

GRADUATE EXIT SEMINAR

Rebecca Ralston

Drivers of spring phenology in a neotropical migratory songbird, the prothonotary warbler (*Protonotaria citrea*)



We are living in a period of rapid global climate change, which is altering species' interactions in complex ways. One well-documented consequence of this is the shifting phenology of plant and animal species, and such phenological shifts can be vital for species such as migratory birds to adapt to climate change. However, while flexibility in bird migration timing is common, the ability of species to shift their phenology varies widely, as individual migratory timing is determined by a complex set of exogenous, endogenous, and organismal factors. Here, I explore how stages of the annual cycle interact to influence the spring migration timing of a neotropical migratory songbird, the prothonotary warbler (*Protonotaria citrea*). I first used eleven years of citizen science data to identify how environmental conditions on the nonbreeding grounds and in spring migratory stopover areas influence arrival timing across the distribution of the species. Next, I determined how environmental conditions on the nonbreeding grounds and near the breeding grounds influence among- and within-individual arrival timing using nine years of arrival data collected at a breeding site in Ohio. Understanding how environmental variation influences the spring phenology of a species may aid in predicting that species' vulnerability to climate change.

Tuesday, November 19, 2024
9:00 AM

Advisor: Dr. Christopher Tonra

Location: Heffner Wetland Building Rm 128

Join the seminar via Zoom:

<https://osu.zoom.us/j/98031201698?pwd=r11A4PBnaFUynsbi5wMZX2U6qyzqDy.1>

Meeting ID: 980 3120 1698

Password: N/A

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