

FOURTEENTH ANNUAL REPORT

TITLE OF PROJECT

Coordinated Avifaunal Roadcounts (CAR)

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OBJECTIVES

Developed countries have appreciated for some time that the future of many species depends as much, or more, on privately owned land, and its management, as on formal nature reserves. In South Africa this is no less the case because so many bird species need to forage and range over large areas – much larger than most nature reserves – to survive. South Africa has only recently begun to make this paradigm shift, but the important role of the private landowner and, in particular, the farmer, is rapidly becoming clear. CAR helps to establish the link between privately owned land and nature conservation. Its long-term contribution will be in providing the scientific basis for the modification of land-management practices to ensure the survival of wild birds.

The objectives of CAR include the following:

- 1) Monitor the populations of a wide range of appropriate medium to large terrestrial species in diverse agricultural districts throughout the country, by means of regular summer and winter road-counts.
- 2) Collect data on habitat associations and age classes to provide greater insights into the biology and population dynamics of each species.
- 3) Produce annual indices of relative abundance for each species, by district and across districts, which will allow the monitoring of short-term variation and long-term trends in population strength. These results will specifically be made available to DEA&T for use in their "State of the Environment" reports.
- 4) Use the results to formulate proposals on ways in which landowners can modify their management practices to the advantage of sensitive and valuable species of wild birds.
- 5) Involve local communities in monitoring, thus engendering a positive attitude towards the conservation of 'their' birds.
- 6) Communicate findings to the broader community through scientific papers, reports, articles in popular media and, in addition, liaise with conservation agencies and lobbies to have the findings made known as widely as possible to the relevant people, i.e. landowners.

Some key questions which will guide the research effort are:

- 1) What is the trend in the population of a given species in a given area? What are the underlying reasons for the trends?
- 2) Are the trends in different parts of the country similar or different? Why?
- 3) What seasonal pattern is evident in a species' utilization of an area?
- 4) What are a given species' primary and secondary habitat associations, particularly with regard to agricultural habitats?
- 5) Are the habitat associations linked to particular age classes or breeding activities, and what are the implications for the population dynamics of the species?

- 6) Are the requirements of different species, with comparable conservation priority, compatible or conflicting within a given area?
- 7) What options are open to landowners to modify their land-use practices to enhance the conservation status of particular species within their area?

CURRENT REPORTING PERIOD

Fourteenth Year: 2006/2007

The fourteenth year was incredibly busy, partly due to the Big Birds on Farms project funded by the Critical Ecosystem Partnership Fund. This project has taken CAR a step further with increased consultation with landowners, the agricultural sector, conservationists and colleagues and the further development of practical measures that farmers can take leading towards the conservation of biodiversity.

Hugues Leray, a volunteer from France, did incredible work from May to June 2007 designing queries for a summarized CAR database with Rene Navarro's help. I am most grateful to Hugues for his time and skills and to Pierre van den Berg, an Overberg observer for many years, through whom I heard about Hugues' desire to work in South Africa for a few months. As eighteen of the species CAR is monitoring are threatened species with Red Data Status, it is most important to make the results available online as soon as possible. There are now 46 precincts, 6600 roadcounts and altogether 36 different species are recorded on the database.

Prideel Majiedt, who worked at the ADU last year, made excellent progress with capturing the new routes established since the 1993-2001 report onto GIS (Geographical Information System). The GIS length of routes is needed to calculate birds per 100 km, as odometers vary considerably. With habitat information being available electronically it is very helpful to have the CAR routes on GIS. It helped enormously to obtain the 1:250 000 maps electronically from the Map Office.

Although the initiation of new CAR routes was not actively encouraged in 2006/2007 due to the need to consolidate and analyse existing data, growth did continue. After reconnaissance counts in July 2006 Brian Guerin and John Broodryk initiated three routes in the Kruger National Park in 2007, these are the first CAR routes in the Savannah biome. Two routes were established by the Robertson Bird Club between Montagu and the N1 in January 2007, thus increasing the routes in the Little Karoo.

The ongoing search for funding for CAR has continued. It has helped enormously that the South African National Biodiversity Institute's (SANBI) provided core funding for CAR through the Birds and Environmental Change Partnership. A review of the CAR project by SANBI took place in August 2007 and we have just heard that we will receive funding for 2008. The African Bird Club Conservation Award was also most helpful and thankfully this organisation has agreed to make an exception and donate funding to CAR for a further year. Funding from the Darwin Initiative project 15/002 and from the Critical Ecosystem Partnership Fund will also continue this year. Funding for publication of the booklet and poster that are part of the Big Birds on Farms project still needs to be sourced.

Funding is still being sought for a Blue Crane genetics research project involving collaboration with the South African Crane Working Group (SACWG), Overberg Crane

Working Group, the Namibian Crane Working Group, Percy FitzPatrick Institute of African Ornithology, nature conservation agencies, Oregon State University, International Crane Foundation, Wildlife Biological Resource Centre, University of KwaZulu-Natal and University of Heidelberg.

The Tony and Lisette Lewis Foundation South Africa has been a consistent sponsor of the ADU. We are most grateful to Strand Rotary, the Howick Birding Group, Birdlife Border and the Somerset West Bird Club for their generous donations in 2007. The support by other individual CAR participants has been much appreciated, including creative efforts like a sponsorship form and selling a calendar made of bird photos. Restio Energy provided accommodation for Hugues Leray.

In February 2007, an introduction to the Big Birds on Farms project was given at the Overberg Integrated Conservation Group Quarterly meeting in Bredasdorp, where representatives from the agricultural sector, Cape Nature, municipalities, Agulhas Biodiversity Initiative and CAPE were present. In preparation for a workshop I gathered information about land use, agricultural practices, land cover and weather in different regions of the Cape Floristic Region (CFR). In May James Harrison and I presented this information and the trends in bird numbers and facilitated the workshop at the ADU with representatives from the agricultural community and conservation. We appreciated the experience and insights of participants in interpreting the trends and developing recommendations for best practice in land management. In August I gave a presentation at the Agri Mega Week in Bredasdorp and interviewed farmers using a questionnaire exploring the understanding of concept of biodiversity and practical measures for the stewardship of biodiversity.

Links with participating and partner organizations were maintained. A presentation of crane results was given in March at the Overberg Crane Group AGM and in September at the annual SACWG Workshop held in KwaZulu-Natal. A presentation on CAR and practical measures for conserving biodiversity was given to the Howick Birding Group. In June Dr Richard Pettifor, of the Zoological Society of London, collected a copy of the CAR database for analysis for the Darwin Initiative project 15/002. In May 2007 the Project Coordinator attended the CAPE conference, 'Nurturing partnerships for lasting benefit'. At this conference the ADU received an award from CAPE for promoting private sector and community involvement in conservation. The brochure produced by CAPE encouraging people at home, in the workplace and at school to leave as small and 'green' a footprint as possible was distributed with the CAR newsletter in June. In October a presentation was given to the Strand Rotary Club about the project in acknowledgement of their donation.

Articles about CAR were published in bird club newsletters, and in the CAPE book *Fynbos fynmense: people making biodiversity work*. Data requests were received from the Bald Ibis project and the Oribi and Ground Hornbill Working Groups.

Newsletters 21 and 22, giving feedback on the 2006 winter and 2007 summer counts respectively, were sent to all participants. Newsletter 21 also included practical ways of conserving energy and natural resources, and a section on 'Sustainability, Farmland Bird Index and the role of birdwatchers'. These newsletters are available at the foot of the CAR webpage, as well as interim reports compiled about two months after each count.

The winter count took place on Saturday, 29 July 2006 in fine weather throughout the country. Participants were encouraged to take older children or farm workers or city dwellers with them to have help counting and increase awareness. The summer count took place on Saturday, 27 January 2007. The following precincts were acknowledged for completing ten years of monitoring: Overberg, Eastern Karoo, Swartland, eight KwaZulu-Natal precincts and Southern and Northeastern Free State. Linda Tsipa captured the winter count data and Denise Lesch captured most of the January count data.

Western Cape

Overberg

Conditions were lush with full dams and rivers for the winter 2006 count. Some changes in habitat were noted on routes OV05 (loss of natural habitat due to crop cultivation), OV13 and OV17 (establishment of vineyards). An all time record of 94 Denham's Bustard on OV13 was recorded. White Storks over-wintered on OV23 for the second time. White Storks were absent, or numbers were low on most routes for the summer 2007 count, apart from three routes with more than 100 birds. The Spur-winged Goose density however was at an all time high.

Swartland

After a number of dry winters this region had good rains in 2006. Gas cannons were used to scare birds on OV05, particularly Spur-winged Goose. Farmers are experiencing problems with the increased number of cranes and a farmer mentioned that his neighbour had bought a gas cannon. Ten White Storks were recorded in this region during the summer 2007 count.

Beaufort West Precinct: Four Black Storks were recorded on WB02 in January 2007 count.

Little Karoo Precinct: A new route, WK03, that was reconnoissanced a few years ago was counted in July 2006 and had 38 Blue Cranes. In January 2007 another two routes were established between Montagu and the N1 after trial counts in 2006.

Uniondale Precinct: Natalie Baker, of Cape Nature and the Precinct Organiser, held a successful training session for the Cape Nature route leaders and acknowledged the assistance of the Lakes Bird Club members on the Uniondale routes. Eleven Ludwig's Bustards were seen on WU05 in July 2006.

Calitzdorp precinct: Bird numbers were particularly low in winter 2006, probably due to the low rainfall. In January 2007 an area under lucerne where Denham's Bustard were regularly seen has been replaced by maize.

Northern Cape

Karoo Precinct: In winter 2006 large numbers of Blue Cranes were seen on several routes, with the overall density being the third highest since counts began in 1995. The data from this region is being analysed by Ute Stenkewitz and Mark Anderson, the Precinct Organiser, and there are indications that the Ludwig's Bustard population is declining and also that the presence of this species is strongly correlated with rainfall (and therefore food). A scientific article "Rainfall in arid zones: predicting effects of climate change on the population ecology of Blue Cranes (*Anthropoides paradiseus*)" has been submitted by Mark and Dr Res Altwegg, of the Animal Demography Unit.

