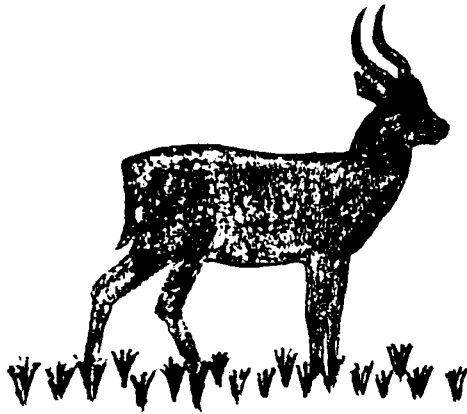


THE EASTERN CAPRIVI.

An ecological summary, with particular reference to larger mammals and their conservation.

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.....
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INTRODUCTION.

In the extreme north-eastern corner of S.W.A/Namibia lies a unique piece of land called Caprivi. Sparkling like an emerald in an otherwise grey semi-arid country it is probably the least known part of Southern Africa today. Covering an area of approximately 11400 square km. it is only about half the size of the Kruger Nat. Park or S.W.A/Namibia's Etosha National Park.

This small and remote area is the scene of a silent battle between its unique wildlife, and the human inhabitants. With the fairly recent arrival of civilization and its modern technology, this last piece of the old Africa of Livingstone and Selous, is fast becoming a thriving westernised community. It took the South African nation 200 years and a leader like Pres. Paul Kruger, to make them look back on the effects of civilization and progress, and to proclaim their first Game sanctuary.

Caprivi does not have 200 years, and the outcome of the struggle will be determined by whether the people can be convinced that it is now considered highly civilized to protect parts of a country against progress, and to conserve one's natural inheritance for the benefit and enjoyment of future generations.

This report was written in an attempt to create an awareness and understanding for the area, its people and its fauna and flora.

*

GEOGRAPHICAL SETTING.

With the Zambezi river forming the boundary with Zambia in the north-east, and the Kwando-Linyanti-Chobe river system forming the boundary with Botswana in the south-west, south and south-east respectively, it is the wettest part of S.W.A/Namibia. The average rainfall is about 650mm.p.a. with a variability of up to 25%. During a normal flood of the Zambezi, as much as 10% of the area may be temporarily inundated. (Ref. appendix)

The area shows four main physiographic features, i.e.:
 (i) The Zambezi river and its extensive floodplain,
 (ii) The Kwando-Linyanti-Chobe swamp system and marginal floodplain, (iii) Shallow depressions and drainage lines, and (iv) Slightly elevated areas supporting large tree woodlands.

Caprivi is part of the great Southern African Kalahari Sand-covered Plain, and rocks are completely absent from the area except for 'mPalila island at the Zambezi-Chobe confluence. (Refer appendix)

The vegetation can be divided ecologically into:
 (i) Permanently inundated swamp communities,
 (ii) Floodplain, depression and drainage line comm. and
 (iii) Kalahari sand communities.

The Kwando-Linyanti system has a navigable mainstream on average 30m. wide, surrounded by a swamp from 2-30km. wide. (Grobler, 1982) This area is dominated by reeds and sedges such as Phragmites and Cyperus sp. (It should be noted that the "mainstream" is not continuous, but is blocked in many places. These blockages presumably start as mere Kariba-weed (Salvinia molesta) build-up against the reeds along the channel, and if the current is not strong enough this weed will spread across the channel, forming a basis for the establishment of sedges. If unchecked, succession will continue until the channel is blocked by a permanent growth of reeds.)

Floodplains are predominantly open grassland with Eragrostis, Brachiaria and Setaria forming the main grass cover. Large termitaria rise above the level of the floodplain and are dominated by Cynodon dactylon and trees such as Phoenix reclinata, Kigelia africana and Lonchocarpus capassa. (These termitaria may occur close together in one area, forming a fairly extensive woody thicket in an otherwise pure grassland. This is a common feature of the Zambezi floodplain.)

