

## Meeting Minutes

Volume 53 Number 4

New Mexico Herpetological Society (NMHS)

April 2, 2015

Convened at American International Rattlesnake Museum in Old Town Albuquerque

Josh Emms presided over our meeting, welcomed 18 guests, including Lorraine Myer in a wheel chair, a child and toddler herpers, and our presenter of the evening. It was decided to put off the business part of the meeting til the end.

PRESENTATION (7:07) about the Gila Monster by Jerry Tuttle.

Jerry told us that he had begun the necessary permitting process with New Mexico Department of Game and Fish eight years ago in order to be allowed to keep a Gila Monster in his possession. He noted the contribution of the Gila Monster to the treatment of Type Two diabetes in humans. A synthetic version of a hormone found in the saliva of the lizard has biological properties similar to human glucagon-like peptide and is marketed as Byetta.

Called "America's Legendary Lizard," *Heloderma suspectum* over the years has been credited with powers for healing as well as powers for causing sickness in humans. It has been portrayed in various ways in the films TREASURE OF THE SIERRA MADRE, RANGO, GILA MONSTER and HANK.

The generic epithet of *Heloderma* refers to the reptile's studded skin, the specific *suspectum* to the suspicion in 1865 that the lizard might be poisonous.

Jerry told us that he has had his *suspectum* named Picasso since it was a week old. It does not display aggressive behavior. It gapes to show its discontent. It benefits from captivity enrichment, has its toenails trimmed, and porpoises through an Eco-Earth plus moss layer in its VisionCage. In the wild, *H. suspectum* spends little (<10%) time out of its burrow above ground. Diurnal and nocturnal, the species is preyed on by coyotes, hawks, and California Kingsnakes and preys upon bird eggs and young, rodents and rabbits. Several Picassos moving along together would be called a "Rumble" of Gila Monsters.

The lizard's venom is principally a mild neurotoxin similar in toxicity to venom of the Coral Snake and would cause respiratory failure if delivered in sufficient volume. There have been no reports in the last hundred years of a human death due to *H. suspectum* envenomation. Albuquerque herper Mike Williamson suffered his "bite" and spent a week in the hospital.

Thank you very much, Jerry, for all of the information and experience and enthusiasm you share with us!

BREAK TIME (8:15)

Sue and Ted Brown brought down a healthy carrot cake from Albertson's in Santa Fe for this evening's

celebration of Ted's and Jaci Fischer's and Scott Bulgrin's and Bill Degenhardt's birthdays.

#### OLD BUSINESS (8:33)

Josh presided and asked Secretary Cosmos for a reading of the Minutes of our March 5, 2015 meeting. This was accepted with few corrections and additions and approved by members present. Josh asked Letitia Peirce to read the Treasurer's Report and she stated that the balance in the NMHS checking account is \$3122.28. Members accepted her Report.

It was announced that USARK (United States Association of Reptile Keepers) petitioned our U.S Fish and Wildlife Service for an extension before imposing Administrative Act 249 of the Lacey Act which bans the importation of certain large constrictor snakes into the U.S.....but the Service said no.

#### NEW BUSINESS

New Mexico Tech of Socorro will put on a program about chytrid fungus "Save The Frogs" in the atrium of our New Mexico Museum of Natural History and Science on April 16<sup>th</sup>.

New Mexico Outdoor Expo is coming up on August 15-16<sup>th</sup> at the Albuquerque Shooting Park. 4500 guests attended in 2014. No talks are planned this year because they did not attract crowds and there will not be a Youth Day.

NMHS will be setting 36 pitfall traps on Sandia Pueblo on April 25<sup>th</sup> after meeting at Scott Bulgrin's office at 9 AM. Expect to be out in the heat and digging in rocky, gravelly granite ground in the oak-grass community at the western base of the Rincon Ridge. On the bajada, four pitfall traps from the 2014 survey season were left in the ground and monitored once a week since November.

NMHS will be setting pitfall traps on Valle de Oro National Wildlife Refuge in south Albuquerque on the following weekend, that is, May 2<sup>nd</sup> or 3<sup>rd</sup>.

On April 30<sup>th</sup> Ted Brown and Jerry Tuttle will bring their herps to Los Golandrinas in south Santa Fe for BEMP day mid-school students who will be coming by every 15 minutes in groups of 15 to 25.

On May 1st Tom Eichhorst will be at the Bosque School in northwest Albuquerque for BEMP senior high school day. The kids will have as monitors post-graduate biology students. Government agencies will be represented and lunch will be free.

Josh reminded us that our NMHS Memorial Day Field Trip is coming up on May 23, 24, 25 and that we have to decide on a destination. There was timely discussion about wanting to have toilet facilities. Fortunately, a veteran of NMHS field trips and a woman flat out said that all that's needed is a shovel and an arroyo. Okay! If the destination's 1) Ute Lake State Park, there are motels in Logan and Tucumcari. And it's 175 miles to Tucumcari. If it's 2) Nara Visa, spelled with a long i, maybe the school will be available for camping with no showers but the opportunity to just fall in the river at bath time. How about 3) Queen near Carlsbad? Or 4) the Gila, especially Upper Gallinas Canyon after the forest fire? Or 5) the Jemez, the area accessed through the Gilman Tunnels, with prospects of finding

gopher, rat, green, atrox and garter snakes? On the way back we could explore the Ojito Wilderness Area. Or 6), Chloride with its tree frogs?

Ted said that he will call Nara Visa and find out if we can camp there. Josh concluded that we'll have to vote for the destination we prefer by email.

Our meeting adjourned at 9:14 PM.

Many thanks to Lorraine and Bob Myer for hosting us in their remarkable museum!

Minutes submitted by Secretary Cosmos

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More about the saliva

Exenatide is a synthetic version of exendin-4, a [hormone](#) found in the saliva of the [Gila monster](#) that was first isolated by [John Eng MD](#) in 1992 while working at the Veterans Administration Medical Center in the Bronx, New York. It displays biological properties similar to human [glucagon-like peptide-1](#) (GLP-1), a regulator of [glucose](#) metabolism and [insulin](#) secretion. According to the package insert, exenatide enhances glucose-dependent insulin secretion by the pancreatic beta-cell, suppresses inappropriately elevated glucagon secretion, and slows gastric emptying, although the mechanism of action is still under study.

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#### REALITY CHECK

James Butler, director of the global monitoring division at the US National Oceanic and Atmospheric Administration.

Global average concentration of carbon dioxide in the atmosphere reached a new record high in March 2015, soaring to surpass 400 parts per million, scientists revealed on Wednesday.

And scientific evidence suggests that these levels have been unseen for the entire history of human civilization as we know it.

Babylonian, Chinese and western civilizations were able to develop during a time of climate stability marked by carbon dioxide concentration levels of 270 to 280 parts per million, Butler said.

With the dawn of the industrial age, carbon dioxide concentration levels in the atmosphere began to climb, going from 280 parts per million in 1800 to 290 parts per million in 1900. In the last century alone, the rise in concentration is one that would normally be expected to happen over the course of 10,000 or 20,000 years, Butler said – definitely not 100.

This March, the International Energy Agency reported that greenhouse gas emissions had plateaued over the last two years, stopping an upward trend.

Emissions may have stagnated, but the degree of carbon dioxide concentration in the atmosphere – a direct cause for global warming – is continuing to rise.

“Once you get carbon dioxide up in the atmosphere, it’s very difficult to make it go away,”  
Butler said.