



Information Sheet No. 4

January 2025

FILLING IN THE CAR ROADCOUNT FORM

Record the following details each time you see a bird and at each 2-km stop if birds are seen. Refer to Information Sheet No. 1 for other important details about CAR counts.

1. KM READING: from the tripmeter. Please zero your tripmeter at the start of your count.

Backtracks or detours: Please use a line of the roadcount form to record the km readings at the beginning and end of each detour or backtrack e.g. 'Detour from 10 km to 20 km'. Continue your route without adjusting your tripmeter. This is so that you can adjust the km reading later for data capture (see Information Sheet No. 1 for further details).

2. SPECIES: All cranes, all bustards, all korhaans, all storks (particularly White), Ground Hornbill, Secretarybird, Southern Bald Ibis, Black-headed Heron, Spur-winged Goose, as well as any other bird which has been identified as relevant in your area. Please note that 12 raptor and vulture species and three crow species are now included in CAR counts. Use the abbreviations for species given at the end of the CAR roadcount form.

Tips to distinguish between Buzzards: The juvenile Jackal Buzzard can "easily be mistaken for the Steppe Buzzard, but has larger, broader wings and a pale unbarred undertail." (Sasol). The juvenile Jackal Buzzards "are larger and more heavily built, with stronger bills and broad rufous tails." The "smaller Steppe Buzzard has longer, narrower wings". (Roberts Birds).

3. COUNT: Count the number of birds seen. Cranes, bustards and storks frequently form quite widely dispersed flocks, so take care to scan around carefully in all directions with binoculars to ensure that you have seen all the birds present in the area. Birds that are near the road or at a great distance get counted in the same manner.

Age Classes: Especially in the case of cranes please decide whether they are adults (A), juveniles (J) or chicks (C) and record the numbers of each in separate columns. In the case of Blue Cranes: adults have a long 'tail', juveniles have a short 'tail' and chicks are downy. In Grey Crowned Cranes the juveniles have a shorter crest and no gular wattles, while the Wattled Crane juveniles have a white crown and the wattles are smaller than those of an adult. These age classes should be applied to all other species where possible, but if you cannot distinguish between the age classes, just record the total number of individuals in the first column (A). In general "chicks" are defined as downy, and "juveniles" are young feathered birds which are noticeably smaller than adults and/or have immature plumage.

4. HABITAT: The habitat occupied by **all** species should be recorded. Sometimes dispersed flocks will have individuals on different habitat types. **In this case, count the number of birds on each habitat type separately and enter each group on a new line on the form, giving the same tripmeter reading for each line.** This will allow habitat use to be recorded accurately.

These are the **major habitat categories:**

a) **bare ground:** a recently ploughed field in which crops have not yet sprouted. (Abbreviate to 'bare'.)

b) **crops:** a field of growing crops, e.g. maize, wheat, canola, oats. (Abbreviate to 'crops'.) If you can specify crop type then refer to the **sub-categories** below and abbreviate accordingly.

1. **cereal crops:** cereals such as wheat, maize, oats, rye and barley. (Abbreviate to 'cereal'.)

2. **non-cereal crops:** non-cereal herbaceous crops such as lupins, canola and vegetables. (Abbreviate to 'non-cereal'.)

3. **orchards:** cultivated fruit trees, vineyards, rooibos, *Opuntia* (prickly pear), cultivated rows of proteas, and any other crops where the structure of the crop is higher and/or woodier than that of the other non-cereal crops. (Abbreviate to 'orchard'.)

4. **forestry plantations:** stands of planted trees such as pines, eucalyptus and wattles. (Abbreviate to 'plantation'.)

