

### 3. CONDUCTING AN ATLAS SURVEY

#### 3.1 Planning your survey

Since you will need to conduct an initial intensive survey on the first day of the allowed five-day survey period, you will need to spend some time planning your atlas surveys. The following guide will help you in achieving this:

1. Acquire an appropriate 1: 50 000 topographical map (paper or digital);
2. Draw in the pentad boundary lines (i.e. every 5 min. of longitude and latitude);
3. Select the pentad(s) you intend to survey;
4. Write down the pentad code for the pentad(s) you have selected (see p. 5);
5. Familiarize yourself with the roads and landscape features in each pentad (refer to the map legends below, or at the bottom of the paper maps);

REFERENCE	VERKLARING
International Boundaries.....	Internasionale Grense
Provincial Boundaries.....	Provinsiale Grense
Multiple Track Railways.....	Veelvoudige Spoorlyne
Single Track Railways.....	Enkelspoorlyne
Electrified Railways.....	Geëlektrifiseerde Spoorlyne
Narrow Gauge Railways.....	Smalspoorlyne
Service Railways.....	Dienspoorlyne
Arterial Roads.....	Hoofverkeerspaai
Main Roads.....	Grootpaai
Secondary Roads.....	Sekondêre Paai
Other Roads.....	Ander Paai
Tracks and Footpaths.....	Dowwe Paai en Voetpaai
Power Lines.....	Kraglyne
Telephone Lines.....	Telefoonlyne
Post Offices, Police Stations and Posts.....	Poskantore, Polisiestasies en poste
Stores, Hotels, Schools and Places of Worship.....	Winkels, Hotelle, Skole en Plekke van Aanbidding
Lighthouses and Marine Lights.....	Vuurtorings en Seevaartligte
Marine Beacons.....	Seevaartbakens
Controlled Area Boundaries.....	Beheerdegebiedsgrense
Bantu and Coloured Area Boundaries.....	Bantoe- en Kleurlinggebiedsgrense

  

REFERENCE	VERKLARING
Trig. Beacons (Number to right and height below)	Trig. Bakens (Nommer regs en hoogte onder)
Magnetic Stations and Ground Signs.....	Magnetiese Stasies en Grondtekens
Huts.....	Hutte
Monuments.....	Monumente
Dipping Tanks.....	Dipbakke
Windmills.....	Windpompe
Walls.....	Mure
Anti-erosion Walls.....	Grondbewaringswalle
Excavations.....	Uitgrawings
Perennial Water.....	Standhoudende Water
Non-perennial Water.....	Nie-standhoudende Water
Dry Pans.....	Droë Panne
Springs, Boreholes, Waterholes and Wells.....	Fonteine, Boorgate, Watergate en Putte
Marshes, Swamps and Vleis.....	Moerasse en Vleie
Pipelines.....	Pyplyne
Photo Centres.....	Fotomiddelpeunte
Prominent Rocky Outcrops.....	Prominente Klipbanke
Terraces.....	Terrasse
Cultivated Lands.....	Bewerkte Lande
Orchards and Vineyards.....	Boorde en Wingerde
Trees and Bush.....	Bome en Bos
Grasslands.....	Graslande

**1: 50 000 map legends or references**  
(use these in conjunction with your digital maps to interpret landscape features)

6. Determine a route through the pentad that will cover all or most of the different habitats (see p. 10) present in the pentad:
  - If you are familiar with the pentad landscapes and the different habitats you should be able to plan a route without too much difficulty;
  - If you are unfamiliar with the pentad landscapes and the habitats present, plan a route that you think will be able cover areas of natural vegetation, farmland or cultivated areas, wetland areas that look accessible, areas that may encompass koppies, mountains or cliffs, and any built-up areas (villages, towns, etc.);
 

**Hint:** once you cover an unknown pentad for the first time, you will be able to better assess future survey routes and access in that pentad based on the initial route you selected;
1. Ensure you have all appropriate equipment together that you will need for the survey:
  - Binoculars/Telescope
  - Field guides
  - GPS
  - Map(s) of your pentad(s)
  - Field Data Sheet/Field Record Sheet/Notebook/Dictaphone
  - Clipboard and pen/pencil
  - Watch/Cellphone
  - SABAP2 Observer Card (obtainable on registration)
  - Refreshments
8. Determine a suitable day for the start of the survey

