

Comments on supposed occurrence of Andean Avocet and American Oystercatcher in Paraguay

Johann Rudolph Rengger (1795-1832) was a Swiss naturalist born in Baden who travelled in eastern Paraguay during 1818-26 (Ramella & Perret 2011). His autobiographical account of these travels was published posthumously following his premature death, and his intention to publish a volume on his ornithological observations thus went unfulfilled (Rengger 1835). Although he did publish a

thorough and scientifically accurate tome on the mammals that he encountered during his time in Paraguay (Rengger 1830), the surviving reports of his ornithological observations are less detailed. Despite this, two country records have been attributed to him and repeated in all major reviews of the Paraguayan avifauna since (von Berlepsch 1887, Bertoni 1901, 1914, 1939, Hayes 1995, Guyra Paraguay 2004), albeit more recently as of questionable validity: Andean Avocet *Recurvirostra andina* and American Oystercatcher *Haematopus palliatus*.

Rengger's (1835) original German text (here

translated) is surprisingly vague, and in fact mentions only genera of waterbirds that a zoologist may encounter in the lagoons and tributaries of the Paraguay River: 'If the hunter is presented with such a variety of prey, then what a yield awaits the zoologist when he navigates the Paraguay River and the tributaries and lagoons which it forms. Every moment he sees, sometimes as singles, sometimes with many individuals, new genera of bird, belonging to the genera *Ardea*, *Platalea*, *Ciconia*, *Mycteria*, *Tantalus*, *Ibis*, *Numenius*, *Recurvirostra*, *Scolopax*, *Jacana*, *Chauna*, *Rallus*, *Fulica*, *Ostralega*, *Vanellus*, *Charadrius*, *Podiceps*, *Carbo*, *Plotus*, *Sterna*, *Rhynchops*, *Larus* etc'. Although many of these generic names are still in use today, in most cases their contents have changed multiple times over the last 200 years. In order to correctly understand Rengger's (1835) meaning, it is important to approach the text from an early 19th century perspective. Rengger was writing in a pre-Darwinian time when multiple parallel taxonomies were being proposed adopting the Linnean system, and the contents of genera were in a constant state of flux and redescription (Bruce 2003). Unfortunately, Rengger (1835) provides no indication of the taxonomic sources for his avifaunal nomenclature.

Andean Avocet

The first mention of Andean Avocet for Paraguay is in Hayes (1995) who, treating it as a 'doubtful species', states: '[von] Berlepsch (1887: 126) cited a record of *Recurvirostra* sp.? as fide Rengger'. Subsequently, Guyra Paraguay (2004) includes the species in a list of doubtful species without further comment. Earlier, Bertoni (1914, 1939) omits the species from his *Catálogos Sistemáticos* but includes a mention of *Recurvirostra* sp in a footnote (translated here) with the statement 'Rengger notes *Recurvirostra* sp. for Paraguay, but there have been no further records. As this family are known wanderers, *R. andina* could reach Paraguay occasionally'. Perhaps significantly, neither Hayes (1995) nor Guyra Paraguay (2004) cite Rengger (1835) in their bibliographies, hence their treatments are based on interpretations made by secondary sources.

Rengger (1835) does not mention *R. andina* specifically (the species was only described in 1861; Philippi & Landbeck 1861) and hence its inclusion in all of these lists is a supposition, presumably derived from the fact that the only regularly occurring Neotropical species of *Recurvirostra* is *R. andina*. Temminck (1820), in reference to Wilson (1818, pl 58), one of the most important and com-

prehensive works on New World birds available at the time, included Wilson's '*Recurvirostra himantopus* d'Amérique' as part of his extended genus *Himantopus* Brisson, 1760. Consequently, both genera were in use for modern *Himantopus* in major ornithological and taxonomical works around the time of Rengger.

With White-backed Stilt *Himantopus melanurus* being a common and conspicuous inhabitant of Paraguayan wetlands (Guyra Paraguay 2004, 2005), its omission from Rengger's otherwise fairly complete list of wetland avifauna seems odd. It would thus seem entirely possible in the context of the time that the reference to *Recurvirostra* sp in Paraguay may be applicable to *Himantopus* Brisson, 1760 and not *Recurvirostra* Linnaeus, 1758.

