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# BREEDING CHESTNUT-BANDED PLOVERS *CHARADRIUS PALLIDUS* AT LEEUPAN, MPUMALANGA

*Faansie Peacock[1]*, Phil Penlington[2], Gareth Hazell[3]*

[1]Ornithology Department, Ditsong National Museum of Natural History (formerly Transvaal Museum), PO Box 413, Pretoria, 0001

[2]PO Box 1219, Wingate Park, Pretoria, 0153

[3]POBox 3726, The Reeds, 0158

*Corresponding author: faansie@ditsong.org.za.

The Chestnut-banded Plover *Charadrius pallidus*, is a localised and highly specialised wader with poorly understood movements. The species is classified as both globally and nationally **Near Threatened** (Underhill 2000, BirdLife International 2012). It is endemic to sub-Saharan Africa, where it occurs in a fragmented pattern in two discrete areas: the alkaline rift valley lakes of southern Kenya and northern Tanzania (subspecies *C. p. venustus*); and both coastal and inland waterbodies in southern Africa (nominate *C. p. pallidus*). Simultaneous counts suggest that the world population numbers some 17,830 birds, of which 6,338 birds represent the smaller east African population, and 11,486 birds the larger southern African population (Simmons 2000, Simmons *et al.* 2007). It is mostly associated with the fringes of saline pans, both natural and modified, but occurs occasionally at coastal bays, estuarine mud flats, salt marshes and rarely freshwater habitats (Hockey and Douie 1995).

Within southern Africa, the Chestnut-banded Plover occurs patchily

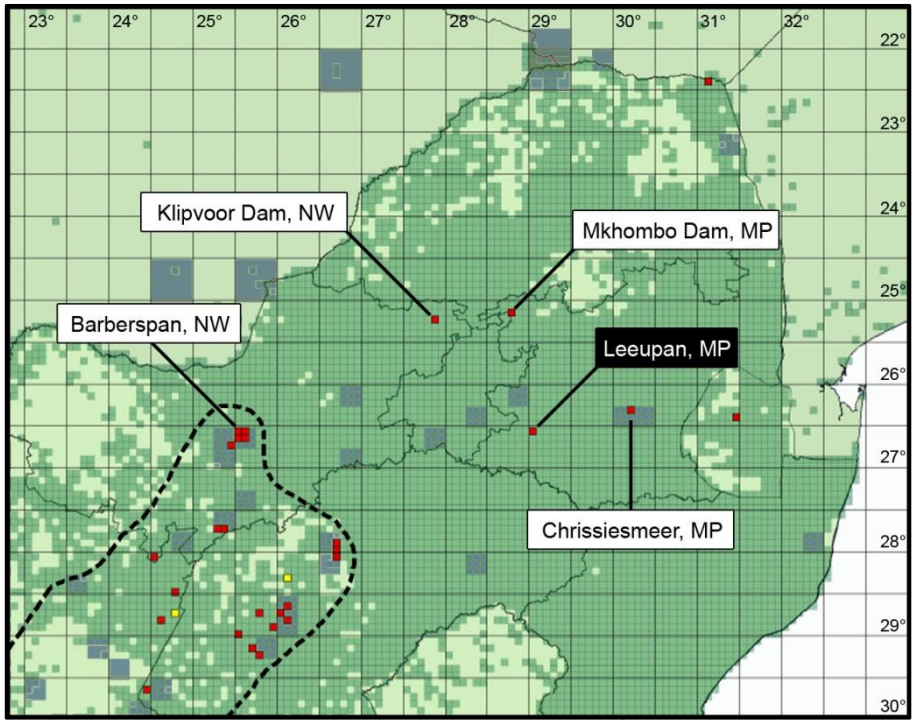


**Fig 1** - Distribution of the Chestnut-banded Plover in north-eastern South Africa. The principal inland stronghold of the species is demarcated by the dotted line: western Free State (Bloemfontein, Welkom areas), North-West Province (Barberspan, Bloemhof), and Northern Cape (Kimberley area). Otherwise the Chestnut-banded Plover occurs in a highly fragmented and erratic fashion. Very few records have been documented in SABAP2 (red pentads), and the species has apparently not been relocated at many sites where it was found to occur during SABAP1 (grey Quarter Degree Square grid cells), especially in southern Gauteng. This is unlikely to be due to incomplete atlasing efforts as a large number of birders are active in the greater Gauteng region. Records from northern Kruger National Park and Swaziland are considered to represent vagrants (Table 1). Map adapted from SABAP2; *http://sabap2.adu.org.za*; downloaded 30 September 2013).

along the coast from south-western Angola into Namibia, and southwards to the west coast of South Africa (Tree 1997); it is uncommon further east, apart from important local populations around Cape Agulhas, Western Cape and the Swartkops River system at Port Elizabeth, Eastern Cape (Hockey and Douie 1995). It is considered a vagrant or casual wanderer to KwaZulu-Natal (Cyrus and Robson 1980). Small numbers occur in southern Mozambique, e.g. around large bays at Maputo, Inhambane and Beira (Clancey 1996, Parker 1999, 2005), where it is likely overlooked.

