GIANT ANTEATERS (*MYRMECOPHAGA TRIDACTYLA*) KILLED BY HUNTERS WITH DOGS IN THE BOSAWAS BIOSPHERE RESERVE, NICARAGUA

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ABSTRACT—This report is the first to document giant anteaters (*Myrmecophaga tridactyla*) in Nicaragua. An indigenous hunter killed four giant anteaters in the Bosawas Biosphere Reserve, Nicaragua. The Mayangna and Miskito residents of the reserve do not eat giant anteaters, but hunters sometimes kill the animals because of the threat they pose to hunting dogs.

RESUMEN—Este es el primer reporte documentado de osos hormigueros gigantes (*Myrmecophaga tridactyla*) en Nicaragua. Un cazador indígena mató cuatro osos hormigueros gigantes en la reserva de la biosfera Bosawas en Nicaragua. Los residentes de Mayangna y de Miskito que viven en la reserva no comen los osos hormigueros, pero los cazadores a veces los matan para defender a sus perros de caza.

In a recent survey of the mammalian order Pilosa in Nicaragua (formerly Xenarthra—Wilson and Reeder, 2005), Genoways and Timm (2003) noted that there was no confirmed sighting of the giant anteater (*Myrmecophaga tridactyla*) in the country. As part of a study on hunting and subsistence in Bosawas Biosphere Reserve, Nicaragua (Koster, 2007), I documented kills of four giant anteaters in July–August 2005. All were killed by the same hunter to protect his dogs after they had chased the animals and forced the giant anteaters to take a defensive posture. I observed one of these kills, and I saw another specimen that the hunter brought to the community. The remaining two kills were documented with a questionnaire following unobserved hunts.

My fieldwork in the Bosawas Biosphere Reserve lasted >1 year, August 2004–August 2005. The study was based in Arang Dak (14°30′56″N, 084°59′58″W), a small community of Mayangna and Miskito Amerindians located on the Lakus River about 16 km upstream of its confluence with the Coco River. Arang Dak is part of Kipla Sait Tasbaika, one of the six indigenous territories in the Bosawas Biosphere Reserve that were delineated as part of the effort to secure legal land title for the indigenous communities (Stocks, 2003). Elevations within 5 km of Arang Dak are ca. 150–400 m, and the watershed of the Lakus River retains most of its primary forest cover. The watershed is almost exclusively broadleaf tropical forest, and it lacks the pine savannas that characterize much of the Caribbean coast (Parsons, 1955; McCain, 2001).

Unlike some Neotropical groups (Hames, 1979; Townsend, 2000), the Mayangna and Miskito do not consume giant anteaters. This aversion is not a formalized taboo, however, and the aversion appears to have no overt religious or

ritualistic significance. When asked, informants suggest that the poor taste explains their reluctance to consume meat from anteaters. Because of their long claws, giant anteaters are widely recognized as a potentially fatal threat to valued hunting dogs, and they often are killed when encountered by hunters with dogs.

The killing of a giant anteater that I observed occurred 27 August 2005 (14°29′43″N, 084°58′39″W). I was accompanying a hunter as he led his two dogs through the forest. After barking indicated an encounter with an animal, the hunter and I arrived to find a giant anteater confronting the dogs. The animal was nearly immobile, as only its head slowly swiveled back and forth while it watched the two dogs. The dogs were barking loudly, but they did not attempt to advance upon the animal. With little delay, the hunter moved in to chop the anteater's neck with his machete. After the anteater was conclusively dead, the hunter took a moment to examine the body and confirm the sex of the animal. He then left the anteater where it fell and led his dogs away from the site, urging them to find more palatable prey. Dogs are not fed anteater meat, as hunters do not want to encourage them to pursue additional anteaters.

Each of the four anteaters killed during the study was reportedly an adult female. As noted, I observed two of the bodies while relying on the hunter's report for the other two kills. The specimen that the hunter brought back to the community (on 20 July 2005) weighed 43 kg. This measurement exceeds the range of 22–39 kg given by Reid (1997) as characteristic of the species. No local resident who examined the body considered this to be unusually large, although the range of their previous experience with bodies of giant anteaters was fairly limited in some cases. The body of the giant anteater that I observed on 27 August 2005 appeared to be comparable in size.

Shaw et al. (1987) and Medri and Mourão (2005) reported that there is considerable overlap in home ranges of giant anteaters, particularly among females. This observation receives some indirect support from the proximity of the four killings in both time and space (Fig. 1). I used a GPS unit to record the location of the observed kill: 14°29′43″N, 084°58′39″W. The hunter pointed out the approximate location of the kill site from the previous week (20 August 2005) and I collected a second GPS point. To plot the remaining two kill sites, I used a mapping method developed by Smith (2003), which relies on indigenous research assistants to interview hunters following an outing and draw a map relating the sites to known landmarks. While there is some inherent imprecision in the method, there were several important landmarks in that hunting zone, and I am confident that the mapped locations of those two kill sites are accurate to <100–200 m. The data therefore suggest that four adult females were killed in a span of ca. 6 weeks within an area of <1 km².

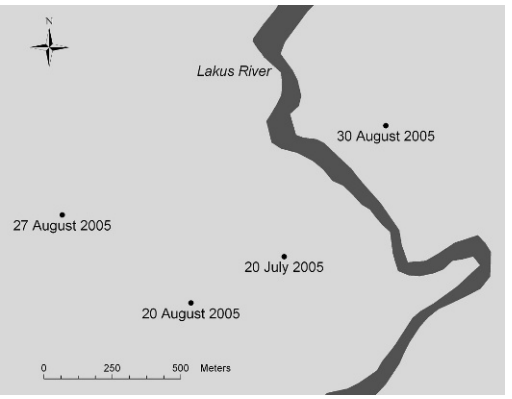

FIG. 1—Location and date giant anteaters (*Myrmecophaga tridactyla*) that were killed by hunters with dogs in the Bosawas Biosphere Reserve, Nicaragua.

In general, giant anteaters appear to be relatively abundant in the watershed of the Lakus River. While no additional kills were documented during the yearlong study, hunters occasionally reported seeing tracks of giant anteaters during hunting trips into the forest. Indigenous field assistants with the Proyecto Biodiversidad of the Saint Louis Zoo likewise reported occasional sightings of tracks in linear transects throughout Kipla Sait Tasbaika (K. Williams-Guillen et al., in litt.). The continued survival of this species in the territory is debatable. Although hunters do not specifically target giant anteaters, they sometimes kill them because of the threat they pose to dogs. However, much of the territory receives little hunting pressure, particularly those areas farthest from the communities. Provided that these areas remain forested and largely unexploited by hunters, the extirpation of giant anteaters from the watershed of the Lakus River does not appear imminent.

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