Smithsonian Institution



The National Zoological Park, Smithsonian Tropical Research Institute, and National Museum of Natural History have collaborated to create Smithsonian Wild, a website featuring 206,000 "camera-trapped" images of wildlife.

Report to the Regents Second Quarter, Fiscal Year 2011

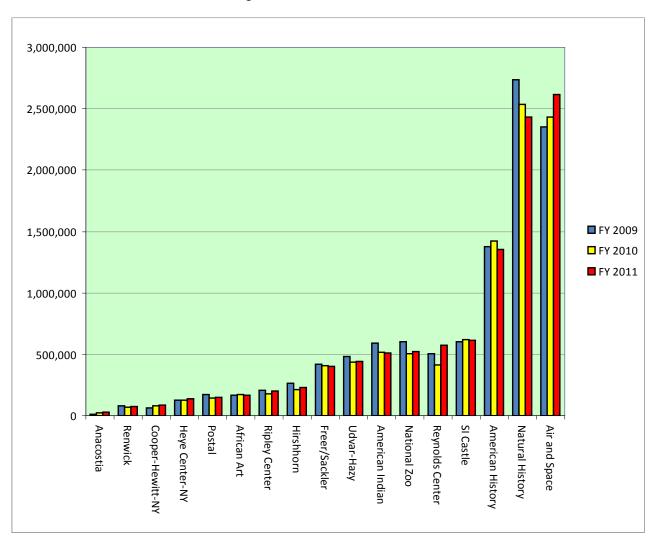
Broadening Access: Visitation Summary

In the second quarter of fiscal year 2011, the Institution counted about 10.5 million visits to its museums in Washington, D.C. and New York, plus the National Zoological Park and Steven F. Udvar-Hazy Center—up about 2 percent from the figure for this period in fiscal year 2010. Of particular note was the increase in visitation at the Donald W. Reynolds Center for American Art and Portraiture (up 38 percent), which reflects the impact of two exhibitions that received wide media coverage: the Smithsonian American Art Museum's *Telling Stories: Norman Rockwell from the Collections of George Lucas and Steven Spielberg* and the National Portrait Gallery's *Hide/Seek: Difference and Desire in American Portraiture*.

The Smithsonian also counted:

- Approximately 1.5 million visits to traveling exhibitions mounted by the Smithsonian Institution Traveling Exhibition Service; and
- About 61 million visits to Smithsonian websites.

Visits to Smithsonian Venues
First Two Quarters, Fiscal Years 2009, 2010, and 2011



Grand Challenges Highlights

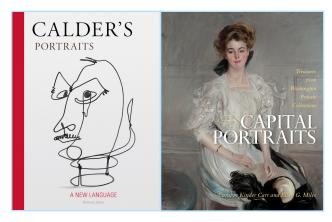
Understanding the American Experience

Research

In conjunction with other Smithsonian museums and external partners, the National Museum of American History launched a research initiative on immigration and migration that will explore the historical and cultural context for this timely topic. Two specific goals for the project are participation in the 2015 Folklife Festival and development of a major exhibition for the Museum in 2016-2017.

The Smithsonian Institution Scholarly Press published two catalogs to accompany exhibitions at the National Portrait Gallery: Calder's Portraits: "A New Language" by Barbara Zabel, and Capital Portraits: Treasures from Washington Private Collections by Carolyn Kinder Carr and Ellen G. Miles.

The Smithsonian American Art Museum published two books to accompany exhibitions: *To Make a World: George Ault and 1940s America* by Alexander Nemerov (Yale University Press); and *History in the Making: Renwick Craft*



Invitational 2011 by Nicholas R. Bell of the Renwick Gallery, Ulysses Grant Dietz, and Andrew Wagner (with Scala Publishers).

In conjunction with the *Hide/Seek* exhibition, the **National Portrait Gallery** hosted over 150 participants at a scholarly symposium, "*Hide/Seek*: Addressing (and Redressing) the Silence—New Scholarship in Sexuality and American Art."

Oberlin sociologist Pawan Dhingra arrived in January 2011 to curate an exhibition arising from the **Asian Pacific American Program's** initiative to document the experiences of Indian Americans, *HomeSpun: Smithsonian Indian American Heritage Project*.



In conjunction with the exhibition *Alexis Rockman: A Fable for Tomorrow*, the **Smithsonian American Art Museum** presented an Art and Science Lecture Series. Speakers included Rockman and a number of Smithsonian and external experts with an interest in the intersection of culture and science.

Broadening Access

Smithsonian Folkways released *JAZZ: The Smithsonian Anthology*, a 6-CD compendium hailed as a "landmark achievement" by the *Washington Post* and "the best single introduction to America's first great musical form" by *Time*. Folkways also released *A Life of Song* by Ella Jenkins, the "First Lady of Children's Music," featuring stories and songs recalling the artist's youth.

The exhibition To Make a World: George Ault and 1940s America at the Smithsonian American Art Museum (March 11-September 5, 2011) evokes a nation buffeted by economic depression and global conflict through paintings by George Ault (1891-1948) and other artists of the era, including Edward Hopper and Andrew Wyeth.

As part of the Smithsonian's Black History Month programming in February, the National Museum of African American History and Culture presented a range of offerings, including:

- A sing-along performance of songs from the Civil Rights era with the Washington Performing Arts Society Children of the Gospel Choir and Grammy nominated hiphop artist Christylez.
- A program of readings of works by Frederick Douglass and others, to accompany a colloquium exploring relationships between free blacks and whites in the antebellum United States—the first of three colloquia co-sponsored by the Museum, the

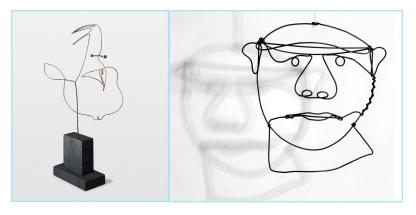
Chautaugua Institution, and Colonial Williamsburg.





