

First record of King Penguin (*Aptenodytes patagonicus*) on the coast of Peru

[Primer registro de Pingüino Rey (*Aptenodytes patagonicus*) en la costa del Perú]

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In South America, breeding King Penguins (*Aptenodytes patagonicus*) are now commonly reported in Argentina and Chile (Huidobro *et al.* 2018, Kusch & Marín, 2012, BirdLife International 2023). Barquete *et al.* (2006) reports the northernmost known record of King Penguin in the Atlantic as a Brazilian sighting (23°56'S / 42°30'W, 0 m) in 1995 (Pacheco *et al.* 1995). Over the past 60 years, King Penguins have re-colonized some previously abandoned locations, such as the Falkland Islands (Pistorius *et al.* 2012).

Meanwhile, some unsuccessful attempts of egg laying were reported in Isla Hornos and Isla Los Estados in Argentina (Pütz *et al.* 2021). On the Pacific Coast, since the 1980s, a colony has re-emerged in Bahía Inútil in the Strait of Magellan in Tierra del Fuego in Chile (Couve & Vidal 2010) that has been growing in numbers to date (Pütz *et al.* 2021). The northernmost previously reported Pacific record (18 December 2019; Playa La Boca, Región Concón Municipio, Condado, Valparaíso, Chile; 32°55'10.2"S / 71°30'46.0"W, 0 m) by J. Delgado was uploaded to eBird (2023).

On February 12th 1993, the remains of a recently deceased adult King Penguin (*Aptenodytes patagonicus*) carcass were delivered by local fishermen to Dr. Patricia Majluf, scientific researcher and founder of a long-term research program in the Punta San Juan reserve. The adult King Penguin was reported to be found alive walking on the shores of guano reserve Pampa Redonda, in Chala, Caravelí province, department of Arequipa, on the southern coast of Peru (16°2'2.46"S / 74°1'2.69"W, 0 m). Therefore, this new record is located 1800 km north of the northernmost record on the Pacific coast (Fig. 1). The animal was reported to have been captured alive by fishermen and to have died during transport to the research station. Only the pelt and skull were delivered to the researchers, and so the sex of the individual remains unknown. According to the available literature, this is the only report of a King Penguin on the coast of Peru and the northernmost report for this species globally.

