

Recent records of Pinnated Bittern *Botaurus pinnatus* in Bolivia

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Botaurus pinnatus es una especie poco conocida a lo largo de todo su rango de distribución desde México hasta Argentina, y en Trinidad. Hasta 1996 fue desconocida en Bolivia. Desde entonces ha sido observada varias veces en las sabanas estacionalmente inundadas del departamento de Santa Cruz y una vez en el departamento de Beni. Aquí resumimos estos registros y especulamos sobre el posible estatus de *Botaurus pinnatus* en Bolivia.

Pinnated Bittern *Botaurus pinnatus* occurs in shallow freshwater wetlands from Mexico to Argentina, and in Trinidad⁶. Until as recently as 1996 it was unknown in Bolivia. Since then the species has been recorded on several occasions in the lowlands of dpto. Santa Cruz and once in dpto. Beni. Here we summarise all known records and discuss its probable status.

Records

Sightings are primarily listed in chronological order. With the exception of the first record and the four most recent, all observations were made by Nick Acheson, often with other observers, all of them listed in the Acknowledgements. The two observations in February 2003 and that in April 2004 were made by OMZ and other observers also listed in the Acknowledgements. We are unaware of other records in Bolivia, but recognise that some may be unknown to us, given the increasing interest in the country's avifauna recently.

On 17 November 1996 Eustace Barnes, François Sagot and Barry Walker observed an individual in flight and on the ground in Parque Regional Lomas de Arena (17°53'S 63°05'W), c.10 km south of Santa Cruz de la Sierra⁹.

The second record was made on 1 November 1997 when one was seen at Palmasola (17°51'S 63°11'W), also on the southern outskirts of Santa Cruz and part of the same extensive sandy savanna as Lomas de Arena. The bird flushed from rank savanna with seasonal pools and was seen well in flight before landing in tall grass⁹. This and the previous record justified the species' inclusion in Hennessey *et al.*⁴.

On 28 January 1998 a bird was flushed from savanna with seasonal and artificial pools within the confines of Viru Viru international airport, Santa Cruz (17°38'S 63°08'W), near the main entrance. There was another record from the same area on 1 December 1998.

In early May 1998 the known range in Bolivia was significantly increased when a Pinnated Bittern was flushed from a deep-flooded, termite mound savanna, on the trail to Isla de la Orquídea,

Flor de Oro, Parque Nacional Noel Kempff Mercado (13°22'S 61°00'W).

On 11 December 2001 a Pinnated Bittern was found beside the unpaved road between San Rafael and San Matías, on the western edge of the Bolivian Pantanal (16°48'S 60°30'W). The bird was initially located in tall grasses but subsequently perched in short emergent vegetation in a small marsh. It was watched for c.1 hour during which it occasionally sang a deep, resonant, gulping song, transcribed as *gu-gloo*. The bird was relocated next day when it was photographed (see Reichle *et al.*⁸) and its vocalisations tape-recorded. At dusk it flew south, but was present in the same area next morning.

On 27 September 2002 one was again observed at Viru Viru airport, initially in non-native grasses between two artificial ponds. It was immobile, with the neck and bill raised vertically, as is typical of the genus and this species^{1,5,11}. It crouched briefly in the grass when a Neotropic Cormorant *Phalacrocorax brasilianus* flew low over and then stalked off into tall grasses. On the observer's approach it flushed and was lost from view. On 19 January 2003, in the same general area, a bird was flushed from a wet ditch beside a recently created road through savanna. The ditch contained short emergent vegetation and the bittern was beside a patch of *Typha* reed-mace. In flight, it gave a croaky *raaa raaa raaa*, corresponding to the flight-call described in Costa Rica¹² and Brazil¹¹. A further record for this general area was made on 21 March 2004.

On 13 February 2003 one was observed in flooded savanna beside a small lake in Parque Regional Lomas de Arena, Santa Cruz (17°56'S 63°10'W). It was watched for c.10 seconds before it landed out of view.

