Traveling the Silk Road
Bringing the World to You

In This Issue:
Traveling the Silk Road Exhibit Opens
Taxidermy on the Move

Sunday, December 8
Taxidermist Tim Bovard will give guests an exclusive look at taxidermy techniques and a peek at dioramas not seen by the public.

Saturday, January 11
Mineral Sciences Curator Eloise Gaillou shares the back stories of NHM’s extraordinary gems and meteorites.

RSVP required. Call 213.763.3316 or e-mail rsvp@nhm.org.
Free for Members at the Patron Family level and higher.

Natural History Museum of Los Angeles County
December 2013 and January 2014

The Magazine of the
Natural History Museum of Los Angeles County
December 2013 and January 2014

SCHOLARSHARE presents Scavenger’s Safari

TERRIFIC TAXIDERMY

GORGEOUS GEMS

SCAVENGER’S SAFARI

Section 18

The Magazine of the Natural History Museum of Los Angeles County
December 2013 and January 2014
As I look around our brand new Museum, now 100 years old, I am struck by how, amidst our transformation, what has not changed is our commitment to offer our visitors something that is new and different for everyone. You told us that you wanted to be able to experience exhibits both individually and in groups, with multi-aged families, with friends and we listened. Now, we have five extraordinary new galleries and gardens that are inspiring the wonder of nature and culture in each visitor, however they choose to take a journey through the Museum.

We are inaugurating our new temporary exhibits gallery with Traveling the Silk Road: Ancient Pathway to the Modern World. Young visitors can mark their passage through the exhibition, which features spectacular sights of ancient civilizations, by stamping special Silk Road Passports. Families will see the planet in a more global way when they move past life-sized camel caravans, walk through a cargo ship, or smell the spices in the new Silk Road Marketplace.

Our dedication to offer each visitor — from toddlers to grandparents to guests in town for the holidays — a way to experience science in fresh ways is also evident in our new permanent exhibition halls and programs. In the Nature Lab, young children come face to face with live animals in habitats we have positioned at their height. People of all ages can “put on their nature eyes” and explore the richness of local habitats in the Nature Gardens. Different generations can engage with a touch screen interactive model of L.A. in Becoming Los Angeles, while young adults can come for after-hours musical performances in our diorama halls. Whichever gallery or event, the Museum has a wealth of experiences waiting for you. I hope you will join us.

Jane G. Pisano
President and Director

**Your Journey**

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Jane G. Pisano
President and Director

**Member Preview Days**

Wednesday, December 18–Saturday, December 21

Saturday, December 21

**Fellows Cocktail Reception**

5–6:30 pm

Renew or upgrade to the Fellows level ($2,000 annually) at NHM.ORG/joinfellows or call 213.763.3253.

**Patron Party**

7–10 pm

Free for members at the Patron Family level or higher ($210 annually). Upgrade or renew now at NHM.ORG/jointhecaravan or call 213.763.3426

**Free tickets for all members! Reserve now at NHM.ORG/membertickets.**

**SHOP**

Shop for the holidays at the Silk Road Marketplace

Opens Friday, November 29

**NATURAL HISTORY MUSEUM LOS ANGELES COUNTY**

ScholarShare presents Member Preview Days

NHM.ORG/SilkRoad

From silks and saffron to camels and culture, this special exhibition in NHM’s new temporary exhibits galleries carries visitors to a desert oasis, spice markets, sea adventures, and more along the most celebrated trade route in history.

**December 22, 2013—April 13, 2014**

Traveling the Silk Road: Ancient Pathway to the Modern World

**December 22, 2013—April 13, 2014**

Traveling the Silk Road: Ancient Pathway to the Modern World is organized by the American Museum of Natural History, New York (www.amnh.org) in collaboration with Azienda Speciale Palaexpo, Rome, Italy; and Codice Idee per la cultura srl, Torino, Italy; the Museum at Marina Bay Sands, Singapore; and the National Museum of Australia, Canberra, Australia; and Art Exhibitions Australia; the National Museum of Natural Science, Taichung, Taiwan; and the United Daily News, Taipei, Taiwan.

