Flora of North America Newsletter

Volume 14, Number 2 April–June 2000

BRYOPHYTE FLORA OF NORTH AMERICA RECEIVES NSF GRANT

The Bryophyte Flora of North America (FNA volumes 27, 28, and 29) has been funded by the Biotic Surveys and Inventories Program of the National Science Foundation for the next three years. The proposal was fully funded at \$175,183. With satisfactory and timely completion of treatments for the first volume, additional NSF funding for completion of the work is probable.

The FNA Editorial Center for Bryophytes, now at the Buffalo Museum of Science, submitted a proposal in October 1999. The funds provide three years' support for Patricia M. Eckel, Illustrator and Technical Editor. Ms. Eckel's work in the Center will build on her experience as a publishing botanist, well-known illustrator, and botanical editor. Some of Ms. Eckel's illustrations can be seen on the BFNA Web site at http://www.nybg.org/bsci/bfna/bryoerth.html (click on the thumbnails to see a resolved picture).

This is a major leap forward for the bryophyte portion of FNA, which treats about 10% of the species in about 10% of the volumes. The BFNA hopes to finish the first of the bryophyte volumes and have significant work accomplished on the remaining volumes by the middle of 2003. Treatments submitted so far this year include William R. Buck's *Henicodium* and Patricia Eckel's *Hyophila* and *Plaubelia*.

A meeting for discussion, progress update, and exchange of information is planned for all BFNA participants (both editors and authors) at the Botany 2000 meetings in Portland, Oregon, at 4:30 p.m. on 7 August, right after the bryophyte paper sessions. It will be chaired by Richard Zander, Lead Editor of the BFNA project. For more information, contact Dr. Zander at rzander@sciencebuff.org.

LATE-BREAKING NEWS New FNA Botanist Appointed

FNA welcomes Dr. Guy Neesom, the newest botanist to join the project. For more information, see the article on page 11.

PUBLICATIONS

Just Published: Volume III, Flora of the Russian Arctic

The third volume in the *Flora of the Russian Arctic* is now available. Volume 3 covers Salicaceae–Ranunculaceae; volumes 1 and 2 may also be purchased.

Packer, J. G., English edition ed. G. C. D. Griffiths, trans. Flora of the Russian Arctic.

1995. Vol. 1. Polypodium–Gramineae. University of Alberta Press. 330 pp. \$65 U.S.

1996. Vol. 2. Cyperaceae–Orchidaceae. University of Alberta Press. 233 pp. \$125 U.S.

2000. Vol. 3. Salicaceae–Ranunculaceae. J. C. Cramer, Berlin, Stuttgart. 472 pp. \$138 U.S.

Volumes 1 and 2 may be ordered through Rainforest Books, 8680 Cambie Street, Vancouver, B.C. V6P 6M9, Canada. Email: info@raincoast.com

Volume 3 may be ordered from Balogh Scientific Books, 1911 North Duncan Road, Champaign, IL 61821; balogh@balogh.com. Volumes I and II are also available through Balogh to U.S. customers.

References to the Vascular Plants of British Columbia

Douglas, G. W., D. Meidlinger, and J. Pojar. 1990a. *Illustrated Flora of British Columbia*. Vol. 3. Dicotyledons (Diapensiaceae through Onagraceae). Ministry of Environment, Lands and Parks, British Columbia Ministry of Forests: Victoria, British Columbia 436 pp.

Douglas, G. W., D. Meidinger, and J. Pojar. 1999b. *Illustrated Flora of British Columbia*. Vol. 4. Dicotyledons (Orobanchaceae through Rubiaceae). Ministry of Environment, Lands and Parks, British Columbia Ministry of Forests: Victoria, British Columbia. 427 pp.

Douglas, G. W., D. Meidinger, and J. Pojar. 2000. *Illustrated Flora of British Columbia*. Vol. 5. Dicotyledons (Salicaceae through Zygophyllaceae). Ministry of Environment, Lands and Parks, British Columbia Ministry of Forests: Victoria, British Columbia. 388 pp.

