ANIMAL WAYS

By Major W. E. Poles, M.C., Senior Game Ranger

From notes made in the Luangwa Valley, Northern Rhodesia

Lions.—One day I found a pride of fifteen lions gathered round the putrid remains of a hippo cow, lying in shallow water at the edge of a wide sand bank. Dozens of crocodiles, attracted by the tainted air and water, lay basking on the sand, the nearest within twenty yards of the lions. The animals were so engrossed in their affairs, two old males growling and snarling at one another across the carcase, that I was able to stalk them over the bare sand and approach sufficiently closely to photograph them, though not so near as to anything like fill my viewfinder. On becoming aware of me the majority ran off across the sand and into the reeds on my right, but the rest stayed and went on feeding. I got a little closer and these too went off. The first to go was a large lioness who, when she came opposite to me, halted and came a pace or two in my direction. She had the coldest look on her face that I have seen on that of any living animal. Presently her tail started to twitch; then it stiffened and was thrown forwards, over her back, a time or two. I must admit that I did not feel too happy, sitting there, out in the middle of a sandbank, armed with a Leica camera, wondering what was going to happen next. The action of her tail disturbed me and I hoped very much that I should not see it shoot straight up into the air. How long the staring match would have continued I have no idea. Finally I had enough and slowly stood up. The lioness cursed me, turned round and went off in a leisurely way into the reeds.

That night the vicinity seemed to be "crawling" with lions. The carriers prepared huge bonfires at a little distance on each side of their camping place. Before the sunset's afterglow had faded from the sky the lions started to tune up. At once the fires were lit and for an hour or two burnt magnificently. By this time the large pride had returned to their stinking hippo, which was about a quarter of a mile further down the river, and at once started to snarl and growl, if anything more loudly than before. Other lions could be heard up and down the river and

from the direction of the lagoon, behind our camp.

It should not be supposed that the lions had killed this hippo. All I am certain about is that they did not kill it. Very likely it had died as a result of an injury inflicted by one of its own kind.

The lions of Northern Rhodesia, particularly those in the Northern Province, have long been notorious for their courage, strength and ruthlessness, which occasionally seems limitless.

I believe there is no other territory in Africa where lions prey so largely on fully adult male buffaloes as is the rule in this Colony, where frequently a single lion accomplishes the feat. Lions do not invariably come off scot-free; occasionally one or more is killed.

There is evidence that lions kill elephant calves; rhino up to at least three-quarters growth and adult hippo whilst grazing at a distance from the water; then it becomes a race against time and, if the river or lagoon is comparatively close at hand, the hippo may reach sanctuary before the lions have succeeded in biting sufficiently deeply to incapacitate it, or in pulling it down.

One of the methods lions adopt when killing a heavy animal is to bite into the spine, over the loins. No doubt the quarry is incapacitated very quickly and, provided the lion does not lose his grip during those few critical moments, his victim cannot retaliate.

One day I watched a large, light coloured lion walking along a game path following the edge of a high precipitous river bank, backed by thorn thickets. A troop of seven bull buffaloes closely followed with their heads low. The lion was moving as fast as possible without the indignity of running. It constantly glanced back, over its shoulder, and seemed to be anxious. In a little while another lion, this time a dark coloured animal, appeared and soon it was closely following the rearmost buffalo. The procession was moving down wind and the buffalo did not take long to realize there was a lion close on their tails; three of them whipped round to face the lion who discreetly turned aside into the bush to make a detour.

One night a pair of lions, who I imagine were shifting their hunting grounds, passed by my camp, where, tethered to a tree, was a donkey. One of the lions charged the donkey, coming right through the camp within a foot of my small camp fire. The donkey dodged smartly round the tree, broke its headstall and ran into the kitchen. Shouts and yells and a red hot log or two so alarmed the lions that they cleared off. I do not pretend to understand how the lion failed to get the donkey. The lion's splayed pug marks led right up to the donkey's tree, their size indicating a very large male.

