

# TABLE OF CONTENTS

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<b>WELCOME TO ALBUQUERQUE.....</b>	<b>2</b>	<b>SCIENTIFIC PROGRAM AT-A-GLANCE.....</b>	<b>29</b>
<b>PARTICIPATING SOCIETIES AND CONFERENCE</b>		Fold-out Program .....	29
<b>PLANNING.....</b>	<b>4</b>	Full Program .....	31
<b>REGISTRATION INFORMATION .....</b>	<b>5</b>	Symposia, Addresses, and Discussion Sessions..	35
<b>MEETING INFORMATION .....</b>	<b>6</b>	Societal / Sectional Programs .....	36
<b>SESSION INFORMATION.....</b>	<b>7</b>	Meetings .....	43
<b>OPENING CEREMONY .....</b>	<b>8</b>	Social Events .....	44
<b>SCIENTIFIC FIELD TRIPS, WORKSHOP,</b>		<b>SCIENTIFIC PROGRAM.....</b>	<b>46</b>
<b>AND LOCAL TOURS .....</b>	<b>10</b>	Saturday, August 11 .....	46
<b>EXHIBITOR INFORMATION .....</b>	<b>17</b>	Sunday, August 12.....	47
<b>SOCIETY INFORMATION .....</b>	<b>19</b>	Monday, August 13.....	48
American Bryological and Lichenological		Tuesday, August 14 .....	69
Society (ABLS) .....	19	Wednesday, August 15 .....	99
American Fern Society (AFS).....	21	Thursday, August 16.....	116
American Society of Plant Taxonomists		<b>AUTHOR INDEX.....</b>	<b>117</b>
(ASPT).....	23	<b>MAPS</b>	
Botanical Society of America (BSA) .....	25	Abuquerque Convention	
International Organization of Plant		Center Floor Plan .....	Inside front cover
Biosystematists (IOPB).....	28	Hyatt Regency Floor Plan.....	123
		Albuquerque Dining and Walking	
		Map .....	Inside back cover

# WELCOME TO ALBUQUERQUE

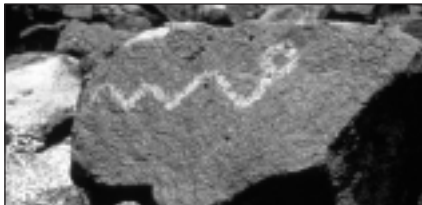
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Albuquerque is located in central New Mexico, the center of the Southwest, a mecca of urban sophistication surrounded by spectacular beauty. It is a city where the views go on forever.

Albuquerque was founded in 1706 by a few Spanish families who built a small chapel and adobe homes around a plaza close to the Rio Grande. A ride up the Sandia Peak Tram, the world's longest single-span tramway, puts you on top of a mountain where the view encompasses 11,000 square miles. To the west, silhouettes of volcanoes against fiery red sunsets inspire the soul. As darkness blankets the city, thousands upon thousands of lights twinkle like tiny desert diamonds.

It's been called the most culturally-diverse city in the country. Albuquerque is a balance of a prehistoric past and a high-tech present. Albuquerque is also the Hot Air Balloon Capital of the World!

Albuquerque enjoys blue skies and sunshine 310 days of the year with summer temperatures an average high of 91° F and low of 62° F. Albuquerque's elevation is 5,352 feet above sea level.





## ***City of Albuquerque***

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

**OFFICE OF THE MAYOR  
JIM BACA**

August 12, 2001

Dear Honored Guests:

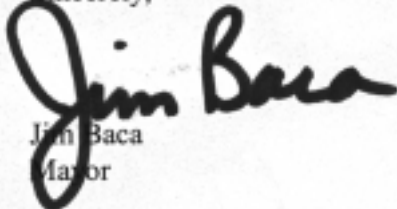
As Mayor of the City of Albuquerque, it is a great privilege for me to extend warm greetings and welcome you to Albuquerque and the "Land of Enchantment." Albuquerque is honored to host the **Botany 2001 Conference**. We are delighted to host your organization, and wish all participants a successful conference.

For those of you visiting from out of town, I encourage you to take advantage of everything Albuquerque has to offer. Explore our art, history and cultural attractions. The Albuquerque Museum, Old Town and other art galleries will provide you with a window into Albuquerque's rich history as well as our vibrant and unique art community.

I trust that you will find the natural beauty and enchantment of Albuquerque, coupled with our unparalleled hospitality and cultural diversity, as a perfect setting to your annual conference.

The people of Albuquerque and of New Mexico are ready to assist in making your visit as enjoyable as possible. Best wishes on an enjoyable stay and productive conference.

Sincerely,



Jim Baca  
Mayor

# PARTICIPATING SOCIETIES

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## **American Byrological and Lichenological Society (ABLS)**

*Robert S. Egan, President*  
Dept. of Biology  
University of Nebraska at Omaha  
Omaha, NE 68182-0040  
Tele: (402) 554-2491  
E-mail: robert\_egan@unomha.edu

## **American Fern Society (AFS)**

*Barbara Joe Hoshizaki, President*  
577 Westmoreland Avenue  
Los Angeles, CA 90004  
Tele: (213) 662-0655  
E-mail: pterophil@email.msn.com

## **American Society of Plant Taxonomists (ASPT)**

*Walter S. Judd, President*  
Dept. of Botany, Bartram Hall  
University of Florida  
P. O. Box 118526  
Gainesville, FL 32611-8526  
Tele: (352) 392-5135  
E-mail: wjudd@botany.ufl.edu

## **Botanical Society of America (BSA)**

*Patricia G. Gensel, President*  
Dept. of Biology  
University of North Carolina  
Chapel Hill, NC 27599-3280  
Tele: (919) 962-6937  
E-mail: pgensel@bio.unc.edu

## **International Organization of Plant Biosystematists (IOPB)**

*Konrad Bachmann, President*  
Institut für Pflanzengenetik und  
Kulturpflanzenforschung  
IPK Gatersleben, D-06466  
Gatersleben, Germany  
Tele: +49-39482-5465  
E-mail: bachmann@ipk-gatersleben.de

# CONFERENCE PLANNING & PROGRAM COORDINATION

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## **Conferon Account Planner**

*Caroline Spinner*  
Conferon, Inc.  
701 Emerson Rd., Suite 410  
St. Louis, MO 63141  
Tele: (314) 997-1500  
E-mail: spinnerc@conferon.com

## **Fieldtrip Coordinator & ABLS Local Representative**

*Kelly Allred*  
Dept. of Animal and Range  
Science, Box 3-I  
New Mexico State University  
Las Cruces, NM 88003  
Tele: (505) 646-1042  
E-mail: kallred@nmsu.edu

## **BSA Meetings Coordinator**

*Wayne J. Elisens*  
Dept. of Botany & Microbiology  
770 Van Vleet Oval  
University of Oklahoma  
Norman, OK 73019  
Tele: (405) 325-5923  
E-mail: elisens@ou.edu

## **BSA Meeting Manager**

*Johanne Stogran*  
Botanical Society of America  
1735 Neil Avenue  
Columbus, OH 43210  
Tele: (614) 292-3519  
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## **BSA Program Director**

*Jeffrey M. Osborn*  
Division of Science  
Truman State University  
100 E. Normal Street  
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## **BSA Webmaster**

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Dept. of Botany & Microbiology  
770 Van Vleet Oval  
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Norman, OK 73019  
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## **BSA Local Representative**

*Diane Marshall*  
Dept. of Biology  
University of New Mexico  
Albuquerque, NM 87131-1091  
Tele: (505) 277-1168  
E-mail: marshall@unm.edu

## **ASPT Acting Program Directors**

*Lynn G. Clark & Robert S. Wallace*  
Dept. of Botany, Bessey Hall  
Iowa State University  
Ames, IA 50011-1020  
Tele: (515) 294-8218 (LC) &  
(515) 294-0367 (RW)  
E-Mail: lgclark@iastate.edu &  
rwallace@iastate.edu

## **ASPT and IOPB Local Representative**

*Timothy K. Lowrey*  
Dept. of Biology  
University of New Mexico  
Albuquerque, NM 87131-1091  
Tele: (505) 277-2604  
E-mail: tlowrey@unm.edu

## **AFS Program Officer & Vice President**

*Christopher H. Haufler*  
Dept. of Ecological and  
Evolutionary Biology  
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Lawrence, KS 66045-2106  
Tele: (785) 864-3255  
E-mail: vulgare@ukans.edu

## **AFS Local Representative**

*Sidney Ash*  
1708 Quail Run Court NE  
Albuquerque, NM 87122-1138  
Tele: (505) 856-5852  
E-mail: sidash@aol.com

## **ABLS Program Officer & President-Elect**

*William R. Buck*  
Institute of Systematic Botany  
New York Botanical Garden  
Bronx, NY 10458-5126  
Tele: (718) 817-8624  
E-mail: bbuck@nybg.org

# REGISTRATION INFORMATION

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## REGISTRATION AREA

On-site registration, pickup of registration packets for those who have pre-registered, and late purchase of social event tickets can be done at the Botany 2001 Registration Desk. The Registration Desk will be located in the Albuquerque Convention Center (ACC; ground level, West Complex) just outside the entrance to Southwest Exhibit Hall and adjacent to the Cyber Café. The Registration Desk will be open at the following times:

Sunday, August 12:	10:00 am to 6:00 pm
Monday, August 13:	7:30 am to 5:00 pm
Tuesday, August 14:	7:30 am to 5:00 pm
Wednesday, August 15:	7:30 am to 12:00 pm

## REFUND AND CANCELLATION POLICY

Requests for fee refunds will be honored if received in writing before June 30, 2001 to: Botany 2001, P. O. Box 75013, Cleveland, OH 44101-2199. Registration fee refunds will be subject to a \$50 processing fee. Multi-day field trips may be subject to a penalty if cancelled after June 15, 2001. Full fee refunds will be granted for Social Events, Scientific Field Trips, Local Tours, and Workshops if they exceed maximum enrollment, do not meet minimum enrollment, or are cancelled for any reason. ALL refunds will be issued AFTER the conference.

## FEDERAL TAX IDENTIFICATION NUMBER

The Federal Tax-Exempt Identification Number is 62-0671591 (Botanical Society of America).

## CONFERENCE HOUSING

Botany 2001 has contracted with a number of hotels convenient to the Albuquerque Convention Center. The Hyatt Regency is the host hotel for the conference. Room reservations at this hotel support society council meetings, most ticketed social events, the Plenary Address and the All-Society Mixer. Additional hotel blocks have been secured at the DoubleTree Albuquerque Hotel, Plaza Inn, and The Hotel Blue.

## SPECIAL SERVICES

If you require special accommodations, assistance or services during Botany 2001, please talk with a Botany 2001 staff member at the Registration Desk.

## CHILD CARE

If you require child care during your stay, Botany 2001 can provide you with a list of local providers. Attendees are responsible for making their own arrangements with the provider. Botany 2001 assumes no responsibility for any difficulties or consequences arising from the use of a child care provider and recommends that the provider be screened carefully. Please see the Registration Desk for additional information.

## GETTING AROUND IN TOWN

Albuquerque is served by the Sun Trolleys which run every 20-30 minutes from the Convention Center to points of interest in downtown. There is also an extensive bus route throughout the city. Contact your hotel's front desk for times and fares. Taxis are available on a regular basis in front of the Hyatt. Checker Express is also available by reservation for charter by private groups. Checker Express phone number is (505) 765-1234.



