Volume 6, Number 4
October-November-December 1992

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

FLORA OF NORTH AMERICA NEWS

Organizational Center

Volume 3 is moving along, with manuscripts finishing round one, which includes technical editing, and bibliographic and nomenclatural checks. Manuscripts are then sent back to the family editor, who confers with the author on suggested changes. Illustrations are well on their way, with authors and family editors evaluating preliminary sketches. Work on maps uses an in-house method different from the off-campus one used in the fern/gymnosperm volume. Regional specialists have been invited to review treatments of taxa occurring in their area and many of the forty-plus have accepted. Manuscripts are sent to taxonomic and regional reviewers as treatments are ready for review.

The 1992 revision of the Guide for Contributors will be sent to all confirmed authors. It has revisions of instructions and sample treatments. This revision of the guide is comb-bound instead of being in a three-ring binder. In addition to the Urticaceae sample treatment, a treatment of the monogeneric Stemonaceae is included. Additional samples will be sent to authors of Poaceae, Asteraceae, and Bryophyte treatments.

About 90 bryophyte invitation letters were sent to potential authors in October. The response to these invitations has been very positive.

Volumes 1 and 2 have completed the first part of final processing with Oxford University Press. Helen Jeude, FNA's technical editor, worked closely with the OUP copy editor. Galleys for the fern/gymnosperm volume and page proofs for the introductory chapters volume are expected in March. Publication is scheduled for late summer.

Manuscripts received between 1 May 1992 and 31 December 1992
Volume 3
George Buddell and John Thieret: Saururaceae
Kerry Barringer: Aristolochiaceae
Bruce Ford: Actaea, Caltha, Coptis, Helleborus, Hepatica, Hydrastis, Isopyrum, and Nigella
Alan Whittemore: Aquilegia and Ranunculus
James Pringle: Clematis - 21 species
Gwynn Ramsey: Cimicifuga
Michael Warnock: Delphinium
Curtis Clark: Eschscholzia, Dendromecon, Canbya, Stylomecon, and Romneya
Richard Wunderlin: Moraceae - 6 genera

Volume 11
Ralph Brooks and Steve Clements: Juncaceae
Robert Kral: Rhynchospora
Fred Utech: Amianthium, Chamaelirium, Helonias, Medeola, Narthecium, Scoliopus, and Xerophyllum
Anita Cholewa and Doug Henderson: Sisyrinchium and

Flora of North America Newsletter 6(4)
Robert Cruden: *Echeandia*
Deborah Q. Lewis: Burmanniaceae

**Volume 4**
Arthur Gibson: *Carnegiea, Lophocereus, Stenocereus,*
and *Bergerocactus*
Mark Hooten: *Harrisia, Cephalocereus,* and *Acanthocereus*

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

**ITEMS for sale** having the FNA name and logo include:

- **T-shirts**, all cotton, $8
  - white: only S and M;
  - teal: only L and XL
- **green coffee mugs** $6
- **cloisonne lapel pins** $4
- **white painter’s caps** $2
- **wheat or white rectangular buttons** with habit of *Floerkea* $1

For delivery, add $2 each (for T-shirts and mugs) for postage and handling, all prepaid please.

**COMPUTER NEWS**

**Computer Mapping at CAN** - The National Herbarium of Canada (CAN), has been mapping vascular plant distributions on a PC since early 1991 using the Canadian-developed mapping software QUIKMap (AXYS Software Ltd., Sidney, B.C.) in conjunction with a file and database manager inFOcus (Earth & Oceans Ltd., Dartmouth, N.S.) —the two together make up a mini GIS.

QUIKMap is a very versatile and affordable mapping program that was developed to run as a free-standing mapping system using dBase III and compatible database file formats and now also supports dBase IV. If you have a 386-based PC and a reasonable-sized hard drive and a laser printer, you could be in the PC mapping business for under $800, which includes the basic mapping software with the digitized map of North America. A map of the world is also available. It works with mouse and keyboard control for accessing the menus and allows for the whole map or zoom windows to be displayed in eight projections. Records can be displayed in a variety of symbols (and colors) using the information in a database file using lat/long or UTM coordinates, and records can also be added directly to the active database on screen by pointing the cursor to a map locality. Map layers can be toggled on and off and line thicknesses and colors changed. Polygons can be digitized on screen, or with digitizing tablets, and filled with numerous hatch patterns. Camera-ready maps can be produced on laser printers and plotters, and maps generated on screen can be saved to plotter files and PCX files.

