and none in 2008 through August.

The gray fox program has shown similar success with 244 cases reported in 1995 (before the first program year), 101 in 1996, 24 in 1997, 36 in 1998, 66 in 1999, 58 in 2000, 20 in 2001, 65 in 2002, 61 in 2003, 22 in 2004, 8 in 2005, 45 in 2006, 62 in 2007, and 11 through August of 2008. Of foxes tested in the gray fox post-vaccination surveillance program in 2007, 61 percent were positive for the biomarker that indicates bait acceptance and 72 percent developed an immune response to the vaccine.

The Texas ORVP has achieved a level of success that could not have been anticipated during early development work done in 1993 and 1994. The South Texas ORVP has moved to a maintenance strategy that can help prevent reintroduc-

tion of the virus. All available resources for the West-Central Texas ORVP will be applied in such a manner as to achieve the most effective and efficient outcome for the control of the rabies epizootic in gray foxes and the protection of the public's health.

For more information, visit [www.dshs.state.tx.us/idcu/disease/rabies/orvp](http://www.dshs.state.tx.us/idcu/disease/rabies/orvp)

Ernest (Skip) Oertli  
ORVP Director  
Texas Department of State  
Health Services

*[Editor's Note: The Ontario Ministry of Natural Resources were an integral part of the team during the initial years of the Texas ORVP program. Staff from the RRDU and Aviation Services worked closely with Texas partners to implement a successful rabies control program. MNR staff were recognized for their contributions by being made honorary Texans in a house resolution adopted in March 1995.]*

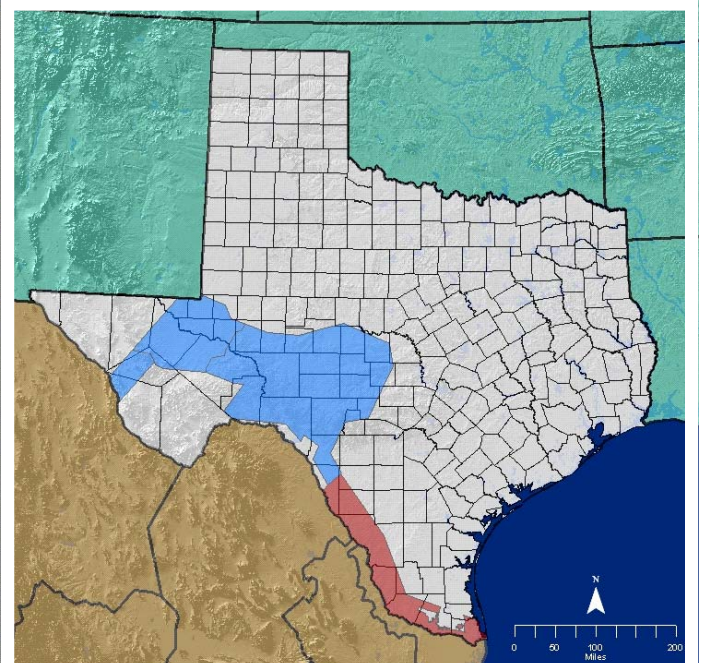


Figure 2. Texas ORVP areas for 2008 in south Texas (pink) and west Texas (blue).



## Chuck Trimarchi is Retiring!

### Vital Statistics

- Wife, sons (3), grandchildren (4, soon 5)
- 20 marathons; 50 to 70 miles per week when training; personal best 3 hr 17 min 00 sec
- 35 peer-reviewed papers; 13 textbook chapters; 63 invited papers; abstracts, too numerous to count
- 1,200 animals annually tested for rabies when he arrived in 1968; 10,000 in 2001 when he left the rabies laboratory
- 8 Department of Health Commissioner's Recognition Awards; Wadsworth Center Employee Recognition Award; Association of

Public Health Laboratory's Gold Standard Award

- 7 Health Commissioners and 5 Laboratory Directors during tenure

Distance running is a solitary sport, so it comes as something of a surprise that Chuck Trimarchi, a consummate team player in his professional life, regularly runs marathons. In fact, three days before his planned retirement in October, he expects to run the Cape Cod Marathon.

