

Flora of North America



Volume 21, Numbers 1 – 2

Newsletter

January – December 2007

PRESIDENT'S REPORT

Flora of North America Association

Luc Brouillet, FNA president

Year 2007 saw the publication of two FNA volumes, the last volume of the Grasses, which completes the Monocots, and the first Bryophyte volume. During the summer, FNA was well represented and active at the Botany & Plant Biology 2007 meeting in Chicago. The Information Technology committee has started work on ways to improve our webpage and the way FNA data are presented to the community of users, as well as examining ways of networking with other organizations.

With respect to volume production, the greatest difficulty encountered by FNA is timely delivery of manuscripts by authors. The lead editors have tried all they could to stimulate delivery, but time available to authors to produce FNA treatments remains a critical factor. Another author issue is the number of genera that are still orphan in upcoming volumes. We are encouraging botanists to examine our list of such genera and either to volunteer or suggest names of likely candidates.

I would also like to acknowledge the tremendous work done by all FNA staff and volunteers during volume production. We are fortunate to have a very dedicated staff, both in St. Louis and elsewhere.

At the fall meeting, the board of directors renewed the mandate of directors Wayne J. Elisens and Jackie M. Poole, and welcomed to its ranks three newly-elected members, Steffi M. Ickert-Bond, James S. Miller, and Deb Trock; Dr. Ickert-Bond is now the new regional coordinator for Alaska-Yukon. Their commitment to FNA is greatly appreciated and will certainly help bring forward completion of the remaining

volumes. Geoff Levin has accepted the role of member-at-large on the Executive Committee (EXC).

David Murray announced his retirement from the EXC and from the FNAA board as of October 2007. I take this opportunity to thank him for his long, outstanding service to the association, as Alaska-Yukon regional coordinator, taxon editor, and manager. Let me underline his stint as head of the management committee. On behalf of all of us, I wish him a good, real retirement and our most heartfelt thanks.

FNA SUCCESS AT BOTANY 2007

At the Chicago Botany 2007 meeting, FNA was mentioned in many papers (by unassociated authors) and it is becoming obvious that all the efforts being put into the project are paying dividends.

A special thank you to the following members for their active participation in FNA-related activities during the meeting:

Nancy Morin for having organized an excellent workshop, in which James Maklin presented future prospects on the Information Technology side of FNA.

Nancy, Jim Zarucchi, and Richard Zander for having manned the FNA booth for long hours. This goes beyond the call of duty. They managed to sell all the remaining t-shirts!

Jim Z. for his nice FNA presentation at the colloquium organized by Mary Barkworth and Zack Murrell and titled "Integrating Plant Systematics."

And all FNA Board of Directors members in attendance who were able to share their thoughts about FNA with others.

TREASURER'S REPORT

1 Jan – 30 Sep 2007

Barney Lipscomb, FNA treasurer

The Treasurer reports that in fiscal year 2007 (1 Jan to 30 Sep), the FNA maintained a consistent level of achievement and progress. Funding support from the Chanticleer Foundation continued and will continue in 2008. Fundraising in the areas of individual gifts, art sponsorships, and notecards/totes/t-shirts is helping make the year a successful one. In addition, earned interest, Oxford Royalty payments, and Oxford reimbursement for page layout, rounded out the earned income.

FNA has administered some \$282,091 spent on program services in the first three quarters of 2007. Combined revenues \$275,730.72; net income is -\$6,361.19.

The IRS 990 was completed and submitted to the IRS on June 15, 2007.

The 2006 Auditor's Report says FNA is in good condition.

Thanks to everyone who helped make this another

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 or
Kristin.Pierce@mobot.org

great year for FNA. Your hard work, commitment and financial contributions truly make a difference, and I hope we may continue to count on your support in the years ahead.

Funding News

Nancy Morin, FNA vice president for business and development

The Flora of North America Association has received a \$200,000 grant from The Andrew W. Mellon Foundation to support operations in 2008, with an invitation to request similar funding in the next three years. This grant is contingent on receiving matching funds from other sources. The Chanticleer Foundation has generously agreed to help with the match and we have excellent prospects for securing the needed funds. We are extremely grateful to both The Mellon Foundation and the Chanticleer Foundation for this wonderful support.

Managing Editor Position Changes Hands

The Composition and Editorial Center for the Flora of North America Association located in Saint Louis would like to announce that Kay Yatskievych retired at the end of March 2007. Kay began her five-year tenure with FNA as a composition consultant. She has worn the hats of production manager and technical editor along the way and retired as the managing editor for the Flora. Kay was instrumental in developing solid protocols governing the editorial and production process for FNA. She maintained and improved the valuable Guide for Contributors, Editorial Handbook, and Stylistic Conventions. Kay is still involved as a Regional Reviewer for the state of Indiana for FNA.



HEIDI SCHMIDT

She has worn the hats of production manager and technical editor along the way and retired as the managing editor for the Flora. Kay was instrumental in developing solid protocols governing the editorial and production process for FNA. She maintained and improved the valuable Guide for Contributors, Editorial Handbook, and Stylistic Conventions. Kay is still involved as a Regional Reviewer for the state of Indiana for FNA.

Heidi Schmidt was approved as the managing editor by the Board of Directors for FNAA in the annual meeting, held in Saint Louis on October 14, 2007. In addition to the existing responsibilities of the managing editor, Heidi will also oversee the main aspects of the illustration process for all FNANM volumes. Please contact her directly at heidi.schmidt@mobot.org with any questions regarding the illustration protocol or visit the FNAA website at www.fna.org for up-to-date information covering all aspects of the illustration process.

