

Range extensions and vagrant bird species in the XII Region of Magallanes, Chile

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La XII región de Magallanes esta localizada en el extremo sur de Chile; con un área total de 137.297 km² se extiende desde los 48°30'S en el norte hasta los 56°30'S en las islas Diego Ramírez. Políticamente esta región incluye el territorio antártico chileno, no considerado dentro de éste trabajo. Por estar ubicada en el extremo sur, la región de Magallanes esta conformada por una diversidad de geografía y hábitat incluyendo una variedad de ambientes. Ubicada al este de los Andes, no existen otras barreras que las distancias como un factor limitante para los movimientos migratorios de las aves hacia el sur tanto accidentales como las colonizadoras para esta parte de Chile. Podemos predecir que en el futuro más especies de aves cuya distribución principal se encuentra en territorio argentino pueden realizar movimientos hacia el sur y se adicionarán a la lista de aves conocidas para la región de Magallanes. El tamaño de esta región, su escasa población y la inaccesibilidad a ciertos sitios podría significar que el entendimiento de la distribución y estatus de las aves sólo está en sus comienzos. Presentamos los reportes de observaciones recientes durante salidas a terreno en la región de Magallanes. Estos reportes incluyen nuevas especies de aves para la región o información más actualizada que puede ayudar a entender su estatus con mayor precisión.

The XII Region of Magallanes lies at the southernmost tip of Chile, covering a total area of 132,297 km² and extending from 48°39'S in the north to 56°30'S at the Diego Ramírez Islands. Magallanes includes Chile's Antarctic claim, but for the purposes of this paper we do not consider Antarctica as part of the region of Magallanes.

For such an austral region, Magallanes is blessed with diversity in geography and habitats, encompassing a variety of environments from Magellanic tundra on the coast and islands, wet temperate forest and alpine tundra in the west to dry Patagonian Steppe grasslands in the east. The climate is dominated by the Andes and the prevailing westerly winds that shed rain on the windward side of the mountains, creating a very wet temperate forest there. On the other hand, the region east of the Andes lies in their rainshadow and is consequently very dry. The gradient of humidity declines quickly away from the Andes and, logically, elevation is another factor with direct influence on the distribution of habitats and thus birds. Magallanes is the only one of Chile's regions of which part lies east of the Andes, meaning that no major barrier, other than distance, might prevent southern movements of vagrants or colonisers from Argentina to this part of Chile. We predict that in the near future many more Argentine species may be added to the list of species known from Magallanes, and perhaps even to the list of birds of Chile.

Following Humphrey *et al.*¹¹ and Venegas & Jory⁴¹, several works have appeared in the last two decades presenting additions to the avifauna of

Magallanes^{5,10,22,39,40,45}. According to Venegas & Siefeld⁴², a total of 207 species has been recorded in Magallanes, including the extirpated Burrowing Owl *Speotyto cunicularia*, but our understanding of the status of many of these is preliminary. Species considered rare may in fact be regular and, in particular, some migrants may be present in some years and not others⁴³.

One site that has been overlooked ornithologically is the Sierra Baguales, at the border between Chile and Argentina, north-northeast of Torres del Paine and immediately south of El Calafate in Argentina. The sierra presents an eastern spur of the Andes and contains several lower passes and valleys. Lying east of the main Andean chain, it is drier than Torres del Paine and represents a rather unique area where dry shrub-steppe reaches its northernmost station in Chile. Several of the observations reported here were made in the Sierra Baguales, unsurprisingly, given the slightly different habitat than elsewhere in Magallanes, and we would be unsurprised to find other unusual species here in the future.

Below we report recent observations from Magallanes, many made opportunistically while leading bird tours. Some records were documented photographically, and although not of publication quality photographs will be deposited at VIREO, Academy of Natural Sciences, Philadelphia. The observations herein include a new record for Chile, new species for the region and novel data which improve understanding of avian distributions in Magallanes.

