

# Flora of North America



Volume 22, Numbers 1

Newsletter

January – June 2008

## PRESIDENT'S REPORT

### Flora of North America Association

*Luc Brouillet, FNA president*

As can be gathered from the progress reports on volume production below, 2008 has been fruitful for the Flora of North America project. Volumes 7 and 8 are, for the most part, in the last stages of production and will be published during the year. Volume 9 has made great strides and should be ready to go to press before the end of 2008 also. And many volumes are now in simultaneous production at each of the centers to ensure timely publication within the next few years, notably vols. 10 and 11, which will include the important family Fabaceae. To ensure steady progress, a new editorial center was established for vol. 12, with Geoff Levin and Lynn Gillespie as lead editors.

The FNA managerial team is making every effort to ensure sustained production of volumes. I must commend Jim Zarucchi, vice president and editorial director, Heidi Schmidt, managing editor, and the personnel at FNA Central in St. Louis, as well as our lead and taxon editors, regional coordinators and reviewers, technical editors and artists at various locations, for their remarkable work. The success of the FNA project is largely attributable to their collective work.

The project could not function as well as it does, let alone subsist, without financial support. Grants received from the Chanticleer and Mellon foundations, and from a foundation that wishes to remain anonymous, will allow FNA to pursue production of volumes for several years. The FNA board is grateful for this support and the faith in the project that these large

contributions represent. I take the occasion to thank Nancy Morin, vice president for business and development, for her excellent work in securing funding, and Dr. Peter Raven, director of the Missouri Botanical Garden, for his exceptional help in securing the anonymous foundation grant.

The creation of the Information Technology committee is starting to pay dividends, as can be seen from the report on a FNA workshop held at Harvard on ways to better present data to the users, and on ways to better network with other botanical information providers, such as the USDA PLANTS database. Thanks to the efforts of Heidi Schmidt and others, the information on the FNA Web page is being updated and improved, particularly with respect to information concerning volumes in production. Do not hesitate to visit our Web page to see how FNA is progressing.

Also, I would like to congratulate Patricia M. Eckel for the award she received from the Linnean Society for her *Flora of North America north of Mexico* artwork. Excellent art is a major contribution to FNANM and she certainly shines in her skill.

Last but not least, I would like to thank our large constituency of volunteer authors and reviewers for their exceptional contribution to FNANM. Without their work, the project would simply not exist. Many groups remain orphan, however, and we will need more authors before the project ends. I urge you to visit our Web site and see whether you could help us with one or more of these genera.

## Botanical Gardens, Plant Conservation, and Flora of North America

Nancy Morin, FNA vice president for business and development

Historically, botanical gardens have been major players in the production of floras, and the same is true today. Many Flora of North America authors, editors, and reviewers are on staff or associated with botanical gardens, and botanical gardens and their foundations have been substantial supporters—both in-kind and financially—of the project. Botanical gardens also play a significant role in plant conservation.

Andrea Kramer, director of Botanic Gardens Conservation International, U.S., sent this report: “In 2003, four associations devoted to mobilizing and enabling the scientific, educational, and other programs of North America’s botanical gardens formalized a partnership to address how North American botanical gardens can contribute to the *Global Strategy for Plant Conservation* (GSPC), issued by the United Nations Convention on Biological Diversity in 2002. Working collaboratively, the American Public Gardens Association (APGA), Botanic Gardens Conservation

International (BGCI), the Center for Plant Conservation (CPC), and the Canadian Botanical Conservation Network (CBCN) joined with the Mexican Association of Botanic Gardens to develop and publish the North American Botanic Garden Strategy for Plant Conservation (NABGS) in 2007. The NABGS promotes the work of the partners and their associated organizations, and sets out a common framework agenda for conservation action (visit [www.bgci.org/usa](http://www.bgci.org/usa) to see this and related publications).

The partners continue to work individually and collectively to promote plant conservation in North America, and will be jointly producing an e-newsletter as a mechanism to monitor and report on progress toward meeting the targets laid out in the NABGS. This e-newsletter will be published periodically, distributed to members of all partner institutions, and posted online at <http://www.plants2010.org/>.

A list of all known plant species in North America is a basic requirement for plant conservation, and botanists engaged in plant systematics can help provide this primary measure of diversity. The first target set out in the NABGS calls for botanic gardens with the capacity for programs in plant systematics to review and contribute to their respective national flora projects, and the NABGS explicitly recognizes the work of the FNA project as fundamental to the plant conservation efforts of the botanical garden community.”

2010—the target for achievement of the goals of the Global Strategy—is just around the corner. We won’t have the entire flora finished by then, but FNA is working with USDA PLANTS database to update information on plants treated in volumes that already have been published, and is beginning to work with authors in remaining volumes to compile a working checklist for the volumes yet to be published. We need such a list to help organize the work to come in any event, but it also allows FNA to provide the fundamental information on plants so important for effective plant conservation.

