

Using the Chandra X-Ray Observatory, Harvard-Smithsonian Center for Astrophysics astronomers have found evidence for the youngest black hole known—only about 30 years old. This image of the galaxy M100 shows the location of supernova 1979c, suspected of producing this black hole

Report to the Regents First Quarter, Fiscal Year 2011

Prepared by
Office of Policy and Analysis



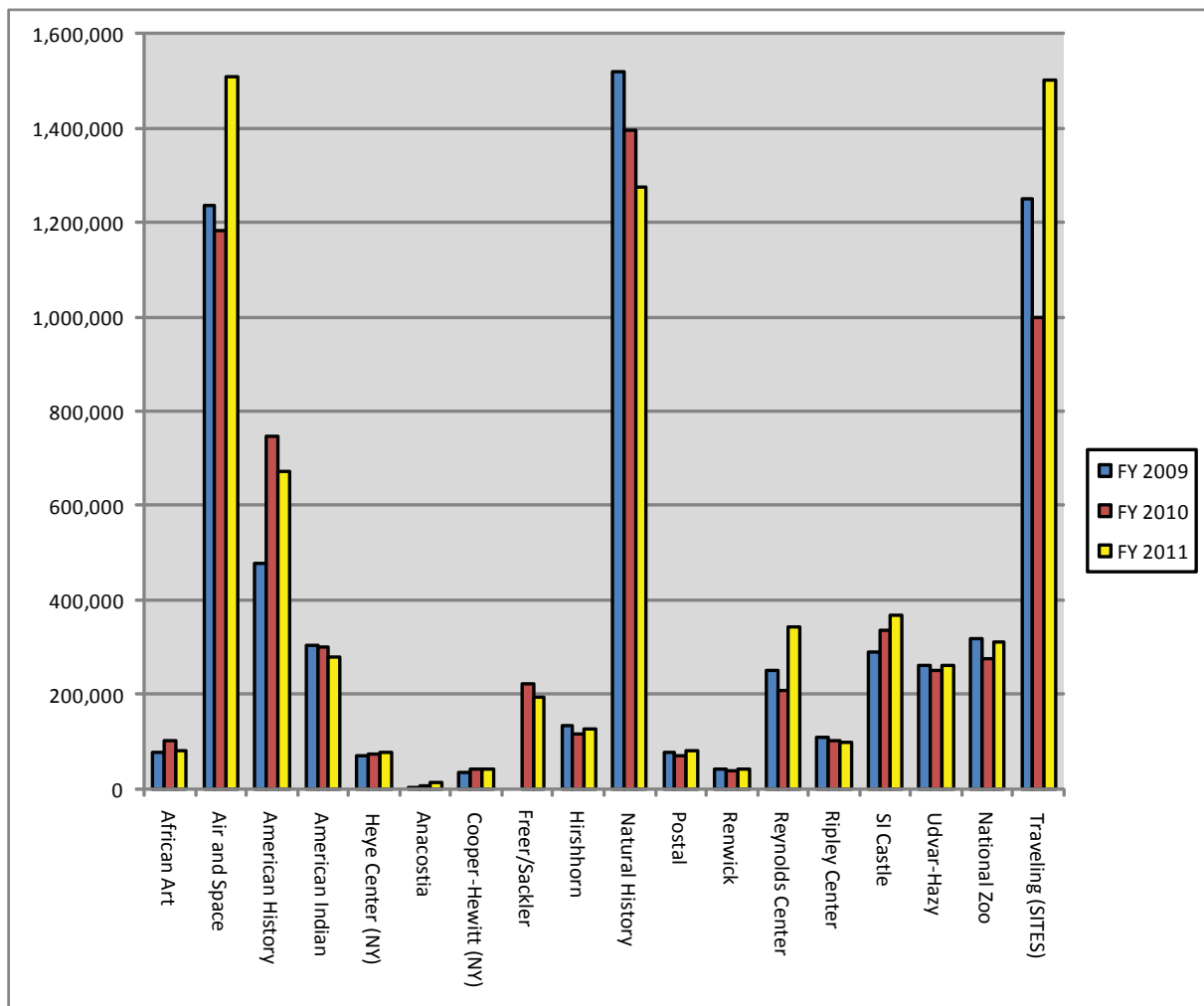
Broadening Access: Visitation Summary

In the first quarter of fiscal year 2011, the Institution counted about 5.8 million visits to its museums in Washington, D.C., and New York City, plus the National Zoological Park and Steven F. Udvar-Hazy Center—up about 6 percent from the figure for this period in fiscal year 2010. Of note were the increases in visitation at the National Air and Space Museum (up 28 percent) and the Donald W. Reynolds Center for American Art and Portraiture (up 64 percent). The latter reflects the impact of two exhibitions that received extensive 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 36 million visits to Smithsonian websites.

Visits to Smithsonian Venues and Traveling Exhibitions
First Quarter, Fiscal Years 2009, 2010, and 2011



Grand Challenges Highlights

November 2010 saw the release of the first in a planned series of papers by Secretary G. Wayne Clough on important issues that cut across Grand Challenge areas and touch on the future of the nation and the Smithsonian. The paper, *Increasing Scientific Literacy: A Shared Responsibility*, addresses the urgent need to improve the scientific literacy of America's citizens.

Unlocking the Mysteries of the Universe

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

SAO's Submillimeter Array obtained pictures of a galaxy so remote that its light has been traveling for 10.8 billion years—80 percent of the age of the universe. The detection was facilitated by the gravity of a closer galaxy, which acted like a magnifying lens. This result, by SAO's Mark Gurwell and Ray Blundell, proves that the former galaxy is in the process of making new stars; it also corroborates the theory of relativity.