### **3.2 Carrying out a survey**

Having determined which pentad(s) you are going to survey, and having acquired the appropriate maps, have your GPS, decided on routes to take and habitats to cover, you will need to carry out your field survey, **for each pentad**, in the following way:

#### **3.1 Intensively cover all habitat types within a pentad within the minimum time period (i.e. at least 2 hours).**

- This initial intensive survey should be approached along the lines of a Birding Big Day (BBD) exercise, i.e. try to visit as many different habitats to record as many different species as possible within the minimum time period.
- Try and do your **initial surveys in the morning**, when birds are most active. We suggest that you try and aim to start about an hour after sunrise. Also, try (where possible) to carry out your surveys in **favourable weather conditions**.
- It may not be possible to visit all habitats in the pentad, due to access difficulties. In these cases, we would only require you to cover areas or habitats that are accessible in the pentad as best you can. If you did not cover all habitats during the survey you will need to indicate this on the Field Data Sheet.

- Basically, we would like you to make a reasonable effort to try and cover as much of the pentad as possible in the minimum time period, so that you are reasonably satisfied that the list of species is comprehensive and represents a fairly accurate list of the species in the grid cell.

### 3.2 Record the species in the order you observe them.

- This means you will need to write down the sequence number for species as and when you **see and/or hear** them, e.g.
  1. Dark-capped Bulbul
  2. Cape Robin-Chat
  3. Southern Masked Weaver
  4. Hadedda Ibis
  5. Red-winged Starling
 etc.
- **Record species only once** (i.e. presence/absence). **Do NOT count individuals** of each species you record (unless this is part of Additional Information you are collecting, see “additional information” on p. XX).
- **Do NOT write down status codes** as was used for SABAP1 and that are currently used for BIRP.
- You can record species in the field using one of four prescribed methods:
  1. Using a SABAP2 Field Data Sheet
  2. Using a SABAP2 Field Record Sheet
  3. Using a notebook
  4. Using a dictaphone or other digital recording device
- We recommend using the Field Record Sheet or a notebook in the field as sequence numbers can be pre-listed making it easier to record your species. You will need to try and keep track of which species you have seen as you progress through the survey but even if you have recorded a species twice this will be automatically rectified during the data capturing or submission process. An example of a completed Field Record Sheet is given below.
- Although the Field Data Sheet has a complete list of all the species in taxonomic order, it will rely on you knowing where each species occurs on the list and will require regular turning of the Data Sheet to find species as they are recorded. It will also require that you keep track of the sequence numbers through your observation period. Should two species accidentally get the same sequence number this will be flagged during the data capturing or submission process. An example of a completed Field Data Sheet is given below.
- The dictaphone method may also be convenient but means that you will have to record the sequence on the Field Data Sheet when playing back the recording later. One advantage with this method is that you will be able to pick up any errors (e.g. recording a species twice) during the transcription process.
- If you come across a large group of species simultaneously, try and record the most abundant species first.
- For species observed after the initial intensive survey period, please continue from the last sequence number that was used.
- Breeding is not regarded as primary data. However, if you notice breeding, record details and it can be added later as additional information (see p. X).
- Remember the golden rule: *IF IN DOUBT, LEAVE IT OUT!* Please do not guess. Only identify species for which you are 100% certain.

**3.3 Record the number of new species observed after each hour for the minimum time period.**

- This means that during your field surveys you will need to indicate in your notebook or on your Field Data Sheet or Field Record Sheet when the first hour is completed, when the second hour is completed, when the third hour is completed, etc. for as long as the minimum time period lasts.
- Please note: ***DO NOT start a new list after every hour*** but continuously add new species seen every hour.

**3.4 Record any additional species seen for a period up to and including five (5) days.**

- Once you feel satisfied that you have covered all habitats initially, additional species can be added to the overall list for up to a period of five days. If you feel you have covered the pentad thoroughly in less than five days then submit that list, but remember that a new field data sheet for each pentad can ONLY be started five days after the start of a previous field data sheet.
- Record the *total number of hours ACTUALLY spent observing* during the five days. Thus, even if you submitted a data sheet covering five days (=120 hours) but you only observed for 20 hours during the five days then you need to write 20 hours on the Field Data Sheet or capture this within the Data Management System.



