

THE UNITED REPUBLIC OF TANZANIA

**POLICY AND MANAGEMENT PLAN FOR
THE BLACK RHINOCEROS IN TANZANIA**

**DEPARTMENT OF WILDLIFE
PO Box 1994, Dar es Salaam, Tanzania**

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This policy and management plan has the approval of the Minister for Tourism,
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A handwritten signature in black ink, appearing to be 'M. M. M.', written over a horizontal line.

Minister

14th day of June, 1993.
Date

POLICY FOR MANAGEMENT OF THE BLACK RHINOCEROS IN TANZANIA

The black rhinoceros, *Diceros bicornis* L., is a large and spectacular animal of ancient origin, an important species within the habitats it occupies and a major part of Tanzania's rich natural heritage. Though basic knowledge is lacking, it appears likely that Tanzania holds two taxonomic units of the black rhinoceros. One taxonomic unit, formerly designated as the sub-species *Db michaeli*, occurs in the north-east of Tanzania. The second taxonomic unit, formerly designated as the sub-species *Db minor*, occurs in the south and west of Tanzania. As in much of the rest of Africa, black rhinos have suffered a severe decline in numbers during the 1970s and 1980s, primarily as a result of illegal exploitation for their horns.

The major requirement for the successful conservation of the black rhinoceros is to allow its populations to recover. Emphasis will be placed on the protection of rhinos within designated Rhino Protection Areas, a term which can include two categories of area. Intensive Protection Zones are defined as any relatively small area, usually unfenced and within a larger protected area, in which rhinos can be closely protected and observed. Sanctuary Areas are usually small fenced areas in which protection and biological management of rhinos is practiced. Through designating Rhino Protection Areas, black rhino populations will be conserved and encouraged to attain their maximum carrying capacities in the different ecosystems where they occurred historically. Thus within appropriate areas of Tanzania designated as Rhino Protection Areas, the aims of black rhino management will be:

- a) to increase their numbers as rapidly as possible, taking account of possible differences between taxonomic units (protection and biological management);
- b) to promote their economic value for tourist game viewing (non-consumptive utilisation);
- c) to encourage their conservation, where appropriate, through involving local communities (community benefit).

A detailed management plan will be drawn up by the Director of Wildlife in which the aims of management in Rhino Protection Areas within protected and certain open areas will be defined. The management plan will be submitted for review and approval to the Minister every three years. A Rhino Conservation Steering Committee will have the power to advise the Director of Wildlife to change management actions within the period of revision of the plan.

Utilisation can, at the moment, include only tourist game viewing. Tanzania will strictly abide by the terms of the Convention on International Trade in Endangered Species of Wild Fauna and Flora for the export of any products of black rhinoceros required for research purposes. Tanzania intends to retain its population of black

rhinoceros on Appendix I of the Convention for the foreseeable future. However, Tanzania will maintain an open mind on initiatives of other range states to conserve their rhinos, providing these are undertaken within the premises of the Convention and in such a way as not to cause further illegal exploitation of black rhinoceros in Tanzania.

The Minister will maintain and strengthen the necessary legislative and institutional frameworks required to implement the protection and management of the black rhinoceros. A primary requirement is to include the black rhinoceros in a proposed category of species to be designated as Totally Protected. Species in this category will not be able to be shot, killed or wounded except under very limited circumstances.

MANAGEMENT PLAN FOR THE BLACK RHINOCEROS (*Diceros bicornis* L.) IN TANZANIA

1. INTRODUCTION

Tanzania's policy towards the black rhinoceros recognises that the black rhino is an important species and a major element of Tanzania's rich natural heritage. In the 1970s Tanzania was estimated to have a population of perhaps around 10,000 black rhinos and this has been reduced to a population of around 3795 in 1980 and to about 100 in 1992. This recent reduction of population size has been mainly due to illegal exploitation of black rhinoceros for their horns, though expanding human populations have contributed to losses in earlier decades. The loss of this rich natural heritage and of this valuable renewable resource and tourist attraction is regretted. The immediate aim of the management plan is to permit a rapid recovery of black rhinos of each taxonomic unit to population sizes that are considered demographically and genetically viable. It is also hoped to minimise any loss in genetic diversity through the protection and translocation of isolated black rhinos. Tanzania will continue to support the Appendix I listing of its population of black rhinoceros under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (hereinafter CITES) for the foreseeable future. The only form of utilisation of black rhinos permitted at present will be tourist game viewing. Accordingly, the management plan aims to encourage:

- a) the rapid recovery of Tanzania's black rhinoceros population and its management on a scientific basis;
- b) the total protection of Tanzania's black rhinos;
- c) the conservation of black rhinos where appropriate through involving local communities.

2. LEGISLATION

In accordance with the Wildlife Conservation Act No. 12 of 1974 (hereinafter the Wildlife Conservation Act), the black rhinoceros may still be hunted or otherwise utilised under a license issued by the Director of Wildlife (hereinafter the Director). The black rhinoceros is not classed as National Game under the Wildlife Conservation (National Game) Order, 1974. Hence, black rhinos do not benefit from the strict controls stated in this regulation, which requires that no person shall except by and in accordance with the written permission of the Director previously sought and obtained hunt, kill, capture or wound any species so included. Furthermore, black rhinos may also still be killed in defense of human life and property.

In practice, no black rhinoceros has been shot on license or included on a hunting quota since 1973, and there are no declared records of black rhinos being shot

in defense of human life and property for many years. However, present legislation with regard to the black rhinoceros does not sufficiently reflect its present critical status in Tanzania. Therefore, the black rhinoceros will be immediately declared as National Game, as presently defined in the Act. Furthermore, it is proposed to establish as soon as possible a category of animals, to include the black rhinoceros, that will be termed Totally Protected. For a species so included, no person shall except by and in accordance with the written permission of the Director previously sought and obtained hunt, kill, capture or wound any animal including in defense of human property.

No consumptive utilisation may take place within National Parks according to the National Parks Ordinance CAP. 412 of 1959. Under the Ngorongoro Conservation Area Ordinance CAP. 413 of 1960, the Authority can make an order to prohibit the removal of flora and fauna, or for persons to carry or use weapons, snares, traps, nets or poison within the Ngorongoro Conservation Area.

An internal ban on trading rhino horn in Tanzania has been in force for many years. Dealing in rhinoceros horn is punishable under the Economic and Organised Crime Act No 13 of 1984. The black rhinoceros was listed on Appendix I of CITES in 1977. Under Article III of CITES, no international trade in rhinoceros parts or derivatives is permitted for purposes that are primarily commercial.

3. ESTABLISHMENT AND ROLE OF RHINO CONSERVATION STEERING COMMITTEE

The co-ordination of the various activities and donors necessary to achieve the rehabilitation of Tanzania's black rhinos is of vital importance. With three authorities charged with the management of different categories of protected area, and one authority in charge of research, it will be necessary to establish a Rhino Conservation Steering Committee (hereinafter the RCSC) within the Ministry with representation from the four authorities and the donor community. The RCSC will be chaired by the Director of Wildlife and will have the Directors General of the Tanzania National Parks (hereinafter TANAPA) and Serengeti Wildlife Research Institute (hereinafter SWRI), and the Conservator of Ngorongoro Conservation Area Authority (hereinafter NCAA) as its permanent members. The RCSC can also co-opt anyone deemed necessary, including the Project Manager of Selous Game Reserve, the Director of Park Management of TANAPA and the Head of Natural Resources Management in NCAA. The RCSC will have the benefit of a full-time Rhino Co-ordinator as its secretariat. The RCSC, through the work of the Rhino Co-ordinator, will have the task of planning and updating detailed management activities based on their past effectiveness, of assessing new areas for the establishment of new black rhino populations, of developing and co-ordinating an integrated research and monitoring programme to meet the conservation needs of the species and of co-ordinating and soliciting of donations for the conservation of the black rhinoceros in Tanzania.