Chuck certainly has gone the distance at Wadsworth Center. He has spent 40 years at Griffin Laboratory in Guilderland, a convenient seven miles from his home in Colton, making the round trip a mid-

size training run. His personal pursuit once proved useful for the rabies laboratory, where Chuck has worked for nearly his entire Wadsworth career.

Crows were needed for a particular study. Despite staff's efforts to capture birds by netting or other conventional means, the quarry eluded them. Enter Marathon Man. One morning, running along Route 155 a mile shy of the laboratory, Chuck spied a crow on the side of the road. He jogged closer; the bird remained. Closer still, they were eye to eye. He scooped up the seemingly stunned animal, noticed a minor injury that accounted for its behavior, and resumed jogging. He kept running all the way to the rabies lab, even after the

bird came to its senses and began to beat its wings frantically, causing Chuck to grasp its feet firmly and hold his prey at arm's length. "I wondered what the passers-by thought of some fellow



Figure 3. Chuck Trimarchi (pictured right) and Bob Rudd mist netting bats.

taking his pet crow for a run," he said, smiling.

Rabies is no laughing matter, as Trimarchi understands better than most.

The nearly always fatal disease wasn't on his radar until, fresh from the University at Albany and with a high score on the state Professional Careers Test in hand, he attended a Department of Health recruitment event. Five laboratory positions were offered to the recent biology graduate.

Animals drew him to the rabies lab in 1968. Dreaming of a veterinary career since boyhood, Chuck found what he was looking for at Griffin's veterinary science and animal production facility - mice, hamsters, rabbits, Canada geese, guinea pigs, cattle, sheep, bats, grey foxes, red foxes, skunks, ducks, raccoons, swine, deer, two wolves, one bear and one crow, among other animals.

People kept him in the rabies lab until 2001. "Without exaggerating at all, I can tell you that the people I worked with in the rabies laboratory, the people I worked for, all the people we worked with in the Division of Labs and Research and now Wadsworth Center have been just terrific and wonderful," he said. Griffin Laboratory has always been a place apart, given its distance from Wadsworth Center's other facilities in Albany. During Chuck's early years, there were card games, chess matches and volleyball games during lunch, plus regular collections for flowers, sunshine baskets or outright donations for ill or down-on-their-luck employees.

Continuing the camaraderie became more difficult in 2001 when he left the rabies laboratory (in the able hands of Bob Rudd) to become chief of the Laboratory of Zoonotic Disease and Clinical Virology, whose 100 scientists, technicians and support staff work at both Griffin and the Axelrod Institute.

The change meant Chuck was leaving his comfort zone, though he wasn't too uncomfortable. "I was giving up a lot of my hands-on science and wasn't publishing as a senior author as much on rabies," he said. "But I needed to learn about all the other [zoonotic] diseases -- the laboratories, regulations, different publics that are served -- so it was very interesting and exciting."

Always, it has been the work that mattered. How else to explain the acceptance of an "alternative schedule" of seven days a week every other week for 10 years, and every third week for another 10 years? Not to mention one emergency stretch of 10 weeks without a day off. Always the work that mattered was about rabies, despite broader responsibilities in recent years.

Any career achievements that Chuck Trimarchi admits to - and only after repeatedly stating that he was but one person contributing to a team effort - relate to rabies, including:

- developing a purified monoclonal antibody diagnostic reagent for the gold standard rabies fluorescent antibody test, used by upwards of 100 rabies laboratories in the U.S.;
- supporting wildlife rabies control by testing raccoons to establish efficacy of oral vaccines distributed in baits; and
- dispelling myths about bats, and describing the distribution and nature of rabies in bats, thus contributing to bat conservation.

For a man who wears a bat tie clip, encounters with these nocturnal mammals over the years were commonplace, as Chuck and his staff tested their bat catching skills at homes throughout the state. Less routine were trips to the Gov-

ernor's Mansion, the Commissioner's floor in the Corning Tower, the tunnel to the New York State Museum, and several Wadsworth locations, including the Dickerman Library.

