are Haemoproteus spp. from a Fiscal Shrike Lanius collaris and a Redbilled Hornbill Tockus erythrorhynchus; Hepatozoon spp. from the Scalyfeathered Finch Sporopipes squamifrons and the Bronze Mannikin Spermestes cucullatus (Dale Hanmer and Susan Schoeman); and Leucocytozoon spp from a Willow Warbler Phylloscopus trochillus and the Redwinged Starling Onychognathus morio. These are only a few examples of the type of parasite data collected during 1993.

The disappointments of the year were the very small numbers of smears received from seabirds and waders and the even smaller numbers received from our migratory birds such as the European Swallows Hirundo rustica which were handled in very large numbers. Not a single smear was made of any of the crow, egret or ibis species and only one smear made from a duck in the whole of southern Africa! Any takers for these groups? Another disappointment is the ringers who showed interest and have received slides and other equipment and have done nothing about it. At present the cost of a packet of 50 slides is close on R6,00.

We looked upon the first year of the bird blood parasite project as the period in which we would try to get ringers to participate and generally get the operation to run fairly smoothly. That we have achieved.

During the second year we would like to keep the momentum going and decide what the priorities should be. We will also concentrate on some specific projects as was mentioned in a previous article (Earlé 1993). To this end, we may approach individual ringers with targets for numbers of smears per species per month.

Results of the parasite loads and interesting parasites from different bird species will be the subject of the next report which will be done as soon as all the smears received during 1993 have been scanned, which will take several months.

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THE BOTSWANA SWALLOW PROJECT: DECEMBER 1993 to JANUARY 1994

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The second expedition of the Botswana Swallow Project took place from 27 December 1993 to 27 January 1994. Our team of four visited the same three swallow roosts as last year: Gaborone Dam, Shashe Dam and a location at the Boteti River about 30 km southeast of Maun (see also pp.20-

21, and see Safring News 22(1):27-29 for the report on 1992-1993 expedition).

At Gaborone Dam we only mistnetted for one evening in a rather small reedbed in the old riverbed near the dam. There was a roost of about 50 000 to 100 000 swallows, probably nearly the capacity of the roost. We trapped and ringed 384 swallows, including one juvenile bird with a British ring.

At Shashe Dam we mistnetted for two evenings and ringed 166 swallows. The number of swallows was rather small and we did not succeed in finding the exact location of the roost. That is why we spent the rest of our time at Boteti River, where the trapping conditions were superb.

The conditions at the trapping site were totally different to those in 1992-1993. The annual floods from the Okavango Delta had not reached the Boteti River so the water level was extremely low, about 1,5-2 m lower than in 1993. The river was gradually drying out and most of the reedbeds lay dry. Nevertheless, they were still used as roosting places for swallows and other birds. However, the impact of grazing cattle, reed cutting and fishing by villagers was increasing.

The weather conditions in the 1993-1994 season differed quite substantially from those of the previous year. In general it was cooler and overcast or raining more often. It is not known whether the increase in precipitation in Botswana was responsible for the high numbers of 'wintering' swallows, but it is not unlikely. In any case, the number of roosting swallows along the Boteti River was higher than ever before. Our estimates range from 1,2 million to 3 million birds, the latter number probably being the most accurate. The same phenomenon was observed amongst other palearctic and intra-African migrants such as Lesser Spotted Eagle and Abdim's Stork, which were staying in Botswana in much higher numbers than usual (pers. comm. M. Herremans).

The departure from the roost was the best moment to make accurate counts. The roost was abandoned within half an hour after first light with the majority of birds leaving the roost in the first ten minutes. At several points along the roost, dense 'snakes' of swallows left the reedbeds, winding upwards without hesitation and reaching a considerable height within a matter of seconds. The departing birds were always in compact groups of thousands, sometimes tens or hundreds of thousands of birds.

The swallows' behaviour at the roost was also different compared to that observed in 1992-1993. This year the swallows usually arrived at the roost very late (the majority about ten minutes after sunset) and actual settlement at the roost was highly synchronised.

Consequently, catching was more peaked than in 1992-1993. These differences had a pronounced effect on the catching regime, and comparisons between the two successive years are very difficult because of methodological incomparability.

In 1994, body mass and fat scores were on average lower than in 1993. During the trapping period the birds hardly changed weight.

In 1993, an increase of body mass and fat score was observed until the third week of January. Thereafter, the total number of birds declined and only swallows with low body mass and low fat scores were captured. This suggested that some of the birds had disappeared: a start of migration perhaps?

Such trends in body mass or fat score were not witnessed in 1993-1994, nor did we notice anything to suggest migration.

We had four retraps during our stay at Boteti River. These retraps were the first indication of site fidelity. Given the high number of roosting birds, the retraps were quite unexpected.

In this respect it would be interesting to know how many roosts are available for swallows in Botswana. So far, the Boteti roost appears to be one of the biggest roosts in the region, possibly even in the southern half of Africa.

In northern Botswana, only Shashe Lake and the Okavango Delta are known to harbour roosting swallows. There are also suitable areas long the Chobe River, but the importance of these sites has yet to be assessed.

At Boteti River we had two more controls of swallows, ringed in Estonia and Belgium. This is much less than in 1993, when we had six controls in Botswana out of almost 6 000 trapped birds.

On this second expedition we ringed 10 069 swallows, of which 19,1% were adults (in

1993 about 28% were adults), as well as other palearctic and African species, achieving a total 10 371 ringed birds.

From December 1994 to January 1995 we hope to make our third and last swallow expedition, after which the big puzzle of data must be worked out.

We are hopeful that the efforts of South African ringers will be of considerable help in solving this puzzle.

Penguin News

Roughly 7 000 African Penguins were brought into the SANCCOB rescue centre near Cape Town in the first few days after oil slicks hit the coastlines of Dassen Island, Robben Island (both are major breeding colonies) and parts of the Cape Peninsula during the last days of June 1994.

At the same time, an order of 5 000 penguin flipper bands arrived to replenish the nearly exhausted stocks at SAFRING. This had been intended to be a few years' supply!

The entire consignment of flipper bands was snapped up at once, the largest single order in the history of SAFRING. The flipper bands are being fitted by a team of ringers from the Western Cape Wader Study Group, the Tygerberg Bird Club Ringing Group and the Avian Demography Unit. At the time of writing, the 3 000 cleanest penguins have been ringed, and the ringers and their assistants are recovering from assorted scratches (from claws), bites (from bills) and bruises (from flipper batterings). All

5 000 bands will be used on rehabilitated penguins over the next few weeks. Lambournes, the UK firm that supplies flipper bands, received an order for a further 8 000 – and agreed to manufacture the first few thousand urgently, so that they could be airfreighted to Cape Town as soon as they were ready!

Teal's Whisky are sponsoring the cost of a follow-up operation to monitor the progress of the rehabilitated birds intensively over the next few months.

Thanks to Teal's Whisky for sponsoring the monitoring operation, to ringers in the Western Cape for their assistance with the ringing operations, to Lambournes for altering their production schedules at short notice, KLM for airfreighting 30 kg of penguin bands at no charge and to the Southern African Nature Foundation for their catalytic role.