4. MANAGEMENT IN PROTECTED AND OPEN AREAS

Black rhinos will be fully protected in all National Parks, in the Ngorongoro Conservation Area, in all Game Reserves, Game Controlled Areas and in open areas. Designated Rhino Protection Areas (hereinafter RPAs) will be established in various protected and open areas to ensure the recovery of black rhinoceros populations to sizes that are considered viable. RPAs can include two categories of area. Intensive Protection Zones (hereinafter IPZs) are defined as any relatively small area, usually unfenced and within a larger protected area, in which rhinos can be closely protected and observed. Sanctuary Areas are usually small fenced areas in which biological management of rhinos is practiced. Utilisation of Tanzania's black rhinos will at present be confined solely to tourist game viewing.

4a. POPULATION RECOVERY

Tanzania's long-term aim is to develop, as rapidly as possible, and conserve in the long-term, a viable population of at least 2000 rhinos of each taxonomic unit in their natural habitat. This will be achieved through the early setting up of designated RPAs within individual protected and open areas. One sanctuary was set up on Rubondo Island National Park in 1963-5 with rhinos translocated from near the Serengeti. This sanctuary has not proved a great success to date in terms of its security or the rate of increase of its translocated rhino populations. The first priority will be to establish IPZs in relatively small areas where there are already known to be concentrations of breeding rhinos in their natural habitat. IPZs will be adequately guarded to ensure the rapid breeding of rhinos within these areas without the risk of loss of rhinos through illegal exploitation. Where necessary, IPZ populations will be augmented by, or founded with, translocation of any isolated individuals that are so dispersed as to be no longer capable of breeding in their source localities. The option of translocation will be of a lower priority initially, due to the possible need for expensive fencing and the costs of translocation. However, it will be necessary to take as rapid steps as possible to ensure that the genetic variability present amongst any surviving but isolated rhinos is not lost, once IPZs based on breeding units are established.

At present, three factors make it difficult to be specific about the exact siting of all potential RPAs, namely lack of knowledge of taxonomy and of distribution, and lack of funds. The approach to each of these problems will be as follows:

- a) little is known about the distribution of the different taxonomic units of black rhinoceros in Tanzania. Until further knowledge is forthcoming, it is proposed to divide the taxonomic units on the basis of the distribution of the two major habitat types in Tanzania, namely the *Acacia-Commiphora* habitats of the semi-arid north-east, and the miombo-dominated woodlands of the semi-humid south and west (Figure 1). Black rhinos originating from the different proposed taxonomic units will be conserved separately.

- b) little is known about the present distribution and status of black rhinos in Tanzania. Breeding units of rhinos occur in the Ngorongoro Conservation Area and have been confirmed recently at three localities in the Selous Game Reserve. Widely scattered black rhinos have also been located throughout much of the rest of Tanzania. Further survey work is a priority but, in the meanwhile, IPZs will be established immediately both in Ngorongoro and in Selous, given that both areas have breeding units of rhinos and each area represents the different proposed taxonomic units of black rhinos.
- c) funds to cover the costs of conservation of black rhinos are generally lacking in Tanzania. Therefore, given the international importance of its black rhinoceros populations, Tanzania will look to the international donor community to assist with the necessary finance and expertise to rehabilitate its rhino populations. It will be particularly important to ensure that adequate security and monitoring capability is provided to all RPAs.

Once the first priority IPZs are established in Selous Game Reserve and Ngorongoro Conservation Area, and with the completion of further survey work, other possible IPZs or Sanctuary Areas can be considered in the following locations: for the north-eastern taxonomic unit, in the Serengeti ecosystem, Tarangire National Park and Mkomazi Game Reserve; for the southern and western taxonomic unit in either the Ruaha National Park or Rungwa Game Reserve, the Moyowosi Game Reserve, the proposed Uwanda Game Reserve and Burigi Game Reserve. Upgrading of the monitoring and security of the Rubondo Island sanctuary is also important to determine if it is security, habitat or demography that has limited the status and performance of this translocated population.

