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3 - 1 A		Origins chlorocephalus	9779
	Inistan Thrush	<u>Nesocichla</u> eremista	9b);
593X	Red-tailed Morning Warbler	Cichladusa ruficauda	010
504X	European Read Warbler	Acrocephalus scirpaceus	91:
604 V	Pufous Reed Warbler	Calamodichla rufescens	ψį.
621X	Red-faced Crombec	Sylvietta whytii	913
621Y	Red-copped Crombec	Sylvietta ruficapilla	914
645X	Chirping Cisticola		
		<u>Cisticola pipiens</u>	915
649X	Forest Prinia	<u>Prinia robertsi</u>	916
	White-collared Flycatcher	Muscicapa albicollis	917
708X	Souza's Shrike	Lanius souzae	918
709	Tropical Boubou	Lanius aethiopicus	977
791X	Clive-headed Weaver	Hyphanturgus olivaceiceps	919
842X	Cinderella Waxbill	Estrilda thomensis	920
SOUX	Lemon-breasted Canary	Serinus citrinipectus	921
	Pig-billed Bunting	Neospiza acunhae questi	968

ORGANISATION OF RINGING INFORMATION AND THE COUPLETION OF SCHEDULES

The ringing data is housed in files organisad by ring series. This is cheaper and quicker to operate than . It ing the data directly into the computer. Recoveries are principled by matching finding details with the ringing information. These two are coded onto a cord which is then punched or a a computer card and entered into and occuped in the computer.

The system has disadvantures. Only primary ringing data is stored in the files. Any scrondary information, biological facts such as mass, recorded at ringing and entered on the ringing schedules is difficult to locate. There is currently no way of knowing where and have more information is stored in the files. Accordingly the policy is to advise people not to enter this type of data on to their ringing schedules, or at least if they do to only put it on their copy.

The second disadvantage is that we do not have duplicate copies of all the ringing schedules. Thus, should we have a fire then they would all be lost. At present the only source of replacement would be from those people who have retained duplicate copies of their ringing data. The possible set from a rights problem and many official or entering the number of the conjugate of the formal of the formal continuous transfer are less to the data the formal continuous transfer are less to the data there are the last transfer to the data to be a second of the continuous transfer to the data to be a second of the continuous transfer to the data to be a second of the continuous transfer to the data to be a second of the continuous transfer to the data to be a second of the continuous transfer to the continuous transfer t

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SAFRING SCHEDULE 1

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In processing recoveries, and in fact any clerical work concerning figures, a major problem is the cierical errors involved in copying figures. It is obviously far more difficult to copy down a hundred numbers correctly than it is a hundred letters arranged in words, as the former are abstract and provide Tew. or no logical check points.

In planning modifications to the processing and storage of recoveries it was necessary to bear these points in mind. The modifications meant alterations to the schedules as well, and the new schedule has to fulfil the following requirements:

- 1. Make minimal change from the previous system;
- 2. Be easy to complete;
- 3. Lend itself to reducing the number of data transfers required between field remarks and data storage reither by field worker or at NASRA ; 4. Be easy to extract the ringing data room;
- Provide a schedule summery shirt of a
 - (a): be easy to enter into the computer.
 - (b): provide a record of the schedule,
 - (c): be used as a method or obtaining a list of soci ringed by years, province and person,
 - It's replace the need to complete annual returns
 - is it be used to stock-take ring sores as an energy of 4 17 1

The ringing schedules were sent out to all ringers for use from July, 1976, onwards. These were accompanied by a set of instructions. As several people decided to use the new schedules to complete their records for July 1975/June 1976, information has been gained about the effectiveness of both the schedules and the instructions. As a result the following modifications are suggested and the instructions repeated here in a revised form.

One point which arose at the ringing conference and which was emphasised by the completed schedules was the meaning of blanks and zeros. People believe blanks to mean nothing. Thus, on the new schedule the concept of a blank being used to mean a ditto was unacceptable. The point about the blanks is that they were supposed to help you fill the schedules by reducing the amount of figure work. From the NUBRA point of view we would prefer it if every line on the schedule were completely filled in. Thus, figures are better than dittos (or the symbolic blanks). This is because the relevant ringing details are extracted by placing a card just below the entry. The persons extracting the information has to shift their eyes up columns to interpret dittos. This leads to potential transfer errors.