KwaZulu-Natal

In July 2006 the Grey Crowned Crane density was at an all time high, with the vast majority occurring in the East Griqualand precinct. There were large amounts of maize stubble throughout the Midlands precinct, much of it ploughed. Most of the first half of KM03 was recently burnt, as well as the last 20 km, which explains the presence of 34 Black-headed herons in the first half. Over-wintering White Storks were recorded on five routes. The Ladysmith area experienced the coldest winter in 20 years.

The summer 2007 count was hot and the grass very tall in most of the province after good rains. Helmeted Guineafowl and Oribi numbers were particularly low, probably due to the consequent reduced visibility. A pair of Wattled Cranes was recorded on KM08 for the first time since summer 1998. This was the last count coordinated by Val and John Baxter, who are moving. Brian Byers has taken over coordination of this precinct.

Free State

Spur-winged Geese numbers exceeded all other species in all three precincts for the winter 2006 count. Blue Korhaan numbers were high with 24 routes recording more than 10 birds. Two Abdim's Storks over-wintered on FW57, this is the first time this species has been recorded in winter since CAR began.

The summer 2007 count was the twentieth count in the southern and northeastern Free State precincts. Brian Colahan, Principal Ornithologist of the Free State Tourism, Environment & Economic Affairs, has set up about 240 routes in this period. The Spur-winged Geese density was much higher than in recent summers. In the southern Free State the Northern Black Korhaan was the most abundant species, although numbers were lower than usual. On FN35 there were more maize fields than in the past and much less natural habitat was available. White Stork numbers were particularly low in the northeastern and northwestern precincts.

Mpumalanga

Steenkampsberg precinct: There were ideal conditions for the winter 2006 count with the grass generally short and many mown fields. However apart from Southern Bald Ibis, Black-headed Heron and Helmeted Guineafowl bird numbers were generally below average.

Denham's Bustard were recorded on three routes for the summer 2007 count, but White Stork and Helmeted Guineafowl numbers were particularly low.

Middleburg precinct: Only one route, MM01, was counted for both counts.

Wakkerstroom precinct: MW02 and MW04 were changed to include more representative habitat for the July 2006 count and re-numbered MW08 and MW09 respectively. A record number of Grey Crowned Cranes (120) were recorded on MW06! During the summer 2007 count huge areas of grassland were being cut and baled. Maize cultivation was evident in low lying ground or right up to wetlands in many places. One of these major areas was up at Heyshope Dam where Grey Crowned Crane flocks were always found, but were absent during this count.

Standerton precinct: Six White Stork were on MT03 in July 2006. Blue Crane numbers were low in summer 2007 count with only two on MT01.

Chrissiesmeer precinct: Despite a beautiful day, bird numbers were low in winter 2006. There is much concern in the community regarding the threat of mining for coal and sand quarrying in this area as well as the Wakkerstroom area where there are pristine grasslands. Chrissiesmeer is the largest lake system in South Africa with 270 lakes, so the monitoring by CAR as well as CWAC is vital.

Kruger Precinct: Three routes were reconnoitred in the Kruger National Park by members of the Lowveld Bird Club. John Broodryk, Chairperson, and Brian Guerin set these up and Brian now coordinates this precinct. These are the first CAR routes in the savannah biome. Three stork species were recorded, Woolly-necked, Saddle-billed and Yellow-billed Storks. Some minor adjustments to these routes were made before the summer 2007 count.

Eastern Cape: The winter 2006 count conditions were good and the results reflect the rains received in most areas. The densities of a number of species were at or close to record levels. There was a notable change in land use on EB03. Two Black Storks were seen on EP04 and one on EH05. Four Wattled Cranes were recorded on EE01. ES05 was incomplete due to impassable muddy conditions.

In January 2007 there were severe storms in the Border precinct the day prior to the count. EB04 was aborted at 39.4 km due to pouring rain and mist, while counting on EH06 was hampered by rain and poor visibility. Nine Southern Bald Ibis were seen on EE11. A Southern Ground Hornbill was heard on EK05, near Alexandria. A farm worker whom the route leaders spoke to confirmed this and reported seeing a pair in December.

Gauteng

Craig Whittington-Jones, of the Gauteng Department of Agriculture, Conservation and Environment who coordinates this precinct began a newsletter called “Memorable order of the under-appreciated Laughing Dove” or MOULD for participants. The network of CAR routes has expanded to 25 routes within six precincts, covering 1235 km and involving 45 volunteers.

In the July 2006 count the Devon precinct produced the highest density of Blue Cranes, Secretarybirds and Black-headed Herons in the province while White Storks, Northern Black Korhaans and Spur-winged Geese were most commonly recorded in the Carletonville precinct. White-bellied Korhaan were only recorded in the Cradle of Humankind World Heritage Site, which also had the highest density of Helmeted Guineafowl though good numbers of this species were recorded along several routes. Unfortunately not all counters were informed of the need to count Helmeted Guineafowl, hence the lack of data for this species along certain routes.

During the January 2007 count Abdim's Storks were recorded in three of precincts, with 36 seen on GW01. Diane Rose saw two White-bellied Korhaan on GD03.

HISTORY OF THE PROJECT

First two years: 1993/94

CAR began on a small scale in July 1993 as a project to monitor the populations of two Red Data (Barnes 2000) species, namely the Blue Crane *Anthropoides paradiseus* and Stanley's Bustard *Neotis denhami stanleyi*, in the Overberg region of the Western Cape Province. The Overberg project can be seen as a pilot study for an expanded CAR project. The project was initiated by David Allan of the ADU, and was carried out with the assistance of volunteers drawn from the Cape Bird Club. Summer and winter counts in December and July respectively have since been carried out, on a regular basis, without interruption.

A method of conducting road-counts was designed involving a number of fixed routes, of between 50 and 80 km in length, all being covered on one day in midsummer and midwinter, every year. Covering a route involves making observations while travelling at 50 km/hr and stopping whenever a target bird is seen, and also at regular 2 km intervals, to scan and count. Details of sightings are recorded on a form, i.e. the locality, number of birds, their activity and any details of breeding. In addition, details of habitat are recorded.

A series of CAR newsletters was begun to provide further instructions and feedback, in addition to regular feedback in *Bird Numbers* (the ADU newsletter) and *Promerops* (the Cape Bird Club newsletter). Results were presented in Allan (1994b, 1994c, 1995). Several local community members became involved in the Overberg counts and they, in turn, provided a direct feedback loop to all sectors of their community.

The feasibility of the project, and the reliability and usefulness of the results, were assessed. The project was refined and established as an ongoing monitoring exercise.

Third year: 1995/96

The Overberg pilot study was expanded to include a wider range of relevant birds which are easily seen from a moving vehicle and from the roadside, i.e. the Secretarybird *Sagittarius serpentarius* and White Stork *Ciconia ciconia*.

CAR became a joint project of the ADU and BirdLife SA. Also the geographical scope of CAR was expanded to include the Swartland in the Western Cape, with assistance from the Cape Bird Club and from Western Cape Nature Conservation. Mr Tim Wood of the Natal Bird Club began setting up the infrastructure in KwaZulu-Natal to form CAR precincts. Mr Mark Anderson, ornithologist for the Northern Cape Nature Conservation Service, initiated the Karoo Large Terrestrial Bird Survey in the De Aar district with excellent participation by local farmers. Les Underhill, Director of ADU, spoke about CAR in De Aar in January 1996.

Fourth year: 1996/97

The project continued to grow with routes being counted in KwaZulu-Natal for the first time. All cranes, all storks, all large bustards (Kori, Ludwig's and Stanley's) and Secretarybirds were counted and Blackheaded Heron, Spurwinged Goose and Ground Hornbill were included. It was decided that the addition of further species would be done on a precinct-by-precinct basis depending on local conditions.

Mrs Wendy Hitchcock was appointed as CAR coordinator in June 1996, but moved to a post in education at the National Botanical Institute, Kirstenbosch, early in 1997.

The winter count took place in July 1996. Routes were covered in the Overberg, Swartland, Karoo and KwaZulu-Natal Midlands precincts. The summer count took place on 2 December 1996 in the Overberg and Swartland. The Karoo and KwaZulu-Natal counts took place on 25 January 1997. The need to have all CAR counts carried out on the same day was prioritized.

Western Cape

Overberg precinct: In winter 1996, 18 routes were counted and in summer two of the longest routes were divided, giving a total of 20 routes. A total of 1561 km was surveyed.

Swartland precinct: In winter 1996, 10, and in summer 12 routes were covered, totalling 866 km.

Northern Cape

Karoo precinct: The 'Karoo Large Terrestrial Bird Survey' is a joint project of the Platberg-Karoo Conservancy and the Northern Cape Nature Conservation Service, and is affiliated to CAR. The winter survey included 15 routes, while the summer survey increased to 21 routes covering 1260 km.

KwaZulu-Natal

Mr Tim Wood of Natal Bird Club took on the organization of CAR in this province. Kevin McCann, of South African Crane Working Group, set up 7 routes in the Midlands. There had been strong indications of a massive decline in the Blue Crane in this province, something not contradicted by the results so far. In winter 1996, five routes were covered in icy conditions. In summer 1997, 10 routes covering 858 km were surveyed.

Free State

Brian Colahan of the Free State Department of Environmental Affairs & Tourism and Rick Nuttall of the National Museum, Bloemfontein, set up routes to form two large precincts, one in the southwest, adjacent to the area covered by the Karoo Large Terrestrial Bird Survey, and one in the northeastern Free State.

Fifth Year: 1997/98

This year saw dramatic growth in CAR, both in the number of precincts and in the number of routes within precincts. The total distance covered increased from 4545 km in summer 1997 to 9066 km in winter 1997. Counts took place for the first time in the southwestern and northeastern Free State and in new precincts in KwaZulu-Natal. The principle of encouraging communities to count within their home areas engendered much interest and enthusiasm. One consequence of this was that the newly established East Griqualand precinct set up a Farmer's Day entitled 'Bird Conservation into the 21st Century'. At this time, approximately 40-50% of participants were farmers.

Mrs Donella Young began coordinating CAR in October 1997. The core of 14 large terrestrial species being monitored remained the same, with some additions in certain precincts. With the establishment of new precincts it was necessary to clarify and increase the number of

habitat categories for recording the habitat occupied by the birds. A start was made to collect written descriptions of all routes and each route was identified by a 4-character code.

