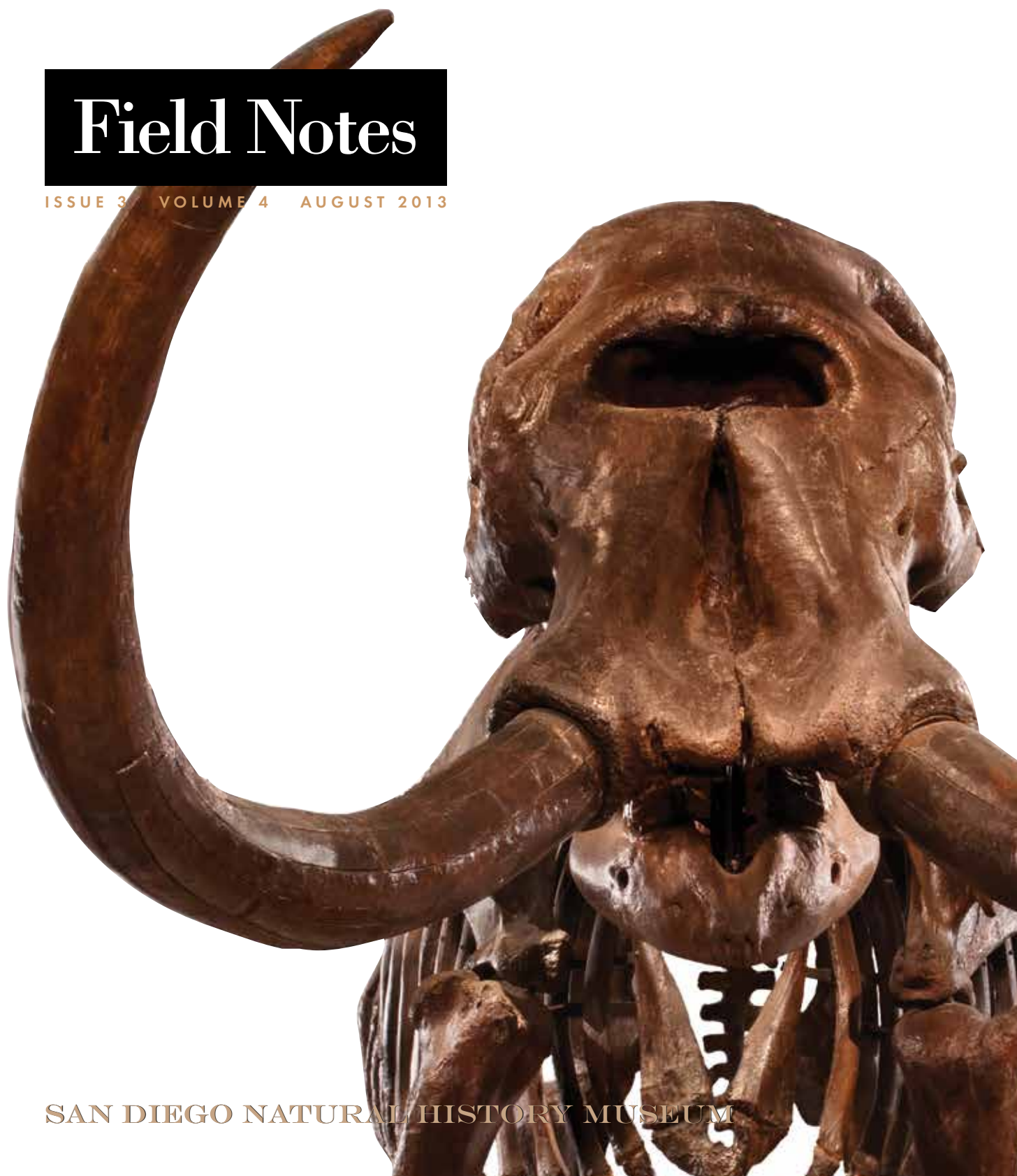


# Field Notes

ISSUE 3 VOLUME 4 AUGUST 2013



SAN DIEGO NATURAL HISTORY MUSEUM

## Pages from the Past

What strange things one can purchase online these days. Would you believe a camouflage-design toilet seat? The use of camo patterns in men's pants or women's bikinis, and even toilet seats, is ubiquitous; what that reveals about our culture is questionable. More to the point, what connects it with a book from 1909, in the Museum's Research Library?

