YELLOW-HEADED CARACARA AND BLACK VULTURE CLEANING BAIRD’S TAPIR

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In a cleaning symbiosis, one animal species, the cleaner, removes and consumes ectoparasites, necrotic tissue, or mucus from another animal species, the client or host. The only raptors reported as cleaners are of the orders Cathartiformes (Black Vulture [Coragyps atratus]) and Falconiformes (Southern Caracara [Caracara plancus]; Striated Caracara [Phalcoboenus australis]; Black Caracara [Daptrius ater]; Yellow-headed Caracara [Milvago chimachima]; Chimango Caracara [M. chimango]; Százma 2011). These raptors have been reported cleaning large mammals including wild and domestic ungulates, capybaras (Hydrochoerus hydrochaeris), elephant seals (Mirounga leonina), and domestic dogs (Canis lupus familiaris; Százma and Százma 2010). Occasional “cheating” during cleaning sessions occurs when the cleaner picks at wounds, consumes flesh, and drinks blood; cheating has been reported for Black Vulture, Southern Caracara, Yellow-headed Caracara, and Chimango Caracara (Százma et al. 2012).

The Yellow-headed Caracara is a habitual cleaner of ticks (Ixodidae) on various mammal species, whereas the Black Vulture has only occasionally been observed cleaning mammals (Százma 2007, 2010). The Yellow-headed Caracara’s known clients are domestic ungulates, the lowland tapir (Tapirus terrestris; Százma and Százma 2010), the capybara (Macdonald 1981) and possibly the brown-throated three-toed sloth (Bradypus variegatus; Krakauer and Krakauer 1999). Clients documented for the Black Vulture are limited to the capybara and the domestic dog (Százma 2007, 2010).

We describe the cleaning of a previously unreported client, Baird’s tapir (Tapirus bairdii, Perissodactyla: Tapiridae), by Yellow-headed Caracara and Black Vulture. Prior to this report, the only cleaner documented for Baird’s tapir was a mammal, the white-nosed coati (Nasua narica; Overall 1980, McClearn 1992). The endangered Baird’s tapir is a keystone browser and an important seed disperser (Foerster and Vaughan 2015, García et al. 2016). Tapirs travel alone with the exception of mothers and dependent young (Eisenberg and Redford 1999).

Raptors were observed cleaning Baird’s tapirs near the Sirena Ranger Station in Corcovado National Park (CNP), Puntarenas Province, Costa Rica (8°27.8’N, 83°35.5’W). This portion of CNP consists of lowland rainforest, secondary forest, yolillo palm (Raphia taedigera) forest, freshwater, and beach habitats, and a mowed, grassy field. This coastal area receives 5500–6000 mm of precipitation annually, primarily during the rainy season in April through December (Kappelle 2016). The tapirs of CNP have tick infestations (≥300 ticks/tapir) year-round, with the highest infestations recorded from December–May, mostly during the dry season (Hernandez-Divers et al. 2005).

From 2012–2017, we documented 11 instances of raptors cleaning Baird’s tapir. For our own observations (n = 3), we used a Canon EOS 7D digital camera equipped with a 700-mm lens or a 20–60× spotting scope. We searched the internet and social media sources for other evidence of these raptors cleaning Baird’s tapir at CNP, reviewed the photographs and videos found, and then interviewed the observers who reported these additional eight observations of cleaning. We first asked each observer to describe the event, then inquired about specific behaviors observed (e.g., cleaning, tick removal), and requested the date, time, location, duration of observation,