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

FLORA OF NORTH AMERICA NEWS

The Flora of North America **Management Committee** met in St. Louis on 22—23 May. Attending were Barbara Thiers, head of the Management Committee, Nancy Morin, Convening Editor, Leila Shultz, Ted Barkley, Bob Kiger, and Jim Zarucchi, Managing Editor. The Management Committee was preparing for a new grant proposal submission to the National Science Foundation for the support of FNA. We also discussed the search for an Executive Director, a position that is still in recruitment. [See position description on page 10.]

The committee was updated on the status of volumes in preparation for press. Volume 22 is nearing completion. Plans were made for expanding the Collaborative Publishing System to include all of the vascular plants. Currently, the web-based manuscript tracking tool is in use only for the bryophytes and grasses. The committee also viewed the beta version of a tool developed by the Center for Botanical Informatics (developer of the Collaborative Publishing System) for preparing electronic georeferenced distribution maps. This Map Exchange Tool will soon be available for use by authors as well as others in the FNA project.

Also at the Management Committee meeting, an agreement was signed between FNA and the Botanical Research Institute of Texas (BRIT) to formalize the establishment of BRIT as an FNA Satellite Center. In this capacity, BRIT will raise funds for the coordination of particular family treatments for FNA. —Barbara Thiers, Chair, FNA Management Committee

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The American Institute of Biological Sciences (AIBS) will hold its 1998 meeting in Baltimore, Maryland, 2—6 August. FNA will have a table in the exhibit hall---be sure to check out the latest T-shirts! They have a palm design commemorating Volume 22, the first installment of the monocots.

FNA and the American Association of Botanical Gardens and Arboreta are co-sponsoring with a contributed papers session on Floristics and Plant Conservation, Monday afternoon 1–5 p.m. The following talks will be given: Elizabeth Wells, "Documentation of Exotic Plant Species in Eighteenth Century Virginia"; Rebecca Brown, "Rivers as Vectors for Exotic Plant Dispersal"; Thomas Antonio and Susanna Masi, "Canopy Cover as a Predictor of Flowering in *Aster furcatus*, a Rare Midwestern Species"; Steven Clemants, "The New York Metropolitan Flora Project"; Ann Rhoads and Timothy Block, "A Natural Areas Inventory of Bucks County, Pennsylvania"; George Yatskievych, "Missouri's Changing Flora—the Last 35 Years"; Marlin Bowles and co-authors, "20-year Woody Vegetation Changes in Northeastern Illinois Upland Forests: Management and Restoration Implications";

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 63166-0299, U.S.A.

George Diggs and co-authors, "The Illustrated Flora of North Central Texas: Producing a Useful Flora Efficiently and Inexpensively"; Leslie Landrum and co-authors "Vascular Plants of Arizona Project"; Leila Shultz and co-authors, "Using Geographic Information Systems for Floristic Studies"; Ronald Hartman, "Floristic Inventories in the Rocky Mountains with Emphasis on Species of Conservation Concern"; S. H. Sohmer, "A Potential Example of Mass Extinction in a Tropical Flora:

The Philippines"; Douglas Ripley, "Native Plant Conservation on Military Lands: Past Accomplishments and Future Initiatives"; and Peggy Olwell, "The Native Plant Conservation Initiative: Partnering for Plant Conservation."

Following this session, FNA will host a reception from 5 to 6 p.m. for anyone interested in the project. Authors, reviewers, and editors are encouraged to attend. Check the program for the location, and look for a sign in front of the room.

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Ted Barkley, EC member and co-taxon editor for the Asteraceae, becomes Professor Emeritus at Kansas State University in September and will relocate to the Botanical Research Institute of Texas (BRIT) in Fort Worth. At BRIT Barkley will center his efforts on the Asteraceae for the FNA. His address from early September will be: Botanical Research Institute of Texas, 509 Pecan Street, Fort Worth, Texas 76102-4060. The new email handle will be: barkley@brit.org

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The Flora of North America project is looking for someone to fill the position of **Executive Director**. That person will provide overall leadership to the FNA program; coordinate all aspects of the program with the advice and consent of the project's Management and Editorial Committees; plan, develop, and manage the overall business plan for FNA, coordinate the annual budget, and administer all contracts and grants on behalf of the project; coordinate FNA activities with governmental agencies at the local, state, national, and international levels and with private entities such as foundation and conservation agencies; maintain significant involvement in fundraising for the project; develop proposals and contracts; pursue new strategies for earned income and grants; and develop and execute short- and long-range strategic plans for the program.

