

# Ontario Scientists for Endangered Species Conservation

October 25, 2006

Hon. Dalton McGuinty  
Premier  
Legislative Building  
Rm. 281  
Queen's Park  
Toronto ON, M7A 1A1

Hon. David Ramsay  
Whitney Block  
6th Floor, Rm. 6630  
99 Wellesley St. W.  
Toronto ON, M7A 1W3

Dear Premier McGuinty and Minister Ramsay,

## **Re: Ontario's new Endangered Species Act**

As members of the scientific community, we are pleased to see that the Province of Ontario is following through on its commitment to update the *Endangered Species Act*. This revision gives Ontario an opportunity to be among the leaders in protecting endangered species. Because the *Species at Risk Act* of the federal government has relatively limited application in Ontario, it is all the more important that Ontario's legislation be updated to fill in the numerous gaps in species conservation. As you contemplate your options for the new provincial legislation, we urge you to implement the following:

- 1) **Science-based definition and listing of species at risk:** The new Act should define 'species' to include geographically or genetically distinct populations as in the federal *Species at Risk Act*. In addition, Ontario should adopt an independent, science-based process for listing species at risk, based on an objective assessment of the abundance and rate of decline of species and populations. Ontario's current Act lists only a fraction of the province's 'endangered' species and offers no assistance in the protection or recovery of species that fall in the other categories of risk (extirpated, threatened, special concern). The new Act should require that Ontario's official list be the science-based list that is already produced and regularly updated by the Committee on the Status of Species at Risk in Ontario (COSSARO). This will help to avoid confusion about what is and

what isn't at risk, as the status of species will be clearly based on their biological likelihood of extinction.

- 2) **Habitat protection:** Habitat loss is the major agent of species loss and endangerment. To be on firm scientific ground, the new legislation should require habitat protection, including the areas, conditions and resources necessary for the survival, reproduction and recovery of a species. For the recovery of many species, this will entail protecting not only habitat that is currently occupied, but also that which can be *potentially* occupied.
- 3) **Socio-economic considerations:** Legislation that includes a science-based listing process and habitat protection must also be able to accommodate and respond to important socio-economic considerations. In other words, there should be room for exceptions and tailored approaches to the protection and recovery of individual species where this is warranted. Ontario's new Act should include an exceptions process to the general protection regime that could be invoked by elected officials to deal with pressing social, economic or ecological factors. However, decisions about making exceptions to the protection regime should be subject to public scrutiny and comment under Ontario's Environmental Bill of Rights.
- 4) **Recovery planning and implementation:** Ontario's new Act should require that recovery plans be produced and implemented for all endangered and threatened species, and should include timeframes for planning and implementation. During the recovery planning process, social and economic considerations will have a role in determining what actions to take. The legislation should also support the development of multi-species and/or ecosystem-based recovery strategies, where appropriate. This would be especially beneficial in protecting many undescribed or poorly monitored species.
- 5) **A preventive approach:** Preventing endangerment is more effective, more efficient and more likely to succeed than trying to recover species once they are threatened with extinction. For this reason, it is imperative that the legislation reflect a preventive approach and address special concern species. They and their habitat should be protected through appropriate prohibitions under the Act to ensure that they do not become threatened. In addition, the legislation should require management plans and ongoing monitoring for species of special concern.

In the past, the conservation of species at risk in Ontario has suffered from a lack of government attention and support. This current legislative initiative indicates your commitment to address this problem and to sustain the rich natural legacy that is central to the cultural identity and the long-term health and prosperity of the people of Ontario. There are now nearly 200 official species at

risk in the province, and the list grows yearly. We therefore urge you to move forward with effective new endangered species legislation as soon as possible.

Sincerely,

Dr. Patricia Chow-Fraser, Professor, Biology, McMaster University

Dr. Mart R. Gross, Professor, Ecology and Evolutionary Biology, University of Toronto

Dr. Jeremy Kerr, Associate Professor, Biology, University of Ottawa

Dr. James Schaefer, Associate Professor and Director, Watershed Ecosystems Graduate Program, Trent University

Diana Abraham, M.Sc., Ecologist / Science Writer, ESSA Technologies Ltd.

