

SCIENTIFIC COMMUNICATION

A brief note on the sleeping habits of the giant anteater – *Myrmecophaga tridactyla* Linnaeus (Xenarthra, Myrmecophagidae)

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ABSTRACT. The scientific literature on giant anteaters states that the animal sleeps with its tail folded over its body to conserve body temperature. However, observations of this species in natural habitats indicate variations in this behavior, depending on the ambient temperature.

KEY WORDS. Ambient temperature, body temperature, Pantanal.

RESUMO. Breve nota sobre hábitos de dormir do tamanduá-bandeira – *Myrmecophaga tridactyla* Linnaeus (Xenarthra, Myrmecophagidae). A literatura científica sobre tamanduá-bandeira afirma que o animal dorme com sua cauda dobrada sobre o corpo para conservar a temperatura corporal. Entretanto, observações desta espécie em habitats naturais indicam variações neste comportamento, dependendo da temperatura ambiente.

PALAVRAS CHAVE. Pantanal, temperatura ambiente, temperatura corporal.

The giant anteater, *Myrmecophaga tridactyla* Linnaeus, 1758 (Myrmecophagidae), has a lower body temperature and basal metabolic rate than other vertebrates of the same body mass, which appear to be adaptive responses to its diet of ants and termites, ubiquitous sources of low nutritional quality (EISENBERG 1989). Thus, notwithstanding its large mass, its coat is long to compensate for its very low basal metabolic rate (McNAB 1985). This low metabolism may also explain why the giant anteater, a tropical species, has developed such a heavy, dense coat (SHAW & CARTER 1980).

The giant anteater uses its hairy tail as a cover when sleeping, folding its bushy tail over its body, especially at low ambient temperatures, to help conserve the body heat generated by its metabolism (SHAW & CARTER 1980, McNAB 1984). This sleeping position also serves to camouflage the sleeping animal (SHAW & CARTER 1980).

A study was conducted in 2001 in the Pantanal wetlands of the state of Mato Grosso do Sul (18°59'S, 056°39'W), Brazil, involving the capture of giant anteaters, which were outfitted with radio transmitters and then released to monitor their movements and estimate their home ranges (MOURÃO & MEDRI 2002, MEDRI & MOURÃO 2005). However, other types of behavior were also recorded and are discussed here.

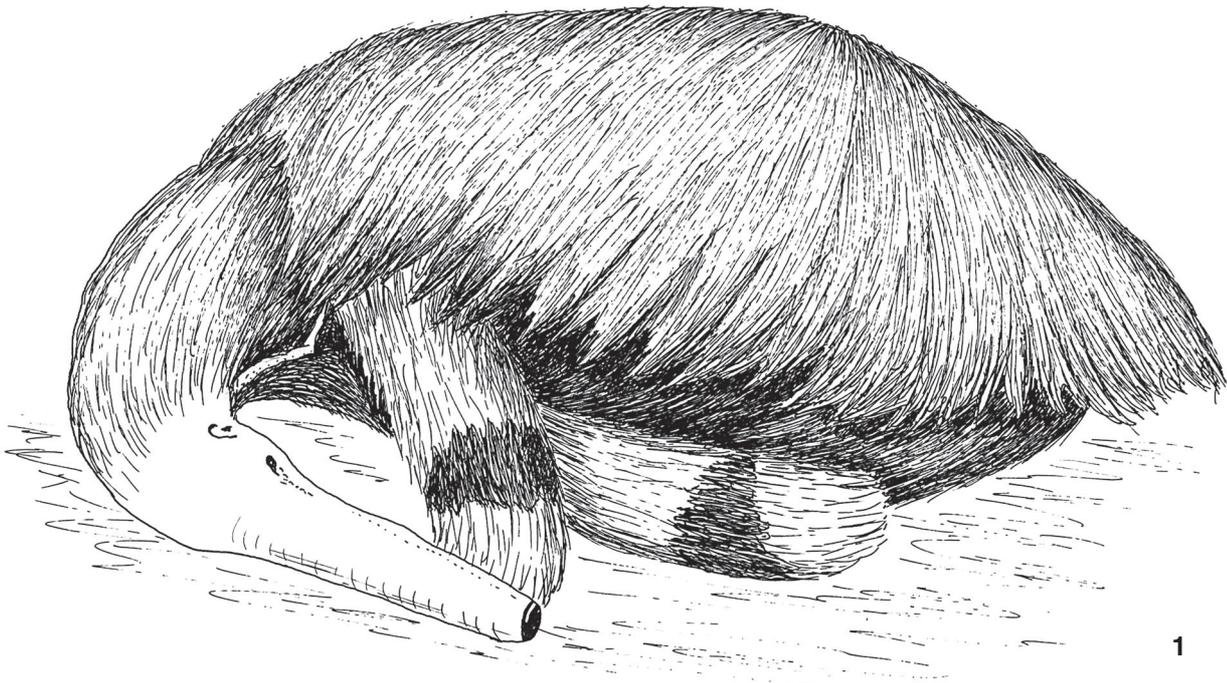
Giant anteaters do not dig burrows but bivouac in sheltered places, generally dense clumps of shrubs (EISENBERG

