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# Southernmost record of Yellow-headed Vulture, *Cathartes burrovianus* Cassin, 1845 (Cathartiformes, Cathartidae), in Buenos Aires province, Argentina

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#### Abstract

We report the southernmost record of Yellow-headed Vulture, *Cathartes burrovianus*, in Punta Piedras, north-eastern Buenos Aires province, Argentina. This record implies the presence of this species in a new habitat: the Pampas ecoregion. Considering this and other records in Argentina and Uruguay, the species distribution could be extending south from its known range.

#### Key words

New World vultures, Pampas ecoregion, range extension, species distribution, talares.

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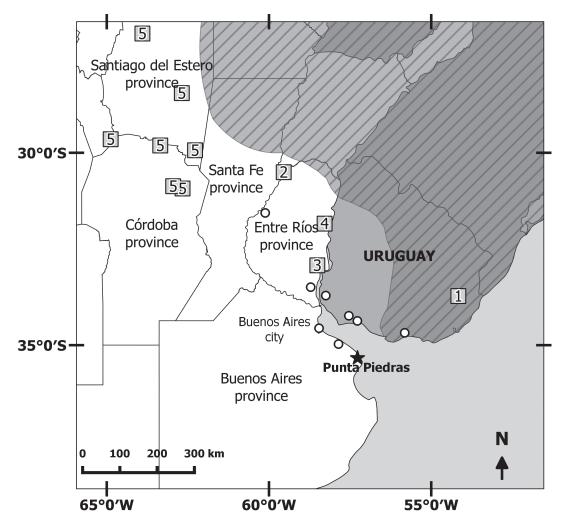
#### Introduction

The genus *Cathartes* Illiger, 1811 comprises 3 species of New World vultures. They are large, scavenger birds that locate their food using a well-developed sense of smell (Graves 1992). Alongside the other members of the family Cathartidae, they play an important role in their ecosystems, finding carcasses and removing carrion (Houston 1994).

The Lesser Yellow-headed Vulture, *Cathartes burrovianus* Cassin, 1845, lives mainly in tropical and subtropical regions, ranging from Mexico to Panama and from Colombia to north-eastern Argentina and Uruguay (Houston 1994, Ferguson-Lees and Christie 2001). Although it is a common and fairly recognizable bird, its status and distribution are not well established, particularly concerning the southern subspecies, *C. burrovianus urubutinga* Pelzeln, 1861 (Houston 1994, Campbell 2005). In Argentina it is usually found in humid regions in the north-east, within Dry and Wet Chaco ecoregions (Paulini et al. 2015), reaching Entre Ríos province at its southern limit (de la Peña 1996, Aves Argentinas 2009, Marateo et al. 2009) (Fig. 1). It can be found in open wet grasslands and marshes, and less frequently in forest edges (Houston 1994, Eitniear and McGehee 2017).

## Methods

Our observation took place during a bird breeding study in Estancia Luis Chico (35°19' S, 057°12' W), Punta Piedras, Punta Indio department, Buenos Aires province, Argentina (Fig. 1). This study area is inside the Parque Costero del Sur Biosphere Reserve (MAB-UNESCO), within the Pampas ecoregion (Morello et al. 2012). The



**Figure 1.** Distribution of Lesser Yellow-headed Vulture (*Cathartes burrovianus*) in southern South America (gray with stripes) according to Ferguson-Lees and Christie (2001), with indications of published records (numbered squares), records available in eBird (2018) and EcoRegistros (2018) (white circles) and new record by this study (black star). [1] = Tremoleras (1927), [2] = De La Peña (1996), [3] = Aves Argentinas (2009), [4] = Marateo et al. (2009), [5] = Paulini et al. (2015).

study site is a semi-open grassland area with patches of woodland mainly dominated by native tree species such as Tala (*Celtis ehrenbergiana*), Coronillo (*Scutia buxifolia*), Molle (*Schinus longifolia*), and Ombú (*Phytolacca dioica*) (Arturi and Goya 2004).

#### Results

**New record.** Argentina: Buenos Aires province, Punta Piedras (35°19'49.75" S, 057°12'54.54" W), obs. by M.A. Colombo & L.N. Segura, 8 January 2018 at 11:25 a.m. (Fig. 2).

