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Nancy R. Morin and Judith M. Unger, co-editors

FLORA OF NORTH AMERICA NEWS

Organizational Center News

The first section finished in this massive push (Dec. to April) to get Volume One to Oxford University Press (OUP) were the **gymnosperm treatments** of six families, totaling 260 pages double-spaced. This also included 124 distribution maps and 14 original illustration plates. Finished next were 17 **Introductory Chapters**, totaling 861 pages double-spaced, and the associated combined bibliography, 150 pages. Artwork for the Intros includes botanical illustrations and other items from previously published works, and original maps showing pertinent items of information. All shipped to OUP on **Friday, April 24, 1992**. (A day that will go down in history as the beginning of the end of Volume One, at least to those of us here at the Organizational Center.) **Treatments of 25 fern families** will be finished and sent to OUP by the end of May. Combined fern and gymnosperm bibliography will be at the end of the taxonomic treatments in Volume One.

Five members of the Editorial Committee who volunteered as the "Final Five" to read everything have been very busy during the last few months reviewing all treatments in volume one. Those five are **Ted Barkley, John Packer, Rich Spellenberg, John Strother, and David Whetstone**. Ted Barkley did final reviews on all the Introductory Chapters. **Bob Kiger** edited all bibliographic information and produced the bibliographies at the end of the Introductory Chapters and the fern and gymnosperm treatments. **John McNeill** reviewed the nomenclature.

In the Organizational Center, **Nancy Morin** brought together all fern reviews and final five comments and **Bruce Parfitt** did the same for the gymnosperm treatments. **Helen Jeude** studied every manuscript for consistency and technical aspects, working with authors for accuracy of information. **Judy Unger** checked all maps and distribution statements, coordinating operations with Washington University (St. Louis) Medical School graphics people.

New Staff

Denis Kearns began in February as a postdoctoral Fellow working on the Leguminosae in Volume Five. He is helping Rich Spellenberg coordinate the treatments and is responsible for the legume genera for which there are no authors. Denis received his Ph.D. from the University of Texas at Austin, studying the systematics of Cucurbitaceae. His revision of Schizocarpum, Polyclathra, Sechiopsis, and Tumamoca are nearing publication. In addition, his generic treatment for the Cucurbitaceae of Mexico, including color photos, is slated for publication in SIDA as an occasional volume. In keeping with that interest, Denis agreed to write the FNA Cucurbitaceae treatment, a task he assumed prior to getting his postdoc.

Carol Davit is once again working in the FNA office, after spending last year teaching English in France. Previously, she worked as an FNA office assistant and data entry person during two school vacations. While completing her Interdisciplinary degree in Biology, French, and English at

the University of Missouri-Columbia, she was a teaching assistant for Botany and Plant Taxonomy laboratory courses and was the herbarium assistant for one year. Currently, she is assisting the FNA staff with technical aspects of the manuscripts, and organizing some information for the International Organization of Plant Information (IOPI), under the direction of Nancy Morin, a member of the IOPI Council. Carol grew up at the Missouri Botanical Garden's Shaw Arboretum in Gray Summit, Missouri (about 45 miles west of the Garden).

The Flora of North America (FNA) project is a cooperative program to produce a Flora of the plants of North America north of Mexico. The FNA Newsletter is published quarterly by the Flora of North America Association to communicate news about the FNA project and other topics of interest to North American floristic researchers. Readers are invited to send appropriate news items to: FNA Newsletter, P.O. Box 299, St. Louis, MO 63166, U.S.A.

Staff Change

Deborah Kama has been named FNA database manager, replacing Bruce Ford. Debbie has been the systems analyst/programmer in the FNA office for about three years. She understands the needs of the project and the capabilities of the programs and computer at the Missouri Botanical Garden, and will be able to move ahead with plans very quickly.

Editorial Committee News

Nancy R. Morin was named AnneL. Lehmann Curator of North American Botany at the Missouri Botanical Garden in a ceremony held there on April 9. She studies Campanulaceae, is head of the Botanical Information Management Department, as well as convening editor of Flora of North America. The curatorship is named in honor of Anne Lionberger Lehmann, who died May 22, 1991. With her husband, Mrs. Lehmann was a major benefactor of the Garden's research program, carried on this support after his death, and was the first woman to receive the Garden's highest honor, the Henry Shaw medal.