New Welcome Packet Available for Contributors

Heidi H. Schmidt, managing editor

An updated Welcome Packet, covering FNAA guidelines for contributing authors, is available in either electronic or hard copy format upon request at heidi.schmidt@mobot.org. It includes:

- Overview and timeline of volume production
- Author's checklist for illustration preparation
- Author's checklist for manuscript preparation
- Contact information
- Guidelines for working with illustrations and manuscripts

Future FNA Volumes With APG Influence

Richard H. Zander, FNA lead editor – Bryophytes

The views expressed in this article do not necessarily reflect those of the FNA board of directors.

The FNA Association determined a short while back that future FNA treatments will follow Angiosperm Phylogeny Group (APG; <http://www.mobot.org/MOBOT/research/APweb/>) as best as possible. Details are being discussed and we have several alternative ways of revamping the classification to reflect APG.

Evolution results in both nested clusters of organisms based on analysis of expressed traits and

branching lineages of organisms based on analysis of non-coding DNA traits. APG emphasizes the latter at the expense of the former, often simply mapping expressed traits to inferred molecular lineages. Cronquist's system is a superb explication of nested groups based on expressed traits, and is an evolutionarily based classification. To the extent that APG classification violates such groupings with insistence on monophyly (versus paraphyly, while paraphyly often makes evolutionary sense and is the most parsimonious solution), and on insistence that ancestors never survive (however, although molecules continue to change, stabilizing selection may sustain a morphotype/biorole combination through many molecular splits). Thus, a possible paraphyletic ancestor of molecularly split morphological taxa is explained away as "massive homoplasy" and parallelism or convergence. There is, however, no empirical basis for monophyly as a thing in nature, or for the requirement that a species cannot be phylogenetically complex. A paraphyletic morphologically based group is the evolutionary null hypothesis that is not falsified by even well-supported monophyly of a molecular lineage.

If a molecular monophyletic group in APG is associated with groupings of expressed traits, well and good, but if it contravenes the Cronquistian system, we should find some way to avoid APG if possible and recognize the paraphyletic group. Rejecting the stricture of monophyly does not reject the taxonomic value of the inferred lineage and preserves decades of analysis of evolution of expressed traits.

The paradigm change in systematics is actually the substitution of a tractable problem (determining molecular lineages) for the wearisome, difficult problem of finding an acceptable evolutionary-based classification in the general absence of fossils and the prevalence of parallelism and convergence in expressed traits. But these are two different problems, and this simply substitutes a different basis for classification (phylogenetic) for the evolutionary classification we have been pursuing since Darwin. Lineages do not directly reveal changes in expressed traits that follow selection and drift. The latter may not be recoverable in anything like the detail that lineages can, but we must find some way to preserve what has been inferred about the

evolution of expressed traits and not fragment it in conformance to the enthusiasm of the moment.

As a major work, the FNANM will be considerably influential in determining taxonomic concepts and philosophy over the next few decades, and we have a certain responsibility to the future. I believe

that molecular phylogenetics and (Cronquist's) evolutionary classification can be combined judiciously by the appropriate FNA experts with the courage to reject the impedimenta that phylogeneticists have used to promote using lineages alone as a basis of classification.

FNA MODIFICATIONS TO VOLUMES 6, 7, AND 8: UPDATED DECEMBER 2007

Based on Angiosperm Phylogeny Group (APG) Influence. Updated Dec 2007

James Zarucchi, FNA vice president and editorial director

Sequential APG family numbers added after family in parentheses following E. Haston et al., *Taxon* 56: 7–12. 2007. We have treatments in hand for nearly all taxa being moved into volumes currently in late-stage production.

Vol. 6 [Hunt/2008]

FAMILY	TAXON EDITOR	GENERA/SPECIES	NOTES
Cucurbitaceae (209)	Utech	23/69	
Datisceae (211)	Poole	1/1	
Begoniaceae (212)	Poole	1/2	
Elatinaceae (245)	Utech	2/10	
Clusiaceae (257)	Utech	3/3	Removed two genera [see 2 down]
Podostemaceae (259)	Shultz	1/1	Moved here from Vol. 11 – MSS at MBG
Hypericaceae (260)	Utech	2/54	<i>Hypericum</i> (50) & <i>Triadenum</i> (4)
Violaceae (263)	Hartman +Rabeler	2/65	
Turneraceae (270)	Poole	2/3	
Passifloraceae (272)	Kiger	1/19	
Muntingiaceae (306)	Kiger	1/1	
Malvaceae (307)	Kiger	53/243	Tiliaceae & Sterculiaceae included
Tiliaceae (—)	(Kiger)		Included in Malvaceae
Sterculiaceae (—)	(Kiger)		Included in Malvaceae
Bixaceae (310)	Poole	1/3	
Thymelaeaceae (312)	Boufford	4/6	Moved here from Vol. 11 – MSS at MBG
Cistaceae (315)	Kiger	5/38	
Frankeniaceae (327)	Poole	1/5	<Should have been in Caryophyllales>
Tamaricaceae (328)	Kiger	1/8	<Should have been in Caryophyllales>
Droseraceae (331)	Morin	2/13	<Should have been in Caryophyllales>

