

The Steppe Eagle *Aquila nipalensis* and other termite-eating raptors in South West Africa

by

R.A.C. Jensen

Division of Nature Conservation and Tourism,
South West Africa Administration.

I. ABSTRACT

Steppe Eagles *Aquila nipalensis orientalis* were recorded in small groups in the Karibib district in January-February 1971. Two specimens were collected, the only previous definite record being Andersson's specimen from the last century. The birds apparently fed exclusively on alate harvester termites, and were found in the company of migrant *Milvus* kites and other raptors.

The probable pattern of movement of the raptor flocks is speculated on, and the 1972 records from the northern Cape claiming a number of highly doubtful new additions to the South African raptor list, are discussed and provisionally rejected.

II. INTRODUCTION

Sporadic and rather vague records of migrant raptor concentrations in South West Africa appear in the literature (e.g. Andersson 1872, van der Westhuizen 1967, de Villiers 1972). However these gatherings and their movements have not enjoyed the attention they deserve. In January-February 1971 strong rains fell in the Karibib district of central South West Africa (Table 1), resulting in a "termite year" with large flights of the harvester termite *Hodotermes mossambicus* (Hagen). Large flocks of raptors appeared in the area and remained for at least a month, although the groups ranged far and seldom stayed in the same locality for more than a few days. Presumably the pattern of movement followed the pattern of local showers and resultant termite flights.

Table 1. Karibib rainfall (mm)

	Dec.	Jan.	Feb.
1970-71	5,7	31,3	193,8
No. of Rain days	1	9	18
Dates of showers ≥ 25 mm	—	—	1;13;17
61-yr Average*	25,6	43,4	52,8

* 61-yr annual average 205,2 mm
(* Up to 1968 when recording station changed locations)

CONTENTS

I. Abstract	73
II. Introduction	73
III. Observations	73
IV. Discussion	74
V. Acknowledgements	76
VI. References	76

NOTE: Since this paper was submitted, I have been informed of an extensive study by Brooke *et al.* "A study of the migratory eagles *Aquila nipalensis* and *A. pomarina* (Aves: Accipitridae) in Southern Africa, with comparative notes on other large raptors." *Arnoldia*, in press.

III. OBSERVATIONS

On 19 January 1971 a concentration of the raptors fed and roosted just south of Karibib town, on municipal ground. About 1 500 kites were present in an approximate ratio of three Yellow-billed *Milvus migrans parasitus* to two Black *M. migrans migrans* (since the kites tended to group by subspecies, widely varying actual ratios were obtained in different samples of 100 birds). Additionally there were about 20 Lanners *Falco biarmicus*, mostly immatures, and about two dozen large brown

eagles ranging appreciably in size. Most of these appeared to be in adult or near-adult plumage and were identified as Steppe Eagles *Aquila nipalensis*, with one or two of the smallest individuals ascribed tentatively to *A. pomarina*, the Lesser Spotted Eagle. Several distinctively plumaged immature Steppe Eagles were present, but no immature Lesser Spotted. The dark non-juvenile Steppe Eagles all showed varying amounts of white at the tail-base, were much darker than most Tawny Eagles *Aquila rapax rapax*, and showed a noticeably more slender bill than that species, although there is considerable variation in this as well as other characters.

The raptors were observed to roost in a loose aggregation in small (3-5 m) trees in the open bushveld which showed signs of considerable overgrazing. On the following morning a number of pellets and pellet fragments were collected beneath roosting perches of Steppe Eagles. These consisted entirely of head and other remains of *Hodotermes mossambicus* alates (identified by Dr. W. Coaton, pers. comm.). Two unbroken whole pellets consisted of at least 630 and 930 termite head remains respectively. Attempts to collect specimens of the eagles that evening failed, partly because the majority had moved their roost elsewhere.

On 11 February a small flock of kites (c.60) with about 12 eagles was found feeding on a *Hodotermes mossambicus* flight on the Karibib-Namib Park road about 27 km south of the Swakop River (border of the farm Tsaobis). One eagle was collected, a small individual, which turned out to be an apparently adult Steppe Eagle (sexed as a female on skinning by P. J. Buys of the State Museum, Windhoek). This group of eagles was feeding on the ground. Later the same day a much larger mixed raptor concentration was encountered about 80 km to the north on the Karibib-Usakos road. Another eagle, in apparently sub-adult plumage, was collected from this flock. The second bird was also sexed as female, and was somewhat larger than the first, 2 550 g against 2 350 g, wing 525 mm against 510 mm. Crops and stomachs contained only termites. P. A. Clancey examined and confirmed both birds as *Aquila nipalensis orientalis* Cabanis (*in litt.*).

In the January group of raptors were a number (about 15) of very pale-crowned large falcons which at first were surmised to be migrants of an unrecorded Palaearctic species or race. Two of these "white-headed falcons" were collected, along with an adult Lanner. The former two were found to be juvenile Lanners, and were confirmed as such ("paler . . . than eastern birds . . .") by Clancey (*in litt.*). All five skins have been deposited at the State Museum, Windhoek.