The art of George Ault

A discussion featuring collectors Bernard and Shirley Kinsey and author Douglas A. Blackmon, focusing on Blackmon's groundbreaking historical study, Slavery by Another Name: The Enslavement of Black Americans from the Civil War to World War II.



The portraiture of Alexander Calder: Calvin Coolidge (left) and Babe Ruth

The exhibition Calder: A New Language opened at the National Portrait Gallery (March 11-August 14, 2011). Although best known for his abstract works, Alexander Calder (1898-1976) was also a prolific portraitist, crafting unique depictions of entertainment, sports, art-world, and other public figures throughout his career, including Josephine Baker, Jimmy Durante, Babe Ruth, and Charles Lindbergh.

The National Portrait Gallery also

acquired a new portrait of baseball player Pedro Martinez. The event at which the portrait was unveiled was attended by a number of major-league players, and received widespread media coverage.

The exhibition R.C. Gorman: Early Prints and Drawings, 1966-1974 (January 13-May 1, 2011) was on display at the National Museum of the American Indian. It featured 28 drawings and lithographs by internationally renowned Navajo artist R.C. Gorman.

History in the Making: Renwick Craft Invitational 2011 (March 25–July 31, 2011) at the Renwick Gallery presents the work of silversmith Ubaldo Vitali, ceramic artist Cliff Lee, glass artist Judith Schaechter, and furniture maker Matthias Pliessnig. It is the fifth in the Gallery's biennial series.

The National Museum of American History website Azucar! The Life and Music of Celia Cruz was selected for inclusion on the National Endowment for the Humanities' EDSITEment website, which features high-quality online resources for education in the humanities.

The National Museum of American History, Smithsonian Affiliations, and the National Museum of African American History and Culture partnered to present two programs marking the 50th anniversary of the 1961 Freedom Rides:

• A Youth Summit, which featured a panel of Freedom Rides veterans including U.S. Representative John Lewis. Over 1,500 middle- and high-school students participated onsite in Washington, D.C. or via webcast at five Smithsonian Affiliate locations, and nearly 20,000 students from across the country joined via the internet.



Three Smithsonian units collaborated on a program to honor the Freedom Riders

• An advance screening of the PBS film *Freedom Riders*, an acclaimed documentary by award-winning filmmaker Stanley Nelson, who participated in a panel discussion following the film.

The Anacostia Community Museum's 26th annual Martin Luther King, Jr. program was held on January 14. It featured a keynote address by political commentator Juan Williams and a question-and-answer session with *Essence* magazine correspondent Cynthia Gordy. Over 400 people attended.



Supreme Court Justice Ruth Bader Ginsberg was featured in a program from The Smithsonian Associates

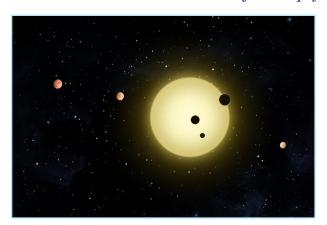
Among the programming highlights from The Smithsonian Associates this quarter was an interview with Supreme Court Justice Ruth Bader Ginsburg, conducted by NPR correspondent Nina Totenberg. The program received national media attention when Justice Ginsburg confirmed during the evening that she would not retire for at least two more years.

The Archives of American Art presented the exhibition SPANS: Photographs from the Esther McCoy Papers at the Archives of American Art, featuring a site-specific installation by artist Terence Gower, in the Lawrence A. Fleischman Gallery of the Reynolds Center (March 9–June 5, 2011). The Archives also launched a redesigned website, featuring a cleaner design and improved navigation.

More than 200 people attended a screening of Junichi Suzuki's film 442: Live with Honor, Die with Dignity sponsored by the Asian Pacific American Program. The program also featured a panel discussion with Suzuki and World War II veteran Terry Shima.

Unlocking the Mysteries of the Universe

Research: Smithsonian Astrophysical Observatory (SAO) Harvard-Smithsonian Center for Astrophysics (CfA)



SAO research includes searching for exoplanets...

Sunspots have been observed for about four centuries, since they were first reported by Galileo. They come in 11-year cycles of activity related to solar storms. The most recent solar cycle was striking: the sun entered the quietest period it has had in 100 years, spending almost two years (2008-2010) devoid of sunspots. SAO astronomers are now able to explain this unusual period in terms of the surface flow of hot material from the sun's equator towards its poles.

CfA astronomers and their colleagues on the Kepler satellite mission team reported the discovery of five new systems of exoplanets (one of

them with six planets), and the identification of over 1,200 new exoplanet "candidates"—objects awaiting confirmation. Fifty-four of these exoplanet candidates are at distances from their stars where water may exist in liquid form, a criterion for life. They have sizes ranging from Earth-sized to larger than Jupiter.



.... And investigating water vapor in space

Galaxy clusters are the most massive objects in the universe. SAO scientists and their colleagues, using the Chandra X-ray Observatory and the South Pole Telescope (both operated with SAO leadership), have discovered the largest known cluster, weighing in at 1.3 thousand trillion solar masses—more than a thousand times the Milky Way's mass. These results help to confirm models of galaxy formation that suggest galaxy clusters began with small spatial variations in the density of matter in the early universe.