Imported to Vol. 6: Podostemaceae (from Vol. 11), Thymelaeaceae (from Vol. 11)

FAMILY	TAXON EDITOR	GENERA/SPECIES	NOTES
Exported from Vol. 6:			
Caricaceae (279)	Poole	1/1	Moved to Vol. 7 after Moringaceae
<i>Flacourtia</i> & <i>Xylosma</i> (—)	Kiger → Boufford	2/2	Moved to Vol. 7 and included in Salicaceae
Fouquieriaceae (371)	Poole	1/1	Moved to Vol. 15 after Polemoniaceae
Loasaceae (363)	Kiger	4/73	Moved to Vol. 12 after [relocated] Hydrangeaceae
Paeoniaceae (151)	Utech → Rabeler	1/2	Moved to Vol. 8 at beginning
Sarraceniaceae (387)	Morin → Freeman	2/24	Moved to Vol. 8 after Primulaceae
Theaceae (383)	Utech → Rabeler	3/4	Moved to Vol. 8 after Primulaceae

Vol. 7 [Missouri/2007]

FAMILY	TAXON EDITOR	GENERA/SPECIES	NOTES
Salicaceae (268)	Boufford	4/123	<i>Flacourtia</i> & <i>Xylosma</i> added (need MSS) Previously in Flacourtiaceae in Vol. 6
Tropaeolaceae (275)	Tucker → Boufford	1/1	Moved here from Vol. 13 – MSS at MBG
Moringaceae (278)	Boufford	1/1	
Caricaceae (279)	Poole	1/1	Moved here from Vol. 6 – MSS at MBG
Limnanthaceae (280)	Tucker → Boufford	2/8	Moved here from Vol. 13
Koeberlinaceae (282)	Shultz	1/1	Previously in Capparaceae
Bataceae (283)	Freeman	1/1	Previously in Vol. 8 – MSS at MBG
Resedaceae (289)	Boufford	2/5	
Capparaceae (290)	Shultz	3/4	Only <i>Atamisquea</i> (1), <i>Cynophalla</i> (1), and <i>Quadrella</i> (2) retained here; <i>Koeberlinia</i> in its own family & moved earlier in volume
Cleomaceae (291)	Shultz	12/34	Previously in Capparaceae
Brassicaceae (292)	Boufford	97/740	

Imported to Vol. 7: Bataceae (from Vol. 8), Caricaceae (from Vol. 6), Tropaeolaceae (from Vol. 13)

Vol. 8 [Kansas/2007]

FAMILY	TAXON EDITOR	GENERA/SPECIES	NOTES
Paeoniaceae (151)	Rabeler	1/2	Moved here from Vol. 6 – MSS done
Iteaceae (153)	Freeman	1/1	See next
Grossulariaceae (154)	Freeman	1/53	Remove <i>Itea</i> (1) – as separate family [previous]
Saxifragaceae (155)	Wells	23/158	Remove <i>Lepuropetalon</i> (1) & <i>Parnassia</i> (1) and place near Celastraceae (Vol. 12), and remove <i>Penthorum</i> (1) and make separate family [see below]
Crassulaceae (157)	Morin	18/110	
Penthoraceae (160)	Wells	1/1	Separated from Saxifragaceae
Sapotaceae (377)	Elisens	5/15	
Ebenaceae (378)	Elisens	1/4	
Theophrastaceae (380)	Rabeler +Hartman	3/6	<i>Samolus</i> added from Primulaceae
Myrsinaceae (382)	Rabeler +Hartman	6/33	
Primulaceae (381)	Rabeler +Hartman	5/52	Remove <i>Samolus</i> – see above: Theophrastaceae
Theaceae (383)	Rabeler	3/4	Moved here from Vol. 6. MSS at Hunt
Symplocaceae (384)	Elisens	1/2	
Diapensiaceae (385)	Freeman	4/6	
Styracaceae (386)	Elisens	2/7	
Sarraceniaceae (387)	Freeman	2/12	Moved here from Vol. 6. MSS at Hunt
Clethraceae (390)	Elisens	1/3	
Cyrillaceae (391)	Elisens	2/2	
Ericaceae (393)	Tucker	45/207	Expanded
Empetraceae (—)	(Elisens)		Included in Ericaceae
Pyrolaceae (—)	(Rabeler)		Included in Ericaceae
Monotropaceae (—)	(Freeman)		Included in Ericaceae

Imported to Vol. 8: Paeoniaceae **Utech** → **Rabeler** (from Vol. 6), Sarraceniaceae **Morin** → **Freeman** (from Vol. 6), Theaceae **Utech** → **Rabeler** (from Vol. 6)

Exported from Vol. 8:

Bataceae (283)	Freeman	1/1	Moved to Vol. 7 after Moringaceae
Hydrangeaceae (362)	Rabeler	9/40	Moved to Vol. 12 after Cornaceae & Nyssaceae
Parnassiaceae (223)	Freeman	2/2	Moved near Celastraceae in Vol. 12
Pittosporaceae (477)	Rabeler +Hartman	2/6	Moved to Vol. 13 after Apiaceae

Too Late to move: Balsaminaceae (from Vol. 13), Haloragaceae (from Vol. 11)

Volume 6 Update

Volume 6, currently under production, is scheduled for completion in 2008 and will include approximately 506 species in 112 genera and 24 families. The majority of the volume consists of the Malvaceae, or Mallow Family, with 42 genera, and 207 species, and the Cucurbitaceae, or Cucumber Family, with 23 genera and 70 species. The Hunt Institute for Botanical Documentation is the Editorial Center for the volume with Bob Kiger as the lead editor and Mary Ann Schmidt as the technical editor, working together to process the 136 manuscripts that represent the efforts of five taxon editors—Ron Hartman, Nancy Morin, Jackie Poole, Rich Rabeler, and Fred Utech—and 40 contributing authors.

