

Volunteer Association Newsletter



NMMNHS

October - November, 2012



Whose eyes are these?

CONTINUING EDUCATION CONTINUES!

(And we're glad it does!)

Our next continuing educational program will be held in the MPR on November 20, 2012, 10:30 to 12:30 PM. All volunteers and docents are invited to attend.

The program consists of presentations by **Tish Morris** and **Roger Kennedy**. Also, **Dwight Jennison** will have a "what's new" commentary for us.

Tish will address the subject of **ANIMAL FLIGHT** and offers the following comment: *Let's compare the animals that have true flight, how are they similar and how are they different. We will cover ideas to engage visitors in the exhibit halls.*

Roger's topic is **GETTING TO KNOW OUR NEAREST STAR**. He asks the following questions and generous invitation: *Did you know that our sun is a variable star; that its atmosphere is hotter than its surface; that a prominence is not a flare? Come explore the fascinating topic of OUR SUN, OUR STAR on 20 November.*

He continues: *Following the Continuing Education talks, all are invited to spend some time in our newest volunteer adventure, the MUSEUM OBSERVATION DOME. Volunteers will be on hand to answer questions, show you the features of the sun and are nice folks to talk with.*

Following the program snacks and good discussion with your fellow volunteers will be available.

*Bud Hodgin, Coordinator
Continuing Education Committee*



RED HOT CHILDREN'S FIESTA 2012 IN SILVER CITY

Team of Four Present Outreach to
Grant County Families

Kendra Milligan, Public Relations Liaison for the Grant County Health Council, knows how to be persistent. Last summer I turned down her request to bring the NM Museum of Natural



History and Science to their annual children's fiesta because their date fell on the same weekend as our State Fair outreach. So, she emailed back a month later and asked again for this year, and let us pick the date. It was hard to turn her down.

For almost a year now we in the Education Department have known we would attend the

Children's Fiesta. Three Museum Volunteers answered a call for assistance, and our team was created: Kathie Leeper, Peggy Minich, Mike Shaver and myself.

The Grant County Council wanted dinosaurs, so, our committee set its minds to building a table of specimens that would reflect our state's discoveries, with emphasis on the Southwestern corner.



Justin Spielmann, and others of Geo Sciences, Mike Sanchez, and Matt Celeskey were a great help in gathering an array of materials to take along. Because it was a children's fiesta, we also took dig boxes, dino-sizers, puppets and skin trace casts for crayon rubbing. Linda Walton's advice and Alicia Borrego-Pierce help in getting us a vehicle were also much appreciated.



The wet lawn of Silver City's Old James Stadium was staked with close to 40 booths and ours was

closest to the gate. After setting up, we spent four solid hours educating and chatting with hundreds of Grant County folks, their families and so many kids. Eyes lit up, questions were pondered and answered, stories were shared, dino-sizers were



stretched across the wide field, dig boxes were kept full, and families kept coming back for more. Kathie's counter registered 674 as the last family departed. We were the last to take down our



tables and pack up. We hit the WNMU Museum with its Mimbres Pottery exhibit for its last half hour. We were treated to gourmet dinner at local Diane's restaurant that evening.

The trip back saw a team ready to explore. Four stops were made in the first 70 miles. Copper ore, Andesite lava, and what first was thought to be obsidian (but turned out to be slag) were specimens collected at those stops. Thankfully, we had Mike Shaver to share his geo/paleo knowledge.

We were even graced with a presentation by one of Hillsboro's oldest families. We couldn't have had a better icing on our Dinosaur Century cake



than that elder, Stretch Luna, sharing his stories with us of 100 years of New Mexico history from that beautiful, rich landscape.