Botanical Gardens are a primary conduit to people who are interested in plants—their members, visitors,

*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* is edited by Barney Lipscomb, Newsletter Editor, Botanical Research Institute of Texas, with the assistance of Kristin Pierce, Assistant Editor, Missouri Botanical Garden. The newsletter is printed at the latter institution and is published twice a year 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:  
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Items also can be sent by e-mail to: [barney@brit.org](mailto:barney@brit.org) or  
[Kristin.Pierce@mobot.org](mailto:Kristin.Pierce@mobot.org)

and people who use their online resources. The work being done by FNA's Information Technology Committee (see below), in addition to helping make the project run more smoothly, will provide a mechanism for Botanical Gardens, Herbaria, land management agencies, and other similar organizations to link Flora of North America information to their plants or specimens. The advantage to Botanical Gardens will be immediate depth of reliable content on the plants of interest to them. The advantage to Flora of North America (and its participants) will be the ability to provide the knowledge and information we have all worked so hard to pull together, review, edit, and polish, to a much wider audience.

### **A Note on Sponsoring Botanical Illustrations**

You'll see elsewhere in the Newsletter another announcement inviting sponsorship of illustrations. Here is the idea: FNA has a team of outstanding artists creating fine, original illustrations of every genus and about 1/6 of the species treated in the flora. We would like the illustrations to be used more, especially by people, organizations, or other groups for whom a

particular species is particularly meaningful. The most likely candidates will be species iconic in a region—either because they are common and much loved or rare and treasured. But it might be a species named for someone's major professor, spouse, or friend. Or a group of plants for which a botanical garden is well known. Specialty plant groups would also be attractive—the American Rose Society has sponsored some illustrations, for instance. A sponsor receives an archival quality copy of the illustration (the original stays in the FNA archives) and permission to use the illustration—think note cards, tote bags, newsletter logo, illustrations in articles. You can learn which families are being worked on at the moment in the reports on volumes in this newsletter or on the Web site. If a genus is monotypic or has only one species in the flora, you know right away which taxon is to be illustrated. For information on larger genera, contact me at [nancy.morin@nau.edu](mailto:nancy.morin@nau.edu). I am in the process of identifying taxa that might be of interest to specific groups or organizations and will be writing soon to alert these potential sponsors of the availability of those taxa.

## **Executive Report on The Flora of North America: Digital Flora Workshop**

*James Macklin & Rich Rabele, co-chairs, FNA IT Committee*

A workshop focusing on the digital presence of the Flora of North America was held at Harvard University on April 22 and 23, 2008. The workshop targeted short-term (until the books are all published) changes but also considered enhancements that would benefit users once the Flora is completed. The agenda separated the workshop into themes relevant to the digital presence of a multi-author compilation like a flora. The first theme was work flow. How does the process flow and get managed from beginning to end? The second was presentation. How do users access FNA information from the web, and what services would they like to have? The third was automation. This is really the connector between work flow and presentation. For example, we can use versioning to keep the work flow organized; we can use automated markup to maximize efficiency; through populating a

database, we can deliver rich content accessible in many different ways. Many of the workshop participants made short presentations based on their involvement in a component of the Flora or expertise in an informatics/IT/web development area.

The work flow for the project has relied on documents being exchanged using an FTP server housed at Harvard. Due to security issues this server is now shut off and is soon to be replaced by a file manager integrated into the new FNA Web site, which uses the content management system, Drupal. Users (in this case authors, reviewers, and editors) will be given accounts that will allow them to drop off and retrieve documents. A versioning system will be investigated to help keep track of the stage that a document is in within the work flow as well as a Really Simple Syndication (RSS) feed to notify users of changes.

## Executive Report *continued*

Rich Rabeler will work with Dan Lipsitt, a Web site specialist, to test the file management system for organizing volume 17.

Participants agreed that the FNA Web site could be dramatically improved. The new Web site developed in Drupal by Dan Lipsitt will be released as soon as possible with enhancements to be added as prioritized. The content management environment will allow Heidi Schmidt, Nancy Morin, and others actively edit content on the site without the need for a webmaster. The participants agreed that brand recognition was very important and therefore we want users to access content through the FNA Web site first and then go out to other services, such as eFloras. We will add search functionality that will link the names of the taxa treated to the eFloras' pages where the content is currently found. We also discussed methods to enhance the chances that a Google (or other) search will rank FNA pages highly. Other enhancements could include integration of the glossary and an ability for unpublished manuscripts to be available as PDFs.

Automation spanned both work flow and presentation, focusing on ways to convert material from the books for use on the web. Hong Cui (School of Information Resources and Library Science at The University of Arizona, Tucson) and a student will work this summer to parse the book formatted documents to a finer level than is available in eFloras, allowing users to query on description-level characteristics (i.e., tell me all species in Rosaceae that have red flowers and 10 stamens). Hong will work with James Macklin and Paul Morris, who will host a new database to store these data, as it will not be fully compatible with eFloras, and to build a framework for searching and displaying the information. Parsing the state-level occurrences will allow maps to be built on-the-fly and content to be delivered on the plants of a State. The goal is to have this parsing technology bundled with a work flow system (outlined by Paul Morris) that will allow treatments to be automatically processed and marked-up leading to production of the book or digital (web) presentation.

