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APPARENT NORTH-WEST RANGE EXTENSION OF BLUE CRANES IN SOUTH AFRICA

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Blue Cranes *Anthropoides paradiseus* are endemic to South Africa and Namibia with four main populations centres: an isolated group of about 60 birds in Etosha National Park, Namibia, the majority of the global population in the Overberg wheatlands of the Western Cape, South Africa, a widespread population in the Karoo and another in the Free State, KwaZulu-Natal and Mpumalanga grasslands (Allan 2005, Simmons et al. 2006). Birds tend to congregate around dams or flooded pans where they roost for safety, but their main habitat requirements are open grasslands, shrublands or wheatlands where they feed on seeds, corms and insects (Allan 2005). In the western part of South Africa the most northerly records are from 3119AA (S31°40', E18°50') (Harrison et al 1997). This note describes two observations indicating an apparent range extension north-westwards in South Africa.

During survey work in Namaqualand, north-west South Africa, in April 2010, I found and photographed (Figure 1) a group of five Blue Cranes on the farm Koegelfontein at S31°02' 06", E17°55' 58". There appeared to be four adults and one juvenile, judging by the shorter tertial or "tail" feathers in one of the photographed birds. They occurred together near two large and full farm dams in habitat comprising a mixture of hayed fields, and natural Namaqualand Klipkoppe Shrubland (Mucina & Rutherford 2006, p251). This region is farmed with sheep and some cereal crops including oats in the valley lands between the smooth granite domes in an undulating



Figure 1 - Five Blue Cranes photographed on the farm Koegelfontein, Namaqualand, South Africa, about 105km north-west of any previous record in South Africa.

landscape. The area experiences about 160mm of rain per annum (Mucina & Rutherford 2006).

The farmer informed me that the birds had arrived in about 2005 and were now regular and resident in the area around his two dams. This may not be an isolated case as judged by a further incidental sighting from farther north in Namaqualand at S30°14' 27" E17°53' 36" recorded in the bird atlas project of the Avian Demography Unit, UCT http://sabap2.adu.org.za/species_maps.php?Spp=216. This observation was of a pair of birds on 24 January 2009 by Niall Perrins (pers comm.), foraging in agricultural grasslands near the

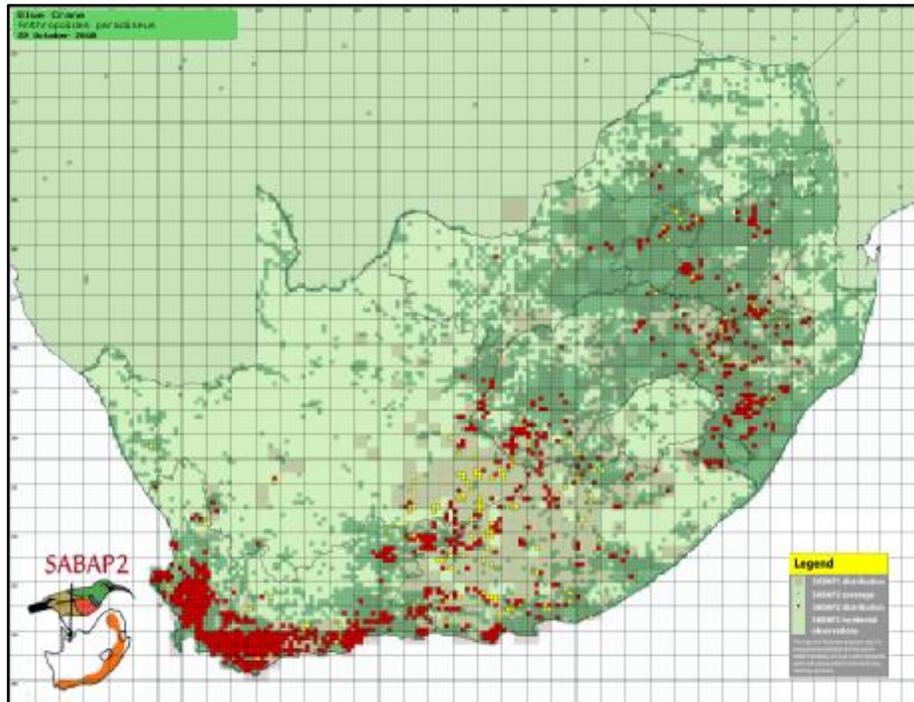


Figure 2 - Recent sightings of Blue Cranes recorded in South Africa up to October 2010 in the SABAP2 atlas scheme (2007- October 2010). Small red spots indicate recent verified crane records, yellow dots ad-hoc sightings, small dull green spots the SABAP2 coverage and larger pale (quarter-degree) squares, positive records for Blue Cranes from the SABAP1 scheme (1987–1992). The circled area indicates the two verified out-of-range records suggesting a recent extension north-westwards.

main road, 5km south of Kamieskroon, but not seen since (Figure 2).

The record of five cranes from Namaqualand constitutes a range extension of about 105km eastwards from the closest SABAP 1 record from the period 1987-1992 (Harrison et al. 1997) and about 110km from the closest cluster of recent records at S31°39' E18°47' near Vredendal (SABAP 2 records from July 2007 to present). The

additional record south of Kamieskroon is even farther north and represents a range extension of 181km from this cluster of crane records.

The likelihood that this region in Namaqualand is simply poorly atlased and thus the cranes have been overlooked is high (my atlas records were the first from this region). However, it cannot be used to explain the cranes' recent presence given the local farmer's comment that the cranes have been in his region for the last five years. They also appear to be breeding as evidenced by the juvenile bird suggesting they have adapted to their "new" environment. The additional record of a pair from Kamieskroon also indicates that the five birds together are not an isolated case and represents more than a single group having found a short-term refuge at a favourable dam in the area.

Cranes are relatively sedentary within their core areas (McCann et al. 1998) but they are capable of making movements as revealed by satellite tagging and ringing of juvenile birds in the Karoo and migratory adults in Mpumalanga Province. However the longest moves are between 95km and 100-120km (Allan 2005). The population in the south-western Western Cape Province, South Africa is described as sedentary (Hockey et al. 1989). Given that both groups of birds were at (105-110km), or beyond (181km), the longest movements previously recorded (McCann et al. 1998, Allan 2005) further suggests these observations represent a range extension rather than a local, short-term movement by a nomadic population.

We can only speculate as to why the birds have moved farther north with the two likely scenarios being either a climate induced movement (favourable climate envelopes are now present farther north than they were previously: Simmons et al. 2004) or wetland-induced moves (because of the dependence of cranes on permanent water, farm dams in Namaqualand are aiding their movement



northwards in an otherwise arid region: Hockey & Midgley 2009). Both are equally plausible although farm dams have been in existence in this region for many decades yet no cranes have been recorded there prior to these records.

Further observations and climatic modeling are required to confirm the presence, permanence and the possible cause of the range extension northwards of Blue Cranes in South Africa.

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Editorial note: The distribution map in Figure 2 is a provisional map as SABAP2 is still work in progress. The map indicates distribution as it was on 22 October 2010 and may change as the project continues.

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