Changes in the status and distribution of savanna birds of Beni and Santa Cruz, Bolivia

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Reportamos cambios en la distribución o estatus de 32 especies de aves sabaneras en Llanos de Moxos, Sabanas del Beni, Chapada y Pantanal de los departamentos del Beni y Santa Cruz, Bolivia. Incluimos seis especies nuevas para el Beni y dos nuevas para Santa Cruz, a más de una especie confirmada en Bolivia por primera vez mediante fotos. Además, presentamos detalles sobre dos taxones que posiblemente representan nuevas especies para la lista boliviana, pero que requieren de más investigación. Varios de los registros corresponden a la época de cría de aves supuestamente migratorias e indican la posibilidad de nidificación local. Queda claro que el estatus de varias especies en las sabanas bolivianas, sobre todo de las que ocurren durante la época de lluvias, necesita más investigación.

The lowlands of Beni and northern Santa Cruz, Bolivia, form a complex mosaic of seasonal tropical shrubland and grasslands interspersed with gallery forests. In the south, this area is dominated by seasonally flooded grassland ('Llanos de Moxos'), with scattered woody vegetation including Curatella americana, and Vernonia becoming increasingly common towards the north and east ('Beni savanna'13). In the east, savannas are found along the border with the Brazilian states of Rondônia and Mato Grosso, and represent a westward expansion of the Brazilian chapada. In south-east Santa Cruz, savannas are associated with the greater Pantanal. Creeks and large rivers such as the Beni, Marmoré and Iténez are surrounded by tall gallery forests, often with a large component of Rhipidocladum bamboo¹³. Locally, termite mounds dominate the landscape and form a vital element of structure in an otherwise relief-lacking terrain¹³. Agriculture has been a dominant component of these savannas since pre-colonial times¹⁶; cattle-, soy- and rice-farming have spread widely in the last decades¹⁷.

The savanna complex of central Bolivia is largely isolated from other Neotropical savannas such as the Brazilian cerrado and chapada. Despite this, the avifauna of the Llanos de Moxos consists largely of a subset of widely distributed and dispersive species of southern South American open habitats, genetically not very well-differentiated from other open-biome avifaunas of southern South America^{14,15,21,25,34}. Nonetheless, a few endemics exist (e.g., the Critically Endangered Blue-throated Macaw Ara glaucogularis, the Near Threatened Unicoloured Thrush Turdus haplochrous, nominate Plain Softtail Thripophaga fusciceps fusciceps and the subspecies boliviensis of Velvet-fronted Grackle Lampropsar tanagrinus) and we suspect populations of more widespread species may be in incipient

stages of (sub)speciation due to their isolation from other Neotropical savannas.

Recently, a flurry of studies documenting the avifauna of the region has led to the discovery of new species for the region and Bolivia^{1,6-8,12,18-} ^{20,27,29,30,35}. Despite this, the ecology of many species remains relatively poorly known and the high seasonality of the area contributes to this. Further, many species are only present during certain times of the year, with many showing particularly puzzling phenologies. For example, Chimango Caracara Milvago chimango is known from year-round records in the region, despite no indication of breeding¹. The temporal occurrence of several species of *Sporophila* seedeaters is unclear and may depend largely on the seeding of grasses^{9,26}. Road infrastructure in the central Bolivian lowlands is limited, and flooding, especially during the wet season (October to March), is frequent, preventing access to large swaths of the Llanos de Moxos and Beni savanna. Because ornithological surveys and ornithological tourism have largely been focused on the dry season, there are gaps in our knowledge of the wet-season occurrence of many species.

In this manuscript, we report records of species outside their usual or known distribution within the Llanos de Moxos and Beni savanna in the Bolivian departments of Beni and Santa Cruz. The main sites visited for this study are shown in Fig. 1. We particularly hope to shed light on the temporal occurrence of several species in the region and point to possible new avenues of research concerning the avifauna of the savannas of Bolivia.

We visited Beni during seven expeditions in a six-year period (2018-2023), during which we recorded birds by sight, photographs and sound-recordings; if photographs were taken or sound-recordings made, we specify this in the

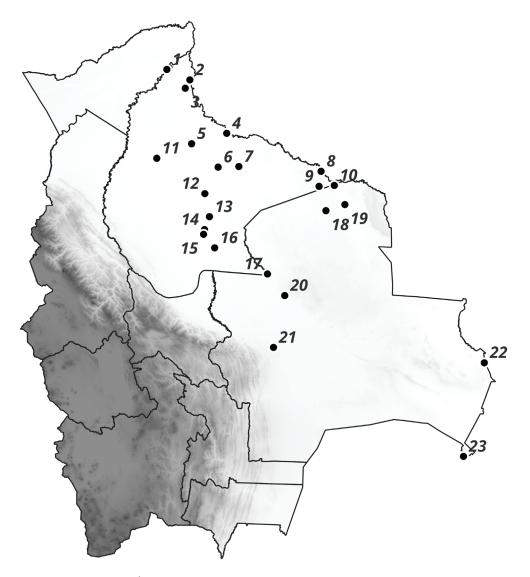


Figure I. Main survey localities: I. Área Protegida Municipal Aquicuana; 2. near Guayaramerín; 3. Ruta Nacional 9, south of Guayaramerín; 4. near Puerto Ustarez; 5. near Puerto Siles; 6. west of San Ramón; 7. west of Magdalena; 8. Iténez River; 9. San Simón; 10. Piso Firme; 11. Estancia Berlín; 12. west of Ruta Nacional 9; 13. north of San Javier; 14. Puerto Ballivián; 15. Comunidad Camiaco; 16. Laney Rickman Nature Reserve; 17. north of Ascensión de Guarayos; 18. Reserva Río Blanco y Negro; 19. Porvenir; 20. Estancia Los Ciervos; 21. Aeropuerto Internacional Viru Viru; 22. Puerto Quijarro; and 23. Parque Nacional Otuquis.

relevant species account. Most records were made by JTW and TW, but where this is not the case, this is indicated. Sound-recordings were deposited in the Macaulay Library (ML; www.macaulaylibrary. org) or Xeno-Canto (XC; www.xeno-canto.org), with many photographs also deposited in the former (and specified in the species account, where appropriate). For some species, we mention recent unpublished records in eBird (https://www.ebird.org).