Depressions and drainage lines, although also basically open grassland may support trees such as Terminalia sericea and Combretum sp. Colophospermum mopane trees are normally restricted to the margins where according to Tinley (1966), "...mopane can invade marginal floodplain woodland as the clay-ran horizon develops." (P.43) The difference in woody vegetation composition between floodplains and inland depressions can, apart from soil variation possibly be ascribed to the fact that; during the period when the area is fired by the local pastoralists to produce green grazing, (Aug./Sept.) the floodplains along the Kwando and Linyanti are normally still inundated. This might enable less fire resistant vegetation to establish themselves on slightly elevated areas such as termitaria. (Termitaria alone may play an important role in protection against fire; being colonized by especially Cynodon dactylon, which is cropped short by hippopotami until it has a lawn like appearance and does not burn easily.)

Kalahari sands support a large variety of trees such as Baikiaea plurijuga, Pterocarpus angolensis, Dialium englerianum, Guibortia coleosperma, Ricinodendron raute-nenii and various combretaceae. (Tinley 1966) Most of these trees are very tall; some attaining a height of 15 - 20m. (The apparent lack of young trees in a woodland consisting mainly of mature trees and scrub, is probably due to the combined effect of utilization without mechanical rejuvenation, and fire. Trees are also used as fuel, building material and turned into boats, by a rapidly increasing local population.)

The Caprivian people consist of two important sub-groups, the Masubia and the Mafwe, which have apparently absorbed smaller groups such as Mayeyi, Matotela, Mashi and Mbukushu. They have no ethnic link with the other Bantu speaking groups of S.W.A/Namibia, but are related to the Lozi and Makololo of Barotseland : (Odendaal Report. 1964)

Despite the changes brought about by civilization, the people are still subsistence farming oriented although communal agriculture is not uncommon. Maize and fish form the staple diet while cattle, although mainly a status symbol, also provide a source of food. (In recent years the emphasis has moved from cattle as an investment and indication of wealth, to the condition and size of your 4 wheel drive vehicle and the turnover of your shop or bottle store. Cattle are sold to the F.N.D.C. butchery in Katima Mulilo. Where do people who have sold precious cattle to buy a vehicle - requiring more money for fuel and maintenance all the time - find fresh meat to supplement a maize diet?)

The smaller tribes living amongst the 'Subia and 'Fwe appear to have been de-culturalised, and only two social organization systems are distinguishable according to Odendaal. (1964) He writes: "...The Masubia are patrilineally oriented, while the Mafwe reflect distinct matrilineal features in their rules on succession." Each of the two tribes has a hereditary Chief (Mamili for the 'Fwe and Moraliswani for the 'Subia), elected n'Gambela and councillors forming the governing body or Khuta. The Khuta is also responsible for the administration of justice.

The total population in the area numbers approx. 40000 (1982) compared to 15840 in 1960 (Odendaal Report. 1964) Very strong tribal segregation exists between the 'Subia in the east and the 'Fwe in the west. (At present there is a dispute over Chieftainship and land division which is a very delicate matter, making it extremely difficult for any Govt. department to work in a specific area without appearing to indicate Government favouritism.)

HISTORICAL BACKGROUND.

In order to understand the apparent apathy toward Govt. departments, including the Directorate of Nature Conservation, it is necessary to have a brief look at the history of the Eastern Caprivi; an area which knew nothing like the wars and strife felt by other parts of S.W.A/Namibia during the previous century.

Caprivi - named after the then German Chancellor, Genl. Graf Leo von Caprivi - became part of German South West Africa in 1890. It was handed over by the British Govt. in exchange for the withdrawal of Germany's claim to the Lake Ngami and Kalahari regions, thereby acknowledging the British Bechuanaland Proclamation of 1885 (Jenny. 1976. P.112)

This change of "ownership" went unnoticed by the people living in the area who were still ruled by the King of

Barotseland, from what is now Zambia. This continued for almost 20 years, until October 1908, when the first German Govt. official arrived and settled at a place he named Schuckmannsburg, after Governor von Schuckmann.

"The arrival of the Germans caused great excitement among some of the tribesmen. Letia, the son and representative of the Barotse king Luanika, retreated with his people across the river (Zambezi) into his tribal territory under British rule." (Jenny. 1976. P. II3) Some people however, subjected themselves to British rule and stayed behind in what was now Caprivi.

In 1914 the German official in Caprivi became a prisoner of war, but was ordered, according to Jenny (1976. P. I20) "...to maintain law and order south of the Zambezi, in the name of 'His Britannic Majesty' until the end of the war."

