Notes on the rediscovery of the Austral Rail *Rallus antarcticus* in Santa Cruz, Argentina

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La Gallineta Chica o Pidén Chico *Rallus antarcticus* es uno de los rálidos neotropicales menos conocidos. Con 19 registros esparcidos en Chile y Argentina, sólo cinco fueron efectuados desde 1900, dos de los cuáles son dudosos[7]. El último registro corresponde a un individuo hallado muerto en las cercanías de El Bolsón, Río Negro, Argentina en 1959[20]. Presentamos aquí los detalles del descubrimiento de una pequeña población de esta especie en la Estancia La Angostura (48°37'S 70°39'W), a c.570 m, en la provincia de Santa Cruz, el 12 y 13 de enero de 1998. Las aves fueron encontradas en los densos juncales de *Schoenoplectus* (*Scirpus*) *californicus* que formaban parches de diversos tamaños en el mallín húmedo que cubría el ancho valle del río Chico. Se describen las vocalizaciones que fueron grabadas por primera vez, comparándolas con las de *Rallus limicola* a las que se parecen. Se hace una reseña y discusión de los registros existentes además del aparente patrón migratorio que éstos sugieren, y la posible preferencia por hábitats de bosque o de estepa. Nuestros registros hasta ahora no permiten cerrar las interrogantes que siguen abiertas acerca de la biología de esta especie. Está previsto un programa de relevamientos a través de un Premio de Conservación del CAN, que esperemos permitan dilucidar éstos y otros aspectos de la situación de *Rallus antarcticus*.

Introduction

Austral Rail *Rallus antarcticus*, is one of the least known rallids in the Neotropics. It has been classified as Endangered/Extinct (possibly extinct)[7], the same category as species such as Eskimo Curlew *Numenius borealis* or Glaucous Macaw *Anodorhynchus glaucus*. It is known from only 19 localities throughout Patagonian Argentina and Chile, with a few records in central Argentina and central Chile[7]. There are only five 20th century reports, two of which are considered doubtful or uncertain[7]. It was last reported on 29 October 1959 when one was found dead in a wet grassy field by a stream near El Bolsón, Río Negro (48°35'S 71°31'W); this specimen is now housed at Museo Argentino de Ciencias Naturales[20] (C. Kovacs pers. comm.).

Here, we report the discovery of a small population at Estancia La Angostura (48°37'S 70°39'W), at c.370 m, and provide the first detailed descriptions of the habits and habitat of the species, as well as a description of its vocalisations which were previously unknown.

Observations

We found *Rallus antarcticus* on 12–13 January 1998 in reedbeds bordering the río Chico, Santa Cruz province, Argentina. The fact that Virginia Rail *Rallus antarcticus* has been considered a subspecies of *R. limicola* led us to believe that its voice would probably resemble *limicola*, and we thus used examples of the latter species' voice presented by Hardy *et al.*[14] to try and obtain a response from Austral Rail, but without success (see below). On arriving at Estancia La Angostura in the evening (c.21h00) of 12 January, we decided to try playback once more in the reedbeds of the río Chico valley, but before we could do this, a bird with a similar song to *Rallus limicola* called from the reeds. It was undoubtedly an Austral Rail (see Vocalisations).

Soon four different birds were calling from a marshy area of 300 x 200 m. One individual was observed through making extensive tape-recordings of its song and then attracting it to playback. It was relatively tame, but always kept within the dense reed cover, c.50 cm from the edge of the vegetation. It walked over a dense mattress of dead reeds, c.40–50 cm above the water level. When it reached the edge of a patch of reeds 75 cm from the next such patch, the bird submerged until only the head and part of the back were above the water surface, and swam this distance, covered by the aquatic grass and milfoil. All the distinctive characters of the species were noted: in addition to its small size—c.20 cm—the bird had brown-washed buffy upperparts, coarsely streaked blackish; dark plumbeous underparts; black belly and vent, finely barred white. The mandible and cutting-edge of the maxilla were dull meat-red and the rest of the bill dull dusky. Legs were dull pinky red. The iris was not seen well but appeared dull red. No rufous patch was apparent on the wing-coverts, as these were concealed by the scapulars and other feathers. The following morning we heard at least three birds calling in the same area, from 06h00–08h00. Some tape-recordings were made from a distance. Notably, when J. Fjeldså and N. Krabbe visited Ea. La Angostura on 12 February 1984, they heard a rail-like song from the same marshy area as that in which our observations were made. This could conceivably have been *Rallus antarcticus* (J. Fjeldså *in litt.* 1998).