Common Ground-Dove Columbina passerina

First reported for Bolivia by Aponte *et al.*¹ in October 2013 from Nacebe sawmill, dpto. Pando, and subsequently also reported from other locations in Pando³⁵. We photographed the species at two additional localities in Bolivia, both in Beni: near Palestina ($13^{\circ}30'22.32''S 62^{\circ}2'21.84''W$) and south of Guayaramerín ($11^{\circ}6'39.6''S 65^{\circ}23'53.52''W$). On 18 June 2022, the species was



Figure 2. Cinnamon-throated Hermit *Phaethornis nattereri*, near Puerto Ustarez, Beni, Bolivia, 13 August 2021. One male from a lek of c.20 (Tini Wijpkema).

also found at Pampa San Lorenzo near Riberalta, Beni at $11^{\circ}3'6.09''S 65^{\circ}44'47.67''W$ (V. Vos pers. comm.). Aponte *et al.*¹ asserted there was a high probability of expansion of the species with continuing deforestation, and this indeed appears to be the case.

Pavonine Cuckoo Dromococcyx pavoninus

Pavonine Cuckoo is known from two disjunct areas, the north-western lowlands and Andes, and eastern Bolivia in the surroundings of Parque Nacional Noel Kempff Mercado⁹, Santa Cruz. We recorded one individual at Remanso (13°34'28.3''S 61°52'11.8''W), extreme eastern Beni, on 5 and 6 November 2020, the first record for Beni from the disjunct eastern Bolivian population.

Black-bellied Cuckoo Piaya melanogaster

Black-bellied Cuckoo has a similarly disjunct distribution in Bolivia as Pavonine Cuckoo, occurring in the Amazon and Yungas, and in eastern Bolivia in the surroundings of Parque Nacional Noel Kempff Mercado, Santa Cruz⁹. We found the species south of the *cerrado* complex at San Simón (13°40'1.20''S 62°6'55.08''W), Beni, on 17 May 2021. To our knowledge this is the first documented record for Beni.

White-winged Nightjar Eleothreptus candicans

This distinctive nightjar, classified as globally Vulnerable, has a local distribution throughout its range^{3,6}. In Bolivia, it is known only from two austral spring records at Beni Biological Station, western Beni⁹, and the recent discovery of at least two females of the species along the road between Santa Ana del Yacuma and Exaltación¹¹. We confirm the breeding occurrence of the species in central Beni, on the road between Santa Ana del Yacuma and Exaltación (13°23'36.30''S 65°21'01.20''W), where we photographed (ML609532169) and recorded (ML609532198) a displaying male on 29 and 30 August 2023 during a full-moon night. The display consisted of a short wing whirr, which was given in a circular flight with a radius of 0.5 m, interspersed with short, well-spaced (mechanical?) double chips, usually given from perch on a termite mound. This behaviour apparently differs from the longer display flights between flat anthills and woody perches generally performed by birds in Paraguay³, and may be part of geographical variation in display patterns or simply a subset of the full display observed in Paraguay.

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Figure 3. Moulting adult Black-bellied Plover *Pluvialis squatarola* feeding in a rice paddy north of Ascensión de Guarayos, Santa Cruz, Bolivia, 3 September 2021 (Tini Wijpkema).

Cinnamon-throated Hermit Phaethornis nattereri

We report the occurrence and likely breeding of Cinnamon-throated Hermit in Beni department. On 13 August 2021 we found a lek of the species (Fig. 2), attended by at least 20 singing individuals (males?), near Puerto Ustarez ($12^{\circ}24'55.81''S$ $64^{\circ}27'27.48''W$). Birds were still present at the lek in January, April and December 2022, and in January 2024, indicating an established population. The lek was in a bamboo patch with a canopy of palms. Herzog *et al.*⁹ list the species exclusively for the environs of Parque Nacional Noel Kempff Mercado, Santa Cruz.

Green-tailed Goldenthroat Polytmus theresiae

We photographed an apparent female (ML611083332) on the Mamoré River floodplain, c.20 km west of Santa Ana del Yacuma (13°41'35.1''S 65°14'29.6''W), on 26 August 2023. This locality falls within the modelled distribution of Whitetailed Goldenthroat P. guainumbi, but c.200 km south of the known range of P. theresiae9, although undocumented records from the Trinidad area exist in eBird²⁸. We recently documented *P. theresiae* outside its known range in north-east Pando and suspect that confusion with P. guainumbi is frequent and that P. theresiae might be found elsewhere in Bolivia in appropriate habitat.