Royal Penguin *Eudyptes schlegeli*

Variation within Macaroni *E. chrysolophus* and Royal Penguins in the extent of white and black on the face complicates identification. Royal Penguin breeds only on Macquarie Island, with vagrants recorded on Marion Island (Indian Ocean)⁷, in south-east Australia, Tasmania, New Zealand, Antarctica²⁰ and South Georgia^{31,36}, whilst a report of breeding in the Falklands lacks details^{24,37}. An immature on the shore of the Strait of Magellan, 20 km north of Punta Arenas (52°56'S 70°46'W), on 14 March 1983, is possibly the first for Chile and continental South America. It is retained as a specimen (CZIP-A1841) in the Instituto de la Patagonia, Universidad de Magallanes, Punta Arenas, where labelled *E. chrysolophus*. Though it exhibits the white face typical of *schlegeli* (the major difference between the two species), measurements more closely match Macaroni (Fig. 1). A recent sighting of a Royal-like bird, by T. Marr (*in litt.* 2007), on 27 February 2007, on Gonz  lo Island, Diego Ram  rez (56°31'S 68°42'W), is supported by a photograph, showing a bird in moult (P. Langer). Given uncertainty as how to separate Royal from white-faced Macaroni Penguin, these records are perhaps best considered 'Royal-like', rather than definitive records of *schlegeli*, unless DNA can be extracted from the specimen and compared to sequences from both taxa.

Little Penguin *Eudyptula minor*

This penguin breeds and ranges along coasts and offshore islands of South Australia, Tasmania, New Zealand, the Stewart and Chatham Islands^{7,36}. Three reports exist for Chile, two supported by physical evidence, one in III Region that was photographed³⁸ and a beached individual in V Region that was photographed and preserved as a specimen^{3,46}. On 30 March 2004, one with damaged plumage appeared in Punta Arenas. It died after a few days in captivity and is preserved as a specimen in the Instituto de la Patagonia collection. Furthermore, Little Penguin was observed on Magdalena Island (Strait of Magellan) on 1–15 January 2004 (R. Fernandez pers. comm.), and photographed there in December 2005 (M. Pearman *in litt.* 2005). These reports represent the fourth and fifth for Chile and the second specimen for the country. Records since the mid-1990s, along a broad latitudinal distribution, suggest that the species may be wandering to Chile more regularly than in the past. Numbers may be higher than known, as available records all pertain to sick or moulting individuals found on beaches; many more could go undetected at sea.

Black-headed Duck *Heteronetta atricapilla*

This duck ranges from V to IX Regions, in central Chile^{2,15,35}, whilst in Argentina the species appears

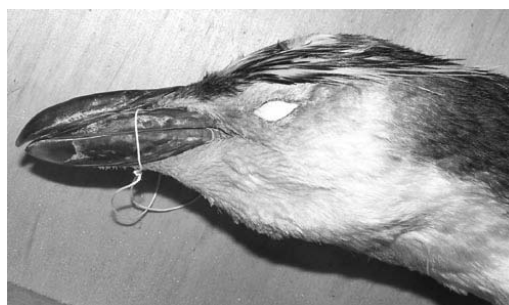


Figure 1. Specimen of Royal *Eudyptes schlegeli*-phenotype penguin, collected at the Strait of Magellan, 20 km north of Punta Arenas, 14 March 1983, and held at the Instituto de la Patagonia, Universidad de Magallanes (R. Matus)

to be regular south to Rio Negro and northern Chubut²⁷, with single records for Trelew, Chubut, and Laguna Nimez, Santa Cruz¹³, as well as the Falklands⁴⁷. On 30 December 2003 two males and a female were photographed in Buque Quemado marsh, a steppe wetland rich in waterfowl. One male was an adult, the other apparently a first-year. All three were observed again on 17 January, 1 and 9 February, and 13 December 2004. Subsequently, the species was noted at the same site in 2005 and 2006. Identification was based on the birds' long slim build, the males' rufous-brown plumage with a blackish head and characteristic blue and red on the bill base. White-winged Coot *Fulica leucoptera* and Rosy-billed Pochard *Netta peposaca* were also recorded at the site, both of which are host species for the parasitic Black-headed Duck, making it possible that *Heteronetta* breeds there. No evidence of this was observed, but breeding is difficult to confirm for this obligate brood-parasite. The presence of Black-headed Duck and large numbers of Red Shovelers *Anas platalea* and Rosy-billed Pochards in 2003–04 was perhaps related to abnormally dry conditions further north in Argentina?

