

Volunteer Association Newsletter



NMMNHS

APRIL - MAY 2013

TITANIC EXHIBITION OPENS!

The Titanic Exhibition opened on time on Saturday, March 23, 2013. We had a total of 2047 Titanic visitors over the first two days!

BioBlitz 2013!

Friday, May 17 & Saturday, May 18, 2013

Join the Sandia Mountain Natural History Center (SMNHC) and the NM Museum of Natural History & Science for BioBlitz 2013! BioBlitz presents a

unique opportunity for citizens and scientists to come together for a 24-hour survey of all the living things that call the SMNHC home.



We invite you to join scientific experts from a variety of fields and organizations as they lead the public on hikes throughout Friday evening and all day Saturday. Each hike will have a different focus - mammals, insects, birds, reptiles, wildflowers, trees, fungi, and more! The entire staff of the SMNHC is excited for the opportunity to bring together scientific experts and citizens for BioBlitz and share this unique ecosystem with the public!

The main goals of BioBlitz 2013 are:

- Bring together volunteers, scientific experts, and citizens
- Estimate species richness of the SMNHC
- Educate the public about biodiversity

The SMNHC is an environmental education center located in the Sandia Mountains just east of Albuquerque, New Mexico. The beautiful property located in Cedar Crest, NM, is owned by Albuquerque Public Schools and is run by the New Mexico Museum of Natural History & Science. Since 1967 the center has been teaching people around New Mexico about the environment and how to preserve it through a variety of award-winning programs. Our 128-acre property is dominated by piñón/juniper woodland, but also has meadow habitats, a fir forest, acres of ponderosa forest, and two springs. Though in a very different ecosystem from the previous years' BioBlitz, there is still a little something for everyone!

BioBlitz is a free event; registration is required for some events. For more information or to get involved visit www.nmnaturalhistory.org/smnhc or contact *Rosie Norlander* at 505-281-5259 or rosie.norlander@state.nm.us

FIRST SUNDAYS AT SMNHC

First Sundays continue at the Sandia Mountain Natural History Center (SMNHC). The 128 acre environmental education center will open its gates from 9:00 AM to 4:00 PM to give outdoor enthusiasts a chance to explore this hidden New Mexico gem.



Visitors will be able to hike over five miles of trails, search for numerous geocaches, learn from two interpretive trails, and spend some time in the exhibit rooms.

Each month has a different education session focused on various aspects of science in the Sandias. This year there will be two opportunities to attend the education sessions. The morning session will begin at 10:00 AM, and the afternoon session will begin at 1:00 PM. There is no cost! Pack a lunch and plan for an exciting day in the Sandia Mountains!

10:00 AM and 1:00 PM Education Topics:

APRIL 7: Bears and Cougars

A New Mexico Game and Fish biologist will share his stories and knowledge of the Bears and Mountain Lions that live in the Sandias.

MAY 5: Forest Health

Learn about the various components that make a forest healthy and how that impacts the wildlife that live in the forest.

JUNE 2: Wildflowers of the Sandias

Larry Littlefield, author of *Wildflowers of the Sandia and Manzano Mountains*, will discuss how to identify flowers and lead a hike to identify what is currently in bloom.



Larry Littlefield

For the Sandia directions to Mountain Natural History Center please go to www.nmnaturalhistory.org/smnhc.

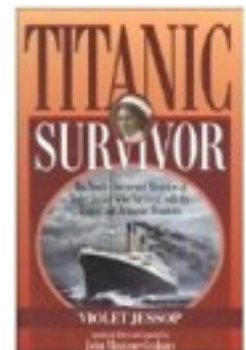
Titanic RESOURCES

The purpose of this column is to help you get ready for our new exhibit. Deb Novak will be putting up a book display in the Lounge and I have a few things as well. Our Volunteers' Library doesn't cover the *Titanic* or other related subjects such as shipwrecks, icebergs, and life in the deep oceans. The Albuquerque Bernalillo County (ABC) Library does have materials of interest. Many are under the call number **910.9163**. If you have access to a library with the Library of Congress classification system, the most common call number is **G530 T6**. I have also found some web resources.