Ruby-topaz Hummingbird Chrysolampis mosquitus We recorded a single male just west of San Ramón (13°15'6.12''S 64°39'30.60''W), Beni, in swampy forest with plenty of bamboo in the undergrowth on 16 and 25 April 2022, photographing it on the latter date (ML450461171). This is c.270 km south-southeast of the area around Guayaramerín, where the species is regularly recorded⁹.

Ocellated Crake Micropygia schomburgkii

On 9 January 2023 PvE heard and tape-recorded (ML588055441, ML588055801) at least three individuals in the tall grasslands with scattered trees on sandy soil surrounding the military hangar just south-west of the main terminal of Aeropuerto Internacional Viru Viru (17[°]39'10.25''S 63[°]8'45.59''W), near the city of Santa Cruz. Our recordings are the first breeding-season records in Santa Cruz outside Parque Nacional Noel Kempff Mercado⁹, the nearest known breeding site located c.450 km to the north-west. We did not hear the species on many previous visits to the airport, which suggests seasonal movements. Heavy rains in December 2022 greened up the savanna surrounding the airport, possibly triggering breeding.

Black-bellied Plover Pluvialis squatarola

We photographed a moulting adult Black-bellied Plover in a rice paddy north of Ascensión de Guarayos (15°51'12.96''S 63°21'12.96''W), Santa

Locality	Coordinates	Number	Date
Puerto Siles	12°48'49.32''S 65°1'6.24''W	5	3 August 2016
RN9	12°40'46.20''S 65°23'22.92''W	3	15 August 2021
Puerto Siles	12°48'49.32''S 65°1'6.24''W	1	2 September 2021
Trinidad	14°28'31.44''S 64°51'16.56''W	l imm	3 September 2021
Puerto Siles	12°49'34.32''S 65°5'22.92''W	l imm	27 September 2021
Estancia Francia	13°28'33.24''S 66°33'41.04''W	2	23 October 2021
east of Magdalena	13°11'14.64''S 63°52'38.64''W	20	24 January 2022
Estancia Francia	13°28'33.24"S, 66°33'41.4"W	2	13 September 2022
Estancia Francia	13°28'33.24"S, 66°33'41.4"W	3 ad	14 September 2022
Estancia Francia	13°28'33.24"S, 66°33'41.4"W	2 ad	15 September 2022
west of Puerto Siles	12°48'49.32''S 65°1'6.24''W	l m, l f	10 December 2022
RN9 km 480	12°37'5.52''S 65°26'28.68''W	1	10 December 2022
west of Puerto Siles	12°48'49.32"S 65°1'6.24"W	1	12 December 2022

Table I. Localities of records of Chimango Caracara *Milvago chimango* from Beni, Bolivia. Abbreviations: ad = adult; imm = immature; m = male; f = female.

Cruz, on 3 September 2021, the first documented record of the species for Bolivia (Fig. 3). There are three previous, undocumented sightings⁹. This coastal species is rarely seen inland in South America^{24,26}.

Least Sandpiper Calidris minutilla

While participating in a shorebird survey, MMA observed three Least Sandpipers on 21 September 2022 along the banks of the Mamoré River near the community of Puerto Geralda (14°54'45''S 64°59'41''W), 12 km south of Trinidad. The species is an uncommon migrant in Bolivia that may appear in any location with suitable habitat⁹.

Great Jacamar Jacamerops aureus

We sound-recorded this species (ML468561071) at Puerto Quijarro ($17^{\circ}47'31.56''S 57^{\circ}45'55.08''W$) on 3 July 2022. It is known to occur in the neighbouring Pantanal of Mato Grosso, Brazil³¹. This represents the first record of the species in Santa Cruz, and the first record away from the Amazon in dptos. Pando, La Paz and Beni⁹. Based on known distribution, our record most likely pertains to the subspecies *ridgwayi*, which occurs in Mato Grosso³¹—and would be new for Bolivia—rather than *isidori* from northern Bolivia.

Rusty-necked Piculet Picumnus fuscus

Known from a handful of locations along the Iténez River⁹, on both the Bolivian and Brazilian sides. We document the species from two additional localities, both in Beni: near San José ($13^{\circ}17'49.92''S$ $62^{\circ}4'32.88''W$; see, e.g., ML342894931) and near Palermo ($13^{\circ}28'37.92''S$ 62°1'4.08''W), 5+ km away from the Iténez, but still in its typical habitat of riverine forest with abundant bamboo and palms. Both records involved single birds.

Chimango Caracara Milvago chimango

Presumed austral migrant known mainly from Reserva Barba Azul, west-central Beni⁹. Herzog et al.⁹ assumed the species to be more widespread in Bolivia, and Aponte *et al.*¹ suggested year-round presence. We have found this to be the case and photographed the species at several localities in Beni (Table 1), including multiple austral summer records. One of these summer records involved 20 individuals east of Magdalena, on 24 January 2022. Chimango Caracara clearly seems to linger in numbers in the area through the austral breeding season. The species is not known to breed anywhere north of 22°S²⁸, but our observations suggest the possibility of an isolated breeding population in the Beni savanna. Analysis of photographs of over-summering birds reveals a mix of adult males (yellow cere) and female/juvenile-type birds (pink cere). Additionally, at least one of our observations likely involved an adult female, based on a lack of whitish speckling on underparts and back (10 December 2022). Because the Bolivian birds do not only involve juveniles, local, disjunct breeding remains a possibility.

