Dr. Jill Biden meets the Graham Road Elementary School Percussion Ensemble at the 17th annual Smithsonian Teachers’ Night, organized by the Smithsonian Center for Education and Museum Studies and hosted by the National Museum of Natural History. Nearly 5,000 teachers attended the event, held on October 23, 2009—the largest turnout ever for a Teachers’ Night.

Report to the Regents
First Quarter, Fiscal Year 2010
Visitation Summary

In the first quarter of fiscal year 2010, the Institution counted 5.48 million visits to its museums in Washington, D.C. and New York, plus the National Zoo and Steven F. Udvar-Hazy Center—up about 1 percent from the same period in fiscal year 2009, despite disruptions from a major blizzard that hit the Washington, D.C. region toward the end of December, 2009.

The Smithsonian counted approximately 1 million visits to 45 traveling exhibitions mounted by the Smithsonian Institution Traveling Exhibition Service, on view in 74 venues in 27 states, the District of Columbia, and Guam.

Smithsonian websites logged more than 41 million visits—about the same as the figure for the first quarter of fiscal year 2009.

Visits to Smithsonian Museums and Traveling Exhibitions
First Quarter of Fiscal Years 2008, 2009, and 2010
Unlocking the Mysteries of the Universe

**Research: Smithsonian Astrophysical Observatory (SAO)**

In the first quarter of 2010, scientists from the Harvard-Smithsonian Center for Astrophysics (a partnership of SAO and Harvard University) published 121 peer-reviewed papers, plus 156 non-peer-reviewed papers at meetings, conferences, and other venues. SAO scientists used a satellite instrument to measure temperatures on a Saturn-sized exoplanet (a planet orbiting a star other than our sun) around a nearby star. They found that the daytime temperature is about 500 degrees Celsius warmer than the nighttime temperature, which suggests the planet’s atmosphere may contain water.

The sun’s corona (the hot outer region of its atmosphere) can produce flares that disrupt communications on earth. Conventional modeling considers only the surface effects of coronal activity, but SAO astronomers showed for the first time that the three-dimensional structure of the corona can significantly influence the observed physical properties of these flares.

SAO astronomers used the Observatory’s Submillimeter Array to study the Orion Nebula, concluding that about 500 years ago, a violent explosion disrupted a massive cluster of stars, scattering three of them apart and producing bright jets of material. Astronomers at the Harvard-Smithsonian Center for Astrophysics helped to discover the farthest known object in the cosmos: a star that exploded when the universe was a mere 630 million years old, less than one-twentieth of its current age. Light from this event had been traveling for about 13 billion years before reaching Earth in April 2009.

**Research: National Air and Space Museum (NASM)**

The NASM Division of Space History sponsored The Hubble Legacy, a symposium that brought together scientists, engineers, and historians to discuss the significance of the Hubble Space Telescope after nearly 20 years of operations. David DeVorkin led the effort. Bruce Campbell is conducting radar mapping of the moon. His data are revealing new information on materials in the uppermost 10-20 meters of the moon’s near surface.
John Grant was the first author of one paper and co-author of two others in a special issue of the journal *Icarus* that highlights results from the HiRISE camera on the Mars Reconnaissance Orbiter spacecraft. Roger D. Launius of the Division of Space History has published a second edition of his book *Space Stations: Base Camps to the Stars*.

**Other Research**

Ed Vicenzi of the Museum Conservation Institute (MCI) traveled to Cambridge for a collaboration between MCI and the Smithsonian Astrophysical Observatory. The NASA-funded project aims to produce high-resolution X-ray microanalysis measurements on cometary materials returned to Earth by the Stardust mission.

**Access**

Research from the Harvard-Smithsonian Center for Astrophysics was featured in three articles in *The New York Times* and multiple articles in the leading scientific journals *Nature* and *Science*. One Center discovery that prompted wide coverage in the popular press was a steam-cloaked, “super-earth” exoplanet, news of which appeared in over 30 newspapers worldwide.

The National Air and Space Museum opened the first stage of *Moving Beyond Earth*, an exhibition that focuses on the Space Shuttle and International Space Station era. It includes a presentation area with television studio capability; one of the first programs to utilize this capability featured a Space Shuttle crew and was beamed to an audience of students in Bristol, England.

During the quarter, the Harvard-Smithsonian Center for Astrophysics’ Astrophysics Data System (ADS) website, which provides search capabilities for and open access to astronomy and astrophysics literature, received over 270 million hits.

The National Air and Space Museum held a real-time online conference to mark the 40th anniversary of the Apollo mission to the moon. Although tailored to the needs of educators in U.S. secondary schools, the conference was available to all, and participants logged in from around the world.

**Understanding and Sustaining a Biodiverse Planet**

**Research: National Zoological Park (NZP)**

NZP scientists and their collaborators became the first to successfully analyze the part of the gene in Asian and African elephants that influences the animals’ resistance to viruses, parasites, and bacteria, thus taking the first step toward an understanding of the role genetics plays in warding off disease among elephants.

Peter Marra of the NZP Migratory Bird Center and his colleagues at the U.S. Geological Survey (USGS) created a USGS-Smithsonian project to investigate the effects of global change on North American bird movements, CLIMB (Climate Change and the Inter-seasonal Movements of Birds). It promises to be one of most ambitious ecological projects ever attempted in this area.
Staff from NZP’s Smithsonian Conservation Biology Institute attended the Kathmandu Global Tiger Workshop in Nepal to coordinate a regional tiger conservation effort and conduct a needs assessment for training programs in the region.