Public domain electronic gazetteer data are available that can be used for looking up lat/long coordinates for populated places and centroid coordinates for all the counties in every state. These are available on
magnetic tape at nominal cost from the US Geological Survey, Reston, Virginia. Populated places databases, the same information as available from the USGS, are also available on disk from some mailhouse suppliers of public domain software. We have these, as well as a large geographical place name database for all of Canada, set up as database files. A place can be located within seconds, using dBase, for determining coordinates for mapping specimens.

**Information Request.** I would very much like to hear from those of you who are using a PC mapping program or GIS. Let me know the name of the software, what you like about it in particular, any special applications you are using it for, if not just for producing dot maps, and an address for the supplier. Early in 1993 I will be putting together a report on the future needs for GIS at the Canadian Museum of Nature. Your responses would help me get a handle on the status of GIS and PC mapping in the systematic community and hopefully provide me with some new insights that may be helpful in making recommendations for changing or expanding our GIS efforts here at the Museum.

I would be interested in knowing what kinds of special specimen management software is being used for recording herbarium records and producing labels using PCs, or even how standard databases software such as dBase or FoxPro are being used for specimen and herbarium management and database creation. If enough responses are received, I will write a brief summary on the topic of computer mapping by systematics in a future issue of the FNA Newsletter. Please write to Erich Haber, Botany Department, Canadian Museum of Nature, P. O. Box 3443, Station D, Ottawa, Canada, K1P 6P4 (FAX: 613-990-6451).

* * * * * *

**Makers of distribution maps** will want to know about the Geographic Name Server, Copyright 1992, Regents of the University of Michigan. If you have access to telnet, enter telnet martini.eecs.umich.edu 3000. Then you can enter '?' or 'help' for assistance or 'info' for news and hints. Basically you enter a place name (mainly in the U.S. for now but with plans for expansion soon) and get information including county, elevation, latitude and longitude, as well as other things not useful for mapping. If you cannot connect using TELNET martini.eecs.umich.edu 3000, try telnet martini.eecs.umich.edu/port=3000. If you still have trouble, direct questions to liber@citi.umich.edu. ---editors

**ONGOING PROJECTS**

**The Jepson Manual: Higher Plants of California** is to be published by the University of California Press in late January 1993. Final editing and page-proofing were completed in September. The last pages of camera-ready copy were delivered to UC Press in mid-November. The Jepson Manual will be composed of 1424 pages and will consist of an Introduction, Keys to Families, Taxonomic Treatments of Ferns and their Allies, Gymnosperms and Angiosperms. The introductory material includes an illustrated glossary of accepted terminology, discussion of geographic subdivisions used in the treatments, and brief narratives on geological and floristic history of California, horticultural information, and sensitive species. Taxonomic treatments were contributed by 186 authors and subsequently edited for terminology and style. Within the manual, 173 families, 1222 genera, 5862 species, and 1169 infraspecific taxa are
recognized. Of these taxa, 3423 species are considered native, of which 1416 are considered endemic. The taxonomic treatments within the three major groups of vascular plants are arranged in alphabetical order, except the angiosperms, in which dicot families precede monocot families. A total of 2178 illustration units with 9 per page complement the text. The illustrations are designed to emphasize morphologic variation and illustrate diagnostic key characters whenever possible. Appendices include a floristic summary, a narrative and summary on phylogenetic classification, and a synonymy limited to reconciling differences between treatments in The Jepson Manual, Munz's A California Flora, his subsequent Supplement, and recent literature.

