

**Testimony in Support of FY 2018 Funding for the  
Department of the Interior and Smithsonian Institution**

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***Submitted by:***

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***Submitted to:***

House Committee on Appropriations  
Subcommittee on Interior, Environment, and Related Agencies

The Natural Science Collections Alliance appreciates the opportunity to provide testimony in support of fiscal year (FY) 2018 appropriations for the Smithsonian Institution and Department of the Interior. We encourage Congress to use 2017 enacted levels as the basis for 2018 funding decisions and to include new investments that address agency backlogs in the preservation and curation of scientific and cultural collections within Interior and the Smithsonian Institution.

*The Natural Science Collections Alliance is a non-profit 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 membership consists of institutions that are part of an international community of museums, botanical gardens, herbaria, universities, and other institutions that contain natural science collections and use them in research, exhibitions, academic and informal science education, and outreach activities.*

Scientific collections, and the collections experts who make, care for, and study those collections, are a vital component of our nation's research infrastructure. Whether held at a museum, government managed laboratory or archive, or in a university science department, these scientific resources contain genetic, tissue, organismal, and environmental samples that constitute a unique and irreplaceable library of Earth's history. The specimens, their associated data, and collections experts drive cutting edge research on significant challenges facing modern society, such as improving human health, enhancing food security, and understanding and responding to environmental change. Collections inspire novel interdisciplinary research that precipitates innovation and addresses some of the most fundamental questions related to biodiversity.

The institutions that care for scientific collections are important research centers that enable other scientists to study the basic data of life; conduct modern biological, geological, anthropological, and environmental research; integrate across these diverse disciplines; and provide undergraduate and graduate students with hands-on training opportunities. In-house institutional staff expertise is vital to the development and deployment of this critical research infrastructure.

According to the federal Interagency Working Group on Scientific Collections, “scientific collections are essential to supporting agency missions and are thus vital to supporting the global research enterprise.” In recognition of the importance of collections, the Office of Science and Technology Policy issued a memo that directed federal agencies to budget for the proper care of collections. “Agencies should ensure that their collections’ necessary costs are properly assessed and realistically projected in agency budgets, so that collections are not compromised.”

Preservation of specimens and the strategic growth of these collections are in the best interest of science and the best interest of taxpayers. Existing scientific collections that are properly cared for and accessible are a critical component of the US science infrastructure and can be readily integrated into new research on significant questions. Specimens that were collected decades or centuries ago are now routinely used in cutting edge research in diverse fields related to genomics, human health, biodiversity sciences, informatics, environmental quality, and agriculture.

The Smithsonian Institution is a valuable federal partner in the curation and research on scientific specimens. The scientific experts at the National Museum of Natural History care for an astounding 140 million specimens and ensure the strategic growth of this national treasure. To increase the availability of these scientific resources to researchers, educators, other federal agencies, and the public, Smithsonian is working on a multi-year effort to digitize its collections. That effort will substantially increase awareness of the availability of these collections via the Internet.

Smithsonian has also been working to strengthen curatorial and research staffing and to backfill positions left open by retirements and budget constraints. The current staffing level is insufficient to provide optimal care for the collections. Future curatorial and collections management staffing levels may be even more in jeopardy given the proposed funding cuts at science agencies that support staff positions embedded at Smithsonian, such as the U.S. Geological Survey.

Interior is an important caretaker of museum collections; the Department has an estimated 146 million items, comparable in size only to the Smithsonian Institution. Although many of the department’s collections are located in bureau facilities, numerous artifacts and specimens are also housed by non-governmental facilities, such as museums and universities.

In addition, the United States Geological Survey (USGS) furthers the preservation, inventory, and digitization of geological scientific collections, such as rock and ice cores, fossils, and samples of oil, gas, and water. The National Geological and Geophysical Data Preservation program helps states with collections management, improves accessibility of collections data, and expands digitization of specimens to ensure their broader use. One example of the pay offs of this program is the potash mineral deposit discovered in Michigan that is worth an estimated \$65 billion. Rock samples from Michigan were entered into a national database, where private companies discovered their existence and are now assessing the potential for mining.

Another USGS program is supporting public access to biodiversity information. The Biodiversity Information Serving Our Nation system is the only web-based federal resource for finding species in the United States and contains 250 million records. It also serves as the U.S. connection to the Global Biodiversity Information Facility. USGS also supports the documentation and conservation of native pollinators through its Native Bee Inventory and Monitoring Lab.

Another USGS program that furthers the curation of and research with biological collections is proposed for elimination. USGS has more than a million specimens of birds, mammals, amphibians, and reptiles that are housed at the Smithsonian. This arrangement goes back to 1889, but is suggested for termination by the Administration. We urge Congress to continue this valuable program. For more on this program, see <http://nscalliance.org/wordpress/wp-content/uploads/2011/02/nsca-usgs-smithsonian-report.pdf>.

The Bureau of Land Management has a large backlog of cultural resources to inventory on public lands. Presently, 90 percent of public lands have not been assessed for heritage resources. Such assessments need to be conducted before unique resources are lost to looting, vandalism, fire, or environmental change.

The National Park Service needs to continue its investments in scientific collections, including cataloging of millions of museum objects. The Park Service curates a wide range of specimens and artifacts, from historical and cultural items to preserved tissues from protected species and living microorganisms collected from national parks. Several parks have made progress on addressing planning, environmental, storage, security, and fire protection deficiencies in museum collections, but much work remains to be done. The President's budget request would undo past progress, with the percentage of museum objects in 'good' condition decreasing from 75 percent to 70 percent by the end of FY 2018.

## **Conclusion**

Scientific collections are critical infrastructure for our nation's research enterprise. Research specimens connect us to the past, are used to solve current societal problems, and are helping to predict threats to human health, methods for ensuring food security, and the impact of future environmental changes. Sustained investments in scientific collections are critical for our nation's continued scientific leadership.

Please support adequate funding for the Department of the Interior's Capital Working Fund, as well as programs within Interior bureaus and the Smithsonian Institution that will support these organizations' efforts to preserve scientific collections – a truly irreplaceable resource.

Thank you for your thoughtful consideration of this request.