WORLD HERITAGE NOMINATION

IUCN TECHNICAL REVIEW

- 1. IDENTIFICATION NUMBER AND NAME 156 Serengeti National Park
- 2. LOCATION: Northwestern Tanzania, 2°S, 34°35'E.
- 3. NOMINATED BY: National Parks Department, Government of Tanzania

4. DOCUMENTATION:

- (i) Nomination form
- (ii) Supplementary documentation (IUCN)
 - a) Consultations with large number of experienced and qualified individuals at the Serengeti Diamond Jubilee, January 1981
 - b) Consultations with Jim Thorsell and Fred Pertet, Kenya Wildlife Planning Unit
 - c) Field visit during Serengeti Diamond Jubilee; field visit to adjacent reserves of Ngorongoro and Masai Mara (Kenya)
 - d) Sinclair, A.R.E. and Norton-Griffiths, M. 1980. <u>Serengeti:</u> <u>Dynamics of an Ecosystem</u>. University of Chicago Press, New York. 389 pp.
 - e) African Wildlife Leadership Foundation, 1974. "The Serengeti Landscape Classification". 26 pp, plus map.

5. BACKGROUND AND SUMMARY

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Serengeti is an area of savanna and open woodland comprising some 1.5 million hectares. It contains the largest herds of grazing animals in the world, providing a wildlife spectacle that is second to none. The great migrating herds of perhaps 2 million wildebeest, 900,000 Thomson's gazelles, and 300,000 zebras are continuously moving through the entire ecosystem, but the sight is most impressive in May and June, when the animals travel en masse from the central plains to the permanent water holes on the western side of the park. As the vast herds move westwards in parades over 10 km long, followed by their predators, they pass through the central Itonjo range in one of the most remarkable and inspiring wildlife spectacles in the world. The Serengeti ecosystem contains much more than these dominant species. There are 7,000 eland, 27,000 topi, 18,000 hartebeest, 70,000 buffalo, 4,000 giraffe, 15,000 warthog, 3,000 waterbuck, 2,700 elephant, 500 hippopotamus, 200 black rhino, plus at least 10 other species of antelope and 7 of primates. The rich fauna of large herbivores supports no less than 5 major predators, including 4,000 lion, 1,000 leopard, 225 cheetah, 3,500 spotted hyena, and 300 wild dog. There are at least 17 species of lesser predators, including bat-eared fox and ratel. The Serengeti National Park is well managed, with a large (200+) and welltrained staff (due particularly to the facilities of the College of African Wildlife Management at Mweka, Tanzania), well-designed tourist facilities, and continuing support from a number of bi-lateral and multi-lateral agencies. Also worthy of note is the presence of the Serengeti Research Institute, established in 1962 to provide a scientific basis for management. Studies cover ecology and behaviour of wildlife, disease and parasitology, elephant damage, distribution of vegetation, effects of burning, and a wide variety of other matters of interest to park management.

6. INTEGRITY

Serengeti is contiguous with Ngorongoro Conservation Unit, an area of 528,000 hectares declared a World Heritage Site in 1979. But even the combined Serengeti-Ngorongoro ecosystem of nearly 2 million hectares does not include the entire ecosystem (which is defined by the area used by the wildebeest); the Maswa Game Reserve in the south and the Mara National Reserve in Kenya to the north are both key areas in the functioning of the great animal migrations (see map attached). It should also be noted that the number of wildebeest have increased remarkably in recent years, from 250,000 in 1961 to 700,000 in 1971 to nearly 2 million today; this represents an accelerating recovery from the rinderpest (a viral disease of ungulates) epidemic which killed 95 percent of the wildebeest in East Africa in 1890, but the rinderpest antibody is no longer found in wildebeest and the crowded conditions are a prescription for disaster. Cropping plans are being developed and should be considered a part of sound management of the site rather than any threat to its integrity. Α more real threat is the plan to build a railroad through Serengeti. This would essentially cut the ecosystem in half, with predictably unfortunate consequences. To conclude, it is felt that the Serengeti National Park is sufficiently large to ensure the survival of all the species contained therein if it is maintained as at present, but that it does not, by itself, ensure the protection of the entire migratory ecosystem.

