

The Department of Natural Resource Ecology and Management is pleased to announce this week's seminar speaker:

Dr. David Wolfson

Postdoctoral Researcher
University of Minnesota



**From Failing to Flourishing: A Current Assessment
of Trumpeter Swans in the Midwest**

Friday, May 8, 2026
Science Hall II, Room 220 & via Webex
3:10 pm – 4:00 pm

Seminar Description:

Trumpeter swans (*Cygnus buccinator*) were once widespread across North America but were nearly eliminated from the lower 48 states in the 19th century due to unregulated hunting. Reintroduction efforts in the late 20th century successfully re-established the Interior Population (IP) in the western Great Lakes region, yet limited ecological information has constrained conservation planning. To address this gap, University of Minnesota researchers collaborated with wildlife agencies across seven U.S. states and one Canadian province to study IP movement ecology, lead exposure, and population genetics. From 2019–2022, we fit 133 swans with GPS-GSM transmitters, revealing that IP trumpeter swans are partial migrants exhibiting a wide range of movement strategies, from local residency to long-distance migration. Much of the variability in movement patterns was related to factors tied to natural history demands (e.g., breeding status) and response to environmental conditions (e.g., through associations with breeding latitude). Blood samples from 119 swans showed detectable lead in all individuals, though most (91%) had levels considered background and unlikely to cause harm; only a small fraction exhibited sub-clinical or severe exposure. Genetic analyses of 150 IP samples, compared with 79 from the other two North American trumpeter swan populations, confirmed that North America's three trumpeter swan populations are genetically distinct, and IP genetic ancestry is particularly complex, likely due to an influx of individuals from zoos and private breeders.

Speaker Background:

Dr. David Wolfson is a Researcher in the Department of Fisheries, Wildlife, and Conservation Biology at the University of Minnesota. He has conducted wildlife research with a variety of taxa and ecosystems across the United States over the last 20 years. He received his M.S. in 2017 and Ph.D. in 2024, both at the University of Minnesota. His research interests include a variety of topics including demographic population modeling, investigating the drivers of animal movement (particularly aspects of migration), and applying the knowledge of dynamic animal space use to inform wildlife management and conservation.