Over half of the manuscripts have been received to date, and over 80% of these are in the review process. Further processing of manuscripts is also proceeding beyond the review phase.

The illustrations for the volume are also on track with over 80 specimens pulled and placed with an illustrator. The illustrators assigned to Volume 6 are Linny Heagy and Yevonn Wilson-Ramsey.

Volume 7 Update

Volume 7, currently under production, will be delivered to Oxford University Press for publication in early 2008, and will include approximately 919 species in 125 genera and 11 families. The bulk of the volume consists of the Brassicaceae, or Mustard Family, with 97 genera and 740 species and the Salicaceae, or Willow Family, with four genera and 123 species. Jim Zarucchi (Missouri Botanical Garden) is the lead editor with Martha Hill (Missouri Botanical Garden) as the technical editor, working together to process the 136 manuscripts that represent the efforts of four taxon editors; Craig Freeman for Bataceae, Jackie Poole for Caricaceae, Leila Shultz for Capparaceae, Cleomaceae, and Koeberliniaceae, and David Boufford for the remaining families, and 35 contributing authors.

We are pleased to report that nearly all treatments



Salix ovalifolia. Frontispiece for volume 7. Drawn by John Myers.

have been submitted as of early December 2007. Manuscript review is progressing well; all submitted manuscripts will be formatted by the technical editor and will be posted for regional review by press time for this newsletter. Currently, 83% of the manuscripts have passed through the review process. The editorial staff would like to acknowledge and compliment all of the Regional Reviewers in Canada and the U.S. for their careful work and insightful comments on Volume 7 manuscripts. Further processing of manuscripts is also proceeding; out of the 919 species to be covered, 39% have been through the first bibliographic pass, and 40% have been indexed and styled.

The illustrations are almost complete for Volume 7 with 100% of all specimens being pulled for the 247 illustrations and the additional 104 insets. By the end of November 2007, 92% of the illustrations are through the pencil stage and 86% have been inked. Four illustrators have worked on Volume 7: Barbara Alongi, Linny Heagy, John Myers, and Yevonn Wilson-Ramsey.

Volume 8 Update

Volume 8, which will go to press in early 2008, will include approximately 680 species in 126 genera and 19 families. The largest families in the volume are Crassulaceae, Ericaceae, and Saxifragaceae. Craig Freeman (University of Kansas) and Rich

Rabeler (University of Michigan) are co-lead editors. Mary Ann Schmidt (Hunt Institute for Botanical Documentation) is the technical editor, helping to process the 151 manuscripts that represent the efforts of seven taxon editors—Wayne Elisens, Craig Freeman, Ron Hartman, Nancy Morin, Rich Rabeler, Gordon Tucker, and Elizabeth Wells—and 63 contributing authors.



Rhododendron maximum. Frontispiece for volume 8. Drawn by Yevonn Wilson-Ramsey.

We are pleased to report that all treatments have been submitted as of early December 2007. Manuscript review is proceeding apace; all submitted manuscripts have been formatted by the technical editor and all have been posted for regional review, with the review process completed for 91% of the manuscripts. The editors are grateful to all of the regional reviewers in Canada and the U.S. for their careful reviews and insightful comments on Volume 8 manuscripts. Further processing of manuscripts is also proceeding; out of the

680 species to be covered, 70% have been through the first bibliographic pass, 24% the second bibliographic pass, 29% have been indexed and styled, and 4% (7 small families) have been composed into final pages.

A determined effort by editors to work closely with authors on artwork has paid dividends for Volume 8. With help from the lead editors and the managing editor, specimens have been pulled for all of the nearly 200 illustrations that will appear in the volume. By the end of October 2007, all of the illustrations were in pencil and 92% were in ink: all of those required for the recently imported families are also now in preparation.

Volume 9 Update

Volume 9, currently in production, is scheduled for completion in mid 2008. It will include four families with 74 genera and about 703 species. Families included are Staphyleaceae, Crossosomataceae, Picramniaceae, and Rosaceae, which constitutes the bulk of the volume with about 690 species and 68 genera. Surianaceae has been moved to Volume 10. Chrysobalanaceae will be moved to a later volume more in accord with its APG position. The Canada Center, located at the Institut de recherche en biologie végétale, Université de Montréal, is the lead center for this volume, with Luc Brouillet as lead and taxon editor, Helen Jeude as technical editor, and Jim Phipps as taxon editor for Rosaceae. There are 43 authors involved.

To date, 73% of manuscripts (generic treatments) have been received, representing 63% of species. Most have gone through regional review and have been returned to authors for corrections. Of all manuscripts, 36% have now gone through the whole editorial process and are essentially ready for the final stages of book preparation.

Instructions and materials have been accumulated for more than 80% of the illustrations. Our artist, Marj Leggitt, has drafted 54% of the unit illustrations for the volume, most of which are also inked and scanned. Other illustrations were done by artists Barbara Alongi and John Myers.

