



### Hall of Stars!

February 15, 6 - 9 pm

Celebrate the opening of our newest permanent exhibition, the **Hall of the Stars!** Use it to explore the seasonal night sky and study objects in deep space. The observatory will be open (weather permitting) and planetarium shows will be presented during the evening.

### The Smithsonian Is in Good Company!

Our Museum is one of only two museums nationwide with a direct connection to the Mars Exploration Rover Mission through a science team member. And we are one of only two museums nationwide to have a special 10th Anniversary Rover Exhibit... in both cases the OTHER museum is the Smithsonian Air and Space.

### Volunteer Spirit Wanted: New Training Opportunity

Monday, February 10  
2 to 3:30 pm

Training on new Mars Exhibit for volunteers.

*Psst -- Could there be a pun here?  
-- Absolutely not! Wouldn't be professional.*

### It's A Baby Kirby! (Should we have a shower?)

As many of you have already learned, last November, 2013, we lost long-time Museum resident Kirby the Lungfish. Kirby had a good run: he came to the Museum over twenty years ago and grew from just over 30 cm. long (about a foot) to a whopping one meter (~39") in length. Kirby's first aquarium home was a 125-gallon tank; he was later moved to a 200 gallon, then to a 300 gallon custom aquarium when the Triassic exhibit opened.



As much as we will miss Kirby, we have great news: Tom Dvorak, a volunteer here at the Museum, worked out a deal with his employer, Clark's Pet Emporium, and they donated a new one! Kirby Too (get it??) was only 19 cm. long when he/she arrived in early December.

#### SOME STATISTICS:

**Scientific Name:**

*Protopterus annectens*

**Common Name:** West African lungfish

**Country of Origin:**

Nigeria

**Gender:** Unknown. We

know that the original Kirby was male because

one year we observed him attempting to build a nest, a behavior only males display. We will have to watch for clues or get a better manual on lungfish anatomy to figure out Kirby Too's gender.



CONTINUED ON PAGE 2

**Age:** Tom estimates Kirby Too to be less than a year old.

**Diet:** Though they lean towards being carnivores, they are more properly omnivorous - they will, literally, eat ANYTHING!

**Preferred foods:** Snails, clams, crustaceans such as crawfish, aquatic insects and their larvae, other smaller or slower fish that happen to get to close to Kirby's business end. In addition, they have been observed eating seeds and water plants such as mosses and ferns (Kirby once ate a whole Java fern and other water plants meant to brighten his aquarium.)

**Maximum size:** around a meter in length (39 inches) and up to 4 kilos (8 pounds).

**Aquarium:** Fresh water - 300 gallons

**Biology:** Lungfish are adapted to flood plains of marginal swamps and backwaters of rivers and lakes. As the name implies, lungfish have functional lungs and must come to the surface to breathe. By far, their most interesting behavior is their ability to survive long periods of drought. As water recedes, lungfish dig a burrow into the mud bottom, biting clumps of mud loose and pumping it out through their gill openings. Once the right depth is reached (up to 25 cm. deep), the lungfish hollows out a chamber, wiggles around until its tail loops over the head, and then takes a long nap until the next season's rains again soaks their environment.

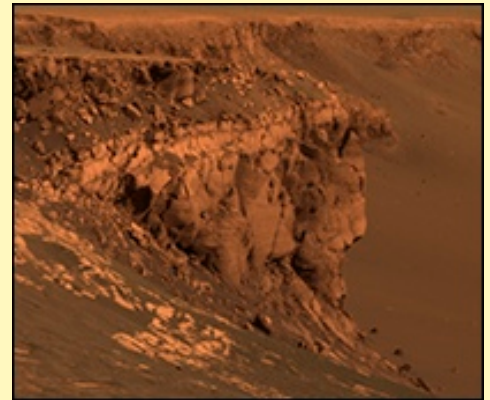
As their sleeping chamber dries out, mucus on the lungfish's skin forms a cocoon around its body. Among the more remarkable facts of lungfish biology is that once they begin to aestivate, they will live off their fat reserves. If they use up their fat reserves, they can resort to metabolizing muscle tissue and can, apparently, go years without food or water! Since they cannot get rid of waste that they produce from metabolism while they aestivate, ammonia accumulates in their tissues making them quite toxic.

