



Target Species Project Feedback Report: 01 January to 31 March 2018

Aim

The main objective of the project to collate data on selected specialist, threatened and endemic bird species (known as target species) within the BirdLife SA (BLSA) recognised Important Bird and Biodiversity Areas (IBA) in the Overberg – using Birdclasser as the monitoring tool to capture and store data. The project is spearheaded by the Nuwejaars Wetlands Special Management Area (NWSMA), partnering with the Overberg Renosterveld Conservation Trust (ORCT) and Overberg Crane Group (OCG). The target species for this project include Heuningnes-Agulhas Plain IBA listed birds which are considered globally and regionally threatened, as well as range restricted birds and species of special interest to the NWSMA. The result is a valuable threatened species database which can be utilised to analyse short and long term trends pertaining to population demography and avian habitat preference, a key requirement for developing conservation action projects. As a sub objective of the project, the NWSMA will focus its efforts on analysing trend data on Southern Black Korhaan, specifically habitat preference within the Overberg.

Methods

Sightings of target species are all logged on Birdclasser mobile app. In order to obtain as much data as possible for the database, we have employed various ways to accumulate more sightings, including:

- NWSMA staff atlas pentads within the NWSMA, and the Heuningnes-Agulhas Plain IBA monthly, logging all species seen, and focusing on searching for target species.
- NWSMA staff log all ad-hoc sightings of target species whilst performing normal operational duties within the NWSMA.
- Together with BLSA, OCG and ORCT the 'Overberg Challenge' was created on Birdclasser. This means that we have access to all the bird sightings of the members of the public who have joined the challenge.

Feedback

The 2018 Overberg 150km challenge went live on 01 January 2018 and currently has 33 participants who have recorded 278 bird species and populated over 6300 sighting records between 01 January and 31 March 2018 (see figure one). To date, 23 of the 25 Target species (see table one) have been recorded leaving Striped Flufftail, Marsh Owl and Cape Eagle-owl still to be found in the area.

African Black Oystercatcher	Cape Eagle-owl	Karoo Korhaan
African Grass owl	Cape Spurfowl	Lanner Falcon
African Marsh-harrier	Caspian Tern	Lesser Flamingo
Agulhas long-billed lark	Chestnut-banded Plover	Martial Eagle
Black Harrier	Damara Tern	Marsh Owl
Blue Crane	Denhams Bustard	Secretary bird
Cape Bulbul	Greater Flamingo	Southern Black Korhaan
Cape clapper lark	Greater Painted-snipe	Striped Flufftail
Cape Cormorant	Hottentot Buttonquail	

Table 1. Listing the 23 Target species sighted within the Challenge area for 2018.

