



Coordinated Avifaunal Road Counts

Newsletter 38 Summer 2025

Photo: Cassie Carstens

Editorial

- Cassie Carstens

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	I can't believe that it's time for another CAR newsletter already!
2	Time seems to be speeding past at an ever increasing rate, barely leaving time to do what is required let alone go for a leisurely bird walk. Alas, there is no rest for the wicked, so here we go!
3	As promised in the previous edition, this one will be science heavy with deep dives into Blue Crane population and distribution dynamics, distance sampling,
4	and how CAR can be used to monitor not just birds but antelope as well!. You will
5	also note that it is considerably more hefty document than the last one, with pre- cinct reports, route descriptions, and interviews filling up the extra pages.
7	However, the section that I'm most excited about is the first Bird Identifica-
8	tion Guide. At one of the quarterly working meetings last year the creation of such
10	guides for certain species were discussed, with the aim that they will be used to
13	assist less experienced birders that take part in the bi-annual surveys. Having been
16	at the shallow end of the gene pool when the skills for visual arts were given away, I
19	reached out to the Young Wildlife Photographers of Southern Africa and the youth
21	birding group from Cape Town led by Gabby Sykora. These amazing youngsters
22	took the rough mental images that I had and brought them to amazing artistic life!
24	That I owe them all a debt of gratitude is an understatement! Their contributions to
	the identification guide for the Corvids of South Africa seen on the CAR surveys has
	set a bar that will be difficult to beat! I can not thank you enough! This will hopefully
	be the first in a long running series of identification guides, and if you'd like to con-
	tribute in the future please reach out.
	Lastly, a reminder that the next CAR survey will take place the last weekend
	of July 2025, so please set the dates aside and contact your local precinct or route
	coordinators to take part in this amazing citizen science project. Also remember to
	visit the shiny new website for the Project .You won't be disappointed!

See you on the road,
CC

Contributors



Peter Divall: Chairperson of BirdLife Midlands and longtime resident of Howick, Peter is the precinct coordinator for the KZN Midlands region.

Lu-Anne Beukes: 26-year-old Lu-Anne is a passionate conservationist and artist who has travelled to Malawi and Seychelles to work with endangered birds

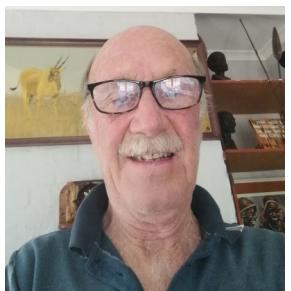
and turtles.



Dr Christie Craig: Christie Craig is based in Cape Town, working for the Endangered Wildlife Trust/International Crane Foundation as a Conservation Scientist for the crane program.

Josh Wenzel: A biology student, Josh is an avid birder, photographer, and artist.

He's working towards his bird ringing license.



Martin van der Walt: Retired and living in Riviersonderend, Martin does atlassing and photography.



Dr Alan Lee: The Science and Innovation Programme Manager at BirdLife South Africa, Alan is a sharp-minded researcher and all-round good guy!



Jessica van Dort: 17-year-old Jessica is an artist, aspiring bird guide and ornithologist who has been birding for many years.



Clara Qualls: An aspiring artist and character designer, Clara also enjoys reading, rock climbing, and spending time outdoors.



Elanie Snyman: Hailing from Johannesburg, Elanie is 22 and a third-year Zoology student at TUKS.



Carina Meyer: Studying to become a nature conservationist, Carina shares her art on Instagram (@moz_kat_).

Driving the CAR website into the future

- Cassie Carstens

In many ways, the Coordinated Avian Road Counts (CAR) surveys are like true automobiles. Most of the action occurs underneath the vehicle's hood: the motive force that keeps everything going is generated out of sight in the mechanical wonder of the internal combustion engine. During the bi-annual surveys, citizen scientists only experience the external parts of the activity. We drive around, record the birds we see, and then enter the data (or fuel) for researchers to use. But how does that CAR engine work? What happens to the collected data once we enter it? And how has that system changed over time?

There is only one man that can answer those questions: **Michael Brooks**.

A long-time stalwart at the University of Cape Town, Michael has been involved with the IT side of all the avian citizen science projects from the very beginning. After completing a National Diploma in Nature Conservation, he joined the former Avian Demographic Unit (ADU) in 2002. When the ADU closed in 2018, he joined the FitzPatrick Institute and has been integral to the online data management systems ever since.

The first CAR website was created between 2012-2014, and Michael was assisted by a student, Nosipho Mali, who did most of the coding for it. The website allowed data to be uploaded quickly and remotely, placing South African avian science at the forefront of online progress. But the speed of that progress quickly outstripped the capabilities of the original website. Many of us who used it can attest that its usability became a large hurdle in our efforts to enter the valuable data we collected.



Due to the outdated coding, the website and the data entry process became incredibly slow, not to mention the random logouts that would occur. This resulted in all your progress being lost when you were busy inputting a survey card. Something had to change swiftly, and Michael came to the rescue once again.

Over the course of nine months, in between keeping the Southern African Bird Atlas Project (SABAP) running smoothly and ensuring that the Coordinated Waterbird Counts (CWAC) kept quacking, he developed a whole new website for CAR. Several improvements were made, with intuitive design and ease of use paramount. The species and route pages were updated, adding more images and visual indicators of bird presence during surveys, not to mention the latest IUCN status updates. Advised by analytical software, other pages or parts were removed due to limited use, and a user dashboard was created, allowing access to historical data. And for those of us remembering the glacial pace of the old site, this new one functions much quicker!

But there are still many more plans for the future! Nestled safely on the servers at the FitzPatrick Institute, the website will be expanded to allow improved administrative input and control, and data will be open for all to access and download. Linkages between the database and Geographical Information Systems (GIS) will also allow environmental impact assessors and practitioners to effortlessly access the most recent data.

Should you choose to take your CAR participation to the level beyond the surveys and data entering, there are two options that you can consider:

1. Submit images of birds and landscapes for use on the website. The goal is a dynamic, ever-changing website showcasing these wonderful surveys.
2. Provide feedback to the CAR team about your experiences using the website: how you use it, any errors or issues you encounter, and any improvements that can be made to facilitate ease of use.

Please get in touch with Sally Hofmeyer (sally.hofmeyer@uct.ac.za) and Michael Brooks (michael.brooks@uct.ac.za) with your pictures or recommendations. The future of this website depends on us, the users, to participate in its growth and development.

Introducing Distance Sampling: New Option for CAR Data

- Dr Alan Lee

As part of our ongoing efforts to enhance the value of the data collected through the Coordinated Avifaunal Road Count (CAR) project, we have introduced an optional new column to the datasheet: **Distance**. This addition enables observers to contribute data that can support Distance Sampling analysis—a powerful method for estimating bird densities more accurately.

What is Distance Sampling?

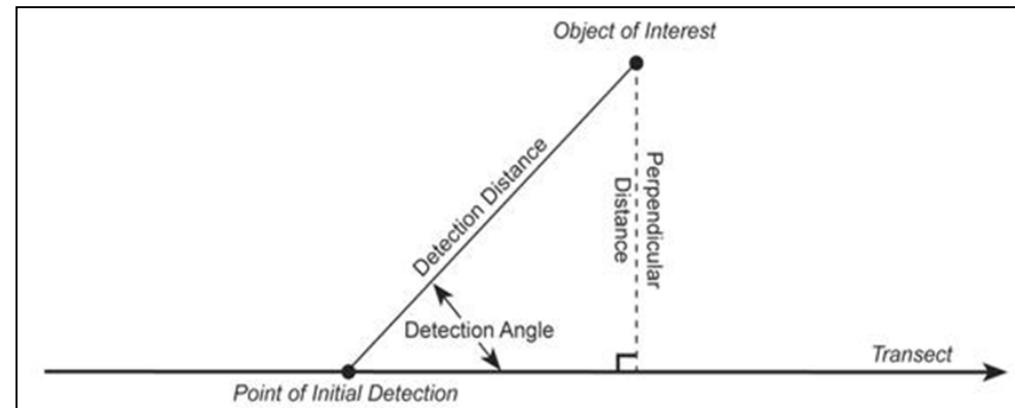
Distance Sampling is a widely used method in ecological research to estimate population densities. The key principle is that the probability of detecting an individual decreases with increasing distance from the observer. By systematically recording how far each bird is from the transect line (i.e., the road in our case), statistical models can be applied to estimate bird densities while accounting for birds that go undetected. Currently, CAR's measure of abundance is number of birds per kilometre, which is a measure of relative abundance. Actual abundance is the number of individuals per area, e.g. square kilometres.

Why Consider Distance Sampling?

