

FIRST EVIDENCE OF THE GIANT ANTEATER
(*MYRMECOPHAGA TRIDACTYLA*)
IN HONDURAS

CHRISTY M. MCCAIN*

Natural History Museum and Department of Ecology and Evolutionary Biology, University of Kansas,
Lawrence, KS 66045

*Correspondent: cmmccain@ukans.edu

The giant anteater (*Myrmecophaga tridactyla*) has a historical distribution from southern Belize through Central and South America to Bolivia, northern Argentina, and Uruguay (Fig. 1; Hall, 1981; Wetzel, 1982, 1985; Gardner, 1993; Emmons, 1997; Reid, 1997; Nowak, 1999). Although giant anteaters were more widely distributed across the Americas in the Pleistocene (Shaw and McDonald, 1987), their range contracted, presumably because of climatic and habitat changes associated with the retreat of the glaciers. The current distribution in Central America is based on a few specimens collected in the early 1900s or earlier from Costa Rica, Guatemala, and Panama (Lyon, 1906; Field Museum; United States National Museum), but the giant anteater was never recorded in Honduras (Goodwin, 1942; Reid, 1997). The northernmost report from southern Belize near Punta Gorda was based on an undocumented personal communication (Alston, 1879–1882). Modern records from Central America are rare, and giant anteaters are thought to be extirpated through much of their Central American range (Handley, 1950; Timm et al., 1989; Emmons, 1997; Reid, 1997; Nowak, 1999; Timm and LaVal, 1999). Only 2 relatively new sightings, 1978–1979, were reported by Timm et al. (1989) in the lowland tropical rainforest of Costa Rica, and Reid (1997) reported an unspecified sighting in northwestern Panama (Fig. 1). *Myrmecophaga tridactyla* is one of the least known mammals in Central America and one of the most endangered.

The first recorded giant anteater from Honduras is an adult of unknown sex captured in the lowland tropical rainforest of La Reserva de la Biósfera del Río Plátano (RBRP) in September 1996 by a Miskito Indian (Fig. 2). RBRP is located on the Mosquito coast of northeastern Honduras (Fig. 1), and protects

the third largest contiguous lowland tropical rainforest remaining in Central America. RBRP was internationally recognized in 1980 under UNESCO's (United Nations Educational, Scientific, and Cultural Organization) Man and the Biosphere Programme and placed on the World Heritage List in 1982. RBRP consists mainly of lowland tropical rainforest, but also includes seasonally flooded pine savanna, mangrove, and mountainous regions. The fauna of the region includes some of the most endangered vertebrates in Central America: jaguar (*Panthera onca*), Baird's tapir (*Tapirus bairdii*), harpy eagle (*Harpyia harpyja*), and scarlet and great green macaws (*Ara macao* and *A. ambigua*), among others. Other Xenarthra I observed in the RBRP during 1995 to 1996 were several silky anteaters (*Cyclopes didactylus*) including a mother with her half-grown offspring in February 1996, northern tamanduas (*Tamandua mexicana*) and numerous nine-banded armadillos (*Dasybus novemcinctus*; pers. obser.). The three-toed sloth (*Bradypus variegatus*) has been reported to occur in RBRP (McCarthy et al., 1999).

The giant anteater was captured within 10 km of Las Marías (15°40'N, 84°50'W), Departamento Gracias a Dios, in the heart of the reserve in lowland tropical wet forest between sea level and 50 m in elevation (Fig. 1). Las Marías is a small, isolated village of 100 to 200 Pech and Miskito Indians who survive on subsistence agriculture, hunting, fishing, and ecotourism (McCain, 1997). This particular animal was captured with the intention of keeping it alive for sale in Asia. In previous contact in the village, buyers paid hunters to trap giant anteaters, although the hunters were unsuccessful in locating anteaters on that occasion. The animal caught in September 1996 was set free because of the difficulty in locating enough food to sustain it. Traditional threats

