

FACTORS AFFECTING SURVIVAL AND RECRUITMENT IN FEMALE MERRIAM'S TURKEYS^{TWS}

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Merriam's turkeys (*Meleagris gallopavo merriami*) historically occurred in ponderosa pine (*Pinus ponderosa*) and Gambel's oak (*Quercus gambelli*) forests in the southwestern U.S. They have been successfully transplanted into a wide array of habitats outside their original range. Some introduced populations are more robust than those within the original range. Annual survival fluctuates widely, ranging from 30 to 76 percent for adults. Survival of subadult hens is typically lower. Predation is the primary mortality factor and coyotes are the most common predator. Percent of females attempting to nest (nesting rates) ranges from ~30 percent to >90 percent for adults. Yearling females nest at lower rates, but within the historic range of Merriam's turkeys, nesting by yearling hens may be almost nonexistent. Management that would increase nesting by yearlings probably has the greatest potential to influence populations given the existing biological limitations to Merriam's turkeys. Nesting rates of adult and yearling hens is likely related to habitat quality or productivity, possibly through nutrition. Survival of poults is low. High quality meadows with abundant herbaceous vegetation and invertebrates may contribute to increased survival of poults.

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