

Short Communication

An aberrant coloured Southern crested caracara *Caracara plancus* Miller 1777 (Falconiformes: Falconidae) from Brazil

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Abstract - We present an aberrant coloured individual of Southern crested caracara (*Caracara plancus*) from Brazil. The individual has predominantly white plumage with a few dark grey feathers on the body; the legs and face are yellow and the eyes are melanic. The individual was observed in the municipality of Nossa Senhora Aparecida, state of Sergipe, northeastern Brazil. The animal presented signs of sun burn and currently is hosted in the Parque dos Falcões, Sergipe, Brazil.

Key words: Sergipe, Southern Crested Caracara, white feathers.

Riassunto - Un caracara crestato meridionale *Caracara plancus* Miller 1777 (Falconiformes: Falconidae) del Brasile di colore aberrante.

Presentiamo un individuo di colore aberrante di caracara meridionale (*Caracara plancus*) per il Brasile. L'individuo ha piumaggio prevalentemente bianco con poche piume grigio scuro sul corpo; le zampe e la faccia sono gialle e gli occhi sono melanici. L'individuo è stato osservato nel comune di Nossa Senhora Aparecida, stato di Sergipe, Brasile nord-orientale. L'animale presentava segni di ustione solare e attualmente è ospitato nel Parque dos Falcões, Sergipe, Brasile.

Parole chiave: caracara crestato meridionale, piume bianche, Sergipe.

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Received for publication: 16 January 2023

Accepted for publication: 30 August 2023

Online publication: 6 October 2023

INTRODUCTION

The Southern crested caracara *Caracara plancus* Miller 1777 is a widespread bird of prey occurring along most of South America, from the Amazon River to Patagonia (Dove & Banks, 1999). *C. plancus* is one of only three species of the genus (Fuchs *et al.*, 2012; Mindell *et al.*, 2018), of which one is extinct (*C. lutosa*; BirdLife International, 2022). The Southern crested caracara, on the other hand, is listed as Least Concern and has an increasing population (BirdLife International, 2016). The species is typical of open areas, benefiting from human habitat modifications, including pastures and crop areas (Tubelis, 2019; Sagge *et al.*, 2021). Caracaras are commonly generalist and scavenger birds (Sazima, 2007; Idoeta & Roesler, 2012), whose diet includes fruits (Sazima, 2007), invertebrates (Morrison *et al.*, 2008), birds and mammals (Vargas *et al.*, 2007), and carrions (Travaini *et al.*, 2001). In addition to scavenging and predation, fruit-eating behaviour results in seed dispersal, which is another important ecosystem service (Galetti & Guimarães Jr., 2004).

The species is mostly black, with dark and light bars over the breast, fine bars, and heavy bars in the upper back and scapulars with bars continuing over the lower back and upper tail (Dove & Banks, 1999). This characteristic colour has only small variations along the species' distribution. A few colour disorders have been reported for the genus, such as albinism observed in *C. cheriway* (von Jacquin 1784) in Mexico (Tinajero & Rodríguez-Estrella, 2010) and leucism observed in *C. plancus* in Argentina (Edelaar *et al.*, 2011; Agüero *et al.*, 2017). The report of *C. plancus* is especially interesting because of the high frequency of individuals presenting with this disorder in a single population.

Leucism is the reduction or absence of melanin production (Miller, 2005), which affects the skin, feathers, hair, fur, or scales (Jehl, 1985). This phenomenon has been documented in many vertebrates (Abreu *et al.*, 2013; Lunghi *et al.*, 2017; Silva *et al.*, 2020; Barreto *et al.*, 2023), including birds (Corrêa *et al.*, 2017). Aberrant colouring, such as albinism and progressive greying, also causes plumage whitening (van Grouw, 2021). Here, we present the report of an aberrantly coloured *C. plancus* in Brazil. The individual was opportunistically observed in the semiarid region of Brazil, in Northeast region.

MATERIAL AND METHODS

We observed the animal at Povoado Lages (10°23'S, 37°30'W), in the municipality of Nossa Senhora Aparecida, state of Sergipe, Brazilian Northeast. The locality is part of the Caatinga biome. According to Köppen's classification (Alvares *et al.*, 2013), the local climate falls within the Tropical Zone with dry summer (*As*), recording an annual precipitation of about 700 mm with dry summer and wet winter, and 25 °C average annual temperature. Local phytophysiology is typically xeric, with most native forests being changed by pasture (Authors' pers. obs.).

