New and noteworthy observations on the distribution of birds in Bolivia

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Reportamos 41 registros de interés para el conocimiento de la distribución de las aves en Bolivia obtenidos durante varias salidas al campo entre julio de 2002 y marzo de 2020. Entre los registros más notables se encuentran los primeros reportes en el país de la Tórtola Común *Columbina passerina* y el Aguatero Americano *Nycticryphes semicollaris*. Además, presentamos nuevos registros departamentales de Ibis Cara Blanca *Plegadis chihi* y Pato Silbón Cara Blanca *Dendrocygna viduata* en La Paz, de Plomizo *Geospizopsis unicolor* y Tangara Azuleja *Thraupis episcopus* en Santa Cruz, de Bandurrita Chaqueña *Tarphonomus certhioides* en Tarija, y Parula Tropical *Setophaga pitiayumi* en Potosí. También presentamos registros de otras especies que mejoran nuestro conocimiento en cuanto a sus rangos de distribución, así como registros de especies poco conocidas, en su mayoría documentadas con fotografías, grabaciones, especímenes o notas de campo.

Bolivia is a megadiverse country that suffers from limited research in most biological fields[12]. At present, c.1,445 bird species have been recorded in Bolivia[11], which makes it the sixth most species-rich country on Earth and the fifth in the Americas[11]. Nevertheless, there are large regions with little or no basic ornithological knowledge[11], where further research is needed. New avian distributional records indicate that there is still much to be discovered[5,14]. Here, we present several novel records of birds in Bolivia using Herzog *et al.*[11] as our main baseline reference for avian ranges in the country.

Records were obtained from July 2002 through March 2020 during several field trips, mainly opportunistic visits by the various authors to different localities. Most records were documented with photographs, recordings, specimens or field notes. Bird specimens are housed at the Museo de Historia Natural Noel Kempff Mercado (MNK. AV, Santa Cruz) or Louisiana State University Museum of Natural Sciences (LSUMZ, Baton Rouge). Some sound-recordings have been deposited at the Macaulay Library (ML; www.macaulaylibrary.org) and Xeno-Canto (XC; www.xeno-canto.org). For some species, we mention recent unpublished records in eBird[8] (https://www.ebird.org). Taxonomy and nomenclature follow the South American Classification Committee of the American Ornithologists' Society (SACC)[23].

Species accounts

Horned Screamer *Anhima cornuta*
On 26 June 2009, LHA observed two perched in trees beside the río Tarumá, near San José de Marquito (16°17'42.85"S 59°17'33.53"W; 160 m), dpto. Santa Cruz. The species has also been reported as follows: one seen at Estancia Purubi, on 6 November 1987; and one at Puerto Pailas, on 6 March 1999, both in dpto. Santa Cruz[8]. Our observations are the southernmost records of the species in Bolivia[11].

White-faced Whistling Duck *Dendrocygna viduata*
On 8 January 2020, MMS & DAP video-recorded a flock of 18 in a flooded area at Santa Catalina (14°45'31.3"S 68°28'21.4"W; 1,390 m), 7.5 km south-west of Apolo, dpto. La Paz. This is the first record of the species in dpto. La Paz[11]. In Bolivia, it occurs mainly in flooded grassland of the Llanos de Moxos, dpto. Beni, and at lakes in the Chaco and Chiquitania regions in southern and eastern dpto. Santa Cruz[11].

Coscoroba Swan *Coscoroba coscoroba*
On 4 August 2007, MAAJ, P. Justiniano & M. Velásquez observed three on Laguna Santa Bárbara (17°00'51.10"S 63°45'15.66"W; 250 m), dpto. Santa Cruz. One male was collected and deposited at MNKM (MNK.AV 4501, fat high, skull 100% ossified; 5 kg). This is the second documented record for Bolivia and dpto. Santa Cruz[26]. Probably a casual austral migrant to southern Bolivia[11].