Semipalmated Plover *Charadrius semipalmatus*

In Chile Semipalmated Plover occurs in the non-breeding season from Arica to Puerto Montt⁸, and is uncommon other than in the far north. The similar Ringed Plover *C. hiaticula* from the Old World has been cited for Viamonte, Tierra del Fuego, Argentina, based on a specimen secured on 5 June 1928 by P. W. Reynolds¹¹. The specimen resides in the Natural History Museum, Tring, but pertains to *C. semipalmatus* not *C. hiaticula*. That the specimen is in basic plumage at the height of the boreal summer suggests the bird was a first-summer. On 10 November 1998, AJ & P. Burke observed a Semipalmated Plover at the Otway Sound penguin colony. Distant photographs were obtained. It showed the single dark breast-band,

white neck collar, orange legs and dull orange base to the dark bill typical of Semipalmated and Ringed Plovers. Separation of Semipalmated from Ringed Plover is notoriously difficult, but the Otway Sound bird was heard to give the diagnostic *tu-wheep* of *semipalmatus*. This is the first record of Semipalmated Plover in Magallanes, but the Viamonte, Argentina, record confirms occurrence even further south.

Rufous-banded Miner *Geositta rufipennis*

This Andean species occurs north to Cochabamba, Bolivia. According to Araya & Millie² its range in Chile reaches south to the XI Region of Aisén, whilst in Argentina *G. rufipennis* occurs along the Andes south to Santa Cruz⁴. Olrog³⁰ collected several in XI Region and noted uncertainty over the species' southernmost locality. In Santa Cruz, it appears to lie between El Calafate and Parque Nacional Los Glaciares (D. Stejskal pers. comm.). RM observed singles in the Sierra Baguales on 6 December 2002, 3 November 2004 and 25 January 2007. All were large greyish-backed miners lacking breast streaking and exhibiting a bold rufous subterminal band on the tail and wings, a pattern that easily distinguishes the species from Common *G. cunicularia* and Short-billed Miners *G. antarctica*, which occur at lower elevations in Magallanes. Based on range these birds were of the race *giaii*³², a subspecies not adequately documented for Chile. No confirmed recent records in Magallanes, although Olrog's³⁰ uncertainty over its southern limits rests on a historical mention from Punta Arenas, which seems highly unlikely. As such, our records are the first with adequate details from Magallanes though we expect that the species is regular, albeit rare, as far south as the Sierra Baguales and perhaps Torres del Paine National Park.

Band-tailed Earthcreeper *Eremobius phoenicurus*

Unknown in Chile prior to the 1990s and breeding was only confirmed in 1996²³. On 19 September 2003 another nest was found, c.50 km west of the first site, near estancia San Gregorio²³. The pair was nesting in a calafate bush *Berberis buxifolia*, the nest being a ball of calafate twigs lined with sheep's wool and *Rhea* feathers. In Magallanes, the species has now been reported on several occasions^{10,21,23,45} and its habitat in this region can be described as shrubby steppe. From the various sightings (most unpublished), *E. phoenicurus* appears to be widespread in the eastern Magellanic Steppe in Chile.

