

House Subcommittee on Information Policy, Census and National Archives

**Testimony of Secretary G. Wayne Clough
Smithsonian Institution**

16 December 2009

Thank you for this opportunity to testify before the House Subcommittee on Information Policy, Census and National Archives regarding the mission of the National Archives. I would like to begin by thanking the Chair, the Honorable William Lacy Clay and Ranking Member, the Honorable Patrick McHenry for holding this important hearing. I would also like to extend my congratulations and good wishes to my new colleague, the Archivist of the United States, David Ferriero and to offer the Smithsonian Institution's assistance in his transition. I am pleased to be here with my distinguished colleague, the Librarian of Congress, Dr. James Billington. Our collective mission is extremely important: The National Archives and Records Administration (NARA) preserves the records of the federal government; the Library of Congress (LOC) serves as the largest library of the world; and the Smithsonian Institution preserves the history, arts, sciences and cultural traditions of the United States and the international community. We complement each other as we pursue our shared goal of preserving our collections and making them as accessible as possible to the American public. I look forward to our increased collaboration.

The Smithsonian (www.si.edu/) is a national and world treasure. With 19 museums, 20 libraries, nine research centers and the National Zoo, the Smithsonian stands out as a unique entity, a leader in science, history, art, and culture. Our museums are open 364 days a year, and admission is free – an especially important service to the public during this time of economic stress. Each year we mount close to 100 new exhibits in the interest of serving the public and each one is backed up by our collections, archives and research by our curators. Additionally we conduct extensive research in the public interest related to topics such as astrophysics, biodiversity, invasive species, preservation science, and paleontology and we offer educational programs in a range of areas to teachers and students and life long learners. All of this work depends on our archival collections which have been shaped over time to support the efforts of our museums and research centers. Our archival collection includes a vast quantity of scientific documents and records, along with letters, diaries, films, maps, sketches, photographs, sound recordings, and other special media totaling more than 100,000 cubic feet, and forms the foundation for research, scholarship, publications, exhibitions, public programs, and outreach. These resources are used not only by Smithsonian researchers and curators, but also by thousands of others who have need for them. We are working tirelessly on digitizing not only our archival collections, but also our three dimensional collections, which poses many exciting challenges. For example, in order to be most useful, a digital 3-D object must allow for rotation

and viewing from various angles. We must also include metadata in the file so the viewer has context and relevant information on the object.

As an international institution we offer the world a picture of America and America a picture of the world. From the very inception of the Smithsonian Institution, our mission has been steadfast – the increase and diffusion of knowledge. We believe our vision will shape the future by preserving our heritage, discovering new knowledge, and sharing our resources with the world.

Strategic Plan

The core mission of the Smithsonian, our work related to research, collections, outreach, and public programs, remains strong. This year, thirty million visitors from across the country and around the world came to the Smithsonian. We had 188 million visitor sessions to our various Websites. To ensure that we bring our vast resources to bear in powerful ways on the critical problems of the world, we recently embarked on the most inclusive and comprehensive strategic planning process in our history. The nation's growing diversity challenges us to reach new audiences and ensure that Smithsonian collections, exhibitions, and outreach programs speak to all Americans. We also must remain relevant to visitors who come from around the world. To accomplish this, we have outlined in our strategic plan ways to use new media and social networking tools to deliver information in customized ways and bring our resources to those who cannot visit in person. Digitizing objects, including archives, and making them accessible online are major Institutional priorities, as is exploring next-generation technologies. We will take advantage of a range of interactive, Web-based technologies to reach learners of all ages.

We are currently putting as much effort as possible into the digitization of our collections to ensure that they are available to the public. We will improve their storage and management, substantially expand access to them through digital technologies, and build public/private partnerships that strategically enhance collections care. Making Smithsonian resources accessible to all through the Internet is a vital component of our new strategic plan. Providing access is not in lieu of preservation. In fact, appropriate digitization plays a significant role in increasing the preservation of materials. The cost associated with digitization includes stabilizing the physical materials. Furthermore, the more collections we can digitize and make available virtually, the less these materials are subject to potentially harmful handling and damage due to changing environmental conditions such as light, temperature and relative humidity fluctuations when they are taken out of storage. There are also significant cost savings to researchers who do not need to travel to the archives in order to view materials in our collection.