FNA Position Available

A full-time **Botanical Illustrator** is needed for the Flora of North America Project. The successful candidate will have a degree (advanced degree preferred) in botany (or in art supplemented by coursework in botany) and/or be able to demonstrate substantial experience in botanical illustration of a scientific nature; must interact smoothly and effectively with other members of the FNA team including artists, authors, editors, and office staff; must be receptive to critical review; must organize and work efficiently to produce accurate illustrations for one volume per year. The illustrator will be responsible for preparing the majority of illustrations for future volumes of the project. Each genus and one third of all species will be illustrated. Published plate format will consist of the upper one third of an 8.5 x 11 inch page, with about three or four species illustrated per plate. Preference will be given to those willing to relocate to St. Louis. Send resume and samples of published work to Human Resource Management, Missouri Botanical Garden, P.O.Box 299, St. Louis, MO 63166. Equal Opportunity Employer. Women and minorities especially invited to apply. M/F/D/V

Manuscripts Received at the Organizational Center

between August 15, 1991 and May 1, 1992

Volume 2:

A. Linn Bogle: *Leitneria*
Allan Bornstein: *Comptonia*
Kevin Nixon: parts of *Castanea*, *Castanopsis*, *Fagus*,
Lithocarpus

Volume 10:

Judith Jernstedt: *Chlorogalum*
Walter Holmes: *Smilax*
Ruben Sauleda: *Pelexia*
Ralph Adams: *Harrisella*
Ruben Sauleda and Ralph Adams: *Beadlea*, *Campylocentrum*,
Cranichis, *Polyrrhiza*, *Polystachya*, *Ponthieva*,
Vanilla
Roger Hammer: *Oeceoclades*
Lawrence Magrath and John Freudenstein: *Corallorhiza*
Charles Sheviak: *Pseudorchis*, *Habenaria*
Eric Hagsater: *Epidendrum*
John Atwood: *Maxillaria*

Volume 5:

Velva Rudd: *Andira*, *Dalbergia*, *Piscidia*

Call for all Volume 2 (Magnoliidae and Hamamelidae) manuscripts, including distribution maps and suggestions for illustrations, to be sent to the Organizational Center immediately. About 25 authors still need to send us manuscripts. We are ready to begin intense work on that volume as soon as the processing of Volume 1 is evaluated and the handling of subsequent volumes is improved where needed.

Volume 10 (Monocots, except Poaceae) authors are urged to complete their manuscripts and send them to the respective taxon editor for preliminary editing. Volume 10 is the third volume to be published.

INFORMATION NEEDED

APIRS - For more than ten years, the Aquatic Plant Information Retrieval System (APIRS) has collected information relating to aquatic plants. Citations, subject categories, and keywords are entered into a database. Computer generated bibliographies, corresponding to any combination of species, names, categories, and keywords of the user's choice are produced and mailed on request. All APIRS services are free of charge.

In July 1991, the APIRS database contained citations for more than 31,000 aquatic plant research papers and books. Several hundred items per month are added to the database. However, APIRS depends on direct contributions from users in order to keep the collection comprehensive and up-to-date. Please put APIRS on your mailing lists for reprints, book announcements, newsletters, etc. Send your items to Center for Aquatic Plants, Institute of Food and Agricultural Sciences, University of Florida, 7922 NW 71st Street, Gainesville, Florida 32606. FAX: 904/392-1799. (taken from the Cyperaceae Newsletter 10 (2-1992), edited by P. Goetgebeur & D. Simpson)

ONGOING PROJECTS

The **Panarctic Biota Project** developed from agreements reached between U.S. and Russian scientists to survey biodiversity for the entire Arctic, which the word panarctic was chosen to stress. The Project consists of two parallel and complementary activities: 1) development of interactive electronic databases to assess past and present biotic and geographic diversity and 2) preparation of manuals, monographs, and special-purpose syntheses for the flora and fauna from data compiled in the databases.

