We assembled ourselves at the American International Rattlesnake Museum in Old Town Albuquerque, New Mexico. Out-going-going-going-and-gone NMHS President and now veteran Meeting-Runner Scott Bulgrin called our Meeting to order and welcomed 23 adult and 1 pre-teen herpers at 7:17 PM.

Scott announced our agenda for this evening: we will have the Presentation first, followed by a Break and then our Business Meeting.

PRESENTATION "Project Oso - a wildlife census using camera traps"

Scott introduced our Speaker Dylan Frentzel who works at our Albuquerque BioPark and in addition helps with the Sandia Bear Collaborative Program.

Dylan said that he has worked at our Albuquerque BioPark for the past ten years, the first five with reptiles, the last five with birds. In 2016 the BioPark kicked off as a conservation project, a conservation committee, which has become a Department. The pilot project is titled "Project Oso - a wildlife census using camera traps" and utilizes camera traps aka game cameras and trail cameras at locations in the field which constantly survey and produce much data for the minimal number of man-hours involved in setting them out in the field for long periods of time.

Dylan compared this to the greater cost for gasoline for driving to the same locations many times and for paying hourly wages of human observers. The initial project cost goes to purchase cameras and accessories. The camera traps gather data about secretive and hard to survey for species such as Black Bears.

Why survey the Sandia Mountains? Because of their island geography. They are islands of green with surface water and are surrounded by seas of dry desert and grassland. New Mexico itself has the second most bio diversity of all states, many geologic features and many biomes from tundra to Chihuahua Desert. Moving up from Sandia’s foothills to the boreal forests on its peak is comparable to going from these same foothills northward to Canada’s boreal forests. Looking ahead, Sandia’s boreal forest might disappear due to global warming.

Sandia also is surrounded by a sea of humanity and separated by I-40 from her sister fault-block mountain to the south Manzano.

Sandia Mountain affords short-distance access from Albuquerque for field work with Black Bears to find out how they use the landscape and ecosystem. The Project shares its findings and educates the public. Dylan showed slides of Tiger Salamander, Leopard Frogs, Short-horned Lizard, Milksnake, Smooth Greensnake, Western Diamondback Rattlesnake (in the Manzanos), Black-tailed Rattlesnake and Prairie Rattlesnake. Dylan said that camera traps could be set by herpers along a rodent trail and at a rattlesnake den.

Project Oso works with the Sandia Mountain Bear Collaborative, a local government and non-government organization, comprised of our New Mexico Department of Game and Fish, United States Forest Service, Bernalillo County Open Space, City of Albuquerque Open Space, Pathways – Wildlife Corridors of New Mexico, ABQ BioPark, Bosque School Bosque Environmental Monitoring Program, Sandia Mountain Natural History Center, Pueblo of Sandia, and Friends of the Sandia Mountains. The Collaborative helps manage bears and people in the Sandias.

Dylan told us that the Oso Project uses Moultrie model 880i ($170) and 1100i ($400) trail cameras in metal security boxes ($35) secured with padlocks and python cables. Written on top
of the boxes are notices: “this is wildlife research in progress, we are not interested in capturing pictures of people, and images are electronically transmitted.” Cameras are set up 9 yards from water and at a height of 22”-32” to target Black Bears and Mountain Lions. For photographing squamata, Dylan suggested positioning the camera lower and, for surer results, positioning it at a box at the middle of a drift fence.

Project Oso produced an archive of videos and stills that recorded occurrences of wildlife: for example, 14 of Mountain Lion, 6 of Black Bear and many of Merriam's Turkey and Mule Deer. In all, more than 20 species came to camera traps including: Red Fox, Gray Fox, (flying!) Abert's Squirrel, Red-shafted Flicker, Rocky Mountain Pygmy Owl, Wood Rat, juvenile Great Plains Skink, Fence Post Lizard, Sharp-shinned Hawk, family of Bobcats, Spotted Skunk and Ring-tailed Cat,

Dylan said that reliable reports dating back to 1950s and earlier are evidence that Red Fox occur on the eastern slope of Sandia Mountain from Cedar Crest to the summit of the mountain. The Red Fox recorded in Project Oso came to a camera trap on the western slope of the mountain.

