

recorder singing loudly from each bush between flights, which took him over the net - this he expertly avoided on each flight!

Cape White-eyes (R.775) have been called up and caught by playing their song.

Cape & Masked Weavers (R.799 & 803) are very easily called up and caught by playing recordings made at weaver colonies. They also come to the Black-eyed Bulbuls mobbing recording.

I have tried playing the call of the Pearl-spotted Owl (R.365) (which I have used to call up birds in other areas when bird-watching, with excellent results) but I have found that this call has no effect whatsoever on the Melville Koppies birds. The only explanation I can think of to account for this, is that this species does not (as far as I am aware) occur at Melville. I have also tried the call of the Spotted Eagle Owl (R.368) (which does occur at Melville Koppies) but to no avail.

The cassette recorder takes 4 x U2 batteries. The normal 'Eveready' ones which cost about 18c for 2 I find only last for \pm 3 hours continuous playing time, I usually use the 'Eveready' "Powermax" batteries which cost about 22c for 2 and they last \pm 7 hours continuous playing time, the 'Eveready' "High Power" batteries which cost about 27c for 2 appear to have no advantage over the "Powermax" for the extra cost. I once found and bought some Japanese make of batteries which cost 99c each but I found these only lasted about 4 hours longer than the "Powermax" batteries. If someone could find or design a re-chargable battery power-pack I think this would be more convenient and less expensive in the long run.

I usually place the recorder under a bush about 1 - 2m from the net, making sure that it is not directly in the sun nor will be during the time it is to be left unattended, which will usually be the amount of time that it takes for one side of the cassette to play. I have found that the most suitable cassettes are those that play for 45 minutes a side.

TRAPPING THE BLACK DUCK *Anas sparsa*

By: P.G.H.Frost,
FitzPatrick Institute,
U.C.T., Rondebosch,
Cape.

At the beginning of 1972 a study of the ecology and social behaviour of the Black Duck *Anas sparsa* was started by the Percy FitzPatrick Institute. The Black Duck inhabits rivers and streams, and like some other riverine duck in New Zealand and South America, appears to be territorial the whole year round. In the more typical dabbling duck (*Anas* spp.), inhabiting perennial or seasonal pans the tendency is to be territorial only during the breeding season. At other times of the year these birds tolerate the close proximity of one another and often aggregate in large flocks. The question therefore is posed: What ecological factors select for year round territoriality in the Black Duck? In order to answer this question we have been collecting data on the fidelity to, and season to season variation in, home range, the degree of territorial behav-

our, the fidelity of the pair bonds and the nature of juvenile dispersal. Much of this information has been obtained by using small (25g) radio transmitters harnessed to the birds, colour marking birds with rings and nasal saddles and by direct observation.

Most of this work has been carried out in a 67km² segment of the Eerste River valley near Stellenbosch. The area is bisected by 13,5km of the Eerste and Blaauwklip Rivers. There are also 105 farm dams in the area. Since the inception of the project we have trapped a total of 90 Black Duck in the Eerste River study area and a further six birds on the Klipplaat River in the Amatola Mountains. 39 Birds have been trapped one or more times to give a total of 118 recaptures. We have had four recoveries, all local. One individual has been trapped 14 times in 21 months while others have been trapped upto 10 times. We have placed radios on 37 individual birds and have now accumulated nearly 10 000 locations and activity records. This vast body of information is to be analysed with the aid of a computer. In this article I will describe the methods we used in trapping Black Duck.

With one exception, all the duck caught by us have been taken in mist nets. One bird was trapped in a self-triggering, walk-in cage which contains two tame Black Duck as decoys. Most of our mist netting has been carried out in rivers. The duck tend to fly a couple of metres above the water, especially if there is an overhead canopy. Two different nets have been used. Initially we used standard 18m x 2m, two-shelf wader nets made by Bridport/Gundry. However their lack of height proved a disadvantage so we ordered 18m x 4,5m, five-shelf, 6mm mesh Siegfried Heindl duck nets. NUBRA imports these nets from Siegfried Heindl, 493 Detmold, Heidenoldendorf, Schwarzenbrinker Strasse 54, W.Germany, at a cost of R25:86. Most of these nets we cut down to 12,5m, to facilitate their use along narrow, tree-lined rivers. The nets are supported at either end by three 2m lengths of 37,5mm O.D. aluminium tubing. The poles are slotted together by means of a 37,5mm I.D. copper tube fastened to one end of each pole. To help in putting up the poles a 1m length of 12,5mm iron rod is driven into the ground at the required spot. (These rods can be left in permanently if the locality is used time and again.) The aluminium pole with the net attached is then slipped over the iron rod. The rod gives added support to the net. The poles are guyed in the usual manner and although the duck hit the net with quite a force, the generous bag and the flexibility of the poles help absorb the shock. One person can put up a net in under 15 minutes.

While it is possible to place nets anywhere across a river and catch duck, especially if there is a canopy overhead, we try to place the nets at the entrance to, or exit from, a pool favoured by the birds. Time spent on the river identifying these spots has proved to be a good investment. Most of our success has been achieved during the early morning or late evening. This is when the birds are most active.

We have also used the nets to catch duck on dams. Single nets on small dams, or a series of nets on larger dams have proved effective provided one knows the preferred flight paths, loafing spots and reaction to disturbance of the duck. Nothing is more frustrating than having the birds fly over, under or around nets. Being so large and heavy the nets tend to be rather conspicuous, especially in the open, but again trapping at dawn and dusk tends to minimise this disadvantage.

In addition to Black Duck we have trapped 35 individual Giant Kingfishers Ceryle maxima. Most small birds get through the nets but doves tend to get badly tangled. Rivers, like marshes or reed beds, tend to be discrete habitats, so that it is possible to trap individuals repeatedly. The wealth of information that this can give you cannot be overemphasised.

RINGING RESEARCH INTO THE
BLACK-SHOULDERED KITE *Elanus caeruleus*

A subgroup of the recently-formed Transvaal Raptor Group has undertaken a specific ringing study of the Black-shouldered Kite (BSK) in the South-central Transvaal. Two recent recoveries (Witwatersrand - Cradock ; Warmbaths - Beira) have shown that the species is capable of long-distance movement. The study group will also gather the following data (anyone ringing BSK's is asked to do the same where possible):

- Basic NUBRA schedule data (Species, Robert's number, ring number, age, sex, mass, time, date, colour code, moult code, locality).
- Wing, tail, culmen, tarsus, tarsal diameter (widest midshaft and widest distal) all in mm.
- Wing surface area (cm²) - by marking wing outline on a flat sheet of paper and measuring later with a grid or a planimeter.
- Colour of soft parts (colour charts available): iris, bill, cere, tarsus and toe, claw.
- Weather conditions
- Trapping details (whether by net, bal-chatrri or other means.)
- Crop distension.
- Sexing: we know of NO way to sex BSK's, but are investigating this aspect.
- Blood smear) submitted to relevant laboratories (addresses
- Ectoparasites) supplied if requested).
- Moult data: wing and tail, use scoring system 5, 4, 3, 2, 1, 0. Body moult in regions. Categories: moulting; not moulting (either new or old).

The Transvaal Raptor Group uses a raptor details form which includes space for all the above topics - these will be supplied for use on BSK's if requested.

Any persons with enquiries, or with similar interests, please contact:

H.C. Biggs,
107 Milner Avenue,
Northcliff,
Johannesburg, Tvl.