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Policy News from NSC Alliance

Through the NSC Alliance partnership with the American Institute of Biological Sciences, we are pleased to provide NSC Alliance members with the following public policy update. If you have any questions or require additional information regarding any of the following items, please contact NSC Alliance director of public policy Dr. Robert Gropp at 202-628-1500 x 250 or at rgropp@aibs.org.

NSC Alliance Briefs Policymakers on Digitizing Scientific Collections

On 5 June, the NSC Alliance briefed Congress, federal agency personnel, and nongovernmental organization representatives about the importance of the nation's natural science collections. The briefing explored how scientists and natural science collections managers are using new technology to digitize the nation's natural science collections in an effort to increase access to these irreplaceable resources for research, education, and to inform our understanding and response to complex environmental problems.

"Natural science collections are a necessary part of America's scientific enterprise," said Dr. Larry Page, president of the Natural Science Collections Alliance, the organization that sponsored the briefing. "We need to make sure that the information contained in scientific collections is accessible to researchers now and in the future."

New technologies and techniques make it possible to digitize the valuable information contained in biological collections so that it is available to scientists, educators, and students around the world at the click of a computer mouse. In turn, these data is used in cutting edge research on the significant challenges facing modern society, such as improving human health, informing oil spill response and restoration, and addressing spread of invasive species and pathogens.

Biodiversity scientists have discovered and described 1.9 million species on earth, stated Dr. Mary Liz Jameson. An associate professor of biology at Wichita State University, Jameson said: "This wealth of knowledge increases what we can say about the world. Natural history museums

serve as the repositories for the vast biological diversity of the planet. They house centuries of data on the history and composition of global biodiversity, and these data are the foundation for managing our biological resources, assisting in the search for genes and biological products, among so many other things."

"Digitizing natural history specimens is an important way to preserve our knowledge of Earth's past and to drive modern research on topics that are relevant to society and policymakers," stated Dr. Michael A. Mares, director of the Sam Noble Oklahoma Museum of Natural History at the University of Oklahoma. Mares further stated, "These vast resources have been held in trust for the people and are a vital part of America's natural heritage."

Presentations were made by:

- Dr. Mary Liz Jameson, Associate Professor, Wichita State University
  "The Value of Biological Collections to Science, Education, and the Economy"
- Dr. Larry Page, President, Natural Science Collections Alliance, Curator of Fishes, Florida Museum of Natural History
  "Digitization: Exponentially Increasing Access to Collections Data"
- Dr. Michael A. Mares, Director, Sam Noble Oklahoma Museum of Natural History and Professor of Zoology, University of Oklahoma
  "Protecting and Using America's Irreplaceable Resource Now and in the Future"

The presentations from the briefing are available for download at http://nscalliance.org/?p=490.

NSF Awards $13 Million for Assembling the Tree of Life

The National Science Foundation (NSF) is funding a new initiative to build a comprehensive evolutionary tree for all life on Earth. The program, "Assembling, Visualizing, and Analyzing the Tree of Life" (AVAToL) has made three awards to scientists who will work to create a central place where researchers can go to see and analyze the entire tree of life.

"The AVAToL awards are an exciting new direction for an area that's a foundation of much of biology," says Alan Townsend, director of NSF's Division of Environmental Biology. "That's critical to understanding a changing relationship between human society and Earth's biodiversity."

The program aims to overcome several difficulties that have plagued researchers. One challenge is dealing with information about millions of species. New computational tools for analyzing large data sets and heterogeneous data will be needed.

AVAToL will differ from past efforts in that is will create an open, dynamic framework that can be updated as new data becomes available. Researchers will be able to access and edit the tree online.

More information about the funded projects is available at http://www.nsf.gov/news/news_summ.jsp?cntn_id=124386&WT.mc_id=USNSF_51&WT.mc_ev=click.

NSF Solicits Proposals for Advancing Digitization of Biodiversity Collections

The National Science Foundation (NSF) has announced the availability of funding to enhance and expand digitization of and access to existing biological and paleontological collections in the United States.

The Advancing Digitization of Biodiversity Collections is seeking full proposals for a third round of funding. Proposals will be accepted for new research themes (Thematic Collections Networks) and for partnerships with existing networks (Partners to Existing Network). Of note, the name of the program has changed: "Biological Collections" is now "Biodiversity Collections."

Proposals are due by 19 October 2012. For more information, visit http://www.nsf.gov/pubs/2012/nsf12565/nsf12565.htm.

Little Remains of Government's First Major Ornithological Study

An important biological collection and associated data may be gone soon, unless action is taken to preserve it. Fifteen specimen jars containing the stomach contents of birds and 230,000 notecards containing information about the specimens are all that remain of the federal government's first major study of birds.

For more than 50 years, starting in the 1880's, the Division of Economic Ornithology at the Department of Agriculture collected at least 230,000 birds and examined their stomach contents. The purpose of the study was to determine what birds were eating in order to determine which species were helpful to farmers and which were detrimental to crops. This information was the basis of hundreds of scientific papers and several books on the food habitats of native birds. The collection is still being used by scientists to determine how humans and modern agriculture have influenced birds.

For decades, the jars sat in storage at the Patuxent Wildlife Research Center in Maryland. Unfortunately, nearly all of the jars were discarded for fear they contained cancer-causing formaldehyde. Only 15 jars survived. The thousands of notecards that accompanied the jars are not stored properly and the United States Geological Survey, which runs the center, does not have the resources to digitize the collection.