**BioSCAN’s NightWatch**

**Taxidermy on the Move**

**For Kids**

**NHM Next: Shirley Hoggatt**

**Events and Calendar**

**Institutional Partners**

**J.P. Morgan**

**Sponsorship**

**The Naturalist magazine is a publication of the Natural History Museum of Los Angeles County and is issued six times a year. As a member benefit, each issue provides a look at Museum exhibits, collections, adventures, research, and events. Through them, we inspire wonder, discovery, and responsibility for our natural and cultural worlds.**

**Cover: Graphic Courtesy of American Museum of Natural History, New York**
A Diamond Butterfly Flyby

THE WORLD’S MOST FANCIFUL BUTTERFLY

is flying into the Museum on Saturday, December 4. The Aurora Butterfly of Peace, a private collection of 240 fancy-colored diamonds in the shape of a butterfly, will alight for a six-month stay in the Gem and Mineral Hall’s Gem Vault. The curator, Alan Bronstein, spent 12 years assembling the spectacular collection—previously displayed at the Smithsonian Museum—one stone at a time. Natural colored diamonds are extremely rare, said Eloise Gaillou, NHM’s Curator of Mineralogy, and this collection is a rainbow. There are purples from Russia, blues and oranges from South Africa, and violets and pinks from Australia. Gaillou will use these sparklers to further investigate which impurities lend pink, blue, and orange diamonds their hue. Dubbed “messengers of the deep earth,” diamonds yield information about geological mysteries. Visitors can see these colorful couriers in the Gem Vault through June 3.

When the Earthmobile rolls up to a school campus, that means a student-powered archeological excavation is about to rev up. NHM’s simulated field lab has been revamped with new tools and a design makeover this year, making it more equipped to dig through time. The focus of the two-hour program supported by the Max H. Gluck Foundation for students in grades 3, 4, and 5, is the daily life and history of the Chumash Native American peoples in Southern California. In the “trenches” of a made-up archaeological site inside the rig, students make observations and collect data to make connections among animals, plants, and people. They look for clues that reveal peoples lived on islands, the coast, or mountain regions and what they traded. In one trench, students find soapstone beads or a digging weight. In another, deer whistles or abalone shells. With newfound archaeological dexterity, Earthmobile veterans also take field trips to NHM Nature Gardens to delve even deeper.

Dig Into the Earthmobile

100 Years of Digging

The Page Museum at the La Brea Tar Pits recently celebrated 100 years of digging, and an unexpected gift was an international viral media blitz. Hundreds of television, stations, and websites from across the globe dove into covering the world’s richest deposit of late Ice Age fossils. The Los Angeles Times, among others, highlighted Museum scientists’ tiny fossil finds. The skeletons of mastodons, dire wolves, and saber-toothed cats harbor a treasure trove of data, but so do fossilized squirrel’s jaws, beetle’s wings, and twigs. Microfossils dug out of the asphalt, say Museum scientists, are yielding information about global climate shifts. There were also media stories about Zed, the not-so-micro Columbian Mammoth whose fossils are on display in the Fishbowl Lab. The same week, the Museum celebrated another honor — hosting the 73rd annual Society of Vertebrate Paleontology conference, which was attended by hundreds of scientists who are curious about the next 100 years.

Dig Into the dirt in the Nature Gardener’s Get Dirty Zone. Find out more at NHM.ORG/nature

Natural History
Family of Museums

William S. Hart Museum

Hart and Hats

Caps, fedoras, top hats, and bonnets—humans have donned headwear for thousands of years. Now, the William S. Hart Museum is celebrating this tradition with a collection of hats worn by Hart as well as some from NHM’s History Collection. The show, on view from Wednesday, January 15 through April 2014, also features hats from the movies and ladies, hats donated by Josephine “Jo” Doolittle, wife of the American general and aviation pioneer. Visitors can also pick up a little history of headwear: For centuries, they offered protection from the elements, falling rocks, and weapons. Hats were later worn for ceremonial or religious purposes. Head coverings also became symbols of status, authority, and military identity. Now, hats are fashion. Don yours and stroll by the Hart.