**Other interesting facts:** There are six species of lungfish today: one in Australia, four in Africa and one species from South America. The African and South American species are in the same Order: *Lepidosireniformes*, further reinforcing arguments for Africa and South America being joined in the geologic past. The Australian species (Order *Ceratodontiformes*) must breathe air, but does not aestivate as their African and South American cousins do.

If you have any other questions about our baby Kirby, please feel free to find me and ask. I am always happy to help.

Mike Sanchez  
Naturalist Center Educator

Kirby Too Photos by Linda Walton



## MARS LANDSCAPE PHOTOGRAPHY

The exhibit is designed to make visitors feel as though they are really seeing Mars--Mars with wall-sized images that they may have never seen before! It is an art exhibit of photographs by those well-known photographers - **Spirit** and **Opportunity**.

*Psst -- See! Those words, again.  
-- Completely coincidental. I'm sure of it.*

## Computer Technology

Computer technology is wonderful... when it's working. There are times, however, when it's not working and, therefore, not at all wonderful. Last weekend, it stopped being "wonderful" for me. I apologize for this issue being late. The technology let me down.

Louise Harris, VAN Editor

**CONTINUING EDUCATIONAL SEMINAR****URANIUM IN NEW MEXICO:  
GEOLOGY, HEALTH AND HISTORY**

Malcolm Siegel PhD, MPH.

February 13, 2-14 in the MPR • 10:30 - 12:00

All volunteers, docents, and tour guides are encouraged to attend.

Dr. Siegel offers the following regarding his talk:

*Uranium and the development of nuclear energy for peaceful and military applications have been an important part of New Mexico's geologic legacy. The debate around proposed new uranium mining in the southwest is characterized by strong stands being taken by proponents and opponents of new mining in places such as the Navajo Reservation. In this talk I'll summarize the geologic setting of major uranium deposits in New Mexico, describe modern mining methods, and discuss some of the major uncertainties in the data used to determine the possible risks to potentially exposed populations. Recent work to evaluate uncertainties in the role of natural attenuation in reducing the risks as well as some of the debate over the susceptibility of indigenous populations to uranium-induced health effects will be reviewed.*

*Bud Hodgins, Coordinator  
Continuing Education Committee*

**CONTINUING EDUCATIONAL COMMITTEE**

Your continuing educational committee consists of four members: **Dwight Jennison, John Throne, Malcolm Siegel, and Bud Hodgins**. The committee sponsors meetings every six weeks designed to educate all volunteers in the science one encounters in our Natural History and Science Museum. Please mark your calendar for future meeting dates of **February 13, March 25, May 8, June 17, July 29, and September 9**. All meetings will be held in the multipurpose room except June and July in the board room (on the 2nd floor of the museum).

*Bud Hodgins, Coordinator  
Continuing Education Committee*

**News of Books**

New books processed since July, 2013

***At the Top of the Grand Staircase: The Late Cretaceous of Southern Utah.***

Edited by Alan L Titus and Mark A. Loewen. (QE688 A85 2013) Donated by Dawn Ranelli.

**Brusatte, Stephen. *Dinosaur Paleobiology.***  
(QE862 D5 B786 2012)

This work is by the gentleman who has lectured several times at the Museum. The hard science latest facts about dinosaurs.

**Fortey, Richard A. *Horseshoe Crabs and Velvet Worms: The Story of the Animals and Plants That Time Has Left Behind.***

(QL434 F67 2012)

Donated by Christie Lucero. *This book is aimed at the general reader. The author goes in search of creatures and plants that tell us about earlier life and times. I started to read just parts of the book on things that interest me most and have found it so fascinating that I am reading the entire book. On display.*

Hölldobler, Bert and Edward O. Wilson.

