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PRINTMAKER



Smithsonian  
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SCIENCE, HISTORY AND THE ARTS

NUMBER 2 • AUTUMN 2003

**Faces on the frontier.** As Union Gen. Philip Sheridan was driving Confederate troops from Virginia's Shenandoah Valley in 1864, a young newspaper illustrator, James E. Taylor, was close at hand, turning out battle scenes for the newspaper *Leslie's Illustrated*. After the Civil War, the public's craving for images of American Indians, gold miners, soldiers, settlers and other wayfarers of the American frontier kept Taylor crisscrossing the West.

"Drawing the Western Frontier: The James E. Taylor Album" is a site where you'll find photos of Buffalo Bill Cody, Wild Bill Hickock and a stagecoach full of other fascinating characters from the American West. This site from the National Anthropological Archives of the Smithsonian's National Museum of Natural History features more than 700 photographs collected by Taylor during his career to use as references for illustrations. The richest vein running through this album is its many stunning portraits of American Indians.

—[www.nmnh.si.edu/naa/taylor](http://www.nmnh.si.edu/naa/taylor)



**Jim Spleen, alias Kit Carson Jr., a young Westerner who tried to enter West Point by posing as Kit Carson's son**

**Getting the picture.** In this age of ephemeral e-mail, it is easy to forget that letters can be visually captivating. On the Smithsonian's Archives of American Art Web site "Getting the Picture: The Art of the Illustrated Letter," visitors are invited to peruse the fine art of letter writing. From winsome declarations of love to lively reports of current events and other personal communiques, each letter on this site is decorated with an expressive illustration by the artist who wrote it. Artists whose letters and artworks appear here include Alexander Calder, Howard Finster, Andrew Wyeth, Winslow Homer, William Wegman and Betty Parsons. Collected entirely from the holdings of the Archives of American Art, the illustrations in these letters "represent an irrepressible urge to picture language," Curator Liza Kirwin says.

—[artarchives.si.edu/exhibits/illusltr/illusltr.htm](http://artarchives.si.edu/exhibits/illusltr/illusltr.htm)



**"Sunset at Kergroës" (detail), an artwork depicting a landscape in Brittany, was included in a 1919 letter from writer R. Lortac to painter Edward Willis Redfield.**

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*On the cover: With no harm done to the animal, a blue crab is measured by researcher Michael Goodison of the Smithsonian Environmental Research Center on the Chesapeake Bay. Data are being collected from crabs netted in the Chesapeake under the Blue Crab Enhancement Project, a joint project of the Smithsonian, the Virginia Institute of Marine Science and the University of Maryland's Center of Marine Biotechnology. (John Barrat photo)*

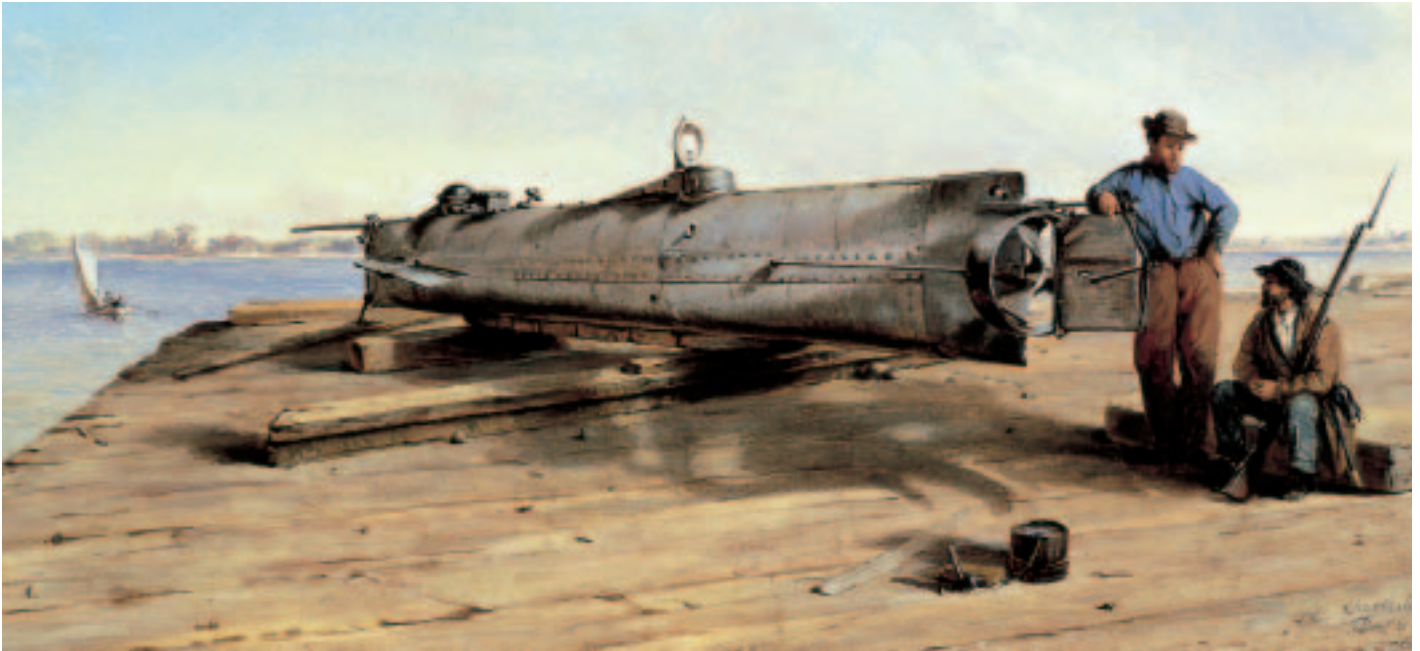


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# Hunley submarine cedes secrets of crew to Smithsonian anthropologist

By Michael Lipske

Special to Inside Smithsonian Research



Confederate General Pierre Beauregard did not mince words when describing the H.L. Hunley, a 40-foot-long submarine built from an iron boiler during the Civil War. “It is more dangerous to those who use it than the enemy” was his dark assessment of this secret weapon of the Confederacy after 13 Rebels drowned inside its cramped quarters during training mishaps. Others disparaged the sub as a “peripatetic coffin.”