An elliptical galaxy

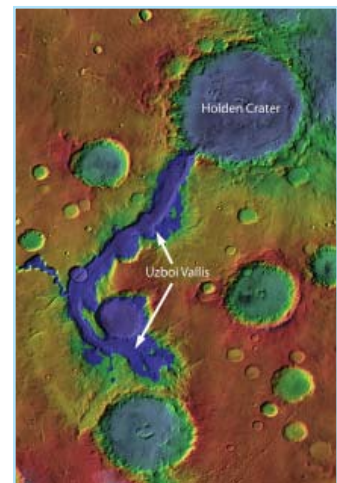
The universe has far more stars than previously suspected. CfA's Charlie Conroy has discovered that elliptical galaxies (the largest type) have 5–10 times as many stars as previously believed. This suggests that the total number of stars in the universe may be three times larger than had been realized.

Near Earth Objects (NEOs) are asteroids that pass close to Earth. Scientists study them for insights into the young solar system, and they are of concern because of the potential for collisions with Earth. Their sizes have been hard to measure, but SAO astronomer Joe Hora and his colleagues used an SAO-developed infrared camera on the Spitzer spacecraft to measure and categorize, for the first time, over 400 NEOs—some as small as 84 meters.

Using the Chandra X-Ray Observatory, CfA astronomers Christine Jones, Avi Loeb, and Daniel Patnaude have found evidence for a black hole that is only 30 years old—the youngest ever known. This discovery offers a unique opportunity to follow a black hole as it develops from infancy.

Other Research

The National Air and Space Museum's John Grant (of the Center for Earth and Planetary Studies) collaborated with the University of Arizona's High Resolution Imaging Science Experiment (HiRISE) science team. This collaboration has led to the discovery of ancient lake deposits in Uzboi Vallis on Mars. The paleolake basin exceeded 4,000 cubic kilometers—twice the volume of Lake Ontario.



Uzboi Vallis, Mars

Understanding and Sustaining a Biodiverse Planet

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

As frogs around the world continue to disappear, one endangered species has received an encouraging boost. Although the La Loma tree frog *Hyloscirtus colymba* is notoriously difficult to care for in captivity, the Panama Amphibian Rescue and Conservation Project recently became the first organization to successfully breed this species. The Project—whose partners include NZP and the Smithsonian Tropical Research Institute—has also successfully bred the endangered Limosa harlequin frog, *Atelopus limosus*.

Two cheetah cubs, born at the **Smithsonian Conservation Biology Institute** to two separate females just days apart, are very lucky animals. In the wild, cheetahs that give birth to a single cub cannot produce enough milk to keep it alive, and typically let the cub die. But scientists at SCBI were able to hand-raise the first cub for 13 days before placing it with the mother of the second, creating a litter of two that stimulated the mother's milk production. Both cubs are thriving.



NZP staff are working to save endangered frogs...



... and cheetahs

Research: National Museum of Natural History (NMNH)



Myotis diminutus

The description of a new bat species in *Mammalian Biology* by Don Wilson of NMNH and Ricardo Moratelli drew coverage in over 100 online media outlets. *Myotis diminutus* is the smallest known bat from South America, and had to be described based on a single specimen collected by Wilson in Ecuador in 1979, and is now in the NMNH collections. The authors delayed naming the species in the hope of collecting more specimens, but noted in the paper that “continuing disappearance of forest habitat on the western slope of the Andes over the past three decades argues against further delay. . . . [W]e know nothing about the natural history of this bat. Unfortunately, the prospects for learning more are bleak.”

In December 2010, *Science* published “The Impact of Conservation on the Status of the World’s Vertebrates.” Among the authors are NMNH-affiliated researchers Bruce Collette of the National Marine Fisheries Service and Bob Reynolds of the U.S. Geological Survey. According to this assessment, one-fifth of vertebrate species are classified as “threatened.” While the study finds evidence that conservation initiatives can help, it concludes that efforts remain insufficient to offset the main drivers of biodiversity loss: agricultural expansion, logging, overexploitation, and invasive alien species.

The **Smithsonian Institution Scholarly Press** published George R. Zug’s *Speciation and Dispersal in a Low Diversity Taxon: The Slender Geckos Hemiphyllodactylus (Reptilia, Gekkonidae)* (Smithsonian Contributions to Zoology, No. 631) for NMNH.

Long ago on the island of Flores in Indonesia, giant rats, komodo dragons, and pygmy elephants lived alongside a tiny species of human, *Homo floresiensis*. Research by NMNH fellow Hanneke Meijer and Rokus Awe Due, published in the *Zoological Journal of the Linnean Society*, has identified a previously unknown species in this menagerie: a carnivorous giant stork, *Leptoptilos robustus*, which at six feet in height would have towered over the 3.3-foot *H. floresiensis*. This juxtaposition of dwarf and giant species shows how different past ecological communities can be from the present.

Research: Smithsonian Environmental Research Center (SERC)

Virginia Sea Grant, part of a Federal program that promotes sustainable management of marine resources, announced that a research team from SERC and Old Dominion University was awarded \$110,999 to develop a model to predict the best places for seagrass restoration. Seagrasses in the Chesapeake Bay have been in decline since the 1930s and restoration efforts are ongoing.



SERC scientists are creating a model to facilitate Chesapeake Bay seagrass replanting

SERC and the Alaska Sea Grant Program of the University of Alaska, Fairbanks, were recently named as recipients of a \$400,000 grant from the National Oceanic and Atmospheric Administration to create an early detection and rapid response system for invasive marine species in Alaska. A non-native species, *Didemnum vexillum* (the carpet sea squirt) was discovered in Sitka, Alaska, in 2010 by SERC and its collaborators. *D. vexillum* is of concern because it grows rapidly and can completely cover nets, shellfish beds, and sensitive marine environments.

Research: Smithsonian Tropical Research Institute (STRI)

Sixty million years ago, a tropical rainforest in northern South America thrived at temperatures 3 to 5 degrees Celsius warmer than today. Based on an analysis of fossil pollen, STRI's Carlos Jaramillo and his colleagues concluded that biodiversity increased and many plant families characteristic of tropical ecosystems appeared for the first time during this warming period. These discoveries were reported in *Science* and widely covered in popular science media.



