Volunteer Association Newsletter

New Mexico Museum Natural History & Science

AUGUST - SEPTEMBER, 2012

SLATE OF CANDIDATES FOR VOLUNTEER ASSOCIATION 2012 - 2013

The Nominating Committee recommends the following slate of nominees to be officers of the NMMNHS Volunteer Association Board. The election will take place on Tuesday, September 25, 2012, at the Meeting of the General Membership of the NMMNHS Volunteers in the Sandia Room, along with a vote to amend the Association By-laws.



Term Limits:

Unforeseen circumstances notwithstanding, the President and President Elect each serve a one year term. The Secretary and Treasurer are asked if they are interested in serving a second term. If so, their position may continue for an additional year. The immediate Past President (in this case Jim Peavler) is invited to attend and participate in all Board Meetings during the year following his or her tenure.

Nominating Committee: Holly Baer, Chair: 238-1431 hollybaer@prodigy.net **Jack Bass:**

jbass85@msn.com

Gerry Laidlaw: 884-1514

gl@green-tara.org

Barry Halsey: 890-8382

bhalsey@q.com

Fran DuBay: 897-3134 Fossilfran3@hotmail.com

The four officers make up the Executive Committee. The total Board membership includes representatives from various and assorted areas of the museum, annex, etc. These members are appointed by the President. The Secretary records the minutes and keeps track of other records as necessary and requested by the Executive Committee. The Board typically meets on the 2nd Tuesday of each month. The meeting is held at the museum.

The meetings this year have been attended by Charlie, our Director. He has helped keep us all informed about what is happening in areas in which most of us do not work.

Holly Baer, Nominating Committee Chairperson



LIBRARY LINE: Did you miss the lecture?

Two of the Centennial Lecture series speakers have books about their talks. In February, Loretta Hall spoke about the contribution of New Mexico to space travel. Her book is called *Out of this World: New Mexico's Contributions to*

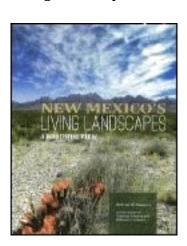
Space Travel (Los Ranchos, NM: Rio Grande Books, 2011). The library copy can be found



under the call number TL789.8 H28 U5 2011. Out of this World covers from Robert Goddard's rocket experiments to the new Spaceport America. Ms Hall writes about the unique qualities of New Mexico that have attracted those interested in space travel. Both Robert Goddard and the

founders of White Sands Missile Range were looking for wide open spaces and good weather to allow them to experiment with their new equipment. These same qualities attracted Spaceport America. Ms Hall writes in a language understandable by the layperson. At the end of most chapters there is a list of resources for those who want to learn more about a topic. Thank you to Dr. Larry Crumpler for donating a copy of this book to the library.

William Dunmire lectured about *New Mexico's Living Landscapes* at the May Centennial



Lecture. This is also the title of his book, which has lots of photographs by the author and photographer Christine Bauman. The book was published by the Museum of New Mexico Press, Santa Fe in 2012. The copy in the library can be found under the call number F 797 D86

2012. The book is arranged by ecoregions comprised of Chihuahuan Desert, Great Basin Desert, Great Basin Grasslands, Piňon-Juniper Woodlands, and Montane Forests. Each chapter follows the same format: first Impressions, description of the ecoregion, its vegetation, animal life, geology, water and the scenic byway that provides access to the region. At the end of

the book is information on additional scenic byways around the state. The main premise of the book is to focus on the landscapes visible from the scenic byways. The beautiful photographs should inspire you to travel more in the state. The book is not meant as a guide book, but rather to help plan your trip.

The lecture on July 19th by Matt Schmader on Albuquerque's open spaces also has a book which will be in our library.

Missing book: There is a volunteer who would like to read *Reining in the Rio Grande* (GF 504 S685 P47 2011), but this book is missing. There is no card in the checked-out-books box and I have searched the shelves in case it was misshelved. If you have the library's copy of this book, please return it. Or, if you know who has it, please let me know. Thank you.

