

Testimony in Support of Increased FY 2009 Funding for  
United States Geological Survey

March 12, 2008

Submitted by:

Michael A. Mares, Ph.D.  
President  
Natural Science Collections Alliance

and

Robert Gropp, Ph.D.  
Director of Public Policy  
Natural Science Collections Alliance  
1444 I Street, NW, Suite 200  
Washington, DC 20005  
202-628-1500 x 250

Submitted to:

Subcommittee on Interior and Related Agencies  
Committee on Appropriations  
B-308 RHOB, United States House of Representatives  
Washington, DC

The Natural Science Collections Alliance (NSC Alliance) encourages Congress to provide the United States Geological Survey (USGS) with at least \$1.3 billion for fiscal year (FY) 2009. From this amount, we encourage you to provide at least \$230 million for the programs and functions of the Biological Resources Discipline (BRD).

The NSC Alliance is a nonprofit association that supports natural science collections, their human resources, the institutions that house them, and their research activities for the benefit of science and society. Our 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, public service, service to governmental entities such as public health, agriculture, homeland security, defense, natural resource conservation, and outreach activities for the betterment of society.

The USGS provides independent research, data, and assessments needed by public and private sector decision-makers. A unique combination of biological, geographical,

geological, and hydrological research programs enable USGS scientists to utilize innovative interdisciplinary research techniques to answer important questions. For instance, USGS data are essential to informing our understanding of how species and ecological systems may respond to climate change and how ecological systems may be able to help ameliorate the effects of environmental change. Moreover, the USGS collects data that other federal agencies and nongovernmental scientists do not collect. We cannot afford to sacrifice this information; rather, we should increase our investments in this work for it is vital to scientific, social, and commercial advancement.

Natural resource managers demand reliable, relevant, and timely information. The Biological Informatics Program develops and applies innovative technologies and practices to the management of biological data, information, and knowledge. For instance, the NSC Alliance has worked with USGS personnel to try to identify barriers to the digitization of data associated with the tens of millions of specimens in natural science collections. Such specimens become increasingly valuable each year as new techniques permit the vast storehouse of information locked in these specimens to be accessed for scientific research. These efforts offer the potential for USGS and academic researchers to use these data to improve our understanding of the distribution and habitat requirements of species, thus improving our ability to efficiently and effectively develop conservation and management policies.

Increased funding for the USGS would enable the Biological Informatics Program to continue on-going activities and begin to implement initiatives that the resource management and research communities have identified as priorities. For example, the National Biological Information Infrastructure (NBII) program within the Biological Informatics office provides scientists and managers access to existing data. In the President's FY 2009 budget request, NBII was cut by \$2.9 million. This cut will have a significant negative impact on this important program. Full funding for NBII would permit the establishment of a more interconnected and accessible information system and would provide for the continued operation of important efforts, such as the National Framework for Early Detection, Rapid Assessment, and Rapid Response to Invasive Species (EDDR). The National EDDR framework would assist scientists and resource managers in correctly identifying invasive species, which are estimated to cost the United States \$138 billion each year in health care, lost income, and environmental consequences.

USGS scientists work collaboratively and are vital members of the research community. Through offices and science centers located in every state and through partnerships with more than 2,000 federal, state, local, tribal, and private organizations, the USGS has built the capacity to leverage additional research expertise. For example, through the Cooperative Research Units program USGS scientists are stationed at many universities. This proximity to academic researchers heightens the intellectual and technical resources devoted to answering biological and natural resource questions. Moreover, Cooperative Research Units are a vital component of our nation's education and training infrastructure, helping to develop the skills that graduate students need to become the natural resource professionals that government agencies require.

Biological science programs within the USGS gather long-term data not available from other sources. Such data have contributed in a fundamental manner to our understanding of bird migratory patterns and the status and dynamics of biological populations, and have improved our understanding of how ecosystems function. This array of research expertise not only serves the core missions of the Department of the Interior, but also contributes to management decisions made by other agencies and private sector organizations. In short, we need to increase our investments in these important research activities.

The USGS is uniquely positioned to address many of the nation's biological and environmental challenges, including energy independence, climate change, water quality, endangered species, introduced pest species, emerging diseases, and conservation of biological diversity. USGS research in biology and ecosystem science provides data on the potential impacts to ecosystems that could result from global climate change or from particular land management practices. Additional studies conducted by the USGS related to global change indicate that sea-level rise will continue to impact coastal areas. These studies will provide critical data for resource managers as they develop adaptive management strategies for restoration and long-term use of the nation's natural resources, including its coastlines.

Funding for the USGS has remained flat for nearly a decade. The situation is even more critical when the budget is adjusted for inflation. The President's FY 2009 budget request for the USGS is \$969 million, \$38 million below the FY 2008 enacted budget and more than \$6 million below the FY 2008 operating plan. Despite inadequate budget requests from the present and prior Administrations, Congress has demonstrated its recognition of the importance of USGS science by restoring proposed cuts. In response, the USGS has made every effort to be responsible stewards of public funds and has sought to leverage its limited human and financial resources to the greatest extent possible.

There is growing concern from within the government and from outside that funding for the USGS must improve if it is to continue to serve its mission. Without an increased investment in USGS science, core missions and national priorities will suffer. Thus, any effort that Congress can make to fundamentally improve funding for the USGS will be appreciated.

Thank you for your thoughtful consideration of this request. If you require additional information, please contact us at 202-628-1500 x 250.