

Avian Demography Unit

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COORDINATED AVIFAUNAL ROADCOUNTS (CAR)

INFORMATION SHEET No. 4

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FILLING IN THE 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 odometer. Please zero your odometer 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 odometer. 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/Bald Ibis, Black-headed Heron and Spur-winged Goose, as well as any other bird which has been identified as relevant in your area. Use the abbreviations for species given at the foot of the CAR roadcount form.

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/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 odometer reading for each line.** This will allow habitat use to be recorded accurately.

There are **nine** major habitat categories:

- bare ground:** a recently ploughed field in which crops have not yet sprouted. (Abbreviate to 'bare'.)
- crops:** a field of growing crops, e.g. maize, wheat, oats, barley. (Abbreviate to 'crops'.) If you can specify crop type then refer to the **sub-categories** below and abbreviate accordingly.
- stubble:** a field in which the crop has been cut or harvested that is characterised by thick, cut dry stalks. (Abbreviate to 'stubble'.)
- 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'.)
- 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'.)
- 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 Karoooveld. (Abbreviate to 'veld'.)
- burnt grassland:** recently burnt and still black. (Abbreviate to 'burnt'.)
- 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) **indeterminate:** When a bird is flying; put '**indeterminate**' 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.

The habitat category '**crops**' has been divided into **four sub-categories**:

- 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**'.

- 5. **RELEVANT FEATURES 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.

N.B. The following columns need be filled in only for the three cranes, i.e. Blue, Grey Crowned/Crowned and Wattled Cranes, and the three large bustards, i.e. Kori, Denham's/Stanley's and Ludwig's Bustard.

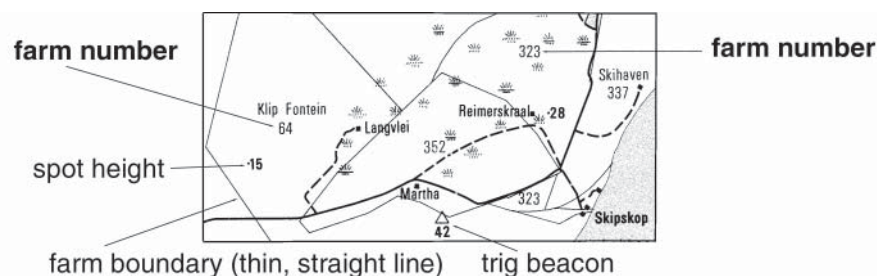
- 6. **ACTIVITY:** Record the activities that the birds are engaged in at the time of observation, using the following categories:
 - a) **inactive:** e.g. standing, preening, loafing etc.
 - b) **feeding:** i.e. actually eating or walking along looking for food.
 - c) **flying:** i.e. airborne.
 - d) **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).

Usually, all flock members are engaged in the same activity, but if not, write down all the relevant activities in the same block. You don't need to count how many are engaged in each activity.

- 7. **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. Some farms have lands on both sides of the road, and in some areas there are no farm numbers, so this information helps to narrow down the locality of the sighting. **Do note: Routes must always be driven in the same direction.**

- 8. **FARM NUMBERS:** Use your 1:250 000 topo-cadastral map to find the number of the farm on which the birds are situated. To do this, work out where you are on your route map using the distance you have travelled and the scale provided (note that 2 cm = 5 km). You may find it helpful to mark a piece of string with 2-cm intervals (i.e. = 5 km) and use this to work out how far you are along your route on your 1:250 000 map, when finding the position and hence farm number for these species. The farm number often appears after the farm name given on the map, but in some cases there is only a number. **Please do NOT backtrack to find the name of the farm.** The farm names which are on the gates are often different from those on the map and they keep changing, whereas those on the map do not change! Record this farm number on your CAR form.

N.B. There are numbers on the map with a dot next to them; these are spot heights and not farm numbers. There are also numbers with a triangle next to them; these are trig beacons and not farm numbers. In some areas there is communal land with no farm boundaries or numbers indicated; in such cases leave this column blank. The following example should help you in finding the correct numbers:



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 and mark the relevant line on the CAR form with an asterisk. Note: the right and left legs of the bird are decided as if you were the bird.

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

James Harrison and Donella Young
Project Manager and Project Coordinator