Volume 10–11 Update

Volume 10–11 is in the early stages of production and publication of the volumes is tentatively scheduled for 2009. The combined volumes will include the Fabaceae, or Bean Family (including Caesalpinaceae and Mimosaceae) as well as the Onagraceae, or Evening Primrose Family, and the Lythraceae, or Loosestrife Family. The volumes will include approximately 1816 species in 206 genera and 15 families. Jim Zarucchi (Missouri Botanical Garden) is the lead editor with Martha Hill (Missouri Botanical Garden) as the technical editor, working together with six taxon editors; Jay Raveill and Michael Vincent are co-taxon editors for the Fabaceae, while David Boufford, Luc Brouillet, Jackie Poole, and Leila Shultz are the taxon editors for the remaining families. Heidi Schmidt is the managing editor.

The Fabaceae covered in the flora include 147 genera with 1460 species. Thirty-three manuscripts are in hand, covering 873 species (22%/60%); 63 genera have been assigned (43%); 23 genera in negotiation with potential authors (16%). There are 23 orphan genera yet to be assigned to authors (54 species) (16%/4%). Please see the list following this article for specifics on the orphan genera. Manuscripts for some of the larger genera have already been received including, *Astragalus* (350 spp. + 200 var.), *Lupinus* in part (154 spp.), *Trifolium* (96 spp.), *Dalea* (57 spp.), *Lathyrus* (44 spp.), and *Vicia* (30 spp.).

The illustrations are being assigned regularly, on target as manuscripts are fine-tuned and submitted. All illustrations are coordinated through the Editorial Center at the Missouri Botanical Garden.

Orphaned Fabaceae Treatments Available for Adoption

The following is a list of Fabaceae genera (and number of species) in need of an author to write the treatment. If you are interested in taking on any of these genera, please contact Dr. Michael Vincent at vincenma@muohio.edu.

<i>Adenanthera</i>	(1)
<i>Ceratonia</i>	(1)
<i>Chamaecytisus</i>	(1)
<i>Colutea</i>	(1)
<i>Delonix</i>	(1)
<i>Dioclea</i>	(1)
<i>Eysenhardtia</i>	(3)
<i>Genista</i>	(7)
<i>Glycyrrhiza</i>	(2)
<i>Hippocrepis</i>	(1)
<i>Lotononis</i>	(1)
<i>Onobrychis</i>	(1)
<i>Ornithopus</i>	(2)
<i>Pachyrhizus</i>	(1)
<i>Paraserianthes</i>	(1)
<i>Parryella</i>	(1)
<i>Peltophorum</i>	(2)
<i>Prosopis</i>	(5)
<i>Scorpiurus</i>	(1)
<i>Securigera</i>	
(formerly <i>Coronilla</i>)	(1)
<i>Spartium</i>	(1)
<i>Tephrosia</i>	(17)
<i>Ulex</i>	(1)

Volume 12 Update

Dr. Lynn Gillespie of the Canadian Museum of Nature and Dr. Geoff Levin of the Illinois Natural History Survey have agreed to take over lead editorship of Volume 12. This volume will cover 20 families, notably Cornaceae, Aquifoliaceae, Buxaceae, Euphorbiaceae, Rhamnaceae, Vitaceae, and Linaceae, and is currently scheduled for publication in 2009.

Volume 17 Update

Volume 17, which we expect will go to press in 2010, will include approximately 920 species in 88 genera and 7 families. This volume encompasses the Scrophulariaceae s.l.; treated here following the work of the Angiosperm Phylogeny Group (APG II), many of the species are distributed to the Orobanchaceae,

Plantaginaceae, and Phrymaceae. The Plantaginaceae represent about one-half of the volume with the genus *Penstemon* comprising about one-half of those species. Craig Freeman and Rich Rabeler are co-lead editors. Wayne Elisens, the taxon editor for Plantaginaceae, has taken on a prominent role in the organizing efforts for the volume. A technical editor is not yet assigned to the volume. We expect there to be at least 95 manuscripts representing the efforts of four taxon editors and 28+ contributing authors.

Early efforts on this volume have focused on verifying author and editor assignments, and finding additional authors where they are needed. A draft Welcome Packet has been prepared, and a genus template will be developed early in 2008 for use by authors and editors. Author assignments have been confirmed for 40 of the 88 genera in the volume (46%). Several potential authors have been, or remain to be, contacted. As of this writing, we have not identified authors for the following larger genera: *Euphrasia* (15 spp.), *Verbascum* (14 spp.), *Aureolaria* (7 spp.), *Seymeria* (5 spp.). If you are interested in contributing any of these treatments, please contact the lead editors. Anyone interested in making a small contribution to FNA by producing a treatment of a monospecific genus should note that 37 of the 88 genera fall into that category; as of this writing, 21 of the 37 are without an author. 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 196. 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, FNA lead editor - Bryophytes

Volume 28, the second moss volume, will address the remainder of the acrocarps and all the pleurocarps. It should be completed at the end of 2008. At present, treatments of 46% of the projected 207

genera and 40% of the projected 701 species are finished. Several major treatments are now in review. The FNAA supported the visit of Michael Ignatov (Moscow Botanical Garden) to the Missouri Botanical Garden for two months to use the collections for his FNANM treatments of the large and difficult Temperate Zone moss family Brachytheciaceae. This afforded him opportunity to work directly with Volume 28 illustrator Patricia Eckel. He also worked on this group for a week at the New York Botanical Garden. His wife, Elena Ignatova, also visited the MBG at the same time to work on the genus *Schistidium* (Grimmiaceae) for Russia.

