

Volume 4, Numbers 5-6
September-December 1990

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

FLORA OF NORTH AMERICA NEWS

Organizational Center News

The National Science Foundation has awarded \$600,000 in a three-year grant to the Flora of North America project. The grant supports work of editors at their home institutions, administrative activities, and postdoctoral positions. The project received a two-year grant from the Foundation in 1987.

Warren Lamboy has accepted the position of **FNA database manager**, a position which had been vacant for about a year. Warren, who comes to us from the University of Illinois with a Ph.D. under the direction of Almut Jones, will begin working in the FNA office in early January. He became interested in botany at the University of Wisconsin while taking courses taught by Hugh Iltis. For the previous five years, he worked in the University of Wisconsin computer center.

The newly-created position of **assistant scientific editor** is available at the FNA organizational center. Responsibilities include 1) editing to assure scientific consistency and comparability of treatments, 2) writing treatments for which no specialist is available, 3) acting as liaison between taxon editor and scientific illustrator, and 4) providing information to editors and other project participants as needed. Ph.D. in plant taxonomy and editorial experience required. Position available immediately. The successful candidate will be a regular employee of Missouri Botanical Garden. Interested candidates should send C.V. and names and addresses of three references to: Human Resources Department, Missouri Botanical Garden, P.O. Box 299, St. Louis, Missouri 63166-0299 immediately. The Garden is an affirmative action, equal-opportunity employer.

The **Cable News Network** telecast a short piece on the Flora of North America project during their Science and Technology program Saturday and Sunday, October 20-21, as well as during some regular news programs earlier that week. Nancy Morin briefly presented the project, mentioning the volumes and the database. The clip also showed what herbaria look like and how they work.

Judy Unger, Project Coordinator, gave a talk on the Flora of North America project at the **National Association of Biology Teachers Convention** held in early November in Houston. The theme of the convention was "Planet Earth in Crisis: How Do We Respond?" The FNA project is a response, by cataloguing all the naturally growing plants on the North American continent, north of Mexico.

Coffee mugs and T-shirts with the FNA logo and the words "Flora of North America", both in forest green on white, are available from Judy Unger at FNA-Central. The shirts are 100%

cotton and are available in men's small, medium, large, and extra-large. The cost for the mugs and the T-shirts is \$5 each, so if you're in St. Louis, stop by and pick them up. If you would like us to mail them, add \$2 each for postage and handling, all prepaid please. You may have seen the T-shirts and mugs at AIBS in August and the mugs at the Missouri Botanical Garden Systematics Symposium in October. They would make a great unique holiday gift.

The Flora of North America (FNA) project is a cooperative program to produce a Flora of the vascular plants of North America north of Mexico. The FNA Newsletter is published bimonthly 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.

New FNA pamphlets are available now from FNA-Central to anyone who would like to distribute them wherever there might be some interest in the FNA project.

Ivan Valdespino visited the FNA November 2-9 to put the finishing touches on his Selaginellaceae treatment.

Editorial Committee News

The FNA Editorial Committee meeting was held Sunday and Monday, 7-8 October 1990, at the Missouri Botanical Garden. Nineteen of the twenty-four members attended. Some of those attending came earlier to attend the MBG Systematics Symposium. Sunday's major topics were: funding; discussion of various ways individual committee members have been and will be publicizing FNA; overview of the Flora of China project by Ihsan Al-Shehbaz (Flora of China-English version will be a 25 volume work covering 28,000 - 30,000 species); status of all Introductory Chapters, reported by Luc Brouillet (some manuscripts are very close to final form, others need some additional work); a report on the fern and gymnosperm treatments by Alan Smith and John Thieret, respectively. Sunday evening the combined Flora of North America and Flora of China Editorial Committees enjoyed an evening meal together at a local Chinese restaurant and exchanged ideas relating to the similar floras.