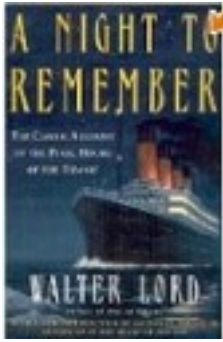
If you are searching a library catalog, one tip is to not just put in the word **titanic** since it will bring up things other than the ship, include the word **steamship** as part of your search. The official subject heading is **Titanic (Steamship)**. A broader heading is **Shipwrecks North Atlantic Ocean**.

Many works present factual accounts of what happened that night. Some works focus on the survivors and other people aboard; others are concerned with building the ship, or recent information found since the 1985 location of the ship by Robert Ballard. *Voyagers of the Titanic: Passengers, Sailors, Shipbuilders, Aristocrats and the Worlds They Came From*, by Richard Davenport-Hines presents a broader perspective than other works that focus just on survivors. There is the story of a woman who survived two disasters: *Titanic Survivor: The Newly Discovered Memoirs of Violet Jessop Who Survived Both the Titanic and Britannic Disasters*.

The work that I recall reading in my youth is *A Night to Remember* by Walter Lord published in 1955. I don't find it in the ABC Library. A successor to the work of Walter Lord is the trilogy by Charles Pellegrino: *Her Name, Titanic; Ghosts of the Titanic* (beware there is at least one other work with this title), and *Farewell*



Titanic. The last two titles are in the ABC Library System. I just finished *Farewell Titanic*, which is a



mix of history detailing why and how the ship sank and science from a 2001 exploration of the wreck site. The author has a website, charlespellegrino.com, which includes access to over 700 letters, memoirs and other documents he and Walter Lord collected. Another historian, Don

Lynch, teamed with artist Ken Marschall to write *Titanic: An Illustrated History*.

The company doing our exhibit has a website: rmstitanic.net. One section is a Learning Center with subsections on Titanic history, the artifacts and additional resources. Another electronic resource is the *Encyclopedia Titanica* found at www.encyclopedia-titanica.org. This site is free, but has advertising. The Library of Congress (www.loc.gov) provides a variety of resources including digital photographs, sound recordings, and other electronic resources.

Works aimed at younger readers are also available including two which received recognition as Notable Books by the Association for Library Service to Children (ALSC). They are *Titanic: Voices from the Disaster* by Deborah Hopkinson and *Iceberg, Right Ahead! The Tragedy of the Titanic* by Stephanie Sammartino McPherson.

If you find additional resources you think would be of interest to other volunteers, please let me know and I can include them in future columns.

Those book titles again:

Voyagers of the Titanic: Passengers, Sailors, Shipbuilders, Aristocrats and the Worlds They Came From, Richard Davenport-Hines

A Night to Remember, Walter Lord

Her Name, Titanic, Charles Pellegrino

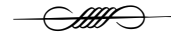
Ghosts of the Titanic, Charles Pellegrino

Farewell Titanic, Charles Pellegrino

Titanic: An Illustrated History, Don Lynch and Ken Marschall

Titanic Survivor: The Newly Discovered Memoirs of Violet Jessop Who Survived Both the Titanic and Britannic Disasters, Violet Jessop (Author), John Maxtone-Graham (Editor)

Your Librarian, Mina Jane Grothey
mgrothey@unm.edu



HERE ARE MORE TITANIC ONLINE RESOURCES

Titanic

<http://www.rmstitanic.net/>

The RMS Titanic website

<http://www.eyewitnesstohistory.com/titanic.htm>

Eyewitness to History: "I asked: 'Is there an accident or danger of any kind?' 'None, so far as I know', was his courteous answer, spoken quietly and most kindly." This is governess Elizabeth Shutes' riveting account of the sinking of the Titanic, boarding the life boat and rescue by the Carpathia.

