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### APRIL 2017 CRANE CENSUS

Our last annual wet-season crane census at Etosha National Park took place from 3-8 April 2017, with a final count of 13 adults/subadults. This is slightly lower than the previous year's count of 16. However, this year eight chicks were counted, of which six have fledged – a result that is encouraging, compared to only two chicks last year. This is probably a reflection of the relatively wetter conditions during the preceding summer.

Hanjo Böhme kindly assisted with a supplementary count the week before the main census. Gabriel Shatumbu and Sethi Guim of the Ministry of Environment and Tourism (MET) were able to ring one of the chicks, surviving from a very late second clutch of two at Twee Palms (NEF; first recorded on 2 May 2017), on 14 June 2017; the other earlier chicks were unfortunately all at the fledging stage and could not be captured. This is the second year running that a second clutch has been recorded for Blue Cranes at Etosha, with two second clutches being recorded in 2016. For the first time, breeding was recorded in the north at Andoni waterhole, although the nest became flooded.

As we now know, our wet season counts are usually lower than those during the dry season, once the birds return to the Park (2016's maximum during the dry season remained at 23 birds, the same as for 2015). For this reason, we again did not carry out a dedicated summer aerial survey but continued to count opportunistically throughout the year. (PTO)

Exciting news is that a record number of 32 cranes was counted at Andoni on 25/9/17 by Thomas Kornelius and reported by Gabriel Shatumbu, both of the MET. A further good count of 26 at Andoni was obtained by Toni Hart on 2/10/17. We are very keen to see if these numbers will be sustained.



Family group of Blue Cranes with chick at Charitsaub waterhole in the Etosha NP (photo Ann Scott)



First breeding attempt recorded at Andoni waterhole in the north of Etosha (photo Angus Middleton)



(L to R) Mike Scott, Sethi Guim and Gabriel Shatumbu during the 2017 summer crane census at Etosha National Park (photo Ann Scott)

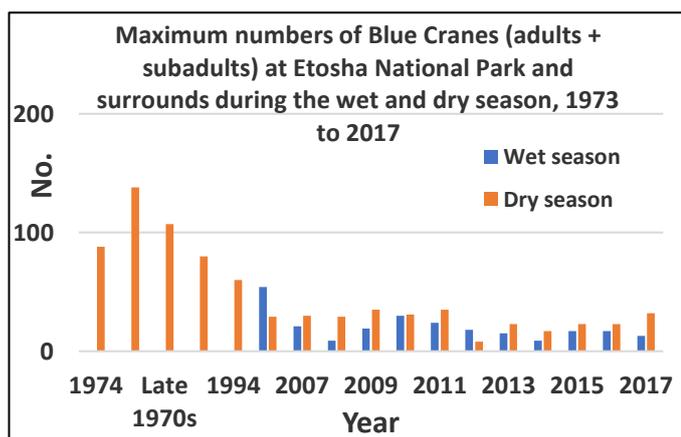
The following (ringed) birds bred or attempted to breed during the summer 2016-2017 season:

- Charitsaub (1 chick that fledged): NHF (2006) & NHH (2007)
- Salvadora (2 chicks that fledged): NHM (2009)
- Halali Seep (1 small chick that did not fledge): NHD (2006) & ringed bird (NBN? 2008)
- Chudop (2 chicks that fledged): NBZ (2008)
- Twee Palms (two clutches; second clutch had two chicks, one of which fledged, ringed NEF on 14/6/17 by Gabriel Shatumbu): unringed adult pair
- Newbrownii (nest only): NCJ (2014)
- Andoni (nest only, flooded): metal ring only
- Another ringed bird that was reported: NCN (2016)

Unfortunately, the satellite transmitter fitted to the Charitsaub chick (NCN) last year on 5/4/16 transmitted only until 19/5/16 (about six weeks). The family group, including the chick with the satellite tag, was observed at Charitsaub by Gabriel Shatumbu on 18 and 19/4/16, who reported that the leg tag was in place as deployed. About a month later the chick made a long maiden flight of around 50 km with its parents to the Ekuma River Mouth in the north-western parts of the Pan; however, it did not survive, for reasons unknown, although we can speculate that with the very dry conditions at the Mouth there was no water for roosting safely – the water had apparently dried up in March. A special thank you to Gabriel and his colleagues for doing a check at this site, and also for all their crane sightings throughout the breeding season.