1989). The animal generally sleeps in a small cavity it makes with its claws in sandy soil. In the Pantanal, giant anteaters rest mainly in forest patches and savanna, and often forage on grasslands and scrub savanna or use them to move from one type of habitat to another. However, giant anteaters have been seen sleeping in high grass on cooler days. Forest fragments in the Pantanal can provide a safe resting place for giant anteaters because of the presence of dense clumps of spiny bromeliads, *Bromelia balansae* Mez (Bromeliaceae). Also, temperatures inside forest fragments are usually mild when compared with open habitats (MEDRI & MOURÃO 2005).

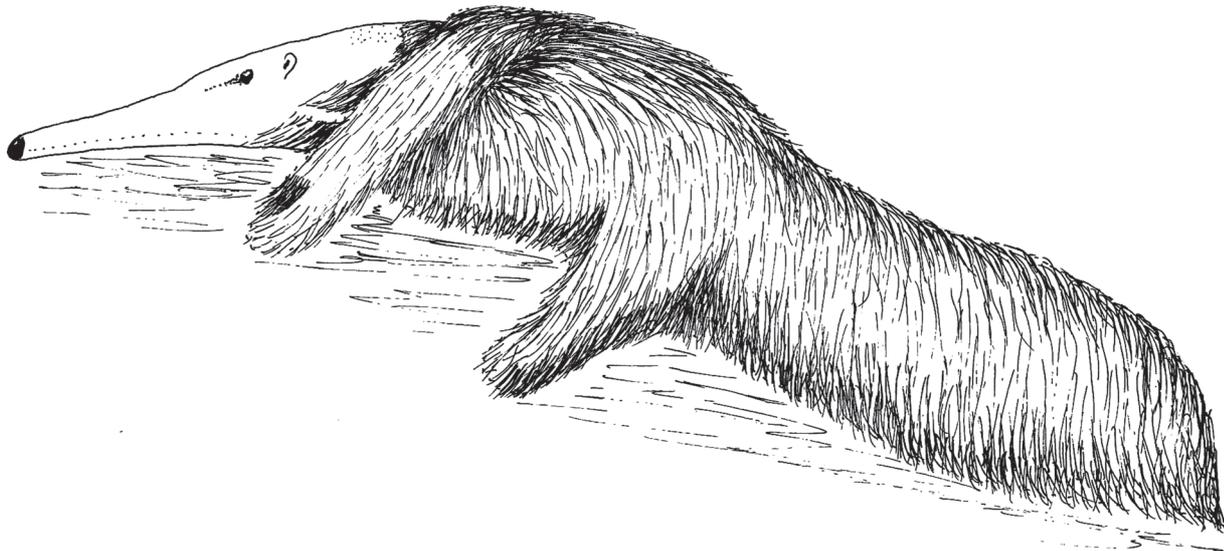
In a large number of sightings (n = 107), giant anteaters were found sleeping with their bushy tails covering their bodies (Fig. 1), even on days when the temperature exceeded 30°C. However, on June 21, 2001, a particularly cool sunny morning when the ambient temperature was about 17°C, the giant anteater shown in figure 1 was sleeping with its tail stretched out flat on the ground (Fig. 2), exposing the full length of its body to the sunlight, a behavior that suggests it was using the sun's rays as a source of heat to raise its body temperature.

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Figures 1-2. (1) Diagrammatic sketch of the giant anteater sleeping with its tail covering its body. This observation was taken on July 24, 2001 at 9:56 a.m. with ambient temperature of about 28.5°C, in the Pantanal wetlands of Mato Grosso do Sul State, Brazil; (2) In the Pantanal wetlands of Mato Grosso do Sul State, Brazil, June 21, 2001, early morning with ambient temperature of about 17°C, giant anteater sleeping with its tail stretched out flat on the ground, suggesting it was using the sun's rays to increase its body temperature.

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