(continued on page 10)

TREATMENTS RECEIVED

Volume 26, Liliaceae and Dioscoreaceae

The following Liliaceae treatments have been newly received in 2000: from Raymond O. Flagg, *Habranthus* and *Zephyranthus*; from Fred Case, *Trillium*; from Fred Utech, *Hesperocallis* and *Hosta*; and from co-authors Norlyn Bodkin and Fred Utech, *Melanthium*. Lauren Raz's treatment of the family Dioscoreaceae has also been received. All treatments are currently available to reviewers on the FNA ftp site.

Volume 4, Chenopodiaceae Almost Complete

Most Chenopodiaceae authors have completed their treatments in good form. Provisional treatments that should go online in the near future include the family description and keys to genera by Clifford Crompton; *Atriplex* by Stanley Welsh; *Bassia, Corspermum, Cycloloma, Kochia,* and *Salsola* by Sergei Mosyakin; *Chenopodium* by Steve Clemants; *Salicornia* by Peter Ball; *Suaeda* by Wayne Ferren and Jochen Schenk; *Suckleya* by Zhu Ge-lin; and *Zuckia* by Stanley Welsh.

Peter Ball will complete the treatments of *Sarcocornia* and *Arthrocnemum*, and Matt Hils is working on the treatment of *Sarcobatus*. Noel Holmgren is working on treatments of *Grayia*, *Monolepis*, and *Krascheninnikovia*.

Jackie Campbell, Technical Editor at NAU, is preparing the treatments for distribution on the Web.

Bryophytes

Three bryophyte treatments have been received so far this year: *Henicodium*, by William R. Buck, and *Hyophila* and *Plaubella*, by Patricia M. Eckel. For more information on the BFNA project, see the article on page 7.

The Flora of North America (FNA) project is a cooperative program to produce a comprehensive account of the plants of North America north of Mexico. The FNA Newsletter, edited at the Hunt Institute and printed at the Missouri Botanical Garden, 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. For more information, please see the FNA Web site, http://www.fna.org.

Readers are invited to send appropriate news items to: Elizabeth A. Polen, Managing Editor Flora of North America Newsletter
Hunt Institute, Carnegie Mellon University
5000 Forbes Avenue, Pittsburgh, PA 15213-3890,USA. Items can also be sent by e-mail to: kiser@andrew.cmu.edu.

ELECTRONIC RESOURCES

Web Servers Updated

Hong Song, FNA Web master, spent a week at the Harvard University Herbaria in May to update the FNA and Flora of China Web servers and to work on improving search features. Hong (song@mobot.org) is the contact person for any questions or comments on the FNA Web site and for any matters relating to ftp.

File-Naming Protocol Adjustment

In the July–December 1999 Newsletter (Volume 13, Numbers 3–4, page 10), we described a new file-naming protocol to clearly indicate each stage of the manuscript as it passes through the editorial process. Some contributors and reviewers will be especially familiar with files names Taxon02rev, which is the version of a treatment that is available on the FNA ftp site. We are now adjusting the Taxon02 and Taxon03 levels to accommodate further levels of editing. The files should now be named as follows:

Taxon01 — author's original submission, accepted by taxon editor; ready for processing

Taxon02 — initial formatting and editing as necessary, initial querying complete; ready for review

Taxon02rev — same as 02, except internal queries not related to reviewers' concerns are omitted; this version put on ftp site to be fetched by reviewers; also posted provisionally on Web site for general access, to be replaced by finished treatment when relevant volume has been published

Taxon03 — taxonomic and regional reviews received; incorporation of comments and intensive tech editing begun

Taxon04 — tech editing complete; ready for final formatting

Taxon05 — final formatting complete; ready for publication

Taxon name may be a family name, genus name, or lower level group. For example: Cypripedium03.doc, or Burmanniaceae05.doc.

Flora of China's New Web Address

Please note that the Flora of China Web site has moved to a new server. Please update your bookmarks to http://flora.huh.harvard.edu/china/.