The traditional CAR method records bird counts but does not adjust for detectability, meaning species seen further from the road may be underrepresented in population estimates. Distance Sampling corrects for this by modelling the decline in detection probability with increasing distance, providing more refined estimates of bird abundance. This is particularly useful for species that are cryptic or occur in variable densities across different habitats.

Challenges and Practical Considerations

We acknowledge that Distance Sampling is not straightforward and requires additional effort from observers. The biggest challenge is obtaining accurate distance measurements. **Rangefinders** are the only practical tool for this task, as they provide precise distance readings and remove the guesswork from estimation. Unfortunately, without a rangefinder, it is nearly impossible to collect reliable Distance Sampling data, so this column remains optional.



The new column records the Perpendicular Distance, which is generally the shortest distance between the road and the centre of the group of target species.

How to Collect Distance Data

If you are equipped with a rangefinder and wish to contribute Distance Sampling data, follow these steps:

- Spot and Identify:** Record all birds observed along the transect.
- Measure Distance:** Use the rangefinder to measure the perpendicular distance from the bird (or flock) to the road. Avoid estimating distances visually.
- Record in the Datasheet:** Enter the measured distance in the new **Distance** column.

If you do not have a rangefinder or are uncomfortable with this method, you can continue recording birds as before. Distance Sampling is entirely optional and should not discourage participation in CAR.

Looking Ahead

By incorporating Distance Sampling into our dataset, we can refine our understanding of bird populations across different landscapes. Over time, this will strengthen the scientific value of CAR. We encourage participants to experiment with this method if they have the necessary equipment and are willing to take on the extra effort.

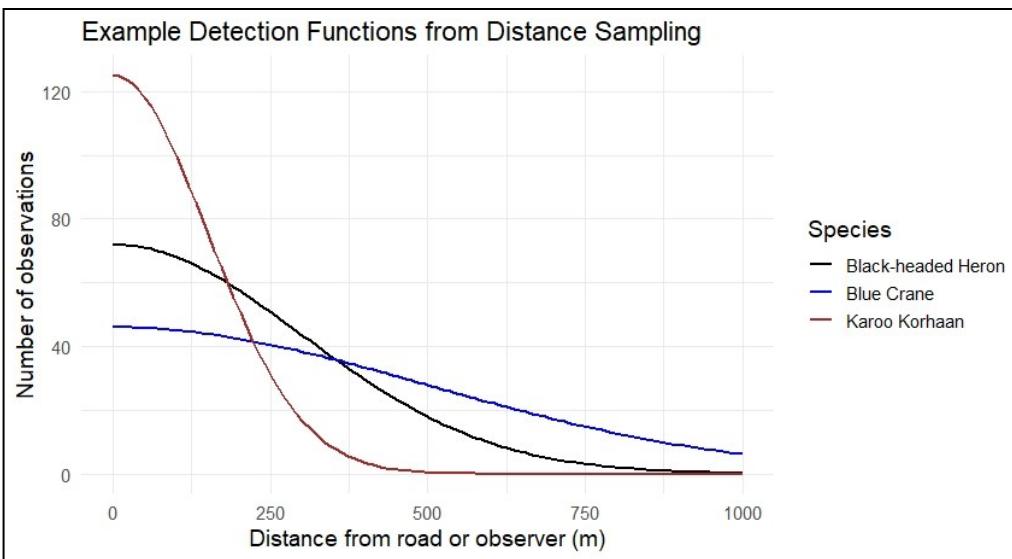
Introducing Distance Sampling

- Dr Alan Lee

As always, we appreciate the dedication and enthusiasm of all CAR participants. If you have any questions about Distance Sampling or need guidance on using a range-finder, please feel free to reach out

Happy Counting!

Example Detection Functions from Distance Sampling



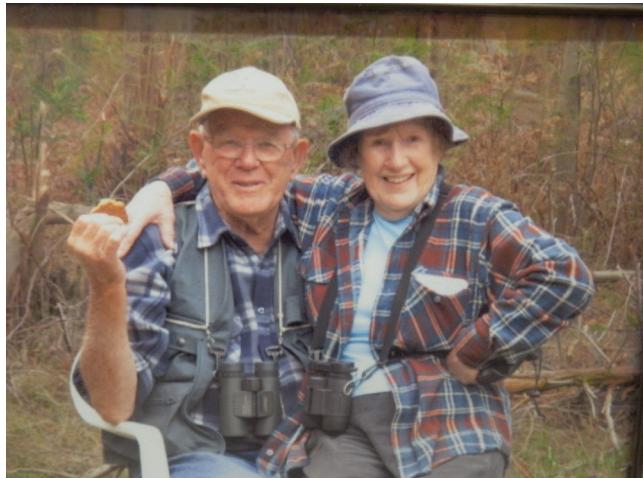
Grey Crowned Cranes, large flock of White Storks, a trio of Wattled Cranes, and frozen pivot irrigation. (Peter Dival)



Riviersonderend (OV15)

- Martin and Dawn van der Walt

Summer 25 CAR was our first without Myra Jones as team leader. Myra passed away just a week after the winter count and two months short of her 96th birthday. She and her husband John participated in over 30 counts on route OV15 before his death, with Myra doing a further nine with us as driver and spotter. They also submitted over 500 pentad record cards to the Birdlasser project spanning sixteen years. What an achievement!



John and Myra Jones (Supplied)

This count produced our lowest total in five years, exceptionally dry conditions and dispersal for breeding, making Blue Cranes scarce. The total absence of White Storks for the second summer is a cause for great concern, as is the absence of Denham's Bustard and Karoo Korhaan.

The highlight of our day was a sighting of a Black Harrier coursing over farmland stubble and pastures. Imagine our surprise 20 km further when encountering another perched on a roadside fence post. This was on my photo bucket list for

years, and I managed to focus and shoot before it flew down to catch a meal.

Pondering their presence in such an alien habitat, we reasoned that extensive veld fires last year in their preferred grassland habitat between the Sonderend River and mountains may have forced them to adapt to the farmlands. Birds are truly amazing in their adaptability.



Black Harrier (Martin van der Walt)

JOIN THE 28TH ANNUAL CAPE PARROT BIG BIRDING DAY



Help us count
Cape Parrots

Hogsback & Limpopo

12 & 13 April

KZN & Eastern EC

3 & 4 May

Contact us if you are interested in joining or
learning more:

Hogsback: Susan Wishart (067 416 7219 / susan@wildbirdtrust.com)

Limpopo: Daryl van der Merwe (063 601 0793 / daryl@wildbirdtrust.com)

KZN & Eastern EC: Prof Colleen Downs (082 920 2026 / downs@ukzn.ac.za)

KZN Midlands Route Report (KM01)

- Peter and Anita Divall

Peter and Anita Divall (ADU 1799) have driven this route 10 times since summer 2018, for both the summer and winter counts. We always enjoyed driving this route occasionally but now only do so during the counts due to the deteriorating road surface – part of it being on dirt and partly on very degraded tar. Luckily, we have a vehicle tough enough to handle it! The section from Hlatikhulu back to the outskirts of Mooi River has been under ‘improvement’ for a number of years – but it becomes more of a challenge, than an improvement, each time we do it! Another reason that we drive this route is that it does require a spotting scope, that most of our route leaders (or their passengers) – do not seem to own. Many of the Crane species, in particular, are often quite far distant from the road and are impossible to count without a scope.

We start our count on the outskirts of Mooi River. On the first section of the route there was a large section of pasture on the left-hand side, but this is slowly being converted to maize. Here we always found good numbers of White Storks which were not as evident on our recent Summer count. The next stopping point, requiring good skills at spotting and counting, is at Summerfield Stables where there is a herony, inside their property, but relatively close to the road. The site was abandoned for a few years, but is now a hive of noisy birds again – Black-headed Herons, Cattle Egrets and Sacred Ibis are the residents. Numbers have varied but there are still a good number of birds here.

We then move on through an area of hilly farmland, planted mainly (and increasingly, to maize). This is one of the areas that a spotting scope is vital to spot the Crowned Cranes and Blue Cranes which seem to prefer this area – in summer and winter. In the past we found quite a number of Southern Bald Ibis near a farmhouse, but as the vegetation increased within and around a large garden at the house they seem to have moved off. At the nine kilometre mark, sadly the land usage has changed. What used to be quite a large wetland-type area, is now pastures with irrigation pivots and the numbers of Spur-winged Geese, Grey Crowned Cranes,



Black-headed Herons (and Sacred Ibis) seen there in the past are no longer present. From this point, driving up to close to the Hlatikhulu area, we have spotted the occasional Long-Crested Eagle, varying numbers of Jackal Buzzard and, for some time there was a Secretarybird – normally around the 25km mark – especially on the Winter counts. On Summer counts we do see small numbers of Common Buzzards. In Winter 2024 we did count in excess of 73 Blue Cranes feeding, but we could not see what had attracted them there as they were on the crest of a hill.

