Welcome to 2019 everyone! 2018 will probably be remembered by those in our industry as the year of mega mergers, atypical weather (which appears to be the new norm) and of course our amazing Annual Meeting in beautiful Niagara Falls where we celebrated the induction of Linda Hall as a Fellow to our society. I’m sure 2019 will be another memorable and exciting year, and I look forward to presiding over the society this year and working with our terrific BOD and Executive committees.

I would like to thank our outgoing president Eric Page for his leadership throughout the year and the many initiatives he either started or saw to completion. He has left some big shoes to fill and I’m certainly grateful that he will remain on the BOD. I also want to thank the CWSS members that have rotated off the board for their many contributions to our society: Linda Hall (Past President) and Steven Shirtliffe (Member at Large West). We are fortunate to have those vacancies filled by Eric Page (Past President) and Jessica Weber (Member at Large West). I already mentioned the Niagara Annual Meeting as a highlight of 2018 and much credit for the success of that meeting lies with Peter Sikkema and his local arrangements committee. Thank you to Peter and all those with direct or indirect roles on the LAC. One final recognition and welcome I’d like to make is to Marie-Josée Simard who accepted the role of 2nd Vice-President for the CWSS-SCM.

For the first time in recent history (maybe ever), our Annual Meeting will be taking us to Kelowna, BC. Arrangements are well underway thanks to the efforts of co-chairs Ken Sapsford and David Clements. In the
lead up to that meeting, the board of directors will be working on several society initiatives. After 11 years of dedicated service to our society, Anita Drabyk will be stepping down as our Executive Assistant at the end of March. We will soon begin the search for someone to fill that important role. Your Executive Committee has also had a meeting with BMO Financial Group to review options for an updated investment strategy that will provide security of our capital and a better annual return. We have ongoing discussions with both the Weed Science Society of America and the Canadian Society of Agronomy regarding future joint meetings. Other projects we are working on include updates to our MOP and website, moving to new web-based software to manage our finances, and as always, trying to find new ways to provide value to our members.

This will be the only formal Newsletter you will receive from CWSS this year, but we will keep you informed on highlights of some of our BOD activities throughout the year as part of the Monthly Blasts that are issued from our communication team. I'll end by thanking each of you for your support and involvement with the CWSS-SCM. Our societies success depends on your active engagement throughout the year, so please don't hesitate to reach out to me or any member of the BOD with suggestions, issues, or any content that you think might be of interest to the weed science community. On behalf of the society, I wish you all the best in 2019!

Yours Truly,

Rory Degenhardt
CWSS-SCM President

The 2019 November CWSS-SCM Annual Meeting will be held at the Delta Hotel in Kelowna, BC, from November 18 to 21, 2019

Plant Canada 2019
Communicating Innovation in Plant Science
July 7-10, 2019
University of Guelph
Guelph, Ontario
Allan Kaastra presented the Best Student Presentations awards on behalf of Bayer:

3rd Place — Brendan Metzger — “Multiple herbicide-resistant Canada fleabane (Conyza canadensis (L.) Cronq.) and waterhemp (Amaranthus tuberculatus (Moq.) J.D. Sauer) dose response to tolpyralate and tolpyralate plus atrazine.”

2nd Place — Nicole Berardi — “Antioxidant responses to weed competition in arabidopsis and maize.”

1st Place — Lauren Benoit — “Occurrence and distribution of waterhemp (Amaranthus tuberculatus var. rudis) from Ontario and Quebec resistant to herbicides spanning four modes of action and control using HPPD-inhibiting herbicides.”

Mark Oostlander presented the Best Posters awards on behalf of BASF:

3rd Place “The use of cereal rye (Secale cereale L.) cover crops to control Canada fleabane (Conyza canadensis (L.) Cronq.)” by Theodore R. Vanhie, François Tardif, Clarence Swanton, and Mike Cowbrough

2nd Place “Weed management practices in annual cropping systems in the prairie provinces” by Julia Y. Leeson

1st Place “Quantitative assays for Amaranthus palmeri and A. tuberculatus detection” by Brent P. Murphy, Dianne E. Plewa, Elizabeth Phillippi, Suzanne M. Bissonnette, and Patrick Tranel

**CWSS-SCM 2019 Kelowna Photo Contest**

Start collecting photos for our next Photo Contest. The objective of our photo contest is to encourage CWSS-SCM members to hone their photographic skills and to make excellent weed and weed management images available for use by CWSS-SCM members and in CWSS-SCM publications.