Grey-bellied Shrike-Tyrant *Agriornis micropterus*

This species possesses two discrete populations; *A. m. micropterus* is restricted as a breeder to the Patagonian Steppe of Argentina, from Mendoza and

southernmost Buenos Aires to Santa Cruz; whilst *A. m. andecola* occurs in puna grassland and shrub from southern Peru, western Bolivia, northernmost Chile, south to Tucumán in north-west Argentina^{27,34}. In Chile only *A. m. andecola* has been recorded, and its distribution is restricted to higher elevations of I and II Regions, being more commonly observed in the latter¹⁵. The nominate race is uncommon in the environs of El Calafate, Santa Cruz, Argentina (D. Stejskal pers. comm.), c.50 km north-northeast of the Sierra Baguales, making it unsurprising that RM has observed the nominate subspecies in the latter range on 30 October, 11 and 16 November, and 6 December 2002, and 25 February 2003. Finally, on 2 February 2004, AJ photographed a juvenile in the Sierra Baguales (Fig. 2), suggesting the species breeds there.

Grey-bellied Shrike-Tyrants were identified by their overall bulk, heavy bill with a yellowish-horn base to the lower mandible, crisp pale supercilium, little streaking on the throat, rather greyish underparts and white restricted to the outer vane of the outer rectrix. No vocalisations were heard. Two other species of *Agriornis* occur in the region, Great Shrike-Tyrant *A. lividus* and Black-billed Shrike-Tyrant *A. montanus*, the latter observed higher in the Sierra Baguales on the same dates on which *micropterus* was observed. It is easily separated by the greater extent of white in the tail, and all-black, slighter bill. Great Shrike-Tyrant has a similar tail pattern to Grey-bellied, but is larger with coarser streaking on the throat, a duller and less contrasting supercilium and, most importantly, has extensive cinnamon on the lower flanks and belly. Grey-bellied Shrike-Tyrant was observed in a zone of shrubby habitat (mainly calafate), adjacent to grassland, typical of the species (AJ pers. obs.) and quite different from the open forest or forest edge used by Great Shrike-Tyrant in Magallanes.



Figure 2. Juvenile Grey-bellied Shrike-Tyrant *Agriornis micropterus*, Sierra Baguales, Magallanes, Chile, 2 February 2004 (A. Jaramillo)

Ours is the first evidence of *A. m. micropterus* in Chile. The species probably breeds in the area, given that we have records throughout the breeding season, and the presence of a juvenile, although this assertion requires confirmation. The juvenile was aged by the fresh and pale-fringed wing-feathers, including the tertials. It also exhibited crisp buffy wingbars and a largely blackish bill, but lacked the extensive white in the tail of Black-billed Shrike-Tyrant.

Spectacled Tyrant *Hymenops perspicillatus*

The first records of this distinctive species in Magallanes concern Venegas's³⁹ notes on specimens, in the collection of the Mayorino Borgatello Museum (Punta Arenas), from Dawson Island, a possible observation in Torres del Paine National Park and another observation north of Puerto Natales⁴². More recently, the species has since been definitely recorded in Torres del Paine^{18,22}, but these are the only published records for Magallanes. In Santa Cruz, Argentina, Spectacled Tyrant occurs at various localities, the two closest to Chile being c.200 km from Torres del Paine, namely Los Glaciares National Park, where common (Imberti in prep.), and near El Calafate at Laguna Nimez¹³. Augmenting the meagre data for Magallanes, AJ observed a male in flight near Cerro Guido on 11 November 2002. The relatively small size, black plumage and striking white patches in the primaries were obvious. A female was photographed at Porteria Laguna Amarga, Torres del Paine National Park, on 3 February 2004 (AJ); and there are further, unpublished records from this site (E. Couve pers. comm.). Imberti¹³ suggested that the species is a recent arrival in Santa Cruz province and that it may be expanding its range. Recent sightings in Chile suggest this is the case and, if Imberti's assertion is correct, the species might be expected more frequently in the future.