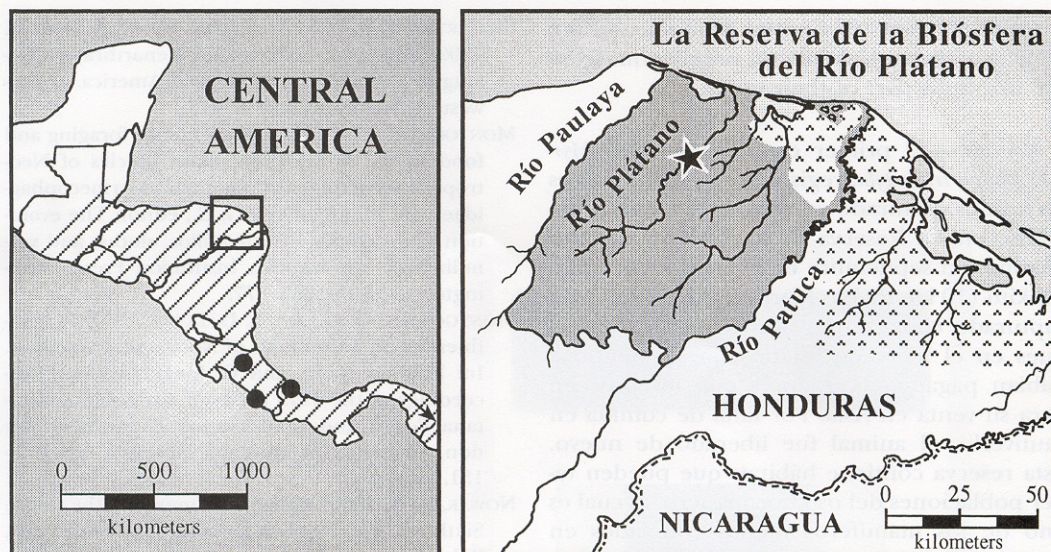


FIG. 1—Left: historical distribution of the giant anteater (*Myrmecophaga tridactyla*) in Central America based on documented and undocumented sightings from the 1900s (cross-hatching), and recent sightings (●). Right: eastern Honduras including La Reserva de la Biósfera del Río Plátano (shaded) and the surrounding area. ★ indicates the sighting of *M. tridactyla* reported here, and patterning indicates the seasonally flooded pine savanna habitat.



FIG. 2—Photograph of the giant anteater (*Myrmecophaga tridactyla*) captured in La Reserva de la Biósfera del Río Plátano, Departamento Gracias a Dios, Honduras, in September 1996. Photograph by author.

to the giant anteater populations in Central and South America have been habitat loss, fire, and killing by farmers (Timm et al., 1989; Reid, 1997; Nowak, 1999). The Miskito and Pech do not hunt anteaters for food, and would not normally capture them if the illegal markets were not offering financial incentive. The potential of such trafficking for anteaters could further endanger giant anteater populations.

Ecological studies of giant anteaters are few, and are based on South American populations in dry and seasonally flooded grasslands and savannas, and in humid forests (Montgomery and Lubin, 1977; Montgomery, 1985; Shaw et al., 1985, 1987). RBRP includes suitable humid rainforest habitat and extensive seasonally flooded pine savanna both of which could harbor populations of giant anteaters, but have been little studied and are mostly isolated from humans. The relative inaccessibility of the area, lack of scientific investigative effort, and the reportedly nocturnal foraging pattern of giant anteaters all may have contributed to previous lack of detection. Future study investigating population dynamics and habitat usage would be valuable in the face of declining giant ant-

eater populations in Central America and the paucity of ecological data on populations from the northern part of their range.

Resumen—El primer oso hormiguero, *Myrmecophaga tridactyla*, registrado en Honduras es un adulto capturado en el bosque tropical húmedo, en La Reserva de la Biósfera del Río Plátano, en septiembre de 1996, por un indio Miskito (10 km de Las Marías). Este animal fue capturado con la intención de venderlo después en el mercado asiático; previamente se habían pagado a cazadores que los proveen para su venta en Asia. Por falta de comida en cautiverio, el animal fue liberado de nuevo. Esta reserva contiene hábitats que pueden tener poblaciones del oso hormiguero, el cual es uno de los mamíferos menos conocidos en Centroamérica y en alto riesgo de extinción.

This work was carried out under the auspices of the Peace Corps, Honduras, and Mosquitia Pawisa. I thank the residents of Las Marías, especially O. Lacayo, O. Agüerro, and D. Ramos for their tutorage in tropical ecology, and A. Agüerro for friendship and sustenance. R. Timm, N. Slade, R. Anderson, and T. McCarthy provided helpful comments on the manuscript.

