



### ***Mike Cardwell***

#### **Mohave “Green” Rattlesnake – Fact or Fiction?**

Mike Cardwell has been living around Mohave Rattlesnakes and studying them most of his life. Using radiotelemetry, he completed the first long-term field study of this notorious rattlesnake, known for its potent but highly variable venom. His first field study involved a population that produces a powerful neurotoxin without the tissue-destroying enzymes common in most other rattlesnake venoms. He is currently establishing a new study area in Ironwood Forest National Monument where Mohave Rattlesnakes produce tissue-destroying venom without the neurotoxin – hoping to find clues to why the different venom types exist.

Mike has an MS degree in ecology, evolution and conservation, earned with a thesis on behavioral changes in Mohave Rattlesnakes during drought. He authored the Mohave Rattlesnake chapter for the two-volume 2016 book *Rattlesnakes of Arizona* and served on the expert panel that revised snakebite treatment guidelines for the United States and Canada in 2015. He has authored or coauthored numerous articles for scientific and medical books and journals, as well as for non-technical publications. He lives in Tucson with his wife, Denise, and enjoys an appointment as Adjunct Research Associate at San Diego State University.



### ***Bill Peachey***

Bill was born with the “Desert Rat” gene fully operationa and then was blessed to have been able to grow up in the post-WWII Phoenix area when the Sonoran Desert could still be experienced there close at hand and in every direction. College found him at the U of A in the mid-1960s where he fell quite willingly into the “black hole” of cave science. During the 1970s he took up geology in the form of exploration in the western hemisphere for metals, uranium, oil, geothermal steam, and

geological engineering. From a crew member I eventually became( with a return to the U of A in Geology) a “Consulting Geologist”. By the 1990s he had become involved in studies of Arizonas two nectar-feeding bats – both of whom feed upon Saguaro flowers. During that time he became the “science guy” for Colossal Cave Mt. Park. Also, his long term work on the natural resources of the Cienega Creek basin resulted in a request by the U.S. Congress for his information on the area for its deliberations concerning its designation of the then pending Empire Cienega Nat. Conservation Area. Along with pack rat midden-researchers, the Van Devenders, we reported, from the analysis of the very first fossil middens found in the San Pedro River Valley that he had discovered, to the BLM about the last 2,000 years of plant history there in “The Late Holocene Vegetation of the San Pedro River Valley, southeastern Arizona”. This report contains the easternmost paleo-record of the Saguaro in Arizona and the only fossil record of the “Needle spine Cactus” Starting in the late 1990s as part of an Arizona Game & Fish Dept. grant on the Mexican Long-tongued Bat( *Choernonycteris Mexicana*), he began his ongoing research concerning the Saguaro Cactus, one of this bat’s major food sources.

Currently, he is engaged in a multitude of Saguaro projects. With co-researchers they are tendering for publication a major paper on the paleofauna of Pyeatt Cave in Cochise County, AZ and are circulating for publication a research paper on the Pallid Bat and its arthropod prey species. The very tip of the Saguaro information “iceberg” of his findings concerning this cactus has just been published by the T.C.S.S. as a “factoid” in a picture caption in the new “Field Guide to Cacti & other Succulents of Arizona”.

### *Dr. Cecil Schwalbe*

Dr. Cecil Schwalbe is an ecologist emeritus with the U.S. Geological Survey and adjunct faculty member at the University of Arizona. He has been harassing Arizona’s amphibians and reptiles for over 40 years. Cecil was the first state herpetologist for Arizona in the late 1980s, then left the Arizona Game and Fish Department in 1990 to establish a conservation-oriented research program on amphibians and reptiles at UA. He continues to serve on graduate student committees and gives invited lectures in a number of UA classes. With his wife, Carol, he is currently co-teaching classes in the science and environmental journalism program that she started in the School of Journalism.



Animals studied by Cecil and his students include the Sonoran desert tortoise, many species of frogs and toads (especially those rare or in decline), rattle and other snakes, lizards on desert dunes and mountaintops, and even sea turtles. He did spend two hours in a Texas City jail.

### *Joe Sheehy*

Joe graduated from the University of Arizona in 1970 with a degree in Wildlife Biology. Joe worked for Tucson Electric Power for 37 years in many capacities and retired in 2010.

During his career at TEP, Joe started their Raptor Protection Program. He worked closely with the University of Arizona and Dr. Mannon's graduate students who were doing their master's degree work with Harris Hawks.

In developing raptor safe construction standards Joe worked closely with the Standards Engineering Department to implement construction practices that prevented raptor electrocutions. That program is still in place today and growing.



Joe is a past resident of the Arizona Desert Bighorn Sheep Society and has been involved in their conservation projects ever since he went on his first waterhole development in 1970. Joe continues to be active in the Society in many capacities including representing Arizona in national chapter & affiliate's meetings and Desert Bighorn Councils.

While working at TEP, Joe used their water tanker to haul water to numerous Arizona Game and Fish Catchments. This was all done on Joe's own time, after hours. One summer Joe hauled 45,000 gallons of water for the benefit of wildlife.

Joe probably hauled over 100,000 gallons of water to wildlife catchments in southern Arizona.

Joe spent every free moment of time in the Catalina's in the 70's and 80's observing and photographing the bighorn sheep.

It was very sad to see them disappear but Joe was very excited to be a part of the Santa Catalina Bighorn Reintroduction Committee that would decide the details on how the herd would be managed after the first release and subsequent releases.

The first herd was released in 2013. To this date, Joe along with others continue to monitor the remaining collared bighorn sheep on a daily basis.

Joe's mother, who is 90 years old and the mother of 6 boys, reflects that her sons all had pictures of their girlfriends on their dressers. Except for Joe. He had pictures of bighorn sheep.

