

Catherine Scott

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email: catherine.elizabeth.scott@gmail.com

phone: +1 (902) 300-6717

[Google Scholar](#) | [ORCID: 0000-0003-0860-480](#)

EDUCATION

- 2019 **Ph.D.**, Ecology and Evolutionary Biology
UNIVERSITY OF TORONTO
Thesis: Mate searching and choosiness are shaped by spatial structure and social information in western black widows
Supervisor: Maydianne Andrade
- 2014 **M.Sc.**, Biology
SIMON FRASER UNIVERSITY
Thesis: The chemical communication system of the western black widow
Supervisor: Gerhard Gries
- 2008 **B.Sc.**, Mathematics
QUEEN'S UNIVERSITY

POSTDOCTORAL RESEARCH APPOINTMENTS

- 2023 – **Honourary Postdoctoral Fellow**, Department of Biology
present MEMORIAL UNIVERSITY
Advisor: Tom Chapman
- 2021 – **Postdoctoral Fellow**, Department of Natural Resource Sciences
present MCGILL UNIVERSITY
Advisor: Chris Buddle
- 2020 **Postdoctoral Fellow**, Department of Biology
ACADIA UNIVERSITY
Advisor: Kirk Hillier

GRANTS, FELLOWSHIPS, AND SCHOLARSHIPS

- 2024 Memorial University Public Engagement Accelerator Grant; PI; in partnership with Nature Newfoundland and Labrador and The Rooms (\$10,000)
- 2023 Memorial University Quick Start Fund for Public Engagement Grant; co-PI with Tom Chapman; in partnership with Nature Newfoundland and Labrador (\$2,500)
- 2023 **Banting Postdoctoral Fellowship** (\$140,000)
- 2021 **NSERC Postdoctoral Fellowship** (\$90,000)
- 2020 Nova Scotia Museum Research Grant; co-PI with Sean McCann (\$4,000)
- 2019 Queen Elizabeth II Graduate Scholarship in Science & Technology (\$15,000)
- 2018 Ontario Graduate Scholarship (\$15,000)
- 2018 General Motors Women in Science and Mathematics Award (\$5,000)
- 2018 Entomological Society of Canada PhD Scholarship (\$2,000)
- 2018 Entomological Society of Canada Danks Scholarship (\$1,000)

- 2017 Toronto Entomologists' Association W. John D. Eberlie Research Grant (\$400)
- 2015 **NSERC Alexander Graham Bell Canada Graduate Scholarship – Doctoral** (\$105,000)
- 2013 Entomological Society of BC Graduate Student Scholarship (\$400)
- 2013 Simon Fraser University Graduate Fellowships (\$6,250)
- 2012 Simon Fraser University Graduate Fellowship (\$6,250)
- 2011 Simon Fraser University Graduate Fellowship (\$6,250)
- 2007 Queen's University Norman Miller Fellowship in Mathematics Education (\$1,000)

HONOURS, PRIZES, AND COMPETITIVE TRAVEL AWARDS

- 2023 McGill Principal's Prize for Public Engagement through Media (runner-up)
- 2022 McGill Association of Postdoctoral Fellows Public Engagement Award
- 2019 Entomological Society of Canada Graduate Student Showcase Symposium (selected by competition to present my PhD research; an honour analogous to the CSEE Excellence in PhD Research Award and Symposium)
- 2018 International Society for Behavioural Ecology Travel Award
- 2016 International Congress of Arachnology award for best student poster in Ecology and Behaviour
- 2016 American Arachnological Society Student Travel Grant
- 2013 Entomological Society of Canada Graduate Student Showcase Symposium (selected by competition to present my MSc research; an honour analogous to the CSEE Excellence in PhD Research Award and Symposium)
- 2012 Entomological Society of Canada President's Prize for best student talk in Behaviour and Biological Control

PUBLICATIONS

*indicates undergraduate coauthor under my supervision; †indicates last (senior) authors contributed equally

26. Cardoso P, Pekar S, Birkhofer K, Chuang A, Fukushima CS, Hebets EA, Henaut Y, Hesselberg T, Malumbres-Olarte J, Michálek O, Michalko R, **Scott C**, Wolff J, Mammola S. Ecosystem services provided by spiders. doi: <https://doi.org/10.22541/au.172538631.11011603/v1> (currently under review at *Biological Reviews*)
25. Drapeau Picard A-P, **Scott C**, Chuang A, Mammola S. (In Press) The influence of spider news on online information-seeking. *PLOS ONE* doi: 10.1371/journal.pone.0308169
24. *Gagnon S, **Scott C**, Buddle C. (2024) Tundra wolf spider (Araneae: Lycosidae) abundance and phenology shift with distance from a northern highway. *Insect Systematics and Diversity* 8:6. doi: [10.1093/isd/ixae008](https://doi.org/10.1093/isd/ixae008)
23. **Scott C**, McCann S. (2023) They mostly come at night: Predation on sleeping insects by introduced candy-striped spiders in North America. *Ecology* e4025. doi: [10.1002/ecy.4025](https://doi.org/10.1002/ecy.4025)
Media coverage: [The New York Times](#); [CBC: As It Happens](#); [The Times Colonist](#); [British Wildlife](#)
22. Blakeman E, Wilson AB, Romer S, Olin E, **Scott C**, Popescu V, Brodie BS. (2023) Passively crowdsourcing images online for measuring wide-scale fly (Diptera) floral interactions and biodiversity. *Journal of Pollination Ecology* 33:189-193. doi: [10.26786/1920-7603\(2023\)724](https://doi.org/10.26786/1920-7603(2023)724)

