Elephants on the Farm

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The author's experience of the damage done by elephants to farms on the edge of a forest reserve in Western Ghana emphasises the point made by Dr. Kai Curry-Lindahl in his recent report to the Ghana government that human settlement should not be allowed close to forest reserves. But where such settlement exists there seems to be no alternative, Mrs Jeffrey suggests, to keeping elephant numbers down by culling.

Our bungalow is on the edge of a 150-square-mile forest reserve between the Krokosua Hills and Ivory Coast border. In this reserve there are at least 50 elephants, which last year made themselves exceptionally conspicuous by raiding farms immediately surrounding the reserve and causing substantial damage to crops and loss to farmers. The farms grow principally mixtures of yams, plantains and maize, and one of them is situated between our bungalow and the forest-reserve boundary path. In the seventeen weeks between April 15th and August 17th, coinciding approximately with the wet season, this farm was visited by elephants eleven times at irregular intervals, in parties of between two and eight animals. They not only caused damage by their movements through the farm, but uprooted plantain, stripping its leaves of their lamina and leaving bare mid-ribs, and occasionally nibbling unripe fruits. Yams were pulled up and stripped of their leaves and maize chewed, leaving stunted foliage and plucked-out cobs. Wanton damage far exceeded the amount actually eaten and numerous plantain were pushed over, or uprooted and then left.

Similar raids were occurring in the same period on farms to the north and south, all adjacent to the reserve. Outside these months there were no raids and no signs of elephants having crossed the boundary path out of the reserve. Reports from local people indicate that in previous years damage occurred at the same time of year. During these months the average hours of sunshine per day is lowest, and most rain falls, consequently fruit production by forest trees is at a minimum. It seems likely that the principal food of forest elephants in the dry season is fallen fruits; elephant faeces found six miles into the reserve contained numerous seeds as well as fibrous matter, indicating a high degree of fruit consumption. The high forest has little in the way of succulent vegetation which is within an elephant's reach, for the high, dense upper canopy allows little light penetration and only scanty growth below.

Dr Curry-Lindahl, in his report to the government on Ghana's wildlife (see ORYX, December 1969, page 147) found that elephant damage in a similar area 30 miles north-east of here in March of the previous year (the end of the dry season) was very modest and chiefly caused by elephants consuming semi-ripe and ripe fruits as they passed through. But in my area the damage was by no means modest; the plot of land

The Morning after a Visit from the Elephants

adjacent to our bungalow and several others were made useless during the period of the elephants' visits. Uprooted plantain usually produced some new growth from the base before the elephants stripped it again, but in some places a succession of three regrowths after uprooting and stripping was discernible.

The pattern of land here is a mosaic of forest reserves with intervening farm plots, and, as Curry-Lindahl suggests, it would be impossible for animals which regularly move around to avoid the farms. In my experience their visits are deliberately to a certain spot, and any cover on the approach to the farm was used to its maximum. They exposed themselves for the minimum time during feeding, indicating that they preferred the forest habitat. Where a neck of forest extends into farmland, this is regularly used by elephants for access to farms further from the boundary. It was noticeable that, after construction of a road along the north side of the reserve, farm-raiding to the north of the road ceased. Frequently the animals came to the road and wandered about a hundred yards along it, browsing on succulent roadside shrubs especially the umbrella tree. But they never entered the forest on the north side of the road, although prior to the road's construction their raiding from forest cover up to four miles north of the road was serious enough to threaten the local population's food supply. It seemed that they did not like to go further than a hundred yards from their home forest block and no instances were recorded of them crossing open ground other than for feeding.

Unlike all other meat providers, elephants are not shot for meat in

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Western Ghana without government intervention. This is almost entirely due to lack of effective rifles. When farmers complain of serious crop damage the Wildlife Department sends scouts to assess the damage and the elephants' numbers and habits, after which an experienced rifleman is sent to shoot a certain number. All recent cullings here have involved two or three elephants. In 1962 two were shot six miles north of us, and last year a further two. The shooting is apparently effective in driving the elephants away for at least another year. They are generally shot in the open where they are easier to see and near to a village so that the distance to head-load meat is minimal. Men and women paid £1 and 10s respectively to head-load away as much meat as they could carry; the tusks go to the state.

To conclude: elephants in the Bia tributaries North and the Sukusuku forest reserves are plentiful and the damage they inflict is serious at certain times of year. A more thorough study is needed to determine the forest-carrying capacity with a view to controlling the population, possibly by more intensive culling.

References

CURRY-LINDAHL K. 1969 Report to the Government of Ghana on Conservation, Management and Utilisation of Ghana's wildlife resources. IUCN Pubs. New Series, Suppl. Paper No. 18.

JEFFREY S. M. 1970 Ghana's Forest Wildlife in Danger. *Oryx*, May 1970, page 240.

Ghana's Forest Wildlife in Danger

Mrs Jeffreys sends the following additions to the list of species included in her article on the forest wildlife of Ghana in the May ORYX, page 242:
Aethosciurus poensis: occasional specimens.
Heliosciurus rufobrachium: suspected to be common.
Dendrohyrax dorsalis: very common.
Manis tricuspis: common.
M. gigantea: one recorded in Sukusuku.
Loxodonta africana was also accidentally omitted.

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responsible for the increase in size and numbers of baboon troops, which wreak havoc in the crops and banana plantations.

The situation may have improved in the past four years, but during my stay there were virtually no controls on hunting. A licence was required, costing about $10, but I never heard of anyone being stopped and checked for his licence, the species of kill, etc. A technical close season, from April until September, which did not include warthogs or wildfowl, was generally ignored.

Since the recent *coup d'état* in Mogadiscio, it is possible that the new government will take a more active part in wildlife conservation than its predecessors. There is still much in Somalia worth saving, and it is gratifying to see someone doing something about it.