***The Ants.*** (Ovs QL568 F7 H57 1990)

Donated by Bud Hodgins. An encyclopedic work on ants. Please note that because of its size, it is shelved in the oversize section.

**Kious, W. Jacquelyne. *This Dynamic Earth: The Story of Plate Tectonics.*** (QE511.4 K56x 1996)

*This work is a good complement to our Quaking Earth exhibit. **Major Transitions in Vertebrate Evolution.** Edited by Jason S. Anderson and Hans-Dieter Sues. (QL607.5 M348 2007) Donated by Dawn Ranelli. On display*

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**Naturalist Center Volunteer Materials.** (Ref AM5 N491 2013)

Thanks to the Naturalist Center for providing the Library with a copy of this most recent set of training materials. So, if you don't work in the Naturalist Center, you can see all the areas that are covered there. Or, if you do work there and want a refresher, this will work if for you. Please note that I placed it in Reference so it doesn't circulate.

**The Oxford Illustrated Science Dictionary.** (Ref Q123 O94 2012)

I was searching for a more recent science dictionary and this was the best I could find. It turns out it is fairly basic, but it is illustrated, which helps. Again this shelves in Reference and doesn't circulate.

Switek, Brian. **My Beloved Brontosaurus: On the Road with Old Bones, New Science, and Our Favorite Dinosaurs.** (QE862 S3 S94 2013)

Yes, the author knows that the *Brontosaurus* is now called *Apatasaurus*, but the point he is making is about how we remember the Brontosaurus from our youth and how it was often our introduction to dinosaurs. This is a very readable book which covers much of the new science about dinosaurs. For mention of our Museum see pages 45-46.

**Many of these works were donated to the library. Thank you to all those mentioned here and to others whose books I haven't yet processed.**

For February and the celebration of **Darwin Days**, I am putting up an exhibit of books dealing with Darwin and evolution. This exhibit is just a sampling of what we have in our Library. The formal subject heading is **Evolution** (Biology) for general works. You can also look under specific categories, such as vertebrates or dinosaurs followed by evolution or even specific animals such as Birds evolution.

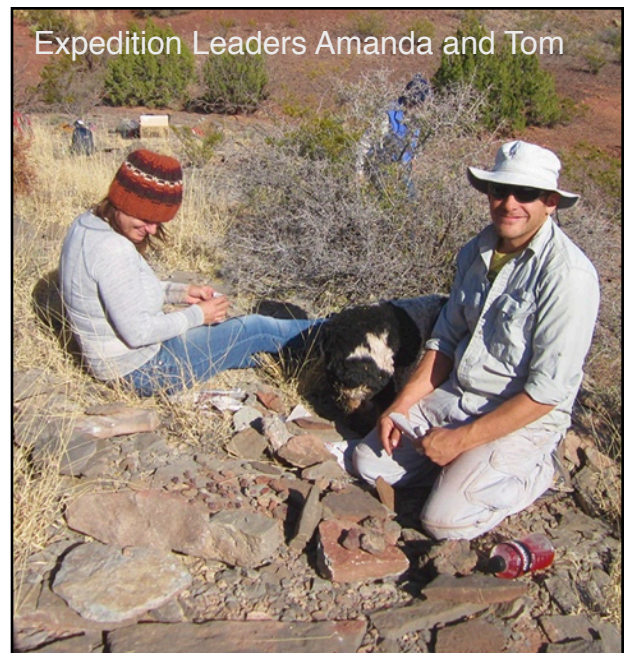
In addition to those in our library, look for others in the Albuquerque Bernalillo County Library System, where you will find more books written by Darwin as well as books about him. Rebecca Stott has written a book called **Darwin's Ghosts: The Secret History of Evolution**, which talks about those before Darwin

who led the way to his theories. You may remember that Mike Sanchez gave a talk on this topic at one of the Continuing Education seminars. For information on other nineteenth century scientists, see **Darwin's Armada: Four Voyages and the Battle for the Theory of Evolution** by Iain McCalman. Darwin Days may become an annual event so look for future displays on this topic.