Cinnamon Teal *Spatula cyanoptera*
On 7 July 2018, MAAJ observed a male for 10–15 minutes on Laguna Guapilo (17°46'46.18"S 63°05'53.27"W; 400 m), dpto. Santa Cruz. There is an increasing number of observations in dpto. Santa Cruz, on small pools in areas close to the hills of the Chaco ecoregion[8]. There are few

Figure 1. Common Ground Dove *Columbina passerina*, Nacebe sawmill, dpto. Pando, Bolivia, 30 October 2013 (Darwin Ric)

Figure 2. Rufous-vented Ground Cuckoo *Neomorphus geoffroyi*, Valle del Gran Flauta, dpto. Santa Cruz, Bolivia, 8 January 2017 (Darwin Ric)

Figure 3. Black-billed Cuckoo *Coccyzus erythrophthalmus,* Machariapo Valley, dpto. La Paz, Bolivia, 15 December 2013 (Ryan S. Terrill)

Figure 4. Southern Lapwing *Vanellus chilensis*, Gonzalo Moreno, dpto. Pando, Bolivia, 28 February 2019 (Miguel Á. Aponte)

Figure 5. Hudsonian Godwit *Limosa haemastica*, Lago Uru Uru, dpto. Oruro, Bolivia, 31 January 2019 (Daniel F. Lane)

Figure 6. South American Painted-snipe *Nycticryphes semicollaris*, Laguna Kaukaya, dpto. Santa Cruz, Bolivia, 20 February 2019 (Darwin Ric)

Figure 7. White-faced Ibis *Plegadis chihi,* Konani, dpto. La Paz, Bolivia, 20 January 2019 (Daniel F. Lane)

Figure 8. Black-and-chestnut Eagle *Spizaetus isidori,* El Nogal, dpto. Santa Cruz, Bolivia, 24 August 2012 (Edson Cortez)

additional records elsewhere in Bolivia[6], all from the south of the country during the austral winter.

Common Ground Dove *Columbina passerina*
On 30 October 2013, DRR photographed two (Fig. 1) near the Nacebe sawmill, río Orthon, dpto. Pando (11º00'11.20"S 67º25'25.50"W; 180 m), the first record in the country. This widespread species[2] is expanding its range throughout Amazonia following forest clearance, especially in neighbouring Brazil, and was expected in Bolivia. There is a high probability that this species will continue to expand into Bolivia as deforestation increases.

Rufous-vented Ground Cuckoo *Neomorphus geoffroyi*
On 12 December 2014 and 3 December 2015, two were photographed and video-recorded with a camera trap sited by RA in the San Martín forestry concession (14°27'20.74"S 61°43'35.01"W; 250 m), north-east dpto. Santa Cruz. On 8 January 2017, DRR observed two and photographed one (Fig. 2) at Hacienda El Valle de la Gran Flauta, dpto. Santa Cruz (15°51'21.36"S 62°36'04"W; 340 m). These records suggest that the species may be more widespread in Amazonian Bolivia than previously thought[11].

Black-billed Cuckoo *Coccyzus erythrophthalmus*
On 14–15 December 2013, RST & G. Seeholzer photographed one (Fig. 3) in the Machariapo Valley, c.40 km north of Apolo (14°22'17.7"S 68°32'26.8"W; 780 m), dpto. La Paz, in tall, dry forest with tall columnar cacti. This record, along with other recent South American records[8], may indicate that the species prefers deciduous woodland in the region, but the paucity of records makes this uncertain. Known from very few boreal winter records meaning that its distribution at this season is still poorly known[11].

Spotted Rail *Pardirallus maculatus*
On 25 July 2015, MAAJ, RST & J. Terrill collected four in flooded rice fields near Warnes (MNK. AV 5602, male, left testis 1 × 1 mm, skull 100% ossified, fat high, 189 g; MNK.AV 5603, male, left testis 7 × 5 mm, skull 100% ossified, fat light, 168 g; LSUMZ 227108, male, left testis 12 × 6 mm, skull 100% ossified, fat light, 185 g; LSUMZ 227109, male, left testis 9 × 3 mm, skull 95% ossified, fat trace, 224 g), dpto. Santa Cruz (17°30'31.4"S 63°01'07.8"W; 320 m). This skulking species is probably more widespread in Bolivia than the few, scattered records in the eastern and northern lowlands indicate[11].

