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

FLORA OF NORTH AMERICA NEWS

EDITORIAL COMMITTEE NEWS

The spring Editorial Committee meeting was held at Utah State University in Logan, Utah on 4-5 May 1991. The hostess for this meeting was Dr. Leila Shultz, a member of the Biology faculty at Utah State University and of the FNA Editorial Committee.

Some topics discussed on Saturday were: 1) Presentation of information related to the addition of Bryophytes to the Flora of North America in a volume scheduled for the late 1990s. This included a summary of the initial bryologists' organizational meeting held in late March at the Missouri Botanical Garden. 2) A report by Mary Barkworth on the Manual of Grasses, especially as it relates to the FNA volume on Poaceae. Mary presented the status of manuscripts she has received, and explained how her group is doing maps and illustrations. Various proposals were presented pertaining to the publication and format of the Grass Manual and the FNA Poaceae volume. Options are being discussed by both Editorial Committees. 3) Updates on the status of all aspects of Volume 1. The status of maps for introductory chapters and fern and gymnosperm treatments was discussed, and illustrations were available for evaluation.

Sunday's discussion topics were: 1) details of scientific editing and some related problems by N. Morin, details of manuscript processing and technical editing by H. Jeude, and details of the review process by J. Unger; 2) reports on Volume 1 -- all manuscripts are in, most Introductory Chapters, all gymnosperms, and three quarters of the ferns have been edited and have been or soon will be sent out for review; 3) reports on Volume 2, which includes Magnoliidae and Hamamelidae -- many manuscripts are in; 4) reports for Volume 10, which includes the Monocots except Poaceae, many manuscripts are in. The meeting closed with suggestions of possible authors for various genera/families in subsequent volumes. If you are interested in doing a treatment of one or more taxa, please notify Dr. Nancy Morin at the Organizational Center.

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Luc Brouillet and Ted Barkley were at the Organizational Center from May 25 through June 1 for another week of intense editing and detail work on the Introductory Chapters. Alan Smith spent the week immediately following the Utah meeting here in St. Louis doing next-to-final review on most of the fern manuscripts that have been through outside review. Similarly, John Thieret was here at the Missouri Botanical Garden from May 29 through June 4 to do next-to-final review on the gymnosperm manuscripts returned from outside review.

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.

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KNOWLEDGE BROKERING: THE MECHANICS OF SYNTHESIS

is the topic of the Annual Systematics Symposium at the Missouri Botanical Garden to be held on 4-5 October 1991. Most of scientific information published focuses on the experimental or observational procedures; rather little effort has been placed on the digestion and synthesis of these papers. Recent years have seen the development of computer-based data-management systems, making it theoretically possible to assimilate diverse information into new and broader syntheses, and to produce recommendations on how the community of biologists may approach these matters. Speakers scheduled include: Dr. T. Barkley, Dr. A. Luchsinger, Dr. J. Nash, Dr. S. Morain, Dr. N. Morin, Dr. J. Gomon, Dr. J. Estes, and Dr. K. Bridges. Registration must be accompanied by a \$40 registration fee (\$35 for students) which includes refreshments at the Friday mixer and lunch, dinner, and cocktails on Saturday. Please make checks payable to Missouri Botanical Garden and mail to: Systematics Symposium, Missouri Botanical Garden, P.O. Box 299, St. Louis, MO 63166.

REQUEST FOR INFORMATION

NATURALIZED ALIEN IRIDACEAE - Questions relating to the treatment of naturalized alien plants are often quite different from those of native species, and the decision about their inclusion in a flora treatment is often arbitrary. Among the problems are several species of African and Eurasian Iridaceae, originally introduced as garden plants. Collections of non-native species are frequently scanty because collectors tend to ignore them, and even when collections exist, notes leave doubt as to whether the plants were truly naturalized or merely persisting after cultivation was abandoned. This note therefore represents a plea to North American systematists for information about possible introduced members of Iridaceae. The only African species known for certain to be naturalized is Crocasmia (Montbretia) crocosmiiflora, which occurs in the Pacific Northwest. Watsonia is reputed to be naturalized in coastal California, and there are a few herbarium collections of horticultural strains of Gladiolus, Freesia, and Crocus. Iris and Belamcanda are equally problematic. Belamcanda is widely naturalized but records are scanty. Do any Eurasian Iris species fall into this category? Have readers any personal observations to share on this matter? I would be glad to examine and identify specimens from herbarium or personal collections. --Peter Goldblatt, Missouri Botanical Garden

PUBLICATIONS

Vascular Plants of Minnesota: A Checklist and Atlas, by Gerald B. Ownbey and Thomas Morley, is a definitive reference to the 2010 vascular plant species (ferns, conifers, and flowering plants) currently found in Minnesota. The maps of the Atlas section show the geographic distribution of each plant, allowing the reader to visualize--for the first time--exactly where a species occurs in the state. Historical plant collections as well as records from detailed surveys conducted in the 1970s and 1980s by the Minnesota DNR, The Nature Conservancy, and individual researchers, are included in this volume.

