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TEXAS TORTOISE (*GOPHERUS BERLANDIERI*) CONSUMED BY A MOUNTAIN LION (*PUMA CONCOLOR*) IN SOUTHERN TEXAS

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Abstract—Mountain lions (*Puma concolor*), throughout their distribution, eat a variety of prey, but primarily consume large prey (e.g., cervids). While monitoring radio-collared mountain lions, we saw a mountain lion kitten consuming a Texas tortoise (*Gopherus berlandieri*). Small prey might increase survival of young mountain lions developing predation skills required for solitary survival as adults.

Resumen—Los pumas (*Puma concolor*) a través de su distribución se alimentan de una variedad de presas, pero principalmente consumen presas de mayor tamaño (por ej. cérvidos). Mientras monitoreábamos pumas con collares de telemetría, observamos una cría de puma consumiendo una tortuga galápago Tamaulipeco (*Gopherus berlandieri*). Presas de menor tamaño pueden incrementar la supervivencia de pumas jóvenes desarrollando las habilidades de depredador necesitadas para la supervivencia como adulto solitario.

Ungulates are the primary prey for mountain lions throughout their range. However, mountain lions supplement their diet with a variety of prey (Anderson, 1983; Logan and Sweanor, 2000), including small animals. Large prey consumed by mountain lions in the Big Bend Region of Texas included mule deer (*Odocoileus hemionus*), white-tailed deer (*O. virginianus*), javelina (*Pecari tajacu*), elk (*Cervus elaphus*), and livestock; small prey included porcupine (*Erethizon dorsatum*), striped skunk (*Mephitis mephitis*), black-tailed jack rabbit (*Lepus californicus*), ground squirrel (*Spermophilus*), coyote (*Canis latrans*), gray fox (*Urocyon cinereoargenteus*), raccoon (*Procyon lotor*), ringtail (*Bassariscus astutus*), Rio Grande turkey (*Meleagris gallopavo*), and turkey vulture (*Cathartes aura*) (Harveson et al., 1996). In southern Texas, small animals (e.g., rodents and lagomorphs) are important food items and might increase survival of juvenile and newly independent mountain lions (Harveson et al., 2000). Texas tortoise (*Gopherus berlandieri*) has not been reported as prey for mountain lions. This report represents the first record of Texas tortoise as a food item for mountain lions, as observed on private lands along the Nueces River in La Salle County, Texas. Vegetation in the area was typical of chaparral communities (Harveson et al., 1997).

While monitoring a radio-collared female mountain lion and her 3 non-radioed kittens on 1 July 1999 at 1900 h (Adams, 2003), we (RBA and JP) observed a mountain lion kitten kill and partially consume a Texas tortoise. This observation took place 5 km south of Farm Road 624 in southeastern La Salle County, Texas, in a dense-shrub habitat defined by Harveson (1997) as mixed-brush shrubland. We first observed the 20-kg (estimated) male kitten (estimated at 3 to 5 months of age) 20 m from our location as it bounded across a dirt road after an eastern cottontail rabbit (*Sylvilagus floridanus*). Within 5 minutes of disappearing into the chaparral vegetation, and prior to returning to the road, the kitten was observed again in the brush. As it crossed the road toward the location at which it was initially observed, the kitten deviated from its path and located a Texas tortoise that was presumably passively regulating its body temperature in the shade of a mesquite (*Prosopis glandulosa*) tree. After approximately 10 minutes of playing with the tortoise (e.g., pawing,

mouthing, gnawing), the kitten began biting at the carapace and consuming tissue. The kitten was then alerted by something (near the estimated location of the radio-collared adult female mountain lion) and left the area without covering or concealing the tortoise. Inspection of the tortoise carcass (estimated maximum plastron length = 12.7 cm) revealed the kitten had eaten through the carapace and consumed some meat (ca. 50%) of the tortoise. No physical evidence was found of a successful rabbit kill.

Texas tortoises are listed as threatened by the State of Texas, but Hellgren et al. (2000) reported a density of 0.26 tortoises/ha in southern Texas. Hellgren et al. (2000) suggested that the Texas tortoise population could withstand predation by coyotes (*Canis latrans*), raccoons (*Procyon lotor*), crested caracaras (*Polyborus plancus*), and other predators. Logan and Sweanor (2001:305–306) reported turtle remains in 1 of 832 scats examined in southern New Mexico. Additionally, Harveson et al. (2000) found no tortoise remains from 25 mountain lion scats, so there is no indication that mountain lions negatively impact the tortoise population in southern Texas. Small prey items, such as the Texas tortoise, are relatively abundant and might increase survival of juvenile mountain lions still developing predation skills required for solitary survival as an adult.

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