One individual of a Lesser Yellow-headed Vulture was feeding on a dead Big Hairy Armadillo, *Chaetophractus villosus* (Desmarest, 1804), which had previously been hit by a car. The bird flushed due to our close presence but then returned to a nearby post and stood still while we photographed it (Fig. 2). The sighting occurred along an unpaved road bordered by trees and fences.

**Identification.** The individual seen was a large, darkbrown bird, with the ventral side of the remiges almost white. Its head was completely bald and the nostrils were perforated. The upper middle of the head was pale blue. The nose was red. The cheeks, which were crossed by a black stripe, were bright yellow (Fig. 2). The brownish tone of the feathers helped us to differentiate it from the more unlikely Greater Yellow-headed Vulture, *C. melambrotus* Wetmore, 1964, and the head color pattern was enough to discard the more common Turkey Vulture, *C. aura* (Linnaeus, 1758).

#### Discussion

This is the southernmost record for the Lesser Yellowheaded Vulture, being approximately 270 km south from the closest documented records in Argentina (Marateo et al. 2009, Aves Argentinas 2009) (Fig. 1). This observation also represents the first published record for the species in Buenos Aires province. In Uruguay, the Lesser Yellow-headed Vulture is usually considered as a resident, but there is little information available concerning its distribution, and few exact locations are described in literature (Tremoleras 1927, Cortés et al. 2013). In addition to our find and the previous published data, there



**Figure 2.** Lesser Yellow-headed Vulture (*Cathartes burrovianus*) observed on 8 January 2018 in Estancia Luis Chico, Punta Piedras, north-eastern Buenos Aires province, Argentina (photograph by MAC).

are some recent records from online databases, such as eBird (https://ebird.org/) and EcoRegistros (https:// ecoregistros.org/) for Entre Ríos and Buenos Aires provinces, and also for southern Uruguay, suggesting that the range of this species may be extending south from its traditionally known distribution (Fig. 1). All these records together undoubtedly show a scarce but regular presence of this species in areas far south of its published range.

Previous records in Argentina are from warmer ecoregions mainly dominated by forests and with mean annual temperatures from 18 °C to 25 °C (Morello et al. 2012). Our record is located within the Pampas ecoregion, which is a new habitat for the species. This ecoregion is characterized by grasslands, with an extreme anthropogenic modification due to the advance of agriculture, and has mean annual temperatures from 15° to 20°C (Morello et al. 2012).

Some vulture species are known to have expanded and grown their populations by associating with human activities, such as cattle, landfills, or urban settings, where they find food and habitat diversity (Avery 2004, Novaes and Cintra 2015). Even though cattle is a main activity in northern Buenos Aires province (Morello et al. 2012), *Cathartes* vultures usually feed on smaller prey (Houston 1994, Campbell 2015, Novaes and Cintra 2015). On the other hand, new sanitary landfills and illegal waste disposal areas may provide vultures with new feeding opportunities (Novaes and Cintra 2015). However, there is a lack of information about solid waste disposal in all of Latin America (Tello Espinoza et al. 2010), which makes it difficult to track these places and survey the fauna associated with them.

Vultures are great flyers that can cover large distances with little effort (Houston 1994), and occasional records may simply be more evident because in recent years there has been an increase of birdwatchers uploading data to platforms such as eBird (Sullivan et al. 2014) and EcoRegistros.

Finally, global climate change can also lead to changes in species distributions (Parmesan and Yohe 2003). In this sense, Chen et al. (2011) found that the distributions of many species have recently shifted to higher latitudes as a consequence of the global warming. Therefore, reporting new locations and reviewing the distribution of Neotropical birds can be important to understanding ecological changes.

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#### Authors' Contributions

MAC and LNS made the field observation and MAC took the photograph. MAC and LNS conceived and wrote the manuscript.

