

## Hunting behaviour of Southern Caracara *Caracara plancus* on medium-sized birds

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O carcará *Caracara plancus* é uma das maiores aves da ordem Falconiformes, conhecida por seus hábitos necrófagos. No entanto, aqui apresentamos três registros de predação coletiva de carcarás a aves de médio porte, entre elas duas garças-vaqueiras *Bubulcus ibis* e um coró-coró *Mesembrinibis cayennensis*. Embora existam alguns relatos de predações pela espécie na literatura, tais hábitos são pouco conhecidos, pois muitas presas observadas sendo consumidas e tratadas como necrofagia, podem ter sido na verdade abatidas por essas aves.

The Falconiformes number several proficient hunters, many of which are well adapted to capture prey at high speed, such as Peregrine Falcon *Falco peregrinus*<sup>10</sup>. However, it also includes species better known for their necrophagy, although they too appear well suited for hunting (hooked bill, narrow wings, strong claws). One such species is Southern Caracara *Caracara plancus*, one of the largest Falconiformes, reaching up to 58 cm in length<sup>5</sup> and c.1 kg body mass<sup>3</sup>. It feeds mostly on carcasses, including roadkill, apparently competing with vultures (Cathartidae)<sup>11,15</sup>.

Despite its apparent predilection for dead animals, often even decomposed, the species has also been reported feeding on live arthropods, molluscs, small invertebrates and even fruit<sup>6,11,13,14</sup>. Foraging behaviour varies widely, from simple collection of fruits or dead animals to kleptoparasitism<sup>4,9</sup>. In fact, insects might represent the bulk of the species' diet by numbers, although their contribution by biomass is lowest<sup>1</sup>. *C. plancus* has also been observed associating with mammals

to pick their ectoparasites<sup>12</sup>. Furthermore, there are also a few reports of hunting<sup>11</sup>, including small or sick animals<sup>9</sup>.

Here we report three observations of predation by *C. plancus* on two medium-sized birds: Cattle Egret *Bubulcus ibis* on two occasions, and Green Ibis *Mesembrinibis cayennensis* on one. Our first observation was on 28 September 2011 in Irapuã municipality, São Paulo state (21°15'S 49°23'W). The local landscape is dominated by citrus orchards and sugarcane plantations, with some mid-sized forest remnants. In the morning, two *C. plancus* chased and attacked a *M. cayennensis* in flight, forcing the ibis to the ground. The carcaras then pecked the live ibis on its head until it was dead (Fig. 1). As we approached to take notes, the carcaras flew off, but as soon as we withdrew they returned and start to consume the ibis.

The second observation was on 30 June 2012, in Três Lagoas municipality, Mato Grosso do Sul state (20°11'S 51°48'W), in a rural area 50 km from the nearest town. The event occurred in a pasture



Figure 1. Green Ibis *Mesembrinibis cayennensis* preyed upon by Southern Caracara *Caracara plancus*, Irapuã municipality, São Paulo, Brazil, 28 September 2011 (Julio César Costa)



Figure 2. Two Southern Caracaras *Caracara plancus* predating a Cattle Egret *Bubulcus ibis*, Prudente municipality, São Paulo, Brazil, 24 July 2013 (Arthur Macarrão)

within the Cerrado biome. Approximately 60 *Bubulcus ibis* were grouped around a cattle feeder, when two *C. plancus* started chasing an egret that took flight, pursued by the caracaras, which again forced the quarry to the ground with their bills, and killed the egret by pecking at it. More detailed observations were impossible, although it is believed that both caracaras consumed the prey.

The final observation was made at a pasture area near a riparian forest in Presidente Prudente municipality, São Paulo state (22°13'S 51°28'W), on 24 July 2013, when two *C. plancus* killed another Cattle Egret in the same way. They pursued the egret in flight, which flew in circles, apparently attempting to evade the caracaras, but it was forced down and killed on the ground (Fig. 2). The landscape where it occurred resembles the previous one.

There are observations of *C. plancus* cooperatively predating a Great Egret *Ardea alba* and a White-faced Ibis *Plegadis chihi* in Buenos Aires, Argentina<sup>6</sup>, and a group of the closely related Northern Caracara *C. cheriway* attacking a *Bubulcus ibis* in Mexico<sup>16</sup>. There is also a record of an unsuccessful attack by two *C. cheriway* on a young Mantled Howler Monkey *Alouatta palliata* and its mother that were foraging in a riparian forest between a cattle pasture and a dirt road<sup>8</sup>.

*Bubulcus ibis* is apparently one of the most frequently consumed medium-sized prey items by caracaras. Layne *et al.*<sup>7</sup> found remains of egrets around seven of 12 nests of *C. cheriway* in Florida, suggesting that the egrets were actively hunted rather than carcasses. The same authors also cited third-party reports of collective attacks by the same species on *B. ibis*. These data suggest that *C. plancus* might opportunistically attack live prey, perhaps in the absence of decaying carcasses.

Although the species is a generalist, inhabits human-modified sites and has an increasing global population, basic natural history information is important to understand its general ecology.

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