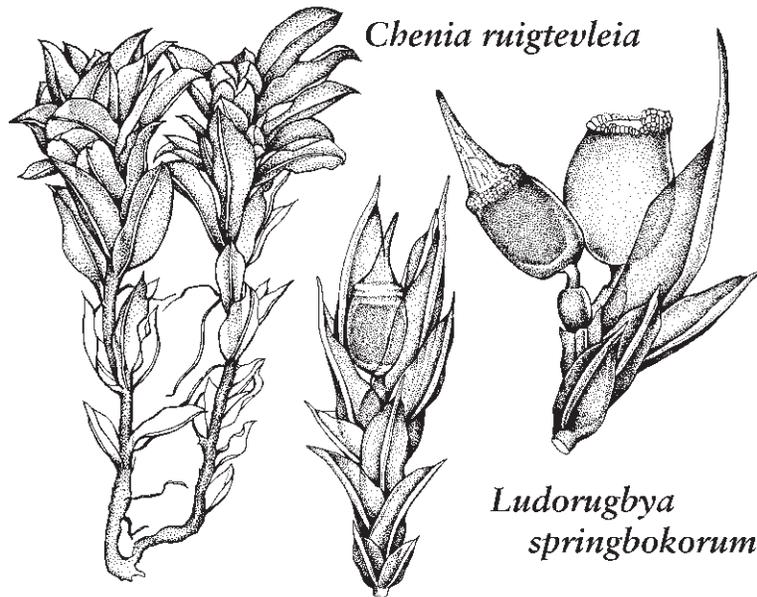
Chris Freeland provided an update on the eFloras project funded by the Institute for Museum and Library Services (IMLS). There will be some new functionality developed that will enhance FNA's eFloras presence, potentially by late 2009. We agreed that it would be mutually beneficial for the FNA IT Committee to participate in the redevelopment of eFloras and decided that regular conference calls and another workshop in fall 2008 would be good avenues to allow collaboration. We also want to make our authoritative data available to other sites/organizations (i.e., USDA PLANTS, IPNI, botanically-based Web sites, COL, IOPI, EOL, etc.) by providing services that may not be covered by eFloras. This would be facilitated by using globally unique identifiers (likely Life Science Identifiers, LSIDs) allowing proper attribution and consistent use of our data. A better feedback mechanism for users was also considered to provide comments and annotations about the FNA site and its content. James Macklin presented a concept for allowing the Flora to 'live and breathe' beyond the books. This involves having two ways to interact with FNA content: a static side that presents the most recent, stable taxonomy and associated information for a group, and a dynamic side allowing registered users to interact with the information through annotation and uploads/downloads. At some point, the dynamic presence may be used to create a new stable version through the use of a work flow management tool with the interaction of authors, reviewers, and editors, as was done when producing the books. Using these tools would allow authors to produce a treatment much more quickly and help manage the process toward publication for which they could get attribution. The participants also agreed that it was time to start focusing more on the data, which will lead to both print and web product and services. Some of the goals for developing our digital presence (especially long-term goals) will require funding and there was some discussion about a proposal to NSF or another suitable funder. The IT Committee will be looking into potential funders and will take charge of writing any necessary proposals with the BOD's approval.

## FNA Illustrator Honored By Linnean Society

Richard H. Zander, FNA lead editor - Bryophytes

The Linnean Society of London has presented the Jill Smythies Award for Botanical Illustration for 2007 to Patricia M. Eckel, of the Bryology Group, Missouri Botanical Garden. The Award is given to a botanical artist for excellence in published illustrations in aid of plant identification, with the emphasis on botanical accuracy and the accurate portrayal of diagnostic characteristics.

Eckel specializes in bryological artwork. She recently completed illustrations for volume 27 of the *Flora of North America north of Mexico*, the first bryophyte



Two mosses by Patricia M. Eckel.

volume, and is continuing with volumes 28 and 29 to complete the mosses and then the hepatics and hornworts. She is also a bryologist with many publications, including 18 treatments (3 co-authored) in FNANM Volume 27, is Botanical Latin Editor for three professional journals, and maintains a Web site describing the vascular flora and plant history of the Niagara Falls

area. The award, which came with a “purse” and silver medal, was given her at the annual meeting of the Linnean Society in London on May 23, 2008.

## FNA Contributor Makes National News

George Yatskievych, botanist with the Missouri Botanical Garden and FNA contributor, recently made national news with his rediscovery of a rare parasitic plant in Mexico that hadn't been seen by botanists in more than 20 years.

The orange-brown, fleshy-stemmed plant, currently unnamed, has a pine cone-shaped dense cluster of flowers and juicy celery-like stalks. It will be classified as a new genus in the family Orobanchaceae, which George is authoring for FNA.

The news was picked up by the Associated Press and published in newspapers and online news across the country.