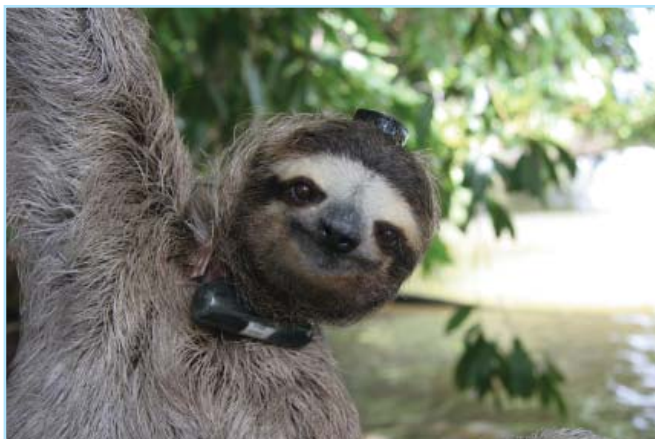
SIGEO is now keeping an eye on insect populations

The STRI-coordinated Smithsonian Global Earth Observatories (SIGEO), a network of over 40 forest plots around the world that provides valuable data for understanding global change and forest health, has added insect monitoring to its repertoire. This will enable scientists to gather long-term data to detect shifts in insect populations that may be driven by climate disturbances or habitat disruption.

On December 9, 2010, for the first time in over 20 years, the Panama Canal was closed. The shutdown, caused by heavy rains, drew media attention to a land-use experiment under way at STRI in partnership with the Panama Canal Authority and Panama's

Environmental Authority. The Agua Salud project examines, from economic and ecological perspectives, how different land-management approaches affect water availability and other “ecosystem services.”

STRI’s Automated Radio Telemetry System (ARTS) has led to breakthroughs in animal tracking, the development of miniaturized tracking devices, and a global archive of tracking data called Movebank. In a symposium in December 2010, STRI hosted pioneering researchers who have employed ARTS. New protocols are now being implanted for the system that will replace towers and antennas with a space-based receiver that employs GPS technology to provide the same 24-hour surveillance.



Tracking sloths in the wild has been one application of ARTS

Broadening Access

On December 9, 2010, one of the **National Zoo’s** new lion cubs was named Aslan, after the magical lion in the *Chronicles of Narnia* series. On this occasion, 20th Century Fox and Walden Media presented a gift to support the Zoo’s great-cat conservation efforts, and actors Georgie Henley and Skandar Keynes from the *Narnia* film series participated in a formal naming ceremony. On December 18, the other six cubs received names and made their public debut; their names were determined in various ways, including a public contest and suggestions by lion keepers and Zoo supporters.



In a successful videoconference exchange hosted by the **Smithsonian Tropical Research Institute**, students from five bilingual schools in Panama joined school kids in Arizona, Michigan, Wisconsin, and Washington state to learn about ants. This pilot project demonstrated the potential for students in the United States to “visit” the Institute’s field sites and speak with its scientists in their classrooms.

The Biodiversity Heritage Library, a collaborative project that includes the **Smithsonian Institution Libraries**, has been awarded the John Thackray Medal by the Society for the History of Natural History. The award was instituted in 2000 to honor significant achievements in biological and earth sciences.

Valuing World Cultures

Research

James Cahill received the **Freer and Sackler Galleries’** Freer Medal, which honors a distinguished scholar for contributions to the field of Asian art history. This was the 12th time the medal has been awarded since it was established in 1956. Cahill, a scholar of Chinese art, was a curator at the Freer between

1956 and 1965, and contributed his research papers to the Galleries' archives.

Staff from the **Center for Folklife and Cultural Heritage** participated in a meeting with the executive director of the American Folklore Society, research center directors from Mexico's National Institute of Anthropology and History, and other scholars to discuss future cultural collaborations between Mexico and the United States. The meeting was spurred by the Mexico Folklife Festival program.

Polynesia: The Mark and Carolyn Blackburn Collection of Polynesian Art by Adrienne L. Kaepler of the **National Museum of Natural History** was published in October 2010 by the University of Hawai'i Press. It explores one of the world's great private collections of Polynesian art, featuring both ceremonial and functional artifacts.

Several works by **National Museum of African Art** scholarly staff recently appeared:

- Erin Haney's book *Photography and Africa* was released by Reaktion Books. Two articles by Haney also appeared: "Fool the Eye: Innocent Photographs" in the Nigerian journal *New Awakenings*, and "8e Rencontres de Bamako" (with Jennifer Bajorek) in *Aperture*.
- Karen Milbourne contributed the article "Seduction's Shadows and the 'Terrible Beauty' of Recent Works by Yinka Shonibare" to the publication *Yinka Shonibare MBE* (edited by Octavio Zaya and published by Comunidad de Madrid).
- Christine Mullen Kreamer and Bryna Freyer contributed a chapter, "Building a National Collection of African Art," to *Representing Africa in American Art Museums: A Century of Collecting and Display* from University of Washington Press. Kreamer also wrote "The Cincinnati Art Museum's Steckelmann Collection: Late-Nineteenth-Century Collecting and Patronage Along the Loango Coast" for the same book.

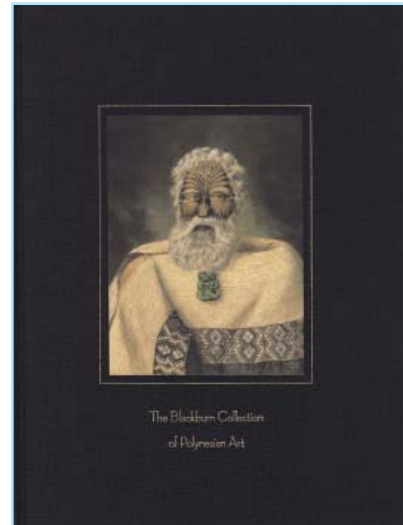
The **Anacostia Community Museum** presented "Connecting the Worlds of the African Diaspora: The Living Legacy of Lorenzo Dow Turner," a research symposium that examined how Turner's scholarship has inspired subsequent work from historians, linguists, and anthropologists, identifying connections among diverse communities within the African diaspora.