Still, in 1864, Beauregard was persuaded to relaunch the Hunley in defense of South Carolina’s Charleston harbor. At 8:45 p.m. on Feb. 17, the Hunley rammed a barbed mine into the hull of the Union steam sloop Housatonic. The Housatonic sank in

minutes, and five men were lost from its crew of 155. But the Southern submarine, Hunley, also perished that night, with its entire crew of eight.

In his laboratory at the Smithsonian’s National Museum of Natural History in Washington, D.C., Physical Anthropologist Douglas Owsley is examining color slides of the recently recovered remains of the eight men from the Hunley submarine. A light-table illuminates photographs of jaws and teeth and skulls and hundreds of separate bones extracted from thick silt inside the sub.

“Here’s a guy with a beautiful pipe facet,” Owsley says, looking at a slide of teeth showing a deep groove worn by a smoker’s habit of clamping down on a pipe stem. “They’re beautifully pre-

served skeletons,” says this connoisseur of bones after flipping through more slides.

Owsley’s study of the bones of the Hunley’s crew and their positions in the sub may some day help solve the mystery of why the Hunley sank after its successful attack on the Housatonic. Using measurements from crew members’ skulls, he also is working to re-create their faces for an upcoming exhibit in a Charleston museum.

*(continued)*

**Above: This oil painting of the Hunley submarine resting in Charleston harbor was painted by Conrad Wise Chapman around 1863. (Courtesy of the Museum of the Confederacy)**

## Recovering a bottle

After the Civil War, showman P.T. Barnum offered \$100,000 to anyone who could find the Hunley. But the sunken submarine stayed hidden until 1995, when adventure novelist and marine explorer Clive Cussler located the vessel under sand and silt in 30 feet of water a few miles off Charleston harbor.

On Aug. 8, 2000, the submarine was raised from the sea by a team put together from the National Park Service, the U.S. Navy, the nonprofit group Friends of the Hunley and others. The Hunley was then lowered into a 90,000-gallon tank of fresh water at a state-of-the-art marine archaeology laboratory, the Warren Lasch Conservation Center, in North Charleston.

Since then, archaeologists have painstakingly removed sediment from

inside the submarine, carefully exposing the Hunley's innards. Robert Neyland, the archaeologist directing the Hunley project, describes the effort "like recovering a bottle—everything is contained inside the submarine."

"Everything" has included wool, linen and silk items of clothing and eight pairs of leather shoes, canteens, tobacco pipes, even battlefield booty in the form of a Union soldier's dog tag.

A diamond ring and diamond brooch, an ornate gold pocket watch and an engraved \$20 gold coin are believed to have belonged to the Hunley's skipper, Lt. George Dixon.

## Oxygen-free environment

Dixon and the Hunley crew were "incredibly brave men, a select group," Owsley says. Volunteers all, the sailors sat

shoulder-to-shoulder on a wooden bench, turning a crank that rotated the vessel's propeller. It was hard labor made harder by cramped quarters—a cabin measuring just 4 feet high and 3½ feet wide.

"I could see somebody going nuts in there," says Owsley, who has spent many hours squeezed inside the sub, identifying bones in the black silt, a substance he likens to "gritty butter."

The silt, however, was a savior. It provided an oxygen-free environment that led to the remarkable degree of preservation of the human remains in the submarine. A pathologist and a toxicologist working on the project have even been able to study brain tissue from the doomed Rebels.

## Laser mapping

Before any bones were removed from the Hunley, their positions were mapped with a system that uses computers and laser signals to gather precise coordinates for the location of any object. As Owsley describes it, extending a special wand containing a laser transmitter into the sub, "I would touch a given bone in at least three different places," thus triangulating the bone's position in the space inside the submarine.



**Left: Douglas Owsley surveys the interior of the Hunley submarine before entering it to begin recovery of the remains of the crew. (Photo courtesy of Friends of the Hunley)**

**Opposite top: The port bow of the Hunley is seen here on Aug. 8, 2000, cradled in the recovery truss that lifted it that day from the ocean floor. (Photo courtesy of Friends of the Hunley)**

**Opposite bottom: Lt. George Dixon, the 24-year-old soldier who was commanding the Hunley on the night that it sank the Housatonic (Photo courtesy of Friends of the Hunley)**



Hunley project archaeologists then incorporated data on bone locations onto digital maps of the overall submarine—maps constructed using a laser-scanning system. The resulting 3-D digital representations of the submarine show bones and other artifacts located exactly as they came to rest before being covered in silt. The maps may help scientists understand what Hunley sailors were doing when they died and thus determine exactly why and how the sub sank.

### Stature, age

All of this information is complemented by Owsley's meticulous notes on and study of the skeletons. "Once we got [each man's] bones sorted, we would go through a description of each person," the anthropologist says. It's the same methodology he has used in a long career of identifying and studying a wide variety of human remains—bones of Native Americans, of settlers in Colonial Virginia, of contemporary crime victims and of victims of "ethnic cleansing" in the Balkans.