Cirrelda Snider-Bryan, Early Childhood Educator
<http://www.nmnaturalhistory.org/preschool.html>



VOICES IN SCIENCE, 2012 OCTOBER AND NOVEMBER

Families Lectures - Coffees Classes
 Tours Special Events Museum Adult and
 Family Events

PROGRAMS AT-A-GLANCE

October

October (Every Monday) • tour
 Docent-led Exhibit Tour

October 3 • curator's coffee
 Degrees of Change

October 7 • First Sunday
 FREE Day at the Museum & SMNHC

October 7 • Special Event
 Meet the Experts

October 11 • For Teachers
 NMSTA Museum Workshops

October 14-20 • special week
 Earth Science Week and National Fossil Day

October 14 • event
 Solar Sunday

October 20 • tour
 Bioscience Collections

October 20 • exhibit
 Dinosaur Century

October 25 • Centennial Lecture
 Lighting Research in New Mexico

October 26 • Special Event
 Halloween Adult Night

October 27 • For Teachers
 Landsat Workshop

November

**Prehistoric Preschool • Fall Session 2:
 November-December**

Sessions begin November 1

November (Every Monday) • tour
 Docent-led Exhibit Tour

November 3 • For Teachers
 Bosque Education Workshop

November 4 • First Sunday
 FREE Day at the Museum & SMNHC

November 11 • event
 Solar Sunday

November 17 • tour
 Geoscience Collections Public Tour

November 17 • exhibit
 Dinosaur Century

November 20 • Centennial lecture
 Caves and Extremophiles

Centennial Lecture Series

The New Mexico Museum of Natural History and Science is proud to present: *The Centennial Lecture Series—100 years of Advances and Significant Discoveries in Natural History and Science in New Mexico*. New Mexico scientists highlight their science and how it has evolved over the past century.

Lecture

Lighting Research at Langmuir Laboratory, New Mexico

Thursday, October 25, 2012 7 – 8:30 PM

William P. Winn, Ph.D.

Chairman, Langmuir Laboratory for Atmospheric Research; Professor, Department of Physics, New Mexico Institute of Mining and Technology

Dr. Winn will discuss the history of thunderstorm and lightning research at Langmuir Laboratory, and will focus on natural and triggered lightning and the techniques used to study their behavior.

If you have had questions about lightning, this is the lecture to attend.

Langmuir Laboratory for Atmospheric Research, operated by New Mexico Tech, is a leading thunderstorm research facility in the U.S. and is recognized worldwide for the scientific work carried out there. The Laboratory is used extensively by scientists at the Institute, and by visiting investigators. The Laboratory was established to provide a base for the study of cloud processes that produce lightning, hail, and rain. These processes are not well understood and are difficult to study because they operate in large clouds that cannot be simulated in a laboratory. The Magdalena Mountains were chosen for the location of the Laboratory because thunderstorms are frequently initiated by the mountains and the storms are often isolated, stationary, and relatively small.

William Winn is Chairman of Langmuir Lab at New Mexico Tech. Dr. Winn introduced instrumented rockets in 1969 for measurements of electric fields in thunderclouds. He also developed new, balloon-borne electric field meters. As a result, balloons are now often used in studies of the electrical aspects of thunderclouds and lightning. His primary research interests are in atmospheric physics, electrical discharges in gases, and instrumentation. He has published many significant research papers on storms and lightning and holds a patent on an electrical field sensing and transmitting apparatus. He received his Ph.D. in physics from the University of California at Berkeley.

All evening lectures are held at the New Mexico Museum of Natural History & Science
1801 Mountain Rd. NW, Albuquerque, NM 87104 • (505) 841-2800

Visit: www.nmnaturalhistory.org

\$6 (\$5 members, \$4 students)

Purchase in advance online to guarantee your seats; go to www.NMnaturalhistory.org or purchase tickets at the door before the talk. Doors open at 6:15 PM.

Questions: August Wainwright
email: programs.NMMNHS@state.nm.us
call 505-841-2861



Where have you seen these eyes before?

Lecture

NEW MEXICO TO MARS: Magnificent Caves and the Extremophiles that call them Home

Tuesday, November 20, 2012 7 – 8:30 PM

Penny Boston, Ph.D.