After the war, the Caprivi strip was handed to the Bechuanaland authorities for administration. The South West African Administration was responsible for the area from 1929, until it was handed over to Pantu Affairs Administration in Pretoria in 1939.

With the implementation of the proposals made by the Odendaal Commission of 1964, the Eastern Caprivi was officially proclaimed as a 'Homeland' in February 1972.

*

PRESENT SITUATION.

In July 1980 the conservation function in Caprivi was taken over by the Directorate of Nature Conservation in Windhoek. One month later, A.G. Proclamation 42 of 1980, controlling elephant and rhino products, comes into effect in the area. Almost at the same time enforcement of the local Game Ordinance (Ord. nr. 3 of 1927) is stepped up.

This sudden, unwanted, change from Pantu Affairs Admin. to Central Government in Windhoek must have had about the same effect as the arrival of Capt. Streitwolf in 1908.

Meanwhile, basic development on two proposed game reserves is halted, because they have to be proclaimed by the S.W.A. Government first. Discussions on a new Nature Conservation Ordinance that would be applicable

throughout S.W.A/Namibia have negative results in Caprivi, possibly because of the infringements that it would involve.

This, and many other incidents, created the situation where the Caprivi strippers probably felt that the S.W.A. Dept. of Nature Conservation's policy was one of prosecution, as opposed to the South African Bantu Affairs Administration's policy of co-operation and development.

Extention work by Conservators in the area has been largely unsuccessful, because the people have now lost all faith in Government officials after being subjected to the whims of these people for almost 100 years.

On seeing no progress on their game reserve from which a whole village had been resettled outside the proposed boundary, the area was taken back by the 'Fwe people. After many promises and extention work, approximately 9000 ha. of the original 50000 ha. was again set aside for conservation. (After a recent brush between the Dept. of Nat. Conservation and the 'Fwe Chief, this area was also repossessed.)

In the meantime, poaching is rife in the area. Locals armed with muzzle loaders, 12gg. shotguns, modern hunting rifles and even automatic 7,62cal. rifles are following the example set by many european govt. officials over the years. Anything from spurwing geese to otters, lechwe, hippo and elephant are being butchered. The local game ordinance with a maximum fine of £25 for poaching lechwe, sitatunga, puku or zebra, to name a few, is no deterrant for people who see very little need for conservation.

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MAMMALS

The Eastern Caprivi contains a large variety of big game, with at least fourteen species which are endemic to the north-east of S.W.A/Namibia. These unique animals are: buffalo, bushbuck, bushpig, hippo, impala, oribi, puku, reedbuck, lechwe, roan, sable, sitatunga, tsessebe and waterbuck.

According to Tinley (1966) "...The acacia woodland and thicket areas on the margins of the flood plains and mironga* are the most favoured big game habitats" in the Western Caprivi strip. This corresponds with personal findings in the Eastern Caprivi where game prefer the

...(6)

* mironga: refered to as a mulapo in Eastern Caprivi or omuramba in other parts of Namibia, it is basically a seasonally inundated depression or drainage line.

marginal floodplain and drainage line wooded terrain. These areas are however largely occupied by human habitation, making it almost essential to proclaim the remaining areas as game sanctuaries as soon as possible.

Larger mammals will be discussed under the following headings: (i) Habitat preference.

(ii) Distribution.

(iii) Status

Carnivores are discussed separately, but not under the abovementioned headings.

ELEPHANT. (*Loxodonta africana*)

(i)

Although elephant prefer the well wooded areas, they move through all the major habitats during the year.

(ii)

Elephant are found mainly in the central and western parts of Caprivi. Large concentrations build up in the forestry area west of Katima Mulilo. This area is densely populated along the perimeter, and elephant are particularly vulnerable during this period. The open Zambezi floodplain in the east is not favoured by elephant, although they do cross over into Caprivi from Chobe Nat. Park in Botswana. A case was recorded where tourists in Botswana were watching a small group of elephant crossing the Chobe river, only to be shot by Caprivian poachers as soon as they set foot on the opposite bank. This is no isolated incident, and the banks of the Chobe are dotted with elephant carcasses.