Fork-tailed Flycatcher *Tyrannus savanna*

On 14 December 2002, a male was observed at estancia Don Alejandro, San Gregorio, c.115 km north of Punta Arenas on highway 255 (RM). The species had previously recorded in Santa Cruz, Argentina (S. Imberti pers. comm.), and there are three records in the Falklands⁴⁷. The 2002 individual was an adult male, having white underparts, dark upperparts, contrasting blackish cap and strikingly elongated tail-feathers. It perched atop a small calafate bush, occasionally dropping to the ground (perhaps to feed); in windy Patagonia, insects are more abundant on the ground. This is the first record for Magallanes and the southernmost ever. In Chile the species has been reported at least four times, all in the north¹⁹ (AJ unpubl.), though to date no photographs or

specimens are available to support its occurrence¹⁹. *T. savanna* is prone to vagrancy, a phenomenon well known in North America where there are many observers and a long history of tracking unusual sightings^{16,26}. In South America the species' vagrancy patterns are unknown and even its regular migration phenology and routes remain to be adequately described.

Bank Swallow (Sand Martin) *Riparia riparia*

This swallow's distribution is poorly known in Chile. Even recent publications list Howell's⁹ observation from Antofagasta as the only record². However, records by Aguirre¹ and von Meyer & Espinoza²⁵ and many unpublished sightings (AJ) suggest that it is a regular and frequently common component of the Chilean avifauna, mainly in the far north¹⁵. In Magallanes *R. riparia* was first recorded by Vuilleumier *et al.*⁴⁵, in November 1989, who collected a bird, at the mouth of the río Santa Maria, which was consorting with a mixed flock of Chilean Swallow *Tachycineta meyeni*, Blue-and-white Swallow *Nothiochelidon cyanoleuca* and Barn Swallow *Hirundo rustica*. We observed at least four at the Buque Quemado wetland, together with Chilean and Blue-and-white Swallows, on 10 November 2002. On 3 February 2004, two flew over Las Totoras marsh, in Torres del Paine National Park, heading north. Ours are the second and third records in Magallanes, and given that several birds were involved, it is probable that the species occurs more regularly than is known. We hypothesise that they arrived in Magallanes from Argentina, rather than from the Chilean side of the Andes. The species' range on the Argentine side is also imperfectly known. Juvenile Blue-and-white Swallow is brown above and may show a weak brownish breast-band, posing an identification challenge with Bank Swallow. Those we saw had neat and distinct breast-bands, a paler neck collar, dull brown back, compact shape and small size.

Cliff Swallow *Petrochelidon phyrronota*

Little has been published on this species' occurrence in Chile, despite that records continue to accumulate for the country. Adding to the two records of Araya & Millie², Howell & Webb¹⁰ mentioned several records in the north, whilst Marin¹⁹, in summarising additional reports, noted the species to be a regular visitor but elected to maintain its status as hypothetical given the lack of photographs or specimens known to him. In fact, Cliff Swallow can be common in I Region and photographs from Santiago exist (G. González pers. comm.). For Magallanes, Venegas & Jory⁴¹ and Venegas³⁹ mentioned two different records, including one of six at Punta Dungeness in October 1981. Vuilleumier⁴⁴ observed a single north of Porvenir, Tierra del Fuego, in November 1985. To

these, we add a sighting of two heading south along the shore of the Strait of Magellan, in the northern outskirts of Punta Arenas, on 3 November 1997 (P. Burke), amidst a large movement of Chilean Swallows *Tachycineta meyeni*. In southern Santa Cruz, Argentina, Cliff Swallow is a regular visitor (S. Imberti *in litt.* 2006). Like Bank Swallow, we consider that Magallanes Cliff Swallows arrive from Argentina; the lack of records from most of Chile south of II Region makes a Pacific route very unlikely.