Owsley searched for evidence of dental disease and documented the presence of gold and amalgam fillings in the teeth of Hunley crew members. He measured the stature of each skeleton and was surprised to find men as tall as 5 feet, 11 inches. Experts had maintained that

sailors would have had to be short to work inside the cramped submarine.

Owsley had assumed the submariners would "turn out to be pretty young guys." After all, Dixon, the commander, was only 24. But judging by their bones, one appears to have been in his late 30s and two in their 40s—"old enough," Owsley observes, "to have arthritis."

### Faces from the past

Owsley also is directing an effort to put faces on the men of the Hunley. Detailed plastic casts of the Hunley skulls have been sent to Sharon A. Long, a Wyoming forensic artist who has created facial reconstructions from skulls for Owsley for some 16 years. As with previous projects, Owsley says, he met with Long "to talk about what we saw in the skulls."

"He reads them like a book," Long explains of Owsley's skill in interpreting how the shape of eye orbits, the nasal cavity, cheekbones, brow ridges and other features determine physiognomy. "One of the Hunley guys had his nose broken a few times," Long says. "He got hit with a right hook."

Hunger also leaves a record. Owsley reminded Long that the Hunley sailors had been at war for several years and were probably undernourished. While modeling the faces with oil-based clay, the artist will adjust tissue thicknesses to

reflect the physical condition of the Rebels.

Further information collected by a Hunley project genealogist may help Owsley and Long decide details of skin complexion and hair color. Eventually, the rebuilt Rebels will be displayed, along with their old submarine, at a Hunley museum in the Charleston area. On Saturday, April 17, 2004, the remains of the Hunley's crew will be buried in Charleston.

In our media-saturated age, the names and faces of the sailors involved in a contemporary Hunley-type incident would be widely known. Owsley and Long could work from photos. But the Confederate sub, for the most part, was crewed by mystery men, appropriate for a secret weapon.

As Owsley says, "This was a true undercover Stealth Bomber of its day." ♦

*The Southern submarine also perished that night, with its entire crew of eight.*



# Chicago train car rattles back to 1959 in new exhibition

By Daniel Friend

Special to Inside Smithsonian Research

**D**ecember 15, 1959. Eisenhower is president, a Rambler sedan costs \$1,795, and Jimmy Stewart and Lee Remick are striking romantic sparks in the movie “Anatomy of a Murder.”

In Chicago, a drizzly, gray winter workday has begun. Bundled against the windy, raw weather, commuters and Christmas shoppers on an elevated train nap, chat and read in the Daily Tribune about the opening of the Northwest Expressway. Some sit, some stand, all are jostled by the movement of the car as the conductor calls out stops—“State, Van Buren...Madison, Wabash”—over the public address system.

This routine commute, a rich slice of Chicago life familiar to millions, has been re-created some 40 years later in a short film playing in a train car in the exhibition “America on the Move,” opening

in November at the Smithsonian’s National Museum of American History. The train car is one of a dozen vignettes in this new 26,000-square-foot exhibition showcasing some 300 vintage vehicles from the popular Smithsonian transportation collections in historic settings.

With the aim of allowing visitors to travel back in time and revisit the sites, sounds and sensations of transportation as it shaped American lives, “America on the Move” will bring to life the most significant places and periods in America’s transportation history.

One of these is the Windy City in December 1959—and for good reason.

## Old 6719

“Chicago thrives on one of the oldest and most expansive mass transit systems



in America,” National Museum of American

History Curator Bonnie Lilienfeld says. “After

World War II, the elevated train, or L, became an integral part of the city’s enormous network of rapid transit trains, streetcars and buses.”

To re-create the experience of an elevated train commute, Lilienfeld rescued an actual L car from a rail yard in Skokie, Ill., in 1999. Chicago Transit Authority car No. 6719, which rocked, lurched and rolled faithfully on Chicago’s L and subway for nearly 30 years, is now installed in the museum. One of the larger objects in the transportation collection, it is 48 feet long and has seating for 45 passengers.

“It was about to be scrapped,” Lilienfeld recalls of the car, built by the St. Louis Car Co. in 1959. “By the time we bought the thing, it was like my baby. I was in love with it.”

Chicago Transit Authority staff loved it, too—they removed the graffiti covering its exterior. Alstom Transport and the American Public Transportation Association restored the car to its original beauty inside and out, including warm layers of Croydon cream, swamp holly orange and Colorado spruce green paint.

Lilienfeld’s research into the thousand miniscule details of a 1959 commute was aided by enthusiastic CTA staff, volunteers at the Illinois Railway Museum and CTA aficionados, who offered their knowledge and resources. They also





*“America on the Move” will bring to life the most significant places and periods in America’s transportation history.*

helped her collect L artifacts, such as a motorman’s control handle, destination signs, a brass key that starts the car’s electric drive motor, CTA decals and promotional posters from inside the cars.

### **Ravenswood Line**

Museum visitors will enter No. 6719 through its folding doors and take a seat on a 1959 commute into Chicago—virtually elbow to elbow with laborers, Christmas-shopping housewives, businessmen, department store clerks and others who Lilienfeld determined would have purchased a 25-cent token on the L that morning.

The film follows an actual route on the Ravenswood Line around Chicago’s elevated loop. Lilienfeld rode the L lines and took pictures and measurements in stations along the line’s downtown loop.

“The Chicago Transit Authority gave me a map that shows the exact points in the loop where the train lights flicker because of breaks in the track,” she says. Light bursts inside the car are synchro-

nized to the flashing in the film. Special effects also include a mechanized system that jostles the car at turns and track switches as they appear on the film—just like the real thing.

