NOTES ON GEOGRAPHIC DISTRIBUTION

Check List 12(2): 1857, 17 March 2016 doi: http://dx.doi.org/10.15560/12.2.1857 ISSN 1809-127X ©2016 Check List and Authors

the journal of biodiversity data

Check List

## A new record of the Blackish Oystercatcher, *Haematopus ater ater* (Vieillot and Oudart, 1825), in the Gulf of Guayaquil, Ecuador

## Fernando Félix\* and Ben Haase

Museo de Ballenas, Av. Enriquez Gallo entre calles 47 y 50, Salinas, Ecuador

\* Corresponding author. E-mail: fefelix90@hotmail.com

**Abstract:** We report a record of a single individual of the Blackish Oystercatcher, *Haematopus ater ater* (Vieillot and Oudart, 1825), photographed on 7 February 2015 in the Gulf of Guayaquil, Ecuador (02.73° S, 080.22° W). This species regularly occurs along rocky sea coasts, mainly in cold and temperate areas of South America. The record was observed during the warmest season and when an ongoing ENSO event in the Southeast Pacific has been confirmed. We discuss two potential causes for this unusual record: variability of environment conditions and population expansion from the Peruvian population.

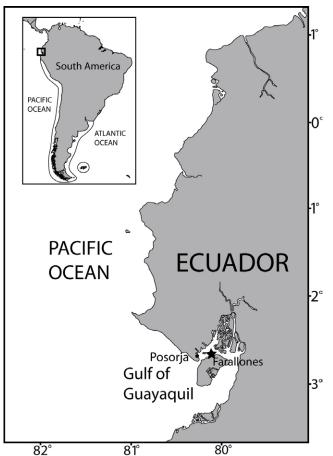
**Key words:** Blackish Oystercatcher; distribution; Ecuador, Gulf of Guayaquil; El Niño–Southern Oscillation event

The Black Oystercatcher, Haematopus ater (Vieillot and Oudart, 1825), is a large shore bird found mainly along rocky shorelines, where it forages on mussels, snails, limpets, sea urchins, and other small invertebrates of the intertidal zone (Lindberg et al. 1987; Andres and Falxa 1995; Pacheco and Castilla 2000). There are two populations of the Black Oystercatcher in the Americas, but their taxonomic status is not well defined. The Northern Hemisphere population is known as H. a. bachmani Audubon, 1838, while the Southern Hemisphere population is *H. ater ater*; the latter is referred as to the Blackish Oystercatcher (Birdlife International 2014). According to the IUCN Red List, the Black Oystercatcher in the Americas is considered as Least Concern; the whole population is currently estimated between 30,900 and 131,000 individuals, but population trends and structure are unknown (Birdlife International 2014).

Both Black and Blackish Oystercatchers are allopatric. The Black Oystercatcher is distributed along the Pacific coast of North America from the Aleutians Islands, Alaska, to Baja California, Mexico (Andres and Falxa 1995; Tesler et al. 2010; Birdlife International 2014). The Blackish Oystercatcher has a continuous distribution along both coasts of South America. On the Pacific coast, it occurs from 07° S in Peru south along the Chilean coast to Cape Horn. This subspecies extends northward along the Atlantic coast of Argentina as far as La Plata River and Uruguay (35–36° S) (Birdlife International 2014; Woods 2014). The Blackish Oystercatcher has been observed for the first time in Ecuador only very recently; Mr. G. Wallace photographed a single juvenile specimen standing on a rocky platform at Chanduy, Gulf of Guayaquil (02.40° S, 080.68° W), on 20 of June 2013 (Nilsson et al. 2014). Here we report the presence of another individual of this subspecies in the Gulf of Guayaquil.

On 7 February 2015, during a dolphin-watching trip at Posorja, province of Guayas, southwest Ecuador, a single individual of the Blackish Oystercatcher was observed flying 1 m above the water surface along the rocky coast of a small island. The island, about 1.2 ha (approximately  $280 \times 40$  m), is the largest of a group of small islands called Los Farallones ( $02.73^{\circ}$  S,  $080.22^{\circ}$  W) (Figure 1). Los Farallones are within the "El Morro Mangrove Wildlife Refuge", a coastal marine protected area declared in 2007 (MAE 2010). The bird was in flight, but photographs confirm the identification. Major body features include the dark brown coloration all over the body, red/orange long beak, and bright yellow eye with red ring (Figure 2). Presuming this bird had originated from the south, this means an extension of 400 km.

