

## **Help for Teaching Biology**

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## **BioScience**

## **Organisms from Molecules to the Environment**

American Institute of Biological Sciences

## **Help for Teaching Biology**

In this issue, AIBS introduces a new feature for *BioScience*: "Teaching Biology," a series of state-of-the-science, example-rich, well-referenced papers that emerged from symposia presented at recent annual meetings of the National Association of Biology Teachers (NABT). Each symposium is organized around a particular topic in evolutionary biology by the immediate past-president of AIBS, with the advice and assistance of the AIBS Education Committee; the AIBS Education Office (with many thanks to Susan Musante, who left AIBS recently, for her work on the first three symposia); Kristin Jenkins and Jory Weintraub at the National Evolutionary Synthesis Center; and, for the first three symposia, staff at the Biological Sciences Curriculum Study (BSCS). The topics are selected in consultation with the director of NABT. After the theme of the symposium has been chosen, scientists who are working in the forefront of research on major aspects of the topic are asked to present concepts, their ideas about them, and examples useful to teachers in exciting, accessible talks.

The topic for the 2005 NABT symposium was "Evolution and the Environment." The discussion by Andrew Blaustein and Betsy Bancroft, from Oregon State University, about the evolutionary considerations of amphibian population declines became the first paper in our new series, presented in this issue of *BioScience* (see p. 437). In the next few months, contributions are expected from Barbara Schaal, Kenneth Olsen, and Luiz Carvalho, of Washington University, on evolution and diversification in the tropical crop cassava; from Jonathan Losos, of Harvard University, on integrating historical and experimental approaches to study the evolutionary diversification of island lizards in the West Indies; and from Anthony Barnosky and Brian Kraatz, of the University of California at Berkeley, on the role of climate change in the evolution of mammals. All of these papers are oriented around an understanding of the relationship of environmental factors to evolution.

The 2006 symposium topic was "Macroevolution," that part of evolutionary biology that deals with the evolution of new lineages of organisms (evolution above the species level) and the development of new morphologies and behaviors associated with them. AIBS plans to publish reports from the presentations at that symposium in coming months.

Educators who want more background information about each speaker's contribution and research area should visit <code>www.aibs.org/special-symposia</code>, where a number of items are posted, including profiles of the speakers, downloadable files of the talks, science and teaching resources for each presentation, and information on ordering the materials from a BSCS workshop on evolution teaching resources.

AIBS is strongly committed to biological education, and welcomes the opportunity to provide teachers with access to good science. We welcome comments from educators about the usefulness of these symposia papers in *BioScience* and the accompanying material on the Web, and we would like to know what kinds of topics in evolutionary biology you would like to see discussed. Let us hear from you!

MARVALEE H. WAKE Past-President, AIBS

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