PLANTS Web Site Expanded

The PLANTS Web site (http://plants.usda.gov) received almost two million hits in April. The USDA, NRCS, National Plant Data Center has made some new additions to the site that may be of interest to FNA members. Several thousand new images have been added; a new weed/invasives module, containing official federal and state noxious weed lists, plus various invasive plant lists, has been integrated; the federal T&E status has been updated; eighty new Plant Guides focusing on native species have been added; and the species Plant Profile has been revised. Version 3.1, to be completed in October, will also include links to FNA, CalFlora, and FRIN; an updated vascular checklist from BONAP; a new liverwort checklist; and a more flexible search and download capability.

POSITIONS AVAILABLE

Graduate Student, Rocky Mountain Herbarium

The Rocky Mountain Herbarium, University of Wyoming, seeks students interested in pursuing M.S. degrees in broadscale floristics. The successful applicants are expected to be energetic, highly motivated individuals capable of working alone for extended periods of time. A member of the staff will spend three to four weeks each summer assisting with collecting. Beginning in the spring of 2001, the Medicine Bow National Forest will fund two summers of the field work, provide housing, and supply space for the processing of specimens. This study area is the Thunder Basin National Grassland and vicinity (1,500 sq. mi., including parts of Campbell, Crook, Niobrara, and Weston counties). Likewise, the Wyoming BLM will fund the completion of the inventory (6,500 numbered collections thus far) of the Bighorn Basin (6,000 sq. mi., including parts of Big Horn, Hot Springs, Park, and Washakie counties). Other projects in the planning stages are the Umatilla National Forest, Oregon, and the southern Shoshone National Forest, Wyoming. The recipients must compete successfully for a teaching assistantship in the Department of Botany. Please see The Rocky Mountain Herbarium, Associated Floristic Inventory, and the Flora of the Rocky Mountain Project (R. L. Hartman 1992, J. Idaho Acad. Sci. 28 (2): 22-43), an update to it, other descriptive information on the program, and the Atlas of the Vascular Plants of Wyoming at http:// www.rmh.uwyo.edu. For details, contact Ronald L. Hartman, Rocky Mountain Herbarium, University of Wyoming, Laramie, WY 82071-3165; (307) 766-2236; rhartman@uwyo.edu.

New York Botanical Garden Positions

The New York Botanical Garden is in need of an Imaging Coordinator and a Curatorial Assistant. Both positions report to Dr. Barbara M. Thiers, Associate Director of the Herbarium. If you have any questions about either position, you may contact Dr. Thiers at bthiers@nybg.org.

For more information about working at NYBG, please see the Herbarium Employment page at http://www.nybg.org/bsci/herb/herb2.html. The NYBG is an affirmative action/equal opportunity employer. Send resume, application (which can be downloaded from http://www.nybg.org/bsci/herb/apply.html), and the names of three references to Ms. Karen Yesneck, Head, Human Resources Department, New York Botanical Garden, Bronx, NY 10458.

Imaging Coordinator, NYBG

Job Duties: Capture, manage, and store digital images of herbarium specimens using the New York Botanical Garden protocol (see http://www.nybg.org/bsci/herbarium_ imaging/ imaging_manual_download.html) established for the Vascular Plant Type Specimens Imaging Project (more details at http://www.nybg.org/bsci/herbarium_imaging/). Update imaging manual as needed. Troubleshoot equipment problems, interact

with vendors and technical assistant staff as needed. Supervise imaging assistant or imaging interns. Give tours and demonstrations of imaging laboratory and procedures to visiting scientists and donors; make presentations about the project at conferences as requested.

Experience and Qualifications: Experience with basic photographic principles, digital imaging, Adobe Photoshop, and Microsoft Windows 98 required; familiarity with plant biology, including the scientific method of naming plants, and how herbarium specimens are used in scientific research is highly desirable. Previous herbarium experience helpful; good organizational skills and attention to detail a must.

Education: B.S. or M.S. in biology, with emphasis on taxonomy preferred.

Starting Date: July 2000, or as soon as possible.

Please send resumes to the address above, Re: Imaging Assistant Position.

Curatorial Assistant, NYBG

Job Duties: Process and file new accessions of fungi, algae, and bryophytes. Manage herbarium transactions in a computerized database. Repair and re-file return loans of fungi, algae, and bryophytes. Catalog data from herbarium specimens into a computerized database; image herbarium specimens.

