

CATALYST

DENVER MUSEUM OF NATURE & SCIENCE MAGAZINE
SUMMER 2015



INSIDE ///

MYTHIC CREATURES
THE POWER OF POISON
HUMPBACK WHALES 3D



MACGILLIVRAY FREEMAN'S

HUMPBACK WHALES



3D

PRESENTED BY PACIFIC LIFE

NARRATED BY EWAN MCGREGOR

A WHALE-SIZED ADVENTURE
FOR THE GIANT SCREEN



OPENS JUNE 5 IN PHIPPS IMAX THEATER

MEMBERS SAVE 30% ON TICKETS EVERY DAY • BUY TICKETS @ DMNS.ORG/IMAX



THANK YOU, MEMBERS!

Your response to the Membership Survey was tremendous and way beyond the typical rate! We appreciate your valuable input, which will help us continue to enhance our commitment to serving you and ensuring you have a great Museum experience.

After reviewing the results of the survey and in an effort to be the best stewards of our resources, we have decided to produce *Catalyst* on a quarterly schedule, leading to a substantial savings for the Museum. The new frequency begins with the publication of this issue. Your next issue of *Catalyst* will arrive around September 1.

It was clear from the survey that you consider *Catalyst* a vital communication tool; however, electronic communications also have been successful among our membership. We will continue to capitalize on both print and digital mediums. On a daily basis, our website www.dmns.org will have the most timely information regarding Museum activities, and the monthly eNewsletter will continue to provide you with members-only news, tips, and special offers. You will soon have the option of receiving only a digital version of *Catalyst*. It is currently posted online at www.dmns.org/catalyst.

If you are not receiving the monthly eNewsletter or advance notifications, please send your e-mail address to members@dmns.org so that we can ensure you are "in the loop."

Please always feel welcome to contact us with any questions or concerns at 303.370.6306 (daily, 9–5) or members@dmns.org.

The generosity and steadfast commitment of our members has truly made the Museum grow and flourish, from the vision of a few local citizens nearly 115 years ago into one of the most respected natural history museums in the country. We appreciate your support and look forward to seeing you soon at the Museum!



George Sparks
President and CEO



Ashley Alexander
Director of Membership

You may contact George Sparks by e-mail at president@dmns.org

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Join Our Community:



ON THE COVER

From the zoology collections

Conus textile

Textile cone

ZC.17329

Philippines, 1972

Venomous species of sea snail



Rick Wicker



MAKE YOUR SUMMER MYTHIC

The wildly popular exhibition Mythic Creatures is open through Monday, September 7. Admission is free for members.

- Come face-to-face with a 17-foot-long dragon.
- Look up to *Gigantopithecus*, a real, now-extinct ape that inspired myths about creatures like Bigfoot.
- Draw your own mythic creature.
- Take a green screen photo of yourself with a unicorn or a dragon.
- See one of the largest fossil eggs in existence from the Museum's collections.
- Check out the "Feejee mermaid," a hoax made famous by P. T. Barnum.
- Create your own digital dragon.
- Learn about Colorado myths, such as jackalope, fur-bearing trout, and the Colorado Howler.
- Walk among the tentacles of an enormous kraken.
- Explore the classic inspirations for the mystical mermaids of the world.
- See what a day in the life is like for Bigfoot @ twitter.com/DenverMuseumNS/statuses/595300162337054720.

Find out more @ www.dmns.org/mythiccreatures.

HEAVENS ABOVE

Antares is a bright reddish star easily observed on summer nights. It is among the 20 brightest visible stars and the brightest star in the fishhook-shaped constellation Scorpius. Both the Arabic and Latin names for Antares mean "heart of the scorpion."

Antares is an enormous star, with a radius approximately 880 times the radius of the sun. If Antares was at the center of the solar system, it would extend well past the orbit of Mars. Despite its size, the overall density of Antares is less than one-millionth that of the sun. Antares's relatively low temperature—about 6,500 F (3,593 C) compared to the sun's 11,000 F (6,093 C)—accounts for its ruddy color. The star's tremendous surface area makes it very bright, approaching 11,000 times the brilliance of the sun.

Astronomically speaking, Antares is close to the end of its stellar lifetime. Someday soon, within about a million years, the star will exhaust its fuel and collapse, resulting in an immense supernova and ultimately leaving in its stead a tiny neutron star or possibly a black hole. The explosion will be spectacular, but with Antares 550 light years from Earth, our planet is unlikely to be affected.

To find Antares, look southward in the early evening after sunset for the fishhook star pattern of Scorpius. Notice the distinctly reddish star which does indeed seem to reside at the scorpion's heart. Further exploration in its direction with a pair of binoculars or telescope reveals a globular star cluster known as M4, just to the right of Antares, and a smaller cluster designated NGC 6144.

Find summer sky information @ dmns.org/heavensabove.

SUMMER FUN FOR TEACHERS

The Museum's summer programs aren't just for kids! We offer workshops that inspire teachers and provide tools and plans to put to use in the classroom. These hands-on experiences are a fun way to get to know the Museum better and meet other teachers who have a deep commitment to enhancing their students' learning experiences. Programs are available for re-certification credit and by specialty and grade level, including ECE, elementary, and middle school. Share the news with your child's teacher, or sign up yourself! Find out more @ www.dmns.org/teachers.

SCI-FI FILM SERIES RETURNS

The Sci-Fi Film Series has become a summer tradition! The Museum is partnering with the Denver Film Society again this year to present the popular series.

Each Wednesday, from July 8 to August 5, a science fiction film will be screened, followed by a discussion hosted by a Museum scientist and Vincent Pitarro, English and film professor at Metropolitan State University of Denver. The post-screening discussions break down the science behind these alternative possibilities and separate fact from fiction.

This year's selections are *Snowpiercer*, *Her*, *Interstellar*, *Planet of the Apes (1968)*, and *Blade Runner*. The screenings alternate between Phipps IMAX Theater and the Sie FilmCenter on Colfax. Find the schedule and buy tickets @ www.dmns.org/scififilmseries.

GET SOME SCIENCE ON THE MUSEUM BLOG

Did you know that Colorado has some of the most epic volcanoes on Earth? They have helped bring diamonds to the surface, burble gold through mountain roots, and turn our ancient landscapes into Pompeii-like fossil deposits.

You can learn more about volcanoes, celestial sightings, and science topics in the news on the Museum blog, authored by staff and volunteers from the Research and Collections Division. Check it out @ www.dmns.org/museum-blog.



MUSEUM HOSTS 2015 MINI MAKER FAIRE

The Museum is pleased to host the 2015 Denver Mini Maker Faire on Saturday and Sunday, June 13 and 14. Via exhibits, demonstrations, and activities, Maker Faires are multigenerational festivals where everyone is encouraged to make, create, learn, invent, craft, hack, recycle, build, think, play, and be inspired.