## FNANM Alphabetical List of Families

An alphabetical list of families is available online at the url: <http://hua.huh.harvard.edu/FNA/families.shtml>.

## New Employee at MBG Editorial Center

Cassandra Howard was hired in May as a Manuscript Specialist, based in Saint Louis, MO. Cassandra has begun working on editing Fabaceae manuscripts for volume 10–11 as well as providing needed assistance for the composition of volumes 7 and 8.

## Volume 7 Update

Volume 7, treating Magnoliophyta: Salicaceae to Brassicaceae, is now scheduled for publication in late 2008. The volume is being processed at the Missouri Botanical Garden Editorial Center with Lead Editor Jim Zarucchi, Managing Editor Heidi Schmidt, Technical Editor Martha Hill (assisted by Michele Funston, Kristin Pierce, Cassandra Howard, and others), and Taxon Editors Dave Boufford (Harvard Univ. Herbaria), Leila Shultz (Utah State Univ.), Jackie Poole (Texas Parks & Wildlife Dept.), and Craig Freeman (The Univ. of Kansas).

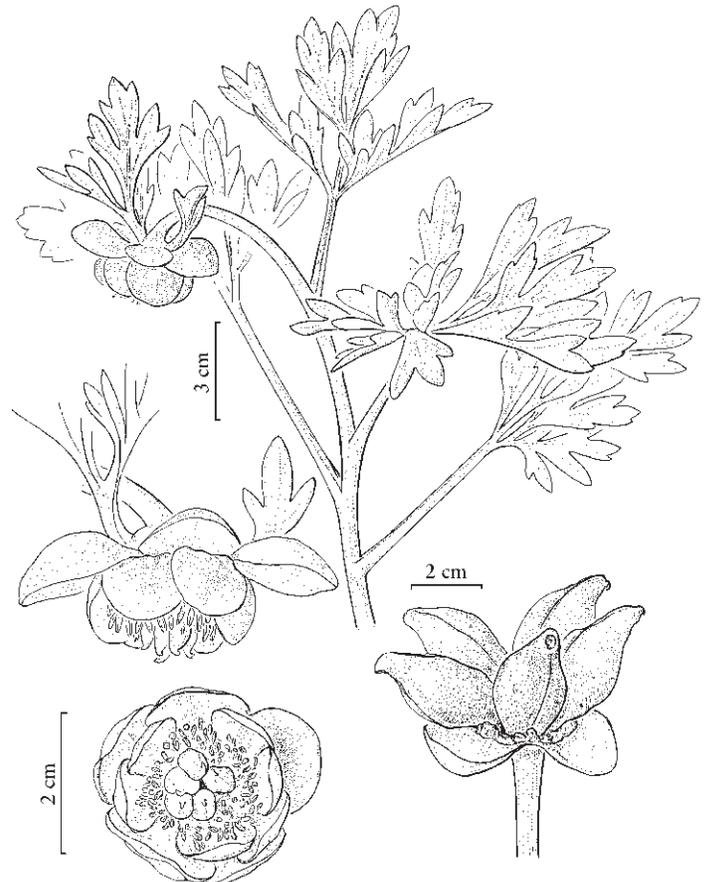
This volume will contain treatments of 11 families, 125 genera, and approximately 919 species. It will include 262 original illustrations with an additional 105 insets (especially in certain genera such as *Boechnera*, *Draba*, and *Salix*) to show specific morphological structures. The watercolor frontispiece illustration provided by John Myers depicts *Salix ovalifolia* (Salicaceae).

All 136 manuscripts have been received and passed through regional review. Over 50% of the families have been indexed and four families are in galley pages, Bataceae, Capparaceae, Koeberliniaceae, and Resedaceae, with Moringaceae and Tropaeolaceae soon to follow.

## Volume 8 Update

Volume 8, which includes 19 families, 126 genera, and 682 species, is scheduled for delivery to Oxford University Press in late summer of 2008. Work is being coordinated through the University of Kansas editorial center. The largest families treated in the volume are Crassulaceae, Ericaceae, and Saxifragaceae. Roughly 70% of manuscripts are in late editorial stages and 30% of manuscripts (13 of the 19 families) are in galleys. Most remaining editorial work is in the Crassulaceae, Ericaceae, and Saxifragaceae. Families recently imported to the volume for better alignment with the APGII classification include Paeoniaceae (1 genus / 2 species), Sarraceniacae (2 / 12), and Theaceae (3 / 4);

exported families include Hydrangeaceae (9 / 25) to Vol. 12, Parnassiaceae (2 / 10) to Vol. 12, and Pittosporaceae (2 / 7) to Vol. 13. Art work for the volume is essentially done. All 194 figures have been scanned and placed into final panels, which will be distributed to authors alongside the galley pages.



*Paeonia brownii*  
by John Myers

Illustration from Volume 8 by John Myers.