Monday's major topics were: a presentation by Laurie Klingensmith on the processing and status of the FNA illustrations, and discussion on many aspects related to the illustrations; a report by Jeremy Bruhl on the character list he has been developing which works on DELTA and also interfaces with TROPICOS; a report by Helen Jeude on her technical editing of the manuscripts. Various editorial questions were discussed and reconciled.

Rahmona Thompson of the University of Oklahoma temporarily replaces James Estes on the Editorial Committee. Jim has been appointed assistant program director in systematic biology at the National Science Foundation, replacing James Rodman, who is on sabbatical for one year. FNA welcomes Rahmona to the Editorial Committee.

Manuscripts Received at the Organizational Center

July-November, 1990

Volume 1:

Lisa Andrews: *Pleopeltis*

Tim Atkinson and David Whetstone: *Osmunda*

Chris Haufler: *Bommeria*

Haufler, Moran, and Windham: *Cystopteris*

J.D. Montgomery and W.H. Wagner: *Dryopteris*

R.J. Taylor: *Picea*

Volume 2:

R.J. Jensen: *Quercus*

F.G. Meyer: Hamamelidaceae and Magnoliaceae

Donald Rhodes: Menispermaceae

Thomas Wilson: Canellaceae

Volume 10

Peter Ball: six sections of *Carex*

G.K. Brown: Bromeliaceae

Mark Chase: *Oncidium*, *Brassia*, *Ionopsis*,
Leochilus, *Macradenia*

Alan Herndon: *Hypoxis*

W.C. Holmes: *Aloe*

Lisa Standley: seven sections of *Carex*

CENTER FOR PLANT CONSERVATION MOVES TO MO

The **Center for Plant Conservation** (CPC), a national center for endangered plants, will move to the Missouri Botanical Garden early next year. The center currently operates in Jamaica Plain, Massachusetts, at the Arnold Arboretum with a staff of ten. Four of the staff members will move here and will be employed by the Garden. Since it was founded six years ago, the CPC has organized a network of more than 20 affiliated botanical gardens including the Missouri Botanical Garden, each responsible for maintaining living plants grown from material collected from the wild that collectively represent the National Collection of Endangered Species.

About 20,000 species of plants, about eight percent of the world's flora, grow throughout the United States. "Of the 20,000 species, between 3000 and 4000 are endangered, meaning they are in danger of dying out because of pollution or other reasons. The center has specimens of nearly 400 of those endangered plants growing in its plant banks," said Donald A. Falk, the center's executive director.

Botanists working under the center's direction identify and collect specimens of endangered plants near each garden. The specimens are brought to the appropriate botanical garden to be protected, studied, and propagated. The center has done pioneering work in plant conservation in other areas as well and has developed computer database systems for plants that are in use at 36 botanical gardens around the world. It is particularly exciting to have the organizational centers for both the CPC and FNA at the Garden.

REQUEST FOR INFORMATION

Raymond Cranfill is currently revising his 1980 book Ferns of Kentucky. He would appreciate hearing from anyone who has suggestions for the revised edition. In particular, he would like to receive information on new records of previously unreported species; rediscoveries of species thought to be extirpated; and/or new county records for species already known within the state. He anticipates completion of the revision by fall of 1991. Communication can be sent to Mr. Cranfill, c/o University Herbarium, University of California, Berkeley, California 94720

NEWS FROM HERBARIA

Dr. Gerard T. Donnelly has been selected by the Board of Trustees of **The Morton Arboretum** to be its new Director. He assumed his new duties on October 1, 1990, at the time of the retirement of Dr. Marion T. Hall. Since 1986, Donnelly has been curator of the W.J. Beal Botanical Garden and the woody plant collection on the 4500 acre Michigan State University campus and allied natural areas near East Lansing, Michigan.

* * *

The University of Florida Herbarium, Florida Museum of Natural History, is pleased to announce the **donation by Angus K. Gholson, Jr., of his herbarium of approximately 15,000 specimens** and the associated library, herbarium cases, and equipment. For the time being, the collection will remain at the Gholson residence in Chattahoochee, Florida, and will continue to be curated by Angus Gholson, a field associate of the museum. The collection contains an excellent representation of plants from the Florida panhandle, with detailed label data, and is the result of years of diligent preparation and care. Currently loans will not be made from this collection, except in special circumstances.