The winter count took place on 29 June 1997 in the Overberg and the Swartland, 19 July 1997 in the Karoo and the Free State and 27 July 1997 in KwaZulu Natal. The summer count took place on 24 January 1998 in all precincts. It was decided that the summer and winter counts would take place on the last Saturdays of January and July respectively.

In March 1998, Donella met with bird club members and members of the farming community in Port Elizabeth, Grahamstown, Queenstown and East London to establish CAR in the Eastern Cape.

Western Cape

Overberg precinct: Three of the longer routes were divided and a new route was begun in the Elim area. Enthusiasm for conservation was high in this area and strong links with the active Overberg Crane Group were maintained. The total number of Blue Cranes counted in January 1998 was 1498 over 1499 km.

Swartland precinct: Members of the Cape Bird Club counted the 12 routes in the Swartland in January and there was an increase in participants living in the Swartland.

Northern Cape

Karoo precinct: The summer count took place with the usual high level of interest and participation. Mark Anderson, ornithologist in the Northern Cape Nature Conservation Service, continued to coordinate this precinct, assisted by Enrico Oosthuysen.

KwaZulu-Natal

CAR expanded rapidly in the province. Tim Wood engendered much enthusiasm and in July 1997, 30 routes within eight precincts were surveyed: Creighton, Dundee, East Griqualand, Ladysmith, Melmoth, Midlands, Underberg and Vryheid areas, each coordinated by a Precinct Organiser. In January 1998, 43 routes were counted owing to the addition of new routes to existing precincts and the formation of a new precinct in the Escourt area. Doreen Booy initiated reconnaissance for a new precinct in the Newcastle area.

Free State

Southwestern Free State precinct: This precinct, which is adjacent to the Karoo precinct and falls within the 'Grassy Karoo', began with 24 routes in July 1997. The grassland on several farms was in good condition and the Blue Crane (472), Ludwig's Bustard (111) and Secretarybird (33) numbers were encouraging.

Northeastern Free State precinct: This precinct also had a good start with 29 routes being surveyed in July 1997. Brian Colahan and Rick Nuttall successfully launched these two Free State precincts with the help of Janet Lourens and Riëtte Griesel. Additional routes were covered in January 1998.

Mpumalanga

Kerryn Morrison and Douglas Harebottle developed a precinct consisting of four routes in January 1998 in the Steenkampsberg. This escarpment area is important for cranes, Stanley's Bustard, Secretarybird and White Storks.

Eastern Cape

Graham Winch of the Border Bird Club set up two routes in the Border area in January 1998. In March 1998, Donella Young met with bird club members and members of the farming community in Port Elizabeth, Grahamstown, Queenstown and East London to establish the project in the Eastern Cape.

Sixth Year: 1998/99

The CAR project continued to grow, both in the number of precincts and in the number of routes within precincts. The total distance covered by 225 routes increased to 14 450 km in winter 1998. Counts took place for the first time in seven new precincts in the Eastern Cape and the Newcastle precinct in KwaZulu-Natal. Participants continued to be enthusiastic volunteers from bird clubs, farming communities, nature conservation agencies and, increasingly, schools.

The number of large terrestrial species being monitored was increased to 19 species with the addition of the Bald Ibis, Whitebellied Korhaan, Blackbellied Korhaan and Blue Korhaan. The Whitequilled Korhaan was recognised as a separate species from the Black Korhaan. It is notable that 13 of these 19 species are on the Red Data list (Barnes, 2000). In KwaZulu-Natal, gamebirds were recorded in response to a request from the African Gamebird Research, Education and Development Trust (AGRED), owing to local declines in gamebirds.

After feedback from participants and discussion with Precinct Organisers, the roadcount form was restructured and refined in time for the January 1999 count, with an accompanying Information Sheet No 4 (both available in Afrikaans). In the case of all crane species and, where possible for other species, the age classes were recorded. Fallow land was added to the habitat categories. For all three crane species and the three large bustards, their position was recorded by entering the farm number (from the 1:250 000 topo-cadastral map) on the roadcount form; this replaced marks on the route map. This change facilitated data capture. Participants were also asked to record details of colour ringed birds. Information Sheets were updated. Software was developed by René Navarro for data capture of all the information on the roadcount forms.

The winter count took place on 25 July 1998, but the Karoo Large Terrestrial Bird Survey took place on 18 July 1998. The summer count took place on 30 January in all precincts, except Somerset East and Port Elizabeth precincts where the count took place on 23 January 1999.

Links were established with Steven Evans of BirdLife South Africa, who coordinates the Important Bird Areas programme, and a map of all the areas covered by CAR routes was prepared for him so that priority areas could be established for new precincts. Strong links were also maintained with the South African Crane Working Group and report backs on CAR were presented at their biannual meetings. The CAR project was in the media more frequently

with articles appearing in district newspapers, a radio interview broadcast in Mpumalanga, and mention on television news in the Western Cape.

Liz Turner was employed in January 1999 to assist with data capture and Lindy Tomalin continued to assist with map work on a voluntary basis. Routes were plotted on 1:250 000 topo-cadastral maps.

Western Cape

Overberg precinct: For safety reasons those routes which had sections on the N2 were shortened or altered for the July 1998 count. In the July count, four new routes were established.

Swartland precinct: The usual 12 routes were covered in July. The largest flock (225+) of Blue Cranes yet recorded on a Swartland CAR count was sighted. Blue Cranes appeared to be increasing in this precinct. Two new routes were added to this precinct in January 1999. A five-year summary of CAR counts in the Overberg and Swartland appeared in *Bird Numbers* 7(2).

Northern Cape

Karoo precinct: The Karoo Large Terrestrial Bird Survey continued to be coordinated by Mark Anderson and a more extensive report of the last seven surveys appeared in CAR Circular 5. Exchange of data between these two projects continued, although different roadcount forms were used.

KwaZulu-Natal

In July 1998, the new Newcastle precinct was established with five routes and additional routes were started in the Dundee and Ladysmith precincts. In January 1999, an additional two routes were added to the Newcastle precinct.

Free State

Southwestern Free State Precinct: In July 1998, 37 routes were counted while in January 1999, 42 routes were surveyed. Brian Colahan worked hard to expand this precinct eastwards. He is also started planning another new precinct in the Northwestern Free State. Honorary Nature Conservators played an important role in this province.

Northeastern Free State Precinct: This precinct grew to 32 routes in July 1998. The diversity of birds was notable in the Free State with its important grassland areas. The numbers of Whitequilled Korhaan, Blue Korhaan and Bald Ibis were encouraging.

Mpumalanga

Kerryn Morrison increased the number of routes to eight in the Steenkampsberg in July 1998 and nine in January 1999. Casper Venter began two routes in the Middelburg area in July 1998 and an additional one in January 1999. Alison Richardson, a new Precinct Organiser, started planning routes in the Wakkerstroom Grassland Biosphere Reserve (IBA 020) with Steven Evan's assistance.

Eastern Cape

A trip by Donella Young to this area in March 1998 led to the establishment of eight precincts: Humansdorp, Port Elizabeth hinterland, Somerset East, Grahamstown, Kenton-on-

Sea, Border, Queenstown and Northeastern Eastern Cape. 40 routes were counted in July 1998.

Seventh Year: 1999/2000

Growth of CAR was sustained. The number of precincts increased to 30, making it important for the Project Coordinator to focus on communication with Precinct Organisers. In January 2000, 302 routes covering 18 300 km were counted by about 700 people. Reconnaissance routes were conducted in the Little Karoo, Beaufort West and Wakkerstroom areas in July 1999, and in the Uniondale district in January 2000. 21 species were monitored with the addition of the Abdim's Stork in July 1999 and Yellowbilled Stork in January 2000. Route description forms were filled in during the January count.

In May 1999, a CAR Working Group (CWG) was formed to consider issues of method and management as they arise. The CWG has been helpful in decisions regarding the recording of korhaans and crop categories. From July 1999 it was decided that korhaans be recorded both when seen and when heard. The 'crop' habitat category was divided into four subcategories.

Discussions with Mark Anderson led to the planning of a roadcount form for the July count, which combined the needs of the CAR project and the Karoo Large Terrestrial Bird Survey. Participants adjusted well to the new form.

René Navarro completed development of software for data capture of roadcount forms and programs for producing summaries required for the regular newsletters to participants. Lindy Tomalin continued to plot routes on 1:250 000 topo-cadastral maps and René captured these into a GIS. Lizzie Turner captured about 80% of the data backlog before leaving to study in December. Carynn Underhill completed the capture of the early Overberg data and Melinda Griffiths completed capture of all outstanding data and the January count.

Proposals for the eight-year CAR report were finalised. Authors began their Precinct descriptions, and Maxie Jonk started work on the illustrations. René Navarro started the development of programs for species and precinct analyses.

The winter count took place on 31 July 1999 and the summer count on 29th January 2000. However, the Somerset East precinct did their winter count a week later owing to muddy roads.

Contact with Steven Evans of BLSA was maintained and a few routes were added to existing precincts to monitor Important Bird Areas. Strong links were maintained with the South African Crane Working Group and report backs were given at their biannual meetings. Articles about the project appeared in district newspapers, bird club newsletters and *Crane Link*, the South African Crane Working Group newsletter.

Western Cape

Overberg precinct: The number of Blue Cranes per 100 km continued to increase. Breeding did not appear to be successful in summer, possibly due to the extreme heat in December. A number of poisoning incidents occurred in this area.

Swartland precinct: A comparison of the number of Blue Cranes per 100 km in different precincts showed that the Swartland population is nationally important, despite numbers being much lower than in the Overberg. More local people are becoming involved in counting.

Beaufort West precinct: In July, one route was set up by Maria Andela of the William Quinton Karoo Wild Bird Society.

Little Karoo: Andrew Schofield, of Cape Wildlife Reserve, conducted reconnaissance trips in July and established two routes in January 2000.

Uniondale precinct: Gail Cleaver, of Cape Nature Conservation, organised five reconnaissance routes in this area, two of which became permanent routes. Three were altered slightly for the July 2000 count.