## Volume 9 Update

Volume 9 is being edited by the Canada Center. Lead editor and taxon editor for Crossosomataceae, Staphyleaceae, and Picramniaceae is Luc Brouillet, taxon editor for Rosaceae is James Phipps, technical editor is Helen Jeude, and illustrator is Marj Leggitt, with some taxa drawn by Barb Alongi and John Myers. Volume 9 is on track and will be published in late 2008 or the first part of 2009. It comprises 4 families, Rosaceae (68 genera, ca. 675 spp.), Staphyleaceae (1 gen., 2 spp.), Crossosomataceae

(3 gen., 7 spp.), and Picramniaceae (2 gen., 2 spp.), for a total of 74 genera and ca. 687 species.

A total of 66 of the 74 genera (89%) have been submitted, which comprises 86% (590 spp.) of the total number of species. Most of the submitted treatments have gone or are going through regional review (84% of total), and about half of these (43%) have been corrected by authors and have been edited by the specialist editors (nomenclature, bibliography). All treatments that have been through the last process have been styled and indexed (40.5%) and are ready for the final steps of production.

Staphyleaceae and Crossosomataceae are complete, including illustrations. Picramniaceae, which was added last fall, has yet to be delivered, and no illustration has been drawn.

Within the Rosaceae, all genera for 11 of the 15 tribes have been submitted. Of the remaining 4 tribes, 1 or 2 genera are still due, and only Rubeae, with the single genus *Rubus*, has no delivered treatment. All of the missing treatments are being actively worked on and are due shortly. Thus, for the Rosaceae, we have 91% of the genera, representing 86% of species; 86.5% have been or are being regionally reviewed, 42% edited by specialists, and 39% styled and indexed.

With respect to illustrations of Rosaceae, about 145 units are projected, and instructions and materials have been received for 87.5%. Drafts have been done for 58% (85), inks for 56.5%, and 43% have been scanned.

Currently, the family description is being edited and corrected by taxon editor J. Phipps. An artificial key to genera has been drafted by him but is awaiting the submission of all generic descriptions to harmonize the key with descriptions.

Descriptions of subfamilies and tribes, as well as key to genera where possible, have been drafted by lead editor L. Brouillet and are being reviewed.

Styled treatments will be assembled as soon as all elements that constitute a starting point (i.e., family or in Rosaceae, subfamily or tribe) are available. A large number of such elements are already available or will become so during the summer, which will allow us to proceed rapidly in volume production as they come.

## Volumes 10 and 11 Update

Volumes 10 and 11 are presently scheduled for completion and delivery for publication in late 2009 or mid 2010. Various components of the volumes will be processed at Miami University in Ohio, University of Central Missouri, and at the Missouri Botanical Garden Editorial Center with Lead Editor Jim Zarucchi. A proposal to the National Science Foundation to provide assistance in completing the legume component of the volumes was submitted in 2006 by Mike Vincent at Miami University in Ohio; unfortunately, that proposal was not funded. Taxon Editors assigned to these two volumes include: for legumes Mike Vincent and Jay Raveill (University of Central Missouri), and for non-legume families—Leila Shultz (Utah State University), Dave Boufford (Harvard University Herbaria), Luc Brouillet (University of Montreal), and Jackie Poole (Texas Parks & Wildlife Dept.).

The volumes will contain treatments of 11 families (Caesalpiniaceae and Mimosaceae will be treated as part of a larger Fabaceae and Punicaceae and Trapaceae part of a larger Lythraceae), over 200 genera, and more than 1850 species. Three families previously in these two volumes have been moved: Gunneraceae (1 / 1) to Vol. 12; Podostemaceae (1 / 1) to Vol. 6; and, Thymelaeaceae (4 / 6) to Vol. 6. Two families have been relocated to this volume: Surianaceae (1 / 1) from Vol. 9 and Polygalaceae from Vol. 12. Also, two families still planned for inclusion in these volumes should have been in other volumes: Proteaceae (3 / 3) in Vol. 3 and Haloragaceae (4 / 19) in Vol. 8.

## Volume 12 Update

Lynn Gillespie and Geoff Levin recently took over editing volume 12, which has been rearranged to follow the APGII classification. It now includes 29 families with about 113 genera and about 670 species. Publication is scheduled for 2010.

Taxon editors have been assigned for all families and authors are confirmed for most genera.

Manuscripts have been received for 33 genera (29%) representing 148 species (22%). Some technical editing has been done; for the most part we are waiting until a technical editor is hired at the Kansas editorial center, which will be producing this volume.

Authors are still needed for the following:

Celastraceae: *Hippocratea*

Garryaceae: *Garrya*

If you are interested in contributing either of these, please contact either Lynn Gillespie (LGILLESPIE@mus-nature.ca) or Geoff Levin (glevin@inhs.uiuc.edu).