Once he unintentionally drove a bat-mobile. In transit to the laboratory after a successful capture, bats escaped from the bag and flew around the state station wagon, one of them hanging on the rear view mirror while at a stoplight on Western Avenue.

It has been a wild wildlife experience over 40 years, and by any independent measure a wildly successful one. Chuck especially considers himself fortunate to have had the opportunity to conduct research in the conjunction with his diagnostic service role in the rabies laboratory.

"When you're a researcher, you may spend months, years, an entire career before seeing the public health results of your research," he said. "It's cumulative with the work of so many other people. So rarely does a researcher, after a few months or years, have a finding where they can say 'My body of work, I did this for mankind'. "But in diagnostic service functions - our clinical laboratory here, whether West Nile virus or rabies - day in and day out you get the satisfaction that you've completed a test, gave someone - a physician - an answer that put them in line to use the right therapeutic either to stop someone's suffering, or in the most extreme cases, save a life.

"I feel lucky in that I've gotten both types of gratification."

*Dr. Jill Taylor  
Deputy Director of Wadsworth  
Laboratories  
New York State Department of  
Health*

## Wildlife Research Grad Students Receive Distinguished Awards

### *Dr. Erin Rees Receives Governor General's Gold Medal; Colleen Doyle Receives Symons Medal for Academic Achievement*

#### Dr. Erin Rees

Dr. Erin Rees is the winner of the Governor General's Gold Medal from Trent University Peterborough, awarded to the student with the highest academic standing in a graduate program.

#### Education

- Ph.D. (Watershed Ecosystems) Trent University, Canada (2007)
- M.Sc. (Geographical Information Science) University of Edinburgh, Scotland (2002)
- B.Sc. (Geography, Biology) Queen's University, Canada (2000)

#### Research Interests

My research focuses on spatio-temporal characteristics of populations, such as genetic population structure, population range extents and connectivity. I am also interested in the effects of sampling design, and how spatial and temporal scales can affect appropriate characterisation system behaviours.

I am currently exploring the viability of genetic simulation modelling for understanding the effect of available habitat and landscape barriers on genetic population structure, animal movement and infectious disease spread. Terrestrial animals may face numerous barriers to movement within and bordering their habitat because of rivers, lakes, mountains, human development and competing species. These factors can restrict available habitat to patches that may or may

not be connected by habitat corridors. Furthermore, climate change may be shifting the range of available habitat to areas with different spatial configurations. All of these factors affect observed population patterns. The difficulty is determining the degree to which any one factor is having an effect - and this is where I see the value of genetic simulation modelling - as a tool for identifying these factors, and quantifying their effects on population processes.

I created the [Raccoon Ecology Database](#) to store and manage over 200 documents on raccoon (*Procyon lotor*) biology and ecology for meta-analytical explorations and raccoon-specific model parameterisation. An empty database is also available to act as a data model for those interested in populating their own ecological databases).

I have worked with Drs. Bruce Pond and Rick Rosatte (Ontario Ministry of Natural Resources scientists in the Wildlife Research and Development Section) and Drs. Brad White, Chris Kyle and Dennis Murray from Trent.

#### Courses Taught

Introduction to Genetics (Biol 205), Department of Biology, Trent University, Canada

#### Publications

1. Rees E.E., Pond B.A., Cullingham C.I., Rowland, R.T., Ball, D., Kyle C.J., and White B.N. Assessing a landscape barrier using genetic simulation modelling: implications for raccoon rabies management. Preventa-

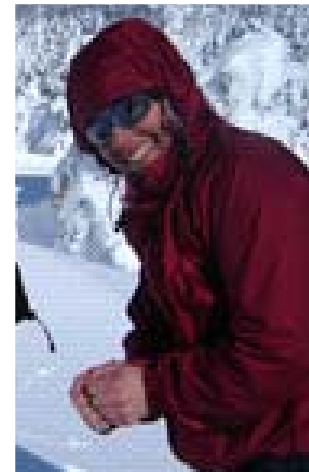


Figure 4. Dr. Erin Rees.

tive Veterinary Medicine (in press).