Volume 29, the hepatics and liverworts volume, is due in 2010, and is proceeding slowly. Recently two additional Russian bryologists, Alexey Potemkin and Vadim Bakalin, have agreed to contribute treatments of the large genera *Scapania* and *Lophozia*, respectively.

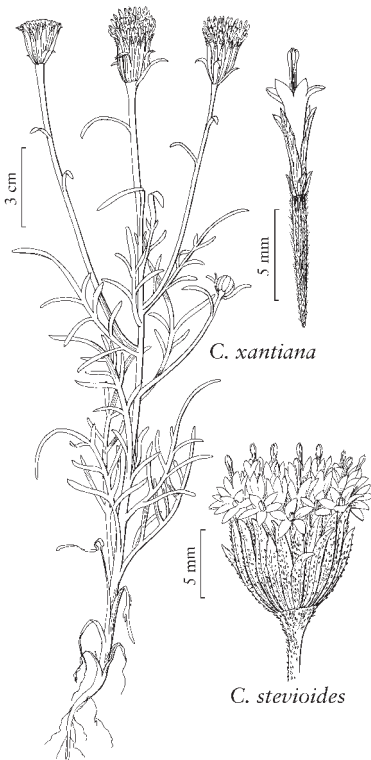
Sponsor Botanical Illustrations and Help Support FNA

Nancy Morin, FNA vice president for business and development

To help support the cost of the illustrations, the Flora of North America Association invites individuals and organizations to sponsor one or more drawings. 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 interest in our native and naturalized plants.

Sponsorship for a basic drawing (whole plant and 1–2 details) is \$200 for not-for-profits and individuals, and \$250 for businesses.



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

Generally, three species are represented on a full panel. The cost to sponsor a panel is \$600 for not-for-profits and individuals and \$750 for businesses. 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 at nancy.morin@nau.edu, or 707-882-2528 for a list of taxa available

for sponsorship or to learn more about sponsoring FNAA's botanical illustrations.

Electronic Resources

eFloras

The Missouri Botanical Garden recently received the IMLS National Leadership grant "eFloras.org: A Collaborative Portal for Biodiversity Research" which will expand eFloras, a Web portal that enables researchers working in natural areas to interact with core botanical data, determine plant identifications, and record research observations. This eFloras enhancement project will develop a standard natural history schema, integrate digital tools, develop options for personal electronics, and provide an opportunity to investigate and catalog natural history resources. This project will improve collection and dissemination of natural history data and biodiversity. An enhanced

eFloras Web portal will serve as a model for all natural history disciplines, improve the collaborative collection of data, and increase availability of this information to a scientific audience. Dissemination will be through blogs, presentations, an electronic mailing list, and on the project's Web site.

Plant Information Online <http://plantinfo.umn.edu>

One of the world's largest resources for botanical and horticultural information is now freely available to the public. Managed by the University of Minnesota Libraries, *Plant Information Online* is a collection of databases of interest to plant and gardening enthusiasts as well as professional botanists, horticulturists, and plant scholars. It offers a range of resources, including nearly 1000 North American plant suppliers, bibliographic details for more than 350,000 images of wild and cultivated plants from around the world in botanical and horticultural books and magazines from 1982 to the present, and a new section: links to expert-selected sites on growing plants in all regions of Canada and the U.S.

Herbarium and Botanical Garden News

Mendocino Coast Botanical Gardens

Christopher Woods has been appointed the new Executive Director, starting January 2, 2008. He was horticulturist and then Executive Director at Chanticleer from 1981 until 2003. While at Chanticleer, he was instrumental in introducing the Board of the Chanticleer Foundation to Flora of North America and encouraging them to develop a partnership with the Flora of North America Association. Thanks to Chris, the Chanticleer Foundation made a 6-year commitment to FNA in 2000 and has awarded \$3 million to date, very generously having continued beyond their original commitment. Chris also spearheaded the establishment of a Business Advisory Committee and development of a Business Plan for FNA. He continues to be an ardent supporter of the project. After leaving

Chanticleer he was vice president for horticulture and external operations at Santa Barbara Botanic Garden and executive director of the Ojai Valley Land Conservancy before becoming Executive Director at VanDusen Botanical Garden, his most recent position. Mendocino Coast Botanical Gardens is located in Fort Bragg, California. The 47 acre property fronts on the Pacific Ocean and includes native plant communities as well as designed gardens and collections of rhododendrons, heathers, magnolias, and Mediterranean plants (see www.gardenbythesea.org for more information about this lovely garden). Nancy Morin has been serving as the Interim Executive Director since June 2007.

California Academy of Sciences (CAS)

The herbarium at the California Academy of Sciences is in the process of moving to its permanent home in its new facility in Golden Gate Park. Beginning November 26th and lasting until sometime in late March or April the entire collection will be inaccessible. It will take a month to move the collections into a freezer and another month for the cabinets to be moved and installed on compactors in the new facility. Beginning in February, the collections will be moved to the new building and the work of putting everything back into the cabinets will begin. For anyone working on treatments involving western North America or California species, please remember that they have the largest and most comprehensive collection of California vascular plants in the country and an extensive collection from the remainder of western North America. Please be aware that if you need to visit before next fall, you will need to make arrangements well in advance, as it will be necessary to get permission for visitors during this transitional time. Visiting researchers will have strictly limited access to areas of the building, due to construction in other areas. Please plan on paying a visit in late 2008 when they open to the public.

