is real value for money! Into the bargain it also calculates Great Circle distances between ringing locality and recovery locality, the direction in which the bird flew, and the elapsed time.

Thirdly there is a printing stage. These programmes are the worst of all to write as it's not easy to get the headings and columns neatly lined up and acceptably laid out. The recovery printout programme does some neat things - like it won't start a new species on a page unless there are enough lines left to make it worthwhile:

Something we are going to do soon is to build up a file of place names so that we can start printing more than just the coordinates in our recovery print-outs.

Soon we will have all the backlog recoveries on the computer - i.e. recoveries since 1948. We plan to sort these by ringer so that we can send you a print-out of your recoveries. We'd like you to give them a final check. The completion of this task will be a major milestone in the life of NUBRA. We will then be able to supply recovery information - on card, tape or print-out - on any species, on any place or over any period, quite readily to anyone who wants to do a detailed study.

NEW REGULATIONS FOR BIRD-MARKING

By:

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At a recent meeting of the NUBRA Technical Subcommittee, the following regulations applying to bird-marking techniques were unanimously adopted. These new regulations come officially into force from the date of publication of this article. All ringers amateur and professional are requested to read them carefully and to comply with them from now on.

- 1. Ringers should wherever possible use marks in combination with numbered metal rings supplied by NUBRA.
- $2.\ \mbox{Notification}$ of any intended marking scheme must be made to NUBRA before the scheme is started.
- 3. No experimental marking scheme may be started without written agreement from NUBRA.

With reference to these regulations, ringers should note the following. When a ringer notifies the Unit of a marking programme, the Ringing Officer will make it clear if he regards the marking technique as experimental. Generally speaking, tarsal colour rings, wing-window marking in birds of prey and nasal saddles in duck can be regarded as sufficiently well-known in southern Africa not to be called experimental, provided that the particular ringer has experience of the technique. Ringers should also be very strict in filling in the colour-marking code on their schedules since colour-marks may influence recovery rate. If anyone has difficulty in finding an appropriate code, they should contact the Unit.

Finally the following register of marking techniques currently and previously in use in southern Africa has been prepared after consultation with Provincial Conservation Departments and Branch Ringing Organisers. If any ringers are currently carrying out studies, using marking techniques, which are not recorded in the list they should notify the Unit immediately.

BIRD-MARKING REGISTER

<u>Colour code</u>: Red (R), White (W), Blue (B), Yellow (Y), Black (BK), Green (G), Orange (O), Purple (P), Pink (PK). Colours are given throughout in brackets. The abbreviation TCR is used for tarsal colour rings.

In the list the name of ringer and the organisation concerned at the time of the study have been given. If the project was an official one, the organisation is given first, the ringer concerned in brackets.

- R.44 Cape Gannet
 - M.Jarvis (U.C.T.) Tarsal colour rings (TCR) Extinct.
- R.48 Cape Cormorant
 - -S.W.A.A. (H.Berry) TCR Extinct.
- R.49 Bank Cormorant
 - J.Cooper (U.C.T.) TCR Extinct
- R.61 Cattle Egret
 - R.Siegfried (C.P.A.) Plumage dyes (PK,B,G) Extinct.
- R.81 Sacred Ibis
 - C.Hunter (W.B.C.)-Plumage dye (P) Extinct.
 - -R.Clarke (W.B.C.) TCR darvic (W.B.Y.R.G.BK) Extant.
- R.82 Bald Ibis
 - T.P.A.(P.Milstein, S.Wolff) TCR darvic (BK,G,B,R,Y,W)- Extant.
 - O.F.S.A.(L.Stöltz) TCR -all colours Extant
- R_{*}88 Spurwing Goose
 - T.P.A. (P.Milstein) Wing-tags (BK,G,B,R,Y,W), Neck collars (R,BK,B) Extinct.
- R.89 Egyptian Goose
 - T.P.A.(P.Milstein) Wing-tags (BK,G,R,B,W,Y) Extinct
- R.90 South African Shelduck
- O.F.S.A.(J.Geldenhuys) Nasal saddles (Y,O,G), TCR all colours - Extant.
- R.94 Cape Shoveler
 - T.P.A.(P.Milstein, D.Skead) Patagial wing-tags (BK,G,B,R,Y,W) Extant.
 - C.P.A. (C.Heÿl) Nasal saddles (B,W) Extant
- R.95 Black Duck
- P.F.I.A.O.(R.Siegfried) Nasal saddles, radios, wing streamers, TCR (R,Y,G,B,W) Extant.

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R.96 Yellowbill Duck
   - T.P.A. (P.Milstein, D.Skead) - Patagial wing-tags (BK,G,B,R,Y,W,)

    Extant.