<http://history1900s.about.com/od/1910s/a/titanicfacts.htm>

Some interesting Titanic facts

<http://www.jsonline.com/entertainment/100-unsinkable-facts-about-the-titanic-2t4psu6-147436195.html>

100 Unsinkable Facts about the Titanic

<http://www.keyflux.com/titanic/facts.htm>

This is a very extensive and interesting fact site about the Titanic. It includes detailed specifications, interesting facts, provisions, cargo, cost of tickets, passenger facilities, people facts, and survivor statistics.

<http://www.encyclopedia-titanica.org/>

This is a very complete resource. It has passenger lists, design information, crew information, stories and articles.

Some Titanic Technology Issues of 1912

I found many differences in emphasis by different authors on the role of communication technology in the sinking of the Titanic, the deaths of 1,500 people and the survival of 700 people. Read the following articles and draw your own conclusions.

http://en.wikipedia.org/wiki/Radio_Act_of_1912

The Radio Act of 1912 in the United States was a direct response to the sinking of the Titanic. Find out how by reading this short Wikipedia article.

<http://earlyradiohistory.us/amtitan.htm>

Early Radio History

<http://earlyradiohistory.us/amtitan.htm>

Jack Phillips and and Harold Bride were Marconi wireless operators on the Titanic. Phillips went down with the Titanic, but Bride survived and went to New York on the Carpathia. This website details the New York Herald's resentment about the New York Times getting exclusive rights to the story told by Bride.

<http://www.environmentalhistory.org/revcomm/features/radio-and-the-titanic/>

This is an interesting article by Bill Kovarik outlining some of the technology-related problems contributing to the sinking of the Titanic.

<http://www.theatlantic.com/technology/archive/2012/04/the-technology-that-allowed-the-titanic-survivors-to-survive/255848/>

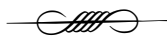
This article from Atlantic magazine is a brief analysis of the part played by Marconi Communication Technology in the sinking of the Titanic and the survival of 700 people.

Historical Fashion and More

<http://www.vogue.co.uk/spy/celebrity-photos/2012/4/11/style-file---1912>

This site is not especially easy to navigate, but it does have some good historical and fashion information. It has many good pictures that help capture the spirit of the period.

--Dwight Harris



NMMNHS SATURDAY STARRY NIGHTS RESUMES: KUDOS TO SO MANY VOLUNTEERS!

After five years, the Space Science committee has resumed the very popular Starry Nights night sky observation and planetarium program. So far there have been two programs and one more is planned this spring. The program will start up again in November when the sun sets much earlier.

Attendance has increased with each event, with the March event drawing about 100 visitors

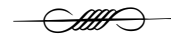
even though the weather did not cooperate. The Wild Life Rescue owls were a big hit, as was the Ham Radio cart.

Many thanks to the 22 volunteers who spent their evening interacting with an enthusiastic crowd. **John Throne** had his cart on display, as did **Jim Peavler**. **Liam Frye** opened the Mars cart, and **Britanny Gallegos** did the Bat cart; **Linda Walton** and **Leonard** and **Jane Witter** showed off the Naturalist Center; **Dave Ray** operated the Science on a Sphere; **Doug Ray** hosted the tour of the new Constellation Hall exhibit; **Linda Kennedy**, **Lynn Plagge**, **Joan Saberhaggen** and **Suzanne Brenneman** excited the kids with their astronomy craft table.

Roger Kennedy helped **Simone Seagle** with the three planetarium shows while **Linda Kennedy** played Celtic music on her harp; **Al Brettner**, **Paul Siniscal**, **Anthony Martinez** and **Asis Carlos** assisted with event management. The museum café even stayed open to serve visitors and workers. Unfortunately, we could not open the observatory or have telescope viewing out front.

Perhaps for the April 20, 2013, event we will have better weather conditions and an even bigger crowd!

--Roger Kennedy



I am so proud to be part of the New Mexico Museum of Natural History and Science! Our new Administrator Mr. Charlie Walter is right on the button to elevate our standing in the State with new, innovative exhibits.

I've been at the Museum for 22 years, and this is the best year yet!