Mina Jane Grothey Librarian <u>mgrothey@unm.edu</u>



NMFOP Working Field trip to El Palacio area, near Española, New Mexico, May 5, 2012

Fossil prospecting can be tiresome, hot, dirty work with nothing to show for one's efforts. But that was not the case on May 5, 2012, when 18 Friends of Paleontology (FOP) members assembled on Bureau of Land Management (BLM) lands to assist in a search for new fossil localities. Temperatures were pleasant with no threat of storms, surface collecting kept everyone relatively clean, and fossils were plentiful.

Gary Morgan (NMMNHS curator) and Phil Gensler (BLM regional paleontologist) served as "tour guides" for the day. We searched two large washes in the El Palacio area near Española, New Mexico, where there were excellent exposures of the middle Miocene (about 14 million years old) Pojoaque Member of the Tesuque Formation. The middle Miocene in New Mexico was a time of

amazing faunal diversity. For example, the rock formation we scouted contains at least 6 genera of horses and eight genera of camels.

The group met at the end of each exploration to share the specimens they had found, receive a preliminary identification from Gary and Phil, and



FOP Crew

turn the fossils in for cataloguing at the Museum. In addition to numerous individual bones and sets of bones, surface material (mostly sand) was collected from two sites for screening by Gary to extract miniature fossils. In the following couple of weeks, Gary conducted a complete survey of material found.

The darling small pronghorn antilocaprid or North American "antelope" (*Meryceros*) was the most common species found at both localities. Fossils from numerous Meryceros included many horn fragments, several lower jaws, isolated teeth, and numerous postcranial elements (limb ends, carpals, tarsals, and toes).



Aepycamelus toe bone

Bones of several horses were found. These included fragments of teeth and a jaw, along with bones of legs, ankles and toes. An end of a tibia showed a possible carnivore bite mark. The two genera of horses that Gary Morgan could identify from our field collections were Neohipparion (pony sized) and Megahippus (horse sized), neither of which evolved into the modern horse (genus Equus).

Several species of camel were represented by fragments of teeth, limbs, vertebrae and a lower jaw, along with the hoof core from a small camel, a pelvis fragment from a large camel and a proximal toe from a rare giant camel (Aepycamelus). Aepycamelus looked like a giraffe, with lengthened cervical vertebrae that held its head 10 feet above the ground.



Dawn Ranelli with complete Meryceros toe

Lagomorph fossils included portions of rabbit limbs and maxilla with four teeth from a pika. A calcaneum (heel bone) from a small rodent was also found.

Less conclusive identifications were made for a four-tusked mastodon (*Gomphotherium*) partial scapula; rhinoceros limb shaft (tibia?); oreodont (*Merychyus*) lower jaw with 3 teeth; large carnivore, probably "bone-crushing" dog (*Aelurodon*) partial 2nd cervical vertebra (axis) and partial teeth; and a small carnivore (Mustelidae, weasel family?) distal end of humerus.

Not all of the bones belonged to mammals. There were also land tortoise (*Hesperotestudo*) shell fragments, partial clavicle, and toe, along with toad/frog (Anura) toes and other postcranial elements.

The El Palacio fossil prospecting trip was a grand success. There was an air of exhilaration among the participants as Gary named the finds and told their stories. Volunteers were thrilled to present their fossil discoveries and learn about extinct animals, many for which they had no previous knowledge. Their excitement is now being shared with other volunteers and museum visitors as they relate their first-hand paleontology experiences.

Submitted by Mary Moore

APRIL 16: FOSSIL ALGAE

Dinosaurs, and their marine reptile cousins, being the largest terrestrial and aquatic animals to live on earth to date, tend to get most of the attention in the fossil record. At the April 16, 2012, FOP meeting, retired geologist and NMMNH&S volunteer Jack Babcock spoke about the other end of the paleo record, fossil algae.