More than 100 makers have registered for the event. Highlights include building musical instruments and participating in a synthesizer petting zoo, creating electrifying art, building art cars, being a mad scientist, make your own creation out of cardboard and old toys, driving a robot, and checking out urban art, Steampunk creations, and more.

Mini Maker Faire will be held inside and outside the Museum, rain or shine. This is a ticketed event for all Museum members and guests. Tickets are \$5 per day.

Find out more @ www.dmns.org/denvermakerfaire.





The POWER of POISON

OPENS FRIDAY, JULY 10
FREE ADMISSION FOR MEMBERS

Don't bite from the poison apple ... he writes with a poison-pen ... that spider is poisonous! Poison has a bad rap, yet it actually plays a fascinating role in natural and cultural history. The new exhibition *The Power of Poison* explores its many paradoxes. Whether as a defense against predators, a source of magical strength, or a lifesaving medical treatment, the story of poison is surprising at every turn.

Over millions of years, toxins and venoms have become part of survival systems that plants and animals rely on for offense and defense. For example, nearly all ants and termites wage chemical warfare using poisonous sprays and secretions in addition to venom. Ants may use these biochemicals as part of a mutually beneficial relationship with plants that provide them with food or shelter.

People have long employed poisons for both sinister and beneficial purposes. Poisoned drinks, clothes, and foods have played a starring role in fictional and real-life cases of crime and political intrigue. Some of the most unlikely tales often contained a kernel of truth. In the late 1800s, toxicology emerged as a scientific discipline, providing new understanding about the chemistry of poisons and new methods for solving criminal cases.

Humans have extracted toxins from nature and used them for medicinal purposes for ages; today, scientists are researching thousands of natural toxins and developing a wealth of potential new drugs. Studying how poisons affect human cells helps scientists figure out how to protect, repair, and heal them.



The exhibition is popular among all ages with its immersive environments, engaging interactives, and intriguing mysteries. The experience includes

- a re-creation of Colombia's remote Chocó forest—including a display of live poison dart frogs—where many plants and animals use poisons to survive
- dioramas depicting Snow White, the Mad Hatter, and the witches from Macbeth, and displays featuring many other famous poisonings, both real and fictional
- a virtual Enchanted Book that, as you turn the pages, “magically” reveals facts about poisonous plants such as belladonna, hemlock, and monkshood
- a live show about a real-life poisoning case and key advances in the forensics of detecting poisons
- life-size shadow boxes that set the scene for poisoning mysteries that visitors solve using an iPad app
- a model of a gigantic yew tree and other displays about how researchers today use natural toxins to develop new medical treatments

“We toss around the word poison but don’t give much thought to the fact that anything is toxic at the right dose, even water,” said Dr. Nicole Garneau, the Museum’s curator of human health. “So poison really has two sides to it. At the right dose, it’s beneficial, even medicinal, but the wrong dose can be fatal. This exhibition engages guests in the full spectrum of poison, from its evolutionary history to its use in modern forensics and medicine. Poison truly impacts humans and all of nature alike.”

MEMBERS TIPS

The Power of Poison will be open July 10 through January 10 in Anschutz Gallery, Level 3. Admission is free for members. Please be prepared to present your membership card at the entrance to the exhibition. Enjoy members-only events in The Power of Poison. See back cover for details.

We are expecting a very busy summer at the Museum. Weekday early mornings and late afternoons and weekend early mornings tend to be less crowded. Please allow plenty of time for parking.

Complimentary guest tickets that came with your membership are valid for general Museum admission and may be used for entry into The Power of Poison.

Find out more @ www.dmns.org/poison.



The Power of Poison is organized by the American Museum of Natural History, New York (www.amnh.org).

AN INSIDER'S VIEW OF HUBBLE

By Steven Lee, PhD

In September 1988, I hosted the “Workshop on Dust on Mars III” at the Stanley Hotel in Estes Park. Several dozen scientists attended—in those days, dust on Mars was a hot topic! During one dinner, there was much conversation about the possibilities for observing Mars with the soon-to-be-launched Hubble Space Telescope. Proposals to NASA to obtain “time on the telescope” were due within months. Word on the street was that only 5 percent would be selected. Rather than compete among ourselves for this precious resource, a group of us agreed to collaborate on a joint proposal.

We submitted our “HST Cycle 0” proposal to NASA in early 1989, and several months later, we were overjoyed to hear that we’d been granted about a dozen “orbits” of observing time during the first three years of Hubble’s mission. Here began my personal connection to Hubble, which also led to professional collaborations and friendships that are still going strong.

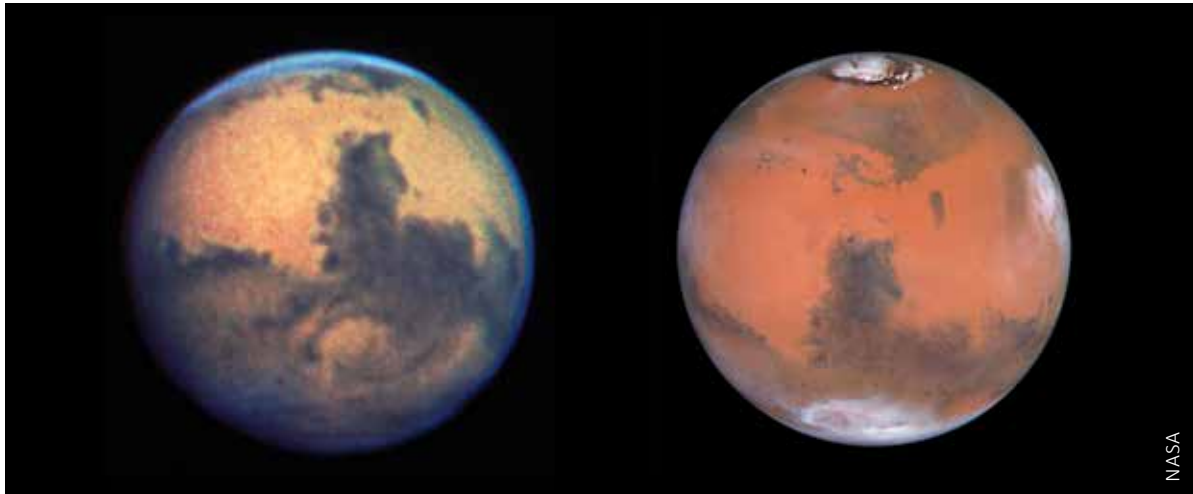
On April 24, 1990, the Hubble Space Telescope was launched, beginning of one of the most remarkable missions in the history of space exploration. The telescope has revolutionized astronomy and expanded humanity’s understanding of the universe—but early on, this outcome was anything but certain! The original launch on April 10 was scrubbed due to a faulty valve. On April 24, I returned to the Kennedy Space Center with a couple of close friends, including the young lady who became my fiancé a few days later and my wife the following year. At T-31 seconds ... a computer glitch and another hold!