The very large farm at Hlatikhulu has altered the landscape in this area. Kilometres of electric fencing have been erected around the property and hectares of maize were originally planted. A dam seemed to have been altered by raising the wall so that there is less water run-off down into the original wetland area below this. When we did our Summer 2024 count, we found that large areas of maize had been replaced and the farmer is now running cattle in areas divided by low electrified strands. Along the edge of the wetland, we sometimes see reasonable numbers of Spur-winged Geese and on the 2025 winter count, 55 Grey Crowned Cranes were spotted with the aid of the spotting scope. Originally, we did find Wattled Cranes along the edges of the cultivated lands but these seem to have moved off. There used to be a pair below the dam, seen on occasion with a young bird, but this

KZN Midlands Route Report (KM01)

- Peter and Anita Dival

was not seen on our 2024 or 2025 counts.

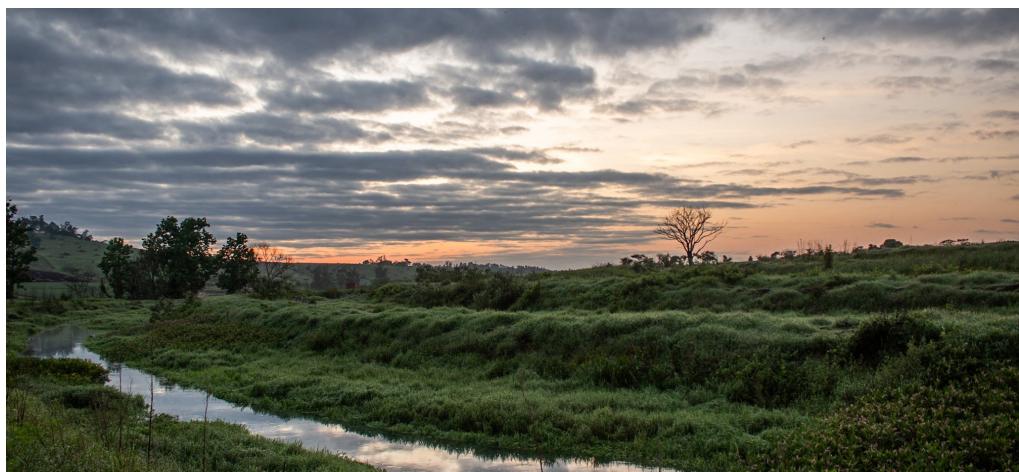
After turning back towards Mooi River, there is an old plantation on the left side of the road and grassland on the right, but the only birds generally seen here during the counts are Pied and Cape Crows on the row of power lines (poles, not pylons) that run along this road for some distance. On the back-track section we have seen the odd Jackal Buzzard, and on the irrigation pivot last winter there was a number of Southern Bald Ibis together along with a few Cape Crows. Back on the main road we have, in the past, seen small flocks of White Storks and Bald Ibis (sometimes in large numbers) but none were seen in January 2025. There were, a few years back, two areas where dairy cows were fed silage and these attracted large numbers of birds – mainly Pied Crows. These feeding stations have mostly disappeared with just one small area, where a small group of Pied Crows were feeding.

We have seen Denham's Bustards on a few occasions over the years – then on both counts in 2015 a single bird was seen in an area of pasture and , three in 2019 and two in 2023. On our recent Summer count, we spotted one, quite high up on a hillside, at 23.9 km.

Our recent Summer count was disappointing, especially in terms of White Storks. There was a fair bit of activity with farmers mowing grasslands or pastures, and where one normally expects to find these birds but they were largely absent. Our Crane count – for all 3 species – was also disappointing.

There is large change in land usage from grassland, and even pastures, to maize and more electric fencing seems to be evident. One farm dam, close to where we turn on to the P19, which has generally produced good numbers of Grey Crowned Cranes, was overgrown with weed and we could not see any water – which was strange given the amount of rain experienced recently and we wondered if this water is being diverted.

We did wonder if having moved the count forward by two weeks (owing to Flock to Marion Again), had impacted the counts in the KM area, as all route leaders commented on reduced or very reduced counts. Unfortunately, we have not had the time to finish processing the information from our eight routes, so are unable to comment on this.



Early morning in the KZN Midlands (Cassie Carstens)

Table 1. Main species counts along KM01 since 2022.

YEAR	SEASON	BC	CC	WC	WS	SEC	BI	SG	BHH
2022	S		23	2	131	1		68	28
2022	W	17	4	2		1		27	30
2023	S	2	10		25		203	44	40
2023	W	14	52	6				20	14
2024	W	73	2	17			18	49	23
2025	S		95		10			15	23

Overberg Route Report (OV18)

- Wicus Leeuwner

I'm blessed.

This route is a "visit" to all the farmers and their personnel who used to be part of my bigger "family" in the Langkloof ward, where I farmed for 26 years. We shared so many happy moments around a braai for birthdays, new arrivals, yearend functions at the river, or making nearly half a ton of sausage for the church bazaar. This route starts west of Caledon on the Greyton tar road from the N2. After about 4 km, it turns left onto the gravel road to Berea and Genadendal. This is dryland cereal country. Today, the main crops are wheat, barley, oats, canola, and some lucerne. The fields stay quite the same until you reach the Rivier-sonder-end river at the farm Middelplaas after about 18 kilometres.

Not much has changed here during the past 32 years. On most of the farms, the new generation that grew up with my kids took over, bringing in fresh ideas and technology. The crops, however, stayed the same except for the arrival of canola. Cranes do not utilize canola fields. Earlier on, there was a lot more dryland pasture in the form of medics. Sheep and cranes loved it. We counted the most cranes during this period. Unfortunately, medics disappeared, leaving lucerne as a dryland pasture.

I still stick to my story that the cranes increased in the Overberg when we had to bring in dryland pastures for sheep because of the scrapping of the bread subsidy. Figures from CRK and BKB show that farmers plant fewer pastures but keep more sheep now. This larger number of sheep are farmed more intensively. The reduction in pastures explains the lower numbers counted to me. A good rain in December- not enjoyed by the campers in Hermanus- provides a nice stand of plants and weeds on pastures. The resultant increase in insects is what the crane chicks need at that stage.

At Middelplaas, you turn west on the Villiersdorp road, which you follow next to the river for about 20 kilometres. Here, farms are irrigated from the river, and practices have changed a lot over the past 32 years. Apple-, pear- and Sharon fruit orchards appeared. Pivot irrigation systems replaced older systems. To the

good of the cranes, the angora goat, sheep, vegetable, and dairy farming remained.



Creating art (Wicus Leeuwner)

I'm happy to state that the next generation of farmers is very crane-friendly, and they proudly talk about their cranes. The exception is Helderstroom Prison on the northern side of the river. Previously, up to 20 breeding pairs could be found on their vast farmland. Dog, staff, and inmates were under control and made aware of cranes. The cranes flourished on the irrigated pastures. Nowadays with a change of management, you'll struggle to find 5 pairs.

After 13 kilometres, turn south on the R43 to reach the N2. This section repeats the first section with dryland farming only.

Overberg Route Report (OV18)

- Wicus Leeuwner

Crane conservation is about people. Farmers and farmworkers are the real custodians of our national birds in the Overberg. About 80% of them speak Afrikaans. Make contact with your farmers on your route. With no funds available for fieldworkers, you could be the only person with a link to their cranes and create awareness

Farms are not the safe places they used to be. Ask the farmers to alert their local farm watch of your presence on a counting day.



August canola (Wicus Leeuwner)



October (Wicus Leeuwner)



Harvest time (Wicus Leeuwner)

RED-BILLED OXPECKER



A dash of lipstick

Although related to the glossy starlings, Oxpeckers lack the brilliant iridescence characteristic of that group and their plumage is plain brown. They thus blend in well on their typically dull-coloured hosts. Red-billed Oxpeckers are rescued from being totally nondescript by their colourful bills and eye-rings – bright red and yellow respectively. The birds' legs are short, with powerful, clasping feet and sharp, strongly curved claws, and their tails are relatively long and rigid. These adaptations are useful for clinging to, clambering around and bracing themselves against the bodies of their hosts. In this respect they resemble woodpeckers, which scale trees in a similar fashion.

Family affairs

Oxpecker nests are usually in holes in trees, where 2–5 eggs are laid. Most hole-nesting birds lay unmarked white eggs, but those of oxpeckers are well patterned, as are the eggs of their similarly hole-nesting starling cousins. Even when breeding, oxpeckers take advantage of their hosts, using copious plucked hair to form a base to their nests. They also engage in courtship and copulation while clinging to the animals.



The Red-billed Oxpecker is an evolutionary marvel and a conservation success story. The mutualism between oxpeckers and their mammalian hosts is a riveting example of ecological interrelationships. Oxpeckers are the world's only obligate mammal gleaners; in other words, they rely on pecking their food off living mammals. Virtually the entire natural history of these birds reflects adaptation to this unique lifestyle.