Read a full account of the collection in an article published in the New York Times on 21 May 2012 at http://www.nytimes.com/2012/05/22/science/relics-with-much-to-tell-about-bird-diets-may-be-lost.html?_r=1&emc=eta1.

Calling All Biologists: Showcase Science to Policymakers

This August, the NSC Alliance is sponsoring the *4th Annual Biological Sciences Congressional District Visits* event. This national initiative encourages members of the science community to meet with their elected officials. Unlike other efforts to educate members of Congress about the importance of scientific research and education programs, this event occurs across the country – not in Washington, DC.

As part of *Biological Sciences Congressional District Visits*, scientists and representatives of research facilities will meet with their members of Congress to describe how science is conducted and why a sustained investment in research and education programs must be a national priority. Participating scientists will meet with their elected officials at a district office or may invite them to visit a research laboratory, field site, or natural history collection.

Participants will receive information about federal funding for biological and environmental research, tools for improving their communication skills, and tips for conducting a successful meeting with an elected official. Participating scientists will receive guidance and some assistance with scheduling meetings.

Participation is free, but registration will close on 15 July 2012. For more information and to register, visit http://www.aibs.org/public-policy/congressional_district_visits.html.

IMLS Seeks Public Comment on Revised Grant Guidelines

The Institute of Museum and Library Services (IMLS) has revised the guidelines for two of its grant programs. IMLS is seeking public comments on the draft guidelines for the Museums for America and National Leadership Grants for Museums programs. The guidelines for these programs have been revised to align with the IMLS Strategic Plan. IMLS is seeking comments to assess how well these guidelines accomplish the following goals:

- Make federal dollars more accessible by reducing complexity;
- Increase clarity and readability;
- Make it easier to see where a project idea fits best;
- Make it easier to articulate the impact of project ideas;
- Allow grantees greater ability to pursue comprehensive collections care projects by combining the purposes of the current Conservation Project Support and Museums for America programs;
- Allow grantees greater ability to pursue professional development activities by combining the purposes and funding for the current 21st Century Museum Professionals and National Leadership Grants for Museums programs;
- Provide greater ability for museums and organizations that serve museums to pursue National Leadership Grants that have broad impact for their communities and create models that can be adapted by others; and

- Make it possible for IMLS to continue to support the full range of museums, large and small, and representing every museum discipline and every geographic area.

The draft guidelines are available for review at Museums for America (http://www.imls.gov/applicants/draft_fy13_guidelines_mfa.aspx) and National Leadership Grants for Museums (http://www.imls.gov/applicants/draft_fy13_guidelines_nlg.aspx).

Comments will be accepted through 6 July 2012. Please send comments to comments@imls.gov. Final guidelines will be posted no later than October 15, 2012.

USGS Seeks Input on Draft Science Strategy

The United States Geological Survey (USGS) is requesting public input on its new draft Science Strategy plan. Public comments are being accepted until 1 August 2012.

The USGS is poised to address some of the most significant issues society faces. To advance the actions the agency can take in the next decade, it is creating strategies specific to its major areas of research.

Please visit http://www.usgs.gov/start_with_science/ to offer your comments. Comments on the focus and scope of these strategies, as opposed to writing, editing, and other editorial suggestions are sought.

Ten New Species Earn Special Distinction

Each year, scientists discover thousands of new species, but only a few enjoy the distinction of being named one of the top ten new species of the year. That honor is bestowed by the Informational Institute for Species Exploration at Arizona State University.

The winners include organisms as diverse as a monkey, a jellyfish, and a fungus. The selections were made by a committee of scientists from around the world. This was the fifth year for the top ten list.

"The top 10 is intended to bring attention to the biodiversity crisis and the unsung species explorers and museums who continue a 250-year tradition of discovering and describing the millions of kinds of plants, animals and microbes with whom we share this planet," said Quentin Wheeler, an entomologist who directs the International Institute for Species Exploration. Dr. Wheeler is a board member of the Natural Science Collections Alliance.

The winners were selected from more than 200 nominations. Selection criteria are simple, according to Mary Liz Jameson, an associate professor at Wichita State University and chair of the selection committee. "Some of the new species have interesting names; some highlight what little we really know about our planet," she said.

Learn more about the 2011 winners at http://species.asu.edu/Top10.

Registration Open for Professional Development Courses for Informal Educators

Informal and K-12 educators can participate in free professional development courses this summer.

One course will focus on plant phenology and climate change. The course will provide information on how to participate in Project BudBurst (www.budburst.org), including suggestions for structuring your classroom involvement. It will be offered in two sessions: 11 June to 9 July and 1 to 29 August. The course will be offered in two sections, one for K-12 educators and one for informal educators at museums, botanic gardens, and nature preserves.

More information can be found at http://budburst.org/academy.

The Natural Science Collections Alliance is a Washington, D.C.-based nonprofit association that serves as an advocate for natural science collections, the institutions that preserve them, and the research and education that extend from them for the benefit of science, society, and stewardship of the environment. NSC Alliance members are part of an international community of museums, botanical gardens, herbariums, universities, and other institutions that house natural science collections and utilize them in research, exhibitions, academic and informal science education, and outreach activities. Website: www.NSCAlliance.org.

Note: You are receiving a copy of this electronic report as part of your membership in the NSC Alliance. Contact the Alliance office with any email address or member representative name changes send an email to spotter@aibs.org.