

J. Raptor Res. 45(3):279–280

© 2011 The Raptor Research Foundation, Inc.

OBSERVATION OF NOCTURNAL FEEDING IN BLACK VULTURES (*CORAGYPS ATRATUS*)

KEY WORDS: *Black Vulture*; *Coragyps atratus*; *foraging*; *nocturnal feeding*; *scavenging*.

New World vultures are typically diurnal with only rare nocturnal activity reported. Tabor and McAllister (1988) observed nocturnal flight by Turkey Vultures (*Cathartes aura*) during migration, and Mandel and Bildstein (2007) observed small groups of Turkey Vultures regularly feeding until 23:00 H at a landfill site in Pennsylvania, U.S.A. We found no published reports of nocturnal activity for the six other species of New World vultures. Here we report an observation of nocturnal feeding by a group of Black Vultures (*Coragyps atratus*) in a limestone quarry in the Southern Yucatan Peninsula, Mexico.

Our observation occurred during an ongoing investigation of foraging behavior in Black Vultures, Turkey Vultures, and King Vultures (*Sarcoramphus papa*). Between 9 September 2009 and 3 January 2010, we placed camera traps at 30 different sites baited with carcasses including both open (pastures, limestone quarries, and deforested areas) and closed (forested) habitats, within 50 km of Xpujil, Campeche, Mexico. Carcasses were collected as road kill or obtained at El Centro de Control de Chetumal (Chetumal, Quintana Roo).

Each site was equipped with a Moultrie video camera (Moultrie Feeders Inc., Alabaster, Alabama, U.S.A.) with digital video recording capability. At each site, the camera was placed 5 m from the carcass and left for 3–6 d (weather dependent). The camera was triggered by movement; once triggered, the camera would take one still photo, then video-record for 30 sec during daylight or 5 sec in darkness, with a 1-min interval between successive still/video recordings.

One camera trap was set at a quarry site 80 m from a road 20 km north of Xpujil (18°43.169'N, 89°23.983'W), baited with a dog carcass, and left for 3 d, after which time the camera was removed and the still photos and video recordings downloaded onto a portable computer. The phase of the moon, precipitation, and cloud cover were also recorded during the study as these variables may influence scavengers' activity patterns (Watanuki 1986). The phase of the

moon was recorded by the camera; precipitation and cloud cover were acquired from the Zoh Laguna weather station (CONAGUA, Mexican National Water Commission).

The camera recorded a group of vultures feeding continuously on the carcass from 11:15 H on 31 December until 14:40 H on 1 January 2010. A maximum of 10 Black Vultures, six Turkey Vultures, and two King Vultures fed at the carcass during the 27.25 hr of recording. One group, composed exclusively of Black Vultures, fed at the carcass between 20:30 H on 31 December 2009 and 11:30 H on 1 January 2010. This group of Black Vultures varied between three and ten individuals as new individuals arrived and others left the carcass. The number of individuals feeding at the carcass at any one time varied from one to three.

Our observation suggests that occasionally, perhaps under certain conditions, Black Vultures feed nocturnally. It was difficult to determine whether our observation was unique, as nocturnal feeding in Black Vultures has not been specifically studied. However, our own data suggest this behavior may be uncommon. Throughout our study, in a total of 1656 hr of nocturnal recordings, we recorded no other instances of Black Vultures feeding later than 19:00 H.

One benefit to Black Vultures of feeding nocturnally may be to reduce interspecific competition from other vulture species. In the Yucatan Peninsula, the two major diurnal competitors of the Black Vulture were the King Vulture and the Turkey Vulture. Competition at carcasses may be intense among these vultures (Wallace and Temple 1987, Houston 1988, Kelly et al. 2007). The much larger King Vulture dominates and generally wins aggressive encounters with Black and Turkey vultures at carrion (Wallace and Temple 1987). Feeding at night may provide Black Vultures with an advantage over their diurnal competitors.

Nocturnal feeding might increase the risk of predation to Black Vultures, although there are few reports in the literature of predation on adult New World vultures (Cole-