

## CONTENTS

VOLUME 34 (3) 2001

EDITORIAL. T. O. OSBORNE .....	1
SIMMONS, R. E. Sandwich Harbour report - April 2001 .....	2 - 3
SIMMONS, R. E. Sandwich Harbour report - July 2001 .....	3 - 5
FREDERICH, G. & T. Wetland birds of Tsutsab Vlei and surrounding waterbodies .....	6 - 14
VON LUDWIGER, K. The nesting chronology and breeding success of the Black Eagles of Falkenstein ...	14 - 19
HALLAGER, S. Saving Gompou: How zoos help Kori Bustards in the wild and how field biologists help Kori Bustards in zoos. ...	20 - 23
SIMMONS, R. E. A helicopter survey of Cape Vultures, Black Eagles and other cliff-nesting raptors around the Waterberg Plateau, Namibia .....	23 - 29
BIRD OBSERVATIONS/SHORT NOTES .....	30 - 32

## Editorial

I am writing this while sitting on my stoep and watching 6 of the 10 endemic Namibian birds flying past or hunting for food amongst the mushara bushes, some of which still have green leaves left. The dry season in Namibia is so pronounced that it is surprising that more of the local birds do not leave for the greener places in Africa. I recently headed east to watch the solar eclipse and kept going east until I hit the Malawi-Mozambique border. If you want to know where all the Paradise Flycatchers migrate to, just visit the rift valley on the shores of Lake Malawi and they will be one of the commoner birds. There is a cold dry season in Malawi but it can rain any month of the year so the bush retains much of its greenery. Surrounded by highlands on most sides, the lake has numerous rivers into it which also provide for evergreen vegetation.

Malawi is a rather small country so it has no endemic species but does have several endemic races which occur on isolated mountains. I was interested in seeing the Brown-breasted Barbet but the dry season was not the time to look for this bird in Liwonde National Park. One fortunate thing Namibia has in its favour is its small human population and thus slow rate of deforestation. I tried to look for the White-winged Apalis in Thyolo forest reserve but failed to find the bird. I doubt that the bird will be there when I next return as the forest was just a remnant and was in the process of being totally cleared during my visit. However, other areas like Mount Mulanje were excellent and birding there was very good. I had forgotten how difficult birding is in montane forest compared to our open dry scrub vegetation. If you cannot recognize bird calls then you will see very few species. The forest is full of skulkers who call from a few meters away, flit around in the dense undergrowth and defy all attempts to bring them out for a view. Just as your patience is wearing thin, they fly across the trail and disappear forever.

The solar eclipse was worth the 2000 km drive and since there will be another one in Namibia on 4 December 2002 I strongly encourage everyone to try and see it. Kate Sharpe and I are willing to lead a bird club outing to Katima Mulilo next year for a combined bird watching and solar eclipse event. That part of the Caprivi is safe to visit and offers many species not seen in the rest of the country. Stay tuned to the Bird Call for specifics on the trip.

## **Saving Gompou: How Zoos Help Kori Bustards in the Wild and How Field Biologists Help Kori Bustards in Zoos**

Sara Hallager

Smithsonian National Zoological Park, Washington DC, USA

As a Biologist at the Smithsonian National Zoological Park (SNZP) in Washington DC, I have worked with kori bustards (*Ardeotis kori*) for 12 years. I am also the International Studbook Keeper for the species, which means that I keep track of kori bustards in zoos all over the world as well as make recommendations that will increase captive breeding and lead to a healthy gene pool. Captive breeding programs for kori bustards are essential to the general understanding of the species and to the conservation of the species as a whole. Conversely, research conducted on wild populations is essential to understanding the biology of the species and is crucial to understanding the needs of captive birds.

In January 2001, I traveled to Namibia where I spent two weeks with Tim and Laurel Osborne who, with authority from the Ministry of Environment and Tourism Permit Office of Namibia, have been studying the ecology of kori bustards in Namibia since 1997. The actual purpose of my visit was to collect blood samples from 10 kori bustards so that DNA from the southern African population of kori bustards *Ardeotis kori kori* could be compared with DNA from kori bustards *Ardeotis kori struthiunculus* from East Africa. Prior to my visit, Tim and I discussed differences in male display between the two subspecies as well as plumage and size differences in the two races. Tim's observations were of wild birds in Namibia, and mine were of captive birds of East African descent. Given the importance of male display in the species, we felt that the differences we noted in display between the two subspecies made the current taxonomy of the kori bustard questionable and affirmed our decision to collect DNA from the two populations. The results of this study will affect future conservation and management of both wild and captive populations of kori bustards.

### **Kori bustards in the wild**

The kori bustard *Ardeotis kori* is a polytypic species with two subspecies classified according to geographic distribution, size and plumage variations. One population *A. k. struthiunculus* resides in eastern Africa and the nominate race *A. k. kori* occurs in southern Africa. The miombo woodland of Central Africa separates the two populations. The species is listed on Appendix II of CITES, and the 2000 Eskom Red Data Book for Birds lists the status of *A. k. kori* as Vulnerable, estimating that in the next three generations, it is expected to decline by 10% in southern Africa (Barnes, 2000). Throughout its range, the species is uncommon to locally common, but generally declining (Urban, 1986). The habitat of both races is under threat from crop farming and bush encroachment. According to del Hoyo (1996), the kori bustard is showing signs of chronic decline and local extinction over its entire range.