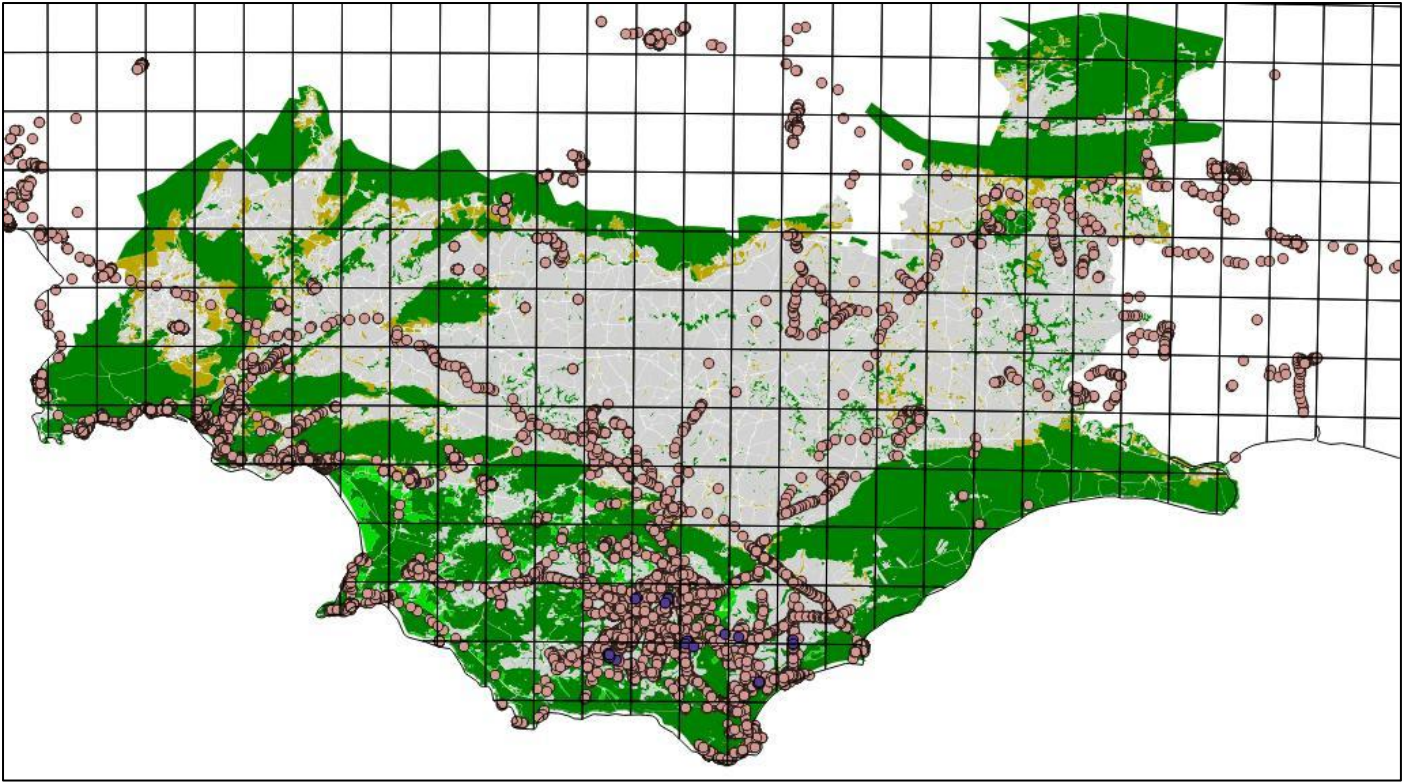


Figure 1. Map showing the Overberg habitat types (green is natural vegetation and grey is degraded/disturbed areas most likely lands used for agriculture). The map presents all bird sightings recorded via Birdclasser for the Overberg Challenge (light pink dots), and highlights the Southern black Korhaan sightings (purple) found within each pentad (grid block lines).

NWSMA has atlased nine pentads within the Heuningnes-Agulhas Plain IBA boundary from the inception of the project, and has recorded over 400 bird sightings and driven over 500 km to log species (an expense that has been kindly donated from the Tygerberg Bird Club).

NWSMA staff have also logged over 100 adhoc sightings of the listed target species and currently NWSMA have recorded 14 of the 25 target species.

Focusing on the Southern Black Korhaan

The Southern Black Korhaan is listed as vulnerable regionally and globally and there is a recognised lack of knowledge regarding the species ecology, population size and distribution. We derived long term raw data from the University of Cape Towns' Animal Demography Unit for Southern Black Korhaan sightings during the Coordinated Avian Road Count (CAR) between 1997 and 2017 for the Overberg Routes. A rudimentary analysis showed a total of 320 records and 463 sightings of Southern Black Korhaan between 1997 and 2017.