Using an SAO-designed satellite, an SAO team has been studying water vapor in space. It previously reported that while water was common in the cosmos, it was much less abundant than predicted—a finding that was problematic for scientists modeling where the water on Earth originated. (Astronomers suspect that water came here in the form of ice via comets from the outer solar system.) The team has now reported that in the Orion Nebula, the water that researchers expected to find is there, but some of it is hidden—in addition to water vapor on the surface, water exists as ice deeper in the cloud.

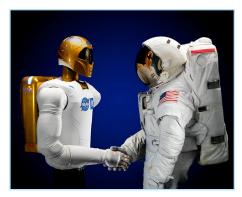
Research: National Air and Space Museum (NASM) Center for Earth and Planetary Studies (CEPS)

NASM hosted a three-day meeting for the Mars Exploration Program Analysis Group, focused on setting scientific criteria for missions to return samples from Mars. CEPS scientist John Grant is playing a lead

role in defining optimal landing site criteria, and the selection of NASM as the venue for this meeting reflects the prominent role CEPS scientists have played in the exploration of Mars.

Broadening Access

On March 16, the National Air and Space Museum's *Moving Beyond Earth* presentation center hosted a special one-day appearance by NASA's Robonaut team to demonstrate Robonaut 2A, twin to the robot currently aboard the International Space Station. The robot, nicknamed R2, was demonstrated to audiences that included school groups, general visitors, spaceflight experts, and staff.



Robotnaut (left) and friend

Coming Home: Reentry and Recovery From Space, a work for non-specialist readers by Roger Launius of the National Air and Space Museum and Dennis Jenkins, has been selected by the American Institute for Aeronautics and Astronautics for its 2011 History Manuscript Award.

Understanding and Sustaining a Biodiverse Planet

Research: National Zoological Park (NZP) Smithsonian Conservation Biology Institute (SCBI)





Black-footed ferrets and clouded leopards are two species that owe a debt of gratitude to the Zoo's JoGayle Howard

Tiger reserves in Asia could support more than 10,000 wild tigers—three times the current number—if they are managed as large-scale landscapes with habitat corridors between core breeding sites, according to a new paper in *Conservation Letters* by SCBI scientists and their colleagues. The study is the first assessment of a recent political commitment by 13 tiger-range countries to double the tiger population across Asia by 2022.

The Zoo mourned the loss of JoGayle Howard. For more than three decades, Howard dedicated her life to the reproduction of endangered species, receiving international acclaim for her innovative research. She played a leadership role in understanding the reproductive biology of the American black-footed ferret, clouded leopard, giant panda, and other species, producing more than 100 peer-reviewed publications and 20 book chapters. A special on Howard and her work, *Nature's Matchmaker*, debuted on March 13, 2011 on the Smithsonian Channel.



An NMNH scientist's study of population distributions of Danish birds yielded surprising results

Research: National Museum of Natural History (NMNH)

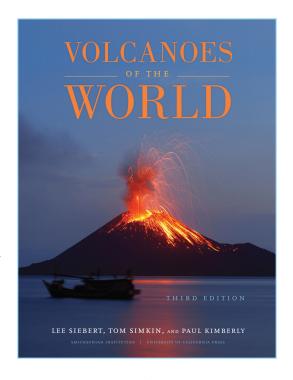
A paper in *Proceedings of the National Academy of Sciences* co-authored by NMNH's Gary Graves reported that computer simulations of co-occurrence patterns in 197 species of Danish birds show that social attraction and competition among species may generate non-random distribution patterns discernable in areas 1,000 to 10,000 times larger than individual territories. This suggests that local inter-species interactions can "scale up" to produce patterns over areas far larger than previously recognized.

Analyses of 12,000-year-old remains from three archaeological sites on California's Northern Channel Islands show that early inhabitants of coastal North America relied heavily on marine resources. A paper in *Science*, co-authored by NMNH archaeologist Torben Rick, details findings of tools and animal remains that suggest Paleocoastal peoples captured sea birds, marine mammals, and fish. The tools also may provide a link to other early tool traditions in Asia, North America, and perhaps South America.

The 3rd edition of *Volcanoes of the World* (University of California Press) by Lee Siebert, Tom Simkin, and Paul Kimberly of NMNH's Global Volcanism Program presents up-to-date information on 10,000 years of volcanic activity. It stands as the most comprehensive resource on Earth's volcanism, and is essential reading for volcanologists, public safety officials, and others with an interest in the subject.

Research: Smithsonian Environmental Research Center (SERC)

Citizen scientists can make important contributions to the research process when managed effectively. At an American Association for the Advancement of Science meeting on "Science without Borders" in Washington, D.C., SERC forest ecologist Jess Parker presented the Center's program for engaging non-scientists in environmental science, focusing on a unique partnership to use HSBC bank personnel to assist with forest tree mapping research.



SERC marine ecologist Greg Ruiz has received grants and contracts totaling nearly \$2 million for research on coastal invasive species from funders including the U.S. Coast Guard (to support the National Ballast Information Clearinghouse), the State of Maryland Port Administration, the State of California, Alaska Sea Grant, and the Regional Citizen Advisory Council of Prince William Sound, Alaska. The range of these projects and sponsors illustrates both the wide impacts of invasive species on coastal ecosystems and the diversity of SERC's external collaborations.



STRI's Stefan Schnitzer

Research: Smithsonian Tropical Research Institute (STRI)

Woody vines are overtaking trees in some tropical forests, according to a study by STRI research associate Stefan Schnitzer published in *Ecology Letters*. Long-term field observations, a hallmark of STRI's research program, reveal that the proportion of vines in tree crowns has more than doubled in the past 40 years on Barro Colorado Island in Panama, a fundamental change in forest structure that will have a profound impact on animals and people. Schnitzer's results call into question the reliability of models for carbon storage, climate, and water availability based on forests dominated by trees.