Qualifications: a Ph.D. in botany or related field; seven plus years experience in botanical systematics, floristics, ecology, and conservation-related activities; record of published accomplishment in floristic and/or monographic research; exceptional written and oral communication skills; and demonstrated leadership and administrative ability.

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FNA is also looking for a **Technical Editor**. That person will technically edit manuscripts to conform to the requirements of Flora of North America, while working closely with editors, authors, and reviewers, to provide highest quality style, form, and consistency as well as adherence to terminology rules, parallel construction within treatments, and correct use of literature citations ensuring highest quality manuscripts for print- and web-based publication.

Qualifications include a Master's degree in Botany/Biology or related field or equal combination of education and experience. Knowledge of scientific conventions, botanical terminology, and publications experience required. Demonstrated relevant experience in natural sciences technical editing preferred. Word processing and spreadsheet experience essential.

If interested in either position, mail a resume to: Missouri Botanical Garden, Attn: Human Resource Management, 2345 Tower Grove Avenue, St. Louis, MO 63110. Include the job name for which you are applying on the cover letter or resume.

Vascular Manuscripts Received 1 January through 15 June 1998:

Volume 23

R. Naczi - Carex sect. Deweyanae and sect. Granulares
C. Bronson and R. Naczi - Carex sect. Careyanae
Volume 26
F. Utech and L. Anderson - Harperocallis
Volume 10
Stan Welsh - Astragalus (352 species)
Volume 11
C. Barre Hellquist - Trapaceae

Bryophyte Manuscripts Received 15 March through 15 June 1998:

Sphagnum, by C. McQueen and R. Andrus Scapania, by A. Potemkin Oedipodiaceae, by H. Crum Tuerckheimia, by P. Eckel

COMPUTER NEWS

INDEX HERBARIORUM - Updated information for herbaria in 21 countries listed in Index Herbariorum, edition 8, and its supplements (published in Index Herbariorum, edition 8, and its supplements (published in Index Index in <a href="Ind

The updated information is available for herbaria in the following countries. The percentage given following each country refers to the percentage of herbaria that have responded to our request for updated information: Argentina (73%), Armenia (60%), Australia (92%), Austria (100%), Azores (100%), Barbados (100%), Belarus (67%), Belgium (83%), Belize (100%), Bolivia (100%), Botswana (100%), Brazil (84%), Brunei Darussalam (100%), Bulgaria (66%), Burkina Faso (100%), Canada (95%), Denmark (100%), Iran (67%), Mexico (77%), Puerto Rico (71%), U.S.A. (100%).

This file will be updated every few months, so please send updates and corrections to Patricia Holmgren (pholmgren@nybg.org).

NEWS FROM HERBARIA

Living collection available for study - The Marie Selby Botanical Gardens in Sarasota, Florida, houses an extensive live collection of plants that are available for study. Selby Gardens is a not-for-profit institution with the mission of promoting the conservation, research, education, and display of tropical vascular epiphytes with emphases on Orchidaceae and Bromeliaceae.

The live orchid collection includes at least one species within each of 36% of the genera of subfamily Epidendroideae with particular strengths in *Bulbophyllum* (78 spp.), *Pleurothallis* (60 spp.), and *Maxillaria* (80 spp.), and the standard horticulturally important orchid genera. In addition, there are collections of primarily terrestrial orchid genera including *Paphiopedilum*, *Phragmipedium*, and examples of several genera of subfamily Spiranthoideae. The bromeliad collection includes 1350 species. Other families of living plants, both epiphytic and terrestrial, include Asclepiadaceae (*Hoya* and *Dischidia*, 30 spp.), Begoniaceae (70 spp.), Cactaceae (65 spp.), Marantaceae (106 spp.), and 130 species of pteridophytes.