RESULTS

The first observation was made on 8 August 2018 by a friend and local resident who contacted JPMC (Fig. 1A) to obtain an identification by sending photographs and video footage. Due to the dust at the observation site, the animal showed a yellowish plumage (Fig. 1A-B), which turned out to be white after washing (Fig. 1C). The bird was often seen alone, but regularly fed by a male who usually brought it frogs (JPMC pers. obs.). After that, JPMC visited the animal three times a week to feed it, in order to accustom it to human presence and facilitate its capture.

On 8 September 2018, JPMC captured the bird and moved it to the Parque dos Falcões (10°44'S, 37°22'W), municipality of Itabaiana, State of Sergipe. On the occasion, the animal, which showed signs of sunburns, weighed 630 g, which is far below the average weight for the species, with females weighing 953 g and males weighing 834 g (Márquez *et al.*, 2005). Subsequent observations, including behaviour, proved that it was a female. The individual is still housed in Parque dos Falcões, where it is paired and ready to breed. Throughout the last four years, we observed the appearance of dark feathers throughout the body (Fig. 2A-C).

DISCUSSION

This is the first report of aberrant colour in *C. plancus* in Brazil. Despite the difficulty in correctly identifying aberrant white coloration, there are some reports of leucism and progressive greying in birds in the literature (Corrêa *et al.*, 2017, 2020; Mora & Loria, 2020; Camacho *et al.*, 2022).

Although largely distributed, Southern crested caracaras are known to form large groups for breeding and foraging (Saggese *et al.*, 2021; Authors' pers. obs.). This may facilitate intragroup or intrapopulation breeding, in-



Fig. 1 - Female Southern caracara recorded in the municipality of Nossa Senhora Aparecida, Sergipe, northeastern Brazil. (A) Free-living individual before capture; (B) yellowish plumage due to local dust; (C) same individual after being washed. / Femmina di caracara meridionale osservata nel comune di Nossa Senhora Aparecida, Sergipe, Brasile nord-orientale. (A) Individuo libero prima della cattura; (B) piumaggio giallastro dovuto alla polvere locale; (C) stesso individuo dopo essere stato lavato.



Fig. 2 - Female Southern Caracara hosted in Parque dos Falcões, municipality of Itabaiana, Sergipe, northeastern Brazil. The images allow us to observe its previous and current white plumage, comparing (A) its first record in 2018 a few days after being rescued; (B) its back view in 2022; and (C) its side view five years later in 2023. / Femmina di caracara meridionale ospitata nel Parque dos Falcões, comune di Itabaiana, Sergipe, Brasile nord-orientale. Le immagini ci permettono di osservare il piumaggio bianco precedente e quello attuale, confrontando (A) la prima osservazione nel 2018, pochi giorni dopo il salvataggio; (B) la vista posteriore nel 2022; e (C) la vista laterale cinque anni dopo, nel 2023.

creasing the frequency of genotypes, such as leucism and albinism. Previous reports of aberrantly coloured individuals of *C. plancus* support this context (Edelaar *et al.*, 2011; Agüero *et al.*, 2017), with apparent advantages in some populations (Edelaar *et al.*, 2011).

The current placement of the bird in the Parque dos Falcões, a private centre for the rehabilitation of birds of prey with more than 20 years of experience in breeding, reproduction and conservation of birds of prey, was authorised by the Brazilian Institute for Natural Resources (IBAMA) in view of its rarity and vulnerability to climatic conditions, predation and capture by humans. The healthy female, now adult, is able to breed, corroborating the idea that with growth, the leucistic condition does not limit a bird's reproductive capacity (see Toledo *et al.*, 2014; van Grouw, 2014). Further observations of leucism in other free-living southern caracaras in Brazil will allow us to understand this phenomenon on a larger scale.

Acknowledgments

We thank the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior – Brasil (CAPES) for

Post-Doctoral research fellowship to RB-M (PNPD: 88887.320996/2019-00). We also thank Hein Van Grouw and Wilhelmus Maria Cornelis Edelaar for their valuable comments and suggestions during the manuscript review.

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