

Association between a Yellow-headed Caracara (*Milvago chimachima*) and a Pale-throated Three-toed Sloth (*Bradypus tridactylus*) in Kourou, French Guiana

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Observation Note:

On May 22, 2026, at 17:05, during a walk at the "Golf de l'Anse" (located at the entrance of the Guiana Space Centre), I heard a Yellow-headed Caracara (*Milvago chimachima*) calling. Looking up, I spotted it at the top of one of the tallest trees in the area, perched right next to a Pale-throated Three-toed Sloth (*Bradypus tridactylus*).

The caracara stopped vocalizing and moved closer to the sloth. The only response the sloth exhibited was raising its head toward the raptor, showing no signs of aggression or escape behaviour. As soon as it was close enough, the caracara leaned in and rapidly pecked at the sloth's arms (on the dorsal side). It then repeated this action more slowly, appearing to probe or dig into the fur on the sloth's back for approximately 3 to 5 seconds before withdrawing its beak.

I was unable to discern whether it retrieved anything in its beak, and I could not take photographs in time to get a closer look, as the interaction occurred rapidly. By the time I retrieved my camera from my bag, the caracara had hopped about 1.5 meters away onto

another branch and resumed vocalizing. The sloth did not exhibit any further behavioral changes.

As the adult caracara flew to a lower branch just behind, I noticed a second individual perched there. It appeared to be a juvenile, potentially one of the two young caracaras I had observed the previous day 150 meters away, feeding on an unidentified mammal (*Rattus* sp.?). Over the preceding days, I had observed up to four individuals simultaneously at this location (perched near a football field at the trail's entrance), including two adults and two juveniles.



Unfortunately, I could not remain at the site to observe whether the juvenile also attempted to forage on the sloth. However, the juvenile clearly witnessed the adult foraging, suggesting a potential opportunity for social learning through observation.

Discussion

The Yellow-headed Caracara (*Milvago chimachima*) is well-known for associating with various domestic and wild mammals, including capybaras (Sazima, 2007), lowland tapirs (Moravec & Campos, 2024), and deer (Gijssman & Guevara, 2020), as well as sloths (Krakauer & Krakauer, 1999).

This raptor typically utilizes mammals for foraging through three distinct strategies: As a predatory perch: Hunting from the animal's back while the host moves and flushes out arthropods. As a ground beater: Foraging on the ground nearby, capitalizing on the host's movements to catch flushed prey. As a cleaner: Foraging directly within the host's skin or fur to consume ectoparasites (ticks, larvae).

Because the sloth in this observation remained completely motionless, the first two strategies can be ruled out. This interaction is best explained by the third strategy (tick-cleaning), which aligns perfectly with the rapid pecking and probing behaviour observed in the fur.

While cleaner-bird interactions are documented, detailed observations involving sloths remain scarce. It is still difficult to determine the exact mechanics of this mutualism; for instance, it remains unknown whether sloths actively solicit the interaction, as seen in capybaras, which display cleaning solicitation behavior by lying down and exposing their abdomens (Sazima, 2007), and in tapirs (Reis et al. 2017, Coulson et al. 2018 and Mosquera-Guerra et al. 2024).

This cleaning association is not restricted to *Milvago chimachima*. Globally, cleaning symbioses have been described in at least 33 bird species across 16 different families. In French Guiana, species of raptors known to engage in this behavior include the Black

Caracara (*Daptrius ater*), Crested Caracara (*Caracara plancus*), Yellow-headed Caracara (*Milvago chimachima*), and the Black Vulture (*Coragyps atratus*). Non-raptor species in the region include: Cattle Egret (*Ardea ibis*), Snowy Egret (*Egretta thula*), Wattled Jacana (*Jacana jacana*), Smooth-billed Ani (*Crotophaga ani*), Shiny Cowbird (*Molothrus bonariensis*), Giant Cowbird (*Molothrus oryzivorus*), Common Gallinule (*Gallinula galeata*).

This diversity suggests that future field observations may reveal additional bird species utilizing sloth fur as a foraging micro-habitat.

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