Inland, the species occurs principally at two large saline pan systems under appropriate conditions, namely Etosha Pan in Namibia, and the Makgadikgadi Pans in Botswana. In inland South Africa (see Fig 1), Chestnut-banded Plovers occur sporadically at scattered localities in the central panveld: in particular, important local populations occur on the natural and modified saline pan systems around Bloemfontein and towards Welkom in the Free State, south of Kimberley in the Northern Cape, and at Barberspan in the North-West Province (SABAP 2; http://sabap2.adu.org.za).

Movements of the species are poorly understood but are likely to be extensive given its ephemeral and localised habitat. While coastal birds are probably mostly resident (Turpie 2005), some Namibian populations apparently move inland to breed when pans are drying out in autumn and winter (Tree 1997). In the western Cape birds occur on commercial salt pans in summer but estuarine systems in winter (Hockey and Douie 1995). Even at relatively stable, controlled commercial salt pans, salinity levels and human activities may influence local occurrence. Occurrence at isolated inland sites is erratic, e.g. up to 34 birds occurred at Barberspan during 1968-1973, when they also bred successfully. However, none were recorded there during 1974-1983 (Tarboton *et al.* 1987). The species may occur at any waterbody where suitable habitat exists, and nomadic wanderers are occasionally reported from unusual localities.

In the greater Gauteng region, the species is considered a very rare transient visitor, especially north of approximately 26 degrees south. Here its occurrence may be linked to dry periods when receding water levels of pans and dams expose large areas of shoreline (Tarboton *et al.* 1987). In the last three years, several birds have been recorded from the Gauteng area (see Table 1); whether this is because of short-term climatic cycles, long-term climate change, or increased observer awareness is unknown. Concurrently, several records of White-fronted Plover *C. marginatus*, another mostly coastal species seldom recorded from the region, were reported, sometimes at the same site as Chestnut-banded Plovers (N. Perrins, pers. comm.).

**Table 1**. Selected recent records of Chestnut-banded Plovers from inland localities. Note: coordinates are only approximate.

| Date | Location | Number/Age | Coordinates |
|---|---|---|---|
| Nov 2010 | Makwadzi Pan, Pafuri, Kruger National Park | 1 juvenile | S22°20' E31°06' |
| Nov 2011 | Klipvoor Dam, Borakalalo National Park, North-West | 1 juvenile | S25°10' E27°51' |
| Nov 2012 | Mkhombo (Rhenosterkop) Dam, Mpumalanga | 1 juvenile, 2 adults | S25°08' E28°49' |
| Nov 2012 | Kgomo-Kgomo, Pienaars River, Limpopo | 1 juvenile | S25°09' E28°04' |
| Nov 2012 | Nibela Peninsula, Lake St Lucia, KwaZulu-Natal | 4, ages unspecified | S27°52' E32°25' |
| Jun 2013 | Mkhombo (Rhenosterkop) Dam, Mpumalanga | 1 adult | S25°08' E28°49' |

| | | | |
|---|---|---|---|
| Sep 2013 | Leeupan, near Secunda, Mpumalanga | 2 adults (breeding) | S26°33' E29°00' |
| Unspecified | Chrissiesmeer area, Mpumalanga | Unspecified | S26°18' E30°13' |

On 21 September 2013 at around 10:20, Phil Penlington and Gareth Hazell observed a male Chestnut-banded Plover in full breeding plumage along the eastern shoreline of Leeupan (S26°33.457' E29° 00.126'), a large Highveld pan situated 22 km south-east of Leandra and 20 km south-west of Secunda in western Mpumalanga. At around 10:56 a female Chestnut-banded Plover appeared and began foraging along the shoreline, while the male flew some 50 m inland, away from the shore. Although PP and GH initially lost sight of the male, it was eventually spotted sitting on the ground about 40-50 m from the shoreline. Upon approaching the area, the male got up and ran about 5 m away, exposing its rudimentary nest containing two eggs in a shallow scrape in the ground, surrounded by dried mud clods and a small succulent plant partially screening the eggs.

PP and GH stationed their vehicle approximately 5-10 m away and waited for the male to return, which he did after doing a full circle of the vehicle. The male was very skittish and flew back to the shoreline after a short while, without covering the eggs. Both the male and female were subsequently seen feeding a few metres apart on the shoreline. The female then bathed and flew to the nest again to resume incubation—possibly an example of belly wetting performed by relieving birds to cool eggs (Urban *et al.* 1986, Tarboton 2011).