Yellow-faced Parrot Alipiopsitta xanthops

Near Threatened. MMA observed a flock of 30 individuals on 28 April 2017 at Estancia Berlín (13°03'18''S 66°12'11''W), which fed for c.30 minutes in a guava *Psidium guajava* tree. This



Figure 4. Chestnut-crowned Becard Pachyramphus castaneus, south of San Luis, north-east Santa Cruz, Bolivia, 12 November 2020 (Tini Wijpkema).

record represents the species' westernmost locality in Bolivia⁹ and in its entire range. Given the availability of suitable habitat to the west (and its nomadic tendencies) the range of this parrot could extend even further.

Bolivian Slaty-Antshrike Thamnophilus sticturus

We report the occurrence of the species from northeasternmost Beni department. We photographed the species near Puerto Villazón (13°28'55.2"'S 61°53'8.16"W; ML205816231), at Piso Firme (13°37'59.46''S 61°44'4.34''W; ML197702141) and in the vicinity of Puerto Ustarez, where we observed the species in good numbers (up to 10 individuals in a 2-hour period; e.g., ML416682181). These records constitute a northern extension of the known range of the species in Beni. In this area, the species' range seems to bisect the known Bolivian range of the related Natterer's Slaty-Antshrike T. stictocephalus⁹. Additionally, Martínez et al.¹⁹ found the latter in northern La Paz, suggesting a more widespread overlap. Parapatry of the two has been suspected for some time already¹⁰, but these observations raise the interesting alternative of the two possibly being locally sympatric, which should be investigated further. Another possibility is that the few records of T. stictiocephalus from east of the Río Mamoré in Beni may be erroneous and actually refer to *T. sticturus*, the Río Mamoré representing the division in distribution between the two species.

Blackish Antbird Cercomacra nigrescens

Herzog *et al.*⁹ mention the species only for extreme south-east Beni and north-east Santa Cruz. We have found it to be common in the vicinity of Puerto Ustarez in north-east Beni, where we observed it in at least three localities (4 and 5 August 2016 at 12°28'41.16''S 64°31'36.48''W; 28 January 2022 at 12°24'28.08''S 64°27'40.34''W; and 22 and 23 April 2022 at 12°28'21.90''S 64°30'53.65''W). At San Joaquín, near Puerto Ustarez, we recorded its distinctive song (e.g., XC723129).

White-naped Xenopsaris Xenopsaris albinucha

Rare austral migrant to Llanos de Moxos⁹. We first found a female in extreme south-east Santa Cruz (20°5'30.48''S 58°8'37.32''W) on 2 May 2019. We have subsequently photographed the species at Estancia Los Ciervos near El Puente, Santa Cruz (16°22'15.92''S 62°53'58.97''W; e.g., ML270209401) on 20 September 2020 (two individuals), 22 September 2020 (three) and 5 May 2021 (two). The species may show fidelity to its wintering sites or is highly selective in its choice of wintering habitat; in this case, a lakeshore



Figure 5. Citron-bellied Attila Attila citriniventris along Ruta Nacional 9, south of Guayaramerín, Beni, Bolivia, 19 April 2022 (Tini Wijpkema).

with abundant short-stature palms adjacent to a vine-covered hummock.

Chestnut-crowned Becard Pachyramphus castaneus

We photographed and sound-recorded one individual singing vigorously south of San Luis $(14^{\circ}15'28.08''S\ 61^{\circ}55'30''W)$, north-east Santa Cruz, on 12 November 2020 (Fig. 4). This represents the first record in Santa Cruz and the first in Bolivia away from the Yungas and Amazonia⁹. The species is not known to migrate, so our record may involve a local, overlooked population, rather than a straggler.

Amazonian Tyrannulet Inezia subflava

This tyrannulet is known in Bolivia from only a few records, all on the Iténez River in Santa Cruz⁹. The species was also predicted to occur in Beni⁹. We have found it away from the Iténez, near the Paragua River at Piso Firme (13°37'59.16''S 61°44'4.2''W; ML77222521), Santa Cruz, on 16 November 2017. The species should be sought also around tributaries of the Iténez River. Subsequently, we found the species at two localities in Beni, both along the Iténez River: at Remanso (13°31'32.52''S 61°52'13.8''W) on 19 December 2019 and at Palestina (13°22'19.2''S 62°00'9.72''W) on 2 November 2020.

Yellow Tyrannulet Capsiempis flaveola

Herzog *et al.*⁹ list the species as rare to uncommon and local in bamboo-rich riparian forest in Pando (e.g., along the Madre de Dios and Orthon Rivers), Beni (Mamoré River floodplain) and on the Brazilian border in Santa Cruz along the Iténez River. Outside of these areas, we have recorded the species on multiple occasions at Puerto Ustarez (12°24'55.8''S 64°27'27.36''W; e.g., ML416688641), north-eastern Beni. Additionally, the species appears to be locally abundant in Beni, with some localities holding at least 4-8 birds: e.g., Puerto Ballivián (14°47'44.88''S 64°58'25.32''W; ML205824211, and near the bypass of the Ruta Nacional 9 (at 13°15'2.88''S 64°39'32.76''W). This species may be overlooked in Bolivia or, at least, its abundance underestimated, in part perhaps because its vocalisations are similar to certain Poecilotriccus tody-flycatchers.

Bearded Tachuri Polystictus pectoralis

Near Threatened. A pair of this presumed austral migrant⁹ was found on 10 July 2022 along the nearly dried-up Negro River in Parque Nacional Otuquis, dpto. Santa Cruz, in far south-eastern Bolivia (19°57'15.8''S 58°6'4.6''W; ML46766281). Only a handful of modern records of the species in Bolivia exists, mainly from central Santa Cruz and the Pantanal in eastern Santa Cruz.