--Adele Coplen

PREHISTORIC PRESCHOOL AND SPRING CAMP HAPPENINGS

There are many Volunteer contributions to be thankful for in our Youth and Family Programs. I wanted to share through words and pictures how Volunteers are making a difference here during our last two sessions of Prehistoric Preschool and at the brand new Spring Break Camp.

Dawn Ranelli keeps offering to share her passion for paleo with our Saturday Prehistoric Preschool families. In the centennial year of 2012, we offered two sessions of the well-honed New Mexico's Dynamic Dinosaurs class in conjunction with the Dinosaur Century Exhibit. These Saturday families all appreciated her hands-on interpretation of her job in FossilWorks, and her stories of field work. This crucial end-of-class visit provides the concrete extension into the real world of paleontology--a favorite subject of young and old alike.



Dawn Ranelli & Prehistoric Preschool Family

Kathie Leeper's involvement with Prehistoric Preschool enriches the interactions between families in many ways. She is now in her 6th season joining our team of teachers. Her long experience as a teacher of both adults and young children is a perfect fit with the program. As well, she generously shares her sewing, knitting and constructing skills - inventing new ways to expand dinosaur costume and puppet patterns. Shown here is the Pterosaur costume she created to allow young children to experience wings made of extended "pinky fingers." We are lucky to have her additions to the long tradition of

beautiful, handmade teaching toys Volunteers have created for the Museum over the years.



Ian wears the Pterosaur costume made by Kathie Leeper

Betty Temple responded to the request to interact with Spring Campers at the Animal Art Camp in mid March with a popular activity at our Paint and Collage table. She brought supplies for painting insects and spiders on rocks, sharing her own well-honed talent for painting with the children. The table filled with arthropods on rocks.



Betty Temple guides arthropod rock art.

Rachel Rhykerd and Ana Love gave a day from their own spring breaks to offer help at the various art centers. Their own experiences as

artists and scientists made them perfect teachers on the day devoted to reptiles and amphibians.



Ana Love and Rachel Rhykerd create reptilian patterns during whole group art activity.

Linda Walton wowed our Spring Campers with her in-depth knowledge of "all things arthropod." Her presentation covered such in-depth terms as endo-thermal and exo-thermal. She had the attention of the five-through ten-year-olds



Linda Walton shows the millipede amidst her other specimens.

throughout, having brought specimens both live and passed, as well as many stories of the relationships with creatures at our Naturalist Center.

Sara DesJardins gave amazing feedback to campers' artistic and scientific creations in her visit to Spring Camp as well. Spring Campers also had the benefit of new volunteer Irene Allen's talent and effort as she helped the Camp Staff prepare materials for the Animal Art Camp.

As you can see, these are contributions to be very thankful for as these Volunteers (and others previously) have truly enriched our programming.

--Cirrelda Snider-Bryan
NMMNHS Early Childhood Educator

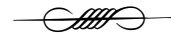
Prehistoric Preschool Spring 2013 Sessions:

JANUARY-MARCH: *Flying with New Mexico Reptiles and Birds*

APRIL-MAY: *Day Sky / Night Sky*

For more info

<http://www.nmnaturalhistory.org/preschool.html>



HELLO, NEW VOLUNTEERS!

The VAN (Volunteer Association Newsletter) is published every other month, and we are always looking for new and creative submissions. Some questions arose recently about VAN topics and article length, and I decided to share that information with everyone.



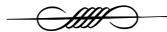
Re appropriate topics: I look for things that have to do with the Museum. It might be an interesting encounter with a visitor, some background on a particular exhibit, something special you've come to appreciate about the Museum, an introduction of a new Volunteer, a listing of a scheduled meeting, a description of a class, or, for the next five or six months, a review of a special Titanic resource you've found. One very-appreciated Volunteer submits sketches she's done around the Museum or on field trips. We generally accept

anything that might be of special interest to our Volunteers. Photographs of all of the above are always welcome, too, as long as they are not copyrighted images.

