



Post Fellowship Reporting - Project Summary

Report Title: A Road Trip Through America's Parks: A Study Of Various Geologic Landforms **Name:** Ann Knight

Other Team Members:

Program: Greater Houston Area Program

Trip Dates: 11/30/-0001 - 11/30/-0001 **Location Visited:** Colorado, New Mexico, & Texas

Post Fellowship Reporting Template: PFR Template 02

Project Summary: Go outside and look around. The surrounding physical landforms that you see are part of our everyday lives and activities. Often, we take these works of nature for granted, never knowing or fully appreciating their beauty, how they formed or why they are even there in the first place. Our school is located on flat, grassy, coastal prairie lands. This terrain is typical of what is found in most of our community. When teaching the concepts of weathering, erosion and various geographical features to elementary students, I notice that most students don't have rich experiences with various physical landforms.

As an elementary science teacher, my method of teaching requires a hands-on approach. My philosophy is that children learn best by doing. In reviewing state testing data, I noted that students consistently struggle with the earth sciences. In particular, students do not have a thorough understanding of landforms and soils.

Armed with these facts, I knew my true mission. My goal was simple: visit, explore, and document various physical landforms so that I could create activity based lessons that teach weathering, erosion, and landforms. What better place to start than in my own backyard! Determined to discover how and why our landscape changes so dramatically within an 800 mile radius, I ventured out this summer and traveled over 3,000 miles in my car as I toured the states of Texas, New Mexico, and Colorado. Along the way, I visited several famous natural landforms such as San Solomon Springs, Carlsbad Caverns, the Chihuahuan Desert, Bandelier National Monument, White Sands National Monument, the red rock formations of the Garden of the Gods, Pikes Peak, the Royal Gorge and Capulin Volcano National Monument. This incredible road trip provided me the time and resources to collect invaluable data necessary for the development of hands-on lessons relating to weathering, erosion and the identification of various landforms.

Career Impact: This amazing summer experience renewed my passion and reverent respect for nature. I realized the significance or perhaps the insignificance of a human lifetime. The numerous interpretive tours and literature inspired me to pursue graduate classes in geology. Furthermore, this journey challenged me to design lessons that simplify the complexities of nature's designs. Through my travel experiences, I witnessed the interplay between man and nature. Mostly, this journey inspired me to instill in my students an urgent sense of stewardship for the earth.

Classroom/Community Impact: During my travels, I was fortunate to speak with several park rangers and museum docents who helped me understand and relate complicated geologic processes in a simple, student friendly format. This tri-state travel experience allowed me the resources to design hands-on lessons that explore the concepts of weathering, erosion and various landforms. I have produced an interactive student slide show that reviews diverse examples of weathering and erosion. Furthermore, I created a working classroom model of Mount Capulin, a dormant cinder volcano. Numerous kid friendly books and artifacts for student use were incorporated into this unit of study.

Open Response: In addition to the hands-on weathering and erosion lessons that will be integrated into this unit of study, I have plans to introduce a 'living landform museum' at my school. Teams of students will select one of our country's unique landforms and conduct research using the many artifacts purchased during my travels. Then students will construct a three dimensional model of their selected landform. We will invite different grade levels to 'tour' our museum and share in our new knowledge. I plan to enroll in graduate level geology and geography classes to enhance my understanding of this topic of study. Just like the earth's landforms, my ideas are dynamic and constantly changing, be it ever so slowly. I know that this particular unit of study will take several seasons to mature.

Quote: In recalling their elementary years, I want my students to remember their rich learning experiences and that 'how' they learned was just as important as 'what' they learned.

Photos:



The Royal Gorge with Bridge in Distance



Garden of the Gods, Colorado-Approaching Rainstorm



Pikes Peak Summit with Snow in June!



Interior of Carlsbad Caverns



Pikes Peak Cog Train



Mount Capulin-A Cinder Volcano



Tree Growing in Igneous Rock at Mount Capulin National Monument



White Sands National Monument