Your Librarian, Mina Jane Grothey  
[mgrothey@unm.edu](mailto:mgrothey@unm.edu)

## FOP Volunteers Find Fossils & Trace Fossils Near Socorro

Friends of Paleontology (FOP) volunteers added to the fossil record while learning about animals and plants in the Pennsylvanian and Permian periods of the Paleozoic era. On November 16, 2013, 25 volunteers traveled to an area northeast of Socorro, New Mexico, to view trackways and prospect for fossils. The team was led by Amanda Cantrell, Interim Collections Manager; and Tom Suazo, Interim Chief Preparator. We also relied on the expertise of Phil Gensler, Bureau of Land Management Regional Paleontologist.



After parking the convoy of vehicles, the group hiked up and down hills and through arroyos to arrive at an exposure of the 300 million year old Bursum Formation of the Pennsylvanian period. Numerous vertebrate fossils and fragments were found. There were skulls, jaws with teeth, vertebrae and other skeletal parts of amphibians and reptiles.

After another trek over hills and across slippery side slopes, we came upon trackway slabs at two locations in the 297 million-year-old Permian Abo formation. The first had reptile footprints resembling those from a large modern lizard. The second showed smaller amphibian tracks and tail



Tony Hunt's Amphibian Footprint!

single huge footprint. It was an amphibian track that looked like a frog's footprint but was as big as a man's hand!

Tony had split the rock perfectly to show the positive print on one half and its counterpart on the other. It was the largest such track that Tom and Amanda had ever seen. **Way to go, Tony!!!**

After Tom and Amanda examined all of the finds, those that were most worthy were transported back to the museum for cataloging in Collections. Tom and Phil had the honors of hauling Tony's two heavy rock pieces back to the cars. It was a lovely paleo day in the desert.

*Mary Moore, FOP Volunteer*



Pennsylvanian Jaw Fragment

drag marks along with scratch marks from reptilian claws. In the Abo, there were numerous traces of ancient conifers and more vertebrate fossils were found.

The highlight of the day happened when Tony Hunt examined a likely-looking chunk of red sandstone, split it open with a couple taps along a midline seam and gazed in astonishment at a



*... a lovely paleo day in the desert.*



## MUSEUM ADULT AND FAMILY EDUCATIONAL PROGRAMS



### February

February 1 • STARTUP  
**Studio Workshop**

February 2 • First Sunday

February 9 • Science Day  
**Darwin Day**

February 12 • Curator's Coffee  
**Planetarium/Observatory**

February 14 • Nights at the  
Museum: **VALENTINE'S**

February 15 • Starry Night  
**Hall of the Stars**

February 19 • Teen  
**Café Scientifique**

February 27 • lecture  
**Jemez Restoration**

### March

March 1 • STARTUP  
**Studio Workshop**

March 2 • First Sunday

March 7 • Adult Class  
**Creative Wire**

March 15 • Starry Nights  
**Jupiter**

March 19 • Teen  
**Café Scientifique**

March 22 • Workshop  
**Paleo-puppets**

March 23 • Solar Sunday

March 27 • Lecture  
**Grand Canyon**

March 28 • Nights at the  
Museum: **APRIL FOOL'S**

## What's going on in your backyard?

### The Southwest Jemez Mountains Landscape Restoration Project

#### Phyllis Ashmead

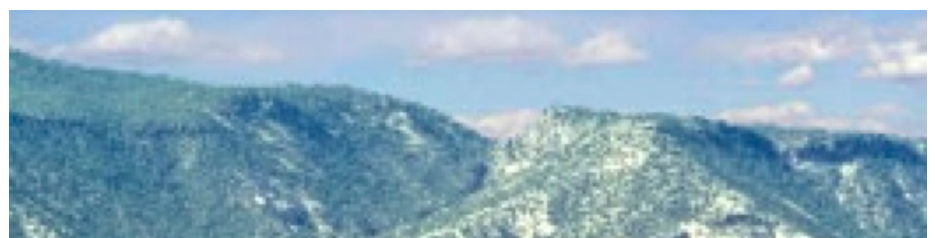
Southwest Jemez Mountains Restoration Partnership Coordinator,  
U.S. Forest Service