(iii)

As a population, they are not considered to be endangered, since many of these animals move to the relative safety of Caprivi, in order to escape hunting pressures in Angola, Zambia and Botswana. With the recent 5 year ban on elephant hunting in Botswana, the situation might change drastically, since there is a major migration route in the west of Caprivi - enabling elephant to move from Angola and Zambia through Caprivi and into Botswana.

Rhinoceros. (*Diceros bicornis*)

The last mention of any rhino in Caprivi was of one that was shot near Kongola on the Kwando river in the early seventies. Since then none were seen and it must be accepted that they have been exterminated.

HIPPOPOTAMUS. (*Hippopotamus amphibius*)

(i)&(ii)

Hippo are found in the open waters of the Zambezi river, as well as in the Kwando-Linyanti swamp system. They are not well represented in the Chobe river, possibly due to hunting pressures.

(iii)

They form an important source of meat for the Caprivians

and are hunted relentlessly. Fairly large numbers still survive in the Linyanti swamp where groups of up to fifteen individuals may be seen. Because of the inaccessability of their refuge it is doubtful that they will disappear from the area. In places where the reedbed is narrow it is fired by the locals to flush these animals into the open water. Their numbers are decreasing steadily, although difficult to assess accurately during aereal surveys. (The encroachment of the waterweed - *Salvinia molesta* - on the habitat could also play a big role in their future status.

BUFFALO. (*Syncerus caffer*)

(i)

The well wooded grassland areas are preferred by buffalo. On Nkasa island in the Linyanti swamp they frequent the thick riverine vegetation along the fringe of the reedbeds.

(ii)

Buffalo occur mainly in two areas; the forestry area west of Katima Mulilo, and the wooded interior part of the area bordering on the Linyanti swamp in the south-west. They are absent from the eastern and central areas and do not venture into Caprivi from Chobe Nat. Park.

(iii)

Although still fairly well represented, buffalo are subjected to heavy poaching pressures. Aereal surveys conducted in 1980 by Grobler and Berry and again in 1982 by Grobler and van Niekerk seem to indicate a sharp decrease in numbers. (The 1982 count showed only 50% of 1980's estimated maximum.) During the dry season they move southward from the northern parts of the forestry area to waterholes along the Katima - Kongola highway where they are very vulnerable.

GIRAFFE. (*Giraffa camelopardalis*)

(i)

They prefer lightly wooded acacia country bordering on open inland depressions.

(ii)

Giraffe are found almost exclusively in the inland parts of the area bordering on the Linyanti swamp in the south west. There are old records of giraffe in the east-central area, but none have been sighted there recently.

(iii)

It is felt that giraffe will disappear from the area unless they are given rigorous protection. Having been hunted extensively in the past, the population was estimated by Grobler and Berry in 1980 at a maximum of 24.

KUDU.(*Tragelaphus strepsiceros*)

(i)

Kudu may be found in marginal woodland and savanna.

(ii)

Their distribution is limited to the central and western parts, with the exception of a few occurring in the north- and south-east.

(iii)

Their numbers seem to be secure and during the past kudu permits have been issued during the hunting season.

SABLE ANTELOPE.(*Hippotragus niger*)

(i)

They prefer tall-wooded sandveld areas.

(ii)

Sable occur mainly in the north-central and western parts of Caprivi.

(iii)

Although the population is small, they seem to be breeding fairly well and it is felt that they are not in imminent danger, although they need protection if they are to maintain a viable population.

ROAN ANTELOPE.(*Hippotragus equinus*)

(i)

Roan seem to prefer more open sandveld, and are usually seen on the fringes of inland depression grasslands.

(ii)

They occur mainly in the south-western interior of Caprivi.

(iii)

As a fairly small population they are under heavy hunting pressure as their meat is highly sought after by the local inhabitants. Despite this they seem to be holding their own and in 1981 small groups were still seen from the road on occasion.

TSESSEBE.(*Damaliscus lunatus*)

(i)

They prefer grassland and panveld, but are also found in more densely wooded areas.

(ii)

Tsessebe occur in the north-central and south-western areas.

(iii)

Although they are hunted heavily, (esp. in the s. west) surveys show that their numbers have apparently remained almost constant after a good calving season in 1981.

RED LECHWE.(Kobus leche)

(i)

Lechwe occur in marginal swampland and adjacent floodplains.