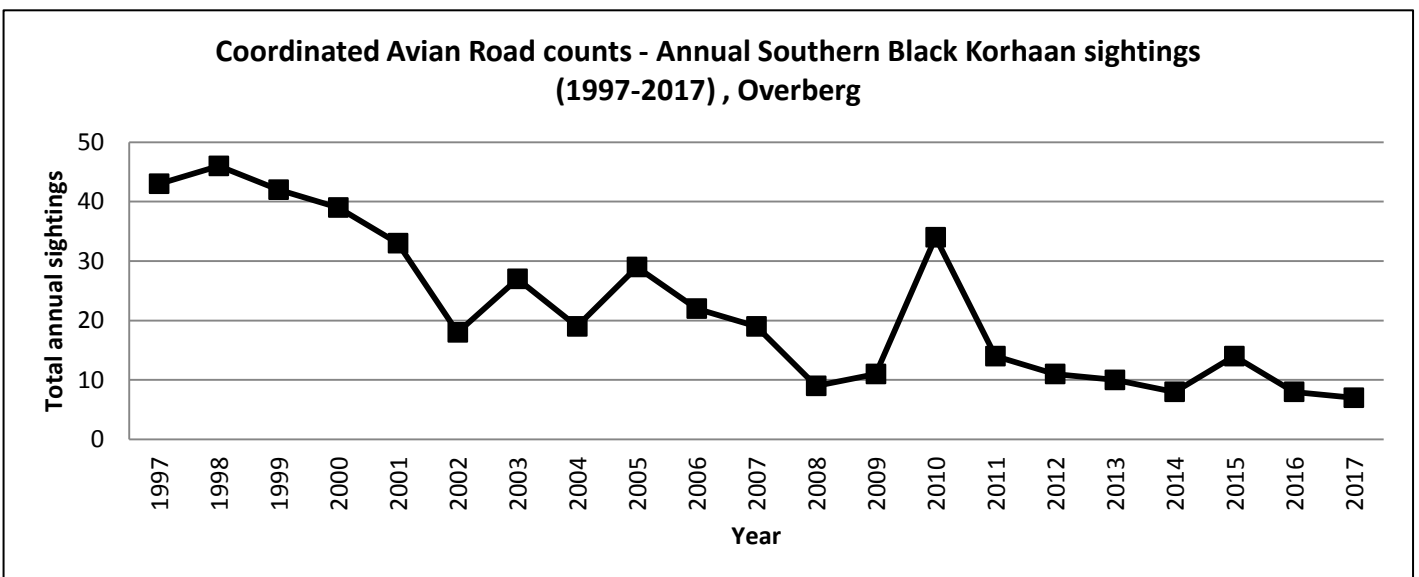


Figure 2. Comparative annual total sightings of Southern Black Korhaan along the CAR Overberg Routes.

The CAR findings echo Cape Nature's Western Cape State of Biodiversity Report for 2017, describing a vast decline in numbers due increased removal of natural vegetation and urbanisation (Turner, 2017). Figure two shows the steady decline of sightings of Southern Black Korhaan along the Overberg Routes of the Coordinated Avian Road Counts between 1997 and 2017.

Southern Black Korhaan prefers Fynbos, Renosterveld and the succulent Karoo as habitat (Chittenden et al. 2017). However, Southern Black Korhaan sightings logged during the CAR counts showed that 30.5% were sighted in natural veld (presumably fynbos/renosterveld), 30% were in recorded in an agricultural landscape (crop, stubble, fallow land or bare soil), and 20% in pasture, meaning that in at least 50% of the sightings the birds were distributed in unnatural vegetated habitat. This is not out of the ordinary as it has been suggested that Southern Black Korhaan make use of agricultural lands when there is no natural veld available (Overberg Crane Group website, 2017).