The 1st Panarctic Biota Project workshop was convened in Moscow February 25 - March 1, 1991 to determine the feasibility of the joint work, and working groups were established for bryophytes and lichens, vascular plants, marine algae, birds, and mammals. The botanists of the Panarctic Flora project had two more days of informal meetings in St. Petersburg at the Komarov Botanical Institute (BIN) at which they agreed that:

- the foundation of the Panarctic Flora Project would be a computerized database from which the floras would ensue;
- the official language of the project would be English, but an effort will be made to publish in both English and Russian;
- there would be two managerial and editorial centers: the University of Alaska Museum (ALA) and the Komarov Botanical Institute (BIN);
- the database center would be at the University of Alaska Museum, and the Russian side would follow the U.S. lead with respect to computers, software, database structure and data standards.

We identified the people and institutions in Russia likely to participate in the project, the major herbaria where arctic material is housed, and the gaps in collections and in talent for systematic coverage for arctic plants. Database specialist for both sides met to assess resources and capabilities. The proposed work was seen by everyone to be desirable, feasible, and mutually beneficial.

A 2nd workshop was held February 3-8, 1992 in St. Petersburg, Russia, with its primary task to develop a detailed plan of action for the next few years. In view of the dramatic political, social, and economic changes that had occurred in Russia in the very short interval since the first workshop, it was important to assess realistically what each side should contribute. Also the zoological side formed a working group for invertebrates. The botanists discussed priorities, division of labor, and an approximate timetable. Some highlights are:

1) BIN will develop a file of all collecting localities in the Russian Arctic providing data according to the requirements of the database. BIN will also develop fields for political units and physiographic regions of the Russian Arctic. From these files, in year 2 of the project, a gazetteer will be produced as a hardcopy product.

2) Both sides will review the botanical literature and record, annually, all papers, books, and monographs relating to floristics, systematics, and geography of arctic plants. The citations will be recorded according to the requirements of the bibliographic database. Collaborators in other countries are being sought.

3) Work will begin to assess the feasibility of a unified classification of habitats and vegetation in an attempt to standardize database entries from specimen labels.

4) Work will begin on the annotated checklist for vascular plants, bryophytes, and lichens with the entry of all names from a list of standard references. The checklist in its preliminary and provisional form will include:

- a) accepted names and bibliographic documentation
- b) synonyms and bibliographic documentation

- c) geographic/floristic sectors of the Arctic
- d) chromosome number based on counts from the Arctic,
- e) comments on rare taxa, especially if a Redbook candidate
- f) comments on problem groups for which a consensus taxonomy is unlikely without further work.

5) A list of candidate taxa will be developed as the first step in the preparation of an Atlas of Beringian Plants.

6) Toward the preparation of a Redbook of Arctic Plants, both sides will work to develop unified criteria for determining rarity following international standards. A list of candidate plants will be drawn up for consideration. Collaborators in other countries are being sought.

7) Efforts will be made to enlist the support of colleagues from Canada and the Nordic countries. Coordination and cooperation with other similar projects has begun: Flora Nordica, Floristic Classification of Circumpolar Arctic Vegetation, International Tundra Experiment (ITEX), Flora of North America (vascular plants and bryophytes).

Those interested in participating in the Panarctic Flora project contact **David Murray** (vascular plants) or **Barbara Murray** (bryophytes and lichens) at FYHERB@ALASKA or FYHERB@ACAD3.ALASKA.EDU [both botanists are on the FNA Editorial Committee]. Their counterparts at BIN are Boris A. Yurtsev (vascular plants) and Nina S. Golubkova (bryophytes and lichens).

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Generic Flora of the Southeastern United States - The Arnold Arboretum of Harvard University has initiated the publication of a **Supplementary Series** to the **Journal of the Arnold Arboretum**, which will contain papers completed as part of the Generic Flora of the Southeastern United States. Volume 1 contains treatments 136 to 140 (of a total of 184), including the genera of Boraginaceae, by Ihsan A. Al-Shehbaz; the genera of Paniceae (Gramineae; Panicoideae), by William J. Crins; the genera of Pedaliaceae, by Stephen D. Manning; the Piperaceae, by Alan J. Bornstein; and the Zamiaceae, by Dennis Wm. Stevenson. A second set of five papers--the genera of Poöideae (Gramineae), Palmae, Hydrocharitaceae, Ranunculaceae, and Scrophulariaceae--is in preparation for Volume 2. Additional volumes in the **Supplementary Series** will follow. Carroll E. Wood Jr. of the Arnold Arboretum and Norton G. Miller of the New York State Museum are co-editors of the Generic Flora and of the **Journal of the Arnold Arboretum, Supplementary Series**.