We want to make sure that school children, their parents, and teachers have access to the extraordinary collections that we have available to us here in Washington, D.C. Like the National Archives and the Library of Congress, we face a huge challenge in making our

materials available to the public, but this is a challenge that we are facing head-on and with great determination. Our success in this endeavor necessitates partnerships and collaboration as a way to broaden opportunities for the American public.

The Smithsonian Institutions Archives

The Smithsonian has a long history of balancing the sometimes competing needs of various constituencies when it comes to issues of access and use of our archival collections.

First, I would like to tell you about the Smithsonian Institution Archives (SIA; www.siarchives.si.edu/). Although the first Smithsonian Secretary, Joseph Henry, was legally charged with preserving the records of the Institution since its creation in 1846, the Smithsonian Institution Archives had its real origins in 1891, when William Jones Rhees, who had been Chief Clerk since 1852, was given the title Keeper of the Archives. The Smithsonian Institution Archives is the institutional memory of a unique American cultural resource and a steward of the national collections. Its holdings constitute the official memory of the Smithsonian and document the development of American science, art, culture, and technology, and the growth of museums in the United States.

In order to ensure institutional accountability and enhance public appreciation of a great national treasure, the SIA is committed to serving the Smithsonian community, scholars, and the general public by engaging in many activities such as 1) evaluating, acquiring, and preserving the records of the Institution and related documentary materials; 2) offering a range of reference, research, and records services; and 3) creating products and services that promote understanding of the Smithsonian and its history.

SIA oversees over 5,500 collections comprising 34,211 cubic feet. These holdings date back to the Smithsonian's founding in 1846 and include Secretarial correspondence, scientific research and original expedition field notes, exhibition records, architectural drawings of Smithsonian buildings, oral and video histories, photographs, film, video, Websites, and a wide variety of records documenting the history of the Smithsonian and the history of scientific discovery, art administration, historical research and museums in the United States and throughout the world. A few highlights include the papers of Nobel Laureate in physics, Riccardo Giacconi (formerly of Smithsonian Astrophysical Observatory (SAO)), the papers of Hirshhorn Museum and Sculpture Gallery founder Joseph Hirshhorn; and a recently acquired collection of over three million photographic images documenting Smithsonian collections and specimens, buildings, events, and staff.

Providing access to the collections is our highest priority. As part of a public trust, SIA is dedicated to providing equitable service to all researchers. Access to its holdings is to the fullest possible extent consistent with personal privacy and Institutional proprietary rights. Currently SIA serves nearly 6,000 researchers each year through use of the SIA Reading Room, email,

mail, and telephone and increasingly through our web presence. SIA makes every effort to provide online access to collection descriptions and detailed finding aids. Seventy-seven percent of unrestricted and minimally restricted holdings have electronically-available and searchable collection guides.

Currently, our most pressing issues are the preservation of electronic records and digital information of all kinds – including large volumes of scientific data collected by our scientists studying the universe or climate change, massive amounts of e-mail, web sites from across the Institution, and a proliferation of digital photography. We are also challenged by the need to preserve all forms of other documentation that are rapidly deteriorating, such as older photographic negatives that require cold storage, video tapes that are nearly unviewable now, and the vast paper records that are also at risk.

Digitization of the collections is a growing challenge as well as an opportunity. As the Web has become ubiquitous, researchers expect greater amounts of original materials to be accessible on the web. Yet, digitization of these materials is mostly done with project funding or on demand, as materials are requested. The percentage of actual materials that are now digitized is a very tiny fraction of our complete holdings. We are working tirelessly to change this.

Providing access to collections through various means of discovery and delivery, preservation – especially preservation of electronic records and digital information - and digitization of massive amounts of archival materials are the biggest issues facing archival collections around the world.

The United States is one of the most advanced countries in terms of providing access to public information for public use. U.S. policies and professional ethics are focused on the widest, most equitable openness to archival holdings. However, many collections remain inaccessible for a host of reasons – for example, insufficient staff, lack of expertise to work with special formats or special language materials. In addition, some institutions may have large backlogs of uncatalogued or unprocessed materials, many of which are in poor condition and in need of conservation treatment prior to allowing their use.