The book is *Concealing-Coloration in the Animal Kingdom*, by A. H. Thayer (1849–1921). Thayer was an eccentric, brilliant American artist and naturalist who conceived "Thayer's Law," the idea that concealment and disguise found in organisms is often through counter-shading—the tendency for animals to be darkest on the dorsal side and lighter on the underside, for concealment against predators most likely to be hunting from above. Thayer, famous early on as one of America's finest figure painters, later became obsessed with the idea that animals' camouflage could benefit American warships and soldiers during the Spanish-American War. He obtained a patent for the idea in 1902. In the early years of World War I, he convinced the British and U.S. to employ disruptive patterning in uniforms and materiel.

Thayer's book investigates such principles as counter-shading and camouflage as they apply to birds, mammals, insects, and other animals. But what would Thayer make of a camo-patterned toilet seat?

*Field Notes* is published three times a year by the San Diego Natural History Museum.

President and CEO  
Michael W. Hager, Ph.D.

Vice President, CFO and COO  
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Editing Committee  
Margaret Dykens, Rebecca Handelsman, Hallie Johnson, Donna Raub, Ann Laddon, Michael Wall, Ph.D.

Photographers: Tom Deméré, Docho Dochev, Michael Jackson, Vladimir Nikolov, Bob Ross, Sarah Siren

Cover Image: Mastodon skeleton, photo by John Weinstein © 2009 The Field Museum

The Membership Department can be reached Monday–Friday, 9 AM–5 PM, for assistance with change of address, replacement cards, renewing or upgrading your membership, and any other questions. Contact 619.255.0275 or [membership@sdnhm.org](mailto:membership@sdnhm.org).

San Diego Natural History Museum Mission: *To interpret the natural world through research, education and exhibits; to promote understanding of the evolution and diversity of southern California and the peninsula of Baja California; and to inspire in all a respect for nature and the environment.*

San Diego Natural History Museum  
1788 El Prado, Balboa Park  
San Diego, CA 92101  
Phone: 619.232.3821 [www.sdnhm.org](http://www.sdnhm.org)

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Dear Museum Member,

I hope you are having a wonderful summer. It is always a fun and exciting time at the Museum as we welcome hundreds of summer campers—including two of my own grandkids—and thousands of locals and tourists to experience and enjoy our exhibitions and terrific programs.

Speaking of exhibitions, if you haven't already seen *Dino Jaws*, you better come in soon—these giant animatronic dinosaurs leave town on September 12. While you're here, make sure to check out *Mammoths and Mastodons: Titans of the Ice Age*. This beautiful exhibition comes to us from the Field Museum in Chicago and you don't want to miss it!

And if you think that mammoths and mastodons only lived in far away places, you'd be mistaken. These amazing creatures were our San Diego neighbors over 100,000 years ago! Tom Deméré, the Museum's Curator of Paleontology, explores the history of mammoths and mastodons in a fascinating article on pages 4–7.

In this issue of *Field Notes*, we also bring you the latest public program news from our Docents, Canyoneers, and the extremely popular Family Days, Nature and Me Storytime, and Ms. Frizzle™ (check out page 14 for a calendar of activities).

Coming up on Wednesday, October 16 is the 139<sup>th</sup> annual meeting—mark your calendar for this members-only event to go behind the scenes and explore our research and collections. This is a once-a-year exclusive event for our members, and we hope you can join us. More details can be found on page 19.

It is truly a pleasure and an honor to share our wonderful Museum projects and programs with you. Thank you for your continued support and commitment to the San Diego Natural History Museum.

I hope you will visit us soon!

Sincerely,

Michael W. Hager, Ph.D.  
President and CEO





# MAMMOTHS AND MASTODONS: PRUNING THE TREE OF LIFE

By Tom Deméré, Ph.D., Curator of Paleontology

Mammoths and mastodons and their surviving evolutionary cousins, the Asian and African elephants, share a number of unique anatomical features including large body size, weight-bearing posture, enlarged upper incisors (tusks), and an elongated nose (trunk). It is this latter feature, the trunk or proboscis, which was used by the German zoologist Johann Karl Wilhelm Illiger in 1811 as the basis for naming this group of mammals the Proboscidea. During the nineteenth century, scientists like Georges Cuvier were able to show that the proboscidean family tree contained many more “branches” than just living elephants and that the majority of the tree had been severely “pruned” by extinction. Today, we know a great deal more about the evolutionary history of proboscideans, a history that began at least 55 million years ago. The first 25 to 30 million years of this history was confined to the African continent where a variety of early evolutionary “experiments” evolved and became extinct. A series of successive dispersals out of Africa occurred beginning

about 25 million years ago in which individual proboscidean lineages moved into Asia and Europe to eventually populate all continents except Australia and Antarctica.