There is no fixed word count for VAN articles. If something were excessively long, I might break it into two pieces and put Part 1 and Part 2 in two successive issues, but I've never needed to do that. Occasionally I have shortened long articles by a paragraph or two.

The regular due date for submissions is the 15th of the month that precedes the issue's publishing date. The date for submissions for the June-July issue, for example, will be May 15. Late items are accepted if they can be fitted in, especially if you've let me know they are coming and I can leave a spot open for them.

--Louise Harris. VAN Editor



Voices in Science Lectures

OVER NEW MEXICO

Jeff Gilkey

Thursday, April 11, 2013 • 7:00 PM– 8:30 PM

Jeff Gilkey returns with an ALL NEW show of photography and high-definition video for another aerial tour of New Mexico (and some surrounding states) from the unique perspective of his ultralight trike. The unrestricted open cockpit view projected on the 5 story DynaTheater screen gives you a first person, "bird's eye view" unlike anything you have experienced before. Jeff will take you over the summits of Ship Rock and Mt Taylor, between the towers of Monument Valley and below the rim of the Green River Canyon in Utah.

You will also explore many of the lesser-known hidden treasures scattered across the New Mexico backcountry. If you attended his previous talks, you know that it was standing-room only... if this is your first experience... buy your ticket early and prepare for an exhilarating evening of fun.

Jeff Gilkey flew hang gliders for 10 years in the '80s and '90s and has been flying trikes since 2004. He has logged over 1200 hours in his

Aerotrike Cobra on cross country adventures into nearly every corner of New Mexico with many extending into Colorado, Arizona, Utah and Texas. For more information, visit his website at <http://www.jeffsflightlog.com>

\$6 (\$5 members, \$4 students) **Free** for Volunteers; sign up in the Volunteer Lounge. 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: call: 505-841-2861 or email: programs.NMMNHS@state.nm.us

EXPLORING EARTH FROM SPACE

Compton Tucker, Ph.D.

Senior Earth Scientist
NASA's Biospheric Sciences
Laboratory, Goddard Spaceflight Center

Thursday, May 30, 2013 • 7 PM – 8:30 PM

The Museum's *Science on a Sphere* exhibit, shows some of the many Earth environmental data sets that have been developed by NASA research scientists. One of the most eminent scientists who has developed the data, tools, and models needed to understand global environmental change is Dr. Compton Tucker. This is a rare opportunity to hear from an expert in the field of terrestrial remote sensing. The lecture will be followed by a guided tour/discussion of the *Science on a Sphere* exhibit.



Dr. Compton Tucker is a native of Carlsbad, NM (and a current NM resident, even though he works in Maryland). Dr. Tucker holds a B.S. degree in biology and M.S. and Ph.D. degrees in forestry, all from Colorado State University. After completing his Ph.D. degree, he was an Academy of Sciences postdoctoral fellow at the Goddard Space Flight Center, before joining NASA as a physical scientist. He is the author of more than 160 scientific articles on the use of remote sensing--using satellite and ground data, to study vegetation. In collaboration with coworkers, he is presently studying tropical

deforestation and fragmentation, global variations in photosynthetic capacity, climatically-coupled diseases, and tropical glacier variation. Some of his many awards include the National Air and Space Museum Trophy, the William Norberg Memorial Award for Earth Sciences, the Mongolian Friendship Medal, the William T. Pecora Award from the U.S. Geological Survey, and the Galathea Medal from the Royal Danish Geographical Society. He is a fellow of the American Geophysical Society.

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) Free for Volunteers...sign up in the Volunteer Lounge. 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: call at 505-841-2861 or email: programs.NMMNHS@state.nm.us

GEOSCIENCE TOURS

Sunday, April 7 • 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: call (505) 841-2861 or email: programs.NMMNHS@state.nm.us

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

K-12 Teacher's Workshop

OUR CHANGING PLANET: PROFESSIONAL DEVELOPMENT WORKSHOP

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

Saturday, April 6, 2013 • 9 AM - Noon

Using the special exhibit Science On a Sphere® and the Museum's Degrees of Change exhibit as starting points, local science teachers and museum staff will share hands-on activities, teacher-tested resources, and online information for teaching about climate change. The information can be adapted for most grade levels.