Although the phrase *fossil algae* may conjure up petrified pond scum, there is more to it than that. Fossil "algae" include a huge, informal group of organisms that include blue-green "algae" (actually bacteria) and true algae characterized by pigment colors of green, red, golden-brown and others. The unifying characteristics of the groups are (a) all types are photosynthetic, (b) they are all aquatic (mostly marine), and (c) they are all *relatively* simple biologically.

Algae are essential in the formation and maintenance of modern reefs. Symbiotic algae (zooxanthellae) flourish in shallow, high energy seas and help coral to calcify, form dense colonies, and provide nutrients. The reasons that reefs live in shallow water is because of the algae, not the environmental constraints of the corals. For paleontologists, fossil algae represent a huge group that includes important biostratigraphic types:

- diatoms, coccoliths (calcareous "shells" of tiny phyto-plankton)
- diatoms (the siliceous tests of algae that are considered to be the preeminent producers of oxygen in modern seas)
- dinoflagellates, (whose encysted forms are valuable index fossils)
- paleoecologically-significant types, especially the red and green algae.

Calcareous green algae create mud and sandsized sediment that fills in between the corals and helps to stabilize the reef mass. Although not really algae, blue-green bacteria are included with this group because of tradition, similar ecological attributes, and similar fossil expression. Green fossil algae are representatives of the Codiaceae and Dasycladaceae families. Some green algae are now known to be the principal creators of lime *mud* in shallow tropical seas. Blue-green (cyanobacterial) mats formed



Bacterial stromatolites

(and still form) stromatolites, which were the only fossils from about 2.5 billion to about 800 million years ago.

Bacterial stromatolites are THE fossils of Precambrian rocks! Calcareous red algae, primarily the Corallinaceae, are abundant in tropical seas as well and are the principal binders of reef frameworks and cementers of reef debris. Leaf-shaped algae are common in upper Paleozoic shallow carbonate settings all over the world.

Fossil algae and algal limestone are found mostly in southern New Mexico. The main areas are the phylloid algal *reefs* of the Sacramento Mountains and the Permian Reef Complex and Guadalupe Mountains near Carlsbad.

Jack Babcock, Volunteer

ARE BIRDS DINOSAURS, OR IS ARCHAEOPTERYX NOT A BIRD ANYMORE?

This contentious and double-sided question was the core of Andy Heckert's talk at the May 15, 2012, FOP meeting. Dr. Heckert spent several years here at the museum and is now an Associate Professor of Geology at Appalachian State University, Boone, NC. He brings a cadre of undergraduates out west every year for field work and never refuses our request to speak to the FOP.

The genesis of the subject question started in earnest with the discovery of Archaeopteryx fossils in Germany in 1861. Until those discoveries, evolution was being pieced together by Darwin, Huxley and other pioneers, and there were numerous missing links that separated reptiles and birds. Archaeopteryx was the first fossil that provided many of those parts. During the 1920's it was thought that dinosaurs did not have a "wishbone" (furcula) as do birds, and the purpose and position of the gastralia on large carnivores was confusing for those who thought there may be a connection. And life size renditions of dinosaurs were basically wrong for decades. The evolution of the pelvis in Saruchians was recognized and accepted by most



Artist rendition of Archaeopteryx by NobuTamura [Wikimedia Commons]

paleontologists, but the notion of feathered dinosaurs raged on until the late 1990's.

Sophisticated computer models proffered on both sides of the issue. Most scholars agreed that all dinosaurs were not birds. But in 2011 an explosion of many Archaeopteryx–like theropod fossils were discovered in the Cretaceous tuffs of China and were characterized as the origin of Aviolae (true birds). These findings were

published in Nature Magazine, accompanied by 52 pages of on-line data. The Chinese seem to conclude from this that every fossil theropod is a new genera or species, while in Germany every new analysis seems to be the next step in the development of Archaeopteryx into dinosauria.

The issue still is not settled among many paleontologists. As for Dr. Heckert, he is content with the bird conclusion, which he said would apply to certain other theropods such as Deinonychus. Off line, he says "who cares? Things have gone to extremes on both sides and now DNA is being manipulated. So practically anything can be proven these days."