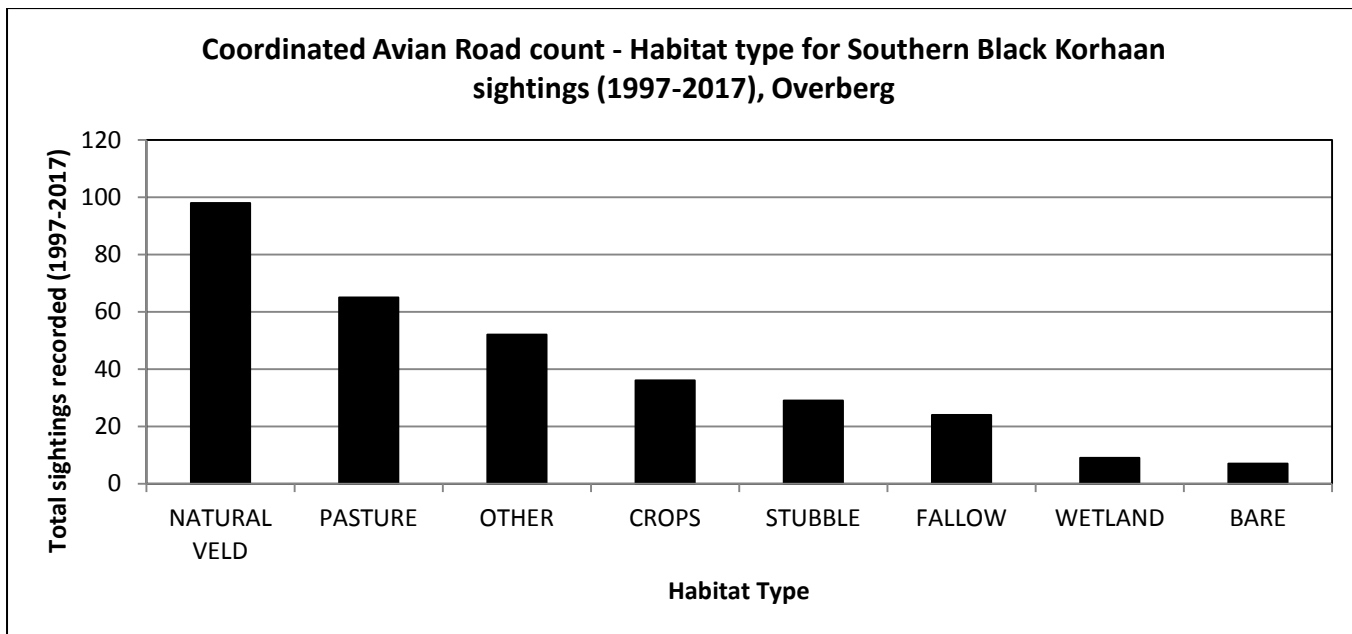


Figure 3. Comparative data showing habitat types of Southern Black Korhaan records from CAR Overberg Counts.

