



NATURAL SCIENCE COLLECTIONS ALLIANCE

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August 3, 2011

The Honorable Sheldon Whitehouse
United States Senate
Washington, DC 20510

Dear Senator Whitehouse:

As President of the Natural Science Collections Alliance (NSC Alliance), I thank you for raising the issue of baseline data on ocean environments during a recent hearing on the status of the Deepwater Horizon Natural Resource Damages Assessment held by the Environment and Public Works Subcommittee on Water and Wildlife.

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 nearly 100 institutional 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.

Baseline environmental data comes from numerous sources, including measurements of physical properties such as temperature, pH, toxins in sediments, and ocean currents, and from observations of species distribution, animal behavior, and ecological processes. Natural science collections often are the entities that provide archival records of this data.

Our nation's natural science collections, whether held at a national museum or in a university science department, contain genetic, tissue, organism, and environmental samples that constitute a library of Earth's history. These specimens and associated data drive cutting edge research on the significant challenges facing modern society, including informing oil spill response and restoration. These specimens enable researchers to answer questions about the effects of climate change, the spread of invasive species and pathogens, and the loss of biological diversity and its effects on ecosystem function. In short, natural science collection specimens and associated data enable scientists, natural resource managers, and public health officials to develop the knowledge required to inform decision-making.

The importance of natural science collections to the restoration of the Gulf of Mexico was highlighted last summer during a hearing on "Ocean Science and Data Limits in a Time of

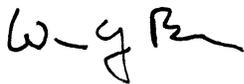
Crisis,” that was held by the House Natural Resources Subcommittee on Insular Affairs, Oceans and Wildlife. Among the witnesses appearing before the committee was Dr. Jonathan Coddington, associate director of research and collections at the National Museum of Natural History. Dr. Coddington testified that the Smithsonian’s collections of marine biological specimens represent a unique and now irreplaceable resource to describe quantitatively the pre-spill Gulf of Mexico ecosystem. These collections document the biological diversity of the region prior to the oil spill, and will contribute to assessments of the spill’s environmental impacts and will help to guide ecological restoration efforts.

Scientific collections held by other institutions will also contribute valuable scientific knowledge to the oil spill response. As Dr. Coddington noted, an estimated 42 percent of publically available biological specimens from the Gulf of Mexico are held by entities other than the Smithsonian Institution. Numerous universities, museums, and non-profit research centers hold biological specimens collected from the region. These collections serve as vital sources of biological information about the Gulf of Mexico and the southeastern United States.

Unfortunately, for too many years, the federal government has failed to make an adequate or coordinated investment in natural science collections. Thus, we often hear from curators about backlogs of specimens that have yet to be identified or properly curated. There is also a need to digitally capture and make available information about key holdings. For these and other reasons, the NSC Alliance has identified the need for a formal interagency process for the preservation and use of the nation’s science collections, both federal and non-federal. The attached information provides an outline of one model that offers an appropriate legislative proposal to establish this interagency process.

Once again, thank you for drawing attention to the importance of environmental monitoring. I would welcome an opportunity to discuss with you the importance of a coordinated federal natural science collections policy. Please do not hesitate to contact me at wycbrown@gmail.com, or NSC Alliance Director of Public Policy Dr. Robert Gropp at 202-628-1500 x 250 or rgropp@aibs.org if you have any questions or if we may provide additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "W-Y-B", with a stylized flourish at the end.

William Y. Brown
President

A BILL

To preserve, protect, develop, modernize, and utilize fully the nation's vital and irreplaceable science collections resources, and to advance scholarly and public access to and use of such collections, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE AND TABLE OF CONTENTS.

(a) Short Title- This Act may be cited as the 'Science Collections Act of 2011'.

(b) Table of Contents- The table of contents for this Act is as follows:

- Sec. 1. Short title and table of contents.
- Sec. 2. Findings and purposes.
- Sec. 3. Definitions.
- Sec. 4. Policy.
- Sec. 5. Science Collections Council
- Sec. 6. Science Collections Advisory Committee.
- Sec. 7. National Science Collections Plan.
- Sec. 8. International cooperation.

SEC. 2. FINDINGS AND PURPOSES.