4b. TRANSLOCATION PROTOCOLS

Translocations and the establishment of new populations will be undertaken under a strict set of protocols that ensure minimum stress and risks to black rhinos. Isolated black rhinos will be captured by a fully-trained darting team with appropriate equipment. Translocations will be properly planned according to circumstances, with the appropriate use of bomas at capture and release sites, and all bomas will be manned by fully-trained staff. The horns of translocated black rhinos will be tipped as a routine measure, as recommended by capture veterinarians to avoid total horn loss during translocation and boma confinement.

The release sites will be established in areas with appropriate security and, if necessary, fencing, based on priorities agreed by the RCSC. All new populations will be established in areas of suitable habitat and of a size that will not be quickly limited by the carrying capacity of the area. The founder population will not be greater than 50% of the estimated ecological carrying capacity of the area, and will, ideally, be of the size of 15 to 20 black rhinos, but certainly not less than 5 black rhinos. The founder

population will be established in as short a period as possible to ensure the rapid growth of any new population. The possibility of obtaining founders for new populations of *Db michaeli* will be explored with other range states. In addition, the possibility of re-introducing black rhinos from zoological collections will be explored.

5. MONITORING AND RESEARCH

Tanzania has four priority monitoring and research requirements in relation to its efforts to conserve its black rhinoceros populations, namely in relation to distribution and population size, to taxonomy, to habitat suitability and to the involvement of local communities.

- a) Indirect surveys of rhino signs will be undertaken by qualified scientists throughout all areas of Tanzania designated as high priority areas for black rhinos by the RCSC. Survey techniques will be increasingly developed which involve Tanzanian field staff undertaking routine monitoring and law enforcement duties. More intensive surveys of rhinos, including the technique of individual recognition, will commence within designated RPAs following their establishment.
- b) It is necessary to determine genetic variability within surviving populations and to gain better information on the distribution of the two different taxonomic units of black rhinos proposed for Tanzania (Figure 1). This will require research on genetic samples collected incidentally from immobilised animals during management procedures, research on skull taxonomy, plus detailed observations on the adaptation of any translocated rhino to its new area. This research will be co-ordinated through IUCN's African Rhino Specialist Group.
- c) Studies of habitats and vegetation dynamics within RPAs will be undertaken to determine habitat suitability and ecological carrying capacities.
- d) Investigations will be undertaken of the potential for involvement of local communities in the security and monitoring of rhinos, within the Ngorongoro Conservation Area and outside other protected areas.

The RCSC will prioritise relevant research activity according to management needs.

6. COMMUNITY INVOLVEMENT IN RHINO CONSERVATION

Through the constructive and enlightened approach of community conservation programmes, Tanzania will attempt both to maximise the value of black rhinos to neighbouring local communities and to enhance the value of wildlife generally to all local communities, to further increase the chances of achieving total protection of the

black rhinoceros. A particularly promising situation is found in Ngorongoro Crater, where black rhinos have been reduced but still survive amongst Masai pastoralists. A pilot project will test the efficacy of using local pastoralists as auxiliary game guards to further protect black rhinos. The possibilities of establishing a sanctuary area in co-operation with local communities living around the Maswa Game Reserve will also be explored.

7. LAW ENFORCEMENT, DEHORNING AND THE RHINO HORN STOCKPILE

One main area of conflict between the black rhinoceros and humans has been evident in Tanzania in recent years, that of illegal exploitation by humans of black rhinoceros primarily for their horns. Tanzania will not condone illegal exploitation of black rhinos within any protected or open area of Tanzania. The respective authorities in charge of different protected areas, namely TANAPA, NCAA and the Department of Wildlife, will make every effort to increase their law enforcement capability, both to achieve high detection rates of potential offenders in the field and to maintain records of intelligence information on known past offenders. Furthermore, penalties for the illegal killing a black rhinoceros for its horn will be increased where appropriate, to reflect the seriousness of this activity.

Tanzania does not permit either internal or international trade in rhino horn, as a result of an internal trade ban and the CITES Appendix I listing. Dealing in rhino horn is considered a very serious offense. Full collaboration will be afforded to any authority, whether national or international, wishing to investigate such acts, whether this involves horn from Tanzanian rhinos or horn from other countries that is passing through Tanzania.