### **Cars cut in**

But the L is only one thread of Chicago’s complex tapestry of transportation history. In 1959, as the exhibition points out, ridership on the L was falling. Dependence on the automobile had been shaping life in American cities and suburbs for more than a decade. On Dec. 15, Chicago’s Northwest Freeway opened to drivers. Commuters in Lilienfeld’s film discuss the new freeway and the prospects of buying a car.

Along with the L, a vastly different slice of Chicago life also gets a close-up look in “America on the Move”: Park Forest, a suburb built around the family car.

As the suburbs spread outward beyond the reach of the L, Chicago authorities began building high-speed expressways into the city to lure suburbanites and

their cars into the business district. Chicago was the first city to lay down subway tracks inside the median strips of automobile expressways.

Despite a century of change, the L still carries commuters into the city daily. From 1896 to 2003, it has helped millions of Chicagoans with the most basic of needs—simply to get around town. As “America on the Move” makes clear in many ways, mobility is the defining experience in American life. ❖

**Opposite top: A period Chicago Transit Authority decal once used on its rail cars**

**Opposite bottom: A tractor-trailer carefully maneuvers the 1959 Chicago L train car into the National Museum of American History. (Photo by Jeff Tinsley)**

**Above: Bonnie Lilienfeld reads a 1959 Chicago Daily Tribune inside the Chicago Transit Authority rail car, which is part of the new transportation exhibition “America on the Move.” (Photo by Jeff Tinsley)**

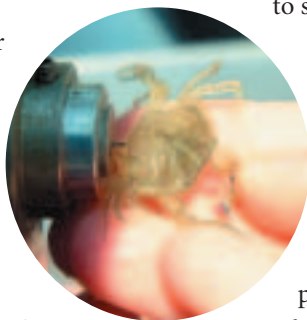
# Hatchery project may help halt decline of the Chesapeake Bay blue crab

By Kimbra Cutlip

Smithsonian Environmental Research Center

**D**ashed generously with special seasoning and heaped on an outdoor picnic table, a bushel of hardshells at Captain Jack's Crab Shack in Spotsylvania, Va., runs about \$140. Customers crack the steamed crustaceans with wooden mallets and eat the semisweet meat with savory side orders of creamy cole slaw and redskin potato salad.

Tastes are running high for the blue crab these days, but American appetites, pollution and habitat loss are putting a serious dent in their numbers. Since 1991, blue crab populations in the Chesapeake Bay have plummeted by 85 percent. Without intervention, says Anson "Tuck" Hines, an estuarine ecologist at the Smithsonian Environmental Research Center in Edgewater, Md., the Chesapeake's blue crab fishery—like the oyster fishing industry—will certainly recede into history.



University of Maryland's Center of Marine Biotechnology are rearing crabs by the tens of thousands and releasing them as juveniles into the Chesapeake Bay. Their work is a test, Hines explains, to determine if raising and releasing crabs in large numbers "is economically viable and ecologically sound."

He emphasizes that the intent is not to subsidize the Chesapeake's crab fishery by adding crabs for fishermen to catch. The project goal for Smithsonian Environmental Research Center scientists is to determine if it is possible to increase the crab population by contributing to the breeding stock without altering the ecology of the ecosystem.

Launched two years ago, the Blue Crab Enhancement Project already has developed techniques that may form the foundation of a new crab aquaculture industry.

## Enhancement project

As a principal researcher for the recently established Blue Crab Enhancement Project, Hines and colleagues at the Virginia Institute of Marine Sciences and the

## Last holdout

A dominant predator, blue crabs are an important species in the Chesapeake Bay. As a seafood delicacy, crabs represent a significant source of revenue for

Maryland and Virginia. The crab fishery remains the last holdout of a series of commercial fishing industries in the bay that have been nearly abandoned due to meager harvests, says Hines, who was studying blue crabs for the Smithsonian when large numbers of oystermen were still plunging their tongs into the Chesapeake.

"The demise of the other fisheries has shifted pressure onto blue crabs," Hines explains. "Today, crabs of reproductive age are very few. Not enough little ones are coming into the system to bring the population up."



**Above:** A small, dime-size crab is tagged with a tiny micro-wire at the Smithsonian Environmental Research Center on the Chesapeake Bay. (Photo by Richard Strauss)

**Right:** Alicia Young-Williams measures the carapace of a young crab that she has captured in a seine net along the shores of the Chesapeake Bay. (Kimbra Cutlip photo)

**Opposite:** An adult Chesapeake Bay blue crab (Photo by John Barrat)





### Raising and tagging

Inside a high-tech University of Maryland hatchery in Baltimore's Inner Harbor, tens of thousands of "little ones" are scrambling around inside 1,000-gallon saltwater aquariums. Researchers here have successfully induced female crabs taken from the bay to produce eggs out of season and spawn millions of larvae.

"For years, the dogma for the Chesapeake Bay blue crab was that each female produced one brood and that was it," says Center of Marine Biotechnology

Director Yonathan Zohar. At this lab, "we were able to produce up to four broods in captivity."

Scientists at the Center of Marine Biotechnology rear the crabs through eight larval stages; one megalops, or "pre-crab" stage; and about four molts.

At two months, the dime-size crabs are transported to the Smithsonian Environmental Research Center's wet lab on the Rhode River, a brackish Chesapeake tributary. Each crab is tagged once with a magnetic micro-wire and again with a harmless injection of brightly colored, easy-to-see plastic before being released at specific sites on the bay.

### Checking in

After releasing the animals, Smithsonian Blue Crab Enhancement Project researchers Jana Davis and Alicia Young-Williams and summer interns in Hines' lab return weekly to check up on the crabs. They trawl and seine the shores, sift through the thick black muck and pick out the tiny, pinching juveniles. "It's an exciting time," Young-Williams says. "Pulling them up and seeing that they are growing and surviving."

