Black-and-tawny Seedeater Sporophila nigrorufa in the cerrados of western Mato Grosso, Brazil

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South American seedeaters of the genus *Sporophila* are a taxonomically complex suite of birds. In this article, the authors seek to shed light on one of the rarest but also most distinctive of the 'capuchinos'.

ith hindsight, the extraordinary travels of the Austrian Johann Natterer in Brazil (where he spent the years 1817 to 1835) merit greater prominence within ornithological nomenclature than they have received. Just one species, Thamnophilus stictocephalus, commemorates his extraordinary contributions in its (newly coined) English name, Natterer's Slaty Antshrike. Nevertheless, a range of others, most of them now deemed subspecies, were also named for him. Species-level taxa range from the unassuming (but globally Vulnerable) Ochrebreasted Pipit Anthus nattereri to a stunning Ramphastidae, Tawny-tufted Toucanet Selenidera nattereri, and a plausibly even more gorgeous Pipridae, Snow-capped Manakin Lepidothrix nattereri.

But Natterer's achievements go well beyond having explored a particularly bountiful (and enormous) country at a time when any devoted naturalist might have been expected to 'rake in' novelties. The credit for the discovery of such extraordinary and long-lost birds as Buff-cheeked Tody-Flycatcher *Poecilotriccus senex*, Pelzeln's Tody-Tyrant *Hemitriccus inornatus*, White-tailed Tityra *Tityra leucura* and Hooded Seedeater *Sporophila melanops* all belongs to Natterer. The first two of these went unseen again until the 1990s, whilst the spectacular, Phoenix-like, resurrection of the *Tityra* from the deepest depths of obscurity into which it had sunk was recently announced by Andrew Whittaker¹³. The seedeater, first and last seen in October 1823, remains *the* challenge for both taxonomists and birdwatchers amongst 'lost' taxa in Brazil⁴.

Between October and December 1826 Natterer was working at the town of Mato Grosso (now called Vila Bela da Santíssima Trindade), less than 30 km from the Bolivian border⁷. It was here that he discovered a beautiful new seedeater, the bird we now know as Black-and-tawny Seedeater *Sporophila nigrorufa*. Just five years later the species was found in Bolivia, in the region of 'Chiquitos', from which material the species was





Figures 1–3. Different males: note the crisp white fringes to the wing feathers and pale bases to many of the black upperpart feathers, indicative of fresh plumage, as well as the differences in bill colour (although that in Fig. 2 is influenced partially by the lighting) and to some degree the depth of saturation of the underparts



described⁴. (Natterer's innumerable finds were in fact only fully detailed by Pelzeln⁷, more than 40 years after the event in many cases.) Black-and-tawny Seedeater then effectively disappeared from the ornithological 'radar' until October 1979, when Bob Ridgely observed a male east of Corumbá, in Mato Grosso do Sul, Brazil⁸. Ten years later, during fieldwork in the Serranía de Huanchaca, it resurfaced in Bolivia¹.

Status and distribution

BirdLife International² currently categorises Blackand-tawny Seedeater as Vulnerable. It is still known from just eight sites in eastern Bolivia (in dpto. Santa Cruz) and three in adjacent Brazil (all in Mato Grosso and Mato Grosso do Sul), with potentially three additional sites in Mato Grosso probably only occupied during the austral winter². In Bolivia the major breeding area is Flor de Oro in Parque Nacional Noel Kempff Mercado. Its presence is to some extent seasonal there, with several hundred birds estimated in late May, slightly lower numbers during the breeding season in October to December, but very few apparently present in July-October⁵. In 2005 Black-andtawny Seedeater was observed in Parque Nacional Otoquis, on the border between Bolivia and Paraguay, but to date the species has not been found in the latter country2.

The species's stronghold in Brazil remains the cerrados east and south of Vila Bela da Santíssima Trindade, Mato Grosso, where 55 were counted in January 1988¹⁴, and at least 100 in July 1997^{2,10}, with other records in March (A. Grosset, J. Minns, R. Parrini & M. Padua). The southernmost record in Brazil pertains to an unspecified number of *S*. nigrorufa within a flock of 100+ Sporophila of 11 species in a 500-ha remnant of *campo sujo* at Fazenda Rio Negro, Pantanal de Nhecolândia, Mato Grosso do Sul, in November 20053. Given that Tubelis & Tomas¹² omitted S. nigrorufa from their checklist of the birds of the Pantanal wetland for lack of evidence, and that the Nhecolandia observations were made during the breeding season, further surveys of this area appear warranted.

Most recently, Güller⁶ reported a male photographed in Parque Nacional Lihué Calel, in La Pampa province, central Argentina, on 14 January 2008. This would constitute the first record for Argentina and presumably comprise a vagrant a long way from the species's known range. However, considerable doubt must be attached to this record, based on the published

photograph, for the following reasons. The very neatly plumaged Argentine bird appears to have a complete rufous nape collar, whereas *S. nigrorufa* always shows a reasonably broad black line of feathers connecting the cap and mantle (although, if the ear-coverts and neck-side feathers are fluffed up, the black nape-line can be far less obvious; see Fig. 5). The black mantle with chestnut-brown markings of the bird from Argentina might also occur in some intermediate plumages of Capped Seedeater *S. bouvreuil bouvreuil*.

