

## INSTITUTE OF CURRENT WORLD AFFAIRS

IMW-34  
Ngorongoro I: Background

P.O.Box 770  
Arusha, Tanganyika  
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366 Madison Avenue  
New York 17, New York

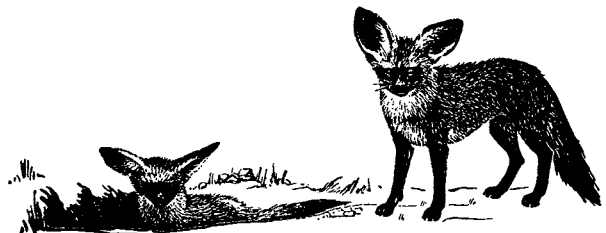
Dear Mr. Nolte:

Ngorongoro is unique. Together with the Serengeti National Park, it contains the largest herds of migrant plains game in the world. In no other place of comparable size can one see such a great number and variety of wildlife. In a short stay of less than a week, we saw all sorts of game ranging from massive herds of eland, buffalo, and wildebeeste to a few lone rhino and a single cheetah. The sheer weight of numbers makes one feel small and insignificant.

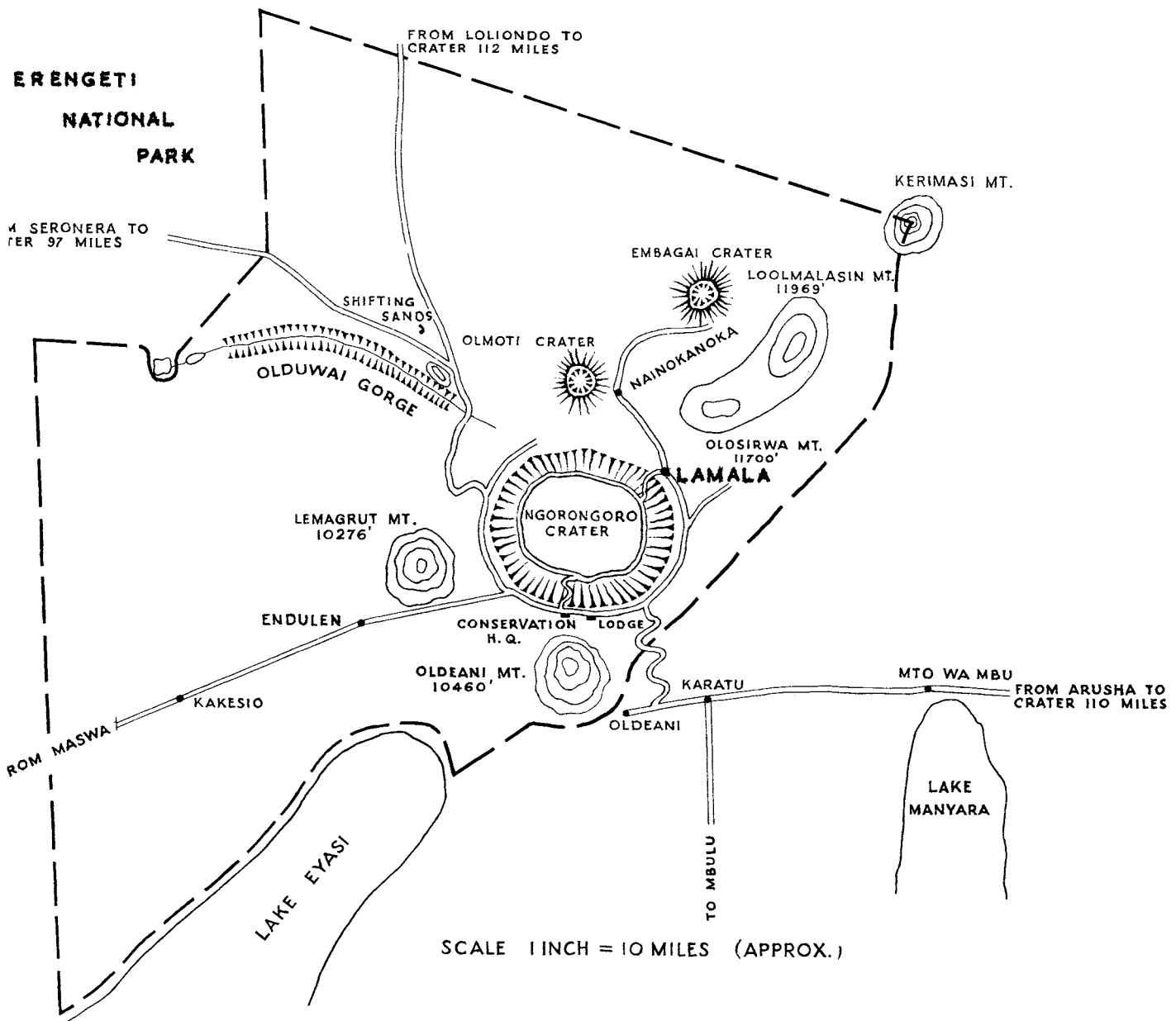
But Ngorongoro is also unique in another way. In a part of the world where man is rapidly closing in on the few remaining great herds of wildlife, it is an effort to find a way in which man and beast can coexist. It is a pioneering attempt to reconcile the interests of Ngorongoro's wildlife to those of the pastoral Masai who inhabit the area as well as conservation in general. For this purpose Ngorongoro and the surrounding highlands and plains were excised from the Serengeti National Park in 1959 and reconstituted as the Ngorongoro Conservation Area (N.C.A.).