# MEETING INFORMATION

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## TICKETED SOCIETY AND ASSOCIATION EVENTS

The following society and group events require tickets. Tickets may be purchased in advance or on-site at the Registration Desk. Pre-paid event tickets will be included in the registration packet.

### **ABLS Breakfast**

Monday, Aug. 13, 7:00 am - 8:30 am .....\$20.00

### **Economic Botany Luncheon**

Monday, August 13, 11:30 am - 1:00 pm .....\$20.00

### **AFS Luncheon**

Monday, Aug. 13, 12:00 pm - 1:30 pm .....\$21.00

### **IOPB Reception/Mixer**

Monday, Aug. 13, 5:30 pm - 8:00 pm .....\$15.00

### **Paleobotany Banquet**

Monday, Aug. 13, 6:30 pm - 10:00 pm .....\$35.00

### **Missouri Botanical Garden Breakfast**

Tuesday, Aug. 14, 7:00 am - 8:30 am .....\$20.00

### **Miami University of Ohio Breakfast**

Tuesday, Aug. 14, 7:00 am - 8:30 am .....\$20.00

### **ASPT Banquet**

Tuesday, Aug. 14, 6:30 pm - 10:00 pm .....\$35.00

### **BSA Banquet**

Wednesday, Aug. 15, 6:30 pm - 10:00 pm .....\$35.00

## FOOD COURT AND COFFEE BREAK CENTRAL

Within the ACC, the Southwest Exhibit Hall will accommodate the Exhibitors, the Poster Displays, and an area where food and beverages may be purchased by meeting attendees will be available.

## THE BOTANY 2001 LOGO

The Botany 2001 logo was created by Dr. Pat Latas. To learn more about the biological illustrator's work, please visit her web site at <[www.illustratingcrab.com](http://www.illustratingcrab.com)>.

## MESSAGE AND ANNOUNCEMENT BOARDS

Messages for conference attendees will be able to post on message boards which will be located in the ACC ground level near the registration area. A 'Positions Available' board will also be available for postings.

## CYBER CAFÉ

E-mail accessibility will be available in the Cyber Café, which will be located in the ACC ground level near the registration area. The Cyber Café will be in operation from 8:00 am - 6:00 pm on Monday and Tuesday, Aug. 13-14 and from 8:00 am - 3:00 pm on Wednesday, Aug. 15.

The **Cyber Café** is sponsored by the  
*University of New Mexico.*

# SESSION INFORMATION

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## LOCATION OF SCIENTIFIC SESSIONS AND EXHIBITS

Albuquerque Convention Center (ACC), 401 Second Street NW, Albuquerque, New Mexico 87102.

## CONTRIBUTED PAPER AND SYMPOSIUM SESSIONS

On Monday and Tuesday, Aug. 13-14, Contributed Paper and Symposium sessions will be held in the East Complex meeting rooms of the ACC. On Wednesday, Aug. 15, the ACC West Complex meeting rooms will be utilized. A 35-mm slide projector, overhead projector, screen, pointer, and audio amplification equipment will be provided in all rooms.

## CONTRIBUTED POSTERS AND RECENT TOPICS POSTERS

All posters will be on display for the duration of the meeting in the ACC, Southwest Exhibit Hall, from 10:00 am - 5:00 pm, Monday, Aug. 13 through Wednesday, Aug. 15.

A single, conference-wide Poster Session for all societies is scheduled for Tuesday, Aug. 14 from 12:30 pm - 2:00 pm (Session 36).

Regular submission posters should fit onto bulletin boards 4' high by 8' wide, and Recent Topics posters should fit onto bulletin boards 4' high by 4' wide. Materials may be secured with push pins or Velcro. Push pins are provided.

Poster set-up time is Monday, 13 Aug. from 8:00 am to 12:00 pm. Poster take-down time is Wednesday, 15 Aug. from 2:00 pm to 5:00 pm. Neither the ACC, the Botany 2001 management, or Convention Services of the Southwest is responsible for any poster materials remaining after 5:30 pm on Wednesday, Aug. 15.

## DISCUSSION SESSIONS

All Discussion Sessions will be held in the ACC. The sessions are scheduled in the East Complex on Tuesday, Aug. 14, and in the West Complex on Wednesday, Aug. 15. For contributed Sessions, an overhead projector and an easel will be provided in all rooms.

The lead-off Discussion Session is on Tuesday from 2:00 p.m. to 3:00 pm and is titled "President's forum: federal funding for botanical research." This forum will be followed by several contributed Sessions on Tuesday and Wednesday afternoons, from 3:30 pm to 4:30 pm on both days.

Complimentary coffee will be available for those attending the contributed Discussion Sessions.

The **Discussion Sessions** are sponsored by the *BSA Developmental and Structural Section* and the *BSA Tropical Biology Section*.

# OPENING CEREMONY

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Sunday, August 12, 7:30 pm  
Hyatt Regency Hotel, Pavilion IV-VI

## WELCOME

**Dr. Ray Powell**  
Commissioner of Public Lands

**D**r. Ray Powell has been New Mexico's Commissioner of Public Lands since May 1993. Appointed to complete an unexpired term, Commissioner Powell was elected to a full, four-year term in November 1994 and was re-elected in November 1998 to a second four-year term.

Commissioner Powell is past president of the Western States Land Commissioners Association. He is a member of the U.S. Department of Agriculture's Advisory Committee on Foreign Animal and Poultry Diseases. He received the Fabian Garcia Founders Award of Excellence from the New Mexico State University College of Agriculture and Home Economics. He previously served as special assistant to Governor Bruce King for environment, natural resources, health and recreation.

Commissioner Powell is a native of Albuquerque. He attended Albuquerque Public Schools and received his bachelor's degree in anthropology and biology and a master's degree in systematic botany and plant ecology from the University of New Mexico. A practicing veterinarian, Powell received his doctorate in veterinary medicine with emphasis in wildlife rehabilitation from Tufts University in 1985. By law, the land commissioner serves on the State Investment Council, Mining Commission, Oil Conservation Commission, State Transportation Authority, Youth Conservation Corps Commission, and the Capitol Building Planning Commission.

## PLENARY ADDRESS

**Dr. Gary Nabhan**  
Ethnobiologist;  
Director, Center for Sustainable Environments  
Northern Arizona University, Flagstaff;  
Agricultural and Desert Ecologist; Nature Writer



*Bridging Western  
Science and  
Indigenous Science:  
Ethnobiology and  
Cross-Cultural  
Conservation  
Collaborations in the  
Bi-National Southwest*

**D**r. Gary Nabhan is an award-winning writer and conservationist whose wide ranging, prolific work has explored such connections as those between cultural diversity and biological diversity, between people and desert wild-life,

between wild and cultivated plants, and between poetry and natural science. His second book, *Gathering the Desert* (1985), received the John Burroughs medal for nature writing. The MacArthur Foundation gave him a "genius" fellowship in 1990, the same year he received a Pew Scholarship on Conservation and Environment. Sicily honored him in 1991 with the Premio Gaia Award for his contributions to "a culture of the environment." Nabhan has focused his projects and writings mostly on the Sonoran Desert region of Northwestern Mexico and the southwestern United States.

Gary Nabhan was born on March 17, 1952, in Gary, Indiana.

Lake Michigan's Indiana Dunes, tucked among the wasteland of the steel mills and power plants, provided Nabhan's early introduction to the wild outdoors, as recounted in *The Geography of Childhood: Why Children Need Wild Places* (1994), a book he co-authored with a long-time friend, Stephen Trimble. His work at the University of Arizona, Tucson, resulted in a M.S. degree in plant sciences in 1978 and a Ph.D. in arid lands resources in 1983 and in a continuing love for the desert and its peoples.

As a graduate student, Nabhan started collecting seeds from Native American farmers, first as a job for the U.S.



Department of Agriculture (USDA) seed bank and then to help a nutrition project introducing vegetable gardening on the Tohono O'odham (Papago) reservation.

His first book, *The Desert Smells Like Rain: A Naturalist in Papago Indian Country* (1982), is a "sensitive and compassionate portrayal," according to Rep. Morris Udall, "of the Indian people he worked with at the time."

In 1983, Nabhan co-founded Native Seeds/SEARCH, a non-profit group that has expanded the seed-saving efforts to include Native peoples throughout the Southwest and to promote the use of native crops and wild foods. The essays in *Enduring Seeds: Native American agriculture and Wild Plant Conservation* (1989) and *Cultures of Habitat: On Nature, Culture and Society* (1997) chronicle some of the important projects started by Nabhan and Native Seeds/SEARCH.

In 1986, Nabhan became assistant director of the Desert Botanical Garden in Phoenix. He helped form the Ironwood Alliance, a bi-national coalition that monitors ironwood tree protection efforts and successfully lobbied for the protection of the Ironwood Forest, a 129,000-acre site near Tucson that received national monument status in 2000. In 1991, Nabhan moved to Tucson to become writer-in-residence at the Arizona-Sonora Desert Museum.

As director of science at the Arizona-Sonora Desert Museum, Nabhan co-founded the museum's "Forgotten Pollinator" campaign to raise awareness on the vital but little-appreciated interdependence of plants and animals that help them reproduce. This project included the book *The Forgotten Pollinators* (1996) that Nabhan co-wrote with Stephen L. Buchmann.

In 2000, Dr. Nabhan became the director of Northern Arizona University's Center for Sustainable Environments, a research center specializing in the sustainable use of natural resources on the Colorado Plateau.

Nabhan lives in Flagstaff, Arizona. He is married to Lauri Monti and has two children, Laura Rose and Dustin Corvus from his first marriage.

## ALL-SOCIETY MIXER

Sunday, August 12, 8:30 pm to 10:00 pm, following the Plenary Address.

Hyatt Regency Hotel, Pavilion I-III

All registrants are invited to a welcoming mixer. Cash bar and complimentary refreshments will be available.

# SCIENTIFIC FIELD TRIPS, WORKSHOP, AND LOCAL TOURS

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**T**ransportation for all field trips, workshops, and local tours departs from and returns to the ACC (except for Local Tour #1). The buses will park on the East side of the ACC on Martin Luther King Drive.

## SCIENTIFIC FIELD TRIPS

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**E**ighteen field trips are scheduled before or after the scientific program from Friday, Aug. 10 to Friday, Aug. 17. Field trip fees include transportation and lunch where indicated. All field trips depart from the ACC. Please read the "Refund and Cancellation Policy." Scientific field trips are ticketed events; tickets may be purchased while registering. Field trip tickets will be included in the registration packet. If you participate in a field trip before you pick up your registration packet, bring your "registration confirmation notice" so that you have a record of your purchased ticket.

### PRE-CONFERENCE, MULTI-DAY

#### **FT 1 Lichens & Bryophytes of the Sangre de Cristo Mountains.....\$150.00**

Departs Friday, August 10 at 8:00 am and returns Saturday, August 11 at 6:00 pm. Lunch included on Friday. Lodging and additional meals on your own.

*Trip Leaders:* Thomas Nash & David Johnson. Contact: Thomas Nash, Dept. of Botany, Arizona State University, Tempe, AZ. Tele: (602) 965-7735, E-mail: tom.nash@asu.edu.

Some of the earliest cryptogams from New Mexico were collected by Bro. Arsene in the Sangre de Cristo Mts, including alpine areas. We will visit these historical sites as well as adjacent areas. Hiking boots recommended; afternoon showers likely.