Greater Yellow Finch *Sicalis auriventris*

In Chile *S. auriventris* occurs from Antofagasta, II Region, to Laguna del Maule, VII Region, where it inhabits the alpine zone above 2,000 m. On the Argentine side of the Andes, it is found south to western Neuquén^{6,29,33}. We first observed Greater Yellow Finches in the Sierra Baguales on 20 November 2001, and again on 11 and 16 November, and 7 December 2002 to 25 February 2003. On 28 October 2003 a flock of c.30 was seen in the same area and regular sightings have occurred into 2006. Poor-quality photographs were obtained on 11 November 2002. Ours are the first records for Magallanes and represent a range extension of over 1,600 km. We suggest that the species might prove to be evenly distributed in alpine habitats between Laguna del Maule and the Sierra Baguales, but ornithologists or birdwatchers rarely visit the intervening area. Greater Yellow Finches were reported on the Argentine side of the Sierra Baguales in 2002 by Imberti¹³, who mentioned the first of our sightings there. The species appears common in the Sierra Baguales, but numbers may vary annually. Its presence in spring and summer suggests that the species breeds, but this requires confirmation. The birds are found at higher elevations than Patagonian Yellow Finch *S. lebruni* and to date we have not found them sympatrically. Male Greater Yellow Finch is large and evenly yellow, with a short bill and very long wings. It lacks the greyish back, flanks, and contrasting yellow shoulders of the smaller Patagonian. Females of Greater Yellow Finch in Baguales are dull grey-brown, lacking obvious field marks; however, the large size, extremely long wings and lack of yellow on the shoulders separate them from female Patagonian. Vocalisations heard at Baguales include a sweet, short *tuuit*, of which a distant recording was made in 2003, sounding much like that of central Chilean populations.

Shiny Cowbird *Molothrus bonariensis*

In Magallanes this species had previously been recorded near Cerro Castillo, prov. Última Esperanza, and on Isla Riesco^{5,17,39}, yet one recent reference gave the range only as far south as prov. Aisén in Chile¹⁵. In Argentina it is regular south to

Chubut and Imberti¹² noted two records from Santa Cruz, one from Perito Moreno National Park and a small flock at El Pluma, the first for the province. We observed a female on 24 February 2003 by the Hosteria Tehuelches, near the intersection of the roads to Primera Angostura and Río Gallegos, within a small flock of House Sparrows *Passer domesticus*. It was a small icterid, with a short dark bill and entirely grey-brown plumage, lacking obvious streaking or other markings. This is the second-most austral record and only the third in Magallanes.

Discussion

Documentation of new records in southernmost Chile and adjacent Santa Cruz, Argentina¹² has added importance for two reasons. This is a distant, large and sparsely populated area yet to be surveyed adequately by ornithologists. Secondly, given global climate change, some of the most important areas to monitor are those closest to the poles, as it is here that climate-induced distributional changes should be most apparent. The avifauna of the extreme south is small and not complex, potentially making new additions and range extensions more easily detectable. Changes or shifts in distribution of South American birds should be more easily detected here, as opposed to further north where the avifauna is larger and more complex. Our observations include records of several species new to Magallanes, and others which have been recorded only a few times in the past. Some might be extending their range southward, e.g. Black-headed Duck, Spectacled Tyrant and Shiny Cowbird. Our discovery of a southernmost population of Greater Yellow Finches probably suggests that the species was overlooked in the past. Of the remainder, some species may have been largely overlooked (swallows and perhaps Grey-bellied Shrike-Tyrant), whilst others are vagrants (penguins and Fork-tailed Flycatcher). It will be interesting to determine if the hirundines and Grey-bellied Shrike-Tyrant occur more frequently in the future, and in increasing numbers, suggesting a southward extension of the population. Monitoring potential effects of climate change not only involves determining southbound shifts in the population of a given species, but also declines in those species typical of Magallanes, but will require data-gathering on population-level phenomena, which has yet to be attempted in Patagonia.

