

Volunteer Association Newsletter



NMMNSH

December 2012 - January 2013

*Wishing you all a joyful present and a well-remembered past.
Best wishes for Happy Holidays and a magnificent New Year.*





FIELD TRIP COORDINATOR

showing and explaining

We need a volunteer to serve as **trip coordinator**. For details, contact Pat Robinson at (pattitrek1@comcast.net).

We usually have only two or three field trips per year. The coordinator solicits a staff person to guide the trip and selects the date, reserves the vans, and makes the announcements.

Pat has a list of places we have visited in the past. These enrichment opportunities are not to be missed, as our staff can read the rocks like a book and you get to see really neat things--often unique to New Mexico!

NOTES FROM OUR PRESIDENT

The New Science Initiative

One of the goals of our Director is to have new things visible to our visitors each time they come to the Museum--such as new scientific discoveries relevant to museum content and not just the same wonderful, but slowly changing, things that make up our "permanent" displays. To this end, The New Science Initiative has been launched. Here is the current plan, worked out after the principles recently met.

Any volunteer seeing "New Science" --exciting things that have public appeal--should make these known to any member of the Continuing Education Committee:

Bud Hodgen (bird57bugs@aol.com)

John Throne (thronej@qwest.net)

Dwight Jennison (d.r.jennison@gmail.com)

Sources for such information include the popular press, magazines, television, and sites such as ScienceDaily.com or LiveScience.com. These will be funneled to myself and sent for review to *Chief Scientist Spencer Lucas*, who will solicit opinions from the relevant curators. This will ensure only credible science is shared. After

approval, I will work up PowerPoint slides, showing and explaining the discovery and its importance, for final review before they are sent to *Deputy Director Alicia Borrego Pierce*, for inclusion in the New Science computer program.



Dwight Jennison

The program will loop in the atrium on a large flat-screen TV, similar to the one occasionally used for Space Science displays. At Continuing Education Seminars, the content will be discussed, so that those who work the floor will have a better understanding of the material. Presently, this program is entering a test stage with an initial loading. This will include some "new" science but also some older but important material that is not yet part of any of our "permanent" displays. Our goal is not to editorialize the information, but to show the public the *dynamics* that are the essence of science--always evolving and never static.

Centennial Exhibit Nearing Completion, Attention Hosts and Docents

We have noticed that many visitors miss the Centennial Exhibit, the last installment of which will be completed in December. Others have commented that the exhibit is extremely well-done and should be of high interest to many--even those with more interest in history than in paleontology. We are asking all hosts and docents

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to kindly point out our Centennial Exhibit to visitors when introducing them to the Museum. This exhibit is one which is special and temporary (only lasting through 2013) and should not be missed.

Dwight Jennison
President

(DOUG) SIMON SAYS...

As the New Volunteer Coordinator, I want to compliment everyone on their dedication to the NM Museum of Natural History and Science and its visitors.



As I review schedules, I notice that weekend staffing with hosts and docents is inadequate, especially for First Sundays. These are important times to

welcome and orient our visitors to all the wonderful things they will discover in the many halls and Museum spaces. I invite more people to sign up for weekend shifts, especially First Sunday.

We are training a new class of hosts, so please also be ready to welcome a new generation to this great Museum family.

Doug Simon
Shared Resources Volunteer Coordinator

OUTREACH OPPORTUNITIES

Our Outreach program is looking for new volunteers to help with our programs. To qualify, you need to be a docent or a museum host with about a year's experience.

On Monday, February 18, 2013, Mike Sanchez and a group of experienced Volunteers will have an introduction to the program. The program will run from 9:30 AM to about 11:30 AM. Following the initial training, we will schedule 4 sessions, using our own student volunteers, to demonstrate each program. Then as requests come in we will have you mentor with an experienced Outreach Volunteer.

This is a fun program and one that is greatly needed. The joy of seeing a child's eyes light up from something you taught to him/her--well, that is just amazing!

Please save the date: Monday, February 18, 2013.



NEW BOOKS

In this column I will write about four new books in the Volunteers' Association Library. One was mentioned in the last column: **Albuquerque's Parks and Open Space** by Matt Schmader. This book is part of the series *Images of America*, and, as the series title suggests, it contains many pictures of Albuquerque through the years showing the variety of parks and open spaces in the city. The book contains six chapters: *Roots and Early Beginnings*, "The boys go to the River," *The Clyde Tingley Era*, *A Department is Born*, "The Most Beautiful Backdrop a City could Have," and *After Shots*. Each chapter starts with a brief essay followed by photographs. If you missed the lecture presented by Mr. Schmader, you can learn about this important aspect of Albuquerque through his book.