#### **FT 2 Paleoeecology of the Cretaceous-Tertiary Boundary in the Raton Basin, New Mexico and Colorado.....\$150.00**

Departs Saturday, August 11 at 8:00 am and returns Sunday, August 12 at 5:00 pm. Lunch included on Saturday. Lodging and additional meals on your own.

*Trip Leader:* Gary Upchurch, Dept. of Biology, Southwest Texas State University, San Marcos, TX 78666. Tele: (512) 245-3751, E-mail: gu01@swt.edu.

The Raton Basin provides important evidence for catastrophic extinction of the land flora and marked changes in climate and vegetation across the Cretaceous-Tertiary (or K-T) boundary. We will collect leaf megafloras that illustrate this vegetational and climatic change, beginning with sub-humid, broad-leaved evergreen assemblages of latest Cretaceous age and ending with wet, broad-leaved evergreen assemblages of early Paleocene age. We will see: 1) a typical small-leaved latest Cretaceous flora, 2) the K-T boundary clay (fallout from the impact of a large asteroid on Earth), 3) the interval of fern dominance that immediately follows extinction of Cretaceous palynomorphs at the K-T boundary clay, 4) large-leaved earliest Paleocene egathermal rainforest assemblages that overlie the fern abundance horizon and represent the early phases of dicot recolonization, and 5) younger large-leaved Paleocene assemblages that post-date the K-T boundary event by roughly 1 million years (if time permits).

### PRE-CONFERENCE, SATURDAY, AUGUST 11

#### **FT 3 El Malpais National Monument.....\$55.00**

Saturday, August 11, departs by bus at 7:30 am and returns at 5:30 pm. Includes box lunch.

*Trip Leader:* David Bleakly, 3813 Monroe NE, Albuquerque, NM 87110. Tele: (505) 888-4608, E-mail: d2bleakly@spinn.net.

In New Mexico, "El Malpais" means volcanic badlands and this Spanish term was used to describe the area southwest of Grants before part of it became a National Monument in 1988. It is composed almost entirely of basaltic lava and volcanic features, such as cinder cones, lava tubes, and kipukas. The several flows were emplaced from about 3000 to over 500,000 years ago. The vegetation on the lava is more mesic than the surrounding grasslands and includes Douglas fir, ponderosa pine, alligator juniper, and quaking aspen which grow at elevations lower than typical. A rare plant, *Phacelia serrata*, is found in New Mexico only in cinders in the northwest corner of the monument area. Some lava tubes contain permanent ice and support unique plant communities near their mouths. The tour will begin at Sandstone Bluffs Overlook, one of the few nonvolcanic substrate locations in the monument. We will continue to the west side of the lava flows and stop at Junction Cave, a lava tube, and take a short hike. The next stop is at the Park Service ranger station. At Zuni ice cave, we will take another

er hike of about a mile to visit Bandera Crater, a classic cinder cone, and the ice cave itself. Although the terrain is very rough we will be mostly on good trails of no more than moderate difficulty. Nevertheless, wear boots or stout shoes and bring a quart of water, a hat, and sun protection (sunscreen, long sleeved shirt). Dress should be suitable for outdoor activities and short hikes in weather that can range from hot to stormy. Pit toilets or bathrooms are available at each stop.

**FT 4 Bosque del Apache National Wildlife Refuge .....\$50.00**

Saturday, Aug. 11, departs by bus at 8:00 am and returns at 5:00 pm. Includes a box lunch.

*Trip Leaders:* Kirk McDaniel & John Taylor. Contact: Kirk McDaniel, Department of Animal and Range Science, MSC Box 3-1, New Mexico State University, Tele: (505) 646-1191, E-mail: kmcdanie@nmsu.edu.

The Bosque del Apache NWR was established in 1939 and is a refuge and breeding grounds for migratory birds and other wildlife. Waterfowl are most abundant in winter, whereas summer, though quiet, remains an oasis in the surrounding arid lands. This tour will view flora typical of the Chihuahuan desert on mesas that border and grade downward to the Rio Grande floor. Discussions will include the approach the refuge is following to restore riparian "bosque" woodlands in areas along the river that are dominated by saltcedar.

**FT 5 Botany and Stream Restoration at the Monticello Box .....\$60.00**

Saturday, Aug. 11, departs at 8:00 am and returns at 6:00 pm. Includes a box lunch.

*Trip Leaders:* Mike Matush, Dennis O'Toole & David Cross. Contact: Mike Matush, New Mexico State Land Office, 310 Santa Fe Trail, Santa Fe NM 87504. Tele: (505) 827-5096, E-mail: mmatush@slo.state.nm.us.

Ojo Caliente, the largest warm springs in New Mexico, is the source of Alamosa Creek, which flows through Monticello Box to the Rio Grande. The field trip will examine the botany and restoration of the springs region. Please bring extra water, sun protection, and extra shoes (you will get your feet wet). No bathrooms.

**FT 6 Plants and People at the Pueblo of Zuni—Traditional Ethnobotany and Recent Invasions.....\$70.00**

Saturday, Aug. 11, departs at 7:15 am and returns at 6:00 pm. Includes a box lunch.

*Trip Leaders:* Carol Brandt, Roman Pawluk, Pablov Padilla, and Wilber Haskie. Contact: Carol Brandt, Dept. of Biology, University of New Mexico, Albuquerque, NM 87131. Tele: (505) 277-4392. E-mail: cbrandt@unm.edu.

Participants will have an opportunity to learn about the flora and human ecology of the Zuni Pueblo, in west central New Mexico. We will walk among archaeological and historical ruins in the pinyon-juniper woodland, below red mesa

walls on Zuni Tribal Lands. We will explore the historic farming villages that cluster at springs in this high desert, looking at plants that have ethnobotanical importance. Our trip will also focus on the recent problems that invasive plants have created at these locations. We would like participants of the field trip to engage in a dialogue about plants and how the Tribe might contend with this problem. The co-leaders include a paleoethnobotanist who will talk about prehistoric plant use, an agronomist who will talk about Zuni traditional and contemporary agriculture, a range manager who will speak about recent invasive plant species, and an ecologist who will talk about the ecology of the Zuni river valley.

Participants should have a hat, carry extra water, wear sturdy boots or shoes, and have sunscreen along. Walking will consist of short one to two mile excursions from our van stops and will be moderately strenuous. Bring your binoculars for bird watching opportunities. Raingear might be helpful since August is "monsoon" season; we can also expect an afternoon thundershower.

**FT 7 Ferns of Central New Mexico .....\$60.00**

Saturday, Aug. 11, departs at 8:00 am and returns at 6:00 pm. Includes a box lunch.

*Trip Leaders:* Michael Windham & George Yatskievych. Contact: Michael Windham. Tele: (801) 581-6520, E-mail: windham@umnh.utah.edu.

We will travel south along the Rio Grande valley approximately 150 miles to visit several localities in the Manzano and Magdalena Mountains. In addition to a few cosmopolitan ferns, participants can expect to see a variety of xeric-adapted genera (*Selaginella*, *Cheilanthes*, *Pellaea*, *Argyrochosma*, and *Astrolepis*) plus several regional endemics in the genus *Woodsia*. This trip will require moderately strenuous walking in dry, rocky habitats, some potential bush-whacking and a circumspect approach to the local fauna. Be prepared for weather extremes ranging from hot, dry conditions to monsoonal showers.

## PRE-CONFERENCE, SUNDAY, AUGUST 12

**FT 8 Helechos de la Frontera (Ferns at the City's Edge) .....\$30.00**

Sunday, August 12, departs at 8:00 am and returns at 1:00 pm. Lunch is on your own.

*Trip Leaders:* Michael Windham & George Yatskievych. Contact: Michael Windham. Tele: (801) 581-6520, E-mail: windham@umnh.utah.edu.

We tentatively plan to visit Embudito Canyon, situated in the Sandia Mountains just east of Albuquerque. This trip, providing an eclectic sampling of the ferns seen on Saturday, is offered for those unable to participate in the longer trip (FT 7) or for those who just can't get enough of the "Land of Enchantment." This trip will require moderately strenuous walking in dry, rocky habitats, some potential bush whacking

and a circumspect approach to the local fauna. Be prepared for weather extremes ranging from hot, dry conditions to monsoonal showers.

**FT 9 Rio Grande Restoration on the Pueblo of Santa Ana.....\$30.00**

Sunday, Aug. 12, departs by bus at 9:00 am and return at 12:00 pm.

*Trip Leader:* Todd Caplan, Santa Ana Pueblo, Dept. of Natural Resources, 51 Jemez Dam Road, Ste 107, Bernalillo, NM 87004. Tele: (505) 867-0615, E-mail: tcaplan@santaana.org.

The tour will focus on a 315-acre portion of the Rio Grande floodplain restoration project. This project was initiated in 1998 with the goals of removing approximately 115-acres of saltcedar and 200-acres of Russian olive from the floodplain and restoring native vegetation to the site. Native grasses have been seeded to the saltcedar area, and 1500 cottonwood and black willow poles have been planted in portions of the Russian olive area. If there is time, the tour will also visit a portion of the river restoration area, where the Pueblo has used bioengineering techniques to stabilize approximately 3600 feet of bankline along the Rio Grande. Bring a hat, water and sunscreen.

**FT 10 Lichens & Byrophytes of the Sandia Mountains.....\$50.00**

Sunday, Aug. 12, departs by van at 7:30 am and returns by 4:00 pm. Includes a box lunch.

*Trip Leaders:* Robert Egan & David Lightfoot. Contact: Robert Egan, Dept. of Biology, University of Nebraska at Omaha, Omaha, NE 68182. Tele: 402-554-2491, E-mail: robert\_egan@unomaha.edu.

This one day field trip will take us to the high elevations of the Sandia Mountains, not far from Albuquerque. Hiking boots recommended; afternoon showers possibly.

**FT 11 Pennsylvanian Floras of the Albuquerque Area.....\$45.00**

Sunday, Aug. 12, departs at 8:00 am and returns at 5:00 pm. Lunch is on your own.

*Trip Leaders:* Sidney Ash & Gene Mapes. Contact: Sidney Ash, 1708 Quail Run Court NE, Albuquerque, NM 87122. Tele: (505) 856-5852, E-mail: sidash@aol.com.

The field trip will start with a short visit to the Crest of 3260 m high Sandia (Watermelon) Mountains on the east side of the Rio Grande Rift. There the participants can view modern subalpine meadows and forests and scenic vistas that extend 100s of km in virtually all directions. After a discussion of the modern flora and the geology of this fault-block mountain the party will proceed to the Kinney Quarry in the adjacent Manzano (Apple) Mountains which has yielded an interesting Late Pennsylvanian biota that includes the unusual non-peat forming flora described by Mamay and others. In route to the quarry stops will be made at other Pennsylvanian plant localities and at a restaurant where par-

ticipants can purchase lunch. Collecting will be permitted at the Kinney Quarry. Shipping materials will be supplied but participants must bring their own collecting tools.

**FT 12 Vascular Flora of the Sandia Mountains.....\$50.00**

Sunday, Aug. 12, departs at 9:00 am and returns at 5:00 pm. Includes a box lunch.

*Trip Leaders:* Bob Sivinski & Ron Hartman. Contact: Bob Sivinski, New Mexico Forestry Division, P.O. Box 1948, Santa Fe, NM 87504. Tele: (505) 476-3347, E-mail: bsivinski@state.nm.us.