Dylan added that fossil Red Foxes and extinct Pleistocene fauna were found in a cave east of Isleta Pueblo in Bernalillo County. The fox might have entered the cave during a wet period. In the present-day U.S. there might be two subspecies of Red Fox: one native and the other introduced from Europe for hunting.

Dylan said that there were no Merriam's Turkeys in 2007 on Sandia Mountain. Soon thereafter the National Turkey Federation and our New Mexico Department of Game and Fish released turkeys on the mountain and these are reproducing.

Project Oso adopted two wildlife drinkers with tanks, one (which has been vandalized) on Cedro Peak and the other on top of the mountain.

Our ABQ BioPark Conservation Department and Research Committee has agreed to fund Project Oso through 2017. The Project will purchase 25 trail cameras which will be strategically located on Sandia Mountain over a 300 square-kilometer grid.

Rick Winslow of our New Mexico Department of Game & Fish referred Dylan to Dr. Travis Pritty at Sandia Laboratories in Albuquerque who already has found that the minimum home range of a Mountain Lion in central New Mexico is 300 square kilometers.

Dylan reported that Lynx from Colorado have reached Sandoval County in New Mexico and Jaguar from Mexico come into New Mexico's Boot Heel and Borderlands.

Dylan said that trail cameras have been set up within the BioPark to study behaviors of its captive animals. The Reconyx camera ($400) is a suitable choice for this monitoring.

ANNOUNCEMENT

One of our guests asked to make an announcement. Ms Mikal Deeze, wild bird rehabilitator of non-profit ON A WING AND A PRAYER, told us that the Central New Mexico Audubon Society is bringing in Dr. Peter Marra, Migratory Bird Specialist at the Smithsonian Institution, to talk about the world-wide devastating depredation of birds by feral domestic cats. Marra wrote the book CAT WARS and will be speaking at our UNM Continuing Education building
conference center on University Boulevard on April 6 at 6:30. Mikal reported that the City of Albuquerque has a trap, neuter and release program in which cats are being fed in colonies and remaining as free-roaming predators of wildlife. The U.S. Department of Interior Fish and Wildlife Service opposes this program but has been ignored by our City.

BREAKTIME

We helped ourselves to liquid and solid sweets while Dylan switched to using his laptop computer to show videos taken with Project Oso camera traps. Scott said that camera traps on Sandia Pueblo have recorded bears travelling within arroyos to reach the bosque along the Rio Grande.

Thank you very much, Dylan, for sharing your fine narrative and slides with us this evening.

BUSINESS MEETING
Scott asked Secretary Cosmos to read the Minutes of our February 3 meeting. These were approved as read by members present.
Scott asked Treasurer Letitia Peirce to read the Treasurer’s Report. She reported that the balance in our NMHS checking account of $4,261.17 as of January 12 had been reduced by 7 expenditures which resulted in a balance of $3,581.67 as of March 2. Letitia said that she will cut a check of $20 to Sparky and Carolyn Newell for travel expenses. The Treasurer’s Report was approved by members present.

OLD BUSINESS
Scott said that he had applied at the Governor’s Office (Malcomb Montoya) at the Pueblo of Sandia for the access permit which allows us to continue our herp survey on Pueblo land.
Scott said that he had talked to Heather at our Rio Grande Nature Center. She asked for a fresh copy of the NMHS pamphlet about reptiles and amphibians of the Center which Scott sent to her as an electronic copy. Heather said that the Center does plan to trap and remove the Soft-shell and Snapping turtles to the nearby Rio Grande. She added that any Red-eared Slider turtles trapped and removed cannot be euthanized. Quick-thinking herpers in our audience this evening suggested taking the trapped Red-eared Sliders and dumping them at the front door of the president of the Rio Grande Turtle and Tortoise Club and/or just across the state line into a deserving river of Texas. Scott said that he will consult with Leland Peirce of New Mexico Department of Game and Fish about carrying out this project with more certain and state-sanctioned success.
Scott said that a woman telephoned him a week ago and said she wanted to part with her Red-eared Slider and tank.

NEW BUSINESS
Scott said that the City of Albuquerque East Side Shelter on Lomas Boulevard, NE in Albuquerque has a feisty albino Cornsnake up for adoption: 10 years old, 3’-4’ long, 1.5” girth.