The Consortium of California Herbaria

This organization was developed to serve as a gateway to information from California vascular plant specimens that are housed in herbaria through

out the state ([url: ucjeps.berkeley.edu/interchange.html](http://ucjeps.berkeley.edu/interchange.html)). The database now includes information from nearly 800,000 specimens, all searchable through a single interface.

Originally developed around botanical collections from University of California herbaria, the consortium continues to grow as more collections are added. The data included in this



database are a snapshot of the California vascular plant collections at partner institutions. More recent data may be available through the individual herbaria.

Another goal of the consortium is to provide coordinate data (latitude/longitude) for as many California specimens as possible. More than 240,000 specimens were georeferenced as of March 2006.

Please send questions or comments regarding the development and use of this database to Richard Moe at rlmoe@berkeley.edu.

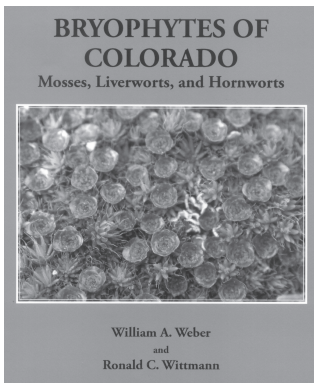
Recent Publications

Flora of the Canadian Arctic Archipelago: Descriptions, Illustrations, Identification, and Information Retrieval. [CD-ROM] NRC Research Press, National Research Council of Canada, Ottawa. S.G. Aiken, M.J. Dallwitz, L.L. Consaul, C.L. McJannet, R.L. Boles, G.W. Argus, J.M. Gillett, P.J. Scott, R. Elven, M.C. LeBlanc, L.J. Gillespie, A.K. Brysting, H. Solstad, and J.G. Harris. 2007.

The *Flora of the Canadian Arctic Archipelago* is scheduled for publication as a CD in Dec 2007 by NRC Press. This is a comprehensive guide to the 352 ferns and flowering plants of the Canadian Arctic Islands. Each species is provided with a detailed morphological description, distribution map, and notes on taxonomy, distribution, and ecology, and the

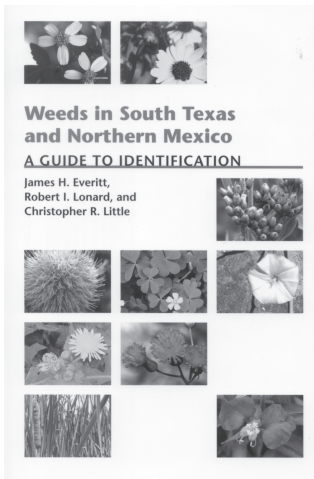
text is complemented by an extensive bibliography. Over 3000 color photographs and line drawings illustrate the habitat, habit, flowers, and distinguishing characters of each species. The DELTA (Descriptive Language in Taxonomy) format allows for interactive identification.

Bryophytes of Colorado. Mosses, Liverworts, and Hornworts, by William A. Weber and Ronald C. Wittmann. Drawings by Patricia Eckel. Pilgrims Process, Inc., Santa Fe, NM; <http://www.pilgrimsprocess.com>. ISBN 978-09790909-1-2. \$29.95, 231 pages, 9 b/w drawings, 8 ½ × 11". 2007.



“This work treats all bryophytes known to occur in Colorado. It should be useful in adjoining parts of neighboring states and more generally in the mountainous regions of the interior western United States.” Contents: Preface; Acknowledgments; Introduction; PART 1.

Mosses; Plates; PART 2. Liverworts and Hornworts; People associated with Bryophyte Names; Glossary; Bibliography; Index by Specific Epithets: Mosses; Index by Specific Epithets: Liverworts and Hornworts; Catalog: Mosses; and Catalog: Liverworts and Hornworts.

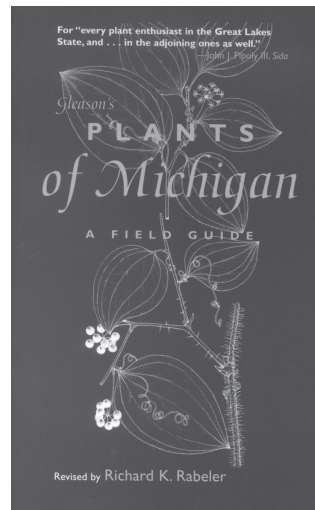


Weeds in South Texas and Northern Mexico. A Guide to Identification, by James H. Everitt, Robert I. Lonard, and Christopher R. Little. Texas Tech University Press; www.ttup.ttu.edu. ISBN 978-0-89672-614-7. \$19.95, 222 pages, color photos, 6 × 9". 2007.

Summary from the publisher: “Identification

guide to the 188 most common species of weedy plants in South Texas and Northern Mexico. Presents information to identify the plants, including a color photograph of each, as well as general comments about the habits of the plants, their uses, and their possible toxicity.” Includes bibliographical references and index.

Gleason’s Plants of Michigan, revised by Richard K. Rabeler; Vivienne N. Armentrout, editor; illustrations by Elise C. Bush. The University of Michigan Press, Ann Arbor, MI. www.press.umich.edu. ISBN 978-0-4721-03246-4. \$24.95, 398 pages, 45 b/w line drawings, bibliography, glossary, subject index, index to plant names, 5 × 8". 2007.