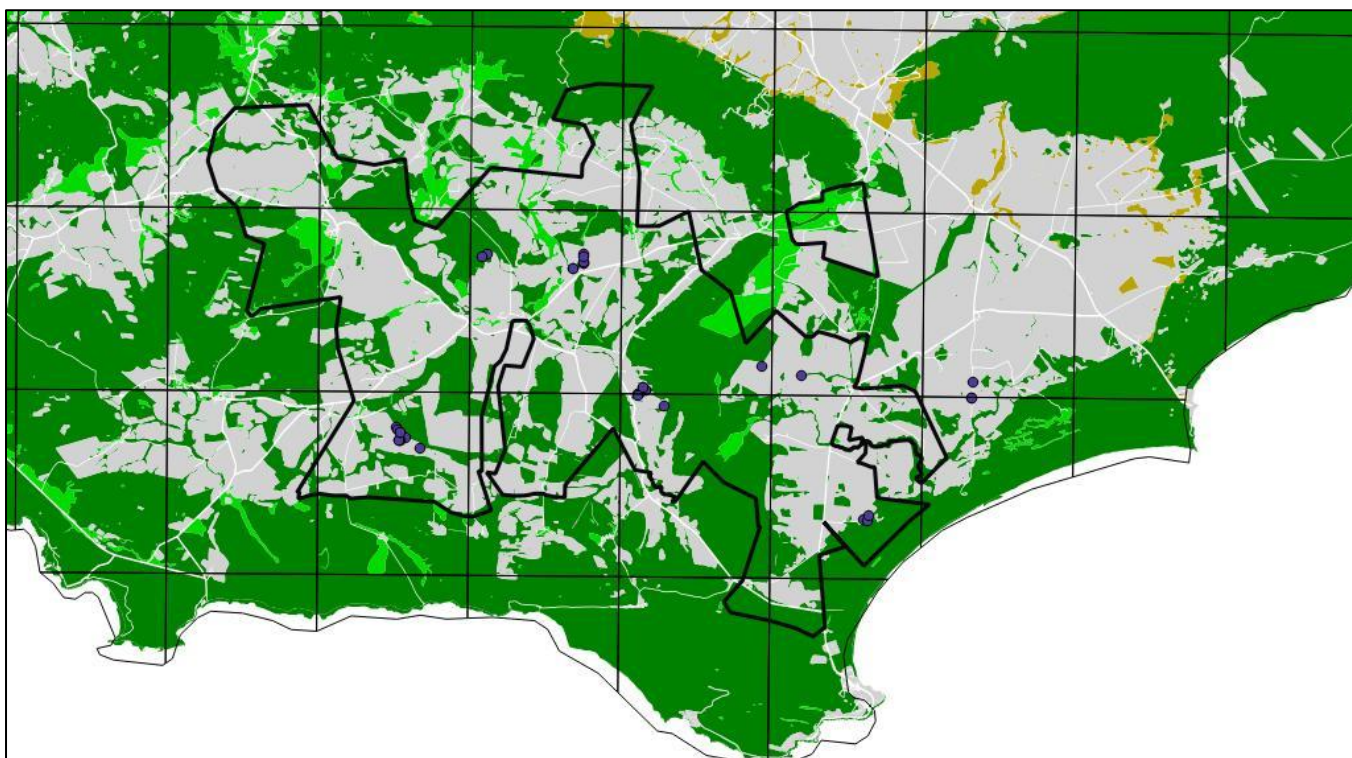
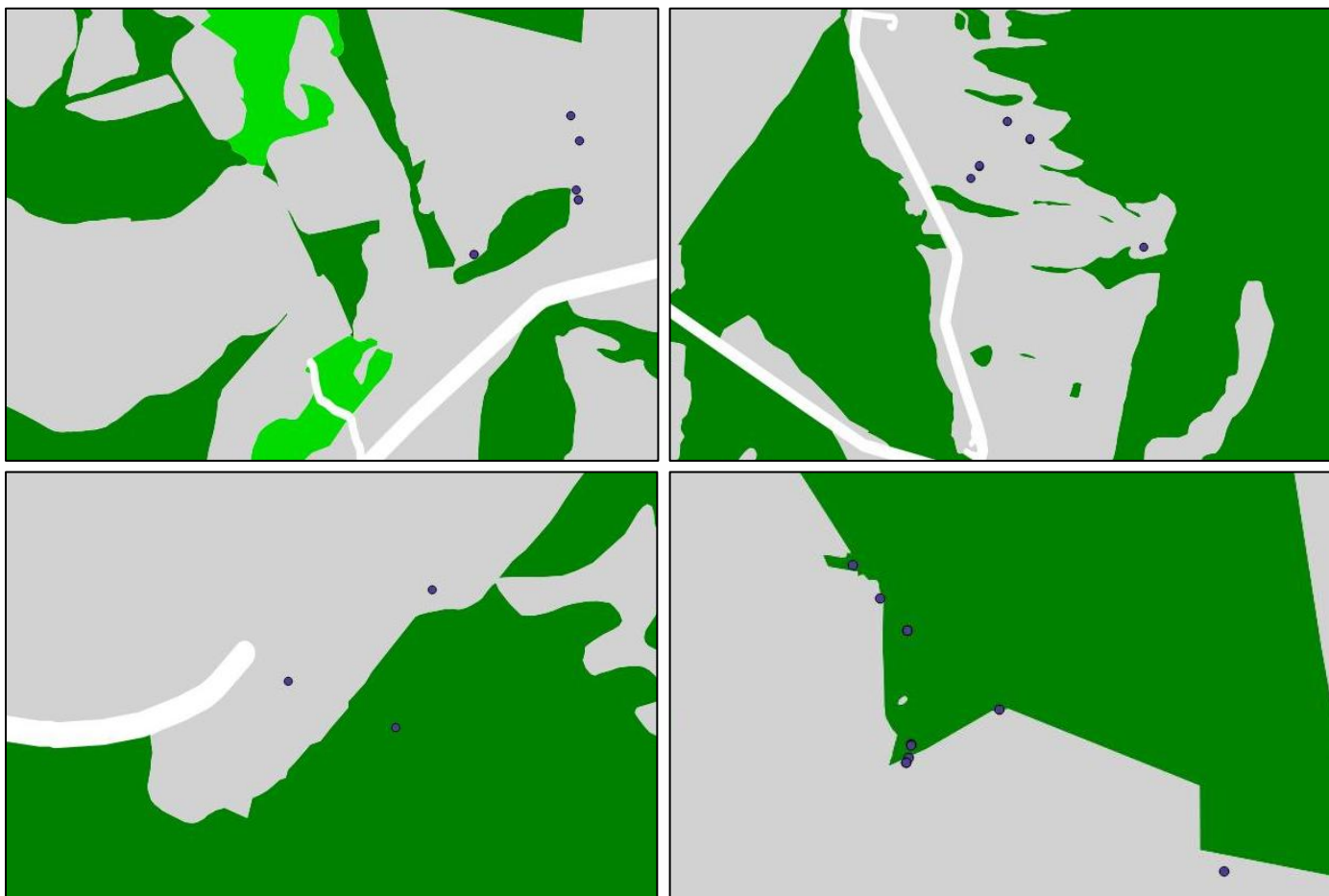