Personnel from the NZP Center for Conservation Education and Sustainability designed and implemented the Peru Andes Biodiversity Monitoring and Assessment Program. It is part of a collaborative effort of the Smithsonian, Peru LNG, the government of Peru, and other stakeholders to integrate biodiversity conservation into sustainable development plans for the region.

Brian Gratwicke was lead author of a paper in the journal *Frontiers in Ecology* that presented research findings that the $40-million-per-year culinary trade of frog legs is a potential carrier of pathogens deadly to amphibians. More than a third of the world’s nearly 6,000 amphibian species are threatened with extinction, and disease is one of the main causes.

**Research: Smithsonian Environmental Research Center (SERC)**

Using a unique dataset of tree biomass, SERC’s Geoffrey (Jess) Parker and his colleagues found that forests in the mid-Atlantic region have been growing much faster in recent years than expected on the basis of historical data from the past 225 years. This result is highly significant, because forest system growth rates can have huge impacts on atmospheric cycles, biogeochemical cycles, climate change, and biodiversity. The findings appeared in the *Proceedings of the National Academy of Sciences*.

Patrick Megonigal was appointed to a blue-ribbon panel to explore the role of coastal wetlands in sequestering greenhouse gases. The panel, which includes leaders in science, environmental engineering, public policy, and carbon offset investing, will examine the current state of knowledge, assess information gaps, and develop guidance for carbon sequestration through coastal wetland restoration projects.

Dennis Whigham co-edited the book *Tidal Freshwater Wetlands*, an examination of how wetlands work, the animal and plant life they support, and the threats they face, with a focus on the wetlands of North America and Europe near the mouths of rivers that flow into estuaries.

**Research: National Museum of Natural History**

A recent publication co-authored by NMNH’s Jonathan Coddington reported the discovery of a new species of spider in Africa and Madagascar, *Nephila komaci*. On average, it is the largest known web-spinning spider, with females having a body length of about 1.5 inches and a leg span of up to 5 inches.
The Weeping Goldsmith: Discoveries in the Secret Land of Myanmar, by W. John Kress of the NMNH Department of Botany, is a first-person narrative of the author's trek through Myanmar’s exotic landscapes to document its botanical biodiversity. Among his many finds was “the weeping goldsmith,” the ginger flower of the book's title.

Evidence shows that most of the earliest angiosperms (flowering plants) were pollinated by insects, but whether this was also the case for early gymnosperms (non-flowering plants such as conifers) has been widely disputed. In findings published in Science, NMNH paleoentomologist Conrad Labandeira and his team present evidence that gymnosperm plants shared a pollination relationship with scorpionfly insects 62 million years before flowering plants appear in fossil records.

Researchers in the field of biogeography analyze patterns of biodiversity, species distribution, and geological history to unravel the complex history of life on Earth. However, the field has historically been fragmented into divergent approaches, with no unifying research theme or method. In Comparative Biogeography: Discovering and Classifying Biogeographical Patterns of a Dynamic Earth, NMNH’s Lynne Parenti and Malte Ebach address this discord and outline tools to unify biogeography.

Research: Smithsonian Tropical Research Institute (STRI)

The results of the Smithsonian's technical workshop and public symposium on tropical extinctions were published as a special section of the December 2009 issue of Conservation Biology, titled New Insights into the Tropical Biodiversity Crisis. The section was co-edited by STRI scientists William F. Laurance and S. Joseph Wright, who also organized the workshop and public symposium in cooperation with the Office of the Under Secretary for Science and with support from the science committee of the Smithsonian National Board.

A team of researchers including Laurance also published an article in Science suggesting a new strategy for saving tropical forest species. It calls on wealthy countries to adopt a carbon-payment system that explicitly incorporates biodiversity values.

In an article in Trends in Ecology and Evolution, STRI scientists and their colleagues at James Cook University in Australia drew on dozens of studies from the Amazon, Australasia, and Central Africa to argue that linear clearing for infrastructure such as roads, canals, and power and gas lines could be the greatest threat to tropical rain forests.

More than 90 experts from the Intergovernmental Panel on Climate Change met at STRI facilities in Panama City to plan the first global scientific assessment of disaster-risk reduction and climate-change adaptation. Their report is to be completed in 2011.
In an article in *Proceedings of the National Academy of Sciences*, STRI’s Carlos Jaramillo and his collaborators investigated how tropical biota responded to the cataclysmic meteorite impact on the Yucatan Peninsula 65 million years ago that led to the extinction of the dinosaurs.

**Research: Other**

Mark Torchin of the Smithsonian Tropical Research Institute and Greg Ruiz of the Smithsonian Environmental Research Center organized an International Workshop on Marine Invasions, held in Panama in November 2009. The meeting, which included participants from the United States, Panama, Belgium, Canada, Mexico, and Australia, explored opportunities for collaborative research on invasions associated with marine transportation between the Pacific and Atlantic Oceans.

Andrew Johnston of the National Air and Space Museum is analyzing tree cover changes in the District of Columbia from 1984-2004, using calibrated satellite remote sensing data. Urban forests are an important focus of study for understanding human-environment interactions, and the results will identify climate patterns and land use practices that affect tree cover.

Research is underway for an upcoming Anacostia Community Museum exhibition that will explore the history and ecology of the Anacostia River, long considered one of the nation’s most troubled urban waterways. Research plans include probing community attitudes toward the River.

