



## **ANOTHER FOSSIL HUNTING TRIP TO KINNEY BRICK QUARRY BY FOP**

Thirty members of the New Mexico Friends of Paleontology (FOP) participated in a working field trip on November 8th, collecting fossils at Kinney Brick Quarry. The quarry is located on private land about 9 miles south-southeast of Tijeras, New Mexico, and was made available by special permission.

In the Museum's paleo collections area, prior to setting out, Amanda Cantrell (*Collections Manager*) and Tom Suazo (*Chief Preparator*) showed a number of specimens that had been found in the past at the Kinney Brick Quarry. Tom also led the group in an examination of the progress he has made on preparing the large fossilized shark from Kinney Brick.

This quarry provided excellent exposures of the late Pennsylvanian (~ 300 million years ago) Pine Shadow Member of the Wild Cow Formation in the Madera Group.



*Phenopteridium* - fossil plant found at Kinney Brick Quarry

CONTINUED ON PAGE 3: [SEE KINNEY BRICK QUARRY](#)

## **VOLUNTEER AWARDS BREAKFAST**

**WHEN:** Friday, January 30, 2015 • 9:30 am - 12:30 pm

**WHERE:** At the National Hispanic Cultural Center

**1701 4th Street SW** at Avenida César Chávez – (4th Street Entrance Parking Area)  
**History and Literary Arts Bldg, Salón Ortega**

Breakfast will be served and the awards presentation will follow. **Volunteers only please.**

RSVP by January 17, 2014, if attending 841-2877 or [doug.simon@state.nm.us](mailto:doug.simon@state.nm.us)





## KINNEY BRICK QUARRY

The Kinney Brick Quarry provided excellent exposures of the late Pennsylvanian (~300 million years ago) Pine Shadow Member of the Wild Cow Formation in the Madera Group. Many of the participants have collected fossils at this location for the Museum before. They have developed skills for chipping out rock slabs and carefully splitting them apart to reveal the treasures inside.



Tom and Amanda had a goal of finding complete or nearly complete specimens. FOP members obliged by finding and collecting beautiful



large specimens of the plants *walchia*, *sphenopteris*, and *neuropteris*. FOP members found a perfectly preserved *palaeoniscoid* fish, and several prehistoric cockroaches. There were lots of micro fossils collected, including some neat little shrimp. All specimens are now in the Museum's

collections.

The weather was dry but chilly and participants appreciated the sun's rays when they finally reached the floor of the quarry. There was much camaraderie as volunteers worked together and traded stories.

One of FOP's newest members was excited to find the source of the quarry's name... she found a Kinney brick!



## HAGERMAN FOSSIL BEDS

Speaker Phil Gensler, the BLM Regional Paleontologist for NM, AZ, and CA, did not talk about BLM at the 20 October 2014 FOP meeting. Instead he talked about his experience as a paleontologist at the Hagerman Fossil Beds National Monument in Idaho.

This Pliocene (about 5.3 to 1.8 million years ago) site is the most prolific paleographic monument in the US, with over 200 different species of animals and plants, and it continues to produce new fossils every year. The type of environment that deposited layers of sand, silt and clay became a river and flood plain around the edge of an ancient lake. In some places the strata were up to 600 feet thick.

It is the richest known depository of fossil horses, including the link between prehistoric and modern horses. One of the recordable aspects of the monument is the continuous, undisturbed record covering about 500,000 years, which is believed to be a complete ecosystem of several types of fauna and flora, including camels, bears, horses, fish, ground sloths, ducks, mollusks, saber-tooth tigers, shrews, swans, and turtles.

Of these, the most important was the large volume of extinct horses known as *Equis*, which lives today. The famous painting by Matternous in the Museum depicts the range of animals at that time. The good condition of the fossils is attributed to a very hard filler that preserved the fossils.

The Smithsonian Institution directed fossil excavations in the early 1930's, and many other museums and research institutions have conducted research here ever since.