Ngorongoro is the crater of an extinct volcano which lies 110 miles due west of Arusha in northern Tanganyika. Geologically known as a caldera, it has a diameter of between ten and twelve miles and a floor area of 102 square miles, making it one of the largest in the world. The average height of the rim is about 2,000 feet above the floor of the crater, and it is surrounded by volcanic highlands with six peaks rising to more than 10,000 feet. The hot and dusty lowlands are largely to the north and west of the crater and merge gradually with the Serengeti Plains. Most of the water rising in the Area drains either into one of the several craters or else disappears into the drainless Rift Valley. A few of the streams in the north-west, however, run into Lake Victoria and thence down the Nile to the Mediterranean.

We drove to Ngorongoro from Arusha (see map on page 2). The road first goes south to a small settlement known as Makuyuni, then west across the hot Rift Valley to a village appropriately called Mto wa Mbu, Mosquito Creek. Then it winds 700 feet up the precipitous western escarpment of the Rift to emerge on a cool



Bat-eared Fox (*Otocyon megalotis*)



### Ngorongoro Conservation Area

plateau with breathtaking views of Lake Manyara National Park and its soda lake below. On a clear day one can also make out the forested slopes of Ngorongoro rising on the horizon. After a further hour's drive over gently rolling country, one arrives at the lodge on the crater rim. Here at 7,500 feet the air is clear and fresh. While pleasantly warm during the day, it becomes quite crisp the moment the sun sets.

From the lodge one can easily watch the great herds of animals below. Occasionally one can make out a herd of Masai cattle, as well as the primitive Masai bomas where they live and herd their cattle at night. Across the floor of the crater

to the north lie the smaller craters of Ol Moti and Embagai. Next to them, Loolmalasin, the highest peak in the Crater Highlands, dominates the countryside. Scenically it is most spectacular country.

The area around Ngorongoro has long been inhabited by man. Nearby Olduvai Gorge is the richest and most important archeological site in East Africa, and it was here in 1959 that Dr. Louis Leakey found the remains of Zinjanthropus, an Australopithecine "near-man". In the following year he found fragments of a skull of a slightly older being, believed to be the earliest toolmaker so far known and therefore by definition the first man. This early hominid is thought to have lived nearly two million years ago. Since then there is evidence of fairly continuous occupation up to this day. The present inhabitants, the Nilo-Hamitic Masai, however, are relative newcomers and arrived only during the first half of the last century.