**Access**

The Smithsonian Center for Education and Museum Studies held a three-day online educational conference, Climate Change, which reached participants in all 50 states and over 80 countries. The conference explored changing global climate from the perspectives of disciplines ranging from wildlife management to paleontology to art history. Twelve Smithsonian units took part.

The Center for Education and Museum Studies also launched an online simulation to complement the fall 2009 issue of *Smithsonian in Your Classroom*, which focuses on the work of Smithsonian paleontologist Scott Wing.

Botanist W. John Kress of the National Museum of Natural History teamed up with Shirley Sherwood, a member of the Museum’s advisory board, to create *The Art of Plant Evolution*, a beautifully illustrated book that juxtaposes the artist’s desire to capture the essence of nature through color and composition, and the botanist’s goal of classifying species and understanding the relationships among them.

The traveling exhibition *Losing Paradise? Endangered Plants Here and Around the World* opened at the Missouri Botanical Garden in St. Louis, Missouri. Featuring 44 botanical artworks of endangered plants, the exhibition was created by the American Society of Botanical Artists in collaboration with the National Museum of Natural History.
The *Nature’s Best Photography* exhibition at the **National Museum of Natural History** (November 12, 2009–May 2, 2010) displays the winners from the 2009 Windland Smith Rice International Awards, which honor talented amateur and professional nature photographers from around the world.

**Valuing World Cultures**

**Research**

The **National Museum of Natural History** sponsored a scholarly workshop, *Recovering Voices: Partnerships in Documentation and Revitalization of Endangered Languages and Indigenous Knowledge*. It was attended by over 50 linguists, anthropologists, Native language activists, and other cultural experts. Scholars from the **Center for Folklife and Cultural Heritage** had a busy quarter.

- Olivia Cadaval, Daniel Sheehy, and Cristina Díaz-Carrera undertook field research in Mexico for a 2010 Smithsonian Folklife Festival program on that country.
- Marjorie Hunt established a partnership with the National Geographic Society to collaborate on a Folklife Festival program on endangered languages around the world.
- Diana N’Diaye lent her expertise to a scholarly selection panel for the International Folk Art Market of Santa Fe, New Mexico.
- Center staff organized two panels at the American Folklife Society’s annual conference in Boise.
- The Center established a partnership with the NGO Serengeti Genesis to conduct research on traditional culture in Tanzania, with an eye to creating a Folklife Festival program for 2011.

Among the publications from the **Freer and Sackler Galleries** were articles by Louise Cort, James Ulak, and Paul Jett, the last of which resulted from an ongoing collaboration with the Shaanxi Provincial Archaeological Institute in Xi’an, China; the proceedings of a symposium, *Scientific Research on Historic Asian Ceramics*; the catalogue *Falnama: The Book of Omens* by Massumeh Farhad with Serpil Bagci; and the first-ever guide book to Galleries collections, *Ideals of Beauty*.

The catalogue for the **Freer and Sackler Galleries** exhibition *Garden and Cosmos: The Royal Paintings of Jodhpur* received the College Art Association’s Alfred H. Barr Jr. Award for museum scholarship.

The **National Museum of the American Indian** conducted a two-day scholarly symposium, *Surveying Andean Legacy: Archeological Research Along the Inka Road System*, a collaborative project with the Inter-American Development Bank Cultural Center.

The **National Museum of African Art** hosted a special symposium for graduate students in art history, visual anthropology, and museum studies, *Locating Yinka Shonibare MBE*, at which attendees shared their research on the noted Nigerian artist.
The National Museum of African Art published Karen E. Milbourne’s *Artists in Dialogue: António Ole and Aimé Mpane*. Museum curator Christine Mullen Kreamer and conservator Stephanie Hornbeck also contributed to a special issue of the journal *African Arts* focusing on the ephemeral arts—the former as guest co-editor, and the latter as an article author.

The catalogue *Guillermo Kuitca: Everything*, featuring the works of a celebrated Latin American contemporary artist, was published to accompany an exhibition organized by the Hirshhorn Museum and Sculpture Garden, Albright-Knox Art Gallery in Buffalo, and Miami Art Museum.

The Smithsonian’s Museum Conservation Institute, in collaboration with the Smithsonian Tropical Research Institute, National Museum of Natural History, and National Museum of the American Indian, is conducting physical analysis of gold collections unearthed in Tropical Research Institute excavations of sites that date back to 700 CE.

**Access**

The exhibition *Falnama: The Book of Omens*, on view at the Arthur M. Sackler Gallery (October 24, 2009–January 24, 2010), showcased brilliantly illustrated divination texts created in Safavid Iran and Ottoman Turkey in the 16th and 17th centuries. The making of the exhibition was the subject of *Inside the Book of Omens*, a video series by BBC World News America.

The Museo del Canal Interoceánico de Panamá, a Smithsonian Affiliate in Panama City, Panamá, collaborated with the Smithsonian Latino Center, Smithsonian Tropical Research Institute, and other Smithsonian units on the exhibition *Panamanian Passages* (October 5, 2009–May 31, 2010, in the International Gallery of the Ripley Center) and a series of performances and programs attached to it.

_Yinka Shonibare MBE_, an exhibition at the National Museum of African Art (November 10, 2009–March 7, 2010) offered a mid-career survey of works by one of the most celebrated African artists of his generation. It was the first offering in the Museum’s multi-year series of exhibitions, programs, and events, Nigeria: Then, Now and Forever.

The National Museum of African Art also was awarded two silver e-medals (for Best Art Museum Site and Best Government Site, respectively) by the independent website assessment group W3.