Tanzania will not dehorn its black rhinos as a crisis measure at present, but will review the necessity of adopting this option if illegal exploitation of rhinos occurs within RPAs. However, black rhinos will have their horns tipped as a routine measure during translocation operations. Samples from such operations will be made available to researchers aiming to determine the origins of rhino horn.

Tanzania intends to maintain its rhino horn stockpile in safe custody and to add to it, both with any future confiscations and seizures, and from horn tipping during translocation operations. Tanzania will not destroy its horn stockpile through burning or other means, and will participate in the compilation of an international database on rhino horn stockpiles.

8. INTERNATIONAL OBLIGATIONS AND CO-OPERATION

Tanzania's international obligations with respect to CITES and dealing in rhino horn have already been defined. Tanzania will engage in other international efforts to promote rhino conservation both within and without of its borders. Tanzania will work

closely with its Southern African Development Co-ordinating Conference (hereinafter SADCC) partners to ensure the successful conservation of rhinos within the SADCC region. Tanzania will participate fully in efforts to co-ordinate the standardised collection of data through IUCNs African Rhino Specialist Group.

Tanzania will also maintain co-operation with its neighbours to ensure the recovery and integrity of black rhinoceros populations that cross international borders. In particular this will involve co-operation with Kenya for any population established in Mkomazi Game Reserve and the present population in Tsavo National Park, for rhinos crossing from Amboseli National Park into Kilimanjaro National Park through the upgrading of the proposed Kilimanjaro Elephant Corridor, and for any population established in the Serengeti ecosystem and the present population in Masai Mara Game Reserve in Kenya.

9. INSTITUTION BUILDING AND DEVELOPMENT OF EXPERTISE

Three main areas of expertise in relation to rhino conservation need, as a matter of urgency, to be developed in Tanzania. Expertise needs to be developed to co-ordinate rhino conservation activities, to monitor and provide security to rhinos in RPAs, and to both capture and translocate rhinos.

- a) The need to develop the capacity of the RCSC will be enhanced through the appointment of a Rhino Co-ordinator. This post will require external support and will be advertised internationally to attract an experienced rhino conservationist, who will work with a Tanzanian counterpart.
- b) The task of providing security and monitoring of designated RPAs will need a cadre of specially trained and fully motivated field staff. Institution building in this area will involve both training of field staff and the provision of appropriate incentives and allowances, using assistance from projects already in existence and from newly developed projects. Incentive payments will be made either from an endowment fund established within the Tanzania Wildlife Protection Fund or from externally funded projects. Consultants with appropriate expertise will be brought to Tanzania and Tanzanian staff will be sent to neighbouring countries to enhance training opportunities.
- c) The capture and translocation of black rhinos must be undertaken in such a way as to minimise the loss of such valuable and scarce animals. Two options will be pursued to develop the capacity to undertake capture and translocation operations, using the already developed expertise of neighbouring countries. One possibility would be to hire the services of an outside capture unit with expertise to undertake translocations. The other possibility would be to seek international assistance and counterpart training to establish a capture unit in the Department of Wildlife.

10. REVISION OF THE PLAN

The plan will be revised and updated, where necessary, by the Director and submitted to the Minister every three years for approval. The RCSC can recommend interim changes to the management plan in response to new or emergency situations within the period of revision.

This plan was prepared by the Secretariat of the Tanzanian Rhino Conservation Workshop, funded by WWF and using data collected by FZS, with technical assistance from the Planning and Assessment for Wildlife Management project.

