# 16<sup>th</sup> Annual Parrot Count- Report on the 2013 Cape Parrot Big Birding Day.

Colleen T. Downs\* and Lorinda Hart

School of Life Sciences, University of KwaZulu-Natal, P/Bag X01, Scottsville, 3209,

South Africa. Email: downs@ukzn.ac.za

\*Cape Parrot Working Group Chairperson.

"Cape Parrots rock!!"- EW 10 year old observer 2013

Quote from datasheet

Forests are one of the most important and biologically diverse ecosystems. However, worldwide continued land conversion and transformation is posing a serious threat to their survival. In South Africa the forest biome is the smallest. As these forests are patchily distributed, conservation of them is difficult to implement. Many were extensively logged in the past. Generally the conservation of large fragments in the afromontane mistbelt forests is highlighted, but conserving smaller fragments is important in terms of maintaining landscape processes. For many remaining forest patches where forest fragmentation is prevalent, the matrix habitat has also been transformed from grasslands to commercial plantations. Such changes have important implications for forest fragment connectivity and ecological processes.

The Cape Parrot, *Poicephalus robustus*, (Fig. 1) is the only parrot species endemic to South Africa and is one of its endangered birds with less than 1600 in the wild. Factors contributing to the parrots decline vary in their effects at different locations and include: the loss or change in the quality of their preferred forest habitat; food and nest-site shortages; illegal poaching for the pet trade; disease (especially Psittacine Beak and Feather Virus); avian predators; and accelerated climate change. Previously the Cape Parrot, a forest specialist, had a more extensive distribution, but it is now mainly restricted to patches in a mosaic of afromontane southern mistbelt forests from Hogsback in the Eastern Cape through to the Balgowan and Karkloof areas of KwaZulu-Natal; with a disjunct population in the Magoeboeskloof region of Limpopo Province (Fig. 2).

Cape Parrots are food nomadics, moving between forest patches due to the irregularity of fruit availability. Their preferred foods are the fruit kernels of yellowwood trees (*Afrocarpus / Podocarpus* sp.) which are usually only available from June through to November. Yellowwood trees have mast fruiting, which is the intermittent but synchronous production of large numbers of fruits by a population of

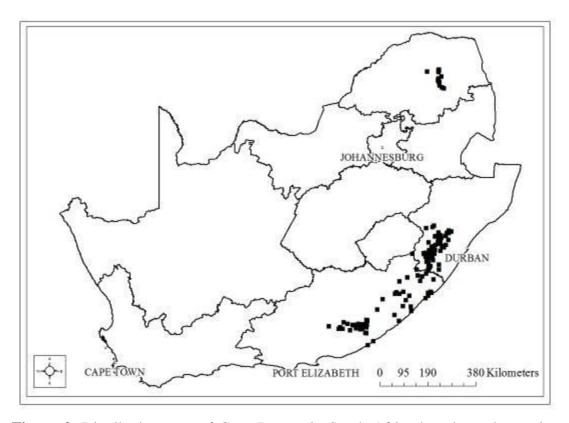
trees. These fruiting events can be separated by long intervals. Consequently the parrots cannot rely on a particular patch of yellowwoods fruiting annually. During the remainder of the year Cape Parrots feed on other forest fruits with kernels, including Harpephyllum caffrum, Celtis africana, Olea capensis, Commiphora caryaefolia, Erythrina sp. and the exotic and invasive Melia azedarach (syringa) and Acacia mollissima (black wattle). They also visit Protea patches adjacent to forests where they feed on seeds. When forest fruit is scarce, they make foraging trips to other forests and / or visit food sources outside of forests including commercial orchards, and gardens. In summer, particularly in the Eastern Cape, they make long overland flights to coastal forest patches to feed, while in KZN they historically did this. In years following extreme heat or rain, or drought it appears that the parrots more often forage outside of forests, occasionally at localities where they have not previously been observed. This suggests that there is a shortage of natural fruit available in the indigenous forests as Cape Parrots aggregate outside of forests, usually to feed on exotic and alien invasive fruiting trees.