(ii)

Distribution is limited by the availability of swampland. They may be found in the extreme east, as well as on islands in the Kwando-Linyanti system.

(iii)

Lechwe numbers have dropped alarmingly over the last few years. Comparison of the figures supplied by the 1980 and '82 surveys (Grobler & Berry and Grobler & van Niekerk) indicate an apparent decrease of about 30% in a population that was estimated at 13000 in 1980. At present, small isolated groups remain in the east, while the majority seem to have sought refuge in the linyanti swamp. A poor flood in 1982 has made this area accessible to poachers, and one hunting vehicle alone was loaded down with 11 lechwe carcasses. Because they are relatively common and plentiful, this species suffer most from illegal hunting.

SITATUNGA.(Tragelaphus spekei)

(i)

Confined to reedswamp and termitaria islands surrounded by swamp.

(ii)

Very few remain in the small swampy area west of the Zambezi - Chobe confluence, while the majority are found in the Kwando-Linyanti system.

(iii)

According to surveys, sitatunga numbers appear to have decreased by about 50%. This can possibly be ascribed to the fact that, being an animal of remote swampland, it is virtually impossible to catch poachers who are prepared to penetrate the swamp. Once the animal is shot the meat is smoke dried on the spot. What is not consumed there, is brought back in small quantities as 'biltong', making it irreconisable as sitatunga meat.

PUKU.(Kobus vardoni)

(i)

Found in fairly open riverine woodland.

(ii)

Puku are confined to a narrow strip along the Zambezi just east of Katima Mulilo.

(iii)

One of the rarest antelope in Southern Africa today, they were estimated to number about 40 animals in 1981. Today they are rarely seen and it is felt that they are on the verge of disappearing from Caprivi, owing to human activities encroaching on their area, and associated poaching.

REEDBUCK.(*Redunca arundinum*)

(i)

Partial to floodplains and grassland with woody thickets.

(ii)

Reedbuck are found in the east, south-east and western parts of the area.

(iii)

These animals are still fairly common on the larger islands in the Linyanti swamp. Their solitary habits have probably provided them with some protection in other, more densely populated areas.

BUSHBUCK.(*Tragelaphus scriptus*)

(i)

Found in woody thickets and riverine woodland.

(ii)

Bushbuck occur mainly along the Zambezi, Kwando and Linyanti rivers, and on Nkasa island in the Linyanti swamp.

(iii)

Because of the denseness of their habitat they have escaped direct hunting, although they are caught in snares in most areas where they occur. Their habits make them difficult to count, but their numbers are probably secure.

WATERBUCK.(*Kobus ellipsiprymnus*)

(i)

Their habitat include marginal floodplains with bordering riverine thickets.

(ii) & (iii)

Waterbuck no longer occur in Eastern Caprivi, although they are common just across the boundary, in Western Caprivi. Their absence can possibly be ascribed to the fairly recent human population increase in the area along the eastern side of the Kwando river. This could have forced them to move across the river to the unpopulated Western Caprivi side where they, along with many other species, are now rigorously protected by the S.A.D.F.

ORIBI.(*Ourebia ourebi*)

(i)

They seem to prefer inland depression grassland and marginal floodplain areas.

(ii)

They occur mainly in the east, and south-western interior.

(iii)

The only place in Caprivi where oribi were seen regularly is in the south-western part bordering on the Linyanti swamp. Despite this they were on a trophy hunting safari quota for five years. Their status at present is uncertain but presumed to be precarious.

IMPALA. (*Aepyceros melampus*)

(i)

Impala were found in well wooded areas (usually mopaneveld.)

(ii)

The two main groups occur just south-east of Katima Mulilo, and in the south-western corner along the Kwando river.

(iii)

These groups are both small; probably not more than 80 in total, and are very vulnerable since major traffic routs run through their areas and they are frequently glimpsed from the road.

ZEBRA. (*Equus burchelli*)

(i)

Zebra prefer inland depression grassland with surrounding open woodland, and were also found on the Zambezi floodplains.

(ii)

They occur in the south-west and eastern parts of Caprivi.

(iii)

Although once common, zebra have virtually disappeared from the eastern floodplains. They are severely hunted and their skins are highly prized since it is one of the few places in Southern Africa, where this subspecies (*Equus burchelli selousi*) of Burchell's zebra still occur.