BOTANICAL NEWS

**Neviusia cliftonii** (Rosaceae: Kerrieae), an intriguing new relict species from California, discovered. During the course of conducting botanical investigations in northern California in May 1992, the third author and Glenn L. Clifton stopped at an exposed limestone area on California Highway 299 east of Redding that had intrigued them for years. At the base of a shaded north-facing slope, they collected a puzzling rosaceous shrub that they could not recognize to genus. It was shown to the senior author, who, after collecting additional material and confirming the shrub as Rosaceae, enlisted the assistance of the second author, who was in the midst of preparing the treatments of several rosaceous genera for The Jepson Manual: Higher Plants of California. After all Rosaceae in various western floras (e.g., Munz 1959; Hitchcock et al. 1961) were eliminated, the shrub was keyed to tribe Kerrieae in Hutchinson (1964). Kerrieae has usually been circumscribed to include three monotypic genera: Kerria D.C. and Rhodotypos Sieb. & Zucc. of eastern Asia, and Neviusia A. Gray of the southeastern United States. A comparison with herbarium material at CAS-DS and UC-JEPS indicated that the shrub was unequivocally *Neviusia*, to the extent that the initial suspicion was that the California material represented an escape from cultivation. Subsequent detailed morphological examination, however, supplemented by the discovery of two additional populations the following month, confirmed that it was indeed a distinct new species of *Neviusia*, the first addition to the tribe in 134 years!

**KEY TO THE SPECIES OF NEVIUSIA**

1a. Petals absent; leaves broadly lanceolate to ovate (cordate), developing after or during anthesis, finely toothed and ± crenulate, teeth ± mucronate; stamens ca. 100+, 4–7 mm long; sepals 3.5–10 mm long at anthesis, ob lanceolate-obovate to elliptic, with > 6 teeth; style 5–6 mm long; southeastern United States.........................*N. alabamensis*

1b. Petals present, white, ob lanceolate, 4–6 mm; leaves ovate to cordate, developing before or during anthesis, coarsely toothed and shallowly lobed, teeth apiculate; stamens ca. 50+, 4–5 mm long; sepals 3.5–6 mm long, ± obovate with = 6 teeth; style ± 3 mm long; northern California.................................*N. cliftonii*

**Ecology.** The three known occurrences are well spaced around the eastern half of Lake Shasta northeast of Redding, 60–80 kilometers south of Mount Shasta, with an elevation range between 300 and 500 m. All sites are on limestone substrates in shaded cool-air canyons adjacent to creeks. Limestone is relatively rare in northern California, centered around Shasta.
Lake where access to many areas is extremely limited because of the rugged, densely forested terrain with few roads or trails. Limestone is likewise a common substrate for *N. alabamensis*, which also occurs on sandstone, sandy loam, and shale.

**Biogeographic significance.** *Neviusia cliftonii* is a remarkable addition to the California Floristic Province. The immediate interpretation is that *Neviusia* is an old, formerly widespread genus with relicts in forest refugia separated by the uplift of the western Cordillera and the formation of the Great Plains. It is therefore immensely satisfying that, by serendipity, Wolfe and Wehr's recent work (1988: 181) came to our attention, wherein a fossil "aff. Kerria" is mentioned from early middle Eocene montane assemblages in the Pacific Northwest. Wolfe suspects (pers. comm.) that this fossil, from the Princeton flora of southern British Columbia, was probably closest to *Neviusia cliftonii*. ---by James Shevock, Department of Botany, California Academy of Sciences; Barbara Erter, University and Jepson Herbaria, University of California at Berkeley; and Dean W. Taylor, Biosystems Analysis Inc., Santa Cruz.

**PUBLICATIONS**

**Vascular Plants of Wyoming,** Second Edition, 1992, by Robert D. Dorn, illustrations by Jane L. Dorn, 340 pages, is available. It includes: keys to 123 families, 662 genera, 2398 species, 709 varieties; separate keys for aquatics and woody plants; both flower and fruit keys for the Mustard and Carrot families and for the Milkvetches; descriptions for families and genera; over 250 illustrations; 3 new combinations, 2 new species; 5 7/8 inches wide, 9 inches long, 3/4 inch thick; paper cover with signature stitched binding. It can be ordered from Mountain West Publishing, P.O. Box 1471, Cheyenne, WY 82003, for $13.00 postpaid in U.S. (Wyoming orders add sales tax for your county: 3% - $0.39, 4% - $0.52, 5% - $0.65).