Northern Cape

Karoo precinct: Mark Anderson continued to coordinate counts in this important area, where agricultural land is not transformed to the extent that it is in some other areas. An additional four species were monitored. Breeding of Blue Cranes appeared to be less successful than usual. White Stork numbers were higher than usual owing to high rainfall and consequent abundance of insects.

KwaZulu Natal

Tim Wood continued to coordinate this area. The number of routes in the Escourt precinct was reduced to two as the area had become very densely populated and it was unsafe to stop. KU01 was shortened for the same reason. A new route was established in January in order to monitor the area around Franklin Vlei (IBA 081). Winterton Primary School pupils assisted on a new route established in July in the Ladysmith precinct. Visibility was much reduced in January owing to long grass in many parts of the province. The overlap of some routes was addressed.

Free State

Southern Free State precinct: (originally known as the southwestern precinct). Growth continued in this precinct, but some routes were too close together and had too many backtracks. This problem was addressed after the July 2000 count. The number of Secretarybirds seemed to be decreasing. A significant number of Abdim's and White Storks were recorded in January owing to the good rainfall. The number of Whitequilled Korhaans was considerably higher in summer, probably because calling birds are now included.

Northeastern Free State precinct: Blue and Crowned Crane numbers were low. Two Wattled Crane were recorded for the first time during CAR in this province.

Northwestern Free State precinct: Brian Colahan, Project Organizer for the Free State, established this new precinct, consisting of 25 routes, in July 1999. This highveld grassland region is largely cultivated with the rest being under considerable grazing pressure.

Mpumalanga

David Gaynor took over coordination of the Steenkampsberg precinct in July 1999. Maize and grass were particularly tall in the Middelburg precinct in summer, reducing visibility. Reconnaissance routes set up by Alison Richardson, of the Wits Bird Club and Steven Evans,

of Important Bird Areas programme, were counted early in July 1999 in the Wakkerstroom area. The first 'official' CAR count took place in January 2000. This is a significant development in this important Grassland Biosphere Reserve (IBA 020).

Eastern Cape

The eight precincts in this province are now well established. There was some difficulty in covering routes in the Northeastern Eastern Cape precinct due to impassable roads and participants moving. A new route, near the Maitland-Gamtoos Coast (IBA 097), was added to the Humansdorp precinct.

Eighth Year: 2000/01

Growth of the project was maintained, particularly in the Karoo precinct and in July 2000 a new precinct was started near Umtata, bringing the number of precincts to 31. In January 2001, 338 routes were counted by 780 participants, covering 18 200 km.

There was only one small change to recording activity: instead of including displaying with breeding, it was recorded separately as "displaying". From the winter 2000 count, a rating of count conditions was introduced; this ensures that factors which reduce visibility are recorded. Information Sheet No. 2 was updated and sent out to all Precinct Organisers. Precinct Organisers were encouraged to re-evaluate all routes in the light of this Information Sheet and discuss any required changes with Donella Young.

Communication with Precinct Organisers was regular, especially with regard to data checks for the CAR report and clarification of route lengths. Mark Anderson, Ronelle Visagie and Brian Colahan spent much time checking data for their precincts. The logos of Northern Cape Nature Conservation Services and the Free State Department of Environmental Affairs and Tourism were included on all CAR newsletters and project material in acknowledgment of the enormous contributions made by Mark Anderson (NCNCS) and Brian Colahan (FSDEAT), as well as other staff in their respective organisations.

Good progress was made with the eight-year CAR report. René Navarro designed and wrote programs to summarise the data. Precinct descriptions were completed for all regions, except the Free State, KwaZulu-Natal (southern region) and the newly established Klein Karoo, Beaufort West and Uniondale precincts. Maxie Jonk (NCNCS) completed most of the illustrations for the report, a few are being finalised. Lindy Tomalin assisted with the checking and editing of GIS route maps. The checking of route lengths and the database continued.

The winter count took place on the 29 July 2000 and the summer count on 27 January 2001. Mary Faragher did the data capture for the winter count and Pavs Pillay captured the summer count data.

Links were maintained with Steven Evans regarding the monitoring of Important Bird Areas and a new route was established near Umvoti Vlei (SA069). Contact with the Overberg Crane Group and South African Crane Working Group was maintained and feedback on the project was given at their biannual meetings. A report on the National Crane Census was presented at the SACWG workshop in November 2000, as well as a presentation of the CAR method of monitoring cranes. An increased number of articles, written by Precinct Organisers about counts in their areas, appeared in district newspapers or bird club newsletters. Articles on

CAR results were published in *Bird Numbers, Africa - Birds & Birding* and the *Proceedings of the 12th South African Crane Working Group Workshop*.

Donella Young met with Brian Colahan to discuss changes to some of the Free State routes. These changes were implemented for the January 2001 count.

Donella Young met participants in the Border (East London), Underberg, Midlands and East Griqualand precincts in November 2000. Staff of the University of Transkei were introduced to the project. In February 2001, Donella Young met participants from the BirdLife Eastern Cape and Diaz Cross Bird Clubs, and from Graaff-Reinet, to present results from counts in their areas. Talks were given to Plettenberg Bay and Hartenbos Bird Clubs, introducing the project. James Harrison, Project Manager, gave a slide presentation to the BirdLife KwaZulu-Natal Forum meeting providing feedback to Precinct Organisers.

A specific sponsor for the project is still urgently required as, at present, it relies on ADU core funding from BirdLife South Africa, the Tony and Lisette Lewis Foundation and use of a Mazda Wildlife vehicle. Generous donations from the Witwatersrand Bird Club and Sandton Bird Club have also assisted.

Western Cape

Overberg Precinct: The winter 2000 count marked the fifteenth count in this precinct. A number of people remarked on the increase in ostrich farming, particularly in the eastern parts of the precinct. The Overberg Crane Group employed Vicki Hudson as a field worker in January 2001.

Swartland Precinct: The increase in Blue Cranes densities continued in this area. Evidence of movement from the Overberg to the Swartland was provided by the recovery of a Blue Crane in Klipheuwel, which was ringed in Caledon three years earlier.

Beaufort West Precinct: In January, Japie Claassen began the second route in this area.

Little Karoo Precinct: Andrew Schofield discontinued WK01 in July as numbers have declined significantly due to the effects of hunting on this route.

Uniondale Precinct: All five routes were counted in July 2000. Donella Young met Gail Cleaver, Western Cape Nature Conservation, who organises these counts in February 2001.

Northern Cape

Karoo Precinct: The transects for each route were marked in on the 1:250 000 and GIS maps. Ronelle Visagie began assisting Mark Anderson with the coordination of this precinct and a number of new participants were recruited in July 2000. There has been significant growth in this precinct with 24 routes being counted in January 2001, instead of between 15 and 19.

KwaZulu Natal

Donella Young met participants in the Underberg and East Griqualand precincts in November 2000 and gave them feedback about the project. Tim Wood continued to encourage Precinct Organisers. James Harrison attended a BirdLife Project Committee meeting in February at which he reported back on CAR results from KwaZulu-Natal and met Precinct Organisers.

Routes in the East Griqualand, Newcastle, Dundee and Vryheid precincts experienced reduced visibility due to tall grass during the January count. KU03 was discontinued after the winter count as increasing afforestation over a period of time has reduced the number of large terrestrial birds. KV02 was established as a new route in July 2000.

Free State

After meeting to discuss the Free State routes in November, Brian Colahan did an enormous amount of work redesigning those routes which had too many backtracks and discontinuing some routes in areas where coverage was more than necessary. All routes which were changed by more than 10% were allocated a new route number. These changes were implemented for the January 2001 count. In most cases the same area is being covered, but the configuration of the routes is simpler.

Visibility in July and January was affected by tall grass due to the good summer rains in certain areas. Abdim's Stork numbers in January 2001 were considerably lower than in January 2000, possibly due to abundant food sources elsewhere. However, more Secretarybirds were seen in summer 2001 than in summer 2000.

Mpumalanga

In July 2000, Helmeted Guineafowl were included in the Steenkampsberg counts due to concern about declining numbers. Details about activity and location for Bald Ibis were collected from July 2001 onwards. This will add to the information being collected by the Escarpment Bird Club for the Important Bird Areas conservation project.

Eastern Cape

In February 2001, Donella Young met with participants from the BirdLife Eastern Cape and Diaz Cross Bird Clubs, and from Graaff-Reinet, to present results from counts in their areas. Talks were also given to the Plettenberg Bay and Hartenbos Bird Clubs, introducing the project. As a result of the meeting in Graaff-Reinet, a bird club has been established with 23 enthusiastic members. It is hoped that as a result of this trip more routes will be started in these precincts, as coverage is still a bit sparse in the Eastern Cape.

After discussions with local farmers, Ken and Jen Munro started an additional route (EP09) in January 2001 to monitor birds in farm lands along the Fish River irrigation scheme. White Stork numbers were exceptionally high on this route and higher than usual in the Eastern Cape in general. Following a meeting introducing the project in November, the first route (EU01) was launched in the 'Transkei' by Sonja Vorster and a team from the University of Transkei. EE07 was discontinued after the January 2000 count as most of the route was through wattle and highly eroded veld. Owing to route changes of more than 10%, EK03 was changed to EK05 in summer 2001.

Ninth year: 2001/02

In January 2002, the first route in North West Province was counted in the Harts River area. The Black Harrier was included in CAR counts in the Western Cape in January, to contribute information to Western Cape Raptor Research Programme conducted by the Percy FitzPatrick Institute of African Ornithology. It was decided to allow inclusion of this threatened raptor, on

a voluntary basis, as it is low-flying and would be in view while scanning for large terrestrial birds.

Two data requests were received during 2001: one for an Environmental Impact Assessment for a proposed wind farm in the Swartland, and another from Eskom-Endangered Wildlife Trust Strategic Partnership for a proposed new powerline.

Doug Harebottle, ADU, gave a slide presentation to the BirdLife KwaZulu-Natal Forum meeting on behalf of the Project Coordinator. In June 2001, the Project Coordinator gave a slide presentation to Free State participants in Bloemfontein. The Project Coordinator attended the Blue Crane PHVA in October and presented results from CAR counts.

Progress on the eight-year report continued. Data analyses were checked and corrected. GIS maps of routes were finalised. By the end of 2001, final results were sent to species-text authors.