Researchers also have access to more than 78,000 specimens in the herbarium, including about 1500 type specimens and a spirit collection of mostly orchid flowers. Herbarium specimens are available on loan to institutions upon request to the Herbarium Manager, Bruce Holst. There is an extensive research library consisting of approximately 6000 volumes and 265 journals specializing in epiphytes and tropical plant literature. The orchid spirit collection is made available on a case by case basis with inquiries to John Atwood. For information about the living collections, contact: Mr. Harry Luther, Curator of Living Collections, Marie Selby Botanical Gardens, 811 South Palm Avenue, Sarasota, FL 34136

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The Linnean Society of London and the National Museums & Galleries on Merseyside (NMGM) have launched the **Smith herbarium project** in June 1998. We aim to make a computerized catalogue and image bank of specimens in the Smith herbaria at LINN and LIV, and to expertly conserve the material using the facilities of the NMGM's Conservation Centre (which has just won the European Museum of the Year award).

The LIV Smith herbarium has already been databased and has been shown to be quite rich in early North American collections. John Edmondson did a presentation on this at an FNA editorial committee meeting a few years ago. The main Smith herbarium at LINN is rich in type material from early collectors such as Bartram, Menzies, Muhlenberg, Pursh, and Swartz. It contains vouchers of some of the earliest material introduced into cultivation in the UK and later described from living material.

We would like to encourage the use of this collection by authors of FNA accounts, who often find that such specimens are not to be found at K and BM. As with the Linnean typification project, there will be a need for expert advice on the identification of historic specimens with modern species and such collaboration would be mutually beneficial. --John Edmondson, Smith herbarium project leader, email: Flora_Europaea@compuserve.com

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Robbin C. Moran, recently of the University of Arkansas-Little Rock, is now the pteridologist at The New York Botanical Garden. Robbin began his position at NY in January, 1998. His new address is The New York Botanical Garden, Bronx, NY 10458-5126, ph: 718/817-8663, fax: 718/220-6505, email: rmoran@nybg.org. Robbin was an author and provided important advice for the pteridophyte treatments for FNA while he was on the staff at the Missouri Botanical Garden.

NEWS FROM THE CANADIAN BOTANICAL CONSERVATION NETWORK

Canada's **Recovery of National Endangered Wildlife** (RENEW) program, which has focused on terrestrial vertebrates in the past decade, is now expanding into other taxonomic groups including plants. There are now three plant recovery teams that have or are using the RENEW guidelines to develop national plant recovery plans, according to Lisa Twolan in an article in the CBCN Newsletter (3[2]: 1, June 1998). They are now working on recovery efforts for the wood poppy (*Stylophorum diphyllum*), red mulberry (*Morus rubra*), Long's braya (*Braya longii*), and Fernald's braya (*Braya fernaldii*). Recovery efforts are also underway for tallgrass prairie and Atlantic coastal plain flora. To become a member of CBCN, write to Royal Botanical Gardens, Attention: CBCN, P.O. Box 399, Hamilton, Ontario, Canada L8N 3H8.

ASSOCATION OF SYSTEMATICS COLLECTIONS APPOINTS DIRECTOR

The Association of Systematics Collections has announced the appointment of Roberta "Bobbie" Faul-Zeitler as the new ASC executive director. Bobbie was editor of the American Association of Museum's *Museum News Magazine* for five years in the 1970s; she created AAM's monthly *Aviso* newsletter, and also worked for the Institute of Museum and Library Services (IMLS), directing their Congressional affairs, and has also been head of public affairs at two Washington-based museums. She has worked with the American Farmland Trust, The Nature Conservancy, Greenwire, Humane Society of the U.S., Washington Apple Commission, and The Computer Society.

ASC will hold its annual meeting in conjunction with AIBS in Baltimore. Papers will be given all day on Monday, with the business meeting being 4:00–5:30. Francesca Grifo, Director, Center for Biodiversity, American Museum of Natural History, will talk on the new Hall of Biodiversity on Tuesday, 1:30–3:00, followed by discussions of function opportunities by Dr. James T. Callahan of NSF and Dan Lukash of IMLS.

REPORT FROM WORKSHOP ON TAXONOMIC AUTHORITY FILES

A meeting to discuss taxonomic authority files was held in Washington, DC 22—23 June 1998 sponsored by the National Science Foundation, USGS National Resources Division, and other groups. It was organized by Stanley D. Blum, Natural History Museum of the University of Kansas, and John N. Mitchell, Cooperative Cataloging Team, Library of Congress. FNA people at the meeting included: Convening Editor Nancy Morin, Management Committee Chair Barbara Thiers, and Informatics Committee members Frank Bisby and Scott Peterson. Taxonomic names are among the most commonly used keys for retrieving, sorting, and summarizing data; therefore biological nomenclature and classification are critically important for management of biological information. Biological taxonomic authority files have, in general, been developed by individuals or institutions in relative isolation, albeit in many cases adhering to accepted standards.