Experience and Qualifications: Course work in botany or herbarium experience with nonvascular plant collections preferred. Experience with computer databasing and word processing. Organized, neat, detail-oriented. Good verbal and written communication skills.

Education: B.S. or M.S. in botany or mycology, with emphasis on taxonomy preferred.

Starting Date: Negotiable, but as soon after 18 August 2000 as possible.

Please send resumes to the above address, Re: Curatorial Assistant Position.

Missouri Botanical Garden Positions

Missouri Botanical Garden seeks candidates for the following four positions to work in the Applied Research Department. Positions are available immediately and are open until filled; there is no closing date. To apply, please e-mail your resume to jobs@mobot.org, or fax it to (314) 577-9597. Please refer to the Web site, www.mobot.org, for detailed information on MBG and for benefits-related information.

For more information on any of the positions, contact Mr. Ric Land, Missouri Botanical Garden, Human Resource Management, 2345 Tower Grove Avenue, St. Louis, MO 63110; rland@admin.mobot.org. The MBG is an equal opportunity employer.

(continued on page 10)

POSITIONS AVAILABLE (continued from page 9)

Post-Doctoral Researcher, Herbal Products, MBG

Performs basic research on the systematics of plant species used as ingredients in dietary supplements. Position involves herbarium, laboratory, and field work. Assists in producing a catalog of the plant species important in the herbal products trade, their taxonomy, and methods for their identification. This is a five-year, grant-funded position. Qualifications include a Ph.D. in systemic botany or related field and familiarity with modern methodology in systematics, herbarium routines, botanical literature, computers, and botanical databases. Excellent written communications skills are essential.

Post-Doctoral Researcher, Flora of Missouri Project, MBG

Responsible for writing text treatments of selected groups of Missouri dicots to be published in Steyermark's *Flora of Missouri*, including the necessary herbarium and library research. Limited field work is possible. Update Missouri distributional records of selected plant groups for incorporation into a specimen database for eventual production of range maps. This is a twelve-month position. Qualifications include a Ph.D. in botany or related field and familiarity with plant systematics, herbarium routines, botanical literature, and computers (word processing and simple databases). Must possess good written and oral communications skills. Knowledge of midwestern U.S. flora preferred. Resume, along with contact information for three references, should be sent to the address above, Attention: FM-PD.

Senior Herbarium Assistant, MBG

Expedites and facilitates identification, labeling, and processing of plant material entering the herbarium. Manages database and coordinates identification of voucher specimens for pharmaceutical research contract. Helps perform contract research on a variety of topics. May participate in field work and/or assist with other botanical research projects. Qualifications include a B.S. in botany or related field; M.S. and previous herbarium and field experience preferred. Knowledge of computer database and other software helpful. Familiarity with botanical literature, rules of botanical nomenclature, and general principles of plant taxonomy required.

There are two Senior Herbarium Assistant positions available. One of them focuses on a research project surveying the diversity of food plants and assisting with collection of food plants from a variety of markets, horticultural collections, and wild plants. If you wish to be considered for this assistant position, please indicate it in your cover letter.

PUBLICATIONS (continued from page 7)

Douglas, G. W., G. B. Straley, and D. Meidinger. 1994. *The Vascular Plants of British Columbia*. Pt. 4. Monocotyledons. Special Report Series 4. British Columbia Ministry of Forests: Victoria, British Columbia. 257 pp.

Douglas, G. W., G. B. Straley, and D. V. Meidinger. 1998a. *Rare Native Vascular Plants of British Columbia*. British Columbia. Conservation Data Centre, Ministry of Environment, Lands and Parks: Victoria, British Columbia. 423 pp.

Douglas, G. W., G. B. Straley, D. Meidinger, and J. Pojar. 1998b. *Illustrated Flora of British Columbia*. Vol. 1. Gymnosperms and Dicotyledons (Aceraceae through Asteraceae). Ministry of Environment, Lands and Parks, British Columbia Ministry of Forests: Victoria, British Columbia. 436 pp.

Douglas, G. W., G. B. Straley, D. Meidinger, and J. Pojar. 1998c. *Illustrated Flora of British Columbia*. Vol. 2. Dicotyledons (Balsaminaceae through Cucurbitaceae). Ministry of Environment, Lands and Parks, British Columbia Ministry of Forests: Victoria, British Columbia. 436 pages.