Figure 4. A zoomed in version of Figure three highlighting all the Southern black Korhaan sightings (purple) found within the Overberg habitat types (green is natural vegetation and grey is degraded/disturbed areas most likely lands used for agriculture). The thick black line shows the Nuwejaars Wetlands Special Management Area boundary.

Similar habitat preference patterns are apparent in the Overberg Challenge and NWSMA atlas data. From August 2017 to March 2018 there have been 36 sightings of Southern Black Korhaan, 33 of which were recorded by NWSMA staff members, within the borders of the Nuwejaars Wetlands Special Management Area. The majority of the Southern Black Korhaan sightings (n=31) logged on Birdlasser mobile app were in degraded areas (see figure 4).



Figures 5, 6, 7 and 8. Show close up Southern Black Korhaan sightings (purple dot) distributed in buffer zones of natural vegetation (green shaded area) and degraded land (grey area) within the Nuwejaars Wetlands Special Management Area.

GPS coordinates show that sightings were often made in buffer zones of natural vegetation areas which may be a contributing factor when describing habitat preference of the birds within the Overberg landscape. The utilisation of these buffer zones where natural land and vegetated land meet could perhaps show that birds are using both habitat types, and could be taking advantage of the plant material such as seeds and green shoots, which are in rich supply in an agricultural landscape during planting seasons. Southern Black Korhaan distribution in transitional zones could also be explained by the monitoring method. Often atlasing a pentad is done by vehicle, as the area is quite large to track by foot, and vehicle access to natural areas is limited to prevent disturbance of the vegetation and this could be why more sightings are found on edges of agricultural lands, as the birds which are in the area are flushed, and logging a sighting is done from the vehicle – not the exact spot where the bird was flushed. The NWSMA will endeavour to atlas more natural areas, and prevent monitoring bias to avoid conflicting habitat preference results.

There's still much to uncover, and we hope that by the end of the year we will have a lot more sightings in order to deliver more conclusive results of habitat preference within the Overberg.

Bibliography

Chittenden, H., Dean, W. R. J., Gibbon, G., & Upfold, G. (2015). Roberts bird guide: a comprehensive field guide to over 950 bird species in southern Africa. John Voelcker Bird Book Fund.

Turner, A. (2017) Western Cape Province State of Biodiversity 2012. Cape Nature Scientific Services, Stellenbosch.

Overberg Crane Group Website (2017) <http://www.bluecrane.org.za/project/southern-black-korhaan/>