Southern Lapwing *Vanellus chilensis*
On 15 November 2011, MAAJ photographed a pair at Gonzalo Moreno (11°05'38"S 66°9'44"W; 160 m), the first documented record in dpto. Pando (Fig. 4). On 28 February 2019, MAAJ, DFL & MAM photographed three at Apolo, dpto. La Paz (14°44'44.1"S 68°24'43.5"W; 1,450 m). This widespread species is mainly restricted to open habitats in Bolivia, with very few records in dpto. La Paz[11].

Hudsonian Godwit *Limosa haemastica*
On 31 January 2019, MAAJ, DFL & MAM photographed five at Lake Uru-Uru (Fig. 5), dpto. Oruro (18°00'39"S 67°08'10"W; 3,720 m). This is the first documented record of wintering in Bolivia, and one of the few records in dpto. Oruro. A previous boreal winter record in the country was reported by S. Herzog, R. Soria-Auza & T. Guerrero-Vallejos at Río Márquez on 14 February 2013[8]. This boreal migrant passes through Bolivia on southbound migration[20] and spends the non-breeding season primarily in southern Argentina and Chile[20].

South American Painted-snipe *Nycticryphes semicollaris*
On 20 February 2019, DRR photographed two at Laguna Kaukaya, dpto. Santa Cruz (19°24'37.05"S 63°27'46.07"W; 940 m) (Fig. 6). The first record for Bolivia. Fairly widespread throughout temperate and subtropical regions of Argentina, Chile, Paraguay, Uruguay and southern Brazil[13], but the lack of previous records in Bolivia is probably at least partly due to its secretive nature.

White-faced Ibis *Plegadis chihi*
On 20 January 2019, MAAJ, DFL & MAM photographed one with a group of 40+ Puna Ibis *Plegadis ridgwayi* and three Yellow-billed Teals *Anas flavirostris* c.2 km from Konani (17°26'52.51"S 67°30'15.25"W; 3,790 m) (Fig. 7). The first record for dpto. La Paz and the highest elevational record in Bolivia[11]. Mainly restricted to the lowlands of the country, although there are some documented sightings from the Cochabamba Valley[14].

Black-and-chestnut Eagle *Spizaetus isidori*
On 24 August 2012, MAAJ & E. Cortez photographed a juvenile at El Nogal, dpto. Santa Cruz (17°58'08.4"S 63°57'52.6"W; 2,080 m) (Fig. 8) as it perched for five minutes in a tree near a road. Categorised as globally Endangered[3]. In Bolivia, the species is threatened by habitat loss and fragmentation[1]. It is rare and fairly poorly known in Bolivia, and represented by very few records in Santa Cruz[11].

Solitary Eagle *Buteogallus solitarius*
On 6 January 2018, RST, MAAJ, O. Johnson, R. Brumfield, M. Brady, A. Hiller & A. Moncrieff photographed two adults soaring above Serranía Incahuasi (19°49'45.06"S 63°43'36.07"W; 1,550 m), dpto. Chuquisaca. On 30 January 2019, MAAJ,

Figure 9. Chimango Caracara *Milvago chimango*, San Lorenzo, Barba Azul Nature Reserve, dpto. Beni, Bolivia, 21 September 2009 (Daniel Alarcón)

Figure 10. Orange-breasted Falcon *Falco deiroleucus*, Carretera Antigua a Coroico, dpto. La Paz, Bolivia, 10 October 2018 (Daniel F. Lane)

Figure 11. Ihering's Antwren *Myrmotherula iheringi*, Tahuamanu Biological Station, dpto. Pando, Bolivia, 14 September 2015 (Miguel Á. Aponte)

