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GOLDEN EAGLE (*AQUILA CHRYSAETOS*) PREDATION ATTEMPTS ON MERRIAM'S TURKEYS (*MELEAGRIS GALLOPAVO MERRIAMII*) IN THE SOUTHERN BLACK HILLS, SOUTH DAKOTA

While trapping Merriam's Wild Turkeys (*Meleagris gallopavo merriami*), we witnessed three predation attempts by Golden Eagles (*Aquila chrysaetos*) on turkeys during winter (January–March) and spring–summer (April–July), 2001–03. Merriam's turkeys in the southern Black Hills of South Dakota primarily use (i.e., roost, feed, and loaf) xeric habitats dominated by ponderosa pine (*Pinus ponderosa*). The first observation of an eagle attempting to prey upon turkeys occurred at a bait-site used to capture turkeys. At approximately 0800 H, 5 February 2001, 13 adult male turkeys were at the bait-site feeding while we observed from a ground blind. Four of the turkeys looked up and emitted alarm “putt” vocalizations (Williams 1984, *The voice and vocabulary of the wild turkey*. Real Turkeys, Gainesville, FL U.S.A.). Within 2–3 sec all the birds were alert and very vocal. At this point, we observed a Golden Eagle dive toward the turkeys. The turkeys flew into the trees, seeking shelter in a thick stand of young-ponderosa pine trees. The eagle followed the turkeys, but captured no birds. The turkeys did not return to the bait-site until the following day.

A second attempt occurred while we were collecting habitat data in the afternoon (1400–1500 H) at a ponderosa pine feeding site on 23 January 2002. While walking toward a radio-marked female turkey in a flock containing 35 females and 10 males, we heard the flock emitting fast alarm “putt” vocalizations. Due to the steep terrain and thick cover, we were able to approach to within 40 m of the flock and could see several females above our position in a thick stand of young ponderosa pine. We noticed a Golden Eagle soaring overhead, and as the eagle neared the flock, the turkeys once again began to emit alarm “putt” vocalizations, which increased in intensity as the Golden Eagle approached the flock. When the eagle was within 80 m of the birds, it went into a dive and maneuvered through the young pine stand and into the flock of turkeys. After hitting several turkeys with its talons and body, the Golden Eagle and two turkeys rolled down the slope and stopped several m below the flock. Both the turkeys struck by the eagle regained their balance and ran back into the flock. Soon after, three different turkeys left the flock and ran at the eagle as it stood below. The turkey's aggressive calling, quick movements, and flailing of wings at the eagle startled the eagle and it quickly left and glided off the slope avoiding further confrontation on the ground with the turkeys. Once in flight, the eagle soared twice over the flock at a height of about 10–15 m, never reentering the flock. The turkeys remained in the dense stand of young ponderosa pine as the eagle made two more approaches.

A third predation attempt occurred while we were observing a radio-marked female and her 6-d-old brood along the edge of a meadow on 11 June 2003. We were roughly 70 m from the female and her brood, watching them feed along the edge of a meadow for 4 min when suddenly the female laid flat in the grass. A Golden Eagle immediately flew from the nearby trees, folded its wings, and dove into the grass ca. 5 m from the hiding female. The female then quickly rose from its hiding position and started emitting fast alarm “putt” vocalizations and circling the raptor trying to attract its attention. The Golden Eagle ignored the “putting” female and appeared to be consuming something on the ground beneath it. After 2 or 3 min the eagle became nervous and flew to a nearby perch. We immediately approached the kill site and found two dead poults. One poult had its head and neck eaten, the other poult was not consumed, but a necropsy revealed it had talon puncture wounds on the neck and breast.

Other observations of wild turkey-raptor interactions have been reported. Rio Grande Wild Turkey (*M. g. intermedia*) behavior (i.e., alarm calls and heightened wariness) has been described for birds reacting to the harassment of overhead flying golden eagles (Thomas et al. 1964, *Wilson Bull.* 76:384–385). Poult protection behavior has been observed by Merriam's females toward a goshawk (*Accipiter gentilis*) (Lehman 2003, *Prairie Nat.* 35:47–48) and by Rio Grande females toward a Red-tailed Hawk (*Buteo jamaicensis*) (Butts 1977, *Southwest. Nat.* 22:404–405).

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