Davis and Young-Williams measure every crab, count missing limbs and distinguish wild crabs from hatchery crabs. By recording this data over time,

researchers hope to eventually answer such critical questions as: Are the hatchery crabs surviving? Are they competing as well as wild-born crabs? Are they out-competing wild crabs and replacing their populations? Are they surviving long enough to contribute to the breeding population?

### Scaling up

To date, the project has released 35,000 crabs. To have a true impact on the Chesapeake—America's largest estuary with a surface area of some 7,000 square miles—millions of crabs will need to be raised and released. So far, crab populations at the release sites have doubled, but the releases have been on a small scale and in select waters.

To determine if this will work for the entire Chesapeake, "we will need to be able to scale things up," Hines says. "That will require another big research effort and more money."

Data and techniques compiled under the Blue Crab Enhancement Project also will help provide sound facts for decision-makers faced with tackling the causes of the crab's decline—overfishing and habitat loss.

Responsible management coupled with an aquaculture industry may ensure that the blue crab remains a healthy resident in the Chesapeake and on the menus of seafood restaurants nationwide. ❖



# Yoshitoshi artworks in collection of prints show less austere side of Japanese art

By Hope Cristol

Special to Inside Smithsonian Research

**C**oy geishas. Paper fans. Flowering trees. For many, these images are what come to mind as the common characteristics of Japanese art.

Then again, most of us aren't familiar with the woodblock prints of Yoshitoshi Tsukioka (1839-1892). During his career, this late-19th-century genius created colorful and exotic images, ranging from the human slaughter of war and highly sexual images of geishas to comical anthropomorphic animals and dramatic incidents from Japanese legend and history.

Thanks to a windfall gift in April, the Smithsonian's Arthur M. Sackler Gallery now owns more than 100 prints by this passionate artist of Japan's Ukiyo-e period, as well as some 4,000 works by other Japanese printmakers, including Ito Shinsui (1898-1972), Yoshikawa Kanpo (1894-1979), Natori Shunsen (1886-1960), Kawase Hasui (1883-1957) and Ohara Koson (1877-1945).

Bequeathed by Connecticut art collector Robert O. Muller, who died in April, the collection is accompanied by a detailed card catalog and many original woodblocks. Selected works from the collection will be unveiled in an August 2004 exhibition, and plans for a dedicated research center and fellowship program centered on Muller's collection are now under way.

## Beardsleyesque

During his lifetime, Yoshitoshi witnessed great political change, instability and up-



Detail of "Fujiwara-no-Ahira, Minister of the State" (1885), by Yoshitoshi (Image courtesy of the Arthur M. Sackler Gallery)

*The austerity of Zen that people often think of is only one tiny sliver of what Japanese art is all about.*

heaval in Japan, much of it bloody. He knew extreme poverty and struggled with depression and mental illness.

A better understanding of the career and artworks of Yoshitoshi is guaranteed to challenge popular perceptions of Japanese art as calmative and sparse.

"The austerity of Zen that people often think of is only one tiny sliver of what Japanese art is all about," Sackler Chief Curator James Ulak says. Yoshitoshi's works "have a certain Beardsleyesque quality," Ulak explains, referring to British art nouveau artist Aubrey Beardsley, known for his ornamental illustrations with sexual and violent overtones.

"Muller loved birds and animals and landscapes," especially "romantic, idealized views of nature," Ulak says. So many of Yoshitoshi's images stand out.

Some of Yoshitoshi's prints resemble the illustrated pages of Aesop's fables. Subjects in his print series "100 Phases of the Moon" are drawn from Japanese history, theater and legend. For example, in the print "100 Phases of the Moon: Hotei" (1888), Yoshitoshi depicts the most popular of the Japanese seven gods of luck, a jolly fat man with thick hairs sprouting from his chest, belly, toes and fingers. His name is Hotei, and he's happily reclining on a sack of treasures, pointing at the moon.

Other Yoshitoshi prints might have been pulled from a modern-day comic book. In "100 Phases of the Moon: Kama in Moonlight" (1886), two skinny scoundrels with tattered clothes are up to no good. One stands in the foreground



**“100 Phases of the Moon: Kama in Moonlight” (1886), by Yoshitoshi (Image courtesy of the Arthur M. Sackler Gallery)**

with the posture of a question mark, pointing toward an enormous “kama,” or iron kettle. The rascal in the background wields an absurdly large mallet. Muller’s notes on the print explain that the two are presumably breaking apart the kettle to steal pieces of iron.

In addition to lovely portraits of Japanese women and disturbing images of many-eyed monsters, Yoshitoshi also illustrated important public figures. In one version of his “Fujiwara-no-Ahira, Minister of the State” (1885), the viewer looks down on the minister’s large rain

hat and yellow wrap as he hurries down the street in a storm.

### **Ukiyo-e and Shin-Hanga**

The Robert O. Muller Collection doesn’t include Yoshitoshi’s earlier and characteristically dark works depicting savage cruelty, the torture of a pregnant woman or bloody wartime scenes, for instance. But, Ulak says, that is not what Muller collected.

“Bob loved a great composition, and his eye was wonderfully attuned to graphic subtleties. He cared a great deal about excellence in craft, the quality of registration”—how well the paper lined up with the inked block— “the nuance of the pigments and how carefully the blocks were carved. He was totally immersed in the beauty of his prints,” Ulak explains.

Muller recognized the historic value of collecting prints by Yoshitoshi, one of the last masters of the final printmaking movement in pre-industrialized Japan—Ukiyo-e.

