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ENDANGERED SPECIES

Technical Bulletin Reprint

Wildland Management Center
The University of Michigan

From the World Wildlife Fund-U.S.

Protecting Africa's "Halfmens"

by

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A plant growing in southern Africa has so caught the imagination of collectors and traders as to drive it to near extinction. The plant is *Pachypodium namaquanum.* "Pachy" means elephant and "podium" means trunk, making the name literally "elephants trunk," probably reflecting the succulent nature of the members of this genus. The species name "namaquanum" is derived from the name of its native habit in the arid regions of South Africa and Namibia known as Namaqualand. A single plant may take several hundred years to grow to its characteristic height of four to six feet.

The people native to Namaqualand call the plant "halfmens," a name associated with local legend. When viewed in silhouette against the sky, each plant bending slightly northward, the plants resemble small people climbing a hill. Legend has it that the plants were once migrating ancestors of the local people, driven south from their native lands, and frozen in place as they looked backwards towards their homeland.

In the U.S. we would probably call the hilly, mountainous Namaqualand to which this species is native a desert. The region receives less than ten inches of rainfall each year, but most of it comes in the cooler, winter months of May through August instead of the springtime as in the North American deserts. Because the water evaporates more slowly in winter rainfall areas, the result of this unusual rain pattern is high species diversity for an arid region - about 7,000 species of plants alone.

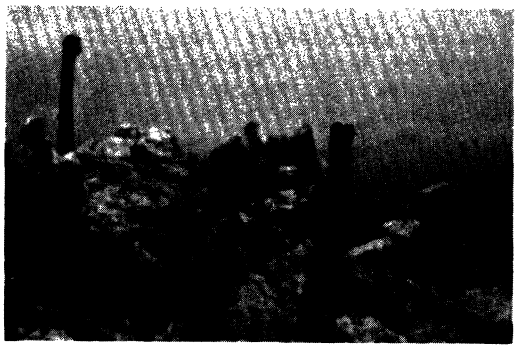
As with many wild plants and animals in trade, halfmens is threatened by habitat loss and collecting. The preferred white quartz rock beds in which the plant grows is mined for several ores, including mica. Several choice habitats, however, are being investigated as possible reserve sites to insure a habitat for this and other Namaqualand flora.

Perhaps the most tragic threat to the species is collection and trade: no plant has yet been known to survive transplantation. Specimens that live hundreds of years in the wild in harsh environments begin to die upon transplantation. Death occurs slowly from the base upwards. Ironically this gives the plant the appearance of being healthy for up to the ten years before the top finally dies. Reportedly one collector who embedded the base of his plant in concrete was still able to win prizes at plant shows; the judges failed to notice that the plant was dying. The deaths of these magnificent plants is unnecessary since plants readily grow from seed in the hands of a skilled propagator.

Conservationists in southern Africa are concerned about the status of the species. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and National protective laws have failed to stop illegal collection and trade. Despite patrols by authorities in the region and occasional arrests of violators, plants continue to be poached from their native habitats.

If the illegal collection can be halted, enough habitat remains to secure species survival in the forseeable future. Otherwise, halfmens may continue to follow the path already charted by the whales and large cats where trade reduced numbers in the wild to near extinction. Because of problems of conserving halfmens, one plant among the approximately 25,000 plants threatened with extinction worldwide, World Wildlife Fund is focusing international attention to the plight of our earth's endangered flora in the coming year. World Wildlife Fund-US has established a plant conservation program to focus our efforts in the Western Hemisphere. In South Africa, The South African Nature Foundation (WWF-South Africa) is drawing attention to the plight of African plants such as halfmens.

photos by L. McMahan



Endangered Species Handbook Available

"In pushing other species to extinction, humanity is busily sawing off the limb on which it is perched," says Paul Ehrlich, Professor of Population Studies at Stanford University. Even so, estimates show that if present trends continue, 20% of all species will become extinct by the year 2000. To explore the causes pushing species toward extinction and encourage educators, students and concerned citizens to take an active role in reversing this trend, the Animal Welfare Institute has published the *Endangered Species Handbook.* In this 215-page illustrated volume, author Greta Nilsson has profiled hundreds of species threatened with extinction, and then presented legislative, educational and individual actions which can be taken to stem the tide.