The winter count took place on 28 July 2001 and the summer count on 26 January 2002. Windy conditions were experienced on the summer count in the Overberg, the Karoo and most of the Free State. Some of the Free State counts were delayed by rain; the northwestern precinct was the most affected.

Carynn Underhill captured the winter count data and Alison Cameron and Mary Faragher captured the summer count data. Lindy Tomalin assisted voluntarily with map work once a week. An article about sustainable farm management and the Conservation Farming Project was included in the June newsletter.

BirdLife South Africa, the Tony and Lisette Lewis Foundation South Africa and Mazda Wildlife Fund continued to support the project. Sandton Bird Club also made a donation to CAR.

Western Cape

Overberg Precinct: In winter 2001, Blue Crane numbers were lower than the previous winter, however there was a marked increase in the number of ringed Blue Cranes re-sighted. The Hartenbos Bird Club became involved in CAR and established a new route, OV33, in winter 2001. A new route, OV34, was started in the test range area near De Hoop Nature Reserve, to provide information about birds in natural vegetation. The White Stork numbers were higher than in the previous January.

Swartland Precinct: Although Blue Crane numbers were lower than in the previous winter, cranes were recorded on every single Swartland route. White Stork numbers were higher than usual on two routes in summer.

Beaufort West Precinct: Karoo Korhaan numbers continued to be high.

Little Karoo Precinct: A number of White Storks were recorded in the January 2002 count.

Uniondale Precinct: The summer count took place on 2 February, as a number of participants were involved in community activities on 26 January.

Northern Cape

Karoo Precinct: Observers were asked to provide additional information about the features used to identify Stanley's Bustard, so that records could be verified.

KwaZulu-Natal

Crowned Crane numbers were the highest yet recorded in KZN, but no Natal Francolin were seen. KV03 was started in the Vryheid area. KG01 was altered and re-numbered KG11. Rose Laatz took over coordination of the Escourt count from George Hattingh in July 2002.

Free State

The number of Blue Cranes, Crowned Cranes and Blue Korhaans in July was the highest for the past three winters. In January, grass cover was good in many areas and poor visibility resulted in lower bird numbers. However, White stork numbers were higher than in the previous summer.

Mpumalanga

Bald Ibis numbers were considerably lower in the Steenkampsberg and Middelburg precincts, but higher in the Wakkerstroom precinct. Spurwinged Goose and Helmeted Guineafowl numbers were much higher than in previous counts.

Eastern Cape

A new route, EB04, was started by the Border Bird Club and Alan Collett started a new route, EP10. Owing to route changes of more than 10%, EK01 was changed to EK04 and ES01 was changed to ES06 in winter 2001. As EE04 was often too wet and impassable in summer, it was altered for the January 2002 count and renumbered EE17.

Bald Ibis, which have been recorded regularly on EE13, were seen for the first time on another EE route in July 2001. School pupils participated on two EE routes in winter. Yvonne Craig took over coordination of the Humansdorp precinct, as Vincent Egan moved.

Tenth year: 2002/03

The winter count on 27 July 2002 was certainly demanding with strong winds in many parts of the Western Cape, Eastern Cape, Karoo and Free State and snow in the northeastern Cape. The summer count took place on 25 January 2003 and this marked the 20th count in the Overberg. About 35 participants gathered on Wicus and Hanlie Leeuwner's farm to celebrate this and the Project Coordinator thanked everyone concerned and mentioned some of the highlights of these counts.

The CAR Working Group decided to include the Black Harrier in counts in all precincts on a voluntary and experimental basis.

Information Sheet No. 3 was updated in December 2002 and sent to all participants to assist in distinguishing between the three large bustards. While vetting data for the eight-year report, it became obvious that identification of these species requires considerable care, particularly in areas where there is an overlap of distributions.

In late February, the Project Coordinator gave slide presentations on project results to the BirdLife KwaZulu-Natal Forum meeting, and CAR participants in the Midlands and Dundee

areas. In May, the Project Coordinator attended the SACWG Annual workshop in Graaff-Reinet. Links were maintained with the Overberg Crane Group.

A website report on the most recent count, with photographs, was begun in 2002 and the CAR project material was also made available on the website. An email distribution list was used to inform participants about this report. Regular newsletters were still posted out to all participants prior to each count.

Intense work on the eight-year report continued. Programmes were developed by René Navarro for summarising the precinct results. Species and precinct texts were received from authors and edited, and introductory chapters were written. The manuscript was typeset in the Avian Demography Unit.

Alison Cameron did the data capture for the July 2002 count and Liz Turner captured the January 2003 data. Lindy Tomalin continued to assist with map work and other administrative tasks.

We are thankful for support from Bird Life South Africa, the Tony and Lisette Lewis Foundation South Africa and Mazda Wildlife Fund, as well as Alison Richardson's donation of a R10 000 award Wits Bird Club received from her employer, Nedcor, for her work as a CAR volunteer.

Western Cape

Overberg Precinct: The number of White Storks over-wintering in the Overberg was the highest yet recorded. For the 20th count in summer 2003, the Blue Crane density was the highest yet recorded at this time of year.

Swartland Precinct: Three Swartland routes were counted on Sunday 28 July, owing to muddy roads following a huge storm early on Saturday. Jan Hofmeyer started counting the White Storks on a pig farm near Tygerberg Zoo at the same time as the CAR count, 138 birds were counted in July and 1310 in January! The Blue Crane summer density was also the highest yet recorded. Participants remarked on the number of breeding pairs and chicks and juveniles.

Beaufort West Precinct: WB02 was not counted for this and subsequent counts as Japie Claassen moved.

Little Karoo Precinct: Andrew Schofield remarked that there was an increase in pastures and trees being planted on his route, WK02.

Uniondale precinct: The winter count took place on 4 August 2002, as a number of participants were involved in community activities on 27 July. The Precinct Organiser, Gail Cleaver, of Kammanasie Nature Reserve, moved and so Nigel Wessels, of Onteniqua Nature Reserve, coordinated the January count.

Northern Cape

Karoo Precinct: The July count was the 15th count in the Karoo. In both the summer and winter count the Blue Crane was the most numerous species. During the summer count, fewer

immature Blue Cranes were observed, indicating lower breeding success. This was almost certainly due to the very low rainfall experienced over most parts.

Kwa-Zulu-Natal

The Bald Ibis density was the highest yet recorded in a January count, with most of the birds being on Newcastle routes and KU01 had its highest total yet. The Wattled Crane numbers were the lowest yet recorded on a summer count, and Helmeted Guineafowl numbers were particularly low. However, the Blackbellied Korhaan count was the highest yet recorded.

Free State

Many observers reported favourable conditions for the winter count, while others were hampered by tall grass affecting visibility and wind and minimal calling activity by korhaans. Brian Colahan began writing the newsletter report in January as Rick Nuttall's responsibilities at the museum increased.

Mpumalanga

Abdim's Stork were counted in the Steenkampsberg precinct for the first time. Very few cranes and bustards were seen.

Casper Venter retired from coordinating the Middelburg routes and unfortunately these routes were not counted in January. Barbi Forsyth began helping Alison Richardson with coordination of the Wakkerstroom routes.

Eastern Cape

The precinct most affected by the wintry weather was the Northeastern Eastern Cape (EE routes), with snow on many routes.

EE14 and EE15 were altered, and renumbered EE18 and EE19 respectively. Routes EH01 and EH02 were also altered, due to the recurring problem of locked gates, making it impossible to complete these routes. The routes have been redesigned so that they cover much of the same area and renumbered EH05 and EH06 respectively.

In January, Robert Böhmke and Indwe High School pupils saw 15 Bald Ibis on EE13, the highest total on any Eastern Cape route since July 2001 when Kevin Meise saw 9 on EE10. Bald Ibis were not recorded in this area during the atlas period. On EU01, near Umtata, 3 Ground Hornbill, another Red Data species, were recorded.

Eleventh Year: 2003/04

The most significant milestone was the publication of the 200-page, eight-year report, ***Big birds on farms: the Mazda CAR report 1993-2001***. The report was launched at a breakfast for local CAR participants and key people who had contributed to the report. A presentation on CAR was given by Donella and Wicus Leeuwener, Chairperson of the Overberg Crane Group, gave a spectacular slide show. Jeffrey Arizon, Principal of Teslaarsdal Primary School, and four Grade 7 learners were also able to attend. Report copies were presented to representatives of this school, the Overberg Crane Group, Cape Nature Conservation and BirdLife SA in acknowledgement of the contribution made by bird clubs, crane groups, nature conservation and schools.

This report summarises the results of the first eight years of CAR and includes detailed accounts for 15 bird species and for 17 geographical regions (precincts). The report provides landowners in each region with advice on how to promote the conservation of these threatened birds on their lands. In summary 10 points are given to guide landowners in their conservation actions.

The report was a team effort involving species specialists, Precinct Organisers, farmers and members of 64 governmental and non-governmental organisations including bird clubs, nature conservation agencies and schools. The Northern Cape Department of Tourism, Environment and Conservation and the Free State Department of Tourism, Environment and Economic Affairs, as well as the Overberg Crane Group and the South African Crane Working Group have played significant roles.

Mazda Wildlife Fund sponsored the report copies sent out to all route leaders and participating organisations. A number of bird clubs responded generously to the appeal for funding sent out with the report. The Sani Wildlife and Environment Society of South Africa, as well as the Dullstroom Flyfishers, also sponsored routes in their areas. Neil Smith, a regular CAR participant, was able to secure substantial funding from CHC Urethane Products (Pty) Ltd. Radiant Lighting also made a donation to CAR, this donation was motivated by a CAR participant for many years, Craig Thom. The Western Cape Raptor Research Programme contributed to the postage of the December newsletter, as we included a pamphlet about the Black Harrier to all participants within the bird's breeding range.

Precinct Organisers continued to write articles about their CAR counts in local newspapers or bird club newsletters. A press release was distributed and through Mark Anderson, Northern Cape Department of Tourism, Environment and Conservation, a striking photograph and article about the CAR report appeared in the *Diamond Fields Advertiser*. Articles about CAR also appeared in *Africa – Birds & Birding*, the *Cape Argus* and *Die Buite Burger*. Reviews of *Big Birds on Farms* were published in *Ibis* and *BirdLife Africa*. Reports on the counts appeared in 'What is new' on the website, www.aviandemographyunit.org, and the CAR page was updated in August 2004.