-Dick Yeck: FOP VP for Programs

**NMMNHS Continuing Education Seminar**

January 6, 2015 • Multi-Purpose Room • 10:30 am

**EARTH HISTORY -- THE FIRST FOUR BILLION YEARS**

The Origins exhibit is hopelessly out of date concerning cosmology (the first 10 billion years of the universe), but it does a pretty good job with the topic here. We'll briefly update the cosmology part.

Then, we cover the first four billion years of the Earth: from moon formation, to the Heavy Bombardment Period, to the first life, to the first photosynthetic life, to the *rusting of the earth*, to the first *snowball earth*, to Eukaryotic cells, to the second series of snowball earths, to the rise of complex (i.e., differentiated) multi-celled animals.

It is quite a ride to get the planet ready for us!

-Dwight Jennison, Ph.D.

*I think in terms of the day's resolutions, not the year's.*

-Henry Moore

**NMMNHS Continuing Education Seminar**

February 19, 2015 • Multi-Purpose Room

10:30 am - 12:30 pm

Tom Suazo, DCA, will talk on the process of making fossil discoveries at the NMMNH&S and how that relates to the museum's mission. His presentation will touch on several stages from finding and collecting fossils to those of research and display. The main example for his talk will be New Mexico's newest dinosaur, *Ziapelta sanjuanensis*, but other specimens will also be mentioned. Tom is the Fossil Preparation Laboratory Manager for the museum.

-Anthony Hunt, Ph.D.



And thinking of holidays and special days...

**Let's Not Forget February!**



## ***KIWANIS LEARNING GARDEN: Part II***

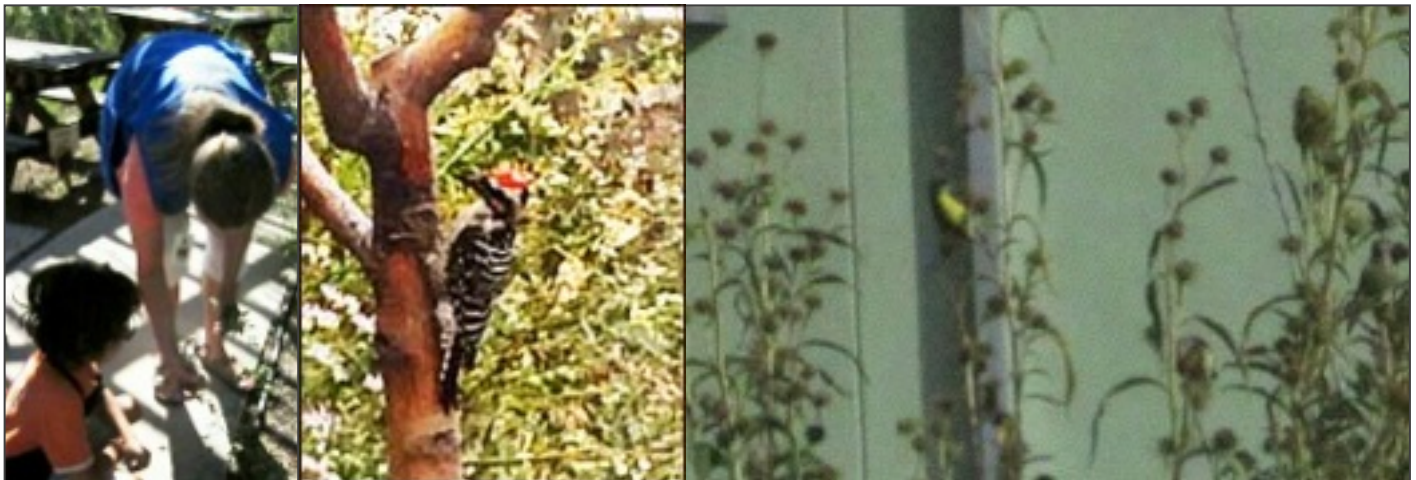
CONTINUED FROM NOV.-DEC. 2014 VAN

Garden as laboratory - a good year for beetles! Naturalist Center Volunteer and Young Explorers Camp Coordinator ***Tina Hansen*** began to use the KLG this summer as an outdoor lab. In her Master Naturalist training she had heard of this summer's resurgence of the Globe Mallow Leaf Beetle, which she shared with CC. CC said that she had seen the beetle thriving in the Globe Mallow plants she had encouraged in the KLG. Tina's use of the garden will be a magnet for others to do the same.