On the 12 January, during the journey from El Calafate to La Angostura along Route 40, we twice stopped in areas which appeared suitable for Austral Rail and tried to lure a response through playback of the calls and songs of *Rallus limicola*. These attempts, by a small stream at the side of a plateau with limited wet grass and

small stands of reeds, failed. Further efforts, this time using the voice of *Rallus antarcticus*, were made on 15 January 1998 near El Pluma, where Route 43 crosses the stream of the same name, a small tributary of the río Deseado (46°29'S 70°13'W). Again, this was unsuccessful.

Other negative results include a search by R. Fraga of five areas of apparently suitable habitat in Los Alerces National Park, on 6–11 February 1998. Specific searches were conducted using our tape of Austral Rail, in marshy areas within Ciprés *Austrocedrus chilensis*, Maitén *Maitenus boaria* and Ñire *Nothofagus antarctica* southern beech forests. No *Rallus antarcticus* were recorded; *Pardirallus sanguinolentus* was found on one occasion.

Habitat

The birds were found in extensive marsh habitat bordering the río Chico. This river valley, which dissects the Cardiel plateau, was knee-deep in water in January 1998. The marsh consisted of an open area densely covered by milfoil *Myriophyllum* sp. and lush green grass, with large patches of dense, tall (c.2 m) reeds *Schoenoplectus* (*Scirpus*) *californicus* of various sizes. The reeds were almost impenetrable, and a significant proportion were dry and bent over, forming a natural platform above the water surface. Other species present included Wren-like Rushbird *Phleocryptes melanops*, Many-coloured Rush-tyrant *Tachuris rubrigastra* and Yellow-winged Blackbird *Agelaius thilius*, as well as numerous waterfowl in the open areas covered by milfoil. These marshes represent a natural oasis within the surrounding dry Patagonian steppe.

Vocalisations

The song of *Rallus antarcticus* was similar to that of *R. limicola*. The species was first located by its distinctive voice and was calling when we first arrived at Estancia La Angostura at c.21h00, 75 minutes before dusk. At this time, four individuals were calling sporadically (every c.2–3 minutes). However, as the sun set, the bird which was attracted to playback sang more frequently and continued until it was dark (c.22h00), by which time it was singing every 8–51 seconds, but most intervals were either 14–17 seconds or 31–39 seconds long. The next day we first heard the species at c.06h00, c.30–50 minutes after dawn, when it sang at 1–2 minute intervals.

Song length varied, from 5–10 notes, but the vast majority had 7–9 notes. Notes were either a single-syllable *píc* or two-syllable *pí-ríc*, but were always high-pitched and strident with a very slight rasping or metallic quality. The two-syllable notes may alternatively be transcribed as *pí-dén*. Notably, pidén is the name given to the species in Chile, and it seems plausible that this name is onomatopoeic. Songs may be transcribed as a series of *píc pí-ríc pí-ríc pí-ríc pí-ríc pí-ríc pí-ríc* with one or more *pí-ríc* notes occasionally replaced by *píc* notes, and sometimes lacking the introductory *píc*.

Compared to the song of Virginia Rail as published by Hardy *et al.*[14], Austral's song is less rasping and higher pitched. Virginia Rail delivers 5–8 note songs every 3–4 seconds (examples one and two of Hardy *et al.*[14]). These differences are noticeable compared to the songs of several of *Laterallus* crakes, which can be very similar (JMB pers. obs.). The only available recording of the third taxon belonging to the superspecies—the Bogotá Rail *Rallus semiplumbeus*[14]—is of a completely different song type.

The calls of Speckled Teal *Anas flavirostris* can also resemble single Austral Rail notes, although the duck's are softer, more flute-like, and less strident.

Range

Austral Rail is largely restricted to Patagonia. In Argentina, it has been recorded in Buenos Aires province during the autumn or winter, except for a doubtful breeding record[7]. The records in Buenos Aires province appear to suggest a pattern of northerly dispersion (see discussion below). All other Argentine records are from Patagonia, during spring and summer[7].