Historically, a series of relentless hammer blows reduced the original distribution and abundance of the Red-billed Oxpecker to remnants. Subsequent conservation interventions have heralded a resurgence of this remarkable creature and a welcome return to many of its ancestral haunts.

When breeding, oxpeckers pluck hair from their mammalian hosts to line their nests.

Bushveld burgher

This species is found in the eastern half of the Afrotropics from South Africa north to the Horn of Africa. It is absent from West Africa, which is curious as its congener, the Yellow-billed Oxpecker, with which it otherwise overlaps extensively, is widespread in that region. The Red-billed Oxpecker is largely a denizen of bushveld areas. It is absent from drier woodlands though, such as most of the Kalahari. This may be related to reduced humidity limiting its favoured tick prey, the mix of suitable ungulate hosts, its apparent need to drink water regularly, or a combination of some or all of these factors.

Avian Ezekiel

Another facet to the mutualism between oxpeckers and their hosts is the hissing alarm calls the birds emit whenever they spot potential predators, including humans, approaching them. The hosts are highly responsive to these warnings and typically take immediate evasive action. It is interesting that in areas where oxpeckers exploit domestic cattle, they often do not utter alarm calls when humans approach. This is apparently linked to the lack of response from these domestic animals, whereas they continue to give such warnings when on wild animals.



Homeward bound

The advent of the modern era was devastating to oxpeckers. The decimation of wild ungulates by hunters severely reduced the abundance of their hosts. This was particularly damaging where game-extermination programmes were implemented to eradicate sleeping sickness. The oxpeckers' recourse to domestic livestock partially compensated for the loss of game, but the rinderpest epidemic of the late 19th century devastated both livestock and wild ungulates. A further body blow came with the widespread dipping of cattle with arsenic-based pesticides. This reduced the oxpeckers' food and poisoned the birds directly.

By the middle of the 20th century, oxpecker populations had been greatly reduced and highly fragmented. The birds were restricted to large conservation areas, with remnant populations in rural areas where livestock dipping was not practised. In South Africa they disappeared locally from many areas and became completely extinct in the Eastern Cape. More recently, the introduction of 'bird-friendly' chemical dips has promoted a reversal in fortunes. An increase in protected areas, including large private game reserves, has probably also contributed to this renaissance. Re-introduction programmes have further brought the birds back to some of their former strongholds. This is most evident in the Eastern Cape, where the species is rapidly re-establishing itself following restoration efforts.

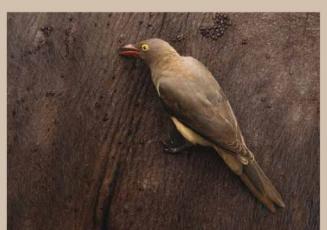
Buffaloes are favoured hosts as they are bulky and occur in large herds. Both factors maximise the food supply available to oxpeckers.



Black pudding

Oxpeckers feed primarily on the ticks that infest their hosts, although they will also take any mites, lice, leeches and biting flies that parasitise these animals. They harvest their prey using a 'scissoring' motion, especially on long-haired animals, and their beaks are flattened for this purpose. Larger ticks, though, are often simply plucked from the skin. The birds may play a critical role in the control of ectoparasites on their primary hosts.

A wide variety of ungulates serve as hosts, with regional variations. Favourites include giraffe, buffalo, rhino, zebra, impala, eland, kudu, roan and sable. Among the less favoured hosts are hippo, warthog, blue wildebeest, nyala and gemsbok. Some herbivorous mammals do not tolerate the attention of oxpeckers; notable among these are elephants, as well as waterbuck and bushbuck. Oxpeckers have not been recorded, or are rare, on other ungulates such as tsessebe, hartebeest, puku, lechwe, reedbuck, oribi, most (possibly all) gazelles and other smaller antelope. The birds adapt to cattle, which are now the primary hosts in many settled regions. Donkeys, mules, pigs and occasionally sheep and goats are also utilised. Camels seem to be mainly avoided and horses appear largely intolerant of the birds.



The nature of the oxpeckers' prey means that mammalian blood forms a large, indeed probably predominant, part of their diet. It is therefore not surprising that the birds will peck at wounds on their hosts to promote blood flow, which is then consumed directly. Although this helps keep sores clean, it may retard healing. Occasionally, oxpeckers will even tear through healthy skin to access blood. These actions seem to occur particularly on domestic stock and can elicit the ire of farmers. It seems worst where existing sores from harnessing gear is implicated and where stock animals are already in poor condition.

CORVID IDENTIFICATION GUIDE

Cape Crow *Corvus capensis*

Fairly common resident in grassland, open savanna, semi-arid shrubland, alien plantations and croplands.

Distribution: Throughout SA.

50 cm; 640 g; 32,5 cm wing length. Glossy black bird with a slender, pointed bill. Only all black corvid in the region. Omnivorous. Host of Great-spotted Cuckoo with 10% of nests parasitised.



Jess van Dort

Pied Crow *Corvus albus*

Resident bird (common to abundant) in a wide variety of habitats. Commonly associated with human habitation and settlements.

Distribution: Throughout SA.

49 cm; 550 g; 35 cm wing length. A black bird with white breast that extends into the collar and around the neck. The female has shorter/slender bills. Omnivorous.



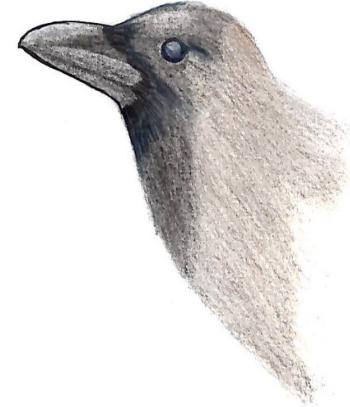
Josh Wenzel

House Crow *Corvus splendens*

Non-native bird introduced to SA in 1972 (Durban). Entirely urban species occurring in large flocks outside of breeding season.

Distribution: Durban, Cape Town.

43 cm; 300 g; 25 cm wing length. Smallest crow in region. Sooty grey breast and neck with the rest of the body black. Omnivorous.



Jess van Dort

White-necked Raven *Corvus albicollis*

Locally common resident found in pairs or alone. Occurs in mountainous areas, gorges, cliffs, and forages

Distribution: Throughout SA.

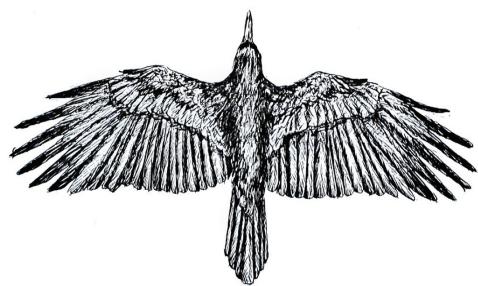
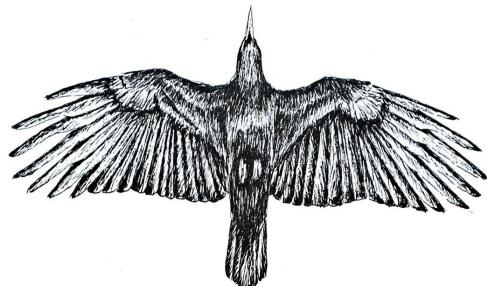
52 cm; 800 g; 40 cm wing length. Largest corvid in region. Thick and heavy bill with white tip. Overall black body with white collar behind the neck. Omnivorous



Josh Wenzel

CORVID IDENTIFICATION GUIDE

Cape Crow



Carina Meyer

Pied Crow



Lu-Anne Beukes

White-necked Raven

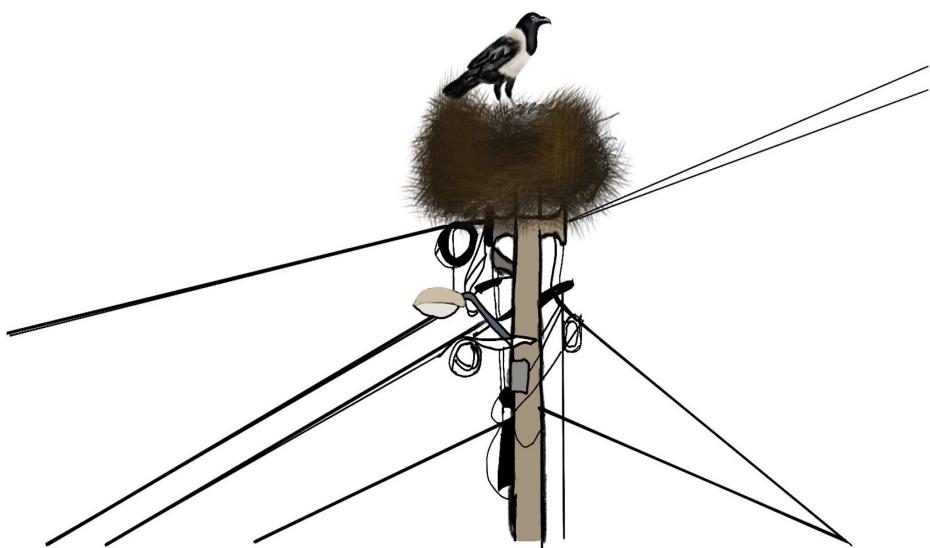


Clara Qualls

CORVID IDENTIFICATION GUIDE

Nesting (Pied Crow)

Nests are constructed by both sexes of sticks, twigs, and sometimes wire. Nests are frequently located on telephone poles or pylons and can be 3-30 m from the ground. 1-7 eggs are laid and incubated by the female for 18-19 days, and nestlings fledge after an additional 35-43 days.



