

## VARIABLE ORIOLE (*ICTERUS PYRRHOPTERUS*) BREEDING IN ABANDONED NESTS OF RED-RUMPED CACIQUES (*CACICUS HAEMORRHOUS*) IN MISIONES, ARGENTINA

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**Boyerito (*Icterus pyrrhopterus*) nidificando en nidos abandonados de Cacique Lomo Rojo (*Cacicus haemorrhous*) en Misiones, Argentina.**

**Key words:** Argentina, nesting, Variable Oriole, *Icterus pyrrhopterus*, Red-rumped Cacique, *Cacicus haemorrhous*.

### INTRODUCTION

Although the Variable Oriole (*Icterus pyrrhopterus*) is widespread in southern South America, published information on its nesting and natural history is still scant (de la Peña 1987, Fraga 1987, Jaramillo and Burke 1999), and mostly obtained in Formosa province, Argentina (Di Giacomo 2005). Variable Orioles stitch their woven nests mostly to the underside of fronds of native and exotic palm species, and to the leaves of other monocots like bananas. However, they also nest within clumps of mistletoes and epiphytes, and in tangles of lianas (de la Peña 1987; Fraga 1987, unpubl. observ.; Di Giacomo 2005). I report two new and unusual observations of orioles breeding in abandoned colonies of Red-rumped Caciques (*Cacicus haemorrhous*) in the Atlantic forest of Misiones province, Argentina. The possible significance of the findings is briefly commented.

### METHODS

The observations were obtained during surveys of cacique colonies (Fraga 2011) at two localities: Puerto Iguazú, departamento Iguazú (25°35'S, 54°34'W) and Parque Provincial Moconá, Departamento Guaraní, Misiones (27°09'S, 53°54'W). The first site was suburban but located near a tract of second growth forest. Vegetation at the second site was old secondary forest. Descriptions and observations were made with 8 x 42 binoculars and tape recorders. Observations lasted 3 and 7 h at each site.

### RESULTS

In the first case, Red-rumped Caciques had recently abandoned a colony of 21 nests in an *Araucaria* tree growing in a garden near a hotel. On 13 December 2000, a pair of Variable Orioles repeatedly carried food to an

unfinished cacique nest that lacked the bottom part. The orioles entered through the original entrance slit at the top. The nest was 12 m high and could not be examined, but oriole chicks were producing faint begging calls.

At the second site, I observed a recently abandoned colony of about 40 nests built in a clearing near the park headquarters. Most cacique nests hung from fronds of a mid-sized "pindó" palm (*Syagrus romanzoffiana*) but three nests were attached to a branch of the leguminous tree "anchico blanco" (*Albizia hassleri*), that almost touched the palm crown. The only birds regularly visiting the colony site were a pair of Variable Orioles, which were carrying food to a 4.5 m high cacique nest in the anchico tree. The cacique nest used by the orioles measured only 40 cm in length, and was unfinished, with the bottom part still open. The oriole nest was built inside the cacique nest. It was a shallow bag stitched to the walls of the cacique nest, slightly above the bottom opening. The orioles entered through the original entrance of the caciques, located at the top. The oriole's structure was visible through the bottom. The cacique's original structure was made of coarse brownish strips of palm leaves; the oriole's nest was woven mostly of thinner yellowish fibers, apparently tendrils of unidentified lianas. My observations ended before fledging time, so the nest was not collected.

A pair of orioles was provisioning two chicks, sometimes simultaneously. A third adult oriole was seen four times around the cacique colony, but it was chased with much singing. Most prey were green insects and caterpillars captured in lianas at the forest edge. Tape recordings of the provisioning interactions suggest that the chicks were in the earlier stages of the nestling period, as their begging voices differed from recordings of older Epaulet Oriole nestlings and fledglings. The orioles chased or mobbed other birds

that visited the colony tree, including Smooth-billed Anis (*Crotophaga ani*) and Cattle Tyrants (*Machetornis rixosus*). No caciques visited the colony.