Figure 12. Dot-backed Antbird *Hylophylax punctulatus*, Tahuamanu Biological Station, dpto. Pando, Bolivia, 10 October 2015 (Miguel Á. Aponte)

Figure 13. Ash-throated Gnateater *Conopophaga peruviana*, Tahuamanu Biological Station, dpto. Pando, Bolivia, 6 September 2015 (Miguel Á. Aponte)

Figure 14. Chaco Earthcreeper *Tarphonomus certhioides*, Caipipendi, dpto. Tarija, Bolivia, 24 November 2019 (Miguel Á. Aponte)

DFL & MAM photographed an immature perched for 3–5 minutes along the road to Nueva Jerusalén, dpto. La Paz (15°07'51.52"S 68°28'11.88"W; 968 m). Poorly known in Bolivia and reported from very few sites in La Paz and Chuquisaca[11].

Harris' Hawk *Parabuteo unicinctus*

On 25 August 2018, MAAJ & LHA photographed one perched in a tree near *cerrado* grassland in Cabecera (18°06'28.5"S 58°12'37.4"W; 240 m), Área Natural de Manejo Integrado San Matías, dpto. Santa Cruz. In Bolivia, the species occurs in open grasslands in dpto. Beni and southern and western dpto. Santa Cruz, but with very few records in eastern Santa Cruz[11].

Zone-tailed Hawk *Buteo albonotatus*

On 29 July 2015, MAAJ, RST & J. Terrill collected an adult female (MNK.AV 5604, ovary 12 × 7 mm, largest ovum 3 × 3 mm, oviduct tiny, skull 95% ossified, fat light) in Palmas Reales, 48 km south of Pailón (18°06'50"S 62°37'48"W; 315 m), dpto. Santa

Cruz. On 8 April 2016, MAAJ & R. Miserendino observed an adult perched on a termite mound in fields around Viru Viru airport, dpto. Santa Cruz (17°37'34"S, 63°08'33"W; 370 m). These are the only departmental records of this low-density raptor in Bolivia[28].

Brown Jacamar *Brachygalba lugubris*
On 13–14 March 2020, MAAJ & LHA photographed three on the edge of the riparian forest in Chiquitano dry forest, 4.2 km south-west of Ascensión de la Frontera (16°20'31.58"S 59°28'47.77"W; 190 m). This record expands its range in Bolivia to eastern dpto. Santa Cruz and the Pantanal ecoregion.

Chimango Caracara *Milvago chimango*
On 21 September 2009, GSA photographed two at Campo San Lorenzo, Barba Azul Nature Reserve (13°45'17.69"S 66°7'12.26"W; 155 m), dpto. Beni (Fig. 9). Subsequently, on 29 September 2009, GSA photographed four at Palmira cattle ranch near San Simón (13°37'30.26"S 66°28'47.05"W; 160 m). Both localities are within the Pampas de Yacuma, dpto. Beni. On 13 October 2009, GSA photographed six along the Loreto–Camiaco road (15°17'1.96"S 64°49'7.92"W; 150 m), dpto. Beni. There are several recent records in the Llanos de Moxos and Cerrado regions of Beni[8], with a gap of >750 km between them and the nearest records in Argentina and Paraguay[8]. Our Beni records suggest that its occurrence had been overlooked previously because of the similarity to juvenile Yellow-headed Caracara *M. chimachima*[11]. Almost all observations were made between late March and mid November, but several austral summer eBird reports[8] (December–February) describe it as common in the Pampas de Yacuma, which suggest that the species is present year-round.

Orange-breasted Falcon *Falco deiroleucus*
On 10 October 2018, C. Lijerón pointed out a perched adult (Fig. 10) to DFL, Micah Riegner and their tour group below Alto Sacramento, along the old La Paz–Coroico highway, dpto. La Paz (c.16°13'S 67°47'W; 1,800 m). There are few Bolivian records of the species[11].