N.B. Where possible observers should still specify the type of crop e.g. wheat or potatoes, if they are able to. This should be recorded, for example, '**cereal – wheat**'.

c) **stubble:** a field in which the crop has been cut or harvested that is characterised by thick, cut dry stalks. (Abbreviate to 'stubble'.)

d) **pasture:** a field of broad-leaved pasture (e.g. lucerne, clover, medics, etc) or 'unnatural' grassland which has been planted specifically for grazing purposes. **Do note:** A pasture is neither a natural grassland nor the remnants of a cultivated crop. Pastures are usually monocultures of one type of plant and often appear lush. Natural grasslands, on the other hand, have a diverse mix of plant species. (Abbreviate to 'pasture'.)

e) **mown pasture:** field which is usually green, with cut grass or lucerne, that may be lying on the ground or may have been baled and removed. The field is clearly grass, not a cereal crop, and has clearly been mown. **Please note:** This category is usually applicable in the grassland biome only. (Abbreviate to 'mown'.)

f) **natural vegetation/veld:** includes all types of **indigenous** natural vegetation, e.g. natural grasslands (applicable to the grassland biome, e.g. parts of the Free State, KwaZulu-Natal), natural fynbos/renosterveld (applicable in the southwestern Cape) and natural Karooveld. (Abbreviate to 'veld'.)

g) **burnt grassland:** recently burnt and still black. (Abbreviate to 'burnt'.)

h) **fallow land:** land which is not being actively cultivated, but has been ploughed in the past. Weeds and some pioneer indigenous vegetation may be evident, and there may be a few remnants of stubble if the land has been fallow for only a year or two. This category is distinct from natural vegetation in that there is not the same diversity of indigenous plants, the structure of the vegetation is obviously not the same as unploughed veld, and signs of past ploughing are evident (e.g. run-off lines, ridging, piles of stones). Fallow land may also be used for grazing, but is distinct from pasture as defined above. (Abbreviate to 'fallow'.)

i) **wetland**: includes dams, pans, rivers, vleis etc., as well as a seasonally 'dry' wetland (Abbreviate to 'wetland'.)

j) **flying**: When a bird is flying; put '**flying**' for habitat. However, if a bird is only flying because it was disturbed, or because it is displaying, then record the habitat it took off from.

k) **other**: any habitat that does not fall into any of the above categories. Please specify "other-road/verge" if the bird is on the road or in the road verge.

l) **unknown**: if you cannot distinguish the type of habitat, usually because it is too far away.

N.B. If a **raptor** is perched on a pole/pylon, record the habitat that is most dominant in the area near the pole, usually the agricultural habitat. Put down '**on pole**' / '**on pylon**' for *Relevant feature nearby* and '**perched**' for *Activity*.

5. RELEVANT FEATURE NEARBY: This column is intended to provide us with additional information about habitat. Birds may be in a habitat because of a food or water source or some other important factor nearby. By **nearby we mean within 100 m of the bird**. Please note that **you don't need to fill this in for every sighting, only if there is an additional important feature that you feel may have attracted the bird**. If a bird is in an agricultural habitat or wetland, but is also within 100 m of indigenous vegetation, then put '**veld**' in this column. If the habitat that a bird is in is '**veld**', you don't need to put '**veld**' for *Relevant feature nearby*. Note that 'on pole', 'on pylon', 'on wire', 'carcass' and 'rocky outcrop' have been added to these options now that raptors and crows are included in the counts.

6. SIDE OF ROAD: Please **always** write **L** or **R** in this column to indicate whether the birds were on the left hand side of the road or on the right. This information helps to narrow down the locality of the sighting.

Do note: Routes must always be driven in the same direction.

If for a particular reason you are unable to do your route in the normal direction, please make a conspicuous note, adjust your km accordingly and indicate that you have done so in the Notes section.

7. DISTANCE (to birds): Optional. If possible, record the perpendicular distance from the road (transect) to the initial location of non-flying target species (before it flies or runs away) in meters. Distance is best measured with a laser rangefinder (e.g. used for golf or hunting). You can estimate distance, but if in doubt, leave this out. The information is used to translate relative abundance (birds/km) into density estimates (birds per area), which is useful for population estimation (once we know effective detection distances). Distance should be to the middle of a flock for large groups. For more technical information, find out more at:
https://en.wikipedia.org/wiki/Distance_sampling

N.B. The last **Activity** column should be filled in for at least the three cranes, i.e. Blue, Grey Crowned and Wattled Cranes, the three large bustards, i.e. Kori, Denham's and Ludwig's Bustard, Southern Black Korhaan, raptors and crows.