Dr. Peter A. Abrams FRSC, Professor, Ecology and Evolutionary Biology, University of Toronto

Dr. M. A. Alikhan, Biology, Laurentian University

Dr. Robert Anderson, Research Scientist, Canadian Museum of Nature

Gary Ash, M.Sc., P.Biol., Canadian Society of Environmental Biologists

Dr. Maydianne Andrade, Associate Professor, Ecology and Evolutionary Biology, University of Toronto Scarborough

Dr. Allan J. Baker, Head, Department of Natural History, Royal Ontario Museum and Professor of Ecology and Evolutionary Biology, University of Toronto

Dr. Spencer C.H. Barrett FRS, FRSC, Professor of Evolutionary Biology Canada Research Chair, Ecology and Evolutionary Biology, University of Toronto

Dr. Nelson Belzile, Professor, Chemistry and Biochemistry, Cooperative Freshwater Ecology Unit, Academic Advisor, Central Analytical Facility, Laurentian University

Dr. J. Derek Bewley FRSC, University Professor Emeritus, Molecular and Cellular Biology, University of Guelph

Dr. Stephen Bocking, Professor, Environment and Resource Studies, Trent University

Dr. Diethard Bohme FRSC, Distinguished Research Professor, Canada Research Chair in Physical Chemistry, York University

Dr. Rudy Boonstra, Professor of Physiology and Zoology, University of Toronto

Dr. François Boudreau, Professeur agrégé, École de service social, Université Laurentienne

Dr. Elizabeth Grace Boulding, Associate Professor, Integrative Biology, University of Guelph

Dr. Kerry Bowman, Bioethicist, University of Toronto, Mount Sinai Hospital

Dr. Irwin M. Brodo, Lichenologist Emeritus, Research Division, Canadian Museum of Nature

Dr. David T. Brown, Associate Professor, Tourism and Environment, Brock University

Dr. Helmut Burkhardt, Professor of Physics Emeritus, Ryerson University

Dr. Marc Cadotte, Research Scientist, Ecology, Evolution and Marine Biology, University of California (Ontario resident working abroad)

Dr. R. Campbell, Co-chair, COSEWIC Freshwater Fishes Species Specialist Subcommittee

Dr. Stan Caveney, Emeritus Professor in Biology, University of Western Ontario

Dr. D. A. Chant, O.C., FRSC, Professor Emeritus of Zoology, University of Toronto

Dr. Alison L. Chasteen, Associate Professor, Psychology, University of Toronto

Dr. Imogen Coe, Associate Professor and Chair, Biology, York University

Dr. Kathy Conlan, Research Scientist, Canadian Museum of Nature

Ian Craine, Ph.D. Candidate, Ecology and Evolutionary Biology, University of Toronto

Dr. Stephen L. Cumbaa, Research Scientist, Paleobiology, Canadian Museum of Nature

Dr. Brian Cumming, Professor and Acting Director, Environmental Studies, Co-director, Paleocological Environmental Assessment and Research Lab, Biology, Queen's University

Dr. David J. Currie, Professor, Biology, University of Ottawa

Dr. Doug Currie, Senior Curator, Department of Natural History, Royal Ontario Museum

Dr. Howard Daugherty, Associate Professor, Director of Las Nubes Neotropical Research and Conservation Program, Faculty of Environmental Studies, York University

Lisanne Desbiens, Environmental Technologist, International Nickel (INCO)

Dr. Christian Detellier, Professor, Chemistry, University of Ottawa

Dr. Tim Dickinson, Senior Curator, ROM Green Plant Herbarium (TRT), Department of Natural History, Royal Ontario Museum

Dr. Peter Dillon FRSC, Professor, Environmental Resource Studies and Chemistry, Trent University

Dr. George Dixon, Professor, Biology, University of Waterloo.

Dr. D.W. Dunham, Professor, Ecology and Evolutionary Biology, University of Toronto

Dr. David J.D. Earn, Department of Mathematics and Statistics, McMaster University

Dr. Judith L. Eger, Senior Curator of Mammals, Department of Natural History, Royal Ontario Museum

Dr. Neil Emery, Associate Professor and Director, Watershed Ecosystems Graduate Program, Trent University

Dr. Lenore Fahrig, Professor, Biology, Carleton University

Dr. J. Bruce Falls, Professor Emeritus, Zoology, University of Toronto

Dr. Leesa Fawcett, Associate Professor, Environmental Studies, York University

Dr. Deryn Fogg, Associate Professor, Chemistry, University of Ottawa

Jennifer Foote, Ph.D. Candidate, Biology, Queen's University

Dr. Mark Forbes, Professor and Canada Research Chair in Ecological Parasitology/Wildlife Health, Carleton University

Dr. Poh-Gek Forkert, Professor Emeritus, Anatomy and Cell Biology, Queen's University

Dr. Marie-Josée Fortin, Professor, Ecology and Evolutionary Biology, University of Toronto

Dr. Michael Fox, Professor, Environmental and Resource Studies Program and Department of Biology, Trent University

Dr. Gail Fraser, Assistant Professor, Environmental Studies, York University

Dr. John Fryxell, Professor, Integrative Biology, University of Guelph

Dr. Bennett (Jeff) Galef, Professor, Psychology, Neuroscience and Behaviour, McMaster University