Crows are monogamous and territorial, with nests separated by more than 200 m.

Elanie Snyman

Feeding

All corvids are omnivorous, but diet composition differs between the species. White-necked Ravens are the most carnivorous, while Pied Crows consume more plant material than others. All three of these species scavenge carrion from road kill and can often be encountered around a carcass or waiting for vehicles to pass.



Elanie Snyman

Blue Crane Population and Conservation Status

- Dr Christie Craig

Population Estimates and Distribution

The current South African Blue Crane population is estimated at approximately 51,000 birds (range 34,000-68,000), which is double the previous estimate from 2002 (25,502) and 2.5 times higher than the 1999 estimate (20,103). The population is distributed across three main regions:

- **Western Cape wheatlands:** ~31,530 birds (Overberg: 25,458; Swartland: 6,072)
- **Karoo:** ~16,464 birds
- **Eastern grasslands:** ~4,000 birds

A very small, isolated population (<50 birds) also exists in northern Namibia.

Population Trends

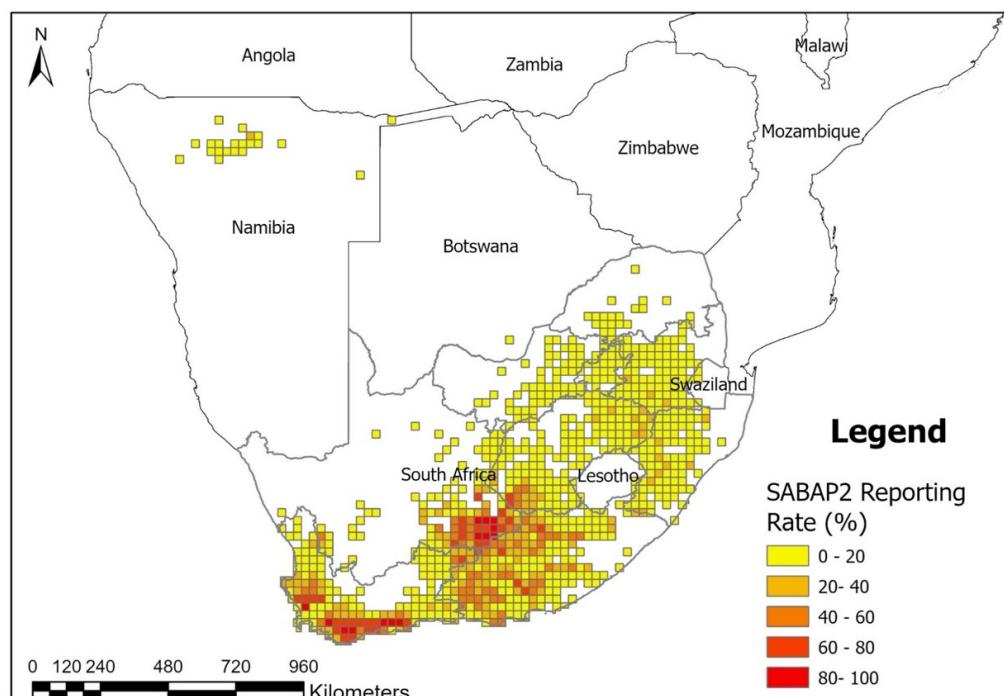
Analysis of long-term citizen science data reveals a complex picture:

- Overall increase of 24% between 2000 and 2019 across all areas
- However, a concerning trend reversal occurred around 2010, with summer counts declining by 19% from 2011-2019
- The Overberg region, which has the highest crane density, saw a significant decline of 22% from 2011 to 2019 after experiencing a 261% increase between 1994 and 2010
- The Swartland showed a 222% increase between 1997 and 2010 but has remained stable since
- The Northern Cape (Eastern Karoo) experienced significant declines of 49% since 2011
- Grassland populations show positive trends but with low statistical confidence due to small sample sizes

Range Changes

Between the Southern African Bird Atlas Project periods (SABAP1: 1987-1991 and SABAP2: 2007-present):

- 22% of areas that recorded Blue Cranes in SABAP1 no longer recorded them in SABAP2
- 18% of areas recorded Blue Cranes in SABAP2 but not in SABAP1
- This indicates a net range contraction of 4%
- Range loss is occurring predominantly in the grasslands (Free State and North West Provinces) and Namibia
- Range expansion is evident along the west coast and western fringes of the Karoo



Blue Crane reporting rates (%) for SABAP2 by QDGC.

Blue Crane Population and Conservation Status

- Dr Christie Craig

Seasonal Behaviour and Habitat Use

During winter, Blue Cranes form larger flocks and select pasture lands, especially lucern and lupin fields and areas near sheep feedlots.

Flock sizes are significantly larger in the Karoo than in the Western Cape, with flocks of up to 1,200 birds counted on irrigated lucerne fields in the Karoo. This preference for agricultural lands is a relatively recent development in the Karoo, coinciding with a 63% increase in irrigated pasture lands since 1990.

Conservation Concerns

Despite the overall population increase over three decades, several concerns are highlighted:

1. **Recent Population Decline:** The reversal from population growth to decline after 2010 is worrying, especially in the Overberg region, which supports the largest population.
2. **Potential Ecological Trap:** The cranes' preference for agricultural lands, particularly pastures, could become problematic if:
 - Farmers become less tolerant due to crop damage (sweet lupins in Swartland)
 - Disturbance at sheep feedlots increases tensions
 - Damage to irrigated pastures in the Karoo escalates farmer-crane conflict

3. Threats from Agricultural Practices:

- Potential for poisoning (both direct and indirect)
- Disease risks when cranes aggregate in large numbers, particularly at feedlots
- Avian influenza transmission between ostriches and cranes in the eastern Overberg

4. **Powerline Collisions:** Cumulative impact on immature cranes in both Western Cape and Karoo regions

Methodological Insights

The research utilized multiple data sources:

- Aerial surveys using distance sampling in the Western Cape and quadrat design in the Karoo
- Coordinated Avifaunal Roadcounts (CAR) data (1993-2019)
- Southern African Bird Atlas Project data (SABAP1 and SABAP2)

A flock of Blue Cranes in the Karoo (Cassie Carstens)



Blue Crane Population and Conservation Status

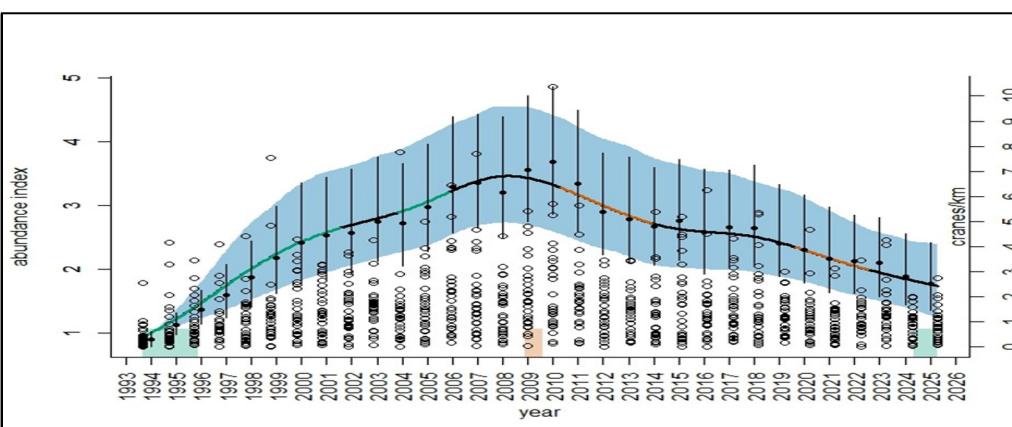
- Dr Christie Craig

Key methodological findings include:

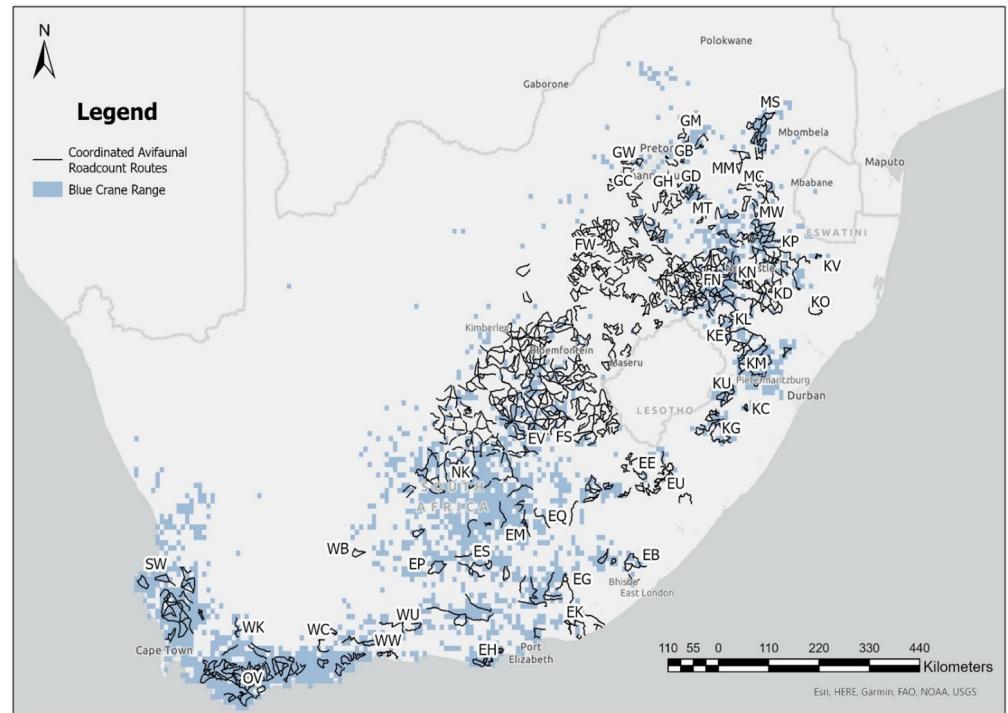
- Winter counts are more variable than summer counts due to crane aggregation
- CAR is effective for monitoring in areas with high crane densities but less reliable in areas with low densities
- SABAP reporting rates may not detect population changes in areas of very high crane density due to ceiling effects
- Within SABAP2 comparisons appear more sensitive to recent population changes than SABAP1 vs. SABAP2 comparisons

Recommendations

- Continuing and reviving CAR routes, particularly in the Western Cape and Karoo
- Investigating potential farmer-crane conflicts, especially in areas with large flocks
- Monitoring disease risks at aggregation sites
- Adapting future aerial survey methodology to a quadrat approach for better accuracy
- Encouraging regular bird atlassing in under-surveyed areas



The GAM models fitted in population trend for summer counts for all CAR precincts combined, between 2000 and 2019. The long-term trend is indicated by the solid black line with the 95% confidence intervals in blue, and the estimates of trend per years as the point, with the vertical lines indicating 95% confidence intervals.



Coordinated Avifaunal Road-count (CAR) routes (black lines; letters indicate the precinct), overlaid with the Blue Crane occurrence map from SABAP2 (blue shaded pentads).

Blue Cranes have successfully adapted to agricultural landscapes, but this adaptation may not be sustainable if socioeconomic conditions and agricultural practices change. Conservation in these dynamic landscapes requires ongoing monitoring and understanding of the social, economic, and political contexts that influence both the landscapes and the people who manage them.

Overberg Precinct Report - Summer 2025

- Donella Young

The January counts this year were the 64th CAR count in the Overberg! It is wonderful that the 30 teams of Overberg observers have been so dedicated, with many counting the same route for multiple years! This makes this long-term dataset covering 32 years so valuable. I checked on the first CAR newsletter in 1996, and five people mentioned there are still counting: Dave and Sue Whitelaw, Freya Brett, Jill Mortimer, and Wicus Leeuwner!

The count went smoothly, with mostly clear skies, and thankfully, most observers and spotters could count on the 18th. It was hot, but only a few people struggled with a heat haze. Several people commented on how dry it was, and Johan van Heerden's photographs below highlight the stark contrast between winter and summer in the Overberg. Pierre van den Berg, who has counted OV16 regularly for many years, remarked that there were fewer sheep on his route, so there were few feed troughs for birds to visit. Wicus Leeuwner usually records many Blue Crane chicks on his route, OV18, but he noted that it must have been a poor breeding season as many pairs had no chicks. I find it remarkable that Blue Cranes, previously mainly found in the grassland regions and breeding in a hot, wet summer, are now mainly in the Overberg breeding in a hot, dry summer.



Stuart McLennan, who counts OV06, drew my attention to the fact that the Excelsior wind farm is on his route. I hope some of you saw the Conservation Conversation presented with great enthusiasm about a BirdLife South Africa staff member who trained staff to look out for vulnerable bird species and immediately alert the Excelsior staff whenever any are present so that the turbines can be temporarily switched off. Stuart suggested that it would be interesting to look at OV06 data before and after the construction of the wind farm, and hopefully, this can be done by the CAR Working Group soon.

All 30 active routes in the precinct were counted. In total, 1,533 Blue Cranes were recorded for this count. I checked back to the January 2009 and 2010 counts when the summer density was at its highest, and 3463 Blue Cranes (2009) and 3561 Blue Cranes (2010) were counted on the same 30 routes (I excluded OV28, which is no longer active). In Table 2, the numbers counted over the past decade and a half point to great concerns about breeding success.

Table 2. Blue Crane numbers along selected routes (adult | immature | juvenile)

Route	January 2009	January 2010	January 2025
OV06	78 14 2	121 17 12	40 8 2
OV14	150 28 3	105 22 11	171 10 3
OV18	198 5 21	237 16 7	84 11 0

Not a single Southern Black Korhaan was recorded this count. The totals for some of the other species are Denham's Bustard (32), Secretarybird (7), Karoo Korhaan (10), White Stork (175), Black Harrier (11), Common (Steppe) Buzzard (365), Jackal Buzzard (168), Black-winged Kite (52), Black-headed Heron (268). It is great that the Black-headed Heron numbers are up again, with 32 on OV13 and 24 on OV14. Charles Britz saw the only three PCGs on OV05. Ross Soller saw an African Marsh Harrier on OV13, and Wicus Leeuwner recorded two on OV18. Steve and Leo Peck (OV10) and Tonia and Flip Schonken (OV21) recorded Booted Eagle.

Overberg Precinct Report - Summer 2025

- Donella Young

Sadly, Lee Burman is no longer well enough to count her route, OV17, near Hermanus. Thank you so much, Lee, for being a dedicated Route leader, counting this route since July 1998. Thankfully, Barbara Swart, who has counted with Lee for many years, is now leading OV17. Thank you to Ross Soller, who is not new to CAR but is now route leader for OV13, as Willemina van der Harst-de Wet has moved to Bredasdorp and plans to assist there. Welcome to Grant Forbes of Overberg Renosterveld Trust, who is now leading OV12.



Blue Crane pair with chick (Kina Joubert)

A big thank you to you all for effortlessly dealing with the new road count forms, the new website and data capture system, as well as the updated information sheets. Huge thanks to Michael Brooks, FitzPatrick Institute of African Ornithology, for all his work on the website and data capture and Christie Craig, Endangered Wildlife Trust, for updating the road count form and the CAR Working Group for all their input and editing, as well as

Tania Anderson, FitzPatrick Institute of African Ornithology, for all her support and encouragement. I am so thankful that Sally Hofmeyr, also at FitzPatrick Institute of African Ornithology, is assisting with CAR now.

Many thanks to all of you who captured your route results online. I am delighted that several of you did your data capture for the first time! This makes a huge difference. Thankfully, Francis Hannay is still willing to capture on behalf of those who can't. A big thank you to Sally Adam and Pam Elof for their help organising the counts in the East Overberg, north of the Breede River, capturing some routes, and checking data capture.



Janlu Nieuwoudt and Ben de Wet along OV12 (Grant Forbes)

This is my last report. For many reasons, I can no longer coordinate the overall operations of the Overberg routes. I will only have time to organise the counts on 10 routes and still help as part of the CAR Working Group. In April, I will hand over the overall coordination to Christie Craig, EWT, who will be the new Precinct Organiser for the Overberg precinct. I have appreciated being in touch with you all again.



