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## **Harry R. Painton Award 2013, to Hope M. Draheim, Patricia Baird, and Susan M. Haig**

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## AWARDS

# Harry R. Painton Award 2013, to Hope M. Draheim, Patricia Baird, and Susan M. Haig

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Every two years, the Cooper Ornithological Society bestows the Harry R. Painton Award for a paper published during the past four years in *The Condor* that made an extraordinary contribution to ornithology. The Harry R. Painton Award for 2013 is presented to Hope M. Draheim, Patricia Baird, and Susan M. Haig for their paper “Temporal analysis of mtDNA variation reveals decreased genetic diversity in Least Terns,” published in *The Condor* 114:145–154 (2012).

Loss of genetic variation resulting from decreased effective population size is one of the major challenges for conservation of rare and endangered species and those that have undergone pronounced population declines. Accordingly, conservation biologists regularly examine the genetic structure of threatened species to determine the extent of genetic variation within and among populations. Such studies, however, usually provide only a static snapshot of current population genetic structure. Although the resulting data can be useful in making inferences about historical events, they do not provide direct historical insight into the dynamics of population genetic change.

Draheim et al.’s study provides a rare temporal perspective on the loss of genetic diversity associated with population declines. By incorporating creative use of mitochondrial DNA extracted from museum specimens—including many specimens collected more than 100 years ago—as well as contemporary tissue samples, the authors demonstrate that California and East Coast populations of the Least Tern have undergone significant loss of historical genetic diversity over the past century. These dynamic changes in genetic variation, as measured by temporal change in both haplotype diversity and nucleotide diversity, are strongly associated with the pronounced population declines that occurred during the 20th century.

The paper’s abstract ends with the following observation: “Our results offer unique insights into changes in the



2013 Painton Award winners Hope Draheim (left) and Sue Haig (right), with Cooper Society President Kim Sullivan. Photo credit: Laurie Haig

Least Tern’s genetic diversity over the past century and highlight the importance and utility of museum specimens in studies of conservation genetics.” These insights and the authors’ imaginative use of museum resources make Draheim, Baird, and Haig highly deserving recipients of the 2013 Harry R. Painton Award.