



Elliot Coues Award 2014, to Staffan Bensch

Source: The Auk, 132(2) : 525-526

Published By: American Ornithological Society

URL: <https://doi.org/10.1642/AUK-14-275.1>

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.



AWARDS

Elliot Coues Award 2014, to Staffan Bensch

Published April 1, 2015

The 2014 Elliot Coues Award was presented by the American Ornithologists' Union to Dr. Staffan Bensch, Professor of Animal Ecology at Lund University in Lund, Sweden.

Staffan received his doctoral degree from Lund University in 1993, conducted postdoctoral work at the University of California, San Diego, in 1994–1995, and has been in research and faculty appointments at Lund University since that time, with continuous funding from Swedish and European Union funding agencies. He is known for combining considerable depth of knowledge with an extensive breadth of research interests and experience, and for being equally at home in the field, in the lab, and at the computer.

Staffan is an accomplished and highly productive avian ecologist and evolutionary biologist who has produced a significant body of work across several important areas of avian research, including the genetics of migration in warblers; population genetics of migratory songbirds; the characterization, impact, and evolution of avian malaria; the evolution of avian sex chromosomes; and the genetics of speciation in birds. His work in these areas has been groundbreaking and of high quality and has produced an incredible array of more than 170 contributions to the scientific literature, much of it in ornithological journals. Staffan has shown a remarkable ability to ask and answer important questions in ornithology, showing exceptional range and creativity in his approaches.

In his early career, while conducting analyses of the behavioral and population ecology of Swedish Great Reed Warblers, often in collaboration with Denis Hasselquist and others, Staffan developed and applied powerful molecular markers and methods that proved extremely useful in assessing the mating patterns, sexual selection, and population genetic and phylogeographic structure of



this species. He made significant strides in determining the roles of song repertoire size, morphology, inbreeding, and ecology on mate choice and extrapair mating.

Staffan also developed a major program to assess patterns of migration in Eurasian warblers, in particular assessing the origins and effects of migratory divides in differentiation and speciation. He applied classical, isotope, and molecular marker methods to characterize these divides in the Willow Warbler and has made great strides toward determining the genetic basis of migratory orientation and behavior with recent transcriptome sequencing and other genomic approaches.

Recently, Staffan has also developed major interests and success in studying the evolution of sex chromosomes and sex-limited gene expression.

At the midpoint of his research career, Staffan developed, almost single-handedly, what would become a novel, “cottage industry” program in modern-day ornithology—the characterization, relationships, diversity, and evolution of avian malaria parasites. Interested in the role of parasites in the life history, ecology, and distribution of songbirds he studied, he explored the use of mitochondrial DNA sequences to characterize the diversity of these parasites, with the initial, seminal paper in *Proceedings of the Royal Society* in 2000. The diversity described in this and subsequent papers by Staffan and others was astounding, at least an order of magnitude higher than ever suspected on the basis of morphological and taxonomic data. He further developed nuclear gene markers, notoriously difficult in a parasite that cannot be cultured and inhabits nucleated erythrocytes, to enable better characterization of species limits and genetic variation. In addition, he forged a highly beneficial collaborative relationship with avian

haemosporidian taxonomist Gediminas Valkiūnas, to incorporate classical taxonomy and parasitological methods into a comprehensive research program. Staffan also developed an online database of parasite DNA sequences (MalAvi) that provides useful information for comparative studies of avian malaria parasites. Finally, in addition to studying these parasites in natural populations of birds, he and colleagues developed methods to experimentally infect birds with malaria in captivity, in order to monitor the development and progress of infections and measure differential host immune responses.

For his excellence in research and substantial contributions to a wide range of fields in ornithology, the American

Ornithologists' Union is proud to present Dr. Staffan Bensch with the 2014 Elliot Coues Award.

Award Criteria.—The Elliott Coues Award recognizes extraordinary contributions to ornithological research. The award is named in honor of Elliott Coues, a pioneering ornithologist of the western United States and a founding member of the AOU. There is no limitation with respect to geographic area, subdiscipline of ornithology, or time course over which the work was done. The award consists of a medal and an honorarium provided through the endowed Elliot Coues Achievement Award Fund.