The part of the island where the individual was observed has a relatively wide, flat, intertidal area that was shaped by the erosion of strong tidal currents (Stevenson 1981). Although small, the island seems an appropriate site for oystercatchers and other shorebirds. A few small mangrove trees, cacti along and on top of the cliffs, and other species of plants typical of the Ecuadorian dry forest grow on the island. Numbering up to few hundred individuals, several species of marine birds, including



**Figure 1.** Site of the Blackish Oystercatcher sighting at Los Farallones in the Gulf of Guayaquil, Ecuador (star). Map on the top left also indicates the previously known distribution range of the species in South America.

Frigate Birds (*Fregata magnificens*), pelicans (*Pelecanus occidentalis* and *P. thagus*), Blue and Peruvian Boobies (*Sula nebouxii* and *S. variegata*), Neotropical Cormorants (*Phalacrocorax brasilianus*), vultures (*Cathartes aura* and *Caragyps atratus*), and others, use these islands for resting (MAE 2010).

The presence of the Blackish Oystercatcher in the Gulf of Guayaquil could be associated to demographic or environment factors or a combination of both. Although the species is mostly resident in South America with only short migratory movements (Woods 2014), it seems likely that the appearance of the Blackish Oystercatcher on the coast of Ecuador is due to seasonal environmental changes such as seawater temperature and prey availability, as occurs with other coastal and marine birds including the Peruvian Pelican (P. thagus), Peruvian Booby (Sula variegata) and Inca Tern (Larosterna inca) (Haase 2011). This would probably explain the first record at Chanduy that occurred at the beginning of the austral winter (June 2013), but the record at Los Farallones was made during the austral summer (February 2014), which suggests that this individual was not a migrant but a vagrant.

Since 2014 other species with a southern origin such as the Peruvian Booby, Inca Tern, and the Guanay Cormorant (*Phalacrocorax bougainvillii*) have appeared in higher numbers along the southwest Ecuadorean coast (Haase 2015). These records could be the result of temporary abnormal environmental conditions in



Figure 2. Black Oystercatcher individual photographed at Los Farallones, Gulf of Guayaquil, Ecuador (F. Félix).

the southeastern Pacific (Haase 2015). The anomalous conditions reverted to normal by the end of 2014 and then changed again to abnormal by end of March 2015 as consequence of the El Niño–Southern Oscillation Phenomenon (ENSO) (CPC/NCEP/NWS 2015; CPPS 2015). Such environmental variability could also have caused changes in the invertebrate communities and be the driving force for movements of Black Oystercatchers north to the Gulf of Guayaquil. It is known that ENSO events affect birds, mammals and entire ecosystems (e.g., Barber and Chavez 1983; Jaksic and Fariña 2010). In the North Pacific, the Black Oystercatcher is thought to be a sensitive indicator of the overall health of the rocky intertidal community (Tessler et al. 2010), and this may be the case with its southern counterpart as well.

Although the population trend is unknown along the west coast of South America (Woods 2014), there is some evidence that the Blackish Oystercatcher may be expanding its distribution in northern Peru, as stated by Figueroa and Stucchi (2012) who reported the northernmost nesting site for this subspecies at Foca Island (05°12′ S, 081° 12′ W). Here, the northern coast of Peru is influenced by the cold and nutrientrich Humboldt Current System (Wyrtky 1975), which occurs in the Gulf of Guayaquil during winter months (June to October). However, the inner estuary, where the Blackish Oystercatcher was recorded, is a huge delta created by the Guayas River, and other freshwater tributaries, with most shores and islands covered with mangrove woodlands and sandy beaches with scattered rocky shores. Thus, salinity, temperature, coastal substrate and intertidal communities are different than in the species' normal range along the coasts of South America. The inner estuary is not ecologically appropriate for establishment this subspecies in the Gulf of Guayaquil. Nevertheless, this unusual record offer proof to the changing distributional range of this species in the northwestern part of South America.

## LITERATURE CITED

- Andres, B.A. and G.A. Falxa. 1995. Black Oystercatcher (*Haematopus bachmani*), the birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology. Accessed at http://bna.birds. cornell.edu/bna/species/155. doi: 10.2173/bna.155
- Barber, R.T. and F.P. Chavez. 1983. Biological consequences of El Niño. Science 222: 1202–1210.
- BirdLife International. 2014. *Haematopus ater*. The IUCN Red List of threatened species. Version 2014.3. Accessed at http://www.iucnredlist.org, 9 February 2015.
- Climate Prediction Center/NCEP/NWS. 2015. El Niño/Southern Oscillation (ENSO), diagnostic discussion. Accessed at http:// www.cpc.ncep.noaa.gov/products/analysis\_monitoring/enso\_ advisory/ensodisc.pdf, 21 February 2015.