Gleason’s Plants of Michigan is a major revision and expansion of *The Plants of Michigan* by Henry A. Gleason—the 1918 classic field guide to the flowering plants and trees found in Michigan, neighboring Great Lakes States, and southern Ontario. Richard K. Rabeler has completely updated the family descriptions and added easy-

to-use keys. Information on habitats and geographical distribution is now included as well as a comprehensive index of plant names, an illustrated section on terminology, a glossary, and an introduction to botany in Michigan.

Rare Plants of Texas: A Field Guide, by Jackie M. Poole, William R. Carr, Dana M. Price, and Jason R. Singhurst. Texas A&M Press Nature Guide Series number 37. ISBN 978-1-58544-557-8. \$35, 656 pages, 247 color photographs, 235 Texas range maps, 215 drawings and bibliographic index. February 2008.

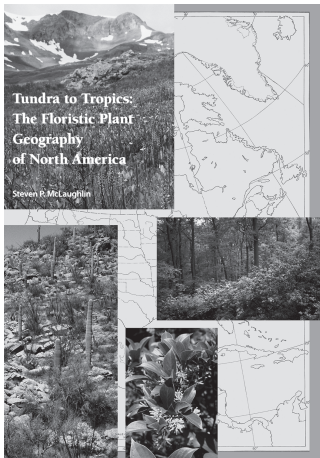
Complete with photographs, line drawings, and county maps, this book describes the officially listed, candidate, and species-of-concern plants in Texas.



Individual accounts include information on distribution, habitat, physical description, flowering time, federal and state status, similar species, and published references. The authors also provide brief introductory chapters on the state's vegetation regions; the history of plant conservation in

Texas; federal, state, and other ranking methods; threats to native plants; recovery methods; and reporting guidelines.

Tundra to Tropics: The Floristic Plant Geography of North America, by Steven P. McLaughlin. Botanical Research Institute of Texas (SBM 30). <http://www.brit.org/brit-press/brit-books/>. ISBN-10-889878-17-0; ISBN-13-978-1889878-17-1. \$20, 58 pp, 50 b/w maps, 7" x 10". April 2007.



Floristic elements and floristic areas for North America were circumscribed using principle components analysis (PCA) of a sample of 245 local floras from Canada, the United States and Mexico. Three analyses were conducted: (1) a PCA on a matrix of Otsuka similarity indices based on shared species, which identified

27 floristic subprovinces; (2) a PCA on a matrix of Pearson correlations on the log number of species per genus in each flora, which identified 12 floristic provinces; and (3) a PCA on a matrix of Pearson correlations on the log number of species per family in each flora, which identified 4 floristic regions. Seventy-eight percent of the 245 floras formed nested hierarchical groups across all three analyses; 98% formed nested groups over two levels of the hierarchy. When

compared with earlier bio-geographic treatments of North America by Dice, Udvardy, and Cronquist, my results supported different aspects of each one but also showed that none completely captured the major floristic patterns on the continent.

Meetings and Workshops

Center for Plant Conservation

2008 TRAINING SCHEDULE

APPLIED PLANT CONSERVATION WORKSHOP

- Learn about imperiled plant populations and issues critical to success in recovery management.
- Learn how to develop a conservation program for imperiled plants.

The Center for Plant Conservation, with botanists nationwide, has designed this training to present an overview of 17 important conservation topics during one week of intensive classroom instruction.

Sessions include: The State of Conservation Biology, Legislative Protection and Regulatory obligations for plant recovery, Population Evaluation, Demography, Population Viability Analysis, Plant Conservation Genetics, Restoration and Management: Ex-Situ and In-Situ, Inventory and Monitoring Techniques, Tools and Partnerships and more!

Participants receive instruction from outstanding faculty as well as pragmatic tips, information resources, contact lists, and a unique opportunity to get questions answered by experts in the field.

March 2-8 2008: Bishop Museum, Honolulu, Hawaii

Sponsored by the U.S. Department of Defense This workshop is Tuition Free for DoD installation personnel and their contracted support.

Registration limited to DoD until Jan 14.

Public registration starts Jan 15.

Meetings and Workshops *continued*

Spring 2008: BLM Training Center, Phoenix, Arizona

Dates and Registration information TBA

For details please visit:

Funded in part by the Bureau of Land Management

www.centerforplantconservation.org

Tuition \$300

or call 314-577-9456

Flora of North America Statistics for First 14 Volumes

VOL.	YEAR	PAGES	FAM.	GEN.	SPP.	AUTHS.	COPIES SOLD*
1	1993	xxi + 372	–	–	–	24	6248
2	1993	xvi + 475	30	97	553	55	6304
3	1997	xxiii + 590	32	128	741	58	4804
22	2000	xxiii + 352	30	89	423	21	2849
26	2002	xxvi + 723	11	177	908	77	2743
23	2002	xxiv + 608	1	27	843	31	2926
25	2003	xxv + 783	½	123	728	54	2612
4	2003	xxiv + 559	10	117	652	40	2394
5	2005	xxii + 656	3	75	739	22	2315
19		xxiv + 579					2059
20	2006	xxii + 666	1	418	2413	90	2031
21		xxii + 616					2011
24	2007	xxviii + 911	½	113	695	64	1933
27	2007	xxi + 713	33	127	704	40	1639
Totals			152	1491	9399		42,928

* - Sales reported by Oxford University Press – New York as of 2 Jan 2008

Flora of North America Newsletter
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