*Professor of Cave and Karst Science
Director, Cave and Karst Studies
Dept. Earth & Environmental Science
New Mexico Tech
and Associate Director, Academics
National Cave and Karst Research Institute
Carlsbad, NM*

Join us for an evening of amazing discoveries concerning New Mexico caves and other caves around the world, and the extreme life that has been discovered within them. Dr. Penny Boston will discuss the lifestyles of exotic microorganisms, the minerals they produce, and the other chemical talents of these amazing tiny lifeforms that help to shape our planet.

Penny Boston travels to some of the most exotic and dangerous caves on Earth including many in New Mexico. Her areas of research include cave geomicrobiology, microbial life in other highly mineralized environments, unique or characteristic biominerals and biosignature detection. She is also deeply involved in astrobiology, the search for life beyond Earth, and cave formation mechanisms on other planetary bodies. In addition, she is a lifelong devotee of the planet Mars, its exploration, and eventual human visits to that planet. She heads the Cave and Karst Studies Program, in conjunction with the National Cave and Karst Research Institute (NCKRI) of which she is the Associate Director (Academics). NMT is the major academic partner associated with this national institute. Boston serves on a number of NASA committees, especially the Subcommittee on Planetary Protection, which ensures that we do not contaminate other planets and do not bring back any contaminants from other planets.

All evening lectures are held at the New Mexico Museum of Natural History & Science
1801 Mountain Rd. NW, Albuquerque, NM 87104 • (505) 841-2800 or visit www.nmnaturalhistory.org

\$6 (\$5 members, \$4 students)

Purchase in advance online to guarantee your seats; go to www.NMnaturalhistory.org or purchase tickets at the door before the talk. Doors open at 6:15 PM

Questions: August Wainwright
email: programs.NMMNHS@state.nm.us
call 505-841-2861

Special Event

Meet the Expert

October 7, 2012

11:00 AM – 3:00 PM

Visitors to the Museum can meet and interact with museum experts ranging from educators, science curators, collection managers, exhibit staff, and other museum partners! Dig in deep – behind the scenes by talking to these experts!

Event held in the Museum Atrium. **Cost:** Free.

No Registration Required

Questions: August Wainwright
email: programs@NMMNHS@state.nm.us
call 505-841-2861

Special Event

Earth Science Week and National Fossil Day

October 14 - 20, 2012

- **Solar Sunday on October 14**
- **Bioscience Collections Tour**
- **NEW *Dinosaur Century* specimen - October 20**

Celebrate Earth Science Week 2012! Held October 14-20, ESW encourages people everywhere to explore the natural world and learn about the geosciences. "Discovering Careers in the Earth Sciences," the theme of ESW 2012, engages young people and the public in learning how geoscientists gather and interpret data about Earth and the other planets.

National Fossil Day, October 17, 2012, is held in conjunction with Earth Science Week. NFD is a celebration organized by the National Park Service to promote public awareness and stewardship of fossils, as well as to foster a greater appreciation of their scientific and educational values. This year's art and photography contest is *Careers in Paleontology*.

Earth Science Week events are FREE with museum admission. For more information go to www.NMnaturalhistory.org

Questions: August Wainwright
email: programs@NMMNHS@state.nm.us
call 505-841-2861

Special Event

Fright Night: Halloween Adult Night

October 26, 2012

7:00 - 10:00 PM

Special evening for adults only, 18 years and above. Cash bar for those 21 and older. Enjoy a live band, the museum exhibits, and discussions with museum curators. See the night sky from our 16 inch Meade telescope in our newly reopened Observatory, and be one of the first to see the Museum's new Cenozoic exhibit.

Costumes Dress to Impress in your Halloween Costume and enter to win a one year Museum Duet Membership!

Cost: \$8 (\$4 members) (Purchased only at the door the night of the event)

Questions: August Wainwright
email: programs.NMMNHS@state.nm.us
call: 505-841-2861

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.

David Gutzler, Ph.D.