To our knowledge, breeding has not been recorded in the region in recent years, although Tarboton et al. (1987) mentions eggs and young from Barberspan (1955, 1970) and near Lake Chrissie (1986).

**Fig 2** - Male Chestnut-banded Plover incubating/shading eggs. The nest consisted of little more than a shallow scrape between drying mud flakes, adjacent to a small succulent plant, and was situated approximately 40-50 m from the shoreline.

In the latter cases, egg-laying occurred in April (1), July (1), August (3) and September (1). The incubation period is not recorded, but in related species is approximately 25-29 days. The fledgling period of Chestnut-banded Plover is estimated at 28-33 days (Urban *et al*. 1986). As several recent November sight records from the greater Gauteng region were of juveniles, such birds could thus conceivably have hatched at inland localities towards the end of winter.

Leeupan has a surface area of ca 560 ha when fully inundated, with a shoreline length of ca. 12.7 km. However, Chestnut-banded Plovers are only likely to occur at the site during dry periods when water levels recede to expose large areas along the eastern and southern shores. We estimate that Leeupan may support 2-6 birds (range 0-15), depending on flood levels and salinity.

Underhill (2000) suggested that an inventory of breeding sites of the Chestnut-banded Plover should be compiled and key sites protected. Although Leeupan probably does not regularly hold significant numbers of this species, our observations prove that breeding does occasionally occur at some of the many pans and dams in the greater Gauteng region. Dedicated searches during late winter and spring are likely to produce additional nests at various localities, and cumulatively such sites may be important breeding refuges for the species. Unfortunately, in the case of Leeupan, the site does not enjoy any formal protection and is a popular angling destination. The position of the nest is extremely vulnerable and could put it in danger of being inadvertently destroyed by birders' or fishermen's vehicles.

The conservation of pans and other inland waterbodies in the greater Gauteng region is also important for a number of other threatened birds, such as the Greater Flamingo *Phoenicopterus ruber*, Lesser Flamingo *Phoeniconaias minor*, Corncrake *Crex crex*, Black-winged Pratincole *Glareola nordmanni*, Caspian Tern *Hydroprogne caspia* and African Grass Owl *Tyto capensis*.

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**Acknowledgements**

Nial Perrins first reported the presence of these birds at Leeupan. We urge other birders to likewise report sightings – and especially breeding records – of Chestnut-banded Plovers at inland localities.

**Fig 3** - Female at the nest. The two eggs were pale greyish white, with pale grey markings overlaid by blackish brown 'scribbles'.

**References**

**BirdLife International. 2012.** *Charadrius pallidus*. IUCN 2012. IUCN Red List of Threatened Species. Version 2012.2. URL: www.iucnredlist.org; date accessed: 2013-09-30.

**Clancey PA 1996.** The birds of southern Mozambique. African Bird Book Publishing, Westville, South Africa.

**Hockey PAR, Douie C 1995.** Waders of southern Africa. Struik Winchester, Cape Town.

**Parker V 1999.** The atlas of the birds of Sul do Save, southern Mozambique. Endangered Wildlife Trust and Avian Demography Unit, Johannesburg and Cape Town.

**Parker V 2005.** The Atlas of the Birds of Central Mozambique. Endangered Wildlife Trust and Avian Demography Unit, Johannesburg/Cape Town.

**Simmons R, Baker N, Braby R, Dodman T, Nasirwa O, Tyler S, Versfeld W, Wearne K, Wheeler M 2007**. The Chestnut-banded Plover is an overlooked globally Near Threatened Species. Bird Conservation International 17: 273-283.

**Simmons RE 2000.** What is the world population of the Chestnut-banded Plover? Bird Numbers 9 (2).

**Tarboton W 2011.** Roberts' nests and eggs of southern African birds. The Trustees of the John Voelcker Bird Book Fund, Cape Town.

**Tarboton WR, Kemp MI, Kemp AC 1987.** Birds of the Transvaal. Transvaal Museum, Pretoria.

**Tree AJ 1997.** Chestnutbanded Plover *Charadrius pallidus*. The atlas of southern African birds. Vol 1: Non-passerines. Ed. by Harrison JA, Allan DG, Underhill LG, Herremans M, Tree AJ, Parker V, Brown CJ. pp. 380-381. BirdLife South Africa, Johannesburg.

**Turpie JK 2005.** Chestnut-banded Plover. Roberts birds of southern Africa (7th edn). Ed. by Hockey PAR, Dean WRJ, Ryan PG. pp. 401-402. Trustees of the John Voelcker Bird Book Fund, Cape Town.

**Underhill LG. 2000.** Chestnut-banded Plover. The Eskom Red Data Book of Birds of South Africa, Lesotho and Swaziland. Ed. by Barnes KN. p. 142. BirdLife South Africa, Johannesburg.

**Urban EK, Fry CH, Keith, S. (eds). 1986.** The birds of Africa. Vol. 2. Academic Press, London.