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FORAGING OF YELLOW-HEADED CARACARAS IN THE FUR OF A THREE-TOED SLOTH

Both the Yellow-headed Caracara (*Milvago chimachima*) and the brown-throated three-toed sloth (*Bradypus variegatus*) inhabit low elevation areas from southern Central America to northern Argentina (Emmons 1990, Neotropical rainforest mammals: a field guide. Univ. Chicago Press, Chicago, IL U.S.A.; Sick 1993, Birds in Brazil, a natural history. Princeton Univ. Press, Princeton, NJ U.S.A.). The sloth is generally limited to forested environments (Emmons 1990), while the caracara prefers more open habitat (Haverschmidt 1962, *Condor* 64:154–158; Sick 1993). Under natural circumstances, most interactions between these two species should be limited to forest edges. In metropolitan settings, however, species may be forced together in parks encircled by urban surroundings. In these situations, it may be easier to observe behaviors between species that remain undetected in more remote areas. Here, we describe the foraging on a brown-throated three-toed sloth by Yellow-headed Caracaras.

We observed the animals in the botanical garden of the Ciudad Universitaria in downtown Caracas, Venezuela, at approximately 1600 H on 16 November 1996. The sloth was 15–20 m above the ground in an isolated *Cecropia* tree, and was attended by two juvenile caracaras. The caracaras appeared to be picking from the fur of the sloth; our observational distance precluded us from seeing anything in the birds' beaks. The sloth showed no sign of defensiveness or aggression toward the caracaras even when they were foraging on its head and neck. It assumed a relaxed posture, reclining on a branch with its front legs extended behind its head. The behavior continued for 5–10 min, until we moved closer. At this point, the caracaras stopped their grooming behavior but remained within a few meters of the sloth. The caracaras appeared to be members of a larger group; we observed an adult and another juvenile in nearby trees.

Although previously undescribed, the nature of this interaction is not surprising. Yellow-headed Caracaras are known to forage by picking ticks and botflies from domestic livestock. When no source of appropriate ectoparasites is available, caracaras are opportunistic and may consume a wide variety of items including insects, fruit and carrion (Haverschmidt 1962). Thus, their opportunistic foraging in the fur of other slow-moving mammals may not be entirely unexpected. Sloths may represent a particularly attractive foraging substrate, as their fur contains a rich fauna of invertebrates, especially Lepidoptera (Waage and Montgomery 1976, *Science* 193:157–158).

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COMMON BLACK-HAWK NESTING IN WEST-CENTRAL TEXAS

Common Black-Hawks (*Buteogallus anthracinus*) are obligate riparian nesters of the southwestern U.S. Although not federally listed, it is listed as Endangered in New Mexico and Threatened in Texas (Schnell 1994, Common Black-Hawk, Birds of North America, No. 122, A. Poole and F. Gill [Eds.], The Birds of North America, Inc., Philadelphia, PA U.S.A.). Once a regular nester along the lower Rio Grande Valley of Texas, all local breeders were extirpated by 1940, apparently the result of extensive habitat loss. In 1970, a small breeding population (about 10 pairs) was discovered along Lympia Creek of the Davis Mountains in Jeff Davis County, Texas (Oberholser 1974, The bird life of Texas. Vol. 1., Univ. Texas Press, Austin, TX U.S.A.; Schnell 1994). To date, this remains the only known regular

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breeding population in Texas. Extralimital breeding attempts have been reported in Val Verde (Lasley and Sexton 1988, *Am. Birds* 42:456–462), Lubbock (Texas Ornithological Society 1995, Checklist of Texas birds, Capital Printing, Inc., Austin, TX U.S.A.), and Brewster (Lasley and Lockwood, Texas Bird Records Committee, Texas Ornithological Society, pers. comm.) counties and the lower Rio Grande Valley (Webster 1976, *Am. Birds* 23:975–978). Only in the Davis Mountains has successful breeding been documented for consecutive years. Nesting attempts by a Common Black-Hawk pair in Big Bend National Park, Brewster County, Texas, were unsuccessful in 1997 and 1998 (M. Lockwood pers. comm.).

