

EVALUATION OF COUGAR PREDATION AND BEAR KLEPTOPARASITISM ON VERMEJO PARK RANCH, NEW MEXICO

Researchers.

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Rationale. Over the last 15 years, in response to drought, declining range and riparian conditions, and projected dry conditions in the future, Vermejo Park Ranch has tried to determine the carrying capacity for large ungulates (e.g., elk and

American bison) on the ranch during an average dry year. While ecological balance with forage resources is the driving factor in setting elk population objectives at Vermejo, a sustainable elk hunting program, wildlife viewing opportunities, and overall ecological function, including healthy populations of predators, are also important considerations. Understanding large predator populations and their role in regulating elk (and other ungulate) populations is an important, but relatively unexplored question at Vermejo. Predators at Vermejo include black bears and cougars. Black bear predation can be a major source of mortality on elk calves. Similarly, cougars, especially males, select for elk calves during summer months. Black bears may benefit from cougar kills through kleptoparasitism, thereby negatively affecting cougars; for example, cougar kill rates can increase by 48% with the presence of black bears. Elevated cougar kill rates, combined with direct predation by black bears, could affect recruitment in ungulate populations. The Institute is undertaking this study to document cougar prey selection on Vermejo and the influence of bear kleptoparasitism on frequency and volume of cougar prey. This information will provide insights on the magnitude of elk and mule deer killed by cougars annually and inform future wildlife management decisions.

Species: cougar, black bear
Topic: ecology, predator, food habits
Researcher: Lonsinger, Cain, Kruse, Bernal, Cajero
University: Oklahoma State
Year Completed: Ongoing