Engineers rushed to the rescue, and soon the space shuttle Discovery roared skyward with Hubble on board.

Two months later, a stunning NASA news conference revealed Hubble was suffering from spherical aberration—its mirror had been ground to near-perfection but to the wrong prescription. What had been billed as the most capable telescope in history was out of focus! One of NASA’s most anticipated, and expensive, missions had become an embarrassment. All observing programs were put on hold while engineers determined a solution. By fall 1990, a powerful software process called deconvolution had been developed, but it only worked well for observing very bright objects.

Our team made a case to NASA: in late 1990, Mars would be at its closest approach to Earth until 2001 and would be among the brightest objects in the sky. We wanted to be guinea pigs. We were granted nine orbits of observations beginning in December 1990.





On December 13, 1990, the telescope was pointed at Mars, and our team became the first General Observers of the Hubble mission. Over the next three months, my colleagues and I spent every other week at the Space Telescope Science Institute in Baltimore turning the fuzzy raw data into sharpened images. By mid-March 1991, our first full-color Mars image was fully processed, and we were able to show the world what was arguably the best telescopic view of the Red Planet ever obtained. While we knew that the Hubble as designed would have garnered far superior results, we realized the magnitude of the opportunity. In May 1991, our first Hubble image of Mars appeared on the cover of *LIFE* magazine!

In December 1993 the astronaut crew onboard space shuttle *Endeavour* performed five very risky spacewalks to repair Hubble, installing a new camera and a corrective optics package. Within weeks, NASA announced that the servicing mission was a complete success, and Hubble was back in business! In March 1995, another round of Mars observations made the improvements obvious. Not only were the images sharp as a tack but our team could now process data within days while sitting at our desks at home.

Through the end of the 1990s, Hubble provided regular updates on the Martian surface and atmosphere. Several scientific high points from this decade-long Mars campaign stand out:

- Hubble filled a 20-year gap in successful missions to Mars until the Mars Pathfinder lander and the Mars Global Surveyor orbiter arrived in 1997. Hubble effectively acted as a weather satellite gazing at the planet year in and year out. Our large library of images also provided a bridge between a century of Earth-based telescopic observations and close-up views from the spacecraft orbiting Mars.

- The periodic global mapping provided by Hubble changed a long-held assumption that dust in the atmosphere was the primary driver of Martian climate. Hubble revealed an extensive belt of water-ice clouds that formed every year when Mars was farthest from the sun. Mars follows an eccentric orbit—solar heating varies by

about 40 percent between the closest (perihelion) and farthest (aphelion) points. This Aphelion Cloud Belt had been occurring all along, but Hubble provided the global views needed to recognize it and show that “colder and cloudy” conditions were actually very distinct from the assumed “warmer and dusty” conditions.

- In 2001, we finally caught a global-scale dust storm shrouding Mars. Once thought to occur yearly, our decade of Hubble observations indicated these were less frequent events. Again, the conventional wisdom of several decades had to be updated!

What began during “that dinner at the Stanley” formed the backbone of my scientific career. Since the mid-1990s, members of our team have been involved with building and operating camera systems for Mars orbiter missions. First was the ill-fated Mars Climate Orbiter (lost while entering orbit in 1999), followed by the Mars Reconnaissance Orbiter, which has been delivering near-continuous observations since late 2006. For me, Hubble’s 25 years recall visions of family, friends, career—and a remarkable spacecraft rising into the heavens on a pillar of fire. Happy anniversary, Hubble!

Facing page: The Hubble Space Telescope in orbit. Above, left: The first image of Mars from Hubble, December 13, 1990. Steve Lee was on the research team that received first access to Hubble after its faulty mirror was discovered; right: a typical image of Mars from the “corrected” Hubble, June 30, 1999.

FIND IT @ DMNS.ORG

Dr. Steve Lee is curator of planetary science. Find out more about his research @ www.dmns.org/science/museum-scientists/steven-lee.

See more photos on the digital version of the Summer 2015 *Catalyst* @ www.dmns.org/catalyst.

HUBBLE 3D RETURNS!

Experience a gripping story of hope, crushing disappointment, dazzling ingenuity, bravery, and triumph captured on the giant IMAX screen. Find showtimes and buy tickets @ www.dmns.org/imax.



OCEANIC ETHNOLOGY COLLECTION

By Melissa Bechhoefer

Power tools.

Perhaps not the first thing that comes to mind when working with delicate artifacts, but as we move forward with rehousing our Oceanic collection, power is proving invaluable.

A grant from the Institute of Museum and Library Services (IMLS) is funding a project to rehouse, recatalog, and move our Oceanic ethnology collection, which contains artifacts from Australia, Polynesia, Micronesia, and Melanesia. As part of the grant, Jeff Phegley, collections assistant, and a corps of volunteers are creating custom archival boxes for the artifacts to protect them during handling and in storage. To reduce the use of adhesives, the boxes are held together using polyethylene rivets and posts most efficiently assembled using handheld power tools. Even with the power, it takes about an hour to make a custom storage mount for a single artifact. We needed help!

Sixteen volunteers have already joined the Department of Anthropology this year to assist with the project. So far they have rehoused objects such as Australian bark paintings, Maori clubs, and a shark tooth sword from the Republic of Kiribati. Two interns are assisting with cataloging the objects using online and traditional library resources as well as irreplaceable archival records kept by the Museum as objects were acquired. Bethany Williams, the collections assistant who is overseeing the cataloging, is consulting with experts from the Oceanic region to help gain a better understanding of the artifacts, including colleagues from the Museum of New Zealand Te Papa Tongarewa, who were in Denver last fall when we hosted the wildly popular Whales exhibition.

Rehousing the Oceanic and other collections was on hold in recent years due to lack of space for storage and processing. With the new Avenir Collections Center and the Dr. Jane Day Anthropology Workshop, staff and volunteers now have a spacious, well-equipped home where they can collaborate on large grant-supported projects. As part of the Oceanic project, the IMLS is funding 34 custom-designed storage cabinets on mobile carriages that will protect and maximize storage space in the anthropology collections.

The Oceanic collection contains about 700 objects representing the peoples of the Pacific Ocean island region, from Hawaii to Papua New Guinea to Australia. Two-hundred of the objects have been recataloged, rehoused, carefully examined for condition reports, and photographed. Those in need of special attention will be sent to the Avenir Conservation Center to be stabilized or repaired by the Museum conservators.