21. Sentenská L, **Scott C**, Baruffaldi L, Andrade MCB. (2023) Pre-copulatory choices drive post-copulatory decisions: Mechanisms of female control shift across different life stages. *BMC Ecology and Evolution* 23:25. doi: [10.1186/s12862-023-02138-6](https://doi.org/10.1186/s12862-023-02138-6)
20. Mammola S, Malumbres-Olarte J, Arabesky V, Barrales-Alcalá D, Barrion-Dupo A, Benamú M, Bird T, Bogolomova M, Cardoso P, Chatzaki M, Cheng R, Chu T, Classen-Rodríguez L, Čupić I, Dhiya'ulhaq N, Drapeau Picard A, El-Hennawy H, Elverici M, Fukushima C, Ganem Z, Gavish-Regev E, Gonnye N, Hacala A, Haddad C, Hesselberg T, Ho T, Into T, Isaia M, Jayaraman D, Karuaera N, Khalap R, Khalap K, Kim D, Korhonen T, Kralj-Fišer S, Land H, Lin S, Loboda S, Lowe E, Lubin Y, Martínez A, Mbo Z, Miličić M, Kioko G, Nanni V, Norma-Rashid Y, Nwankwo D, Painting C, Pang A, Pantini P, Pavlek M, Pearce R, Petcharad B, Petillon J, Raberahona O, Saarinen J, Segura-Hernández L, Sentenská L, Uhl G, Walker L, Warui C, Wiśniewski K, Zamani A, †Chuang A, †**Scott C**. (2022) The global spread of misinformation on spiders. *Current Biology* 32: R871-R873. doi: [10.1016/j.cub.2022.07.026](https://doi.org/10.1016/j.cub.2022.07.026)
Selected media coverage: [The New York Times](#); [Science News](#); [Smithsonian Magazine](#); [CBC: The Current](#)
19. Sentenská L, **Scott C**, Mouginit P, Andrade MCBA (2022). Risky business: Males choose more receptive adults over safer subadults in a cannibalistic spider. *Behavioural Ecology* 33: 688-697. doi: [10.1093/beheco/amac023](https://doi.org/10.1093/beheco/amac023)
Media coverage: [The Atlantic](#)
18. Mammola S, Malumbres-Olarte J, Arabesky V, Barrales-Alcalá D, Barrion-Dupo A, Benamú M, Bird T, Bogolomova M, Cardoso P, Chatzaki M, Cheng R, Chu T, Classen-Rodríguez L, Čupić I, Dhiya'ulhaq N, Drapeau Picard A, El-Hennawy H, Elverici M, Fukushima C, Ganem Z, Gavish-Regev E, Gonnye N, Hacala A, Haddad C, Hesselberg T, Ho T, Into T, Isaia M, Jayaraman D, Karuaera N, Khalap R, Khalap K, Kim D, Korhonen T, Kralj-Fišer S, Land H, Lin S, Loboda S, Lowe E, Lubin Y, Martínez A, Mbo Z, Miličić M, Kioko G, Nanni V, Norma-Rashid Y, Nwankwo D, Painting C, Pang A, Pantini P, Pavlek M, Pearce R, Petcharad B, Petillon J, Raberahona O, Saarinen J, Segura-Hernández L, Sentenská L, Uhl G, Walker L, Warui C, Wiśniewski K, Zamani A †**Scott C**, †Chuang A. (2022) An expert-curated global database of online newspaper articles on spiders and spider bites. *Scientific Data* 9: 1-12. doi:[10.1038/s41597-022-01197-6](https://doi.org/10.1038/s41597-022-01197-6)
17. *Bowen-MacLean GR, **Scott C**, Hillier NK. (2021) Two-spotted spider mites respond to chemical cues associated with conspecifics' silk when choosing a microhabitat. *Journal of Insect Behavior*. doi:[10.1007/s10905-021-09787-9](https://doi.org/10.1007/s10905-021-09787-9)
16. Lowe EJ, Wolff J, Aceves-Aparicio A, Birkhofer K, Veiga Branco V, Cardoso P, Chichorro, F, Fukushima C, Goncalves-Sousa T, Haddad C, Isaia M, Krehenwinkel H, Lynn Audisio T, Macias Hernandez N, Malumbres-Olarte J, Mammola S, McLean DJ, Michalko R, Nentwig W, Pekar S, Petillon J, Privet K, **Scott C**, Uhl G, Urbano Tenorio F, Wong BH, and Herberstein ME. (2020) Towards establishment of a centralized spider traits database. *Journal of Arachnology* 48: 103-109. doi:[10.1636/0161-8202-48.2.103](https://doi.org/10.1636/0161-8202-48.2.103)
15. Faraone N, Light M, **Scott C**, MacPherson S, Hillier NK. (2020) Chemosensory and behavioural responses of *Ixodes scapularis* to natural products: role of chemosensory organs in volatile detection. *Insects* 11: 502. doi:[10.3390/insects11080502](https://doi.org/10.3390/insects11080502)
14. **Scott C**, McCann M, Andrade MCB. (2020) Black widows as plastic wallflowers: female choosiness increases with indicators of high mate availability in a natural population. *Scientific Reports* 10: 8981. doi:[10.1038/s41598-020-65985-z](https://doi.org/10.1038/s41598-020-65985-z)