In November 1989, **The Marie Selby Botanical Gardens was asked by the U.S. Fish and Wildlife Service to care for impounded shipments of illegally collected orchids from China.** These plants have been transferred to the Gardens for purposes of research, display, and education. This presents a unique conservation opportunity that is an important part of the Gardens' mission. In an effort to maximize the use of these plants, we will distribute some of them to other institutions that can demonstrate use of them for purposes of research, education, and display. The Gardens will retain a sufficient number of plants to insure a sound scientific design for horticultural research and our own education and horticulture programs. Dr. John T. Atwood, Director of the Orchid Identification Center and an expert in *Paphiopedilum*, has submitted a list of the plants that are available for release to other gardens and horticultural groups. Approximately 1000 plants will be available, including *P. barbigerum*, *P. hirsutissimum*, *P. purpuratum*, *P. armeniacum*, and *P. micranthum*. Requests for transfer of plants should be made to the Director of Research, Nalini M. Nadkarni. Priority will be based on how the anticipated use fills the goals put forth by the U.S. Fish and Wildlife Service.--N. Nadkarni

AIBS Meeting News and Awards

The following announcements and awards were made at the annual Botanical Society of America (BSA) banquet, held at the 41st Annual AIBS meeting of August 5-9, 1990, Richmond, Virginia.

Botanical Society of America Merit Awards, for Outstanding Contributions to Botanical Science, were made to: **Kenton L. Chambers, Bassett Maguire, Carlos A. Miller, and Barry Tomlinson**. Dr. Chambers is author of the treatment of *Thuja* for FNA Volume 1.

The **George R. Cooley Award**, given by the American Society of Plant Taxonomists for the outstanding contributed paper presented at the annual meeting, was awarded to **Loren H. Rieseberg** (Rancho Santa Ana Botanic Garden) for his paper "Phylogenetic and systematic inferences from chloroplast DNA, nuclear ribosomal DNA, and isozyme variation in *Helianthus* section *Helianthus* (Asteraceae)," presented with S. Beckstrom-Sternberg, A. Liston, and D. Arias.

The **Edgar T. Wherry Award** of the Pteridological Section of the Botanical Society of America was awarded to **Judith E. Skog**, George Mason University, for her paper titled "The relationship of the fossil fern *Schizaeopsis* to *Schizaea* and *Actinostachys*."

The **Isabel C. Cookson Paleobotanical Award** was given to **Patrick Herendeen**, Indiana University, for his paper "Fossil history of the Leguminosae from the Eocene of southeastern North America."

The American Society of Plant Taxonomists made these awards during its annual banquet held during the AIBS meeting:

The **Asa Gray Award** was presented to **Warren Herbert Wagner**, University of Michigan, who is FNA pteridophyte editor and author of many treatments in FNA Volume 1, for his lifetime of work on Pteridophytes, teaching excellence, study of phylogeny, and conservation efforts. The Asa Gray Award is given by the American Society of Plant Taxonomists to honor an individual "for outstanding accomplishments pertinent to the goals of the Society."

A Field Work Initiation Grant was made to **David W. Haines**, The Ohio State University, for his proposal "Biosystematics and Evolution of the genus *Brachylaena* R. Brown (Compositae)." A Laboratory Research Grant was made to **Daniel R. DeJode**, Iowa State University, for his proposal "A Study of Homoploid Reticulate Evolution in *Gossypium aridum* (Rose & Standley) Skovsted (Malvaceae)."

CONSERVATION NEWS

The Center for Plant Conservation's Priority Region Program is a direct result of the Center's nationwide Endangerment Survey, which found that 253 plants face extinction in the next five years and another 427 in the next ten years. Nearly 73 percent of these plants occur in the priority regions of Hawaii, California, Texas, Florida, and Puerto Rico, [California, Texas, and Florida are the only ones in the official Flora of North America area]. Therefore the Center established task forces to address biological priorities within each region.

