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AWARD ANNOUNCEMENTS

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KATMA AWARD CITATION 2011

The Katma Award is intended to encourage formulation of new ideas that could change the course of thinking about avian biology. This award, proposed and sponsored by Dr. Robert W. Storer, is to be given to the author(s) of an outstanding paper related to ornithology that offers unconventional ideas or innovative approaches, backed by a well-reasoned argument. Bob felt that science moves forward by the production and acceptance of new ideas, yet it has become increasingly difficult to air new ideas in both pure and applied sciences. Bob wrote, “*Serious work that questions current dogma too often is stifled by those who are angered by seeing their own work questioned. . . . Establishing the Katma Award of the Cooper Ornithological Society is a positive effort to counter this trend by encouraging the publication and discussion of new ideas, especially those that run counter to established opinion.*” Originally designated for an outstanding paper appearing in publications of the Cooper Ornithological Society, the award has been broadened to include papers published in any peer-reviewed publication. The award includes a cash prize of \$2500 accompanied by a certificate.

The 2011 Katma Award goes to Sievert Rohwer, Keith A. Hobson, and Vanya G. Rohwer for their 2009 paper “Migratory double breeding in neotropical migrant birds,” which appeared in *Proceedings of the National Academy of Sciences USA* 106:19050–19055.

One the unwavering “truths” in ornithology is that migratory passerines do not breed during migration or on their wintering grounds. This belief was on par with other long held “truths,” such as only birds have feathers (we now know that many theropod dinosaurs had feathers) or that 90% of the world’s birds are monogamous (paternity tests found extra-pair paternity to be widespread). Hundreds of species worldwide breed in temperate regions and migrate to overwinter in the tropics. Rohwer et al. are the first to show that, surprisingly, some species breed at a second site in fall migration.

Rohwer et al. studied migratory songbirds at a stopover site in the lowland thorn forests of coastal western Mexico. They expected to find migrants that had stopped during migration to molt

feathers, but instead found singing males and active nests. The researchers set out to determine if these individuals had been there all along or if they were migrants that had bred previously in the north. They presented convincing evidence for double breeding of five species, the Yellow-billed Cuckoo, Cassin’s Vireo, Yellow-breasted Chat, and Orchard and Hooded Orioles.

First, Rohwer et al. found that females of all five species had dry and featherless brood patches, indicating they had bred earlier that summer. Second, on the basis of hundreds of hours of mist netting, no fledglings or juveniles were detected at the stopover site, suggesting the females had not nested earlier at that site. Third, males of all five species were singing and defending territories or guarding females, and active nests of two species were found. Finally, isotopic analysis of the birds’ tissues showed that many had recently arrived in west Mexico from temperate areas farther north. In an elegant test, Rohwer et al. showed that muscle tissue, which would have been deposited before birds left their northern breeding grounds, had a northern isotopic signature, while the testes and ovaries contained the signature of tissue grown in Mexico.

Whereas Rohwer et al. focused on presenting evidence for double breeding, there are interesting and important consequences of this finding for migration biology and conservation. Offspring from the same parents may be hatched in widely disparate locations, raising questions about genetic programming of migration direction and how naive juveniles orient appropriately for migration. If some stopover sites are important not just for survival during migration, as previously thought, but also for breeding productivity, then degradation of these sites could have a larger effect on population dynamics than previously realized.

The discovery by Rohwer et al. required thinking, and doing, outside of the proverbial box. Their paper raises a suite of intriguing questions about life-history tradeoffs, migration ecology, and population dynamics of migratory songbirds that had not been asked before. More evidence of double breeding may be expected, now that it is possible to track the migration routes and stopover locations of larger songbirds with geolocators and other emerging technologies.

Katma Award Committee: Steve Beissinger (Chair), Joe Jehl, Ellen Ketterson, Bridget Stutchbury, Robert Zink