With contributions from James Buckley, U.S. State Department, Barry Groveman, Los Angeles City Attorney, and Michael Bean, Senior Counsel, Environmental Defense Fund, the text concentrates on two subject areas: "Vanishing Species" and "Legislative and Citizen Action". The first chapter, entitled "Dinosaurs and Dodos", delves into circumstances which have resulted in extinction. "Unlearned Lessons" and "Trade in Wild Animals" outline pressures which threaten wildlife, including land abuse and commerce in fur, reptile products, ivory, whale meat and oil, and wild pets. Other chapters examine the impact of trophy and unregulated meat hunting on diminishing species, and explore drastic declines in wild populations resulting from predator control programs. Effects of acid rain and pesticides on wildlife, the incidental kill of dolphins and sea turtles in fish and shrimp nets, and animal fatalities caused by motorboat and auto collisions, are also considered.

In part two of the source book, devoted to "Legislative an Citizen Action", the Convention on International Trade in Endangered Species (CITES), the U.S. Endangered Species Act, and state endangered species programs are summarized. "People Who Make A Difference" describes individuals who, by direct action, such as hauling food out to hungry Trumpeter Swans or teaching captive chimpanzees how to return to the wild, have fought to save species from extinction.

A series of educational projects designed by scientists and teachers, for the classroom or science fairs, helps readers become more familiar with animal behavior, the environment and ecology, and numerous other subjects relating to vanishing species. An extensive list of organizations, films, publications and books pertaining to endangered species is collated here.

The *Endangered Species Handbook* Appendix contains a list of mammals, birds, reptiles, and amphibians which have become extinct since 1600, a roster of endangered species—those protected by CITES, the U.S. Endangered Species Act, and state laws, as well as those listed by the Red Data Books of the International Union for the Conservation of Nature.

To obtain copies of the *Endangered Species Handbook,* send $5.00 per book to Animal Welfare Institute, P.O. Box 3650, Washington, D.C. 20007 or telephone (202) 337-2332.

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A forum for information exchange on endangered species from

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Parrots Forefeited to U.S. Fish and Wildlife Service Under Lacey Act Violation

More than 100 cockatoos and parrots valued at over a half-million dollars have been forfeited to the U.S. Fish and Wildlife Service after being illegally imported into the United States. The forfeiture is "one of the most valuable ever involving parrots," according to G. Ray Arnett, Interior Department Assistant Secretary for Fish and Wildlife and Parks.

The birds, 104 palm cockatoos and 28 grand eclectus parrots from Indonesia, were valued at $700,000 by the importer, Anna Marie's Inc., a wholesale wildlife business in Fort Lauderdale, Florida. A U.S. District Court order issued February 7 in Miami forfeited the birds for having been imported in violation of the Lacey Act, a Federal law that prohibits importation of wildlife illegally exported from another country. The export of both palm cockatoos and eclectus parrots for commercial purposes is prohibited by the countries where they live in the wild — Indonesia, Australia, and Papua New Guinea.

"This case is an example of the impact of the Lacey Act internationally in helping other countries enforce their wildlife conservation laws," Assistant Secretary Arnett said. "We hope this case will result in enhanced compliance with both U.S. and foreign laws, for the benefit of many species of wildlife."

Anna Marie's imported 100 of the palm cockatoos and the 28 parrots at Miami on September 28, 1983 — the largest importation of the palm cockatoos ever known to have been made into the United States. The firm had previously imported four other cockatoos at Los Angeles. After the birds concluded a 30-day quarantine period required by the U.S. Department of Agriculture, Fish and Wildlife Service special agents took custody of them. No decision has yet been made concerning final disposition of the birds, which are being cared for in various zoos.

TRAFFIC (U.S.A.) Reports on International Trade

TRAFFIC (U.S.A.) is one of five regional TRAFFIC offices in an international network to help monitor trade in wild animals and plants. TRAFFIC stands for "Trade Records Analysis of Flora and Fauna in Commerce." The US office is a program of the World Wildlife Fund-U.S. and cooperates with the International Union for the Conservation of Nature and Natural Resources (IUCN).

The TRAFFIC (U.S.A.) Newsletter is published four times each year and contains articles on the laws affecting international trade and reports on trade statistics on U.S. imports of live animals, animal products and plants. The most recent issue of the newsletter contains an overview of the Lacey Act and an analysis of apparent violations of the act.

A tax deductible donation of $10 (made payable to the World Wildlife Fund) entitles one to four issues of the newsletter. In addition to the newsletter, TRAFFIC has also prepared a series of detailed reports on specific aspects of trade in plants and animals.