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Citron-bellied Attila Attila citriniventris

We found the species on 19 April 2022 along Ruta Nacional 9 south of Guayaramerín (11°19'9.48''S 65°30'37.44''W). This is the first documented record for Beni (Fig. 5). Our record also represents the first south of the Madre de Dios River in Bolivia, and it is likely to be found more widely in northern Beni. Additionally, this seems to be the southernmost record throughout its range²⁸.

Sulphury Flycatcher Tyrannopsis sulphurea

This flycatcher is a very local resident in Bolivian Amazonia⁹, with few records from Santa Cruz. We recorded it at Reserva Río Blanco y Negro in north-eastSantaCruz(14°15'28.08''S 61°55'30''W; ML201699481) on 19 October 2018 and at nearby Dekma (14°30'14.25''S 61°31'8.04''W) on 24 October 2018.

Cock-tailed Tyrant Alectrurus tricolor

Vulnerable. This specialist of native grasslands is known to occur at scattered sites mainly in central, east-central, and south-east Beni^{7,23}. We have found it in two additional areas in northcentral Beni: along Ruta Nacional 9 (between $12^{\circ}41'7.44''S$ $65^{\circ}19'58.44''W$ and $12^{\circ}37'5.52''S$ $65^{\circ}26'28.68''W$; e.g., ML505904971), with counts of up to 18 individuals at a time. Our records from this area span from August 2016 to December 2022, indicating that there is an established population in this area. We also found the species along Ruta Nacional 9 towards Puerto Ustarez (between $12^{\circ}42'26.28''S$ $64^{\circ}36'33.12''W$ and $12^{\circ}37'37.56''S$, $64^{\circ}34'38.28''W$). We have only seen the species here in August 2016, despite the habitat appearing little altered on later visits.

Black-Tyrant sp. Knipolegus sp.

We photographed a male black-tyrant that presumably corresponds to Hudson's Black-Tyrant K. hudsoni at Los Ciervos (16°22'30''S 62°53'60''W), Santa Cruz, on 4 December 2022, which might represent the first documented late-spring record in Bolivia⁹. Our photographs do not show the white flank patch diagnostic for this species, but this is often concealed and dependent on posture⁹. Hudson's Black-Tyrant is an austral migrant to the eastern lowlands of Bolivia⁹, where it is seen generally between May and October. We assume therefore that our record refers to an over-summering individual rather than the morphologically similar White-winged Black-Tyrant K. aterrimus, because the latter is not known to occur in the humid lowlands anywhere in the tropical portion of its range²⁵, whereas Hudson's Black-Tyrant is regularly recorded in the Los Ciervos area from May to September⁹. Amazonian Black-Tyrant K. poecilocercus and Riverside Tyrant K. orenocensis can be ruled out because our bird showed white wing flashes in flight (not photographed). The bird remained inconspicuous in the lower branches of Prosopis sp., a behaviour more typical of K. hudsoni than K. aterrimus, which generally perches more in the open⁹. We did not hear vocalisations.



Figure 6. Spot-billed Ground-Tyrant Muscisaxicola maculirostris south of Porvenir, Santa Cruz, Bolivia, on 5 April 2017 (Tini Wijpkema).

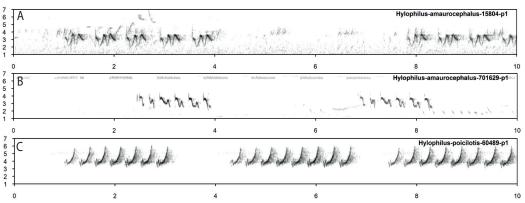


Figure 7. Spectograms of songs of greenlets Hylophilus spp.: (top) Grey-crowned Greenlet Hylophilus amaurocephalus, Petrópolis, Rio de Janeiro, Brazil (XC15804; Ricardo Gagliardi); (middle) greenlet sp. H. cf. amaurocephalus, San Ramón, Beni, Bolivia (XC701629; Jacob Wijpkema); (bottom) Rufous-crowned Greenlet H. poicilotis from Parque Nacional Iguazú, Misiones, Argentina (XC60489; Miguel Castelino).

Spot-billed Ground-Tyrant *Muscisaxicola maculirostris* We found a Spot-billed Ground-Tyrant feeding on a dirt road south of Porvenir (14°5'38.76''S 61°27'15.48''W), Santa Cruz, on 5 April 2017 (Fig. 6). The bird showed the pronounced supercilium, pale yellow base to the mandible and buffy wing bars typical of this species, rather than the expected Little Ground-Tyrant *Syrtidicola fluviatilis* or Drab Water-Tyrant *Ochthornis littoralis*^{9,25}. This represents the first Bolivian record away from the Andes⁹.

White Monjita Xolmis irupero

The species is an austral migrant to large parts of lowland Bolivia9, with a few summer records mainly from the south-east, although it has also been regarded as resident through south-eastern and central Bolivia²⁵. We have found it at several localities in the northern and central lowlands of Bolivia during the austral breeding season: west of Magdalena (at 13°13'37.92''S 64°8'17.88''W; ML520086071); along Ruta Nacional 9 (13°54'36.36''S 64°58'50.88''W; ML416210481); northofSanJavier(14°28'31.44''S64°51'16.56''W; ML205826681); and at Laney Rickman Nature Reserve (15°14'25.44''S 64°42'27.36''W), plus five individuals west of Puerto Siles (12°42'3.96"'S 65°16'10.2"W). None of the observations involved birds in juvenile plumage. This indicates that White Monjita might be an uncommon but fairly widespread species across lowland Bolivia in the austral breeding season. We believe the species will eventually be found breeding in the Llanos de Moxos.

