

Description of the nest and eggs of the Black-and-white Monjita *Heteroxolmis dominicana*

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Se presentan los detalles sobre cinco nidos de *Heteroxolmis dominicana*, encontrados en terrenos húmedos en São Francisco de Paula, nordeste de Rio Grande do Sul, Brasil, entre octubre–diciembre 1992. Todos estaban bien escondidos en sectores sujetos a inundaciones durante fuertes lluvias. La vegetación que contenía al nido era generalmente *Eryngium pandanifolium*, *E. floribundum* o *E. horridum*, asociado a matas de pasto alto. Todos los nidos se encontraban en los bordes de los terrenos húmedos. Los mismos eran asimétricos en su exterior, y la taza prácticamente simétrica y circular y consistía en dos partes principales, la externa, más desprolija y el revestimiento más delicado. El revestimiento consistía principalmente en tallos de pastos muy finos, cuidadosamente entremezclados con plumas, plumón y/o pelos. Los 14 huevos encontrados en este estudio eran totalmente blancos o apenas amarillentos, redondos en un polo y elípticos en el otro. Cuatro huevos medían en promedio 23,75 mm (23,5–24,0 mm) por 19,25 mm (19,0–19,5 mm). La postura promedio fue de 3,5 huevos por nido.

São apresentados detalhes de cinco ninhos de *Heteroxolmis dominicana*, encontrados em terrenos baixos e pantanosos em São Francisco de Paula, nordeste do Rio Grande do Sul, Brasil, entre outubro e dezembro de 1992. Todos os ninhos estavam bem escondidos em áreas sujeitas a enchentes durante épocas de fortes chuvas. A vegetação que sustentava os ninhos era geralmente ou *Eryngium pandanifolium*, *E. floribundum* ou *E. horridum*, associadas com moitas de pastos altos. Todos os ninhos estavam perto da borda das áreas baixas sendo assimétricos externamente. As tigelas eram virtualmente simétricas e circulares, consistindo fundamentalmente de duas partes: a externa, a parte mais rústica, e a interna, mais delicada. O interior está formado principalmente por raízes de pastos muito finos entrelaçados com penas de contorno, penugem e/ou pele. Os 14 ovos observados durante este estudo eram completamente brancos ou brancos com um leve tonalidade amarelada, sendo arredondados em uma das suas extremidades e elípticos na outra. Quatro ovos tinham um comprimento médio de 23,75 mm (variando entre 23,5 e 24,0 mm) e uma largura média de 19,25 mm (variando entre 19,0 e 19,5 mm). A postura média observada foi de 3,5 ovos por ninho.

Introduction

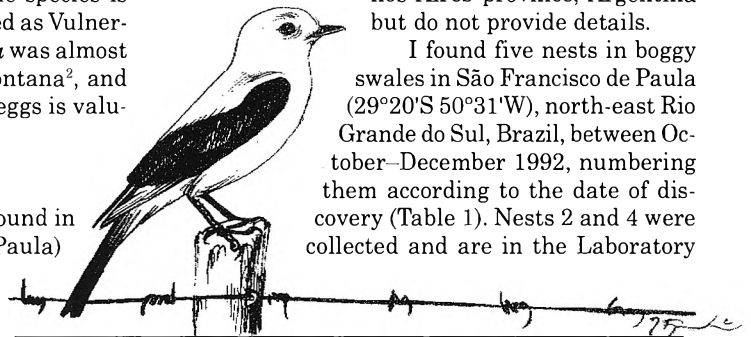
The Black-and-white Monjita *Heteroxolmis dominicana* is local in Paraguay, Uruguay, north-east Argentina and south-east Brazil, where it is found from Paraná south to Rio Grande do Sul, although recent records are only from Santa Catarina and Rio Grande do Sul⁵. The species is rare throughout its range and classified as Vulnerable¹. The life history of *H. dominicana* was almost wholly unknown until the work of Fontana², and thus a full description of its nest and eggs is valuable.

Previous information

Belton (*in litt.* 1992) wrote "... a nest found in Rio Grande do Sul (São Francisco de Paula) was a relatively bulky, substantial, open, cup-shaped structure of woven, dry grasses, with coarse, heavy stems in the base and outer portion, but finer

grasses and a few feathers in the lining. No mud or other adhesive material was used. The nest was well-hidden in a low bush within a small clump of marsh vegetation in open terrain with high grasses and reeds subject to periodic flooding...". Narosky & DiGiacomo⁴ mention breeding in eastern Buenos Aires province, Argentina but do not provide details.

I found five nests in boggy swales in São Francisco de Paula (29°20'S 50°31'W), north-east Rio Grande do Sul, Brazil, between October–December 1992, numbering them according to the date of discovery (Table 1). Nests 2 and 4 were collected and are in the Laboratory



Black-and-white Monjita *Heteroxolmis dominicana* (Jon Fjeldså)

Table 1. Measurements and number of eggs and nestlings of five nests of *Heteroxolmis dominicana*.