Joining Tina as chronicler of biodiversity in the garden is ***Carol Cooperrider*** of Explora. Carol has frequented the KLG for years as a place to eat her lunch at work. She has shared birds observed, as well as given feedback on garden projects. Some of her sightings are: Ladder-backed woodpeckers, Juncos (cited by Project Manager for the Wonder of Learning Exhibit Gigi Yu); Roadrunner, as usual; Finches, eating sunflower seeds; Mourning doves; and three beautiful crows. It's hard not to notice urban nature in the space!

The Learning Garden, thanks to the efforts of the above-mentioned contributors, now provides an outdoor haven for enjoyment and discovery, as well as an excellent spot to eat your lunch in the shade! We hope everyone will encourage visitors to drop in, as well as take time to enjoy it yourself.

If you would like to join in the care-taking of the garden, there are now ***monthly established Garden Gatherings*** - always the last Sunday of the month from 3:30 pm to 5:00 pm. Hot or cold tea is served, depending on the season. Garden camaraderie is also offered, along with the current project of the day. The project for October was creating a Pumpkin Patch. The project for November was staining tables and structures.



*Tina Hansen*

*Ladder-backed  
woodpecker, Junco*

*Lesser Goldfinches eating Maximilian Sunflower seeds*

For more info, contact CC Snider-Bryan - [cirrelda.snider@state.nm.us](mailto:cirrelda.snider@state.nm.us) or call 505-948-1615.

# JANUARY-FEBRUARY 2015

## Museum Adult and Family Educational Programs

### JANUARY

January 2 • *Teacher Workshop*  
Bosque Education Guide

January 4 • *First Sunday*

January 9 • *Lecture*  
Russian Meteorite

January 17 • *STARTUP Studio*

January 19 • *STARTUP Studio*

January 22 • *Prehistoric Preschool*  
Session 1 First classes

January 22 • *Short Talk*  
Bosque del Apache Field Trip

January 26 • *Field Trip*  
Bosque del Apache

January 26 • *Space Science*  
Lunar Monday

January 29 • *Curator's Coffee*  
Algae

### FEBRUARY

February 1 • *First Sunday*

February 3 • *Adult Class*  
Wire Sculpture

February 8 • *STARTUP Studio Workshop*

February 12 • *Lecture*  
Rio Grande Food Webs

February 21 • *STARTUP Studio*

February 23 • *Space Science*  
Lunar Monday

February 28 • *Special Event*  
NM Bird Experts

### **NATURESCAPES 2015**

The theme for the 2015 Naturescapes photo salon is "**Colors of Nature in New Mexico.**" Start taking photographs now to submit in summer 2015. **More details to come!**

### **SPACE SCIENCE EVENTS**

Exciting Changes Coming to Space Sciences!

Check [www.nmnaturalhistory.org/planetarium.html](http://www.nmnaturalhistory.org/planetarium.html) for updates on new exhibits and planetarium projection system.

#### **LUNAR MONDAYS**

**January 26, February 23 • 7 - 8 pm** (canceled if the sky is cloudy)

Join members of The Albuquerque Astronomical Society and study the moon in the museum's observatory. Learn how lunar features formed, and get the latest information from Lunar exploration missions.

No registration required. Admission by Donation



The NMMNHS is proud to host this special free lecture sponsored by the New Mexico Academy of Science.