The earliest proboscideans to reach North America arrived between 18 and 15 million years ago and quickly adapted to the open ecological niches here, undergoing an impressive evolutionary radiation that produced species as varied as the bizarre shovel-tusked gomphothere, *Amebelodon fricki*, and the more familiar American mastodon, *Mammot americanum*. Meanwhile in the cradle of proboscidean evolution in Africa, the earliest members of the elephant/mammoth lineage had evolved, and by about 8 million years ago this group had split into two main branches, one leading to the living African elephant lineage and the other leading to the Asian elephant-mammoth lineage. It was this latter lineage that gave rise to the second wave of emigration out of Africa that eventually resulted in dispersal of mammoths into North America, initially with immigration of the southern mammoth, *Mammuthus meridionalis*, and later with the dispersal into northern latitudes of the woolly mammoth, *Mammuthus primigenius*.

Woolly mammoths never made it as far south as the southern California region. However, fossil remains of other species of mammoths, as well as mastodons, have been discovered in local sedimentary rocks, indicating that these extinct proboscideans once roamed our local hills and valleys. In February 2009, the skull, tusks, lower jaw, and leg bones of an adult southern mammoth (*M. meridionalis*) were discovered by Museum paleontologists during construction of the Thomas Jefferson School of Law in the East Village near Petco Park. This specimen was found in a sandstone stratum unearthed



Facing page: Plaster jackets containing mammoth fossils discovered during construction of the Thomas Jefferson School of Law. Above: Museum paleontologists excavating a mammoth tusk in downtown San Diego.





Bones and teeth of an American mastodon being excavated in Oceanside.

some 24 feet below street level and may be as much as 500,000 years old. The bones and teeth were spread over a 100-square-foot area like pieces in a forensic puzzle. The skull was right-side up and the two 10-foot-long tusks had slipped out of their respective sockets. The left tusk was lying on a partial left forelimb next to the skull, while the right tusk was found more than six feet away and lying next to the atlas vertebra and lower jaw and teeth. The rest of the skeleton was nowhere to be found. A more complete and considerably older (~1.1 million years old) adult southern mammoth skeleton had been discovered more than 20

years earlier in the Borrego Badlands in the northern part of the Anza Borrego Desert State Park. This specimen was represented by almost 70% of the skeleton and included the skull, lower jaw, one tusk, most of the vertebrae and ribs, and many of the limb bones. Recovery of the fossil remains took place over a two-year period. As with the East Village mammoth, the bones of this older mammoth were also spread across a relatively large area. Like a crime scene where there are no witnesses, the distribution pattern of the fossils begs for an explanation of the events that occurred between the time of death and the eventual



Museum paleontologists collecting fossil remains in Oceanside.

burial of the remains. Evidence from the remains and the enclosing sedimentary matrix suggests the possibility that the mammoth carcass decomposed in a stream bed where flowing water sorted and reoriented the bones and teeth according to their size and shape. Curious patterns of breakage and wear on certain bones further suggested that the carcass may have been scavenged prior to eventual burial.

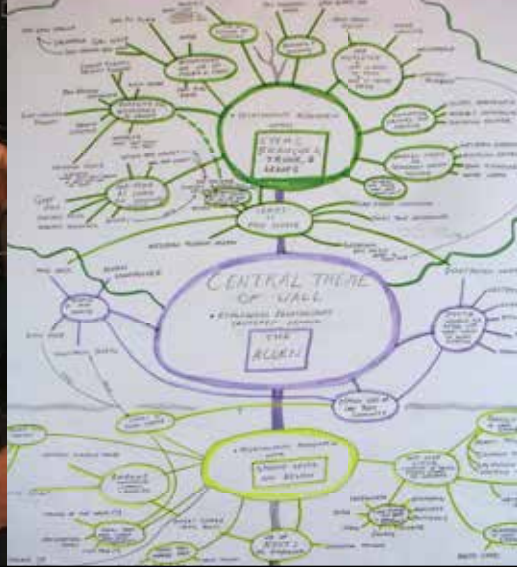
In August 2002, construction of a new housing development in the San Luis Rey River Valley in Oceanside resulted in the discovery by Museum paleontologists of a partial skeleton of a geologically younger Columbian mammoth (*M. columbi*) in ancient oxbow lake deposits dating from approximately 100,000 to 200,000 years ago. Also found in the same sedimentary layer was the partial skeleton of an American mastodon. The skeletons were about 100 feet apart and were arranged as disarticulated bones and teeth scattered along the ancient lakeshore. From this pattern it is

not hard to imagine a prehistoric scene where the bloated and decomposing carcasses of a mammoth and mastodon were pushed by prevailing westerly ocean breezes up onto the eastern shore of this ancient lake. Fossils such as the ones from these discoveries, are on display in the Museum's *Fossil Mysteries* exhibition.

