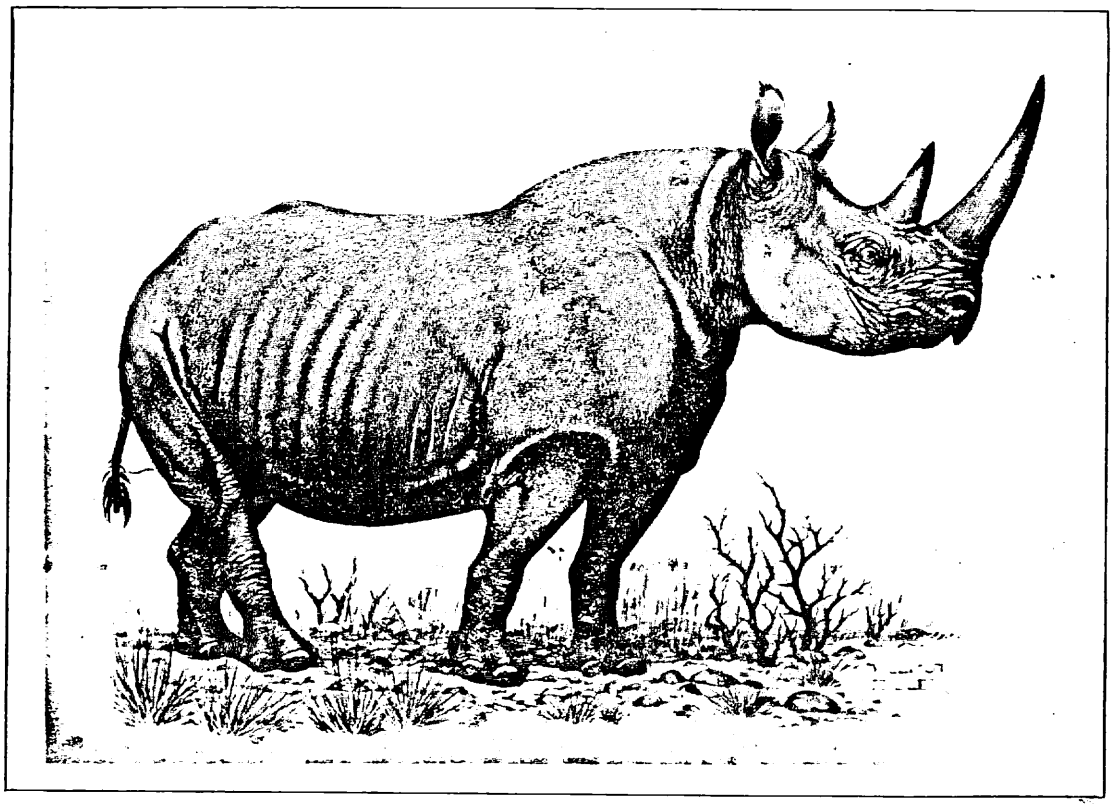
INTERNATIONAL UNION FOR CONSERVATION OF NATURE AND NATURAL RESOURCES

Black Rhino



From
The IUCN Red Data Book

by L. Jane Thornback

SPECIES CONSERVATION MONITORING UNIT
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BLACK RHINOCEROS ENDANGERED

Diceros bicornis (Linnaeus, 1758)

Order PERISSODACTYLA Family RHINOCEROTIDAE

SUMMARY Distribution now very sporadic in its African savannah habitat. Declining, in some areas rapidly, population thought to be anywhere between 15,000 and 20,000 with the minimum figure perhaps the more realistic. Decline attributed to poaching for its horn and habitat loss. Commercial poaching poses a very serious threat to rhinos, which live at low densities, are easy to hunt, relatively slow to reproduce and carry a potentially very valuable and easily transported horn. Protected by law where it occurs in national parks and reserves, although protection is often inadequate. Main conservation need is an effective ban on trade in rhino horn and particularly on its importation to Asian and Middle Eastern countries, and increasingly effective antipoaching and law enforcement measures.

DISTRIBUTION

African savannah zone. Formerly widespread from South West Africa/Namibia and south-western Cape Province north through Botswana, Zimbabwe, Mozambique, Malawi, Zambia, Angola, Zaire, Tanzania, Uganda and Kenya to Somalia, Ethiopia and the Sudan, thence westwards to the Central African Republic, northern Cameroon and Chad; also in Nigeria and further west, but no longer. In general, the species is still to be found over most of the extensive area indicated, but has been locally exterminated, with the survivors scattered in remnant populations, mostly in parks and reserves. For detailed accounts of distribution see (2,7,14,22,29,44).

