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ABSTRACT

This guide is intended for those who wish to study the literature dealing with various aspects of endangered plant species. This document includes the following sections, some of which are bibliographies: (1) "Introductions to the Topic"; (2) "Subject Headings" (for endangered species of plants used by the Library of Congress); (3) "General Texts"; (4) "Specialized Titles-By Geographic Area"; (5) "Related Titles"; (6) "Handbooks, Directories and Bibliographies"; (7) "State-of-the-Art Reviews and Conference Proceedings"; (8) "Government Publications"; (9) "Abstracting and Indexing Services"; (10) "Journals"; (11) "Representative Journal Articles"; (12) "Reports"; (13) "Selected Technical Reports"; (14) "Selected Materials"; and (15) "Additional Sources of Information". (CW)

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ENDANGERED SPECIES (PLANTS)

Compiled by Diana Niskern

TB 89-6

August 1989

SCOPE: Although plants are absolutely essential to human and animal life. endangered plants receive relatively little attention compared with that bestowed on endangered animals. The number of vascular plant species in the world is estimated at 250,000, with the majority growing in the tropics, where forests are rapidly being destroyed by human activities. Worldwide, at least 15 per cent of plant species may already be very rare or threatened with extinction, primarily through loss or degradation of habitat.

As many as 3,000 of the 25,000 species of plants native to the United States are considere! at risk of extinction. Nearly three-fourths of the species in greatest danger of imminent extinction occur in California, Florida, Hawaii, Texas, and Puerto Rico.

Modern focd crops have evolved through centuries of selection for desired characteristics. Only 20 species provide about 90 per cent of the world's food needs. These highly bred cultivated crops are vulnerable to changes in climate and to attack by new strains of diseases and posts. Thus it is essential to maintain wild plants and primitive crop varieties, either in protected areas or in gene banks, so that they may serve as source material for breeding improved or resistant varieties. These plants may also be useful as new crops in themselves or as sources of medicinal or industrial products.

This guide is intended for those who wish to study the literature dealing with various aspects of endangered plant species. to be a comprehensive bibliography, the guide is designed -- as the name of the series implies -- to put the reader "on target."

INTRODUCTIONS TO THE TOPIC

Durrell, Lee. State of the ark. Researched by IUCN. Garden City. N.Y., Doubleday, c1986. p. 90-97. QH75.D87 1986

BEST COPY AVAILABLE

Huxley, Anthony Julian. Saving the plants that save us. In his Green inheritance: the World Wildlife Fund book of plants. Garden City, N.Y., Anchor Press/Doubleday, 1985. p. 174-187.

See also "Disappearing beauties": p. 144-145. QK50.H83 1985*

Mohlenbrock, Robert H. Why should we save our plants? Nature Conservancy magazine, v. 37, Nov./Dec. 1987: 4-9.

QH76.N33a and Pamphlet box*

SUBJECT HEADINGS used by the Library of Congress, under which books on endangered species of plants can be located in most card, book, and online catalogs, include the following:

RARE PLANTS (Highly relevant)
PLANT CONSERVATION (Highly relevant)
PLANTS--EXTINCTION (Relevant)
ENDANGERED SPECIES (More general)
BIOLOGICAL DIVERSITA CONSERVATION (Related)
GENE BANKS, PLANT (Related)
GERMPLASM RESOURCES, PLANT (Related)

GENERAL TEXTS

Koopowitz, Harold, and Hilary Kaye. Plant extinction: a global crisis. Washington, Stone Wall Press; Harrisburg, Pa., Distributed by Stackpole Books, c1983. 239 p. QK86.AlK66 1983* Bibliographies: p. 227-232.

Our green and living world: the wisdom to save it. By Edward S. Ayensu and others. Washington, Smithsonian Institution; Cambridge, Eng., New York, Cambridge University Press, 1984.

255 p. QH75.093 1984
Bibliography: p. 248-249.

