

Mortalities of birds caught for the bird export trade in South West Africa/Namibia

by

K. Panagis

Department of Agriculture and Nature Conservation
Private Bag 13306
Windhoek 9000
South West Africa/Namibia

and

Irene M. Stutterheim*

State Museum
P.O. Box 1203
Windhoek 9000
South West Africa/Namibia

Received: 9 May 1983
Accepted: 3 July 1984

*Present address:
Department of Agriculture and Nature Conservation
Private Bag 13306
Windhoek 9000
South West Africa/Namibia

ABSTRACT

Mortalities of birds caught for the bird export trade were investigated between August and September 1982. There was a mean mortality rate of 6,5 % from the time of capture to the time of export. Stress due to handling was the greatest cause of mortality. Other deaths were a consequence of overcrowding and insufficient care with confinement during capture and transport.

CONTENTS

1 Introduction	173
2 Methods	173
3 Results	174
3.1 Overall mortality rate estimates	174
3.2 Mortality rate estimates for 3-successive day periods	174
3.3 Causes of mortality	174
4 Discussion	175
5 Acknowledgements	175
6 References	175

1 INTRODUCTION

There is international concern over the mortality of birds in the course of the bird export trade. While data exist for mortality in flight (Inskipp, 1975, Inskipp and Thomas, 1977), there are few data for post-import mortality (I.C.B.P. Conf. on Imp. of Birds, 1967, Przygodda, 1971, Mountfort, 1972) and such data as exist for pre-export mortality show great variation (Robbins, 1974, Curry-Lindahl, 1972, McClure and Chaiyaphun, 1971) and are seldom if ever documented.

Trade in wild birds has been permitted in South West Africa only for species which are seed-eaters and thus hardy for handling, and for a single frugivorous species classed as a pest.

This study forms part of an investigation of the bird trade in South West Africa/Namibia carried out from August to September 1982. This paper presents data on mortality rates of various species of bird caught, from the time of capture to the time of export and discusses suspected causes of death.

2 METHODS

Quantitative mortality data were collected in two ways:

1 For the period from capture to export, the dead birds during all the stages of capture were counted. All the sites used by the game dealers for trapping birds were monitored. These consisted of 50 trapping sites on 30 farms, in the Tsumeb, Omaruru, Otjiwarongo and Okahandja districts. The overall bird mortality rates (= cumulative mortality loss over a defined period of time) were calculated for each species caught.

2 Since the greatest number of deaths was expected to occur within the three days after capture, calculation of bird mortality rates (up to the time of export) was based on estimates of successive three day mortality rates. This method assumes that mortality is greatest during the first three days and minimal thereafter. For

each species an estimate of the mortality rates was calculated as follows:

$$\text{bird species mortality to time of export} = \frac{\text{total number of dead birds during successive three days}}{\text{total number of birds caught during successive three days}}$$

3 RESULTS

3.1 Overall mortality rate estimates:

As no significant differences were found to occur in bird mortalities between the two dealers, although the methods of capture and care differed, the data were combined. Up to the point of export 478 deaths were recorded, giving a 6,5% mortality rate. Proportionally more Namaqua Doves died than any other species (11,8%) (Table 1). Mortality rates of 9,8; 8,8 and 6,8% occurred in Violeteared Waxbills, Scalyfeathered Finches and Blackcheeked Waxbills respectively (Table 1). In five species, Rosyfacéd Lovebirds, Blackthroated Canaries, Blue Waxbills, Rock Buntings and Paradise Whydahs, no deaths occurred, while Yellow Canaries and Larklike Buntings had less than one per cent deaths.

3.2 Mortality rate estimates for 3-successive day periods:

The 1982 bird totals caught were 7 371 of which 272 birds belonging to 14 species were released. The mortality rates of the remaining 7 099 birds differed according to the species involved. Within the three day period following capture the highest mortality rates were among the Violeteared Waxbills (13,8%) (Table 1) and Blackcheeked Waxbills (12,4%), while Redhead-

ed Finches and Scalyfeathered Finches had mean mortality rates of 9,9 and 5,2% respectively (Table 1). The greatest variation occurred among the Blackcheeked Waxbills (7,7—25,8%), suggesting that the number of birds dying was dependent on the daily number caught and resultant degree of crowding.

3.3 Causes of mortality:

- 1 Death in the nets: A total of 15 birds died in the nets during all the trapping efforts. This figure represents 0,2% of the total number of birds handled and no further deaths were found to occur in the transport cages, from the site of capture to the holding cages. The low number of deaths in the nets was a result of the rapid removal of the birds once caught, where the average time between the clearing of nets was approximately 15 minutes.
- 2 Mortality due to overcrowding and stress: Handling of the birds and the degree of overcrowding in the holding boxes were thought to be the two greatest factors contributing to the high bird mortality rates. Since the birds were well cared for, food and water supplied *ad libitum*, stress due to disturbance during feeding, stress of capture and the mere presence of humans were enough to cause bird deaths.
- 3 Mortality due to trampling and disease: Trampling due to overcrowding and disturbance was seen to occur only in one species, the Scalyfeathered Finches. Handling of birds was kept to a minimum by both dealers during all stages, as well as by ourselves during counts. Deaths due to trampling were not quantified. Disease seemed to be a minor cause of death due to the short time (14-20 days) they are held before export.