7. COMPARISON WITH OTHER AREAS

A number of East African ecologists, game wardens, and administrators were interviewed in Serengeti in January 1981. Their unanimous judgement was that Serengeti is unmatched in the world as a wildlife spectacle. It is considered an excellent, even necessary, complement to Ngorongoro Conservation Unit. Other protected areas of Serengeti's general size and character in the same biogeographic province include Rungwa National Reserve in Tanzania, Southern National Park in Sudan, and Ruaha National Park in Tanzania. Serengeti is superior to all of these in its spectacle of migration, effective management, and long-term continuing research.

8. EVALUATION

Serengeti National Park, with its vast herds of ungulates and their associated predators, is an outstanding example of a Pleistocene large mammal ecosystem where mankind developed as a hunter; the nearby archeological sites of Olduvai (Oldopai) Gorge (included in the Ngorongoro Conservation Unit World Heritage Site) demonstrate that this was a habitat where humanity evolved. The area is sufficiently large to ensure the survival of this savanna ecosystem in perpetuity, though the migratory part of the system also requires the protection of the Maswa Game Reserve (217,600 ha.) to the south and the Masai Mara National Reserve (151,300 ha.) in Kenya to the north. The wildlife spectacle of Serengeti is the quintessence of Africa, but cannot be matched by any other African site; it has the largest and most diverse concentration of large mammals in the world. The wildlife is secure in Serengeti, provided it can be maintained at its present level of protection.

9. RECOMMENDATION

Serengeti National Park meets the criteria of the Convention and should be added to the World Heritage List. The Tanzanian Government should be encouraged to add Maswa Game Reserve to the site, though it is not considered necessary to include the Game Reserve in the National Park because the ecosystem will benefit by areas where controlled exploitation of certain wildlife



The Serengeti-Mara ecosystem is the area used by the wildebeest (even broken line). The Serengeti National Park is shown by the heavy line. Hills are shaded. (From Sinclair and Norton-Griffiths, 1980)



Seasonal movements of wildebeest, Thomson's gazelle and zebra in the Serengeti ecosystem. (From Sinclair and Norton-Griffiths, 1980) species is allowed. Kenya's Masai Mara National Reserve was visited as part of this Technical Review; it is clearly part of the Serengeti-Mara ecosystem and should be considered for addition to the World Heritage List once Kenya becomes a signatory to the Convention. In the interim, it is sufficiently well managed to provide protection to the migratory wildlife.



International Union for Conservation of Nature and Natural Resources 1.00 A.

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July 1981 (rev)

SERENGETI NATIONAL PARK (Tanzania)

Serengeti is the essence of the African savanna. Comprising some 1.5 million hectares, it contains the largest herds of grazing animals in the world, providing a wildlife spectacle that is unmatched anywhere on earth.

The great migrating herds of perhaps 2 million wildebeest, 900,000 Thomson's gazelles, and 300,000 zebras are continuously moving through the entire ecosystem, but the sight is most impressive in May and June, when the animals travel en masse from the central plains to the permanent water holes on the western side of the park. As the vast herds move westwards in parades over 10 km long, followed by their predators, they pass through the central Itonjo range in one of the most remarkable and inspiring wildlife spectacles in the world.

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Serengeti National Park, with its vast herds of ungulates and their associated predators, is the outstanding example of a large mammal ecosystem which resembles that of the Pleistocene Epoch, when mankind developed as a hunter; the nearby archeological site at Olduvai Gorge (included in the adjacent Ngorongoro Conservation Unit World Heritage Site) demonstrates that this was the habitat where mankind evolved in Africa. The Serengeti area, together with Ngorongoro, is large enough to ensure the survival of this savanna ecosystem in perpetuity, provided it can be maintained at its current level of protection.

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