SPECIALIZED TITLES-BY GEOGRAPHIC AREA

Crow, Garrett E. New England's rare, threatened, and endangered plants. In collaboration with the New England Botanical Club Endangered Species Committee. Prepared for the United States Department of the Interior, Fish and Wildlife Service, Northeast Region in cooperation with the New Hampshire Agricultural Experiment Station, University of New Hampshire. Washington, The Service; For sale by the Supt. of Docs., U.S. Govt. Print. Off., 1982. 130 p. QK86.U6C76 1982 and Pamphlet box* Bibliography: p. 119-123.



^{*}Available in reference collection, Science Reading Room

Fisher, John. Wild flowers in danger. London, V. Gollancz, 1987.
194 p. QK36.G7F57 1987

Bibliography: p. 184-186.

Describes the rare plants of Great Britain and discusses measures to conserve them.

- Given, David R. Rare and endangered plants of New Zealand. Wellington, Reed, 1981. 154 p. QK86.N45G577 1981 Bibliography: p. 146-149.
- Inventory of rare and endangered vascular plants of California.

 Edited by James Payne Smith, Jr., and Ken Berg. 4th ed.
 Sacramento, California Native Plant Society, 1988. 168 p.
 (California Native Plant Society. Special publication, no. 1)
 Bibliography: p. 158-161. QK86.U6158 1988
- List of rare, threatened, and endemic plants in Europe. By the Threatened Plants Unit (IUCN Conservation Monitoring Centre). 1982 ed. Strasbourg, European Committee for the Conservation of Nature and Natural Resources; Croton, N.Y., Manhattan Pub. Co. [distributor], 1983. 357 p. (Nature and environment series, no. QK86.E85L57 1983
- Mohlenbrock, Robert H. Where have all the wildflowers gone? A region-by-region guide to threatened or endangered U.S. wildflowers. New York, Macmillan; London, Collier Macmillan, c1983. 239 p. QK86.U6M63 1983*
- Plant conservation in the Mediterranean area. Edited by C. Goméz-Campo. Dordrecht, Boston, W. Junk Publishers; Hingham, Mass., Distributors for the U.S. and Canada, Kluwer Academic Publishers, 1985. 269 p. (Geobotany, 7) QK86.M47P58 1985 Includes bibliographies.
- Rare and endangered vascular plants of Maryland. Prepared by C. Rose Broome and others. Newton Corner, Mass., U.S. Fish and Wildlife Service, 1979, i.e. 1980. 64 leaves. QK86.U6R37 Bibliography: leaves 53-64.
- St. John, Harold. Rare endemic plants of the Hawaiian islands. Edited by Carolyn A. Corn. Honolulu, State of Hawaii, Dept. of Land and Natural Resources, Division of Forestry and Wildlife, 1981
 UK86.U6S75 1981

 Includes bibliographical references.
- Woodbury, Roy O. Rare and endangered plants of Puerto Rico: a committee report. Washington, U.S. Dept. of Agriculture, Soil Conservation Service in cooperation with the Department of Natural Resources, Commonwealth of Puerto Rico, 1975. 85 p. QK86.P9W66



RELATED TITLES

- Conservation and commerce of cacti and other succulents. Edited by Douglas Fuller and Sarah Fitzgerald. Washington, Traffic (U.S...), World Wildlife Fund, c1987. 264 p. S8438.3.C66 1987 Includes bibliographies.
- Conservation biology: the science of scarcity and diversity. Edited by Michael E. Soulé. Sunderland, Mass., Sinauer Associates, c1986. 584 p. QH75.C664 1986* Bibliography: p. 521-570.
- Gene banks and the world's food. Donald L. Plucknett and others. Princeton, N.J., Princeton University Press, c1987. 247 p. Bibliography: p. 209-231. SB123.3.G46 1987*
- Genetics and conservation: a reference for managing wild animal and plant populations. Edited by Christine M. Schonewald-Cox and others. Menlo Park, Calif., Benjamin/Cummings, 1983. 722 p.
 Bibliography: p. 525-570. QH75.G45 1983
- Myers, Norman. A wealth of wild species: storehouse for human welfare. Boulder, Colo., Westview Press, 1983. 274 p.
 Bibliography: p. 229-254. QH75.M93 1983
- Seeds and sovereignty: the use and control of plant genetic resources. Edited by Jack R. Kloppenburg, Jr. Durham, N.C., Duke University Press, 1988. 368 p. S3123.3.844 1988
 "Published in cooperation with the American Association for the Advancement of Science."
 Includes bibliographies.