Greenlet sp. Hylophilus cf. amaurocephalus

 $Olrog^{22}$ first found a greenlet in Bolivia that corresponded morphologically to Rufous-crowned Greenlet *H. poicilotis* or Grey-eyed Greenlet *H.*



Figure 8. Greenlet sp. Hylophilus cf. amaurocephalus, near San Ramón, Beni, Bolivia, 10 February 2023 (Tini Wijpkema).

amaurocephalus. Lane¹² subsequently reported the occurrence of this unknown greenlet from near Trinidad, Beni, and identified it tentatively as Grev-eved Greenlet based on visible morphological characteristics in a photograph (although the colour of the iris was indeterminable due to camera flash) but was unable to obtain recordings of the song. We recorded its song (ML415073571; Fig. 7), which does not match the song of either species from www.xeno-canto.org, but more closely resembles Grey-eyed than it does Rufous-crowned Greenlet. However, because greenlets are oscine songbirds, songs may be highly variable and further vocal analysis is necessary. Additionally, we and others have photographed this taxon in Beni, and all available photos show birds with dark irides as in Rufous-crowned Greenlet, including photos of adults as well as probable juveniles showing a distinct gape (Fig. 8). The known range of Grey-eyed Greenlet is in eastern Brazil and

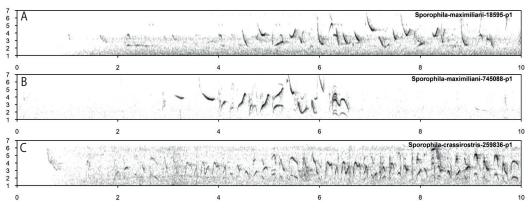


Figure 9. Spectograms of songs of seed-finches Sporophila spp: (top) Great-billed Seed-Finch Sporophila maximiliani, Parque Nacional Emas, Goiás, Brazil (XC18595; Tomas Sigrist); (middle) Sporophila cf. maximilliani/crassirostris from Beni, Bolivia (XC745088; Jacob Wijpkema); and (bottom) Large-billed Seed-Finch S. crassirostris, Yuturi Lodge, Orellana, Ecuador (XC259836; John V. Moore).

geographically much further away than that of Rufous-crowned Greenlet²⁵. Records of Grey-eyed Greenlet and Rufous-crowned Greenlet from Bolivia²⁸ are not supported by evidence, and likely all refer to the unknown taxon. Past connectivity between the Atlantic Forest realm and Andean and Amazonian realms is well known, and sister relationships between birds from both regions are frequent^{2,32}, so the hypothesis that the Hylophilus sp. occurring in Beni is closely related to Grey-eyed Greenlet and not the geographically closer Rufous-crowned remains plausible. In addition to previously reported localities around Laguna Suárez, Trinidad^{12,22}, we have photographed the taxon along Ruta Nacional 9 (10 February 2023; 13°32'45.6''S 64°52'30.0''W), as far north as San Ramón, Beni (23 January 2021; 13°32'45.6''S 64°52'30.0''W) and near Santa Ana del Yacuma (26 August 2023; 13°41'35.1''S 65°14'29.6''W), always in short-stature savanna (gallery) woodland. If this taxon is found to be distinct from either Grey-eyed Greenlet or Rufous-crowned Greenlet, it would be endemic to Beni.

Green Oropendola Psarocolius viridis

We present the first Beni record at Área Protegida Municipal Aquicuana near Riberalta ($10^{\circ}51'41.4''S$ $65^{\circ}58'26.40''W$; ML161249711) on 16 August 2015, indicating that the species occurs south of the Madre de Dios, in addition to previous records from Pando³⁵. The species has subsequently been seen regularly in the area (V. Vos pers. comm.), and MMA found a group of five on 31 October 2022 at Aquicuana.

Golden-winged Cacique Cacicus chrysopterus

We found one individual on the road to Lago Gaibo (18°42'23.4''S 58°31'31.8''W; ML467960901) on 29 June 2022. While regularly occurring in dry

Andean foothills and Chaco woodlands, the species is a rare presumed austral migrant to the Bolivian Pantanal⁹.

Rufous-rumped Seedeater Sporophila hypochroma Near Threatened. This species' status in Bolivia is uncertain⁹; it may be an austral migrant, it may breed locally or both may be correct. We observed small groups on multiple occasions during the austral summer; at least six males (females not identified) were present at Aeropuerto Internacional Viru Viru on 1 December 2022, and a young, moulting male was present here on 9 January 2023 (PvE). Seven were present along Ruta Nacional 9 (12°37'05''S 65°26'28.7"W; ML517418811) on 12 December 2022. There are more records from the austral summer, when the number of observers in Bolivia is lower, than during the austral non-breeding season²⁸. This may be an indication that the species breeds locally during the rainy season and is resident year-round. We have not observed nesting or singing individuals, but we consider it likely that the species will be found breeding in the savannas of Beni and Santa Cruz.