In Chile, it has been recorded in Magallanes, southern Patagonia, in summer and autumn[7] and in five localities in central Chile, in addition to several skins or records for which there are no data other than "central Chile", "Santiago" or simply "Chile"[7,16,21]. Of these five, one (a nest with six eggs found in November 1940 at San Ignacio, Santiago[7]) is of uncertain identity and two others are unspecified as to date and lack details[7]. The remaining two also lack details, but are at least more consistent with other observations of the species: Reed[23] claimed the species was found at Hacienda (Estancia) Cauquenes, Colchagua, where "it hides among the grass by the swamps". This record is undated, but presumably relates to 1875; and Johnson[18] published an extract from a letter by Dr Wolffhügel who claimed the species was resident at Cayutué, where it could be seen "in the second growth trees bordering the virgin forest" and was confined to the reedbeds of lake Cayutué during summer. He also mentioned that others had told him the species was present in reedbeds at Peulla and Puntiagudo. All three localities are adjacent to lake Todos los Santos, Llanquihué. Habitat in this area is now all farmland and disturbed patchy forest (M. Marín *in litt.* 1998).

Other than the historical records cited by Navas[20] and Collar *et al.*[7], there have been a series of

undocumented reports published in the *Neotropical Waterbird Censuses*. The first such census—in July 1990—reported two Austral Rails in Chile at "Lenqui/Astilleros cerca de Maollin en la Región X"[6]. No indication of observer, habitat or other details are given. Both localities are within secondary and disturbed *Nothofagus* forests (M. Marín *in litt*. 1998). Blanco & Canevari[2] mention four Austral Rails from Chile in a table depicting the total results for the July 1991 census. Under the "Comentarios sobre Especies" section for Chile, it is stated that "According to Dr Schlatter, some of the questionable records include the sighting of 4 *Rallus antarcticus* (*R. sanguinolentus*?) and 4 *Numenius borealis* (*N. phaeopus*?), in Chiloé Insular (Sector Cucao)." No further details are provided for either species and none of these records was documented (R. Schlatter *in litt*. 1998). In 1994, Austral Rail was recorded again on the February census (seven in Argentina) and on the July–August census (one in Argentina)[5]. No locality was provided, and the species was not even mentioned under the "Comentarios sobre especies" section, which includes—among others—"species that stand out because of their rarity". D. Blanco (pers. comm.) provided details of the Argentine records, all of which were made by M. Diez Trabadelo near Carhué—the same locality where it was recorded by Barrows[1]. Trabadelo's records were as follows: three on 2 April 1993 and seven on 5 February 1994 at Bañados de Carhué (37°12'S 62°46'W); and one on 13 July 1994 at Laguna Epecuén Sur (37°12'S 62°46'W). These records require formal confirmation.

No other interesting rail observations were made during the January–February and July–August 1992, or February 1993 and July–August 1993 censuses, except three *Rallus* sp. in Argentina in February 1993[3,4].

Although all these records merit further investigation, we prefer to regard them as unconfirmed, given the lack of evidence or further details.

There have also been unconfirmed reports in the El Bolsón area, Río Negro in recent years[25]. These refer to sightings made by C. Kovacs of birds which may have been Austral Rails, but eluded precise identification. Songs of unidentified birds were also heard in the marshes in that area (C. Kovacs pers. comm.).

Discussion and conclusions

Perhaps the most remarkable fact concerning our rediscovery is that a small population appears to inhabit suitable habitat at Estancia La Angostura. Most accounts concerning the species describe casual encounters in which a single bird was collected[13,20,24,27], or the discovery of nests of uncertain identity[7,15]. In fact, these accounts provide virtually no information on the species' habitat or habits, and most usually mention little more than the fact that a specimen was secured, often without even mentioning a precise locality or date.

Extreme dates of records from Patagonia are 29 October and 13 April[7]. Records in Buenos Aires province suggest that *Rallus antarcticus* was formerly a non-breeding visitor to the area. Barrows[1]—not Withington[27] as erroneously suggested by Collar *et al*.[7]—found the species relatively common at Carhué in April 1881. Withington[27] recorded it only once at Lomas de Zamora, where one was killed by dogs in a swamp in June 1884. Gibson[13] found two separate birds on 24 July 1899 on Isla Gonzalez, Cape San Antonio, in a flooded "espartillar" [*Spartina densiflora*] where one of the birds, "unable to adopt its usual tactics of skulking away amongst the covert" was "disabled by a lucky whip-cut.". Weller[26] did not find the species during two periods spent studying Black-headed Ducks *Heteronetta atricapilla* in Cape San Antonio, and Narosky & Di Giácomo[19] mention no further records from Buenos Aires. The record of two nests found on 1 November 1900 at Barracas al Sud (currently Avellaneda)[15] appears doubtful and has already been questioned by Hellmayr & Conover[17] due to the lack of specimen material. The "possible" record at Concepción del Uruguay, Entre Ríos[7], seems more likely to refer to young Plumbeous Rails *Pardirallus sanguinolentus*[1].