POPULATION

Not known with any precision but probably 15,000-20,000 and everywhere depleted. The following rough estimates have been made.

Angola At least 110, decreasing. About 10 live in the Namib and about 100 in the Kwando-Kubango area (20,44).

Botswana About 20, and decreasing slowly (21,44).

Cameroon Possibly the low hundreds in the north (38,42,44). Pfeffer visited Cameroon in April/May 1980 and reported that the trend was stable and perhaps increasing (42).

Central African Republic At least 1000 (30), and possibly 3000-5000; decreasing slowly (44).

Chad About 25 (10,44), decreasing (44).

Ethiopia 10-20, decreasing (44). 1979 sightings in the proposed Omo National Park in Mago District, none known from elsewhere (38).

Kenya June 1979 estimate of less than 1500 and decreasing rapidly, in 1969 there were 15,000-20,000 (21,24,44). Government aerial censuses gave 2118-3936 in 1977 and 871-1442 in 1978, a reduction in one year of 31.4% (6,11,37). Between 1970-74 rhino losses were as high as 95 % in Tsavo National Park, 85% in Amboseli, and over 90% in Meru National Park (17).

Malawi 20-50, most in Kasungu National Park, possibly increasing (38,44).

Mozambique Less than 400 (41), trend unknown (41,44).

Rwanda 20-40, all in Akagera National Park, this is a result of 6 introduced in 1958 (38,44).

Somalia Probably low hundreds (44), trend unknown (21).

South Africa About 580 in parks, reserves and private ranches, and are increasing. 68% occur in the Hluhluwe/Mflolozi corridor complex (38,44).

South West Africa/Namibia About 190, of which approximately 150 are in Etosha National Park, where the population is increasing, the rest in Damaraland and Kaokoland are declining rapidly (38,44).

Sudan Probably considerably less than 500, in very sporadic distribution and decreasing (38,44).

Tanzania 4000-9000, of which at least 3000-4000 are in the Selous Game Reserve region. Those in the north are decreasing rapidly (38,44), since 1969 probable losses in Ngorongoro of 70%, in Ruaha of 70-80%, in Tarangire 80% and in Manyara of 80-85% (17).

Uganda By 1979 status endangered due to recent drastic decreases caused by poaching (21,38), number in the low tens in Kidepo National Park, in Kabalega National Park have been drastically reduced (38,44).

Zaire Possibly extinct, the Zairian National Institute for the Conservation of Nature having stated in 1977 that none have been seen since 1954 (1).

Zambia 3850-5300 (38), numbers declining slowly but range contracting more rapidly as relict populations become extinct (35). Most (2500-4500) occur in the Luangwa Valley which still contains one of the largest populations remaining in Africa (3,21,35,36,38).

Zimbabwe 1100-1250 min., stable or decreasing slowly (38,44).

HABITAT AND ECOLOGY

Transitional zone or ecotone between grassland and forest (28), preferably thick thorn bush or acacia scrub, but also more open country and occasionally evergreen forest. The Black rhino is a browser and lives on a variety of bushes and shrubs; it is usually inactive during the heat of the day (14,28). The only stable social unit is the mother-child association (28). A calf is produced about every 2.5-3.25 years (28), the gestation period being approximately 15 months (9,28).

THREATS TO SURVIVAL

Main cause of recent severe declines in rhino populations is increased demand for its horn, although in the long term habitat loss will become a major factor.

Hunting and Trade Rhino horn is considered by many Asian peoples to have medicinal uses and supposed aphrodisiac properties. Also since before 400 BC rhino horn cups have been used in the East to detect poison (16,17,21,40). In the Middle East rhino horn is carved into traditional dagger (jambia) handles (16,17,40). The increased demand for horn has resulted in sharp price rises (17,19,25,40). In Tanzania Rhino horn fetched US $45 per kilo in 1977 and rose to $250 by 1978 (19). In Kenya official export figures for rhino horn show an increase from US $23 per kilo in 1969 to US $112 in 1976. By 1979 quotes give wholesale prices paid to poachers in East Africa as US $240-265 per kilo. Statistics for legal export from East Africa from 1950 to 1971 show that on average 1.56 metric tonnes were exported annually. Main markets for this 22-year period were Hong Kong, the Yemen, China, USA, Japan and the UK. However from 1972 to 1976 statistics show an average legal export of 4.2 metric tonnes per year. Main markets over this five year period, in order of importance, were Hong Kong, China, North Yemen and Japan. Most Kenyan rhino horn goes to North Yemen for dagger (jambia) handles (16,17,40). Between 1975-77 official North Yemen statistics show an average import of 7.6 metric tonnes per year, indicating that at least 4000 rhinos died over this two year period to supply North Yemen imports. The main reason for this tremendous increase, from 233 kilos in 1969/70 to 8310 kilos in 1975/76, is a vast rise in the per capita income of the average Yemeni, due almost totally to remittances brought back by Yemenis working in Saudi Arabia and other oil rich Gulf countries (16,17,40). The jambia has long been a traditional symbol of masculinity in North Yemen and since the Yeminis now have money, purchasing of jambias has greatly increased. Numbers of rhinos in Kenya in 1979 constitute less than one year's supply of horns to North Yemen (17,40).

