TRIA-FoR: Transformative Risk Assessment and Forest Resilience Using Genomic Tools for the Mountain Pine Beetle Outbreak

Newsletter

As the year comes to a close, we want to take a moment to express our heartfelt gratitude for your continued support and partnership. May your holidays be filled with warmth, laughter, and cherished moments. We look forward to another wonderful year together.

Happy Holidays and a Happy New Year!

Annual Meeting for the Canadian Society of Ecology and Evolution (CSEE)

TRIA was well represented at the annual meeting of the Canadian Society for Ecology and Evolution (CSEE) this year, an event that brings together ecologists and evolutionary biologists from across Canada. As a non-partisan group, CSEE fosters collaboration among professionals in these fields, and TRIA's contributions were significant. Our team led two symposiums, delivered thirteen presentations, and showcased one poster presentation. Five different labs from our network were also represented, highlighting the depth and breadth of our ongoing research initiatives.


Credit: Kévan Rastello

Credit: Dr. Catherine Cullingham

CSEE Symposium: Bark beetle dynamics under global change

This symposium brought together researchers to share their visions of how understanding MPB dynamics can address practical questions related to the spread of MPB and forest management, and on how to address uncertainties from novel environments and climate change.

Credit: Kévan Rastello

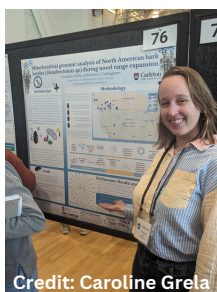Credit: Kévan Rastello

Credit: Kévan Rastello
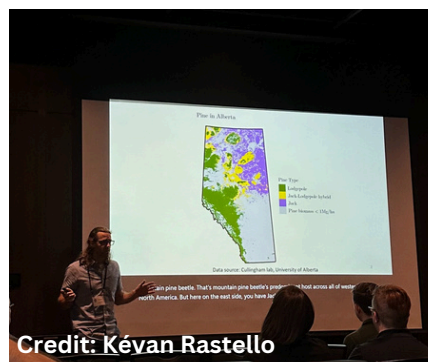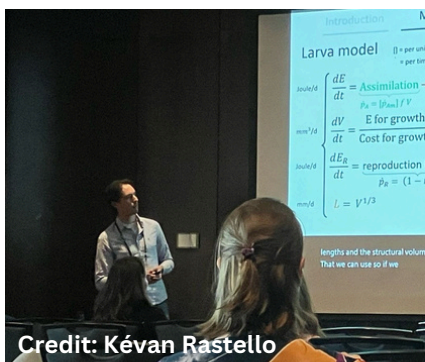
CSEE Symposium: Collaborating across disciplines in socio-ecological systems: a case study in mountain pine beetles

Our symposium highlighted the importance of collaborative work by focusing on different aspects of the TRIA-FoR project that aim to assess and reduce the risk and impact of mountain pine beetle in western Canada. We invited biologists, mathematicians, social scientists, government, and community members to speak about their expertise related to graduate student training, management and planning, government action, community impact, and knowledge sharing within this project. Such interdisciplinary projects are vital to understand big questions within systems that have wide-reaching ecosystem and community impacts.

Credit: Caroline Grela

Credit: Caroline Grela

Credit: Caroline Grela
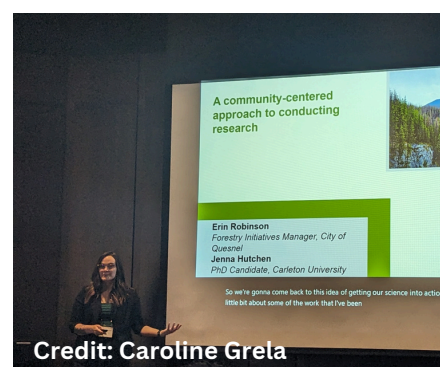
Student Poster Award!

Credit: Caroline Grela

Caroline Grela from the Cullingham Lab was awarded 2nd Place in the CSEE Student Poster Awards for her work on mitochondrial genomic analysis of North American bark beetles (Dendroctonus sp.) during their novel range expansion. Congratulations, Caroline!

See more about how we share our research here

Research Group Spotlight: GE3LS Research Group

Part of the GE3LS team's work this summer was participating in community events in the Slave Lake, AB area to listen and learn. Valerie B., joined by Colleen F. and Antonia M., participated in the 125th anniversary of the signing of Treaty 8 on June 21st near Grouard. Colleen and Antonia were a fountain of knowledge when answering attendees questions

Credit: Kyle Plotsky

about Mountain Pine Beetle and TRIA-FoR's work. Valerie talked to attendees about MPB and learned about people's views and concerns around forests. A youth drawing contest describing what they love about forests was held and received over 60 entries! We plan to place a copy of the drawings in the Treaty 8 archive in Edmonton.

Credit: Kyle Plotsky

Vivian N., Rebeccah K., and Kyle P. attended the Sucker Creek First Nation culture camp to connect with community members, talk about our work, and learn about their use of the forest (e.g., medicines, art, rattles). A couple weeks later, Stephan S., Howie H., and Kyle P. attended a Metis youth camp at Marten Lakes. We helped build a sweat lodge and learned about smoking fish, snaring, medicinal plants, and hand games. Lastly, we held a community meeting with Swan River First Nation in Kinuso with more than 25 community members in attendance. We discussed their concerns about MPB, logging, and the planting of selectively bred trees. The meeting concluded with a bus ride and rainy walk to hear people's thoughts on a recent selectively cut area.

These activities provided important opportunities for us to get to know the community and vice-versa. This is important for any collaborative work with Indigenous communities and enables us to better design and contextualize our work so that it is relevant to the communities. We heard and saw some of the concerns of rightsholders in the Slave Lake area and how people relate to and use forests.
For example, concerns about the impact of logging and MPB on the environment (e.g., wind, fire) as well as concerns about the planting of trees from another area (e.g., planting seedlings from BC in Alberta) were common. The most consistent concern was the increasing difficulty of finding traditional plants and animals in the forest. These are important topics that our GE3LS work can explore with important implications on mobilizing TRIA-FoR's work as well as integrated forest and MPB management more broadly.

Credit: Kyle Plotsky

New Team Members

Christine Bubac

Bioinformatician
Carleton University

Kyle Plotsky

Post Doctoral Fellow
Carleton University

Meet the team

First Nation and Land Acknowledgement

The various TRIA-FoR University researchers are based at institutions located on traditional/ancestral First Nations lands. As such, we respectfully offer these acknowledgements:

- UBC Vancouver is situated in the traditional, ancestral and unceded territory of the xʷməθkʷəy̓əm (Musqueam).
- The University of Alberta acknowledges that it is located on Treaty 6 territory, and respects the histories, languages, and cultures of First Nations, Métis, Inuit, and all First Peoples of Canada, whose presence continues to enrich our vibrant community.
- Carleton University acknowledges thelocation of its campus on the traditional, unceded territories of the Algonquin nation.
- Western University acknowledges that it is located on the traditional lands of the Anishinaabek, Haudenosaunee, Lūnaapéewak and Attawandaron peoples, on lands connected with the London Township and Sombra Treaties of 1796 and the Dish with One Spoon Covenant Wampum.

Funding and Support

You are receiving this email because you are a member of the TRIA-FoR project, a project collaborator or partner, or you have subscribed