

# Conservation News

## Launching of the Locally led East Asian Flyway Acoustics Program



















The East Asian–Australasian Flyway is a globally important bird migration route used by many species threatened by the synergistic pressures of poaching, habitat loss and climate change (Yong et al., 2021, *Frontiers in Ecology and Evolution*, 9, 613172). There are major knowledge gaps regarding the ecology of birds in the Flyway, and the key threats and causes of population declines. Recent advances in acoustic recording technology and machine learning for automated detection of bird sounds have improved the monitoring of migratory birds. However, the bias towards species in temperate regions, particularly North America, means these tools are not as effective or accessible in Southeast Asia. A lack of locally relevant resources and training materials creates an additional barrier for conservationists in the region.

To improve conservation of migratory birds in the East Asian–Australasian Flyway, the Locally led East Asian Flyway Acoustics programme began acoustic data collection in September 2024, during the autumn migration, across 17 locations in Cambodia, Malaysia, Indonesia, the Philippines and Taiwan. Embracing a locally led approach, participants from across the region have worked since January 2024 to prepare for the deployment of autonomous recording units, learn analytical approaches for acoustic data and develop research questions. Participants also formed working groups focused on bird identification, machine learning, scientific publication and community outreach. The acoustic data collected will be used to map migration across the Flyway, filling data gaps in the citizen science platform eBird ([ebird.org](http://ebird.org)). Participants will also work with developers of the research platform BirdNET ([birdnet.cornell.edu](http://birdnet.cornell.edu)), which aims to automate acoustic bird species recognition at a large scale, and SILIC (Sound Identification and Labeling Intelligence for Creatures) that can recognize 257 species of terrestrial vertebrates found in Taiwan, including 213 bird species (Wu et al., 2022, *Ecological Informatics*, 101524; [silic.tbn.org.tw](http://silic.tbn.org.tw)). Their input will help to evaluate and improve the performance of automated algorithms for the identification of migratory bird species in the Flyway.

Acoustic monitoring produces extensive datasets that can be analysed to identify species, track migration routes and patterns, and detect threats and changes in bird populations and habitats. These datasets offer fine-scale spatial and temporal insights into the distribution patterns of migratory birds, which are essential for the design of species-specific conservation plans, habitat restoration and protected area management; this information is challenging to obtain through traditional survey methods. Importantly, the

Locally led East Asian Flyway Acoustics network will connect local initiatives across a hemispheric scale, enhancing our understanding of migratory bird ecology and drawing greater attention to the Flyway.

The Locally led East Asian Flyway Acoustics network recently launched a website and blog that can be used to monitor progress ([birds.cornell.edu/ccb/locally-led-east-asian-flyway-acoustics-leafa](http://birds.cornell.edu/ccb/locally-led-east-asian-flyway-acoustics-leafa)). The project is co-organized by BISA Indonesia, Universiti of Malaysia Terengganu, and the K. Lisa Yang Center for Conservation Bioacoustics. Initial funding for this project comes with generous support from the Cornell Lab of Ornithology through the H. Elliot McClure Fund for the Research and Conservation of Birds in Asia.

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