Registration for Nature Navigators begins Monday, December 2. Find out how to register online at NHM.ORG/calendar

Dig Into the dirt in the Nature Gardener’s Get Dirty Zone. Find out more at NHM.ORG/nature

Visit TARPIPTS.ORG and see the latest finds.
Your Caravan Has Arrived

Every day at NHM, visitors are transported back to the Jurassic Period in the Dinosaur Hall. They feel the earth’s crushing power in the Gem and Mineral Hall and embark on a bug-hunting excursion in the Museum’s new Nature Gardens. Now, NHM is adding a special selection to our menu of adventures.

TRAVELING THE SILK ROAD: ANCIENT PATHWAY TO THE MODERN WORLD, which opens Sunday, December 22, marks the inaugural exhibition of the new 12,000-square-foot temporary exhibits gallery. The first time seen on the West Coast, Silk Road ferries visitors on a jaunt along the most legendary trade route in history.

“There can be no more thrilling way to inaugurate our renovated gallery for temporary exhibitions than to invite visitors to glimpse the spectacular sights of the great ancient civilizations,” said Dr. Jane Pisano, President and Director of NHM. “With Traveling the Silk Road, we will continue to look out at the planet in a broader, more global way.”

The Silk Road was named for the prized Chinese fabric traded along the often-treacherous route. During its golden age (AD 600 to 1200), the Silk Road opened up the world to new ideas and products. It stretched 4,600 miles through scorching desert sands and freezing snowy mountain passes, from eastern China through Central Asia to the Middle East. Caravans conveyed a cornucopia of goods, including spices, fruit, precious gems and furs, paper, and glass. This pathway was more than an instrument for the transfer of material goods—it was a conduit for ideas. While Europe languished in the Dark Ages, the East housed centers of great learning and civilization, developing ideas that would change the world. Traders ferried scientific knowledge, technological developments, folklore, art, music, religious beliefs, and travelers along the Silk Road and stopped in cities such as Xi’an, Turfan, Samarkand, and Baghdad, which were, at the time, the most tolerant and advanced places on earth.

SILK’S STORY

When visitor’s step into the exhibition and stamp their passport, they’ll first encounter a vehicle familiar to merchants, pilgrims, nomads, and scholars of ancient times: three life-size camel models decked out in full caravan regalia and loaded with trade goods. The exhibition’s first disembarkation point is remarkable: Xi’an, the capital of China’s Tang Dynasty, was the largest city in the world at the time with one million-plus inhabitants. The city grew in large part because of Chinese silk, which was used as currency. Visitors to the galleries can see a colony of live silkworms and discover why the industrious caterpillar was important enough to name a whole road system after them. Nearby, a massive replica of a Tang-era loom shows how the precious threads were spun into the coveted fabrics. As visitors move through this section, they’ll experience the ambiance of a Xi’an street. A musical interactive display invites visitors to activate the sounds of cymbals, drums, and other instruments, or queue up a traditional Chinese tune. Museum travelers will then be conveyed into the night market of Turfan, a desert oasis. Wandering through the re-creation of a Central Asian desert refuge, they will marvel at stalls overflowing with sapphires, silks, jades and rubies, leopard furs and peacock feathers, and fruits and spices that would have captivated Silk Road regulars during the city’s heyday 1,000 years ago. Ingenious irrigation systems brought cool water from nearby mountains to Turfan. This was the spot where thirsty camels could enjoy a drink, a chef could procure fresh ingredients, travelers swapped recipes, and a well-to-do merchant could acquire a fashionable hat.