Existing taxonomic authority files are distributed; there is little coordination across major taxonomic groupings; there are few mechanisms for rapid integration of new, newly compiled, or newly verified data. For plants, there has been a kind of hierarchy of coordination. The Taxonomic Databases Working Group has provided a forum for development of standards. Individual taxonomic specialists or groups of specialists have compiled some family databases (best example is the International Legume Data and Information Service) and there are floristic databases (e.g., Flora Europaea). The International Organization for Plant Information, in turn, has designed a strategy using the Internet for achieving world consensus on these more localized taxonomic views. Across taxonomic groups, the Integrated Taxonomic Information System (ITIS) has compiled taxonomic authority files primarily for within the U.S., and Species 2000, established by IUBS, hopes to create a common access system to data sets of major groups treated worldwide.

The Workshop concluded that both communities—taxonomic and library—could learn from the other and that there were opportunities for collaboration. The taxonomic community has no equivalent to the Library of Congress, which has served as the central authority, central facilitator, and central repository for cataloging information, nor is there a strong organization of taxonomists that could lead and coordinate an effort similar to that for the libraries. There are, however, a number of existing organizations, such as ITIS, that might take on a coordinating role.

A more detailed report on the workshop will be published soon (possibly only on the Internet), and participants in the workshop will continue to discuss options, in hopes of identifying a workable strategy to establish integrated biological taxonomic authority files.

PUBLICATIONS

A Guide to the Vascular Plants of Florida, by Richard Wunderlin - With more than 4000 kinds of native and nonnative ferns and fern allies, nonflowering seed plants, and flowering seed plants that reproduce outside of cultivation, Florida has the third largest plant diversity of any state in the nation. Some of its plant species are found nowhere else in the world; many of these are endangered. Because of the state's mild climate, many of the nonnative species—including major pest species—readily become naturalized, contributing nearly one-third of the species of known flora.

Wunderlin provides a means to identify these plants through a series of taxonomic keys to family, genus, and species. He gives the up-to-date accepted scientific name of each species, the major nomenclatural synonyms, many common names, the general habitat preference, and, for plants not native to Florida, their area of presumed origin.

Clothbound, \$35.00, ISBN 0-8130-1556-1, 704 pages, 6 x 9 inches, map, index. Orders can be placed with the University Press of Florida by calling 800/ 226-3822; by fax: 352/392-7302; or on the web at: http://nersp.nerdc.ufl.edu/~upf

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Shinners & Mahler's **Illustrated Flora of North Central Texas** by George M. Diggs Jr., Barney L. Lipscomb, and Robert J. O'Kennon - This publication is an illustrated floristic treatment of all species of native and naturalized vascular plants known to occur in North Central Texas. The flora of 2375 taxa represents about 46% of the species known for Texas. The region stretches from the Red River border with Oklahoma on the north, south nearly to Austin, and from Paris on the east, to Abilene and Wichita Falls in the west.

A number of features have been incorporated to make the book more useful to non-specialists. Line drawing illustrations are provided for all species, with color photographs for 170. To provide backgrounds and context concerning North Central Texas, an introduction is included covering general aspects of the vegetation, geology, soils, climate, and presettlement conditions.

This **SIDA**, **Botanical Miscellany** work, published by Botanical Research Institute of Texas (BRIT), is 7 ½ x 10 ½ inches, contains approx. 1500 pp., 2300 b/w illustrations, 170 color photographs, and is a collaborative project of BRIT and the Austin College Center for Environmental Studies. Coming in the fall of 1998, you can reserve your prepaid copy between 1 July and 31 August 1998 for \$79.95, with tax and postage/handling included; after 31 August 1998, the cost is \$91.55. Check or money order payable to BRIT Press, Visa or Mastercard accepted. Standing orders to the series receive their 15% discount and pay no postage. For more information, contact Barney Lipscomb via email: sida@brit.org or on the web at: http://www.brit.org/sida/sbm.

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The Atlas of the Vascular Flora of Louisiana Vol. 3--l998—Dicotyledons Fabaceae-Zygophyllaceae by R. Dale Thomas & Charles M. Allen has recently been published. The catalog of taxa for volume 3 includes: 199 families, 990 genera, and 3249 species and subspecific taxa; 826 or about 25% of the taxa are introduced.