## **2013 Chelyabinsk (Russian) Meteorite and Other Stories of Destructive Impacts and Airbursts on Earth**

**Mark Boslough, Ph.D., Sandia National Laboratories**

**Friday, January 9, 2015 • 7:00 pm - 8:30 pm**

Shortly after dawn on February 15, 2013, an asteroid descended to Earth at about 19 kilometers per second (42,500 mph) exploding at high altitude in a momentary flash brighter than the sun and generating a shock wave that injured over a thousand people. This type of event is not as unusual on Earth as you might think. Come and hear the full story and related research from our New Mexico expert on planetary impacts and global catastrophes. Dr. Boslough's research on airbursts challenged the conventional view of asteroid collision risk and is now widely accepted by the scientific community. In 2011 he stated, "It is virtually certain (probability >99%) that the next destructive NEO (Near Earth Object) event will be an airburst.

*Dr. Boslough's work has been profiled on PBS NOVA, the Discovery Channel, National Geographic, and the BBC. The asteroid 73520 Boslough (2003 MB1) is named after him. He is currently a principal member of the technical staff at Sandia Labs. He earned his B.S. in Physics (Colorado State University) and MS and Ph.D. in Applied Physics (Caltech) where his research focused on geophysics.*

Held at the New Mexico Museum of Natural History & Science, 1801 Mountain Rd. NW, Albuquerque, NM 87104 • (505) 841-2800. Doors open at 6:15 pm. Visit: [www.nmnaturalhistory.org](http://www.nmnaturalhistory.org)

**FREE.** No registration required. **Questions:** August Wainwright, email: [programs.NMMNHS@state.nm.us](mailto:programs.NMMNHS@state.nm.us) call (505) 841-2861



## **The Rio Grande: Its Food Webs**

**Ayesha Burdett, Ph.D., Curator of Bioscience, NMMNHS**

**Thursday, February 12, 2015 • 7:00 - 8:30 pm**

Food webs are used by biologists to describe relationships among predators and their prey linked together by food chains. There are several different ways to understand food webs and how they change over time. In the Rio Grande, the food web is constantly changing because our river's flow conditions change throughout the year. This means that different populations are abundant in the river during different seasons. Join Dr. Burdett as she discusses her research about variability in New Mexico's largest river with an emphasis on the aquatic invertebrate fauna who make the river their home.

*Dr. Ayesha Burdett is the Bioscience Curator at New Mexico Museum of Natural History and Science. She is a freshwater ecologist who asks questions about why different insects live in certain places within rivers or wetlands. When not at the Museum, she enjoys wandering by the river, spotting damselflies, and encouraging her daughters to get muddy. She earned her BA/BSc in Biology and Geography in 1997 (University of Melbourne, Australia) and Ph.D. in Environmental Science in 2005 (Charles Sturt University, Australia).*

Held at the New Mexico Museum of Natural History & Science, 1801 Mountain Rd. NW, Albuquerque, NM 87104 (505) 841-2800

Visit: [www.nmnaturalhistory.org](http://www.nmnaturalhistory.org)

\$6 (\$5 members, \$4 students) Museum Volunteers are **FREE.**

To purchase tickets in advance, online, to guarantee your seats, go to [www.NMnaturalhistory.org](http://www.NMnaturalhistory.org). Or purchase tickets at the admissions desk the night of the event. Doors open at 6:15 pm. Questions: August Wainwright, call (505) 841-286 or email: [programs.NMMNHS@state.nm.us](mailto:programs.NMMNHS@state.nm.us)


**CURATOR'S COFFEE**
**A Café Style Program**

Join us for a casual discussion followed by a themed tour. Limited to 15 people and includes coffee, light refreshments, and Museum admission.

***The Who, What, and How of Algae***

**Rebecca Bixby, Ph.D.**

**Thursday, January 29, 2015 9:30 am to 11 am**

*"The small things of the worlds are also wonderful and big and of these small things, the worlds are built." C.G. Ehrenberg 1818*

How does the diversity of algae play a role in the study of changing environment and how can we use algal biodiversity to explore questions like alternative energy (such as biofuels)? We'll talk about the amazing diversity of algae and how they adapt to interesting, (often) extreme environments including our own New Mexican rivers and springs.