Common Buzzard and Karoo Korhaan (Steve Peck)

Bloemfontein-Kimberley Precinct Report - Winter 2024

- Brian Colahan

Conditions were reasonable the last weekend of July 2024 when 25 routes covering 1,758.9 km were surveyed in the Bloemfontein-Kimberley Precinct by 46 observers, five of whom tackled more than one route (Table 1). 2,384 birds were counted (135.5/100 km), far more than the previous winter when conditions were atrocious (1 511, 103/100 km).

The high number was mainly because of the 978 Spur-winged geese seen (469 in 2023), with 518 of them counted along FS48 (S of Dealesville) by Marietjie Jordaan and her team.

There were also far more Northern Black Korhaans (342, 19.4/100 km vs 156, 10.6/100 km) and vultures (90, 5.1/100 km vs 29, 2.0/100 km). Of the Red Data species there were unfortunately far fewer: Secretarybirds (26, 1.5/100 km vs 59, 4.0/10 km), but more Blue Cranes (230, 13.1/100 km vs 153, 10.4/100 km) with 124 of them seen along FS60 (SW of Koffiefontein) by Coenie Erasmus's team. Only 22 Ludwig's Bustards were recorded (1.3/100 km vs 11, 0.8/100 km), along just three routes with 17 spotted by Annelie van der Vyfer and Lizette de Coning (FS54, just S of the Modder River).

ROUTE	ROUTE LEADER	OBS	km	SEC	BC	UK	NBK	WBV	PCG	BSKT	PICW	SG	BHH	OTHER SPECIES	
FS17	Brian Colahan	1	74.9		2	10	28		6	1	24	41	1		
FS18	Louise Coetzee	1	73.3	2	38		1		1	1	20	5	1		
FS19	Lanél Pietersen	3	84.0			2	26		1	5	28		1		
FS20	Angelo Nichas	4	64.5				8		5	6	42		1	1JKBZ	
FS21	Jos Josling	2	61.7				21			4	17		1		
FS31	Johan van Niekerk	1	72.2		2	5	6				29	2		2LB	
FS40	Suzanne Erasmus	4	72.0				4	1	6		35		1		
FS41	Heidi Folscher	1	69.3	1	5		2	17	2	4	18	150	4		
FS42	Heidi Folscher	1	65.5		14		10	17	3		47	71			
FS43	Nacelle Collins	1	77.6	1			49					15			
FS45	Frans Marais	2	77.2							2	3	73			
FS47	Brian Colahan	1	77.6	1	45	3	57			2	2		1	6UGV	
FS48	Marietjie Jordaan	3	69.5	2			30		3	3	32	518	1		
FS54	Annelie van der Vyfer	2	59.3	2			30		6	1	8		3	17LB, 8CV	
FS55	Anthony Orrock	4	56.4				11		2	1	37			2UGV	
FS56	Fanie Buys	2	70.2	6			21	32			24		3		
FS58	Suzanne Erasmus	4	82.5				11	1	3	3	34				
FS60	Coenie Erasmus	2	67.6		124		4	6	3	3	7	24		3LB	
FS65	Niel Pienaar	2	51.4				2				4	2	1		
FS68	Daan Müller	2	64.4	5		1	2				47	2	4		
FS103	Fritz Krohn	2	51.5						2	3	9		3		
FS106	Dawie de Swardt	2	51.0				4		2		4		2		
FS117	Eric Schroeder	2	67.5	2			2		1		27	43	1		
FS122	Lourens Goosen	2	65.4	1			2		1	6	8		2		
FS130	Brian Colahan	2	46.9	3			15		1	1	28	47			
TOTALS		53	1758.9	26	230	21	342	74	48	46	549	978	31	22LB, 8CV, 8UGV, 1JKBZ	
Birds/100 km					1.5	13.1	1.2	19.4	4.2	2.7	2.6	31.2	55.6	1.8	

Monitoring Antelope through the Coordinated Avifaunal Road Counts

- Dr Alan Lee

For over three decades, you—our dedicated volunteers—have been collecting invaluable data on South Africa's large terrestrial birds as part of the Coordinated Avifaunal Roadcount (CAR). Since 2012, many of you have also taken note of select mammal species, particularly Steenbok, Cape Grysok, Grey (Vaal) Rhebok, and Oribi. Your efforts have helped us understand how these antelope fare across different regions and times of the year. Below is a summary of our latest findings, along with a reminder of the critical role you play in the success of CAR.

Four Focal Antelope Species

Steenbok (*Raphicerus campestris*)

Steenbok emerged as the most frequently recorded antelope, with more than 2,000 individuals counted. We found a slight increase in the probability of detecting them over the last decade—suggesting you're more likely to see Steenbok now compared to the earlier years of this monitoring effort. However, total abundance did not show a strong trend, indicating that while Steenbok remain relatively common, overall numbers have held steady. Notably, winter surveys recorded fewer Steenbok, possibly reflecting changes in visibility or foraging behaviour in colder months.

Fun Fact: Steenbok are known for their solitary habits. Indeed, the average group size observed was just **1.42** animals, reflecting this small, often single-pair structure.

Grey (Vaal) Rhebok (*Pelea capreolus*)

Grey Rhebok showed the most encouraging signs of growth in both detectability and numbers. Analyses point to a moderate but consistent positive trend, suggesting that—at least on surveyed routes—Grey Rhebok populations may be increasing or more reliably encountered than in previous years. Although they favour rugged, high-altitude habitats, your observations confirm that Grey Rhebok can thrive across multiple precincts when conditions permit.

Did You Know? The average Grey Rhebok group size was nearly **3.8** individuals, notably larger than Steenbok or Cape Grysok groups.



Cape Grysok (Alan Lee)

Cape Grysok (*Raphicerus melanotis*)

By contrast, Cape Grysok was recorded far less frequently, and we found no clear trend in detection or abundance. Low sample sizes likely make it difficult to detect subtle population shifts. Cape Grysok prefer dense cover and can be quite elusive, so your sightings of this small browser are especially valuable. Future efforts, including better habitat mapping and targeted community outreach, could provide more robust data.

Tip: If your route includes fynbos or renosterveld, keep an extra-sharp lookout in early mornings or late afternoons, when Cape Grysok might be more active.

Oribi (*Ourebia ourebi*)

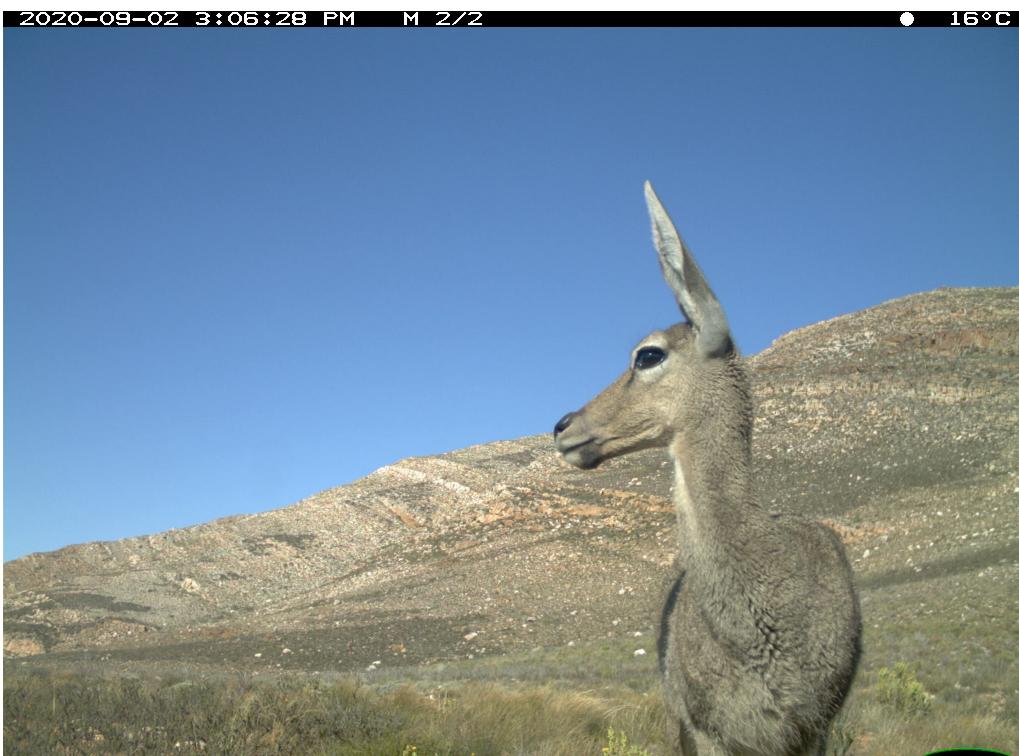
Oribi, a grassland specialist, remains patchily distributed, with only 172 total sightings since 2012. Interestingly, winter surveys yielded higher detection rates—likely reflecting changes in vegetation height or movement patterns during cooler months. We did not observe a significant change in Oribi numbers over time, but

Monitoring Antelope through the Coordinated Avifaunal Road Counts

- Dr Alan Lee

your continued participation is critical given the species' vulnerability to habitat fragmentation and poaching, particularly outside formally protected areas.