## Volume 13 Update

Volume 13 will be produced at the Canada Center, with Luc Brouillet as lead editor. Taxon editors for this volume currently are Rich Rabeler (Escalloniaceae, Pittosporaceae), Bruce Ford (Balsaminaceae), Alan Weakley (Sapindaceae), Gordon Tucker (Geraniaceae), Geoff Levin (Nitrariaceae, Burseraceae), and Luc Brouillet and Geoff Levin (Araliaceae, Apiaceae). The volume now includes 13 families mostly from Sapindales and Apiales. Currently, authors are assigned to 58% of families and 37% of genera, and 5 treatments have been received so far. The lead and taxon editors are actively seeking authors. Publication is targeted for 2010. Prospective authors are encouraged to visit the volume 13 Web page (<http://hua.huh.harvard.edu/FNA/Review/under-prod-13.shtml>) to see what genera are currently orphan.

## Volume 17 Update

Volume 17, which is projected to go to press in 2011, will include 931 species in 89 genera and 7 families. This volume encompasses the Scrophulariaceae s.l., with family circumscriptions following APGII. The largest families in the volume are Plantaginaceae (468 species), Orobanchaceae (281 species), and Phrymaceae (112 species). Approximately half of the species in Plantaginaceae are in the genus *Penstemon*.

Craig C. Freeman (University of Kansas) and Richard K. Rabeler (University of Michigan) are co-lead editors. Wayne J. Elisens, taxon editor for Plantaginaceae, has assumed a prominent role organizing efforts for the volume. Five taxon editors and more than 30 authors will write and edit the nearly 100 manuscripts comprising the volume.

In early February, 2008, the lead editors met in St. Louis to coordinate efforts on the volume, developing a tentative production schedule, refining the Welcome Packet for authors, preparing draft family descriptions, and verifying author and editor assignments. In mid March, the lead editors and Wayne Elisens held a 2-day planning meeting in Norman, Oklahoma, refining draft documents and confirming additional author and editor assignments. Currently, all taxon editor assignments have been confirmed and author assignments have been confirmed for 76 of 89 genera (85%) representing 770 of 931 species (85%) in the volume. Some prospective authors have yet to be contacted. Welcome Packets and author confirmation letters will be sent to authors from the Missouri Botanical Garden, beginning in the summer of 2008. Unassigned genera include *Angelonia* (1 sp.), *Digitalis* (4 spp.), *Linaria* (15 sp.), *Misopates* (1 sp.), and *Torenia* (2 spp.). If you are interested in contributing any of these treatments, please contact the lead editors. Draft treatments exist for 5 genera (*Besseyia*, *Gratiola*, *Orthocarpus*, *Synthyris*, and *Triphysaria*) totaling 44 species.

The projected number of illustrations for the volume, based on the 1:6 guideline, is 199. The lead editors have started pulling specimens for illustration and will be working with authors and the managing editor when staff artists become available to begin work on the volume.

## Bryophyte Editorial Center Update

Richard H. Zander

For Volume 28, authors are being cajoled to finish treatments and to send appropriate material for illustration to fit the artist's line up of about 3 plates per week. Each genus will have at least one plate (half panel) and, then, as many additional as there is time,

acknowledging a limit of funding for 1 plate per six species for each genus. Fifty-nine percent of the genera and 46% of the species have been submitted. Forty-six percent of the plates are finished. Introductory Chapters for Volume 28 will be Preface (R. Zander); History of North American Floristic Bryology (M. Crosby); Classification and Phylogeny of the Mosses (J. Shaw); and, Keys to the Genera of Mosses (D. Vitt and W. Buck). Some struggle remains in dealing with phylogenetic changes. We hope to have manuscripts finished by the end of 2008; as usual this depends on the actual completion of treatments by authors. Vadim Bakalin, Institute of Biology and Soil Science, Vladivostok, Russian Federation, is scheduled to visit the Missouri Botanical Garden in November of 2008, with micro-grant support, to work on a treatment of the hepatic genus *Lophozia*.

Volume 29, hepatics and anthocerotales, is due 2010. Twenty-four percent of the genera and 21% of the species are submitted, and 2% of the plates are finished. Authors have been apprised that their volume is due in the not too distant future.

The Web site for the bryophyte volumes mounts all treatments and illustrations after scientific review: <http://www.mobot.org/plantscience/bfna/bfnamenu.htm>. The portion on the BFNA Web site allotted to Volume 27 has been shut down and readers rerouted to the eFloras online version.

## Sponsor Botanical Illustrations and Help Support FNA

To help support the cost of the illustrations, the Flora of North America Association invites individuals and organizations to sponsor one or more drawing. Sponsorships will be acknowledged in a special section of the relevant volume, and sponsors will receive a high-quality reproduction of the black and white illustration in the original size of 6 ½" × 11", suitable for framing and with permission to reuse the image.