HANDBOOKS, DIRECTORIES and BIBLIOGRAPHIES

- Ayensu, Edward S., and Robert A. DeFilipps. Endangered and threatened plants of the United States. With the assistance of Sam E. Fowler and others. Washington, Smithsonian Institution, 1978. 403 p. QKS6.U6A93 1978*

 Ed. of 1975, by the Smithsonian Institution, published under title Report on endangered and threatened plant species of the United States.
 - Includes bibliographies.

Includes bibliographies.

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The IUCN plant red data book: comprising red data sheets on 250 selected plants threatened on a world scale. International Union for Conservation of Nature as Matural Resources; compiled by Gren Lucas and Hugh Synge for the Threatened Plants Committee of the Survival Service Commission of IUCN, with the help and advice of experts throughout the world. Morges, Switzerland, IUCN, 1978. 540 p. QK36.Ali9 1978*



- Maclean, Jayne T. Endangered species of plants, January 1984-January 1989. Beltsville, Md., U.S. Dept. of Agriculture, National Agricultural Library, 1989. 19 p. (Quick bibliography series, 89-47)

 Pamphlet box*
- Miasek, Meryl A., and Charles R. Long. Endangered plant species of the world and their endangered habitats: a compilation of the literature. Rev. and enlarged ed. Bronx, N.Y., New York Botanical Garden Library, 1985. 153 p. (Plant bibliography, no. 6) 25354-P73M53 1985
- 1988 Plant conservation resource book. Compiled by Linda R. McMahan with the assistance of Ruth Flanagan and Heike Striebeck. Jamaica Plain, Mass., Center for Plant Conservation, 1988. 96 p.

Pamphlet box*

Lists federal and state contacts, state laws and regulations, and citations to rare plant lists for each state.

- Plants in danger: what do we know? Stephen D. Davis and others. Gland, Switzerland, International Union for Conservation of Nature and Natural Resources, 1986. 461 p. QK86.AIP58 1986*

 For each country and island group, provides a summary of its floristics and vegetation, then selectively lists checklists and floras, field guides, information on threatened plants, laws protecting plants, voluntary organizations, botanic gardens, useful addresses, and additional references.
- Wood, Don A. Endangered species: concepts, principles, and programs: a bibliography. Tallahassee, Florida Game and Fresh Water Fish Commission, 1981. 228 p. 27994.95066 1981

STATE-OF-THE-ART REVIEWS and CONFERENCE PROCEEDINGS

- Audubon wildlife report. 1985— New York, National Audubon Society, annual. QL84.2.A9*

 See particularly species accounts and, in appendices, endangered species lists.
- The Biological aspects of rare plant conservation. Edited by Hugh Synge. Chichester, Eng., New York, Wiley, c1981. 558 p.

QK86.A1B56

Proceedings of an international conference held at King's College, Cambridge, July 14-19, 1980, and sponsored by the Linnean Society of London and the Botanical Society of the British Isles.

Includes bibliographies.

Botanic gardens and the world conservation strategy: proceedings of an international conference, 26-30 November 1985, held at Las Palmas de Gran Canaria. Edited by D. Bramwell and others. London, Orlando, Published for TUCN by Academic Press, 1987. 367 p. QK71.B653 1987



Conference on the Conservation and Management of Rare and Endangered Plants (1986, Sacramento, Calif.). Conservation and management of rare and endangered plants: proceedings of a California Conference on the Conservation and Management of Rare and Endangered Plants. Edited by Thomas S. Elias. Sacramento, Calif., California Native Plant Society, c1987. 630 p. QKSo.U6Co6 1986 Includes bibliographies.

Extlaction is forever: threatened and endangered species of plants in the Americas and their significance in ecosystems today and in the future: proceedings of a symposium held at the New York Botanical Garden, May 11-13, 1976, in commemoration of the Bicentennial of the United States of America. Edited by Ghillean T. Prance and Thomas S. Elias. Bronx, N.Y., New York Botanical Garden, c1977.

437 p.

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"Endangered plant species of the world and their endangered habitats: a selected bibliography, compiled by C. R. Long and M. A. Miasek": p. 389-395.