Habitat Progressive deterioration and loss of habitat due to rapidly increasing human populations poses another grave threat to the rhino's future. In some areas e.g. Tsavo East National Park, habitat destruction by elephants, sometimes made worse by drought, has also been detrimental (8,12).

CONSERVATION MEASURES TAKEN

International Listed in Appendix I of the 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), trade in it or its products therefore being subject to strict regulation by ratifying nations, and trade for primarily commercial purposes banned. Listed in Class B of the 1968 African Convention on the Conservation of Nature and Natural Resources, and as such may only be hunted or collected under special authorization granted by the competent authority. Early in 1979 Hong Kong banned all imports of rhino horn (17).

National By 1979 could not be legally hunted anywhere in Africa (except in South Africa in exceptional circumstances) (38).

Protected areas Occurs in many national parks and reserves; but protection is often inadequate (33).

Studies The IUCN/SSC African Rhino Specialist Group has prepared an action plan for the conservation of the Black Rhino, (44) a detailed summary of which appears in their Newsletter No.2 (41). In conjunction, WWF has mounted an international fund-raising campaign 'Save the Rhino' to finance the rhino conservation action plan. By October 1980 US$1.4 million had been raised, and much of this has been committed to anti-poaching operations, creation of new reserves, reinforcement of national park operations, and public education projects. A report on the International Trade in Rhino Products was published by Dr Esmond Bradley Martin in 1979 (40) and is the basis of an official statement by IUCN/WWF on such trade and the action which should be taken to curtail it (43). In particular IUCN/WWF will:

a) Mount a campaign to encourage interest in producing, consuming and trading countries to join CITES, to enforce CITES more effectively, and to halt trade in rhino products.

b) Provide technical assistance to producing countries, especially in Africa, on improvements to the administration and enforcement of trade controls under CITES, so as to make full use of this Convention.

c) Pay particular attention to bringing the seriousness of the situation to the notice of the Chinese authorities, who have acceded to CITES and indicated their desire to control the trade in rhino products. Contact will be made with medical and pharmaceutical associations and with practitioners in other Asian countries to persuade them not to prescribe or dispense any rhino derivatives, and to encourage the use of alternatives and substitutes.

Far Eastern wholesale dealers in rhino products will be encouraged to withdraw from this market - as dealers in Hong Kong have already done. Particular attention will also be given to drawing the attention of the Government of the People's Democratic Republic of Yemen to the consequences of ther demand for rhino horn daggers. An approach which recognises the deep respect of the Yemeni people for Islamic traditions and which urges the use of alternative materials for dagger handles will also be made. Governments will be requested to halt all internal as well as external trade by placing a moratorium on the sale of all government and parastatal stocks of rhino products. Records of these stocks, regularly updated, should be made available to IUCN. Hunting of rhino should be prohibited anywhere in the world except where such hunting serves to promote the conservation of particular populations and provided proper control of the hunting and disposal of products and trophies is assured (43).

CONSERVATION MEASURES PROPOSED

Effective protection against poaching. Control of trade in rhino horn. A ban on the import of rhino horn to Asian and Middle Eastern countries would be extremely beneficial to the species.

CAPTIVE BREEDING

In 1979 at least 70 males and 81 females were held in 64 zoo collections (50 bred in captivity) (26).