These fossil discoveries and numerous others from coastal and inland San Diego County serve as direct evidence of the exotic biodiversity that was once characteristic of our region. The absence of mammoths and mastodons from our region is a reminder of the ebb and flow of life on our planet and of what we have to lose if we allow the last of the proboscideans to go extinct.

Want to learn more? Don't miss the exhibition *Mammoths and Mastodons: Titans of the Ice Age* through November 11, or the film *Titans of the Ice Age 3D* through February 2014. Both are free for members!

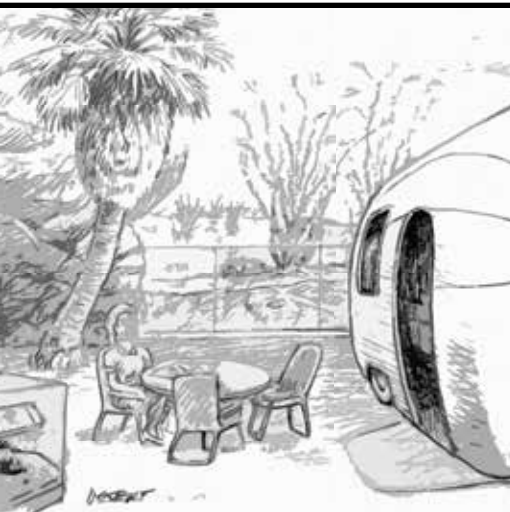




## C O U N T D O W N T O



## C O A S T T O C A C T U S



## AS SAN DIEGANS, WE OFTEN BOAST HOW WE CAN SKI IN THE MOUNTAINS, HIKE IN THE DESERT, AND SWIM IN THE OCEAN—ALL IN THE SAME DAY.

But what many don't realize is that the topographic and climatic features that allow us to pursue all of these activities within a day also create one of the most biodiverse regions in the world—one that is home to more species than any other area of similar size within the continental United States.

That's a pretty special story, one we plan to tell through a new exhibition that's being mounted on Level 2 of the Museum beginning this fall.

*Coast to Cactus in Southern California* is an innovative, 8,000-square-foot permanent exhibition that has been years—even decades—in the making. Construction starts this September after *Dino Jaws* closes, beginning the 14-month countdown to the exhibition's scheduled soft opening date of November 2014. Members will have the opportunity to get a sneak peek at the model and meet the exhibition development team at the Annual Meeting on October 16, 2013.

*Coast to Cactus* will invite visitors to explore the unique habitats of southern California, from the coastal wetlands and urban canyons to the mountains and the desert. The exhibition will cultivate a sense of place for a region that offers much more than can be seen at first glance, taking visitors beyond the breathtaking coastlines that draw millions of tourists and into the ecosystems that make this area special. Using specimens from the Museum's scientific collections alongside immersive environments and innovative media, *Coast to Cactus* will help visitors discover what it means to live in a biodiversity hotspot:

the story of why our region is home to so very many species, why these species are so critically threatened at this moment in history, and why it matters.

"Our goal is to inspire visitors—including those who will be our future leaders—to go out and experience the wonderful parks and trails throughout our spectacular and diverse region and, once inspired, to help preserve our quality of life," said Michael Hager, Ph.D., president and CEO of the San Diego Natural History Museum.

Currently, there is no single venue where visitors or students can learn about the biodiversity of the region. Certainly, the visitor centers in our city, county, state, and national parks as well as some regional nature centers are already playing a key role in sharing parts of this story, and they are ideally situated to do so, as nature lies just beyond their doorsteps. But no one place currently exists to interpret the comprehensive picture of the entire southern California bioregion under one roof. That is, until now.

Next time you tell a visitor in San Diego that they can ski in the mountains, hike in the desert, and swim in the ocean all in the same day, we also hope you will share that they can see a Torrey Pine tree, a gray whale, and a bighorn sheep all in the same day. That is something we should be proud to say you can't do anywhere else in the world.

Stay tuned to learn more about *Coast to Cactus* and to get a feel for what it takes to bring an exhibition from concept to fruition.