Dick Yeck VP For Programs

FRIENDS OF PALEONTOLOGY

FOP meetings will resume in September, 2012.

The next meeting of the Friends of Paleontology will be held in the Museum Multipurpose Room at the following date and time:

DATE: Monday, September 2012, 7:00 PM

SPEAKER: Gary Morgan

SUBJECT: TBD

Dick Yeck, VP for Programs

VOICES IN SCIENCE ADULT PROGRAMS: AUGUST AND SEPTEMBER 2012

PROGRAMS AT-A-GLANCE

August

August • Monday tour

Docent-led Exhibit Tour

August 2 • Centennial Lecture Series
Alien Sunspots, Spotted Stars, and NESSI in
New Mexico

August 5 • event

First Sunday Mars Family Day August 10-11 • special event

BioBlitz

August 11 • exhibit

Dino Century – new specimen

August 12 • event

Solar Sunday

August 18 • tour

Bioscience Collections

August 23 • Centennial Lecture Series

The Story of National Parks and Monuments in New Mexico

September

September • Monday tour

Docent-led Exhibit Tour

September 2 • event

First Sunday

September 9 • event

Solar Sunday

September 15 • exhibit

Dino Century – new specimen

September 15 • tour

Geoscience Collections

September 26 • special event

Teacher Open House

September 27 • Centennial Lecture Series

Ice Age Vertebrates in New Mexico

Docent Training - August 6

Docent Training begins August 6... the full schedule will be posted in the Volunteer Lounge. If you are an experienced Docent, you are welcome to sit in on some of the sessions. You are also needed to participate in helping to train the new docents... please contact Chris and/or Jayne if you are interested.

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.

Centennial Lecture Series

Alien Sunsets, Spotted Stars, and NESSI in New Mexico

Michelle Creech-Eakman, Ph.D.

New Mexico Tech and Magdalena Ridge Observatory

Thursday, August 2, 2012 7 PM – 8:30 PM

Exciting new discoveries are taking place under New Mexico's Enchanted Skies at the Magdalena Ridge Observatory. Two innovative instruments will be deployed at the observatory. The first is the New Mexico Tech Extrasolar Spectroscopic Survey Instrument (NESSI), a spectrometer designed to examine the atmospheres of newly discovered exoplanets found throughout the galaxy. The second is an optical interferometric array, an instrument that is the equivalent of the VLA but working at optical and infrared wavelengths—enabling astronomers to see details with a resolution of 100X that of the Hubble Space Telescope. Together these new instruments will help shape our understanding of astronomy.

Michelle Creech-Eakman received her PhD in Physics with a concentration in Astrophysics from the University of Denver in 1997. She worked at Caltech and the Jet Propulsion Lab on infrared instrumentation and interferometry, before joining the faculty at the New Mexico Institute of Mining and Technology (NM Tech) in 2003. She is the Principal Investigator on the New Mexico Tech Extrasolar Spectroscopic Survey Instrument (NESSI) and Project Scientist of the Magdalena Ridge Observatory Interferometer.

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

Centennial Lecture

The Story of National Parks and Monuments in New Mexico

Diane E. Souder,

Chief of Interpretation and Outreach Petroglyph National Monument, NPS

Thursday, August 23, 2012 7 PM - 8:30 PM

Learn about New Mexico's 13 National Parks and Monuments and explore their significant cultural and natural resources. Petroglyph National Monument, the newest National Park unit in New Mexico, protects a variety of cultural and natural resources including volcanoes, plants, mammals, reptiles, archeological sites, and an estimated 24,000 carved images. It is surrounded by an urban environment. Trace the past 100 years of New Mexico in the history and stories of the national park system units in our state.