All of the above can be purchased from Crown Publications, 521 Fort Street, Victoria, BC, V8W 1E7 Canada; (250) 386-4636; fax (250) 386-0221. Cost is \$40 CAN for *Rare Plants*, \$30 for any of the others.

The Flora of Manitoulin Island (Third Edition) Now Available

Manitoulin Island and the many smaller islands in the surrounding waters of Georgian Bay, Lake Huron, and the North Channel in the Great Lakes region of Canada are areas of unique biological interest with a remarkably rich flora, including about a quarter of all the vascular plant genera in Canada. It has been a crossroads and meeting point in plant migrations since the last glacial period, and this makes its flora one of most unusual biogeographical interest.

The Flora of Manitoulin Island (J. K. Morton and Joan M. Venn, illustrated by Donald R. Gunn, University of Waterloo Biology Series No. 40, 2000) contains an account of the distribution, abundance, and phenology of each of the 1,350 kinds of vascular plants known from the region. Extensive taxonomic and nomenclatural notes are included for many of the species that present particular problems in the region, and in several of the larger and more difficult groups, keys are provided to facilitate identification. A full bibliography refers the reader to recent literature relating to each species.

Computer-drawn distribution maps are provided for each species, drawn from a database of over 66,000 records from the region. Introductory chapters deal with the geology, climate, post-glacial history, vegetation, conservation, and history of botanical exploration in the region. The *Flora* also includes 124 color illustrations. In this edition, the text and maps have been completely revised, while the colored plates are the same as in the second edition.

The Flora of Manitoulin Island can be ordered from Biology Series, Department of Biology, University of Waterloo, Waterloo, ON, N2L 3G1 Canada. Prices are as follows and include shipping and handling (and, in Canada, GST): spiral-bound (Canada) \$37.45; spiral-bound (outside Canada) \$37.50; hardbound (Canada) \$50.83; hardbound (outside Canada) \$50.00. Recognized book sellers and libraries may receive a 20% discount on one to four copies of one item, or a 40% discount on five or more copies of one item. Checks or money orders should be made payable to the University of Waterloo.

For postage and handling costs on multiple book purchases, please contact Joan Venn at the above address; (519) 888-4567 ext. 3751; fax (519) 746-0614; jvenn@sciborg.uwaterloo.ca.

The Ferns of Florida an Excellent Resource

Nelson, Gil. 2000. *The Ferns of Florida*. Pineapple Press, Inc.: Sarasota, Florida. 208 pp. Ordering information: P. O. Box 3899, Sarasota, FL 34230; www.pineapplepress.com. ISBN 1-56164-193-6 (hardbound), \$27.95 U.S.; ISBN 1-56164-197-9 (paperback), \$19.95.

This is an up-to-date reference and field guide to the ferns and fern allies of Florida, treating 164 taxa (123 native) and including an introduction, glossary, keys, descriptions of species, habitat statements, Florida and minimal extraterritorial distributions, remarks, and a small map for each species or infraspecific taxon. Nelson uses as the taxonomic underpinning of his book the 1993 treatment of the pteridophytes in Flora of North America, Volume 2. There are also 204 color photographs (arranged five or six per page) of living plants; these are generally of good quality and sufficient for purposes of making identifications. Black-and-white photographs and line drawings add to the interpretive value. Nelson includes four appendices, the most important being a checklist of Florida pteridophytes with their endangerment status on various lists. Another appendix has discussion of places — parks, preserves, gardens, nature centers — to see Florida ferns. A bibliography and index conclude the work.

An important feature of this book for FNA readers is the discussion and documentation of taxa not included in Volume 2 of that work, e.g., *Adiantum trapeziforme* and *Thelypteris opulenta*. Mostly these are relatively recent escapes from cultivation, but a few deal with taxa (both native and naturalized) overlooked in the preparation of FNA. Altogether, eleven species treated in Nelson's book are not reported for Florida in FNA Volume 2. One of these, *Ophioderma pendula*, was discovered only after the publication of Volume 2, but some of the others had been documented as occurring in the state well before 1993. Treatments of several species allude to relatively recent rediscoveries of taxa thought to be extirpated in Florida. Two species given a Florida range in FNA are excluded by Nelson.