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References

1. Aguirre, J. (1992) Las golondrinas de Chile. *Bol. Inf. UNORCH* 14: 18–19.
2. Araya, B. & Millie, G. (1996) *Guía de campo de las aves de Chile*. Santiago: Ed. Universitaria.
3. Brito, J. L. (1999) Segundo registro en Chile para el pingüino azul *Eudyptula minor* (Spheniscidae) en la costa de Santo Domingo. *Bol. Chil. Orn.* 6: 45–46.
4. Canevari, M., Canevari, P., Carrizo, G. R., Harris, G., Rodríguez Mata, J. & Straneck, R. J. (1991) *Nueva guía de las aves Argentinas*, 2. Buenos Aires: Fundación Acindar.
5. Couve, E. & Vidal, C. (2003) *Aves de Patagonia, Tierra del Fuego y Península Antártica*. Punta Arenas: Fantastico Sur.
6. Fjeldså, J. & Krabbe, N. (1990) *Birds of the high Andes*. Copenhagen: Zool. Mus., Univ. of Copenhagen & Svendborg: Apollo Books.
7. Harrison, P. (1987) *Seabirds of the world: a photographic guide*. Princeton, NJ: Princeton University Press.
8. Hellmayr, C. E. (1932) The birds of Chile. *Field Mus. Nat. Hist. Zool. Ser.* XIX: 1–472.
9. Howell, T. R. (1975) Bank Swallow (*Riparia riparia*), Bobolink (*Dolichonyx oryzivorus*), and other birds at a desert reservoir in Chile. *Condor* 77: 105–106.
10. Howell, S. & Webb, S. (1995) Noteworthy bird observations from Chile. *Bull. Brit. Orn. Club* 115: 57–66.
11. Humphrey, P. S., Bridge, D., Reynolds, P. W. & Peterson, R. T. (1970) *Birds of Isla Grande (Tierra del Fuego)*. Washington DC: Smithsonian Institution.
12. Imberti, S. (2003) Notes on the distribution and natural history of some birds in Santa Cruz and Tierra del Fuego provinces, Patagonia, Argentina. *Cotinga* 19: 15–24.
13. Imberti, S. & Albrieu, C. (2001) *Lista de las aves de Laguna Nimez*. Río Gallegos: Universidad Nacional de la Patagonia Austral.
14. Jaramillo, A. & Burke, P. (1999) *New World blackbirds*. London, UK: Christopher Helm.
15. Jaramillo, A., Burke, P. & Beadle, D. (2003) *Birds of Chile*. London, UK: Christopher Helm.
16. Lockwood, M. (1999) Possible anywhere: Fork-tailed Flycatcher. *Birding* 31: 126–139.
17. Marín, M. (2000) The Shiny Cowbird (*Molothrus bonariensis*) in Chile: introduction or dispersion? Its hosts and parasitic trends. *Orn. Neotrop.* 11: 285–296.
18. Marín, M. (2003) *Hymenops perspicillata* en Magallanes. *Bol. Chil. Orn.* 9: 48.
19. Marín, M. (2004) *Lista comentada de las aves de Chile*. Barcelona: Lynx Edicions.
20. Martínez, I. (1992) Family Spheniscidae (penguins). In: del Hoyo, J., Elliott, A. & Sargatal, J. (eds.) *Handbook of the birds of the world*, 1. Barcelona: Lynx Edicions.
21. Matus, R. (1998) Presencia accidental de *Corvus splendens* (Aves: Corvidae) y nuevos registros de aves raras en Magallanes: *Rollandia gallardoi* y *Eremobius phoenicurus*. *Ans. Inst. Pat.* 26: 137–139.
22. Matus, R. & Barriá, C. (1999) Adiciones a la lista de aves del Parque Nacional Torres del Paine. *Ans. Inst. Pat.* 27: 105–113.
23. Matus, R. & Gonzalez, B. (1997) Registro de anidación de *Eremobius phoenicurus*, Bandurrilla de Cola Negra (Furnariidae), en la región de Magallanes. *Bol. Chil. Orn.* 4: 37–39.
24. Mazar Barnett, J. & Pearman, M. (2001) *Lista comentada de las aves Argentinas*. Barcelona: Lynx Edicions.
25. von Meyer, A. & Espinosa, L. (1996) Golondrina Barranquera (*Riparia riparia*) en Cucao, Chiloé. *Bol. Chil. Orn.* 3: 40.
26. Monroe, B. L. & Barron, A. (1980) The Fork-tailed Flycatcher in North America. *Amer. Birds* 34: 842–845.
27. Narosky, T. & Babarskas, M. (2000) *Guía de aves de Patagonia & Tierra del Fuego*. Buenos Aires: Zagier & Irruty.
28. Narosky, T. & Di Giacomo, A. G. (1993) *Las aves de la provincia de Buenos Aires*. Buenos Aires: Literature of Latin America.
29. Narosky, T. & Yzurieta, D. (1987) *Guía para la identificación de las aves de Argentina y Uruguay*. Buenos Aires: Asoc. Ornitológica del Plata.
30. Olrog, C. C. (1948) Observaciones sobre la avifauna de Tierra del Fuego y Chile. *Act. Zool. Lilloana* 5: 437–531.
31. Prince, P. A. & Croxall, J. P. (1996) The birds of South Georgia. *Bull. Brit. Orn. Club* 116: 81–104.
32. Remsen, J. V. (2003) Family Furnariidae (ovenbirds). In: del Hoyo, J., Elliott, A. & Christie, D. A. (eds.) *Handbook of the birds of the world*, 8. Barcelona: Lynx Edicions.
33. Ridgely, R. S. & Tudor, G. (1989) *The birds of South America*, 1. Austin: University of Texas Press.
34. Ridgely, R. S. & Tudor, G. (1994) *The birds of South America*, 2. Austin: University of Texas Press.
35. Rottmann, J. (1995) *Guía de identificación de aves de ambientes acuáticos*. Santiago: Unión de Ornitológicos de Chile.
36. Shirihai, H. (2002) *A complete guide to Antarctic wildlife*. Degerby: Alula Press.
37. Strange, I. J. (1992) *A field guide to the wildlife of the Falkland Islands and South Georgia*. London, UK: HarperCollins.
38. Valverde, V. & Oyarzo, H. (1996) Registro de *Eudyptula minor* (Spheniscidae) en la costa de la región de Atacama, Chile. *Bol. Chil. Orn.* 3: 42–43.
39. Venegas, C. (1982) Nuevos registros ornitológicos en Magallanes. *Ans. Inst. Pat.* 13: 183–187.