Diane Souder has lived in Albuquerque since 1976 and has worked at Petroglyph National Monument since it was established in 1990, where she was the first and, for a year, the only employee. She has worked on monument planning issues such as roads, visitor use, land acquisition and drainage; and is currently concerned with public understanding of the significance of the monument's resources. She has an Urban Studies degree from Mount Holyoke College and a Masters of Urban Planning from the University of Michigan. Diane is involved with The Albuquerque Conservation Assn., the Public Lands Interpretive Assn.; and The Albuquerque Environmental Story.

Evening lectures are held at the New Mexico Museum of Natural History & Science 1801 Mountain Rd. NW.

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

Purchase in advance to guarantee your seats at 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

Centennial Lecture

Ice Age Vertebrates of New Mexico: 100 Years of Research and Exploration

Thursday, September 27, 2012

Gary Morgan

Curator of Vertebrate Paleontology New Mexico Museum of Natural History and Science

Camels, and mammoths, and horses... Join Gary Morgan, Curator of Ice Age Paleontology, as he introduces you to the world of Pleistocene New Mexico and some of the new finds from New Mexico that have changed our ideas about the Ice Age mega-fauna during the past 100 years.

Gary Morgan is a curator of vertebrate paleontology at the New Mexico Museum of Natural History and Science. His primary area of interest is fossil mammals from the younger half of the Cenozoic Era, about the last 35 million years of geologic time. His field and research program in New Mexico concentrates on faunal and biostratigraphic studies of Miocene, Pliocene, and Pleistocene vertebrate sites throughout the state. Ongoing projects in New Mexico include studies on Pliocene (2-5 million years old) vertebrates from the Rio Grande Valley south of Las Cruces in Dona Ana Count; extinct free-tailed bats and other vertebrate species from medial Pleistocene (200,000 years old) cave deposits in Slaughter Canyon Cave in Carlsbad Caverns National Park; horses and mammoths from a Pleistocene bone bed near Ouemado Lake in the Gila National Forest in Catron Count; and fossil vertebrates associated with Paleoindian artifacts from late Pleistocene deposits (11-12,000 years old) in Sandia Cave in the Sandia Mountains near Albuquerque. He has a life-long interest in Ice Age vertebrate faunas from North America, including New Mexico, Mexico, Florida, and the West Indian islands.

First Sundays

Sundays, August 5 and September 2 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.)

FREE Admission to the Sandia Mountain Natural History Center

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

Also open to all visitors, on First Sundays, is the Sandia Mountain Natural History Center (SMNHC), the Museum's off-site environmental education facility located in the Sandia Mountains. Attend a special natural history presentation and experience geocaching, the bird blind, self-guided hikes, picnicking, and solar telescope viewing.

SMNHC Presentations

August 5- Ice Age Vertebrates of the Sandias September 2 -TBA

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

Museum Tours

Guided Tours of the Museum Public Exhibits

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

Every Monday 1:30 - 2:30 PM

Limit 14 people ages 13 and up. **Free** (with Museum Admission)

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Questions: August Wainwright

email: <u>programs.NMMNHS@state.nm.us</u>

call: (505) 841-2861

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

Museum Collections Tours

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

Geoscience Tours

Saturday, September 15 • 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 Tours

Saturdays, August 18, 1:00-2:00 PM

Bioscience Collections Manager, Patricia Gegick, will conduct a tour of the Museum's biological collections, which include 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 Event

Teacher Open House Free September 26, 2012 5-8 PM

Annual Event for teachers of all grade levels from central New Mexico. The NMMNHS, the Albuquerque Museum, and Explora will all be open and free. In addition, 50 providers of low-cost or no-cost curriculum or classroom materials will be exhibiting for teachers.

NOTE: Volunteers are needed for this event... please sign up on the sheet in the Volunteer Lounge.

No registration required but there is <u>limited</u> <u>seating</u>. To guarantee your seat, register online, go

to www.NMnaturalhistory.org

Questions: August Wainwright

email: programs.NMMNHS@state.nm.us

call: (505) 841-2861

<u>Special Event -</u>

Mars Family Day Free

Sunday August 5, 2012

Celebrate the landing of the Curiosity lander (taking place at 11:30pm our time on August 5) and participate in our family day. Multiple activities, video of landing scenario, short talk by Mars scientist, Dr. Larry Crumpler.