On 19 February 2003 a bird was seen briefly on the ground and in flight in seasonally flooded savanna at El Vallecito, 9 km north of Santa Cruz (17°41'S 63°08'W). This site forms part of the same savanna as at the international airport.

Finally, on 27 April 2004 one was observed in flooded grassland at estancia Santa María, prov. Yacuma, dpto. Beni (12°34'S 65°26'W). It was

watched for c.2 minutes before flying off vocalising. This is the first record for Beni.

Discussion

Despite its wide range, Pinnated Bittern is poorly known, especially in the Southern Hemisphere. That the species went undetected in Bolivia until recently is probably due to it being easily overlooked¹¹. Furthermore, access to appropriate regions during the early ornithological exploration of Bolivia was very difficult, and in recent decades field work has concentrated on forest habitats. It is also possible that in Bolivia the species is largely present in the austral summer (October–April), when suitable habitat is often flooded and even more poorly sampled by ornithologists. As well as areas at the base of the Andes, Short¹⁰ stated that in South America the species nests in the northern Pampas and over most of the Chaco. However, at the time *B. pinnatus* was unknown from the Paraguayan Chaco and Santa Cruz, Bolivia. Belton¹ reported that the species is apparently a summer resident in Rio Grande do Sul, Brazil (extreme dates 16 September and 17 May) and Martínez-Vilalta & Motis⁶ added that it had not been recorded outside the austral summer in southern Brazil, Paraguay, Uruguay and northern Argentina. In contrast, on the basis of two specimens (March and April) and a sight record from September, Hayes³ considered the species a permanent resident in Paraguay; breeding was confirmed by Mazar Barnett *et al.*⁷.

The records reported here may support the hypothesis that the species is largely a summer resident in lowland Bolivia. Eight are from the peak wet season (November–February) with another in the late dry season made in conjunction with apparent migration of other waterbirds, i.e. Pied-billed Grebe *Podilymbus podiceps*, Brazilian Teal *Amazonetta brasiliensis*, South American Snipe *Gallinago paraguaiiae* and Solitary Sandpiper *Tringa solitaria*. However, it must be emphasised that no firm conclusions can be drawn.

Probable breeding in Bolivia during the austral summer is suggested by the individual observed in the Pantanal, presumably a male, which was heard singing on two consecutive days. In the genus *Botaurus*, males' booming songs serve to attract females and to defend territory⁶.

Records from estancia Santa María in April and Flor de Oro in early May might reflect post-breeding migration, birds on their wintering grounds, or residents, although during the driest part of the austral winter and early austral summer (August–October) these savannas afford little suitable habitat for bitterns, except at small permanent wetlands. Nonetheless, the possibility that Pinnated Bittern is present during the austral winter in parts of eastern Bolivia is suggested by

recent August records very close to the Bolivian border in Paraguay and Brazil¹³. The vast seasonally flooded savannas and permanent wetlands of the Bolivian Pantanal remain little studied by ornithologists, especially in Parque Nacional Otuquis where huge areas of apparently suitable habitat are unexplored. It is therefore possible that *B. pinnatus* may be seasonally or permanently present there. Given presence in the Beni and a record from the Tambopata-Candamo area of adjacent Peru², we speculate that the species may occur widely in the seasonally flooded savannas of the Pampas del Heath and Iturrealde (dpto. La Paz), and the Llanos de Moxos (dpto. Beni), which lie between south-east Peru and the handful of known sites in eastern Bolivia.

It is noteworthy that all of the records were made in habitats at least moderately impacted by human presence. The Viru Viru savanna is burned annually to encourage growth of young grasses which are subsequently harvested. The savannas of Palmasola, Lomas de Arena and estancia Santa María are grazed by domestic livestock, as was Flor de Oro at the time of the observation. Palmasola is fast being colonised, as is El Vallecito, leaving only small areas of savanna. Two of the Viru Viru records and that from the Pantanal were at man-made ponds or ditches, suggesting that Pinnated Bittern tolerates some habitat alteration and may even select anthropogenic habitats. Martínez-Vilalta & Motis⁶ reported that the species occasionally feeds in rice and sugarcane fields.

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