The National Museum of American History hosted a family Day of the Dead/Día de los Muertos festival that brought one of Mexico’s biggest holidays to the Mall.
The Latino Virtual Museum, a project of the Smithsonian Latino Center hosted by Second Life, presented a virtual Día de Muertos festival to mark the Mexican celebration of the ancestors. Website hits to the Día de Muertos directory numbered nearly 60,000, with almost 2,000 visitor avatars making “personal” appearances.

The Smithsonian Folkways: Sounds to Grow On podcast was featured on iTunes and reached #21 on the music podcast charts. The program, hosted by Michael Asch, son of Folkways Records founder Moses Asch, has been downloaded more than 250,000 times.

Thirteen Smithsonian Folkways albums and songs, representing a variety of nations and genres, were named Independent Music Award finalists, and two albums went on to win in February.

The Smithsonian Folkways recording Borders y Bailes, featuring traditional conjunto tejano music of south Texas as performed by the group Los Texmaniacs, was nominated for a Grammy award in the Best Tejano Album Category. In February 2010, it was named a winner.

The African Presence in México: From Yanga to the Present (November 9, 2009–July 4, 2010), an exhibition at the Anacostia Community Museum, examines the history, culture, and art of Afro-Mexicans. It is accompanied by the companion exhibit Who Are We Now? Roots, Resistance, and Recognition, which charts the relationship of African Americans to Mexico and Mexicans.

Understanding the American Experience

Research

The American Art Museum and University of California Press published What's It All Mean: William T. Wiley in Retrospect, to accompany the exhibition with the same title organized by the Museum. The book gives an overview of the artist's 50-year career.

The catalogue Anne Truitt: Perception and Reflection was published by the Hirshhorn Museum and Sculpture Garden to accompany its exhibition of the same name.

In collaboration with the National Museum of African American History and Culture, the National Museum of the American Indian hosted a scholarly symposium tied to the exhibition IndiVisible: African-Native American Lives in the Americas. A catalogue to accompany the exhibition was also released.

The Smithsonian Latino Center is sponsoring the Latino D.C. History Project, which seeks to document and interpret the Latino presence in the Washington, D.C. region since World War II. Led by Professor Elaine Peña of George Washington University, the Project is expected to result in an exhibition, public programs, and education and outreach activities.
The winter 2009 issue of the *Archives of American Art Journal* explores “artists and animals” with articles that draw on Archives collections, including a contribution by Leonard Marcus on *No Such Animal*, an early children’s work by writer-painter-poet Charles Green Shaw.

In partnership with the Freer and Sackler Galleries and Smithsonian Asian Pacific American Program, the American Art Museum hosted a symposium, *A Long and Tumultuous Relationship: East-West Interchanges in American Art.*

The Anacostia Community Museum is collaborating with the American University’s Center for Community Voice to develop a video component for a community documentation project on the Frederick Douglass Dwellings, the largest war housing project for African American citizens in Washington, D.C.

An article by Cheryl Ganz of the National Postal Museum in the journal *American Philatelist*, *The History of American Women in Philately*, recounts the contributions of U.S. women to the study and preservation of postage stamps.

The Museum Conservation Institute performed expert conservation work on a dress sewn by Civil Rights icon Rosa Parks. The dress, which was acquired by the National Museum of African American History and Culture in 2007, had been marred by a number of small but disfiguring tears.

Access

William H. Gross, founder of PIMCO and an avid stamp collector, has donated $8 million to the National Postal Museum to create a new 12,000 square-foot gallery that will be named in his honor. The gallery, which will give the Museum public space at the street level, is expected to open in 2012.

In conjunction with its *Outwin Boochever Portrait Competition 2009* exhibition (October 23, 2009–August 22, 2010), the National Portrait Gallery announced the Competition winners. Grand-prize winner Dave Woody will be commissioned to do a portrait of a prominent living American for the Gallery’s collection. The Gallery also unveiled the exhibition *Portraiture Now: Communities* (November 6, 2009–July 5, 2010).

The National Portrait Gallery joined iTunes U, a part of the iTunes Store featuring free lectures, lessons, and audiobooks, to provide a distribution channel for the Gallery’s recorded lectures, curator talks, artist interviews, exhibition tours, and other audio resources. Since joining iTunes U, podcast downloads have jumped from about 14,000 per month to over 130,000.

The American Art Museum hosted the exhibition *What’s It All Mean: William T. Wiley in Retrospect* (October 2, 2009–January 24, 2010), featuring works from the 1960s to the present, some rarely screened or on public display for the first time. A Clarice Smith Distinguished Lecture featuring William Wiley on September 30, 2009 drew a standing room crowd.
Brian Jungen: Strange Comfort (October 16, 2009–August 8, 2010), an exhibition at the National Museum of the American Indian, offers a major survey of the work of Brian Jungen (Dunne-za First Nations/Swiss-Canadian), who transforms familiar elements into exquisite art that comments upon themes such as globalization and pop culture.

The George Gustav Heye Center of the National Museum of the American Indian in New York is hosting the exhibition A Song for the Horse Nation (November 11, 2009–July 7, 2011), a treasure-trove of historical objects that illustrate how horses shaped American Indian life, particularly on the Great Plains.

The Hirshhorn Museum and Sculpture Garden presented the exhibition Anne Truitt: Perception and Reflection (October 8, 2009–January 3, 2010), a retrospective of a significant but under-appreciated Washington, D.C. artist. It enjoyed national press and critical attention, and was chosen as one of the year’s best by Washington Post art critic Blake Gopnik.