IV. DISCUSSION

The above records constitute the second verified occurrence of the Steppe Eagle in South West Africa, the first being a specimen collected by Andersson somewhere in Damaraland about a century ago

(Roberts 1936, Hoesch and Niethammer 1940, Winterbottom 1971). Three other specimens procured by Bradfield near the Waterberg (Roberts 1928) were subsequently found to be *Aquila pomarina* (Roberts 1934). However, it seems clear that the migrant eagles have been largely overlooked, since a number of reports have come to my attention of eagles in groups feeding on termites in previous years in various parts of S.W.A. (e.g. G. Braine, H. Ebedes, pers. comms.). Specific Steppe Eagle sight records of my own include, besides numerous records from the Usakos and Karibib districts in January-February 1971, one bird in mid-October 1971 along the Okavango River. It seems worth mentioning also considerable numbers of Steppe Eagles feeding on termite flights on overgrazed pans in the Moremi Reserve, Botswana, in November 1971 (the species is not listed by Smithers 1964).

It appears that the occurrence of these migrant raptor aggregations in the south-western parts of the wintering range is sporadic, being at least partly dependent on the particular rainfall and termite-flight pattern of a particular year. Thus in 1972 no concentrations appeared in central South West Africa, to my knowledge; nor were they seen in the Karibib district in the prior two years 1969 and 1970. The focus in 1972 may well have shifted south to the extreme northern Cape, where good rains fell (*vide* Button and Clancey 1972).

An interesting point emerges from the rainfall figures (Table 1), viz. the rainfall in December and January 1970-71 was below normal, yet termites and raptors were already in evidence in mid-January, anticipating (correctly) a good year. Possibly a part of the explanation lies in the extremely scattered rainfall pattern, i.e. the "rain center" or front remained over the district for weeks, precipitating however only in localized showers and thunderstorms which may have largely missed the Karibib rain-gauge during January, but which individually were quite sufficient to stimulate local termite flights of considerable proportions. After the first few heavy rains of February however, the termite flights tailed off and the raptor flocks moved on.

Finally, in view of personal experiences with "white-headed falcons" and other strange, but non-new, raptors, it seems necessary to comment on a number of highly doubtful records claimed by Button and Clancey (1972) on the basis of the former's observations supported by inadequate photographs, from the extreme northern Cape Province. Mr. Clancey kindly sent me duplicates of the critical slides involved in the cases of the Red Kite *Milvus milvus*, the Saker *Falco cherrug* and the Barbary Falcon *F. (peregrinus) peregrinoides*. Although these slides are considerably better than the printed reproductions, careful examination, and comparison with my own slide collection and with photographs, paintings and descriptions in the literature failed to convince me of their acceptability. Further correspondence with Clancey yielded no additional supporting evidence. It seems unnecessary to go into details regarding the reasons for rejecting these re-

Figure 1. A probably adult Steppe Eagle. The bill is noticeably slender in the field when compared with a Tawny Eagle's. White tail-base does not show in this pose.



Figure 2. A sub-adult Steppe Eagle, probably in the 3rd-4th year. White lines of wing-coverts (partly obscured by twigs) are not as pronounced as in juveniles, and the bird is darker.



Figure 3. A Steppe Eagle probably in its first year. Typically these birds are "cafe au lait" in general colour, but darker than juvenile Tawny Eagles, with diagnostic white wing-bands. Pale wing-window also shows in near wing.



cords. It may be noted that neither in the paper (*op. cit.*) nor in correspondence was any indication given of how the kites and falcons were identified as non-Black Kites and non-Lanners except by the most subjective criteria. While the case for *Milvus milvus* is perhaps the least weak, it appears that the *Falcos* must be ascribed to immature Lanners which are quite variable and often very "white-headed" by mid-summer in the western arid regions. Under the circumstances, while none of the claimed records is impossible, one must urge both more precise work and more caution in the study of these fascinating migrant raptor congregations.

V. ACKNOWLEDGEMENTS

I am indebted to the Director of Nature Conservation and Tourism for special permission to collect the specimens, to the landowners concerned, and to J. Lenssen and O. P. M. Prozesky for the actual collecting. W. Ferguson assisted with skin preparation, pellet analysis and observations, M. Odendaal with photographic printing. Dr. W. G. H. Coaton identified termite remains. Karibib rainfall figures were provided by the Weather Bureau's Windhoek Office. P. A. Clancey extended full co-operation, R. K. Brooke, M. K. Rowan and P. Steyn commented on the manuscript and R. Liversidge kindly commented on both the manuscript and the kite-falcon correspondence with Mr. Clancey.

VI. REFERENCES

- ANDERSSON, C.J.
1872 *Notes on the birds of Damaraland.*
(ed. J. H. Gurney) J. van Voorst, London.
- BUTTON, E.L. and CLANCEY, P.A.
1972 Some interesting records of wintering Palaearctic raptors from the northern Cape. *Durban Mus. Novitates* 9 (part 13): 201–207.
- DE VILLIERS, J.S.
1972 The Yellow-billed Kite in South West Africa. *Ostrich* 43: 136.
- HOESCH, W. and NIETHAMMER, G.
1940 Die Vogelwelt Deutsch-Südwestafrikas.
J. Ornithol. 88, Sonderheft (Berlin).
- ROBERTS, A.
1928 Birds and mammals from South-West Africa.
Ann. Tvl. Mus. 12: 289–329.
1934 Reviews and records. *Ostrich* 5: 85.
1936 Ornithological notes. *Ann. Tvl. Mus.* 18: 255–269.
- SMITHERS, R.H.N.
1964 *A check list of the birds of the Bechuanaland Protectorate and the Caprivi Strip.*
Rhodesian Nat. Museums, Salisbury.
- VAN DER WESTHUIZEN, P.M.
1967 Black Kites and Woolly-necked Storks in South West Africa. *Ostrich* 38: 203.
- WINTERBOTTOM, J.M.
1971 *A preliminary check list of the birds of South West Africa.* S.W.A. Scientific Society, Windhoek.