In Panama's Coiba National Park, scientists have discovered 45 new chemicals from corals, sponges, and bacteria that show great promise for treating cancer and tropical diseases. The origins of this work lie in research undertaken 20 years ago by a scientist exploring how tropical plants protect themselves against insects at STRI's research station on Barro Colorado Island. Her important insight was that the search for new drugs could be made much less expensive by targeting plants with little insect damage.

For centuries, jungle explorers pressed flowers and tendrils onto herbarium sheets to be stored at museums in North America and Europe. Today, scientists in the most biodiverse countries often lack easy access to these collections, which are needed to identify plants. The Global Plants Initiative aims to address this issue by sharing collections through an online database of high-resolution scans. Initiative partners met in January 2011 at STRI, which serves as a regional organizer for the project.

Broadening Access

Smithsonian scientists, educators, and IT specialists from the National Zoological Park, Smithsonian Tropical Research Institute, and National Museum of Natural History have collaborated to create *Smithsonian Wild*, a website featuring 206,000 "camera-trapped" images of wildlife from four continents and eight research sites. In its first month, *Smithsonian Wild* hosted more than 400,000 visits.

The Smithsonian Center for Education and Museum Studies presented two web conferences in the year-long series *Shout*, a global program



A giraffe "trapped" by the cameras of Smithsonian Wild

focused on environmental issues. In these conferences, experts from the National Museum of Natural History, Smithsonian Environmental Research Center, and Smithsonian American Art Museum interacted online with more than 2,000 students in 50 countries.



Orchids: A View from the East

Orchids: A View from the East (January 29–April 24, 2011), a collaboration with Smithsonian Gardens and the Freer and Sackler Galleries, was featured at the National Museum of Natural History. In it, visitors were surrounded by the sights and smells of live orchids as they explored Chinese reverence for this enchanting plant.

In the past quarter, the Smithsonian Tropical Research Institute hosted courses from Princeton University, Northeastern University, Arizona State University, and the University of Wisconsin, Green Bay.

The construction project to widen the Panama Canal has provided a unique opportunity for geologists and

paleontologists, led by the **Smithsonian Tropical Research Institute's** Carlos Jaramillo, to investigate the rise of the Isthmus of Panama. The Panama Canal Project, a collaboration among four U.S. and three Panamanian partners, includes a capacity-building component that trains scientists, and is also expected to produce a bilingual traveling exhibition with web-based supplementary resources.

Valuing World Cultures

Research

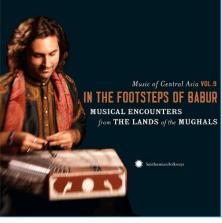
The National Museum of the American Indian held a two-day symposium, "Red, Black, and Brown: Artists and the Aesthetics of Race," which focused on themes of identity and social justice in the works of artists of mixed Native American, African American, and Latin American heritage.

Broadening Access

For the third consecutive year, **Smithsonian Folkways** won multiple Independent Music Awards. The winners were:

- Music of Central Asia Vol. 8: Rainbow, a collaboration among San Francisco's Kronos Quartet, Azerbaijan's Alim and Fargana Qasimov, and Afghanistan's Homayun Sakhi. This release was also nominated as a finalist for a 2011 Songlines Music Award.
- Music of Central Asia Vol. 9: In the Footsteps of Babur— Musical Encounters from the Lands of the Mughals, a collection of works by leading exponents of the region's musical heritage.
- Rising Sun Melodies, by Ola Belle Reed.
- Classic Appalachian Blues, featuring a distinctive regional blend of European and African styles born at the cultural crossroads of railroad camps, mines, and rural settlements.





The Art Newspaper listed the Arthur M. Sackler Gallery exhibition Falnama as the 10th most popular international art museum exhibition of 2010.

In February, the National Museum of the American Indian held its annual "Power of Chocolate" festival to celebrate one of the world's favorite flavors. The two-day event drew over 11,000 visitors.

The exhibition *Echoes of the Past: The Buddhist Cave Temples of Xiangtangshan* (February 26–July 31, 2011) at the **Arthur M. Sackler Gallery** combines majestic sixth-century Chinese Buddhist sculpture with contemporary 3-D digital imaging to explore an important group of Buddhist devotional sites.

Artists in Dialogue 2: Sandile Zulu and Henrique Oliveira (February 2–December 4, 2011) opened at the National Museum of African Art, the second in a series of exhibitions in which two artists respond to each other's work, resulting in site-specific works for the Museum.



Echoes of the Past at the Sackler Gallery

The National Museum of African Art also

hosted a North African Film Festival that showcased the diversity of recent cinema from and about this region. It featured moderated discussions following each screening and a roundtable on "Perspectives of Algerian Cinema and Visual Culture" co-sponsored by Howard University and the Algerian Ministry of Culture. Over 1,100 people attended.

Three exhibitions opened at the George Gustav Heye Center of the National Museum of the American Indian in New York City:

- The photographs of GRAB (January 29–July 31, 2011) chronicle Grab Day, a tradition in the villages of the Laguna Pueblo in which water and food are thrown from rooftops to people below.
- Small Spirits (March 5, 2011–March 2012) features a variety of Native American dolls, from prehistoric ceramic figures to contemporary creations by Inuit and Pueblo artists.
- Preston Singletary: Echoes, Fire, and Shadows (March 19–September 5, 2011) displays the works of internationally acclaimed glass artist Preston Singletary.