American Oystercatcher

Von Berlepsch (1887) includes the text '327. *Haematopus palliatus* (Temm.) – Paraguay (Rengger)' but this name does not feature in Rengger (1835). Bertoni (1901), in a virtual carbon copy of von Berlepsch, cites '*Aematopus palliatus* (Temm.) – (Rengger) Paraguay', which, despite the transcription error, indicates that the source of the record is the same. The species is subsequently mentioned by von Ihering (1904) but he provides no details at all. It may thus be assumed that these references are all repeating the same information. Bertoni (1914, 1939) lists the species for the locality 'Alto Paraná' but that locality is used erratically throughout both manuscripts, because the latter is heavily based on the former. In both his introductions, Bertoni (1914, 1939) explains that (translation) 'Alto Paraná (A.P.)' refers to 'a vast distribution, generally on both banks (of the Paraná river) in the forests between Encarnación and Guairá'. Clearly this definition is not applicable to a coastal genus of such unlikely occurrence as *Haematopus*, and hence must be treated with caution.

Laubman (1939) cites Bertoni (1914) in listing *Haematopus ostralegus palliatus* and adds the following (translated): 'The occurrence of oystercatchers in Paraguay is only mentioned for Alto Parana by Bertoni. Presumably these are of the race *palliatus*. Further studies are important here.' Laubmann (1939) lists von Berlepsch (1887), Bertoni (1901, 1914) and von Ihering (1904) in his references but again omits Rengger (1835). Laubman's statement that Bertoni (1914) represents the only record of the species is presumably swayed by the locality provided which, as previously shown, is of questionable value. As a result, all these sources appear to have included the species in the Paraguayan avifauna without question, de-

spite the vague evidence to support it, and most have done so without reference to Rengger (1835).

In the modern era, Hayes (1995) mentions these earlier citations but includes the species in his list of 'doubtful species' observing that 'any Paraguayan locality is too far out of range to be credible'. This arrangement was followed by Guyra Paraguay (2004), who included the species in a list of doubtful species with no further comment.

Rengger (1835) does not cite *Haematopus* Linnaeus, 1758 in his list of genera, instead preferring the junior synonym *Ostralega* Brisson, 1760, a name which appears never to have come into widespread usage. Von Berlepsch (1887) associated this genus with the species *Haematopus palliatus* but the basis for doing so is questionable. Even allowing for the unlikely fact that the birds that Rengger (1835) refers to as *Ostralega* really were *Haematopus*, three species of *Haematopus* occur in southern South America: American, Magellanic *H leucopodus* and Blackish Oystercatcher *H ater*, and although the understanding of species limits in the genus has changed over time (Johnsgard 1981), the only grounds for assigning these birds to American is to support von Berlepsch's (1887) personal interpretation of likelihood of occurrence, based presumably on geographic distribution. Such an interpretation ignores the fact that American is strictly coastal and resident within its South American range (Hayman et al 1986). Magellanic Oystercatcher is in fact the only species that habitually occurs away from sea coasts and indeed the only one that undertakes regular seasonal movements away from the coast (Johnsgard 1981), although its distribution well to the south of Paraguay makes its presence in Paraguay equally improbable.

Consequently, we agree with Hayes (1995) that the presence of any species of *Haematopus* in Paraguay is unlikely to be credible but sustain that there is no valid scientific reason for conclusively associating Rengger's (1835) report of the genus specifically with *H palliatus*.

Conclusion

Given the vagaries of the paragraph in Rengger (1835) purportedly referring to the presence of these genera in Paraguay, we are inclined to dismiss it entirely as a credible source of ornithological records. The context is narrative, not scientific, and thus conclusions drawn from it should be made with care. Consequently, whilst they remain the only citations for Paraguay, we find the listing of *Recurvirostra* and *Ostralega* to be unconvinc-

ing. However, the credibility afforded to this paragraph by the specific identification of Andean Avocet and American Oystercatcher by subsequent authors means that their complete omission from future works on the Paraguayan avifauna is now impossible. However, we contend that there is no valid scientific reason for identifying Rengger's text with specific species and hence recommend that they both be retained as doubtful but referred to as *Recurvirostra* sp and *Haematopus* sp, respectively, in future revisions of the Paraguayan avifauna.

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