The three best photos submitted in each of three categories will be recognized. The winning photos will be selected by a panel of judges selected by the Photo Contest Co-ordinator. For more information on submission of Photo Contest entries, see the Photo Contest section of the Annual Meeting notice on the CWSS-SCM webpage.

**JOIN OUR SOCIETY**

If you have not paid your membership dues for 2019, you can now do so online. If you attended our November meeting, your fees for 2019 were included in the meeting fees. If you weren’t able to attend you can become a member or renew your membership using the online link.

Regular: (Educators, extension agents, government employees, growers, commercialization agents, regulators, researchers) - $200

Student enrolled at an International University: - $50

Retired: (Any CWSS-SCM member who has retired.) - $0

Student enrolled at a Canadian University (with signature of supervisor) - $0

**2018 CWSS-SCM Meeting Abstracts**

The 2018 Canadian Weed Science Society (CWSS-SCM) Proceedings – Niagara Falls ON can be found by clicking on the link here. Check out the student presentation photos.
Dr. Linda Hall
Professor of Weed Science and Biosafety of Transgenic Crops, University of Alberta.

Dr. Linda Hall is a Professor of Weed Science and Biosafety of Transgenic Crops in the Faculty of Agriculture, Life and Environmental Sciences at the University of Alberta.

Linda was born and raised in Medicine Hat, AB. She attended the University of Alberta, for her undergraduate degree (Botany) followed by a MSc in Plant Physiology. Linda then pursued a PhD at the University of Saskatchewan under the supervision of Malcolm Devine (1998). Upon completion of her PhD, she worked as a PDF in Dr. Stephen Powles laboratory at the University of Adelaide, followed by a PDF position at the University of Alberta. In 1994, she joined Alberta Agriculture as a Research Scientist followed by an appointment as Associate Professor at the University of Alberta in 2006. In 2010, Linda was awarded Full Professorship at the University of Alberta.

Linda has enjoyed a very productive career in weed science and transgenic crop biosafety. She has published 104 peer reviewed manuscripts and contributed to 19 book chapters. Linda has given over 50 invited presentations and has contributed to 90 presentations and posters at scientific conferences. Linda is recognized nationally and internationally for her research in weed science, agronomy, and transgenic crop biosafety. She pioneered research on the environmental impacts of transgenic crops, gene flow via pollen and seeds, and evaluation of crops that could serve as bio-platforms for novel traits or molecular farming. Her research has not only advanced science but is also invaluable to regulatory agencies. Linda’s research in weed science and biosafety were recognized as she was a finalist for the ASTech Innovation in Agricultural Science Award in 2016, one of the most prestigious scientific honors awarded in the province of Alberta. In addition to outstanding research, Linda’s greatest legacy is the teaching, mentoring, and training of undergraduate and graduate students as future leaders in weed science and in the agri-food sector. Her teaching contributions include undergraduate classes in Introductory Plant Science, Herbicide Physiology, Cropping Systems and Weed Science. She has supervised 19 graduate students and has served on numerous graduate student committees. Her graduate students admire her focus on student success, as well as her unselfish commitment to student learning and development. Her teaching efforts have been recognized with many awards including the University of Alberta’s Department of Agriculture, Life and Environmental Sciences Teacher of the Year Award in 2017. Linda has been an active member of the CWSS-SCM and has served on the Board of Directors as 2nd Vice-President, 1st Vice President, President, and Past President from 2015 to 2018. In addition, she served on many Local Arrangement Committees. In the words of a former student, “Linda’s enthusiasm and pride in CWSS-SCM is infectious and has led to a number of her former students remaining active within the society”.

2018 CWSS-SCM Fellow Award Winner — Dr. Linda Hall

Eric Page (right), President of CWSS-SCM, presents the Fellow Award to Dr. Linda Hall
herbicide resistant weeds. His research aims at providing a better understanding of their mechanisms of resistance, and overall reproductive fitness. It is hoped that this research will lead to more efficient ways to identify herbicide resistance in the field and will improve management methods. Another area of research that he is actively involved in is herbicide evaluations for both field and horticultural crops. Further to this he is currently the Test Site Manager for the minor use pesticide program at Harrow. Robert holds a BSc Hons. degree in Ecology and Evolution from Western University, an MSc degree in Weed Ecology from the University of Guelph and a PhD in Weed Ecology from Cornell University. He has served as the Editor-in-Chief of the Canadian Journal of Plant Science and is currently an Associate Editor for the journal Weed Technology. Since 2010, Dr. Nurse has also served as an Adjunct Professor in the Department of Biology at Western University and as a Special Graduate Faculty member at the University of Guelph in the Department of Plant Agriculture.