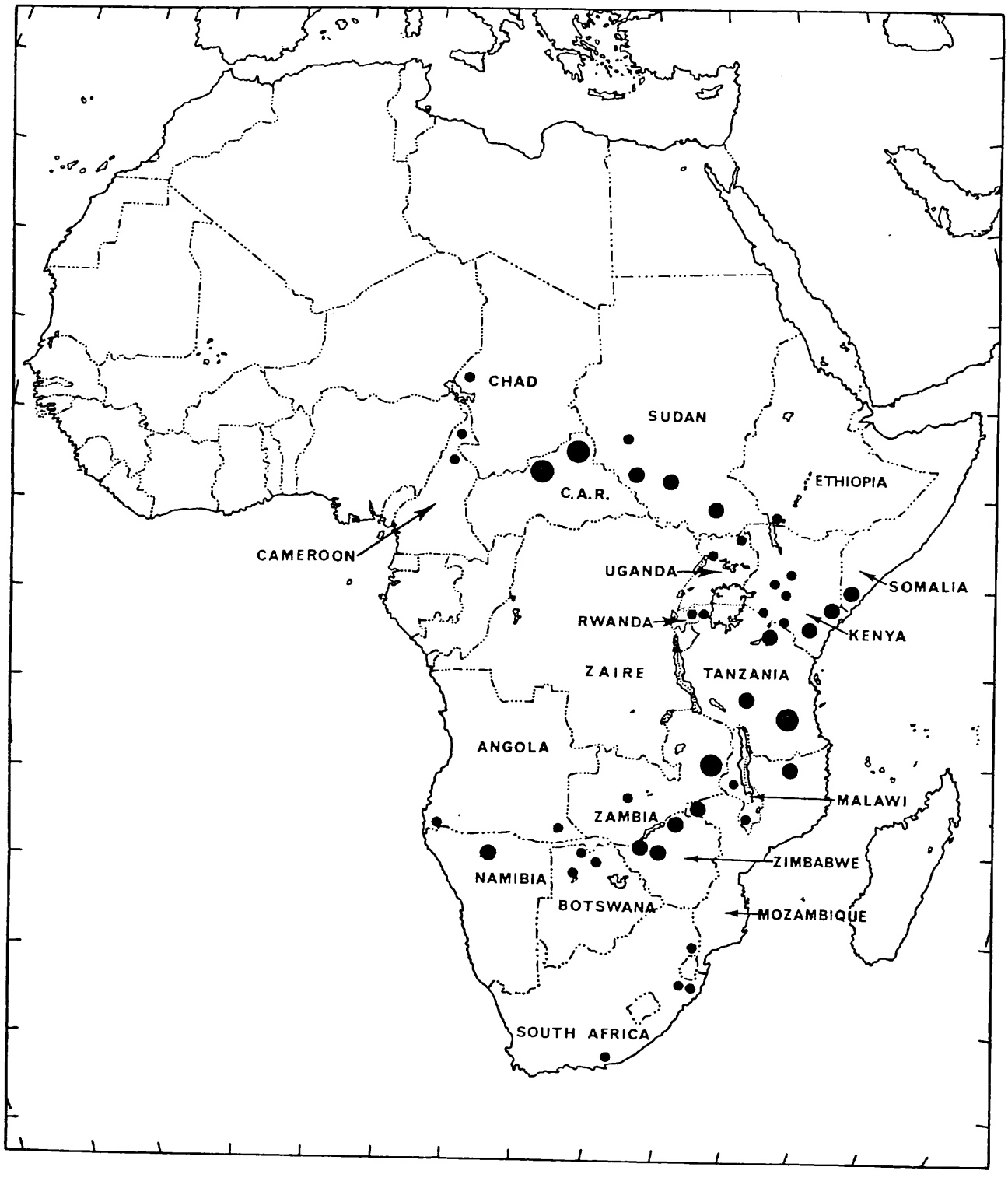
REMARKS

For description of animal see (2,7,13,14,34,39). Groves lists 7 subspecies (13). This data sheet was compiled with the assistance of the IUCN/SSC African Rhino Specialist Group under the Chairmanship of Dr Kes Hillman.