In February 1990 the Texas Natural Heritage Program hosted the second Texas Priority Region Task Force meeting. Fifteen attendees from 12 organizations determined the 10 highest priority plants for integrated conservation projects. Texas wildrice, (Zizania texana), the number one species of concern, doesn't flower or set seed in the wild. The Center is working with the U.S. Fish and Wildlife Service to fund research on seed storage techniques for it.

In March 1990, task force meetings in both south Florida and north Florida were organized. Fairchild Tropical Botanical Garden hosted a one-day meeting with 43 people from 38 organizations. Since only 2% of the Miami Rockridge Pineland habitat is left outside of Everglades National Park, south Florida's taxa facing extinction within the next 10 years were reviewed. Eight taxa were added to the Center's list.

Rancho Santa Ana Botanic Garden hosted the first California Task Force meeting in April 1990. Twenty-one participants from 16 organizations worked through their priority A and B lists. Because California has such a well-established database and an active native plant society, they were able to list quickly 43 taxa from which the top 15 plants were selected.

The Center is working with The Nature Conservancy, the California Native Plant Society, and the California Department of Fish and Game Natural Heritage Division to survey several California herbaria for specimens of plants thought to be extinct or for specimens of plants with extirpated sites. The specimens will be examined for seed or potential reintroduction into their original site. The project will serve as a model for a project CPC will conduct. --from an article by Peggy Orwell in Plant Conservation, Volume 5:2.

UPCOMING MEETINGS

An international symposium, "The Biology and Conservation of Epiphytes," will be held at Selby Botanical Gardens, Sarasota, Florida, U.S.A., May 5-8, 1991, to foster exchange of information across lines of individual disciplines, geographical areas, and plant taxa. Papers will address botanical, ecological, and horticultural topics pertaining to tropical and temperate vascular and non-vascular epiphytes, including their systematics, ecology, interaction with canopy fauna, physiology, conservation, micropropagation, and cultural management in botanical gardens. Selby Gardens specializes in epiphytic plants. The symposium is open to all biologists and horticulturalists interested in epiphytes. Contact Nalini M. Nadkarni, Director of Research, Marie Selby Botanical Gardens, 811 South Palm Avenue, Sarasota, Florida 34236, for additional information.

* * *

The **6th Annual Meeting of the Society for the Preservation of Natural History Collections** will be hosted by the Canadian Museum of Nature in Ottawa, May 6-11, 1991. The program will include: council and committee meetings, technical sessions and tours, a three-day annual conference (May 7-9) and a two-day training workshop on "Practical Approaches to Preventive

Conservation for Natural History Collections," given by the Canadian Conservation Institute (May 10-11). For information, contact G.R. Fitzgerald, Canadian Museum of Nature, Earth Sciences (Paleobiology), P. O. Box 3443, Station D, Ottawa, Ontario K1P 6P4.

RECENT PUBLICATIONS

The Official World Wildlife Fund Guide to Endangered Species of North America, 1990, edited by John R. Matthews and Charles J. Moseley (managing editor David W. Low), is packed with information on the 525 plant and animal taxa on the U.S. federal list present within the continental U.S., Alaska, Hawaii, and Puerto Rico before August 1989 (they include an appendix of 15 taxa added in August, September, and October). In the introduction the editors explain that "until now, it has been difficult for conservationists, wildlife professionals, the media, Congress, or the interested public to quickly locate information on the plant and wildlife species that are protected by the Endangered Species Act. Access to this information is vital, not only to raise the level of public debate, but to evaluate the shortcomings and successes of the nation's species protection and conservation program." These books (two volumes totaling 1272 pages and a small, spiral bound photo locator) provide much more than a handy, clear reference to help you answer questions about endangered species. Each account includes a common name, brief description, behavior (for animals), habitat, historic range, current distribution, plans for conservation and recovery, references, and who to contact. Each also includes a photograph (some color photographs), a map, and a short list of facts. The habitat, historic range, and current distribution for plants are excellent portraits of the areas in which our endangered plants are found and give brief, clear explanations of the ecological factors of greatest importance in those areas. There are a few typographical errors in the books but it seemed overwhelmingly to be well written and informative. Sadly, many of the accounts chart the apparently irreversible decline of populations. The photographs and descriptions are poignant reminders of what treasures we are losing. ISBN 0-9338833-17-2, Beacham Publishing, Inc., 1733 Connecticut Avenue, Washington, D.C., 20009 \$113 for the set.--N. Morin