The first European to lay eyes on Ngorongoro was Dr. Oscar Baumann, a German, who on March 18, 1892 recorded in his diary: "At noon we suddenly found ourselves on the rim of a sheer cliff and looked down into the oblong bowl of Ngorongoro, the remains of an old crater. Its bottom was grassland, alive with a great number of game; the western part was occupied by a small lake." Descending into the crater, Baumann promptly disposed of "one wildebeeste and three rhino; the latter we left to the Masai." Presumably the wildebeeste was for his own larder, but the rhino were undoubtedly dispatched for profit, although he and none of the early explorers admitted it. In those days, as today, rhino horn commanded a high price at the coast whence it was exported to India and the Far East for medicinal purposes ranging from an aphrodisiac in Indonesia (a fallacious belief) to a general health tonic in India and a fever reducer in China.

During the German colonial period, the Government tried to exclude the Masai from the area, although in this they were not entirely successful. This policy, however, permitted the alienation of much of the crater floor to the brothers Siedentopf



Masai Moran

who surely must have owned one of the most unusual farms in what was then German East. The rest of the area was largely unadministered, although it had been thoroughly explored and well mapped.

When the British took over after the First World War, certain Masai sub-tribes were encouraged to return. Siedentopf's farm was sold by the Custodian of Enemy Property, but since the purchaser failed to fulfill the necessary development conditions, it eventually reverted to the Government in 1938.

During the early years of the British administration the first hesitant steps toward conservation were taken, and by 1928 the Ngorongoro Crater area had been given a high degree of protection. This was gradually increased, and in 1940 the western Serengeti and the Ngorongoro game reserves were merged to form the Serengeti National Park. The Second World War intervened, and as the attention of the Government was absorbed by other issues, there was little actual change in the administration of the area. After the war when the National Parks organization was established and at last took over, the local Masai had no idea that their rights to the area, although safeguarded, had been limited by legislation. The conflict between the exercise of these rights and the interests of conservation were to beset the area with difficulties from the very beginning.

Gradually the Parks organization came to the conclusion that the continued presence of the Masai and their stock within the boundaries of the Park was irreconcilable with its purpose. They thus approached the Provincial Administration and together worked out a proposal to establish a park free from human habitation over the three most important game areas: the western Serengeti, Ngorongoro Crater, and Embagai Crater. The remaining parts would become a conservation area where human interests would be allowed although game would be protected.



The publication of these proposals as a Government White Paper led to a tremendous uproar from conservationists in England and America. The Fauna Preservation Society commissioned Professor Pearsall of London University to make an ecological examination of the

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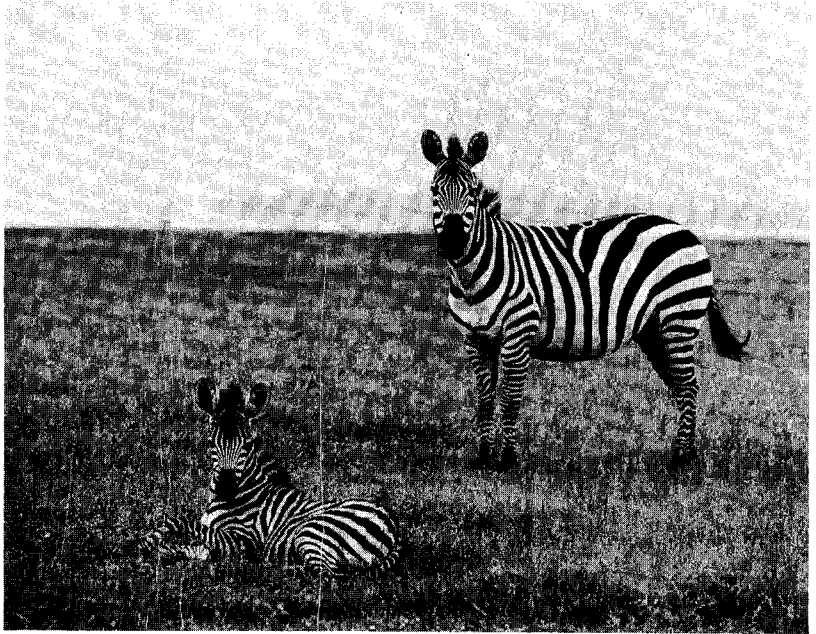
Lake Manyara from the top of the Rift Escarpment.

## Zebra with foal.

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the area. His report, published in 1957, noted that increased competition between the game and the Masai in the area was inevitable. "Hence they should ultimately occupy separate territories, each suitable for their somewhat different needs."