Seed-Finch sp. Sporophila cf. crassirostris/S. maximilliani

Vidoz *et al.*³⁶ first reported the occurrence of 'white-billed' seedeaters in Bolivia from Estación Biológica Caparú, after which Lane¹¹ provided further information of observations from Laguna Suárez, near Trinidad. These birds were left unidentified, but Lane stated they probably referred to *S. crassirostris* based on bill size. We will not attempt to identify these birds to species without molecular support, but we do provide additional information on their possible identity. Several photographed individuals showed clear grooves on the bill, which is consistent with *S. maximilliani*^{5,33}. Also, at least a few individuals showed a distinct ridge on the culmen, which is also consistent with S. maximilliani^{5,33}. Bill size and shape may evolve rapidly and vary within species⁴, so is thus perhaps not a consistently diagnostic character. We obtained several soundrecordings, and these are more similar to the song of S. maximilliani from Brazil than to song of S. crassirostris from Ecuador (Fig. 9). Nonetheless, we believe it best to further study the genetics. vocalisations and morphology of these birds to settle on a definitive identification. It is possible that the Bolivian birds represent an unknown taxon. Aside from the margins of Laguna Suárez, we have found 'white-billed' seedeaters at five localities between Trinidad and San Ignacio (precise locations undisclosed for the safety of the species, which is susceptible to trapping for the cage-bird trade); the observations span 30 January to 15 April (2019-2023), mostly coinciding with the rainy season. We frequently saw singing males, pairs and up to 15 individuals per locality. Several sites where this seed-finch has been seen have already disappeared, mainly due to rice-farming.

Wing-barred Seedeater Sporophila americana

Only recently reported for the first time in Bolivia⁹, on 22 September 2023 we photographed a male (ML612849015) accompanied by several unidentified female *Sporophila* on a grassy verge along the Madre de Dios River at $10^{\circ}32'26''S$ $65^{\circ}35'53.4''W$. Other recent observations of the species are from similar habitat in northernmost Beni (V. Vos pers. comm.), and it is likely spreading with deforestation⁸.

White-banded Tanager Neothraupis fasciata

We report for the first time the occurrence of White-banded Tanager in Beni. The species, which is a *cerrado*-specialist, has only been reported in Bolivia from the eastern half of Santa Cruz⁹. On 20 October 2018 we found a pair at Cerro San Simón (13°37'8.4''S 62°1'54.12''W, ML345203391), southeastern Beni. On subsequent visits to the area, in October 2020 and May 2021, we also found the species, indicating that there is an established population.

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References

- Aponte, M. Á., Ric, D., Maillard, O., Lane, D. F., Terrill, R. S., Calle, A. G., Ramírez, R., Montenegro, M. Á., Arispe, R., Acosta, L. H., Salvatierra, M. M., Pantoja, W. S., Sánchez, G. & Aliaga-Pantoja, D. (2022) New and noteworthy observations on the distribution of birds in Bolivia. *Cotinga* 44: 9–18.
- Batalha-Filho, H., Fjeldså, J., Fabre, P. H. & Miyaki, C. Y. (2013) Connections between the Atlantic and the Amazonian Forest avifaunas represent distinct historical events. J. Orn. 154: 41-50.
- Clay, R. P., López Lanús, B., Tobias, J. A., Lowen, J. C. & Barnett, J. M. (2000) The display of the White-winged Nightjar. J. Field Orn. 71: 619-626.
- Cooney, C. R., Bright, J. A., Capp, E. J. R., Chira, A. M., Hughes, E. C., Moody, C. J. A., Nouri, L. O., Varley, Z. K. & Thomas, G. H. (2017) Mega-evolutionary dynamics of the adaptive radiation of birds. *Nature* 542: 344-347.
- Dyer, D. (2021) Which large species of seed finch occurred on Trinidad? Bull. Brit. Orn. Cl. 141: 248-255.
- Grim, T. & Šumbera, R. (2006) A new record of the endangered white-winged nightjar (*Eleothreptus* candicans) from Beni, Bolivia. Wilson J. Orn. 118: 109-112.
- Herrera, M. & Maillard, O. (2007) Registros significativos de aves para el departamento del Beni, Bolivia. *Kempffiana* 3: 28-34.
- Herrera, M. & Vidoz, J. Q. (2009) Registros significativos de aves para el departamento del Beni, Bolivia: parte 3. *Kempffiana* 5: 65-71.
- Herzog, S. K., Terrill, R. S., Jahn, A. E., Remsen, J. V., Maillard, O. Z., García-Solíz, V. H., MacLeod, R., Maccormick, A., Vidoz, J. Q., Tofte, C. C. & Slongo, H. (2016) *Birds of Bolivia: field guide*. Santa Cruz: Asociación Armonía.
- Isler, M. L., Isler, P. R. & Whitney, B. M. (1997) Biogeography and systematics of the *Thamnophilus punctatus* (Thamnophilidae) complex. Orn. Monogr. 48: 355-381.
- 11. Jansen, R. (in press) Range extension of Whitewinged Nightjar *Eleothreptus candicans* in Beni, Bolivia. *Cotinga* 46: XX-YY.
- 12. Lane, D. F. (2014) New and noteworthy records of birds in Bolivia. *Cotinga*.
- Larrea-Alcázar, D. M., López, R. P., Quintanilla, M. & Vargas, A. (2010) Gap analysis of two savanna-type ecoregions: a two-scale floristic approach applied to the Llanos de Moxos and Beni Cerrado, Bolivia. *Biodivers. Conserv.* 19: 1769–1783.
- 14. Larrea-Alcázar, D. M., Embert, D., Aguirre, L. F., Ríos-Uzeda, B., Quintanilla, M. & Vargas, A. (2011) Spatial patterns of biological diversity in a neotropical lowland savanna of northeastern Bolivia. *Biodivers. Conserv.* 20: 1167–1182.
- Lima-Rezende, C. A., Cabanne, G. S., Rocha, A. V., Carboni, M., Zink, R. M. & Caparroz, R. (2022) A comparative phylogenomic analysis

of birds reveals heterogeneous differentiation processes among Neotropical savannas. *Mol. Ecol.* 31: 3451–3467.