This is one of a three-volume set in which the earlier volumes contain: Vol. I—Ferns & Fern Allies, Conifers, & Monocotyledons (1993); Vol. 2—Dicotyledons--Acanthaceae-Euphorbiaceae (1996). Published by Louisiana Department of Wildlife and Fisheries, Natural Heritage Program with cooperation of The Nature Conservancy Louisiana Office. Each of the volumes is available from the Natural Heritage Program, Louisiana Department of Wildlife and Fisheries, P. O. Box 98000, Baton Rouge, La. 70898-9000 for \$12 (\$10 plus \$2 postage). Phone 504/765-2821.

Both authors can be contacted at the Biology Department, Northeast Louisiana University, Monroe, LA. 7l209-0502. Additions and/or corrections are welcomed at our email addresses--(BiThomas@alpa.NLU.edu or BiAllen@alpha.NLU.edu). Phone: 3l8/342-l8l2.

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The Ferns and Allied Plants of New England, by Alice F. Tryon and Robbin C. Moran. 1997. xv + 325 pp., black and white photos, SEM micrographs, line drawings, silhouettes, and maps. ISBN 0-932691-23-4, \$49.95 (hardcover). Lincoln, MA: Massachusetts Audubon Society. A beautifully designed book, and packed with information. It will be the main reference work on the ferns, horsetails, and lycopods of New England for a long time to come.

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The Flora of Maine, a manual for identification of native and naturalized vascular plants of Maine, by Arthur Haines and Thomas F. Vining, covers 139 families, 699 genera, and 2096 species growing without cultivation in Maine. For many groups, there are keys to both vegetative and reproductive characters. The book also includes a glossary. Cost is \$45, plus \$6 shipping and handling for the first book, \$2 for each additional book. Send order with payment to V. F. Thomas Co., P.O. Box 281, Bar Harbor, ME 04609-0281.

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Poisonous Plants of Southern California has been published by the County of Los Angeles Department of Parks and Recreation. 36 pp., line drawing illustrations; \$4 each plus \$2 each for shipping and handling. To order write L.A. County Parks and Recreation, Poisonous Plants Book, 301 N. Baldwin Ave., Arcadia, CA 91007-2697.

AWARDS

Rupert Barneby Award - The New York Botanical Garden invites applications for the 1998 Rupert Barneby Award. The award of \$1000 is to assist researchers to visit the New York Botanical Garden to study the rich collection of Leguminosae. Anyone interested in applying for the award should submit their curriculum vitae and a detailed letter describing the project for which the award is sought. Travel to NYBG should be planned for sometime in 1999. The letter should be addressed to Dr. James L. Luteyn, Institute of Systematic Botany, The New York Botanical Garden, Bronx, NY 10458-5126 USA, and received no later than 1 December 1998. Announcement of the recipient will be made by 15th December. Those interested in making contributions to THE RUPERT BARNEBY FUND IN LEGUME SYSTEMATICS, which supports this award, may send their checks, payable to The New York Botanical Garden, to Dr. Luteyn.

MEETINGS

Missouri Botanical Garden 45th Annual Systematics Symposium 9—10 October 1998, entitled Our Unknown Planet: Recent Discoveries and the Future - Recent years have seen many new discoveries in the plant, animal, and other kingdoms. How can we estimate how many more

organisms are out there to be discovered? An international group of experts has been invited to St. Louis to give thoughts and predictions about this area of biology. The symposium will consist of an exciting set of presentations, ranging from flowering plants in the U.S., Australia, and the tropics, to freshwater fishes, mammals, and last, but not least in every sense, extremophiles and other bacteria.

