

“Exploring Avian Ecoimmunology Research at Fresno State: From City Living to Pretty Feathers”

Joel Slade, PhD

Friday, April 3, 2020, 3:00 – 4:00 PM

Zoom link:

<https://fresnostate.zoom.us/j/877670461?pwd=aHNqR1lwSTUrVnFwem1XaFZaWXdvQT09>



About the speaker: Dr. Slade was born and raised in Nova Scotia, Canada. He grew up in a small fishing village where he explored tide pools and watched seabirds. This sparked his interest in the natural world, and since then he has never stopped. He is very excited and eager to establish his research lab and teaching at California State University, Fresno. He enjoys wildlife biology within research and as a hobby, such as birding, and video games (when he has the time).

Abstract: Wildlife health is a timely issue, as human activities can force natural populations to adapt quickly or perish. In particular, urban development can disrupt gene flow within breeding populations of birds and can influence disease transfer between and within species (e.g. increased social contact at localized feeders). In addition to disease challenges, wild birds need to ensure they choose mates that pass on high immune gene quality to offspring. My research program aims to explore how the avian immune system is adapting to a quickly-changing environment due to human activities and how birds honestly signal the quality of their immune genes. I will be discussing several ongoing research projects on avian ecoimmunology, such as active projects exploring parasite-mediated population divergence, and West Nile Virus resistance in songbirds. Also, I will discuss future projects on the effects of urbanization on local songbird immunity, and how birds may honestly signal immune gene quality to potential mates. Ultimately, the overarching goal of my research program is to develop new perspectives within the field of avian ecoimmunology, and more specifically, the role of immunogenetics on songbird conservation and sexual selection.

