Endangered and Threatened Wildlife and Plants; Endangered Status for the Black Rhinoceroses

SUMMARY: The Service determines that the African black rhinoceros (Diceros bicornis) is an endangered species pursuant to the Endangered Species Act of 1973. This action is being taken because information has revealed that the species has declined rapidly throughout a significant portion of its range and is in danger of extinction. Listing the black rhinoceros as endangered will benefit the species by affording it the protection of the Endangered Species Act of 1973, and then hopefully will aid in the prevention of its demise.

DATES: This rule becomes effective on August 10, 1980.

ENDANGERED AND THREATENED WILDLIFE AND PLANTS; ENDANGERED STATUS FOR THE BLACK RHINOCEROSES

ADMINISTRATION OF THE DEPARTMENT OF THE INTERIOR

U.S. Department of the Interior

U.S. Fish and Wildlife Service

50 CFR Part 17

This rule is issued by the U.S. Fish and Wildlife Service, Department of the Interior, Washington, D.C., 20240.

ENDANGERED AND THREATENED WILDLIFE AND PLANTS; ENDANGERED STATUS FOR THE BLACK RHINOCEROSES

AGENCY: Fish and Wildlife Service, Department of the Interior.

ACTION: Final rule.

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ADDRESS: Questions concerning this action may be directed to the Office of Endangered Species, U.S. Fish and Wildlife Service, Department of the Interior, Washington, D.C. 20240.


SUPPLEMENTARY INFORMATION:

Background:

On August 11, 1977, the Service published a notice of review in the Federal Register (42 FR 40719-17) announcing that it was conducting a review of the status of the black rhinoceros (Diceros bicornis) and requesting comments from interested parties. The Service carefully reviewed the public comments and available evidence and determined that sufficient data were available to propose this species for endangered status; this proposal was published on October 1, 1979 (44 FR 59918-20). The Service now determines the black rhinoceros to be endangered. The basis for the determination is summarized below:

The Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) defines an endangered species as:

Any species which is in danger of extinction throughout all or a significant portion of its range * * * (16 U.S.C. 1532 (6)); and a threatened species as:

Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range * * * (16 U.S.C. 1532 (20)).

The Act also provides that the Secretary shall by regulation determine a species to be endangered or threatened because of any of the following factors:

1. The present or threatened destruction, modification, or curtailment of its habitat or range;

2. Overutilization for commercial, sporting, scientific or educational purposes;

3. Disease or predation;

4. The inadequacy of existing regulatory mechanisms; or

5. Other natural or man-made factors affecting its continued existence.

This authority has been delegated to the Director.

Summary of Factors Affecting the Species:

There are currently five species of rhinoceroses occurring in Africa and Southeast Asia. All five have long suffered from the effects of human demands. As a result, the Javan and Sumatran rhinos, which 50 years ago were widespread, have been reduced to tiny relict populations; less than 55 Javan rhinos (Rhinozeros sondaicus) remain in western Java (there are a few unconfirmed reports of their existence on mainland Asia), and there are less than 300 Sumatran rhinos (Diceros sumatrensis) in the world. The Indian or greater one-horned rhinoceros (Rhinoceros unicornis) has had its once extensive range reduced to a few populations totalling less than 1,200 individuals in small reserves in northeast India and Nepal. All of the above species are officially listed as Endangered under the Endangered Species Act of 1973.

The Service believes that there are presently fewer than 1,500 black rhinos in Kenya, less than 10% of the number present only ten years ago. This compares with an estimate of 6,000 to 9,000 specimens in Kenya's Tsavo ecological unit alone in 1899. The trend is also evident in other African nations. In Tanzania probable black rhino declines of 70% in Ngorongoro, 70-80% in Ruaha, 60% in Tarangire and 80-85% in Manyara over the last ten years are suggested by the data. Twenty-five rhinos were killed in Manyara last year alone (1979) and probably less than 12 are left alive now, of which perhaps three or four are females capable of reproduction.

Based on the available data, the Service believes that there are perhaps fewer than 15,000 black rhinos remaining in Africa and in the world.
A number of factors have contributed to the severe decline in rhino populations in general and black rhino numbers in particular. Perhaps the major reason why the black rhino has declined is trade in its parts and products. East African statistics on the legal export of rhino horn from 1950 to 1971 show that 1.56 tons were exported annually. From 1972 to 1976, the statistics show that 4.2 tons of rhino horn were exported legally from East Africa, a tremendous increase when compared with the figures from the earlier period. During the two years 1976 and 1977, official North Yemen statistics showed that traders imported an average of 7.8 tons per year of rhino horn. Since the average weight of rhino horn is approximately 3.5 kilos (about 7.7 pounds) per animal, over this two year period at least 4,000 rhinos were killed to provide for North Yemen imports alone. These statistics indicate the great number of rhinos that were taken to satisfy world demand for their parts or products.