Plant genetic resources: a conservation imperative. Edited by Christopher W. Yeatman, David Kafton, Garrison Wilkes. Boulder, Colo., Published by Westview Press for the American Association for the Advancement of Science, Washington, 1984. 164 p. (AAAS selected symposia series, 87)

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Rare plant conservation: geographical data organization. Edited by Larry E. Morse and Mary Sue Henifin. Bronx, N.Y., New York Botanical Garden, 1981. 377 p. QK86-A1R37 1981

Based on the presentations and discussions at a conference sponsored by the U.S. National Park Service and held in Nov. 1977 at the New York Botanical Garden.

Includes bibliographies.

Regional Norkshop on Conservation of Tropical Plant Resources in South-East Asia (1982, New Delhi, India). Conservation of tropical plant resources: proceedings of the Regional Workshop on Conservation of Tropical Plant Resources in South-East Asia, New Delhi, March 8-12, 1982. Edited by S. K. Jain and K. L. Mehra. Howrah, India, Botanical Survey of India, Dept. of Environment, Govt. of India, c1983. 253 p. QK86.A735R44 1982

GOVERNMENT PUBLICATIONS

An Atlas and illustrated guide to the threatened and endangered vascular plants of the mountains of North Carolina and Virginia. J. R. Massey and others. Asheville, N.C., Southeastern Forest Experiment Station, 1983. 218 p. (General technical report SE, 20)

Includes bibliographies.



Convention on international trade in endangered species of wild fauna and flora. 1980- Washington, Federal Wildlife Permit Office, U.S. Fish and Wildlife Service, U.S. Dept. of the Interior. annual. QL81.5.U54a

Title varies slightly.

Endangered and threatened wildlife and plants: 50 CFR 17.11 and 17.12. 1985— Washington, Dept. of the Interior, U.S. Fish and Wildlife Service. annual. QL81.5.E53*

A compilation and special reprint of 50 CFR 17.11 and 17.12, as well as all published final rules that have subsequently appeared in the Federal register.

Grassroots conservation of biological diversity in the United States: background paper #i. Washington, Congress of the U.S., Office of Technology Assessment; For sale by the Supt. of Docs., U.S. Govi. Print. Off., 1986. 67 p. QH76.G73 1986

Little, Elbert Luther. Rarg and local conifers in the United States. Washington, U.S. Dept. of Agriculture, Forest Service; U.S. Govt. Print. Off., 1975. 25 p. (Conservation research report, no. 19) \$950.055 no. 19

ABSTRACTING AND INDEXING SERVICES that index relevant journal articles and other literature on endangered plants are listed below. Some suggested terms are given as aids in searching.

The following indexes are available in most public and college libraries.

Biological & Agricultural Index (1915-) 25073.A46*
See: Plants, Rare
Plants, Extinct
Plant Conservation

General Science Index (1973-) 27401.046*
See: Plants, Rare
Plants, Extinct
Endangered Species Legislation

Magazine Index Available in several formats in LC
Sec: Rare Plants
Endangered Species
Plant Conservation
Plants--Extinction

Note: Consult reference librarian for location of abstracting and indexing services in the Science Reading Room



Readers' Guide to Periodical Literature (1900-) AI3.R45
See: Rare Plants
Endangered Species Act

Plants, Extinct

The following abstracting and indexing services, which should be used for more exhaustive searches, may be available only in large or specialized libraries.

Biological Abstracts (1926-) QH301.B37*

See keywords of interest in the Subject, Biosystematic, and Generic Indexes

Biology Digest (1974-) QH301.B44*

See: Endangered Species

Ecology Abstracts (1975-) QH540.A66*

See: Endangered Species Rare Species

Environment Index (1971-1987) Z5322.E2E57* and Envir.ament Abstracts
Annual (1988-) GF1.E553*

See: Endangered Species-Plant Names of individual species

Index to Legal Periodicals (1926-) K9.N32

See: Endangered Species

Wildlife Review (1935-) SK351.W58*

See: Endangered and Threatened Species

JOURNALS that often contain relevant articles include the following:

Audubon QL671.A82

Biological Conservation S900.B5

BioScience QH1.A277

Conservation Biology QH75.A1C665

Defenders S960.D43

Erlangered Species Update uncataloged

Each issue includes a reprint of the latest Endangered Species Technical Bulletin.