Broadening Access

The exhibition *Guillermo Kuitca: Everything—Paintings and Works on Paper, 1980–2008* (October 21, 2010–January 16, 2011) at the **Hirshhorn Museum and Sculpture Garden** launched a year of shows at the museum featuring Latin American artists working in a diverse range of media. It was the first survey of the Argentinean artist's work in the United States in more than 10 years.



The art of Guillermo Kuitca



Artwork from the *Blackburn Collection*

The **Smithsonian Latino Center**–sponsored exhibition *Southern Identity: Contemporary Argentine Art* (October 12, 2010–January 23, 2011) was on display in the International Gallery of the S. Dillon Ripley Center. It was the largest show of contemporary Argentine art ever organized in the United States.

Infinity of Nations: Art and History in the Collections of the National Museum of the American Indian opened at the **George Gustav Heye Center of the National Museum of the American Indian** in New York City on October 23, 2010. This permanent exhibition includes 700 works of Native art from North, Central, and South America, showcasing the



An artifact from the Heye Center's *Infinity of Nations*

breadth of the museum's renowned collection.

African Mosaic: Celebrating a Decade of Collecting opened at the **National**

Museum of African Art on November 19, 2010, and will continue through 2011. This exhibition showcases museum acquisitions of the past decade, including both traditional and contemporary art. A highlight is the towering sculpture of Haitian leader Toussaint Louverture by contemporary Senegalese artist Ousmane Sow.



Ousmane Sow's *Toussaint Louverture et la vieille esclave*

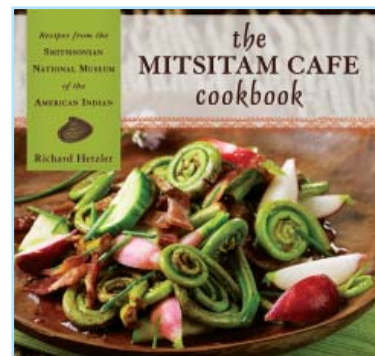
Organized by the **Smithsonian Center for Education and Museum Studies** and hosted by the **National Museum of the American Indian**, the feature event in this year's American Indian Heritage Month was a two-day Harvest Festival that attracted 9,000 visitors.

In collaboration with the Embassy of the Republic of Cyprus and the **National Museum of Natural History**, **The Smithsonian Associates** presented two programs on Cypriot culture and cuisine that tied into the museum's exhibition *Cyprus: Crossroads of Civilizations*.

The **Asian Pacific American Program** presented several programs highlighting Asian and Asian American arts and culture, including:

- a screening of the documentary film *The Great Pinoy Boxing Era*, followed by a panel discussion and demonstration by renowned Filipino American martial artist Dan Inosanto;
- the 10th annual South Asian Literary and Theater Arts Festival, showcasing South Asian literature and films (in collaboration with the Network of South Asian Professionals); and,
- in collaboration with the **Freer and Sackler Galleries**, a performance by choreographer/dancer Peggy Choy re-envisioning the legacy of martial arts film star Bruce Lee, as well as a lecture on the work of artist Fiona Tan by Konrad Ng, professor of creative media at the University of Hawai'i and senior adviser to the Program.

The **National Museum of the American Indian** released a book by Head Chef Richard Hetzler of the museum's Mitsitam Cafe, *The Mitsitam Cafe Cookbook: Recipes from the Smithsonian National Museum of the American Indian* (Fulcrum Publishing).



The **National Museum of the American Indian** and **National Museum of American History** celebrated their annual Dia de los Muertos program at the former venue, featuring food demonstrations, presentations by guest artists, and hands-on activities. It drew over 17,000 visitors.

Understanding the American Experience

Research

National Museum of American History Curator Deborah Warner completed *Sweet Stuff*, a history of American sweeteners from sugar to sucralose that explores the interplay of science, technology, labor, politics, and popular culture surrounding these products. The book is due to appear in spring 2011.

The **Smithsonian American Art Museum** produced an exhibition catalogue for *Alexis Rockman: A Fable for Tomorrow*, written by the museum curator Joanna Marsh and copublished with D. Giles Limited.

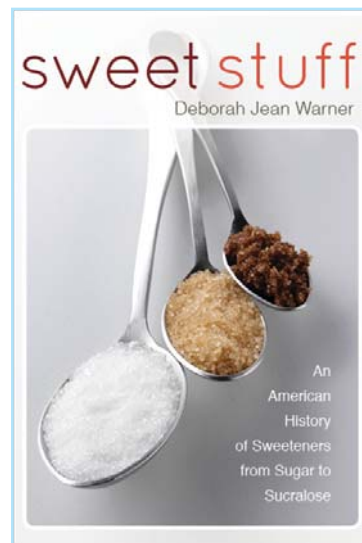
Broadening Access

The **National Portrait Gallery** hosted two popular exhibitions:

- *Hide/Seek: Difference and Desire in American Portraiture* (October 30, 2010–February 13, 2011) generated a great deal of media coverage and public discussion in December 2010, after the decision to remove a video by the artist David Wojnarowicz from the show.
- *Elvis at 21: Photographs by Alfred Wertheimer* (October 23, 2010–January 23, 2011), a joint exhibition initiative with the **Smithsonian Institution Traveling Exhibition Service**, opened in the National Portrait Gallery after three previous stops. It will travel to four more museums through March 2012.