FNAA hopes that individuals who love plants, and native plant societies, specialty plant societies, and garden clubs will consider sponsoring one or

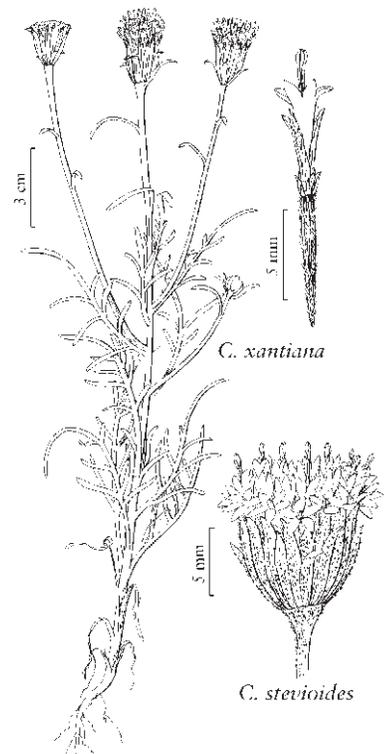
more illustrations, or that horticultural or other businesses will take advantage of this opportunity to promote their interests in our native and naturalized plants.

## Sponsorship for a basic drawing (whole plant and 1–2 details) is \$200.

Generally, three species are represented on a full panel. The cost to sponsor a panel is \$600. Rates may be negotiable under special circumstances or in cases where multiple plates are being funded.

**Want to go all out!? Sponsor a full-color frontispiece! Only one per volume, for a modest donation of \$1000.**

Contact Nancy Morin ([nancy.morin@nau.edu](mailto:nancy.morin@nau.edu), 707/882-2528) for a list of taxa available for sponsorship or to learn more about sponsoring FNA's botanical illustrations.



Basic drawing with 1 detail, plus 1 inset *Chaenactis*, drawn by Linny Heagy. Flora of North America, volume 21, page 406

## FNA Micro-Grants

Dr. Jeanette Fryer who is British and co-author of *Cotoneaster* for FNA volume 9, received a micro-grant to cover expenses of returning herbarium loans from USA herbaria that she borrowed during her research for the FNA treatment. The *Cotoneaster* treatment could not have been done without her expertise and resulted in the first thorough evaluation of the species present on the continent (the number of which went from 6 to approximately 30). She is

retired and does not benefit from working at an institution.

**D**r. Douglas Goldman requested and received a micro-grant to assist with the treatment of *Rubus* for volume 9. Doug has collected in many regions of North America. Recently, he organized and identified the entire southeastern USA backlog of *Rubus* in the Harvard University Herbaria. He is also contributing part of the *Passiflora* treatment for FNA, which is in the final stages of editing. Doug is currently seeking employment and is an Associate at the Harvard University Herbaria.

**D**r. Michael Ignatov visited the Missouri Botanical Garden October 15 through November 24, 2007, with a micro-grant in support of research associated with preparation of a treatment of the moss family Brachytheciaceae for Volume 28 of FNA.

## Electronic Resources

*Ellen Farr, Botany Department, Smithsonian Institution*

**I**ndex Nominum Genericorum (ING) has moved to a new Web server. The new URL is <http://botany.si.edu/ing/>

The original purpose of ING was to provide a resource for discovering whether a generic name had already been published in any group covered by the International Code of Botanical Nomenclature. It is no longer possible to keep ING completely up to date with newly published names in all groups, so the ING search form also has a “distributed search” that looks for generic names of plants in other online resources. The results are presented on a single screen along with the ING entry.

Our goal is to limit the information returned by a search to generic names only to make comparison between sources easier. Please let us know if you encounter problems or have information that will help us improve this service.

If you are linking to ING on your Web site or have a link that passes generic names to ING, please update your links accordingly. The old ‘Ravenel.si.edu’

server will redirect to the new site for several months at least. However, you should change links that pass names from (for example):

<http://Ravenel.si.edu/botany/ing/ingsearch.cfm?searchword=achillea> to:

<http://botany.si.edu/ing/ingsearch.cfm?searchword=achillea>.

## Smithsonian Department of Botany Web Site

**T**he Department of Botany (Smithsonian Institution) Web site has a new address and a new look: <http://botany.si.edu/>. It includes checklists and floras for Hawaii, The Marquesas Islands, Myanmar, the Washington-Baltimore area, Puerto Rico and the Virgin Islands, and the Guiana Shield. Nomenclatural resources include Index Nominum Genericorum (ING), a list and details for generic or specific names considered confusable under the Botanical Code, and a searchable database of conservation/rejection proposals and their disposition for scientific names of plants. A search feature will look for a generic name in 13 of its on-line research databases and provide a list of links for all of the species in that genus. The new center column of the home page will change frequently and will announce new presentations and provide a quick link to selected features.

## Spellex 2008 Edition of Botanical Spelling Software

**T**his new software release includes more than 100,000 specialty words from the botanical industry and includes compatibility with Microsoft, Corel, Web sites, and more. It is a comprehensive botanical spell checker that includes the correct spelling of tens of thousands of vascular plants, mosses, liverworts, hornworts, and lichens grown around the world, including a complete listing of common names, scientific names, classifications, and more from the Natural Resources Conservation Service’s PLANTS Database. *Spellex Botanical* also includes hundreds of plant diseases. Also covered is a wide variety of plants with common uses including edible and medicinal plants and plants used for habitat creation and landscape restoration.