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40. Venegas, C. (1982) Suplemento a la *Guía de campo para las aves de Magallanes*. *Ans. Inst. Pat.* 13: 189–206.
41. Venegas, C. & Jory, J. (1979) *Guía de campo para las aves de Magallanes*. Punta Arenas: Instituto de la Patagonia.
42. Venegas, C. & Siefeld, W. (1998) *Catálogos de los vertebrados de la región de Magallanes y Antártica chilena*. Punta Arenas: Ed. Universidad de Magallanes.
43. Vuilleumier, F. (1994) Nidificación y status de *Phrygilus fruticeti* (Aves, Emberizidae) en la Patagonia Chilena: un ejemplo del fenómeno de límite de la especie? *Rev. Chil. Hist. Nat.* 67: 299–307.
44. Vuilleumier, F. (1995) Boreal migrant birds in southern South America: distribution, abundance, and ecological impact on Neotropical breeding species. *Ecotropica* 1: 99–145.
45. Vuilleumier, F., Caparella, A. P. & Lazo, I. (1993) Two notable bird records from Chilean Patagonia. *Bull. Brit. Orn. Club* 113: 85–87.
46. Wilson, R. P., Simeone, A. & McGill, P. (2000) Nota complementaria a la observación de un pinguino azul *Eudyptula minor* en la costa de Santo Domingo. *Bol. Chil. Orn.* 7: 30–31.
47. Woods, R. (1988) *Guide to the birds of the Falkland Islands*. Oswestry: Anthony Nelson.

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