The Sandia Mountains are a block-fault range that towers above the Albuquerque metropolitan area. 'Sandia,' is Spanish for 'watermelon.' The origin of this name becomes apparent when the setting sun illuminates the arid Precambrian granite of Sandia escarpment in a glowing pink twilight. The gentle limestone backslope is wetter and blanketed in coniferous forest. This floristically diverse mountain rises from an arid grassland footslope at an elevation of 1,800 m and crests in subalpine forest and meadows at 3,260 m. Our field trip will drive you to the Sandia Crest, stopping at mid-elevation conifer forests en route. Once on the crest, we will walk 1 km to Kiwanis Point to admire the spectacular views and the Rocky Mountain subalpine flora. Decent from the mountain will follow and stop in the deciduous riparian woodland of Las Huertas Canyon and finally end with a look at the gypsophilic plants of the Todilto Formation gypsum. Absolutely the greatest variety of New Mexican flora you can see in a single day field trip. Footwear appropriate for rocky trails. Hikes will be easy, but the summit is 3260 m, which can exacerbate pre-existing respiratory problems. Bring extra water and be prepared for afternoon rain showers.

**FT 13 Rio Grande Botanic Garden.....\$30.00**

Sunday, Aug. 12, departs by bus at 1:00 pm and returns at 5:00 pm.

*Trip Leaders:* Dave Ferguson & Jon Stewart. Contact: Dave Ferguson, Rio Grande Botanic Garden, 2601 Central Avenue, Albuquerque, NM 87104. Tele: (505) 848-7149, E-mail: dferguson@cabq.gov.

The Botanic Garden opened to the public in December 1996 so we are still a young facility. It is one of three facilities in the City of Albuquerque's BioPark division. The other two are the Rio Grande Zoo and the Albuquerque Aquarium. Currently there are around 10 acres developed with an additional 60 available for future expansion. The Garden has formal gardens, including a rose garden, and native gardens displaying native New Mexico plants. We also have two conservatories. The Desert Conservatory displays plants from the southwest deserts that cannot be displayed outside. The Mediterranean conservatory displays plants that come from areas with cool wet winters and hot dry summers. Dress for warm weather: hat, sunscreen. Restrooms are available. Visitors should carry water since there are no fountains in the garden.



**FT 14 Cerro Grande Fire and the Los Alamos  
National Laboratory.....\$50.00**

Sunday, Aug. 12, departs by bus at 8:00 am and returns by 6:00 pm. Includes lunch.

*Trip Leader:* Randy G. Balice, Ecology Group, Mail Stop M887, Los Alamos National Laboratory, Los Alamos NM 87545. Tele: (505) 665-1270, E-mail: balice@lanl.gov.

An introduction to the fire ecology of the Pajarito Plateau and the effects of the Cerro Grande Fire on the regional ecosystems, the Los Alamos National Lab, and the Los Alamos townsite. We will examine the ecological and historical diversity of the Plateau and its surroundings, and their relationships to fire. A wide diversity of environments include five vegetational zones and 23 endangered species or species of concern. Dress should be suitable for outdoor activities and short hikes in weather that can range from hot to stormy.

**FT 15 Flora of the Southern Chuska Mountains.....\$65.00**

Sunday, Aug. 12, departs by van at 7:00 am and returns by 7:00 pm. Includes a box lunch.

*Trip Leaders:* Ken Heil, Daniella Roth, and Steve O’Kane. Contact: Ken Heil, San Juan College, 4601 College Blvd., Farmington, NM 87402. Tele: 505-599-0358, E-mail: heil@sjc.cc.nm.us. Daniella Roth, Navajo Natural Heritage Program. Tele: (520) 523-7242, E-mail: droth@juno.com.

The Chuska Mountains and Defiance Plateau are located within the Navajo Nation and straddle the Arizona/New Mexico state line for nearly 80 miles. A 600,000 acre upland ecosystem of ponderosa pine and mixed conifer forest covers the crest of the mountains, known collectively as the Navajo Forest. The watersheds of the range are a primary Navajo domestic water source and contain the highest levels of wildlife diversity on the Navajo Nation. Seven plant and animal species occurring on the Navajo Forest are listed as threatened and endangered or as candidate species by the federal government. Additionally, nineteen threatened and endangered species found on the forest are listed or are candidates for the Navajo Nation Endangered Species Act. En route to the Chuskas, we will make stops at Thoreau and Nakaibito (Mexican Springs), then on through the Chuskas ending at Whiskey Lake (8900 ft). Mostly easy hiking. There may be afternoon thunder storms. NO collecting is allowed unless they have a Navajo Nation Permit. Daniella Roth can help in obtaining these, if desired; contact her early!

**FT 16 Petroglyph National Monument.....\$30.00**

Sunday, Aug. 12, departs by bus at 8:00 am and returns by 12:00 pm.

*Trip Leader:* Mike Medrano, Petroglyph National Monument, 6001 Unser Blvd NW, Albuquerque, NM 87120. Tele: (505) 899-0205 X 3349, E-mail: medrano27@netscape.net.

Petroglyph National Monument was created in June 1990 to preserve an estimated 25,000 - 30,000 petroglyphs made by ancestral pueblos. The 7,200 acre park is located

around a basalt volcanic field and the volcano where the volcanic field originated. The Monument is an important site to many native groups due in particular to the unique natural resources found in the Monument. Come experience the natural and cultural resources of Albuquerque’s West Mesa. Bring sun protection; be prepared for heat and don’t rule out sporadic thunderstorms.

**FT 17 Natural History of Bandelier National Monument  
and the Jemez Mountains.....\$50.00**

Sunday, Aug. 12, departs by bus at 8:00 am and returns at 6:00 pm. Includes lunch.

*Trip Leaders:* Bill Dunmire & Gail Tierney. Contact: Bill Dunmire, 12 Camino a las Estrellas Placitas, NM 87043. Tele: (505) 864-3474, E-mail: bdunmire@unm.edu.

This all day tour begins with a bus ride up the Rio Grande Valley to Bandelier National Monument, spectacular home to the prehistoric “Anasazi” Pueblo Indians. Here we hike to the famous cliff ruins in beautiful Frijoles Canyon, along the trail identifying the many species of plants that were used by these ancient peoples. After a picnic lunch and tour of the park museum, we continue on one of New Mexico’s most scenic loop roads up into the forested Jemez Mountains, stopping to observe the dramatic revegetation from the Cerro Grande (Los Alamos) wildfire of last year, the Valle Grande, a million-year-old volcanic caldera (now a national preserve) and other botanical/geological points of interest. Wear sturdy walking shoes, and a hat, don’t forget sun-block, and a water bottle.

## POST-CONFERENCE, MULTI-DAY

**FT 18 The Gila National Forest: An Island  
in the Rough .....\$150.00**

Departs Thursday, Aug. 16 at 7:00 am and returns Friday, Aug. 17 at 8:00 pm. Lunch included on Thursday. Lodging and additional meals on your own

*Trip Leaders:* Jack Carter & Paul Boucher. Contact: Jack Carter, P.O. Box 1244, Silver City, NM 88601. Tele: (505) 388-9221, E-mail: jmcarter@zianet.com.

The Gila National Forest includes 3.3 million acres of publicly owned forest and grassland rising above the deserts of the Southwest. Within the Gila National Forest lies the Gila and the Aldo Leopold Wilderness areas. From 50 miles north of the Mexican border, the Forest forms an irregular outline of 65 by 100 miles in area. The flora and fauna reflect the influence of the Southern Rocky Mountains, the Mogollon Mountains, Mexico’s Sierra Madre Mountains, and the Chihuahuan Desert, with elevations ranging from 4500 ft in the desert regions to almost 11,000 ft on Whitewater Baldy. Although over 900 vascular plants have been collected and identified from the Gila National Forest, there are still relatively large areas that have never been critically studied. Field clothing will be necessary, including field boots, sun protection, insect repellent and rain gear.



## WORKSHOP

One workshop is scheduled for Botany 2001, and all fees include transportation between the ACC and the University of New Mexico campus. Please read "Refund and Cancellation Policy". The workshop is a ticketed event; tickets may be purchased while registering.

### WS 1 Teaching general physical principles using botany: xylem and fluid dynamics.....\$25.00

Sunday, Aug. 12, 1:00 pm to 4:00 pm.  
University of New Mexico - Castetter Hall, Room 120.

Organizer: Stanley A. Rice, Dept. of Biological Sciences, Southeastern Oklahoma State University, Durant OK 74701-0609. Tele: (580) 745-2688, Fax: 580-745-7459, E-mail: [srice@sosu.edu](mailto:srice@sosu.edu).

The Hagen-Poiselle principle (which relates water flux rate to the fourth power of the radius of a pipe) applies to the flow of water through xylem, and the flow of blood through arteries, as well as to the flux of fluid through pipes. It is thus useful for teaching about the connections between different scientific disciplines. In this workshop, participants will use staining and microscopy to measure the diameters of xylem elements in stems, and to compare the xylem measurements with the previously-measured transpiration rates of the plants. Using statistical analysis, participants will determine the mathematical model that best fits the results: the sum of xylem diameters, the sum of squares, the sum of cubes, or the sum of fourth powers (as the Hagen-Poiselle principle demands). Participants will also discuss other factors that influence transpiration rate and the limitations of applying the Hagen-Poiselle principle to transpiration rate.

## LOCAL TOURS

Local tour fees include transportation from and return to the ACC or hotel and lunch for LT 6. Ticket prices are different for adults and children. Please note that local tours require a minimum number of individuals. Please read "Refund and Cancellation Policy". Local tours are ticketed events; tickets may be purchased while registering.

### LT 1 Hot Air Ballooning.....\$149.00\*

Each morning, Saturday through Thursday, Aug. 11-17, 6:15 am to 9:15 am. Price includes transportation from hotel, 1 hour flight, certificate, and refreshments.

\*\$99 for children 12 and under. Not available for children under 42" tall.

Albuquerque is the hot air ballooning capital of the world. Our flight takes us over the beautiful Rio Grande valley for breath taking views of the city, the Sandia Mountains to the east and the volcanoes to the west. Light refreshments and a ceremony commemorating our adventure at the end of the flight. Be sure and indicate the day you wish to participate.

### LT 2 Jane Butel Southwestern Cooking School.....\$59.00

Monday, Aug. 13, 10:00 am to 12:30 pm. Includes lunch of prepared food.

Jane Butel began teaching Southwestern cooking over 30 years ago. You will watch as she prepares traditional New Mexican favorites such as enchiladas, sopapillas, guacamole, salsa and quesadillas. At the end of the demonstration you will enjoy tasting all that has been prepared for you!

### LT 3 Sandia Peak Tram .....\$41.00\*

Monday, Aug. 13, 12:30 pm to 5:00 pm. Includes tram ticket.  
\*\$20.50 for children under 12 (under 5, free).

Sandia Mountain dominates Albuquerque's east side with its 5,000 foot vertical rise. Our 15 minute tram ride takes us through the four biological life zones and reveals awe-inspiring views. Note: due to elevation, individuals with heart or respiratory conditions should ask the advice of their doctor.

### LT 4 Experience Santa Fe .....\$35.00\*

Tuesday, Aug. 13, 9:00 am to 5:00 pm. Lunch on your own.  
\*\$17.50 for children under 12 (under 5, free).