REFERENCES

1. American Embassy Kinshasa to US Department of State, 5 Nov. 1977.
2. Ansell, W.F.H. (1971). Part 14. Order Perissodactyla. In Meester, J. and Setzer, H.W. (Eds). The Mammals of Africa. An Identification Manual. Smithsonian Institution Press, Washington, D.C.
3. Ansell, W.H.F. (1969 and 1975). Black Rhinoceros in Zambia. Oryx 10(3): 176-192 and 13 (1): 83-84.
4. Blower, J. (1978). In litt.
5. Bothma, J. du P. (1975). Conservation Status of the Larger Mammals of Southern Africa. Biol. Conserv. 7: 87-95.
6. Dirschl, H.J., Mbugua, S.W. and Wetmore, S.P. (1978). Preliminary results for an aerial census of livestock and wildlife in Kenya's Rangelands. Aeriel Survey Technical Report Series No. 3. Kenya Rangeland Ecological Monitoring Unit. Ministry of Tourism and Wildlife, Kenya.
7. Dorst, J. and Dandelot, P. (1970). A Field Guide to the Larger Mammals of Africa. Collins, London.
8. East African Wildlife Society Scientific and Technical Committee. Report of the Working Group on the Distribution and Status of East African Mammals (1977). Phase 1: Large Mammals.
9. Frame, G.W. (1971). The Black Rhinoceros. Animals 13: 692-699.
10. Grimwood, I.R. (1975). In litt.
11. Goddard, J. (1967). The Validity of censusing Black Rhinoceros Populations from the Air. E. Afr. Wildl. J. 5: 18-22.
12. Goddard, J. (1970). Age Criteria and Vital Statistics of a Black Rhinoceros Population. E. Afr. Wildl. J. 8: 105-121.
13. Groves, C.P. (1967). Geographic Variation in the Black Rhinoceros, Diceros bicornis (L. 1758). Z. Säugetierk. 32: 267-276.
14. Guggisberg, C.A.W. (1966). S.O.S. Rhino. A Survival Book. Andre Deutsch.
15. Hey, D. (1977). In litt.
16. Hill, A. (1979). Taking the Rhino by the horns. New Scientist 82 (1158): 843-844.
17. Hillman, K. and Martin, E. (1979). Rhinos - within and out of East Africa. Unpublished MS.
18. Hitchins, P.(1975). The Black rhinoceros in South Africa. Endangered Wildlife 1 (2): 1-2.
19. Honey, M. (1978). Mounting threat to Tanzania's big game. New African March: 33-34.
20. Huntley, B.J. (1972). An Interim Report on the status of Red Data Book Species in Angola. Ms.
21. IUCN/SSC African Rhino Specialist Group. (1979). In litt.
22. Joubert, E. (1971). The Past and Present Distribution and Status of the Black Rhinoceros (Diceros bicornis Linn. 1758) in South West Africa. Madoqua 1(4): 33-43.
23. Joubert, E. and Mostert, P.K.N. (1975). Distribution patterns and status of some mammals in South West Africa Madoqua 9 (1): 5-44.
24. Kenya Rhino Action Working Groups. (1979). Estimated Rhino Populations in Kenya, June 1979. Ms. 2 pp.
25. Martin, D. (1978). Threat to the rhino. The Observer, (London). 9 April, p. 7.
26. Olney P.J.S. (Ed.) (1980). International Zoo Yearbook 20. Zool. Soc. London.
27. Rodgers, A. (1978). In litt.
28. Schenkel, R. and Schenkel-Hulliger, L. (1969). Ecology and Behaviour of the Black Rhinoceros (Diceros bicornis L.). Verlag Paul Parey, Hamburg, and Berlin.
29. Sidney, J. (1965). The Past and Present Distribution of some African Ungulates. Trans. Zool. Soc. London 30.
30. Spinage, C.A. (1977). In litt.
31. Stephenson, J.A. (1977). In litt.
32. Tanzania National Parks. (1978). In litt.
33. Vincent, J. (1977). In litt.
34. Walker, E.P. (1975). Mammals of the World. The Johns Hopkins Univ. Press, Baltimore and London.
35. IUCN/SSC African Rhino Group. (1979). Brief Summary of Information gathered on the Present Status of Rhinos in Zambia. June 1979. Ms. 6 pp.
36. Naylor, J.N., Caughley, G.C., Abel, N.D.J. and Liberg, O. (1973). Luangwa Valley Conservation and Development Project, Zambia; Game Management and Habitat Manipulation; UNDP/FAO Working Document No. 1. FO: DP/ZAM/68/510.

Black Rhino Distribution in Africa as known in January 1980



37. Sterfox, J.G., Kufwafwa, J.W. and Mbugua, S.W. (1979). Distributions, Densities and Trends of Elephants and Rhinoceros in Kenya, 1977-8. Kenya Rangeland Ecological Monitoring Unit. Ministry of Tourism and Wildlife.
38. IUCN/SSC African Rhino Group Report December 1979 (Also SWARA).
39. Haltenorth, T. and Diller, H. (1980). A Field Guide to the Mammals of Africa including Madagascar. Collins, London. English translation.
40. Martin, E.B. (1979). The International Trade in Rhinoceros Products. A Report for the World Wildlife Fund (WWF) and the International Union for Conservation of Nature and Natural Resources (IUCN).
41. IUCN/SSC. (1980). African Rhino Group Newsletter No. 2 October. NYZS/WWF.
42. WWF. (1980). Black Rhino in Cameroon. WWF Monthly Report August 1980. Project 1707.
43. IUCN/WWF. (1980). Statement on the International trade in Rhino products.
44. IUCN/SSC. African Rhino Group (1980). Rhino Distribution in Africa as known January 1980 and Action Plan. Ms.