#### Thursday, February 27 • 7:00 - 8:30 pm

The Jemez Mountains are a special place. They are the ancestral home to the Pueblo people, important to thousands of forest visitors who come to recreate, and support a diverse habitat for unique wildlife. Ecologically speaking, these mountains are out of whack due to the effects of human activities starting in the late 1800s. As a result, this landscape does not function in a way that allows it to recover from major disturbances. We are in a race against time to prevent another Las Conchas fire. The Southwest Jemez Mountains Landscape Restoration Project aims to create a more resilient landscape that will benefit generations to come.

*Phyllis Ashmead is the Southwest Jemez Mountains Restoration Partnership Coordinator, providing outreach and education about this landscape restoration project. She earned a degree in Natural Resources from Humboldt State University. Over the course of her career she has worked in several Forest Service resource-related positions including interpretive services, botany, and resource management. She came to the Santa Fe National Forest in the fall of 2012 to contribute to this important project.*

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) Volunteers are FREE. Sign up in the Volunteer Lounge. Purchase in advance online to guarantee your seats, go to [www.NMnaturalhistory.org](http://www.NMnaturalhistory.org) (linked to BrownPaperTickets.com) or purchase tickets at the Admissions desk the night of the event. Doors open at 6:15 pm • Questions: August Wainwright, email: [programs.NMMNHS@state.nm.us](mailto:programs.NMMNHS@state.nm.us), or call (505) 841-2861





## ADULT CLASS

### **Creative Wire: Minerals and Jewelry**

**Camille Argeanas, Artist**

**Jayne Aubele, Geologist**

Friday, March 7 • 10:00-noon

Learn a few fun things about New Mexico's minerals from a geologist's perspective and then create your own handcrafted wire jewelry showcasing green colored minerals in honor of St. Patrick's Day. This class is geared for adults and older children, ages 12 and above. No prior experience required. The class fee includes all materials.



*Camille Argeanas, a native New Mexican, is a nationally known wire wrapping artist and teacher who has virtually transformed the meaning of using wire to create unique and beautiful jewelry. She has taught regularly at the UNM's Division of Continuing Education for over twenty years.*

*Jayne Aubele is a Senior Educator/Geologist at the New Mexico Museum of Natural History and Science. Over the years, she has taught adult classes in all aspects of geology.*

**\$35 (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) (linked to BrownPaperTickets.com)

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



## ADULT CLASS

### **::: STARTUP Studio**

### **Workshops :::**

For Families, Students, and Adults

Workshops are held in the  
Highlands Classroom at the  
Museum.

**Instructor: Miles Tokunow**

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

**Saturday, February 1 • 1-3 pm**

### **Introduction to Scratch Computer Programming**

Produce your own mini-games with the program Scratch. For beginners, this can be an introduction to programming language. Non-beginners are encouraged to join as well!

**Saturday, March 1 • 1-3 pm**

### **Introduction to Soldering and Creative Circuits**

Explore non-traditional circuitry like conductive paint, copper tape, and conductive silly putty to make designs with LEDs. After you master the art of creative circuitry, you will learn a new skill that is fundamental to electronics - soldering your own LED badge.

\$15 (Members, 10% discount) for each class

Pre-registration required. Go to [www.NMnaturalhistory.org](http://www.NMnaturalhistory.org) (linked to BrownPaperTickets.com). Questions: August Wainwright, email [programs.NMMNHS@state.nm.us](mailto:programs.NMMNHS@state.nm.us) or call (505) 841-2861

## How Old is The Grand Canyon?

Karl Karlstrom, Ph.D.