Shattering: Food, Politics, and the Loss of Genetic Diversity, by Cary Fowler and Pat Mooney, forecasts a gloomy future for another source of diversity--traditional crops of the world, which are being crowded out by more uniform seed varieties. "Like Paul Revere, the authors will go down in history of warning the public of a dramatic change--that control of the global food economy is up for grabs," says Gary Paul Nabhan, author and founder of Native Seeds/SEARCH. The authors show that the world's richest genetic resources are found in the tropical latitudes of Third World regions. Wealthy industrialized nations--grain rich but gene poor--increasingly look to Africa, Asia, and Central America for the germplasm they need, thus bringing international politics into play. "Shattering," \$24.95 clothbound and \$12.95 paperback, is available at booksellers and can be ordered from the University of Arizona Press, 1240 North Park Avenue, Suite 102, Tucson, AZ 85719.

CO2 Diet for a Greenhouse Planet: A Citizen's Guide for

Slowing Global Warming, by John DeCicco, James Cook, Dorene Bolze, and Jan Beyea, is available from the National Audubon Society. This 1990 Audubon Policy Report quantifies common sources of carbon dioxide emissions, provides a "diet plan" for individuals who want to help cut down on CO₂ emissions, and gives a personal account by an Audubon staffer who followed the proposed plan. Chapters are supplemented with tables and worksheets for individual calculations and emission estimates. Copies of the 80-page CO₂ Diet Policy Report are available from Information Services, National Audubon Society, 950 Third Avenue, NY, NY 10022 for \$4.95. The book and a diet poster are available for \$6 (Poster regularly \$2). Note: All policy report and/or poster orders must be prepaid.

Legume (Fabaceae) Nomenclature in the USDA Germplasm System, by John H. Wiersema, Joseph H. Kirkbride, Jr., and Charles R. Gunn. The legume family, the largest flowering plant family after the Asteraceae and Orchidaceae, has about 650 genera and 18,000 species. The Germplasm Resources Information Network (GRIN) is the germplasm database of the U.S. Department of Agriculture (USDA), Agricultural Research Service's (ARS) National Plant Germplasm System (NPGS). The taxonomic portion of GRIN currently contains information on approximately 45,000 scientific names, both correct names and synonyms. Of approximately 3500 accepted legume names in GRIN, about 1450 are represented by approximately 77,400 germplasm accessions currently maintained by the NPGS. Information on nomenclature, common names, distributions, and literature references is presented in a concise and standardized form. The most recent advancements in classification have been incorporated, based on examination of almost all current legume taxonomic literature and consultation with legume specialists. All scientific names have been evaluated according to the international rules of nomenclature. Over 6600 legume scientific names are listed, including about 3200 synonyms. The majority of these are legumes of economic importance, particularly those of agricultural significance. USDA Technical Bulletin No. 1757, March 1990, 572 pp., may be purchased from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

Missouri

Catalogue of the Flora of Missouri by George Yatskievych and Joanna Turner. 1990. Monographs in Systematic Botany for the Missouri Botanical Garden, volume 37. xii + 345 pp. This annotated checklist of the 2622 species and named hybrids of native and introduced Missouri plants is the first complete listing of the state's vascular flora since Steyermark's (1963) Flora of Missouri, and it includes all the plants added to our knowledge of the flora since that time. It features an extensive bibliography of publications justifying additions and nomenclatural updates, and all entries are cross-referenced to the existing manual by page number. Common names are included where they exist, and introduced species and additions are indicated. A short introduction explains how to use the Catalogue. Available for \$9.00 + \$1.50 postage (\$2.50 outside the U.S.) from Department Eleven, Missouri Botanical Garden, P.O. Box 299, St. Louis, MO 63166-0299.