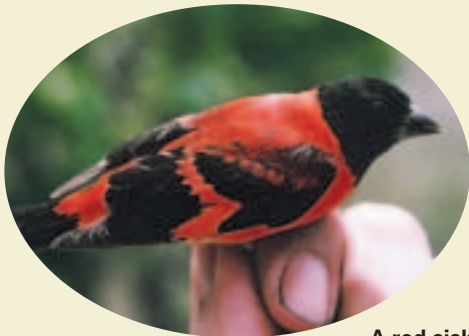
As the country turned from a Far Eastern culture to an industrial society, printmaking guilds were replaced by mass-production techniques, such as lithographs and the printing press.

After Yoshitoshi’s death in 1892, the woodblock print was revived in Japan in the early 20th century by Shin-Hanga printmaking guilds. These artists portrayed a new, romanticized view of Japanese women, one that became widely familiar to most Westerners. Instead of erotic images of prostitutes in the pleasure quarters, these works “sought to depict more generalized notions of feminine beauty,” Ulak explains. “Shin-Hanga women were part coquettish, part erotic, part domestic—new roles for women to be playing [in Japanese art].”

But before Shin-Hanga was Ukiyo-e and Yoshitoshi. His works in Muller’s collection represent an earlier Japan and an artist balancing tradition and change. ❖

**Red siskins**

A previously unknown population of red siskins, a federally listed endangered bird species, has been discovered in Guyana by researchers from the Smithsonian's National Museum of Natural History and the University of Kansas. Closely related to the goldfinch, the siskin is a popular pet in Europe and America. Trapping and trading have decimated their wild populations. Red siskins once occurred widely from eastern Colombia through northern Venezuela, but they now exist only in small, isolated populations. The new population, whose numbers may reach a few thousand, were found during a survey of birds of Guyana. Their location is being kept confidential.



A red siskin

**Robert Emmet**

In a ceremony on Sept. 17 in Washington, D.C.'s Emmet Park, the Smithsonian American Art Museum celebrated the completed restoration of "Robert Emmet," a 1916 bronze sculpture of the Irish patriot created by American sculptor Jerome Stanley Connor. The sculpture, which is part of the museum's collection, depicts Emmet making an impassioned speech at his trial in front of a British special court in 1803, the day before he was executed. Treatment of the statue—which is on long-term loan to the National Park Service—included washing, applying a corrosion inhibitor and brushing on a protective hot-wax coating.

**Da Vinci Medal**

Bart Hacker, a curator in the Division of Armed Forces History at the Smithsonian's National Museum of American History, has been awarded the Leonardo da Vinci Medal from the Society for the History of Technology. The medal is presented annually to a person who has made an outstanding contribution to the history of technology through research, teaching, publishing and other activities. Hacker came to the Smithsonian in 1998 and was co-curator of the National Museum of American History exhibitions "Fast Attacks and Boomers: Submarines in the Cold War" and "West Point in the Making of America."

**Botanical exploration**

A new Botanical Exploration Fund has been established at the Smithsonian's National Museum of Natural History to permit Smithsonian scientists to examine the flora of habitats and regions around the world and establish maintenance and conservation plans. Dedicated to furthering the discovery, documentation and conservation of the Earth's plants, the first gift to the fund was made by Shirley Sherwood, a renowned collector of botanical art, whose collection made up the recent Natural History Museum exhibition "A Passion for Plants."



"Sunflower," by Paul Jones, from "A Passion for Plants" at the National Museum of Natural History

**Enola Gay**

The Smithsonian's National Air and Space Museum unveiled in August the newly reassembled Enola Gay, the Boeing B-29 Superfortress used to drop the first atomic bomb in combat on Aug. 6, 1945. Restoration of the aircraft began in 1984 and involved 300,000 staff hours. The Enola Gay will be on display at the museum's Steven F. Udvar-Hazy Center in Chantilly, Va., when the center opens to the public on Dec. 15.



The Enola Gay, with its 141-foot wingspan, in place at the Steven F. Udvar Hazy Center

## *African American celebrations shape a uniquely American identity*

When the residents of Boley, Okla.—one of the oldest all-African American towns in the United States—turn out to celebrate the town’s anniversary, they parade on Main Street, barbecue nonstop and host a rodeo of the area’s best black cowboys. In Lerty, Va., a full-immersion baptism gets the faithful exultant with dancing and tables of heavenly food.

In big cities and small towns across the United States, African American celebrations, from the mainstream to the little-known and from the sacred to the secular, are being visited by the staff of the Smithsonian’s Anacostia Museum and Center for African American History and Culture. The result of this research will be “Jubilee: African American Celebration and Memory,” an exhibition opening in 2004.

African American celebrations are “about family, community, shared history and people finding a way to connect to something bigger than themselves,” says Museum Specialist Anthony Gualtieri, who has documented a variety of African American celebrations for the exhibition.

One of his stops was a Pinkster celebration in Tarrytown, N.Y. Derived from “Pfungster,” the Colonial Dutch observance of Pentecost, “the black population of Albany, N.Y., so transformed this holiday that, by the mid-1800s, it was virtually considered a black celebration,” Anacostia Historian Portia James explains.

“Many celebrations originating in the 18th and 19th centuries and observed for generations, such as Election Day,



**A full-immersion baptism in Lerty, Va. (Photo by Steven Cummings)**

Pinkster and John Canoe, no longer exist in their original forms,” James points out. “Others, including Big Quarterly, camp meeting and Shrove Tuesday, are celebrated regionally and are not well-known.”

Holidays and traditions, James says, were used by early African and African American communities to shape a uniquely American identity.

