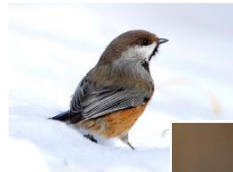


Are migratory birds that breed in Alaska keeping up with climate change?



evergreen



Master of Environmental Studies

MES faculty **John Withey** is recruiting 1-2 students interested in working on a collaborative research project with Dr. Julie Hagelin, Regional Wildlife Biologist for the Alaska Department of Fish & Game (Threatened, Endangered & Diversity Program). We will use eBird data, remotely sensed vegetation cover, and climatic variables in specific parts of Alaska to ask to what extent migratory birds track changes in spring temperatures and greenup through their spring arrival dates.

Our approach will be similar to that used in Mayor et al. (2017), but for specific regions of Alaska with enough eBird data. We are particularly interested in identifying any Species of Greatest Conservation Need from the 2015 Alaska Wildlife Action Plan that may be at risk for phenological mismatch.

Students may design a graduate or undergraduate Individual Learning Contract for Summer or Fall 2022. There is no compensation available for this research. Weekly hours will depend on ILC credit, but if volunteering at least 5 hrs/week should be expected. Students will need to be able to access a CAL computer either in-person or remotely, or use ArcGIS on their own computer. Some experience with ArcGIS and R required. If you are interested in this research or have questions, contact John Withey directly: witheyj@evergreen.edu or 206-214-6819.

John's web page is jwithey.weebly.com and you can read more about Dr. Hagelin here: <https://www.adfg.alaska.gov/index.cfm?adfg=wildlifediversity.staff>

Alaska Department of Fish and Game. 2015. Alaska Wildlife Action Plan. Juneau, Alaska.

Mayor, Stephen J., Robert P. Guralnick, Morgan W. Tingley, Javier Otegui, John C. Withey, Sarah C. Elmendorf, Margaret E. Andrew, Stefan Leyk, Ian S. Pearse & David C. Schneider. 2017. Increasing phenological asynchrony between spring green-up and arrival of migratory birds. *Scientific Reports* 7, Article number: 1902 (2017).

For photo credits see Appendix F in AK DFG (2015).