The second book is **Fossil Ecosystems of North America: A Guide to the Sites and their Extraordinary Biotas** by John R. Nudds and Paul A. Selden. Special rock strata called *Fossil Lagerstätten* preserve a rich record either a concentration of different types of fossils, noted for quantity, or the conservation of high quality fossils sometimes including soft tissue. It is strata of this latter type that are presented in this book. The biota are arranged in chronological order from the Archean Gunflint Chert to the Pleistocene Rancho La Brea, which allows the following of the Earth's ecosystems through a series of snapshots of life at a number of points in time (Introduction p.9). Each chapter begins with Background followed by History of Discovery then Stratigraphic Setting and Taphonomy, next is a Description of the Biota, Paleoecology and ends with a comparison to other sites. At the end of the book is an Appendix of Museums and Site Visits. The NMMNH&S is mentioned for the Chinle Group.

The third new book, which we just received from the New Mexico Geological Society, is the 63rd Annual Field Conference guidebook entitled **Geology of the Warm Spring Region** with Spencer Lucas and Justin Spielmann serving as two of the editors. It focuses on Sierra County.

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Last, but surely not least, is a book about our Triassic Hall written for young adults. The authors are Jaenet Guggenheim and Spencer Lucas. Subtitled ***Building the Triassic Exhibit from the Ground Up***, this book does just that, taking the reader through every phase of planning and construction. It explains why the Triassic Hall is different from the other two Mesozoic halls. Instead of putting the visitor into a recreation of the time period, the Triassic Hall is built around the theme of perseverance, evolution, and extinction. This book has been nominated for two awards--the *Benjamin Franklin Awards*, which recognize excellence in independent publishing, and the *ForeWord Review's Book of the Year Award*, established to bring attention to the literary and graphic achievements of independent publishers.

To those who have donated items to the library, I apologize that I have not had a chance to process these items yet, but I will work on them in the new year.

*Your Librarian, Mina Jane Grothey
mgrothey@unm.edu*



LATE CENOZOIC VERTEBRATE PALEONTOLOGY IN NEW MEXICO

Gary Morgan, the museum's expert on Cenozoic vertebrate paleontology, presented a different view of paleontology in that Era at the September 17, 2012, FOP meeting. The Cenozoic Era is the most recent division of the rock record and represents time from 65mya to the present.

Instead of focusing completely on the fossil animals, of which there are many, Gary highlighted the more famous paleontologists that have found many of the important Cenozoic fossils in New Mexico in the last 139 years. Starting in 1873, mastodon teeth were uncovered

near Espanola. Shortly thereafter, renowned paleontologist Edward Drinker Cope worked the Pojoaque Bluffs area for a brief two weeks and collected 32 new species including tortoise, mastodons, horses, rhinos, and 14 types of camels. Nothing approaching that has been achieved since. These results were published in 1876 with the help of Lt. George Wheeler, a scientist in the Army and for whom New Mexico's highest peak is named. Another renowned paleontologist from the American Museum in New York City, Childs Frick, successfully prospected the Espanola-Chimayo region in 1926. That museum sent scientists to New Mexico until the 1950's.

From 1995 to the present, NMMNH&S scientists, led by Gary Morgan, Larry Rhinehart and others, have continued to collect various tracks and fossils at other sites across state, such as the Benevidez Ranch, which yielded the trackway displayed in the Tertiary Hall, and the Bosque del Apache, from which a nearly complete *Oreodont* was collected by Gary last year. Other successes are the giant tortoise collected with the help of the BLM, a stegomastodon from Elephant Butte, the almost complete camel exhumed from an Albuquerque gravel pit on display in the Tertiary Hall, and a unique block of Jurassic Todilto gypsum that contains Cenozoic fossils.

A measure of Gary's leadership is the fact that when he came to the Museum in 1995 there were about 200 Cenozoic fossils in the Geoscience collection. Now there are about 10,000.

*Dick Yeck
VP Programs, FOP*



NEXT FOP MEETING

The next meeting of the Friends of Paleontology will be held in the Museum Multipurpose Room:

DATE: Monday, December 17, 2012
TIME: 7:00 PM
SPEAKER: Charles Walters
SUBJECT: TBD



GEOLOGY AND PALEONTOLOGY OF THE ABO PASS, NM

A good turnout at the October 15, 2012, FOP meeting enjoyed a lively presentation of recent work by amateur fossil collector Ken McKeighen and brother Henry in the Abo Pass at the south end of the Manzano Mountains. The two have collected lower Permian vertebrate fossils on private lands on both sides of Route 60 with permission of the landowners and support and guidance from NMMNH&S paleontologist Spencer Lucas. Since 2009 some of their work has been entered in the Geoscience collection and they have been published in paleontology literature.

