

## Ringling administration

### 9.1 KEEPING RECORDS

The job is not finished until the paperwork is done! The ringing of birds will have no purpose unless accurate records are carefully kept and updated after each ringing session. What records should a ringer keep? The measurements required by SAFRING are the mass of the bird, wing length and primary moult. But keep it in mind that there is nothing as frustrating as when, after a number of years of ringing, you want to do a study or project on a specific species and you discover that you ringed hundreds of them but you have no data or measurements written down. Therefore it is advisable to collect as many data as possible.

### 9.2 FIELD RECORDS

Each ringer has his/her own way of recording his/her data collected. Some like to write all birds caught and ringed on a specific day in a file or book in sequential order, and then transfer the data to another file according to ring series when they get home. These days most ringers prefer to have schedules ready with the ring numbers pre-recorded in series of 50 rings (Appendix 5). For each different ring series a schedule is kept in a file and when full it may be transferred to another file kept for completed ring series.

The following are the more common details that are recorded:

#### *Obligatory items*

- Ring number:** prefix and number of ring.
- Species number:** number given in the ring-size guide (old Roberts number).
- Date:** in Day/Month/Year.
- Locality:** place name, nearest town and district.
- Coordinates:** determined by a GPS or from a map (degrees and minutes).

#### *Recommended items*

- Mass:** weight of bird in grams, suggesting the following:
  - ✧ 0–50 g scale to the nearest 0.2 g.
  - ✧ 0–100 g scale to the nearest 0.5 g.
  - ✧ >100 g scales to the nearest 1 g except for the large scales (5 g and 10 g units).

- Wing length:** wing length in mm, using the ‘maximum chord’ method.
- Primary moult:** score each primary (e.g. 5554310000).

#### *Optional items*

- Species name:** bird name as given in ring-size guide (Appendix 9).
- Tail length:** tail length in mm.
- Tarsus:** length of tarsus in mm to the nearest 0.1 mm.
- Culmen length:** length of bill to the nearest 0.1 mm.
- Head length:** total head length to the nearest 0.1 mm.
- Time:** use the 24-hour clock, e.g. 13h25 or 1325.
- Notes:** for any additional information, e.g. Bird has only one leg or laid egg in bag, etc.

The above is just an example of what data a ringer may want to collect. He can add other data, e.g. colours for various soft parts.

### 9.3 SAFRING ELECTRONIC SCHEDULES

The SAFRING ringing year runs from 1 July of the one year to 30 June the following year. Schedules must be submitted electronically or on SAFRING Schedule 1 forms. These should be submitted at regular intervals, e.g. monthly. On 30 June every year all outstanding ringing records must be submitted for the ringing year totals to be calculated. Paper schedules make provision for 50 rings and it is suggested that schedules are completed and forwarded to SAFRING as soon as they are completed; this reduces the end-of-year rush both for the ringer and at SAFRING. Similar principles apply to the submission of electronic schedules. Remember SAFRING can and will withhold the supply of equipment and rings if schedules are not submitted at least annually and in good time.

#### 9.3.1 Format of electronic data

Summaries and initial details (i.e. total rings used and dates of first/last rings), which were part of the Schedule 1 form, should be excluded.

Each column or field is discussed in detail below. The fields are listed in bold in the sequence in which they must be submitted.

- Ring** – each record must have a complete ring number, not just the last two digits. The format of the ring number should have no hyphens, blanks or other characters, i.e. the prefix and number should be continuous: e.g. 456001 rather than 4-56001, and BC23001 rather than BC 23001.
- Code** – this is to distinguish recaptures and controls from newly ringed birds. Use the following codes:
 

<b>1:</b> Newly ringed bird	<b>4:</b> Resighting record
<b>2:</b> Recapture/Control/Resighting	<b>L:</b> Lost ring
	<b>X:</b> Ring recovery

In the past only recaptures of over one year needed to be submitted to SAFRING (on the Schedule 2 or 3 forms). Now all recaptures (after the date of ringing) may be submitted. Recoveries can be included in your database in the same way as recaptures. Note

that additional details should be submitted to SAFRING, i.e. details on the condition of the bird (fresh, decomposing, etc.) and how the bird died, etc. For resightings state the colour combinations seen in an extra column.

- Date** – Enter the date: dd mm yyyy.
- Species** – continue using the SAFRING numbers (similar to the old Roberts number). SAFRING can e-mail a list of species names with Roberts numbers to any ringers who would like it. Species not listed in the old Roberts have been assigned numbers by SAFRING (see Appendix 9). If you ring a bird where you do not know the number, contact SAFRING to get the number before submitting the data.
- Ringer** – Each ring record must have your ringer’s number. For those who have more than one number (for different provinces), only use your current number (i.e. for where you are living now). Use your current number for all ringing, no matter where the ringing occurs.
- Age** – unchanged, i.e.