The presentation of this work is among the best of modern state fern floras, and the documentation of the novelties and additions is an example for other authors to emulate. It is certainly one of the best places to go for reliable information on Florida ferns.

— Alan R. Smith, University Herbarium, University of California, Berkeley

NEWS FROM FLAGSTAFF

The FNA editorial and mapping center at The Arboretum at Flagstaff has recently added three new staff members to assist with editing Volume 4 and preparing maps for volumes 23, 26, and beyond. Technical Editor Jackie Campbell and Map Technicians Jane Gonzales and Jason McNeil joined the Arboretum this spring and were visited by Helen Jeude, Senior Technical Editor, in June for a week of training. Ms. Campbell is very familiar with mapping from her previous work as a professional engineer, and she is assisting Nancy Morin with managing the Arboretum office and the FNA manuscript flow. Ms. Gonzales, a part-time employee, and Mr. McNeil, a recent NAU graduate, both have also had considerable experience with mapping procedures and equipment.

The new staff are in high spirits, especially now that all of the necessary equipment is up and running. Mapping for volumes 23 and 26 is currently underway, and work on future volumes will begin soon.

FNA BOTANIST APPOINTED

FNA is pleased to announce that Dr. Guy Nesom has accepted a twelve-month appointment as a project botanist at the FNA editorial center at the North Carolina Botanical Garden. His responsibilities will include preparing treatments for upcoming volumes of the Flora in the cases where a genus has not been assigned an author, or where an author has been unable to complete a treatment. Dr. Nesom's particular focus will be on Volume 4, which includes the families Phytolaccaceae, Achatocarpaceae, Nyctaginaceae, Aizoaceae, Cactaceae, Chenopodiaceae, Amaranthaceae, Portulacaceae, Basellaceae, and Molluginaceae. His position, while initially one year in length, may be for up to six years, provided the FNA organization meets the terms of the Chanticleer grant by publishing two volumes per year.

OTHER FLORA PROJECTS

Atlas of the Florida Vascular Plants Update Available

The Institute for Systemic Botany has an updated version of the *Atlas of the Florida Vascular Plants* with many new search features and data not previously available. Synonymy, excluded taxa, native/introduced status, endemics, wetland classification, state and federal listing status, location of vouchers, full nomenclatural citations, and excluded species are new features, now fully implemented, that give users unprecedented access to the details of the Florida flora. The new site presents "onthe-fly" mapping of county distribution. Information is frequently updated. The location of voucher specimens should be particularly helpful to FNA authors and reviewers for tracing distribution records.

The updated *Atlas* can be accessed at http:// www.plantatlas.usf.edu and can also be linked through the old *Atlas* address, http://www.usf.edu/~isb, until the end of the year.

RICHARD SPELLENBERG RETIRES FROM NMSU

After thirty-two years as a faculty member in the Biology Department, Professor Richard Spellenberg has retired from New Mexico State University in Las Cruces. His responsibilities included curation of the NMSU Herbarium (NMC), which during his career maintained a tight regional focus (including northern Mexico), moved twice (each time to improved facilities), and grew from about 37,000 to 67,000 specimens. Important collections at NMC include those documenting Dr. Spellenberg's studies in the Nyctaginaceae and *Quercus* of northern Mexico, and those that document numerous environmental impact studies within New Mexico. He will continue to serve as the FNA taxon editor for Bombacaceae, Caesalpiniaceae, Convolvulaceae, Cuscutaceae, Elaeocarpaceae, Fabaceae, Malpighiaceae, Malvaceae, Mimosaceae, Nyctaginaceae, Solanaceae, Sterculiaceae, and Tiliaceae.

In the next year or two, Dr. Spellenberg, who maintains an office and e-mail account at NMSU, will continue curating NMC until the department finds a replacement for him. Presently, the department intends to seek a plant systematist, but there are a number of faculty openings that have a broad range of teaching needs. Priorities are being discussed. In the meantime, researchers are encouraged to request loans from NMC for any reason, especially that of preparing treatments for FNA.

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