No trip to New Mexico is complete without a stop in Santa Fe, the "City Different." The tour guide will lead a walking orientation tour of the Plaza and then you will have approximately 4 hours to experience Santa Fe with your own interests in mind. Shopping around the Plaza is always exciting. Some of Santa Fe's finest clothing and specialty stores are located in the old Victorian buildings looking out onto the Plaza. Local native artisans are found at the portal of the Palace of the Governors, selling exquisite Indian art and crafts including pottery and jewelry. There are commercial galleries in the area and when you are tired of shopping, fine cafes are found around and near the Plaza. There will also be a shuttle available to go to the Santa Fe's Children's Museum for those with Children.

### LT 5 Zia Pueblo Feast Day.....\$32.00\*

Wednesday, Aug. 15, 9:00 am to 4:00 pm. Lunch on your own at fiesta.

\*\$16 for children under 12 (under 5, free).

This is a very unique experience! Zia Pueblo is located northwest of Albuquerque; its annual feast day is August 15. It is situated on a rocky knoll where it blends into the landscape like a natural feature of the terrain. For six hundred plus years it has weathered the worst that man and nature could inflict upon it - and it has survived. Although the pueblo itself is inconspicuous, its Sun Symbol is familiar to all New Mexicans, for it is the official state insignia appearing on the state flag. On the way to the Pueblo, the guide will explain Pueblo etiquette so you will be sure not to make a faux pas. We will watch dances in the Plaza that are virtually unchanged for nearly a millennium. There will also be a good number of "carnival" type foods and jewelry vendor

booths. Photography, video or recording of any kind is not allowed. For more information regarding this unique adventure go to <[www.indianpueblo.org/zia](http://www.indianpueblo.org/zia)>.

**LT 6 Acoma Indian Pueblo – Sky City.....\$55.00\***

Thursday, Aug. 16, 9:00 am to 5:00 pm. Includes lunch. Photography limited.

\*\$27.50 for children under 12 (under 5, free).

Acoma Pueblo is situated on top of a mesa, hundreds of feet above the surrounding land. It commands a breathtaking view of the countryside, other mesas and the distant mountains - no wonder it is called Sky City. Step back in time as we visit Petroglyph Park and walk the short trails among these ancient rock carvings (some thousands of years old). These petroglyphs are preserved in a volcanic escarpment on Albuquerque's west side. Afterwards, enjoy your box lunch as we travel to New Mexico's oldest, continually inhabited Indian village (over 1000 years old) which remains without electricity or running water. Wear comfortable walking shoes, the mesa top is uneven rock and sand. Bring a hat and sunglasses. Photography is limited. Camera permits are \$10, no video, no digital cameras. For more information about this fascinating place visit <[www.indianpueblo.org/acoma](http://www.indianpueblo.org/acoma)>.

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# EXHIBITOR INFORMATION

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Please visit the array of commercial and scientific exhibits offered in the Albuquerque Convention Center, Southwest Exhibit Hall. The Exhibit Hall will be open from 10:00 am to 5:00 pm on Monday, Aug. 13 through Wednesday, Aug. 15.

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P. O. Box 299  
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# SOCIETY INFORMATION

## AMERICAN BRYOLOGICAL AND LICHENOLOGY SOCIETY (ABLS)

**T**he Sullivant Moss Chapter of the Agassiz Association was founded in 1898, the same year that the first issue of *The Bryologist* was published. The society was founded by Elizabeth Britton, A. J. Grout and Willard N. Clute, and in the first year there were 34 members. In 1899 the society had its first meeting and dissolved its association with the Agassiz Association. From the beginning years of the society, not only mosses but also hepatics and lichens were of interest to the membership and the first articles on these later two groups appeared in the 1901 volume of *The Bryologist*. The society and journal continued to grow and mature. During the middle part of the 20th century, William Campbell Steere, through his guiding efforts and his leadership of the young generation of bryologists, helped to move bryology into a more professional arena. In 1949 the society changed its name to the American Bryological Society, to reflect its position as a national society with international membership. In 1969 the membership voted to give the society its current name to indicate the significant past and continuing contributions of lichenology to the society. As the society became more professional, *The Bryologist* became more technical. Because of the need for microscopic dissection and chemical analysis for many identifications of bryophytes and lichens, the study of these organisms has often been primarily limited to professionals. In an effort to bring more amateurs into the society, *Evansia* was initiated in 1984 to provide notes on techniques and local floristics. Today, the American Bryological and Lichenological Society has about 500 individual members from throughout the globe and continues to promote all aspects of study on bryophytes and lichens. The URL for the ABLS website is <[www.unomaha.edu/~abls/](http://www.unomaha.edu/~abls/)> and membership information can be found there. The URL for *The Bryologist* is <[www.devonian.ualberta.ca/bryologist/](http://www.devonian.ualberta.ca/bryologist/)>.

### President

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**Field Trip Organizers**

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***[www.unomaha.edu/~abls/](http://www.unomaha.edu/~abls/)***



## AMERICAN FERN SOCIETY (AFS)

The Linnaean Fern Chapter of the Agassiz Association was founded in 1892 by five people united by their mutual interest in fern study. It published the quarterly *Linnaean Fern Bulletin*, which contained original research, reports of field trips and floristic discoveries, and business and news. Because the Chapter was so small, it allowed W. N. Clute, its first President, to assume ownership of the *Bulletin*. By mid-1905, when a vote to adopt the name American Fern Society passed, 150 members were counted, few of them professional botanists. A member's library was begun to circulate fern books by mail. In 1910, the Society voted to establish and own the *American Fern Journal*, and the *Bulletin* ceased publication in 1912.

The Society grew fitfully through several decades and then rapidly due to the invigoration of botanical science after World War II. A fern spore exchange was established to provide amateur horticulturalists and botanical researchers with a wide variety of fern spores. By the 1970s, the Journal published mostly scientific papers, and so a newsletter, now called *Fiddlehead Forum*, was established to carry Society news, reports of field trips, and articles of interest to horticulturally and floristically inclined members. In 1979, a very occasional monograph series, *Pteridologia*, was begun. At present the Society has about 800 members, many of them botanists. The American Fern Society remains active in promoting all aspects of fern study, which was the intent of its five founders. Visit our home page on the World Wide Web at [www.amerfernsoc.org/](http://www.amerfernsoc.org/).

### President

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### Bulletin Editor

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### Curator of Spore Exchange

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**[www.amerfernsoc.org/](http://www.amerfernsoc.org/)**



# AMERICAN FERN SOCIETY

## MEMBERSHIP APPLICATION

---

Mr./Ms./Dr./Prof. (**Please print name**)

---

Department and Institution (if applicable)

---

Street and number

---

City, State, and Country with postal code

**JOURNAL MEMBERS** receive both *Fiddlehead Forum* (to which \$6.00 of the dues applies) and *American Fern Journal* (to which \$7.00 of dues applies).

**REGULAR MEMBERS** receive only *Fiddlehead Forum* (to which \$6.00 of the dues applies). Please check only one box and remit accordingly. Excess dues will be credited to the following year, unless you request a refund. Delivery to **ALL OTHER COUNTRIES** is made by private air lift and is the equivalent of airmail delivery.

- ☐ **JOURNAL MEMBERSHIP** to the **USA, Canada, or Mexico** .....\$15.00  
☐ **JOURNAL MEMBERSHIP** to **ALL OTHER COUNTRIES**.....\$22.00  
☐ **REGULAR MEMBERSHIP** to the **USA, Canada, or Mexico**.....\$ 8.00  
☐ **REGULAR MEMBERSHIP** to **ALL OTHER COUNTRIES**.....\$11.00

**TOTAL ENCLOSED \$**\_\_\_\_\_

Please return this application with your remittance made payable to the American Fern Society, Inc. and mail it to:  
Dr. David Lellinger, Membership Secretary  
326 West St. NW  
Vienna, VA 22180-4151

Foreign members, please pay in US dollars or with an international bank draft payable on a US Bank or an international postal money order.

### Please clip and save this information!

*Membership is on a calendar-year basis. Dues notices are sent to members in October and are payable upon receipt. Membership includes the quarterly American Fern Journal and/or the bimonthly Fiddlehead Forum, as noted above, plus access to field trips and by to the AFS Spore Exchange.*

*Persons joining the Society during the first ten months of the calendar year are considered to be members for that year, all publications for the year will be sent to them. Persons joining after Oct. 1 will have their membership begin with Jan. 1 of the following year. Members should receive their initial publications within 60-90 days after joining the Society. Please send any changes of address to the Membership Secretary promptly.*

*Libraries and businesses may not be members of the society, but may subscribe to the American Fern Journal (with a complimentary copy of the Fiddlehead Forum). Annual subscriptions are \$20.00 in the US, Canada, and Mexico, \$27.00 elsewhere, plus any fees that a subscription agency may apply.*

## AMERICAN SOCIETY OF PLANT TAXONOMISTS (ASPT)

The American Society of Plant Taxonomists promotes systematic botany through education, training, and public dissemination of original research on plants. Organized in 1935, the Society has a membership of about 1300. Information about dues schedules, activities of the Society, literature, publications, etc. is available at ASPT headquarters during the meeting, or from the Treasurer at other times.

The Society publishes the journal *Systematic Botany*, a quarterly included with the membership dues. The Society also publishes *Systematic Botany Monographs*, at irregular intervals; standing or by-the-issue orders are available for this publication. Additionally a printed or electronic *ASPT Newsletter* is also included with Society membership dues.

The ASPT also sponsors an annual competition for research grants for graduate student investigators. Support is available for students (both master's and doctoral levels) conducting field work, herbarium travel, and/or laboratory research in any area of plant systematics.

The George R. Cooley Award is given for the outstanding contributed paper presented at the annual meeting.

The Asa Gray Award honors an individual for outstanding accomplishments pertinent to the goals of the Society. The 2000 Asa Gray Award was presented to William T. Stearn. Recent winners were Tod Stuessy (1999), Sir Ghilleen Prance (1998), Daniel J. Crawford (1997), and Peter H. Raven (1996).

The current officers of the ASPT fiscal year 2001 (1 September 2000 to 31 August 2001) are:

### President

WALTER S. JUDD, Dept. of Botany, University of Florida, 220 Bartram Hall, P. O. Box 118526, Gainesville, FL 32611-8526. Tele: (352) 392-5135, E-mail: wjudd@botany.ufl.edu.

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SHIRLEY A. GRAHAM, Dept. of Biological Sciences, Kent State University, Kent, OH 44242. Tele: (330) 672-3699, E-mail: sgraham@kent.edu.

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### Editor of the ASPT Newsletter

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### Local Representative

TIMOTHY K. LOWREY, Dept. of Biology, University of New Mexico, P. O. Box 0001, Albuquerque, NM 87131-1091. Tele: (505) 277-2604, E-mail: tlowrey@unm.edu.

The standing and *ad hoc* committees of the Society include: Honors and Awards, Environment and Public Policy, Internet Communications, Nominations, Publicity, and Systematic Collections. The publications of the Society each have an Editorial Committee. Members of the Committees are appointed by the current President. Reports on activities of the committees can be found in the ASPT Newsletter.

Information about current and upcoming issues of *Systematic Botany Monographs* is available at the address of the Editor.

For information on membership in ASPT, contact Ms. Linda J. Brown, Manager, ASPT Business Office, Dept. of Botany, University of Wyoming, Laramie, WY 82071-3165. Tele: (307) 766-2556, E-mail: aspt@uwyo.edu.