Presentations, moderated by Peter Raven, Missouri Botanical Garden, include: M. Madigan, Southern Illinois University, Carbondale, "Extremophiles and Other Bacteria"; L. Margulis, University of MA, "Five Kingdoms and Their Appearance in the Fossil Record"; R. Brusca, Columbia University/Biosphere 2, "Diversification and Present Status of the Arthropods"; E. Nielsen, CSIRO, Canberra, "Insects"; J. Lundberg, University of AZ, M. Kottelat, Cornol, Switzerland, G. Smith, University of MI, and M. Stiassny, American Museum of Natural History, "Freshwater Fishes"; J. McKinnon, Canterbury, "New Mammals and Prospects for Future Discoveries"; B. Ertter, UC-Berkeley, "Floristic Surprises in North America"; B. Briggs, Royal Botanic Gardens, Sydney, "What is Significant - Wollemi Pine or Southern Rushes?" G.T. Prance, Royal Botanic Gardens, Kew, "Rare Tropical Plant Species are Disappearing Rapidly"; M. Donoghue, Harvard University, "A Visual Profusion of New Organisms".

Friday evening, 9 October, will be devoted to an informal mixer on the Garden grounds for all Symposium participants and speakers. All papers will be presented on Saturday, 10 October. Registration must be accompanied by a \$50.00 registration fee (\$40.00 for students), which covers the cost of refreshments at the Friday mixer, and lunch, dinner and cocktails on Saturday. Information on local hotels and motels will be sent to registrants. No refunds will be granted after 30 September. Space is limited to 400 registrants; please register early.

To register, send name, address, phone, fax, and email information along with \$50 registration fee (checks payable to Missouri Botanical Garden): Systematics Symposium, Missouri Botanical Garden, P.O. Box 299, St. Louis, MO 63166-0299. For further information, contact P. Mick Richardson, tel. 314-577-5176; fax 314-577-0820; email richards@mobot.org.

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The 1998 International **Conference of the Society for Ecological Restoration**, entitled <u>Making Connections</u>, will be held 28-30 September 1998 in Austin, Texas. Over 25 conference sessions are planned, and the annual banquet will be held on Tuesday evening, 29 September. Preconference and post-conference trips and workshops are arranged. Registration fee, before 7 August 1998, is \$150 for members and \$225 for non-members; after 7 August 1998 the fee is \$225 for members and \$300 for non-members. For more information or registration forms contact: Society for Ecological Restoration, 1207 Seminole Highway, Suite B, Madison, WI 53711. Phone: 608/262-9547; fax: 608/265-8557; email: ser@vms2.macc.wisc.edu

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The 1998 **Midwestern Rare Plant Conference and Task Force Meeting** will be held at the Chicago Botanic Garden, Glencoe, Illinois, 4—6 November 1998. Conference days are Wednesday and Thursday, 4—5 November, with the Task Force Meeting beginning at 3:30 pm Thursday, 5 November and continuing through Friday, 6 November.

The conference and task force meeting are intended to provide a forum for exchanging research results on rare Midwestern plants, for setting regional plant conservation priorities, and for developing and implementing collaborative plant conservation projects in the Midwest. The first day of the conference will feature a symposium by invited speakers titled "Pollination Biology: Implications for Rare Plant Conservation". The invited speakers include Jeff Karron, John Nason, Diana Wolf, Diane Elam, Ed Guerrant, and Steve Buchmann.

The second day will consist of contributed presentations on research and stewardship projects. To participate in the task force meeting on 6 November (participation in a task force working group is expected), contact Kayri Havens, Manager of Endangered Plants at khavens@mcs.net by 1 October. Cost is: member \$129, non-member \$162, student \$85 with copy of current student i.d. U.S. funds only. Members of sponsoring organizations may pay the member fee. To obtain a brochure or to register with credit card, call the Registrar at (847) 835-8261.

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The XIV Latin America Botanical Congress will be held in Mexico City 18-24 October 1998. Of particular interest to FNA Newsletter readers might be a Symposium comparing the impact by man on natural vegetation in the U.S. and Canada versus Latin America; many other symposia are also of interest. For information on the Congress, see the website at http://iztapalapa.uam.mx/clb/actividades.htm

POSITIONS AVAILABLE

The Department of Biology, Sonoma State University, is seeking a biologist who uses a range of analytical and molecular techniques to study plant evolution and systematics. We are searching for a dynamic teacher-scholar who will contribute innovative ideas and modern expertise to a collaborative learning environment. The successful candidate will teach plant taxonomy and other courses, and we expect the successful candidate to become actively involved in externally-funded research with undergraduate students and master's candidates. This is a tenure track position at the assistant/associate professor level. Complete applications shall include a cover letter; CV; statement of professional goals for teaching and research; transcripts (undergraduate and graduate); copies of major publications; copies of recent teaching evaluations; and three letters of reference. Also send the names, titles, and phone numbers of three people who have been asked to send letters of recommendation. Applications postmarked by 14 August 1998 will receive priority consideration. Applications will be accepted until a final postmark date of 25 September 1998. Position starting in January or August 1999 For additional information about this position and about our department, please see our website (http://www.sonoma.edu/biology). You may also contact: Dr. Philip T. Northen, Chair, Department of Biology, Sonoma State University, 1801 E. Cotati Avenue, Rohnert Park, CA 94928-3609 phone: 707-664-2189; fax: 707-664-301; email: phil.northen@ sonoma.edu.