*Dr. Becky Bixby is a Research Assistant Professor at the University of New Mexico and part of the EPSCoR energy research partnership with this Museum. As a freshwater algal ecologist, her local projects include exploring human and natural impacts on diatom biodiversity and abundance in arid land rivers. She earned a B.A. from Albion College (Michigan), an M.S. from the University of Cincinnati, and a Ph.D. from the University of Michigan.*

**\$8** (10% discount for members and volunteers)

**Pre-registration required. Limit 15 participants.** To guarantee your place, register online, go to [www.NMnaturalhistory.org](http://www.NMnaturalhistory.org)

**Questions:** August Wainwright  
email: [programs.NMMNHS@state.nm.us](mailto:programs.NMMNHS@state.nm.us)  
call (505) 841-2861


**ADULT CLASS**
***Tree of Life - Wire Sculpture***

**Camille Argeanas, artist**

**Jayne Aubele, geologist**

**Friday, February 6 • 9:00 - noon**

Learn about ore metals that are used to make wire, such as gold, silver, iron, and copper, and their important history as part of New Mexico's mining heritage. Then learn a few fun things about some of New Mexico's minerals from a geologist's perspective. Do you know the difference between silver and sterling silver? What does 14K gold actually mean? Did you know that the very first "gold rush" in North America took place here in NM?

Then bring out your creative side by creating a sculpted tree out of bailing wire with small gem minerals for leaves. With easy, step-by-step instruction you'll leave the class with a prized accomplishment you will want to show everyone.

This class is geared for adults and older children, ages 12 and above. No prior experience required.

The class fee includes all materials. You are encouraged to bring a favorite fist-sized rock or mineral specimen to use as a base for your tree.

*Camille Argeanas, a native New Mexican, is a nationally known wire artist. She has taught regularly at the UNM's Division of Continuing Education for over twenty years.*

*Jayne Aubele is a Adult Programs Educator/Geologist at the Museum. Over the years, she has taught adult classes in all aspects of geology.*

**\$45** (10% member discount)

**Pre-registration required.** For more information or to guarantee your place in this class, register online, go to [www.NMnaturalhistory.org](http://www.NMnaturalhistory.org)





## FIELD TRIP

### *Birds of the Bosque del Apache*

#### TRIP DATE

**Sunday, January 25, 2015 • 10 am - 9 pm**  
(Depart Albuquerque/Return to Albuquerque)

#### PREVIEW TALK

**Thursday, January 22 • 7 pm - 8 pm**

#### TRIP LEADERS

**Laurel Ladwig:** *life-long birder and excellent photographer.*

**Tish Morris:** *Naturalist, who has led many field trips for the Museum, including annual trips to Bosque del Apache.*

Join us on a day-long journey to see migrating and year-round avian residents. There are always thousands of birds to see at New Mexico's own world-famous refuge south of Socorro. No experience is necessary - come and join the fun!

You are welcome to drive down to the Bosque on your own OR ride with us in the Museum van. Bring your own lunch. We will use a Refuge bus, and we may get to see areas off the regular tour loop. It is always spectacular there in the winter and we will identify as many species of birds as we can until dusk. We will stop for a group no-host supper in Socorro.

Preregistration is required. Space is limited to 25 participants. Adults only.

Go to [www.NMnaturalhistory.org](http://www.NMnaturalhistory.org) for registration.

Cost: \$45 for the field trip and talk  
(10% discount for members)

Questions: call August Wainwright at 841-2861, or email [programs.NMMNHS@state.nm.us](mailto:programs.NMMNHS@state.nm.us)



## STARTUP Studio Workshops

*For families (children age 6 and up), students, and adults. Workshops are held in the Highlands Classroom at the Museum.*

**INSTRUCTOR:** Miles Tokunow, New Mexico Highlands University

### *3D Printing for Space*

**Saturday January 17 • 1 - 4 pm**

NASA is now using 3D printing in space. Learn to use a 3D printer to design tools for space travel!

### *Learn to Code!*

**Monday, January 19 • 1 pm - 4 pm**

People can drop in at any time to learn how to program a computer, micro-controller, create a website, and more!

