

## **Earth Science Achievement Award citation for Dr. Greg Mack**

*Presented April 13, 2018 by:*

**Dr. Nelia Dunbar, NMBGMR Director and State Geologist**  
*(At the 2018 New Mexico Geological Society Spring Meeting, Macey Center, Socorro, NM)*

I am honored and pleased to be presenting the 2018 Earth Science Achievement Award in Research and Education to Greg Mack.

Greg is a true field geologist, and has immersed himself in understanding the sedimentary and structural geology of New Mexico since he arrived at New Mexico State University in 1980. During his career, he has sought, among other things, to develop a better understanding of the evolution of the ancestral and historical Rio Grande, which runs the length of the state. However, beyond Greg's body of work itself, through his interactions with colleagues, and rigorous education of generations of New Mexico geoscience students, he has created a legacy that will go forward for many years to come.

Greg hails originally from Indiana, where he earned an undergraduate degree in geology at Ball State University in 1973, and then MS and PhD degrees from Indiana University in 1975 and 1977, respectively, at Indiana University. He then spent a few years at Georgia State University. In 1980, he moved to New Mexico, and has been here ever since.

Greg has worked on rocks of a wide range of ages, from the Cambro-Ordovician Bliss sandstone to the much younger ancestral Rio Grande sediments. His research has been largely focused in New Mexico, but he has also worked in places as far away as Greece and Brazil. His work is typically based of careful and thorough field observations, one of Greg's great strengths. His research focuses on sedimentation, stratigraphy and tectonics, but also incorporates paleontology, isotope geochemistry and paleoclimatology. His projects are typically local to regional in scope, but the conclusions that he reaches are applicable to similar geological problems in many other parts of the world. For instance, his detailed work on axial-fluvial deposits in the Rio Grande rift lead to two summary papers published in the "Encyclopedia of Sediments and Sedimentary Rocks". Greg has over 120 publications, many in national or international, peer-reviewed journals. One way to assess the reach of a scientist's body

of work is to examine how the papers are cited. Greg's papers have been cited thousands of times, with a number of individual papers having been cited between 50 and 100 times each. Greg has one paper, "Classification of Paleosols", published in GSA Bulletin which alone, has been cited 495 times, a testimony to the reach of his research.

This award is geared toward not just research, but also education, and Greg excels in this arena as well. He taught geology at NMSU for 32 years, until his retirement in 2012, and continues to work with NMSU students, sharing his immense knowledge of field geology around Las Cruces. He has advised 35 graduate students, and has taught countless undergrads, always emphasizing the importance of field observations. The graduate students who have come to Tech after being undergraduates at NMSU come notably well-grounded in field methods, thanks, in part, to their instruction by "Mack" as he seems to have been known in the NMSU student crowd.

Finally, given the presentation of this award at a New Mexico Geological Society meeting, I have to mention Greg's long-term involvement in the society. Greg has been a long-time member of the society, and was awarded honorary lifetime membership in 2009, after serving for 5 years on the NMGS executive committee. He also edited, and contributed to, an NMGS special publication titled "Geology of New Mexico", which is a remarkably thorough and detailed treatise on all aspects of geology in New Mexico. It has been one of the society's all time best-selling publications. He also chaired the notably complex and time-consuming, but geologically fantastic NMGS fall field conferences in 1988, 1998, and 2008, all around the Las Cruces area, and is chairing again in 2018. Greg has a great philosophy about these field trips, which is "MORE ROCKS, LESS TALK". I'm looking forward to his 2018 trip, and am hoping for another one in 2028!

Greg is an enthusiastic and engaging colleague, and I always look forward to seeing him at NMGS events, and hearing about his current projects, and ideas about geology.

For all of these past and ongoing achievements, it is our privilege to present Greg Mack with the 2018 Earth Science Achievement Award in Research and Education, commemorate by the plaque, made of a polished slab of Belen travertine. Congratulations, Greg.