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Post-doctoral Position, Plant Molecular Systematics, U.C. Davis A two year postdoctoral position in Plant Molecular Systematics/Evolution is available in the section of Evolution and Ecology at the University of California, Davis. We seek an individual interested in participating in a research project integrating molecular and fossil evidence on the age of angiosperms and other seed plants. Applicants should be familiar with modern sequence-based molecular systematic techniques and have broad interests in seed plant phylogenetics, molecular evolution, and/or paleobotany. The position is available starting 1 September 1998. Please send a statement of research interests, CV, and two letters of recommendation to: Dr. Michael Sanderson, Section of Evolution and Ecology, UC Davis, Davis, CA 95616, FAX 530-752-1449; email: mjsanderson@ucdavis.edu.

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The **New York Botanical Garden Herbarium** has an opening for the newly created position of **Imaging Coordinator**. This new position has been created as a result of the Garden's efforts to

increase accessibility of its collections. Of highest priority in the Master Plan for Specimen Cataloging of The New York Botanical Garden Herbarium is completing a Catalog of the Vascular Plant Type Specimens and making these data and images available on the Internet. As of this date, data from nearly 50,000 of the Garden's vascular plant types have been entered into the specimen-database, and most of these data are available on the Internet (http://www.nybg.org /bsci/hcol/). The next step is to image the specimens. Working with Garden staff members, the Biomedical Photographic Communications Department of the Rochester Institute of Technology has developed the protocol for imaging NYBG specimens, prepared a list of equipment needed, and made a recommendation for training of the Garden's Imaging Coordinator.

Job duties: Photograph specimens in the New York Botanical Garden Herbarium with a digital camera, beginning with the approximately 75,000 vascular plant type specimens, and make these images available on the Garden's web site (http://www.nybg. org/bsci/). Catalog data from type specimens. Reports to: Senior Administrative Curator (Dr. Barbara M. Thiers). Experience and qualifications required: basic computer software skills (word processing, spreadsheet, and database) required; graphics program skills, such as Adobe Photoshop, preferred; photographic skills preferred; herbarium work experience preferred; organized, neat, and detail-oriented; good verbal and written communication skills. Education: B.S. or M.S. in Botany or Biology, preferably with an emphasis on plant taxonomy, or equivalent experience. Salary: \$25,000 - 31,000, depending on experience/year, plus benefits. Contact for more information: Barbara M. Thiers, Senior Administrative Curator To apply: Send application, résumé, and names of three references to: Lourdes M. Reyes, Human Resources Department, New York Botanical Garden, Bronx, NY 10458-5126

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Mt. Cuba Center, a not-for-profit foundation engaged in the study of Piedmont flora, is seeking a **Director**. The Center is located near Wilmington, Delaware; it has 29 employees, 21 volunteers, and occupies 230 acres of natural lands and 60 acres of managed gardens, research facilities, offices, numerous residences, and related buildings. The Director will administer the policies of the Board of Managers for the development, maintenance, and use of the varied resources of the Mt. Cuba Center; have general and active management responsibility for the center's day-to-day operations, programs, and communications; and be responsible for communicating the Center's goals, accomplishments, and contributions to the horticultural and public garden world. The Director will not be required to fundraise.

Requirements: Proven administrative and managerial capability; understanding of and working experience with the functions of botanical gardens, including financial and personnel control, building and landscape maintenance, education and interpretation, design and planting, and applied horticultural research. Minimum of a bachelor's and master's degree in suitable fields required but appropriate advanced degrees are desirable. Position is available 1 January 1999. To apply, send letter with resume and salary history, four references with addresses and telephone numbers to Ms. Claire E. Sawyers, Director, the Scott Arboretum of Swarthmore College, 500 College Avenue, Swarthmore, PA 19081-1397