

David Price Rumbelow, M.S. Thesis Candidate



My name is David Price Rumbelow. I am from Van, a small town in east Texas. I moved to Alpine Texas in 2009 to attend Sul Ross State University. As an undergraduate my major was Biology and my minor was Natural Resource Management. In my junior year I was accepted into the McNair Scholars Program where I conducted a survey of Mexican spotted owls, locating them on The Nature Conservancy's Davis Mountains Preserve. In my senior year I did a second McNair project, this time assisting the US Fish and Wildlife Service in their 2012 peregrine falcon monitoring project in Big Bend National Park. After graduating I volunteered with the wildlife biologist at Big Bend National Park for three months. I was then accepted into the Master's program in Range and Wildlife Management researching human and mountain lion interaction in the Chisos Mountains of Big Bend National Park. Additionally, as a technician for Borderlands Research Institute, I am assisting with

the ongoing mountain lion research on the Davis Mountains Preserve.

Thesis Project: Human and Puma: Use and Interaction in the Chisos Mountains, Big Bend National Park

Puma (*Puma concolor*) spark apprehension, curiosity, and fascination in the minds of the people who coexist with them. Most people never will see a puma because of their nocturnal habits and elusive nature. One of the few places where someone can have a chance to see a puma in the wild is Big Bend National Park (BIBE). The Chisos Basin developed area in BIBE is an example of human development in puma habitat. Puma occur throughout BIBE but the Chisos Mountain Zone (CMZ) provides the highest likelihood of a human – puma encounter. The purpose of this project is to study puma movement, habitat selection, and prey selection along with human use patterns in the CMZ of BIBE. To this end puma in and around the CMZ will be captured using trained hounds and live traps, sedated with a Ketamine (100mg/ml) - Medetomidine (10mg/ml) combination i.m., and fitted with satellite linked G.P.S. transmitting collars. Data gathered will be used to show how human use affects puma habits and determine spatially and temporally where an encounter is most likely to occur.

