## A VULTURE IN THE HAND(S)

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A bird presumably suffers quite a shock when it is captured and ringed. The trauma can perhaps be lessened by hooding the bird, and by keeping it in a dark holding box, but meanwhile much valuable data can and should be collected whilst the bird is in the hand.

Generally speaking, data and samples will be collected in answer to specific questions, questions that are outside the scope of these towards which ringing provides answers. Examples are: does weight or fat condition change with season? Are adults larger than immatures? What parasites are carried? How does plumage change with age? And so on.

As far as vultures are concerned, it takes me and an assistant on average, about 20 minutes to ring and process each bird. For the sake of brevity, no technical details are given below, but these would be gladly supplied by the writer on request. There exist in southern Africa research workers able to advise on collection techniques, and keen to receive specimens, for all the procedures outlined.

Weight and a number of measurements are taken. Moult and plumage patterns are recorded; colour photographs are useful here. Sexing of monomorphic birds is difficult, and several techniques are available, only one of which is likely to be 100% reliable and applicable to all such species. This is a cytogenetic examination of a growing feather. Abnormalities, including unusual feather numbers, are noted. Ectoparasites and a faecal sample can be collected, a blood smear made, and a blood sample drawn.

In the unfortunate event of killing a bird, other data and samples, in addition to the above, can be taken. Fat condition is assessed; an internal examination of organs made, worms preserved; a representative selection of feathers plucked to illustrate the plumage state of the bird; gonads removed; and crop and stomach contents examined. Perhaps whole guts and other organs should also be collected as interest in the comparative anatomy of birds is reviving. Finally, the bird's skeleton should be prepared.