



Southern Ground-Hornbill Research and Conservation Program ExCo Quarterly Report July 2014



Fledged chicks

Some of our efforts over this dry season have focussed on making contact with those nine groups that fledged chicks this last breeding season to confirm fledging survival. Seven chicks have been seen and are known to be alive and well. Some have been photographed but most remained shy and mostly out of sight. We have just two groups left to monitor and we're hopeful that the chicks in these groups will also be present and begging loudly!

CET holiday workshop – Hornbills!

The July theme of the Children's Eco Training (CET) Holiday workshop is Hornbills. CET's Corné Havenga agreed that this will make an excellent holiday theme, so we brought on board Nthabiseng Monama (Mabula education coordinator) who together with CET arranged the material for the kid's daily activities. The focus is Ground Hornbills but with information also provided on the smaller Tokus species. We arranged for visits to Senalala nest to show the instructors and learners an artificial nest while instructors provided all the interesting facts about Hornbill breeding and nesting behaviour to the learners at the nest site. The workshop is currently underway as I write this and has been received with much excitement.



Photo: CET instructors out in the field learning about Hornbill nesting behaviour with us.

Status of harvested APNR chicks

The chick harvested from Janovsky nest in 2010 is still doing well as part of the wild group on Mabula. A second APNR-harvested chick in the wild release program became unwell in the release bome on Madikwe and died just a few weeks prior to its release. The cause of death was malnutrition: its cage mate was outcompeting it for food, a behaviour which has never been recorded before in a pre-release boma, or any enclosure containing two or more individuals. Two APNR chicks currently in a boma at Loskop are ear-marked for release on Loskop Reserve.

Wild release birds

Current Loc	Gender	Origin	Action
Mabula	Male	Janovsky 2010	Stay as is
Madikwe	Male	H-burg 2011	Died in release boma – malnourished