Conservation Note: Oribi depend on intact grasslands. Your data provide an early warning system for habitat changes in farmland and communal lands where Oribi occur.



Grey Rhebok (Alan Lee)

.How Do These Findings Help?

1. **Regional Management:** The variability among precincts, captured by the random effects in our models, shows that localized conditions matter. Land-use practices, vegetation types, and even road networks can create unique pockets of habitat or risk.
2. **Adaptive Monitoring:** Confirming that some species (Steenbok, Grey Rhebok) remain stable or are even increasing is good news. Where data are sparse (Cape Grysbok, Oribi), your reports can help bridge these gaps, enabling early detection of declines if they occur.
3. **Policy Influence:** CAR data isn't just academic, it can guide how conservation agencies like CapeNature focus their resources, from prioritizing landowner engagement in specific precincts to informing reintroduction or protection efforts for vulnerable species.

Looking Ahead: Your Role Is More Important Than Ever

- **Keep Counting:** Even if you're primarily "birders," continue to log mammal sightings during your routes. Every observation especially of Cape Grysbok or Oribi helps fill crucial knowledge gaps.
- **Share Experiences:** If you come across interesting antelope behaviour, unusual sightings, or local habitat changes, let your precinct organizer know. Anecdotal observations often spark deeper investigations.

A Word of Thanks

We appreciate every kilometer you drive and every form you submit. With participation dipping in some areas in recent years, your continued commitment can help maintain robust datasets, allowing us to track both birds and mammals over time. Thank you for being part of this **remarkable long-term conservation effort**.

Brian Colahan - The Hero of CAR

- Cassie Carstens

For 27 years he has been taking part. For 27 years Brian Colahan has been picking up his binoculars and datasheets, packing his car, and heading out to record birds. And over that time, he has completed and submitted 229 surveys for the Coordinated Avifaunal Road Counts (CAR), almost 100 more than the person in second place! He truly is the hero of CAR! But who is this suave surveyor? Where does this avid avifaunal expert come from? And how did this champion of CAR participate so many times? To find out, I bombarded him with some questions.

CC: Where were you born and where do you currently reside?

BC: I am a “Rhodesian refugee” and was born in Salisbury (Harare); I now live in Bloemfontein.

CC: What is your occupation?

BC: I am retired but was ornithologist in the Environmental Affairs section of the Free State Provincial Government until the end of 2018.

CC: How long have you been a birder?

BC: I must have been about 10 when I was given my first pair of binoculars: an old pair of Perl 6x25s, made in France. My first field guide was Gill’s *A first Guide to South African Birds* which wasn’t very satisfactory, but which was soon replaced with a Roberts.

CC: What are your first memories of birds/birding?

BC: I can still recall a Common Fiscal nest I found in our garden when I was five; the nest material included pieces of balloons from a recent birthday party.

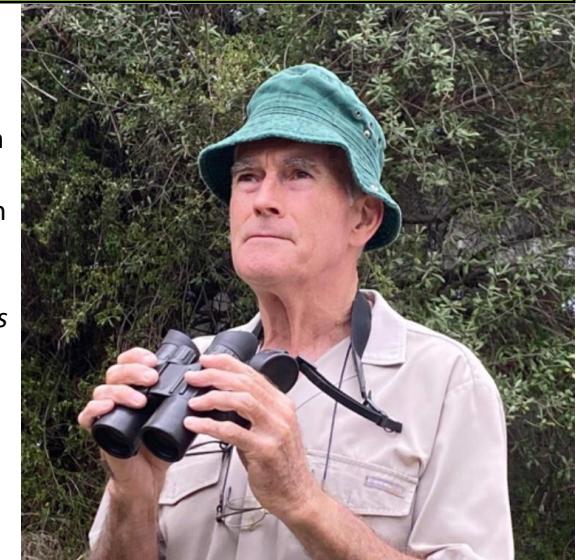
CC: How did you manage to complete the number of surveys that you did?

BC: While working for the Free State Provincial Government, I was able to take on the supervision of Coordinated Avifaunal Road Counts in the Free State as an official project in 1998; I initially surveyed just one of two routes per weekend count, but with the expansion of the Southern Free State precinct, it became difficult making sure that the routes were covered for each count. I was able to take over some of these myself and surveyed them over the following week. So, most of my surveys were not done as a “citizen scientist” but as an employee of the provincial

government! However, I must add that the ornithologist post I vacated in 2018 is still vacant and that the large Southern Free State precinct in which I was active has now been reduced to one between Bloemfontein and Kimberley.

CC: Do any of the routes stand out as favourites?

BC: I always did FS118 on the Saturday of a CAR weekend; this starts between Luckhoff and Philippolis and ends W of the latter. This route always had Blue Cranes (655 in the 2013 winter survey) and usually also some Ludwig’s Bustards and Secretarybirds.



CC: Did the landscape change throughout the years that you were doing the surveys? If so, how?

BC: The Southern Free State precinct I was active in was mostly commercial farmland used for sheep farming; this has fortunately not changed over the years. The routes in the other two precincts I supervised, Northeastern Free State and Northwestern Free State, were mostly unchanged while still active. However, the roads in all three precincts got steadily worse!

CC: Did you have regular companions who accompanied you?

BC: I didn’t have an assistant when working for the Provincial Government so I was on my own for most surveys, but for ones done on a Sunday I usually had (and still have) my daughter, Deirdré, assisting.

CC: Which birds did you most look forward to seeing on the surveys?

BC: Always a pleasure to see any of the Red Data species!

Brian Colahan - The Hero of CAR

- Cassie Carstens

CC: How many bird species have you recorded in South Africa?

BC: I am embarrassed to admit that I have never kept a list of the species I've seen in South Africa -- too lazy?!

CC: Do you have any favourite birds in South Africa?

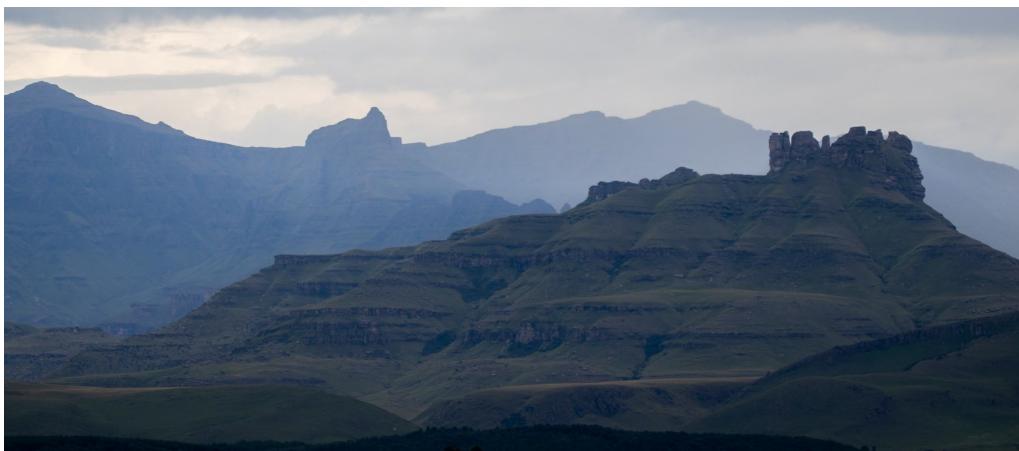
BC: That's a difficult one to answer, but I really do enjoy watching and listening to the male African Paradise Flycatcher.

CC: What do you feel is the value of CAR surveys?

BC: Repeated surveys along set routes provides an effective way of monitoring the populations of certain birds, especially our threatened, large terrestrial species.

CC: How would you encourage those who have never participated to start doing so?

BC: A CAR survey is usually an interesting and enjoyable outing, during which one is collecting valuable data; and, even if you see only one or two of the species being monitored, the results of a properly done survey will still be of value.



Garden Castle in the Central Drakensberg seen from KU03 in Underberg (Cassie Carstens)

WINTER 2025

**The next CAR survey will take place
26-27 July 2025.**

SUBMISSIONS

Should you like to submit a story, some pictures, or in depth data analysis to the CAR newsletter, please do so by emailing Tania Anderson at sabap2@birdlife.org.za, and she will forward it to the editor.

Limit your article to 1,000 words, and send you images at the highest quality in .jpg-format. Credit will be provided to the photographer.

Submission deadlines are 30-days after each count.

For more information about CAR visit:
<https://car.birdmap.africa/>

This newsletter was published in March 2025 by the CAR Working Group consisting of members from SANBI, The FitzPatrick Institute of African Ornithology, BirdLife South Africa, and the Endangered Wildlife Trust.