**2024 Summer Workshop**

***Wetlands that can’t be Peat:* *Exploring the relationship between bogs and wildlife***

Friday, September 6, 2024

Sax-Zim Bog | Lois King Education Center | 8793 Owl Avenue Toivola, MN

**8:30 AM** **Breakfast refreshments & food**

**9:00 AM** **Welcome and Logistics**

**9:15 AM** **Introduction to Sax-Zim Bog**

Sparky Stensaas,Executive Director, Friends of Sax-Zim Bog

The Sax-Zim Bog is a well-known bird watching location during the winter season, dazzling visitors with resident bog species like Great Gray Owl, Black-backed Woodpecker, and Boreal Chickadee. While folks brave the winter season and cold weather, few know of the amazing biodiversity found in the summer! This talk will serve as an introduction to the greater Sax-Zim Bog ecosystem, the Friends of Sax-Zim Bog organization, and what makes this location such an important place for birds and beyond!

**9:45 AM** **Conserving Minnesota’s Lowland Conifer Bird Communities**

Alexis Grinde Ph.D., Avian Ecologist, Natural Resources Research Institute, University of Minnesota, Duluth.

Co-authors: Steve Kolbe, Kara Snow, Josh Bednar, Rob Slesak, Marcella Windmuller Campione

Alexis will review the findings of an on-going study assessing the ecology of forested lowland conifer systems with a focus on bird communities, including the Connecticut Warbler.

**10:15 AM** ***BREAK***

**10:30 AM** **Habitat Use and Breeding Ecology of Boreal Chickadees**

Steve Kolbe M.S., Avian Ecologist, Natural Resources Research Institute, University of Minnesota, Duluth.

Co-authors: Alexis Grinde, Kara Snow, Josh Bednar, Rob Slesak, Marcella Windmuller Campione

Steve will discuss the results of an on-going study that focuses on and documents the breeding ecology of Boreal Chickadees during the breeding and post-fledging periods.

**11:00 AM** ***Field Trip* #1** – **FULL**

Led by Clinton Dexter-Nienhaus, Head Naturalist, friends of Sax-Zim Bog

The greater Sax-Zim Bog ecosystem offers a lot to visitors, no matter your interest in the natural world. With over 3600 species documented, the best way to experience the Bog is through the eyes of Friends of Sax-Zim Bog staff! Join us on a hike around the Welcome Center exploring all that northern Minnesota forests and bogs have to offer!

***Optional Field Trip*** - Explore Sax Zim Bog on your own. See “Additional Information” document for more info!

**12:30 AM** ***LUNCH*** – lunch provided

**1:00 PM** **Bogs and Beyond: Searching for Minnesota’s Rare Amphibians and Reptiles**

Jennifer Lamb Ph.D., Associate professor of Biology, St. Cloud State University and Alyssa Robers, M.S., St. Cloud State University

Several amphibians and reptiles are of conservation concern in Minnesota, such as the Four-toed salamander (*Hemidactylium scutatum*) and the Blanding's Turtle (*Emydoidea* *blandingii*). These species are also difficult to detect, which makes them challenging to monitor. The Lamb Lab at St. Cloud State University is collaborating with the MN Dept. of Natural Resources to evaluate methods like environmental DNA or camera trap surveys to locate populations and understand habitat use by these species.

**1:30 PM** **Voyageur Wolf Project**

Maeve Rogers, Voyageurs Wolf Project Collaborator

Join Maeve Rogers from the Voyageurs Wolf Project as she delves into the fascinating world of Minnesota's wolves and the groundbreaking research uncovering new aspects of their ecology. Focusing on the summer behaviors of wolves in the Greater Voyageurs Ecosystem, this presentation will highlight how rigorous scientific research has deepened our understanding of these elusive predators. Maeve will discuss wolf predation behavior, pup-rearing practices, and the cutting-edge technologies employed to gather critical data for this research. Don't miss this opportunity to learn about the innovative work being done by the Voyageurs Wolf Project!

**2:00 PM An Overview of the Spruce and Peatland Responses Under Changing Environments (SPRUCE) Experiment - Virtual**

Stephen Sebestyen, Research Hydrologist, Northern Research Station

The SPRUCE experiment is the primary component of the Terrestrial Ecosystem Science Scientific Focus Area of ORNL's Climate Change Program, focused on terrestrial ecosystems and the mechanisms that underlie their responses to climatic change. The site is located at the southern margin of the boreal peatland forest. It is an ecosystem considered especially vulnerable to climate change and anticipated to be near its tipping point with respect to climate change. Responses to warming and interactions with increased atmospheric CO2 concentration are anticipated to have important feedbacks on the atmosphere and climate, because of the high carbon stocks harbored by such ecosystems. The experiment provides a platform for testing mechanisms controlling the vulnerability of organisms, biogeochemical processes and ecosystems to climatic change (e.g., thresholds for organism decline or mortality, limitations to regeneration, biogeochemical limitations to productivity, the cycling and release of CO2 and CH4 to the atmosphere).

**2:30 PM** **Closing Discussion and Adjourn**

**3:00 PM *Field Trip #2 - Placeholder, if needed***

Led by Clinton Dexter-Nienhaus, Head Naturalist, Sax Zim Bog, MN

***Optional Field Trip*** - Explore Sax-Zim Bog on your own. See “Additional Information” document for more info!

**Special thanks to:** The MN Wildlife Society Chapter Board Members for their support in coordinating the summer workshop; Sax-Zim Bog and their staff for accommodating and hosting this event; and to all the presenters for their amazing research and willingness to share their knowledge.

**Thank you to our Sponsors!**

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