In 1976, the black rhinoceros was listed on Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (Convention). The Convention limits international trade in parts or products of species listed on Appendix I for nations party to the agreement, and the 1976 listing probably reduced pressure on the black rhinoceros from this source to some extent. However, the evidence indicates that the black rhinoceros has not significantly increased in numbers since the trade restrictions of the Convention went into effect. This is due, in part, to the fact that much of the rhino trade occurs between countries which are not parties to the Convention.

The black rhinoceros is also subject to illegal poaching. The price of rhino horn increased from $23 per kilo in 1969, to $112 in 1976, to $675 in 1978. The increased value in rhinoceros parts or products has stimulated illegal poaching, which has reportedly become both more widespread and sophisticated. In the past, spears, traps and poisoned arrows were the poachers' main weapons. Today the rhinos are generally shot in groups. In some quoted examples the horns are then removed crudely with axes. They are transported by the poachers and sold to middlemen. At present, there is inadequate information on the transport routes out of East Africa, but some leave by dhows or aircraft.

The biology of the black rhinoceros also may be contributing to its demise. For a species that exists largely as solitary individuals at a naturally low density, the severe declines cause further problems by reducing the densities of individuals to such an extent that the probabilities of reproduction may also be greatly reduced. In addition, they are easy to stumble and those that are left are showing evidence of extreme disturbance in response to the harassment. The potential reproductive rate of the declined populations may therefore also be lowered and some populations face total extinction without strong measures being taken.

In listing the black rhinoceros as an endangered species, the Service also relies on the fact that the species was added to Appendix I of the Convention. Recognition of the precarious status of the black rhinoceros by the party nations constitutes evidence that the species is Endangered under the Endangered Species Act.

References

Summary of Comments
Section 4(b)(1)(c) of the Act requires that a summary of all comments and recommendations received be published in the Federal Register prior to adding any species to the List of Endangered and Threatened Wildlife.

In the October 1, 1979, Federal Register Proposed Rulemaking (44 FR 56618-56620) all interested parties were invited to submit factual reports or information which might contribute to the formulation of a final rulemaking.

All public comments received during the October 1, 1979, to December 30, 1979, comment period were considered.

A total of 12 letters containing comments were received. Two, one from the Peace Corps and one from the Department of the Army, commented only that they had no further information and were not involved in any projects that would affect the species. One, from Safari Club International, favored a listing of Threatened throughout most of the black rhino's range. The remaining 9 favored protection as proposed.

Dr. Kes Hillman (IUCN/SSC African Rhinogroup): Dr. Hillman supplied articles on the black rhino including the following new information:

1. (1) Rhino horn is being sold at about $675 a kilo.
2. (2) 1979 population estimates are less than 1,500 rhinos in Kenya and between 2,000 and 8,000 in Tanzania; and
3. (3) The Selous Game Reserve, Tanzania, may be secure from poaching but poaching has increased in the Parks and Reserves to the north. Poaching increased in Manyara from 2 in 1973 to 25 in 1978, with probably less than 12 rhinos remaining alive. In Serengeti, 6 poached rhinos were found in 1975, 24 in 1977. In Arusha N.P., poaching had increased from 1 animal in 1975 to 10 in 1977. At the end of 1978, 4 or 5 rhinos were still alive in the park. In Ruaha N.P., two were found dead in 1975, and 32 in 1977. In addition, Tarangire census figures show a decrease from 239 in 1978, to 55 in 1977, to 0 in December, 1978.

S. Dillon Ripley (Secretary, Smithsonian Institution): Dr. Ripley verified the $675 per kilo price for rhino horn. He cited the International Trade in Wildlife (1979) Earthscan publication as the source.

Stefan Graham (Director, City of Baltimore Department of Recreation and Parks): Mr. Graham provided information on the value of a single rhino horn selling in the range of $15,000. No sources were cited.

Thurman S. Grafton, D.V.M. (Executive Director, National Society for Medical Research): Dr. Grafton indicated that there is no known scientific basis for medicinal use of rhino horns.

Seymore H. Levy (Legislative Vice President, Safari Club International): Mr. Levy agreed that the black rhinoceros was endangered in Kenya, but felt that populations in Zambia and South Africa were not. He feels that threatened status would be sufficient throughout most of its range. He indicated that listing would provide little benefit, since the reasons for its decline are beyond our control, i.e., poaching, land clearance and demand for rhino horn.

Safari Club also submitted additional information for southern and southwestern Africa. The information indicates a long term decline in the population and that the rhino is considered locally endangered but the overall present trend is for a population increase. They also cite evidence that present survey techniques are grossly underestimating actual populations.