## DISCUSSION

The use of Red-rumped Cacique nests by Variable Orioles has not been previously reported, not even in Brazil (Duca & Marini 2004, Pizo 2009). Oriole occupation of cacique nests was not detected among 25 active colonies of Red-rumped Cacique observed for periods exceeding two days in the Atlantic forest of Misiones. I observed orioles visiting two colonies, but they were quickly chased by nesting Red-rumped Caciques. My observations suggest that oriole occupation of cacique nests occurs when the cacique colonies are abandoned. Unless destroyed by predators, Red-rumped Cacique colonies in northeastern Argentina are abandoned not earlier than December (pers. observ.). The breeding season of Variable Orioles in Argentina extends from mid-October to the end of December (Di Giacomo 2005). Probably only late nesting attempts by orioles could occur in cacique's nests.

Bodrati (pers. com.) also observed Variable Orioles in Argentina nesting within the woven nests of Golden-winged Caciques (*C. chrysopterus*). Within *Icterus*, the three troupials are the best known cases for using other birds' nests (Pinto 1967, Lindell & Bosque 1999), but only the Orange-backed Troupial (*I. croconotus*) regularly usurps nests of the colonial nesting Yellow-rumped Caciques (*Cacicus vela*) throughout Amazonia (Pearson 1974, Robinson 1985, and pers. observ. in Brazil and Peru). This troupial differs from Variable Orioles in being an aggressive and specialized nest pirate, attacking and evicting several nesting caciques from an active colony. The troupial places an unwoven cup or mat of plant material within one of the cap-

tured nests (Robinson 1985). Robinson (1985) suggested that troupials may confuse predators by breeding within clusters of empty cacique nests, and this hypothesis could also apply to Variable Orioles.

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#### REFERENCES

- de la Peña, M. R. 1987. Nidos y huevos de aves argentinas. Imprenta Lux, Santa Fe, Argentina.
- Di Giacomo, A. G. 2005. Aves de la reserva El Bagual, Pp. 201–465 in Di Giacomo, A. G., & S. Krapovickas (eds). Historia natural y paisaje de la reserva El Bagual, Provincia de Formosa. Temas de Naturaleza y Conservación N° 4, Aves Argentinas, Buenos Aires, Argentina.
- Duca, C., & M. A. Marini. 2004. Aspectos da nidificação de *Cacicus haemorrhous* (Passeriformes, Icterini) no sudeste do Brasil. *Ararajuba* 12: 25–32.
- Fraga, R. M. 1987. Vocal mimicry in the Epaulet Oriole *Icterus cayanensis*. *Condor* 89: 133–137.
- Fraga, R. M. 2011. Giant Cowbird (*Molothrus oryzivorus*) parasitism of Red-rumped Caciques (*Cacicus haemorrhous*) in the Atlantic Forest, north-eastern Argentina. *Wilson J. Ornithol.* 123: 277–282.
- Jaramillo, A., & P. Burke. 1999. New World blackbirds. The icterids. A. & C. Black Publishers, London, UK.
- Lindell, C., & C. Bosque. 1999. Notes on the breeding and roosting biology of troupials (*Icterus icterus*) in Venezuela. *Ornitol. Neotrop.* 10: 85–90.
- Pearson, D. L. 1974. Use of abandoned cacique nests by nesting Troupials (*Icterus icterus*): precursor to parasitism? *Wilson Bull.* 86: 290–291.
- Pinto, O. M. O. 1967. Do parasitismo provável de *Icterus jamacaii* (Gmelin) em *Pseudoseisura cristata* (Gmelin). *Hornero* 10: 447–449.
- Pizo, M. A. 2009. Nest associates and colony trees of the Red-rumped Cacique (*Cacicus haemorrhous*, Icteridae). *Ornitol. Neotrop.* 20: 623–627.
- Robinson, S. K. 1985. The Yellow-rumped Cacique and its associated nest pirates. *Ornithol. Monogr.* 36: 898–907.

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