Copies of Volume 1 (paperback) may be obtained by sending a check made payable to the Arnold Arboretum for US\$25. No advance orders taken. Send orders to Ms. Susan Kelley, The Arnold Arboretum of Harvard University, 22 Divinity Avenue, Cambridge, Massachusetts 02138, U.S.A.

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Vascular Plants of Arizona - Completed and approved manuscripts for Vascular Plants of Arizona (VPA) can now be published in the Journal of the Arizona-Nevada Academy of Science. The first 50 page contribution of eleven families recently has been printed and is available for \$6. Membership in the Academy is \$25 per year. Don Pinkava and Leslie Landrum, the editors of the Journal, expect that at least one issue of the Journal each year will be devoted to publishing VPA treatments. Other articles that appear in the Journal include a wide range of subjects such as

ecology, geology, paleontology, and zoology. Anyone interested in membership or back issues should write Dr. Stephen Williams, Department of Biology, Glendale Community College, Glendale, Arizona 85302. It is the intention of the VPA Editorial Committee that all treatments will be published together in a book. Also it is hoped that by publishing completed contributions as available, they can be tested and criticized, thus improving the final product. It also gives authors an opportunity to include additional material, such as illustrations and maps, not planned for the book.

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Catalog of the Colorado Flora, by R.C. Wittmann and W. A. Weber, 1991, accounts for all names used for Colorado vascular plants, lichens, and bryophytes, from 1874 to the present. Lists of synonyms are cross-referenced, and plants originally described from Colorado specimens dating back to the 1860s are listed with their bibliographic citations and specific data. References from which Colorado records were drawn are provided and cross-referenced to a comprehensive bibliography. 8 1/2 x 11", 272 pages, cloth, \$34.95. Order from University Press of Colorado, P.O. Box 849, Niwot, Colorado 80544.

NEWS FROM HERBARIA

Dr. Edward Schneider has been appointed Director of the **Santa Barbara Botanic Garden**, beginning 1 June 1992. Schneider is currently Dean of the College of Science at Southwest Texas State University in San Marcos, Texas. He is an authority on aquatic plants and is the Secretary of the International Water Lily Society, in addition to being the Vice President and President-elect of the Texas Academy of Science. He received his Ph.D. at University of California, Santa Barbara, and his research interests include plant anatomy, floral ecology, and plant evolution.

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Walla Walla College in College Place, Washington, recently decided to close its herbarium. Vascular plants have been transferred to the Marion Ownbey Herbarium (**WS**) at Washington State University in Pullman. Once the merger is complete this influx of over 30,000 specimens will increase the size of the **WS** collection to over 350,000 specimens. Bryophytes and fungi are scheduled to be transferred to the University of Washington in Seattle (**WTU**).

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Joseph Laferrière has been appointed acting director of the herbarium of Washington State University as of August 1991; Richard N. Mack will become acting director in August 1992. Joy Mastrogiuseppe remains as curator, Joanna Tomassacci and Qiu-Yun Xiang are curatorial assistants.

NEWS AND NOTES

New Look For Crossosoma - Beginning in 1992, the publications of Southern California Botanists have a new look. **Crossosoma** will be published twice a year with more articles in each issue. **Leaflets** will be published six times a year as **Crossosoma** was in the past. **Leaflets** will include notices of field trips, plant sales, and symposia.

Articles for **Crossosoma** can include any aspect of plants or plant

communities of southern California. Instructions for authors will be included in the next issue. **Crossosoma** will include a new feature-- **Letters to the Editor**. Please address all submissions to Curtis Clark, Editor, **Crossosoma**, Biological Sciences, California State Polytechnic University, Pomona, California 91768.

RECENT PUBLICATIONS

The Hunt Institute for Botanical Documentation announces the publication of *Botanico-Periodicum-Huntianum/ Supplementum (B-P-H/S)*, a companion volume that supplements and partially revises *Botanico-Periodicum-Huntianum (B-P-H)*, published by the Institute in 1968. The new volume continues the attempt to account for all periodicals published from 1665 to the present that might be consulted in a wide spectrum of plant-science and related activities, and to provide standardized abbreviations of their titles.

