

AIBS news

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AIBS and BioOne Team with JSTOR to Put *BioScience* Archives Online

AIBS and BioOne are working with JSTOR, the not-for-profit online digital archive, to digitize all back issues of *Bio-Science*. Full-text PDF volumes of *Bio-Science*, dating from the journal's inception as the *AIBS bulletin* in 1951 up to the most recent five years, are now available at *www.jstor.org* for searching, browsing, downloading, and printing by patrons whose libraries subscribe to JSTOR's new Biological Sciences Collection.

Soon all individual members of AIBS also will have direct access to the *Bio-Science* archive files at JSTOR through a members-only section of the AIBS Web site. Details will be announced later this year.

More recent issues of *BioScience*, from January 1999 onward, are already available for library subscribers and AIBS individual members on the Ingenta platform. There is no additional charge to institutional or individual print subscribers for online access, and libraries have the option of subscribing to the online version only. Nonsubscribers can purchase individual articles for \$10 each. For details, please see *www.aibs.org/ bioscience/current_issue.html*.

AIBS Cosponsors "Science @ Work" on Capitol Hill

AIBS recently joined other scientific societies and universities to cosponsor "Science @ Work," the 11th annual Coalition for National Science Funding exhibition and reception on Capitol Hill. This year's event included poster presentations by more than 30 recipients of grants from the National Science Foundation, representing the breadth of that agency's research and education programs. At least a dozen members of Congress and several dozen congressional staffers attended the event.

NEON Design Process on Schedule

The NEON Design Consortium (NDC) completed its third planning meeting in Estes Park, Colorado, 7–9 June 2005. The agenda included discussions ranging from which science questions NEON should address and how NEON, Inc., should be governed, to where observatories might be located and what elements of sensor technology and infrastructure are essential to the project's success.

Science drives NEON planning, and an important focus of the meeting was to consider three broad science questions comprising a much larger subset of specific research questions that NEON will support:

- How are ecological systems affected by changes in land use and climate across a range of spatiotemporal scales?
- 2. How do changes in the availability and distribution of the nation's water affect ecological systems?
- 3. How do the patterns and movement of genes and organisms across the continent affect biodiversity, ecosystem function, and the spread of infectious diseases and invasive species?

The complex array of infrastructure associated with the three overarching questions prompted detailed discussions about the linkages between questions and subquestions, on the one hand, and the kinds of overlapping observational capabilities required to support a wide range of NEON experiments, on the other. The refinement of infrastructure needs—data rates and volumes, temporal and spatial configurations for sensors, sample collection and archiving—is an ongoing task for the project's planners. Members of the NDC also discussed the concept that each NEON observatory might consist of a suite of subobservatories deployed across a gradient of landscapes, ranging from urban to suburban, to managed lands (forests, cropland), to native or near-pristine ecosystems. Such a configuration, if it also included an aquatic element (lake, river, or wetland), might support research under all three of NEON's overarching questions.

While NEON's designers are creating a network that will consist of new arrays of sensor technology and cyberinfrastructure, they also recognize the importance of forming partnerships with existing observational systems and with the many federal agencies that conduct ecological research.

"We want to maximize those connections. We don't want to reinvent the wheel," said NEON codirector Bruce Hayden. "Collaborations with existing programs and agencies will help us make NEON a truly continental-scale enterprise."

In addition to forming productive partnerships, a number of other criteria have guided the NDC effort to prioritize and define NEON science, education, and infrastructure. These guidelines include a high science return; the ability to transform ecological science; societal



benefits; technological readiness for build-out and deployment; program balance among initiatives, including a balance between research and education; fulfillment of NSF's requirements for NEON; and accurate and feasible cost projections for both construction and maintenance and operations.

These criteria are also guiding the final phase of NEON design: the creation of a reference design and project execution plan (the NEON engineering blueprint), scheduled for delivery to the NSF in June 2006. To achieve these objectives, the planning process will shift from the 160member NEON Design Consortium to the program's senior management team and the National Network Design Committee, which will receive input from both the NDC and members of the ecological research community as new documents become available for review.

NEON Note: Next Stop, Canada

NEON will be featured in a special session at the annual meeting of the Ecological Society of America, in Montreal, Canada, 7-12 August 2005. Codirectors Bruce Hayden and William Michener will present an overview of the planning process and an update of the NEON project execution plan now in development. Additional presentations will address the NEON science mission, integrating education with NEON science, and the role of embedded networked sensing in NEON. Special session 10 is scheduled for Wednesday, 10 August, from 8:00 a.m. to 11:30 a.m. For details, visit www.esa.org/ program/specialsession10.html.

Recent Articles Online at www.actionbioscience.org

Original article in English

 "The State of Ecosystems," an interview with Cristian Samper, director of the National Museum of Natural History, Smithsonian Institution, Washington, DC

Lessons for classroom activities

"Evolution in a Ring," written by John Ausema, Gonzaga College High School, Washington, DC, to accompany the article "Ring Species: Unusual Demonstrations of Speciation," by Darren Irwin, Department of Animal Ecology, Lund University, Sweden

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 "How Much Is an Ecosystem Worth?" written by John Ausema, Gonzaga College High School, Washington, DC, to accompany the article "Ecosystem Services: A Primer," by the Ecological Society of America

Spanish translations of previously posted articles

- "Las Especies, la Especiación y el Medio Ambiente" [Species, Speciation, and the Environment], by Niles Eldredge, American Museum of Natural History, New York
- "El Error y la Naturaleza de la Ciencia" [Error and the Nature of

Science], by Douglas Allchin, historian and philosopher of biology at the University of Minnesota

Recent Public Policy Reports Online at *www.aibs.org* Public Policy Report for 5 July 2005

- Appropriations update
- Interior spending moves forward
- Science on Capitol Hill
- Evolution update: Kansas and Pennsylvania
- New in *BioScience*: "The Summers Affair: Has It Prompted an Effective Plan for Harvard?"
- From the *Federal Register*

Public Policy Report for 20 June 2005

- Appropriations update: NSF holds on in House, NOAA not as fortunate
- AIBS and others submit amicus brief in Cobb County evolution case
- White House criticized for politicizing climate change science
- Changes in USGS leadership
- New in *BioScience:* "States, Congress, Environmental Groups Oppose New EPA Regulation"
- From the Federal Register

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