2018 CWSS-SCM Excellence in Weed Science Award - Dr. Robert Nurse

Robert Nurse is a Research Scientist in Weed Management at Agriculture and Agri-Food Canada’s Harrow Research and Development Centre. His current work focuses on the study of herbicide resistant weeds. His research aims at providing a better understanding of their mechanisms of resistance, and overall reproductive fitness. It is hoped that this research will lead to more efficient ways to identify herbicide resistance in the field and will improve management methods. Another area of research that he is actively involved in is herbicide evaluations for both field and horticultural crops. Further to this he is currently the Test Site Manager for the minor use pesticide program at Harrow. Robert holds a BSc Hons. degree in Ecology and Evolution from Western University, an MSc degree in Weed Ecology from the University of Guelph and a PhD in Weed Ecology from Cornell University. He has served as the Editor-in-Chief of the Canadian Journal of Plant Science and is currently an Associate Editor for the journal Weed Technology. Since 2010, Dr. Nurse has also served as an Adjunct Professor in the Department of Biology at Western University and as a Special Graduate Faculty member at the University of Guelph in the Department of Plant Agriculture.

2018 CWSS-SCM Photo Contest

Check out the photos from the photo contest. Then check out the winners. This year there were 9 different photographers winning the 1st, 2nd, and 3rd in each category. Such a great cross section of talent. Check the link for winners’ names.
Kristen has a MSc in weed science from the University of Manitoba and an BSc honors from the University of Guelph. As OMAFRA’s Weed Management Specialist for Horticulture crops, she leads the development, coordination and implementation of various programs related to weed management issues in Ontario. She is a past recipient of the Deputy Minister’s Award for her work as a provincial vegetable specialist. She previously spent several years with the Ontario Greenhouse Vegetable Growers and in the private sector coordinating research trials in support of new product registrations.

Dr. Rory Degenhardt
Canadian Integrated Field Sciences Research Leader for Corteva Agriscience

Rory Degenhardt is the Canadian Integrated Field Sciences Research Leader for Corteva Agriscience. Rory and the research team he leads are responsible for characterizing and developing new crop protection and trait technologies to address the evolving needs of Canadian farmers and consumers.

2018 CWSS-SCM Excellence in Weed Extension Award — Kristen Obeid

Kristen has a MSc in weed science from the University of Manitoba and an BSc honors from the University of Guelph. As OMAFRA’s Weed Management Specialist for Horticulture crops, she leads the development, coordination and implementation of various programs related to weed management issues in Ontario. She is a past recipient of the Deputy Minister’s Award for her work as a provincial vegetable specialist. She previously spent several years with the Ontario Greenhouse Vegetable Growers and in the private sector coordinating research trials in support of new product registrations.
Peter Smith, University of Guelph Technician in the Weed Science program

Peter Smith received his BSc from the University of Guelph in 1988. After working in various capacities in the Department of Crop Science (Forage and Pasture program, Cropping Systems program) he was appointment as a technician in the Weed Science program in 1996. He first worked under the sole supervision of Dr. François Tardif and, in 2013, his responsibilities were split between Dr. Clarence Swanton and Dr. Tardif. Peter has been a member of CWSS since its inception. He has attended every meeting and has contributed in different ways. When the meeting was in Ontario he has been part of the LAC in various capacities. For example, he has coordinated the photo contest in Niagara Falls in 2011 and has been the conference photographer in other occasions.

2018 CWSS-SCM Canadian Journal of Plant Science Outstanding Weed Science Paper Award

Scott White (left), CWSS-SCM banquet Master of Ceremonies, presents the Canadian Journal of Plant Science Outstanding Weed Science Paper Award — Marie-Josée Simard, Martin Laforest, Brahim Soufiane, Diane Lyse Benoit, and François J. Tardif

2018 CWSS-SCM Provincial Reports

Check out the provincial reports: British Columbia Report to the CWSS /SMC, Alberta Update -- Provincial Report to the CWSS-SCM, Provincial Report to the CWSS/SCM – horticulture, rapport du QUÉBEC À la SOCIÉTÉ CANADIENNE DE MALHERBOLOGIE, New Brunswick Report to the CWSS/SCM, Nova Scotia Department of Agriculture Report to the CWSS/SCM