2. Rees E.E., Pond, B.A., Phillips, J.R., and Murray, D.L. 2008. Raccoon

Ecology Database: a re-

source for population dynamics modeling and meta-analysis. Ecological Informatics (in press).

3. Rees, E.E., Pond, B.A., Rosatte, R., and Sobey, K. A refined approach to density estimation using capture-mark-recapture data. Oikos (submitted).
4. Rees, E.E., B.A. Pond, R. Tinline and D. Ball. 2004. Model sensitivity testing using information theory. Proceedings of GISVET'04, Veterinary Laboratories Agency, Weybridge, England.
5. Cullingham C.I., Rees E.E., Kyle C.J., Pond B.A., Rosatte R.C., and White B.N. Direct and Indirect Methods of Estimating Dispersal: Applications for Raccoon Rabies Management. Molecular Ecology (submitted).
6. Kitchener A.C., and Rees E.E. Modelling biogeography of wildcats during the last glacial

cycle: implications for taxonomy and conservation. *Journal of Zoology* (submitted).

## Theses

- Rees E.E. 2008. Approaches to Modelling Raccoon Rabies. PhD Thesis. Trent University, Peterborough, Ontario.
- Rees E.E. 2002. GIS, Environmental Change, and the Late Quaternary Distribution of the Eurasian/African Wildcat (*Felis silvestris*). University of Edinburgh, Edinburgh, Scotland.

For more information on Erin Rees or the Natural Resources DNA Profiling and Forensic Centre, visit <http://web.nrdpfc.ca/research.html>

## Colleen Doyle

Congratulations to Colleen Doyle, winner of the Symons medal for academic achievement. Colleen is an Assistant Wildlife Biologist with the Ontario Ministry of Natural Resources Wildlife Research and Development Section and has been involved in the cloning and sequencing of major histocompatibility (MHC) genes from raccoons from across North America. Investigation of these genes, involved in immunity, will allow for the elucidation of spatial patterns of MHC genes throughout North America, for use in rabies research. Upon completing her Bachelor of Science degree in Forensic Science, she received the Symons Medal which was established in 1972 in honour of T.H.B. Symons, the founding president of Trent University. This medal is awarded to students in the Honours program who achieve high overall standing on graduation. Colleen is currently pursuing her MSc in molecular and cell biology and genetics at Trent University.

Val von Zuben  
RRDU  
Peterborough, ON

# Rabies Advisory Committee Members Reappointed For an Additional Three Years

On August 15, 2008, the Orders in Council (OICs) giving authority for the Rabies Advisory Committee, and all of the appointments to that Committee (Chair plus eight members) will expire. That is why a request to renew the committee and re-appoint the current chair and members for a further three years was put forth in June. The following terms of reference for the Rabies Advisory Committee was updated and reflects the results of the re-appointment process. There were no changes to membership from the previous term. This terms of reference also outlines the purpose, composition, achievements and future directions of the Committee.

We would like to acknowledge Gina Cunningham, the policy liaison specialist who ensured a smooth re-appointment process.

## TERMS OF REFERENCE

### Introduction

The Rabies Advisory Committee was established in August 1979 under the Ministry of Natural Resources Act.

### Purpose of the Committee

The Rabies Advisory Committee exists to advise the Minister regarding the means to mitigate the impact of wildlife rabies in Ontario.

### Terms of Reference

The terms of reference of the Rabies Advisory Committee within the context of this purpose are:

- to provide a broad range of knowledge to advise re-

searchers and the Ministry;

- to monitor and assess the performance contractors, collaborators, and the Ministry of Natural Resources;
- to review and make recommendations on solicited and unsolicited research projects and monitor progress of projects;
- to review and contribute to the priority settings of projects and proposals of contractors and the Ministry;
- to represent the Ministry's interests to review to undertake field trials through the Canadian Veterinary Biologics Section of CFIA;
- to maintain liaison among provincial and federal organizations involved in rabies-related research and in wildlife, domestic animal, and public health policy.

