

Geographic Distribution and Status of the Black Howler Monkey

Until 1970, when Smith (1970) discovered two distinct populations of howler monkeys in Mexico, *Alouatta pigra** was considered to be a subspecies of *A. palliata*. Smith noted differences in cranial morphology, dentition and pelage between these species. Horwich (1983) has since noted additional morphological and behavioral differences: 1) troop size is extremely small for *A. pigra*, averaging 5-6 individuals, while troops of *A. palliata* are generally between 15-20 animals; 2) in *A. pigra* males are easily recognized by white descended testes at a very young age, whereas in sympatric *A. palliata* it is difficult to distinguish the sexes; 3)

* Note that some authorities consider the correct name for *A. pigra* to be *A. villosa*. See Napier (1976) and Mittermeier and Coimbra-Filho (1981) for a discussion of this nomenclatorial problem.

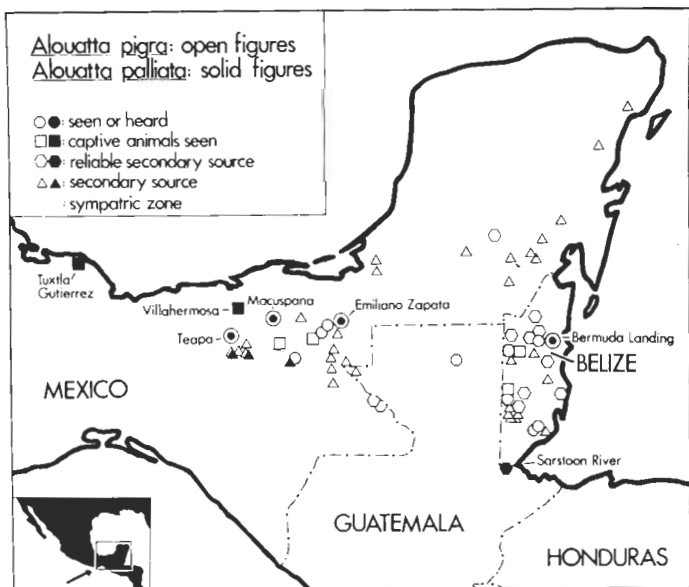


Fig. 27: Reported occurrences of *Alouatta pigra* and *Alouatta palliata* in Mexico, Guatemala and Belize. Solid figures refer to *Alouatta palliata* and open figures to *Alouatta pigra*. Circles represent wild monkeys seen or heard, whereas squares designate captive individuals seen. Hexagons denote information from reliable secondary sources and triangles information received from other secondary sources.

A. pigra shows a marked tendency toward one male grouping; and 4) the roaring sounds of the two species are auditorially distinct in accordance with the larger hyoid apparatus of *A. pigra*.

From mid-January through mid-April, 1983, we travelled extensively through southern Mexico and Belize studying howler monkeys. Since we covered a large area in a limited amount of time, much of our locality data was based on secondary sources. However, we did see or hear *A. pigra* at 7 locations and saw captive animals at 4 more locations (Fig. 27). Our journey covered 9,660 km within the range of *A. pigra*, throughout which we made frequent observations of existing vegetation. No evidence of howlers was found in the reported area of overlap of *A. pigra* and *A. palliata* near Macuspana, Tabasco (Smith, 1970). However, 40 km southwest near Teapa, we found possible evidence that the two species may overlap in some low hills. The only other evidence of possible overlap was on the southern Belize-Guatemala border. We heard a believable report of *A. palliata* seen across the Sarstoon River in Guatemala, where presumably *A. pigra* may occur as well.

In general, the range of *A. pigra*, as noted by Smith (1970), closely follows the limits of tropical forests (Toledo, 1982) and it is specifically found in areas where the average annual temperature is above 25°C and the average annual precipitation level reaches 1,000 mm or above. An additional limitation that we noted was that in almost all the sites recorded in Fig. 27, the elevation was below 330 m and the few sites above that were still below 400 m. If altitude is a limiting factor, then *A. pigra* is probably restricted from expanding its present range by the Chiapas highlands and the Guatemala mountains which curve around close to the southern border of Belize.

One characteristic of the habitat was surprising to us. Smith (1970) noted *A. pigra*'s affinity for undisturbed, mesic tropical forest, whereas *A. palliata* exists in subclimax or secondary forests. The two most populated areas we observed for *A. pigra* near Zapata, Mexico and Bermuda Landing, Belize were both low areas of short riverine growth, which sometimes flooded during the rainy season. Other highland areas were tropical forests similar to the habitat of *A. palliata* at Los Tuxtlas, Mexico (Estrada, 1983).

As described by Estrada (1983), we found Mexico's rain forests to be disappearing rapidly. We saw much evidence of logging and consequent cultivation and cattle pastures. The Lacandon Forest in Chiapas is the only large, lowland rain forest remaining in Mexico. Due to the poor condition of the roads we could not survey this particular area. However, informants indicated that lumbering rights were given to the indigenous Lacandon people, who have since leased them to the Mexican government, presumably making the status of that area insecure as well.

In Belize the status of *A. pigra* is better. The species ranges widely throughout the country, unmolested by the Creoles who do not hunt or eat them, but in some areas even claim a distinct affinity towards these monkeys. Informants did say, however, that Mayans eat howlers and other primates in Belize. We encountered animals being kept as pets, yet never saw or heard of any for sale. At present, the low human population level and amount of cultivation pose no immediate

threat to these primates, and the population has increased in the last few years. This increase follows a supposed major population reduction in the 1950's due to a serious yellow fever outbreak. However, the Belize government currently welcomes Latin American immigrants and we expect that the slash and burn cultivation rate will increase in coming years. Counteracting this, the government, with the help of the local Audubon Society, is pursuing an active conservation policy by beginning to designate specific areas as wildlife reserves. Informants have also noted that the government has been working with both private individuals and organizations in these directions, and should be commended for its conservation consciousness.

In Mexico, we recorded instances of *A. pigra* being sold as pets and for consumption. Monkey meat is listed on menus in this country. There are two captive (free ranging) breeding groups of *A. palliata* in Mexico which we observed at Parque La Venta, Villahermosa and in the State Zoo of Chiapas at Tuxtla Gutierrez (Mittermeier, 1979). Both troops have the free run of the park and are monitored, but not provisioned. The troop in Tuxtla Gutierrez was established with excess animals from Parque La Venta. Besides having a healthy breeding troop of *A. palliata*, the zoo at Tuxtla Gutierrez is an extremely fine zoo with conservation underlying its very being (Mittermeier, 1979).

Tikal National Park was the only site we visited in Guatemala. We found that the park is being managed quite well both in regard to the archeological structures and the wildlife. The howlers and their habitat are in very good shape and we found some park employees interested in howler ecology actively gathering information on the plants they eat.

In summary, we found *A. pigra* to exist in the tropical evergreen and semi-evergreen forests in Mexico, Belize and Guatemala, below 330 m in altitude. They particularly seem to thrive in the riverine areas. In Mexico the situation is bleak for howlers and their habitat, and we feel effort should be made to curtail the hunting and live capture of howlers there. The area of overlap of the two species around Teapa should be explored in depth with an attempt made at convincing the government to preserve such areas. However, more realistically, in Mexico the strongest conservation efforts should be directed towards preserving the largest remaining rain forests in Chiapas. We found the Bermuda Landing area of Belize to be unique in numbers of howlers. Despite the use of habitat for farming and cattle the monkeys seem to be doing quite well. We feel that documentation of howler ecology and the successful human-howler relations in this area might prove interesting. We also feel that a community based reserve for the howlers could be a distinct possibility to be worked on with residents of that area.

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