

Early Career Researcher Awards 2025

Announcement



The Early Career Researcher Award (ECRA) honours fledgling ornithologists - in academia, industry, non-government or government agencies – that show strong potential for future leadership in Canadian ornithology.

This year's winner, Dr. Elly Knight, is described as “a trail blazing individual that is setting a new path for ecology using big data. Dr. Knight has developed several cutting-edge techniques using machine-learning approaches that fundamentally advanced our ability to process information from audio recordings and spatial movement data collected by GPS transmitters”.

Dr. Knight completed her PhD in 2021 at the University of Alberta under the direction of Dr. Erin Bayne and Dr. Mark Brigham, for which she received a NSERC PGS-D, the prestigious Killiam Award, Governor General's Gold Medal and the Faculty of Science Dissertation Award, recognizing her academic prowess and thesis quality. She then worked as a Postdoctoral Fellow with the Smithsonian Institute, under the direction of Dr. Pete Marra. Shortly after, she was attracted back to Alberta where she is now a Quantitative Ecologist with the Alberta Biodiversity Monitoring Institute/ Boreal Avian Monitoring Project.

Dr. Knight gave a Plenary at the SCO-SCO 2025 Annual Conference in Saskatoon entitled: **Deep learning and data integration for improved bird conservation.** Her talk touched on two major tools that can help make the best use of big data: 1) deep learning classification models to maximize the information that can be obtained from remote sensors like acoustic recording units, and 2) statistical tools that allow for the integration of traditional survey methods with new technologies.

Stay tuned for more details about Dr. Knight's research in a forthcoming issue of *Picoides*.