The National Museum of American History opened several new exhibitions:

- **Holidays on Display** (November 12, 2009–September 30, 2010) looks at the heyday of holiday displays and parades in U.S. cities, from the 1920s through the 1960s.

- **Hotspots of Invention** (opened November 6, 2009), a showcase exhibit from the Lemelson Center for the Study of Invention and Innovation, examines how war-era labs at the Massachusetts Institute of Technology helped transform Cambridge, Massachusetts into a center of innovation.

- **Indian Ledger Drawings** (November 13, 2009–February 5, 2010), in the Albert H. Small Documents Gallery, explored how drawings made by American Indians in captivity preserved their heritage.

In addition, the American History Museum’s Gunboat Philadelphia exhibition has been extensively renovated and updated.
The National Postal Museum expanded its online offerings for teachers with two new sets of lesson plans, Moving the Mail West (for middle- and high-school classes studying the history of the American West) and Design-It (which integrates art and social studies standards for upper elementary grades in a lesson package about stamp designing).

The Postal Museum also offered several new online exhibits:

- The Museum collaborated with the National Gallery of Art to create a special holiday online exhibition, The Art of Christmas Stamps.
- *The Lost Symbol on U.S. Postage Stamps* focuses on stamps that feature the iconic Washington, D.C. structures that figure in Dan Brown’s recent thriller, *The Lost Symbol*.
- For Hispanic Heritage Month, the Museum launched a Spanish version of its online exhibit Celebrating Hispanic Heritage: People, Places, and Events on Stamps.

The exhibition Design USA: Contemporary Innovation (October 16, 2009–April 4, 2010) at Cooper-Hewitt, National Design Museum celebrates the winners of the prestigious National Design Awards. According to The New York Times, the exhibition’s innovative audio visual tour makes other museum tours look like a “horse and buggy.”

Caroline Payson, head of education at Cooper-Hewitt, presented at the 2009 U.S. National Design Policy Summit, which brought together leaders from professional design associations, design education bodies, and Federal government agencies to craft an agenda for U.S. design policy to promote economic competitiveness and democratic governance.

The Asian Pacific-American Program presented a panel discussion on Filipino American World War II veterans; a South Asian Literary and Theater Arts Festival showcasing South Asian-American writers and filmmakers; and a presentation by Resident Scholar Konrad Ng on how new media are affecting media representations of Asian Pacific Americans.

Over 12,000 visitors attended the National Museum of the American Indian’s Deer to Dance Family Day, a collaboration with the Smithsonian Center for Education and Museum Studies. The program included hide-tanning, moccasin-making, beading, leather working, storytelling, and performances of song and dance.

The American Art Museum has created Art Signs, a monthly series of gallery talks presented in American Sign Language, with voice interpretation for hearing visitors. The Museum also received a grant from the David and Lucile Packard Foundation to bring every 6th grade student from Washington D.C. public and public charter schools to the Museum.

The National Museum of the American Indian held training workshops for Native cultural center staff in Washington, California, Minnesota, New York, Wisconsin, Tennessee, and Maryland, as well as for staff from D.C. area schools. It also distributed over 17,000 classroom resources nationwide, including teaching posters and guides, pre-visit materials, and e-newsletters.
Education, Events, and Outreach

Education

The 17th annual Smithsonian Teachers’ Night, organized by the Smithsonian Center for Education and Museum Studies and hosted by the National Museum of Natural History on October 23, 2009, was the best-attended Teachers’ Night ever, drawing 4,800 educators. Dr. Jill Biden, wife of Vice President Joe Biden and an educator for 29 years, was guest speaker.

The National Air and Space Museum offers a variety of programs to support the national effort to improve STEM (Science, Technology, Engineering and Mathematics) education. These include a Science in Pre-K program that offers professional development for teachers and classroom and fieldtrip experiences for young children; and astronomy programming for D.C. 5th-grade students that can now include observing the sky with a professional telescope at the Museum’s new public observatory.

The Museum Conservation Institute and the U.S. Department of State’s Cultural Heritage Center organized a three-day workshop, Preventing Illicit Trafficking, Protecting Cultural Heritage, for U.S. Department of Homeland Security agents tasked with preventing the illicit trade of art and antiquities.


Events

Nearly 10,000 people visited Cooper-Hewitt, National Design Museum during its fourth annual National Design Week. The highlight was the tenth annual National Design Awards Gala on October 22, 2009, which celebrated the 2009 Award honorees. Coverage appeared in a variety of design, architecture, and general-interest publications with a readership of over 277 million.

The Hirshhorn Museum held another of its highly successful After Hours programs for young professionals, selling 2,200 tickets in advance for the evening of music, fun, and art. Its popularity has inspired other Smithsonian units to plan similar events.

National and International Outreach

Smithsonian Affiliations offers museums, cultural institutions, and educational organizations access to the Institution’s collections and resources. As of December 2009, there were 168 Affiliates in 41 states, the District of Columbia, Panama, and Puerto Rico. In the first quarter of fiscal year 2010:

- The Smithsonian welcomed two new Affiliates: The Institute of Texan Cultures in San Antonio, Texas; and The Putnam Museum of History and Natural Science in Davenport, Iowa.

- Smithsonian units loaned 267 artifacts to Affiliate organizations; there are currently 1,132 Smithsonian objects on view at Affiliate organizations.
• The Durham Museum, an Affiliate in Omaha, Nebraska, hosted a Smithsonian Teacher’s Night for the fifth consecutive year. Affiliations’ YouTube channel, SmithsonianNeighbor, featured It’s Your Story, from the National Museum of American Jewish History in Philadelphia, Pennsylvania; it attracted 208,000 online viewers in three months.

