



# FrontiersEcoPics

## Identity theft: anti-predator mimicry by the giant anteater?

The giant anteater (*Myrmecophaga tridactyla*) ranges widely in northern South America and southern Central America, where its main predators are jaguars (*Panthera onca*) and pumas (*Puma concolor*). The species' bold color pattern has been attributed to predator avoidance through both aposematism and disruptive camouflage. Its powerful front claws can be used not only for ripping open ant and termite nests but also as a lethal defense against attacking jaguars (and humans!); this has led to the suggestion that the conspicuous black "bracelets" on its forelimbs could be an aposematic warning signal to potential predators (Philos *TR Soc B* 2009; doi.org/10.1098/rstb.2008.0221). After photographing this unaccompanied pair of giant anteaters in the Brazilian Pantanal in September 2022, we suggest another function for their distinctive coloration – mimicry. The forelimb "bracelets" create a panda-like pattern with a black nose, eyepatch, and ear. The paleness of the anteater's near forelimb

extends up and back toward its rump, creating the visual impression of an upper body of another animal. The pale inner side of the anteater's far forelimb makes it appear to be a near forelimb, adding to the illusion of a separate, smaller animal. The resulting pattern strongly suggests a bear (Ursidae) and could be an example of Batesian mimicry, but we propose a more novel form of mimicry. As a knuckle-walker, *M tridactyla* moves relatively slowly; this, when coupled with its small head, long snout, and absence of teeth, makes the giant anteater especially vulnerable to a large predator. Procyonids (eg raccoons [*Procyon* spp] and coatis [*Nasua* spp]) are smaller than the giant anteater and common throughout its current range; notably, some procyonid species have dark noses, eyepatches, and ears, and larger felids regularly prey upon them. By projecting the likeness of a smaller prey species, an anteater might lure an attacker to a less vulnerable part of its body, which could then allow it to respond with its formidable claws. Or are we just seeing things?

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