

Noteworthy Record of a Black Howler Monkey (Alouatta caraya) from the Central Dry Chaco of Paraguay

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NOTEWORTHY RECORD OF A BLACK HOWLER MONKEY (*ALOUATTA CARAYA*) FROM THE CENTRAL DRY CHACO OF PARAGUAY

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Howler monkeys (Alouatta) comprise a diverse genus of neotropical primates that range from southern Mexico (A. palliata, A. pigra) to northern Argentina and southeastern Brazil (A. guariba, A. caraya) (Cortés-Ortiz et al., 2003). Howler monkeys are the most folivorous of the Neotropical primates (Terborgh, 1983), and thus must forage for long periods to meet their high energetic demands. The southernmost distributed of the howler species, the South American black howler (A. caraya) has been reported to occur at the highest densities (Zunino and Rumiz, 1986; Bicca-Marques, 1990; Rumiz, 1990; Crockett, 1998). Considered principally an inhabitant of tropical lowland deciduous and semideciduous forests, black howlers are also known to frequent the gallery forests of the Rio Paraguay and Rio Paraná, as well as the seasonally inundated Pantanal in Brazil (Redford and Eisenberg, 1992; Crockett, 1998).

In Paraguay, black howlers are mostly associated with inland Atlantic forest fragments in the east and gallery forests of high rainfall in the Chaco (Stallings, 1985; Crockett, 1998). However, they have not been reported from the more xeric regions of the Chaco Boreal far from a major drainage system. Stallings and Mittermeier (1983: 161) found that *A. caraya* was "recorded from the higher forest [of the Chaco Boreal] but seemed to be rare in the region." However, they made no specific reference to geographic location, as howlers were not the primary subject of their discussion. Furthermore, they did not reference the time of year their primate observations were made. In conducting primate transects at Chaco Defensores National Park, Stallings *et al.* (1989) failed to record an observation of *A. caraya* during the austral winter. Neither of these claims is surprising given that xeric regions of deciduous and semideciduous scrub forest likely act as barriers to the seasonal movements of a species that depends entirely on a low-quality, leafy forage. This is particularly true during the austral winter, when most such deciduous trees are devoid of leaves.

Here we describe an encounter with a solitary adult male black howler monkey of unknown age in the north-central Chaco of Paraguay. The encounter took place on a cool, overcast morning between 10:00 and 11:00 hours on 7 August, 2007. The solitary male was observed on private property approximately 130 km south of Chaco Defensores National Park (21° 41.176 South, 060° 09.234 West). The property is approximately 45,000 ha in expanse, >80% of which contains natural vegetation. In contrast, the majority of the surrounding properties have converted most of the natural vegetation into rangeland for livestock, and there is little opportunity for far-reaching habitat connectivity.

The howler was at the top of a short canopy tree (< 12-15 m)completely devoid of foliage. The tree was at the edge of a new clearing that had been opened up to create a cattle pasture and was isolated from other neighboring trees (i.e., the only access into the tree would have been from the base). We were able to observe it unobstructed, aided by binoculars, for approximately 20 minutes, while standing <2-3 meters from the trunk. During this time, the animal appeared completely undisturbed, and made no attempt to flee. On the contrary, it appeared indifferent to our presence and more concerned with that morning's cold temperature as it huddled over its extremities and moved very little. This observation occurred before the onset of a prolonged drought in the Paraguayan Chaco, and at the time when few trees were bearing leaves. Furthermore, the property owner, who observed the animal as well and had owned and managed the property for more than 20 years at the time of the observation, had never before seen the species on his property or anywhere else in the north-central Chaco. It was unclear where the animal had come from and what was sustaining it. We left to pursue other unrelated activities and returned less than 1 hour later to find the monkey gone, with no evidence as to where it had gone to. A subsequent, albeit anecdotal, inquiry among landowners found few to be familiar with this species. It would not be unreasonable to conclude that this male did not exist in isolation amidst such a sizeable region in the dry Chaco. Horwich (1998) remarked on the general adaptability of all Alouatta species, and we agree that A. caraya must be particularly adaptable to persist in such an ecosystem during a time of year when its limiting resources must be considered very scarce at best.

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PRELIMINARY OBSERVATIONS OF NAPO TAMARINS (*SAGUINUS GRAELLSI*) AND NOTES ON PRIMATES OF WILDSUMACO WILDLIFE SANCTUARY

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Wildsumaco Wildlife Sanctuary is a new reserve located on the eastern slopes of the Andes in Ecuador (400 hectares; 1400 m elevation; S 00° 40.28' W 77° 35.91'). The reserve consists of primary and secondary forest in a matrix of agricultural land. A top priority for the sanctuary and the affiliated Rio Pucuno Foundation is to conserve the remaining forest and biodiversity of the area. Research to date has focused on birds and mammals, especially carnivores. Primate surveys were conducted for 20 days and 3 nights from July 9–31, 2010. The Napo Tamarin (*Saguinus graellsi*) was