To order any of the following reports or to make a contribution, please write:

TRAFFIC (U.S.A.)
1601 Connecticut Avenue, N.W.
Washington, D.C. 20009

TRAFFIC Reports:

- **CITES Appendix I Species in Captivity, 1977-1981,** by Lynn Gray-Schofield. A survey of the maintenance and breeding of captive mammals, birds, reptiles, and amphibians from three data sources. 1983 76 pp. includes six photographs. ($7.50)
- **1980 U.S. Imports of Mammal Trophies and Skins from Africa,** by Nancy Roeper. March 1983 41 pp, includes six photographs. ($6.00)
- **Trends in Wildlife Trade from India to the United States,** by Lynn Gray-Schofield, prepared for the Scientific Seminar on Conservation in Developing Countries, Bombay, India. 1983 8 pp. ($1.50)
- **Comments on the Endangered Species Act,** House testimony. March 22, 1982 14 pp. ($1.50)
- **Crocodile and Alligator Trade by the United States, 1981,** by Nancy Roeper and Ginette Hemley. September 1982 23 pp. ($3.50)
- **International Trade in Plants: Focus on U.S. Exports and Imports,** by Thomas Gibson, Niall McCarten, Faith Campbell, and Linda McMahan, December 1981 125 pp. ($9.50)
- **International Trade in Sea Turtle Products,** by David Mack, Nicole Duplaix, and Susan Wells, World Conference on Sea Turtle Conservation, November 27, 1979 revised edition 84 pp. ($6.50)
- **Shell Trade in Florida,** by Dr. R. Tucker Abbott, December 1980 85 pp. ($6.00)
- **The Trade, Biology, and Management of American Ginseng, Panax quinquefolius,** prepared by Linda McMahan. Staff report, U.S. International Convention Advisory Commission. 1981 (published by TRAFFIC(U.S.A.), 173 pp. ($12.50)
- **Trade in Latin American Crocodiles,** a special report by TRAFFIC(U.S.A.), June 1982 11 pp. ($2.50)
- **U.S. Exports and Imports of Cacti, 1977-1979: A Presentation and Analysis from U.S. Fish and Wildlife Service Records and Data,** by Linda McMahan. A republication of a 1981 report by the U.S. International Convention Advisory Commission, 1981 65 pp. ($5.25)

Interior Adds Wood Stork to the Endangered Species List

The Department of the Interior's U.S. Fish and Wildlife Service has added the U.S. breeding population of the wood stork, *Mycetia americana,* found in the states of Florida, Georgia, South Carolina, and Alabama, to the endangered species list, Service Director Robert A. Jantzen announced. The action follows an extensive review of available information concerning the species and a determination by the Service that breeding populations of the birds are continuing to decline.

Estimates indicate the breeding populations, located mainly in peninsula Florida, have declined by 75 percent since the 1930's. Much of the decline can be attributed to human manipulation of water tables through construction of drainage canals, levees, and lumbering of large cypress trees that offer nesting habitat. The nesting population of wood storks declined from more than 20,000 pairs during the 1930's to approximately 10,000 by 1960. Since 1978, fewer than 5,000 pairs have bred each year.

The wood stork, also commonly known as the wood ibis, is the only stork native to the United States and a cousin of the white stork of Europe and Asia known for its legendary, but mythical, role in human obstetrics. Adult wood storks stand over 3 feet tall with a five foot wingspan. The breeding and feeding habits of this white wading bird are closely linked to wetlands, primarily shallow ponds and cypress-mangrove swamps. The mainstay of the stork's diet is small fish, and an entire flock of the birds will often descend on a small pond or section of swamp to feed by groping the muddy bottom with their long, sensitive beaks.

Feeding habits depend upon a period of high water that causes an increase in the number of fish, followed by a drying period that concentrates the fish in a smaller area and makes them easier prey for the feeding flocks of birds. The drying period, when feeding is easier, triggers the storks' breeding season which lasts from November to April or May. During these months the birds congregate in colonial nesting or rookery sites mainly found in mangrove and cypress swamps. The rest of the year they can be found throughout most of the Southeast.

The location of rookery sites may shift according to the amount of rainfall, depth of water, and other such variables. This shifting, as well as the fact the birds spread far and wide when not breeding, prompted the Service to not recommend areas of critical habitat for the stork.

As a result of listing the wood stork as an endangered species, the Fish and Wildlife Service will work with State wildlife agencies and South Florida water management districts to curb the species' decline. The ruling does not affect nonbreeding populations of wood storks found west of Alabama at times.

The wood stork is the 247th species found in the U.S. to be added to the endangered species list.

TO OUR READERS:

We apologize for the delay in reaching you with the March issue. As you can see from this month's publication, we have been making some changes in the layout of the publication. We have also left the original month of publication of the *Technical Bulletin* the same on the reprinted copy to avoid confusion over referencing two different months for the bulletin.

Our subscriptions have been building slowly and we have just reached over 300 annual subscribers. We appreciate your support and hope that the *Technical Bulletin Reprint* will be of value to you in your work or studies. We are still looking for monthly contributions to the Reprint, so send us your news items!

- Reprint Editor

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