Professor, Department of Earth and Planetary Sciences, UNM

**Thursday, March 27 • 7:00 - 8:30 pm**

**[Rescheduled from December 5 due to inclement weather.  
Your December 5 tickets will be honored on March 27.]**

The Grand Canyon is one of the world's premier geologic landscapes. Three series of rocks, representing different geologic times and processes, are visible in the canyon walls. Dr. Karlstrom's new research is helping to define when and how the canyon we know today was formed.

*Dr. Karl Karlstrom's research interests involve structural geology and tectonics. He has worked extensively on the geology of the Grand Canyon, made more than 50 river trips in the canyon, and helped create the Trail of Time exhibit for visitors to the canyon. He is the co-editor of Grand Canyon Geology: Two Billion Years of Earth's History. He received the Geological Society of America (GSA) Distinguished Service Award for his service to the geoscience community and he is a Fellow of GSA. He earned a B.S. at Northern Arizona University, and M.S. and Ph.D. from the University of Wyoming.*

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)  
Volunteers are FREE. Sign up in the Volunteer Lounge. Purchase in advance online to guarantee your seats, go to [www.NMnaturalhistory.org](http://www.NMnaturalhistory.org) (linked to BrownPaperTickets.com) or purchase tickets at the Admissions desk the night of the event.  
Doors open at 6:15 pm • Questions: August Wainwright, email: [programs.NMMNHS@state.nm.us](mailto:programs.NMMNHS@state.nm.us), or call (505) 841-2861



**March 23 • 10:00 am - 2:00 pm**

View the sun through solar scopes and participate in hands-on activities. ABC Libraries and UNM Institute of Meteoritics will be in the Atrium.

Observatory open (weather permitting)

No registration required.

**FREE** (with Museum admission)



Starry Nights opens the Museum's observatory for night viewing. One evening a month the observatory is open, and special programs are offered for adults and families on a variety of space science topics. The evening may also include planetarium shows, special events, short talks, and hands-on activities.

**Saturday February 15**  
**The Hall of the Stars**  
**6:00 - 9:00 pm**

Explore the night sky and study objects in deep space as we celebrate the opening of our new exhibit, **The Hall of the Stars**. The observatory will be open (weather permitting) and planetarium shows will be presented during the evening.

**Saturday, March 15**  
**Explore Jupiter**  
**6:00 - 9:00 pm**

Learn about the largest planet in our solar system and its incredible system of moons. Hear about the latest discoveries made by a fleet of international robotic explorers that visited Jupiter during the past few decades. See Jupiter through our observatory telescope (weather permitting) from 8 to 9 pm.

\$8 (\$6 members & Seniors, \$4 children)

Purchase in advance online at

[www.NMnaturalhistory.org](http://www.NMnaturalhistory.org) (linked to BrownPaperTickets.com) or purchase at the Admissions Desk the night of the event.

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





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.

Choose either:

*Thursday, Friday, or Saturday morning classes  
from 10 am to noon*

*Thursday or Saturday afternoon classes  
from 1 pm to 3 pm*

There are 4 classes in each session with classes meeting every other week.

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

\$90 for the first child, \$81 for the second child in the same family. Museum members receive a 10% discount.

**Spring Session 1:  
Rocks & Volcanoes  
January 23- March 8  
Classes begin January 23-25**

What's the difference between a pink rock and a black one? How does a volcano explode? Will the many volcanoes in our state ever erupt again? Are Mars red rocks like New Mexico red rocks? An optional Sunday Fossil and Rock Hunt Field Trip to SMNHC will be offered in February.

**Spring Session 2:  
Museum Explorers  
April 10 - May 24 • Classes begin  
April 10-12**

Become a Junior Museum Curator! Experience the WHOLE museum in one session. Discover some of the creepiest creatures that roam New Mexico, light up the dark in the Hall of Stars, see what makes a computer work, and explore the dynamic dinosaurs of New Mexico.