**[www.sysbot.org/](http://www.sysbot.org/)**



# AMERICAN SOCIETY OF PLANT TAXONOMISTS



## Membership Application

All persons interested in plant systematics, including modern and traditional methods and philosophies and all plant groups, are encouraged to join the Society. Advantages of membership include: affiliation with colleagues who share our interests; subscription to *Systematic Botany*, the Society's journal; eligibility to submit manuscripts to *Systematic Botany*, with free page charges; and the opportunity to present papers at the Society's annual meeting.

Annual dues for memberships in the Society, including a subscription to *Systematic Botany* are:

Regular	\$40.00 (Check) / \$43.00 (credit card)
Student **	\$15.00 (Check) / \$18.00 (credit card)
Emeritus	\$30.00 (Check) / \$33.00 (credit card)
Regular Family	\$45.00 (Check) / \$48.00 (credit card)
Student Family**	\$20.00 (Check) / \$23.00 (credit card)
Emeritus Family	\$35.00 (Check) / \$38.00 (credit card)

Institutions and non-members may subscribe to *Systematic Botany* for \$115.00 per year (i.e., per volume).

Back issues of *Systematic Botany* are available to members of the Society @ \$10.75 per issue, \$43.00 per volume, and to non-members or institutions @ \$30.00 per issue, \$115.00 per volume.

Application for emeritus status (retired and 25 years of membership in the Society) should be sent to the Treasurer of the Society.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP: \_\_\_\_\_

Phone: \_\_\_\_\_ FAX: \_\_\_\_\_ E-mail: \_\_\_\_\_

Research Interests: \_\_\_\_\_

\*\*Faculty co-signature is necessary to confirm student status: \_\_\_\_\_

Payment method: ☐ Check ☐ Visa ☐ Mastercard

Visa / Mastercard #: \_\_\_\_\_ Exp. Date: \_\_\_\_\_

Signature of Card Holder: \_\_\_\_\_

Applications for membership, institutional subscription orders, and back issue orders should be accompanied by payment drawn to the American Society of Plant Taxonomists (USD) and should be sent/faxed to the Business Office: Ms. Linda Brown, ASPT Business Office, Department of Botany, University of Wyoming, Laramie, WY 82071-3165. Tele: (307) 766-2556, Fax: (307) 766-2851, E-mail: [aspt@uwyo.edu](mailto:aspt@uwyo.edu).

## BOTANICAL SOCIETY OF AMERICA (BSA)

The original Botanical Society was organized in 1894. The present Botanical Society of America was founded in 1906 by the federation of the original Botanical Society of America, the Society of Plant Morphology and Physiology, and the American Mycological Society.

The Botanical Society of America exists to promote research and teaching in all fields of plant biology, to facilitate cooperation among plant biologists and other scientists worldwide, and to disseminate knowledge of plants, algae and fungi to all groups of society. The Society currently includes approximately 2,700 members from throughout the United States and abroad. Members are encouraged to present contributed papers and posters at the annual meeting in one or several disciplinary sections and to organize or otherwise participate in symposia, workshops and/or field trips. A variety of sectional and Society-wide awards, including Merit Awards, the highest career honor offered by the Society, are also presented at the annual meeting each year.

The Botanical Society of America publishes the *American Journal of Botany* monthly and the *Plant Science Bulletin* quarterly. The *American Journal of Botany* includes original research articles covering a broad range of botanical topics <[www.amjbot.org/](http://www.amjbot.org/)>. Shorter articles of general interest, along with botanical news items and book reviews are published in the *Plant Science Bulletin* <[www.botany.org/bsa/psb/index.html](http://www.botany.org/bsa/psb/index.html)>. Current and recent issues of both publications are fully accessible on the world wide web and more than 1,800 libraries from around the world subscribe to these periodicals. The *American Journal of Botany* is also available electronically from Volume 1, Number 1 at institutions which participate in the online scholarly journal archive, JSTOR <[www.jstor.org/](http://www.jstor.org/)>. In addition, the Botanical Society of America periodically releases special publications and reports.

More information about the Botanical Society of America's mission, annual conferences, publications, disciplinary and regional sections, awards, etc. is available on the Society's website at <[www.botany.org/](http://www.botany.org/)>.

### President

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**Abstracts:** The abstracts of contributed papers, contributed posters, symposia presentations, the President-Elect's banquet address, and the plenary address for Botany 2001 were published on-line at <[www.botany2001.org](http://www.botany2001.org)> and in printed form in the Conference packet. Abstracts from members of other professional societies participating in the meeting are included within affiliated BSA Sections. Additional copies of the abstract volume are available for sale at the BSA table in the Exhibition Hall of the Albuquerque Convention Center, or from Kimberly Hiser, BSA Business Manager (contact information provided above).

**Field Trips & Workshops:** Detailed descriptions of scientific field trips and workshops can be found in the final Program.

**Affiliated Societies:** Four other professional societies are participating in Botany 2001 and these societies are meeting jointly with three affiliated BSA Sections. These include the: American Bryological and Lichenological Society (ABLS) with the BSA Bryological and Lichenological Section; American Fern Society (AFS) with the BSA Pteridological Section; American Society of Plant Taxonomists (ASPT) and International Organization of Plant Biosystematists (IOPB) with the BSA Systematics Section.

**Banquet:** The Annual Banquet for all plant biologists will be at 7:00 pm on Wednesday, 15 August in the Hyatt Regency Hotel, Sendero Ballroom. The Banquet will be preceded by a mixer at 6:00 pm.

**Business Meeting:** The Annual Business Meeting of the Botanical Society of America will be held on Tuesday, 14 August from 4:30 to 5:30 pm in the ACC, Room 113 - Dona Ana. Members are urged to attend and to become involved in the affairs of the Society.

[www.botany.org/](http://www.botany.org/)





# Botanical Society of America

## New Member Application

Membership includes 1-year subscription to the *American Journal of Botany*, *Plant Science Bulletin*

Memberships and subscriptions are calendar year only (Jan. to Dec.). Approx. 50% of membership dues goes towards the cost of the AJB.

Date \_\_\_\_\_

\*Name \_\_\_\_\_ Title \_\_\_\_\_  
last first middle (Dr., Mrs., etc.)

\*Family members: copy form, fill out separately, submit both copies together.

Mailing Address \_\_\_\_\_

Phone (\_\_\_\_\_) \_\_\_\_\_ ZIP \_\_\_\_\_

FAX (\_\_\_\_\_) \_\_\_\_\_ e-mail: \_\_\_\_\_

## Desired section affiliation(s)

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Bryology-Lichenology (L) <b>add \$2</b>     | <input type="checkbox"/> Phytochemical (C) <b>add \$2</b> | <input type="checkbox"/> Mycological (M)                 |
| <input type="checkbox"/> Developmental-Structural (D) <b>add \$2</b> | <input type="checkbox"/> Economic Botany (B)              | <input type="checkbox"/> Teaching (T)                    |
| <input type="checkbox"/> Ecological (E) <b>add \$2</b>               | <input type="checkbox"/> Pteridological (O)               | <input type="checkbox"/> Northeastern (U)                |
| <input type="checkbox"/> Genetics (G) <b>add \$4</b>                 | <input type="checkbox"/> Historical (H)                   | <input type="checkbox"/> Mid-Continent (I)               |
| <input type="checkbox"/> Paleobotanical (F) <b>add \$8</b>           | <input type="checkbox"/> Tropical Biology (J)             | <input type="checkbox"/> Southeastern (V) <b>add \$2</b> |
| <input type="checkbox"/> Phycological (A)                            | <input type="checkbox"/> Systematics (S)                  | <input type="checkbox"/> Pacific (W)                     |
| <input type="checkbox"/> Physiological (P) <b>add \$2</b>            |   |  |

## Annual Membership Dues

- |  |           |
|--|-----------|
| <input type="checkbox"/> Student (max. eligibility - 7 yrs- <b>must provide proof of student status!</b> ) (S) ..... | \$30.00   |
| <input type="checkbox"/> Student Family (max. eligibility - 7 yrs) (Y, X) .....                                      | \$35.00   |
| <input type="checkbox"/> Regular (M) .....   | \$80.00   |
| <input type="checkbox"/> Regular Family (F, X) .....   | \$85.00   |
| <input type="checkbox"/> Life (1 payment) (L) .....  | \$2000.00 |

## Please indicate when membership is to start:

\_\_\_\_\_ January of current year Amount for Dues: \$ \_\_\_\_\_  
 (Backissues of current volume of AJB will be sent)

\_\_\_\_\_ January of **next** year Amount for Sections: \$ \_\_\_\_\_

**Total:** \$ \_\_\_\_\_

Office use only

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Payment must be a U.S. bank check or Postal Money Order in U.S. Dollars, payable to the Botanical Society of America or by MasterCard or Visa.

Charge my ☐ MasterCard ☐ Visa Card# \_\_\_\_\_ Exp. date: \_\_\_\_\_

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\*By submitting this individual membership form I agree **not** to re-sell or place the Journal in a library or similar facility for at least three years.

**Send to:** Botanical Society of America • 1735 Neil Ave. • Columbus, OH • 43210-1293  
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## INTERNATIONAL ORGANIZATION OF PLANT BIOSYSTEMATISTS (IOPB)

**T**he International Organization of Plant Biosystematists was founded in 1960 to promote international cooperation in the study of biosystematics. Traditionally, biosystematics applies methods beyond comparative morphology to analyze taxon boundaries and taxon relationships. Most research covers the range from population biology to the taxonomic levels of genus and family. Besides experimentation with the living plants to determine crossing relationships, character stability or plasticity, and the genetics of character differences, there is an emphasis on cytology for the investigation of ploidy and hybridization, the chemistry of secondary compounds and molecular marker systems from isoenzymes to comparative genomic sequencing.

IOPB publishes a newsletter twice a year, and organizes an international symposium every three years. Previous Symposia took place in Montreal, Canada (1960 and 1983), Zürich, Switzerland (1986) Kyoto, Japan (1989), St. Louis, Mo., USA (1992), Tromsø, Norway (1995), and Amsterdam, The Netherlands (1998). The Newsletter presents profiles of biosystematics laboratories, publishes a list of chromosome number data and introduces research groups working on molecular biosystematics of plants. Our internet address is <[www.iopb.org/](http://www.iopb.org/)>.

Any inquiries about joining IOPB, fees or Newsletter subscriptions should be addressed to the Secretary/Treasurer, Dr. Tommy Lennartsson, Department of Conservation Biology, Swedish University of Agricultural Sciences, P. O. Box 7072, SE-75007 Uppsala, Sweden. E-mail: [tommy.lennartsson@nvb.slu.se](mailto:tommy.lennartsson@nvb.slu.se).

