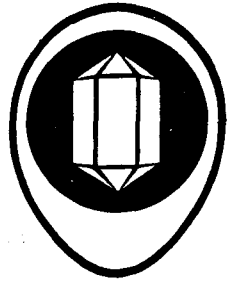


Lanioturdus torquatus
Drosselwürger

MITTEILUNGEN

ORNITHOLOGISCHE ARBEITSGRUPPE



SCHRIFTLÉITUNG: POSTFACH 67, WINDHOEK, S.W.A.

No. 7/8

- 9. Jahrgang -

Okt./Nov. 1973

"DIE LEBENSANPASSUNG DER VÖGEL IN EINEM HEISSEN UND TROCKENEN KLIMA"

Ornithologisches Symposium in Hardap, S.W.A. am 24. und 25. Sept. 1973;
Veranstaltet von der S.A. Ornithological Society, Cape Town, und
der S.W.A. Wissenschaftlichen Gesellschaft, Windhoek.

INHALT:

die Referate in Kurzfassungen.

FROST, P.G.H. and SIEGFRIED, W.R.: Behavioural adaptations of the Jackass Penguin to a hot, arid environment.	S. 3
KEMP, A.C. and M.I.: A study of the biology of Monteiro's Hornbill.	S. 3
WINTERBOTTOM, J.M.: Bergman's and Allen's rules in the Western Cape.	S. 4
MACLEAN, G.L.: Arid zone adaptations in Southern African birds.	S. 4
SKEAD, D.M.: Drinking habits of birds in the Central Transvaal Bushveld.	S. 5
WOODALL, P.F.: Some plovers transport water to their nests.	S. 5
SOSSINKA, R.: Early sexual development in the Zebra Finch as an adaptation to arid areas.	S. 6
JENSEN, R.A.C.: A comparative study of bird breeding ecology in the Namib Desert Park and adjacent rainfall areas of central South West Africa.	S. 6
SIEGFRIED, W.R. and FROST, P.G.H.: Egg temperature and incubation behaviour of the Ostrich.	S. 7
MACLEAN, G.L.: A contribution to the biology of the Social Weaver in the Kalahari Sandveld.	S. 7
MILSTEIN, P. le S.: Random movements as an adaptation to arid environments.	S. 9
WATT, J.S.: Breeding habits of the Chestnut Weaver.	S.10
Letter from the Chairman of the S.A. Ornithological Society	S.10

however, indicate an approximate ratio of eight males to five females in the study area.

Wing moult is slow: each remex takes about a month for replacement. Body moult occurs within the space of a month, usually after rain while the birds are breeding. Primary remiges are moulted proximodistally from 1 to 9; secondaries are moulted disto-proximally from 1 to 6. Body moult is antero-posterior with the dorsal surface slightly in advance of the ventral surface.

The main nest predator of the Sociable Weaver in the Kalahari sandveld is the Cape Cobra *Naja nivea*. This snake causes great losses of eggs and chicks; one cobra may eat the contents of an entire nest mass at one feed. Another nest predator which causes smaller losses of eggs and chicks but great destruction to the nest masses is the Honey Badger *Mellivora capensis*. These are the only two nest predators on the Sociable Weavers in the study area. Predators on adult Sociable Weavers include several birds of prey and some small carnivorous mammals.

Adult Sociable Weavers have few ectoparasites and hardly any Mallophaga. A common ectoparasite on the legs of chicks is a blood-sucking *Dermetes* larva which appears not to be harmful. The only endoparasite found was the nematode *Diplostriaena ozouxi*, which infected the abdominal air sacs of the adult birds.

The nest material of the Social Weavers' communal nest masses is inhabited by a wealth of invertebrate animals and a few harmless reptiles such as skinks and geckos.

Some of the chambers in a Sociable Weaver nest mass may be taken over by other species of birds. Most of these, such as the Red-headed Finch *Amadina erythrocephala*, use the chambers for breeding purposes only, but the most important avian symbiont, the Pygmy Falcon *Polihierax semitorquatus*, is a permanent resident in the chambers. The presence of Pygmy Falcons is resented by the weavers, but the falcons may help to keep snakes away from the nest mass. Adult Sociable Weavers are not normally preyed on by Pygmy Falcons, although the falcons may occasionally take young weavers in the nest chambers.

The top of a nest mass may be used as a nest site by the Giant Eagle-Owl *Bubo lacteus*. Barn Owls *Tyto alba* may use cavities in the superstructure of a nest mass for roosting in. Neither of these owls appeared to prey on the weavers.

The food of the Sociable Weaver during the study period consisted of 78,9% of animal material by wet weight; the rest was mainly seeds, mostly of green grasses. The young are fed entirely on animal food. The most important single source of animal food in the Kalahari is the harvester termite, *Hodotermes mossambica*. Sociable Weavers are independent of drinking water under natural conditions. Members of a colony do not usually feed more than about 1,5 km from the nest mass.

RANDOM MOVEMENTS AS AN ADAPTATION TO ARID ENVIRONMENTS

P. le S. Milstein

The climatic fluctuations of Southern Africa are considerable, and it is often essential that birds are able to adapt to these. Random movements to more favourable areas, distinguished from migration as being irregular, are of advantage. They may be short or finally extensive, gradually extended to a journey from which the birds may never return. The term "irruption" in this context for large and spectacular random movements can be criticised.

European findings of the ultimate cause of these movements being food shortage are supported. Under our conditions this appears to be the result of rainfall, with temperature secondary rather than primary. However a European suggestion (Svardson) of such movements having the same proximal causes as true migration seems less certain, and an alternative suggestion (Lack) of high population numbers is likely to be only contributory. The conclusion of Cornwallis that a situation of population - food imbalance results in these random movements does not seem disputable on present indications.

Similarly his conclusion that these random movements are far more widespread than is generally supposed is also strongly supported. Tentative indications from a three-year sojourn at Barberspan on the western edge of the Highveld are presented in the light of available earlier data. It seems clear that contributions from modest "bird observatories", on European lines but possibly less elaborate, could be of considerable value in assessing the minimal tolerances of many of our indigenous species to environmental variations.

BREEDING HABITS OF THE
CHESTNUT WEAVER, PLOCEUS RUBIGINOSUS

J.S. Watt

A talk, illustrated by slides, covering the following aspects:

Early reports - Personal observations - Seasonal nature of breeding
- Choice of nesting terrain - Choice of nesting sites - Breeding pattern - The eggs - General observations

LETTER FROM THE CHAIRMAN OF THE
SOUTH AFRICAN ORNITHOLOGICAL SOCIETY

Dr. G.J.A. Curry

Cape Town 15.10.73

Dear Mr Kolberg,

The S.A.O.S. and the Symposium Subcommittee of the S.A.O.S. wish to thank you most sincerely and Dr. Rust for the part you both played in the organization of the Symposium and the excursion. Every section of the Symposium was enjoyed fully.

Mr Stoeck must be thanked very much indeed also for all the help he gave.

At the meeting of the S.A.O.S. council last night, a unanimous and sincere vote of thanks was given to the S.W.A. Scientific Society.

The excursion was very well organised and we were indeed fortunate to be informed about desert Biology by Dr. Jensen and Mr Berry. The hotel accomodation was of a high standard.

We had heard about S.W.A. hospitality and friendship and it was great to have had the opportunity of experiencing it.

Yours sincerely

Signature

Chairman