—Fleur Paysour

## *Vaccines help stop West Nile virus among National Zoo animals*

Vaccines and mosquito control appear to have helped deliver a knockout punch to the West Nile virus at the Smithsonian’s National Zoological Park this year.

In 2002, the virus sickened and killed some 20 birds at the National Zoo. This year, it has not been found in a single animal in the Zoo’s collection.

A few hundred Zoo animals—mostly birds, along with rhinos, zebras and tapirs—were vaccinated against West Nile virus in 2002 and 2003. Zoo medical staff, however, are reluctant to credit vaccinations as the sole factor in the decline of this virus. “Although we aren’t seeing the disease in our vaccinated animals,” Associate Pathologist Donald Nichols says, “we are not seeing much in



**Flamingos at the National Zoo**

wild birds either, and they were not vaccinated.”

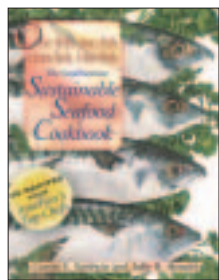
Zoo staff stepped up mosquito control measures this year, using bug traps and removing standing water on National

Zoo grounds. “We also are using a biological control derived from otherwise harmless bacteria that eliminate mosquito larvae” in areas such as the Zoo’s duck pond, says Richard Montali, chief pathologist at the National Zoo.

A drastically reduced population of wild crows, hit hard by the virus last year, as well as natural immunity, may be additional factors in the low West Nile infection rate among Zoo animals. “Last year, the disease was spreading through the area and susceptible birds were dying,” says the Zoo’s Chief Veterinarian Suzan Murray. “West Nile is now considered endemic here. Most animals already have been exposed and have some level of immunity.”

—Carolyn Martin

**One Fish, Two Fish, Crawfish, Bluefish: The Smithsonian Sustainable Seafood Cookbook**, by Carole C. Baldwin and Julie H. Mounts (Smithsonian Books, 2003, \$35). This cookbook is filled with delectable and ecologically sound seafood recipes by some of America's top chefs, including Alice Waters and Jacques Pepin.



**At First Sight: Photography and the Smithsonian**, by Merry A. Foresta (Smithsonian Books, 2003, \$60). A senior curator of photography at the Smithsonian examines for the first time the extraordinary collections of photographs owned by the Institution.

**Lost Highway: The True Story of Country Music**, by Colin Escott (Smithsonian Books, 2003, \$26.95). Singing cowboys, love-struck songsters, rough-neck rebels and Nashville icons populate this definitive celebration of the raw spirit of authentic country music.



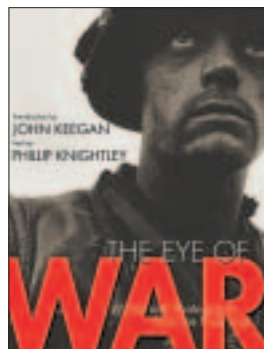
**Snakehead: A Fish out of Water**, by Eric Jay Dolin (Smithsonian Books, 2003, \$24.95). The amazing story of an invasive species that went from obscurity to fame, spawning "snakehead summer" and becoming a topic of David Letterman's Top 10 list. This book explores many serious questions about invasive species in America while bringing to life this enthralling tale.

**Studies of Halictinae (Apoidea: Halictidae), II: Revision of *Sphecodogastra* Ashmead, Floral Specialists of Onagraceae**, by Ronald J. McGinley (Smithsonian Contributions to Zoology). A scientific update of the taxonomy of the bee genus *Sphecodogastra*.

**One Nation Under Goods: Malls and the Seductions of American Shopping**, by James J. Farrell (Smithsonian Books, 2003, \$24.95). A lively, fast-paced history of the hidden secrets of the shopping mall that explains how retailers make goods "irresistible."

**Senator Mansfield: The Extraordinary Life of a Great American Statesman and Diplomat**, by Don Oberdorfer (Smithsonian Books, 2003, \$32.95). A spellbinding biography of one of the most powerful and dignified men to ever come to Washington, D.C.

**The Eye of War: Words and Photographs From the Front Line**, by Phillip Knightley (Smithsonian Books, 2003, \$60). An unforgettable tableau of 200 of the most powerful war photographs accompanied by poignant testimonies from soldiers and witnesses.



**Cubano Be, Cubano Bop: One Hundred Years of Jazz in Cuba**, by Leonardo Acosta (Smithsonian Books, 2003, \$29.95). Testimony from scores of Cuban musicians enriches this first history of jazz in Cuba. Written by an acclaimed Cuban musician, musicologist and writer.

**Pete Seeger: American Favorite Ballads, Vol. 1** (Smithsonian Folkways Recordings, \$15 CD). This CD features 28 classic American ballads recorded by Seeger in the 1950s and 1960s.



**Lord Invader: Calypso in New York** (Smithsonian Folkways Recordings, \$15 CD). Inspired improvisation and compelling rhythms fill these 1940s and 1950s recordings by Rupert Westmore Grant.

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Smithsonian Folkways Recordings can be ordered from Smithsonian Folkways Mail Order, Victor Building, Suite 4100, MRC 953, P.O. Box 37012, Washington, D.C. 20013-7012. To order by phone, call (202) 275-1143 or 1 (800) 410-9815. There is a \$5.50 fee for shipping and handling.

## Lewis and Clark: Across the Divide

By Carolyn Gilman, with an introduction by James P. Ronda (Smithsonian Books, 2003, \$60 cloth)

Ten minutes after she swallowed a dose of ground rattlesnake tail, Sacagawea gave birth to a son, Pomp, in the winter of 1805. In the absence of a doctor or modern medicine, Meriwether Lewis had to trust this Choctaw remedy for his young Shoshone guide's difficult childbirth.