Usually there is no need to drive a lion or lions off a kill, for they don't wait to be driven. However, occasionally there is an

exception to the rule. One day, when the sun was high, we came upon two magnificent, dark maned lions at the carcase of a buffalo they had killed early the preceding night. These lions were not disposed to surrender their kill. I was anxious to get a little nearer and so increase the size of their image in my viewfinder. However, one of the lions informed me so clearly that a closer intrusion would be resented that I decided to take the hint.

One day I followed two lions into a narrow apex formed by the confluence of two streams. In shape it was an isosceles triangle about 300 yards long with a base of about 100 yards. The enclosed area was full of thorn thicket, at this season leafless. I found one of the lions but failed to discover the other. After this, my personal staff were dispersed to seek a lion's foot print sufficiently clear to photograph. The boys were unusually stupid, some having wandered so far away that it was necessary to shout to bring them back. When all were collected, the camera was set up and I was engaged in the tedious business of focusing when one of my game guards touched my leg. Looking up I saw one of the lions standing on the game path within 20 yards, apparently intrigued at what was going on. Probably it had waited until quietness once more prevailed before deciding to seek a safe line of retreat.

Lions undoubtedly exact a heavy toll of the game but in exercising a useful check on the very rapid increase of the buffalo they serve a useful purpose which goes far to offset transgressions in other directions.

Individuals that take to rhino killing are likely to acquire the habit permanently and, if it is practicable, such lions should be destroyed. There is no occasion, at least at present, materially to reduce the lion population.

Bush-pig, Wart-hog and the Carnivores.—There can be no doubt that there are very few bush-pig in this game reserve. Even allowing for the fact that their habits are crepuscular and nocturnal, there would be signs of them if they were at all numerous. There can also be no doubt that their scarcity is due to the attentions of the larger carnivora, principally lions.

Nothing could be more short-sighted and unimaginative than to allow lions wantonly to be killed in rural areas where the population is agricultural rather than pastoral. I am by no means the only field naturalist who has drawn attention to this. By all means kill lions when they become dangerous or a nuisance and take to habitual cattle killing, but a starving lion that is obliged to kill an odd domestic animal in country where the

human population already has destroyed most of the game, commits a misdemeanour not deserving a death sentence.

The reason why wart-hog are plentiful and wild pig scarce is that, although both are crepuscular, the former are largely diurnal and the latter nocturnal. Also the wart-hog farrows and lies up in deep burrows, whereas wild pig farrow in a loose nest of grass, above ground, and during their inactive periods prefer the open air. Thus, of the two, the wild pig is much more vulnerable to attack by the larger carnivores.

Elephant.—I saw only one bull whose tusks were at all extraordinary. This individual's ivory extended approximately five feet beyond the lip; the tips of the tusks reaching to within a few inches of the ground when the head was carried in the position normally adopted by an elephant when walking.

This elephant was accompanied by four others, each of them fully mature though none carried tusks whose weight would exceed 50 lbs.

I photographed the troop and later intercepted the magnificent tusker on a game path, along which he was leading his companions. A really first rate bull seldom places himself in such a vulnerable position and such an unusual opportunity was not to be dismissed. Merely by sitting still, I was able to make two exposures, the first close, the second much nearer. The elephant was so startled when it finally caught sight of me, as I rose up to get out of its way, that it skidded in turning and showered me with dust.

I have been much impressed with the elephants' 'rapidly growing addiction towards the baobab trees. That in the past they have always given attention to these trees there can be no doubt. The fibre lying beneath the thin bark is as pithy and contains almost as much moisture as an equal volume of sugar cane. At the present time the baobabs are being destroyed wholesale. Frequently the elephants fell the largest baobabs, afterwards chiselling off the great limbs, splitting the bowl and generally completely demolishing the tree. Few baobabs remain that are not more or less severely damaged.

Black Rhinoceros.—The degree of wastage, infantile mortality if you like, among rhino appears to be high. Young rhino, like young elephants, accompany their dam for several years and remain with her until at least half grown. Whereas a cow elephant frequently is accompanied by calves of different ages, I have never found a cow rhino accompanied by more than one juvenile; which suggests that the female rhino does not conceive again until her latest progeny is sufficiently well grown to survive

separately. It is probable that before she again gives birth her previous young one is turned off on its own.