*Professor, Earth & Planetary Sciences Department
University of New Mexico*

Recent heat waves and droughts have prompted lots of debate about whether these high-impact events can be blamed on human-caused global warming. We'll review some recent extreme climate anomalies, such as last year's record setting drought centered in Texas, discuss how we can assess extreme weather in the context of a changing climate, and illustrate how one might expect to see the signs of global warming emerging in local weather.

David Gutzler's research is on climate variability and change, with an emphasis on monsoon circulations and semiarid climates. He is former Editor of the American Meteorological Society's Journal of Climate and an AMS-Certified Consulting Meteorologist. He is currently a Lead Author for the upcoming 5th Assessment Report of the UN Intergovernmental Panel on Climate Change (IPCC). He received his PhD in Meteorology from MIT. He has worked with the Museum as an external Curator for the Degrees of Change exhibit and as an expert consultant about climate change in New Mexico.

\$8 (10% discount for members)

Pre-registration required. Limited to only 15 participants. To guarantee your place, register online, go to www.NMnaturalhistory.org

Questions: August Wainwright
email: programs.NMMNHS@state.nm.us
call: 505-841-2861

First Sundays

Sundays: October 7 and November 4

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.)

October 7 – Special Event “Meet the Expert” at the Museum 11am – 3pm

FREE Admission to the Sandia Mountain Natural History Center

October First Sunday only (NOTE: the Center is closed in November and December)

Gates open for the public • 9:00 AM - 4:00 PM

The Sandia Mountain Natural History Center (SMNHC), the Museum’s off-site environmental education facility, is located in the Sandia Mountains. On the first Sunday of September and October, attend a special natural history presentation, and experience geocaching, the bird blind, self-guided hikes, and picnicking.

Presentations @ SMNHC

October 7 – Family Nature Mapping

No Registration Required. For directions to the center, go to www.NMnaturalhistory.org

Information: www.NMnaturalhistory.org

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

Solar Sundays

Sundays: October 14 and November 11
12:00 Noon – 3:00 PM

Telescopes, sun, and hands-on activities for the whole family

Planetarium Presentation at 11:00 AM (Regular fee applies)

Free (with Museum admission)

No registration required

Information: www.NMnaturalhistory.org

Questions: August Wainwright
email: programs.NMMNHS@state.nm.us
call: 505-841-2861

Museum Tours

Museum Observatory OPEN

Every Monday - Saturday

10:00 AM – 12:30 PM

And Solar Sundays

Noon – 3:00 PM

Learn about our star; see the sun, sunspots, and solar flares

Guided Tours of the Museum Public Exhibits

Every Monday

1:30 – 2:30 PM

Take a fact-filled, fun, guided tour of the Museum exhibits. Our docent-led museum exhibit tours for the public are scheduled for every Monday of the month at 1:30 PM and last about one hour.

Limited to 14 participants ages 13 and up.

Free (with Museum Admission)

Registration welcome, go to

www.NMnaturalhistory.org

or come for the tour, first-come, first-served. Meet in the Atrium at the stadium seating.

Questions: August Wainwright
email: programs.NMMNHS@state.nm.us
call: 505-841-2861

Museum Collections Tours

Join us for behind-the-scenes tours of our Bioscience and Geoscience collection areas.

Geoscience Tour

Saturday, November 17 • 1:00 – 2:00 PM

See the largest collection of fossils in New Mexico and learn about important fossils collected from across the state. Tours allow participants to see fossils actively being prepared for exhibits and research.

Limit 20 people. Children under 13 must be accompanied by an adult.

Free (with Museum Admission)

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

No registration required. Tours are 45 minutes to an hour in length, and first-come, first served.

Bioscience Tour

Saturday, October 20 **1:00 - 2:00 PM**

Bioscience Collections Manager, **Patricia Gegick**, will conduct a tour of the Museum's biological collections, which includes plants, insects, mammals, mollusks, and birds. Learn the importance of museum collections, how they are used, and how they are preserved and maintained. Tours are 45-60 minutes in length.