Ihering's Antwren *Myrmotherula iheringi*
On 14 September 2015, MAAJ & AGC trapped and photographed a male (Fig. 11) in a *Guadua* bamboo forest along the río Muyumano (11°27'47.16"S 69°2'3.53"W; 240 m), western dpto. Pando. Previously known only from three widely spread localities in Bolivia, all in western Pando[24].

Dot-backed Antbird *Hylophylax punctulatus*
On 10 October 2015, MAAJ & AGC trapped a pair of this river-edge specialist (Fig. 12) at Tahuamanu Biological Station (11°25'59.43"S 69°5'13.79"W; 250 m), dpto. Pando. The species is known only from a few localities in Bolivia, near the confluence of the ríos Madre de Dios and Beni in east Pando, north Beni and north Santa Cruz departments[11]. Our record represents a westward extension in Bolivia.

Ash-throated Gnateater *Conopophaga peruviana*
On 6 September 2015, MAAJ & AGC trapped and photographed a male (Fig. 13) at Tahuamanu Biological Station (11°26'38.43"S 69°2'58.80"W; 250 m), dpto. Pando. The first documented record in Pando. Previously, there was an undocumented report at Reserva Manuripi[17]. Its presence in Pando was expected given multiple reports from adjacent Peru, in Madre de Dios[8]. Rare in Bolivia, where the species is known from two additional sites in the lowlands of dpto. La Paz[18].

Crested Gallito *Rhinocrypta lanceolata*
On 31 January 2020, WSP observed one foraging on the road near San Lorencito (21°07'14.94"S 64°28'56.97"W; 2,010 m), dpto. Tarija. On 1 February 2020, WSP & LHA observed a pair near the road in Quebrada Quenaquinayu, dpto. Tarija (21°08'18.97"S 64°29'19.11"W; 2,015 m). There is a single previous record from southern Bolivia, in dpto. Chuquisaca[26]. These records suggest that there is a resident Andean population in Bolivia. There are several recent records in eBird[8] for eastern Tarija, but not southwards in the country.

Rufous-fronted Antthrush *Formicarius rufifrons*
On 30 August 2015, MAAJ & AGC heard this species in two localities at Tahuamanu Biological Station (11°26'35.2"S 69°04'58.1"W; 240 m) and on 28 September 2015 along the río Muyumano, dpto. Pando. On 10 December 2019, MAM heard and then trapped one in river edge forest along the río Tahuamanu, dpto. Pando (11°25'52.48"S 69°00'9.54"W; 240 m). There were just two previous records in Bolivia[11] of this retiring and poorly known species.

Point-tailed Palmcreeper *Berlepschia rikeri*
On 30 May 2016, MAAJ collected two (MNK.AV 5605, male, left testis 2 × 1 mm, skull 100% ossified, fat moderate, 38 g; MNK.AV 5606, female, ovary 7 × 4 mm, skull 100% ossified, fat high, 35 g) near Lago Rogaguado (13°01'45.36"S 65°50'42.14"W; 150 m), dpto. Beni. Both were foraging in Moriche palms (*Mauritia flexuosa*). There are few Bolivian records, with previous reports in Beni at Misión Fátima, apparently near San Borja[18], and at least five additional localities[11].

Peruvian Recurvebill *Syndactyla ucayalae*
On 20 September 2015, MAAJ & AGC observed and recorded the song of this species in a

Guadua bamboo forest near the río Muyumano, at Tahuamanu Biological Station (11°27'47.16"S 69°2'3.53"W, 240 m), western dpto. Pando. This habitat specialist was previously known from just three localities in Bolivia, all in western Pando[11].

Chaco Earthcreeper *Tarphonomus certhioides*
During 22–24 November 2019, MAAJ photographed two (Fig. 14) in chaco vegetation near Caipipendi (21°08'39.13"S 63°45'14.54"W; 510 m), dpto. Tarija. There are several recent records in eastern Tarija[11], but ours is the first documented record for the department.

