Blackcheeked Lovebirds in the hand

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Most parrot species do not lend themselves easily, or indeed painlessly, to bird ringing. Lovebirds, however, by virtue of their relatively small size, dependence on water and largely terrestrial foraging habits are somewhat softer targets – so soft in fact that none of us have a lasting scar to show for the experience! Few lovebirds have previously been caught with the intention of collecting ringing records, and the current SAFRING database is almost void of any lovebird records.

In 1998 I began two and a half years of fieldwork in south-west Zambia researching the basic ecology of the Blackcheeked Lovebird *Agapornis nigrigenis*, continuing the status and distribution work of Tim Dodman and team (Ostrich 71: 228–234). Tim has the honour of being the first person to ring Blackcheeked Lovebirds, catching seven birds between 30/11/94 and 01/12/94.

Zambian ringer Pete Leonard and Kate Knox kindly interrupted their holiday in the Nanzhila region of Kafue National Park to assist with the initial ringing portion of my study. On the afternoon of the 24/10/98 we erected nets around a pool with a total circumference of 64 metres. The pool was 225 metres from the lovebird's assembly tree, a tall Acacia polyacantha, and 15 metres from their pre-drinking perching trees. Prior to this, my field assistant, Debbie Smy and I had carefully observed various lovebird preferred drinking sites to get a clear idea of arrival patterns (timing and direction), perching positions (assembly tree and pre-drinking). drinking spot preferences, size of lovebird flocks and utilisation of the pool by other species (the large furries and huge flocks of Redbilled Quelea Quelea quelea were best

avoided!). October is known as the 'suicide month' in the Zambezi Valley for good reason. It's very hot and dry, forcing increasing numbers of lovebirds to flock to the last remaining pools of surface water.

The timing of lovebird arrivals to the assembly tree, first drink and departure from the area were remarkably constant and predictable, allowing us to set up the nets and sit back to await the first lovebird arrivals on cue. One of our major problems was trying to prevent the quelea from getting caught in the



Adult Blackcheeked Lovebird.

Table 1. Measurements of Black-cheeked Lovebird (includes data of Tim Dodman's team).

	n	Mean	Range
Mass	28	38.8 g	35-46 g
Wing length	28	98.0 mm	91-103 mm
Tail length	21	44.1 mm	42.25 45.5 mm
Tarsus length	25	14.2 mm	12.8-14.8 mm
Culmen length	25	15.4 mm	15.5-16.5 mm
Culmen width	28	9.5 mm	8.5-10.4 mm

nets before the lovebirds. Prior to drinking the quelea assemble in the bushes close to the pool and go down to the water before the lovebirds. Our quelea deflection strategy was to have Pete jump out from under one of the bushes just before the quelea went down to drink to temporarily scare them away.

On our first attempt we caught 6 lovebirds and 14 more the following morning. As we extracted the birds the nets were closed given the slightly lengthy extraction and processing times. Some lovebirds managed to avoid the nets by flying over them and landing inside the edges of the pool. The birds netted on our first attempt were kept overnight as their flock-mates disappeared to their roost-sites soon after drinking. The captured birds remained quiet and settled. The following morning prior to the first lovebird arrival at 05h40 the nets were unfurled and Pete crawled under the quelea bush. The previous evenings captives were hung in the shade of the assembly tree, to be released once the nets had been emptied to avoid recapture. By 05h53 47 lovebirds had been counted flying into the assembly tree. As more lovebirds flew in, the captive birds started to respond by returning calls. I wondered whether they recognised individual calls of arriving flockmates as they had remained silent until this point. At 06h14 the first lovebirds went down to drink. A few birds were netted immediately although a large number bounced straight out of the nets. The majority continued trying to reach the water, with a few even perching on the guy ropes!

Once in the net, the (14) lovebirds remained quiet, although they screeched loudly while being extracted. Other species caught included: Lilacbreasted Roller (Coracias caudata), Southern Greyheaded Sparrow (Passer diffusus), Common Waxbill (Estrilda astrild), Blue Waxbill (Uraeginthus angolensis), Redbilled Firefinch (Lagonostica senegala). Yelloweved Canary (Serinus mozambicus), Greater Blue-cared Starling (Lamprotornis chalybaeus), Cape Turtle Dove (Streptopelia capicola), Blackeyed Bulbul (Pycnonotus barbatus) and Redbilled Quelea. As soon as the nets were closed the previous evenings captives were released, and flew straight into the assembly tree where the rest of the lovebirds had retreated to and were calling noisily from. In follow-up visits several days later the same number of lovebirds were still using the pool.

On 04/11/98, in the company of ringer Lauren Gilson, three nets were set up at the same pool. Unfortunately this time the deflection of large flocks of quelea and waxbills was not so successful, and disturbed the approaching lovebirds, the majority of whom circuited the pool, and only one was caught. By 07/11/98 the rains had sufficiently set in to fill the pans in the Mopane woodlands allowing the lovebirds to disperse over a wide area to drink.

With hindsight the optimum ringing time would have been from the beginning of September through October, although predictable lovebird flocks were observed at pans from mid-July onwards, 'C' overlap rings were supplied by the Zambian Ornithological Society with the recovery address being Livingstone Museum. I personally feel that it is highly unlikely that lovebirds can be netted away from drinking sites, although the use of 'decoy' birds, or perhaps soundrecording might lure the birds into a specific area. It may also be possible to trap birds during the crop-ripening of millet and sorghum, although the use of nets in front of local villagers would be a highly foolish act in terms of lovebird conservation.

Most lovebirds showed some body moult, and a few had moulted tail coverts. The



Juvenile Blackcheeked Lovebird.

majority of tails displayed some form of abrasion, a feature generally expected in cavity roosters. Iris colour ranged from pale to dark brown. Juvenile birds have a dark iris, although all birds caught were presumed to be at least seven months old. Measurements were taken (Table 1, includes Dodman data). Other measurements taken, but not shown here, include: tarsus width, beak (cere-tip), hind-claw, colour definition on head and nape and signs of sexual activity.

Between February and April 2000 the lovebirds were observed breeding and first records of breeding behaviour in the wild were collected. During this period my field assistants were Darryl Birch and Frankie Hobro from the Mauritius Wildlife Foundation, who brought invaluable experience from the Echo Parakeet project with them. Although 78 nests were found, and 64 climbed up to cavity height, only 5 nests had large enough cavity entrances allowing human access to the nests. Eighteen chicks were briefly removed and measured, photographed and blood sampled. Seven of the larger chicks (lovebirds are asynchronous) were ringed. While re-measuring the one clutch five days later, it was noticed that the leg area around the ring looked slightly red. The ring was probably exerting some pressure on the tarsus since the chick was inactive in the nest. We removed all but one ring (that chick subsequently fledged). I would therefore like to suggest that rings are not fitted onto unfledged lovebirds, although this is standard practice with captive birds. The chicks did not appear stressed by the handling, and adult birds resumed parental duties almost immediately. We did however feel that after the second handling the older near-fledged chicks were less relaxed, and would like to recommend that in future projects lovebird chicks are only removed from the nest for measurements once

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