Limit 12 people. No strollers or children under the age of 7. Children must be accompanied by an adult.

Free (with Museum Admission)

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

No registration required. Tours are 45 minutes to an hour in length, and first-come, first served.

Special Exhibits

Dinosaur Century, a Centennial Exhibit

This exhibit highlights 100 years of significant fossil finds in New Mexico that have previously only been seen by research scientists. New specimens will be added each month on the dates listed, visit each month to see what's new...

October 20, 2012 **Knobs, Spikes, and Horns**
November 17, 2012 **Dinosaur Crests**

ISEA 2012

International Symposium on Electronic Art
Exhibition of sculptures that re-envision art, technology and nature

On display at the Museum

September 20, 2012, through January 6, 2013

Both Exhibits are Free (with Museum Admission)

No registration required.

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



SPECIAL EVENTS – FOR TEACHERS ONLY

Workshop for Teachers *Landsat Professional Development Workshop for Teachers*

October 27, 2012 **9 AM - 1 PM**

Observing our Earth from space with satellites such as Landsat brings new perspectives on our planet and new ways of solving problems for our communities. Landsat goes back to 1972. The treasure trove of Landsat data is now available at no cost, and there is no-cost software one can use to study landforms and cities, and to analyze change over time. With Landsat, people can see the effects of forest fire, assess the health of agricultural fields, see cities grow, and estimate the extent of natural disasters such as volcanoes and floods.

In this four-hour workshop you will learn how Landsat images are made and the "power in the pixel." Learn to download and analyze your own Landsat scenes of almost anywhere on Earth, and find out how to use Landsat images as a tool in your classroom.

Instructor: **Jeannie Allen, Sigma Space Corp.**
Hydrospheric and Biospheric Sciences
NASA Goddard Space Flight Center

NOTE: This workshop is designed for middle and high school teachers

Cost: \$20 (10% discount for museum members). Includes 3-ring binders, coffee and pastries at the beginning of the day, and light refreshments during a mid-morning break.

Preregistration required. To guarantee your place, register online, go to www.NMnaturalhistory.org

Questions: August Wainwright
email: programs.NMMNHS@state.nm.us
call: 505-841-2861

Special - Museum Workshop or Field Trip For Teachers Only (Associated with NMSTA Fall Meeting)

NOTE: only available to those teachers attending the Fall Conference of NMSTA/EEANM/NMCTM in Albuquerque October 11 - 13

On October 11, if you are a teacher attending the Fall NMSTA meeting, spend a day with the Museum... choose from:

PROFESSIONAL DEVELOPMENT WORKSHOP (FULL DAY): Teaching About Climate Change

October 11, 2012 10:00 AM to 3:30 PM

At the New Mexico Museum of Natural History and Science

Cost: \$25

**(Stipends for substitutes and material/activity kits available for each participant)
Preregistration is required. Teachers must pre-register for the NMSTA Fall Conference and for this workshop through NMSTA**

For more information or to register, go to www.nmsta.org/

FULL DAY FIELD TRIP:

Sandia Mountain Field Ecology

October 11 8:00 AM to 3:30 PM

At the Sandia Mountain Natural History Center, the Museum's offsite environmental education facility.

Cost: \$25

(Stipends for substitutes and material/activity kits available for each participant)

Preregistration is required. Teachers must pre-register for the NMSTA Fall Conference and for this workshop through NMSTA

For more information or to register, go to www.nmsta.org/

Workshop for Teachers

Bosque Education Guide Workshop

November 3 8:30 AM – 4:30 PM

At Rio Grande Nature Center State Park

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

For more information, visit the Bosque Education Guide website:

<http://www.nmnaturalhistory.org/bosque-education-guide.html>

Preregistration is required. To reserve a space call:

505-344-7240

Cost: Workshop is free. \$3 per vehicle day-use fee (exact change or check) for the RGNC. Curriculum and kit of materials included with full-day workshop.