BULLETIN OF THE ENTOMOLOGICAL SOCIETY OF CANADA
BULLETIN DE LA SOCIÉTÉ D'ENTOMOLOGIE DU CANADA

As part of an initiative for information exchange with the Entomological society of Canada, we let our readers know the contents of their bulletin. They, in turn, also publish information about CWSS-SCM. Please click here for more information on and content of their Bulletins.
Stephen Darbyshire is a nationally and internationally known plant taxonomist with Agriculture and Agri-Food Canada in Ottawa, Ontario, who has provided leadership, knowledge and support for advancing weed science in Canada. He received his BSc in Biology from the University of Guelph in 1977 and his Masters of Science in Plant Taxonomy and Evolution from the University of Ottawa in 1992. In his career, Stephen has collected approximately 10,000 specimens of plant, bryophyte, and fungal specimens, primarily from Canada. These specimens are stored in either the DAO, Ottawa (also known as the Collection of Vascular Plants) or the National Herbarium of Canada (located in the Canadian Museum of Nature, Ottawa). Stephen’s research pursuits in terms of botanical collections include the family Poaceae and weeds. His contributions have been integral to the A0 grass collection being known as one of the best in Canada and one of the best in the world. With the worldwide importance of cereals to humans, it is naturally an important world resource. The importance of the collection with regard to grasses is a result of a long tradition of major contributions of AAFC researchers to grass systematics. In addition, Stephen’s taxonomy expertise is constantly sought to assist in plant identification through workshops and field days. He has served as an advisor to the Canadian Food Inspection Agency, the United States IR-4 program and has been a member of the Weed Science Society of America’s Weed Nomenclature Committee. Stephen has provided leadership and knowledge in program development for managing Invasive Plant Species, including a federal ad hoc Interdepartmental Committee on Invasive Alien Species, which was the primary origin of the National Invasive Alien Species Strategy. He participated in a CFIA working group developing an eradication program for woolly cupgrass in southern Quebec. Stephen has been very active in CWSS-SCM including LAC committees, organizing and obtaining funding for a symposium on Invasive plants at the 2006-07 Annual meeting, acting as co-editor for a Topics in Canadian Weed Science volume, and serving as Publications Director on the Board of Directors. He was the CWSS-SCM appointed Associate Editor for the Canadian Journal of Plant Science from 2003-2009 and has been a very active contributor and reviewer to the Biology of Canadian Weeds series. Stephen has authored or co-authored 98 scientific publications, and written 50 book chapters or books. He has contributed to 32 conference or workshop proceedings, as well as written 30 miscellaneous publications. A very important publication that Stephen has authored is the Inventory of Canadian Agricultural Weeds, which has entries for 872 species and 198 subspecific taxa, for which over 9000 common and scientific names are given, including the most common synonyms. Stephen has also been very active in the organization of Weeds Across Borders conferences in the United States, Mexico and Canada.
Leila Kamino, University of Manitoba

I am currently a Ph.D. student at the University of Manitoba under the supervision of Dr. Rob Gulden since May 2014. My passion for science was inspired by my parents who had careers in the medical profession. I therefore pursued a Bachelor of Science in Biochemistry at Egerton University, Kenya. Following graduation, I worked as a research support for the Cereal Breeding department at the Kenyan Agricultural and Livestock Research Organization, Njoro. The research experience at K.A.R.I, strengthened my skills in molecular techniques which I continuously employ in my current research.

In the year 2011 I received a scholarship which enabled me to pursue a master’s degree at the University of Sydney, Australia, with my research topic focusing on genetics of resistance to stripe rust (Puccinia striiformis) species in barley. Having an open mind to learn, I enrolled into the Ph.D. program and my current research is geared towards understanding the dynamics of soil microbes that contribute to extracellular DNA (eDNA) cycling in the environment and influence of agronomic practices to soil microbes. The objective of my research is to study the interactions between crops and microbes in the soil. Specifically, the studies I do seek to elucidate how crop type (canola, wheat, oats, alfalfa and flax) affects soil microbial structure and DNase production. Beyond my academic pursuit, I deeply desire to inspire and support young women who pursue their studies in Science and Agriculture.

Brendan Metzger, University of Guelph Ridgetown

Brendan grew up on a small farm in Wellington County, Ontario. He received an Associate Diploma in Agriculture from the University of Guelph, Ridgetown Campus in 2014, and a B.Sc. (Agr.) from the University of Guelph in 2016, majoring in Crop, Horticulture and Turfgrass Sciences. For the past 18 months, Brendan has been working on his M.Sc. with Dr. Peter Sikkema and Dr. Darren Robinson at the University of Guelph, Ridgetown Campus, where he is studying tolpyralate for weed management in Ontario corn.