Black-faced Cotinga *Conioptilon mcilhennyi*
On 5 September 2015, MAAJ & AGC photographed one as it foraged in the canopy of riparian forest for c.5 minutes, at Tahuamanu Biological Station (11°26'38.43"S 69°02'58.80"W; 250 m). Subsequently, on 12 December 2019, MAM photographed one in riparian forest near Tahuamanu, dpto. Pando (11°25'51.18"S 69°0'6.93"W; 240 m). These observations and other recent reports indicate that the species is more continuously distributed in western Pando than previously thought[11].

Várzea Schiffornis *Schiffornis major*
On 27 August 2015, MAAJ & AGC trapped one in *várzea* forest along the río Tahuamanu, dpto. Pando (11°25'59.43"S 69°05'13.79"W; 250 m). The first documented record of this habitat specialist in western Pando[11]. Its presence in this region was expected based on the species' occurrence in adjacent Peru[8].

Large Elaenia *Elaenia spectabilis*
On 27 September 2018, together with their tour group, DFL & M. Riegner photographed and sound-recorded a pair nestbuilding (see https://ebird.org/checklist/S48782717) near Laguna Suárez, south-east of Trinidad, dpto. Beni (14°53'26"S 64°50'21"W; 160 m). The photographs and recordings help corroborate the identification. This is the first documented nesting record of this species in Beni, where it was previously thought to be solely an austral winter visitor[11].

Bearded Tachuri *Polystictus pectoralis*
On 20 August 2018, MAAJ photographed one at Curichi Tapera, Área Natural de Manejo Integrado San Matías (17°40'07"S 58°43'54"W; 145 m), dpto. Santa Cruz. This austral migrant is known from few records in Bolivia, all in dpto. Santa Cruz[11]. Other recent records are from San Matías (LSUMZ 169009, male, left testis 1.0 × 0.5 mm, skull 100% ossified, 6.3 g, 31 July 1999) collected by a LSUMZ and MNKM field team, as well as from Lomas de Arena and Otuquis[8].

Crested Doradito *Pseudocolopteryx sclateri*
On 25 July 2015, MAAJ & MAM collected a female (MNK.AV 5607, ovary 5 × 4 mm, oviduct 1 mm diameter, skull 100% ossified, fat moderate, 6.55 g) in a hedgerow adjacent to rice fields near Warnes, dpto. Santa Cruz (17°30'31.4"S 63°01'07.8"W; 320 m). Prior to collection, the bird was observed foraging in and around the aquatic plant *Schoenoplectus californicus* (Cyperaceae). The species occurs in the Llanos de Moxos and easternmost Santa Cruz[11]. This record extends the known range in Santa Cruz significantly to the west[11], but may represent only non-breeding dispersal.

Subtropical Doradito *Pseudocolopteryx acutipennis*
On 17 August 2018, MAAJ photographed one at Curichi Tapera, Área Natural de Manejo Integrado San Matías, dpto. Santa Cruz (17°40'06.23"S 58°43'56.58"W; 140 m). It was foraging at the edge of aquatic vegetation, mainly *Cyperus* sp. (Cyperaceae). Prior to this, specimens were collected in eastern Santa Fe, 138 km south-west of San Matías, dpto. Santa Cruz (LSUMZ 199013, female, ovary 3 × 3 mm, skull 75% ossified, 7.1 g, 22 July 1999; LSUMZ 169012, male, left testis 1 × 1 mm, skull 100% ossified, 6.8 g, 21 July 1999; LSUMZ 169010, female, ovary 4 × 2 mm, skull 75% ossified, 6.7 g, 21 July 1999). There are few lowland records of the species in Bolivia, and it is suspected to be a non-breeding visitor to the region, with nesting confined to Andean marshes[11].

Veery *Catharus fuscescens*
On 26 February 2019, MAM & WSP collected two near Totaizales (18°15'39.24"S 59°44'17.20"W; 770 m), dpto. Santa Cruz, deposited in MNKM (MNK.AV 6200, male, left testis 1 × 1 mm, skull 100% ossified, fat high, 31 g; MNK.AV 6201, female, ovary 11 × 3 mm, greater ovum 1 × 1 mm, skull 100% ossified, fat high, 39.2 g). The winter distribution of this species has long been controversial[9,18,22], but it is now known to be centred on the Chiquitania region[7]. It is known in Bolivia from a very few widely scattered records.

