

Acoustic Monitoring of Migratory Shorebirds In Montana (Poster)

Ashley Huang*, University of Illinois, Urbana, Illinois
Benjamin Van Doren, University of Illinois, Urbana, Illinois
Kate Stone, MPG Ranch, Missoula, Montana

*Indicates Presenter

**Indicates Student Presentation

Acoustic monitoring is increasingly being utilized to monitor migratory birds on the move, but has typically been applied to landbirds, primarily songbirds. To evaluate the efficacy of acoustic monitoring for monitoring shorebird migration, we trained a shorebird-capable acoustic classifier based on Nighthawk, a deep learning model. The classifier detected tens of thousands of shorebird flight calls in a 2012-2018 acoustic dataset from the Bitterroot Valley of Montana. We analyzed the spatial distribution and phenology of these detections and compared them with visual observations from the participatory science project eBird. Our data suggest that acoustic monitoring has great promise for monitoring shorebird migration, particularly for monitoring underdetected via traditional surveys.