The winter count took place on 26 July 2003 and the summer count on 31 January 2004, 780 participants travelled 19 000 km on 340 CAR routes. Linda Tsipa captured the data for both counts. The first CAR count in Gauteng was conducted by Craig Whittington-Jones, of Gauteng Department of Agriculture, Conservation and Environment in January.

Western Cape

Overberg Precinct: All routes with more than 300 Blue Cranes in the July count were east of the Swellendam-Bredasdorp road and south of the N2, an area which received better rains. The White Stork numbers in January were higher on routes near Heidelberg, generally fewer than usual storks were seen in the Caledon area. More Black Harriers were recorded than usual during the summer count.

Swartland Precinct: Due to a severe winter drought in this area there were many patchy wheat fields, or even bare, unplanted fields. The Spurwinged Goose numbers were at an all time high, probably partly because they were more visible due to the reduced height of the wheat. The highest number of Blue Cranes ever seen was recorded on SW09 and SW10 in January.

Beaufort West Precinct: A new route, WB03, was started in July.

Little Karoo Precinct: Trial counts for a new route were conducted in the Robertson area.

Uniondale Precinct: A record number of Stanley's Bustard were seen on WU05 (62).

Northern Cape

Karoo Precinct: In July, Blue Crane numbers were significantly lower than in July 2002. The larger number of Ludwig's Bustard recorded in July was probably due to the severe drought in Namaqualand, as these birds usually frequent the winter rainfall region during the winter months. In summer 2004 there were no White Stork on most routes, however two neighbouring routes near Hanover did have significant numbers.

KwaZulu-Natal

Oribi were included in the KZN counts for the first time in the July count, to contribute to research being conducted by the Oribi Working Group on this threatened species. In July, Ground Hornbills were seen on three routes. Ann Gray introduced Winterton Primary School learners to CAR counts. Frik Lemmer, of Ezemvelo KZN Wildlife, started a new route in Paulpietersburg area in July. 76 Wattled Cranes were counted in the January count.

Free State

An increase in parties of hunting dogs was noted in the south in winter. Observers were reminded to check their korhaan identification carefully. 116 routes were counted in January, covering a distance of 8310 km. There was sparser grass cover in January due to poor mid-season rains and Whitequilled Korhaan numbers were high. There were fewer White Stork than in the previous summer. Altogether 12 Red Data Species were recorded in the Free State in January.

Mpumalanga

Conditions were very dry during the winter count. The Middelburg routes were not counted in July, but Pieter du Plessis fortunately took over coordination of these routes in January 2004. A new route, MT01, was started in July 2003 by Colin and Ronald Williams and another in January. The first Wattled Crane on a Wakkerstroom CAR route was sighted in January 2004. Two volunteers from the Wakkerstroom Bird Club took part for the first time in January.

In May 2004, Donella met members of the Wits Bird Club in Johannesburg for the first time and gave a presentation on the project. Alison Richardson and Barbi Forsyth also discussed the possibility of establishing a new precinct with Donella, as well as handing over the Wakkerstroom precinct to local residents. In September 2004 Alison and Barbi met with Pieter du Plessis and some residents of Chrissiesmeer to look at potential CAR routes in this IBA.

Eastern Cape

Two Wattled Cranes were seen on EE03 for the first time in July, and Kori Bustard numbers were the highest yet recorded in the Eastern Cape. Debbie Abrahamson, Environmental Educational Officer for the Blue Crane Route Municipality, did a trial count for a new route, ES07, near Somerset East. In January, Helen Lechmere-Oertel, Educational Officer for North East Cape Forests, started coordinating the northeastern Eastern Cape precinct, as Jon Smallie

moved. Alison Brown also took over coordination of the Somerset East precinct in January, as David Jolliffe emigrated. Emile Plumstead continued the route near Umtata in January as Sonya Vorster left Umtata. Conditions were very cold in the Eastern Cape in July and very dry in parts in January.

Gauteng

Craig Whittington-Jones, of Gauteng Nature Conservation, started the first Gauteng CAR route in January near Devon. In May, Donella spoke to the Pretoria Bird Club about the establishment of more routes in this province.

Botswana

Donella was invited by BirdLife Botswana to give a presentation on the CAR project in Gaborone in May. It is possible that CAR routes may spread to this country in January 2005. Valuable data could be collected about the Kori Bustard and Ground Hornbill in particular.

Twelfth Year: 2004/05

Although the CAR project has continued to expand with new routes being established in all provinces, the lack of funding for the project has been of great concern. This has meant that the Project Coordinator has needed to spend more time establishing contacts and applying for funding and it has not been possible to update the trends for as many species as originally hoped.

The greatest expansion of CAR has occurred in the Gauteng province. Craig Whittington-Jones and Sean West, of Gauteng Department of Agriculture, Conservation and Environment, have spent many hours designing and reconnoitering over 20 routes within suitable agricultural areas and also a few Nature Reserves. A new precinct was initiated in the Chrissiesmeer area of Mpumalanga in January.

BirdLife SA has approached a number of corporates for funding for CAR, but to date has not been able to find a sponsor. The Project Coordinator has also been applying for funding, it is proving difficult to source funding for a long term monitoring project. One funding proposal involving collaboration with the South African Crane Working Group (SACWG) on a research project has been submitted and another involving collaboration with SACWG, Namibian Crane Working Group, nature conservation agencies and an American academic institution is being submitted.

In July 2005 Les Underhill sent out an appeal with the CAR newsletter to participants asking them to consider assisting by contributing R200 per route, while we are in the process of securing funding. There has been a generous response to this from nine Bird Clubs, Sani (KZN) branch of Wildlife and Environment Society of South Africa (WESSA) and Dullstroom Flyfishers. What has been striking is that it is the smaller bird clubs which have responded. In addition over 40 individual participants have donated money to CAR totaling almost R10 000.

Articles about CAR counts and results were published by Precinct Organisers in local newspapers and bird club newsletters.

A new leaflet (available in English and Afrikaans) was produced in December 2004, giving general information about the CAR project and highlighting the measures which landowners can take to conserve large terrestrial birds on their lands. This was sent out to participants to give to members of the public, particularly farmers, who often inquire during a CAR count.

Links with participating organizations were maintained. In February 2005 the Project Coordinator was invited to attend the Ground Hornbill Population and Habitat Viability Assessment Workshop (PHVA) and an illustrated talk about CAR was presented one evening. New contacts were made and it is hoped that routes will be initiated in the threatened savannah biome shortly. In May 2005 three presentations were given at the South African Crane Working Group (SACWG) Workshop. A number of histograms showing trends in crane numbers in different regions were shown and the scientific value of the CAR information was acknowledged. The evening before the winter count many Karoo Large Terrestrial Bird Survey (KLTBS) participants gathered to celebrate 10 years of roadcounting and a number of landowners were presented with Crane Custodian Boards by the Department of Tourism, Environment and Conservation in partnership with Vodacom and SACWG. The KLTBS follows the same method as CAR and contributes all their data to CAR.

Feedback to participants remained a priority, but due to funding constraints, trips were limited. On return from the SACWG workshop in May the Project Coordinator gave a presentation on CAR to participants in Graaff-Reinet. Early in August 2005 James Harrison and I travelled to Oudtshoorn to give presentations and feedback on ADU projects to Cape Nature. It is most helpful to have the opportunity to meet participants and Precinct Organisers involved in the project.

The winter count took place on 31 July 2004 with icy cold weather, mud, or even snow in some regions. The column, “close to” on the roadcount form was replaced with “relevant features nearby” in an effort to clarify the information sought. The summer count took place on 29 January 2005 and all participants were asked to fill in route description forms in an effort to keep track of any significant changes in land use or habitat on CAR routes. Linda Tsipa captured the data for both counts.

The ADU was presented with the WESSA President’s award in September 2004 recognizing the role that the unit has played in involving volunteers in conservation actions. In June 2005 the Project Coordinator, assisted by some CAR participants, gave a presentation on ADU projects involving volunteers, focusing on CAR, at the CAPE (Cape Action for People and the Environment) conference, Fynbos Fynmense. The ADU received an award from CAPE “for mobilizing community participation in long-term bird monitoring”. In May 2005 the ADU was presented with a BirdLife South Africa Eagle Award in acknowledgement of “their enormous scientific input into the collection of bird data”.

Western Cape

Overberg Precinct: The 2004 winter count took place after a very dry period until shortly before the count. A new route, OV35, was explored. There was a marked increase in the number of Stanley's/ Denham's Bustard (24) on OV33. Over 6 000 White Storks were recorded on the summer 2005 count, the second highest total since CAR started monitoring this species in 1995. The Blue Crane Numbers were also at their highest yet for a summer count.

Swartland Precinct: The highest density of Blue Cranes ever was recorded in the Swartland (74 birds/100km) and a number of juvenile birds were reported in July 2004. A new route, SW15, was started near Tulbagh in January 2005.

Beaufort West Precinct: More Karoo Korhaans were seen on WB03 than on any other CAR route in July 2004.

Little Karoo Precinct: A suitable route in the Robertson area has not been identified yet.

Uniondale Precinct: Two routes had 100 or more Blue Cranes.

Calitzdorp precinct: A single route near Calitzdorp has been counted since July 2002. Another route was developed by Elton le Roux, of Gamkaberg Nature Reserve, and counted officially in July 2005.

Northern Cape

Karoo Precinct: The winter count took place during extremely cold conditions. The density of Blue Cranes was high, compared to July 2003, but not as high as 124.2 birds per 100 km in July 2002. The January 2005 count marked 10 years of Karoo Large Terrestrial Bird Surveys! Mark Anderson initiated and has developed this survey, assisted by Enrico Oosthuisen in the earlier days and now Ronelle Visagie. The eastern Karoo is an important area where Blue Cranes still occur on natural habitat, supporting more than 25 percent of the world's population of Blue Cranes.

KwaZulu-Natal

Conditions were very cold in KZN with snow on some routes. Blue Crane numbers were very low, with only 16 sighted on all routes throughout the province. In the July 2004 count there were more Oribi on KC01 (24) than were counted in the whole of KZN in January 2004 (23). Ken Gordon did a reconnaissance for a route in Weenen Nature Reserve in August 2004.