Equally, although extensive variation exists in colour saturation in some species of Sporophila (JIA unpubl.), the red colour of the underparts seems much deeper and darker in the Argentine bird than those we have observed in Brazil and on museum specimens (even allowing for some fading of the latter). In sum, given our present knowledge of the species's plumages, the photograph cannot be safely attributed to S. nigrorufa. Furthermore, although non-breeding flocks might engage in short-range movements, there is no previous evidence of long-distance migrations by this seedeater9, it being more or less restricted to the 'East Bolivian cerrados' secondary area (i.e., which did not quite qualify as an Endemic Bird Area)11.

Our observations

During August 2007 and June 2008, we visited the *cerrados* south and east of Vila Bela da Santíssima Trindade. During both visits, Black-and-tawny Seedeaters were found in large groups, consorting with other seedeaters, whereas later in the year when breeding they are found in pairs or much smaller feeding parties.

In August, GMK found large flocks of S. nigrorufa (comprising 100-200 individuals) together with several Rusty-collared Seedeaters S. collaris, a handful of Dark-throated Seedeaters S. ruficollis (Fig. 7; Near Threatened) and similarly small numbers of Tawny-bellied Seedeaters S. hypoxantha, Rufous-rumped Seedeaters S. hypochroma (Near Threatened) and White-bellied Seedeaters *S. leucoptera bicolor*. All of the male Black-and-tawny Seedeaters (Figs. 1-3) that were closely studied were in very fresh plumage, with pale tips and fringes to all of the wing-coverts, pale bases to the crown and mantle feathers, offering an overall greyer (less black) effect to these tracts, as well as very broad white fringes to the tertials and very neat pale tips to the rectrices, which were all very point-tipped. At this season (pre-breeding) many still had rather pale bills (i.e.

not all black), although a few did have all-dark bills.

Some presumed younger males (Fig. 4) were also observed closely; these were much paler chestnut below, with rather browner caps and much less obvious fringes to the wing feathers, but otherwise similar to adult males. To our knowledge, female Black-and-tawny Seedeater has not previously been well illustrated in the literature, making the photographs published here (Figs. 5–6) the first. However, as earlier noted by Ridgely & Tudor⁸, it seems doubtful whether females of this species could be reliably separated from those of other 'rufous-plumaged' *Sporophila* if observed alone or mixed with other species.

In June, JIA found more than 100 S. nigrorufa within several large mixed-species flocks of seedeaters, one of which numbered over 250 individuals, including several Plumbeous Seedeaters S. plumbea, as well as Rusty-collared, Rufous-rumped, Tawny-bellied and Dark-throated Seedeaters, and numerous Blue-black Grassquits Volatinia jacarina. One of the few seedeaters that was easily identified to species based on plumage was *S. nigrorufa*, as all of the *S. hypoxantha* and *S.* hypochroma exhibited brownish upperparts and very faint underparts colorations, thereby being virtually impossible to identify, other than by voice. Likewise, males of S. ruficollis could be confidently identified in only a few instances, as most individuals exhibited extremely pale underparts with only a few dark feathers intermixed in the throat region, and had almost all-yellow bills. Thus, unlike other seedeaters present in the area, males of *S. nigrorufa* are readily identifiable, even in winter.

Several adult males of *S. nigrorufa* were growing new rectrices, and the black dorsal plumage and cap of several males showed some faint chestnut-brown markings. Some males had a paler greyish-brown mantle and cap, and paler underparts, thus resembling the winter or perhaps eclipse plumages of *S. b. bouvreuil*. Immature males, virtually identical to females in the field, were tape-recorded singing vigorously as they perfected their songs, presumably in preparation for the upcoming breeding season. Adult males did not sing as persistently and would ignore playback of their own voices while in large flocks.

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SEEING BLACK-AND-TAWNY SEEDEATERS

The small town of Vila Bela da Santíssima Trindade lies c.500 km west of Cuiabá, the capital of Mato Grosso. From Cuiabá, take highway BR70 to Cáceres and continue west to Pontes e Lacerda. From here, it is a slow and 'birdy' drive to Vila Bela through suitable habitat for Black-and-tawny Seedater. The road is in fairly good condition and paved throughout, so a 4WD is unnecessary. Vila Bela can also be reached by bus from Cuiabá; details of schedules are available from the bus terminal. Once at Vila Bela, the Hotel Cascata near the square provides decent accommodation. Mario Friedlander (e-mail: mariofriedlander@top.com.br) knows several birding sites in the area, and can provide both helpful advice and accommodation. Black-and-tawny Seedeaters are easily found in an area known as Campos do Encanto (15°03'S 59°48'W) between Pontes e Lacerda and Vila Bela. This area is extremely important for the conservation of wintering seedeaters, and deserves formal protection. Your visit to the area can only serve to alert local people to the need to conserve these grasslands.

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Figure 4 (left). Presumed younger adult male, given its less richly coloured underparts and browner 'cap' than the birds in Figs 1–3, mantle and scapulars: this bird is certainly not a juvenile and to date we have no definite knowledge whether males of this *Sporophila* acquire an 'eclipse' plumage

Figure 5 (right). Male (left) and female (right)





Figure 6 (left). At least two plumages that we consider to represent females

Figure 7 (right). Male Dark-throated Seedeater Sporophila ruficollis: quite large numbers of this Near Threatened species probably winter in the cerrados of this region

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All photographs were taken by William Price (www.pbase.com/tereksandpiper) at Vila Bela da Santíssima Trindade, Mato Grosso, Brazil, in August 2007. With the exception of Fig. 7, all relate to Blackand-tawny Seedeater Sporophila nigrorufa.