Also at the **Heye Center**, the 15th Native American Film+Video Festival was held from



The art of Preston Singletary

March 31–April 3, 2011. The Festival, which this year focused on "Mother Earth in Crisis," showcased nearly 100 features, short films, documentaries, and animations from 11 countries.

In March, the Freer and Sackler Galleries hosted the third Nowruz Festival, celebrating the Persian New Year. Over 6,500 people attended.

The National Museum of African Art presented an event in its new series "Island Africa" that brought together scholars, artists, and performers to explore the history and culture of Cabo Verde. Over 1,200 visitors were in attendance, including Cabo Verde Ambassador H.E. Fátima Veiga. The Museum also hosted its first after-hours event, "Africa Underground." Tickets sold out for the Afro-Brazilian themed night, which received wide media coverage.



"Island Africa" at the National Museum of African Art

In honor of Martin Luther King, the National Museum of African Art, National Museum of the American Indian, and Smithsonian Latino Center presented the two-day festival "Sharing the Dream: A Multicultural Celebration of Love and Justice," featuring the stories, music, and other traditions of African, Latino, and Native American communities.

Crossing Boundaries

Research

During this period, the Museum Conservation Institute worked on over 100 projects with over 10 Smithsonian museums, research centers, and offices, as well as NASA, NIST, the State Department, the Folger Shakespeare Library, and other government agencies, conservation groups, and universities.

The Smithsonian Institution Libraries' Smithsonian Research Online (SRO) program recently passed the mark of 10,000 publications in its digital repository. Each year, SRO collects information on nearly 2,000 publications by Institution researchers, many of whom also contribute digital versions of their articles to the repository.

Control Contro

Wayne Clough and Cate Blanchett at Cooper-Hewitt

Broadening Access

Cooper-Hewitt, National Design Museum celebrated the opening of the exhibition Set in Style: The Jewelry of Van Cleef &

Arpels (February 18–June 5, 2011) with a black-tie gala hosted by Van Cleef & Arpels at the Museum. Among the attendees were Smithsonian Secretary Wayne Clough and luminaries from the worlds of design and entertainment. Since 1906, Van Cleef & Arpels' timeless pieces have been worn by style icons including the Duchess of Windsor, Grace Kelly, and Elizabeth Taylor.

Also at Cooper-Hewitt, Color Moves: Art and Fashion by Sonia Delaunay (March 18–June 5, 2011) presented works from an artist known primarily as an abstract painter and colorist, but who also applied her talents to graphics, interiors, theater and film, fashion, and textiles.

The Hirshhorn Museum and Sculpture Garden's annual James T. Demetrion Lecture featured performance art pioneer Marina Abramović. Following up on her retrospective at the Museum of Modern Art last year, Abramović discussed how performance art is entering the history of art. The program sold out immediately after reservations were opened to the public.

The **Hirshhorn** show *Yves Klein: With the Void, Full Powers* won first place in the category of Best Historical Museum Show Nationally, in an award from the International Association of Art Critics.

In a program from The Smithsonian Associates that highlighted the *Hall of Human Origins* at the National Museum of Natural History, paleoartists John Gurche and Karen Carr discussed how they craft ancient human likenesses and landscapes from fossils and archeological artifacts.

The National Postal Museum launched the virtual exhibition *Russian Zemstvos: The G.H. Kaestlin Specialized Collection*. The Museum holds 14,000 Russian stamps in its collection, including some exceedingly rare stamps issued by Russian *zemstvos*—local administrations that provided postal services to less-accessible rural areas in pre-revolution Russia.

The National Museum of Natural History signed an MOU with the Government of Chile to produce an exhibition on the 2010 Chilean mine collapse and rescue. Chile will lend the Museum its now-famous mine rescue capsule for this special exhibition.

A family day celebrating "Women in Aviation and Space" was held at the Steven F. Udvar Hazy Center of the National Air and Space Museum. Partners for the event included the Girl Scouts, the Society of Women Engineers, Women in Aviation, and the Federal Aviation Administration.

Broadening Access: Outreach

In the second quarter of fiscal year 2011, the Smithsonian Institution Traveling Exhibition Service (SITES) circulated 44 exhibitions to 311 venues in all 50 states, plus the District of Columbia, Guam, and U.S. military bases in 10 countries. They were viewed by approximately 1.5 million visitors.

- SITES launched one new exhibition on a national tour: *Farmers, Warriors, Builders: The Hidden Life of Ants* premiered on January 29, 2011 at the New York State Museum in Albany. Developed by the **National Museum of Natural History**, it features macro photos, hands-on models, and opportunities for hosts to set up their own ant farms.
- SITES also launched a bilingual website for its upcoming exhibition *American Sabor: Latinos in U.S. Popular Music*, which is to debut at the Sacramento Public Library in Sacramento, California in May 2011.



The Hidden Life of Ants

• The Asbury Park, New Jersey opening of the SITES exhibition *New Harmonies* featured a concert with legendary musicians for whom the boardwalk town is home. Although the town's most famous musical son, Bruce Springsteen, had obligations out of town, he visited later, and other luminary musicians drew a sold-out concert hall crowd and lots of media attention.

Smithsonian Affiliations offers museums, cultural institutions, and educational organizations access to the Institution's collections and other resources. At the end of the past quarter, there were 168 Affiliates in 40 states, plus the District of Columbia, Panama, and Puerto Rico. In this quarter:

- The Smithsonian welcomed two new Affiliates: HistoryMiami in Miami, Florida, and the Tampa Bay History Center in Tampa, Florida.
- Twenty-seven artifacts were loaned to Affiliate organizations; there are currently 1,209 Smithsonian artifacts on view at Affiliate organizations.
- Twenty-three Smithsonian staff participated in programs and events with Affiliates.