ELAND. (*Taurotragus oryx*)

(i)

Eland seem to prefer sandveld woodland, and inland depression grassland with surrounding woodland.

(ii)

They were noted only in the western part of Caprivi.

(iii)

Eland are poorly represented in the area, and are not often seen. Their future is uncertain, although they are afforded some protection in that they are regarded as 'Royal Game' by the 'Fwe chief.

WILDEBEEST. (*Connochaetes taurinus*)

Although probably quite common in the past, wildebeest have now disappeared from the area.

BUSHFIG. (*Potamochoerus porcus*)

(i)

Found in riverine and inland thickets.

(ii)

Their distribution seems to be coupled closely to areas with suitable habitat in the vicinity of cultivated fields, such as the area west of Katima Mulilo, and along the Kwando river.

(iii)

Human activity seems to have little effect on these

nocturnal creatures, and very few are killed by local agriculturalists.

LION. (*Panthera leo*)

Lion seem to be confined to the south-western parts, including the two large islands in the Linyanti swamp. (Occasional reports of troublesome lions were however received from other areas.) They are rather common on the islands and cross onto the mainland through the swamp. They are not considered to be endangered.

LEOPARD. (*Panthera pardus*)

Leopard were found mainly on Nkasa island in the Linyanti swamp, but also occur inland of the island and in the eastern part of the forestry area.

CHEETAH. (*Acinonyx jubatus*)

Cheetah are very rarely seen in Eastern Caprivi. With livestock consisting almost exclusively of cattle, their decline might be ascribed to over exploitation for skins.

SPOTTED HYAENA. (*Crocuta crocuta*)

Hyaena are still fairly common in the central and western parts where they are prosecuted because of predation on livestock.

WILD DOG. (*Lycaon pictus*)

Wild dog were only seen in the extreme south-western corner, bordering on the Linyanti swamp. Although they are very common across the river in Western Caprivi, they are probably on the verge of extinction in Eastern Caprivi.

OTTERS

Both the cape clawless otter (*Aonyx capensis*) and the spotted necked otter (*Lutra maculicollis*) occur in the area. Although they are not often seen, their tracks were found along the Zambezi and Kwando rivers. (Cape clawless otter tracks were found at large waterholes in the forestry area south of the Katima - Kongola highway in 1980.) Very little is known about their status. They are exploited by the locals for their skins, which is sewn into floor- and wallmats, or turned into 'karosses'. These mats and blankets are sold in Katima Mulilo and although expensive, are in great demand. Their skins are also incorporated in mats made from lechwe, sitatunga, reedbuck and bushbuck skins, which fetch prices of R100 and more.

NILE CROCODILE. (Crocodylus niloticus)

Crocodiles still occur in all the river systems, and most of the large permanent waterways in Caprivi. Tinley in 1966 during his survey of Western Caprivi observed that: "...crocodile were seen only in the Okavango river. They have been shot out of the Kwando river." (underlining mine.) This is true only for the populated northern part of the river where it forms the boundary between Eastern and Western Caprivi. The southern section of the Kwando river represents the highest crocodile population density in Caprivi. During a survey in 1983, alarmingly few nesting sites were found, with a correspondingly low % of hatchlings. Their natural recruitment rate is normally very low, since they are preyed upon, before and after hatching, by monitor lizards, black kites, marabou, saddle-bills, herons and egrets. Crocodile numbers were grossly overestimated in the past, when there was rumoured to be several thousand.

Hatchling catching seems to be a favourite passtime for many local whites in Caprivi. These little creatures are injected with formaline and displayed as 'ornaments', in many cases only to be replaced with 'fresh' ones as soon as they become shriveled and dry. Yearlings have been found in the streets of Katima Mulilo; flattened by a vehicle after having escaped from the sportsmans vehicle. In such a case the gentelman will simply have to return for another specimen.