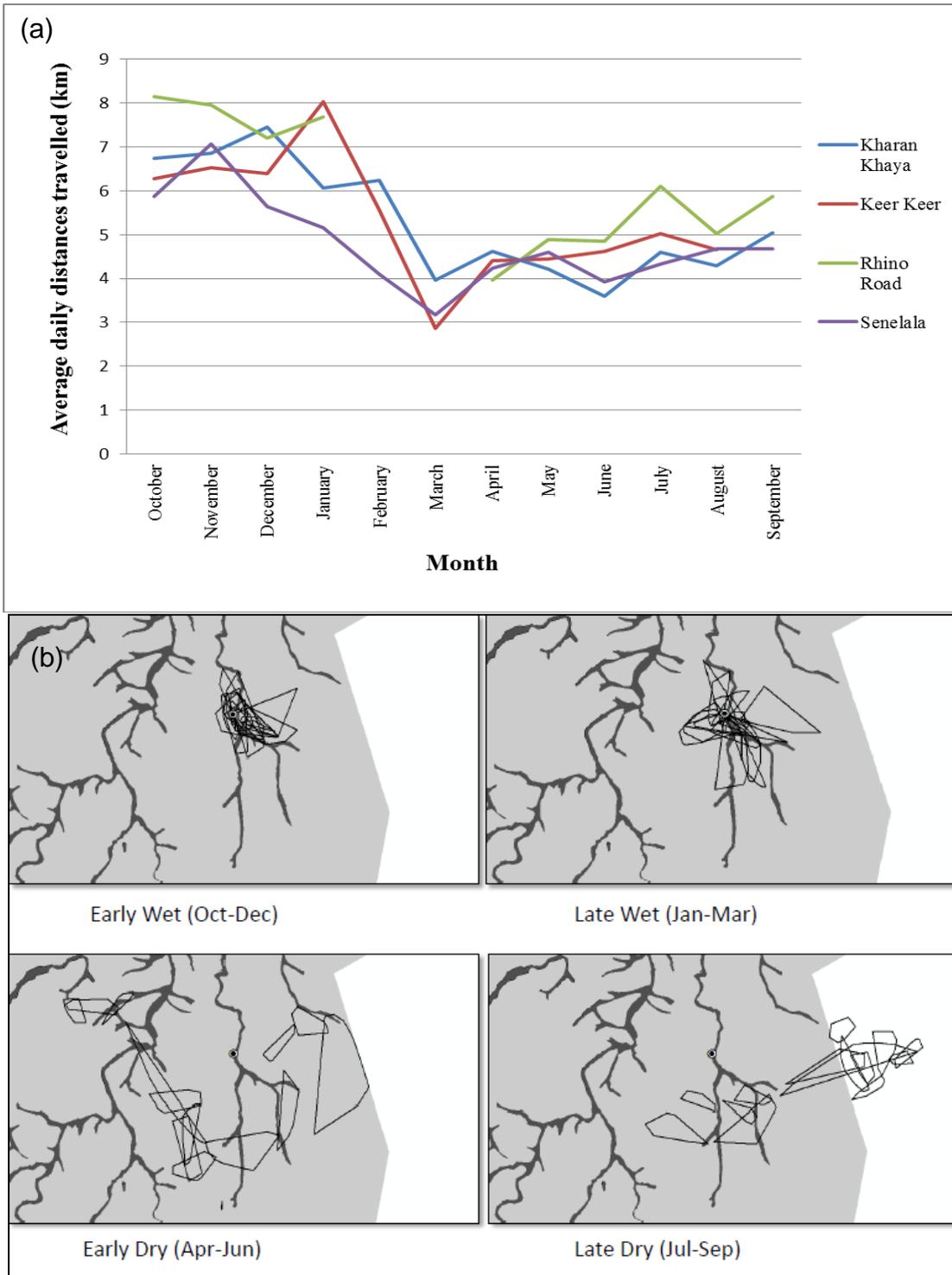
Captive

Current location	Gender	Origin	Action
Johannesburg	Male	Karan Khaya 2011	Stay as is
Johannesburg	Male	Janovsky 2012	Stay as is
Johannesburg	Male	Rhino Road 2011	Stay as is
Loskop	Male	HB 2010	Stay as is. Helper to captive pair.
Loskop	Male	Karan Khaya 2012	Move to Kapama as helper to captive pair.
Loskop	Female	Hull 2012	Move to Umgeni - pair Imvula
Loskop	Female	Yankee Dam 2011	Stay as is.
Loskop	Male	De Luca 2010	Loskop Release
Loskop	Male	Janovsky 2011	Loskop Release
Loskop	Unk	Rhino Road 2013	Sex
Loskop	Unk	Addgar 2013	Sex
Pretoria	Female	Hull 2011	Stay as is. All female group.
Pretoria	Female	Ross 2012	Stay as is. All female group.
Boscia Birds	Female	Copenhagen 2010	Stay as is.
Boscia Birds	Male	Addgar 2011	Stay as is. Helper.
Hoedspruit	Male	Tanda-Tula 2003	Need to be scoped. Helper needed.

Daily movement patterns of SGHs

Initial results from Blair Zoghby's MSc show interesting insights into SGH daily movement patterns. We know from William Wyness' honours project that SGHs restrict their movements during the summer months around the nest. Although a smaller area is used during this time, the birds show higher daily distances travelled within this space compared with the dry months. During the wet season, groups travel up to 8 km per day as birds travel to and from the nest (Figure 1). This drops dramatically around the time of chicks fledging (March) with groups reducing their daily distances to around 3.5 km as their efforts focus on staying with the newly fledged chick (Figure 1). The daily distances travelled remain low (4-6 km per day) during the dry season as groups focus their foraging efforts in quality patches within their home ranges.

Figure 1. Characteristics of Southern Ground Hornbill daily movements. (a) Average daily distances travelled for four groups; (b) tracks of a Karan Khaya individual representing 14 consecutive days of movement during November (Early Wet); February (Late Wet); May (Early Dry) and August (Late Dry). Graphs and diagrams from MSc student Blair Zoghby, UCT.



Capture of wild sub-adult males

Capture of sub-adult males was a topic I didn't think I'd be revisiting given the lack of success in previous attempts last year. Given that capture of APNR groups is now needed to undertake a comprehensive study of genetic relatedness, we have revisited capturing methods and designed a new trap which is soon to be tested. If our attempts prove successful, we could be in a good position to supply two sub-adult males for the wild-release program.

The need for wild sub-adults for the release program is still high with one release ready to go. A release boma has been constructed at Loskop Dam and two of our APNR chicks are ear-marked for release there. Further information on the release and status of the wild release program is provided in the attachment, and I would like to ask the APNR Joint Committee for their approval for us to once again go ahead with attempts to capture sub-adults for the wild release program. The approach would be the same as described in the previous proposal. Java and Caroline Groups are now 6 birds strong and would be our first choice. Neither of these two groups has experienced a capture trap before. If possible, we would attempt capture before the October 2014 to get the first sub-adult male to the release group and ready for release at Loskop this summer.

Recent SGH publications

1. Our paper on Egg-capping was published in Ostrich last month:

Carstens, K.F., 2014. Egg-capping in the Southern Ground-Hornbill *Bucorvus leadbeateri*. Ostrich: Journal of African Ornithology 85, 89–91.

2. On cultural beliefs and Ground-Hornbills:

Coetzee, H., Nell, W., Rensburg, L. van, 2014. An exploration of cultural beliefs and practices across the Southern Ground-Hornbill's range in Africa. Journal of Ethnobiology and Ethnomedicine 10, 28

3. On Ground-Hornbills in the Matobo NP:

Witteveen, M., Parry, E., Norris-Rogers, M., Brown, M., 2013. Breeding density of the Southern Ground Hornbill, *Bucorvus leadbeateri*, in the communal areas surrounding the Matobo National Park, Zimbabwe. African Zoology 48, 274–278.

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