- CPPS (Comisión Permanente del Pacífico Sur). 2015. Boletín de alerta climático BAC. No 295, abril 2015. Accessed at http:// cpps.dyndns.info/cpps-docs-web/dircient/bac/histórico/295/ bac295%20VR.pdf, 22 May 2015.
- Figueroa, J. and M. Stucchi. 2012. Isla Foca (Perú): registros de reproducción más septentrionales del pelícano (*Pelecanus thagus*) y del pilpilén negro (*Haematopus ater*). Boletín Chileno de Ornitología 18(1–2): 35–43.
- Haase, B. 2011. Aves marinas de Ecuador continental y acuáticas de las piscinas artificiales de Ecuasal. Guayaquil, Ecuador: Aves & Conservación, BirdLife en Ecuador y Ecuasal.. 170 pp.
- Haase, B. 2015. Sea bird reaction to special oceanographic conditions in the Pacific in 2014. Oral presentation at the 42<sup>nd</sup> Conference of the Pacific Seabird Group, 18–21 February 2015, San José, California. USA.
- Jaksic, F.M. and J.M. Fariña. 2010. El Niño and the birds: a resourcebased interpretation of climatic forcing in the Southeastern Pacific. Anales Instituto Patagonia (Chile) 38(1): 121–140.
- Lindberg, D.R., K.I. Warheit and J.A. Estes. 1987. Prey preference and seasonal predation by oystercatchers on limpets at San Nicolas Island, California, USA. Marine Ecology Progress Series 39:105–113.
- MAE (Ministerio del Ambiente del Ecuador). 2010. Plan de Manejo del Refugio de Vida Silvestre Manglares El Morro. Fundación Ecuatoriana para el Estudio de Mamíferos Marinos (FEMM), Fundación Natura y Conservación Internacional Ecuador. General Villamil, Ecuador. 164 pp.
- Nilsson, J., J.F. Freile, R. Ahlman, D. Brinkhuizen, P. Greenfield and A. Solano-Ugalde. 2014. Rare birds in Ecuador: second report of the Committee of Ecuadorean Records in Ornithology (CERO). Avances en Ciencias e Ingenerías 6(2): B38–B50. http://www. usfq.edu.ec/publicaciones/avances/archivo\_de\_contenidos/ Documents/volumen\_5\_numero\_2/b24\_5\_2\_2013.pdf
- Pacheco, C. and J.C. Castilla. 2000. Trophic ecology of the oystercatchers *Haematopus palliatus pitanay* (Murphy 1925) and *Haematopus ater* (Vieillot et Oudart 1825) on beds of the tunicate *Pyura praeputialis* (Heller 1878) in the Bay of Antofagasta, Chile. Revista Chilena de Historia Natural 73: 533–541.
- Stevenson, M. 1981. Seasonal variations in the Gulf of Guayaquil, a tropical estuary. Instituto Nacional de Pesca de Ecuador. Boletín Científico y Técnico 4(1): 1–131.
- Tessler, D.F., J.A. Johnson, B.A. Andres, S. Thomas and R. Lanctot. 2010. Black Oystercatcher (*Haematopus bachmani*) conservation action plan. Version 1.1. International Black Oystercatcher Working Group, Alaska Department of Fish and Game, Anchorage, Alaska, U.S. Fish and Wildlife Service, Anchorage, Alaska, and Manomet Center for Conservation Sciences, Manomet, Massachusetts. 115 pp. http://www.whsrn.org/conservation-plan
- Woods, R.W. 2014. Conservation assessment of the Blackish Oystercatcher *Haematopus ater*. International Wader Studies 20: 109–115.
- Wyrtky, K. (1975). Fluctuation of the dynamic topography in the Pacific Ocean. Journal of Physical Oceanography 5: 450–459. doi: 10.1175/1520-0485(1975)005<0450:FOTDTI>2.0.CO;2

**Author contributions:** FF observed the record; FF and BH wrote the text.

Received: 16 June 2015 Accepted: 1 March 2016 Academic editor: Boris Tinoco