**Figure 1.** Cape Parrot feeding on pecans near Boston, KwaZulu-Natal in May 2013. (Photo C. Wilson).

Movements and seasonal changes in the feeding patterns of Cape Parrots highlight the importance of conserving networks of South African afromontane indigenous forest patches. Of concern are those forests where illegal logging and / or hunting of wildlife occurs. Understanding the feeding behaviours which drive the parrots' movements is an essential component in their conservation and of the

forests they inhabit. The occupancy of forest patches by Cape Parrots has remained largely the same over the past 50 years. This suggests that the absence of parrots in some forest patches during certain periods are not local extinctions, but are likely due to the absence of food, as the fruiting of their preferred yellowwoods may be sporadic and absent in some years. Consequently there is a need to conserve the network of forests where Cape Parrots occur, due to their nomadic feeding behaviour. Furthermore these networks of forest patches are important for a number of other bird and mammal species that move between the patches depending on food availability, or because of seasonal temperature changes.

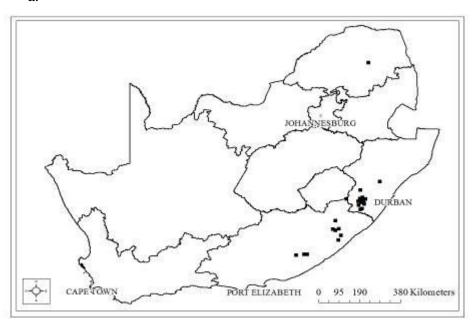


**Figure 2.** Distribution map of Cape Parrots in South Africa based on observations from 1998-2012 CPBBD. (From Downs et al. 2013).

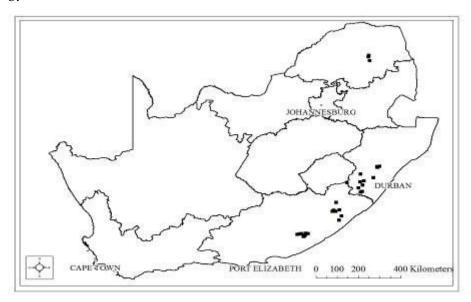
Standard bird counting techniques are not suitable for Cape Parrots. As mentioned they are nomadic feeders and their presence at a forest is unpredictable. The first national census was initiated 16 years ago, known as the Cape Parrot Big Birding Day (CPBBD), and has been held annually ever since. This census involves mainly volunteers from a range of backgrounds and walks of life. The census is a difficult task as it requires knowledge of the often-remote forest habitats and suitable observation posts, knowledge of parrot movements and the availability of enough volunteers to cover the areas where parrots occur. Other considerations are whether all areas are covered, whether volunteers are knowledgeable and have good vantage

points, and ensuring parrots are not counted more than once when moving between locations. Sadly during the past two years' surveys the weather did not co-operate, with many regions experiencing misty weather, and visibility almost nil in some. Many observers are stalwarts that have participated in more than 90% of CPBBD's. As with many things in life it is often a core of people that show such dedication, and we are most grateful to these people. Each year we involve more young people, especially those from the University of KwaZulu-Natal (UKZN) (usually a group of 40 cover the Ingeli area) and those from local schools in the areas where the parrots occur.

a.



b.



**Figure 3**: Distribution map of a. Southern Ground Hornbills (*Bucorvus leadbeateri*), and b. Samango Monkeys (*Cercopithecus mitis*) in parts of South Africa based on observations from 1998-2012 CPBBD. (From Downs et al. 2013).

In recent years fewer than 1600 parrots have been counted in the wild. Although the primary aim of the CPBBD is to estimate population numbers of Cape Parrots in the wild, there are a number of other benefits. Movements and seasonal changes in the feeding patterns of the parrots are evident. The annual CPBBD also highlights the importance of our South African Afromontane / -temperate indigenous forest patches. In particular, other endangered forest species or those found in the neighbouring grasslands, including Samango Monkeys (*Cercopithecus mitis*) and Southern Ground Hornbills (*Bucorvus leadbeateri*) are recorded too (Fig. 3). Interestingly this year several people reported Cape Vulture (*Gyps coprotheres*), and the African Crowned Eagle (*Stephanoaetus coronatus*) at various localities.