The Silk Road Marketplace Opens Friday, November 29 from 9:30 am–5 pm

Member Preview Days are Wednesday, December 18–Saturday, December 21

The Silk Road Marketplace:

Young explorers can mark their passage through the exhibition by stamping special Silk Road passports issued to them at the exhibition entrance.
A disposable plastic bowl, a clear drinking cup, a tiny light bulb, a battery, and a rubber band. NHM scientists are employing these simple items for a grand purpose — a bug trap that could help us understand the biodiversity of insect species on the planet. That’s what our scientists, who recently launched BioSCAN’s NightWatch, are hoping for. The project enlists 100 Angelenos to help discover what’s buzzing and zipping around L.A. on one given night. The effort is an offshoot of BioSCAN (Biodiversity Science: City and Nature), the Museum’s three-year inventory of insects, the most diverse animals on earth. The BioSCAN team has already installed the more sophisticated Malaise traps — which have mini-weather stations and will collect insects for three years — in 30 sites from downtown L.A. to Griffith Park. The cattle industry billions of dollars — a great example of biological control.

“People want to be more engaged in learning more about the natural environment,” said NHM’s Dean Pentcheff, who oversees BioSCAN. “This definitely does that.” Look out for NightWatch II, the sequel, coming to a backyard near you this spring.
For nearly 30 years at the Museum, NHM’s taxidermist TIM BOVARD has sculpted and groomed wild beasts, from otters to gorillas, to assume poses in the dioramas of the North American and African Mammal Halls. He has unruffled the feathers of the Bird Hall’s avian occupants. But now, Bovard’s masterworks are on the move, taking their places on pedestals in the new Nature Lab and Becoming Los Angeles exhibitions.

Unlike the old days when animals were collected in the wild for dioramas, the hundreds of newer taxidermy creatures that populate the Museum are specimens salvaged after death, mostly acquired through zoos, rehab centers, government agencies, and donations from private collections.

“The ultimate is to take real things and make them look real again, to capture people’s attention and help tell a story about creatures in the natural world.”

— NHM taxidermist Tim Bovard

When Angelinos step into the new exhibition Becoming Los Angeles, they’ll encounter larger creatures. The exhibition tells a 500-year saga of how nature and culture shaped L.A. from a tiny pueblo into a metropolis. A central player in this L.A. story is a magnificent cow standing in the middle of the exhibit. Corrientes cattle once roamed the L.A. Basin and were central to the economy. Later, drought, floods, and grass-eating locusts decimated herds and the rancho lifestyle. Another L.A. giant, a grizzly bear that once lumbered through L.A.’s valleys, looms nearby in the exhibit. “These animals all have personality,” says Bovard. “What has always fascinated me is how to capture that.”
For Kids

Hundreds of years ago in China and the Middle East there were no supermarkets or malls. People traveled across deserts and kingdoms to trade goods at outdoor marketplaces. Here are some fun things you’ll find at the Museum and maybe even in your home or school!

Did you know? Silk Maker
Silk, the most luxurious cloth in the world, could not be made without silkworms. Here are a few facts about these amazing little white caterpillars:

- Female silkworms lay about 500 tiny eggs.
- It takes about 2,500 silkworms to produce one pound of silk, enough for one robe.
- It takes about 2,500 silkworms to produce one pound of silk, enough for one robe.

Unwinding the cocoons makes silk threads.

See live silkworms making silk in the Traveling the Silk Road exhibit, open December 22.

Member Preview Days are December 18–21.

At the Museum

Like a Camel
Camels have some surprising things in common with other creatures large and small. Match the animal to the fact:

- Grows to seven feet tall.
- Can carry one-third of its weight on its back.
- Can survive for six months without a meal.
- Stores fats and extracts energy when needed.

NHM has five camels!
Find two in the Age of Mammals and three more in Traveling the Silk Road.
Visit the Page Museum at the La Brea Tar Pits and see a camel from the Ice Age!
Visit TARPITS.ORG

At Home

Along the Silk Road, spices were as valuable as sapphires and rubies. Look in your kitchen at home to see if you can find any of these spices and discover where they came from.