Young rhino calves are independent little creatures, frequently straying considerable distances from their dams; on such occasions they become vulnerable to attack by lions.

One day I met a rhino in some thorn scrub surrounding a little sandy clearing which I reached without much trouble. I sat down with the intention of taking a photograph but found that intervening twigs would utterly spoil the picture. To approach more closely would worsen rather than improve the conditions, so it occurred to me to excite the animal's curiosity sufficiently to bring it out to the edge of the thorns. The rhino, already looking at me, needed little encouragement and out it came, but instead of stopping when it reached the edge of the little glade, it carried on advancing at a fast walk. Like a fool I forgot to re-adjust the focus of my lens and, when finally I made an exposure the rhino had passed through the field of focus by a good many yards. I had already left things a bit late and I found it necessary to move quickly. The rhino followed, adjusting its speed to conform to my own. The chase, if it can be called such, continued for quite a long way. Wherever I turned the rhino followed, so that I became rather anxious. At last it gave up. If it hadn't done, I should have done so. It was not charging me nor even running its best. I think it was very inquisitive and wanted to find out all about me and satisfy itself beyond all doubt as to my identity. One would imagine that my foot scent would have given it all the information it required but apparently not. Moral: Don't tease rhinos.

But on another occasion I was searching for rhino with Baron Schimmelpenninck Van der Cye, who especially wanted to photograph one. The rhino we eventually discovered was sleeping so soundly that I was obliged to wake it up with a stick

to get it on its feet to be photographed.

On yet another occasion a bull rhino followed me over the plain for a distance of about 300 yards. It "kept station" some 15 yards behind me, suiting its pace to my own. As I was walking into the wind, the animal could have been in no doubt as to my identity. I led it to a solitary tree where I exposed a good deal of film, first from a sitting position and finally lying full length. On my climbing the tree to reload the camera, the rhino wandered off. Having recharged the camera I descended, induced the rhino to return, and continued to take a few more portraits—a more amenable animal it would be impossible to imagine.

Buffalo.—As the dry season advances the herds tend to amalgamate, occasionally assuming huge proportions as is illustrated in the following extract from my field journal, the date being 13th September—"... After this the herd moved in crescent formation, straight up wind. We walked across the tangent which was not less than half a mile. The depth of the herd, advancing on this wide frontage, was impossible to determine. Their van was out of sight when the rearmost were in view. Ahead stretched a broad unbroken mass of tightly packed, black bodies, extending forward into an opaque cloud of rising dust. Certainly there could have been no fewer than 1,000 animals."

Besides large herds, seldom embracing fewer than 200 head, numerous troops of adult males up to 20 in number are to be found throughout the area.

Baboons.—Baboons and game animals seem always to be on the best of terms; in fact their association may be said to be intimate. I am inclined to discount the many stories that are current regarding the baboons' ferocity which very likely has its origin in the behaviour of domesticated members of the species who through confinement and illtreatment have become savage; these stories frequently draw attention to the tendency of the large males to attack and sometimes devour small juveniles of the lesser antelopes.

I feel sure the relationship between baboons and the smaller antelope is amicable. If it were otherwise the latter must have developed an instinctive intolerance to the close proximity of baboons, whereas their attitude towards them is in fact quite devoid of fear or even uneasiness.

I have heard on good authority accounts of baboons riding such animals as impala; searching their hides or playfully jumping on or off their backs. I have had ample opportunities but as yet have never witnessed it. It is most unlikely in their wild state that game would tolerate such liberties.

The association between the monkeys and chital deer in the forests of Ceylon is closely comparable with the intimacy that exists between the baboons and impala in this country. In both countries the terrestrial animals rely on their arboreous companions to supply them with tender leaves and buds from the topmost branches of the trees. The baboons' wasteful methods cause a continual shower of leafy twigs to fall beneath the trees in which they happen to be feeding; these are eagerly sought by various ungulates.

Where late fires have destroyed the leaves of bushes and lower

trees, the baboons' contribution is invaluable and may be the means of ensuring the survival of many animals which otherwise might perish before the spring foliage appears. The importance of this is difficult to determine with accuracy but is a matter that the game conservationist would do well to bear in mind.