## Southern African Bird Atlas Project 2

### Field Record Sheet (example)

These sheets are provided as an alternative to the Field Data Sheets when carrying out your field surveys. Once complete, either transcribe onto a Field Data Sheet (for submission to the ADU) or capture directly into the electronic Data Management System.

Pentad code: 3355\_1825 Start Date: 01/03/2007 Start time: 06:30 End Date: 5/03/2007

Seq. no.	Species name	Notes*
1	Redwinged Starling	
2	Sombre Bulbul	
3	Cape White-eye	<div style="border: 1px solid red; padding: 5px;"> <p>It is fine to use the old Roberts 6 names if you are more familiar with these names ... but be careful when it comes to capturing your data later!</p> </div>
4	Olive Thrush	
5	Cape Robin-chat	
6	Cape Bulbul	
7	Southern Double-collared Sunbird	
8	Redeyed Dove	
9	Laughing Dove	<div style="border: 1px solid red; padding: 5px;"> <p>You can use abbreviated names to help in writing down species as quickly as possible...but be very careful as you will need to know exactly which species it refers to. To avoid any confusion we recommend writing the name in full or use clear abbreviations!</p> </div>
10	Rameron Pigeon	
11	Cape Canary	
12	Southern Boubou	
13	Karoo Prinia	
14	H. Ibis	
15	Helmeted Guineafowl	
16	Cape Spurfowl	
17	Speckled Mousebird	
18	Cape Sugarbird	
19	OB Sunbird	<div style="border: 1px solid purple; border-radius: 50%; padding: 5px; display: inline-block;"> <p>[end of first hour]</p> </div>
20	Cape Butis	
21	Dusky Flycatcher	<div style="border: 1px solid purple; padding: 5px;"> <p>Remember to indicate when you reach the end of each hour</p> </div>
22	European Common Starling	
23	Feral Pigeon	
24	Barn Swallow	
25	B. Swift	
26	Alpine Swift	
27	White-rumped Swift	
28	Cattle Egret	
29	Blackheaded Heron	
30	Grassveld Pipit	

\* The Notes column is provided to include information that is relevant to the Additional Information section in the Instructions (e.g. breeding information, counts of species, general behaviour, etc.)

Seq. no.	Species name	Notes*
31	OT Longclaw	
32	Greybacked Cisticola	
33	Little Swift	
34	White-necked Raven	
35	Common Fiscal	[end of second hour]
36	Zitting Cisticola	
37	Black-winged Stilt	50 birds seen in Black River
38	Common Moorhen	
39	Redknobbed Coot	
40	Cape Wagtail	
41	African Darter	
42	White-breasted Cormorant	
43	Reed Cormorant	
44	African Black Duck	
45	Yellowbilled Duck	
46	Hartlaub's Gull	Flock of 83 birds counted
47	Glossy Ibis	
48	African Sacred Ibis	
49	Lesser Swamp Warbler	[end of third hour]
50	Three-banded Plover	
51	Blacksmith Lapwing	70 birds counted on bank of river
52	Levaillant's Cisticola	
53	Kelp Gull	
54	C. Tern	
55	Pied Crow	
56	<del>Black</del> Verreaux's Eagle	
57	Rock Kestrel	
58	Rock Martin	
59	Cape Sparrow	Adults seen carrying food to nest
60	Cape Weaver	
61	Speckled Pigeon	
62	Ground Woodpecker	
63	Cape Bunting	
64	Grassbird	
65	Black-shouldered Kite	[end of fourth hour and initial survey]

Where possible, counts like these provide useful additional information

50 birds seen in Black River

Flock of 83 birds counted

Again, be careful when abbreviating species names. C. here could refer to Caspian or Common!

Adults seen carrying food to nest

If you do see evidence of breeding try, where possible, to record it in the notes column

SABAP2 Instructions

Seq. no.	Species name	Notes*
66	Spotted Eagle Owl	Roadkill, seen on 3 March
67	Spotted Dikop	Heard calling at night
68	African Fish Eagle	Flying over house on 4 March
69	Greater Striped Swallow	
70	Lanner Falcon	
71	Cape Siskin	
72	Black Saw-wing Swallow	[end of five day period]
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