*Spellex Botanical* dictionaries start at \$64.95 and educational discounts are available. Spellex dictionaries are compatible with Microsoft, most Windows programs, developer tools, and Web browsers, and are available in both US English and UK English. To request product information or to place an order, contact Spellex Corporation at 800-442-WORD (9673) or 813-792-7000 or visit [www.spellex.com/products/botany.htm](http://www.spellex.com/products/botany.htm).

## Herbarium and Botanical Garden News

### Botanical Research Institute of Texas (BRIT)

Please note that BRIT has moved to a new interim facility as of 1 June 2008. Tours and access to the library and herbarium will be temporarily unavailable from May–July. Please contact us for details if you have any questions during this time.

Our new address starting June 1 will be:

**Botanical Research Institute of Texas**  
**500 E 4th St.**  
**Fort Worth, TX 76102-4025 U.S.A.**  
**Phone/fax/e-mail remain the same.**

## Recent Publications

*Woody Plants of the Southeastern United States: A Field Botany Course on CD*, by Bruce Kirchoff. Feb. 2008. Missouri Botanical Garden Press. CD-ROM. ISBN: 978 1 930723 62 7.

*Woody Plants of the Southeastern United States, A Field Botany Course on CD, CD ROM, WPSEUS*, is a computer-based visual training program designed to rapidly and efficiently help users become experts in plant identification. Unlike novices, experts are able to quickly recognize patterns. This allows chess masters to recognize meaningful chess configurations, and field botanists to identify plants at a glance. *WPSEUS* helps users achieve this mastery in a fraction of the time that is normally required. It does this by adapting

active learning techniques from the cognitive psychology literature.

*WPSEUS* uses active learning to promote holistic processing, the visual processing mode used by experts. Active learning has been shown to engage the brain areas associated with visual expertise, while passive learning does not. The training techniques are based on two key competencies of experts. Experts are able to recognize patterns, and have the ability to segment their perceptual fields in order to pick out relevant details. Acquiring these competencies is part of what it means to learn to see. *WPSEUS* is the only program that trains users in these competencies from its first use. It functions like a field course in plant identification.

## Meetings

### Botany and Plant Biology 2008 Botany Without Borders

JULY 26–30, 2008

Location is the University of British Columbia, Vancouver, BC. Visit <http://www.botanyconference.org/> for more information.

### 5th Southwest Rare Plant Conference

MARCH 16–20, 2009

Location is the University of Utah, Salt Lake City, Utah. Contact Mindy Wheeler for more information: [wheelermindy@yahoo.com](mailto:wheelermindy@yahoo.com).

### 6th Eastern Native Grass Symposium

OCTOBER 7–10, 2009???

Location is in Columbia, SC. The Symposium registration is now available on-line at <http://www.Regonline.com/ENGS2008>.

For more complete details on the Symposium location, dates, program, etc., go to [http://clemsun.edu/~bstrngr/E\\_Native\\_Grass](http://clemsun.edu/~bstrngr/E_Native_Grass).

## OBITUARIES

### Richard Joshua Shaw

**R**ichard Joshua Shaw, 84, passed away April 21, 2008, in Logan, Utah. He was born June 25, 1923, in Ogden, Utah, the son of David M. and Gwendolyn Shaw. He was a professor of botany, prolific author, national park naturalist, and, most importantly, a devoted husband, father, and grandfather. He graduated with his BS in biology from Utah State University (USU) in 1947 an MS in plant taxonomy in 1950, and obtained a PhD from Claremont Graduate School in 1961. He was an enthusiastic instructor of botany at USU from 1951 through 1987, and students will always remember him for his energy and passion for plants, biology, and the environment.

Richard authored numerous books on plants and wild flowers, which are noted for their clarity, organization, and beautiful photography and illustrations. His books have been a staple in Yellowstone, Grand Teton, and elsewhere for over 50 years. He served as director of the Intermountain Herbarium at USU and added hundreds of specimens to its collection.

Condolences may be sent to the family at [www.allenmortuaries.net](http://www.allenmortuaries.net). Donations in his memory may be made to Grand Teton Association at PO Box 170, Moose, WY, 83012.

### Clifford L. Schmidt

**C**lifford L. Schmidt, 82, who authored the CFNANM treatment of *Ceanothus*, passed away on April 23, 2008. He was born in Los Angeles, California, on March 27, 1926. He spent his early years in Texas and Bakersfield, California. Upon graduating from Kern County High School in 1943, Cliff joined the Navy. He served during WWII on the U.S.S. Canberra. Cliff received his baccalaureate and masters degrees from San Jose State University. After receiving two Danforth scholarships, he completed his doctorate at Stanford University in the field of Population Biology.

During his career he taught at San Jose State University and spent two summers in the Pacific Studies program in Saipan and Palau. After his retirement, the family moved to Salem, Oregon where he was able to continue his taxonomic research as a courtesy professor at Oregon State University.

Cliff loved learning and was always a student and a teacher. Remembrances in lieu of flowers can be made to Westminster Presbyterian Church Memorial Fund or the Oregon Native Plant Society, PO Box 902, Eugene, OR 97440.