The Smithsonian Institution Traveling Exhibition Service (SITES) continued to sustain a high level of outreach activity:

• SITES revised its Museum on Main Street operating plan to facilitate direct collaboration with state humanities councils, expanding the Smithsonian’s reach into rural America. Exhibits in the series have been displayed in 844 communities in 43 states and one U.S. territory.

• The buzz surrounding the upcoming 75th birthday anniversary of “The King” in January 2010 drew extensive media coverage to the new SITES exhibition Elvis at 21. This included coverage on Entertainment Tonight, in Vanity Fair, on CBS Sunday Morning, and in other media.

• SITES installed the Center for Folklife and Cultural Heritage exhibition The Working White House: 200 Years of Tradition and Memories at the White House Visitor Center on December 15, 2009, in time for the peak holiday tourist season.

The National Science Resources Center (NSRC) remained active in promoting reform in the science curriculum across the nation’s schools and beyond:

• NSRC was invited by the Gates Foundation to participate in Understanding the STEM Competitive Priority: A Resource Conference for State Teams, held in Baltimore. The conference, convened by industry partners interested in strengthening science, technology, engineering, and mathematics (STEM) education in the United States, drew representatives from 22 states.

• NSRC co-hosted the Building Awareness of Science Education Symposium for 125 Indiana leaders, to build support for a statewide science education strategy.

• The NSRC’s preliminary needs assessment for K-16 science education reform in Alaska has catalyzed an initiative to transform science education in the state. First steps in 2010 will include a summit to engage government officials and representatives from other interested organizations.

• The NSRC hosted a meeting of its International Coalition, a network of education stakeholders that seeks to disseminate best practices, explore innovative strategies, promote collaboration across sectors of the economy, and develop strategic alliances.

On November 4, 2009, in a ceremony carried on Korean television and covered by the Korean Times and other Korean national media, Freer and Sackler Galleries Director Julian Raby signed an agreement with the National Museum of Korea in Seoul to collaborate on projects promoting Korean art and culture.
The Smithsonian Conservation Biology Institute of the National Zoo hosted an international stakeholder workshop, The Role of Zoos in the Conservation of Wild Asian Elephants, at its facility in Front Royal, Virginia.

In November, four Smithsonian scholars presented Native American Plains heritage to over a thousand Natrona County elementary school students as part of a Smithsonian Associates’ Scholars in the Schools program in Casper, Wyoming.

Center for Folklife and Cultural Heritage researcher James Deutsch completed a lecture and consultancy tour in the Czech Republic, which included working with curators at the National Technical Museum in Prague on collections and exhibition plans.

Collections

On December 23, 2009, the National Museum of African American History and Culture received an extraordinary gift from noted historian and collector Dr. Charles Blockson, consisting of artifacts and archival collections from the life of abolitionist Harriet Tubman. It includes photographs, a lithograph portrait, speaking notes, correspondence, and a shawl given to Tubman by Britain’s Queen Victoria.

The National Portrait Gallery made two significant additions to its collections:

- A daguerreotype of the Native American leader Blacksnake, circa 1850. Daguerreotype portraits of identified, biographically significant Native Americans are exceedingly rare.
- An engraving of Christopher Columbus by André Thevet, circa 1584, which lays claim to being the most authentic image of Columbus in existence, and which, as the first portrait of Columbus in the Gallery’s collection, fills a critical gap.

The National Museum of American History transferred ownership of a 1938 PEPCO Fireless locomotive to the B&O Railroad Museum in Baltimore, Maryland, which unveiled it at a celebration of the Museum’s 10th Anniversary as a Smithsonian Affiliate in October, 2009.

The Smithsonian Institution Archives and National Museum of Natural History Department of Botany received a competitive grant of nearly $500,000 from the Council on Library and Information Resources (CLIR) to support a documentation project, Exposing Biodiversity Fieldbooks and Original Expedition Journals. The three-year project will describe, digitize, and make web-accessible both field notebooks held in the Archives and expedition specimens held in the Natural History Museum.
The Archives of American Art received a $250,000 matching grant from the Save America’s Treasures program to digitally reformat 4,000 reels, cassettes, and mini-disks of interviews conducted for the Archives’ Oral History Program, previously at risk due to deterioration and format obsolescence.

The Hirshhorn Museum and Sculpture Garden completed a comprehensive collections policy document covering collecting strategy, acquisition priorities, collections management, and digitization. An inventory of the sculpture collection was completed, and a photographer was hired to help achieve the goal of digitizing 50 percent of the collection by the end of 2010.

The Smithsonian Institution Libraries has established an Adopt-A-Book Program that will significantly increase the Libraries’ ability to purchase new books, preserve rare books and manuscripts, and digitize its collections, which include include first editions of books by Copernicus and Galileo and manuscripts by Isaac Newton and Albert Einstein.

A state-of-the-art book scanner installed in the Smithsonian Institution Libraries’ Dibner Library of the History of Science and Technology will help to share the Libraries’ collections of rare books with the world. It will allow for pages to be reproduced and sent to any corner of the world digitally within 30 minutes, while preserving the condition of the rare books.