For the summer 2005 count visibility was restricted in some areas due to long grass following good summer rains. This certainly affected bird numbers with the lowest Bald Ibis, Helmeted Guineafowl, Denham's /Stanley's Bustard, Secretarybird and Spurwinged Goose totals being recorded. However, White Stork numbers were at their highest (6432) with 1606 storks on one route, KL01. This is a record for a KZN route. St Gregory's Primary School learners took part in a CAR count for the first time on KE01. BirdLife Trogans explored two new routes in southern KZN, but need to investigate further.

Free State

For the winter count conditions were windy in the two northern precincts, particularly the North-eastern precinct. While the Southern Free State was initially rather cold it was not so

windy. Thirteen over-wintering White Storks were recorded on FN55. For the first time there were more Blue Cranes in the Western precinct (55) than the North-east (37), but all those in the west were on one route. All three bustards were recorded in the southern Free State.

One hundred and seventeen routes were counted in this province in January 2005. Conditions were generally satisfactory for this count. In the Southern precinct rains had been very patchy resulting in very variable veld conditions, even along individual routes. However there was obviously sufficient rainfall to provide good grass cover in most of the precinct as a record number of Northern Black/Whitequilled Korhaan were recorded (53.7/100km). Bald Ibis and White Stork were the dominant species in the Northeastern precinct, where there had been good rains generally.

Mpumalanga

In the Steenkampsberg precinct counts were low in July 2004, possibly due to the very cold winter. For the first time two Wattled Cranes were seen on a winter count. A Blackbellied Korhaan was recorded on MS02 in January 2005.

The Middelburg routes were counted but there has been a major increase in open-cast mining in the past few years: the roads are much busier and visibility is considerably reduced on one route. Pieter du Plessis, the Precinct Organiser, has planned two new routes in Amersfoort-Bethal-Carolina District Important Bird Area.

Alison Richardson and Barbi Forsyth, of Wits Bird Club, together with Pieter du Plessis investigated the possibility of new routes in the Chrissiesmeer area, an Important Bird Area, towards end of 2004. Wits Bird Club handed over the Wakkerstroom CAR precinct to the Wakkerstroom Bird Club in January 2005 and Judy-Lynn Wheeler became Precinct Organiser. Alison and some Wits birders continued to assist, while Barbi organised the first Chrissiesmeer counts in January 2005; 6 routes were counted.

Eastern Cape

Conditions were extremely cold for the July 2004 count and many people started their count in temperatures below zero. Some EE routes were delayed because of snow, Helen Lechmere-Oertel coordinated these routes for the last time. A new route was reced near Addo and one in the Somerset East precinct. Blue Crane numbers were the highest yet recorded in the province, with the majority on two routes in fields under central pivot irrigation in the Fish River Valley.

In January 2005 the visibility on some routes was reduced due to long grass following good rains. The White Stork numbers were patchy, but at their highest in this province (589 were recorded on the new route, EP11, near Addo. Not many Kori Bustard were recorded, only 10 altogether in the province. Game farms have developed from farm land on EK02 and EG03. Two recce counts were conducted in the Somerset East precinct and Bradley Gibbons, a SACWG Field Officer investigated a new route near Middleburg.

Terry and Herman Hertel became Precinct Organisers for the EP precinct.

Gauteng

A new route was counted in Suikerbosrand Nature Reserve in January 2005 and another route near Bronkhorstspuit was reced by Craig Whittington-Jones, of Gauteng Department of Agriculture, Conservation and Environment.

Thirteenth Year: 2005/06

The year is ending on a more positive note regarding funding, as is outlined later. But the lack of funding for this project has been of great concern throughout the year and the Project Coordinator has spent much time applying for funding. It has therefore not been possible to update the trends for as many species, or precincts as originally hoped. There has not been sufficient time to capture the new routes since the eight year report onto GIS, however there is hope of voluntary assistance with this task next year. The GIS lengths of routes are required to calculate birds per 100 km accurately. Updated trends for the main species in the Overberg and Swartland can be found on the website by clicking on the species names in the table at the foot of the CAR webpage (www.aviandemographyunit.org). Updated trends for the Blue Crane, Grey Crowned Crane, Secretarybird, Denham's Bustard and White Stork also appear here for those precincts for which we do have GIS lengths. The Blue Crane results for the Overberg and Swartland precincts have been written up for publication in the journal, *Ostrich*.

The greatest expansion of CAR continues to be in the Gauteng province. Craig Whittington-Jones and Sean West, of the Gauteng Department of Agriculture, Conservation and Environment, set up five and ten new routes for the July 2005 and January 2006 counts respectively. Contact was established with the Lowveld Bird Club to start CAR counts in the Kruger National Park to begin monitoring birds in the savannah biome.

It has proved difficult to source funding, but there is at last hope of continuing this long term monitoring project. The fact that birds are important indicators of environmental change is at last being recognised. The South African National Biodiversity Institute's (SANBI) Global Change and Biodiversity Programme, together with Dr Res Altwegg of the ADU, is identifying a series of long-term southern African bird databases which can be analysed to give us a better understanding of how climate change, land use change and other pressures may affect birds with different life history strategies, and what this means for their population trends and conservation status. SANBI is active in highlighting the serious impacts of climate change on biodiversity. The ADU is most grateful to SANBI for funding for CAR through the Birds and Environmental Change Partnership. Phoebe Barnard, of SANBI, has been most helpful in this regard. Early next year we will be conducting a review of CAR, together with SANBI and a workshop is scheduled in June.

I am delighted that CAR has been awarded an African Bird Club (ABC) Conservation Award. The ABC's conservation programme supports small conservation projects in Africa, provided they meet their criteria.

James Harrison and I are also encouraged that a project proposal, Big Birds on Farms (BBOF), submitted to the Critical Ecosystem Partnership Fund has been accepted. Through our links with Cape Action for People and the Environment (CAPE) we became aware of requests for proposals. This funding will enable us to take the results of the CAR project in the Cape Floristic Region (CFR), a biodiversity hotspot, a significant step further. BBOF will promote private sector and community involvement in conservation in agricultural landscapes within and surrounding the CFR biodiversity corridors. This will be achieved by promoting

best practice in land management for the stewardship of biodiversity. This will involve consultation with landowners, conservancies, Cape Nature and others within the agricultural sector to assess their needs and constraints and assist in developing recommendations regarding conservation and management of biodiversity. At a later stage a series of public presentations and workshops with the agricultural and conservation extension staff will communicate and ensure implementation of the findings, together with a published booklet, poster and website; followed by a follow-up survey. We will collaborate with Odette Curtis, who is coordinating a project on gamebirds and biodiversity, in consulting with target groups in the initial stages of the project and giving public presentations and workshops with agricultural and conservation extension staff. Funding for publication of the booklet and poster still needs to be sourced.

In July 2006 Donella was flown up to participate in the planning workshop for the Darwin Initiative project 'Integrating Crane Conservation with Sustainable Habitat Utilisation' coordinated by the South African Crane Working Group (SACWG) and the Zoological Society of London. CAR will receive funding in return for access to the CAR data. Putting new routes onto GIS, in order to update species trends, is the main task in fulfilling the ADU's contribution to this project. It was also possible to briefly meet the new Project Coordinator for the Ground Hornbill Working Group and meet with Barbi Forsyth, the Chrissiesmeer Precinct Organiser.

Funding is still being sought for a research project involving collaboration with SACWG, the Namibian Crane Working Group, nature conservation agencies and Oregon University. The proposal for this project was presented at the SACWG workshop in May 2005 and published in *Indwa*.

BirdLife South Africa has not been able to find a sponsor for CAR. The Tony and Lisette Lewis Foundation South Africa has been a consistent sponsor of the ADU.

We are most grateful to the Amajuba Wildlife Centre, the Newcastle Branch of Wildlife and Environment Society of South Africa, Birdlife Border and the Somerset West Bird Club for their generous donations in 2006. The support by other individual CAR participants is also much appreciated. Some committed birders had the idea of sponsoring 'a rand a bird' for their count and made an appropriate, and very welcome, contribution to our CAR resources. It is hoped that more participants may be able to assist in this way, although hopefully friends will, as participants already contribute so much in terms of time, skills and petrol. Birding Ecotours also organized an outing to Strandfontein Sewage Works and donated the proceeds to CAR.

Precinct Organisers have continued to publish articles about CAR counts in local newspapers and bird club newsletters. Erina Botha, a free lance journalist, published informative articles in *Die Burger*. In January 2006 Greg and Belinda Shaw applied to 50/50 for funding for a few minutes on this wildlife television programme. They filmed the beginning of a CAR count involving Donella, the Principal of Teslaarsdal Primary School and a few learners and highlighted the need for funding for CAR. In July Donella was interviewed about CAR by John Richards on SAFM, a national radio programme.

The CAR leaflet produced in December 2004, giving general information about the CAR project and highlighting the measures which landowners can take to conserve large terrestrial

birds on their lands, has proved useful to participants to give to members of the public, particularly farmers, who often inquire during CAR counts.

Links with participating organizations were maintained. In May 2006 a presentation of crane results was given at the annual SACWG Workshop held at Potberg Environmental Education Centre. Details of ringed Blue Cranes are collected at all times of year for SACWG. In June 2006 the Project Coordinator attended the CAPE conference, Business and Biodiversity.

Andrew Jenkins requested data for species on an Overberg route that criss-crosses an area for a proposed powerline. The fact that habitat is recorded during counts was very helpful in interpreting the results.

Due to funding constraints it was not possible to undertake trips to give feedback and encouragement to participants. However, a combined trip with Neil Smith, of BirdLife SA and the Project Coordinator for the next Bird Atlas, and Marius Wheeler of the ADU, who coordinates the Coordinated Waterbird counts, is planned for next year.

Feedback to participants received priority with newsletters being sent to all participants as usual prior to each count. Newsletter 19, with the results of the July 2005 count, also contained a section on climate change, biodiversity and energy highlighting the value of long-term field studies, developing renewable energy sources and conserving energy. The publication of Roberts VII has necessitated a change of some abbreviations used in filling out the roadcount form, due to the change of some species names. Newsletter 20 contained a section on Business and Biodiversity encouraging sustainable development, wise consumer choice as well as recycling. Interim website reports http://web.uct.ac.za/depts/stats/adu/car_w2005.htm , http://web.uct.ac.za/depts/stats/adu/car_s2006.htm were also posted about two months after each count.