About a third of the artifacts were the result of Museum expeditions to Australia and southwestern Pacific islands beginning in 1949. Although the Oceanic collection is one of the smallest of the Museum's ethnology collections, it is diverse in its materials, technologies, forms, and designs that were used in the early- to mid-20th century. It includes outrigger canoes, palm-leaf clothing and mats, coconut utensils, tusk and shell ornaments, and ceremonial carvings.

By early 2016, the Oceanic collection will be safely housed in its new home and several objects will be displayed in a new exhibit, debuting next year, on Level 2 near the South Pacific Islands and Australia Halls. These beautiful cultural objects will continue to tell the stories of this fascinating part of the world for years to come.



Facing page: Club (*Wahaika*), A443.3, Maori, New Zealand; above: mask carving, AN-2009-10.24, Melanesian, Sepik River Region, Papua New Guinea. Both objects are ca. early- to mid-20th century.

FIND IT @ DMNS.ORG

Melissa Bechhoefer is collections manager in the Department of Anthropology. Find out more about the department's collections and research @ www.dmns.org/science/research/anthropology.

We invite you to join a dynamic team of volunteers. Find information about volunteer opportunities throughout the Museum @ www.dmns.org/join/volunteering.



SCIENCE ON TAP: PICK YOUR POISON!

Join Dr. Chip Colwell, curator of anthropology, on a journey through the history of mind-altering concoctions. Mingle with fellow Young Professionals, snack on local fare, and savor signature drinks based on poison's powerful grip throughout the centuries. Don't miss the annual Science on Tap event, set for Thursday, July 23.

The Young Professionals are metro-area leaders who not only support the Museum's mission but also receive a full year of benefits designed specifically for them. Join today to gain access to Science on Tap as well as the many benefits available to all Museum members. Find out more @ www.dmns.org/YP.

YOU HELPED MAKE 2014 A GREAT YEAR

Members helped us serve 1,434,000 people who visited the Museum and participated in offsite programs in 2014. More than 305,000 children, teens, teachers, and families attended science education programs. You and our other 62,000 member households provided \$4.8 million in revenue. Your support is recognized and appreciated!

Please take a moment to read our 2014 Annual Report at www.dmns.org/annualreport. Our commitment to igniting a passion for nature and science in all Coloradans wouldn't be possible without you.

PLAN NOW FOR AN ENDURING FUTURE

Since its founding, vital community and individual support has allowed the Museum to grow into a thriving institution that has served Colorado for nearly 115 years! By planning now for the future, you have the opportunity to ensure that the Museum's mission endures for generations to come.

There are many options for creating a planned gift that will meet your needs while supporting the Museum. Find out more @ dmns.planmylegacy.org for access to downloadable brochures and a free Estate Planning Kit to help you get started or evaluate your current plan.

FUEL YOUR MUSEUM

Donate your used car, boat, motorcycle, truck, or RV to the Museum and support your favorite cultural institution while receiving a tax deduction. The Museum is partnering with Cars Helping Charities to give you the opportunity to quickly and easily donate a vehicle in any condition. Find out more or schedule a pickup @ www.dmns.org/give/vehicle-donation or 866.697.0697.

DID YOU KNOW?

Your employer may be one of 10,000 companies that match employee donations to nonprofits such as the Museum. See your personnel office for more information and forms.



GET THE ULTIMATE MUSEUM EXPERIENCE

We invite you to upgrade your membership today and join the Giving Club at \$300 or above. You will receive invitations to customized events and other exclusive benefits!

- IMAX Family Nights, Tuesday and Wednesday, June 16 and 17: Go to the movies, IMAX style with complimentary snacks.
- Behind-the-Scenes Night, Tuesday, October 13: An evening planned just for you and your family as you meet Museum scientists, explore treasures not on public display, and enjoy fun snacks and a cash bar.
- Free IMAX and Planetarium tickets: Although members receive a discount on tickets to our theaters every day, members of the Giving Club receive free tickets to these venues. You may use the tickets for yourself or share them with friends and family.
- “Anytime” tickets: All Giving Club members receive free “anytime” tickets to all surcharged exhibitions guaranteeing quick and easy access to temporary exhibitions, including The International Exhibition of Sherlock Holmes, opening this fall.

It is easier and more affordable than ever to become a Giving Club member with monthly installments of as little as \$25 per month! Find out more about Giving Club levels and benefits @ www.dmns.org/join/giving-club.



TEEN SCIENCE SCHOLAR HONORED

Tiye Garrett-Mills, a 2014 Teen Science Scholar from Hinkley High School in Aurora, was selected to participate in the fifth annual White House Science Fair in March. Hosted by President Obama, the event recognizes students from across America for their achievements in a broad range of science, technology, engineering, and math (STEM) competitions. During the science fair, Tiye had the opportunity to discuss her project with the President when he stopped by her display.

Her project, “It’s All In The Same Vein,” proposed this question: Can we learn from the success of X-ray imaging and adapt the protocol to a desktop scanner, thereby providing a more economically viable and efficient way to image leaf structure systems? The impact of her research could be far-reaching because leaf vein analysis provides a wealth of information about the evolutionary and ecological history of plants, and contributes to our understanding of climate change over time when compared to fossil leaves.

Tiye introduced her project by explaining that in flatbed scanners the light photons free the electrons in the semiconducting material, creating a charge directly proportional to the intensity of the light. This makes it useful for leaf venation imaging because it allows variation in light intensity. She selected *Mahonia aquifolium* because of its medium thickness and small size. She covered each sample in either a thin sheet of polyvinyl chloride plastic or a piece of acetate paper. The samples were either wet or dry. The samples were exposed to either an LED light from an iPhone 5c or a green CFL bulb from varying distances. She then analyzed the quality and usefulness of the images.

Among her observations:

- The further away either an LED light or a green CFL were held from the sample the better quality of the image.
- Dry samples showed up better than wet ones.

- The polyvinyl chloride cover performed better than the acetate paper cover.
- The images taken in a room with very little outside light interference were clearer than those taken in a room with lots of outside light interference.
- The green CFL light consistently performed well, however, it didn’t show up nearly as well as the LED light when there was outside interference.

She concluded that a desktop scanner can be used to image some major and minor leaf venation systems. By simultaneously providing a high-quality and economic solution, Tiye has taken the first step in creating a more efficient tool for scientists who study leaf venation networks.

The Teen Science Scholars program was launched in 2007 with six students. It has grown to more than 20 students participating each year, with a majority of scholars continuing on to college and majoring in a STEM field of study. The program is open to junior or senior teens who demonstrate their qualification through their application, essay, and interview. The scholars receive an opportunity to explore and work beside Museum scientists on authentic research projects. Tiye hopes to continue her research as she heads to college and pursues her passion for engineering and biochemistry.