R.97 Redbill Teal
   - T.P.A. (D.Skead) - Patagial wing-tags (BK,G,B,R,Y,W) - Extant
R.98 Cape Teal
   - T.P.A. (P.Milstein, D.Skead) - Patagial wing-tags (BK,G,B,R,Y,W)
   - C.P.A. (C.Heÿl) - Nasal saddles (G,W,Y,O,B,R) - Extant.
R. 102 South African Pochard
   - T.P.A. (P.Milstein) - Patagial wing-tags (BK,G,B,R,Y,W)Suspended.
R. 106 Cape Vulture
   - Vulture Study Group (J.Ledger, leader) - TCR all colours -Extant.
R.107 White-backed Vulture
   - Vulture Study Group - TCR all colours - Extant.
R. 108 Lappet-faced Vulture
   - Vulture Study Group - TCR all colours - Extant
R.109 White-headed Vulture
   - Vulture Study Group - TCR all colours - Extant
R.110 Hooded Vulture
   - Vulture Study Group - TCR all colours - Extant.
R,122 Greater Kestrel
   - J.Ledger (W.B.C.) - TCR - Extant.
R.130 Black-shouldered Kite
   - BSK Study Group (H.Biggs, leader) - TCR (B,G,BK), chest dyes
R.146 Black-breasted Snake Eagle
   - H.Biggs (N.T.O.S.) - Wing windows - Extinct,
R. 152 Jackal (Augur) Buzzard
   - I.Macdonald (R.O.S.) - TCR - Extant.
R.154 Steppe Buzzard
   - G.Broekhuysen (C.B.C.) - TCR - Extant.
R. 159 Black Sparrowhawk
   - T.P.A. (P.Milstein) - TCR (Bk,G,B,R,Y,W) - Extant.
R. 165 Pale Chanting Goshawk
   - H.Biggs (N.T.O.S.) - TCR - Extinct.
R. 192 Crowned Guineafowl
   - T.Crowe (P.F.I.A.O.) - TCR all colours - Extant.
R.212 Red-knobbed Coot
  - T.P.A. (P.Milstein) - Patagial wing-tags (BK,G,B,R,Y,W)Suspended
R.235 White-fronted Plover

    W.J.Lawson (N.B.C.) - TCR - Extinct.
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R. 237 Kittlitz Plover
    - A.J.Tree (R.O.S.) - Tibiotarsal tags - Extinct.
R. 251 Curlew Sandpiper
    - W.C.W.S.G. (M.Waltner, leader) - TCR (G.W) - Extinct.
R.289 Hartlaubs Gull
    - L.& G.Underhill (C.B.C.) - TCR (BK,B, et al.) - Extant.
R.307 Namaqua Sandgrouse
    - S.W.A.A. (J.Dixon) - TCR - Extant.
R.311 Rock Pigeon
    - C.Elliott (NUBRA) - TCR (O.G.R.W), Patagial wing-tags (.R.Y)
R.316 Cape Turtle Dove
    - C.P.A. (C.Heÿl) - TCR (B) - Extinct.
R.317 Laughing Dove
    - C.P.A. (C.Heÿl) - TCR (B) - Extinct.
R.439 Crested Barbet
    - C.Nel (N.T.O.S.) - Ponchos - Extinct.
R.453 Red-throated Wryneck
    - W.Tarboton (W.B.C.) - Wing-tags - Extant.
R.533 Arrow-marked Babbler
    - R.Harwin (R.O.S.) - TCR (Y) - Extant.
R.578 Chorister Robin
    - T.Oatley (N.B.C.) - TCR - Extant.
R.581 Cape Robin
    - J.Bunning (W.B.C.) - TCR - Extant.
    - T.Oatley (N.B.C.) - TCR - Extant.
R.589 Starred Robin
    - T.Oatley (N.B.C.) - TCR - Extant.
R.707 Fiscal Shrike
    - J.Bunning (W.B.C.) - TCR - Extent,
    - J. Hargrove (R.O.S.) - TCR - Extant.
R.727 Helmet Shrike species
    - C. Vernon (R.O.S.) - TCR - Extant.
R.734 Indian Myna
    - J. Mendelsohn (U.N.) - TCR - Extinct.
R.748 Red-billed Oxpecker
    - J. Stutterheim (K.N.P.) - TCR, Ponchos, Wing-tags - Extant.
R.784 House Sparrow
    - W.Lawson (N.B.C.) - TCR - Extinct.
    - T.Choate (R.O.S.) - TCR - Extinct.
R.786 Cape Sparrow
    - M.K.Rowan (P.F.I.A.O.) - TCR - Extinct.
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- R.799 Cape Weaver C.Elliott (NUBRA) TCR all colours Extinct.
- R.803 Masked Weaver
 P.Chenaux-Repond (R.O.S.) TCR (G.BK,Y.B.R) Extant.
- R.808 Red Bishop
 - - A.Craig (U.C.T.) TCR Extinct.
 - P.F.I.A.O. (R.Siegfried) Plumage Dyes Extinct.
- R.823 Bronze Mannikin - W.Lawson (N.B.C.) - TCR - Extinct.

Community Studies

Lusitu Forest, Rhodesia - I.Macdonald (R.O.S.) - TCR all colours - Extant.

Alexandria, E.Cape - Dr. Harcus (PFIAO) - TCR all colours - Extant.

Fort Victoria, Rhodesia - C. Vernon (RPB) - TCR - Extant.

Lake Kariba, Island 126, Rhodesia - T.Choate - Extinct.

Namib Desert Park, S.W.A. - R.Jensen (S.W.A.A.) - TCR - Extinct.

University Experimental Farm, Pretoria - M.Johannesmeier (N.T.O.S.)
- TCR (B,G,R,Y,W,BK) - Extant.

In a Bulawayo Garden, Rhodesia - F.Roberts (R.O.S.) TCR all colours - Extant.

Windhoek Area, S.W.A. - H.Stöck (S.W.A.S.S.) - TCR - Extant.