Testimony in Support of FY 2020 Funding for the Department of the Interior and Smithsonian Institution

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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) 2020 appropriations for the Smithsonian Institution and the Department of the Interior. We encourage Congress to make new investments that address agency backlogs in the preservation and curation of scientific and cultural collections within the Department of the Interior and the Smithsonian Institution. We request that Congress provide new funding to the National Museum of Natural History to correct for it being flat funded the past two years. We further request that Congress restore the $1.6 million in funding for the U.S. Geological Survey's Biological Survey Unit housed at 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 network 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 professionals and scientists who make, care for, and study these resources, 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 consist of data (for example, genetic, tissue, organism, and environmental) that are a unique and irreplaceable foundation from which scientists are studying and explaining past and present life on earth. Research results improve human health, enhance food security, and provide monitoring for responses to environmental change and species conservation.

The institutions that care for scientific collections are important research centers that enable other scientists to study the basic data of life; conduct biological, geological, anthropological, and environmental research; and integrate research findings from across these diverse disciplines. Their professional staff members train future generations with the tools and

expertise required to move science forward. 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." 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 are readily integrated into new research on significant questions. Specimens that were collected decades or centuries ago are now routinely used in research in diverse fields related to genomics, human health, biodiversity sciences, informatics, environmental quality, and agriculture.

The Smithsonian Institution's National Museum of Natural History (NMNH) is a valuable federal partner in the curation and research on scientific specimens. The scientific experts at the NMNH care for 140 million specimens and ensure the strategic growth of this internationally recognized scientific research institution. To increase the availability of these scientific resources to researchers, educators, other federal agencies, and the public, NMNH is working on a multi-year effort to digitize its collections. That effort will substantially increase the scientific uses of these collections.

The National Museum of Natural History 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 further jeopardized given funding cuts at science agencies, such as the USGS, that support staff positions at the National Museum of Natural History.

Interior is an important caretaker of museum collections as well; 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 returns from this program is the potash mineral deposit discovered in Michigan that is valued at an estimated $65 billion. Rock samples from Michigan were entered into a national database, where private companies discovered the deposit's existence and are now assessing the potential for mining. USGS also supports the documentation and conservation of native pollinators through its Native Bee Inventory and Monitoring Lab.

The Biological Survey Unit consists of USGS scientists stationed at the National Museum of Natural History, where they curate and conduct research on USGS-specimens of fish, reptiles,

birds and mammals that are curated at the NMNH. 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 has been proposed for elimination by the Administration. This is irresponsible. These specimens, data and the research they enable are required to inform Department of the Interior land and natural resource management decisions, and often also support decision-making by State and Tribal governments. We urge Congress to fund this valuable program at $1.6 million and to direct the USGS to sustain this effort.

The Bureau of Land Management has a large backlog of cultural resources to inventory on public lands. Currently, only 10 percent of public lands have 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 must continue its investments in scientific collections, including cataloging millions of museum objects and connecting those databases to national and global data portals. The National 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 in our National Parks. Several parks have made progress on addressing planning, environmental, storage, security, and fire protection deficiencies in museum collections, but much work remains. The President's budget request would undo past progress, with the percentage of museum collections in 'good' condition decreasing from 75 percent in FY 2014 to 69 percent by the end of FY 2019.

Conclusion

Scientific collections are critical infrastructure for our nation's research enterprise and a national treasure. Research specimens connect us to the past, are used to solve current 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 in our national interest.

The budget for NMNH has remained flat over the past two years. We urge Congress to provide NMNH with at least $53 million in FY 2020 to allow the museum to undertake critical collections care, make needed technology upgrades, and conduct cutting edge research. Please support adequate funding for the Department of the Interior's Capital Working Fund, as well as programs within Interior bureaus, such as the Biological Survey Unit, that support the preservation and use of scientific collections – a truly irreplaceable resource.

Thank you for your thoughtful consideration of this request.