LITERATURE CITED

- ALSTON, E. R. 1879–1882. *Biologia Centrali-Americana*, Mammalia. Taylor and Francis, London.
- EMMONS, L. H. 1997. Neotropical rainforest mammals: a field guide, Second ed. University of Chicago Press, Chicago.
- GARDNER, A. L. 1993. Order Xenarthra. In: Wilson, D. E., and D. M. Reeder, editors. *Mammal species of the world: a taxonomic and geographic reference*, Second ed. Smithsonian Institution Press, Washington, D.C. Pp. 63–68.
- GOODWIN, G. G. 1942. Mammals of Honduras. *Bulletin of the American Museum of Natural History* 79:107–195.
- HALL, E. R. 1981. *The mammals of North America*, Second ed. John Wiley & Sons, New York.
- HANDLEY, C. O., JR. 1950. A fish and wildlife survey of Guatemala. Special Scientific Report: Wildlife No. 5, United States Department of the Interior Fish and Wildlife Service.
- LYON, M. W. 1906. Description of a new species of great ant-eater from Central America. *Proceedings of the United States National Museum* 31: 569–571.
- MCCAIN, C. M. 1997. Ecotourism in Honduras. *Women in Natural Resources* 18:36–37.
- MCCARTHY, T. J., D. L. ANDERSON, AND G. A. CRUZ D. 1999. Tree sloths (Mammalia: Xenarthra) in Nicaragua and Honduras, Central America. *Southwestern Naturalist* 44:410–413.
- MONTGOMERY, G. G. 1985. Movements, foraging and food habits of the four extant species of Neotropical vermilinguas (Mammalia: Myrmecophagidae). In: Montgomery, G. G., editor. *The evolution and ecology of armadillos, sloths, and vermilinguas*. Smithsonian Institution Press, Washington, D.C. Pp. 365–377.
- MONTGOMERY, G. G., AND Y. D. LUBIN. 1977. Prey influences on movements of Neotropical anteaters. In: Phillips, R. L., and C. Jonkel, editors. *Proceedings of the 1975 predator symposium*. Montana Forest and Conservation Experiment Station, University of Montana, Missoula. Pp. 103–131.
- NOWAK, R. M. 1999. *Walker's mammals of the world*, Sixth ed., Vol. 1. Johns Hopkins University Press, Baltimore, Maryland.
- REID, F. A. 1997. *A field guide to the mammals of Central America & southeast Mexico*. Oxford University Press, New York.
- SHAW, C. A., AND H. G. McDONALD. 1987. First record of giant anteater (Xenarthra, Myrmecophagidae) in North America. *Science* 236:186–187.
- SHAW, J. H., T. S. CARTER, AND J. C. MACHADO-NETO. 1985. Ecology of the giant anteater *Myrmecophaga tridactyla* in Serra da Canastra, Minas Gerais, Brazil: a pilot study. In: Montgomery, G. G., editor. *The evolution and ecology of armadillos, sloths, and vermilinguas*. Smithsonian Institution Press, Washington, D.C. Pp. 379–384.
- SHAW, J. H., J. C. MACHADO-NETO, AND T. S. CARTER. 1987. Behavior of free-living giant anteaters (*Myrmecophaga tridactyla*). *Biotropica* 19:225–259.
- TIMM, R. M., D. E. WILSON, B. L. CLAUSON, R. K. LAVAL, AND C. S. VAUGHAN. 1989. Mammals of La Selva-Braulio Carrillo Complex, Costa Rica. *North American Fauna* 75:1–162.
- TIMM, R. M., AND R. K. LAVAL. 1999. Mammals. In: Nadkarni, N. M., and N. T. Wheelwright, editors. *Ecology and conservation of a tropical cloud forest*. Oxford University Press, New York.
- WETZEL, R. M. 1982. Order Edentata-Xenarthra. In: Honacki, J. H., K. E. Kinnan, and J. W. Koeppl, editors. *Mammal species of the world*. Allen Press and Association of Systematics Collections, Lawrence, Kansas. Pp. 52–57.
- WETZEL, R. M. 1985. The identification and distribution of Recent Xenarthra (=Edentata). In: Montgomery, G. G., editor. *The evolution and ecology of armadillos, sloths, and vermilinguas*. Smithsonian Institution Press, Washington, D.C. Pp. 5–21.

Submitted 6 May 1999. Accepted 25 January 2000.

Associate Editor was Mark D. Engstrom.