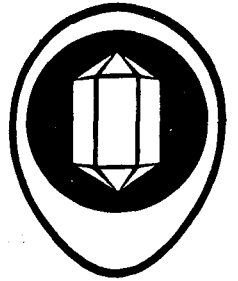


Lanioturdus torquatus
Drosselwürger

MITTEILUNGEN

ORNITHOLOGISCHE ARBEITSGRUPPE



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

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"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

in a similar manner to that reported from the sandgrouse (Pteroclididae). Gravimetric experiments tended to confirm that these structures do assist in water retention, although not to the same extent as in the sandgrouse. This region of specialised barbules is visible macroscopically as a zone on either side of the rachis of breast and belly feathers, similar in position but narrower than that found in the sandgrouse.

A brief survey of local Charadriiformes has indicated that these specialised feathers are most developed in the Charadriidae and Scopelidae, although they are also present in certain Recurvirostridae and Glareolidae.

Both the behavioural and structural aspects of this investigation give additional support to the suggestion that the sandgrouse are more closely related to the Charadriiformes than to the Columbiformes.

EARLY SEXUAL DEVELOPMENT IN THE ZEBRA FINCH
AS AN ADAPTATION TO ARID AREAS

R. Sossinka

In the arid zones of Central Australia, the Zebra Finch underwent strong selection for several drought-adaptations. As a result, it can survive without any water for more than 18 months. A further adaptation is a natural hypersexualisation in adult birds. But the young-ones too are hypersexualized, as can be seen in the pronounced precocity at young males: They show a very rapid gonadal development without any juvenile refractory period, but with an increased testosterone production 30 days old, and they have mature sperm as early as 70 days old.

The importance of the natural selection pressure, caused by the sparse and irregular rainfall, which do not allow a long preparatory phase for reproduction, can be seen by a comparison between wild and domesticated strains of Zebra Finches. Domesticated ones, after more than 100 generations in captivity and being selected in quite another way than in the wild, are sexually less active and mature later than wild ones, being raised under identical conditions.

A COMPARATIVE STUDY OF BIRD BREEDING ECOLOGY IN THE NAMIB DESERT
PARK AND ADJACENT HIGHER RAINFALL AREAS OF CENTRAL SOUTH WEST AFRICA

R.A.C. Jensen

Just over 200 species of birds have been recorded so far from the 5000 square mile (1 312 000 ha) Namib Desert Park. About 45% breed there, most of them in the linear oases formed by the two major seasonally-flowing rivers traversing the Park from east to west, or in the narrow hilly eastern strip above the 100 mm isohyet.

Four other comparison areas with different topography, rainfall, altitude and distance inland were studied concurrently. Namib riverine breeders tended to nest earlier or showed prolonged breeding activity to nest earlier or showed prolonged breeding activity when compared with the summer-breeding inland populations of the same species. Birds breeding in the Namib Parks 100 mm isohyet region outside the rivers generally nested later in summer-autumn than their conspecifics further inland, in line with progressively later summer rains from east to west.