The flora of Minnesota is of special interest because it represents the western limits of the vast eastern deciduous forest flora, the northern and

eastern boundaries of the flora of the prairies and great plains, and the southwestern limits of the northern coniferous forest. These three contrasting continental floras meet more sharply in Minnesota than in other regions.

The Checklist section provides both an authoritative summary of the nomenclature of Minnesota plants and extensive references to taxonomic literature. As such, it is the most complete list ever prepared for the entire state. Arranged alphabetically, group within group, the Checklist provides both Latin and common names for all species, subspecies, and varieties. All the plants included in the Checklist are cross-referenced in the Atlas section.

This book can be purchased for \$39.95 plus tax and shipping from: Univ. of Minnesota Press, 2037 University Ave. SE, Minneapolis, MN 55104.

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New technical reports available from Rancho Santa Ana Botanic Garden include: Drought Tolerant Planting Bibliography, by B. Beck, 68 pp., June 1990 \$14; Species Management Guide for Dudleya densiflora (Rose) Moran by O. Mistretta, 18 pp., Dec. 1989, \$5; and other species management guides for Castilleja gleasonii, Claytonia lanceolata var. peirsonii, and Mahonia nevinii.

Drought Tolerant Planting Bibliography is a comprehensive bibliography that will help the home gardener, horticulturist, landscape architect, or librarian locate useful information on drought tolerant plants. Hundreds of recent articles, books, and videos are available on the subject, including topics such as ornamental plants, grasses, trees, edible landscaping, native vegetation and wildflowers. For ease of use, citations are formatted so that periodical articles are listed with the complete title of each journal rather than abbreviations.

All technical reports are with paper covers and spiral binders and are available from: Publications, Rancho Santa Ana Botanic Garden, 1500 North College Avenue, Claremont, CA 91711. Shipping and handling: US\$1.50 for the first volume, \$0.50 for each additional volume, with payment accompanying order!

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DISCOVER NATURAL MISSOURI A Guide to Exploring the Nature Conservancy Preserves, by the Missouri Chapter of TNC, is a newly published 212 page book, covers TNC's 34 preserves protecting over 36,000 acres of critical natural habitat in Missouri. In the foreword by Dr. Peter Raven, he says, "Missouri stands alone among mid-western states for the variety and diversity of its natural communities. No less than six major natural divisions exist in the state, each with a distinct assemblage of plant and animal species." The book may be purchased for \$12.95 plus \$1.50 postage and handling from: The Nature Conservancy, Missouri Field Office, 2800 S. Brentwood Blvd., St. Louis, MO 63144.

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Haustorium Parasitic Plants Newsletter, Official Organ of the International Parasitic Seed Plant Research Group, Number 25, February 1991, was

received at the FNA Organizational Center recently. Haustorium is edited by L.J. Musselman, Parasitic Plant Laboratory, Department of Biological Sciences, Old Dominion University, Norfolk, Virginia 23529-0266, USA, fax 804/683-5155 and C. Parker, C/O Long Ashton Research Station, University of Bristol, Bristol BS18 9AF, ENGLAND, fax 0272/394007. It is published by Old Dominion University and mailed free of charge twice a year, usually in January and July. Unsigned articles and literature reviews are by the editors. Send material for publication to either editor and requests for copies to L.J. Musselman.

NEWS AND NOTES

The Encyclopedia of the Useful Plants of Texas, the Southeastern and Southwestern United States, and Northern Mexico, by Scooter Cheatham and Marshall Johnston, illustrates, describes, and covers the range of uses of nearly 3000 species--from edible to medicinal, from folk remedies to industrial functions--and offers historical information about their use.

Where there was doubt about a plant's usage, the authors conducted many of their own experiments. They've turned plants into food, soda pop, dyes, candle wax, and a multitude of other products. Cheatham's Weedfeed class at the University of Texas at Austin brought forth recipes for such edible (and he says tasty) concoctions as: wood sorrel salad, mesquite bean cornbread, and *trandescantia* flower liqueur. But the class learned never to eat or use any plant without a trained botanist acting as a guide.

Quietly through the years, and with little praise or publicity, Scooter Cheatham has created this enormous reference work. It stretches through 11 volumes and about 5000 pages from prehistoric times to the present, and covers the uses of almost 3000 species of wild plants native to or naturalized in Texas.

Botanists in England and the United States who have glimpsed the work are calling it extraordinary and exhaustive. The director of the Royal Botanical Gardens in England, Ghilleen T. Prance, says, "There is indeed nothing quite like this for any other area." Bruce Bradley of the Crow Canyon Archaeological Center in Cortez, Colorado, calls it "a monumental study" that will stand as a reference work for decades to come.