Organizational Excellence

Leadership Milestones

Dennis Kelly was named Director of the National Zoological Park, and assumed this position in February 2010. Since 2003, Kelly had served as president and CEO of Zoo Atlanta, where he presided over enhancements of the scientific and animal welfare programs and the visitor experience; rebuilt marketing, government relations, and fundraising capabilities; and raised more than $40 million.

Bill Moggridge was appointed Director of the Cooper-Hewitt, National Design Museum, effective March 2010. An entrepreneur, innovator, and leader in the design world, Moggridge designed the first laptop computer in 1980 and was co-founder of IDEO, a renowned design firm. Before coming to the Smithsonian, he was a consulting associate professor in the design program at Stanford University.

Major Construction, Renovation, and Facilities Projects

National Museum of African American History and Culture

$500 million total estimated project cost

The architectural team of Freelon Adjaye Bond/SmithGroup is working with Smithsonian staff on the second phase of an environmental impact statement (EIS) and on concept design alternatives. Public outreach on the Museum’s design has included an EIS public scoping meeting in December 2009 and monthly meetings with historic resources consulting parties. The architectural team briefed the Commission of Fine Arts and the National Capital Planning Commission on the proposed design, and is engaged with the Commissions’ staffs on developing concept alternatives. Construction procurement strategies are being considered, with the goal of opening the Museum in late 2015. Total project costs are $250 million in Federal funds and $250 million in Trust funds.
Arts and Industries Building (AIB)

$64 million estimated cost for shell only

The development of construction documents is on schedule for roof reconstruction, window replacement, and structural upgrades; construction on these improvements will begin in fall 2010. Work on the building core is in the scope development phase. Exterior masonry repair/cleaning and selective interior demolition and hazmat removal (funded by the American Recovery and Reinvestment Act) will be completed this spring. Program possibilities appropriate for the building continue to be explored. A strategy that will result in a public opening in fiscal year 2015 has been developed, and consensus is being sought on an allocation of resources within the Facilities Capital Plan to support the revitalization effort.

National Zoological Park, Asia Trail II: Elephant Trails

$52.4 million estimated total project and program cost

The second phase of the Asia Trail project will renovate the elephant house and enlarge yard space at a projected cost of $52.4 million—$37.6 million Federal (received in fiscal years 2006–2010) and $14.8 million Trust. Construction began in March 2008 and is scheduled for completion in April 2011. The elephant barn and outdoor habitat are substantially complete, and the elephants moved into their new holding area late this spring. Renovation of the “elephant community center” will commence in late spring, after the elephants acclimate to their barn and a decision is made on whether to bring in a new contractor to complete the work, given the less than satisfactory performance of the current contractor.

National Zoological Park, Seal / Sea Lion Exhibit

$40.0 million total estimated project cost

The Zoo’s seal/sea lion exhibit requires major revitalization to meet Department of Agriculture and Association of Zoos and Aquariums standards for animal care. Further, the pathway through the exhibit area is difficult for strollers and people with disabilities, and needs renovations to improve accessibility. The project will also include an upgrade of underground utilities. The U.S. Commission of Fine Arts and the National Capital Planning Commission approved the final design in 2009; a construction contract was awarded in September 2009; and demolition and site preparation work is now underway. The non-capital, interpretive component of the project will be funded with $1 million in Trust funds. The Federal capital component is approximately $39 million, with multi-year funding in fiscal years 2009–2011.

National Zoological Park, General Services Building

$28.4 million total estimated project cost

Design continues for structural repairs, fire-protection improvements, and safety upgrades at the Zoo’s General Services Building, which houses vital functions that must remain operational throughout construction. The phased project will entail permanent relocation of the Institution’s vehicle maintenance branch to Suitland and temporary relocation of other functions to swing space. The construction authorization request for the new vehicle maintenance facility in Suitland was approved by the House and is currently under review by the Senate. A contract for construction of this facility was awarded.
in January 2010 with fiscal year 2010 funds. Design for General Services Building upgrades will be complete by April 2010, and structural renovation is expected to begin in 2012. Federal funding has been requested for fiscal years 2012–2014.

**National Museum of American History, Kenneth E. Behring Center**

Revitalization of west wing public space, package III: $60 million total project cost

The focus of the third phase of renovation is renewal and modernization of three public space floors on the west wing of the Museum. Data gathering and field surveys on existing conditions have been completed, and the schematic design phase is expected to be completed by summer 2010. The Federal appropriation for design ($6 million) was received in fiscal years 2009 and 2010. Additional Federal funding ($54 million) has been requested for fiscal years 2011–2013.

**Donald W. Reynolds Center for American Art and Portraiture**

$19.5 million total estimated project cost

By agreement with the National Capital Planning Commission, the Smithsonian will complete the renovation of the Reynolds Center with the reconstruction of the F Street stairs and the addition of landscaping and security. Fiscal year 2016 estimates for the associated costs are $9.5 million in Federal funds and $10.0 million in Trust funds.

**Cooper-Hewitt, National Design Museum**

$53.5 million total estimated project cost

A contract for renovation of the Fox-Miller townhouses was awarded in January 2010, with construction beginning in February 2010. Design for the Carnegie Mansion renovation is scheduled for completion in March 2010, with a construction contract expected to be awarded in September 2010 and construction expected to begin in June 2011. Total project costs include $21 million in Federal funds and $32.5 million in private funding. Federal funds included pre-fiscal year 2009 awards of $2.9 million for design and collections storage, $1.7 million in fiscal year 2009 funds for the Fox-Miller work, and the balance for Mansion construction in fiscal years 2011–2013. Of the required private funds, over $28.5 million (nearly 90 percent) has been identified in gifts and pledges.