Fremontia (California Native Plant Society) QK149.F73

Garden (Garden Society, New York) SB1.G18

International Wildlife QL81.5.156

Kew Magazine QKl.K46

National Wildlife \$964.U6N35

Natural Areas Journal QH76.J68

Nature Conservancy Magazine QH76.N33a

Oryx QL81.5.079



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- Dusek, Karen H. Update on our rarest pine. American forests, v. 91, Nov. 1985: 26-29, 61, 63. SDL-A55 Torrey pine.
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- Mehrhoff, Loyal A. Reproductive vigor and environmental factors in populations of an endangered North American orchid, <u>Isotria medeoloides</u> (Pursh) Rafinesque. Biological conservation, v. 47, no. 4, 1989: 281-296.
- Meijer, Willem. Saving the world's largest flower. National geographic, v. 168, July 1985: 136-140. G1.N27 Rafflesia arnoldii.
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- Oldfield, Sara. Conservation of rare & endangered bulbs. Kew magazine, v. 1, Apr. 1984; 23-29. QK1.K46
- Palmer, Mary E. A critical look at race plane monitoring in the United States. Biological conservation, v. 39, no. 2, 1987: 113-127.
- Read, Mike. Bromeliads threatened by trade. Kew magazine, v. 6, Feb. 1989: 22-29. QK1.K46
- Viswanathan, T. V. Endangered tree species in northern Ethiopia. Environmental conservation, v. 13, spring 1986: 71-72. T0169.E58



Waller, D. M., D. M. O'Malley, and S. C. Gawler. Genetic variation in the extreme endemic <u>Pedicularis furbishine</u> (Scrophulariaceae). Conservation biology, v. 1, Dec. 1987: 335-340. QH75.A1C665

PEPORTS and other types of literature are indexed in the following guides:

Government Reports Announcements & Index (1946-) 27916.678* See: Endangered Species

Monthly Catalog of United States Government Publications (1895-) Z1223.A18*

See: Endangered Species
Rare Plants

SELECTED TECHNICAL REPORTS, sold by the National Technical Information Service, Springfield, Virginia 22161, include the following:

Bratton, Susan P. Preliminary status of rare plants in Great Smoky Mountains National Park. Gatlinburg, Tenn.. Uplands Field Research Lab., Great Smoky Mountains National Park, Mar. 1979.

46 p. PB83-110726**

McCoy, Earl D. Rare, threatened, and endangered plant species [of] southwest Florida and potential OGS activity impacts. Performed for National Coastal Ecocystems Team, Biological Services Program, Fish and Wildlife Service, U.S. Department of the Interior. Washington, The Team, 1981. 83 p.

QK86.U6M38 1981 and PB82-182452**

Menges, Eric S., Susin C. Gawler, and Donald M. Waller. Population biology of the endemic plant, Furbish's lousewort (Pedicularis furbishiae)--1984 research. Indianapolis, Ind., Holcomb Research Institute, Apr. 1985. 126 p. PB87-172052**

Mohlenbrock, Robert H. Inventory of endangered plants, St. Louis District. Carbondale, Ill., Biotic Consultants, Inc., 1977. 56 p. AD-Al31 186**

SELECTED MATERIALS available in the Science Reading Room pamphlet boxes include:

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- Tanner, Ogden. The flowers that afflict us with 'a sort of madness.' Smithsonian, v. 15, Nov. 1985: 168-170, 172, 174-181, 243. About orchids.

ADDITIONAL SOURCES OF INFORMATION

Center for Plant Conservation 125 Arborway Jamaica Plain, Massachusetts 02130 Telephone: (617) 524-6988

Defenders of Wildlife 1244 19th Street, N.W. Washington, D.C. 20036 Telephone: (202) 659-9510

The Nature Conservancy 1815 North Lynn Street Arlington, Virginia 22209 Telephone: (703) 841-5300



World Wildlife Fund 1250 24th Street, N.W. Washington, O.C. 20037 Telephone: (202) 293-4800

