Julia Shonfield

Doctor of Philosophy

Department of Biological Sciences, Faculty of Science

Image created at Lac la Biche,
Alberta

Owl Acoustic Surveys Using Autonomous Recorders

Semi-Finalist

My PhD research involves determining the effects of industrial noise on several owl species in the boreal forest of northeastern Alberta. Owls use vocal communication to attract mates and defend territories, and they use acoustic cues when hunting for prey at night. To determine whether owls avoid areas impacted by chronic industrial noise, I use autonomous recording units (ARUs) such as the one in this image to conduct passive acoustic surveys to detect owls calling in the spring at noisy and quiet sites. Owls call frequently in the spring to attract mates and defend their breeding territory. My study area is the Lower Athabasca region of northeastern Alberta, an area with increasing oil and gas development, and subsequently, increasing noise in the environment.