### *Creative Circuits for Valentine's Day*

**Sunday, February 8, 2015 • 1 - 4 pm**

What better way to show your love than make your own Valentine's Day card light up with LEDs! Learn the basics of electronics to make creative cards for Valentine's Day.

### *Intro to Robotics:*

### *Brushbots and 3D Printing*

**Saturday, February 21, 2015 • 1 - 4 pm**

Learn basic electronics and 3D printing. Make robots out of household items and print 3D fossils from around the Museum!

*Miles Tokunow is an artist and graduate student in Media Arts at NM Highlands University.*

**\$15** (Members, 10% discount) **for each class. Pre-registration required.** Go to [www.NMnaturalhistory.org](http://www.NMnaturalhistory.org) (linked to BrownPaperTickets.com) **Questions:** Contact August Wainwright at [programs.NMMNHS@state.nm.us](mailto:programs.NMMNHS@state.nm.us) or call 505-841-2861

EDITOR'S REQUEST: Please put the word "VAN" in your email title when you submit an article or photo for the VAN. Thank you!

## SPECIAL EVENTS

**NEW EXHIBIT OPENS  
JANUARY 24 TO AUGUST 16**

### *Birds of Paradise: Amazing Avian Evolution*

Take a walk into the dense rain forests of New Guinea and Australia, and, with the help of National Geographic's cameras, see all 39 species of birds-of-paradise display a kaleidoscope of brilliant plumage. In 2004, National Geographic photographer **Tim Laman** and Cornell University Lab of Ornithology scientist **Edwin Scholes** began a series of 15 targeted expeditions over eight years to document these bizarre birds.



The fascinating stories of ground breaking research and adventure paired with amazing footage and photography are the foundation of this exhibition.

**"Birds of Paradise"** is a science exhibit,

art show, and natural history display all at one time.

This educationally enthralling and visually stunning exhibit will be at the New Mexico Museum of Natural History and Science beginning January 24, 2015. The highly interactive exhibit is appropriate for all ages.

**"Birds of Paradise has been co-developed by the National Geographic Society and the Cornell Lab of Ornithology."**

Exhibit is included in general museum admission. Check the **Museum website** for more information.

## SPECIAL EVENT

Celebrate the exhibit *Birds of Paradise* and join us for...

### *New Mexico Birds Weekend*

**Saturday, February 28 • 11 am to 2 pm**

**Sunday, March 1, 2015 • 11 am to 2 pm**

Meet New Mexico bird experts and learn about the NM Bird Groups working to protect our New Mexico birds.

Also on both days...Attend special presentations by **Karen Herzenberg**, New Mexico Naturalist.

**11 am to noon for children and families  
1 pm to 2 pm for adults**

Ms. Herzenberg will introduce you to Florence Merriam Bailey. Bailey spent many seasons in the field in the early 1900s, cataloguing species for the US Biological Survey. She wrote eight published books, including the first popular guide to bird watching, *Birds Through an Opera Glass* (1889), and the comprehensive, *Birds of New Mexico* (1928).

**Karen Herzenberg** is a naturalist working on projects for Bernalillo County, Valle de Oro National Wildlife Refuge, and Albuquerque. She is on the advisory committee for the New Mexico Master Naturalist program and leads bird and nature walks in the Albuquerque Metro area.

No registration required. **Free** (with Museum admission) on February 28. **Free** (no admission charge) for all NM residents on March 1.

Questions: Contact August Wainwright at [programs.NMMNHS@state.nm.us](mailto:programs.NMMNHS@state.nm.us) or call 505-841-2861

## MUSEUM TOURS

**Museum Exhibit Tours Mondays • 1:30 - 2:30 pm**

Take a docent-led, fact-filled, fun, guided tour of the Museum exhibits. Limited to 14 participants ages 13 and up. Meet in the Atrium at the stadium seating.