The local blacks find a good excuse to shoot crocodile in that they cause damage to fishnets. European helpers with high-power rifles, 200 000 candlepower spotlights and fast powerboats are seldom in short supply. Rifles have been lost and damaged on such occasions, but as long as crocodiles are not protected by law there will always be people wanting to "eradicate this menace." Many Caprivians rely on fish (Tilapia sp. esp.) as their sole supply of protein, as well as providing an income in cases where fish are sold. Tinley (1966. P.102) notes that: "...they (crocodiles) play an important part in the predator-prey relationships of African rivers and lakes. They are an important agent in maintaining healthy populations of fish. ...the importance of crocodile in the African aquatic ecosystem is, amongst other factors, due to their predation on adult barbel (Clarias) which prey heavily on other fish." In a few years time we might be able to observe the effect of man's thoughtless actions, on a society that is almost absolutely dependant on a healthy aquatic ecosystem.

It is accepted that crocodiles do some damage to fish-nets, but powerfull speedboats are probably responsible for far more damage. It is a common sight to see furious anglers ripping and cutting away at fishnets wrapped around the propellors of their boat engines, but neither boat nor angler is shot, possibly since their skins cannot compete with those of crocodiles on the black market!

*

CONCLUSIONS.

With Eastern Caprivi ecosystems being exploited at the present rate, time is running out and it is doubtful whether much will remain in this small area with it's 40 000 inhabitants, unless the people can be 'educated' now while there is so much at stake.

"The unreality of modern education is to be seen at its worst in the mental equipment of its final products, where politicians, not scientists hold the reins. Add the fallacious belief that in Africa land is inexhaustible and put there man to exploit at will, and you have disaster. Ecological knowledge in the hands of those whose influence is greatest, could do much to help restore the balance of nature, as the preservation of the land is no longer a scientific problem but a social one. The problem of saving mankind from self-annihilation by controlling the size of his populations and adjusting his education, lies in the hands of the politicians who must be made to realise that the only hope for Africa is for the emphasis on education to be shifted from pure literacy skills to a better understanding of the value of scientific knowledge, particularly concerning man's influence upon his habitat and how to preserve it for the future. Education is a slow process requiring at least one generation, but the situation is too desperate to wait: something must be done at once. Who will do it?"

— GLOVER. (Tinley. 1966. Intr.)

It is felt that this task of environmental education can only be accomplished through the mediation of a non-Government conservation organisation, working directly amongst the people and with their support, but in conjunction with the respective government departments involved in similar work.

The aim of such a private body would be to obtain support from the local Chiefs, and to maintain that support, but not at the expense of the Govt. Conservation dept. Once the project has been sanctioned by the Chiefs, it is only a matter of time, perseverance and sincerity, and we might yet find that the Caprivians are prepared to follow the example set by the Tswana people almost 20 years ago, when they proclaimed the Moremi Wildlife Reserve.

BIBLIOGRAPHY.

BERRY H. & GROBLER H.J.W.

1980. AIREAL GAME SENSUS OF EASTERN CAPRIVI.
(Unpubl. ms. S.W.A. Dept. Nat. Cons. records)

COMMISSION OF ENQUIRY INTO S.W.A AFFAIRS. REPORT OF -
1964. (Odendaal Report.) Govt. Printer Pretoria.

GROBLER H.J.W

1982. DIE EFFEK VAN MAKROFIETE OP DIE EKOLOGIE VAN
DIE KWANDO-LINYANTI SISTEEM IN OOS-CAPRIVI.
(Paper presented at professional officers
meeting.S.W.A. Dept.Nat.cons.- roneoed ms.)

GROBLER H.J.W. & van NIEKERK C.

1982. LUGSENSUS VAN OOS-CAPRIVI.
(Unpubl. ms. S.W.A. Dept. Nat. Cons. records)

JENNY H.

1976. SOUTH WEST AFRICA - LAND OF EXTREMES.
(John Meinert (Pty) Ltd. Windhoek)

LEVINSON O.

1978. STORY OF NAMIBIA.
(Tafelberg publ. Cape Town)

TINLEY K.L.

1966. AN ECOLOGICAL RECONNAISSANCE OF THE MOREMI
WILDLIFE RESERVE - BOTSWANA.
(Gothic printing company ltd. Cape Town)

TINLEY K.L.

1966. PROPOSAL OF NATURAL RESOURCE LAND USE -
WESTERN CAPRIVI.
(Roneoed ms. S.W.A. Dept. Nat. Cons. records)

Except for the historical section and a number of instances where other people are specifically quoted, this report reflects the personal views and findings of the author after spending a period of two years in area. (Including 16 months as Govt.Nature Conservator)