



Saskatchewan  
Prairie Conservation  
Action Plan

# Native Prairie Speaker Series Webinar

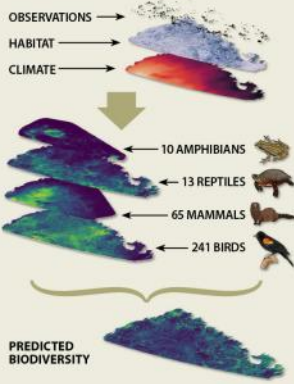


## Predicting the effects of land cover change on biodiversity in Prairie Canada using species distribution models

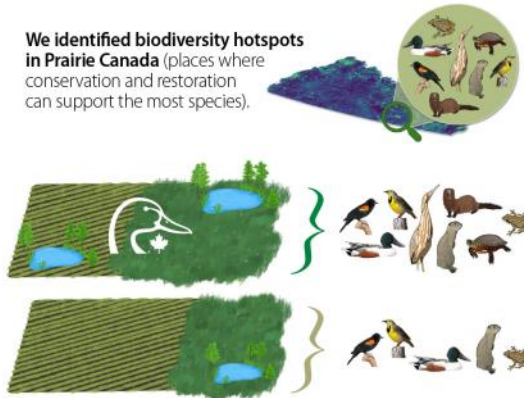
PATERSON, BORTOLOTTI, KOWAL, PIDWERBESKY AND DEVRIES - 2024

**Where are biodiversity hotspots in Prairie Canada? How much biodiversity is conserved in natural habitats within farms?**

We developed a biodiversity mapping and assessment tool at a fine spatial scale for 329 species.



We identified biodiversity hotspots in Prairie Canada (places where conservation and restoration can support the most species).



Farms with Ducks Unlimited Canada conservation easements (habitat protection) had more species than nearby unprotected sites.

**Retaining natural habitats in agricultural landscapes supports biodiversity, and our predictions can guide habitat conservation and restoration efforts.**

# Supporting Conservation Decisions with a Biodiversity Mapping and Assessment Tool

**Tuesday October 21st, 2025 at 12:00pm**

Speaker: Dr. James Paterson, Research Scientist, Ducks Unlimited Canada

**Register Free: [https://us02web.zoom.us/webinar/register/WN\\_OoqW3UG9RMKYTZZR3lpiXQ](https://us02web.zoom.us/webinar/register/WN_OoqW3UG9RMKYTZZR3lpiXQ)**

This presentation is FREE! Tune in from anywhere! Everyone welcome!  
More Information: SK PCAP at 306.352.0472 or pcap@sasktel.net

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# Native Prairie Speaker Series Webinar

*This webinar is in conjunction with Transboundary*

**Speaker:** James Paterson, Ph.D. (he/him), Research Scientist, Institute for Wetland and Waterfowl Research, Ducks Unlimited Canada

**About this Webinar:**

Land use change is the largest driver of biodiversity loss, but society has solutions to address this threat, including habitat protection, habitat restoration, and policy changes. Scientists can support these solutions by filling in knowledge gaps of where actions can benefit the most species. We used species distribution models to develop a Biodiversity Mapping and Assessment Tool for conservation practitioners, partners, and scientists to identify biodiversity hotspots and places where protection and restoration will have the largest benefits. I will share more about our tool and how to use it, including case studies of how we tested the biodiversity benefits of Conservation Easements, identified hotspots for different taxa, and identified the primary land cover changes affecting biodiversity in Prairie Canada. You can read more and try it out: <https://www.ducks.ca/our-work/science/prairie-biodiversity-mapping-tool/>

**About the Speaker:**

James Paterson is a Research Scientist in Biodiversity at the Institute for Wetland and Waterfowl Research, the science arm of Ducks Unlimited Canada. He completed his PhD at the University of Ottawa, his MSc. at Laurentian University, and his BSc. in Zoology at the University of Guelph. Prior to joining Ducks Unlimited Canada he was a Liber Ero Fellow at Trent University. The goal of his research program is to explain spatial and temporal variation in biodiversity, and to improve the application of conservation interventions, such as habitat protection and restoration.

PCAP's Native Prairie Speaker Series is a monthly webinar about prairie conservation or species at risk.

**Hosted by:** Caitlin Mroz-Sailer, Stewardship Coordinator, Saskatchewan Prairie Conservation Action Plan

*We respectfully acknowledge that we are on the traditional territories of many Indigenous Nations and communities, past and present. For a millennia, they have worked to protect these landscapes and the life these areas sustain. I would like to thank these original caretakers, and acknowledge the ongoing work and presence of Indigenous Peoples in Canada today.*