8. ACTIVITY: Record the activities that the birds are engaged in at the time of observation, using the following categories:

- a) **inactive:** e.g. standing, preening, loafing etc.
- b) **feeding:** i.e. actually eating or walking along looking for food.
- c) **flying:** i.e. airborne.
- d) **breeding:** i.e. mating, incubating, etc. Do not disturb any bird seen incubating.
- e) **displaying:** i.e. displaying or dancing birds (don't include this activity with breeding).

For raptors and crows there are two additional activities as well:

- 1) **perched**
- 2) **hunting** (actively searching for food).

Usually, all flock members are engaged in the same activity, but if not, record the most dominant activity.

9. COLOUR RINGS: For colour-ringed birds write down the sequence of the colour rings from top to bottom (e.g. red over blue) in the section provided as well as km. Note: the right and left legs of the bird are decided as if you were the bird. It is very helpful if you can take a photograph as well.

10. DEAD BIRDS: Record dead birds under Notes: recording species name, km reading, whether under powerline or other information that may indicate suspected cause of death. Important contacts: For powerline deaths please send images, location and pole numbers to Ndzalama Chauke (ndzalamac@ewt.org).. For suspected poisonings please contact Andre Botha for advice: 0829625725 or andreb@ewt.org.

11. FINISHING:

a. Fill in the time and km when you completed your route. (You are welcome to take a break before the end of the route, but do indicate this break (when and for how long clearly on your form).

b. Calculate the length of your route, i.e. subtract any detours or backtracks from your tripmeter reading, and fill the distance in on your form. Make sure all the details required are completed and fill in any information of interest or comments in the Notes section provided.

c. If you are new to CAR you will first need to obtain a Citizen Scientist Number, unless you already participate in the South African Bird Atlas Project 2 or one of the other Birdmap projects and already have an Observer Number.

To obtain a Citizen Scientist Number please go to the South African Bird Atlas Project 2 webpage <https://sabap2.birdmap.africa/> then click on **How to participate** in the Menu at the top. Then go to **Registering as an Observer** and click **here**, you will then need to fill in all your details. if you have an Observer or Citizen Scientist Number you will be able to login to the CAR webpage <https://car.birdmap.africa/>

d. **Please capture your count online** if possible. **You must be logged in** to the CAR website using your email address, Citizen Scientist or Observer No (fills in automatically as linked to your email address) and password. Then click on **Upload** in the Menu at the top of the CAR webpage and enter your **Route No** under **Survey Information and conditions** on the left. Complete this section, followed by the **Survey distance information** and **General Notes** on the right. Please note that you need to select whether the time is AM or PM. **Check everything** before clicking **Save Header**. Then it will be possible to add additional observers and then capture all the bird species information. Do check entries before you click **Add Record**, as you can't see all the captured information once it is added on the right. Check that the final totals agree with your own totals on the roadcount form.

Then add any Mammal species information by selecting Mammal under **Type** of species. Then click **Done** to submit your count results. Your count will go into **Pending** for your Precinct Organiser to check and submit. Your count can be found under **Dashboard** in the Menu at the top. If you need to edit any of the Survey information do remember to click **Save Header** again. You can still make corrections while it is in **Pending**. If it is already submitted, please contact your Precinct Organiser or the Project Coordinator if any changes need to be made.

e. Please always keep your roadcount form and email a copy to your Precinct Organiser. If you are unable to capture your count online your Precinct Organiser will do this or send it to a volunteer.

f. If you were unable to do the count at the last minute, or have any problems or queries, please contact your Precinct Organiser.

g. If you have problems registering or capturing data please check the FAQs (Frequently Asked Questions) on the CAR website or contact your Precinct Organiser, or Tania Anderson on tania.anderson@uct.ac.za

Thank you for your time and care in counting and contributing to this important project!

Tania Anderson, Michael Brooks, Christie Craig, Cassie Carstens, Donella Young, Brian Colahan, Mick D'Alton, Bradley Gibbons, and Alan Lee

CAR Working Group