Cost: \$20 (10% discount for museum members). Includes abundant handouts and materials plus light refreshments during a mid-morning break.

Pre-registration required. To guarantee your place, register online, go to www.NMnaturalhistory.org **Questions:** August Wainwright: call 505-841-2861 or email programs.NMMNHS@state.nm.us

PREHISTORIC PRESCHOOL

Prehistoric Preschool for 3- to 5-year-olds and their adult companions. 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 to attend either:

Thursday, Friday, or Saturday morning classes from 10:00 AM to Noon

or

Thursday (new!) or Saturday afternoon classes from 1:00 PM to 3:00 PM.

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



Spring Session 2: Day Sky/Night Sky

Observe the day and night sky – clouds, the sun and moon, and... is that a star? Experience the new constellation exhibit and “Science on a Sphere” exhibit.

- **APRIL 4, 5 or 6:** What's the Weather Today: *Hot, Cold, Wet, Dry?*
- **APRIL 18, 19 or 20:** Moon, Planets, Stars: *Night Sky Discoveries*
- **MAY 2, 3 or 4:** Seasons and the Sun: *First Day of Spring*
- **MAY 16, 17 or 18** Asteroids, Comets and Meteors: *What's the Difference?*

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

Preregistration is required. **Information:** www.NMnaturalhistory.org **Questions:** August Wainwright: call 505-841-2861 or email programs.NMMNHS@state.nm.us

Note: Classes already in progress may still have openings. If you join a class already in progress, the cost will be prorated.

FIRST SUNDAYS

Sundays, April 7 & May 5 • 9:00 AM – 5:00 PM

On the first Sunday of every month, the *New Mexico Museum of Natural History & Science* and the *Sandia Mountain Natural History Center* are **FREE** to all New Mexico residents. (Bring NM ID or proof of residence.)

Sunday, May 7, 2013 • 9:00 AM – 4:00 PM
Special Family Day Activities related to the new exhibit *Science On a Sphere®*

See Page 2 for Sandia Mountain Natural History Center information.

FREE Admission to the Museum--regular admission fees for DynaTheater and Planetarium shows.

No Registration required. **Directions/ Information:** go to www.NMnaturalhistory.org **Questions:** August Wainwright: call (505) 841-2861 or email: programs.NMMNHS@state.nm.us

SOLAR SUNDAYS

Sundays, April 14 and May 12
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)

Special Science On a Sphere® activities for the entire family on March 10 and April 14

Free (with Museum admission) No registration required. **Information:** www.NMnaturalhistory.org **Questions:** August Wainwright: call 505-841-2861 or email programs.NMMNHS@state.nm.us

*This
summer...*

**FAMILY FUN
ON A RIVER
RUN!
RAFTING THE
SAN JUAN
RIVER**



June 19-22, 2013

Join us for a family rafting adventure this summer! 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.

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, naturalist, and Kristin Gunckel, Ph.D., geologist

Co-sponsored by Four Corners School of Outdoor Education.

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 June 19, 2013. Camping equipment may be rented. **Preregistration** is required, go to: www.NMnaturalhistory.org

Register early. Limited Space. **Questions:** Contact August Wainwright at 505-841-2861 or programs.nmmnhs@state.nm.us



FRIENDS OF PALEONTOLOGY

The next two meetings of the Friends of Paleontology will be held in the Museum Multipurpose Room at the following dates and times:

Date: Monday, 18 March, 2013, 7:00 PM.

Speaker: Tom Williamson.

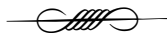
Subject: **Early Paleozoic of the San Juan Basin New Mexico.**

Date: Monday, 15 April, 2013, 7:00 PM

Speaker: Felissa Smith, UNM Biology Professor.