In an effort to solve the problem equitably, the Government appointed a Committee of Enquiry in 1957. Their recommendations included that the Masai should be kept out of the western Serengeti completely; that the Crater Highlands should constitute a special conservation unit, to be administered directly by Government, where the Masai would be allowed to continue their traditional mode of life under minimum safeguards and conditions; and that the Ngorongoro and Embagai Craters should have a special status as nature reserves where no human habitation would be allowed.



In order to find a solution which might "after the uncertainty of recent years, be simple, clear and final", the Government accepted most of the Committee's recommendations. It modified them, however, in two important ways: 1) it did not accept the proposal to create special nature reserves in the Ngorongoro and Embagai Craters, although it did recognize they would be "a special concern of the team responsibility for the administration of the Conservation Unit"; and 2) it extended the proposed conservation area to include not only the Crater Highlands but the whole of the Ngorongoro Division of Masai District.

In terms of area there was a sizable redistribution of land. The old Serengeti National Park enclosed approximately 8000 square miles, 3000 of which were excised to form the N.C.A. Nevertheless a further 3000 were added to the new park bringing its area back to 8000 square miles. In other words there is more land under some form of protection now than there was before 1959.

On July 1, 1959 the Ngorongoro Conservation Area Ordinance came into effect. It charged the administration with "the conservation and development of the natural resources of the Conservation Area". Shortly afterwards the situation was explained to the Masai by the Governor when he addressed their Federal Council on August 27, 1959:



From the Crater rim.

Another matter which closely concerns the Masai is the new scheme for the protection of the Ngorongoro Crater. I should like to make it clear to you all that it is the intention of the Government to develop the Crater in the interests of the people who use it. At the same time the Government intends to protect the game animals of the area; but should there be any conflict between the interests of the game and the human inhabitants, those of the latter must take precedence. The Government is ready to

start work on increasing the waters and improving the grazing ranges of the Crater and the country around it; for your part you must take care to fulfill the agreements into which you have entered to keep the countryside in good heart. You must not destroy the forests, nor may you graze your cattle in areas which have been closed under any controlled grazing scheme; at the same time you must be certain to follow veterinary instructions designed to prevent disease.

The first years of the N.C.A. represented years of trial and error during which the administration attempted to find the most suitable way to carry out its unique mandate. Throughout, the N.C.A. has remained supreme in matters dealing with land management, natural resources, and conservation. In more detail, the administration's duties include the development of better grazing with greater carrying capacity, efficient range management, the provision of additional water points, the protection of the forests and water catchment areas, and the protection of wild life. Social services, police, and the law, however, have remained integrated with the Masai District of which Ngorongoro is a part.

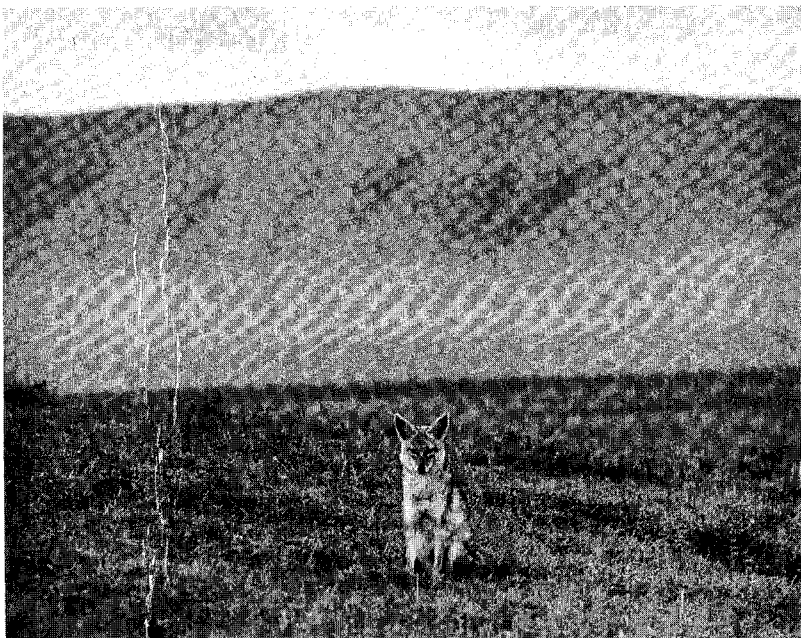
In September 1961 the Minister for Lands, Forests and Wildlife appointed a full-time Conservator responsible directly to him. Henry Fosbrooke, the Conservator, was once district officer at Ngorongoro as well as Senior Government Sociologist. The purpose behind making him directly responsible to the Minister is that there should be national control of a national asset, much in the same way as the U.S. National Park Service. Furthermore, national politicians are not as sensitive to local pressures as local politicians and so can better keep the interests of conservation uppermost.