### Membership of the Rabies Advisory Committee

The composition of the Committee is structured to ensure essential linkages among the key organizations concerned with rabies. In addition to their scientific expertise, Committee members represent the Ontario Ministry of Agriculture, Food; the Ontario Ministry of Health and Long Term Care; the Public Health Agency of Canada, and the Canadian Food Inspection Agency (one member from program and research and one from the Animal Diseases Research Institute (ADRI)).



The Committee consists of a Chairman and 8 members, who are appointed for their technical expertise who may provide expertise in each of the following fields:

- Microbiology
- Veterinary Science
- Population Dynamics and Epidemiology
- Immunology
- Community Medicine Physician

### **Reporting Relationship**

The Committee is accountable to the Minister of Natural Resources. The Rabies Research and Development Unit, under direction of the coordinator, in the Wildlife Research and Development Section; Applied Research and Development Branch, designates a secretary to the Committee. The Manager, Wildlife Research and Development Section, receives notices of meetings and attends meetings as necessary.

Special reports and background papers are produced as required.

### **Achievements to Date**

- Effective partnerships of government (provincial and federal), private industry and universities have resulted in an excellent cooperative network to encourage innovation and applied research;
- Through the Rabies Advisory Committee partnerships, Ontario has achieved effective understanding of the rabies problem and generated support for the development of a control program among municipal councils and the general public;
- Ontario has become a world leader in certain aspects of rabies research, especially mass production and distribution of baits to induce wild animal vaccination against

the disease;

- Ontario has been asked to provide scientific and technical assistance to several states and provinces including: Quebec, New Brunswick, Newfoundland, Texas, New York State, Vermont, Maine, New Hampshire, Ohio, Virginia, West Virginia, Pennsylvania, Georgia, Alabama, Tennessee, and Florida;
- Ontario has developed an effective and economical approach to rabies control;
- Ontario has successfully contained raccoon rabies to a small area in eastern Ontario;
- Ontario has successfully eliminated fox rabies from southeastern and southcentral Ontario.

### **Future Direction**

- Promote elimination of pockets of raccoon and fox strain of rabies;
- Development of a vaccine which is effective in skunks;
- Development of a universal bait which is acceptable to all three vectors – raccoons, foxes, and skunks;
- Develop association of genetic structure, pathology, and pathogenesis of rabies on different wild animal species;
- Continue computer modeling studies to evaluate rabies control and spread scenarios to predict rabies events;
- Promote continued vigilance/monitoring to detect rabies cases at low levels to prevent reinfection of rabies-free areas;
- Improve methods to detect immunity and detect rabies at lower levels of infections;
- Promote public education to decrease human health risk

from bat rabies;

- Continue marketing technology to other states and provinces interested in rabies control
- Monitor effects on wildlife populations of eliminating a disease which may have limited population size

### **Rabies Advisory Committee Members**

#### **Jim Broadfoot (Chairman)**

(member since December 2006)

Senior Biologist

Azimuth Environmental Consulting Inc.

Area of expertise: wildlife biology

#### **Dr. Klaus H. Nielsen**

(member since September 1984)

Immunology Unit

Animal Diseases Research Institute

Agriculture Canada

Area of expertise: immunology, veterinary science

#### **Dr. Elliot Salsberg**

(member since August 1995)

Program Specialist, Veterinary Epidemiologist

Canadian Food Inspection Agency

Area of expertise: population dynamics, epidemiology

#### **Dr. Kenneth F. Lawson**

(member since August 1995)

Area of expertise: veterinary science, immunology, experimental physiology, epidemiology, bait and vaccine development

#### **Dr. W. Bruce McNab**

(member since December 1997)

Lead Veterinarian – Epidemiology

Office of the Chief Veterinar-



ian for Ontario

Area of expertise: veterinary science, population dynamics, computer studies, epidemiology, disease risk management

#### **Dr. G. Douglas Campbell**

(member since March 2000)  
Canadian Cooperative Wildlife Health Centre  
OVC Pathology  
University of Guelph  
Area of expertise: veterinary science, microbiology, epidemiology, wildlife disease expert

#### **Peter A. Buck**

(member since October 2002)  
Public Health Agency of Canada  
Centre for Infectious Disease Prevention and Control  
Area of expertise: public health physician