FIND IT @ DMNS.ORG

Find out more about Teen Science Scholars @ dmns.org/sciencescholars, and about the White House Science Fair @ www.whitehouse.gov/science-fair.

For nearly 115 years, the Museum has been inspiring the next generation of scientists—and we do it 364 days a year—thanks to the ongoing support of people like you. We invite you to help us make other stories like Tiye’s possible by making a tax-deductible gift @ www.dmns.org/givenow. Thank you!

MEMBERS-ONLY OPEN HOUSE

THURSDAY, JUNE 11, 6–9 P.M.

Reservations now open!

Enjoy this FREE exclusive evening for families and adults!

- Visit your favorite exhibits throughout the Museum.
- Admire the best view in Denver from the Anschutz Family Sky Terrace.
- See treasures behind the scenes in the Avenir Collections Center.
- Experience the wonders of the cosmos in Gates Planetarium.
- Meet Mr. Bones, the dinosaur puppeteer.

Optional prepurchased dinner is available for \$10 adult, senior, and junior member; and \$7 child, 3–11 years. See full menu @ www.dmns.org/memberevents.

This event is free for members; however, charges apply for dinner and RESERVATIONS ARE REQUIRED @ www.dmns.org/memberevents or 303.370.6000 (daily, 9–5). Dinner reservations are due by June 3.

MEMBERS APPRECIATION DAY

SUNDAY, AUGUST 16

Enjoy these special discounts just for you!

- 20% off* on select items in all Museum Shops
- 20% off in the T-Rex Cafe and Deli
- 10% off gift memberships
- 50% off IMAX and Planetarium tickets
- Loyalty Lounge for our 10+ year members

*Extra 10% discount does not apply to DVDs, CDs, and books. Special offers are valid in person only on August 16, 2015, and are not redeemable over the phone or online.

DON'T WAIT IN LINE—PRINT AT HOME!

Save time at the Museum and use print-at-home tickets for surcharged exhibitions, IMAX and Planetarium shows, and lectures and programs. Print-at-home allows you to print your tickets as soon as you finish making your purchase online—with no handling fee! When you arrive, proceed directly to the Ticket Taker booth with your printed tickets and begin enjoying the Museum.

GET THE MOST FROM YOUR MEMBERSHIP

- Visit anytime for free 364 days a year!
- Read the monthly Members eNews with members-only news, tips, and special offers. By sharing your e-mail address, you can also take advantage of advance registration for popular programs such as Summer Day Camps and receive other insider updates. Not getting the eNews or advance notifications? Send your e-mail address to members@dmns.org.
- Go electronic and keep your membership card on your smart phone by downloading the free eCard app from your device's app store. Find out how @ www.dmns.org/membcard.
- Keep your membership current with Auto-Renew, an easy automatic renewal process. Enroll in Auto-Renew @ 303.370.6306 (daily, 9–5) and get a free gift. Your expiration date is printed on the mail label on the back of this magazine and under "Your Membership At-a-Glance" in your Members eNews.
- Add another adult to your membership for just \$20. The Add-on option is great for nannies and grandparents! Add-on members



must be enrolled by name in case they want to visit on their own. Not valid on Individual level memberships.

- Visit 330 science centers and museums using your free admission through the ASTC Passport Program. Free admission begins outside a 90-mile radius of Denver and your residence. Find out more @ www.astc.org/passport.
- Upgrade to Family Plus level membership and higher and enjoy a special reciprocity agreement with Fort Collins Museum of Discovery. (This agreement is separate from ASTC Passport program.)
- Find yourself frequently bringing the grandkids to the Museum? Check out the Grandparent membership level! It covers two adults living at the same address plus four of their own grandchildren, ages 3–18 years.

QUESTIONS?

- 303.370.6306 (daily, 9–5)
- members@dmns.org
- www.dmns.org/members
- Stop by the Members Lane at the Ticketing Desk

THANK YOU FOR YOUR SUPPORT! Your membership helps us provide outstanding science education programs, exhibitions, and research.

MEMBERS ONLY! THE POWER OF POISON

Members-Only Preview Day

Thursday, July 9, 9 a.m.–9 p.m.

See it before it opens to the public! Enjoy an extra 10% off in the T-Rex Cafe this day only before 5 p.m.

Members-Only After-Hours

Thursday, July 23, 6–9 p.m.

Optional pre-purchased dinner available for additional charge featuring fun dishes inspired by the exhibition, such as “love potion” salad and a “death by chocolate” dessert. See full menu @ www.dmns.org/memberevents.

Members-Only After Hours (ages 21+)

Thursday, August 6, 6–9 p.m.

In addition to an adults-only evening in the exhibition, enjoy a variety of delicious hors d'oeuvres and a cash bar. See full menu @ www.dmns.org/memberevents.

Admission to The Power of Poison is free for members; however, charges apply for meals and **RESERVATIONS ARE REQUIRED FOR ALL EVENTS** @ www.dmns.org/memberevents or 303.370.6000 (daily, 9–5).



WHAT'S HAPPENING AT THE MUSEUM

ADULTS | CHILDREN | FAMILIES | TEENS

SUMMER 2015 | RESERVATIONS 303.370.6000 OR WWW.DMNS.ORG

The Science Lounge

ENTERTAINMENT
MIND-EXPANDING SCIENCE
COCKTAILS
EVERY 3RD THURS 6:30 - 9:30 P.M.



June 18: Explorers Unite The compass points to 2001 Colorado Boulevard and the Sixth Annual Geek Cup Challenge! Navigate the darkest stretches of the Museum's depths, explore with tools ancient and modern, and try your luck with the fate of stars and sun. Enjoy a cocktail and cheer on the competitors, or take up the challenge and orient yourself to victory.

July 16: Pluto Party Planet or not, Pluto needs a party! Celebrate the infamous dwarf planet on a journey through our solar system. Size up the stats for what defines a planet. Raise a glass and gaze out into the night sky through telescopes and learn about the New Horizons mission that offers us a peek at petite Pluto.

August 20: Toxic Fun Dabble in toxins and dangerous concoctions during this evening devoted to poison. Summon your courage to venture into the exhibition The Power of Poison and make surprising discoveries at every turn. Beware stings and bites—but an elixir awaits! Drink your dram at the bar.

Buy tickets at dmns.org/sciencelounge
\$10 Museum member, \$12 nonmember

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[THE DENVER MAGAZINE] **Westword**

SUMMER 2015

EXHIBITIONS

Mythic Creatures: Dragons, Unicorns, and Mermaids

Now open through September 7 • Free with Museum admission • Phipps Gallery, Level 3
Face off with legendary creatures that for centuries have inspired stories, music, art, and many theories about their origins and existence.

