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### FIRST REPORTED NEST OF THE BLACK-FRONTED WOODQUAIL (*ODONTOPHORUS ATRIFRONS*)

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**Primer reporte del nido de la Perdiz carinegra (*Odontophorus atrifrons*).**

**Key words:** *Odontophorus atrifrons*, nest, eggs, Sierra Nevada de Santa Marta, Colombia.

The Black-fronted Woodquail (*Odontophorus atrifrons*) has a disjunct range throughout north-east Colombia and extreme western Venezuela, in the Sierra Nevada de Santa Marta (ssp. *atrifrons*), on both sides of the Perijá mountains along the Colombian-Venezuelan border (ssp. *navai*), and to the north of eastern Andes of Colombia in depts. Norte de Santander and Santander (ssp. *variegates*). This species inhabits humid montane and cloud forests at elevations between 1650–3100 m in Venezuela (Hilty 2003) and between 700–3100 m in Colombia (Hilty & Brown 1986, Fjeldsâ & Krabbe 1990, Strewe & Navarro 2004a).

*O. atrifrons* is a wary and secretive species as it forages in dense undergrowth (Todd & Carriker 1922). The only information on its breeding ecology are two males and one female in breeding-condition found in August, and an immature individual observed in July in the Perijá mountains (Hilty &

Brown 1986). Habits and reproductive behaviour are poorly known for most wood-quails of the genus *Odontophorus*; for the majority of members, including the relatively widespread species, nest have remained undescribed (del Hoyo *et al.* 1994).

*Study site.* We report the discovery of a nest of the nominotypical form in “La Cumbre” private natural reserve (11°06'53"N, 74°02'16"W), on the southwestern slope of the San Lorenzo ridge, municipality of Santa Marta, Sierra Nevada de Santa Marta, dept. of Magdalena, Colombia. The natural reserve (71 ha) was originally a cattle farm. During the last four years the management changed and more emphasis has been given to the protection and recuperation of natural habitats. Nowadays the natural reserve protects fragments of primary forest and little disturbed forest at altitudes between 1800–2500 m, habitat of 14 endemic birds species from the

Sierra Nevada de Santa Marta and 12 threatened globally bird species (Stattersfield *et al.* 1998, BirdLife International 2008).

*Nest report.* This is apparently the first published record of the nest for the species. It was discovered on 15 May 2008, when an adult quail was flushed from the edge of a mountain trail. The nest was located on a steep slope within a small fragment (c. 0.5 ha) of humid submontane forest at 1900 m. It was found at the border of dense undergrowth of primary forest, 2 m above from the footpath. It was quite shady and designed on the ground in a hollow-like with a bed of dried leaves and small sticks (Fig. 1); it looked as no additional material was used. It measured 21 x 13 cm and nearly 15 cm in depth. The nest was densely surrounded by herby plants in growth and ferns. It contained a clutch of three unpitted white eggs, partially speckled with brown for the mud or spots of leaf stains (Fig. 1). All eggs were newly checked on 19 and 21 May 2008. On 21 May, no adult was present and the eggs were covered by dry leaves. The fate of the nest has remained unknown.

Within “La Cumbre” natural reserve, two more observations were made concerning the breeding biology of *O. atrifrons*. On 2 June 2007, four downy chicks were found within a forest fragment on the western limits of the reserve at 2200 m. On 5 June 2008, three young birds were recorded in the San Lorenzo Military base captured by Colombian soldiers in the nearby forest to the natural reserve. Owing to the intervention of JV, the young birds were released in their habitat. On May 2008, *O. atrifrons* occupied three territories within the natural reserve, spotted by their singing and calling at dawn and at dusk. Callings were not recorded from the place of the nest or its surroundings in May 2008. The small forest fragment where the nest was

found is connected through a corridor with a bigger fragment of nearly 8 ha.

*Discussion.* Most of the previously information about the breeding biology of New World wood-quails comes from North American species, which have been better studied than those of the Neotropics. Clutch sizes range from 3-6 eggs and the incubation takes between 16-30 days depending on the species; chicks are precocial and quickly leave the nest to accompany their parents in large family groups (del Hoyo *et al.* 1994). Skutch (1947) described the nest, eggs, and incubation behavior of Marbled Wood-Quail (*Odontophorus gujanensis*) in Costa Rica, with nests found to be a roofed structure with a side entrance or a deep depression in fallen leaves (Stiles & Skutch 1989). McDonald & Winnett-Murray (1989) described the nesting of Black-Breasted Wood-Quail (*Odontophorus leucolaemus*) from Costa Rica, and Fierro-Calderón & Franco (2006) of Chestnut Wood-Quail (*Odontophorus hyperythrus*) from Colombia. The three descriptions are similar to the nest reported for *O. atrifrons*.

*O. atrifrons* is a range-restricted species classified as Vulnerable, owing to its small and fragmented range and habitat loss (Stattersfield *et al.* 1998, BirdLife International 2000, Franco-Amaya *et al.* 2002, BirdLife International 2008). Recent records of this species come mainly from the Sierra Nevada de Santa Marta (BirdLife International 2008). The species has been rarely recorded in primary forest, forest fragments, and shady coffee plantations from the San Salvador valley on the northern slope and the río Frío valley on the north-western slope of the massif (Strewe & Navarro 2003, 2004b).

The Sierra Nevada de Santa Marta has been extensively degraded during the past decades, with progressive deforestation of the lower montane slopes. The forest ecosystems of the Sierra Nevada de Santa Marta are



FIG. 1. Nest and eggs of *Odontophorus atrifrons* on 15 May 2008, La Cumbre natural reserve, Department of Magdalena, Colombia.

threatened by agricultural expansion, cattle-ranching, coca plantations, logging, and burning. *O. atrifrons* is hunted within its entire range, including the Sierra Nevada and indigenous reserves. Although this part of the species' range is included in Sierra Nevada de Santa Marta Biosphere Reserve and National Natural Park, no adequate protection for the species is currently provided (Strewe & Navarro 2003, 2004b).

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