and specimens could be collected for bacteriological examinations without any difficulty.

Catching and ringing started on a very small scale in July, 1972 and after a year a total of 32 vultures was ringed. The project has already proved to be rewarding with a number of ground to air sightings being recorded within the first three-months period after capture. All of these have been local observations within a 50 mile radius from the capture site. No ring recoveries have been recorded to date.

Although difficulties were encountered, the catching procedure was found satisfactory and will be used with a few minor alterations in the coming year. However, suggestions on the catching technique, from readers of SAFRING News will be most welcome.

THE ANALYSIS OF RINGING AND RETRAP DATA

Part II: Longevity

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Introduction

A start was made in the previous article in this series, SAFRING News 2 : 12-16, on the preliminary analysis of ringing and retrap data. As before the example used is the African Marsh Warbler Acrocephalus baeticatus. In this article I will consider the problem of estimating longevity from ringing data. The data consist of the combined results of two geographically close populations at Melrose Dam and Rosherville Dam, both on the Central Witwatersrand. As before I am grateful to the former W.B.C. Branch Ringing Organiser Des Hewitt, for collecting and collating the data.

Methods and Results

Very little is known of the potential or actual lifespans of most insectivorous passerines. The elapsed time between the first and last captures is shown in Table 1 and Fig.1. A duration of zero means that the bird was handled once only, i.e. it was never recaptured or recovered.

Interpretation

From either Fig.1 or Table 1 it is possible to see that the maximum duration between first and last captures is approximately eight years, (in fact it is 3 045 days, i.e. eight and one-third years.)

If we include those caught once only the mean duration between first and last captures is 450 days (i.e. 1.22 years). If those caught once are excluded then the mean duration is 502 days (i.e. 1.38 years).

Now it should be fairly obvious that if birds are caught in a purely random manner then the above method for estimating their mean and maximum lifespans will underestimate the true values. If the birds are initially caught in some post-fledgling stage of develop-

ment then the time taken for the birds to fledge may be added to the above estimates.

If some of the birds are 'trap-happy' or 'trap-shy' then this will distort the estimates. In general we may say that these estimates produce a lower bound to the mean and maximum ages.

The most reliable estimates of the lifespan of a species comes from those birds ringed as pulli and eventually recovered.

Table 1

The distribution of times between the first and last captures

Age Class	Number	Percent of Total
0 to 0 days	16	11.27
1 " 10 "	13	6.15
11 " 20 "	7	4.93
21 " 50 "	21	14.79
51 " 183 "	7	4.93
$\frac{1}{2}$ " 1 year	22	15.49
1 " $1\frac{1}{2}$ years	12	8.45
$1\frac{1}{2}$ " 2 "	10	7.04
2 " $2\frac{1}{2}$ "	7	4.93
$2\frac{1}{2}$ " 3 "	13	9.15
3 " $3\frac{1}{2}$ "	2	1.41
$3\frac{1}{2}$ " 4 "	4	2.82
4 " $4\frac{1}{2}$ "	1	0.70
$4\frac{1}{2}$ " 5 "	2	1.41
5 " $5\frac{1}{2}$ "	1	0.70
$5\frac{1}{2}$ " 6 "	1	0.70
6 " $6\frac{1}{2}$ "	0	0.00
$6\frac{1}{2}$ " 7 "	2	1.41
7 " $7\frac{1}{2}$ "	0	0.00
$7\frac{1}{2}$ " 10 "	1	0.70