The **National Museum of African American History and Culture (NMAAHC)** exhibition *The Kinsey Collection: The Shared Treasures of Bernard and Shirley Kinsey—Where Art and History Intersect* (October 15, 2010–May 1, 2011) opened in the NMAAHC Gallery at the **National Museum of American History**. It features more than 100 artifacts, documents, and artworks spanning four centuries of the African American experience. The museum also presented several exciting public programs:

- To mark the opening of the *Kinsey Collection* exhibition, collectors Bernard and Shirley Kinsey took visitors on a journey through art and history in “What You Didn’t Learn in High School History” at the Carmichael Auditorium of the **National Museum of American History**. The Kinseys also led a private tour of the exhibition for educators attending Smithsonian Teachers’ Night.
- Also at the Carmichael Auditorium, the museum presented “Lessons Learned: The Early History of the Game,” a roundtable in which National Basketball Association Hall of Fame honorees discussed the early years of pro basketball.



A work from the Kinsey Collection



Rappers Common (left) and Kurtis Blow (right)

- A roundtable discussion on rap lyrics, “The Anthology of Rap,” at the historic Lincoln Theater featured hip hop artist and actor Common, rapper and producer Kurtis Blow, and the editors of the new book *The Anthology of Rap*, Adam Bradley and Andrew DuBois. It drew a capacity crowd of over 1,200 and received extensive media coverage.

After over 25,000 hours of research by 100 volunteers and staff, the **National Museum of American History** launched a website featuring the diary of piano manufacturer William Steinway, 1861–1896. The

site offers a unique window on American life during a tumultuous period. The diary is also featured in a special exhibition in the museum’s document gallery (December 17, 2010–April 8, 2011).

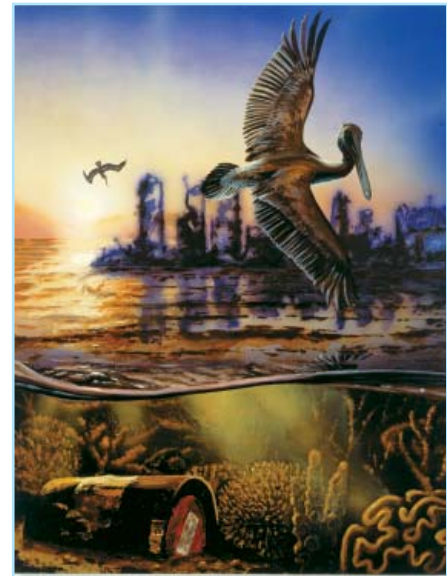
The **Smithsonian American Art Museum** opened *Alexis Rockman: A Fable for Tomorrow* (November 19, 2010–May 8, 2011), the first major survey of the artist’s provocative work, which expresses deep concern for the world’s fragile ecosystems through vivid, even apocalyptic, imagery.

In tandem with the publication of President Jimmy Carter’s new book, *White House Diary*, **The Smithsonian Associates** presented a program in which Carter reflected on his years in the White House in an interview with Ray Suarez of National Public Radio.

The **National Portrait Gallery** presented a number of well-received public programs:

- The gallery’s “Cultures in Motion” program presented *Ira Aldridge: The African Roscius* to a full McEvoy auditorium on December 6, 2010. The original script was performed by actor Avery Brooks as Aldridge.
- As a part of the lead-up to the exhibition *Gertrude Stein: Five Stories*, the gallery hosted several well-attended “Stein Salons,” including one that was held as a part of the opening events for the *Hide/Seek* exhibition.
- In collaboration with Smithsonian Enterprises, the gallery presented a conversation and book signing with legendary musician and artist Patti Smith. Smith spoke with gallery historian David Ward about poetry, luck, and a life in art. The program was webcast live.

In January 1961, Richard Avedon photographed President-elect John Kennedy and his family in Florida for an article in *Harpers Bazaar*—the only professional images taken between the election and inauguration. These photos were later donated to the **National Museum of American History**, where a selection is on display for the first time in *The Kennedys 50 Years Ago*, through April 10, 2011.



The art of Alexis Rockman



The Kennedys 50 Years Ago

The **National Museum of American History** opened *1939*, a small exhibition that explores how Americans used entertainment to distract themselves during a turbulent year when the country was recovering from the Great Depression and World War II loomed. Through a collaboration with the Smithsonian Channel, visitors were able, for the first time, to access videos related to the exhibition on their cell phones.

On November 5 and 6, 2010, the Lemelson Center of the **National Museum of American History** hosted its 2010 invention and innovation symposium; this year's topic was "Food for Tomorrow."



"Food for Tomorrow" from the Lemelson Center

The **Anacostia Community Museum** presented the community forum "Perspectives on *East of the River*" to mark the publication of its book *East of the River: Continuity and Change*. The program featured presentations by authors of several of the book's essays. The museum's Gail Lowe, the book's editor, served as moderator.

The **Archives of American Art** exhibition *Lost & Found: the Gay and Lesbian Presence in the Archives of American Art* (October 29, 2010–February 13, 2011) at the Reynolds Center presented letters, photographs, unpublished writings, and rare printed material that offered glimpses into the lives, careers, and communities of gay American artists. It complemented the **National Portrait Gallery** exhibition *Hide/Seek: Difference and Desire in American Portraiture*.

Crossing Boundaries

Research

Cooper-Hewitt, National Design Museum and General Electric presented a one-day conference, "Why Design Now? Solving Global Challenges" to explore the role of design in addressing pressing global issues. It brought together leading thinkers, scientists, and designers to share their ideas.