The Power of Poison

Coming July 10–January 10 • Free with Museum admission • Anschutz Gallery, Level 3
Uncover the surprising secrets of poison, from the pages of fairy tales to the journals of modern medicine.

The International Exhibition of Sherlock Holmes

Coming October 23–January 31 • Special ticket required • Phipps Gallery, Level 3
Step into Victorian London and work alongside Sherlock as he tackles a baffling new case using your curious mind and scientific methods.

PHIPPS IMAX 3D THEATER

Be swept away on adventures from the ocean's darkest depths to the far corners of the universe.

Through June 4: *Deepsea Challenge 3D* • *Journey to the South Pacific 3D*

Opening June 5: *Humpback Whales 3D*

Through August 13: *Hubble 3D* • *Prehistoric Planet: Walking with Dinosaurs 3D* • *Tiny Giants 3D*

Opening August 14: *Galapagos 3D* • *Journey to Space 3D* • *Secret Ocean 3D*

GATES PLANETARIUM

Sit back and take an incredible journey as you soar through the cosmos.

Black Holes: The Other Side of Infinity

Cosmic Journey

Opening June 5: *Inside NASA: From Dream to Discovery*

One World, One Sky: Big Bird's Adventure

Perfect Little Planet


We Are Aliens

ADMISSION Museum admission is free for members every day!


	MUSEUM	IMAX	PLANETARIUM
Adult member	FREE	\$7	\$5
Senior member (65+)	FREE	\$6	\$4
Child/Junior member (3–18)	FREE	\$6	\$4

The Museum is open daily 9 a.m.–5 p.m., with extended hours at various times.
Dates, times, and prices subject to change. • To plan your visit and for other information, go to www.dmns.org.


JUNE

SUN	MON	TUE	WED	THU	FRI	SAT
					Photographer Art Wolfe, p. 5 <i>Humpback Whales 3D</i> Opens	Art Wolfe class, p. 8
	1	2	3	4	5	6
Summer Day Camp						
		The Soul of an Octopus, p. 5	Pluto-Palooza, p. 5	Members Only Open House		Denver Mini Maker Faire
7	8	9	10	11	12	13
Summer Day Camp						
Denver Mini Maker Faire			Colorado's Stratigraphy, p. 8	Science Lounge, inside cover		
14	15	16	17	18	19	20
Summer Day Camp						
Summer solstice			60 Minutes in Space, p. 6	Bird Walk, p. 9		
21	22	23	24	25	26	27
	SCFD Community Free Day  SCFD Scientific & Cultural Exchange Initiative STUDIES MAKING IT POSSIBLE					
28	29	30				

JULY

SUN	MON	TUE	WED	THU	FRI	SAT
			1	2	3	4
Summer Day Camp						
5	6	7	8 Sci-Fi Film Series, p. 6	9 Poison Members Preview Bird Walk p. 9	10 The Power of Poison opens Summertime Family Overnight, p. 11	11
Summer Day Camp						
12	13	14	15 Sci-Fi Film Series, p. 6	16 Science Lounge, inside cover	17	18
Summer Day Camp						
19	20	21	22 Sci-Fi Film Series, p. 6	23 Poison Members-Only Night	24	25
Summer Day Camp						
SCFD Community Free Day 	26	27	28 60 Minutes in Space, p. 6 Sci-Fi Film Series, p. 6	29	30	31

AUGUST

SUN	MON	TUE	WED	THU	FRI	SAT
						1
Summer Day Camp						
	General Arachnology, p. 8		Sci-Fi Film Series, p. 6	Bird Walk, p. 9 Adults Night in Poison		
2	3	4	5	6	7	8
Summer Day Camp						
					New IMAX films open	
9	10	11	12	13	14	15
Members Appreciation Day	SCFD Community Free Day 	Desert Islands, p. 6		Science Lounge, inside cover		
16	17	18	19	20	21	22
			60 Minutes in Space, p. 6	Einstein's Ideas, p. 7		
23	24					
Family Chemistry, p. 11						
30	31	25	26	27	28	29

AFTERHOURS



AT THE MUSEUM

Encounter new ideas, cutting-edge science, and captivating individuals.

Earth Is My Witness with Photographer Art Wolfe

Bask in the beauty of stunning landscapes, wildlife, and cultures from every continent as documented by renowned photographer Art Wolfe. Wolfe's images and live narration explore the delicate interconnectivity of life, immersing the audience in Earth's natural wonders with the accompaniment of an environmental soundtrack. From the rich sights and smells of the Pushkar Camel Fair to the moment when a polar bear and her cubs leave their arctic den, the images are brought to life by Wolfe's intimate stories about his exploration of our diverse planet. See p. 8 for a photography seminar with Wolfe.

Friday, June 5 • 7 p.m. • Gates Planetarium • \$27 member, \$33 nonmember



The Soul of an Octopus

From apes and tigers to dolphins, pigs, and chickens, the works of author Sy Montgomery bring readers into close contact with the mysterious animal world surrounding us. In her new book *The Soul of an Octopus: A Playful Exploration into the Wonder of Consciousness*, Montgomery examines one of nature's most alien yet endearing creatures. Following up on her popular 2011 *Orion* magazine piece about her friendship with a sensitive, sweet-natured octopus named

Athena, Montgomery continues to explore the complex lives and psychologies of the octopus, whose last ancestor diverged from humankind's half a billion years ago.

Tuesday, June 9 • 7 p.m. • Ricketson Auditorium • \$8 member, \$10 nonmember • Book sale & signing

Pluto-Palooza!

Let's hear it for the little guys! This special event is dedicated to NASA's New Horizons mission to Pluto, featuring the fastest spacecraft ever launched, which is scheduled to make a historic flyby of the icy dwarf planet in July. Join key mission scientists and engineers—all based right here in Colorado—as they share their favorite highlights from New Horizons' nearly decade-long journey across the solar system and provide a sneak peek at the fascinating new science expected from this mission. Our guests will be Alan Stern, principal investigator; Fran Bagenal, co-investigator; Joe Peterson, team lead for the Tombaugh Science Operations Center; and Jamey Szalay, a member of the Student Dust Counter instrument team. Space enthusiasts of all ages are welcome!

Wednesday, June 10 • 7 p.m. • Phipps IMAX Theater • \$12 member, \$8 member child • \$15 nonmember, \$10 nonmember child

60 Minutes in Space

Go “behind the stories” with space scientists who will use the best images and animation available to help you understand new developments in space exploration. No reservations required; seating is first come, first served.