#### **Dr. Michael Corriveau**

(member since June 2003)  
Medical Officer of Health  
Renfrew County and District Health Unit  
Area of expertise: public health physician, medical virology

#### **Dr. Dean Middleton**

(member since August 2004)  
Senior Veterinary Consultant, Veterinary Epidemiologist  
Ministry of Health and Long Term Care  
Public Health Branch  
Area of expertise: veterinary science, public health, epidemiology

*Introduction by:*

*Val von Zuben*

*RRDU*

*Peterborough, ON*

## World Rabies Day 2008

The mission of World Rabies Day is to raise awareness about the impact of human and animal rabies, how easy it is to prevent it, and how to eliminate the main global sources. Even though the major impact of rabies occurs in regions of the world where many needs are present, rabies should no longer be neglected. The tools and technology for human rabies prevention and dog rabies elimination are available. Through the World Rabies Day initiative, partners will be.....***Working Together to Make Rabies History!***<sup>TM</sup>

Rabies in humans is 100% preventable through prompt appropriate medical care. Yet, more than 55,000 people, mostly in Africa and Asia, die from rabies every year - a rate of one person every ten minutes. The most important global source of rabies in humans is from uncontrolled rabies in dogs. Children are often at greatest risk from rabies. They are more likely to be bitten by dogs, and are also more likely to be severely exposed through multiple bites in high-risk sites on the body. Severe exposures make it more difficult to prevent rabies unless access to good medical care is immediately available. This major source of rabies in humans can be eliminated through ensuring adequate animal vaccination and control, educating those at risk, and enhancing access of those bitten to appropriate medical care.

In 2006, a group of researchers and professionals formed a global Alliance for Rabies Control. They created and began inviting partners to join the World Rabies Day initiative. The inaugural World Rabies Day initiative now involves human and animal health partners at the international, national, state/provincial, and local levels, veteri-

nary, medical and other specialized professional and student organizations, and corporate and non-profit partners. The goal of this outreach is to mobilize awareness and resources in support of human rabies prevention and animal rabies control. With the initial goal of engaging 55,000 people to take action, one for each person who dies each year from rabies, the inaugural campaign on September 8, 2007 saw participation of nearly 400,000 individuals from at least 74 countries! This overwhelming response was an important step forward for rabies prevention and control and further illustrates the widespread recognition of the need for action to control this easily preventable disease.

#### **Events in Canada**

- St-Hyacinthe, Canada—World Rabies Day Faculty of Veterinary Medicine
- Vet clinics and hospitals all across Canada, and select US locations, Canada
- VWB/VSF's 2008 Rabies Fundraising Drive
- Regina, Saskatchewan, Canada Prevention of animal bites and rabies
- Guelph, Ontario, Canada - People and Pets Walk to Help End Rabies

For more information, visit <http://www.worldrabiesday.org/EN/Events.html>.

#### **HOW TO REACH US:**

Rabies Research and Development Unit  
Ontario Ministry of Natural Resources  
Trent University—DNA Building  
2140 East Bank Drive  
Peterborough, ON K9J 7B8  
Canada

Office phone: 705-755-2272  
Office fax: 705-755-1559  
Email: [beverly.stevenson@ontario.ca](mailto:beverly.stevenson@ontario.ca)

## Animal Rabies Report: April to June 2008

[illegible]