- turmeric
- cinnamon
- cloves

Find the many rubies and sapphires in the Gem and Mineral Hall at the Museum and the many spices on display in Traveling the Silk Road.

Mark your passage through Traveling the Silk Road by stamping the special Silk Road Passport issued to ticket holders at the exhibition entrance. NHM.ORG/silkroad

Answers: Like a Camel: Top to bottom: Kangaroo, Human, Snake, Bird.

ACTIVITIES

NHM has five camels!
Find two in the Age of Mammals and three more in Traveling the Silk Road.
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of a second career. Her first career as a pediatric nurse included two years as a civilian nurse in a U.S. Army evacuation hospital in Germany in the 1960s. After an interlude as a ski bum in the Alps, Shirley returned to California, earned a master’s degree in public health from the University of Washington, followed by a job as a liaison nurse at Rancho Los Amigos Hospital. She met her husband, Gene, in a ski club that made weekend trips to Mammoth.

After their son, Bari, entered the fourth grade and was in school until 3 pm, Shirley began making weekly trips to NHM from Santa Ana to become a docent. The training, she recalls, “was like taking a college course without the exams. We studied every hall and wrote a research paper at the end.” Shirley’s paper tried to resolve that no, dinosaurs did not ski. All these years later, Shirley is still a docent and still adores NHM, particularly the Nature Lab, which she feels offers all sorts of opportunities to share observations and discuss nature with visitors. To celebrate her commitment, she has included NHM in her estate plan by making a large planned gift that she hopes will help the Museum to conserve its collections and to continue to renew itself to stay relevant to future generations. “I hate to think of NHM not being here. It is our responsibility to preserve it so that it can continue to be as exciting as it is now, and so that all of this important knowledge is cultivated and shared.”

### DECEMBER

**Traveling the Silk Road Exhibition opens Sunday, December 22**

In a renovated gallery space that reinstates NHM’s ongoing traveling exhibits program, Traveling the Silk Road: Ancient Pathway to the Modern World brings to life the most celebrated trade route in human history. Visit NHM.ORG/silkroad.

**Dinosaur Encounters Saturdays and Sundays at 11:30 am, 1:30 pm, 2:30 pm, and 3:30 pm**

**Ice Age Encounters**

New times on Saturdays and Sundays at 11:30 am, 1:30 pm, and 2:30 pm. Free for members.

**Radio Disney Meet ‘n’ Greet**

Karan Brar from Disney Channel’s Jessie Saturday, December 7, 12–2 pm

**Cowboys and Carols**

Saturday, December 7

Doors open at 7 pm; concert at 8 pm. A delightful concert of western music at William S. Hart’s hilltop mansion.

**Teacher Workshop**

Saturday, December 7, 8:30 am–12:30 pm

Integrate science notebooking into your classrooms to support Common Core Standards. Presented by J.P. Morgan.

**Critter Club: Cold Weather Quest**

Saturday, January 18, 10 am and 11 am

Help us find winter habitats for our animal friends. For 3- to 5-year-olds and a participating adult.

**Nature Navigators**

Saturday, January 18, 10 am

A new program designed for 10- to 12-year-olds to discover the abundance of local biodiversity.

**Junior Scientist: Zoological Wonders**

Saturday, January 18, 10:30 am and 11:30 am

Animals are changing with the seasons. Help us find winter habitats for our animal friends. For 3- to 5-year-olds and a participating adult.

**Tea Workshop**

Saturday, January 18, 1–3 pm

Tea workshop exploring blends from China and history of tea trade along the Silk Road. Register at NHM.ORG/workshops.

**Radio Disney Celebrates Chinese New Year**

Saturday, January 25, 11 am–1 pm

For more information about all events, visit NHM.ORG/calendar.
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**To learn more about the Museum's programs and events, visit nhm.org/calendar.**