We are also grateful for the regular reports of crane sightings, including ringed birds, that we continue to receive from birders and other visitors to Etosha National Park, which enable us to piece together the movements of Etosha's elusive Blue Cranes throughout the years.

Blue Crane numbers at Etosha and environs have declined from 80 in 1988 and 60 in 1994 to 35 (2006-2011) and 23 (2013 to the present), with an increase again to 32 in 2017. The key question remains: to which areas do the cranes go when they leave the safety of the Park during the dry winter months (in 2017, this was between June and August); and how can crane conservation be promoted in such areas?



Blue Crane NHM with two tiny chicks near Salvadora on 17 January 2017 (photo Mathias Ebert)



A late chick NEF, the product of a second clutch, was ringed at Twee Palms on 14 June 2017 by Gabriel Shatumbu (photo MET)



(L to R) Mike Scott and Absalom Vilho discuss crane awareness materials at the Namutoni Environmental Education Centre, Etosha (photo Ann Scott)

In order to help us address this need, Absalom Vilho at the MET's Namutoni Environmental Education Centre at Etosha (see photos on previous page and below) is presently doing a sterling job with promoting awareness about the conservation of cranes and their habitats amongst the local communities.



PHOTOGRAPHS ABOVE (Absalom Vilho)  
 Above: Pupils from the JF Cam Primary School in the south (Hardap Region) investigate our Crane Activity Book under the guidance of Absalom Vilho at the Namutoni Environmental Education Centre (NEEC) at Etosha.  
 Below: A teacher and pupils from the Ondjora Combined School in the north, at the NEEC.



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Germany, Mathias Stein and Barbara Hudoc, for their continued interest and invaluable financial support over the years.

*The results of the above 2016-2017 wet season count at Etosha have also been published as follows:*

*"Results of the Annual Wet Season Crane Count at Etosha National Park, Namibia." African Cranes, Wetlands and Communities newsletter, Vol 17 Sept. 2017 pp 6-7 (available on request from Osiman*

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## ARE NAMIBIAN BLUE CRANES GENETICALLY DIFFERENT TO SOUTH AFRICAN BLUE CRANES?

At last we have some answers to this very pertinent question! The results of recent Blue Crane genetic studies by the University of Pretoria have been published recently (2017). The latest study builds on earlier work and is entitled, Landscape Genetics of the Blue Crane (*Anthropoides paradiseus*), and was carried out by Claire M. Lenahan, Arrie W. Klopper, and Paulette Bloomer as part of the Molecular Ecology and Evolution Programme of the Department of Genetics, Faculty of Natural and Agricultural Sciences, University of Pretoria, South Africa (report and poster downloadable from [www.the-eis.com](http://www.the-eis.com)). The conclusions reached in the latest study are as follows: "... this study determined a lack of genetic differentiation and sex-biased gene flow between the two geographically separate populations in South Africa and Namibia, as well as within the large South African population. No significant spatial clustering of related individuals was found within the South African population. The represented Namibian population was also shown to have a significantly lower level of molecular genetic variation than the South African population and possesses only one private allele. These results suggest that the two populations can currently be managed together for conservation purposes, and that the Namibian and South African individuals are genetically similar enough that, should it be necessary (as potentially indicated by the significant loss of genetic diversity in Namibia), the Namibian population could be supplemented with South African individuals from either of the two represented strongholds." (Ed: Note that the studies are based on five Namibian samples; hopefully, additional samples can be sourced in due course.)

So, in summary, the conclusions are:

- There is a lack of genetic differentiation and sex-biased gene flow between the two populations (i.e. South Africa and Namibia), as well as within the South African population;
- Indications of subtle population structure were revealed;
- The Namibian population has a significantly lower level of molecular genetic variation; and
- Relevance of the study: the two populations can currently be managed together for conservation purposes.