**Free** (with Museum Admission) **No registration required.** First-come, first-served.

Sunday, January 4 • 9:00 am – 5:00 pm  
 Sunday, February 1 • 9:00 am – 5:00 pm

**FREE Admission to the Museum for all New Mexico Residents**

On the first Sunday of every month, the New Mexico Museum of Natural History and Science is **FREE** to all New Mexico residents. Bring NM ID or proof of residence. Regular admission fees for DynaTheater and Planetarium shows.

### **Guided Tour of the Museum Public Exhibits**

**Every First Sunday • 1:30-2:30 pm**

Take a free, fact-filled, fun, guided tour of the Museum exhibits.

**Special Event at the Museum on March First Sunday  
 Sunday March 1 • New Mexico Birds**

Talk with NM bird experts and attend a special presentation about early NM birders.

Limited to 14 participants ages 13 and up  
 Tours are first-come, first-served.

## **YOUNG EXPLORERS SUMMER SCIENCE CAMP 2015**

*Looking for summer fun for children from  
 Kindergarten through eighth grade?*

Experience an adventure with the New Mexico Museum of Natural History & Science this summer! Explore mountains, climb volcanoes, dig fossils, and hike forest trails with experienced instructors. Interested in space? Space camps for all ages will be offered. Discover the biology, geology, paleontology, ecology, and space science of our state. Create art through natural exploration.

Week-long, full-day or half-day camps for children entering Kindergarten through eighth grade.

Camp sessions will begin in June. For camp schedules and registration information, visit [www.NMnaturalhistory.org](http://www.NMnaturalhistory.org).

## **Prehistoric Preschool**

Prehistoric Preschool is a Museum program for 3- to 5-year-olds and their adult companions to explore natural history topics in a supportive and fun atmosphere. All activities are child-centered, hands-on, and age appropriate. Classes include two hours of crafts, songs, games, puppet shows, investigating specimens from the Museum's collections, Museum visits, and a fun and healthy snack

All class participants must be accompanied by an adult. **No more than two children per adult companion, and no more than two adult per child.** Permission for attendance by siblings younger than 3 is made on a case-by-case basis with Early Childhood Educator. Maximum class size is 12 children and their adult companions.

### **Spring Session 1:**

## **New Mexico's Dynamic Dinos**

**January 22 - March 7, 2015**

Have a favorite dinosaur? Find out all about the ones whose fossils were found here in our state, as we celebrate each kind of dinosaur with its own special class. From plant-eaters to predators, from fast to slow-moving, from big to small, get to know more about New Mexico's Dynamic Dinos!

**Preregistration is required.**

**\$90** for first child, **\$81** for second child in the same family. **10% discount for Museum members or Museum volunteers.** Scholarships available.

**Pro-rated registration** available after classes have started. For more information or to Register for classes, go to <http://www.nmnaturalhistory.org/preschool.html>

**Questions?** August Wainwright at [programs.NMMNHS@state.nm.us](mailto:programs.NMMNHS@state.nm.us) or **(505) 841-2861**

## MUSEUM JUNIOR DOCENTS 2015

### Calling All Teens!

Are you a teen entering 7th grade - 12th grade this fall and 13-17 years old? Know anyone who is?

Join us on an adventure in science and technology as JUNIOR DOCENTS this summer!



*Junior Docents - 2014*

Learn science content and put your customer service skills as you work as an educator in the Museum's exhibit halls. Special projects are available to draw on your interests and skills, and the field trips are just one of the perks.

### **Applications Due: February 1 - March 15, 2015**

(Applications will be accepted after this window depending on availability.)

### **Acceptance Notification - on or after April 15, 2015**

### **Training Week - June 1-5, 2015**

### **Work Weeks - June 6-July 31, 2015**

**COST: \$175**

Visit [www.nmnaturalhistory.org/juniordocents](http://www.nmnaturalhistory.org/juniordocents) for more information and applications or contact Kelly White, Junior Docent Coordinator at [kellyj.white@state.nm.us](mailto:kellyj.white@state.nm.us)

-Kelly White

## FAMILY FUN ON A RIVER RUN!

### *Rafting the San Juan River*

**June 17-20, 2015**

Join us for a family rafting adventure next summer! We'll float 26 miles between Bluff and Mexican Hat, Utah. Learn about the natural history of this river ecosystem, and the plants and animals of the area through games, stories and other fun activities. There will be lots of time for playing in and on the water. It is a great family experience!