NOTE: Volunteers are needed for this event, please sign up on the sheet in the Volunteer Lounge.

No registration required for more information, go to www.NMnaturalhistory.org

Questions: August Wainwright

email: programs.NMMNHS@state.nm.us

call: (505) 841-2861

Special Event

BioBlitz 2012

Free

Friday and Saturday, August 10-11

Explore the mountain ecosystem at the Sandia Mountain Natural History Center.

No registration required. For more information, go to www.NMnaturalhistory.org

Questions: August Wainwright

email: programs.NMMNHS@state.nm.us

call: (505) 841-2861

Special Exhibit

Celebrate New Mexico's 100 years of statehood with the New Mexico Museum of Natural History and Science

Dinosaur Century, a Centennial Exhibit

Important dinosaur discoveries have been made in New Mexico since the 1880s. Dinosaur fossils from New Mexico have pushed forward the frontiers of dinosaur science. 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 throughout the year to see what's new....

August 11, 2012 The Last Brontosaur September 15, 2012 Dinosaur Pretenders

Free (*Dinosaur Century* is included with Museum Admission)

No registration required. Questions: August Wainwright

email: programs.NMMNHS@state.nm.us

call: (505) 841-2861

Community Science Connections

Museums, Libraries, and Families: Working in partnership to bring fun-filled educational events to the community!

CSC is funded by a grant from the Institute of Museum and Library Services. Look for CSC events at http://libguides.cabq.gov/CSC >.

Albuquerque Bernalillo County Library's Summer Reading Program, June 1 - July 20, 2012. For more info www.cabg.gov/library or 311.

CSC Programs are funded by the *Institute of Museum* and *Library Services (IMLS)* and managed by the New Mexico Museum of Natural History and Science.

Solar Sundays

August 12 and September 9, 2012 Sundays: 12:00 Noon-3:00 PM

Solar Sunday is the place to be! This great family event is becoming more popular every month. Don't miss out. Telescopes, sun, and bilingual, 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

August 2012

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
				Centennial		
				Lecture Series		
5	6	7	8	9	10	11
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First Sunday	Monday Tour				BioBlitz at SMNHC	Dino Century
Mars Family	Docent				Sivil VI 10	BioBlitz at
Day	Training					SMNHC
	Begins					
12	13	14	15	16	17	18
Solar Sunday	Monday Tour					Bioscience
						Collections
						Tour
19	20	21	22	23	24	25
	Monday Tour			Centennial		
				Lecture Series		
26	27	00	29	20	01	
26		28	29	30	31	
	Monday Tour					

September 2012

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
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		A			7	
2 First Sunday		4	5	6	7	8
9	10	11	12	13	14	15
Solar Sunday	Monday Tour					Dino Century Geoscience Collections Tour
16	17 Monday Tour	18	19	20	21	22
23	24 Monday Tour		Teacher Open House		28	29
30						1



BioBlitz 2012!Friday, August 10, 2012, 5 - 9 PM,
Saturday, August 11, 2012, 7AM - 4 PM

Join the Sandia Mountain Natural History Center (SMNHC) and the NM Museum of Natural History & Science for BioBlitz 2012! BioBlitz presents a unique opportunity for citizens and scientists to come together for a 24-hour survey of all living things that call the SMNHC home.

We invite you to join scientific experts from a variety of fields and organizations (including UNM, NM Museum of Natural History & Science, NM State Forestry, NM Department of Game & Fish, The Nature Conservancy, and NM State Parks) 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! There are two new events for this year: tabling for environmental and natural resource organizations and a family activity area. The entire staff of the SMNHC is excited about the opportunity to bring together scientific experts and citizens for BioBlitz and share this unique ecosystem with the public!

The main goals of BioBlitz 2012 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.

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 < louise@goingourway.net with a copy to Chris Sanchez 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.