TABLE 1: Total number and mortalities among birds caught for exporting in South West Africa/Namibia during August/September 1982.

Species	Total caught	% of Total caught	Mortalities		
			3-day range (%)	Periods mean (%)	% of total caught
Blackcheeked Waxbill	1270	17,2	7,7 — 25,8	12,4	6,8
Violeteared Waxbill	2554	34,6	7,3 — 19,0	13,8	9,8
Yellow Canary	831	11,3	0	0	0,8
Scalyfeathered Finch	906	12,3	0,0 — 12,5	5,2	8,8
Namaqua Dove	76	1,0	0	0	11,8
Rosyfacéd Lovebird	38	0,5	0	0	0
Redheaded Finch	158	2,1	0,0 — 20,0	9,9	4,4
Melba Finch	556	7,5	0,0 — 5,9	2,4	6,8
Shafttailed Whydah	35	0,5	0,0 — 16,7	2,4	2,9
Blackthroated Canary	182	2,5	0	0	0
Goldenbreasted Bunting	138	1,5	0	0	2,2
Blue Waxbill	52	0,7	0	0	0
Larklike Bunting	141	1,9	0	0	0,7
Rock Bunting	8	0,1	0	0	0
Paradise Whydah	3	0,04	0	0	0
Redeyed Bulbul	151	2,0	0	0	2
Others	272	—	—	—	—
TOTAL	7371	100	—	—	—

4 DISCUSSION

The mortality rate estimates for three successive day periods based on the daily number of birds caught, and dependent on the accuracy of the count, probably approximated the actual mortalities occurring. The pattern as to when most birds' deaths occurred, was one where the birds died in large numbers the first three days during the 'acclimatisation' period, and thereafter only occasionally. The large proportion of young birds caught seemed to have the highest mortality and these birds were possibly the first to die in captivity. The data collected suggest that the number of birds dying was dependent on daily numbers caught and the resultant degree of crowding.

With a mortality rate of up to 25,8 per cent during the three successive day periods, mortality rates before export could be in the vicinity of 30 per cent. Estimates of deaths of birds between capture and export range from 50 to 98 per cent (Curry-Lindahl, 1972, Robbins, 1974), while 20 per cent of Yellowbreasted Buntings die (McClure and Chaiyaphun, 1971). Figures available on the numbers of deaths occurring once cages are unloaded and the birds distributed to dealers, range from two per cent (I.C.B.P. Conf. on Imp. of Birds, 1967) to 50 per cent (Przygodda, 1971), with the life-span of many of these birds not much more than a month or two in captivity (Mountfort, 1972). Mortality figures of 3,9 per cent are given for the large number of birds arriving at Heathrow Airport (Inskipp, 1974, Inskipp, 1975, Inskipp and Thomas, 1977), where the principal factors causing deaths are overcrowding, insufficient care and stress.

The species that seem to be able to readily adapt to captive conditions were Rosy-faced Lovebirds, Black-throated Canaries, Blue Waxbills, Rock Buntings, Paradise Whydahs, Yellow Canaries and Larklike Buntings, having less than one per cent mortality rate to before export.

In accordance with the ICBP's resolution passed in August 1982 (I.C.B.P., 1982) in which it was decided to urge governments to allow free trade only in birds proven to be able to withstand such trade the Department of Agriculture and Nature Conservation placed

restrictions on the number and species that could be caught for export. The number of species that the dealers were allowed to export from South West Africa was reduced to 16 species that Martin (1980) considered suitable as cage and aviary birds. We consider this to be the major reason for the relatively low number of deaths that occurred. The bird export trade was stopped on 1 August 1983.

5 ACKNOWLEDGEMENTS

The assistance given by all the personnel of the Department of Agriculture and Nature Conservation is greatly appreciated. We would also like to thank the two game dealers and their helpers for their co-operation during the study.

6 REFERENCES

- CURRY-LINDAHL, K.
1972: Conservation for survival, Gollancz, London. 355.
- I.C.B.P.
1967: Report on informal conference on conditions of transport and importation of live birds. 51.
1982: Report on the XVIII World Conference. I.C.B.P. newsletter 4: No 4/5:8.
- INSKIPP, T.P.
1975: All heaven in a rage. A study of importation of wild birds into the United Kingdom, R.S.P.B. 25.
- INSKIPP, T.P. and THOMAS, G.J.
1977: Airborne birds. A further study into the importation of birds into the United Kingdom. R.S.P.B. 25.
- MARTIN, R.M.
1980: Cage and aviary birds, Collins, London.
- MCCLURE, H.E. and CHAIYAPHUN, S.
1971: The sale of birds at the Bangkok "Sunday Market", Thailand. *Nat. Hist. Bull. Siam. Soc.*, 14-78.
- MOUNTFORT, G.
1972: Birds in danger. *World of birds* 1:22-26.
- PRZYGODDA, W.
1971: Abuses in the trade in birds for caging in the German Federal Republic. XI Bull, I.C.B.P. 193.
- ROBBINS, C.
1974: Death trail to the pet shop. *Windhoek Observer*, 24 November, 5.