## Animal Rabies Report: April to June 2008

| Animal Type       | Fox |            |    | Raccoon |            |    | Skunk |            |    | Other Wildlife |            |    | Bat |            |    | Dog |            |    | Cat |            |    | Livestock |            |    | Totals |            |    |
|-------------------|-----|------------|----|---------|------------|----|-------|------------|----|----------------|------------|----|-----|------------|----|-----|------------|----|-----|------------|----|-----------|------------|----|--------|------------|----|
| County or Region  | #   | Cumulative |    | #       | Cumulative |    | #     | Cumulative |    | #              | Cumulative |    | #   | Cumulative |    | #   | Cumulative |    | #   | Cumulative |    | #         | Cumulative |    | #      | Cumulative |    |
|                   |     | 08         | 07 |         | 08         | 07 |       | 08         | 07 |                | 08         | 07 |     | 08         | 07 |     | 08         | 07 |     | 08         | 07 |           | 08         | 07 |        |            |    |
| Southern          |     |            |    |         |            |    |       |            |    |                |            |    |     |            |    |     |            |    |     |            |    |           |            |    |        |            |    |
| Wentworth         |     |            |    |         |            |    |       |            |    |                |            | 1  | 2   | 1          |    |     |            |    |     |            |    |           |            |    | 1      | 2          | 1  |
| Haldimand-Norfolk |     |            |    |         |            |    |       |            |    |                |            |    |     | 1          |    |     |            |    |     |            |    |           |            |    | 0      | 0          | 1  |
| Brant             |     |            |    |         |            |    |       |            |    |                |            |    |     |            |    |     |            |    |     |            |    |           |            |    | 0      | 0          | 0  |
| Niagara           |     |            |    |         |            |    |       |            |    |                |            |    |     | 2          |    |     |            |    |     |            |    |           |            |    | 0      | 0          | 2  |
| Elgin             |     |            |    |         |            |    |       |            |    |                |            |    |     |            |    |     |            |    |     |            |    |           |            |    | 0      | 0          | 0  |
| Oxford            |     |            |    |         |            |    |       | 1          |    |                |            |    |     |            |    |     |            |    |     |            |    |           |            |    | 0      | 0          | 1  |
| Middlesex         |     |            |    |         |            |    |       |            |    |                |            |    |     |            |    |     |            |    |     |            |    |           |            |    | 0      | 0          | 0  |
| Lambton           |     |            |    |         |            |    |       |            |    |                |            |    |     | 1          |    |     |            |    |     |            |    |           |            |    | 0      | 0          | 1  |
| 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            |     | 1          |    |         |            |    |       |            |    |                |            |    |     |            |    |     |            |    |     |            |    |           |            |    | 0      | 1          | 0  |
| Regional Totals   |     |            |    |         |            |    |       |            |    |                |            |    |     |            |    |     |            |    |     |            |    |           |            |    |        |            |    |
| Eastern           | 0   | 0          | 0  | 0       | 0          | 0  | 0     | 0          | 0  | 0              | 0          | 0  | 0   | 2          | 0  | 0   | 0          | 0  | 0   | 0          | 0  | 0         | 0          | 0  | 0      | 0          | 2  |
| Central           | 0   | 0          | 0  | 0       | 0          | 0  | 0     | 0          | 0  | 0              | 0          | 0  | 1   | 1          | 6  | 0   | 1          | 0  | 0   | 0          | 0  | 0         | 0          | 1  | 1      | 2          | 7  |
| Western           | 0   | 0          | 0  | 0       | 0          | 0  | 9     | 17         | 13 | 0              | 0          | 0  | 0   | 1          | 1  | 0   | 1          | 1  | 1   | 1          | 0  | 3         | 8          | 4  | 13     | 28         | 19 |
| Southern          | 0   | 0          | 0  | 0       | 0          | 0  | 0     | 0          | 1  | 0              | 0          | 0  | 1   | 2          | 5  | 0   | 0          | 0  | 0   | 0          | 0  | 0         | 0          | 0  | 1      | 2          | 6  |
| Northern          | 0   | 1          | 0  | 0       | 0          | 0  | 0     | 0          | 0  | 0              | 0          | 0  | 0   | 0          | 0  | 0   | 0          | 0  | 0   | 0          | 0  | 0         | 0          | 0  | 0      | 1          | 0  |
| Totals            | 0   | 1          | 0  | 0       | 0          | 0  | 9     | 17         | 14 | 0              | 0          | 0  | 2   | 4          | 14 | 0   | 2          | 1  | 1   | 1          | 0  | 3         | 8          | 5  | 15     | 33         | 34 |

Notes for this quarter:

The bats were big brown bats. The livestock cases were a bovine in Bruce County and an equine in both Perth and Wellington counties.