#### **RESULTS FOR 2013**

The areas of South Africa covered by the CPBBD included the Eastern Cape, KZN and Limpopo Provinces. This year at least 225 volunteers were posted at 84 localities in the three provinces. Despite the poor weather, at least 1182 parrots were seen during the afternoon count while 1317 were seen the following morning. As a consequence this should not be regarded as a total count as it is likely an underestimate. The maximum number of Cape Parrots seen in each of the areas covered suggests that there were at least 1402 parrots in the wild on the CPBBD in 2013. These results are similar to those of 2012. Interestingly the parrots are sometimes seen either on the Saturday or Sunday in a particular forest patch, further showing how unpredictable their presence is. This highlights the need to conserve a network of forest patches. On the Sunday the parrots were observed at 70% of the localities, while on the Saturday they were seen at 65% of localities. The localities where no parrots were observed are ones where the birds have previously been seen and therefore need to be covered; although for observers nil counts are often very negative. One observer who has observed near Alice the past 16 years commented "This year was the most parrots ever seen in Alice, which begs the question: why were they all there? Food shortages elsewhere maybe? The birds were not all shy this year and with the over abundance of ripe pecan nuts, were in and out of the orchard all the time. We observed a lot (approximately 30%) of iuveniles."

As in past years, there were several communities involved in this year's CPBBD. This highlights the importance of the CPBBD day in developing interest, knowledge and hopefully conservation awareness. The observers in the Langeni / Matiwane region had a get together and produced a very detailed report for their area (Bertus Bouwer, Mandla Mavalanji, Alfred Mbiyo, Helen Dalton, Indwe Security field rangers and Starlight Security are thanked).



**Figure 4.** UKZN students watching over a forest patch for parrots near Ingeli in the cold and (Photo M. Pfeiffer)

#### **Acknowledgements**

We are most grateful to all those who participated in the CPBBD, particularly for the effort, enthusiasm and continued support of the co-ordinators (Appendix 1) and those volunteers who have participated for a number of years. We are also grateful for the contribution of Border Bird Club, DAFF, DEAT, Rance Timbers, Sappi and Mondi foresters, Indwe Security, and E. Cape Parks and Ezemvelo KZN Wildlife officials (particularly those from Coleford Nature Reserve who camp out at Gxalingele), and the Armours who host the UKZN students near Ingeli.

#### References

Downs, C.T., Pfeiffer, M., & Hart, L. 2013. Fifteen years of annual Cape Parrots (*Poicephalus robustus*) census: current population trends and conservation contributions. In review.

Downs, C.T. & Hart, L. 2013. Joining the dots for Cape Parrots. Why conservation of networks of forests is important for the Cape Parrot. Birdlife IBA Programme newsletter Autumn 2013.

Observations of Cape Parrots through the year: if possible go to the SABAP2 special watch site to record your Cape Parrot observations through the year <a href="http://sabap2.adu.org.za/special\_watch">http://sabap2.adu.org.za/special\_watch</a>. Otherwise email or tel CT Downs.

**Genetic study on Cape Parrots**: As part of a genetic study on Cape Parrots, we would be grateful if you find any Cape Parrot feathers to put them in an envelope with the locality details and send it to CT Downs for our PhD student Riel Coetzer.

**DVDS** of **Don Guy's 50/50 Cape Parrot documentary** in 2000 detailing factors affecting their decline are available from Prof CT Downs for R50.00. Funds go to the ongoing Cape Parrot research at UKZN. Please contact her +27-332605127 or email downs@ukzn.ac.za

## Cape Parrot Day 2013- please diarise 3 and 4<sup>th</sup> May 2014

Appendix 1. Grateful thanks is extended to the co-ordinators of the Cape Parrot Big Birding Day 2013.

