A case of leucism in Southern Lapwing (*Vanellus chilensis*) in the Pantanal, Brazil

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Resumen
Un caso de leucismo en *Vanellus chilensis* fue observado en una salina en la Fazenda Rio Negro, al sur del Pantanal, Brazil entre julio de 2005 y mayo de 2006. Presentamos una descripción completa y fotografías del individuo aberrante.

Palabras clave: Brasil, leucismo, Pantanal, Tero Común, *Vanellus chilensis*.

Abstract
We observed a case of leucism in a Southern Lapwing (*Vanellus chilensis*) present from July 2005 to May 2006 in a salt lake at Rio Negro farm, south of the Pantanal, Brazil. Here we present a complete description and pictures of the aberrant individual.

Keywords: Brazil, leucism, Pantanal, Southern Lapwing, *Vanellus chilensis*.

Introduction

Leucism, sometimes incorrectly called partial albinism, is the complete lack of particular pigment in some or all feathers, resulting in pure white feathers; unlike albinism, pigments in other parts of the body are unaffected (Buckley 1982, Nemésio 1999). Generally, plumage aberrations can result from hybridization, nutritional deficiency, genetic mutation, or represent a previously unrecognized transitional plumage (Anciães et al. 2005). In the case of leucism, the causes are often attributed to expression of mutant alleles (Bensch et al. 2000) or deviations in gene expression that disrupt the pigmentation at feather development (Møller & Mousseau 2001). Alternatively, such cases may result from physiological disturbance (Phillips 1954).

The Southern Lapwing (*Vanellus chilensis*) ranges throughout South America northwards to Panama in Central America (Infonatura 2004). It is found in open areas near water and marshes, grassland, open pastures and is frequently seen around ranch houses and in urban gardens (Piersman 1996).

Methods

We conducted fieldwork on birds at Rio Negro farm, Pantanal, State of Mato Grosso do Sul, Brazil (19º33'S, 56º13'W, 100 m.a.s.l.) between 2005 and 2006. The Rio Negro farm spans nearly 8,000 hectares and contains salt lakes and other open areas near water that provide habitat for the Southern Lapwing. A Southern Lapwing with aberrant plumage was recorded monthly during field work conducted from July 2005 to May 2006 at a salt lake located at the Rio Negro farm.

Results

The aberrant Southern Lapwing had pure white feathers covering most of its head and nape where Southern Lapwings with typical plumage have gray and black feathers (Fig. 1). The coloration of the rest of the body appeared identical to typically pigmented individuals, including the soft parts, irides, legs, and the remainder of its plumage. The description of the aberrant individual is as follows: bill pinkish with black tip; legs pink; mantle mostly brownish gray; shoulders bronzy green; breast black; all the head (except the long pointed occipital

crest) and part of the neck white as a substitute of typical gray head; forehead black; and throat patch black.

Fig. 1. A typical *Vanellus chilensis* (left) and a leucistic individual (right) showing aberrant white plumage on the head, Pantanal, Brazil, May 2006 (Photo: C. Cestari).

Southern Lapwings usually present some variation in the extent of black in the forehead and throat, as well as the amount of white bordering this black plumage, and geographic differences in this variation are used to distinguish subspecies (Piersman 1996). No Southern Lapwing subspecies exhibit white cheeks behind the eye, crowns, or napes. The presence of pure white feathers over a large portion of the aberrant bird's head, in areas where typical birds have colored feathers, fits the diagnosis of leucism (Hosner & Lebbin 2006).

The leucistic individual was frequently accompanied by conspecifics with normal plumage patterns and seemed not show any different habits or behavior. In almost all time observed, the leucistic individual foraged in close proximity to typical birds along the sandy bank of the salt lake. No breeding behavior was verified during out study. No similar aberrant individual was recorded in the area previously.

Discussion

This is the first reported instance of leucism in Southern Lapwing. Partial leucism has been previously reported for plovers (Buckley 1982), including the Eurasian Lapwing (*Vanellus vanellus*). Partial leucism limited to head feathers is apparently a common form of leucism, previously observed in a variety of other groups including wrens, spinetails, tapaculos, tanagers, thrushes, seed-eaters, and warblers (Kratter & Nice 2001, Nemésio 2001, Piacentini 2001, Krabbe & Schulenberg. 2003, Kroodsma & Brewer 2005, Hosner & Lebbin 2006, Lebbin et al. 2007).

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