Nest	Outer dimensions			Cup dimensions			nest height (cm)	distance into marsh (m)	entrance direction	No. eggs	No. nestlings	No. fledged
	length ^a (cm)	width ^b (cm)	height (cm)	length ^a (cm)	width (cm)	depth (cm)						
I	17	11	8	8.5	8.5	4	25	6	north-west	4	4	3
II*	16	11	8	9	9	5	50	2.5	east	3	3	2
III	18	10.5	7	9	7.5	5	39	8	south	4	0	0
IV*	14.5	13	7	9	9	5	45	9	west	-	2	2
V	-	-	-	-	-	-	-	7	west	3	0	0
Mean	16.38	11.38	7.5	8.88	8.5	4.75	39.8	6.5				
Variance	2.23	1.23	0.33	0.06	0.75	0.25	117	6.25				

*nests measured *in situ*; ^ameasured along axis of greatest outer width; ^bmeasured perpendicular to axis of greatest outer width

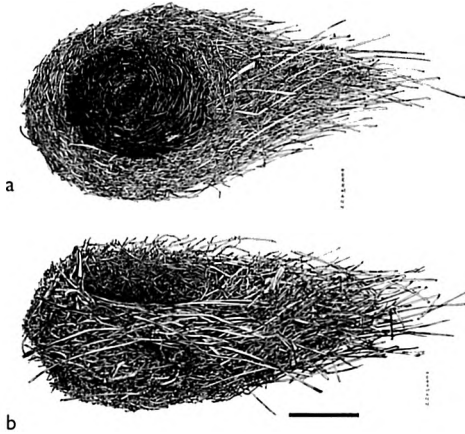


Figure 1. Nest of *Heteroxolmis dominicana*, based on nest III. a – dorsal view; b – lateral view. The scale represents 50 mm. (Jorge Hermann)

of Ornithology, Museu de Ciências e Tecnologia of the Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil. In this paper I use the term 'boggy swales' following Ridgely & Tudor³ to define marshy terrain, often with stands of sedges such as *Cyperus* spp. or *Eryngium* spp.

Nest description

All five nests were well hidden in the boggy swales vegetation, in areas subject to flooding during heavy rains. The vegetation supporting the nests was usually a species of 'gravat' (*Eryngium pandanifolium*, *E. floribundum* or *E. horridum*), with associated tussocks of tall grass. All nests were 2.5–9 m from the edge of the swales (Table 1), which were c.2.5–4.2 ha in size, and were thus close to their edges.

The nests are externally asymmetric, elongated on one side and slightly concave and thicker on the other (Figures 1a,b). The nest cups are virtually symmetric and circular (Figure 1a). Each nest consists of two fundamental parts, the outer, coarser portion and the more delicate lining. The external, basal portion of the nest is more substantial and

coarser than the inner lining, and is principally composed of dry grass stalks and leaves of various sizes (Figures 1a,b and 2), with small amounts of dry *Sphagnum* spp. also present. A small amount of mud adhering thin, dry vegetation was also identified in the base of nest¹. The amount of mud, however, was very small, suggesting it was not used as adhesive material. Mud was not found in any of the other nests.

The lining is primarily formed of very fine grass roots carefully woven with contour feathers, down feathers and/or fur (Figure 2). Feathers found in the nests probably belonged to Red-winged Tinamou *Rynchotus rufescens*, Whistling Heron



Figure 2. Marshy terrain (boggy swale) in São Francisco de Paula, RS, where nest 3 was found. (Roberto E. Reis)



Figure 3. Grass bush containing nest 2 (indicated by arrow) of *H. dominicana*. (Carla S. Fontana)



Figure 4. Nest 3 and eggs of *H. dominicana*, after removal. Shape and average size of egg in insert. (Roberto E. Reis)



Figure 5. Inner view of the nest and nestlings of *H. dominicana*. (Haroldo Palo Jr.)

Syrigma sibilatrix, Crested Caracara *Polyborus plancus* and Red-legged Seriema *Cariama cristata*. One of the nests also contained feathers of Helmeted Guineafowl *Numida meleagris*, which are commonly raised on nearby farms. Feathers collected from nest 3 averaged 48 mm (n=16). Several tufts of Azara's Fox *Dusicyon thous* and other Carnivora fur, were also found in this nest along with some sheep wool. Nearby, a large quantity Azara's Fox fur was found, which could explain its utilisation in the nest. Nest 1 also contained feathers (n=15), probably of *C. cristata*, with a mean length of 63 mm, and fur in its lining. Most of the feathers were contour and down feathers, and the fur was of underfur type. Guard hair, in smaller quantities, was woven along with contour feathers and fine grass roots.

The outer and inner measurements of the nests are given in Table 1. Nest 5 was destroyed by a storm before the eggs hatched and was not measured.

Eggs

According to Nehr Korn in Ihering³, the eggs of *H. dominicana* are light yellowish white with some brownish blotches and measure 24 x 13.5 mm. Con-

trary to this, however, the 14 eggs observed in this study were totally white or slightly yellowish white. The eggs were rounded at one end and elliptical at the other (Figure 4). Four eggs were measured and had a mean length of 23.75 mm (range 23.5–24.0 mm) and width of 19.25 mm (range 19.0–19.5 mm) (Figure 4). Both measurements and coloration suggest that there is either considerable variation in the eggs of *H. dominicana* or that Nehr Korn's eggs were of another species. Mean clutch size was 3.5 eggs per nest (Table 1).

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