The National Museum of American History has launched a web initiative to engage the public with the development of its upcoming exhibition *American Enterprise*, which will examine the economic history of the United States and is scheduled to open in 2014. Through the site, members of the public can contribute comments, suggest topics and objects, and provide feedback to the exhibition team.



The voters' choice: 1948 Tucker

In another experiment with online public engagement, the National Museum of American History conducted a web poll to choose two automobiles for temporary display in the Museum. Over 24,000 people voted, choosing a 1929 Miller race car and 1948 Tucker sedan, which went on display in January.

When Smithsonian Folkways released *Abayudaya: Music from* the Jewish People in Uganda in 2003, it decided to dedicate all royalties from sales of the disc to support the higher education of students from the represented community. Nineteen students are

now benefiting from this program, including the first four women in the community to attend college.

Affiliate museums in Maryland, Oklahoma, Alabama, Florida, and California will participate in the

Lemelson Center's Spark!Lab Outreach Kit pilot project, which is designed to replicate at other locations the Center's innovative handson science center activities for children. Center staff will travel to each Affiliate to train staff to use kit activities, which will be integrated into the hosts' educational programs.

The Smithsonian American Art Museum invited the public to help select the games to be included in its upcoming exhibition, *The Art of Video Games*, which will open next March and will explore the 40-year evolution of video games as an artistic medium. Almost 4 million votes were cast in seven weeks.

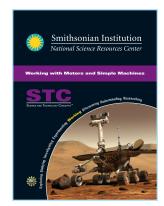


The Art of Video Games

Broadening Access: Education

The National Science Resources Center (NSRC) remained active in collaborative efforts to improve the teaching of science in schools across the nation and around the world:

- NSRC released six revised Science and Technology Concepts curriculum units for secondary students: Experimenting with Forces and Motion, Working with Motors and Simple Machines, Investigating Circuit Design, Discovering Electrical Systems, Exploring the Properties of Matter, and Experimenting with Mixtures, Compounds, and Elements.
- Seventy-eight leaders from around the country attended NSRC's annual Science Educational Leadership Forum, which focused on developing professional learning communities.
- For its Investing in Innovation and Improvement (i3) Award from the Department of Education, NSRC brought together 31 education leaders and project staff from North Carolina, Texas, and Indiana to discuss how the project will be implemented in each region.



Vanished, a new "science-mystery game" produced by the **Smithsonian Center for Education and Museum Studies** and the Massachusetts Institute of Technology, received advance media coverage starting with a story in *USAToday*. The live game itself took place in April and May; more than 6,000 students participated and 2,000 adults observed.

The Hirshhorn hosted the premiere of a new PBS series, *Digital Media: New Learners of the 21st Century*. It profiles innovative use of digital media in classrooms, after-school programs, and museums, including the ArtLab Digital Media project at the Hirshhorn.

Strengthening Collections

The National Zoo and the China Wildlife Conservation Association signed an agreement to extend the Zoo's panda program for five years. The agreement commits both sides to jointly research and oversee the breeding of the Zoo's pandas, Mei Xiang and Tian Tian. If after two years either is found to be unsuitable for breeding, the two institutions may exchange them for other pandas from China. The pair has not produced a cub since 2005, when Tai Shan, a male, was born. Tai Shan was sent to China in 2010; both parents and offspring remain under the ownership of China.

Conservation work on the Thomas Jefferson Bible is the most significant object preservation effort at the National Museum of American History since its work on the Star-Spangled Banner. In collaboration with the Museum Conservation Institute and outside experts, the Museum has investigated the Bible's component materials, binding structure, and assemblage process, and has developed a treatment plan.

The National Air and Space Museum's archives received a collection of the papers of Emory Malick, the first known licensed African American pilot. The collection is an important addition to the Museum's archival collection on African American aviation history.



The National Zoo's pandas



Conservation work on Jefferson's bible

Six Smithsonian units won grants from the Save America's Treasures program administered by the National Park Service in partnership with the President's Committee on the Arts and Humanities, the National Endowment for the Arts, the National Endowment for the Humanities, and the Institute of Museum and Library Services. The recipients were:

- The National Museum of African American History and Culture, for the restoration of a Pullman-built Jim Crow railroad car with "white" and "colored" passenger compartments to accommodate segregationist practices.
- The Center for Folklife and Cultural Heritage, for preservation and digitization of the Moses and Frances Asch Collection of recordings, business records, correspondence, photographs, album artwork, and film dating to the founding of Folkways in 1948.
- The National Museum of the American Indian, for the preservation of a collection of archival records and films that document the Museum's predecessor, the Museum of the American Indian/Heye Foundation (1916–1989).
- The Smithsonian Institution Archives and the National Museum of Natural History's Department of Botany, for conserving 19th- and 20th-century field notebooks documenting the exploration of the American frontier.
- The **Smithsonian American Art Museum**, for renovation of the Renwick Gallery, the capital's first art gallery.



Jim Crow-era railway car



The Renwick Gallery

Organizational Excellence

Information Technology

The Digitization Program Office completed two major steps in the Institution's digitization program:

- The publication of Smithsonian Directive 610, "Digitization and Digital Asset Management,"
 which formally establishes the Digitization Program Office and sets forth the requirements for
 unit digitization plans and digital asset plans; and
- Completion of an inaugural digitization count, which reports that 13 percent of the Institution's object collections items and lots have been digitized.

The Smithsonian's EDAN system brings together disparate online collections through a common index. By the end of the second quarter, EDAN had indexed 7.4 million collections items and lots, with links to over 550,000 digital assets. All major Smithsonian collections are now indexed, with the exception of those at the National Museum of African Art.