The first modification to the completion of the schedules is that only in cases where al! entries on the schedule are identical can blanks be used. In this case only the first entry need be written out in full (Fig. I). In all other cases, the successive duplicate entries must be either written in or marked with dittos or a vertical line (Fig. 2). Thus a zero or a blank means that the information was not known or not recorded.

The schedule summary caused three difficulties:

- (i) The first ring number must refer to the first ring reported on the schedule. Thus, if the first five rings of the series 5.54701 were reported on an earlier schedule, then the number entered is $5.5470\underline{6}$. It is essential that this number is correct for stocktaking and record keeping purposes.
- (ii) The "total used" refers to the number of rings reported on the schedule. It includes those rings lost or defective, but excludes all rings previously reported. Thus, only in cases where rings are lost or defective will the total used not match the sum of entries in the schedule summary.
- (iii) The date of the first ring used refers again to the date of the rings reported and not those used earlier. The date must only be month and year.

There are some people who did not complete their schedule summaries. Sarah Batchelor and Lawrence Cwati have done this for them. However, in future all incomplete summaries will be returned.

COMPLETION OF SAFRING SCHEDULE 1:

RINGING DATA:

Ring number: The schedule is used for ringing information for 50 rings in a series, and are entered in sets of 25 on either side of a sheet. The ring series may start either at number 01 or 51. The inapplicable number may be deleted, but it is not necessary as the complete number of the first ring used is entered in the schedule summary. If part of the ring series has been reported on an earlier schedule, then a diagonal line should be placed through the previously reported lines, or a horizontal line may be drawn above the first ring number to be reported (Fig 1). A courtesy message referring to the fate of the earlier rings can be given such as "submitted 1974/75".

Species: The species of bird ringed is entered by its number in the latest edition of "Roberts' Birds of South Africa" by MacLachlan & Liversidge. The extralimital and additional species which have X numbers, have been given numbers greater than 875. For example the Red-faced Crombec (621X) is 913. A list of these species is given in this edition. No provision is made on the schedule for the names of the species ringed. It is up to the ringer to ensure that the Roberts' number entered is the correct one. A system is being devised whereby each person will receive a report of all the species ringed according to the schedule summaries. The species will be reported there by name not number and this should help eliminate some errors.

In cases where the same species are ringed in succession then dittos or a line may be used to indicate this (Fig. 2). However, we do prefer the actual Roberts' number to be entered each time.

Age: The age of the bird ringed is entered in the third column. Two sets of codes are used for age, and are used according to whether a species can be placed in few or many age classes. The age codes are given on the reverse side of each sheet. In the cases of difficulty or doubt a zero must be entered.

Sex: The sex of a bird is entered in the fourth column. The codes for sex are given on the reverse side of each sheet. If the sex is not determined a zero must be entered. The sex and age columns must be completed for each species, i.e. dittos must not be used. Zeros and blanks will mean unknown or missing data.

<u>Date</u>: The column for date of ringing is divided into six; with two figures each for day, month and year. The date must be entered in the order: day month and year. The date must not be entered in the American manner of month, day and year. Six figures must be used, so that the first nine days of the months and the first nine months of the year are 01 - 09. e.g. 7th January, 1976 = 07 01 76. Note the space to make reading of the date easier. Dittos or a line may be used to show duplicate entries.

FIGURE 2

SAFRING SCHEDULE 1

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markers may affect recovery rates. Each entry must be taken as zeros.

Condition: The sixth column refers to the condition of a bird at time of ringing. The codes for condition are given on the reverse side of each sheet. Generally speaking most people will leave this column blank as only free-living and healthy birds should be ringed.

Co-ordinates: The latitute and longitude of the ringing place is placed in the seventh and eighth columns. Each are divided into four, referring to the degrees and minutes of the south and east co-ordinates. No other form of map reference should be recorded. If any persons are in any doubt as to the co-ordinates of their minging locality they should contact NHBRA. The co-ordinate should be regarded as an eight figure word. Thus diffes or lines may only be used if the entire co-ordinate are the same as the earlier entry.