## VOLUNTEER NEWS



### Docents Celebrate 45 Years of Connecting Students to Nature

The first meeting of the newly formed Docent committee of The Covey was held February 23, 1968, with Ardith Reed presiding. At that time, guided tours in San Diego museums were unheard of, and the word “docent,” meaning “teaching guide,” was new to most Covey members. The purpose of the new Docent program was to make the Museum interesting and accessible to children and their families and to teach them what a regional museum offers.

The first training class consisted of five lectures and a rigorous exam. Fifteen Docents passed that first class and continued their preparations, familiarizing themselves with the Museum

exhibitions, in anticipation of offering tours in September. But the Educational Activities Department had other ideas. The director announced that tours had already been scheduled and from May 10–June 7 of that first year, more than 1,600 students were guided through the Museum by the Docents. Five years into the program, more than 33,700 students had received Docent tours.

Early on, teachers of disabled children requested a special tour for blind, partially-sighted, and hearing-impaired students. Their students could not benefit from tours of specimens behind glass cases they could not see, nor from tours

they could not hear. Under the direction of Fay Dalton, Docents worked throughout the summer to put together a portable tour incorporating the senses of touch, feel, smell, and taste. The Tactile Mobile Museum was born and was highly successful. Out of these beginnings grew the Docent outreach effort that now includes eight programs for preschool through primary grades and senior citizens.

Always looking for new ways to educate the public about the rich biodiversity of our region, Docents have developed tours of *Fossil Mysteries* and other exhibitions as well as interpretive carts filled with items to touch and feel. The Docents continue to look for ways to expand their offerings, writing new curricula and gathering exhibits for their next new program. The Museum’s Docents never stop learning and sharing what they know.

Today, 65 Docents contribute more than 8,000 hours annually reaching thousands of visitors in the Museum and more than 2,500 schoolchildren each year with their outreach efforts. Congratulations, Docents, on 45 years of supporting the Museum’s mission!



Opposite: Joan Parker has served as a board member, donor, and Docent for more than 40 years. Above: Volunteer Pam Barrett discusses butterflies as part of the *Incredible Insects* Docent program.

### Have you considered volunteering?

There are hundreds of opportunities to volunteer throughout San Diego, and volunteering at the San Diego Natural History Museum is a chance to not only make a contribution but to immerse yourself in nature, learning as you go.

- Share your love of the ocean and the magnificent whales with people from all over the world as a Museum Whaler.
- Lead hiking enthusiasts on guided nature walks throughout San Diego County as a Canyoneer.
- Deliver programs to school groups and preschools in the Museum and around the county as a Museum Docent.
- Help maintain the Museum’s vast collections of specimens in a variety of areas as a science volunteer.
- Join The Covey, and enjoy lectures by the Museum curators while supporting the Museum’s mission

Training for Museum Whalers, Canyoneers, and Docents begins in September, while science volunteers learn on the job.

If you are interested in any of these opportunities, contact Janet Morris at 619.255.0245 or [jmorris@sdnhm.org](mailto:jmorris@sdnhm.org) or apply online [atsdnhm.org/support/volunteer/volunteer-application](https://atsdnhm.org/support/volunteer/volunteer-application).

Feel Fine About Philanthropy!  
Join the Live Oaks Society!

Members of the Museum’s Live Oaks Society have included the San Diego Natural History Museum in their estate plans. We are tremendously grateful to these visionary friends who have named the Museum in their will or in a trust they have established. Such gifts have no minimum level.

These friends are greatly appreciated for their thoughtfulness and awareness that the Museum needs this type of support, as well as annual gifts and memberships, in order to continue to serve our community for generations to come.

To encourage others to join the Museum’s Live Oaks Society, here are some of the benefits your membership will let you enjoy NOW!

Live Oaks Benefits

Invitations\* to two annual events (fall and spring) exclusively for Live Oaks members and guests, including a curator’s program in the Sefton Boardroom

Invitations to behind-the-scenes tours of the Museum’s research divisions (for groups of four to eight guests, led by a curator, offered bi-monthly)

Invitations to VIP receptions for exhibition openings

Invitations to lectures in the Charmaine & Maurice Kaplan Theater

\$5 discount on most membership levels/categories

Members-only magazine—*Field Notes*

For information about joining Live Oaks, please call Donna Raub at 619.255.0314 or email draub@sdnhm.org.