The key to the Conservation Area is the 10,000 Masai who

who live there. Any effort to conserve and develop its natural resources must take into consideration their traditional way of life since, subject to certain conditions, they have clearly defined rights in the Area. These they guard jealousy, largely because of a feeling of insecurity. As Henry Fosbrooke points out, this has its roots deep in the past. Since the European conquest of East Africa, the Masai have steadily lost land, in Kenya and Tanganyika, to white settlers as well as Africans. For obvious reasons this land tended to be their best; land with sufficient water to which they could retreat with their cattle in dry periods. This has resulted in overcrowding on the remaining areas, leading to erosion, pasture deterioration, and famine during droughts. Thus every suggestion concerning land is regarded, and not without reason, with the utmost suspicion. The Masai of Ngorongoro are determined to maintain their rights to the Area, even if it involves such things as the apparently senseless effort of trekking their cattle into the Crater every day for water rather than availing themselves of a piped water supply at the rim specially built for their convenience. "This is a trick" was their response "to get us out of the Crater."

Nevertheless, some of the more advanced Masai are beginning to realize not only that their present wasteful practices are destroying the habitat, but also that wildlife is a resource of great potential. Because of rainfall, soil, and topographic limitations, the most efficient use of much of Masailand lies in forage for livestock and game. There is much evidence that a certain degree of symbiosis between the two is beneficial. Fosbrooke again points out that although pure pastoralism has a general effect of degradation of the environment, pastoralists are not usually hunters since they do not have a protein deficiency. On the other hand there is a close relationship between agriculture and poaching. Indeed the great game concentrations in East Africa exist in areas inhabited either by pastoralists or by the tsetse fly.

Luckily for Ngorongoro, the Masai are pastoralists, distaining agricultural work of any kind. On the other hand they have allowed agriculturists to settle on their land. With ample protein available from



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Jackal

their own herds, they do not eat game meat, nor do they poach, and some of the greatest of African game parks are within Masai-land's borders, such as Amboseli, Serengeti, and Ngorongoro. Where the Masai have lost land, the great herds of wildlife have disappeared too. The Masai attitude is exceptional among African tribes, who in Swahili refer to wild animals as nyama, meat, much as we refer to them as "game". They seem interested in preserving these animals, and if properly managed there need be only the minimum conflict between man and wildlife. This is just what the Ngorongoro Conservation Area hopes to accomplish, but first of all the Masai employ certain techniques which are harmful to the environment and which must be controlled before development can take place. These are cultural patterns, however, and are not amenable to administrative decrees.