* * * * * * *

**New York State Rare Plant Status List,** edited by Stephen M. Young. This new edition from the New York State Natural Heritage Program lists all rare vascular plants in New York State with information on counties of occurrence, global and state rarity ranks and phenology. August 1992, 82 pp. No charge. Available from Botanist, New York Natural Heritage Program, 700 Troy-Schenectady Road, Latham, NY 12110-2400.

* * * * * * *

**Non-Timber Products from Tropical Forests,** Evaluation of a Conservation and Development Strategy, edited by Daniel C. Nepstad & Stephan Schwartzman, contains fourteen chapters based on papers and discussions of an international symposium convened in Washington, D.C. This volume in the Advances in Economic Botany series brings together an interdisciplinary array of studies on extractive products and extractive economies by the foremost scientists in the field. Included are discussions of the biological, cultural, political and economic contexts of non-timber forest product extraction and trade. Case studies from Amazonia, Africa, and Southeast Asia are presented. Order No. AEB 9; ISBN 0-89327-376-7; paper; November 1992; 176 pp. U.S. orders: $22.70; non U.S. orders $23.90; (All orders are prepaid in U.S. currency and include postage and handling.) Mail to: Scientific Publications Department, The New York Botanical Garden, Bronx, New York 10458-5126, U.S.A.
Commercialization and Wildlife Management: Dancing with the Devil, 
edited by Alex W. L. Hawley - A group of prestigious wildlife 
professionals discuss why there is not much wild anymore, and what should 
be done about it. The book follows the links between historical aspects of 
wildlife management and future trends. Wildly disparate views and 
opinions are united by the common thread of exploring the role of 
commercialization in wildlife conservation. Some topics include: origins 
of wildlife management in the western world; failures in wildlife 
management: opportunities for success; who is accountable: the ethics of 
conservation. 
For information contact Krieger Publishing Company, P.O. Box 9542, 
Melbourne, FL 32902-9542; phone 407/724-9542, fax 407/951-3671.

NEWS AND NOTES

What is a Native Plant? Does that seem like a dumb question? We all 
know without doubt that [to Arizona] a saguaro is a native plant while a 
salt-cedar is not. Native plants are like love or sleep. If you are the type 
that has to define them, you obviously don't know what they are. If you 
have ever tried to write an ordinance dealing with revegetation issues, you 
have probably had the embarrassing experience of discovering that you 
aren't so sure after all. Let's look at some attempted definitions:

1. Native plants are the "common plants generally found in an area." These 
   include palo verde, desert-marigold, mesquite, saguaro, ponderosa pine, 
tumbleweed, lovegrass----whoops.

2. Native plants are "those plants that arrived in our area on their own and 
   were not introduced by man." This raises problems of knowing what plants 
   were actually introduced by man, especially pre-Spanish man. Perhaps 
   mescal or a yucca was cultivated by the Hohokam. Does anyone have a 
good species list from 1066 or 1492?

3. Native plants are "those that arrived in an area on their own and 
   were not introduced by man in the last 100 years." Isn't this one a bit 
eurocentric? What is botanically different about plants introduced by 
Anglos as opposed to O'Odham? Or is the difference the number of 
generations?

Now let's look at the dictionary definition of a native: "Being such by birth 
or origin." If we used that definition, an exotic plant would become native 
in the second generation, just as a native Arizonan is one born here even if 
the parents came from Peoria. (The only real Native Americans, however, 
are those whose ancestors arrived here before the conquest.) That doesn't 
work.

How about "Originating, growing or produced in a certain place; 
indigenous as opposed to exotic or foreign." That has all the problems of 
the definition above, except it does not include those "introduced from 
outside." Since a lot of southern Arizona species arrived within the past 
10,000 years, they would technically be indigenous. Actually, 
"indigenous" is probably closest to what we really mean, but would you 
prefer to belong to the "Indigenous Plant Society?"
"Who cares?" you say. "I know what I mean." Sure but put that into an ordinance. Try telling someone in the construction business that they must revegetate with native plants, without telling him or her what natives are. And try taking him or her to court for the crime of planting a non-native, without being able to prove that that plant really is non-native—and to do that you need to know what a native is.