*\*Let us know whether you prefer to receive invitations by email or regular mail. In an effort to conserve resources, some invitations are sent by email. We want to accommodate your wishes.*



*Jerry and Laurie Clarkson, both of whom volunteer for the Museum as Whalers with Dr. Michael Hager at the May 29 Live Oaks event.*



*Members of the Museum’s Live Oaks Society and their guests recently enjoyed a lovely afternoon for a rooftop reception, and a presentation by Dr. Michael Wall, Curator of Entomology. The event was catered by Authentic Flavors.*

Live Oaks Society Members  
As of August 2013

The Board of Directors, staff, and volunteers of the San Diego Natural History Museum are grateful to all the individuals listed here who have demonstrated the foresight and generosity to include the Museum in their estate plans, either through a bequest, a gift of a retirement or insurance policy, by participation in the Pooled Income Fund, or in other ways that will help to secure the Museum’s future.

- |                            |                                |                           |
|----------------------------|--------------------------------|---------------------------|
| Anonymous (11)             | Iris and Paul Engstrand        | Virginia W. Martin        |
| Francoise D. Baker         | Mrs. William Gordon            | Ms. Ray-Etta L. Morrell   |
| Mona Baumgartel            | Barbara and Dr. David Groce    | Dr. James D. Nauman       |
| and John DeBeer            | Judy Guilmette                 | Nancy Nenow               |
| Barbara Bowman             | Mr. and Mrs. Enrique Hambleton | Dr. and Mrs. Fred Orton   |
| Susan and Richard Breisch  | Ed and Janelle Harris          | Walter and Anne Pagels    |
| George Brooks-Gonyer       | Lois and John Harris           | Mrs. Joseph R. Parker     |
| Mrs. Ramona Bush           | Dorothy Hester                 | James and Barbara Peugh   |
| Margaret E. Carl           | Mr. and Mrs. Michael Hctor     | Rudy and Marilyn Regalado |
| Mary Jane Cherry           | Kathleen Howell                | James K. Richardson       |
| Henry and Charlotte Clark  | Mr. and Mrs. Gary C. Jacobson  | Richard Roncaglia         |
| Dale Hollis Clark          | Adrian Jaffer                  | Ms. Ronnie Schneider      |
| Jerry Clarkson             | Linda D. King                  | Richard C. Schwenkmeyer   |
| Karen Clements             | Mr. Philip M. Klauber          | Jeanne and Henry Shenkman |
| Mr. David R. Crawford      | Harry J. Koons                 | David Dwyer Smith         |
| Lois Day                   | Catherine O. Kuck              | Elizabeth K. Smith        |
| Jose de la Torre-Bueno     | H. William Kuni                | Phyllis and Frank Tabor   |
| Mrs. P. H. Dickinson       | Ann Laddon                     | Bill Thomas               |
| Mr. and Mrs. James M. Dort | Luisa J. Larson                | Christine Tratnyek        |
| Glenn Dunham               | Dr. Jack L. Littlepage         | Dr. Robert C. Vinton      |
| Bernard J. Eggertsen       | Ms. Barbara J. Lohne           | Mrs. Mary M. Yount        |

LIVE OAKS SOCIETY MEMBERSHIP

The Live Oaks Society honors those who have made bequests or life income gifts to the San Diego Natural History Museum. If you have included the Museum in your estate plans, or when you fund a life income gift such as a charitable gift annuity, naming the Museum as a beneficiary, you may receive significant income and estate tax benefits. For more information contact Donna Raub, Director of Planned Giving at 619.255.0314 or draub@sdnhm.org.





FAMILY FUN

Join us for family-friendly activities at the Museum. All events listed below are FREE for members!

<b>Family Days</b> All Family Day activities are held between 11 AM and 3 PM.	Saturday, December 14 Nature Detective!	All ages are welcome (ages 1–5 suggested) with a parent or guardian.
Monday, September 2 Fossil Frenzy <i>Sponsored by the Rice Family Foundation</i>	<b>Wacky Science Sundays* with The Magic School Bus™!</b> Join Ms. Frizzle and friends every Sunday at 12:15 and 2:15 PM.	September 12 Prehistoric Animals
Saturday, October 26 Howloween! <i>Sponsored by Lori &amp; Bill Walton of Bill Walton, Inc.</i>	September–Coyotes October–Bats November–Reptiles December–Geology <small>*The Magic School Bus™ Scholastic Inc. All rights reserved.</small>	October 10 Bats
Saturday, November 16 Reptile Round-Up! <i>Sponsored by Lori &amp; Bill Walton of Bill Walton, Inc.</i>	<b>Nature and Me Storytime</b> Nature and Me Storytime is held the second Thursday of every month at 10:15 AM.	November 14 Native American Folktales
		December 12 Winter Animals