Louisiana

Asteraceae of Louisiana (Sida, Bot. Misc. 4:1-202), by Kancheepuram N. Gandhi and R. Dale Thomas, will be happily welcomed by "DYC" lovers and will become an important reference for students of the flora of the southern United States. The Asteraceae is the largest family in Louisiana "represented by over 340 species." Actually, counting the entries for varieties and hybrids, the number of taxa is 380, a total that corresponds closely with D. T. MacRoberts' treatment (Documented checklist and atlas of the vascular flora of Louisiana, Bull. Mus. Life Sci. no. 8, Louisiana State University in Shreveport, 1989) in which 389 taxa are listed. Asteraceae of Louisiana is prefaced by a discussion on the descriptive morphology of the family, accompanied by detailed illustrations of head types and variation in phyllaries, corollas, pappus, anther bases, style branches, and fruits. Head types include the standards --ligulate, discoid, and radiate--and disciform has been added for such genera as Soliva, Gnaphalium, and Pterocaulon.

A key to the genera is provided. Each genus is characterized morphologically, and information is given regarding its size and worldwide distribution. Pertinent literature citations and chromosome numbers are also provided. Keys to the species are given under the generic descriptions. The taxa are listed alphabetically. This book concludes with a list of references, glossary, and indexes to common and scientific names. Principal taxa appear in bold print on 7 x 10 inch pages with a paperback binding. The price per copy is \$25 with a 10% discount to those who have a standing order to Sida, Botanical Miscellany. -- reviewed by Loran C. Anderson, Dept. of Biological Science, Florida State University, Tallahassee, Florida 32306 U.S.A.

Flore Louisiana: An Ethnobotanical Study of French-Speaking Louisiana, by Walter C. Holmes, a guide to the Louisiana French names of vascular plants of Louisiana. The book is written for both the botanist and nonbotanist and treats about 200 vascular plants. Each species is briefly described and most are accompanied by an illustration. 145 pp. plus preface and introduction; hardbound, ISBN 0-940984-55-5, \$19.95 each, which includes postage. Available from: Center for Louisiana Studies, P.O. Box 40831, University of Southwestern Louisiana, Lafayette, Louisiana, 70504-0831 U.S.A.

Texas

Checklist of the Vascular Plants of Texas, compiled by S.L. Hatch, K.N. Gandhi, and Larry E. Brown, contains introductory information of the physical features, geology, and climate of the state and a summary of the ten vegetational areas. The families are arranged in the modified Engler and Prantl system used in Correll and Johnston's Manual of the Vascular plant of Texas. The list includes scientific name, vernacular name, origin (native or introduced), longevity and season of growth. Additions, corrections, and taxonomic changes to Correll and Johnston are indicated. Order from the Department of Agriculture Commission, Texas A & M, College Station, Texas, 77843. Price is \$6 per copy.

New York

Platanaceae through Myricaceae of New York State, by Richard S. Mitchell. 1988. 98 pp. Illustrated Bulletin 464. \$8.00
Juncaceae (Rush Family) of New York State, by Stephen E. Clemants. 1990. 67 pp. Illustrated Bulletin 475. \$6.00. Available from the NYS Museum - Pub. Sales, 3140 C.E.C., Albany, NY 12230. Please add \$1.00 for shipping and handling. Over the last 12 years the Biological Survey of the Museum has published nine titles in its series The Flora of New York. Nine other titles are currently in various stages of production. Information about all of the titles and copies of the published titles can be obtained from the above address.