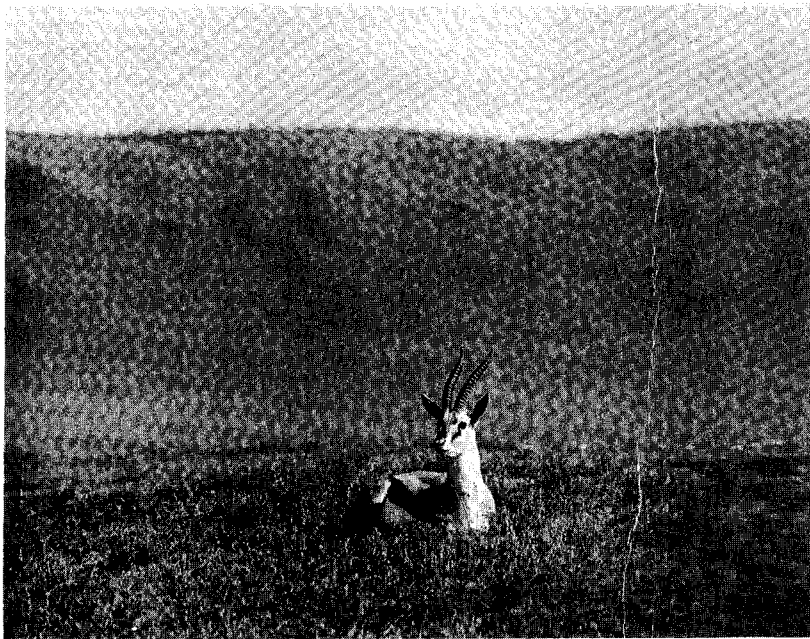
A nomadic people, the Masai are attracted to Ngorongoro (one-fifth of all Tanganyika Masai and their cattle live within the N.C.A.) because of its assured water supply during the dry seasons. They herd their cattle to the Crater Highlands when the dry grazing becomes sparse, only to return immediately at the onset of the rains. This is injurious to the pasture, however, for the plains grasses are flogged before they have a chance to grow, while the highland grasses are neglected so that the coarser species mature and become inedible before grazing takes place. In other words the plains are overgrazed, while at the same time the highland pastures are deteriorating because they are not utilized sufficiently.

At the same time the large size of some Masai herds are obviously excessive and greater than the land can carry, for the Masai value quantity over quality and pay little attention to the carrying capacity of the land. The catastrophic drought of 1960-61 reduced some herds by as much as 90% (only 15% at Ngorongoro), but they can recuperate all too quickly in a series of good years, eating everything in sight and exposing the top-soil to erosion. Many of the 1961 Arusha Conference members (see IMW-6) who visited Ngorongoro left convinced it was a vast dust-bowl. Its rich volcanic soil has incredible recuperative powers, however, and it was lush and green during our visit.

The destruction of the environment is

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Thompson's Gazelle



White-bearded wildebeest  
or gnu.

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another crucial problem in Masailand as a whole.

Uncontrolled and wide-spread fires have been particularly harmful in the Ngorongoro Area.

Besides producing fresh pasture, the Masai burn the grassland because it rids the ground of disease-bearing ticks. But it also leads to erosion and the encroachment of coarse tufted grasses.

Furthermore, uncontrolled fires gradually invade the forests destroying or seriously harming

essential catchment basins. In general the destruction of the environment can be far more harmful to the existence of wildlife than a direct attack by hunting and poaching.



In order to coordinate the objectives of the N.C.A. a Management Plan was drawn up in 1960 and later revised in 1962. It asserted that Ngorongoro is an asset both of national importance and international significance:

A basic requisite for the Area is a stable environment in which its human and animal inhabitants, including livestock, can prosper. Such stability of environment is essential for the achievement of the long-term objective, namely the conservation and rational development of the natural resources of the Area which embrace in addition to water, soil, flora and fauna, those other equally valuable but less tangible resources contributing to amenity and recreation. Only if all these resources are in balance will it be possible to maintain the rights of the existing residents, preserve unscathed the scenic attraction, safeguard the wildlife, perpetuate the value of the area for research, and so ensure that both the national and international obligations are honored. Management of the Area must be directed at meeting these diverse requirements in full, and this is the management task laid on those responsible.

Since it is inherent in a stable environment that there shall be no permanent deterioration of the habitat, the uncontrolled increase within the Area of human beings, domestic stock and wild animals cannot be allowed.



Frozen with fear, the African hare blends in with his surroundings.

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This document includes all kinds of information and material relating to Ngorongoro which had not been gathered together before. With chapters on history, agriculture, forestry, game, and land use, it provides an integrated plan for the development of the Area and is presently being used as a basis for operations.

In my next newsletter I shall describe some of the day to day problems of running the N.C.A. and their implications for the future.

Very sincerely yours,

Ian Michael Wright

Opposite: Lion. The black spot in the middle of the nearest lion's back is a swarm of stomoxys flies (see IMW-35).

Page 12: Rhino.

The line drawing of bat-eared foxes on page one is reproduced by courtesy of Miss Ruth Yudelowitz. The map on page two is reproduced by courtesy of the Conservator, Ngorongoro Conservation Area.

Received in New York February 27, 1964.