(a) Findings - Congress finds that -

(1) science collections gathered and held by many institutions over the past half millennium are fundamental reference points upon which science depends. They range from moon rocks and dinosaurs to insects and human tissues. They underpin contemporary research and education in many fields, from anthropology to zoology, and they support regulatory, management, and policy decisions.

(2) preservation, modernization, and use of science collections is a national priority, but many science collections are deteriorating and some have been lost, and many science collections are inadequately utilized.

(b) Purposes - The purposes of this Act are to improve planning and allocation of resources to preserve, protect, develop, modernize, and utilize fully the nation's vital and irreplaceable science collections resources, and to advance scholarly and public access to and use of such collections.

SEC. 3. DEFINITIONS.

(a) "Federal agency" means an executive department or agency, but does not include independent establishments as defined by 5 U.S.C. 104.

(b) “Science collections” (“collections”) means biological, geological and anthropological specimens that form part of the nation’s scientific infrastructure and are held as long-term assets, as opposed to expendable research supplies, by federal agencies, museums, botanical gardens, herbariums, universities, institutes, centers, zoos, aquariums, or other organizations, and used in research, exhibitions, academic and informal science education, and outreach activities.

(c) “Stakeholders” means, but is not limited to, State, territorial, commonwealth, and local government agencies, museums, botanical gardens, herbariums, universities, institutes, centers, zoos, aquariums, nongovernmental organizations, scientists, educators, commercial interests, medical professionals, students, and the public at-large.

(c) “United States” means the 50 States, the District of Columbia, Puerto Rico, Guam, and all possessions, territories, and the territorial sea of the United States.

SECTION 4. POLICY.

(a) All Federal agencies whose actions may affect collections shall identify such actions and as feasible utilize their programs and authorities in cooperation with stakeholders to enhance and preserve such collections and to advance access to and use of collections by stakeholders.

(b) All Federal agencies needing the use of scientific collections shall consider cost-effective uses of existing scientific collections and the facilities that hold them before establishing new collections and facilities.

SECTION 5. SCIENCE COLLECTIONS COUNCIL.

(a) The Secretary of Interior, the Secretary of Agriculture, and the Secretary of Commerce shall co-chair a Science Collections Council (“Council”) that shall oversee implementation of the requirements of this Act."

(b) The Council members shall include, but not be limited to, the Secretary of State, the Secretary of the Treasury, the Secretary of Defense, the Secretary of the Interior, the Secretary of Agriculture, the Secretary of Commerce, the Secretary of Health and Human Services, the Secretary of Transportation, the Secretary of Education, the Secretary of Homeland Security, the Administrator of the Environmental Protection Agency, the Administrator of the Agency for International Development, the Director of the Office of Science and Technology Policy, and the Director of the National Science Foundation.

(c) The Council may invite additional Federal agency representatives to be members, including representatives from subcabinet bureaus or offices with significant responsibilities concerning collections, and the Council may invite a representative of the Smithsonian Institution to be a member.

SECTION 6. SCIENCE COLLECTIONS ADVISORY COMMITTEE.

(a) The Secretary of Commerce shall establish a Science Collections Advisory Committee under the Federal Advisory Committee Act, 5 U.S.C. App., to provide information and advice for consideration by the Council, and shall, after consultation with other members of the Council, appoint members of the advisory committee representing stakeholders.

(b) The Science Collections Advisory Committee shall recommend plans and actions at local, tribal, State, and regional levels to achieve the goals and objectives of the plan developed pursuant to section 5 of this order.

(c) The Secretary of Commerce shall provide the administrative and financial support for the Science Collections Advisory Committee.

SECTION 7. NATIONAL SCIENCE COLLECTIONS PLAN.

(a) Within 18 months after enactment of this Act, the Council, with assistance from the Science Collections Advisory Committee, shall prepare and issue the first edition of a five-year national plan for the preservation, utilization, and continued development of the nation's science collections.

(b) The national science collection plan shall detail and recommend performance-oriented goals and objectives and specific measures to advance the policy set forth in section 4 of this Act. The plan shall be developed through a public process and in consultation with Federal agencies and stakeholders, and shall be updated and reissued not less than once in any five-year period.

SECTION 8. INTERNATIONAL COOPERATION.

The Secretary of State and the Administrator of the Agency for International Development, in cooperation with other members of the Council and drawing upon their expertise, shall take appropriate actions to engage international cooperation in advancing the policy set forth in section 4 of this Act.