The Abo formation in the Abo Pass area has been well documented by the brothers. The stratigraphy is primarily nonmarine fluvial floodplains that formed dark red, fine-grained mudstones and coarse, brown, river sandstones.

Stream channels and thick flood strata are common. The brothers also noted desiccation cracking, which they contend is generally associated with small fossils, and collected distinctive water flow marks and rain drop patterns in mudstones.

Regarding vertebrates, the amphibious pelycosaurs *Dimetrodon* (two species) and *Sphenacodon*, the largest carnivores of their time, are the dominant fossils. Numerous specimens of their sail-like neural spines were collected, and parts of *Eryops*,

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Old Bones by Gary Snyder

**Out there walking round, looking out for food,
a rootstalk, a birdcall, a seed that you can crack
plucking, digging, snaring, snagging,
barely getting by,**

**no food out there on dusty slopes of scree—
carry some—look for some,
go for a hungry dream.
Deer bone, Dall sheep,
bones hunger home.**

**Out there somewhere
a shrine for the old ones,
the dust of the old bones,
old songs and tales.**

**What we ate--who ate what--
how we all prevailed.**

FROM: Gary Snyder, *Mountains and Rivers Without End*
(Washington D.C.: Counterpoint Press, 1996) 10.

ABO PASS CONTINUED FROM PAGE 5

an older amphibian, were found. Fossils were also collected from the now defunct Scholle copper mine detritus. Plants and trackways were not overlooked: the sphenophyte Calamites and conifer Walchia were found, as were small animal and scorpion tracks. Over all, the brothers have found a wide variety of fossils, but generally poor specimens due to extensive river transport and some copperization around the Scholle mine. But they will continue to prospect and collect as long as the land owners allow this unique opportunity and would welcome any volunteer help offered.

*Dick Yeck
VP Programs, FOP*

CONTINUING EDUCATION

**January 8, 2013
MPR 10:30 - 12:45**

- 10:30-10:45 To be determined
- 10:45-11:45 *The New Science Initiative*
Dwight Jennison
The atrium display is explained, including background on each of the "topics" to be shown
- 11:45-12:15 What's New
- 12:15-12:45 Snacks and Socialization



**MUSEUM ADULT AND FAMILY
EDUCATIONAL PROGRAMS**

December 2012 – January 2013

Programs at-a-glance

DECEMBER

December (Every Monday) • Tour
Docent-led Exhibit Tour

December 2 • First Sunday
FREE Day at the Museum & SMNHC

December 4 • Centennial Lecture
Tyrannosaurs

December 6 • Curator's Coffee
Dinosaur Century

December 8 • Special Event
Adult Night

December 9 • Event
Solar Sunday

December 7 • Adult Class
Nature Artscapes

December 15 • Tour
Bioscience Collections Public Tour

December 15 • Exhibit
Dinosaur Century

JANUARY

January (Every Monday) • Tour
Docent-led Exhibit Tour

January 6 • First Sunday
FREE Day at the Museum & SMNHC

January 13 • Solar Sunday
Observatory Open

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

Tyrannosaurs of New Mexico

Thomas Williamson, Ph.D.

Curator of Paleontology, NMMNHS

Tuesday, December 4, 2012

7 PM – 8:30 PM

(Lecture rescheduled from June 28 to December 4.)

Tyrannosaurus rex and Albertosaurus were both named in the same publication in 1905. Within the last decade the number of tyrannosaur species has grown to more than 20 and range back to the Middle Jurassic. They are now among the most intensely studied dinosaurs. These specimens have led to a much greater understanding of dinosaur evolution, anatomy, and other aspects of their biology including growth dynamics, population structure, feeding, locomotion, and biogeography. New Mexico was home to at least two tyrannosaurs, Tyrannosaurus and Bistahieversor (aka, the Bisti Beast)—a recently discovered skull and partial skeleton that represent the most complete tyrannosaur ever found in New Mexico.

***Tom Williamson** received his Ph.D. from the University of New Mexico and has been a Curator of Paleontology at the New Mexico Museum of Natural History and Science for over 18 years. He is a vertebrate paleontologist who focuses his research on Cretaceous and Paleogene fossils of the San Juan Basin, northwestern New Mexico. Dr. Williamson has worked with colleagues to name three North American tyrannosaurs (including Bistahieversor).*

All evening lectures are held at the New Mexico Museum of Natural History & Science.