13. **Scott C**, McCann S, Andrade MCB. (2019) Male black widows parasitize mate-searching effort of rivals to find females faster. *Proceedings of the Royal Society B* 286: 20191470
doi:[10.1098/rspb.2019.1470](https://doi.org/10.1098/rspb.2019.1470)
Selected media coverage: [The New York Times](#); [Science](#), [Smithsonian Magazine](#); [Scientific American](#)
12. **Scott C**, Anderson A, Andrade MCB. (2018) A review of the mechanisms and functional roles of male silk use in spider courtship and mating. *Journal of Arachnology* 46: 173-206.
doi:[10.1636/JoA-S-17-093.1](https://doi.org/10.1636/JoA-S-17-093.1)
11. Rosario K, Mettel KA, Benner BE, Johnson R, **Scott C**, Yusseff-Vanegas SZ, Baker CCM, Cassill DL, Storer C, Varsani A, Breitbart M. (2018) Virus discovery in all three major lineages of terrestrial arthropods highlights the diversity of single stranded DNA viruses associated with invertebrates. *PeerJ* 6:e5761. doi:[10.7717/peerj.5761](https://doi.org/10.7717/peerj.5761)
10. **Scott C**, *Gerak C, McCann S, Gries G. (2017) The role of silk in courtship and chemical communication of the false widow spider, *Steatoda grossa* (Araneae: Theridiidae). *Journal of Ethology* 36: 191-197. doi:[10.1007/s10164-017-0539-3](https://doi.org/10.1007/s10164-017-0539-3)
9. Vibert S, Salomon M, **Scott C**, Blackburn GS, Gries G. (2017) Life-history data for the funnel weavers *Eratigena agrestis* and *Eratigena atrica* (Araneae: Agelenidae) in the Pacific Northwest of North America. *The Canadian Entomologist* 149: 345-356. doi:[10.4039/tce.2016.73](https://doi.org/10.4039/tce.2016.73)
8. Vibert S, **Scott C**, Gries G. (2016) Vibration transmission through sheet webs of hobo spiders (*Eratigena agrestis*) and tangle webs of western black widow spiders (*Latrodectus hesperus*). *Journal of Comparative Physiology A* 202: 749–758. doi:[10.1007/s00359-016-1113-0](https://doi.org/10.1007/s00359-016-1113-0)
7. **Scott C**, *Kirk D, McCann S, Gries G. (2015) Web reduction by male black widows renders pheromone-emitting females' webs less attractive to rivals. *Animal Behaviour* 107: 71-78.
doi:[10.1016/j.anbehav.2015.06.009](https://doi.org/10.1016/j.anbehav.2015.06.009)
Selected media coverage: [Scientific American](#); [Discover Magazine](#); [Entomology Today](#)
6. **Scott C**, McCann S, Gries R, Khaskin G, Gries G. (2015) *N*-3-Methylbutyryl-*O*-methylpropanoyl-*L*-serine methyl ester – pheromone component of western black widow females. *Journal of Chemical Ecology* 41: 465-472. doi:[10.1007/s10886-015-0582-x](https://doi.org/10.1007/s10886-015-0582-x)
5. McCann S, **Scott C**, Moeri O, Jones T, O'Donnell S, Gries G. (2015) Red-throated Caracara, a falconid raptor, rivals predatory impact of army ants on social wasps. *Insectes Sociaux* 62: 101-108. doi:[10.1007/s00040-014-0384-0](https://doi.org/10.1007/s00040-014-0384-0)
4. McCann S, Moeri O, Ibarra Jiminez S, **Scott C**, Gries G. (2015) Developing a paired-target apparatus for quantitative testing of nest defense behavior by vespine wasps in response to con- or heterospecific nest defense pheromones. *Journal of Hymenoptera Research* 46: 151-163.
doi:[10.3897/JHR.46.6585](https://doi.org/10.3897/JHR.46.6585)
3. Vibert S, **Scott C**, Gries G. (2014) A meal or a male: the 'whispers' of black widow males do not trigger a predatory response in females. *Frontiers in Zoology* 11: 4. doi:[10.1186/1742-9994-11-4](https://doi.org/10.1186/1742-9994-11-4)
Selected media coverage: [The Washington Post](#), [CBC News](#), [CTV News](#), [Fox News](#)
2. McCann S, Moeri O, Jones T, **Scott C**, Gries R, Khaskin G, O'Donnell S, Gries G. (2013) Strike fast, strike hard: the Red-throated Caracara exploits absconding behavior of social wasps during nest predation. *PLOS ONE* 8: e84114. doi:[0.1371/journal.pone.0084114](https://doi.org/10.1371/journal.pone.0084114)
1. **Scott C**, Vibert S, Gries G. (2012) Evidence that web reduction by western black widow males functions in sexual communication. *The Canadian Entomologist* 144: 672-678.
doi:[10.4039/tce.2012.56](https://doi.org/10.4039/tce.2012.56)