Swainson's Thrush *Catharus ustulatus*
On 4 November 2015, MAM, AGC & M. Herrera observed one (Fig. 15) in *várzea* forest at Abuna Biological Station (10°05'22.30"S 66°50'14.59"W; 140 m), dpto. Pando, which is the first record for the department[10]. On 24 February 2019, MAM & WSP collected a female (MNK.AV 6202, ovary 7 × 3 mm, skull 100% ossified, fat high, 28.6 g) at Totaizales (18°15'15.29"S 59°44'31.70"W; 860 m), Valle de Tucabaca Protected Area; and on 15 December 2019, MAAJ & MAM collected a male (MNK.AV. 5908, left testis 1.6 × 1.1 mm, skull 100% ossified, 22.5 g) in Taturuqui (17°54'09.85"S

60°40'50.81"W; 370 m). Both records were in dpto. Santa Cruz, in Chiquitano dry forest, and are only the third and fourth records in eastern Bolivia[25,29]. They suggest that the species may winter in Chiquitano dry forest, which represents similar habitat to semi-deciduous forests of the Machariapo Valley in La Paz, where it is abundant in December and January. A common boreal migrant to mid elevations in the Andes, but very few records in the lowlands of Bolivia.

Tropical Parula *Setophaga pitiayumi*
On 12 July 2002, OMZ collected a male (MNK. AV 6017, left testis 2 × 1 mm, skull 100% ossified, fat light, 6 g) c.1 km south of Toro Toro, dpto. Potosí (17°59'8"S 65°50'28"W; 2,760 m), in a mixed flock comprising Yellow-billed Tit-Tyrant *Anairetes flavirostris*, Blue-and-yellow Tanager *Rauenia bonariensis*, Masked Gnatcatcher *Polioptila dumicola* and Purple-throated Euphonia *Euphonia chlorotica*, apparently feeding on *Schinus mole* fruits, c.12 m up. The specimen is the first record for Potosí.

Connecticut Warbler *Oporornis agilis*
DFL, MAAJ, RST, MAM & J. Schmitt observed at least ten on 21, 26 and 27 December 2012 and another 6+ individuals on 28–29 January 2019, in the upper Machariapo Valley, c.40 km north of Apolo (14°37.14'S 68°25.60'W; 1,220 m), dpto. La Paz (Fig. 16). At this locality, the species is present in low-stature, dense deciduous scrub (canopy c.5–7 m), with little or no overstorey, at elevations of 1,200–1,500 m. The habitat is near-impenetrable, so the species is easily overlooked if its voice is not known. Playback of call notes resulted in moderate to strong response from birds of both sexes, suggesting territoriality. A few observations without playback indicated that the birds remained on or near the ground in dense understorey, where they were only detected by occasional calls (XC 121778, 121779, 121781; ML 139521361, 139521371, 139521391, 139519191, 139519171, 139519161). The species winters in South America, but is known from few records due to its secretive habits[21]. This large number of records—more than all previous Bolivian winter reports combined—suggests that deciduous inter-Andean valleys may be an important non-breeding habitat. Geolocator studies indicate that birds breeding in Manitoba, Canada, migrate to sites further east in Chiquitania and Chaco habitats of Bolivia, Paraguay and south-east Amazonian Brazil[16]. We suspect that the Machariapo Valley harbours a small, isolated wintering population. Previous records in Bolivia are from Chaco dry forest in dpto. Santa Cruz[10,16].

Plumbeous Sierra Finch *Geospizopsis unicolor*
On 13 June 2019, DRR observed an individual at Salsipuedes, Pucara, dpto. Santa Cruz (18°40'43.84"S 64°07'35.88"W; 2,890 m) (Fig. 17). This is the first record of this high-elevation species for Santa Cruz.

