

Dr. Rafael Otfinowski Biography

Dr. Otfinowski (Biology, University of Winnipeg) has extensive experience designing greenhouse, field, and natural experiments. His primary research focuses on understanding links between plants and soils to conserve, manage, and restore prairie ecosystems. He uses statistical models, multivariate and spatial analyses, including GIS, to predict how the structure, composition, and diversity of restored prairie communities affects their function. His research explores how root systems connect plants and soil food webs, how the morphology and architecture of roots changes during restoration, and how invasive plants effect prairie and rangeland ecosystems. He is keen to explore the use of robotic and ML-based tools to measure the health of restored ecosystems. He continues to collaborate with conservation agencies, including Parks Canada, beef and forage producers, and Manitoba Agriculture to contribute to the restoration and sustainable use of prairie ecosystems in western Canada.