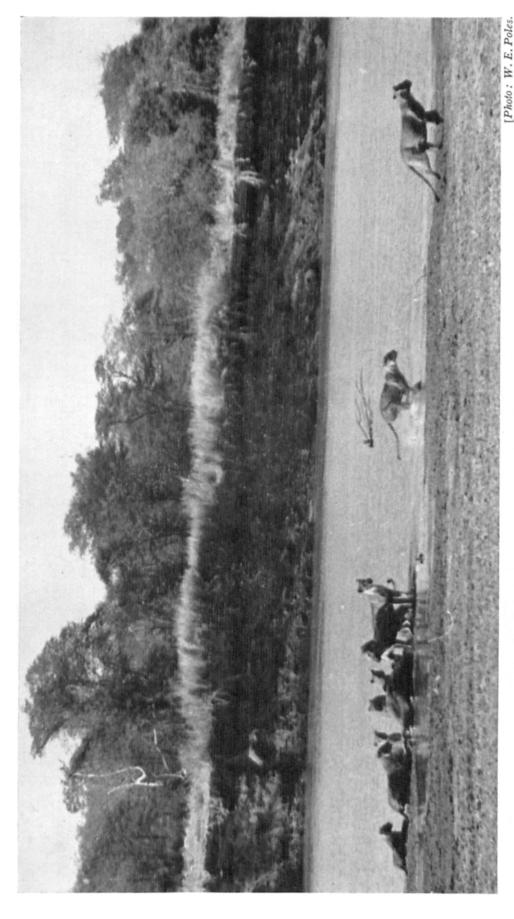
The baboons' wasteful habit of stripping more than they can eat may represent an ecological factor of some importance. It is submitted, merely as a suggestion, that the wholesale stripping of the tips of branches has the effect of producing a heavier overhead canopy as well as inducing a heavier crop of fruit than the tree otherwise would produce. In fact they may prune the trees.

Baboons being largely terrestrial and their diet omnivorous, it is obvious that they consume large quantities of harmful insects and their larvae, besides constantly moving logs and stones, thus exposing the pupae of tsetse flies to the lethal effect of sunlight.

My critics need not fear that I have any intention to present a case for the universal protection of baboons. My object merely is to draw attention to the fact that in a game sanctuary these animals are of value.

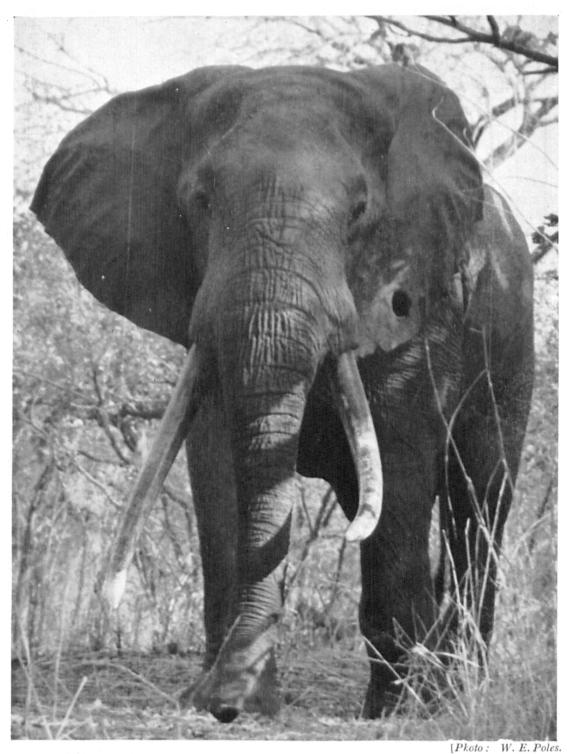
Animal ways are often a source of surprise and delight. Not so long ago I was driving along a newly made road in the southern section of the Luangwa Valley Game Reserve which we are developing for tourism, when a very large troop of baboons to whom a motor vehicle was a novelty and therefore an object of suspicion, galloped away towards the woodland; all but two, a young, nearly adult female and a very tiny juvenile. They were facing in the opposite direction to the hurrying crowd galloping past them and the larger baboon had one hand resting on the little one. I had stopped my Land Rover to give the troop the right of way and my attention was riveted on the two stationary figures whose immobility in the prevailing circumstances was so unusual.