For children 7 years and over with parent(s), grandparent(s), aunt(s) or uncle(s)—no experience necessary. Complete itinerary available.

### **Expert Guides:**

**Tish Morris**—has led this trip for the museum for many years and thinks a few days on the San Juan are just the best!  
**Kristin Gunckel, Ph.D.**—A veteran of many Museum raft trips, is a geologist, educator and faculty at the University of Arizona and brings a wealth of knowledge and engagement with children to this trip.

**Cost: \$715 adults, \$690 child under 12** (\$20 off for Museum members: \$695 adult/\$670 child)

Includes all food from dinner Day 1 through Lunch Day 4, expert staff, river guides, group equipment and supplies. Families meet in Bluff, Utah on the evening of Wednesday, June 17<sup>th</sup> and get off the river and back to Bluff the afternoon of Sunday, June 20<sup>th</sup>. Camping equipment may be rented.

Co-sponsored by Four Corners School of Outdoor Education

Trip questions: [tish.morris11@gmail.com](mailto:tish.morris11@gmail.com)

Additional information at [www.NMnaturalhistory.org](http://www.NMnaturalhistory.org)

**Registration through:** Four Corners School of Outdoor Education: <http://www.fourcornersschool.org/programs/southwest-ed-ventures-swed> 800-525-4456



## FOR TEACHERS ONLY

### Bosque Education Guide - Teacher Workshop Friday, January 2, 2015 • 8:30 a.m. to 4:30 p.m. At the Rio Grande Nature Center State Park.

Join other educators in getting to know this amazing hands-on, K-12 interdisciplinary curriculum about the Middle Rio Grande bosque ecosystem.

For more information, visit the Bosque Education Guide website: [nmnaturalhistory.org/bosque-education-guide.html](http://nmnaturalhistory.org/bosque-education-guide.html).

Reservation required, call the Rio Grande Nature Center at (505) 344-7240

For directions or additional information for the Rio Grand Nature State Park visit the website: [www.emnrd.state.nm.us/prd/rgnc.htm](http://www.emnrd.state.nm.us/prd/rgnc.htm)

Cost: \$3 per vehicle day-use fee.

*Sponsored by: New Mexico State Parks, NMMNHS, and the Albuquerque Urban Bird Treaty*

---

## The Volunteer Association Newsletter (The VAN)

The VAN is published bimonthly. There are six regular issues each year: January-February, March-April, May-June, July-August, September-October, and November-December with an occasional Special Issue. The deadline for submitting articles and photographs for the next regular issue is always the fifteenth of the month prior to the publishing date of that issue. The deadline for the **March-April** Issue, for example, will be **February 15**.

Please send items for the VAN to Louise Harris, VAN Editor, <[louise@goingourway.net](mailto:louise@goingourway.net)>, with a copy to Chris Sanchez DCA <[chris.sanchez@state.nm.us](mailto:chris.sanchez@state.nm.us)> and Doug Simon DCA <[doug.simon@state.nm.us](mailto:doug.simon@state.nm.us)>

The VAN mission is to inform, engage, and enhance the experience of NMMNHS Volunteers by acting as a vehicle of continuing education, keeping volunteers informed about the Museum, and relaying news of volunteers and their activities.

*Your articles pertaining to the museum are most welcome.  
Articles may be edited for clarity and space limitations.*

**EDITOR'S REQUEST:** Please put the word "VAN" in your email title when you submit an article or photo for the VAN. Thank you!

---

# 2015 CALENDAR

January						
Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

February						
Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

March						
Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

April						
Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

May						
Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

June						
Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

July						
Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

August						
Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

September						
Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

October						
Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

November						
Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

December						
Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		