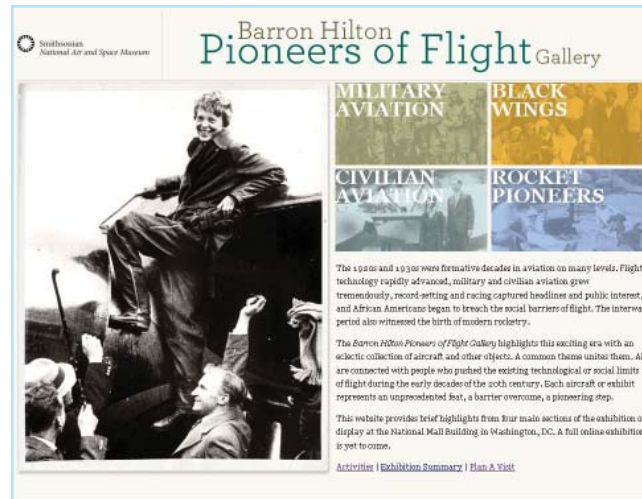
The Cooper-Hewitt's "Why Design Now?" conference

The **National Museum of the American Indian** hosted an important symposium, "Centuries of Change: State of the Native Nations," which looked at the role of the indigenous people of the Western Hemisphere in the evolution of the Americas. The museum partnered with the Organization of American States to develop the program, which featured some of the world's top scholars and policymakers in indigenous affairs.

Broadening Access

The **National Air and Space Museum** completed the opening of the *Barron Hilton Pioneers of Flight Gallery*, and launched an exhibition website. Online activities allow visitors to design an air racer, plan a round-the-world flight, pack for an exploration flight into the unknown, fly a bomber escort mission, and explore 360-degree views of cockpits of pioneering aircraft.

From October 9 to 17, 2010, **Cooper-Hewitt** celebrated the role that design plays in daily life with its annual National Design Week. Public programs included a Teen Design Fair that gave young people a chance to meet leading designers in the fields of fashion, industrial design, multimedia, graphic design, and architecture. As part of the festivities, Cooper-Hewitt celebrated the 11th annual National Design Awards Gala, which honored the 2010 Award winners and raised nearly \$900,000.



The iconic Hope Diamond was placed on display in a new, temporary necklace setting designed by



The Hope Diamond in its new setting



The Hyperbolic Crochet Coral Reef

Harry Winston, Inc. to commemorate the 50th anniversary of its arrival at the **National Museum of Natural History**. The new exhibit also coincided with the world premiere of the Smithsonian Channel documentary film *Mystery of the Hope Diamond*.

Also at the **National Museum of Natural History**: A temporary exhibit in the Sant Ocean Hall, *The Hyperbolic Crochet Coral Reef* (October 16, 2010–April 24, 2011) is a thought-provoking fusion of science, conservation, mathematics, and art that celebrates the beautiful diversity of coral reefs and speaks to the urgent need to protect these vanishing ecosystems.

On October 22, 2010, the **Smithsonian**

Institution Archives joined with other archives and special collection units at the Smithsonian to offer the inaugural Smithsonian Archives Fair. The Fair offered members of the public a chance to interact with archival experts, show off their own treasures, and ask questions about care.

The **National Postal Museum** unveiled three new online exhibitions:

- *Mexico Via Airmail* highlights how Mexico used airmail stamps to promote a progressive national image worldwide following its revolution in 1910.
- *Important Events in American History* is the result of a series of workshops with students at Pine Spring Elementary School in Falls Church, Virginia; every aspect of it was selected, written, and organized by Pine Spring Elementary students.
- The 2010 edition of *Celebrating Hispanic Heritage: People, Places, and Events* highlights U.S. postage stamps featuring Hispanic people and events.

Broadening Access: Outreach

Smithsonian Affiliations offers museums, cultural institutions, and educational organizations access to the Institution's collections and other resources. At the end of the first quarter of fiscal year 2011, there were 164 Affiliates in 40 states, the District of Columbia, Panama, and Puerto Rico. In this quarter:

- The Smithsonian welcomed two new Affiliates: the San Diego Museum of Man in San Diego, California; and the Louisiana Office of State Parks / Poverty Point State Historic Site in Baton Rouge, Louisiana;
- Forty-seven artifacts were loaned to Affiliate organizations; there are currently 1,228 Smithsonian artifacts on view at Affiliate organizations;
- Twenty-eight Smithsonian staff participated in programs and events with Affiliates.



Ain't Nothing Like the Real Thing: The Supremes at the Apollo



Suited for Space panel

In the first quarter of fiscal year 2011, the **Smithsonian Institution Traveling Exhibition Service** (SITES) circulated 45 exhibitions to 357 venues in all 50 states, plus the District of Columbia, Guam, and U.S. military bases in 10 countries, where they were viewed by approximately 1.5 million visitors.

- SITES also launched a traveling version of the **National Museum of African American History and Culture** exhibition *Ain't Nothing Like the Real Thing: How the Apollo Theater Shaped American Entertainment*, with an opening at the Charles H. Wright Museum of African American History in Detroit, Michigan.
- SITES and the **National Air and Space Museum** launched the public program component of their collaborative exhibition *Suited for Space* with a panel discussion about the invention of the lightweight, self-contained life support system known as the “spacesuit.”

The Smithsonian Channel's documentary *Mystery of the Hope Diamond* premiered on November 21, 2010. The program, narrated by actress Kim Basinger, chronicles the history and alleged curse of the Hope Diamond, and features scientific studies carried out on blue diamonds by **National Museum of Natural History** scientists.

Historic Flushing Town Hall, a Smithsonian Affiliate in Flushing, New York, is hosting the **Museum Conservation Institute's** traveling exhibit *Within the Emperor's Garden* (October 2010–September 2011). Flushing is home to one of the largest Chinese-American communities in the United States.

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 the world:

- NSRC launched a \$34 million Department of Education Investing in Innovation (i3) Validation grant in partnership with the University of Memphis and schools in Indiana, North Carolina, and Texas. It will research the effectiveness of the Center's Leadership and Assistance for Science Education Reform (LASER) model for K–12 science programs.
- The Stevens Institute of Technology and NSRC launched a program funded by a \$11.5 million National Science Foundation grant. The Partnership to Improve Student Achievement in Physical Sciences (PISA2) aims to enhance science learning in 12 districts across New Jersey.
- Sally Goetz Shuler and William D. Cassidy represented NSRC at a conference in Britain sponsored by the Science Education Program of the InterAcademy Panel. They met with other education leaders to discuss an international alliance to expand upon global efforts to promote the inquiry-based science education approach that NSRC champions.