The winter count took place on 30 July 2005. The summer count took place on 28 January 2006 and proved to be the count most disrupted by weather to date. Counts in a number of precincts were postponed due to heavy rains. The province that was most affected was the Free State where the Precinct Organiser, Brian Colahan, re-scheduled counts for about 100 routes a week later! Some precincts in the northeastern Eastern Cape and Mpumalanga were also re-scheduled. It was unfortunately impossible to count most of the Wakkerstroom routes, as heavy rains (1240 mm in January and February!) caused extensive damage to roads and bridges. Linda Tsipa captured the data for both counts. From the January 2006 count onwards participants were requested to submit photographs showing typical habitat at different points along their route, if possible. This will assist in documenting changes in land use and in interpreting CAR results.

Western Cape

Overberg Precinct: The 2005 winter count followed good winter rains as well as floods in the Bredasdorp area in April, crops and pastures were in excellent condition. There were many large flocks of cranes and the highest density of cranes to date was recorded. Denham's Bustard numbers were also encouraging with OV13 recording 52 and OV12 their highest total ever (39). The highest number of migratory White Storks for a winter count was recorded, with 108 on OV16. In contrast the Overberg was very dry for the summer 2006 count,

however the Blue Crane summer density was still on the increase. White Stork numbers were low, not surprising given the dry conditions and good rains further north.

Swartland Precinct: In July 2005 the largest flock of Blue Cranes (381) to date were seen on SW01, a route which had very few cranes in earlier counts. Over 1 000 cranes were recorded in this precinct. Mist delayed the start of some counts, two routes were incomplete due to mist and two were re-scheduled to a week later. A proliferation of vineyards was noted on SW02, particularly on the first half of the route and vineyards were gradually being established on SW08. A new route SW16 was also counted. Conditions were extremely dry for the summer 2006 count and the diversity of birds very low. However the density of cranes was still on the increase. On SW15 large tracts of land had been burnt.

Beaufort West Precinct: Only half WB01 was counted in summer 2006 due to an impassable muddy riverbed.

Little Karoo Precinct: The results for WK02 have not been received yet.

Uniondale Precinct: Natalie Baker and Paul Buccholz, of CapeNature, have taken over coordination of this precinct as Peter Chadwick has moved. Few White Storks were recorded in January 2006. The first Ludwig's Bustard was sighted on WU05.

Calitzdorp precinct: A new route was developed by Elton le Roux, of Gamkaberg Nature Reserve, and counted officially in July 2005. In July 28 cranes were recorded on this route.

Northern Cape

Karoo Precinct: Overall numbers of large terrestrial birds were low in this precinct in July 2005, probably partly due to the particularly dry conditions in the eastern Karoo during 2005. A function marking 10 years of counting was held on 29 July 2005 and a number of landowners were presented with Crane Custodian Boards. The Northern Cape Department of Tourism, Environment and Conservation presented these boards in partnership with Vodacom and the South African Crane Working Group. Black-headed Heron and Spur-winged Geese which are not usually common in the Karoo were recorded during the summer 2006 count which followed high rainfall and the inundation of many ephemeral wetlands. A lower number of Blue Crane chicks were spotted, the breeding season appeared to be later than usual.

KwaZulu-Natal

There were three reports of Southern Ground-Hornbill sightings following the July 2005 count. KE03, which was discontinued in 2002 due to transport difficulties and dense human populations, was counted but no birds were recorded. Increasing human settlement was also noted on KN01, leading to a decrease in large terrestrial birds. Children from St Gregory Primary and Winterton Primary Schools participated in counts. Frik Lemmer, of KZN Wildlife, initiated a new route in the savannah biome in the Pongola area. Wattled Cranes were seen on two routes in each of the Swartberg, Midlands and Underberg precincts.

Visibility was again restricted for the January 2006 count due to tall vegetation following a very wet summer. Blue Crane numbers were higher than usual. A single Woolly-necked Stork was recorded on KG10. Many more Wattled Cranes were back on KG09. KL02 had changed

character, as soya beans replaced maize. No Southern Ground-Hornbills were recorded on the count, but three were present on a participant's farm near Melmoth the day before.

Free State

The winter 2005 count conditions were generally good. More Blue Cranes were recorded in the north-western precinct than in the north-eastern precinct. In the southern precinct three species (Northern Black Korhaan, Blue Crane and Spur-winged Goose) yielded > 20 birds per 100km.

Recent heavy rains necessitated re-scheduling the summer count to a week later. No Abdim's Storks were seen in the north-eastern precinct. The highest number (19) of Denham's Bustard to date was recorded in this precinct. Both migrant storks were recorded in the north-western precinct, but all on one route. The most abundant species was Northern Black Korhaan, as usual, in this precinct. The density of this species was the highest ever in the southern precinct.

Mpumalanga

The Oribi Working Group requested that Oribi be included in counts in this province.

Steenkampsberg precinct: The winter 2005 counts were average. The Wattled Crane pair, seen for the first time last winter on MS01, was clearly nesting. Numbers were generally above average for the summer 2006 count. Five Denham's Bustard were counted on MS06, the highest total for this species in 17 CAR counts. A single Wattled Crane was seen on MS07.

Middleburg precinct: Pieter du Plessis, the Precinct Organiser, saw Grey Crowned Cranes, the first recorded since July 1998. In January 2006 only one route was counted, unfortunately Pieter is no longer able to co-ordinate these counts.

Wakkerstroom precinct: These routes were successfully counted by the new Wakkerstroom participants together with Alison Richardson and other Wits Bird Club members in July 2005. It was only possible to count a few routes in January 2006, due to impassable road conditions caused by heavy rain as mentioned earlier. For this count MW05 was changed and re-numbered MW10, as parts of the route had become so densely populated that it was now dangerous to stop. The route was altered to include similar habitat to the original MW05.

Standerton precinct: Four routes were counted in July 2005. White Storks were sighted on three of these. For the summer 2006 count these routes were counted two weeks late due to heavy rain. Birds were widely dispersed and the lush vegetation reduced visibility.

Chrissiesmeer precinct: Seven routes were counted in this precinct in July 2005. Fourteen Blue Korhaan were seen on MC07. Heavy rain fell the night before the summer 2006 count, but it was clear for the count. It was not possible to count all of MC06 due to flooding. White Storks and Southern Bald Ibis were recorded on most routes.

Eastern Cape

Oribi were also included in the Eastern Cape counts, but were only seen on two Kenton-on-Sea routes. Some routes in the northeastern Eastern Cape were very dry, as was the Humansdorp precinct. Some routes, like EP01 and ES08 however did receive good rain. Two

new routes were reconnoitred in the Somerset East precinct, one of which (ES09) will not be continued. Bradley Gibbons, of SACWG, counted a new route (EM01) near Middelburg.

In January 2006 most counts in the northeastern Eastern Cape were re-scheduled by Mark van Niekerk, the new Precinct Organiser, due to rain. Fifteen Southern Bald Ibis were recorded on EE11, this Vulnerable Red Data species was not recorded in this area during the period of the Atlas. Many pine trees have been planted along EE20 having a definite impact on bird life. As the road is not maintained for the last section of EE09, this route has been shortened and re-numbered EE21. There was a noticeable drop in bird numbers in the Humansdorp precinct, probably due to strong wind and the extensive fires in the area in November followed by a dry season. The heronry on EH06 was entirely empty for the first time in ten years.

Gauteng

Craig Whittington-Jones, of Gauteng Department of Agriculture, Conservation and Environment, arranged for seven routes to be counted in four precincts within this province. For the January count seventeen routes were counted due to the hard work conducted by Craig and a colleague, Sean West, in setting up new routes. Habitat transformation has been extensive in this province, so monitoring is particularly important in this province.

SUMMARY

For the period 2006/2007, CAR continued to grow with the development of a new precinct in the savannah biome and the addition of new routes to existing precincts. Expansion of routes continued in the Gauteng province forming six precincts. Funding from the Critical Ecosystem Partnership Fund has facilitated increased collaboration with farmers, nature conservationists and the Department of Agriculture. Through a workshop at the ADU and conducting interviews at the Agri Megaweek further insights were gathered resulting in the further development of guidelines for best practice for land management practices that promote the conservation of biodiversity.

The CAR count involves more people (750+) on a single day than any other birding activity in Africa. Precinct Organisers continue to play an important role in the project. Population data are being gathered on a wide range of large terrestrial birds over an extensive area and valuable new information on population trends, movements and habitat use is emerging. The eight-year report, *Big birds on farms: the Mazda CAR report 1993-2001*, summarised the results and gave advice to landowners on how to conserve these threatened species. Updated trends of species in some precincts have been posted on the website. Software has been developed to query a summarised database, so that it will soon be possible to obtain regularly updated results online from the website. The CAR database now contains more than 7000 roadcounts.

Important links continue with BirdLife SA, the Overberg Crane Group, the South African Crane Working Group, the Namibian Crane Working Group, Cape Action for People and the Environment and provincial nature conservation agencies, especially in the Northern Cape, Free State, Western Cape, KwaZulu-Natal and recently Gauteng. Links have also been established with the Oribi Working Group and the Ground Hornbill Working Group.

Feedback to participants remains a priority, but it was only possible to give a presentation to the Midlands precinct participants while in KwaZulu-Natal for the SACWG workshop due to

time and funding constraints. The website, www.aviandemographyunit.org, is updated regularly and a website report, two months after each count, as well as the postage of newsletters twice a year continues.

The future of CAR is still not secure. Although some funding is assured through the Darwin Initiative, the Critical Ecosystem Partnership Fund, and the African Bird Club Award, as well as core funding from the South African National Biodiversity Institute, there will still be a deficit. In the past year, some bird clubs have funded CAR routes in their respective areas and individual participants have generously supported CAR. Participants already contribute a huge amount in terms of time, skills and petrol.

It is encouraging that the value of this long term monitoring data of species utilising agricultural lands is being recognised and that the enthusiastic, skilled team of volunteers and Precinct Organisers continue to participate regularly. Especially since about 80% of South Africa's land is agricultural and 50% of the counts are conducted by landowners.

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