TEACHING

- 2023 Guest Lecturer: One lecture on the Chelicerata for BIOL2122 Biology of Invertebrates at Memorial University of Newfoundland (MUN)
- 2023 **Course Leader:** WILD475 Desert Ecology (field course) at McGill University
- 2022 Guest Lecturer (MUN): 1. One lecture on the Chelicerata for BIOL2122 Biology of Invertebrates; 2. Two lectures on sexual selection in BIOL3750 Animal Behaviour
- 2019 **Course Instructor:** BIOD53 Special Topics in Behavioural Ecology at University of Toronto Scarborough (UTSC)
- 2018 TA/Lab Instructor: BIOD53 Special Topics in Behavioural Ecology at UTSC
Guest lecturer: 1. Chemical Ecology; 2. Introduction to the Biology and Diversity of Spiders
- 2018 TA: BIOB51 Evolutionary Biology (grading) at UTSC
- 2017 TA/Lab Instructor: BIOD53 Special Topics in Behavioural Ecology at UTSC
Guest lecturer: Courtship behaviour and chemical communication in black widows
- 2017 TA: BIOC54 Animal Behaviour (tutorials) at UTSC
- 2016 TA: BIOA01 Life on Earth: Unifying Principles (labs) at UTSC
- 2015 TA: BISC 102 General Biology (labs and tutorials) at Simon Fraser University (SFU)
- 2014 TA: BISC 204 Introduction to Ecology (tutorials) at SFU
Guest lecturer: Ecology of Spiders
- 2013 TA: BISC 101 General Biology (labs and tutorials) at SFU
- 2007 TA and Co-Course Coordinator: MATH 121/122 Math Investigations Calculus Program at Queen's University
- 2007 TA: Math Help Centre at Queen's
- 2006 TA: MATH 121/122 Math Investigations Calculus Program at Queen's

RESEARCH SUPERVISION

- 2024 **Co-supervisor** (with Dr. Chris Buddle): Savannah Burroughs, Undergraduate Summer Research Assistant (McGill University)
Savannah studied the natural history and behaviour of the Beringian pseudoscorpion in YT and will present this work at the 2024 Annual Meeting of the Entomological Society of Canada.
- 2023 **Supervisor:** Abbie Mullins, Independent Undergraduate Researcher (Memorial University)
Abbie studied the abundance, habitat use, and plant preferences of introduced candy-striped spiders and native crab spiders to predict the impact of an invasive predator on native arthropod communities. Abbie presented this work at the Annual Meeting of the Acadian Entomological Society, receiving an honourable mention in the student poster competition, and will also present at the 2024 Annual Meeting of the Entomological Society of Canada. We are currently preparing a manuscript for publication, with Abbie as first author.
- 2022 **Co-supervisor** (with Dr. Chris Buddle): Stephanie Gagnon, Undergraduate Summer Research Assistant (McGill University)

Stephanie studied the effect of roads on community structure and phenology of subarctic tundra wolf spiders. She presented this work at two conferences in 2022 (the Annual Meeting of the Entomological Society of Ontario and the Joint Annual Meeting of the Entomological Societies of America and Canada) and co-authored a paper in *Insect Systematics and Diversity*.

2022 **Co-supervisor** (with Dr. Morgan Jackson): Catherine Woo-Durand, Vanier College Intern at the Lyman Entomological Museum (McGill University)

2020 **Co-supervisor** (with Dr. Kirk Hillier): Grace Bowen-MacLean, Honours Thesis Student (Acadia University)

Grace's thesis was published in the *Journal of Insect Behaviour* and she won first place in the undergraduate student poster competition (Chemical Ecology) at the 2020 meeting of the Entomological Society of America.