Area	Name	Tel	Email
Overall co-ordinator	Colleen Downs	033 260 5127; 0829202026	downs@ukzn.ac.za
Karkloof	John and Jenny Robinson	033-5029090/ 082-4433805	tomrob@mweb.co.za
Midlands conservancies:	Sally Cummings	033 330 7175	capeparrots@dargleconservancy.org.za
Dargle/ Nottingham Rd/		072 119 4253	
Balgowan			
Byrne Valley	Malcolm Anderson	033 2122744	mmanderson@mweb.co.za
		082 5723455	
Boston	Barbara & Glyn Bullock	033 997 1783; 0843049842;	grbullock@telkomsa.net
		0843529864	
Bulwer	Russell Hill	0741267274	carolhill@futurenet.co.za
		082 9239649	
Creighton/Donnybrook	Malcolm Gemmell	039 8331029	info@buttonbirding.com
		082 7895000	
Ngeli	Colleen Downs	See above	
Mpur/Glengarry	Andy Ruffle	039 695 0829; 0728933794	andy_ruffle@yahoo.co.uk
Alfred Nzo Region,	Dean Ricketts	0824325104	<u>Dean.Rickets@deaet.ecape.gov.za</u>
namely: Ntsiswa, Gomo,			
Bulembu, Tonti, Amanzinyama and Xhama			
Forest			
Mthatha	Gary Harvey	083 452 0883; 043-740 2993 (w)	vanessa@starsec.net
Langeni / Matiwane	Bertus Bouwer	082 856 3982; 043-726 0513 (w)	gary@starsec.net / starsec@mweb.co.za
Ngcobo			bertus@starsec.net
Hogsback	Graham Russell	045 9621084 0823746583	gandm@procomp.co.za
Stutterheim	Neill Harvey	043-6832384	alliedin@eci.co.za
	Donald Kemp	073 4272 119, 043-683 1661	donald@barkaybirds.co.za
Wild Coast (Port St	Kathryn Costello	047 5641240	outspan@wildcoast.co.za
Johns)			
Mbotyi	Wendy Ayliffe	039-2537200/01	info@mbotyi.co.za
	Taz Moola		
KWT/Alice	Gertie Griffith	043 7352195	gerken@intekom.com
	Peter Mather-Pike	043 7403566	pamp@supafeeds.co.za
		0829248514	
Limpopo Province	David Letsoalo	0835684678	info@krm.co.za

### CAPE PARROT (Poicephalus robustus) facts.

- Found only in South Africa. Regarded as Endangered.
- Virtually the whole lifestyle of these birds is centred on yellowwood trees.
   Their preferred feeding, roosting and nesting sites are in forests dominated by these trees.
- Feed on yellowwood fruit when this is available otherwise forest fruits with kernels, including Harpephyllum caffrum, Celtis africana, Olea capensis, Commiphora caryaefolia, and the exotic and invasive Melia azedarach and Acacia mollissima. They visit Protea patches adjacent to forests where they feed on seeds. When forest fruit is scarce, they make foraging trips to other forests and/ or visit food sources outside of forest including commercial orchards, and gardens.
- In South Africa suitable forest patches are found in the Eastern Cape and southern KwaZulu-Natal with a few scattered yellowwood forest patches in Limpopo.
- Must not be confused with the Grey-headed Parrot, (Poicephalus fuscicollis suahelicus) which looks very similar to the Cape Parrot, but is found in the Limpopo Province, Mozambique and Zimbabwe and is now regarded as a separate species from the Cape Parrot.
- A mature Cape Parrot stands 30cm high and can weigh up to 350g. Like all parrots it has a robust beak which is used to crack open nuts and seeds. The favoured seed is that of the yellowwood tree and their availability greatly influences seasonal movements of these birds. They also feed on other forest trees especially the Natal plum and White stinkwood. If the indigenous food source is in short supply, the parrots are sometimes forced to feed outside forests and will raid fruit orchards or pecan nut trees.
- Nest in cavities usually in dead yellowwood trees. They usually lay three eggs of which one to two chicks survive the first year.
- Use mature yellowwood trees, which usually project out of the forest canopy, as roosting sites and vantage points They are active and inquisitive birds which are often seen flying around and above forest patches in the early morning or late afternoon.
- Characteristic loud squawk is usually heard when the birds are in flight and contact calls between roosting birds may also be heard.