Canada

Poisonous Plants of Canada, by G.A. Mulligan and D.B. Munro, provides an up-to-date, annotated bibliography of wild, cultivated, and indoor plants in Canada reported to be poisonous. This handbook, prepared for Agriculture Canada, contains: an alphabetical listing of plants by botanical family name, botanical and common names of plants in English and French, distribution, toxicity to humans and animals, literature references for documented cases of poisonings in Canada, and indexes to common and botanical names. CGPC: 019901, ISBN: 0-660-13467-5, 96pp, \$8.95 (Canada), US\$10.75 (Outside Canada). Order from Canadian Government Publishing Centre, Ottawa, Ontario, K1A 0S9.

INTERNSHIPS AVAILABLE

The Morris Arboretum, University of Pennsylvania has a one-year internship available for work on the Flora of Pennsylvania, beginning in June, 1991, with the option of 3 hours of credit. An undergraduate degree in biology with course work in botany is required. To apply, send letter of application, college transcript, and three letters of recommendation to: Botany Department Internship, Morris Arboretum, 9414 Meadowbrook Avenue, Philadelphia, PA 19118.

INTERNSHIPS AT PUBLIC GARDENS - The American Association of Botanical Gardens and Arboreta has made available [The AABGA Internship Directory - 1991](#), listing over 400 internships and summer jobs for students at 132 public gardens. The directory lists the garden's address and contact person, deadlines for applications, positions available, hours and salary plus comments about the positions and the educational benefits offered.

Internships and summer jobs at public gardens are an excellent way to prepare for a career in horticulture. Application deadlines are often early in the year, so students should make their summer

plans now. For a copy, send \$3.00/members, \$4.00/nonmembers to AABGA, 786 Church Road, Wayne, PA 19087, 215/688-1120.

POSITIONS AVAILABLE

OHIO BIOLOGICAL SURVEY - Applications are invited for the position of Executive Director, available July 1, 1991. OBS, a consortium of Ohio academic and curatorial organizations, is administered by the College of Biological Sciences, The Ohio State University. Responsibilities of the nontenured Director include coordinating production of technical publication and meetings, writing proposals, soliciting extramural funding, and presenting seminars throughout Ohio. Early in 1992, the Director will supervise moving OBS into a new facility housing the Biological Collections of the Ohio States University. The successful candidate must have a PH.D. in Biological Science, experience in technical editing and publishing, administrative skills, experience in fund raising and public relations, and familiarity with Ohio's natural history. Salary will be commensurate with qualifications. Send résumé and contact information for three references to: Charles C. King, Chair of the Search Committee, Ohio Biological Survey, 484 W. 12th Ave., Columbus, OH 43210, Phone: 614/292-9645, FAX: 614/292-1538. Closing date for applications is December 1, 1990. The Ohio State University is an Affirmative Action/Equal Opportunity Employer.

THE BARBARA J. HARVILL BOTANICAL RESEARCH FUND FOR FLORISTIC AND REVISIONAL RESEARCH IN VIRGINIA

Small research grants for field and or herbarium work relating to the flora of Virginia are available from the Barbara J. Harvill Botanical Research fund. This fund was endowed in 1989 by friends and family of the late Barbara J. Harvill, ardent supporter of Virginian floristics and co-worker with Alton J. Harvill, Jr., Longwood College, Farmville, Virginia, on numerous projects relating to the flora of Virginia.

This endowment is for the purpose of encouraging floristic and revisional work in the Commonwealth of Virginia. Applicants may request an application form or write a letter giving a short description of the proposed research project and itemizing costs for which funds are sought. Funds may be requested for such categories as mileage, lodging, equipment, and disposable supplies. Send proposals to Donna M.E. Ware, Sec., Virginia Botanical Associates, Herbarium, Biology Dept., The College of William and Mary, Williamsburg, VA 23185. Deadlines for receipt of applications for 1991 are February 1 and July 30. Funds will be awarded by March 1 and August 30.