

Philippines may have more unique bird species: biologist

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Recent work by Dr. David Lohman, assistant professor of biology at The City College of New York, suggests the Philippines, considered by biologists to be a "biodiversity hotspot," could have more unique species of birds than previously thought. If that proves to be the case, it could have important ramifications for conservation practices there.

Many of the [animal species](#) found in the Philippines are endemic to this nation, which is made up of more than 7,100 islands. For example, 64 percent of its land mammal species and 77 percent of its amphibians are not found anywhere else. However, only 31 percent of its bird species are considered Philippines-only.

To test whether the Philippines' bird fauna might include unrecognized distinct species, Professor Lohman studied seven species of small, perching birds that are found in that country and elsewhere in Southeast Asia. Through a series of genetics tests to reconstruct evolutionary histories and identify [genetic differences](#), he found that samples from Philippines populations of the species were always distinct from samples from other parts of Southeast Asia.

"These unique genetic lineages were unknown before, however, our research hasn't gone far enough to say these are new species," Professor Lohman said. "More rigorous analysis of the morphology may be needed to make that determination."

Traditionally, taxonomists have used plumage color and markings to

identify species of birds, he noted. "Those features are not ideal, since closely related but distinct species can look similar." As an island-bound nation several hundred miles from Asia's mainland, the Philippines' passerine populations are not likely to have much contact with those of other landmasses.

"While there are differences of opinion over whether these birds constitute new species, there are unique genetic lineages that were unknown before," he added.

Nevertheless, he maintains the findings highlight the need to conserve habitats for these and other species in a nation that has lost 75 percent of its forests. "In no other place on this planet is conservation more crucial than in the Philippines. While the species we studied are not in danger of extinction, other undiscovered species might be."

Professor Lohman's findings were published in the journal "*Biological Conservation*."

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Provided by City College of New York

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