Of course you could just list them, but that brings up another problem. Any list is bound to exclude someone's favorite species unless it is many pages long. And one has to have good reasons for putting plants on a list or leaving them off. I actually saw a list of natives for Pima County which included the Canary Island Palm. Who am I to say that's not now native?

One legal attempt to define native referred to plants naturally found within a certain number of feet of the property in question. Plants may be native to riparian areas, but not surrounding lands. And that would mean the creosote flats would have to be revegetated with creosote where the landscaper might have preferred saguaros.

I think you get the picture. Now that the Society has a position on revegetation and a strong statement of principles, it would help to know what we are talking about. If anyone has found a good working definition of "native plant" please send it to the Editor [of The Plant Press, the Arizona Native Plant Society, P.O. Box 41206, Tucson, AZ 85717] for further consideration. This right answer could make you a winner, especially if you're a "native" Arizonan. --by Barbara Tellman, taken from The Plant Press, the Arizona Native Plant Society, Vol. 16, No. 3, Fall, 1992

* * * * * * *

The Center for Plant Conservation and the USDA Forest Service are banding together to save rare and threatened plants in national forests and on grasslands. The two organizations signed a landmark Memo of Understanding at Rancho Santa Ana Botanic Garden, Claremont, California, during the Center's Annual Meeting of Participating Institutions on 16 November 1992. Under the agreement, native, imperiled plant populations will be conserved in the wild, and the organizations will work jointly to further public education and understanding of the plight of endangered plants in the United States.

The Center for Plant Conservation, headquartered at the Missouri Botanical Garden in St. Louis, works with a network of 25 botanical gardens and arboreta nationwide to collect and maintain endangered plants. This National Collection consists of more than 400 different species of threatened and endangered plants. The Collection is used for germplasm storage, research, education, and as potential stock to reestablish species in their native habitat.

The Forest Service manages 191 million acres of public land, ranging from subarctic Alaska to tropical Puerto Rico, including lands in 43 states comprising 156 national forests and 19 national grasslands. The Forest Service is responsible for the protection and management of fish, wildlife, and plant habitats, and its lands provide habitat for at least 81 federally listed threatened or endangered plants and for another 1650 sensitive plant species.

* * * * * * 

Flora of North America Newsletter 6(4)#
Scientists identified Canada's oldest tree while checking a clearcut on Vancouver Island. Trouble was, loggers had already felled the 1636-year-old yellow cedar and left it behind as waste wood. The venerable tree first sprouted needles back when Buddhism was taking root in China, and the Roman Empire was adopting a new religion—Christianity. -taken from Common Ground Vol. 4 No. 1 Nov-Dec 1992

MEETINGS

Restoring Diversity: Is Reintroduction an Option for Endangered Plants? April 20-22, 1993 --- Reintroduction is used increasingly by government agencies, conservation groups, and the private sector as part of strategies to conserve biological resources. Reintroduction offers the potential to incorporate rare plants into community and ecological restoration and management projects. However, much of this effort is experimental and conducted in the absence of national policy guidelines or understanding of its long-term biological significance. Moreover, reintroduction and restoration may have important consequences for national policy on protection of existing populations and habitat.

The Center for Plant Conservation is holding a three-day symposium in St. Louis to examine these issues. Symposium topics will include: issues and principles in rare plant reintroductions; strategic and political considerations; ecosystem management practices; biological significance; technical feasibility; case studies; mitigation and rare plant reintroduction; policy analysis and guidelines. The expected results of the symposium will be a book of contributed papers, and national guidelines that can be used for reintroduction projects by agencies and organizations throughout the country.

The call for posters and papers appropriate to the symposium has a deadline of March 1. Hotel reservations should be made to the Clarion Hotel, site of the symposium, by February 19. Call Marie Bruegmann at 314/577-9450 for information or reservation forms.