Response: The Service realizes that present survey techniques tend to provide underestimates of actual
populations of rhinos. However, field workers generally take this into account and adjust figures upward. Surveys are conducted repeatedly in the same manner and thus show trends. This is all present survey techniques can hope to accomplish. Clearly, the trends are toward a population decline and poaching activity increases.

The Service must consider the status of the species throughout its entire range. Kenya and Tanzania make up a significant portion of the range of the black rhinoceros and clearly the populations are declining seriously in these areas. The Kenya population is near extinction; less than ten years ago it had populations similar to or greater than Tanzania's present population. Now, Tanzania is experiencing increased poaching pressure. If present and past trends continue, along with the increased value of rhino horn, the Tanzania population can be expected to be extinct in less than ten years.

An endangered species is defined in the Act as:

"Any species which is in danger of extinction throughout all or a significant portion of its range.

In the Service's opinion, the black rhino is in danger of extinction throughout a significant portion of its range. Listing this rhino as endangered in parts of its range and threatened in others would be inconsistent with the Act's intent. Problems would also result for law enforcement officials since rhinoceroses whose horns are indistinguishable from those of the black African rhino.

The following correspondents provided no new information but favored the proposal:

Don D. Farst and Robert O. Wagner, American Association of Zoological Parks and Aquariums; Jane Risk, Animal Protection Institute of America; Wilbur B. Amand, Philadelphia Zoological Garden; and Gerald D. Aquillina, Buffalo Zoological Gardens.

After a thorough review and consideration of all the information available, the Director has determined that (1) the black rhinoceros is in danger of extinction throughout a significant portion of its range due to one or more of the factors described in Section 4(a) of the Act, and (2) listing this species as Endangered will provide it with some protection which may help ensure its survival.

Effects of the Rulemaking

As noted above, the black rhinoceros is on Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora. Therefore, legal trade in the species is already regulated among nations that adhere to this Convention. Listing of the black rhinoceros as endangered under the Endangered Species Act of 1973 will not only provide an additional prohibition against importation of the species and its parts and products (such as hunting trophies) into the United States, but will also restrict transportation or sale in interstate or foreign commerce (16 U.S.C. 1538(a)(1); 50 CFR 17.21(a)). The other prohibitions of Section 9 of the Act will also be applicable, as well as restrictions on Federal activity jeopardizing the continued existence of the species, as contained in Section 7.

Under both the Convention and the Act, permits are available in certain instances for scientific and other specified purposes such as hardship situations. However, given the present precarious status of the black rhino, the Service believes that the issuance of hardship permits for the importation of any sport hunting trophies is inconsistent with the conservation of the species at this time, and therefore intends to deny all such applications.

Listing of the black rhinoceros as endangered will also allow the United States to attempt to: (1) Make the countries in which the black rhino is resident more aware of the importance of providing strong and immediate protection for the species; (2) make available to scientists of other countries the results of rhino research undertaken under U.S. sponsorship in such forms as to be helpful to them in developing their own research plans; (3) encourage African countries to undertake comprehensive surveys of the status and distribution of this species; (4) encourage African countries to establish additional reserves; (5) encourage reintroductions into areas where black rhinos were once distributed; (6) consult with U.S. Federal agencies contemplating any actions which might jeopardize the continued existence of the species; (7) provide, if requested, U.S. technical expertise for establishing management and recovery programs; and (8) possibly provide funds if available, to assist in the management and recovery of the species.

National Environmental Policy Act

An Environmental Assessment has been prepared in conjunction with this rule. It is on file at the Office of Endangered Species, and may be examined during regular business hours. This assessment forms the basis for a decision that this is not a major Federal action which would significantly affect the quality of the human environment within the meaning of section 102(2)(C) of the National Environmental Policy Act of 1969.

The primary authors of this rule are John L. Paradiso and William Gill, Office of Endangered Species, 1000 N. Glebe Road, Arlington, Virginia 22201 (telephone (703) 235-1975).

Note.—The Service has determined that this document does not contain a significant proposal requiring preparation of a regulatory analysis under Executive Order 12044 and 43 CFR Part 14.

Accordingly, the Service amends 50 CFR Part 17 by adding the following to the list in § 17.11(i), alphabetically under "MAMMALS":

<table>
<thead>
<tr>
<th>Species</th>
<th>Common name</th>
<th>Scientific name</th>
<th>Historic range</th>
<th>Vertebrate population where endangered or threatened</th>
<th>Status</th>
<th>When listed</th>
<th>Critical habitat</th>
<th>Special rules</th>
</tr>
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<tbody>
<tr>
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<td>Diceros bicornis</td>
<td></td>
<td>Sub-Saharan Africa</td>
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