Rio Grande Nature Center State Park
2901 Candelaria NW
Albuquerque, NM 87107
505-344-7240

Prehistoric Preschool

Prehistoric Preschool is a Museum program for three-to five-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.

Participants may choose to attend either Thursday, Friday, or Saturday morning classes from 10 AM to noon or Thursday or Saturday afternoon classes from 1 to 3 PM There are five class times in each session with classes meeting every other week.

FALL SESSION 1: Rocks & Volcanoes September 6 – October 20, 2012

What's the difference between a pink rock and a black one? How does a volcano explode? Will any of the many extinct volcanoes in our state ever erupt again? Are Mars red rocks like New Mexico red rocks? If you and your child love rocks, and are curious about volcanoes, come explore rocks and volcanoes of New Mexico and Mars together!

- 1) All About Rocks 9/6 to 9/8
- 2) All About Volcanoes 9/20 to 9/22
- 3) NM's Rocks and Volcanoes 10/4 to 10/6
- 4) Rocks and Volcanoes of the Planet Mars 10/18 to 10/20

FALL SESSION 2: New Mexico's Dynamic Dinos

Note: new activities and puppet shows

November 1 – December 15

Get to know the dinosaurs whose fossils were found here in our state. We will celebrate each kind of dinosaur with its own special class! From Horned Heads to Long Necks, from plant-eaters to predators, get to know more about New Mexico's Dynamic Dinos! We offer new activities and puppet shows to this popular class to help

celebrate the Centennial Exhibit Dinosaur Century's last two months.

- 1) Horned Heads 11/1 to 11/3
- 2) Long Necks 11/15 to 11/17
- 3) Sharp Tooth Dinos 11/29 to 12/1
- 4) Coelophysis Spectacular 12/13 to - 12/15

All class participants must be accompanied by an adult. No more than two children may be registered per adult companion and no more than two adult companions may accompany any one child. Maximum class size is 12 children and their adult companions.

Cost: \$90 for the first child, \$81 for the second child in the same family.

Museum members receive a 10% discount. **Scholarships available.**

Preregistration is required.

See detailed descriptions of sessions and register for classes at <http://www.nmnaturalhistory.org/preschool.html>



Time to say
bye-bye!



Photographs by
Dwight Harris

October

2012

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1	2	3	4	5	6
	Exhibit Tour		Curator's Coffee			
7	8	9	10	11	12	13
First Sunday	Exhibit Tour				NMSTA Museum Workshops	
14	15	16	17	18	19	20
Earth Science Week National Fossil Day Solar Sunday	Earth Science Week Exhibit Tour	Earth Science Week	Earth Science Week	Earth Science Week	Earth Science Week	Earth Science Week Exhibit: Dinosaur Century
21	22	23	24	25	26	27
	Exhibit Tour			Centennial Lecture: Lighting Research	Halloween Adult Night	Teachers Landsat Workshop
28	29	30	31			
	Exhibit Tour		Halloween			

November 2012

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				1	2	3
				Prehistoric Preschool: Fall Session 2 Starts		
4	5	6	7	8	9	10
First Sunday FREE Day at the Museum & SMNHC	Exhibit Tour					
11	12	13	14	15	16	17
Solar Sunday	Exhibit Tour					Exhibit: Dinosaur Century Geoscience Collections Public Tour
18	19	20	21	22	23	24
	Exhibit Tour	Centennial Lecture: Caves and Extremophiles				
25	26	27	28	29	30	
	Exhibit Tour					

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*. The deadline for submitting articles or photographs for the next issue is always the fifteenth of the month before. The deadline for the *October-November* issue, for example, will be September 15, 2012.

Please send items for the VAN to Louise Harris, VAN Editor, <louise@goingourway.net> with a copy to Doug Simon, Volunteer Coordinator (email available later).

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.

We welcome your articles pertaining to the museum. We may edit for clarity and space limitations.