Subject: **The Evolutionary History Of Mammal Body Size.**

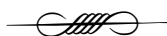
Dick Yeck, VP Programs, FOP



FRIENDS OF PALEONTOLOGY FIELD TRIP POLICY

Due to the increasing popularity of Friends of Paleontology (FOP) field trips, the following guidelines are now in effect. Field trip attendees will be prioritized with FOP members first and museum volunteers who are not FOP members second. If there is room on the trip and other interested parties have asked to go, they will be asked to join FOP before going on the field trip.

--Lannois Neely, FOP President



Dinosaur Century: 100 YEARS OF DINOSAUR DISCOVERIES IN NM

The topic of the January 21, 2011 FOP meeting was not a particular dinosaur, but an analytical history of dinosaur discoveries in NM. History shows that dinosaur paleontology in NM is as good or better than other western states for late Triassic to end Cretaceous specimens. Speaker Spencer Lucas organized the talk into three Phases.

Phase 1 (1885 -1912). During this time analytical and narrative processes and non-scientific interpretation were used until statehood. Similar approaches were used for earlier discoveries such as the 1853 find by Richard Owen of the "Terrible Lizard," which was likely a dinosaur based on some clumsy drawings. A one page, high level description was published, but the bones were subsequently lost in 1855, and no further study was possible. Owen also coined the word *dinosaur*. In 1887 Coelophysis, the first dinosaur, was discovered in NM by David Baldwin and described by Edward Drinker Cope. It is still considered to be the most important dinosaur ever found due to its early age and the quantity and quality of the specimens. Then in 1905 Barnum Brown discovered T. Rex (in Montana) and Kritosaurus, a duck bill, at Ojo Alamo in the San Juan basin in 1910.

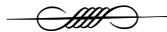
Phase 2 (1912 - 1980). This phase was characterized as the "colonial science period." Colonial science techniques involved establishing consensus among researchers that were using rapidly developing new tools such as computers, the early internet and plate tectonic knowledge. The San Juan basin became a target for prospecting, and in 1919 Alamosaurus was discovered by John Reeside and curator Charles Gilmore along with many other specimens. Another freelance collector named Charles Stenborg worked almost alone in the 1920's. The Coelophysis quarries at Ghost Ranch in the 1940's continued to yield quality material, the taphonomy of which is still not agreed on.

Phase 3 (1980 - present). This is the independent tradition phase, when new science flourished as major museums established modern research, prepping and mounting

techniques that allowed the rapid advancement of paleontology. The NMMNHS opened in 1983 and became the flagship natural history museum in this state. Recent major dinosaur digs in NM include:

- 1979: The Seismosaurus in our Jurassic Hall, found in the Ojito.
- 1982: The dinosaur footprint at Elephant Butte.
- 1983: The NMMNHS opened and became the state's Geoscience center.
- 1985: The Cretaceous dinosaur trackway near Clayton, NM.
- 1989: The Peterson quarry, a Jurassic bone bed discovered by a volunteer.
- 1997: The Cretaceous Bisti Beast, a new species found in the San Juan Basin.

*--Dick Yeck
VP for Programs*



FORAMINIFERANS

The speaker for the 18 February 2013 FOP meeting, John McDonnell, characterized his subject as "a bunch of crafty little critters." These foraminiferans, 'forams' for short, appeared in the Cambrian with a variety of phyla called *protistsans*, commonly known as protozoans. They were single celled animals that grew to a maximum size of about an inch and could secrete calcidic skeletons.

They were neither plant nor animal and had no feet, but slowly moved about with "false" feet made by continuously attaching grains of sand, twigs or mud to their bodies and kind of rolling around. They developed a variety of two sided shells--none of which opened like brachiopods or clams because there was no hinge. The shells were made four ways:

- agglutinated forms, which involved using foreign material like sand grains and mud
- glossy (Hyaline) shell fragments from other animals
- porcelaneous forms
- microgranular material produced within their own bodies.



They spent their Paleozoic time in shallow planktonic water where they floated on or near the surface. Today those older rice grain sized specimens can be seen in New Mexico in the Pennsylvanian Madera limestone in the Sandia and Manzano mountain range, the Lucero Uplift west of Los Lunas, and in Permian San Andreas limestone in central New Mexico.