1801 Mountain Rd. NW, Albuquerque, NM 87104

Visit: www.nmnaturalhistory.org

\$6 (\$5 members, \$4 students) Volunteers are FREE... sign up on the sheet in the Vol Lounge.

Note: Lecture rescheduled from June 28 to December 4.

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

ADULT CLASS

Nature Artscapes

Instructor: **Mary Sundstrom**

Friday December 7, 2012

10 AM - 3 PM

Combine art and science. Spend some time at the Museum. Step out of the holiday rush for a day and make wonderful gifts for friends, family or yourself, while you examine objects from the Museum collections and learn a new art form.

You will learn to cut shapes from nature out of colored papers with a craft knife and apply them in layers, mixing a crisp cut edge with overlapped shapes. Choose your subjects from specimens provided by the museum's collections. At the end of the class, you will have created a 12"x 12" original paper cut-out to take home and materials to make another paper cut-out art piece on your own.

This class is geared for adults and older children, ages 14 and above. No prior experience in art or paper cutouts is required. The class fee includes lunch and most materials.

***Mary Sundstrom's** experience encompasses art instruction, fine arts printer/printmaker, book illustrator with 17 children's book titles and an Audubon field guide series, as well as numerous exhibit illustrations for the New Mexico Museum of Natural History & Science. She has lately had several shows of her paper cut out artworks.*

\$90.00 (10% discount for members and volunteers)

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Pre-registration required. For more information or to guarantee your place in this class, register online, go to www.NMnaturalhistory.org. At registration, you will receive a short supply list.

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

SPECIAL EVENT

Adult Night

Saturday, December 8

7:00 PM - 10:00 PM

Join us for an evening of Electric Cello and Video Art. Relax, refresh, explore, and learn. The evening is designed for adults only, 18 years and above. Cash bar for those 21 and older. See the night sky from our 16 inch Meade telescope in our Observatory, enjoy the museum exhibits, and talk with museum staff! This is the opportunity to ask those questions you have always wanted to ask.

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.

Dinosaur Century: Dinosaur Discoveries in New Mexico and the Museum's Centennial Exhibit

Spencer Lucas, Ph.D.
Curator of Geology and Paleontology

New Mexico Museum of Natural History and Science

Thursday, December 6

9:30 - 11:00 AM

This Curator's Coffee will discuss and present the Museum's year-long Centennial Exhibit, Dinosaur Century. New Mexico has been a magnet to some of the world's legendary dinosaur hunters. Fossils of New Mexico

dinosaurs are in the collections of (or on display at) the nation's largest natural history museums, including the Smithsonian, American Museum and the Field Museum. Since the 1980s, the New Mexico Museum of Natural History and Science has taken the lead in digging up, studying and interpreting New Mexico's dinosaurs. The session will include a walking tour of the Museum's Dinosaur Century exhibit.

Spencer Lucas is Curator of Geology and Paleontology and Chief Scientist at the NMMNHS. He has worked at the Museum since 1988. A graduate of the University of New Mexico and Yale University, Lucas is a paleontologist who specializes in the use of fossils to determine the ages of geological and biological events in Earth history. He is the author of more than 1000 scientific articles.

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

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

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



FIRST SUNDAYS

Sundays, **December 2** and **January 6**

FREE Admission to the Museum for all New Mexico Residents

9:00 AM - 5:00 PM

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 will be in effect.

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

December 2012



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
First Sunday	2 Docent-led Exhibit Tour	3 Centennial Lecture <i>Tyrannosaurs</i>	4	5 Curator's Coffee <i>Dinosaur Century</i>	6 Adult class <i>Nature Artscapes</i>	7 Special Event <i>Adult Night</i>
Curator's Coffee <i>Dinosaur Century</i>	9 Docent-led Exhibit Tour	10	11	12	13	14 Bioscience Collections Public Tour Dinosaur Century
	16 Docent-led Exhibit Tour FOP Charlie Walters	17	18	19	20	21
	23 Docent-led Exhibit Tour	24 <i>Merry Christmas!</i> <i>¡Feliz Navidad!</i>	25	26	27	28
	30 Docent-led Exhibit Tour	31				

January 2013



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 <i>Happy New Year!</i>	2	3	4	5
6 First Sunday	7 Docent-led Exhibit Tour	8 Continuing Education TBD	9	10	11	12
13 Solar Sunday Observatory Open	14 Docent-led Exhibit Tour	15	16	17	18	19
20	21 Docent-led Exhibit Tour	22	23	24	25	26
27	28 Docent-led Exhibit Tour	29	30	31		

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 *February-March* issue, for example, will be January 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!