On October 22, 2010, the **National Museum of American History** hosted over 2,200 educators at the **Smithsonian Center for Education and Museum Studies'** 18th annual Smithsonian Teachers Night event. Participants met Smithsonian educators, explored hands-on activities for children, and engaged in other special offerings.

Shout, a new online education collaboration with Microsoft Partners in Learning, connects educators with content, tools, and expertise that prompt students to take action on global issues. Smithsonian contributions include online conferences and a global tree-banding project led by the **Smithsonian Environmental Research Center**. The director of the **Smithsonian Center for Education and Museum Studies**, which has facilitated the project, and other senior staff attended the project kickoff in Cape Town, South Africa.



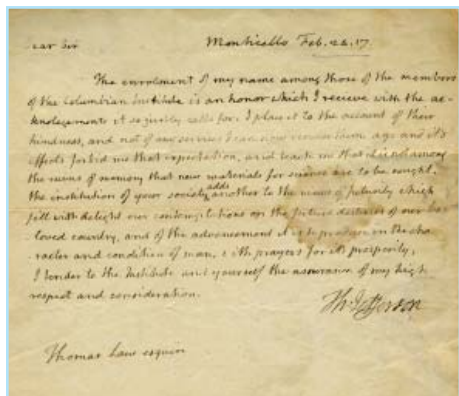
The **National Postal Museum** kicked off its Teacher Leader Program by partnering with eight schools in the D.C. region. The program is designed to transform classroom teaching philosophies to better integrate new media and museum interpretation techniques.

The **Smithsonian Associates** sponsored the visit of three Smithsonian scientists to Lafayette, Louisiana, public schools for three days, during which they presented to over 700 8th-graders. The visitors were volcanologist Ed Venzke and geologist Mike Wise of the **National Museum of Natural History**; and Frank Hailer, a biologist from the **National Zoo's** Genetics Lab, who focused on the environmental effects of the BP oil spill in the Gulf.

In collaboration with the **National Air and Space Museum**, the **Smithsonian Latino Center** sponsored the bilingual Hispanic Heritage Month Family Day: Argentina in Air and Space as part of the Museum's 2010 Heritage Family Day Series.

Strengthening Collections

The **National Collections Program** and the **Office of Planning and Project Management** are leading an Institution-wide initiative to develop a collections space plan, with recommendations for addressing current and projected Institution-wide storage requirements. Although the Smithsonian has made progress in expanding and improving collections space, the collapse of Garber Building 21 reinforced the need to continue efforts to replace substandard facilities and upgrade collections space.



A surprise from the SIA collections: A letter from Thomas Jefferson

It is not unusual for the **Smithsonian Institution Archives** to discover documents from prominent Americans in its collections, but such finds are still exciting—as when reference archivist Tad Bennicoff recently found a letter by Thomas Jefferson.

The **National Air and Space Museum** archives acquired a collection of documents on Amelia Earhart's 1937 around-the-world flight, consisting of correspondence, telegrams, Coast Guard dispatches, newspaper articles, and reports on the planning of the flight and the naval search for Earhart following her disappearance.

The **National Museum of Natural History** acquired the meteorite that crashed through the roof of a medical office in Lorton, Virginia, on January 18, 2010. While chondrites of its type make up nearly 90 percent of all meteorites, only a fraction are recovered as freshly fallen objects, which are valued because of the lack of terrestrial contamination and weathering.

Sandra Herbert, Professor Emerita at the University of Maryland, Baltimore, and her husband Jim, have donated a silk embroidered handkerchief once owned by Charles Darwin to the **Smithsonian Institution Libraries**.



The Lorton meteorite

Organizational Excellence

Leadership Milestones

In December 2010, **Scott Miller** was named to the new position of Deputy Under Secretary for Collections and Interdisciplinary Support. Miller will oversee the **National Collections Program**, **Office of Fellowships and Internships**, **Office of International Relations**, **Smithsonian Institution Archives**, **Smithsonian Institution Libraries**, and **Smithsonian Institution Scholarly Press**. He will also serve as the Smithsonian's liaison to various U.S. and international cultural and scientific organizations.

Information Technology

On December 13, 2010, the Smithsonian launched a new version of its main website, Smithsonian.org/si.edu. In addition to freshening up the site's overall look and feel, improvements were made to help visitors find content, both at the central Smithsonian website and through links to museum, research center, and other program websites. It also incorporates an improved site-wide search feature; new exhibitions and Encyclopedia Smithsonian databases; translations into more than 50 languages through Google translate; and a central location for all of the Institution's social media offerings.

To date, the Institution has published five apps on the iPhone, Android, and iPad app platforms and has launched seven mobile websites, with an additional dozen or more projects in development. Most importantly, a Mall visitors' mobile website and application will be soft-launched in spring 2011.

Over 1,200 public comments were received on the Smithsonian Commons prototype website, with 97 percent voicing support for the initiative. The Smithsonian Commons project, which is currently in a fundraising phase, will create a new digital presence dedicated to stimulating learning, creation, and innovation through open access to Smithsonian research, collections, and communities. The commons prototype comments can be viewed at <http://www.si.edu/commons/prototype>.

Major Construction, Renovation, and Facilities Projects

Arts and Industries Building (AIB)

\$52.8 million estimated cost for shell only

The AIB shell project, consisting of roof/window replacements and upgrades to the building's structure, began on November 15, 2010, and is scheduled to be completed by mid-fiscal year 2013. Total project costs for the shell are \$15 million in Federal capital funds, \$30 million from the Federal Legacy Fund, and the remainder from private donations. A favorable bidding climate has permitted additional interior demolition to be added to the project scope; this will further reveal the character of the original spaces and open views through the building that have been obscured for nearly 100 years. Design of the building core and the development of a future program for the building are in the scope development phase.