2017 **Supervisor:** BIOC99 Team Research at University of Toronto Scarborough (UTSC)

Sumaya Dano, Ajay David, Nimra Javaid, Dilakshan Srikanthan, & Amanda Yee: These students collaborated on a one-semester research project and presented their results in a poster at the 2017 meeting of the Animal Behaviour Society in Toronto. They also won 2nd prize for this work at the 2017 UTSC Undergraduate Research Poster Forum.

2017 TA/Supervisor: BIOD98 Directed Research (UTSC)

2017 TA/Supervisor: BIOB98 Supervised Introductory Research (UTSC)

2013 **Supervisor:** BISC 498 Undergraduate Research Projects (Simon Fraser University)

Chloe Gerak coauthored paper in *Journal of Ethology*; won President's Prize for best undergraduate student talk at the meeting of the Entomological Society of BC in 2014. Devin Kirk coauthored paper in *Animal Behaviour*.

INVITED SEMINARS AND PLENARY

2023 Departmental Seminar. Ecology, Evolution, and Environmental Biology Department, Columbia University, New York, NY. 26 Sept.

2023 Departmental Seminar. Department of Entomology, University of Manitoba, Winnipeg, MB. Online, 28 Mar.

2023 Departmental Seminar. Department of Biology, Memorial University, St. John's NL. 24 Mar.

2023 Departmental Seminar. Department of Integrative Biology, University of Guelph, Guelph, ON. Online, 2 Feb.

2021 Invited Seminar. 'Arthropodata' Virtual Seminar Series. Online, 31 May.

2020 Conference Plenary (co-presented with S. McCann). Annual Meeting of the Acadian Entomological Society, Online, 10 Aug.

2019 Departmental Seminar. Department of Biology, Acadia University, Wolfville, NS. 16 Aug.

INVITED TALKS IN CONFERENCE SYMPOSIA

^Iinternational conference; ^Nnational conference; ^Rregional conference

2022 ^I**Scott C.** 'Inspidering' change in entomological societies, online communities, and beyond. Symposium: *Diverse Voices Influencing Change in Entomology through Art, Culture, and Science*. Joint Annual Meeting of the Entomological Societies of America, Canada, and British Columbia, Vancouver, BC, 13–16 Nov.

- 2020 ^NScott C, Bertone M, Spicer-Rice E. Twitter as a tool for entomological outreach: reflections on two years of #RecluseOrNot. Symposium: *e-Entomology: Inclusive Outreach in a Digital World*. Entomological Society of America Meeting, Online, 11–25 Nov.
- 2019 ^IScott C, Anderson A, Andrade MCB. Spider silk and sex: from mating threads to veils and gift-wrap. Symposium: *Sexual Strategies and Reproductive Morphology in Arachnids*. XXI International Congress of Arachnology, Christchurch, New Zealand, 10–15 Feb.
- 2019 ^IScott C, Bertone M, Spicer-Rice E. Twitter as a tool for arachnological outreach: reflections on a year of @RecluseOrNot. Symposium: *Arachnological Outreach for Community Engagement, Conservation and Research*. International Congress of Arachnology, Christchurch, New Zealand, 10–15 Feb.
- 2014 ^RScott C. The truth about spider bites: “Aggressive” spiders and the threat to public health. Symposium: *Arthropods Affecting Human Health: Fact and Fiction*. Annual Meeting of the Entomological Society of British Columbia, Burnaby, BC, 28 Sept.–1 Oct.

CONTRIBUTED TALKS AT CONFERENCES

- 2023 Joint Annual Meeting of the Entomological Society of Canada and the Entomological Society of Saskatchewan, Saskatoon, SK, 15–18 Oct. 2023.
- 2019 Joint Annual Meeting of the Entomological Society of Canada and the Canadian Society for Ecology and Evolution, Fredericton, NB, 18–21 Aug. 2019. ***Talk in the Graduate Student Showcase***
- 2018 Joint Annual Meeting of the Entomological Societies of America, Canada, and British Columbia, Vancouver, BC, 10–14 Nov. 2018.
- 2018 Annual General meeting of the Entomological Society of Ontario, Sault Ste. Marie, ON, 19–21 Oct. 2018.
- 2018 17th International Behavioral Ecology Congress, Minneapolis, MN, 11–16 Aug. 2018.
- 2018 Toronto Entomologists’ Association Student Symposium, Toronto, ON, 24 Mar. 2018.
- 2017 Annual Conference of the Animal Behavior Society, Scarborough, ON, 12–16 Jun. 2017.
- 2016 Toronto Entomologists’ Association Student Symposium, Toronto, ON, 19 Mar. 2016.
- 2015 Joint Annual Meeting of the Entomological Society of Canada and the Société d’entomologie du Québec, Montréal, QC, 8-11 Nov. 2015.
- 2015 Annual Meeting of the Entomological Society of Ontario, Elgin, ON, 18–20 Sept. 2015.
- 2013 Joint Annual Meeting of the Entomological Society of Saskatchewan and Entomological Society of Canada, Saskatoon SK, 20-23 Oct. 2013. ***Talk in the Graduate Student Showcase***
- 2012 Joint Annual Meeting of the Entomological Society of Ontario and the Entomological Society of Canada, Guelph ON, 4–7 Nov. 2012. ***President’s Prize for best student talk (Behaviour and Biological Control)***
- 2011 Joint Annual Meeting of the Entomological Society of Canada and the Entomological Society of Alberta, Edmonton AB.
- 2010 Joint Annual Meeting of the Entomological Societies of BC and Canada, Vancouver BC, 31 Oct.–3 Nov. 2010.