* * * * * *

National Association of Biology Teachers 1993 Convention entitled Biology In the 90's: New Directions, New Challenges BOSTON, NOVEMBER 17-21, 1993 --- The NABT national convention offers short course presentations, hands on workshops, commercial workshops, lectures, symposia, contributed papers, general sessions, featured and update speakers, panels, demonstrations, poster sessions, receptions, luncheons or special events of each NABT section, exhibits, and field trips. Presentations are offered at all levels: secondary, 2 and 4 year college, university, and advancement in research.

Some areas covered are: bioethics, botany, environment, ecology, molecular biology, biological frontiers, and biological careers. Program proposals are due by March 15. Registration for the convention and information are available by calling the NABT office in Reston, VA at 703/471-1134. Program chairpersons are Agnes Hayes, Bridgewater, MA and Paul King, Sharon, MA.

POSITIONS AVAILABLE

The Santa Barbara Botanic Garden, an educational and scientific
institution devoted to the study, display, and conservation of California flora invited applications for the position of Botanical Researcher/Director of Research.

**RESPONSIBILITIES:** Provide leadership in the implementation of short and long range plans for the Department of Research; administration of the department's budget and, in cooperation with staff, create and sustain an environment supportive of excellence in scholarship and instruction; maintain an active, externally funded, research program and assume an active role in seeking support for the department.

**QUALIFICATIONS:** Earned doctorate in the botanical sciences and a scholarly record appropriate for an adjunct faculty appointment at the University of California, Santa Barbara. Preference will be given to applicants in the areas of plant ecology, taxonomy/systematics, or conservation biology. The position is a twelve-month appointment with a competitive salary and an excellent benefit package. Review of applications begins April 1, 1993. Anticipated start date is September 1, 1993. Submit cover letter and resume to: Dr. Sherwin Carlquist, Chair, Search Committee, Santa Barbara Botanic Garden, 1212 Mission Canyon Road, Santa Barbara, California 93105. SBBG is an Equal Opportunity Employer.

* * * * * * *

Summer internships in practical horticulture offered by Descanso Gardens (County of Los Angeles Department of Arboreta and Botanic Gardens) for the summer of 1993. During the 10-week summer internship, students will be paid a stipulated amount for their participation. The wide range of training the students encounter fulfills the internship requirements at most schools and universities. Students will participate in "hands-on" training sessions. Field trips and study sessions may also be included.

Applicants must be enrolled in either botany, horticulture, forestry, or related curricula. Completed applications (or resumes), with three letters of recommendation and cover letter describing qualifications and reason for applying, should be sent to: Dr. Steven Cohan, Director, Descanso Gardens, 1418 Descanso Drive, La Canada-Flintridge, CA 91011, Ph: 818/952-4403. Deadline for applications for the summer program is March 30, 1993. Housing and transportation are the responsibility of the student. A two-page application is available at the phone number provided.

**VOLUME 3 FAMILIES AND GENERA**

Families and genera are in sequence used for volume 3 as of January 1993. Curators who wish their material to be studied may contact authors directly.

- **Magnoliaceae**
  - Magnolia Frederick Meyer
  - Liriodendron Frederick Meyer

- **Annonaceae**
  - Annona Robert Kral
  - Asimina Robert Kral
  - Deeringothamnus Robert Kral

- **Canellaceae**
  - Canella Thomas Wilson

- **Calycanthaceae**
  - Calycanthus George Johnson

- **Lauraceae**
  - Lindera Eugene Wofford
  - Litsea Henk van der Werff
  - Sassafras Henk van der Werff
  - Umbellularia Henk van der Werff
Cinnamomum Henk van der Werff
Licaria Henk van der Werff
Nectandra Henk van der Werff
Persea Eugene Wofford
Cassyna Henk van der Werff