Wednesdays, June 24, July 29, August 26 • 7 p.m. • Gates Planetarium • FREE

Sci-Fi Film Series

A summertime favorite is back! Science fiction feeds the imagination and helps us to explore possible futures, our hopes and fears, and the unfolding of technologies. Various Museum scientists and Vincent Piturro, English and film professor at Metropolitan State University of Denver, join together to host screenings of famous sci-fi films and lead discussions to break down the science behind these alternative possibilities. Wednesdays, July 8–August 5 • 7 p.m. • \$12 Museum or DFS member, \$15 nonmember, \$8 student (per film) Tickets at www.dmns.org/scififilmseries

July 8, *Snowpiercer* with earth scientist James Hagadorn • Sie Film Center

July 15, *Her* with health scientist Nicole Garneau • Sie Film Center

July 22, *Interstellar* with space scientist Dimitri Klebe • Phipps Theater

July 29, *Planet of the Apes* (1968) with zoologist Jeff Stephenson • Sie Film Center

August 5, *Blade Runner* with space scientist Ka Chun Yu • Phipps Theater



A New Film from the Museum Archives: Desert Islands

Former Museum director Alfred M. Bailey (left in photo) conducted fieldwork around the world, documenting it through journals, photographs, and moving images. In 1966, Bailey presented *Desert Islands* to an enthusiastic audience during his popular film lecture

series. With the help of Cinema Lab, the Image Archives Department has produced a new digital motion picture of Bailey’s presentation covering “out-of-the-way islands off Baja California” and concluding with highlights of the Galápagos Islands. This film is truly unique and includes footage of San Benedicto Island, which experienced a volcanic eruption shortly after the expedition. Hosted by René O’Connell, Museum image archivist, and Robert David of Cinema Lab, who will discuss the preservation and digitization of dying film.

Tuesday, August 18 • 7 p.m. • Ricketson Auditorium • \$8 member, \$10 nonmember

What Is Relativity? Einstein's Ideas and Why They Matter

As best-selling author and astrophysicist Jeffrey Bennett points out on the very first page of *What Is Relativity?*, the truth is that black holes don't suck. Bennett begins his accessible and entertaining introduction to Einstein's theories by taking you on an imaginary journey to a black hole and describing the amazing phenomena that you would really experience on that trip. For Einstein and our understanding of the modern world, it's all relative! Get an in-depth look at how the theory of relativity shapes much of our contemporary relationship to the universe.

Tuesday, August 27 • 7 p.m. • Ricketson Auditorium • \$8 member, \$10 nonmember • book sale & signing

Archaeology of the Undocumented

The U.S.-Mexico border is the subject of great, and at times heated, debate. What is largely lost in news headlines is a vital long-term, nuanced understanding of the modern immigrant experience. Jason De León is assistant professor of anthropology at the University of Michigan and director of the Undocumented Migration Project. For the past five years, De León has used path-breaking forensic, archaeological, and ethnographic research to examine the trek north through



harsh desert, putting a human face on the real life and death struggles of migrants. Hear tragic and exhilarating stories as narrated by De León's compelling research from one of the most significant, dangerous, and clandestine places in the world. This is the inaugural talk for the George McJunkin Lecture, recognizing the African American cowboy who discovered bison bones in Folsom, New Mexico, that eventually made archaeological history.

Thursday, September 3 • 7 p.m. • Ricketson Auditorium • \$8 member, \$10 nonmember

The Poison King

Widely noted folklorist and science historian Adrienne Mayor brings to life the story of the world's first experimental toxicologist. Her book *The Poison King: The Life and Legend of Mithradates, Rome's Deadliest Enemy* examines the brilliant rebel leader who challenged Roman imperialism in the first century B.C. The teenage Mithradates inherited a wealthy Black Sea kingdom after his mother poisoned his father. He fled into exile but returned in triumph to become a ruler of intelligence and ambition determined to build an empire to compare with Rome. His uncanny ability to elude capture and overcome devastating losses unnerved the Romans, while his mastery of poisons allowed him to foil assassination attempts and eliminate rivals. Mayor, a research scholar in classics and the history and philosophy of science at Stanford University, will explore how poison and power can operate in tandem to change the course of history.

Wednesday, September 9 • 7 p.m. • Ricketson Auditorium • \$8 member, \$10 nonmember

How to Clone a Mammoth

So, how does one clone a mammoth? Well, as evolutionary biologist and “ancient DNA” expert Beth Shapiro shows in her new book, this all depends on what you consider “cloning” and what you consider a “mammoth.” Shapiro examines the process of de-extinction—from which animals to select to how scientists find and use DNA samples to what we do with a cloned animal once we have one. She also addresses concerns related to ecology, the environment, climate change, and even GMO laws. Shapiro employs anecdotes from the field and the lab for this first mass market book about a very complex subject.

Wednesday, September 16 • 7 p.m. • Ricketson Auditorium • \$8 member, \$10 nonmember • book sale & signing

COURSES

The Art of Composition with Art Wolfe

For 40 years, renowned photographer Art Wolfe has been capturing the beauty of the planet’s stunning landscapes, wildlife, and cultures on every continent. In this instructional photographic seminar, Wolfe will analyze the visual image and explore what makes a compelling and emotionally engaging photograph. Seminar attendees will be inspired and equipped with tangible tips and techniques to improve their own photography.

Saturday, June 6 • 10 a.m.–3 p.m. • Ricketson Auditorium • \$195 adult



Colorado’s Stratigraphy

Do you enjoy looking at the beautiful layers of rock along I-70 or hiking around Colorado? Learn about the pages of Colorado’s geological book as written in chapters we can see by bus and boat. Study the geological record and learn details of rock preservation and character. This is an applied stratigraphy class, building on Reading Colorado: An Introduction to the Geology of Colorado.

Wednesdays, June 17 & 24 • 6:30–8:30 p.m. •
Field trips: Saturdays, June 20 & 27 • \$150 member,
\$180 nonmember

General Arachnology

Learn the evolutionary history of arachnids, such as scorpions, camel spiders, daddy longlegs, and ticks, the natural history and biology of the different groups, and the medical and economic importance of these animals. Experience a behind-the-scenes look at the wealth of specimens in the zoology collections with Paula Cushing, curator of invertebrate zoology.

Mondays & Wednesdays, August 3–12 • 6:30–8:30 p.m. • \$75 member, \$105 nonmember

Spider Biology

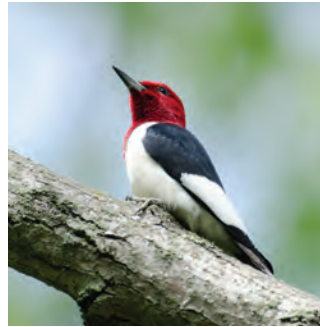
Whether you love spiders or fear them, this class will spin you up in a web of wonder. Paula Cushing, curator of invertebrate zoology, shares the family ties between spiders and their closest relatives, weaving in facts about their biology, their importance in terrestrial environments, and their ecology and behavior. You will learn how to identify different families of spiders and will become certified to take part in the Colorado Spider Survey, a project for citizen scientists.