CONTRIBUTED POSTERS AT CONFERENCES

- 2023 Annual General Meeting of the Entomological Society of Ontario, Gueph, ON, 27–29 Oct.
- 2022 Joint Annual Meeting of the Entomological Societies of America, Canada, and British Columbia, Vancouver, BC, 13–16 Nov.
- 2015 International Congress of Arachnology, Golden, CO, 2–9 Jul. 2015. *Prize for best student poster (Behaviour and Ecology)*
- 2011 Annual meeting of the International Society of Chemical Ecology, Burnaby BC, 24–28 Jul. 2011. *Honorable mention, student poster competition*

CONFERENCES AND SYMPOSIA ORGANISED

- 2022 **Symposium co-organiser** (with Jacob Gorneau and Lauren Esposito). *Many eyes on many eyes: a diverse look at arachnology*. Joint Annual Meeting of the Entomological Societies of America, Canada and British Columbia, Vancouver BC, Nov. 13–16.
- 2021 **Symposium co-organiser** (with Valérie Fournier, Morgan Jackson, Véronique Martel, and Sabrina Rondeau). *Bridging Community Engagement, Entomology and Research*. Joint Annual Meeting of the Entomological Societies of Canada and Ontario, Online, Nov. 15–18.
- 2021 **Organizing Committee Member** and Co-chair of Ancillary Programming. Virtual Meeting of the American Arachnological Society, Online, June 24–30.
- 2018 **Symposium co-organiser** (with Robb Bennett, Claudia Copley, and Heather Proctor). *Crossing Taxonomic Borders: Challenging Arachnological Traditions in North America*. Joint Annual Meeting of the Entomological Societies of America, Canada, and British Columbia, Vancouver, BC, 11–14 Nov.

ACADEMIC SERVICE**Editing and reviewing:**

Co-Editor-in-Chief of the Journal of the Entomological Society of Ontario (Nov. 2022–present)

Guest Editor for a special issue of Insect Systematics and Diversity: Many Eyes on Many Eyes: a Diverse Look at Arachnology (2023)

Peer Reviewer for the following journals:

Acta Ethologica; Agricultural and Forest Entomology; Animal Behaviour; Arachnology; Austral Entomology; Behavioral Ecology; Biological Invasions; Biological Journal of the Linnean Society; Biology; Biotropica; BMC Evolutionary Biology; Bulletin of the British Arachnological Society; Bulletin of the New Jersey Academy of Science; Canadian Journal of Zoology; Current Biology; Current Zoology; Ecology and Evolution; Ethology; Ethology Ecology and Evolution; Food Webs; Functional Ecology; Graellsia; Integrative and Comparative Biology; Journal of Agricultural and Food Chemistry; Journal of Animal Ecology; Journal of Arachnology; Journal of Ethology; Journal of Insect Behaviour; Journal of Thermal Biology; Naturwissenschaften; New Zealand Journal of Zoology; PeerJ; Peer Community in Zoology; PloS One; Royal Society Open Science

External reviewer for one MSc student in the Boreal Ecosystems and Agricultural Sciences program at Memorial University's Grenfeld Campus (2023)

Grant reviewer for the POLONEZ BIS Postdoctoral Fellowship Program of the Polish National Science Centre (2022)

Peer-review mentor for the [Zoom-a-review](#) mentorship program of Behavioral Ecology (2020)

Elected societal leadership roles:

Equity, Diversity, and Inclusion Director and EDI Committee Chair for the Entomological Society of Canada (2023–present).

President of the Friends of Island View Beach Society (2020–2024).

Regional Director of the Entomological Society of Canada representing the Acadian Entomological Society (2020–2021).

Vice-president (2017–2020) and Student Representative on the board (2016–2017) of the Toronto chapter of Sigma Xi Scientific Society.

Student Representative on the board of the Entomological Society of Ontario (2016–2018).

Committee memberships:

Entomological Society of Canada: EDI Committee (2021–present), Student and Early Professional Affairs Committee and Communications Committee (2020–present); Public Education Committee (2019–2022); Nominations Committee (2020).

American Arachnological Society: Education and Outreach Committee and co-lead of the Community Science subcommittee (2020–present).