Saururaceae
Anemopsis George Buddell
Saururus George Buddell

Piperaceae
Piper David Boufford
Peperomia David Boufford

Aristolochiaceae
Aristolochia Kerry Barringer
Asarum Kerry Barringer

Illiciaceae
Illicium Michael Vincent Schisandraceae
Schisandra Michael Vincent

Nelumbonaceae
Nelumbo John Wiersema

Nymphaeaceae
Nuphar John Wiersema
Nymphaea John Wiersema

Cabombaceae
Brasenia John Wiersema
Cabomba John Wiersema

Ceratophyllaceae
Ceratophyllum Donald Les

Ranunculaceae
Hydrastis Bruce Ford
Ranunculus Alan Whittemore
Myosurus Alan Whittemore
Trautvetteria Bruce Parfitt
Anemone Bryan Dutton
Hepatica Bruce Ford
Clematis James Pringle
Nancy Moreno

Helleborus Bruce Ford
Cimicifuga Gwynn Ramsey
Arctea Bruce Ford
Eranthis Bruce Parfitt
Nigella Bruce Ford
Adonis Bruce Parfitt
Caltha Bruce Ford
Trollius Bruce Parfitt
Aconitum Don Brink
Delphinium Michael Warnock
Consolida Michael Warnock
Coptis Bruce Ford
Xanthorhiza Bruce Parfitt
Isopyrum Bruce Ford
Aquilegia Alan Whittemore
Thalictrum Marilyn Park

Berberidaceae
Nandina David Whetstone
Caulophyllum Tim Atkinson
Berberis Alan Whittemore
Diphyllaea Lisa George
Podophyllum Lisa George
Achlys David Whetstone
Tim Atkinson
Vancouveria David Whetstone
Tim Atkinson
Jeffersonia Lisa George

Lardizabalaceae
Akebia John Thieret

Menispermaceae
Calycocarpum Donald Rhodes
Cocculus Donald Rhodes
Menispermum Donald Rhodes
Cissampelos Donald Rhodes

Papaveraceae
Chelidonium Robert Kiger
Glaucium  Robert Kiger
Maclaya  Robert Kiger
Sanguinaria  Robert Kiger
Stylophorum  Robert Kiger
Dendromecon  Curtis Clark
Eschscholzia  Curtis Clark
Arctomecon  Susan Meyer
Argemone  Gerald Ownbey
Canbya  Curtis Clark
Papaver  Robert Kiger
Roemeria  Robert Kiger
Romneya  Curtis Clark
Stylomecon  Curtis Clark
Hesperomecon  Gary Hannan
Meconella  Gary Hannan
Platytemon  Gary Hannan

Fumariaceae
Dicentra  Kingsley Stern
Adlumia  David Boufford
Corydalis  Kingsley Stern
Fumaria  David Boufford

Platanaceae
Platanus  Robert Kaul

Hamamelidaceae
Hamamelis  Frederick Meyer
Fothingilla  Frederick Meyer
Liquidambar  Frederick Meyer

Ulmaceae
Ulmus  Sue Sherman-Broyles
Plana  William Barker
Celis  William Barker
Trema  William Barker

Cannabaceae
Cannabis  Ernie Small
Humulus  Ernie Small

Moraceae
Fatua  Richard Wunderlin
Morus  Richard Wunderlin
Brossonnetia  Richard Wunderlin
Maclura  Richard Wunderlin
Brossimum  Richard Wunderlin
Dorstenia  Richard Wunderlin
Ficus  Richard Wunderlin

Urticaceae
Urtica  David Boufford
Hesperocnide  David Boufford
Laportea  David Boufford
Parietaria  David Boufford
Pilea  David Boufford
Pouzolzia  David Boufford
Soleirolia  David Boufford
Boehmeria  David Boufford

Leitneriaceae
Leitneria  Linn Bogle

Juglandaceae
Carya  Donald Stone
Juglans  Donald Stone

Myricaceae
Myrica  Allan Bornstein
Comptonia  Allan Bornstein

Fagaceae
Fagus  Kevin Nixon
Lithocarpus  Kevin Nixon
Chysolepis  Kevin Nixon
Castanea  Kevin Nixon
Quercus  Kevin Nixon

Betulaceae
Alnus  John Furlow
Betula  John Furlow
Carpinus  John Furlow
Ostrya  John Furlow
Corylus  John Furlow

Casuarinaceae
Casuarina  Karen Wilson