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Dr. Suzanne Warwick, Canada

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# FULL PROGRAM AT-A-GLANCE

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## SATURDAY, 11 AUGUST

- 2:00 pm - 5:00 pm Flora of North America Management Committee Meeting (Hyatt, Enchantment C-D)
- 3:30 pm - 6:00 pm BSA Financial Advisory Committee Meeting (Hyatt, Enchantment A-B)
- 6:00 pm - 10:00 pm BSA Executive Committee Meeting (Hyatt, McGrath's)

## SUNDAY, 12 AUGUST

- 8:30 am - 4:00 pm ASPT Council Meeting and Luncheon (Hyatt, Fiesta 1)
- 9:00 am - 3:00 pm BSA Council Meeting and Luncheon (Hyatt, Fiesta 3-4)
- 3:00 pm - 6:30 pm AFS Council Meeting (Hyatt, Enchantment C-D)
- 5:00 pm - 7:00 pm ABLIS Executive Committee Meeting (Hyatt, Enchantment A-B)
- 7:30 pm - 8:30 pm Plenary Address (Hyatt, Pavilion IV-VI)
- 8:30 pm - 10:00 pm All Society Mixer (Hyatt, Pavilion I-III)

# MONDAY, 13 AUGUST

## Morning

7:00 am - 8:30 am	ABLS Breakfast (Ticketed Event) (Hyatt, Fiesta)
8:00 am - 11:00 am	Plenary Symposium: Comparative and functional genomics: evolutionary implications (Session 1 - ACC, 101-Brazos)
8:00 am - 12:00 pm	ASPT / Systematics Section / IOPB Papers: Phylogeny of plant and major plant clades (Session 2 - ACC, 205-San Miguel)
8:15 am - 11:45 am	ASPT / Systematics Section / IOPB Papers: Biogeography (Session 3 - ACC, 215-Mesilla)
8:15 am - 11:45 pm	ASPT / Systematics Section / IOPB Papers: Early-diverging asterids and euasterids II (Session 4 - ACC, 103-Galisteo)
8:15 am - 12:00 pm	Ecological Section Papers: Life history and phenotypic plasticity (Session 5 - ACC, 107-Aztec)
8:30 am - 12:00 pm	Genetics Section Papers: Population and conservation genetics, molecular evolution and genetics (Session 6 - ACC, 201-La Cienega)
8:40 am - 11:30 am	Paleobotanical Section Papers: Isabel Cookson student award session (Session 7 - ACC, 207-Ruidoso)
9:00 am - 11:15 am	Developmental and Structural Section Papers: Roots and shoots (Session 8 - ACC, 113-Dona Ana)
9:00 am - 11:45 am	Symposium: Form and function in bryophytes (Session 9 - ACC, 111-Cimarron)
9:00 am - 9:45 am	Economic Botany Section Papers (Session 10 - ACC, 203-Tijeras)
9:15 am - 11:15 am	AFS / Pteridological Section Papers (Session 11 - ACC, 209-Pecos)
10:00 am - 11:00 am	Economic Botany Section Business Meeting (ACC, 203-Tijeras)
11:30 am - 12:00 pm	Historical Section Papers (Session 12- ACC, 203-Tijeras)
11:30 am - 1:00 pm	Economic Botany Luncheon (Ticketed Event) (Hyatt, Fiesta 3-4)

## Afternoon

12:00 pm - 1:30 pm	AFS Luncheon (Ticketed Event) (Hyatt, Fiesta 1-2)
1:00 pm - 3:30 pm	ABLS / Bryological and Lichenological Section Papers: A. J. Sharp student papers (Session 13 - ACC, 111-Cimarron)
1:00 pm - 5:00 pm	Symposium: Linnaean taxonomy: a viable system for the new millennium? (Session 14 - ACC, 101-Brazos)

1:00 pm - 5:00 pm	ASPT / Systematics Section / IOPB Papers: Molecular characters in phylogenetic analysis, rare species, and conservation genetics (Session 15 - ACC, 205-San Miguel)
1:00 pm - 5:00 pm	Symposium: Plasticity of integrated phenotypes (Session 16 - ACC, 107-Aztec)
1:00 pm - 2:15 pm	Paleobotanical Section Papers: Early land biota, paleobotany of New Mexico (Session 17 - ACC, 207-Ruidoso)
1:30 pm - 4:45 pm	Symposium: Origin and biology of desert flora (Session 18 - ACC, 215-Mesilla)
1:30 pm - 4:00 pm	Developmental and Structural Section Papers: Fertilization, embryos, endosperm, and developmental genetics (Session 19 - ACC, 103-Galisteo)
1:30 pm - 3:45 pm	Genetics Section Papers: Molecular evolution and genetics (Session 20 - ACC, 201-La Cienega)
1:30 pm - 3:00 pm	Physiological Section Papers (Session 21 - ACC, 113-Dona Ana)
2:00 pm - 4:15 pm	AFS / Pteridological Section Papers (Session 22 - ACC, 209-Pecos)
3:00 pm - 3:45 pm	Phytochemical Section Papers: Phytochemistry (Session 23 - ACC, 203-Tijeras)
3:45 pm - 5:00 pm	ABLS Presentation: Graduate opportunities in bryology (Session 24 - ACC, 111-Cimarron)
4:00 pm - 5:00 pm	Genetics Section Business Meeting (ACC, 201-La Cienega)
4:00 pm - 5:00 pm	Phycological Section Business Meeting (ACC, 113-Dona Ana)
4:00 pm - 5:00 pm	Phytochemical Section Business Meeting (ACC, 203-Tijeras)
4:15 pm - 5:00 pm	Pteridological Section Business Meeting (ACC, 209-Pecos)
5:15 pm - 6:00 pm	ASPT / BSA Systematics Section Business Meeting (ACC, 205-San Miguel)
5:15 pm - 6:00 pm	Meeting: Bryophyte Flora of North America (ACC, 111-Cimarron)

## Evening

5:30 pm - 7:30 pm	Developmental and Structural Section Mixer and Business Meeting (ACC, 103-Galisteo)
5:30 pm - 8:00 pm	IOPB Reception / Mixer (Ticketed Event) (Hyatt, Enchantment A-B)
6:00 pm - 6:30 pm	Paleobotanical Section Mixer (New Mexico Museum of Natural History)
6:30 pm - 10:00 pm	Paleobotanical Section Banquet and Auction (Ticketed Event) (New Mexico Museum of Natural History)
8:00 pm - 9:00 pm	Flora of North America Reception (Hyatt, Enchantment A-B)

## TUESDAY, 14 AUGUST

### Morning

7:00 am - 8:30 am	Missouri Botanical Garden Breakfast (Ticketed Event) (Hyatt, Fiesta 1-2)
7:00 am - 8:30 am	Miami University of Ohio Breakfast (Ticketed Event) (Hyatt, Fiesta 3-4)
8:00 am - 12:00 pm	ASPT / Systematics Section / IOPB Papers: Asteraceae I (Session <b>25</b> - ACC, 101-Brazos)
8:00 am - 12:00 pm	ASPT / Systematics Section / IOPB Papers: Paleoherbs, magnoliids, Ranunculales and Caryophyllales (Session <b>26</b> - ACC, 205-San Miguel)
8:00 am - 12:00 pm	ASPT / Systematics Section / IOPB Papers: Monocots (Session <b>27</b> - ACC, 103-Galisteo)
8:00 am - 12:00 pm	ASPT / Systematics Section / IOPB Papers: Molecular evolution and polyploidy (Session <b>28</b> - ACC, 215-Mesilla)
8:00 am - 11:15 am	Teaching Section Papers: Teaching and learning plant biology (Session <b>29</b> - ACC, 201-La Cienega)
8:15 am - 11:30 am	Ecological Section Papers: Evolutionary ecology and conservation biology (Session <b>30</b> - ACC, 107-Aztec)
8:30 am - 11:30 am	ABLS / Bryological and Lichenological Section Papers: Bryophyte morphology, biology, conservation and systematics (Session <b>31</b> - ACC, 111-Cimarron)
8:30 am - 12:00 pm	Symposium: Evolution and adaptations of pteridophytes in dry climates (Session <b>32</b> - ACC, 209-Pecos)
8:30 am - 12:00 pm	Developmental and Structural Section Papers: Reproductive and dispersal structures and cell biology (Session <b>33</b> - ACC, 113-Dona Ana)
9:00 am - 11:45 am	Paleobotanical Section Papers: Paleozoic and Mesozoic plants (Session <b>34</b> - ACC, 207-Ruidoso)
9:00 am - 11:30 am	Physiological Section Papers: Stress physiology (Session <b>35</b> - ACC, 203-Tijeras)
11:15 am - 12:00 pm	Teaching Section Business Meeting and Luncheon (ACC, 201-La Cienega)
11:30 am - 12:30 pm	Physiological Section Business Meeting and Luncheon (ACC, 203-Tijeras)

### Afternoon

12:30 pm - 2:00 pm	Posters: All Societies (Session <b>36</b> - ACC, SW Exhibition Hall)
1:15 pm - 5:45 pm	ASPT / Systematics Section / IOPB Papers: Asteraceae II and Deep Achene: The Compositae Alliance (Session <b>37</b> - ACC, 205-San Miguel)
2:00 pm - 4:30 pm	ASPT / Systematics Section Colloquium: Evolution, biogeography, and systematics of Begoniaceae (Session <b>38</b> - ACC, 215-Mesilla)
2:00 pm - 5:00 pm	ASPT / Systematics Section / IOPB Papers: Commelinid monocots, hybridization, and speciation (Session <b>39</b> - ACC, 103-Galisteo)
2:00 pm - 4:30 pm	Ecological Section Papers: Genetical and physiological ecology (Session <b>40</b> - ACC, 107-Aztec)
2:00 pm - 3:15 pm	Paleobotanical Section Papers: Phylogeny, ferns, and flowering plants (Session <b>41</b> - ACC, 207-Ruidoso)
2:00 pm - 3:30 pm	Discussion Session: Presidents' forum: federal funding for botanical research (Session <b>D1</b> - ACC, 101-Brazos)
2:30 pm - 4:45 pm	ABLS / Bryological and Lichenological Section Papers: Lichen biology (Session <b>42</b> - ACC, 111-Cimarron)
3:30 pm - 4:30 pm	Paleobotanical Section Business Meeting (ACC, 207-Ruidoso)
3:30 pm - 4:30 pm	Discussion Session: A feeling for the organism (Session <b>D2</b> - ACC, 209-Pecos)
3:30 pm - 4:30 pm	Discussion Session: The future of botany at the undergraduate level (Session <b>D3</b> - ACC, 201-La Cienega)
4:30 pm - 5:30 pm	BSA Business Meeting (ACC, 113-Dona Ana)
5:00 pm - 6:00 pm	ABLS Business Meeting (ACC, 111-Cimarron)

### Evening

6:00 pm - 7:30 pm	ABLS Social (Hyatt, Enchantment A-D)
6:00 pm - 7:00 pm	ASPT / IOPB Mixer (New Mexico Museum of Natural History)
7:00 pm - 10:00 pm	ASPT / IOPB Banquet (Ticketed Event) (New Mexico Museum of Natural History)

## WEDNESDAY, 15 AUGUST

### Morning

- 7:00 am - 8:30 am Pacific Section Meeting and Light Breakfast (Hyatt, Fiesta 1-2)
- 7:00 am - 8:30 am 2002 Education/Outreach Meeting - Planning Committee Meeting and Light Breakfast (Hyatt, Fiesta 3-4)
- 8:00 am - 12:00 pm ASPT / Systematics Section / IOPB Papers: Euasterids I, Part I (Session **43** - ACC, 206-Ballroom A)
- 8:00 am - 12:00 pm ASPT / Systematics Section / IOPB Papers: General rosids and eurosids I (Session **44** - ACC, 204-Ballroom B)
- 8:20 am - 12:00 pm Symposium: Biogeography and phylogeny of Caribbean plants (Session **45** - ACC, 202-Ballroom C)
- 8:25 am - 12:00 pm Symposium: Why leaves turn red: the function of anthocyanins in vegetative organs. Part I. (Session **46** - ACC, 66-Picuris)
- 8:30 am - 12:00 pm Ecological Section Papers: Seed ecology and reproductive biology (Session **47** - ACC, 76-Taos)
- 9:00 am - 11:45 am Symposium: Lichen biodeterioration: progress and problems. Part I. (Session **48** - ACC, 68/70-Sandia/Santa Ana)
- 9:00 am - 11:00 am Developmental and Structural Section Papers: Vasculture, wood, and ecological anatomy (Session **49** - ACC, 54-Cochiti)
- 9:00 am - 12:00 pm Paleobotanical Section Papers: Tertiary fossil plants, informal presentations (Session **50** - ACC, 50/78/80-Acoma/Tesuque/Zuni)