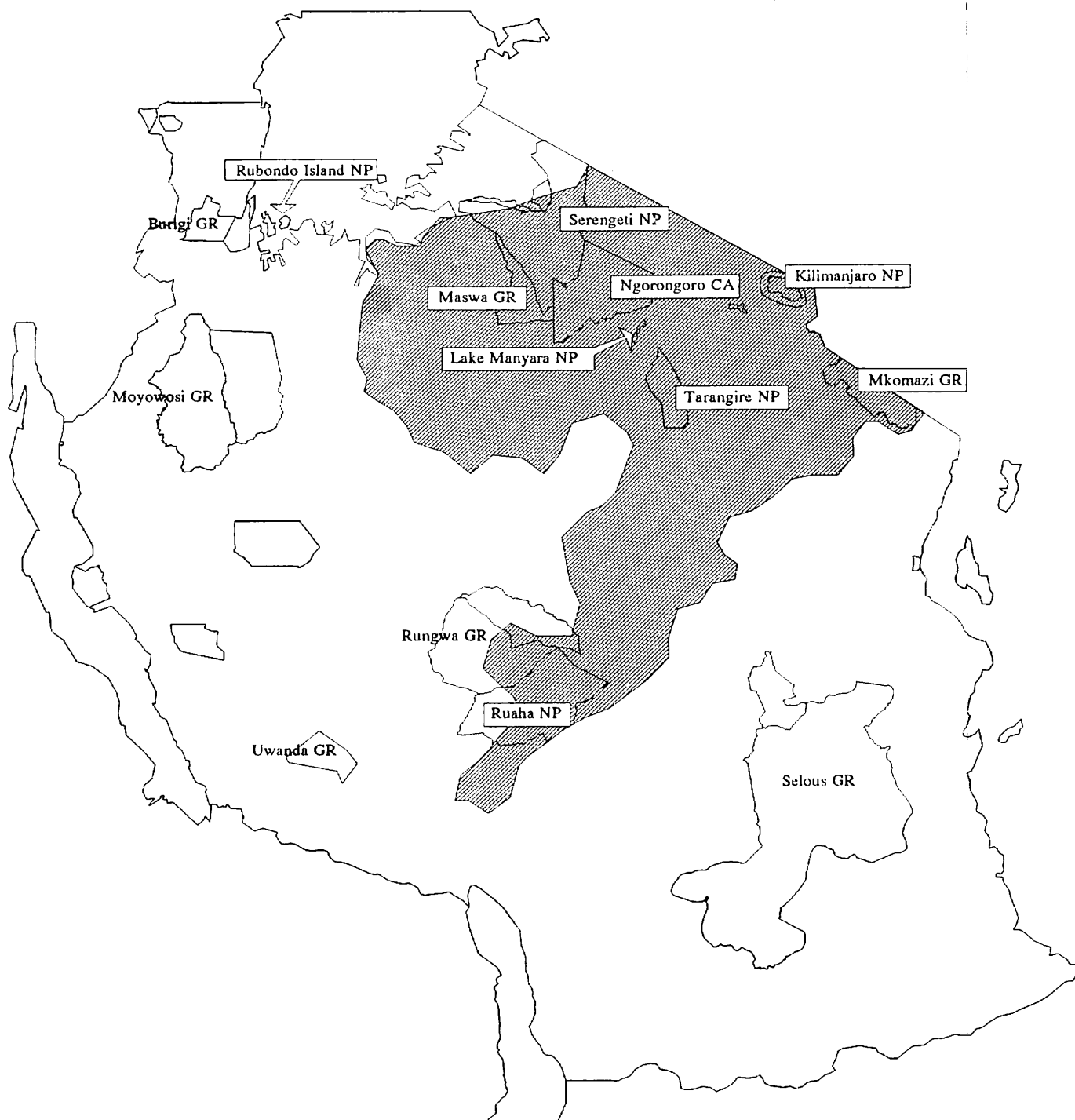
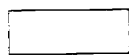


Figure 1.

Tanzania proposes to keep its two taxonomic units of black rhinoceros separate, using the dividing line between major habitat types as a basis for the separation.



Acacia-Commiphora habitats believed to hold the northern taxonomic unit, equivalent to *D.b. michaeli*.



Miombo-dominated woodland believed to hold the southern taxonomic unit, equivalent to *D.b. minor*.

Areas most likely to be designated as Rhino Protection Areas are shown, with NP = National Park, CA = Conservation Area and GR = Game Reserve.