Dr. Ann Gallie, Associate Professor, Earth Sciences, Laurentian University

Dr. R. John Gibson, Scientist Emeritus, Department of Fisheries and Oceans Canada

Dr. Barrie K Gilbert, Professor Emeritus, Wildland Resources, Utah State University (current Ontario resident)

Dr. Lynn Gillespie, Research Scientist, Research Division, Canadian Museum of Nature

Dr. Katie Gilmour, Associate Professor, Biology, University of Ottawa

Dr. Jean-Guy Godin, Professor, Biology, Dean, Faculty of Science, Carleton University

Dr. Brian Golding, Professor, Biology, McMaster University

Antonia Guidotti, B.Sc., M.Sc., Entomology Technician, Department of Natural History, Royal Ontario Museum

Dr. David S. Guttman, Associate Professor, Canada Research Chair in Comparative Genomics, Director (Interim), Centre for the Analysis of Genome Evolution and Function, Department of Cell and Systems Biology, Department of Ecology and Evolutionary Biology, University of Toronto

Dr. Roland Hall, Associate Professor, Biology, University of Waterloo

Dr. Paul Handford, Biology, University of Western Ontario

Dr. Wayne Hayes, Assistant Professor, Computer Science, University of California (Ontario resident working abroad)

Dr. Michele C. Heath FRSC, Professor Emerita, Cell and Systems Biology, University of Toronto

Dr. Kringen Henein, Lecturer, Biology and Environmental Science, Carleton University

Dr. Norman Huner DSc (hc), FRSC, Professor, University of Western Ontario, Canada Research Chair in Environmental Stress Biology, and Scientific Director, The Biotron Institute for Experimental Climate Change Research

Dr. Donald A. Jackson, Professor, Ecology and Evolutionary Biology, University of Toronto

Dr. Leo B. Jonker, Professor of Mathematics, Queen's University

Dr. Harold Kalant FRSC, Professor Emeritus, Pharmacology, Faculty of Medicine, University of Toronto

Dr. Ilan Kapoor, Associate Professor, Environmental Studies, York University

Dr. Paul Karrow, Distinguished Professor Emeritus and Adjunct Professor of Earth Sciences, University of Waterloo

Dr. Morris Kates FRSC, Professor Emeritus, Biochemistry, Microbiology and Immunology, Faculty of Medicine, University of Ottawa

Dr. Linda M. Kohn, Professor, Ecology and Evolutionary Biology, University of Toronto, Biology Group, University of Toronto at Mississauga

Dr. Peter M. Kotanen, Ecology and Evolutionary Biology, University of Toronto at Mississauga

Dr. Anita Krajnc, Ph.D., Writer

Dr. David Lean, Professor, Biology, Centre for Advanced Research in Environmental Genomics, University of Ottawa

Dr. Louis Lefeber, Professor Emeritus, Social and Political Thought, York University

Dr. Trevor H. Levere FRSC, Professor, Institute for the History of Science and Technology, University of Toronto

Dr. B.G. Loughton, Professor Emeritus, Biology, York University

Dr. Sheila M. Macfie, Assistant Professor, Biology, University of Western Ontario

Dr. Gerald L. Mackie, Professor Emeritus, University of Guelph

Dr. Jay R. Malcolm, Associate Professor, Forestry, University of Toronto

Dr. Azim Mallik, Professor (Plant Ecology), Biology, Lakehead University

Dr. Paul M. Mayer, Associate Professor, Director, University of Ottawa Mass Spectrometry Centre, Chemistry, University of Ottawa

Dr. Dan McCarthy, Associate Professor, Earth Sciences and Biology, Brock University

Dr. Deborah McLennan, Associate Professor, Ecology and Evolutionary Biology, University of Toronto

Dr. Charles K. Minns, Scientist Emeritus, Fisheries and Oceans Canada, Adjunct Professor, Ecology and Evolutionary Biology, University of Toronto

Les Misch, Principal/Senior Ecologist, EcoServices Inc.

