ISSN 1713-7845

JOURNAL of the ENTOMOLOGICAL SOCIETY of

ONTARIO

Volume One Hundred and Forty Two 2011

THE ENTOMOLOGICAL SOCIETY OF ONTARIO OFFICERS AND GOVERNORS 2010-2011

2010-2011		
President: H. FRASER	I. SCOTT (2010-2012	2)
Ontario Ministry of Agriculture, Food and Rural Affairs	Agriculture and Agri-Food Canada	_
4890 Victoria Ave. North, P.O. Box 8000	1391 Sandford Street, London, ON N5V 4T3	
Vineland, ON L0R 2E0	Ian.Scott@agr.gc.ca	
hannah.fraser@ontario.ca	ESO Regional Rep to ESC: H. DOUGLAS	
President-Elect: B. GILL	Canadian Food Inspection Agency	
Entomology Unit, Ontario Plant Laboratories, Canadian		
Food Inspection Agency. Building 18 C.E.F.	douglash@inspection.gc.ca	
960 Carling Ave., Ottawa, ON K1A 0C6	Librarian: J. BRETT	
bruce.gill@inspection.gc.ca	Library, University of Guelph	
Past-President: G. UMPHREY	Guelph, ON N1G 2W1	
Department of Mathematics and Statistics	jimbrett@uoguelph.ca	
University of Guelph, Guelph, ON N1G 2W1	Newsletter Editor: A. GRADISH	
umphrey@uoguelph.ca	School of Environmental Science	
Secretary: N. MCKENZIE	University of Guelph, Guelph ON N1G 4Y2	
Vista Centre, 1830 Bank Street, P.O. Box 83025	agradish@uoguelph.ca	
Ottawa, ON K1V 1A3	Student Representative: M. LOCKE	
nicole mckenzie@hc-sc.gc.ca	Agriculture and Agri-Food Canada	
Treasurer: S. LI	960 Carling Avenue, K.W. Neatby Building	
Pest Management Centre, Building 57	Ottawa, ON, K1A 0C6	
Agriculture and Agri-Food Canada	michelle.locke@agr.gc.ca	
960 Carling Ave., Ottawa, ON K1A 0C6	Website: M. JACKSON	
Dr.Shiyou.Li@nrcan.gc.ca	School of Environmental Science	
Directors:	University of Guelph, Guelph, ON N1G 2W1 jackson@uoguelph.ca	
R. BUITENHUIS (2011-2013)	Jackson@uogucipii.ca	
Vineland Research and Innovation Centre 4890 Victoria Ave. North, P.O. Box 4000	JESO Editor: J. HUBER	
Vineland, ON LOR 2E0	Canadian National Collection of Insects	
rose.buitenhuis@vinelandresearch.com	Agriculture and Agri-Food Canada	
S. LACHANCE (2010-2012)	960 Carling Ave. Ottawa, ON,K1A 0C6	
Université de Guelph - Campus d'Alfred	John.Huber@agr.gc.ca	
31 St. Paul Street, Alfred, ON K0B 1A0	Technical Editor: J. VICKRUCK	
Slachance@alfredc.uoguelph.ca	Dept. of Biological Sciences, Brock University St. Catharines, ON L2S 3A1	
S. KULLIK (2009-2011) Department of Environmental Biology	jess.vickruck@brocku.ca	
University of Guelph, Guelph, ON N1G 2W1	Associate Editors:	
sigrun.kullik@sympatico.ca	A. BENNETT	

FELLOWS OF THE ENTOMOLOGICAL SOCIETY OF ONTARIO

(2011-2013)

(2009-2011)

Agriculture and Agri-Food Canada

Agriculture and Agri-Food Canada

Engage Agro Corporation

neilcarter@engageagro.com

J. SKEVINGTON

N. CARTER

960 Carling Ave., Ottawa ON K1A 06C

1030 Gordon St., Guelph, ON, N1G 4X5

Eastern Cereal and Oilseed Research Centre

960 Carling Ave., Ottawa, ON K1A 0C6

J. MCNEIL

K. RYALL

Department of Biology, BGS 3066

Canadian Forest Service, Great Lakes Forestry Centre,

Natural Resources Canada, 1219 Queen Street East,

University of Western Ontario,

Sault Ste. Marie, ON P6A 2E5

krista.ryall@NRCan-RNCan.gc.ca

London, ON N6A 5B7

imcneil2@uwo.ca

W. W. BILL JUDD	2002
C. RON HARRIS	2003
GLENN WIGGINS	2006
BERNARD PHILOGENE	2010
FREEMAN MCEWEN	2010

ENTOMOLOGICAL SOCIETY OF ONTARIO

The **Society** founded in 1863, is the second oldest Entomological Society in North America and among the nine oldest, existing entomological societies in the world. It serves as an association of persons interested in entomology and is dedicated to the furtherance of the science by holding meetings and publication of the **Journal of the Entomological Society of Ontario**. The **Journal** publishes fully refereed scientific papers, and has a world-wide circulation. The Society headquarters are at the University of Guelph. The **Society's library** is housed in the McLaughlin Library of the University and is available to all members.

An annual fee of \$30 provides membership in the **Society**, and the right to publish in the **Journal**, and receive the **Newsletter** and the **Journal**. Students, amateurs and retired entomologists within Canada can join free of charge but do not receive the Journal.

A World Wide Web home page for the **Society** is available at the following URL: http://www.entsocont.ca

APPLICATION FOR MEMBERSHIP

Please send your name, address (including postal code) and email address to:
Nicole McKenzie, Secretary, Entomological Society of Ontario
c/o Vista Centre, 1830 Bank Street, P.O. Box 83025 Ottawa, ON K1V 1A3
email: nicole mckenzie@hc-sc.gc.ca

NOTICE TO CONTRIBUTORS

Please refer to the Society web site (http://www.entsocont.ca) for current instructions to authors. Please submit manuscripts electronically to the Scientific Editor (john.huber@agr.gc.ca).