"This was the first child which this woman had bourn [sic], and as is common in such cases her labour was tedious and the pain violent," Lewis wrote in a journal in which he also chronicled many other incidents of the exhilarating 1804 to 1806 expedition that opened the American West.

Two centuries have passed since Meriwether Lewis and William Clark's Corps of Discovery were the first to chronicle the varied landscapes and diverse Native cultures of the West. Now, in *Lewis and Clark: Across the Divide*, Carolyn Gilman meticulously examines the artifacts gathered during the expedition, as well as the equipment used to carry out the journey. She brings history to life in this engaging chronological narrative.

The book is a companion to the Missouri Historical Society exhibition "Lewis and Clark: The National Bicentennial Exhibition," which will begin a national tour next year. Gilman is curator of the exhibition, which reunites artifacts from Lewis and Clark's journey that have not been seen together since 1806. Using 400 color illustrations, *Lewis and Clark: Across the Divide* draws upon the storytelling power of these artifacts,



This George Catlin painting from *Lewis and Clark: Across the Divide*, titled "Scalp Dance, Sioux, 1832," was created almost 30 years after Lewis and Clark's expedition. It depicts a scene similar to Sioux firelit evening performances witnessed by the expedition members. (Photo courtesy of the Smithsonian American Art Museum)

lent by more than 50 individuals and institutions.

Gilman expands and transforms this familiar story by exploring the social and cultural landscapes the explorers traversed. Two perspectives on America came together from 1804 to 1806. Lewis and Clark, men shaped by Jefferson's Enlightenment ideals, encountered an Indian world they only partly understood. Traveling through Native lands, the explorers experienced moments of discovery that revealed the contrasts, similarities and creative exchange of ideas that occur when different worlds meet face-to-face. This navigation across the social divide is a story as tense and complex as the crossing of the physical landscape.

*Lewis and Clark: Across the Divide* provides intricate details of the journey's preparations, such as Lewis' purchase of a set of dental tools for \$2.25—including

keys for pulling teeth and various blades and scalpels—and a pair of \$10 pocket pistols with secret triggers that pop out when the flintlock hammers are cocked.

Equally intriguing are Gilman's explanations of the customs of the tribes Lewis and Clark encountered, including the head-flattening methods of the Clatsop and Chinook of the Northwest. Their infants were placed in tight wooden cradles equipped with a basketry attachment that was tightened gradually to flatten a baby's forehead.

*Lewis and Clark: Across the Divide* offers a new view of the equipment the Corps used, the artifacts they collected and the complexity of the cultures they encountered. It was an experience that gave the young Republic its first glimpse of what it was eventually to become—a cross-continental nation.

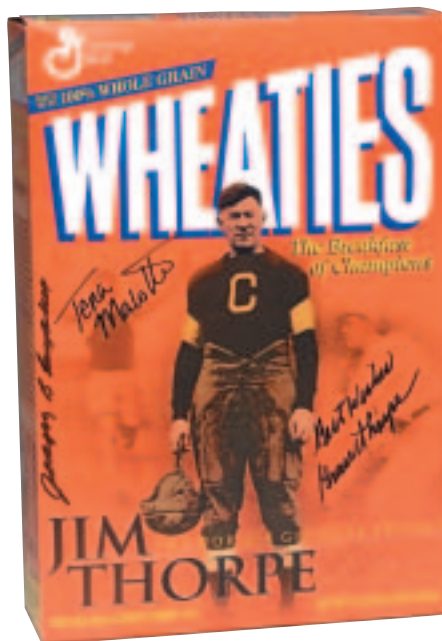
—Daniel Friend

## *Jim Thorpe Wheaties boxes come to Indian Museum collections*

Few foodstuffs from grocery store shelves ever find their way inside a museum's collection storage rooms, where eating and drinking are strictly prohibited. But when Joseph Campbell, of Welsh, Okla., offered to donate two unopened boxes of Wheaties breakfast cereal to the Smithsonian's National Museum of the American Indian, the museum gladly accepted. The reason: Native American athlete Jim Thorpe was featured prominently on the outside of the boxes.

Each box also bears the signatures of Campbell; Thorpe's daughter, Grace Thorpe; his great granddaughter, Tena Malotte; and Anna McKibben, a former Miss Indian U.S.A., who came up with the idea to have Jim Thorpe honored by Wheaties.

After an initial request to put Jim Thorpe on the cover of the cereal box



**Jim Thorpe, a member of the Sac and Fox tribe, won gold medals in both the pentathlon and decathlon during the 1912 Summer Olympics. He excelled in professional baseball and football and became the first president of what is now the National Football League.**

was turned down, these four American Indians organized a successful letter-writing campaign to General Mills, maker of Wheaties, petitioning the company to honor Thorpe. "It was a real grass-roots effort," recalls Grace Thorpe, now 82. "We had entire grammar-school classes writing directly to the chairman of the board."

The Jim Thorpe Wheaties box was unveiled by General Mills in a special ceremony in Jim Thorpe, Pa., on Nov. 20, 2001. They were then offered for sale in grocery stores nationwide.

The National Museum of the American Indian acquired the boxes, because "our collection includes a number of objects associated with 'famous' Indians—Sitting Bull, Chief Joseph, Osceola—but the 20th century is not well-represented," Museum Specialist Mary Jane Lenz explains. In addition, she says, "the campaign to have Jim Thorpe recognized, originated and orchestrated by Native people, speaks to a successful effort to present Native people in nontraditional roles."

—John Barrat

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