**FREE FOR MEMBERS!**

**TITANS OF THE ICE AGE**

NARRATED BY CHRISTOPHER PLUMMER

[www.titansoftheiceage.com](http://www.titansoftheiceage.com)



School in the Park

School in the Park (SITP) utilizes the vast resources of San Diego’s Balboa Park museums to provide engaging, hands-on educational experiences for students. By maintaining rigorous academic standards and high expectations for the students, these learning experiences are designed to foster critical and creative thinking. Foundational goals include increasing self-confidence and instilling a deep, abiding love of learning.

Focused on the urban core community of City Heights, SITP provides nearly 300 students in grades 3, 4, and 5 from Rosa Parks Elementary and over 400 students in grades 6 and 7 from Wilson Middle School with four to six weeks of programs in cooperation with ten Balboa Park institutions, including the San Diego Natural History Museum.

Depending on grade level academic standards, students going to ‘school at theNAT’ focus on Earth and Life Sciences. Topics range from rocks and minerals, to landforms, climate and water conservation, geologic time, and plate tectonics. Each of these topics focus on the San

Diego region, and one will often see groups of students with clipboards and graphic organizers in hand studying the many fossil specimens and William Stout murals in the *Fossil Mysteries* exhibition.

The week-long, project-based lessons culminate with presentations on Friday. Previous projects include students creating a ‘News Report’ with studio and field reporters, a paleontologist, and biologist. These are recorded on iPads provided by our funder, Price Charities, and shared with the class to evaluate and critique. The topics covered at the Museum are easily transferred back to school where classroom

teachers can extend the learning.

SITP opens the door to cultural institutions many of our students might otherwise never see. While providing a portion of their academics, we hope to create lifelong patrons of museums.

The San Diego Natural History Museum would like to thank Price Charities, Dr. Carla Mathison, and the SITP Staff in Balboa Park for their continued dedication and support of this amazing and enriching program.

For more information on the School in the Park Program, visit [www.schoolinthepark.net](http://www.schoolinthepark.net).





Promethean Boards

The Merriam-Webster dictionary defines the word *promethean* as daringly original or creative, an appropriate name, then, for the company who brings engaging interactive teaching tools into the classroom—Promethean, Inc. Thanks to a partnership with Pam Slater-Price, who was the District 3 County Supervisor for nearly 20 years before retiring last year, and a matching grant from the Legler Benbough Foundation, we have this amazing technology in our classrooms at the Museum.

Last fall we began using Promethean Boards with our School in the Park students. While many of us remember our school days of chalk and blackboard (and hoping or dreading to be called up to write our answer in front of the class), this twenty-first century learning environment keeps our students engaged with a medium with which they are familiar—interactive technology.

Promethean Boards are interactive whiteboards. Imagine a whiteboard on which you can digitally write, highlight text, move images, take pictures, and so much more, all with the touch of a stylus or a finger. Handheld devices called Student Response Devices (SRD) can



quickly and easily check for comprehension; a question is presented on the Promethean Board and each student has her own SRD to individually answer each question, providing the opportunity for full student engagement.

Sixth-grade students participating in the School in the Park program had three weeks of their school year at the San Diego Natural History Museum. Depending on the content, each week students collected and analyzed information from the *Fossil Mysteries* and *Water: A California Story* exhibitions. As part of their project, students working in small groups created a Promethean Flipchart (similar to a PowerPoint presentation) to present their opinions and conclusions to their classmates at the end of each week. At the conclusions of each Flipchart presentation, students were expected to participate in a

Q & A session from their peers, as well as a peer critique and instructor evaluation.

Since schools participating in the School in the Park program have Promethean Boards in their classroom, the Flipchart presentations were exported back to the school where students and classroom teachers could continue their project throughout the course of the year.

The San Diego Natural History Museum continually explores various avenues afforded by this creative technology and would like to thank former Supervisor Pam Slater-Price, the San Diego County Board of Supervisors, the Legler Benbough Foundation, and the staff at Promethean and Logical Choice for their continued support and enthusiasm to transform science learning at the Museum.

Making a Difference

We are honored to be stewards of an institution founded nearly 140 years ago that offers an unprecedented combination of core programs, including world-class exhibitions, scientific biodiversity research, and 7.3 million natural specimens, some dating back 150 million years—all housed under one roof! These precious assets fuel the programs of our Environmental Science Education Center, reaching more than 160,000 individuals each year, most of whom are K-12 students.

