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NEW OBSERVATIONS OF *FULICA ARDESIACA* (GRUIFORMES: RALLIDAE) FROM CARRIZAL BAJO WETLANDS AND A POSSIBLY CASE OF HYBRIDIZATION

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ABSTRACT

We present new observations of Andean Coot *Fulica ardesiaca* (Gruiformes: Rallidae) in the Carrizal Bajo wetlands, extending its known distribution and confirming the breeding of the species through direct observation of chicks and the vocalization of alert calls in the face of the human presence near them. We propose a probable case of natural hybridization with the other Coots species inhabiting in the area.

KeyWords: *Fulica ardesiaca,* distribution.

RESUMEN

Nuevas observaciones de *Fulica ardesiaca* (Gruiformes: Rallidae) de Humedales de Carrizal bajo y Presunto caso de Hibridación. Presentamos nuevas observaciones de Tagua andina *Fulica ardesiaca* (Gruiformes: Rallidae) en el humedal de Carrizal Bajo, extendiendo su distribución geográfica conocida y confirmando la reproducción de la especie en el lugar basados en la observación directa de polluelos, además de la vocalización de llamadas de alerta ante la presencia humana cerca de los polluelos. Proponemos que posiblemente estemos ante un caso de hibridación natural de esta especie con otras especies de taguas del área.

Palabras Clave: *Fulica ardesiaca*, distribución.

Fulica ardesiaca, the Andean Coot, is commonly found in Chile at Altiplano lakes and ponds and sometimes in lower wetlands. The known distribution of *F. ardesiaca* is the Andes of southwestern Colombia, Ecuador (Cisneros – Heredia 2006), Peru, Bolivia, and, Tarapaca and Antofagasta in northern Chile (Blake 1977, Dillon Ripley and Beehler 1985). Recently, its presence has been reported in the provinces of Catamarca, Jujuy and Salta in Argentina (Navas and Camperi 2006). In Peru, there have been unconfirmed reports of its presence in the range between 0 and 300 masl in the Valle de Majes, Arequipa (González and Málaga 1997). Although it is known that the Andean Coot nests mainly in the Andean Puna, it has also been observed to nest in the Southern coast of Peru (Pearson 1974) being abundant in the Ite wetlands (Vizcarra 2008).

In this paper we report the presence of chicks and possible nests of *F. ardesiaca* at Carrizal Bajo wetlands, confirming the locality as a breeding site for this species. We established the breeding state of *F. ardesiaca* from its response to human presence near the possible nest and chicks. The Andean Coot was previously reported at the Carrizal Bajo wetlands by Rosende *et al.* (2006) interacting with the Red – gartered Coot, *Fulica armillata.*

The Carrizal Bajo wetlands are located at 28º04’58’’S, 71º08’34’’W. The locality was visited on October 10th of 2008. Photographical records of the adults (a couple was directly observed) of *F. ardesiaca* at the site is presented as evidence. Regarding previous reports, the occurrence of this species at the coastal wetlands of Carrizal

Bajo could be more common than previously thought. Together with the Andean Coot, a Chilean Flamingo, *Phoenicopterus chilensis,*was observed. The presence of this species was previously reported during 2000 and 2004, with one and two individuals respectively, together with a Black–necked Swan, *Cygnus melancoryphus* (Aguirre – Castro 2004).

At the site, the presence of Cocoi Heron (*Ardea cocoi*), the Red – gartered Coot (*Fulica armillata*) and the White – winged Coot (*Fulica leucoptera*) was also observed.

The presence of a white patch in the undertail coverts of the Andean Coot specimens was also observed. This patch is observed in the White–winged Coot, *Fulica leucoptera*, the Red–gartered Coot, *Fulica armillata* and the Red–fronted Coot, *Fulica rufifrons*, but it had not been observed in the Andean Coot (Jaramillo 2003). Future studies are required to determine whether this is a sign of hybridization among the Coots of the area.

In Gruiformes, hybridization is uncommon (Aliabadian and Nijman 2007). Nevertheless, cases of hybridization between *Fulica americana* and *Fulica caribaea* have been reported (Voous 1983; McNair and Cramer – Burke 2006). The former also hybridize with *F. ardesiaca* and *Gallinula chloropus* (McCarthy 2006 and references therein).

It has been reported that as much as 10% of the birds in the field may exhibit evidence of natural hybridization (Grant and Grant 1992). But such cases are hard to observe when the two species have very similar plumages (Randler 2004).

It is important to establish whether this report actually reflects a recent displacement of the species, or whether the presence of the Andean Coot had been unreported due to lack of previous studies in the area. Also, it is necessary to determine if hybridization is indeed taking place. Hybridization may represent a threat to the species, since it could lead to the fusion of previously distinct lineages, extinction or local extirpation of both lineages, evolution of reproductive isolation via reinforcement, and the production of novel, highly fit hybrid phenotypes (Fitzpatrick and Bradley Shaffer 2007).

FIGURE 1: *Fulica ardesiaca* at Carrizal Bajo wetlands. It's observed the white patch in the undertail coverts

FIGURE 2: Supposed nest of *Fulica ardesiaca* at Carrizal Bajo wetlands

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