



Ornithologist Francisca Helena Aguiar-Silva (right) tracks raptors in Brazil. She and others aim to improve work on neotropical birds such as the black-fronted piping guan (left).

ORNITHOLOGY

Neotropical bird scientists call for an end to bias

Two manifestos offer recommendations for shifting field's flawed "northern lens"

By Emiliano Rodríguez Mega

wo years ago, some ornithologists were outraged by the publication of a paper that highlighted how much scientists still don't know about birds from Latin America and the Caribbean. Many criticized the authors—based at universities in the United States and the United Kingdom—for citing few studies by scientists from the region and from journals that don't publish in English. Others said the paper, published in *Ornithological Advances*, perpetuated an elitist, exclusionary, "northern" approach that overlooked, for instance, the knowledge of Indigenous people.

"It made me angry," recalls bird ecologist Ernesto Ruelas Inzunza of the University of Veracruz in Xalapa, Mexico. "Deliberately or not," he says, the article ignored "that today's neotropical ornithology is nurtured by Latin American and Caribbean scientists." He and others vowed to change that, by smashing barriers they say have disadvantaged ornithologists from neotropical nations and deprived the field of their contributions. This week, their resolve bore fruit in two papers published in *Ornithological Applications*.

In one, 124 authors from the region examine numerous factors—including a shortage of funding, few Latin American ornithologists in leadership roles, and a bias against citing papers in Spanish and Portuguese—they say have often marginalized the region's researchers. In the other, a smaller group offers 14 recommendations for how the field's major journals can revise their policies and practices to improve the flow of science from the region's bird scientists.

Both papers identify "language hegemony," the use of English by major journals, as a problem. Few people in neotropical nations are native English speakers, the authors note, so journals often ask researchers from the region to have their manuscripts edited by a professional. But that can cost up to \$600—more than many Latin American scientists make in a month. To lower the language barrier, the authors recommend journals accept manuscripts in Spanish and Portuguese for review, then translate them into English if accepted for publication—and also consider publishing a version in a second language.

Language hegemony also hinders clear communication about bird names and imposes a "northern lens" on the field, the authors say. Journals and meetings often require the use of English names, they note, "rather than the scientific (Latin) names that are supposed to be a global standard." Such rules not only require Latin American researchers to learn the English names, which were often imposed by Europeans studying museum specimens, but also discourage the use of names developed by Indigenous people, which can carry valuable information about how a bird sings or where it lives.

"We continue to legitimize the idea that what's important is European knowledge," says Kristina Cockle, a Canadian ornithologist at the Institute of Subtropical Biology in Argentina, where she has lived for nearly 20 years. She and her co-authors urge funders and others to encourage collaboration with local communities, including by allowing nonacademics to help develop research questions, co-lead projects, and author papers.

Funders and others also need to do more to encourage studies of the basic biology of neotropical birds, the authors say. Descriptive information, such as a bird's diet or behavior, is often foundational to broader insights into ecology and evolution, they note, and much of it comes from fieldwork in the neotropics. But such work is often ineligible for funding and can be hard to publish in key journals, which favor studies of ecology, biogeography, or conservation.

The papers offer examples of how a lack of data from the neotropics has allowed flawed ideas to linger. In the 1990s, North American researchers published an influential study indicating neotropical birds thought to be monogamous cheated on their partners less often than monogamous species in temperate regions. But Valentina Ferretti, an evolutionary ecologist at the Institute of Ecology, Genetics, and Evolution in Argentina, noted the study's sample included few neotropical species. In 2019, after adding data that she and other researchers had gathered on additional species, she found there was no clear geographic pattern. "It's a mistake to come up with theories that are based on only a minority of bird diversity," Ferretti says.

The papers "will undoubtedly sensitize" ornithologists from the north about the challenges their colleagues face in the south, says ornithologist Joseph Wunderle of the U.S. Forest Service, who is based in Puerto Rico.

The lead author of the 2020 study that ignited the discussion, ornithologist Alexander Lees of Manchester Metropolitan University, says he hopes the new papers catalyze change. Initially, he felt stung by the criticism, particularly because he has collaborated for decades with local researchers in the Brazilian Amazon. Now, he thinks his paper could produce "a bit of a funny legacy. ... [I]f it means that the field grows and becomes more inclusive, then, you know, I'll take that."

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