Tuesdays & Thursdays, September 8–17 • 6:30–8:30 p.m. • Field trip: Sunday, September 13 • \$110 member, \$140 nonmember

BIRD WALKS

Rocky Mountain National Park

“Rocky Park” is home to some of the most sought-after birds of Colorado. In the aspen groves are the nest cavities of Williamson’s and red-naped sapsuckers, as well as warbling vireo and dusky flycatcher. The meadows are alive with mountain bluebirds, Wilson’s warblers and Lincoln’s sparrows. Above tree line roam white-tailed ptarmigan, American pipits, and brown-capped rosy-finches. A bonus is the awe-inspiring combination of scenery and other wildlife, with possible marmot, pika, and elk sightings.



Thursday, June 25 • 6:30 a.m.–6 p.m. • \$27 member, \$35 nonmember

Staunton State Park

Visit Colorado’s newest state park, featuring a variety of foothills habitats and a number of nesting summer resident species. Sightings may include three species of nuthatches, five woodpeckers, vireos, warblers, flycatchers, red crossbill, Steller’s jay, and many others. Involves a considerable amount of walking on smooth trails with some elevation gain.

Thursday, July 9 • 6:30 a.m.–6 p.m. • \$27 member, \$35 nonmember

Foothills Parks

By midsummer, most birds have hatched and fledged their young, and family groups are in search of food. Visit several parks in the near foothills. Along streams look for American dipper, while canyon cliffs may reveal white-throated swift or canyon wren. Pine forests host nuthatches, sapsuckers, and finches, while deciduous woodlands have warblers, vireos, and thrushes.

Thursday, August 6 • 6:30 a.m.–6 p.m. • \$27 member, \$35 nonmember

Chico Basin Ranch

This private ranch welcomes birders and hosts a Rocky Mountain Bird Observatory banding station. It has become a fall migration hot spot where curve-billed thrashers frequent the cholla flats, and swallows and flycatchers abound around the ponds and lakes. There are usually a few rarities. Almost anything can show up at Chico Basin!

Thursday, September 3 • 6:15 a.m.–6 p.m. • \$40 member, \$50 nonmember (includes entry to Chico Basin)



Barr Lake State Park

Barr Lake is a popular “migrant trap” in the fall and host to a Rocky Mountain Bird Observatory banding station, where you will get to see captured songbirds. The riparian woodland often features yellow-rumped and Wilson’s warblers, hermit thrushes, and many sparrows. Loons, grebes, ducks, and geese should still be at the reservoir.

Thursday, September 24 • 8 a.m.–5 p.m. • \$27 member, \$35 nonmember

CANOE TRIPS

Museum experts and Centennial Canoe Outfitters plan these specially themed trips. You’ll paddle along scenic rivers while soaking in the sun and gaining new knowledge about geology, wildlife, astronomy, and dinosaurs.

Reservations and information: 720.283.0553 • 1.877.353.1850 • www.CentennialCanoe.com



Birds and Wildlife by Canoe on the Yampa River

Canoe a gentle, enchanting 33-mile stretch of the Yampa River with wildlife expert Ron Beane. Pitch your tent and explore remote areas teeming with colorful vegetation, picturesque views, and wildlife, such as deer, antelope, coyotes, hawks, and eagles.

Friday–Sunday, June 26–28 • \$421 adult, \$391 child (6–12 years)

Dinosaurs by Canoe on the Gunnison River

Experience fascinating rock formations and fossils from the Jurassic and Cretaceous Periods as you paddle your way along the Gunnison River with earth scientist Kent Hups. This stunning journey will inspire and exhilarate nature lovers, history buffs, and explorers alike.

Friday–Sunday, July 17–19 • \$421 adult, \$391 child (6–12 years)

Western History by Canoe on the Gunnison River

Let the magical and playful Gunnison River whisk you away through the high canyon red sandstone walls of the Colorado Plateau. Museum educator Jennifer Moss Logan will share stories of the colorful characters and events that helped shape the western landscape. This trip, indulges both the adventurer and historian at heart.

Friday–Sunday, July 31–August 2 • \$421 adult, \$391 child (6–12 years)

FAMILY PROGRAMS

Family Fun: Summertime Overnight • Grades K–8

It's a night at the Museum for the whole family! Grab your sleeping bag for a starry night of constellations and wilderness exploration, all at the Museum. We'll breathe in the great outdoors to view the night sky through telescopes, gaze at spectacular planetarium shows, make our own bright lights to shine through the Wildlife Halls, and tell campfire stories complete with s'mores. Includes pizza dinner, evening snack, and hot breakfast.

Friday, July 10–Saturday, July 11 • 6 p.m. • \$65 adult member, \$55 child member • \$80 adult nonmember, \$70 child nonmember

Family Chemistry • Grades K–5

Does your family have good chemistry? We're not talking about how well you get along. We're talking science! At this wacky workshop, your whole family will really "bond" while experiencing cool chemical demonstrations and trying out some experiments that you can take home and conduct together.

Sunday, August 30 • 10 a.m.–noon • \$12 adult member, \$8 child member • \$15 adult nonmember, \$10 child nonmember



RESERVATIONS AND GENERAL INFORMATION

303.370.6000, daily, 9 a.m.–5 p.m., or www.dmns.org

MEMBERSHIP OFFICE

303.370.6306 or members@dmns.org

PRINT-AT-HOME TICKETS

Print-at-home tickets are available for exhibitions, IMAX and Planetarium shows, and lectures and programs, and there's no handling fee! When you arrive at the Museum, proceed directly to the Ticket Taker booth or to your program. Please always bring your membership card and photo ID when you visit the Museum. There is a \$2 handling fee per ticket for surcharged exhibitions reserved by phone.

RENEW YOUR MEMBERSHIP ONLINE

www.dmns.org/members

E-COMMUNICATIONS

Receive a monthly newsletter with updates and special offers as well as advance notices and other insider information when you share your e-mail address with us at members@dmns.org.

CONFIRMATION

For After Hours programs, classes, field trips, and programs for families and teens, you will receive a reminder e-mail with directions for entering the Museum and other details up to a week before the event. For children's programs, you will receive a confirmation letter and pertinent forms prior to the event.

REFUND POLICY

Sales are final on all tickets unless the Museum cancels the event.

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Hours, fees, and schedules are subject to change.

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TAKE HOME A LEGEND

THE MUSEUM SHOPS—LEVELS 1 & 3



Members save 10% every day!

Your purchases support Museum education, research, and collections.



T-REX CAFE

SALAD BAR, GRILL, KIDS MEALS
11 a.m.—2 p.m.

SANDWICHES, SNACKS READY TO GO
10 a.m.—4 p.m.

Proudly serving locally sourced Colorado products.