In February, scientists including the Smithsonian's Richard Vari performed a survey of fish in parts of the Cuyuni River, Guyana, and needed to identify over 5,000 specimens for an export permit. With little time and few local library resources, they posted specimen images to Facebook and turned to colleagues

around the world for help. This yielded identification of 90 percent of the specimens to at least the genus level, and highlighted two undescribed species. Such crowd sourcing was impossible five years ago.

Construction, Renovation, and Facilities Projects

Smithsonian Institution Libraries celebrated the re-opening of the National Museum of Natural History's main library. New features of the renovated facility include two state-of-the-art conference rooms, wifi access, computer workstations with printers, study tables with outlets, collaboration areas, and a coffee bar.

The design for the **Hirshhorn's** Seasonal Inflatable Structure by architects Diller, Scofidio, and Renfro won a 2011 Progressive Architecture Award from the American Institute of Architects—one of the highest honors in the field.

All buildings in urban environments develop soiling from the accumulation of particulate contaminants and biological organisms, but the rate of staining on the National Museum of the American Indian building since it was last cleaned has been unusually rapid. The Museum Conservation Institute is working with the Museum and the Office of Facilities Engineering and Operations to understand the source of the soiling and develop a maintenance protocol that will reduce its rate.



The Museum Conservation Institute's Robert Koestler at the National Museum of the American Indian

National Zoological Park, Asia Trail II: Elephant Trails

\$55.9 million estimated total project and program cost

The second phase of the Asia Trail project has a projected cost of \$55.9 million—\$41.05 million Federal (received in fiscal years 2006–2012) and \$14.8 million Trust. Construction of the new elephant barn and two of three outdoor habitats was completed in June 2010. Work on the elephant community center is 16 percent complete. Additional private funding is being sought for completion of the final habitat, and the project is now scheduled to be finished in 2013.

National Zoological Park, General Services Building and North Road Retaining Wall

\$34.8 million total estimated project cost

Design is substantially complete for structural repairs, fire-protection improvements, and safety upgrades at the Zoo's General Services Building. Replacement of an adjacent retaining wall supporting the North Road was recently incorporated into the project and was reviewed by the Commission of Fine Arts and the National Capital Planning Commission in February and March 2011. A supplemental environmental assessment is required and began in May 2011. The project also includes relocation of the Institution's vehicle maintenance branch to a Suitland, Maryland facility that is nearly 60 percent complete. Federal funding has been requested for fiscal years 2012–2014 for construction of the retaining wall and General Services Building.

National Zoological Park, Smithsonian Conservation Biology Institute—Smithsonian-Mason Global Conservation Studies Partnership

\$40.7 million total estimated project cost

In a 2008 Memorandum of Understanding, the Smithsonian and George Mason University (GMU) pledged to provide facilities to support a joint conservation biology program for undergraduates and professionals at the National Zoo's facilities in Front Royal, Virginia. A bill authorizing construction was passed by the House during the 111th Congress, but has not been introduced during the 112th Congress. The Smithsonian is proceeding with renovating and expanding an existing building to house classrooms, laboratories, and faculty offices. The cost of this work is \$12.5 million—\$7.5 million in Federal funds in fiscal years 2010–2013 (some of which has already been allocated) and \$5 million in private funds. Relocation of animals from this building is underway, paid for with \$1.6 million in raised funds. Design is complete, bidding is underway, and construction began in late spring 2011. The Smithsonian will also upgrade site utilities with \$6.6 million in Federal funds. GMU has secured a \$20 million bond to fund its construction of residential and dining facilities. All facilities are projected to be complete for the start of the fall 2012 semester.

National Zoological Park, Seal / Sea Lion Exhibit

\$40.0 million total estimated project cost

The Zoo's Seal/Sea Lion exhibit is being revitalized to meet standards for animal care and to improve accessibility. The project also includes an upgrade of underground utilities in Beaver Valley. Construction is approximately 50 percent complete and is projected to be finished in mid-2012. The non-capital, interpretive component of the project will be funded with \$1 million in Trust funds, while the Federal capital contribution is approximately \$39 million in fiscal years 2009–2012.

Arts and Industries Building (AIB)

\$52.8 million estimated cost for shell only

The AIB shell project, consisting of roof and window replacements and upgrades to the building's structure, began on November 15, 2010 and should be completed by spring 2013. Construction is progressing on schedule. Project funding consists of \$30 million from the Federal Legacy Fund, \$15 million from Federal facilities capital funds, and the rest from private donations. Scope definition is underway for the next phase, which will include design of an underground services building shared with the Castle.

Cooper-Hewitt, National Design Museum

\$57.7 million total estimated project cost

The renovation of the Fox-Miller townhouses is scheduled to be complete in late summer 2011. Design for the Carnegie Mansion renovation was completed in April 2011, with a construction contract to be awarded in summer 2011 and construction itself to be completed by mid-2013. Total project costs include \$25.2 million in Federal funds and \$32.5 million in private funds. Of the required private funds, over \$30 million (more than 94 percent) have been identified in gifts and pledges.

National Museum of African American History and Culture

\$500 million total estimated project cost



Updated concept submittals were made in March to the Commission of Fine Arts and the National Capital Planning Commission. In their subsequent meetings, each commission commented favorably on the evolution of the landscape and building design, commended the Smithsonian for addressing earlier comments, and offered new comments to guide design development. Regarding National Environmental Protection Act regulations, the Smithsonian expects to issue a Record of Decision with the

final environmental impact statement in early summer 2011. In late summer, the Section 106 Historic Resources consultations will culminate with issuance of the programmatic agreement. The Museum has now begun the concept phase of exhibit design with Ralph Appelbaum Associates. Best-value selection for a construction management firm is nearing conclusion, and the successful bidder will be brought onto the project in June 2011. Relocation of a gas main started in May, and site preparation and utility work is planned to start as early as fall 2011. Total project costs are to be shared evenly, with \$250 million from Federal capital funds and \$250 million from non-Federal sources.