A moment later I noticed a large female streaking towards the pair. When she approached to within a few feet of them the little baboon's companion took away her hand and the next moment the big female, without faltering or changing her stride, passed right over the baby which instantly disappeared. As the old mother and the middle-sized female, possibly the tiny baboon's aunt, ran away together after the troop, I could just make out the baby pressed tightly to its mother's belly. Obviously it had clutched its mother as she passed over it at full speed. Such a feat required perfect timing by both mother



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| Photo: W. E. Poles.

"THE RHINO FOLLOWED, ADJUSTING ITS SPEED TO CONFORM TO MY OWN."

and child. I was astonished that such a very small juvenile was capable of such dexterity. Also I was impressed by Auntie's sagacity and courage, for it takes real courage to stand still and face danger when everyone else is fleeing to safety.

Wood Ibis.—A large congregation of these birds was seen at a lagoon and I witnessed some really spectacular flying which I presumed was part of their courtship display. Many birds were in the acacia trees beside the lagoon but a number were in the air, at a stupendous height. One after the other these closed their wings and dived in a manner very similar to the stoop of a long-winged hawk. The noise of the air rushing through their pinions at first sounded like a thin whistle but as the descending birds drew nearer and their speed accelerated, the noise rose to a scream, very reminiscent of the whine of a dive-bombing aircraft. Each bird came out of its dive in a half roll, its wings fully extended and held rigidly. The sudden air pressure on the primaries caused the feathers to bend to fantastic limits. After such a performance the bird reduced speed, circled round and joined the others in the trees.

Crocodile.—Although we are familiar with the habits of the crocodile, it seems that its value, or otherwise, in the ecology of our lakes and rivers, still remains imperfectly understood. Any biologist could hazard several suggestions but research, particularly in regard to the crocodiles' relation towards maintaining a degree of control over various species of fish, is a task that might well be undertaken as soon as possible.

The modern tendency is to exploit every living thing. Recently the crocodile has been receiving prominent attention from commercial firms who see a handsome profit in the sale of crocodile leather. I have discussed this unlicensed and almost unrestricted crocodile hunting with Messrs. R. I. G. Attwell and C. W. Benson. All of us are agreed that until the crocodile's usefulness or otherwise is fully understood, it is exceedingly dangerous to allow the wholesale destruction of these reptiles.

During one of my expeditions we came upon a crocodile in the middle of an open plain, about a mile and a half from the nearest water; in this case a lagoon. The time was 10.00 hours; the crocodile was about 7 feet in length.

Foolishly, I tormented the reptile, prodding it with a small stick which it snatched from my hand and, with a shake of its head, threw away. Another stick, thrown at its head, was caught, shaken and hurled to a distance of about 20 yards. With the idea of testing its strength, I took a long, heavy stick and, holding it in both hands, offered the other end to the crocodile. This was

seized and shaken with such strength and violence that it was wrenched away from me and brought down so smartly on my hand as to lay open one of my fingers. Having learnt my lesson, I left the crocodile to its own devices, only regretting that I had not done so sooner.

The fact that crocodiles are cannibalistic is well known. Of course crocodiles devour the bodies of their dead companions but until recently I had no evidence that adult crocodiles actually preyed on other than very small juveniles of their own species.

One day I was watching a large congregation of crocodiles that had collected to feed on the dead body of a large animal. Presently a crocodile about 6 to 7 feet in length hurried out of the water on to a sandbank, hotly pursued by a very much larger one, a real monster. The smaller crocodile, finding escape impossible, lay still. Thereupon the big one slowed down; walked ponderously towards its intended victim; stood over it at the full extent of its fore legs and lowering its head, seized the small crocodile by the base of the head. Then, without any apparent effort, it carried its struggling victim to the river where, after swimming on the surface for a short distance, it submerged; no doubt, as my companion remarked, "Taking its dinner to the larder."