NOTES ON THE BLACK STORK

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In the Ostrich of September 1967 W.R. Siegfried published a paper, in a series covering rare and endangered species, on the distribution and status of the Black Stork Ciconia nigra. The following notes, which include observations by the Matabeleland Branch of the R.O.S. over the past 12 years, add to what is known of this interesting family. Observations have been maintained concurrent with the Black Eagle survey, as there was thought to be competition for nest sites.

While still mentioned by Roberts and Praed and Grant as a Palaearctic migrant, Moreau in Bird Migration 1972 is positive it no longer reaches the equator. Significantly the Cape Bird Club say it is most often recorded between November and May, but other records cite June to August. In the Cape, flock sizes range up to twenty-nine birds, and about half that number are seen during the breeding months; these would be mostly young birds not yet paired for breeding. From this it is unlikely that any Palaearctic migrants reach here, as these would be recorded en route both ways throughout the Ethiopian region.

Habitat. Professor Voous describes the Black Stork of the northern hemisphere as "A bird that retreats before cultivation, its breeding habitat is heavily foliated forest with pools, grassy glades and marshes; also wooded mountain gorges and streams in forested regions". Here in southern Africa we have no record of tree nesting, the preferred nest site being a rock cave where the young are not exposed to direct sun. While the general habitat within the Matopos corresponds to some extent with Voous' description, there are many instances
where the nest site is on a rocky hill in open grassland and
quite near human habitations. From this it is reasonable to
conclude that there has been no interchange between the
Palaearctic populations and our southern members of the family
for a long period of time.

Distribution. Sightings in Rhodesia cover all months except
January. Recorded sightings include twenty-two at Chingalani
Dam in the Hwange National Park in July, one at Toghwa Dam
13 December, Malowe pair over nest from early April, Domboshaba
pair over nest 15 February, several at Chintamba Dam March/
April. In the south, six to eight on a pan in the middle of
the Kruger National Park.

Breeding. Present known breeding areas range from Southern
Tanzania and Zambia. The greatest known concentration being
across the Rhodesian watershed from Salisbury to Bulawayo.
In the south, while concentrated in the Drakensberg mountains,
sightings indicate breeding from Aughrabies and Fish River
Canyon north through the Kuiseb River to southern Angola on
the western side of southern Africa.

Breeding takes place during the colder months from May to Sep-
tember, a clutch being two to four. Average of young reared
to flying age is two. Surprisingly, predation of young on
the nest by baboons appears to be less of a problem than with
cliff-breeding eagles. The nest is often easily accessible
to baboons, yet very little predation has been recorded. This
may be due to the aggressive display by the young and pro-
sumably by the adults. The display includes beak snapping
with vicious thrusts of the sharp bill and guttural growling
not unlike a dog. One isolated exception found in 1975 in the
TL in the southern Matopos was an egg shell where it was
evident the chick had started to chip out. It had been eaten
from the shell a few hours before. A vervet monkey was boldly
sitting on a rock just above as the nest was checked. This
nest is well away from baboon territory.
The breeding history of one nest at Maleme has been:

Five positive breeding records with a total of eleven fledged.
Four positive with a potential of seven, making eighteen over ten years with two years when no breeding took place.

Of the sixteen breeding sites known to us in this area, four are at Shangani, one at Bailla Bailla and one at Maleme.

Food. Being an aquatic feeder eating frogs and fish, *Licinia nigra* is restricted in its breeding and post-breeding dispersal to suitable food supplies. In particular during breeding, at the time of greatest demand - i.e. when the young are growing rapidly on the nest, a ready supply of such food must be available in the near vicinity of the nest. Ideally the optimum conditions are a dried-up river course where the remaining aquatic life is concentrated in small pools up to November. The present year 1970 has been an exception in that all dams have remained full, and heavy rains in October have caused fish to be more widely dispersed. As quoted by Siegfried, the greater concentration of food in isolated pools may explain hitherto unconfirmed reports of Black Storks breeding in the Fish and Kuiseb canyons of South West Africa. When full grown and ready to fly, the mass of young storks is about 3.75 kg.

In the Cape Province foothills of the Drakensberg where the bird is sometimes called the "king of kingfishers", trout anglers are known to have shot several Black Storks although it is a protected bird. In the Barkly East district it has been accused of clearing dams and streams of trout.

Ringing. Ringing of nestlings has been done as often as possible since 1965, both in the Matopos and on the de Beers Ranch in the Shangani area. To date no recoveries have been received, though this is a long-term project and one hopes that future recoveries will add much to our knowledge of the species.
Acknowledgements are due for information in this article to the members of the Matabeleland Branch, Roy Siegfried, the National Parks for permission to make observations within the Matapos National Park, and others as quoted.

SWIFT Terns

A combined Sea Bird Group and Western Cape Wader Study Group party visited Jutten Island (33 05S, 17 55E) near Saldanha Bay on 30 April 1977 to ring Swift Terns; some 1 336 pulli, all at the "runner" stage, were ringed.

To date 31 recoveries have been reported from Lambert's Bay in the west to Richards Bay in the east. A single ringed bird has been sighted at Maputo, Mozambique.

Please report any recoveries or sightings of ringed Swift Terns to:

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