Despite its large conspicuous stature, the kori bustard has not received any kind of ecological study until only recently when Tim and Laurel Osborne began their research. Although the distribution of both races is documented, total population size is unknown for either subspecies and very little is known about the movements or migration patterns of either population. Consequently, the conservation status of the kori bustard is based on insufficient data.

### **Kori bustards in captivity**

As of January 2001, there were 200 birds in 35 facilities around the world. The United States is the second largest holder of kori bustards in the world. Only the National Avian Research Center (NARC) in Abu Dhabi maintains more birds. The US has a long history with the species with the first bird entering the country in 1940, although zoos did not begin to concentrate on breeding kori bustards until the late 1980's. Improvements in diet, exhibit design, husbandry protocols and attention to detail paid off when, in 1992, the Dallas Zoo became the first institution in the Western Hemisphere to hatch a kori bustard. Since that time, births have occurred at the SNZP, The Phoenix Zoo and most recently, St. Catherine's Wildlife Conservation Society. Today, the US population of 60 kori bustards is 50% captive born (Hallager, 2000).

Despite the recent success in breeding however, the species is not self-sustaining in US zoos and periodic imports of either wild caught birds or captive born birds are still needed to maintain a healthy gene pool. If US zoos are to import captive born birds, the only active breeding center for the species outside the US is NARC. Birds there however, are of southern African descent (Ramadan-Jaradi, 1991). Before birds are imported from NARC, it is important to look at the genetic makeup of the two populations to determine if breeding should or can occur.

### **Working together**

Prior to my visit to Namibia, blood samples were collected from nine kori bustards at the SNZP which are of East African descent. While obtaining blood samples from kori bustards at the zoo was hard, it was not as challenging as obtaining blood samples from wild kori bustards, which first had to be located and then captured.

Fortunately, Etosha National Park has a large number of kori bustards with road counts yielding one bird every 16.7 km (Osborne, 1998). And because Tim and Laurel have caught over 100 birds in four years, catching 10 kori bustards for our study seemed relatively easy (to me).

Once a bird was located, a monofilament gillnet measuring 100 m x 3 m with a mesh size of 150 mm was erected between several trees and the bird was slowly guided into the net by our vehicle. Once in the net, the bird was quickly untangled and moved to a shady area. Within 15 minutes, morphometric measurements and weights were taken, wing tags and leg bands were affixed, and fecal samples were collected when available. Some birds were affixed with 60-gram radiotags. Finally, a small amount of blood was taken for the DNA study and the bird was released. Sometimes the bird simply walked away and sometimes it flew. And when it did fly, seeing the worlds heaviest bird take to the air was truly an amazing sight.

### **Conclusion**

DNA from the blood samples I brought back from Namibia have been analyzed in the SNZP Genetics Laboratory and compared with the DNA from the zoo

birds. The results are still pending. Whatever the conclusion, it is important for zoos and field researchers to continue to work together to learn more about kori bustards. Only by working together, can these majestic and captivating birds be protected and saved for future generations.

### **Literature Cited**

- Barnes, K. 2000. The Eskom Red Data Book of Birds of South Africa, Lesotho and Swaziland. Birdlife. South Africa.
- del Hoyo, J., Elliot, A. & J.Sargatal. (eds.). 1996. Handbook of the Birds of the World. Vol. 3, Hoatzin to Auks. Lynx Edicions, Barcelona.
- Hallager, S. 2000. International studbook for the kori bustard. Smithsonian National Zoological Park.
- Osborne, T. & L. Osborne. 1998. Home on the range. Africa Birds and Birding 3(3): 18.
- Ramadan-Jaradi, G. & M. Ramadan-Jaradi. 1991. Captive breeding of the Kori Bustard (*Ardeotis kori*) in Al Ain Zoo. Zool. Garten 61: 238-288.
- Urban, E., Fry, C.H. & S. Keith (eds). 1986. The Birds of Africa Vol. II. Academic Press, London.

---

## **A helicopter survey of Cape Vultures, Black Eagles and other cliff-nesting raptors around the Waterberg Plateau, Namibia**

R.E. Simmons

*Ornithologist, National Biodiversity Programme,  
DEA, Ministry of Environment & Tourism, Private Bag 13306, Windhoek  
harrier@iafrica.com.na*

The Waterberg Plateau Park is a state-protected sandstone plateau area in north-central Namibia surrounded by the Waterberg Conservancy. The park is important in the ornithological world as it is the only place in Namibia where Cape Vultures *Gyps coprotheres* are known to breed (Brown 1985). The Cape Vulture has declined in numbers and stopped breeding in about 1995 (Simmons & Bridgeford 1997) despite the continued provisioning of uncontaminated food. According to monitors at the vulture restaurant on the top of the Plateau, a minimum of seven birds still frequent the carcasses and offal put out by Ministry of Environment