Archives Best Practices

The Association of Research Libraries has as part of its national agenda a program designed to help archives expose their “Hidden Collections.” Funding to support these projects is being managed by the Council on Library and Information Resources (CLIR.) SIA in collaboration with the Botany Department of the National Museum of Natural History recently received a \$500,000 grant from CLIR to digitize expedition field notebooks along with the botanical specimens gathered on those research trips. The materials span two centuries of fieldwork and cover both terrestrial and marine environments. The collections are significantly strong in their coverage of 19th century expeditions across North America, including the 1820 Long Expedition; the U.S. - Mexican Boundary Survey (1848); Expedition of Maj. J.W. Powell

(1868); Jenny Expedition to the Black Hills (1875); Death Valley Expedition (1890-91); Peary Expedition to Greenland (1897); Harriman Alaska Expedition (1899); and numerous voyages of discovery, such as the North Pacific Exploring Expedition; the HMS Challenger expedition; the US Eclipse Expedition; and the US Steamer Albatross expedition. We will virtually reunite these materials on our website to improve their accessibility to researchers and the general public. This is a good example of the kind of collaboration and interdisciplinary work that we seek in our new strategic plan.

In February 2005, the Archives of American Art (www.aaa.si.edu/) received an award of \$3.6 million to dramatically increase the accessibility of its resources on the web. This support is funding a comprehensive, six-year program to digitize and make available on the Archives' website a substantial cross-section of the Archives' most important collections, including the papers of a highly diverse range of artists and arts-related figures from the eighteenth century to today. At the end of the program, scheduled for completion in 2011, an estimated 1.2 million digital files will be available to the public.

Another example of some of the work that we are doing with our archival materials is related to weather data. Recently, we held a conference at the Smithsonian of a group called GEOSS-Global Earth Observation System of Systems. During the conference we were able to show the participants some of the earliest, systematic recordings of weather data collected by the Smithsonian's first Secretary, Joseph Henry. The raw data gathered over those early years are preserved in the SI Archives. This is extremely important because they are the earliest climate observations and a necessary part of the longitudinal studies that are vital to our understanding of climate change. Today, there are enormous amounts of digital data that must be kept and preserved, just as this early data has been preserved.

One example that I am really proud of at the Smithsonian is the work that we have accomplished in the digitization of the botany collection. The Department of Botany began its early efforts to digitize the Type Specimens of the United States National Herbarium in 1970, long before digitizing technology was well-developed. Although initial progress was slow, these efforts took off during the last decade through support from the National Science Foundation and the Andrew Mellon Foundation. To date, over 100,000 Type Specimens, which constitute the most important plant collections at the Smithsonian, have been digitized using high-resolution camera and scanning equipment. All of these images are available for scientists around the world to use via the Department of Botany website (www.nmnh.si.edu/botany). Making the Type Specimens available as high resolution images on the web site has reduced the need for sending these specimens to researchers at other institutions by over 80%, thereby reducing the risk of damage and loss of these valuable specimens.

The Smithsonian also partners with a project called the Encyclopedia of Life (EOL). We are working with the scientific and citizen-science communities to assemble infinitely-expandable

web pages for each of the word's known species. The Biodiversity Heritage Library (BHL), the digitization component of EOL, is a consortium of 12 major natural history museum libraries, botanical libraries, and research institutions organized to digitize, serve, and preserve the legacy literature of biodiversity. Prior to digitization, the resources housed within each BHL institution have existed in isolation, available only to those with physical access to the collections. These collections are of exceptional value because the domain of systematic biology depends – more than any other science – upon its historic literature. To date BHL has scanned more than 26 million pages of biodiversity literature from more than 70,000 volumes. EOL currently serves over 500,000 species pages with links to BHL's rich materials.

Conclusion

I look forward to the Smithsonian Institution's collaboration with my colleagues from the Library of Congress and the National Archives and Records Administration. We each play an important role in inspiring the public by engaging them in an exploration of who they are and the world we live in.

For 163 years, the Smithsonian Institution has built the national collections, disseminated innovative research, and welcomed millions of visitors to its museums, creating a reputation so strong that the Smithsonian is known as a symbol of America throughout the world. I am extremely proud of the work that we have accomplished and the progress that we will continue to make guided by the mission and vision outlined in our new strategic plan.

Again, I would like to thank the Chair and the Ranking Member for holding this important hearing. I look forward to any questions you might have.

Thank you.