The impact of science learning goes far beyond the specific content at hand. According to the Association of Science-Technology Centers, out-of-school science programs promote increases in

creativity, logic development, communication skills, and reading readiness. We are grateful to recognize some of the funding partners that support our science education programs and make it possible for all students and teachers to participate in them:

**QUALCOMM Foundation:** Supporting the Environmental Science Education Center and the Museum Access Fund, ensuring that underserved students can access our programs at no charge to them or their Title 1 schools.

**San Diego Gas & Electric:** Supporting the range of Environmental Science Education Center programs and our annual Fossil Ball Gala, the proceeds of which support critical Museum operations.

**The Thursday Club Foundation:** Supporting the *Nature To You* Specimen Loan Program, which offers more than 1,300 cased and touchable natural specimens—ranging from beetles to bobcats—to enliven science learning in classrooms throughout the County.

**Walter J. and Betty C. Zable Foundation:** Supporting the range of Environmental Science Education Center programs, including science workshops, Family Days, guided nature hikes, Educator Guides, and more.

**Wells Fargo:** Supporting the Museum Access Fund for three consecutive years, directly enabling 2,400 disadvantaged students to participate in our high-quality science learning programs. In total, the Museum Access Fund serves more than 6,000 students each year!

**FREE FOR MEMBERS!**

**DINOSAURS**  
*Alive!* **3D**

Major funding was provided by the National Science Foundation with additional support from the Museum Film Network and the 3D Film Interest Group.

A large, detailed 3D model of a Tyrannosaurus Rex head, shown in profile with its mouth open, revealing sharp teeth. It is set against a background of a lush green forest with trees and foliage.



Board of Directors Election

Thank you for participating in the annual board election in May. Our second all-electronic ballot was a success, and we're delighted to welcome three new board members for a three-year term and five board members for a second three-year term. In addition, another 16 members are currently serving on the board.

2013-14 Board of Directors  
San Diego Natural History Museum

Jeff Block, <i>Chair</i> General Manager, KGTV Channel 10	John Downing Downing Family Vineyards	Diana Lindsay Sunbelt Publications
Austin Blue Co-Founder & President, Spectrum Aeronautical and SciFly	Susan Evanco, <i>Secretary</i> Community Volunteer	Steven McDonald Attorney & Counselor at Law
Anita Busquets President and COO, NCE Pharmaceuticals, Inc.	Tom Fleming SAIC	Terry Moore, <i>Treasurer</i> Principal, Director, Small Business & Program Divisions, Barney & Barney LLC
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Walt Davis, <i>Vice Chair</i> Vice Admiral, U.S. Navy (Retired)	Allison Henderson Community Volunteer	Jerome Navarra Jerome's Furniture
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	Jeffrey Kent Kent's Bromeliads	Mary Yang, Ph.D. Scientist
		Ellen Zinn Community Volunteer

Attention Members: Save the date for our  
139<sup>th</sup> Annual Meeting!  
Wednesday, October 16, 2013  
6-9 PM

Once a year we open all of our doors—just for members—to show you what happens behind the scenes at the Museum. This year we look forward to celebrating on National Fossil Day™. Join us on a scavenger hunt and see fossils from all over southern and Baja California. Whether you love plants, bugs, birds, or reptiles, we have something you'll enjoy.

6-8 PM  
Hot chocolate, coffee, and dessert bites in the Atrium

6:30-7 PM  
Annual Meeting in the Charmaine and Maurice Kaplan Theater

7-9 PM  
All floors open!  
Scavenger hunt  
Herpetology Wet Range tours  
Fossil crafts in Parker French classrooms  
Meet the scientists

This is your exclusive opportunity as a Museum member to have an all-access pass to the Museum!



- Meet the exhibitions staff, the amazing team behind *Fossil Mysteries*, and view the planning of our newest exhibition *Coast to Cactus*—set to open in November 2014.
- Explore our research and collections—including over 7.3 million specimens.
- See the Herpetology Wet Range, located deep in the basement of the Museum.
- Check out our *Nature to You* Loan Library, a natural history library of over 1,300 specimens available for artists and schools throughout the region

We hope to see you there! Official invitations will be coming soon.

Members receive  
**10% off**  
at the Alex and Elizabeth Wise  
Museum Store.





SAN DIEGO NATURAL HISTORY MUSEUM  
P.O. Box 121390  
San Diego, CA 92112-1390

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