Preregistration is required. For class descriptions and to register [www.NMnaturalhistory.org](http://www.NMnaturalhistory.org) (linked to BrownPaperTickets.com)

Note: Classes already in progress may still have openings. If you join a class already in progress, the cost will be prorated. Scholarships are available for families who qualify. To apply, download the Preschool Scholarship Application and instructions. Event Questions? Contact: August Wainwright [programs.nmmnhs@state.nm.us](mailto:programs.nmmnhs@state.nm.us) (505)841-2861





## Children's Classes

### The World of the Cretaceous: A Paleo-Puppet Workshop

For Adult/child or Families

Saturday, March 22

9 am - noon (with a break)

Instructor: Michael Serwich

Michael Serwich is a theater/visual artist, author, puppet builder/performer.

After a brief description of the world of the Cretaceous and a demonstration of a shadow-puppet show, students will make their own puppets, choosing from a variety of dinosaurs including New Mexico's own Pentaceratops. Students will then perform a short scene in our puppet theater. The shows will be filmed and a YouTube link will be sent to the students. Students will receive instructions for making their own miniature shadow screen at home.

All supplies used during the workshop are included.

This workshop is for children from 2<sup>nd</sup> through 5<sup>th</sup> grade. Students must be accompanied by an adult. (No more than two children per adult companion, and no more than two adults per child.) Space is limited to 18 children and their adult companions. Snacks will be provided or bring your own.

\$35 for the first child, \$15 for the second child in the same family.

Museum members receive a 10% discount). Pre-registration required. Go to [www.NMnaturalhistory.org](http://www.NMnaturalhistory.org) (linked to BrownPaperTickets.com). Questions: August Wainwright, email [programs.NMMNHS@state.nm.us](mailto:programs.NMMNHS@state.nm.us) or call (505) 841-2861



## Spring Break Camp

### Junior Artist-Scientist Program: Where Art Meets Science

April 14-18

Class #1 for grades K-2nd

Class #2 for grades 3rd-5th

9 am to 4 pm each day

Choose your favorite type of animal and make art and do science all day!

Come for one day, several days, or the entire week!

Monday	April 14th	Mammal Mayhem
Tuesday	April 15th	Herp Hoopla
Wednesday	April 16th	Arthropod Antics
Thursday	April 17th	Bird Bonanza
Friday	April 18th	Fossil Fandango

Experience Museum exhibits and Museum specimens with staff scientists and artists. Explore how and why animals look and live the way they do with studio time and outdoor explorations. Make animal art with reusable materials including collage and printmaking, sculpting with bottlecaps and clay, and sketching and watercolors.

Cost is \$65/day. (\$58.50/day, members). Bring your own lunch.

Sign up for all 5 for \$295 (10% discount for members)

Pre-registration is required. More information and registration is available online at <http://www.nmnaturalhistory.org/young-explorers-spring-science-program.html>

- on the website by January 15, 2014.

Questions? Please contact August Wainwright email: [programs.NMMNHS@state.nm.us](mailto:programs.NMMNHS@state.nm.us) phone: 505-841-2861



## Family Fun on a River Run! Rafting the San Juan River June 22-25, 2014

Trip Leaders: Tish Morris, Naturalist/Science Educator;  
Kristin Gunckel, Ph.D., Geologist/Educator

Join us for a family rafting adventure this 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.

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

Cost: \$715 adults, \$690 child under 12 (\$695 adult/\$670 child, for members)  
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 Sunday, June 22<sup>nd</sup>. Camping equipment may be rented.

Co-sponsored by Four Corners School of Outdoor Education

Preregistration required. Space is limited. Go to [www.NMnaturalhistory.org](http://www.NMnaturalhistory.org) for information and registration.

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





## The VAN

The VAN is published bimonthly. There are six regular issues each year: *February-March, April-May, June-July, August-September, October-November and December-January* and an occasional *Special Issue*. The deadline for submitting articles or photographs for the next regular issue is always the fifteenth of the month prior to the publishing date of the next issue. The deadline for the *April-May* issue, for example, will be *March 15, 2014*.

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 Request: Please put the word "VAN" in your email title.***

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