During the Cenozoic they gradually developed heavier, more complex and rounded forms and inhabited shallow benthic sea bottoms by the end of the Cretaceous period. By Neogene time they had expanded their diet, developed more complex structures, including spines, and created their own calcium layers.

And they are still with us today. Most live in bottom benthic conditions, with some floating swarms in various depths, which are generally called plankton. Their steady and novel adaptations led to different shapes which enabled them to be useful in biostratigraphy dating and are used by the oil and gas industry for strata markers.

*--Dick Yeck
VP for Programs*

Mary Alice Root, Ornithologist
& long time NMMNHS Supporter

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Remembering Mary Alice Root

The Museum lost a longtime supporter when Mary Alice Root passed away at the end of January of 2013. Her passion and hard work brought *Diatryma* back to New Mexico! Once she retired as Administrator of the University of New Mexico Biology Department, Mary Alice spent much time focused on her life-long interest in birds often channeling her efforts through the Museum.

She became an Adjunct Naturalist Curator for the Museum, entering bird record data accumulated over decades on paper into a computer database for research analysis.

Traveling to almost every continent, eagerly birding wherever she went, Mary Alice co-led trips for the Museum to Costa Rica with Dave Hafner, our long time Bioscience Curator. And, together, Mary Alice and I (along with John Arnold, Helen Haskell and Amy Grochowski and others) led many trips to Bosque del Apache for the Museum.

She would present a lecture on a weeknight about what birds we might see there, and we would take a couple of dozen folks to the Refuge the following Saturday. She knew so much, like the time she told us about the shrike she had seen in Africa that was a different color than our Loggerhead Shrike, but had the exact same behavior—catching grasshoppers or

small lizards and sticking them on the spine of a bush or barbed wire to “cure” for a few days before eating—half a world away a shrike will do the same shrike-thing. Mary Alice had the depth of knowledge to make things interesting.

She was always learning throughout her life--taking classes every semester--and generously sharing her knowledge with others. Mary Alice

extended her avian interest by undertaking the study of fossil birds, reading every paper written, to become our local expert and, in turn, giving talks to groups near and far about fossil birds. This curiosity directly



benefitted the Museum when she learned about *Diatryma*, a huge, flightless bird that was first named from New Mexican fossil specimens. As the Museum was the place to see and learn about fossils in New Mexico, she became an advocate for showing off this huge bird here.

So, Mary Alice tracked down the only known maker of mounted skeletons of *Diatryma*, in New York. He looked at his old molds and told her they would survive about

one more cast. So she placed the order and went about finding the money to pay for it. She gave talks to every group who would have her, to all of her friends and acquaintances, and raised the

“I had a lot of wonderful support and help, and I couldn't be more pleased to have the people of NM know the whole story of *Diatryma*,”

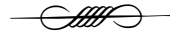
Mary Alice Root

money. The *Diatryma* became the centerpiece of the Evolving Grasslands hall.

As her health failed, she moved to Minnesota to be closer to family. I usually travel to Minnesota each year to see my own family and have been fortunate to see her there. This past year, I got an urgent question about the status of *Diatryma*. She had heard it was not on display and wanted answers. I talked with Curator Gary Morgan and sent along the update. When I visited her last August, she had copies of all her *Diatryma* information waiting for me to bring back to Gary—to complete the Registrar’s files on the acquisition. Today, the room has just been redone, the *Diatryma* is again featured in the renamed hall, *Rise of the Recent: Cenozoic New Mexico*, along with images and information in the new interactive table.

“She has been an inspiration to me, to keep learning, teaching, and contributing to our community.”

--Tish Morris



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. The deadline for the *June-July* issue, for example, will be May 15, 2012.

Please send items for the VAN to Louise Harris, VAN Editor, <louise@goingourway.net>, with a copy to Chris Sanchez DCA <chris.sanchez@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.

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

Submission Request: Please leave only one space between sentences. Thanks!