<b>0</b> = Age unknown	<b>5</b> = 0 to ½ year
<b>1</b> = Pullus	<b>6</b> = ½ to 1 year
<b>2</b> = Juvenile	<b>7</b> = 1 to 2 years
<b>3</b> = Immature	<b>8</b> = 2 to 3 years
<b>4</b> = Adult	<b>9</b> = Older

- Sex** – unchanged, i.e.

<b>0</b> = Sex unknown.	<b>3</b> = Possible male
<b>1</b> = Male	<b>4</b> = Possible female
<b>2</b> = Female	

- Marking** – unchanged (but with some additions), i.e.

<b>0</b> = Metal ring only	<b>6</b> = Colour dyes
<b>1</b> = Colour ring	<b>7</b> = Dyes and colour ring
<b>2</b> = Wing tag	<b>8</b> = Radio/transponder
<b>3</b> = Nasal saddle	<b>9</b> = Satellite
<b>4</b> = Collar	<b>10</b> = Canadian (colour ring with inscription)
<b>5</b> = Harness	

- Condition** – unchanged, i.e.

<b>0</b> = No other code required	<b>8</b> = Released away from place of capture
<b>6</b> = Rehabilitated	<b>9</b> = Oiled and cleaned
<b>7</b> = Artificially reared	

- Coords** – the coordinates must be obtained from a GPS or maps. Coordinates obtained from a GPS must be truncated to the nearest minute when submitted to SAFRING. The format should be 2345S 1828E. There must be one space after the S. You must use the letters S and E, since the gazetteer references the field exactly as written.

- Locality** – use up to 25 characters here to describe the location. Be consistent in naming localities, and in using the same name every time you ring at the same site. The name should ideally describe the entire minute-by-minute grid cell, because the SAFRING gazetteer uses one name per set of coordinates.

- Province** – use the new province designations as listed below (make sure you know in which province the locality falls). Note the capitals for SA provinces and lower case for countries.

<b>WC</b>	Western Cape
<b>MP</b>	Mpumalanga
<b>GP</b>	Gauteng
<b>EC</b>	Eastern Cape
<b>KZ</b>	KwaZulu-Natal
<b>FS</b>	Free State
<b>NC</b>	Northern Cape
<b>NP</b>	Northern Province
<b>NW</b>	North West Province
<b>bw</b>	Botswana
<b>ls</b>	Lesotho
<b>mw</b>	Malawi
<b>mz</b>	Mozambique
<b>na</b>	Namibia
<b>sz</b>	Swaziland
<b>zm</b>	Zambia
<b>zw</b>	Zimbabwe

- YrR** – the ringing year (e.g. 1999 for 1 July 1999 to 30 June 2000).
- Mass** – mass of bird in grams, as on Schedule 1 forms. For large birds of several kilograms you still need to give the mass in grams and not in kilograms.
- Wing** – length of wing in mm, flattened wing chord.
- Moult** – primary moult, each feather from P1 to P10 in one string, e.g. 5555543100, or 555554310 if P10 is reduced or absent.
- Colour rings** – add one column if you use colour rings. Use this format: red/light green/blue, black/red/metal. Left leg, with rings from top to bottom, comma, right leg with rings from top.
- Sent** – a field for your own reference. When you have sent records to SAFRING, mark this field (e.g. with the date of sending) so that you do not send the same data again. Do not send this field to SAFRING.

### 9.3.2 Additional fields

You may have additional fields for other measurements or notes. Do not send these to SAFRING at this stage.

### 9.3.3 Software and suggested method

Use Microsoft Excel for Windows 95 or check with SAFRING if you have other software.

- Put your Ringing tables on separate pages, one page per series. (If you use thousands of rings of one type, you can split the data into several pages if you like). You can choose a separate page for recaptures, or else record recaptures on the relevant ring-series page.

2. Set up the columns in your spreadsheet, and copy the columns to as many pages as you need for your different ring series. If you're using older versions (without pages), then use separate files per ring series. Name the pages (/files) by the ring prefix.
3. Add in the ring data from your field book after each ringing session.

### 9.3.4 Adding data

- When you buy rings, add ring numbers to your sheet.
- To add consecutive ring numbers in Excel: Type the first ring number (e.g. BC06001). Select the cell and click and hold on the bottom right corner (on the plus symbol) and move down with the mouse. The ring numbers are then automatically incremented as you keep on moving. Let go of the left mouse button where you want to end.
- Some fields need only be filled in if relevant, i.e. Marking, Condition, Colour rings.
- Mass, Wing, Moults are not compulsory but you are encouraged to fill these in.
- All other fields must be filled in for each ring record. You may not use dittos or blanks for repeat data. You can use the copy function to copy dates, localities, etc. that are the same.
- Beware of errors. With computers it is easy to make mistakes!
- You may have many additional fields (e.g. other measurements) in additional columns for your own use.
- Do not use 0 or – for data not obtained; leave the cell blank.