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 includes an upgrade of underground utilities in Beaver Valley. Construction is approximately 40 percent complete and is projected to be finished in early 2012. The noncapital, 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.

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 were recently completed. Remaining work on the “elephant community center” has been removed from the original contract and awarded to a new contractor; work on this component is approximately 10 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

\$33.3 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, which houses vital support functions that must remain operational throughout construction and will be temporarily relocated to swing space. Replacement of an adjacent retaining wall supporting the North Road was recently incorporated into the project and will be reviewed with the Commission of Fine Arts and the National Capital Planning Commission in February and March 2011. The project also includes the permanent relocation of the Institution’s vehicle maintenance branch to a Suitland, Maryland, facility, which is nearly 50 percent complete. Federal funding has been requested for fiscal years 2012–2014 for work on the retaining wall and the General Services Building.

National Zoological Park, Smithsonian Conservation Biology Institute

Smithsonian-Mason Global Conservation Studies Partnership and Utilities Upgrade

\$39.6 million total estimated project cost

A 2008 Memorandum of Understanding between the Smithsonian and George Mason University (GMU) pledged both parties 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 at a cost of \$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 raised funds. Relocation of animals from this building is under way, with \$1.6 million in raised funds. Design is 95 percent complete, and construction is expected to begin in late spring 2011. Along with this contract award, the Smithsonian will upgrade site utilities with \$5.5 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 Museum of African American History and Culture

\$500 million total estimated project cost

Schematic design for the Smithsonian's newest museum is in process and will yield refined submittals to the Commission of Fine Arts and National Capital Planning Commission for their respective March and April 2011 hearings. In parallel with design activities, and in accordance with the National Historic Preservation Act, regular consultations with interested parties continue. Several public hearings were held in November 2010 and January 2011 to present the Environmental Impact Statement (EIS) process and to receive comments on the Draft EIS. The EIS public comment period ended in mid-January, and comments will be incorporated in the final EIS. A contract has been signed with the exhibit design firm of Ralph Appelbaum Associates, enabling exhibition design to proceed in concert with building design. Additionally, proposals have been received and are in review for a construction manager at-risk. The RFP was issued in December 2010; selection and award are anticipated in spring 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 space, package III: \$60 million total project cost

The focus of the third phase of renovation at the National Museum of American History is on renewal of three west wing public spaces. Data gathering, field surveys on existing conditions, and schematic design have been completed. The 35 percent design documents are complete, with final design expected by summer 2011 and construction to begin by early 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.

Cooper-Hewitt, National Design Museum

\$57.7 million total estimated project cost

The renovation of the Fox-Miller townhouses is scheduled to be completed in summer 2011. Design for the Carnegie Mansion renovation is scheduled for completion in early 2011, with a construction contract to be awarded in June 2011 and construction to begin in July 2011. Total project costs include \$25.2 million in Federal funds and \$32.5 million in private funding. Federal funds include 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 \$30 million (more than 90 percent) have been identified in gifts and pledges.

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 slated for 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, an improved paleobiology laboratory, and a 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

With 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 facility 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.

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

\$81.8 million total project cost

Phase II of the Udvar-Hazy Center has added 237,000 square feet of collections care space to the current facility. The infrastructure construction (\$68.7 million in Trust funds) was completed in December 2010. The equipment fit-out for the center's storage, processing, and archives spaces will be completed using Federal funds.



Smithsonian Environmental Research Center, Mathias Replacement Laboratory Project

\$44.5 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. Design was completed in October 2010, and construction is scheduled to commence in early 2011 and to be completed in 2014.

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. Estimates for the associated costs are \$9.5 million in Federal funds and \$10.0 million in Trust funds.

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

\$42.6 million total estimated project cost

Renovations have been completed on Pod 3 in Suitland, Maryland, which will provide consolidated storage space for several types of collections, allowing the Smithsonian to vacate leased properties and freeing up congested space in several museums. 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 \$5 million to complete.

Permanent Physical Security Barriers

\$55 million total project cost

Construction of security barriers at the National Air and Space Museum is complete. The final phase of security barriers at the National Museum of Natural History is under way, with completion expected by summer 2011. The installation of security barriers around the perimeter of the National Museum of American History was completed in December 2010. Construction of security barriers for the Castle and Quadrangle is slated to start in fiscal year 2014. 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, most involving safety/code compliance or sustainability and energy efficiency. All project contracts were awarded by the end of fiscal year 2010. Final contractor payments and reporting will occur by spring 2011.

Sustainability

In response to Executive Order 13514, "Federal Leadership in Environmental, Energy, and Economic Performance," the Smithsonian submitted greenhouse gas (GHG) emission inventories for fiscal years 2008 and 2010 (the former was established by the order as the baseline year for tracking GHG emission reduction progress). The Smithsonian reported 2010 GHG emissions equal to 152,309 metric tons carbon dioxide equivalent (MTCO₂e), comparable to the annual impact of approximately 27,690 typical passenger vehicles. About 60 percent of these emissions are attributable to the transmission, distribution, and consumption of purchased electricity. Other major contributions, in descending order, include purchased steam, stationary combustion of natural gas and fuel oil, employee commuting, and purchased chilled water. The inventory also includes emissions related to solid waste disposal, business travel, vehicles and equipment, use of fluorinated gases, and wastewater treatment.

The Smithsonian was awarded a contract for energy and water assessments at the Reynolds Center, Heye Center, Herndon Data Center, Quadrangle, and Freer Gallery. These assessments, now under way, are expected to identify conservation opportunities, with estimated costs and economic payback. At the Quadrangle and Freer, the scope also includes retro-commissioning of major energy-using systems aimed at improving both efficiency and performance.