We observed the successful nesting of a pair of Common Black-Hawks in Tom Green County, Texas from 1996-98, at a location 345 km northeast of the nearest breeding population at Lympia Creek. A single pair of Common Black-Hawks was initially found during June 1996 nesting in a narrow (<300 m wide) band of riparian woodland along the spring-fed Cole Creek, a tributary of the South Concho River (2.5 km south, 0.62 km west Christoval, Texas). The 67 ha riparian woodland was dominated by pecan trees (Carya illinoensis; 49%), bur oak (Quercus macrocarpa; 14%) and plateau liveoak (Q. virginiana; 7%). Seven other tree species were present, but in small numbers Mean tree density and mean canopy height, as determined by a point-quarter technique (Cottam and Curtis 1956, Ecology 37:451-460), was 383 ha⁻¹ and 21.4 m, respectively. Adjacent vegetation consisted of a patchwork of mixed mesquite (Prosopis glandulosa) brushlands and juniper (Juniperus spp.)-liveoak savanna. When they were found, the adults were carrying food (an unidentified snake) back to a nest containing one nestling. The nest was in the forked primary limb of a pecan tree of greater than local average size. The nest tree was 26 m tall, had a dbh of 107.7 cm and a maximum canopy width of 14.6 m. It was positioned 78 m from the edge of the riparian woodland and 125 m from Cole Creek. The closest tree of equal or greater dbh was 103 m away. Before nest measurements could be taken, the limb holding the nest fell during a storm following fledging. In 1997, a nest was constructed in the fork of a primary limb of the same pecan tree at a height of 18 m and 4.5 m from canopy edge. The limb had an estimated diameter of 26 cm at the base of the fork; the three branches arising from the fork had a diameter of about 14 cm This same nest was subsequently reused in 1998.

Irregular visits were made to the site throughout the summer of 1996 and again from April through August of 1997 and 1998. During 1997 and 1998, a pair was observed nesting in the same tree as 1996. We observed the successful fledging of one individual each year. Attempts to band adults were unsuccessful, so we do not know if the nesting pair was the same each year.

Although the nest was close to water in Cole Creek (125 m away), all foraging we observed was from the South Concho River at a man-made rock dam (1 km away). We were unable to identify food items carried from the South Concho River, but potential prey observed at the rock dam included crayfish (*Procambarus clarki*), largemouth bass (*Micropterus salmoides*), gizzard shad (*Darosoma cepedianum*), channel (*Ictalurus punctatus*), blue (*I. furcatus*) and flathead (*Pylodictis olivaris*) catfish, green (*Lepomis cyanellus*) and long-eared (*L. megalotis*) sunfish, bluegill (*L. macrochirus*), Rio Grande (*Rana berlandieri*) and plains (*R. blairi*) leopard frogs, cricket frog (*Acris crepitans*), checkered garter snake (*Thamnophis marcianus*), ribbon snake (*T. proximus*), plain-bellied (*Nerodia erythrogaster*) and diamond-backed (*N. rhombifera*) watersnakes, and cottonmouth (*Agkistrodon piscivorus*).

While local tree species composition can be considerably different, structural characteristics of this location were similar to those reported at other nesting sites in Arizona, New Mexico and Texas (Schnell 1994). It is the isolation and consistent breeding success at this location that makes these records important. To our knowledge, this is the first known incident of successful breeding of Common Black-Hawks outside of the Davis Mountains in Texas since 1939. The chance discovery of this nesting site brings up the issue of potential range expansion by a species considered Threatened in Texas. While similar pockets of riparian woodlands are widespread in west-central Texas, potentially providing suitable nesting habitat, many of these sites are on private land holdings making extensive surveys for more nests difficult.

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