With more than 1050 pages and over 25,000 entries arranged alphabetically by full title, *B-P-H/S* will serve as the key volume of the pair, referring the user back to the original volume only when an entry there remains unchanged. It features coverage through 1990, improved cross-referencing, and an expanded thesaurus of title words and their abbreviations. The number of titles recorded in *B-P-H/S* is more than double the 1968 figure, and coverage now includes periodicals dealing with molecular biology, biotechnology, environmental studies, and conservation. The price of (*B-P-H/S*) is \$95.00, plus postage and handling. Orders and inquiries should be directed to Hunt Institute, Carnegie Mellon University, Pittsburgh, Pennsylvania 15213.

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Index to Plant Chromosome Numbers 1988-1989, edited by Peter Goldblatt and Dale Johnson, has been published as Monograph in Systematic Botany from the Missouri Botanical Garden, Number 40. 238 pages. Paper cover. Price: \$16.00, plus postage. To order, send check or money order in U.S. funds, payable through a U.S. bank to Missouri Botanical Garden, Department 11, P.O. Box 299, St. Louis, Missouri 63166-0299, U.S.A. Postage: U.S. shipments add \$2.00 for one book and \$0.75 for each additional book; non-U.S. shipments: add \$3.00 for one book and \$0.75 for each additional book. Orders must be prepaid. A \$1.00 fee will be added to orders requiring an invoice.

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Ferns and Fern Allies of Canada by William J. Cody and Donald M. Britton has been reprinted. Because of great demand the stock of the English version of this book, which was published in 1989, was quickly sold out. It has now been reprinted and can be obtained from: Canadian Government Publishing Centre, Ottawa, Canada K1S 0S9 at a cost of \$38.50 (Canada) or US \$46.20 (outside Canada) + \$2.75 shipping and handling. Quote CGPC Code 012701 when ordering. Checks or money orders should be made payable to Receiver General for Canada.

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1992 Plant Conservation Resource Book Now Available - The Center for Plant Conservation announces an updated publication featuring the only

comprehensive list of more than 500 professionals and offices involved in conserving U.S. native plants, and a summary of state plant conservation laws.

The 1992 PLANT CONSERVATION DIRECTORY, now available, contains the following information: Center for Plant Conservation contacts within each state; federal and state government contacts at the resource level who can provide information about rare and endangered plants, permit procedures, and government programs; botanists and other contacts in state Heritage Programs, Native Plant Societies, and others in national private organizations working on plant conservation; and rare plant laws and rare and endangered plant lists by state.

To order, send name, name of organization, address and phone number along with check or money order for \$15. per copy (includes postage) to the Center for Plant Conservation, Missouri Botanical Garden, PO Box 299, St. Louis, Missouri 63166. Additional contributions will be gratefully received. Also, indicate if you would like more information about CPC.

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Tidal Marsh Plants by Lionel N. Eleuterius is written specifically for use in the field, as a guide to the vascular plants found in the salt marshes along the Atlantic and Gulf coasts of the United States.

Tidal Marsh Plants is the product of years of extensive and detailed study of the coastal wetlands. Included are sections on plant taxonomy, phenology, identification of monocotyledons and dicotyledons, comparisons of grasses (Poaceae), sedges (Cyperaceae), and rushes (Juncaceae), and detailed descriptions and illustrations of over 200 plants. Latin and common names are given, a glossary, and 98 photographs of species. **Tidal Marsh Plants** is available by writing to Pelican Publishing Company, P. O. Box 189, Dept. TID3, Gretna, Louisiana 70054.

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Botanical Exploration of the Trans-Mississippi West by Susan Delano McKelvey has been reprinted by Northwest Reprints. First published in 1955 by the Arnold Arboretum of Harvard University, it has been out of print for several years.

The reprint has a forward and annotated bibliographic supplement by Joseph Ewan and an introduction by Stephen Dow Beckham. The reprint includes McKelvey's text in its entirety, the 9 original maps by Erwin Raisz, and a new map drawn specially for this edition showing the routes of all journeys discussed in the text.