Locality: The ninth column has 13 divisions. These are for a 12-letter locality name and the initial letter of the province/country of ringing. This is the name that will appear on the print-outs of recoveries. The initial letter of the province/country should be entered on the right hand side. Where ringing is not down at a permanent ringing station i.e. Barberspan or Muruwati, the locality name must refer to a feature on the 1: 250 000 series maps of South Africa, such as a post office, prominant lake or mountain, or railway-siding closest to the site of ringing. The co-ordinates must refer to the exact ringing place while the locality name serves to indicate the general area in which the ringing took place. The initial letters of the provinces are:

- $A=\operatorname{Places}$ in the Antarctic and sub-Antarctic such as Marion Island.
- B = Botswana
- C = Cape Province
- I = Islands in the Indian Ocean
- M = Malawi
- N = Natal
- 0 = Orange Free State
- R = Rhodesia
- S = South West Africa
- T = Transvaal

Other areas will be given initials as and when ringing takes place there.

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totals for the pulli and full-grown plus any lost or defective rings should equal the number entered in "total used".

The box numbers refer to the column numbers on a standard computer card. The broad line after every eighth row of the species summary marks the end of 80 columns on a computer card, and serves as a guide to the people who punch the data on to computer cards.

In general, please attempt to enter the figures on the schedule so that they are clear and do not touch any lines. It is best to correct mistakes by putting a line through them and writing the correct figure above.

REPORTING OF LOCAL RECOVERIES AND RETRAPS

SAFRING SCHEDULE 3

Att retraps of birds ringed over one year previously and recoveries should be reported.

There are four terms: Recoveries, Local Recoveries, Controls and Retraps; which pertain to ringing information. These are defined below:

RECOVERY: A dead ringed bird found by a person who has no access to the original ringing data. The finder informs SAFRING who in turn informs the person who ringed the bird.

CONTROL: A live ringed bird found and reported in the same manner as a recovery.

LOCAL RECOVERY: A dead bird found at site of ringing by a person who has access to the ringing data.

RETRAP; A live bird recaptured by the person who ringed the bird. These can be divided into:

- (i) recaptured at site of ringing, or an adjacent locality which has the same co-ordinates as the ringing place, less than one year after ringing or last recapture.
- (ii) recaptured at site of ringing more than one year after ringing or last recapture
- (iii) recaptured at a different locality which has different co-ordinates from those of the site of ringing.

These contain information about movements and survival rates of birds and should be housed at NUBRA. Recoveries and controls are reported to NUBRA as the Unit acts to inform the ringer of the findings of one of his birds, and to tell the finder where the bird was ringed.

Local recoveries and retraps type (ii) and (iii) should be reported to NUBRA as they contain information about movements and survival rates. They should be reported on SAFRING SCHEDULE 3. This schedule is supplied to all ringing stations and to

Branch Ringing Organisers.

The schedule is designed so that the information can be entered directly into the computer. The layout of the schedules follows that of the ringing form - SAFRING SCHEDULE I. Additional information pertaining to recovery date, recovery place and state of bird is also required. The state of bird should be a brief statement which suggests how the bird died and for how long it had been dead before finding. If a retrap is being reported then the word "RETRAP" is used to describe the state of the bird.

The columns on the schedule numbered 41 to 48 are not to be completed by the ringer. These are used at SNUBRA; to code information on to the schedule.

The retraps type (1) - those of birds recaptured less than one year since peror recapture or ringing are not reported to MUBRA. The blue Retrap Schedules are available to all those people who wish to record these retraps. A duplicate copy of these blue retrap schedules can be sent to NUBRA where it will be housed.

A fourth schedule - SAFRING SCHEDULE 2 is available which is suitable for recording information collected while ringing. This schedule is discussed in the Chapter on recording data in the new Ringing Manual (in prep.). This schedule is available to all ringers on the basis that they submit a duplicate of their records to NUBRA. The ringers will retain the customary rights over their data.

REQUEST FOR INFORMATION:

MOUSEBIRDS:

! am currently engaged in a study on the ecology of mousebirds, and I should be grateful for any retrap data for the three mousebird <u>Colius</u> species. The information required includes total number of birds ringed, total number of recaptures and individual recapture records (i.e. time elapsed and distance moved between ringing and recapture). Any additional information on weight, moult etc. would also be much appreciated. Acknowledgement will be made.

P.G.H. Frost, Percy FitzPatrick Institute of African Ornithology, University of Cape Town, Rondebosch, 7700.