### 9.3.5 Submission of data

- Send data to SAFRING regularly, and certainly by the end of every ringing year. A good idea is to send data whenever you've handled 100 to 500 birds (over one or several sessions). Then the file will not be too large to send (by e-mail). Choose a new page (/file) in your spreadsheet; copy the lines of unsent records from the different series to this page, as well as unsent recapture records.
- Copy the page to a separate single file, using your name or ringer's number as a name (e.g. george.xls or 15.xls), and mark the records as having been sent.
- If you have access to e-mail, mail the data as an attachment to dieter@maths.uct.ac.za.
- If you don't have e-mail, copy the data to a stiffy disc, put your name on the disc, and post it.
- When you receive confirmation from SAFRING, check the SAFRING report against your computer records.

## 9.4 SAFRING SCHEDULE 1 AND 2 FORMS

Ringers without access to computers must submit their ringing returns on SAFRING Schedule 1 forms.

### 9.4.1 Completing a SAFRING Schedule 1

Schedules must be completed in pen. The Schedule 1 form has three sections. The first is for general data, the second is the schedule summary and the third is the individual ring account.

#### 9.4.1.1 Section 1: general section

- First ring number**
- Prefix:** (Blocks 1 to 3) – the prefix can either be alpha or numeric and can be one or two characters. (Blocks 4 to 8) – the number of the first ring used during the specific ringing year, e.g. if the first bird ringed after the 1st July got ring AC70011, then this is entered.
- Ringer:** Ringer's full initials and surname. (Blocks 9 to 11) – SAFRING ringer's number.
- Total used:** (Blocks 12 and 13) – the total number of rings used in the specific series during the ringing year. Do not include rings lost or damaged. If the first ring was 10006 and the last 10040, then the total will be 35.
- Date first ring used:** (Blocks 14 to 17) – the month and year of the first ring used after 1 July.
- Date last ring used:** (Blocks 18 to 21) – the month and year of the last ring used before or on 30 June.

#### 9.4.1.2 Section 2: schedule summary

- Species:** (Blocks 22 to 24) – the three-digit code number of the bird as given in the SAFRING Guide to ring sizes. Do not use the numbers given in any other bird book as this is a different numbering system.
- Pulli:** (Blocks 25 and 26) – number of chicks ringed still in the nest.
- Full grown:** (Blocks 27 and 28) – the number of free-flying birds ringed.

Note: new forms do not have a Schedule Summary Box; total the species ringed and write it on the schedule.

#### 9.4.1.3 Section 3: individual ring account

There is a maximum of 50 rings per schedule, running either from 01 to 50 or 51 to the next hundred. Schedule 1 forms make provision for both types of series on a single form and the one not applicable must be deleted.

Ring series must always be used in sequence.

Go to the number on the schedule which corresponds with the ring number of the series with which the first bird was ringed during the year and start completing the form from there.

- Species:** The three-digit code number as used in Appendix 9.
- Age:** Fill in the age code as on the schedule form (or see Electronic data).
- Sex:** Fill in the sex code as on the schedule form (or see Electronic data).
- Marking:** Fill in the marking code as on the schedule form (or see Electronic data).
- Condition:** Fill in the condition code as on the schedule form (or see Electronic data).
- Mass:** The weight of the bird is filled in here, a decimal can be used, e.g. a warbler that weighs 10.5 g, and a dove that weighs 105 g. A bird weighing 1.050 kg will be written as 1050.

- Date:** Written as DDMMYY for day, month, year; 2 February 2000 is 020200.
- Coordinates:** Filled in, in degrees and minutes.
  - ✧ Degrees south read on map from top to bottom.
  - ✧ Degrees east read on map from left to right.
- Locality:** Give town or suburb or feature. For rural sites give approximate distance and direction from nearest mapped place name, e.g. 17 km NW Tuinplaas.
- Province:** Fill in the abbreviation (two letters per province or country; see Electronic schedules).

#### 9.4.2 SAFRING Schedule 2

This form is completed for recaptures of birds that have been ringed more than 12 months previously or that have completed a full migration cycle, i.e. a bird that migrated north and has returned once more.

##### 9.4.2.1 How to fill in a SAFRING Schedule 2 form

- Ringer:** Initials, surname and SAFRING ringer's number.
- Locality:** See detail for SAFRING Schedule 1.
- Ring number, species, age, sex, ringing date, marking, condition and ringing coordinates:** as for SAFRING Schedule 1.
- Ringling date (blocks 14 to 19) and ringing coordinates (blocks 22 to 29):** must be the original date and coordinates of the bird's first ringing.
- Ringer:** (Blocks 30 to 32) SAFRING ringer's number. Blocks 41 to 48 are for official use only.
- Retrap date:** (Blocks 49 to 54) – date of recapture in day/month/year.
- Retrap coordinates:** (Blocks 55 to 64) – coordinates of place where bird was recaptured in degrees and minutes.
- State of bird:** Note down the condition of the bird, e.g. good, poor, in heavy moult, etc.