National Museum of American History, Kenneth E. Behring Center

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



The third phase of renovation at the National Museum of American History will focus on renewal of three west wing public spaces. Data gathering, field surveys on existing conditions, and schematic design have been completed. The 65 percent design documents are complete, with final construction documents expected by summer 2011 and construction to begin in early spring 2012. The Federal appropriation for design (\$6 million) was received in fiscal years 2009 and 2010. Initial construction funding of \$5 million was received in fiscal year 2011, with the remainder (\$49 million) requested for fiscal years 2012-2013.

National Museum of Natural History, Main Building Ground Floor and Mezzanine

\$24.0 million total project cost

The entire north ground floor of the main Natural History Building is under renovation. The 15,500 square-foot west end of the floor will become a new learning center, and the 27,600 square-foot east end will house an expanded Smithsonian Early Enrichment Center, renovated Smithsonian Institution Libraries facilities, paleobiology laboratory, and consolidated facility support operations center. The project was awarded for construction in December 2010, with completion planned for mid-2012.

Smithsonian Tropical Research Institute, Gamboa Laboratory Facilities

\$19.4 million total estimated project cost

Following the acquisition of 172.5 acres in Gamboa in 2007, the Smithsonian Tropical Research Institute is proceeding with the replacement of outdated facilities. A new terrestrial science lab on the Gamboa site will be funded with \$15.94 million in Federal and \$3.46 million in Trust funds. Programming, design, and selection of construction management are complete, with construction to begin in 2011.

Donald W. Reynolds Center for American Art and Portraiture

\$19.5 million total estimated project cost

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. Cost are estimated to be \$9.5 million in Federal funds and \$10.0 million in Trust funds.

National Air and Space Museum—Steven F. Udvar-Hazy Center, Phase Two

\$81.8 million total project cost

Phase two of the Udvar-Hazy Center adds 237,000 square feet of collections care space. Infrastructure construction (financed with \$68.7 million in Trust funds) was completed in December 2010, and equipment fit-out for storage, processing, and archives spaces will be completed using Federal funds.

National Postal Museum, New Program Space

\$18.2 million total estimated project cost

The National Postal Museum, located in the historic Washington, D.C. City Post Office Building, has been given 12,000 square feet of additional space and use of a central hall by the U.S. Postal Service. Using funds from non-Federal sources, the project will transform the new space into a philatelic center and a visitor orientation space. Design is scheduled to be complete in mid-summer 2011, with construction starting in late 2011 to meet an opening in early 2013.

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

\$38.5 million total estimated project cost

Renovations have been completed on Pod 3 in Suitland, Maryland, which provides consolidated storage space for several types of collections. Over \$15 million of shelving/racking, cases, and freezers are now being installed. Transfers of collections from four museums began in June 2010, and will take two years and cost almost \$2 million to complete.

Smithsonian Environmental Research Center, Mathias Replacement Laboratory Project

\$50.66 million total estimated project cost

The Smithsonian Environmental Research Center is eliminating trailers that house lab space and offices; renovating and reconfiguring the Mathias Lab; and creating replacement labs that meet national standards. The 85,000 square-foot project employs sustainable technologies and building materials that will yield substantial reductions in energy and maintenance costs. A construction award was made in early April 2011, with completion expected by mid-2014.

Permanent Physical Security Barriers

\$55 million total project cost

Security barriers at the National Air and Space Museum and the National Museum of American History are complete. The final phase of barrier construction at the National Museum of Natural History is underway, with completion expected by summer 2011. Construction of barriers for the Castle and Quadrangle will start in fiscal year 2014, and work on off-Mall barriers will follow in order of priority.

American Recovery and Reinvestment Act of 2009 Projects

\$25 million total project cost

The American Recovery and Reinvestment Act of 2009 provided \$25 million for repair and revitalization projects not covered by fiscal year 2009 funding. All project contracts were awarded by the end of fiscal year 2010, and final contractor payments were made by the end of January 2011. Contract closeouts and final reporting occured in May 2011.

Sustainability

The Smithsonian is committed to the strategic objectives and goals of Executive Order 13514, "Federal Leadership in Environmental, Energy, and Economic Performance," which set sustainability goals for Federal agencies. Using the Institution's fiscal year 2010 scorecard on sustainability and energy performance as a benchmark, the Smithsonian has identified and is tracking opportunities to reduce pollution, improve efficiency, and lower costs.

This fiscal year, the Institution's goals include decreasing fleet petroleum use through measures such as reducing fleet size, installing bio-diesel fueling equipment, piloting an idle reduction system, and deploying both alternative-fuel and hybrid vehicles. The Smithsonian is also fulfilling renewable energy goals by purchasing additional green power from wind and biomass sources.

The Smithsonian's first quarter 2011 recycling metric (landfill diversion) was 29 percent, compared to 19 percent for the same period in fiscal year 2010. Recycled materials include paper, comingled containers, compost, steel, and wood. The Institution is continuing to investigate other recycling opportunities.

Additionally, simple but effective efforts are being undertaken to reduce energy use, such as deploying "Lights Off" labels to remind employees to turn lights off when not needed.

Other sustainability efforts will be highlighted in the fiscal year 2011 Smithsonian Strategic Sustainability Performance Plan, scheduled for completion in June.



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