

## Karlee Cork, M.S. Thesis Candidate

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I am Karlee Cork and I grew up in a small town in northern Nevada. The rugged countryside paired with my father's love of birding, camping and hiking sparked my love of natural sciences. I earned my bachelor's degree in wildlife ecology and conservation from the University of Nevada, Reno in the winter of 2012. Since then I have had the privilege to be a part of several research projects working with upland game birds, grassland song birds, and raptors. The main focus of my research interests lie in the ecology of avian species, especially in regards to anthropogenic influence. I will be researching Montezuma Quail Ecology under the advisement of Dr. Ryan Luna.

### **Thesis Project: Spatial ecology and habitat selection of Montezuma Quail in the Capitan Mountains of New Mexico**

Montezuma quail (*Cyrtonyx montezumae*) are some of the most understudied quail in North America with few studies dedicated to them. This is most likely due to the fact that contemporary capture methods for quail have not been effective. Montezuma Quail occur in three states in the US, and harvest is allowed in two, which makes gaining dependable knowledge very important. We have tested several novel capture methods to determine which is the most reliable to facilitate more research on this species in the future. Once captured, we will use VHF and GPS collars to determine the impact of mechanical thinning on both general movement, as well as determine home ranges for this unique species. We will also be walking search transects for Montezuma Quail digs in the proposed thinning area before, during, and after thinning is occurring to determine if dig site selection is influenced by canopy cover. Fine scale habitat measurements will be recorded to determine precisely what aspects are being selected for to determine best course of management action. No study previously has used GPS units on Montezuma Quail or has determined the importance of canopy cover on their ecology.