Entomological Society of Ontario: Outreach Committee, and Scholarship Committee (2016–2018); Bug Eye Photo Competition coordinator (2018); Social Media Coordinator (2015–2017).

Organizing committee member for Ontario Ecology Ethology and Evolution Colloquium (OE3C) 2016 meeting at the University of Toronto.

SFU Biological Sciences Graduate Student Caucus Executive: Teaching Support Staff Union Representative (2012–2013); Events Committee Officer (2011–2012).

Other societal service roles:

Judge for the student presentation competition at the 2023 Annual General Meeting of the Entomological Society of Ontario.

Judge for the student presentation competition at the 2023 Joint Annual Meeting of the Entomological Society of Canada and the Entomological Society of Saskatchewan.

Volunteer at the membership booths for the Entomological Society of Canada and the Entomological Society of British Columbia at the 2022 joint meeting of the Entomological Societies of America, Canada, and British Columbia in Vancouver BC.

Judge for the student presentation competition at the 2022 Annual Meeting of the Entomological Society of Ontario.

Judge for the student presentation competition at the 2021 meeting of the American Arachnological Society.

Volunteer at the membership booth for the 2019 Entomological Society of Canada at the joint meeting of the Entomological Society of Canada and the Canadian Society for Ecology and Evolution.

Volunteer at the membership booths for the Entomological Society of Canada and the Entomological Society of British Columbia at the 2018 Joint Meeting of the Entomological Societies of America, Canada, and British Columbia.

Volunteer AV operator at the annual meeting of the Animal Behaviour Society in Toronto in 2017.

Volunteer moderator and AV operator at the 2015 Joint Annual Meeting of the Entomological Societies of Canada and Quebec.

Scanning and uploading back issues of the Bulletin of the Entomological Society of Canada to make them available and searchable online (2013).

Volunteer AV operator, 2012 Joint Annual Meeting of the Entomological Society of Canada and the Entomological Society of Alberta.

SCIENCE COMMUNICATION, PUBLIC ENGAGEMENT, & COMMUNITY SCIENCE

Selected radio and podcast interviews:

As it Happens, CBC, 13 Mar. 2023 ([link](#))

Two Brad for You podcast, 10 Mar. 2023 ([link](#))

On the Island, CBC, 8 Mar. 2023 ([link](#))

Just Between Us podcast, 21 Sept. 2022 ([link](#))

The Current, CBC, 24 Aug. 2022 ([link](#))

Anthropomania podcast, 26 Apr. 2022 ([link](#))

Scientific American 60-second Science podcast, 1 Aug. 2019. ([link](#))

But Why: A Podcast for Curious Kids, NPR, 9 Nov. 2018. ([link](#))

Science Friday, NPR, 27 Oct. 2017. ([link](#))

Science Friday, NPR, 30 Oct. 2015. ([link](#))

What She Said, Sirius Radio, 27 Oct. 2015. ([link](#))

Scientific American 60-second Science podcast, 16 July 2015. ([link](#))

TV appearances:

The Weather Network, 13 Mar. 2023 ([link](#))

The Nature of Things (CBC), 10 Mar. 2023 ([link](#))

CTV Atlantic, 1 Sept. 2022. ([link](#))

Invited public talks:

Saskatoon Nature Society Speaker Series, Online, 15 Feb. 2024.

Mississippi Valley Field Naturalists Lecture Series, Online, 18 Jan. 2024.

Toronto Entomologists' Association Speaker Series, Online, 25 Nov. 2023.

Nature Newfoundland and Labrador Lecture Series, St. John's NL, 16 Nov. 2023.

Willow Beach Field Naturalists Speaker Series, 31 Mar. 2023.

Nature London Speaker Series, Online, 17 Mar. 2023.

South Peel Naturalists Speaker Series, Online, 21 Nov. 2022.

North Durham Naturalists Speaker Series, Online, 26 Oct. 2021.

Woodstock Field Naturalists' Club Speaker Series, Online, 13 Sep. 2021.

Toronto Field Naturalists Lecture Series, Online, 12 Sept. 2021.

Halton/North Peel Naturalists Club Speaker Series, Glen Williams, ON, 12 Mar. 2019.

Cumberland Community Forest Society Pub Night & Fundraiser, Cumberland, BC, 19 Oct. 2018

Pickering Naturalists' Speaker Series, Pickering, ON, 7 Jun. 2018.

Upper Credit Field Naturalists' Speaker Series, Orangeville, ON, 27 Mar. 2018.

Durham Region Field Naturalists' Lecture Series, Durham, ON, 27 Mar. 2017.

Victoria Natural History Society, Victoria, BC, 13 Sept. 2016.

Royal Canadian Institute for the Advancement of Science Lecture Series, Toronto, ON, 14 Feb, 2016.

Other outreach and education activities:

Developed and led an entomology lab for Let's Talk Science at MUN, 23 Apr. 2024.

Cohost for NPR's Science Friday Trivia Night (online), 29 Sept. 2021.