October 1991, 7 x 10 inches, 1200 pages, hardcover. ISBN 0-87071-513-5. \$85 through 31 May, plus \$5 for postage and handling for the first copy, and \$2 for each additional copy (Canada \$10 postage and handling, \$3 for each additional copy). Copies will be shipped UPS and insured against damage in transit. Send orders to Oregon State University Press, 101 Waldo Hall, Corvallis, Oregon 97331-6407, Ph.: 503/737-3166. [This book is truly a classic, and great reading as well. Thanks to Northwest Reprints for reprinting it.--ed.]

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Ancient Forests of the Pacific Northwest by Elliott A. Norse, forward by

Peter H. Raven, presents scientific facts and conclusions about the relative values of old growth forests compared to tree plantations. For each, the book describes the plants and animals, ecology, role in maintaining water supply and quality, relationship to greenhouse warming, and economic value for recreation, fishing, and timber. Twelve contributed essays provide the scientific detail that underlies the analysis by Elliott Norse. Published by The Wilderness Society, 1990. 327 pp. Hardcover, \$34.95; softcover, \$19.95.

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America's Renewable Resources: Historical Trends and Current Challenges, edited by Kenneth D. Frederick and Roger A. Sedjo. Six noted analysts describe America's use and management of renewable resources from the colonial era to the present in order to assess their current status and future adequacy. Chapters on water, forests, rangeland, cropland and soils, and wildlife portray the effects of changes in demand, technologies, policies, and institutions fostered by an expanding, diversifying society. A concluding chapter examines the implications of the growing demand for outdoor recreation upon these resources.

The book will assist both policymakers and the public at large to look past short-term events such as droughts and crop failures to the conditions fundamental to maintaining sound economic and environmental management practices in the United States and around the world. 310 pages, index, bibliographies, 78 photos, 45 tables. Price: \$34.95 cloth/\$19.95 paperback. Book Orders/Professor exam copies: Resources for the Future, PO Box 4852, Hampden Station, Baltimore, MD 21211 (Phone: 410-526-6955). FOR REVIEW COPIES, contact--Shirley McDermott, 1616 P Street, NW, Washington, DC 20036 (Phone: 202-328-5086).

MEETINGS

The Third International Legume Conference will be held 12-17 July 1992 at the Royal Botanic Gardens, Kew. To receive the relevant circulars write Dr. L. Rico-Arce, ILC3 Administration, Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AE, United Kingdom.

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National Carrying Capacity Issues Conference will be held on June 19-21, 1992 in Washington, D.C. Carrying Capacity Network (CCN) invite groups and individuals from around the country to assess America's carrying capacity. Some topics are: What are the Limits: Protecting the Environment, Water, Resources, Energy, Agriculture; Carrying Capacity: Concept and Reality; Achieving Sustainability: Population, Economics, Resources, Energy, Agriculture. CCN invites proposals for papers and presentations. For further information, contact Carrying Capacity Network, 1325 G St., N.W., Suite 1003, Washington, D.C. 20005. Telephone: 202/879-3044; 800/466-4866; FAX: 202/879-3019.

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Rediscovering America: Natural Areas in the 1990s - The 19th Annual Natural Areas Conference and the 14th Annual Meeting of the Natural Areas Association sponsor "Rediscovering America: Natural Areas in the 1990s," to be held Oct. 27-30, 1992, at

Indiana University in Bloomington, Indiana. Some conference topics include: natural area conservation and protection, both national and international; rare species inventory, management, monitoring and recovery; natural area management (including exotics, visitor impacts, etc.); restoration of ecological communities.

All are encouraged to submit abstracts for papers and posters (indicate preference) on the above topics or others related to natural areas. Five copies of each abstract should be submitted by May 31, 1992 to Cloyce L. Hege, Division of Nature Preserves, 402 W. Washington Street Room W 267, Indianapolis, Indiana 46204. Please use the following format when submitting abstracts: TITLE IN CAPITAL LETTERS, Author(s), Affiliation. The abstract should be 200 words or less, using 1 1/2 inch margins and 10 point text, if possible. Registration information will be mailed in late July. To receive a brochure, contact Natural Areas Conference Registration, Division of Nature Preserves, 402 West Washington Street, Room W267, Indianapolis, Indiana 46204 (Phone: 317-232-4052).

