

## *Native Prairie Speaker Series*

**Title:** Effects of oil development and anthropogenic noise on grassland songbirds in Canada

**Speaker:** Nicola Koper, Professor and Associate Head, Natural Resources Institute, University of Manitoba, Winnipeg, Canada

### **Summary:**

In an era of increasing energy demands and rapid development of new technologies, understanding the impacts of energy development on birds is increasingly important. Grassland birds are declining more rapidly than birds of any other ecosystem in Canada, making this work particularly important for prairie conservation. My team has conducted a range of large-scale ecological studies in Alberta to study effects of oil wells, roads, and noise on birds. We observed numerous effects of wells on avian abundance, behaviour, reproductive success, and stress hormones. Surprisingly, in most cases, effects of wells or noise were caused simply by the presence of infrastructure, while the noise produced by wells had little impact on most species (although chestnut-collared longspurs, which are Threatened in Canada, can be sensitive to well noise). However, noise from wells being drilled had numerous negative impacts on birds, perhaps because drilling noise is unpredictable and difficult to adapt to. Clearly, different types of industrial noise have different impacts on wildlife, and land management policy should consider this relative risk among noise types. Effective management of oil wells requires that we minimize how much well-related infrastructure is on our landscape, while also minimize noise, especially from drilling activities, where possible.

### **About the Speaker:**

Nicola Koper is a Professor of Conservation Biology at the Natural Resources Institute of the University of Manitoba, and focuses on avian conservation in Canada and the Neotropics. She has studied impacts of COVID-19 lockdowns, energy development, agroecosystems, and habitat loss and fragmentation on birds.

**This Native Prairie Speaker Series Webinar is Presented by:**



### **Supporting Sponsors:**

**Camp Wolf Willow  
Ranchers Stewardship Alliance Inc.**

This project was undertaken with the financial support of:  
Ce projet a été réalisé avec l'appui financier de :



Environment and  
Climate Change Canada

Environnement et  
Changement climatique Canada