We also acknowledge support from many local sponsors:
**2nd Place Award for M.Sc. Student provided by Syngenta**

**Qiming Lyu**, Dalhousie University Faculty of Agriculture Project - Weed Survey and Development of Management Strategies for Spreading Dogbane (*Apocynum androsaemifolium* L.) in Wild Blueberry

Hugh Qiming Lyu is originally from Fujian, China. He has two BSc degrees in Plant Science and Horticulture from Dalhousie University in Truro, Nova Scotia and Fujian Agriculture and Forestry University in Fujian, China. He has more than 4 years research experience in wild blueberry research and vegetation management. When he was an undergraduate student, he worked as a summer student in the Wild Blueberry Research Program with Dr. David Percival in the Dalhousie University Faculty of Agriculture. His first research experience brought him into agricultural research and he found a great passion about agriculture. After he graduated, he worked as a research assistant for Dr. Percival, focusing on wild blueberry disease control and nutrition management. His next job was with Dr. Scott White in Vegetation Management, assisting with various graduate students’ projects, such as perennial grass management, goldenrod control, sheep sorrel herbicide trials, and Japanese knotweed management. His true interests are in field research, which has inspired him to pursue a career in agriculture. Hugh is currently in his second year of the Master of Science program at Dalhousie University under the supervision of Dr. Scott White. He is doing research on vegetation management in Nova Scotia wild blueberry fields, with a specific focus on i) conducting a weed survey of wild blueberry fields and ii) development of management strategies for spreading dogbane (*Apocynum androsaemifolium* L.).

**3rd Place Award for M.Sc. Student provided by CWSS-SCM**

**Deanna McLennan**, University of Manitoba Project - Cultural control of ACCase resistant green foxtail (*Setaria viridis*) within two canola-wheat-soybean crop rotations.

Originally from a grain farm near Mather, Manitoba, Deanna decided she wanted to advance her education in agriculture by enrolling in the Agronomy program at the University of Manitoba. In 2015, Deanna graduated with a Bachelor of Science in Agriculture. She then worked in industry before travelling to Asia and New Zealand. Once back on home soil in the spring of 2017, she started a Masters of Science with Dr. Robert Gulden at the University of Manitoba working on a project on cultural controls of ACCase resistant green foxtail within two canola–wheat–soybean rotations. Once she has successfully defended her thesis, she would like to find employment in agricultural research somewhere abroad and therefore keep travelling.
Thank you to our 2018 Meeting sponsors

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### Upcoming Meetings

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>February 3 to 7, 2019</td>
<td>Southern Weed Science Society (SWSS), Oklahoma City, OK</td>
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<tr>
<td>February 11 to 14, 2019</td>
<td>Weed Science Society of America Annual Meeting, New Orleans, LA</td>
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<tr>
<td>July 7 to 10, 2019</td>
<td>Plant Canada 2019 at The University of Guelph, ON</td>
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<tr>
<td>July 7 to 10, 2019</td>
<td>The 2019 Canadian Society of Agronomy Annual General Meeting will be held in conjunction with Plant Canada 2019 at The University of Guelph, ON</td>
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<tr>
<td>July 14 to 17, 2019</td>
<td>Aquatic Plant Management Society (APMS), San Diego, California</td>
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<tr>
<td>August 18 to 21, 2019</td>
<td>Entomological Society of Canada (ESC) Fredericton, New Brunswick</td>
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<td>March 11 to 14, 2019</td>
<td>Western Society of Weed Science, Denver, CO</td>
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<tr>
<td>April 10 to 13, 2019</td>
<td>First International Molecular Plant Protection Congress, Adana, Turkey</td>
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<tr>
<td>November 18 to 21, 2019</td>
<td>CWSS-SCM Annual Meeting in Kelowna BC</td>
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<tr>
<td>December 13 to 16, 2019</td>
<td>North Central Weed Science Society (NCWSS), Columbus, OH</td>
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<tr>
<td>June 21 to 25, 2020</td>
<td>8th International Crop Science Congress, Saskatoon, Saskatchewan, Canada</td>
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### Articles for Newsletter

Articles, photos, letters and news items for the newsletters can be submitted to:

**Mailing Address**
CWSS-SCM
6000 C&E Trail
Lacombe, AB T4L 1W1

E-mail: cwss.scm.assistant@gmail.com

### 2019 CWSS-SCM Board of Directors

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- **Local Arrangements (2020)** .................... Ken Sapsford