Tom Eichhorst announced that Evelyn Candelaria passed away in January four years after being diagnosed with cancer. Following Evelyn’s wishes no celebration of life, memorial service or funeral was conducted. Evelyn had been a member of NMHS since the ’70s. Carolyn Newell said that she will send a sympathy card to Evelyn’s daughter Nanna and family.

OUTREACH
March 11. Josh Emms will put on a program for the Boy Scout Outdoor Leadership training session.
April 19. Scott will show herps at Wilson Middle School.

April 29. Ted Brown told us about an upcoming special day for kids at the Bosque del Apache National Wildlife Refuge and NMHS will be there. Friends of the Refuge invite Boys and Girls ages 7 - 13 (with an adult chaperone) to participate in the 2017 Field Day Event on Saturday April 29 from 8:30 am to 1:30 pm. Registration ends April 15 and the Event is limited to 48 kids. Participants will be expected to stay the entire time, and walk about 1.5 miles during the Event. Stations of exploration include Ancient Lifeways, Archery, Photography, and Animal Evidence. Ted said that Tom has volunteered to show his Bullsnakes and kingsnakes. Ted and Sue will show lizards. Jaci Fischer offered to sell NMHS T-shirts. Set-up time will be 11 at AM.

April 29. Jerry will show his herps at the Annual Family Fun Day in Daniel Fernandez Park in Los Lunas from noon to 4 PM.

Tom popped in and thanked our Secretary for compiling a calendar of upcoming NMHS outreach events and emailing it to members.

July 19-22. Lori King said that preparations for the 40th Annual International Herpetological Symposium, Charlie Painter BioBlitz and The Biology of Snakes are going full-tilt at the Chiricahua Desert Museum at Rodeo, New Mexico. The keynote speaker might be Andy Holycross, Professor at Mesa Community College/University of Arizona who worked with Charlie Painter on Crotalus willardii.

[ Keynote Speaker will be Wade Sherbrooke, Research Associate at the American Museum of Natural History, author of HORNED LIZARDS OF NORTH AMERICA, University of California Press 2002. Wade will speak about “Horned Lizards: Report from a Biological Scout”]

[Banquet Speaker will be Mark O'Shea. He was Chairman of the International Herpetological Society (IHS) from 1983–86 and its President from 2003–06. Since 1980, O'Shea has conducted herpetological fieldwork in over 30 countries on six continents. He is an author, filmmaker and artist]

May 29. NMHS Memorial Day Field Trip. Josh will take suggestions about destinations. Jemez? Ojito Wilderness? Is camping allowed in Ojito?

GUESTS

Scott introduced guests Matt and 8-year old daughter Jasmine Smith. She’s into reading about snakes and would like to have one.

ADJOURNED

MISSED OUTREACH: The annual New Mexico Outdoors Adventures Hunting and Fishing Show. February 17-19 in the Manuel Lujan Building at Expo New Mexico on the state fairgrounds in Albuquerque. The show opened to the public from 1 to 8 p.m. Friday, 9 a.m. to 5 p.m. Saturday, and 10 a.m. to 4 p.m. Sunday.

SECRETARY’S RECENT OUTREACH WAS TO

Esther I. Nelson
Wildlife Biologist Regional Reptile and Amphibian Coordinator Forest Service Cibola National Forest Sandia and Mountainair Ranger Districts p: 505-281-3304 ext. 5108 f: 505-281-1176 einelson@fs.fed.us 11776 Highway 337 Tijeras, NM 87059 http://www.fs.fed.us/

Thank you very much Bob and Lorraine Myers for hosting us in your American International Rattlesnake Museum in Old Town Albuquerque, New Mexico.
NMHS OFFICERS

PRESIDENT

VICE-PRESIDENT

SECRETARY               Cosmos

TREASURER               Letitia Peirce

NEWSLETTER EDITOR

PARLIAMENTARIAN   William Degenhardt

REALITY CHECK (all articles below are at www.theguardian.com/environment/)

Northern hemisphere sees in early spring due to global warming
Arctic ice falls to record winter low after polar 'heatwaves'
Climate change: ‘human fingerprint’ found on global extreme weather
Trump and climate chaos: a letter to my daughter
Why I decided to write a novel about catastrophic climate change for teenagers | James Bradley