Guest speaker (arachnology) via Skype (via Skype a Scientist and other programs) to >10 elementary and high school science classrooms and libraries in Canada, USA, UK & China (2017–present).

Contributed to an online webinar (arthropod natural history and identification) for the Maritime Backyard Bioblitz, part of the City Nature Challenge, in Kentville, NS, 28 Apr. 2020.

Organized and led arachnology-related activities (games and discussion, with live spiders, via Skype) for a Brownies (Girl Guides of Canada) group in Wolfville, NS, 19 Apr. 2020.

Organized and led entomology-related activities (games, crafts, and discussion, with live arthropods) for a Sparks (Girl Guides of Canada) group in Toronto, ON, 19 Mar. 2018.

Co-organized and led guided arthropod bioblitzes (focused on spiders and pollinators) for the public as part of the Rouge National Urban Park Bioblitz in Toronto, ON, 24-25 Jun. 2017.

Guest speaker for careers class at The Study Academy, Toronto, ON, 15 Jan. 2016.

Led a discussion and activity about spider biology for grade 2 and 3 students as a Science Mentor for SFU Science Alive Quarks camp 2 Jul. 2015.

Organized and presented an interactive educational display communicating information about spiders at the Iona Beach Regional Park [Spiders Unraveled](#) event, 13 Sept. 2014.

Organized and presented an interactive educational display communicating information about arthropods to families at the Richmond Nature Park Bugs Galore! event, 8 Sept. 2013 & 7 Sept. 2014.

Guest speaker at grade 2 and 3 Spider Club at Upper Lynn elementary school, 7 & 21 May 2014.

Organized and presented an interactive educational display about arthropods and science for families at SFU's Halloween Science Spooktacular event, 26 Oct. 2013.

Online writing:

[SpiderBytes](#): A blog aimed at a general audience (>500 pageviews per day since 2016), where I write about spider diversity, and natural history, and post lay summaries of my publications. (2013–present)

Representative pieces:

Bolas Spiders: Masters of Deception (natural history; [link](#))

The Great Black Widow Race: Spiders use the Silk Road to Find Females Faster (lay summary; [link](#))

Small Pond Science: I am an occasional contributor to this blog, which focuses on teaching and research at primarily undergraduate institutions and often includes discussions around equity, diversity, and inclusion in STEM and higher education. (2015–present)

Representative pieces:

If Your Society is Serious about EDI You Need to Keep Having Online Conferences ([link](#))

Dear Students, a Member of the Class Asked... ([link](#))

Community Science Projects:

Making a Buzz about Bugs is a participatory science and outreach program funded by the Memorial University's Office of Public Engagement and jointly run by Nature Newfoundland and Labrador, the Memorial University Botanical Garden, and the Rooms (Newfoundland and Labrador's provincial museum), currently in its second year. We are a member of a North American Insect Monitoring Network, a continent-wide collaboration to document changes in insect abundance and responses to climate change. In addition to collecting data on insect and spider abundance and diversity at two sites in St. John's, NL, we run outreach programs at the Botanical Garden and train volunteers to identify and curate the collected insects, which are deposited in the natural history collection at the Rooms.

Media coverage: [Memorial University Gazette](#); [CBC Radio: On the Go](#);

Spider Hunters is an iNaturalist-based community science project that contributes data about the distribution, phenology, diet, and plant associations of the introduced candy-striped spider in North America, as part of my current research program. I have presented some of the results of this research at international and regional conferences.

Recluse Or Not? was a Twitter-based community science project to enhance understanding of a rarely encountered, widely feared, medically important spider and to track its potential range expansion. I started the Twitter account [@RecluseOrNot](#) in 2017 (with collaborators Dr. Eleanor Spicer Rice and Dr. Matt Bertone at North Carolina State University), with the goals of (1) providing expert identification of spiders in submitted photographs; (2) communicating accurate information about recluse spiders in North America and the risk of envenomation; and (3) collecting data about the current distribution of recluse spiders and the spiders most commonly mistaken for them. This project is ongoing but has already yielded a rich scientific dataset based on contributions from across North America. I have been invited to present this work in symposia at two international conferences.

Media coverage: [Science Friday \(NPR\)](#); [University of Toronto Scarborough News](#); [NC State University News](#)

SCIENTIFIC CONSULTING AND CONTRACT WORK

- 2024 BBC Studios Natural History Unit. Scientific Consultant for an episode of a nature documentary to be filmed in 2025.
- 2023 Silverback Films. Scientific Consultant and Research Assistant for filming of arctic arthropods for a nature documentary in production.
- 2022 Canadian Wildlife Service, Environment and Climate Change Canada. Contract to reassess the conservation status of harvestmen and pseudoscorpions in Canada.
- 2021 Plimsoll Productions. Research Assistant for filming of red-throated caracaras for the Netflix documentary "Animal" (Season 2, Episode 2: Birds of Prey).