#### References

- Arturi MF, Goya JF (2004) Estructura, dinámica y manejo de los talares del NE de Buenos Aires. Ecología y manejo de los Bosques de Argentina. Universidad Nacional de La Plata, La Plata, 1–24.
- Avery ML (2004) Trends in North American vulture populations. In: RM Timm, Gorenzel WP (Eds) Proceedings of the 21st Vertebrate Pest Conference. University of California, Davis, 116–121.
- Aves Argentinas (2009) Lista de las Aves de la Estancia y Reserva "El Potrero de San Lorenzo". Aves Argentinas/AOP, Buenos Aires, 40 pp.
- Chen I, Hill JK, Ohlenmüller R, Roy DB, Thomas CD (2011) Rapid range shift of species associated with high levels of climate warming. Science 333 (6045): 1024–1026. https://doi.org/10.1126/ science.1206432
- Campbell MO (2015) Vultures: Their Evolution, Ecology and Conservation. CRC Press, London, 374 pp.
- Cortés GD, Rodríguez-Cajarville MJ, Azpiroz AB, Maier M (2013) Estado del conocimiento sobre las aves rapaces de Uruguay. Ornitología Neotropical 24 (3): 243–256.
- De la Peña MR (1996) Nuevos registros o aves poco citadas para las provincias de Santa Fe y Entre Ríos, Argentina. El Hornero 14 (3): 87–89.
- eBird (2018) eBird: an Online Database of Bird Distribution and Abundance. http://www.ebird.org. Accessed on: 2018-7-16.
- EcoRegistros (2018) Jote Cabeza Amarilla (*Cathartes burrovianus*). http://www.ecoregistros.org. Accessed on: 2018-7-16.
- Eitniear JC, McGehee SM (2017) Lesser Yellow-headed Vulture mandibular ecomorphology and feeding interactions at an established feeding site in Belize. Texas Journal of Science 69 (1): 37–46.
- Ferguson-Lees J, Christie DA (2001) Raptors of the World. Houghton Mifflin Company, New York, 992 pp.
- Graves GR (1992) Greater Yellow headed-Vulture (*Cathartes melambrotus*) locates food by olfaction. Journal of Raptor Research 26 (1): 38–39.
- Houston DC (1994) Family Cathartidae. In: del Hoyo J, Elliot A, Sargatal J (Eds) Handbook of the Birds of the World, Vol. 2 (New

World Vultures to Guineafowl). Lynx Edicions, Barcelona, 24-41.

- Morello J, Matteucci S, Rodríguez A (2012) Ecorregiones y complejos ecosistémicos argentinos. 1<sup>a</sup> edición. Orientación Gráfica Editora, Buenos Aires, 752 pp.
- Marateo G, Povedano H, Alonso J (2009) Inventario de las aves del Parque Nacional El Palmar, Argentina. Cotinga 31: 47–60.
- Novaes WG, Cintra R (2015) Anthropogenic features influencing occurrence of Black Vultures (*Coragyps atratus*) and Turkey Vultures (*Cathartes aura*) in an urban area in central Amazonian Brazil. Condor 117 (4): 650-659. https://doi.org/10.1650/ condor-15-56.1
- Parmesan C, Yohe G (2003) A globally coherent fingerprint of climate change impacts across natural systems. Nature 421 (6918): 37–42. https://doi.org/10.1038/nature01286
- Paulini H, Torres R, Villalba S, Michelutti M, Lépez M (2015) Presencia del jote cabeza amarilla (*Cathartes burrovianus*) en el Chaco Seco argentino. Nótulas Faunísticas (segunda serie) 187: 1–5.
- Sullivan BL, Aycrigg JL, Barry JH, Bonney RE, Bruns N, Cooper CB, Damoulas T, Dhondt AA, Dietterich T, Farnsworth A, Fink D, Fitzpatrick JW, Fredericks T, Gerbracht J, Gomes C, Hochachka WM, Iliff MJ, Lagoze C, La Sorte FA, Merrifield M, Morris W, Phillips TB, Reynolds M, Rodewald AD, Rosenberg KV, Trautmann NM, Wiggins A, Winkler DW, Wong WK, Wood CL, Yu J, Kelling S (2014) The eBird enterprise: an integrated approach to development and application of citizen science. Biological Conservation 169: 31–40. https://doi.org/10.1016/j.biocon.2013.11.003
- Tello Espinoza P, Martínez Arce E, Daza D, Soulier Faure M, Terraza H (2010) Informe de la evaluación regional del manejo de residuos sólidos urbanos en América Latina y el Caribe 2010. IBD Monograph, Organización Panamericana de la Salud, Banco Interamericano de Desarrollo & Asociación Interamericana de Ingeniería Sanitaria y Ambiental, 158 pp.
- Tremoleras J (1927). Adiciones y Correcciones a la "Lista de aves uruguayas". El Hornero 4 (1): 16–22.