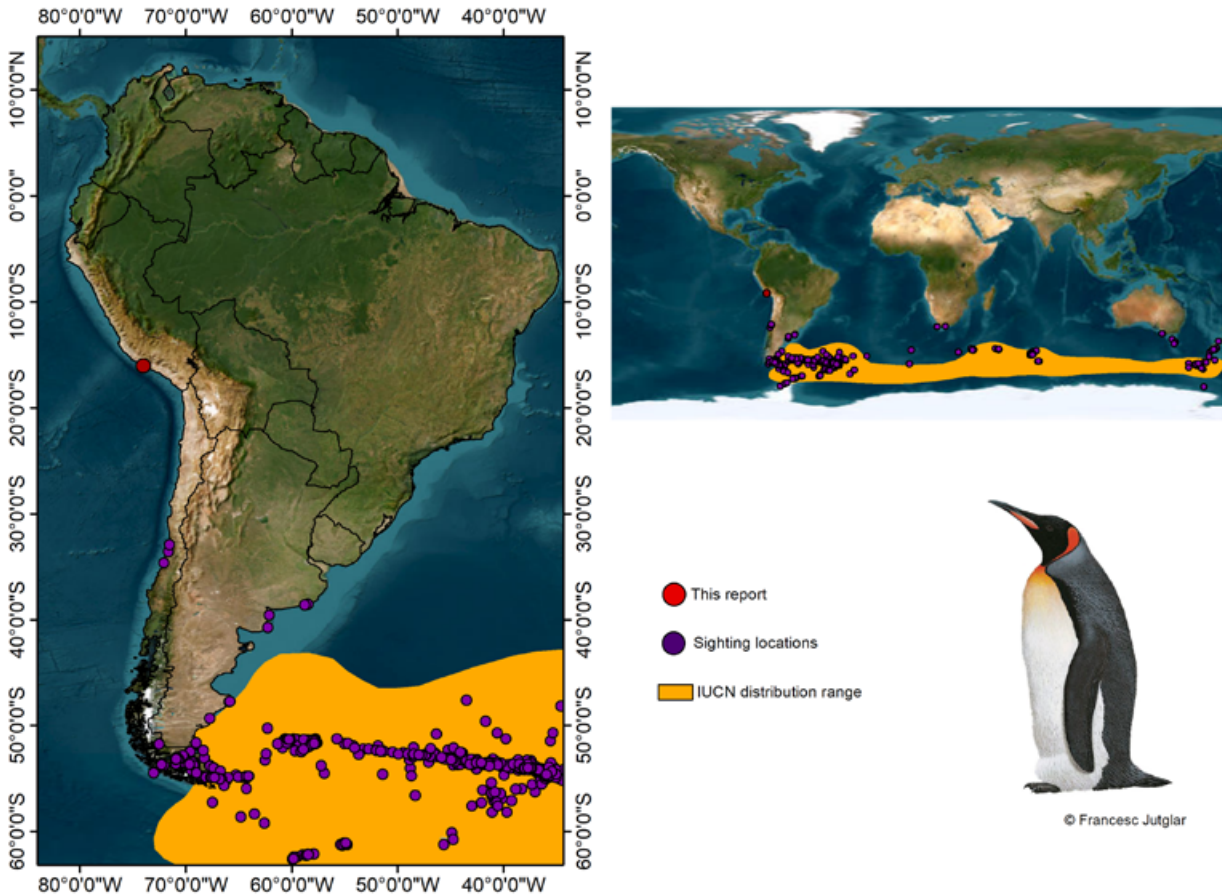


Figure 1. Map of the IUCN distribution range (orange area), sighting locations (violet circles) and the reported location presented in this study (red circle) of King Penguin (*Aptenodytes patagonicus*). Source: ebird (2023).

Fledgling King Penguins develop their foraging expertise in relation to their breeding colony progressively over time (Pütz *et al.* 2014), and juveniles can spend several years exploring the Southern Ocean and then usually return to their natal colony upon reaching sexual maturity at the age of 5–6 years. Upon reaching maturity, individuals occasionally start breeding elsewhere and may molt at different sites other than their breeding colonies (Pütz *et al.* 2014). Therefore, given the light yellow ear patches evidenced in the pelt (Fig. 2) that are less reflective (less orange) in non-breeding immature individuals of 2-3 years of age (Nicolaus *et al.* 2007) it is possible that this report pertains to the case of a young adult King Penguin that dispersed far from its original breeding

colony and was then poached by fishers on the coast of Peru.

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LITERATURE CITED

Barquete, V., Bugoni, L., Silva-Filho, R.P. & A. C. Adornes (2006) Review of records and notes on King Penguin (*Aptenodytes*



Figure 2. a) Superior and b) lateral view of the skull and of c) pelt of adult King penguin (*Aptenodytes patagonicus*) found in the south coast of Peru on February 12th, 1993. Length of pelt and coloration of yellowish ear patches are indicative of an immature *Aptenodytes patagonicus*. The yellow ear patch has well-defined black edges, and continues through a fine line towards the chest; the beak is long and slightly curved. Both characteristics exclude this specimen of being an *Aptenodytes forsteri*.

patagonicus) and Rockhopper Penguin (*Eudyptes chrysocome*) in Brazil. Hornero, 21 (1):45-48.

BirdLife International (2023) Species factsheet: *Aptenodytes patagonicus*. Disponible: <http://datazone.birdlife.org/species/factsheet/king-penguin-apternodytes-patagonicus> (Accedido el 12/12/2023).

Couve, E. & C. F. Vidal (2010) Probable asentamiento de Pingüino Rey en Tierra del Fuego. Chiricoca, 11: 55-58.

eBird (2023). eBird: Una base de datos en línea para la abundancia y distribución de las aves [aplicación de internet]. eBird,

Ithaca, New York. Disponible: <http://www.ebird.org> (Accedido el 12/12/2023).

Huidobro, M., Oporto, J., Zurita, C. & E. Couve (2018) Caracterización del Período de crianza de polluelos de Pingüino Rey (*Aptenodytes patagonicus*) en isla grande de Tierra de Fuego. Brotes Científicos, 2 (1): 61-66.

IUCN (International Union for Conservation of Nature) (2016). *Aptenodytes patagonicus* (spatial data). The IUCN Red List of Threatened Species 2023(1). Disponible: <https://www.iucnredlist.org> (Accedido el 11/12/2023).

Kusch, A., & M. Marín (2012). Sobre la distribución del Pingüino Rey *Aptenodytes patagonicus* (aves: Spheniscidae) en Chile. *Anales Instituto Patagonia (Chile)*, 40 (1): 157-163.

Nicolaus, M., Le Bohec, C., Nolan, P. M., Gauthier-Clerc, M., Le Mao, J. K. & P. Jouventin (2007). Ornamental colors reveal age in the King Penguin. *Polar Biology*, 31: 53-61.

Pacheco, J. F., Ramos, V. & L. P. Fedullo (1995). *Aptenodytes patagonicus*, primeiro registro no Brasil. *Atualidades Ornitológicas*, 64:4.

Pistorius, P., Baylis, A., Crofts, S. & K. Pütz (2012). Population development and historical occurrence of King Penguins at the Falkland Islands. *Antarctic Science*, 24 (5): 435–440.

Pütz K., Trathan P. N., Pedrana J., Collins M.A., Poncet S., Lüthi B. (2014) Post-Fledging dispersal of King Penguins (*Aptenodytes patagonicus*) from two breeding sites in the South Atlantic. *PLoS ONE* 9(5): e97164.

Pütz, K., Gherardi-Fuentes, C., García-Borboroglu, P., Godoy, C., Flagg, M., Pedrana, J., Vianna, J. A., Simeone, A. & B. Lüthi (2021). Exceptional foraging plasticity in King Penguins (*Aptenodytes patagonicus*) from a recently established breeding site in Tierra del Fuego, Chile. *Global Ecology and Conservation*, 28, e01669.