And it is almost finished--but almost is a big word for Cheatham and his right hand researcher, Lynn Marshall, both of whom have received minor monetary compensation from grants funneled through the botany department at the University of Texas at Austin. Cheatham says with understatement, "It has been a struggle to raise money." Half the time, he and Marshall have drawn themselves paychecks redeemable only in personal satisfaction. So have the almost 100 botanists, pharmacists, medical scientists, archaeologists, nutritionists, historians, horticulturists, farmers, artists, and others who have given their expertise to the encyclopedia.

The publisher, Timber Press of Portland, Oregon, hopes to keep the price of the 11 volumes to \$60 each. Cheatham is 75% finished with the second revision of the manuscript, but Timber Press has not set a target date for its publication. Retired UT botany professor Marshall Johnston (and FNA Editorial Committee member), the encyclopedia's co-author, worked with the project until 1984. The publisher thinks Cheatham can take comfort in knowing that his encyclopedia will be read well into the next century. -- excerpted from an article in the 23 March 1991 edition of the Austin American-Statesman

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NEW SALT WATER SEED CROP - A seed-producing crop that grows in salt water has been developed from a wild halophyte; its yields of high quality oil (high in unsaturated fatty acids) and protein could make it a valuable agricultural crop in subtropical coastal deserts. Six years of field trials in the coastal desert environment of Sonora Mexico's northern Gulf of California have now been completed. Seed production by the succulent Salicornia bigelovii irrigated with salt water equaled or exceeded that of sunflower and soybean plants irrigated with fresh water. Both the oil and the meal from the seeds were suitable for use in chicken feed. Glenn et al., from an article in the 1 March 1991 issue of Science Vol. 251, pp. 1065-1067, note that many areas of the world where the greatest demand exists for oilseeds are exactly those in which this plant is expected to thrive.

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THE U.S. FOREST SERVICE has a rapidly expanding program for the conservation of threatened, endangered, and sensitive plants. The 156 National Forests and Grasslands include 191 million acres (almost 9% of the entire USA land mass) in 42 states and Puerto Rico. There are now 65 permanent, full-time professional botanists (the majority have an MS in botany) and many more non-permanent personnel working in the land management branch of the agency. This is double the 1989 total. These botanists have considerable local floristic knowledge; they are a great resource for the wider botanical community. The Forest Service plant conservation program is particularly strong in California, the Pacific Northwest, and parts of the south; most National Forests in those regions have at least one botanist. The botanists work closely with the State Natural Heritage programs and other cooperators, such as the Center for Plant Conservation and The Nature Conservancy. There are several job opportunities for professional botanists and a real shortage of good botany students for summer, field-oriented jobs. Continued program growth is anticipated, and additional botanists will be needed in the future. We encourage universities to train students with appropriate taxonomic, ecological, quantitative, and field-based skills to provide land managers with talented staff. More information is available from Chris Topik, National Endangered Plants Program Manager, U.S. Forest Service, Wildlife and Fisheries, P.O. Box 96090, Washington, D.C. 20090, (202)453-8206 or from your local National Forest botanist.

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THE NATIONAL AUDUBON SOCIETY has a brochure entitled War on Wetlands: Casualties in Our Own Backyard available for increasing the public's awareness of the value of wetlands. Copies can be ordered through their Information Services at \$50 per 100. They also have a slide show and a wetlands activist kit available for purchase. An ancient forest brochure is in the works and should be available in early July. For further information or to order, send check or money order to: Information Services, National Audubon Society, 950 Third Avenue, New York, NY 10022.

MEETINGS

EXOTIC SPECIES SYMPOSIUM - The Indiana Academy of Science is organizing a major symposium entitled **BIOLOGICAL POLLUTION: THE CONTROL AND IMPACT OF INVASIVE EXOTIC SPECIES**. It is scheduled for 25-26 October 1991 at the IUPUI University Place Conference Center in Indianapolis and will feature 26 outstanding invited speakers from across the country representing various federal, state, and private agencies. The presentations will focus on the impact of invasive exotics (animals and plants) on the native species and natural aquatic and terrestrial systems of eastern North America. Special consideration will be given to vectors, economic and environmental consequences, land management practices, prevention, interagency communication, control measures, and legislation. Attendance is limited to 350. For registration information contact: Bill N. McKnight, Indiana State Museum, 202 North Alabama, Indianapolis, IN 46204, 317/232-8178.

AWARDS

THE DELZIE DEMAREE TRAVEL AWARD ANNOUNCEMENT OF 1990 RECIPIENT AND A CALL FOR 1991 APPLICATIONS - Sara Hoot, a graduate student of A.A. Reznicek at the University of Michigan Herbarium, was the recipient of the second annual Delzie Damaree Travel Award. She is studying both morphology and phylogeny of Anemone, a world-wide genus showing African-South American disjunctions. The award supports attendance at the Missouri Botanical Garden Systematics Symposium.

Letters of application for the 1991 award should be mailed to Donna M.E. Ware, Herbarium, Biology Dept., The College of William and Mary, Williamsburg, VA 23185 by 1 August 1991. Those applying should send a letter describing the benefits of symposium attendance and arrange for a letter of recommendation to be sent by the major professor.