**Smithsonian Environmental Research Center, Mathias Replacement Laboratory Project**

$44.5 million total estimated project cost

The Smithsonian Environmental Research Center is eliminating deteriorating trailers (which currently house 25 percent of lab space and 65 percent of office space); renovating and reconfiguring the existing Mathias Lab; and creating replacement laboratories to meet national standards. The 85,000 square-foot project will employ sustainable technologies and building materials that will yield substantial reductions in energy and maintenance costs. Schematic design was completed in September 2009, with final design completion scheduled for mid-2010. Construction is scheduled to commence in early 2011 and to be completed in 2013.
National Air and Space Museum—Steven F. Udvar-Hazy Center, Phase II

$80.9 million total project cost

Phase II of the Udvar-Hazy Center is under construction. It will add 237,000 square feet of collections care space to the current facility, including a restoration hangar, storage and processing space, a conservation laboratory, and archives. Construction should be complete in mid-2011, with fit-out of the storage, processing, and archives spaces subject to the receipt of Federal funding. Total project costs include $67.8 million in Trust funds and $13.1 million in Federal funds.

Museum Support Center of the National Museum of Natural History, Pod 3

$42.6 million total estimated project cost

In July 2008, the Smithsonian awarded a $22.6 million construction contract for renovations to Pod 3 in Suitland. The renovated Pod 3, on schedule for completion in March 2010, will provide a consolidated site for frozen, refrigerated, gas-preserved, and dry collections, allowing the Smithsonian to vacate leased properties and free up congested space in several museums. With 92 percent of construction completed in December 2009, more than $15 million of shelving/racking, collections and meteorite cases, and freezers are being installed. Transfers of collections are expected to be completed within two years.

Permanent Physical Security Barriers

$55 million total project cost

Construction of security barriers at the National Air and Space Museum is complete. The first phase of barrier construction at the National Museum of Natural History has been finished, and a contract for the final phase will be awarded in fiscal year 2010. Barriers are now in place on three sides of the National Museum of American History, and the final side will be completed by early summer 2010. Construction of security barriers for the Castle and Quadrangle is scheduled to start in fiscal year 2014. Design and construction of off-Mall barriers will follow in order of priority.

Smithsonian Tropical Research Institute, Gamboa Laboratory Facilities

$19.1 million total estimated project cost

With the acquisition of 172.5 acres in Gamboa from the Republic of Panama in 2007, the Smithsonian Tropical Research Institute is proceeding with the replacement of existing facilities that have outgrown their space and would need major infrastructure adjustments to support modern terrestrial tropical science. A new facility on the Gamboa site, funded with $15.67 million in Federal and $3.46 million in Trust funds, will be dedicated to terrestrial science. Programming and design of the laboratory are underway, with the first construction procurement actions scheduled for fiscal year 2010.

American Recovery and Reinvestment Act of 2009 Projects

$25.0 million total project cost

The American Recovery and Reinvestment Act, signed on February 17, 2009, provided $25 million for urgent repair and revitalization projects that were not covered by fiscal year 2009 funding. Most involve safety/code compliance or sustainability and energy efficiency. By the end of December 2009, all 23 project contract actions, totaling $21.7 million (more than 87 percent of the total), were under contract, with the residual held for contingencies and management. Construction on all projects is scheduled to be finished by early fiscal year 2011. In compliance with the Act, the Smithsonian is reporting on jobs created and expenditure of funds; the second quarterly report was completed at the end of January 2010.
**Sustainability**

Around the Smithsonian, 17 green building projects are in progress or planned. In August 2009, the Office of Facilities Engineering and Operations published a Sustainable Buildings Implementation Plan that identifies a path to greening 15 percent of the eligible Smithsonian building inventory by 2015. The plan focuses on meeting Federal sustainability requirements and earning Leadership in Energy and Environmental Design (LEED) certifications, not only for new construction and major renovations, but also for existing buildings.

- In October 2009, the Energy Savings Performance Contract project for the National Museum of American History and National Museum of Natural History received the General Services Administration's annual Achievement Award for Real Property Innovation for sustainability.
- In November 2009, the National Zoological Park converted its 2500-gallon diesel fuel pumps to run on a cleaner-burning soy-based bio-diesel blend, which will help reduce hydrocarbon emissions by 20 percent, as well as lowering carbon monoxide and particulate emissions.
- By year end, work was underway to develop Smithsonian fiscal year 2020 greenhouse gas emission reduction targets, in response to an Executive Order (Federal Leadership in Environmental, Energy and Economic Performance) issued on October 5, 2009.

**Information Technology**

The first quarter of fiscal year 2010 saw several notable developments at the Office of the Chief Information Officer (OCIO):

- OCIO began a redesign of the main Smithsonian website, www.si.edu, which last underwent a major redesign eight years ago. The newly designed site will incorporate features that respond more effectively to the expectations of today's virtual visitors; it will be launched in summer 2010.
- OCIO successfully deployed MedarX, a newly-developed, web-based veterinary medical record-keeping system for animal care at the National Zoo and its Smithsonian Conservation Biology Institute. This replaced a 1990s-era system that had been experiencing data and reliability issues.
- OCIO completed infrastructure enhancements to accommodate pan-Institutional research access by all interested Smithsonian scientists to the High Performance Computing Cluster, located in the Smithsonian's Data Center in Herndon. The Cluster originated at, and was previously only available to, the Smithsonian Astrophysical Observatory.
Prepared by
Office of Policy and Analysis