As mentioned above, the historical data are generally poor and inconsistent, whilst the paucity of records, particularly from the 20th century, does not permit an unequivocal interpretation of the species' distribution and movements. It is possible that the species was formerly more widespread and abundant, and that at least some individuals moved north to winter in Buenos Aires province. However, there have been no records in Buenos Aires since 1899[7,19] (but see Range), and it is unclear if these records represented regular migration or if they were just stragglers from a formerly more widespread population. If truly migratory, it appears unusual that the species has not been recorded outside Patagonia this century.

According to Dr Wolffhügel[18] the species breeds in reedbeds during the summer and spent the winter in second growth adjacent to the lake. However, a nest (of uncertain identity) was found under a bramble *Rubus* bordering an irrigation canal[7]. That we found the birds in dense reeds in mid-January clearly suggests it breeds in such areas.

The reasons for the species' apparent range retraction and decline in numbers are enigmatic. The scarcity of records suggests that "it was already genuinely rare at the turn of the century"[7]. It has been suggested that overgrazing and haymaking had obviously detrimental effects for birds on river plains, as large quantities of aquatic vegetation (*Scirpus*, *Elodea*, *Myriophyllum* etc.) are harvested for cattle. This could have been a significant factor in the Austral Rail's decline[9,11] and appears at least partially true in some areas of Santa Cruz (SI pers. obs.). However, the rushy meadows of Estancia La Angostura have long held sheep and cattle in small numbers without apparently damaging the reedbed significantly, perhaps because the animals were unable to

cross a channel of deeper water. Indeed, the reedbeds have increased in area during recent years due to particularly wet conditions (M. Kusanovic pers. comm.). The extent to which rushy habitats were reduced through overgrazing and the effect this could have had on the Austral Rail is undetermined. Fjeldså[9] records that overgrazing steppe also has a significant effect on nearby wetlands, as bare soil is windblown and deposited in pools and marshes.

It is also unclear if *Rallus antarcticus* is a habitat specialist, in part due to the almost complete lack of habitat data from historical records. We found it in a wetland within the Patagonian steppe. Most records in the south of its range are from steppe areas, whereas those from central Chile and the El Bolsón record in Argentina appear to come from southern beech *Nothofagus* forests. In Argentina this habitat has been well documented ornithologically (e.g. around Bariloche and El Bolsón, Rio Negro, and in Los Alerces National Park, Chubut, and Los Glaciares National Park, Santa Cruz) (see Observations), and the species' absence, or near-absence, from these areas (only one record in El Bolsón despite Kovacs spending a lifetime collecting in this area, but see Range) strongly suggests that (at least in Argentina) it is absent from rushy swamps in forested areas of Patagonia (which are usually inhabited by *Pardirallus sanguinolentus*). Hopefully, future surveys will help to answer some of these questions.

Rallus antarcticus is currently classified as Critical[8,12]. We suspect that, given knowledge of its voice, it will be found to be commoner than previously thought, and we expect to find it at a number of additional localities. We plan to undertake surveys throughout Santa Cruz province in order to determine its movements and assess its habitat requirements and distribution. Interestingly, our record is not the first for the río Chico. One was collected by J. B. Hatcher at the "Lower Rio Chico, Patagonia" on 30 March 1897[24]. This locality is in south-east Santa Cruz[22] (and refers to the same río Chico) and not in south-west Río Negro as previously suggested[10] (J. Fjeldså *in litt*. 1998). Satellite photographs reveal the presence of reedbeds along the río Chico downstream of La Angostura, connecting the La Angostura reedbeds those even further downstream. These areas, as well as others that have been identified (e.g. the extensive marshes of río Deseado at its junction with arroyo El Pluma), will be surveyed for *Rallus antarcticus*.

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