- Loughlin, N. J., Mayle, F. E., Otano, N. B. N., O'Keefe, J. M., Duncan, N. A., Walker, J. H. & Whitney, B. S. (2021) Insights into past land-use and vegetation change in the Llanos de Moxos (Bolivia) using fungal non-pollen palynomorphs. J. Arch. Sci. 130: 105382.
- Killeen, T. J., Guerra, A., Calzada, M., Correa, L. Calderón, V., Soria, L., Quezada, B. & Steininger, M. K. (2008) Total historical land-use change in eastern Bolivia: Who, where, when, and how much? *Ecol. & Society* 13: 36.
- Maillard, O., Vidoz, J. Q. & Herrera, M. (2008) Registros significativos de aves para el Departamento del Beni, Bolivia: parte 2. Kempffiana 4: 8-12.
- Martínez, O., Salvatierra, R., Chao, J. & Szabo, A. (2020) Natterer's Slaty-Antshrike (*Thamnophilus stictocephalus* Pelzeln, Aves: Thamnophilidae), new record for La Paz Department (Bolivia). *Ecología en Bolivia* 55: 226-230.
- Montenegro-Ávila, M. A., Ávalos, N. A., Parada, G. A. & Miserendino Salazar, R. S. (2023) Two new bird species for Bolivia. *Bull. Brit. Orn. Cl.* 143: 370–374.
- Norambuena, H. V. & van Els, P. (2021) A general scenario to evaluate evolution of grassland birds in the Neotropics. *Ibis* 163: 722–727.
- Olrog, C. C. (1963) Notas sobre aves bolivianas. Acta Lilloana 19: 407–478.
- Padial, J. M. & Heredia, J. (2004) Notes on Cock-tailed Tyrant (*Alectrurus tricolor*) from Bolivia. *Cotinga* 22: 79-80.
- 24. Pearman, M., & Areta, J. I. (2020) Field guide to the birds of Argentina and the southwest Atlantic. London: Christopher Helm.
- 25. Ridgely, R. S. & Tudor, G. (2009) Field guide to the songbirds of South America: the passerines. Austin: University of Texas Press.
- 26. Schulenberg, T. S., Stotz, D. F., Lane, D. F., O'Neill, J. P. & Parker III, T. A. (2010) Birds of Peru: revised and updated edition. Princeton, NJ: Princeton University Press.
- Stuart, T. E. H. (2000) The first record of Variable Seedeater Sporophila americana in Bolivia. Cotinga 13: 76.
- Sullivan, B. L., Wood, C. L., Iliff, M. J., Bonney, R. E., Fink, D. & Kelling, S. (2009) eBird: a citizen-based bird observation network in the biological sciences. *Biol. Cons.* 142: 2282-2292.
- 29. Terrill, R. S., Aponte Justiniano, M. A., Harvey, M. G., Seeholzer, G. F. & Strem, R. I. (2014) Notes on the avifauna of the floodplain forest of the Rio Mamoré, Beni, Bolivia, with a description of the juvenile plumage of Unicolored Thrush (*Turdus haplochrous*) (Aves: Turdidae). Occ. Pap. Mus. Nat. Sci. L.S.U. 1: 1–21.

- Tobias, J. A. & Seddon, N. (2007) Nine bird species new to Bolivia and notes on other significant records. *Bull. Brit. Orn. Cl.* 127: 49–48.
- 31. Todd, W. E. C. (1943) Studies in the Jacamars and Puffbirds. Ann. Carnegie Mus. 30: 1–18.
- 32. Trujillo-Arias, N., Calderón, L., Santos, F. R., Miyaki, C. Y., Aleixo, A., Witt, C. C., Tubaro, P. & Cabanne, G. S. (2018) Forest corridors between the central Andes and the southern Atlantic Forest enabled dispersal and peripatric diversification without niche divergence in a passerine. *Mol. Phyl. Evol.* 128: 221–232.
- 33. Ubaid, F. K., Silveira, L. F., Medolago, C. A., Costa, T. V., Francisco, M. R., Barbosa, K. V. & Junior, A. D. (2018) Taxonomy, natural history, and conservation of the Great-billed Seed-Finch Sporophila maximiliani (Cabanis, 1851) (Thraupidae, Sporophilinae). Zootaxa 444: 551-571.
- 34. van Els, P., Zarza, E., Rocha Moreira, L., Gómez-Bahamón, V., Santana, A., Aleixo, A., Ribas, C. C., Sena do Rêgo, P., Dantas Santos, M. P., Zyskowski, K., Prum, R. O. & Berv, J. (2021) Recent divergence and lack of shared phylogeographic history characterize the diversification of neotropical savanna birds. J. Biogeo. 48: 1124-1137.
- 35. van Els., P., Wijpkema T. & Wijpkema J. T. (2023) Noteworthy records of birds from Pando including two new species for Bolivia. *Bull. Brit. Orn. Cl.* 143: 330–345.
- 36. Vidoz, J. Q., Jahn, A. E. & Mamani, A. M. (2010) The avifauna of Estación Biológica Caparú, Bolivia. Cotinga 32: 51-68.

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