POSITIONS AVAILABLE

The **Texas A & M University** System invites nominations and applications for the position of Professor and Head, Department of Wildlife and Fisheries Sciences. The successful candidate will provide administrative direction of the department's teaching, research, and extension programs in ecology and management of wildlife and fisheries resources, aquaculture, biodiversity and systematics, and human dimensions of wildlife and fisheries utilization. The Department Head holds an academic appointment as Professor in the College of Agriculture and Life Sciences and also is responsible for administrative leadership of two statewide programs.

Requirements include an earned Ph.D. in ecology, zoology, or other discipline central to wildlife and fisheries sciences; a record of outstanding scholarly achievement in a university environment; and demonstrated capability for leadership and management of an integrated multidisciplinary program. Prior administrative experience, and involvement in the Land Grant College system, are desirable.

Applications will be accepted through 1 June 1992, or until a suitable candidate is selected. Send application with current curriculum vitae, a statement of administrative philosophy, and names of at least three references to Dr. Brian R. Murphy, Chair, Search Advisory Committee, Department of Wildlife and Fisheries Sciences, Texas A & M University, College Station, Texas 77843-2258, Ph.: 409/845-5777.

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Environmental Professionals - The Environmental Careers Organization is seeking applicants for hundreds of challenging, professional environmental positions in the Northeast, Great Lakes, Florida, California, and Pacific Northwest. These positions are paid, short-term (3-18 months) environmental jobs with leading government agencies, corporations, consulting firms, and nonprofit groups.

The Environmental Careers Organization (formerly CEIP) is a private, national nonprofit organization that has helped students and entry-level professional get started since 1972. If you are a senior undergraduate, graduate student, recent graduate, or environmental job-seeker, they would

like to send you a free 1991-92 application form with a listing of representative jobs. Environmental scientists and engineers are particularly needed. Write to The Environmental Careers Organization, 68 Harrison Ave., Fifth Floor, Boston, MA 02111. (taken from Earth Work, 2:5, May 1992)

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Plant Toxicologist position is available with Toxicon Environmental Science in Florida. Person would conduct seed germination, plant growth, and crop rotation studies. Support aquatic field studies with algal and macrophyte assessments. Salary is \$18,000-\$28,000, depending on experience, plus benefits. Qualifications include BS/MS in botany or related discipline and/or direct experience in GLP laboratory/field testing required. To apply send resume to Toxicon Environmental Sciences, 535 E. Indiantown Rd., First Floor, Jupiter, Florida 33477. (taken from Earth Work, 2:5, May 1992) .

National Science Foundation is seeking applicants for its Division of Environmental Biology (formerly Biotic Systems and Resources) Program Director positions in fiscal year 1993. The incumbents to these positions will administer grant programs in support of research in the areas of ecology, systematic biology, population biology, and ecosystem studies. These positions will be filled on a 1- or 2-year visiting scientist basis and excepted from the competitive civil service. Applicants must have a Ph.D. or equivalent experience. In addition, six or more years of successful research experience beyond the Ph.D. is required. Some administrative experience is also desired. Applications are also being accepted for future vacancies for these positions. Applicants should submit a Standard Form 171, Applications for Federal Employment, or résumé to National Science Foundation, Division of Human Resource Management, Room 208, 1800 G Street N.W., Washington, DC 20550. Attention: Catherine Handle. Telephone 202/357-9681 for further information about the NSF application process or 202/357-7332 for technical details on these specific positions. Hearing impaired individuals should call 202/357-7492.

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WETLANDS SPECIALIST: The successful candidate will possess an MS degree in Botany, with plant identification skills coupled with five or more years experience in wetland delineation and wetland permitting. Familiarity with federal wetland guidelines, manuals, regulations is a must. Prior experience in wetland identification, delineation, functional assessment, impact assessment, mitigation plan development are required. Excellent oral and written communications skills are required.

WETLAND DELINEATOR: Selected candidate will possess an MS degree in Botany or related field with strong botanical background. Ability to identify plants to the species level is a must. Course work or training in botany, soils, and/or hydrology preferred. Previous experience in wetland delineation is a plus. Strong oral and written communication skills required.

Black & Veatch offers competitive salaries, comprehensive benefits, including profit sharing and a 401(k) plan. For immediate consideration call 1-800-852-2293, between 8 a.m. and 5 p.m. Central Time, Monday through Friday or send resume to R.D. Sharp, Dept. FLE 12/20, Black & Veatch, 8400 Ward Parkway, Kansas City, Missouri 64114.