Great-billed/Large-billed Seed Finch *Sporophila maximiliani/crassirostris*
On 17 and 20 August 2018, MAAJ observed two seed finches tentatively identified as *S. maximiliani* (Fig. 18) at Curichi Tapera, dpto. Santa Cruz (17°40'06.23"S 58°43'56.58"W; 140 m). They were vocalising from aquatic vegetation, predominantly *Cyperus* sp. In Bolivia, *S. maximiliani* is known from several records in the Llanos de Moxos, dpto. Beni[7], but there are just three published records in Santa Cruz[7,19,28]. If identification of the Curichi Tapera birds can be corroborated, these records would extend the species' known range in Bolivia c.390 km south-west, although the observations were anticipated given its presence in Brazil[27].

On 4 September 2014, DFL and a tour group encountered a flock of >150 (Fig. 19) of large white-billed *Sporophila* seedeaters outside the city of Trinidad, near Laguna Suárez (14°52'S 64°53'W; 150 m), dpto. Beni. They appeared to be a nomadic group, with no singing males. The sizes of the bills were variable, but their smooth texture and bright colour suggested they were *S. crassirostris*. However, this species is not represented by specimens from Beni. Confirmation of the identity of white-billed seed finches in Bolivia is desirable, but probably requires specimens.

Black-billed Seed Finch *Sporophila atrirostris*
On 16 January 2017, RR photographed a vocalising individual (Fig. 20) between two agricultural fields near the río Víbora, northern dpto. Santa Cruz (17°03'27"S 64°29'46"W; 220 m). This is c.50 km south-southeast of the previous southernmost record in Bolivia[15] and is only the fourth published record for the country, although *S. a. gigantirostris* was described from Bolivia[4,14,15].

Blue-grey Tanager *Thraupis episcopus*
On 19 August 2012, DRR photographed one at Piso Firme (Fig. 21), dpto. Santa Cruz (13°37'45.51"S 61°44'11.21"W; 160 m). On 7 August 2014, DRR photographed one near the río Paragua, Porvenir area, dpto. Beni (13°34'22.43"S 61°49'18.53"W; 160 m). These records extend the species' range in Beni, and represent the first record for Santa Cruz, respectively.

Progress in ornithology in Bolivia has been remarkable in recent years, especially since the publication of *Birds of Bolivia*[11]. This guide has been an important tool for conservationists and

Figure 15. Swainson's Thrush *Catharus ustulatus*, Abuna Biological Station, dpto. Pando, Bolivia, 24 February 2019 (Miguel Á. Montenegro)

Figure 16. Connecticut Warbler *Oporornis agilis,* Machariapo Valley, dpto. La Paz, Bolivia, 29 January 2019 (Miguel Á. Aponte)

Figure 17. Plumbeous Sierra Finch *Geospizopsis unicolor,* Salsipuedes, dpto. Santa Cruz, Bolivia, 13 June 2019 (Darwin Ric)

Figure 18. Great-billed/Large-billed Seed Finch *Sporophila maximiliani/crassirostris*, Curichi Tapera, dpto. Santa Cruz, Bolivia, 20 August 2018 (Miguel Á. Aponte)

Figure 19. Large-billed Seed Finches *Sporophila crassirostris,* Trinidad, dpto. Beni, Bolivia, 4 September 2014 (Daniel F. Lane)

Figure 20. Black-billed Seed Finch *Sporophila atrirostris*, Víbora river, dpto. Santa Cruz, Bolivia, 16 January 2017 (Roger Ramírez)

Figure 21. Blue-grey Tanager *Thraupis episcopus*, Piso Firme, dpto. Santa Cruz, Bolivia, 7 August 2014 (Darwin Ric)

decision-makers to learn about the richness and distribution of all Bolivian bird species. However, we believe that there is still much to be discovered, with evidence for this supplied by the novel records presented herein. A major challenge is the validation of many undocumented records that are reported monthly online[8], but not adequately reported in scientific publications. In this sense, it is important to develop a Bolivian committee for the validation of ornithological records.

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