Dr. Thomas W. Moon, Professor of Biology and Vice Dean Research, Faculty of Science, University of Ottawa

Dr. Alan V. Morgan, Professor, University of Waterloo

Dr. Anne Morgan, Biologist (retired), University of Waterloo

Dr. Ted Mosquin, Ecologist (retired), President, Mosquin Bio-Information Limited

Dr. Stephen D. Murphy, Associate Professor, Environment and Resource Studies, University of Waterloo

Dr. Timothy G. Myles, Director, Urban Entomology Program, Center for Urban and Community Studies, University of Toronto

Dr. Roger Nash, Professor, Philosophy, Laurentian University

Denisa Andreea Necula, Environmental Biologist, Vice-president of the Canadian Society of Environmental Biologists, Ontario Region

Dr. Bryan D. Neff, Associate Professor, Biology, University of Western Ontario

Dr. Liisa North, Professor Emeritus, Political Science, York University

Dr. Gertrud Nurnberg, Environmental Consultant, Freshwater Research

Dr. Laurence Packer, Professor, Biology, York University and COSEWIC co-chair Arthropods Species Specialist Subcommittee

Dr. Glenn Parker, Professor, Biology, Laurentian University

Dr. Aviva Patel, Terrestrial Specialist, Credit Valley Conservation Authority

Dr. Micheline Paulin-Levasseur, Associate Professor, Biology, University of Ottawa

Dr. Cheryl M. Pearce, Associate Professor, Department of Geography, University of Western Ontario

Dr. David Pearson, Professor, Earth Sciences, Laurentian University

Dr. Sergio L. Pereira, Post Doctoral Fellow, Department of Natural History, Royal Ontario Museum

Dr. Robert Pike, Professor Emeritus, Sociology, Queen's University

Gerald Poisson, Terrestrial Ecologist, Michalski Nielsen Associates Ltd.

Dr. Jay Pratt, Professor, Psychology, University of Toronto

Dr. James S. Quinn, Professor, Biology, McMaster University

Dr. Mani Rappon, Professor of Chemistry, Lakehead University

Dr. Laurene Ratcliff, Professor of Biology, Psychology and Women's Studies, Associate Dean (Research), Faculty of Arts and Science, Queen's University

Dr. Claude B. Renaud, Research Services Division, Canadian Museum of Nature

Dr. Joe Repka, Professor, Mathematics, University of Toronto

Lisa Roberti, Hon. B.Sc., MES (PI), Planning Ecology Analyst, Ecology Division, Toronto and Region Conservation

Dr. Beren W. Robinson, Integrative Biology, University of Guelph

Dr. Raymond A. Rogers, Associate Professor and Graduate Program Director, Environmental Studies, York University

Dr. Locke Rowe, Professor, Ecology and Evolutionary Biology, University of Toronto

Dr. Jane Rutherford, Associate Professor and Chair, Biology, Wilfrid Laurier University

Dr. C. Andre T. Salama, FIEEE, FCAE, FRSC, University Professor Emeritus, Electrical and Computer Engineering, University of Toronto

Dr. Cate Mortimer-Sandilands, Canada Research Chair in Sustainability and Culture, Environmental Studies, York University

Dr. Jan Sapp, Professor, Biology, York University

Dr. Beth Savan, MCIP, Sustainability Director, University of Toronto, Research Director, Centre for Environment

Dr. Joe Sheridan, Associate Professor, Environmental Studies and Education, Joint Program in Communications and Culture, York University

Dr. Scott Slocombe, Professor, Geography and Environmental Studies, Wilfrid Laurier University

Dr. M. Alex Smith, Research Program Coordinator, Biodiversity Institute of Ontario, University of Guelph

Dr. Sandy M. Smith, Professor, Forestry, University of Toronto

Dr. John P. Smol FRSC, Professor, Canada Research Chair in Environmental Change

Kathlyn Stewart, Research Scientist, Paleobiology, Canadian Museum of Nature

Dr. Peter Taylor, Professor and Head, Mathematics and Statistics, Queen's University

Dr. G. Torrie, Professor of Chemistry, Royal Military College of Canada

Dr. Peggy Tripp, Professor, Biology, Lakehead University

Dr. Matthew Turner, Associate Professor, Economics, University of Toronto

Ken Ursic, M.Sc., Senior Ecologist, Dougan & Associates - Ecological Consulting Services

Dr. Peter Victor, Professor, Environmental Studies, York University

Rob West, Senior Environmental Scientist, Oakridge Environmental Limited

Dr. Tony Weis, Assistant Professor, Geography, University of Western Ontario

Dr. Stu Whittington, Professor, Chemistry, University of Toronto

Dr. John P. Wiebe, Professor, Hormonal Regulatory Mechanisms, Biology, University of Western Ontario

Dr. D. Dudley Williams, Professor, Environmental Sciences and Graduate Department of Ecology and Evolutionary Biology, University of Toronto

Dr. Margo Wilson FRSC, Professor, McMaster University

Dr. Richard Winterbottom, Professor, Ecology and Evolutionary Biology, University of Toronto

Dr. Patrick T.K. Woo, University Professor Emeritus, University of Guelph

Dr. Chris M. Wood FRSC, Professor, Biology, Distinguished McMaster University Professor, and Canada Research Chair in Environment and Health