### Afternoon

- 12:00 pm - 1:00 pm *American Journal of Botany* Editorial Board Meeting and Luncheon (Hyatt, Fiesta 1-2)
- 12:00 pm - 1:00 pm Project Kaleidoscope (PKAL) Informational Meeting and Light Lunch (Hyatt, Fiesta 3-4)
- 1:00 pm - 3:45 pm Symposium: Lichen biodeterioration: progress and problems. Part II. (Session **51** - ACC, 68/70-Sandia/Santa Ana)
- 1:00 pm - 4:00 pm Symposium: Why leaves turn red: the function of anthocyanins in vegetative organs. Part II. (Session **52** - ACC, 66-Picuris)
- 1:00 pm - 5:15 pm ASPT / Systematics Section / IOPB Papers: Euasterids I, Part II (Session **53** - ACC, 206-Ballroom A)
- 1:00 pm - 5:45 pm ASPT / Systematics Section / IOPB Papers: Eurosids I and eurosids II (Session **54** - ACC, 204-Ballroom B)
- 1:00 pm - 5:15 pm ASPT / Systematics Section / IOPB Papers: Poaceae and Cyperaceae (Session **55** - ACC, 50/78/80-Acoma/Tesuque/Zuni)

- 1:00 pm - 4:00 pm Ecological Section Papers: Mostly reproductive biology (Session **56** - ACC, 76-Taos)
- 1:15 pm - 6:00 pm Symposium: Structural botany in systematics: a symposium in memory of William C. Dickison (Session **57** - ACC, 202-Ballroom C)
- 3:30 pm - 4:30 pm Discussion Session: Why botany? (Session **D4** - ACC, 60/62-Nambe/Navajo)
- 3:30 pm - 4:30 pm Discussion Session: Scientific publishing in an electronic age (Session **D5** - ACC, 52-Apache)
- 4:00 pm - 4:45 pm Ecological Section Business Meeting (ACC, 76-Taos)
- 4:30 pm - 5:30 pm Anthocyanin Symposium Reception (ACC, 56/58-Isleta/Jemez)
- 4:30 pm - 5:45 pm IOPB Business Meeting (ACC, 66-Picuris)

### Evening

- 6:00 pm - 7:00 pm BSA Mixer (Hyatt, Sendero Lobby)
- 7:00 pm - 10:00 pm BSA Banquet (Ticketed Event) (Hyatt, Sendero Ballroom)

## THURSDAY, 16 AUGUST

- 8:00 am - 9:30 pm BSA Executive Committee Meeting (Hyatt, Fiesta 1)
- 8:00 am - 5:00 pm Deep Time Research Coordination Network Meeting (Hyatt, Fiesta 3)
- 8:00 am - 5:00 pm Deep Gene Research Coordination Network Meeting (Hyatt, Fiesta 4)
- 9:30 am - 5:00 pm BSA Strategic Planning Meeting (Hyatt, Fiesta 1)

# SYMPOSIA, ADDRESSES AND DISCUSSION SESSIONS AT-A-GLANCE

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## SUNDAY, 12 AUGUST

7:30 pm - 8:30 pm Plenary Address (Gary Nabhan): Bridging Western science and indigenous science: ethnobiology and cross-cultural conservation collaborations in the bi-national Southwest (Hyatt, Pavilion IV-VI)

## MONDAY, 13 AUGUST

8:00 am - 11:00 am Plenary Symposium: Comparative and functional genomics: evolutionary implications (Session 1 - ACC, 101-Brazos)

9:00 am - 11:45 am Symposium: Form and function in bryophytes (Session 9 - ACC, 111-Cimarron)

11:30 am - 1:00 pm Luncheon Lecture of the BSA Economic Botany Section (Gary Nabhan): Ethnobiological education and conservation based in indigenous communities: successes in the Sonoran Desert and Colorado Plateau (Ticketed Event) (Hyatt, Fiesta 3-4)

1:00 pm - 5:00 pm Symposium: Linnaean taxonomy: a viable system for the new millennium? (Session 14 - ACC, 101-Brazos)

1:00 pm - 5:00 pm Symposium: Plasticity of integrated phenotypes (Session 16 - ACC, 107-Aztec)

1:30 pm - 4:45 pm Symposium: Origin and biology of desert flora (Session 18 - ACC, 215-Mesilla)

## TUESDAY, 14 AUGUST

8:30 am - 12:00 pm Symposium: Evolution and adaptations of pteridophytes in dry climates (Session 32 - ACC, 209-Pecos)

2:00 pm - 4:30 pm Colloquium: Evolution, biogeography, and systematics of Begoniaceae (Session 38 - ACC, 215-Mesilla)

2:00 pm - 3:30 pm Discussion Session: Presidents' forum: federal funding for botanical research (Session D1 - ACC, 101-Brazos)

3:30 pm - 4:30 pm Discussion Session: A feeling for the organism (Session D2 - ACC, 209-Pecos)

3:30 pm - 4:30 pm Discussion Session: The future of botany at the undergraduate level (Session D3 - ACC, 201-La Cienega)

7:00 pm - 10:00 pm Address of the ASPT President-Elect (Thomas F. Daniel): Botanical heroes (at the ASPT / IOPB Banquet; Ticketed Event) (New Mexico Museum of Natural History)

## WEDNESDAY, 15 AUGUST

8:20 am - 12:00 pm Symposium: Biogeography and phylogeny of Caribbean plants (Session 45 - ACC, 202-Ballroom C)

8:25 am - 4:00 pm Symposium: Why leaves turn red: the function of anthocyanins in vegetative organs. (Sessions 46 & 52 - ACC, 66-Picuris)

9:00 am - 3:45 pm Symposium: Lichen biodeterioration: progress and problems. (Sessions 48 & 51 - ACC, 68/70-Sandia/Santa Ana)

1:15 pm - 6:00 pm Symposium: Structural botany in systematics: a symposium in memory of William C. Dickison (Session 57 - ACC, 202-Ballroom C)

3:30 pm - 4:30 pm Discussion Session: Why botany? (Session D4 - ACC, 60/62-Nambe/Navajo)

3:30 pm - 4:30 pm Discussion Session: Scientific publishing in an electronic age (Session D5 - ACC, 52-Apache)

7:00 pm - 10:00 pm Address of the BSA President-Elect (Judy Jernstedt): With apologies to Euell Gibbons: stalking the wild *Welwitschia* (at the BSA Banquet; Ticketed Event) (Hyatt, Sendero Ballroom)



## SOCIETAL / SECTIONAL PROGRAMS AT-A-GLANCE

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### AMERICAN BRYOLOGICAL AND LICHENOLOGICAL SOCIETY (ABLS) / BRYOLOGICAL AND LICHENOLOGICAL SECTION, BSA

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#### FRIDAY, 10 AUGUST

8:00 am Field Trip to Sangre de Cristo Mountains  
(return to Albuquerque on Saturday, 11  
August, 6:00 pm)

#### SUNDAY, 12 AUGUST

7:30 am - 4:00 pm Field Trip to Sandia Mountains  
5:00 pm - 7:00 pm ABLS Executive Committee Meeting (Hyatt,  
Enchantment A-B)  
7:30 pm - 8:30 pm Plenary Address (Hyatt, Pavilion IV-VI)  
8:30 pm - 10:00 pm All Society Mixer (Hyatt, Pavilion I-III)

#### MONDAY, 13 AUGUST

7:00 am - 8:30 am ABLS Breakfast (Ticketed Event) (Hyatt,  
Fiesta)  
8:00 am - 11:00 am Plenary Symposium: Comparative and func-  
tional genomics: evolutionary implications  
(Session 1 - ACC, Room 101-Brazos)  
9:00 am - 11:45 am Symposium: Form and function in  
bryophytes (Session 9 - ACC, 111-Cimarron)  
1:00 pm - 3:30 pm Papers: A. J. Sharp Student Papers (Session  
13 - ACC, 111-Cimarron)  
3:45 pm - 5:00 pm Presentation: Graduate opportunities in bry-  
ology (Session 24 - ACC, 111-Cimarron)  
5:15 pm - 6:00 pm Meeting: Bryophyte Flora of North America  
(ACC, 111-Cimarron)

#### TUESDAY, 14 AUGUST

8:30 am - 11:30 am Papers: Bryophyte morphology, biology,  
conservation and systematics (Session 31 -  
ACC, 111-Cimarron)  
12:30 pm - 2:00 pm Posters (Session 36 - ACC, SW Exhibition  
Hall)  
2:00 pm - 3:30 pm Discussion Session: Presidents' forum: fed-  
eral funding for botanical research (Session  
D1 - ACC, 101-Brazos)  
2:30 pm - 4:45 pm Papers: Lichen biology (Session 42 - ACC,  
111-Cimarron)  
3:30 pm - 4:30 pm Discussion Session: A feeling for the organ-  
ism (Session D2 - ACC, 209-Pecos)  
3:30 pm - 4:30 pm Discussion Session: The future of botany at  
the undergraduate level (Session D3 - ACC,  
201-La Cienega)  
5:00 pm - 6:00 pm ABLS Business Meeting (ACC, 111-  
Cimarron)  
6:00 pm - 7:30 pm ABLS Social (Hyatt, Enchantment A-D)

#### WEDNESDAY, 15 AUGUST

9:00 am - 11:45 am Symposium: Lichen biodeterioration:  
progress and problems. Part I (Session 48 -  
ACC, 68/70-Sandia/Santa Ana)  
1:00 pm - 3:45 pm Symposium: Lichen biodeterioration:  
progress and problems. Part II (Session 51 -  
ACC, 68/70-Sandia/Santa Ana)  
3:30 pm - 4:30 pm Discussion Session: Why botany? (Session  
D4 - ACC, 60/62-Nambe/Navajo)  
3:30 pm - 4:30 pm Discussion Session: Scientific publishing in  
an electronic age (Session D5 - ACC, 52-  
Apache)

## AMERICAN FERN SOCIETY (AFS) / PTERIDOLOGICAL SECTION, BSA

### SATURDAY, 11 AUGUST

8:00 am - 6:00 pm Field Trip

### SUNDAY, 12 AUGUST

8:00 am - 1:00 pm Field Trip

3:00 pm - 6:30 pm AFS Council Meeting (Hyatt, Enchantment C-D)

7:30 pm - 8:30 pm Plenary Address (Hyatt, Pavilion IV-VI)

8:30 pm - 10:00 pm All Society Mixer (Hyatt, Pavilion I-III)

### MONDAY, 13 AUGUST

8:00 am - 11:00 am Plenary Symposium: Comparative and functional genomics: evolutionary implications (Session **1** - ACC, 101-Brazos)

9:15 am - 11:15 am Contributed Papers (Session **11** - ACC, 209-Pecos)

12:00 pm - 1:30 pm AFS Luncheon (Ticketed Event) (Hyatt, Fiesta 1-2)

2:00 pm - 4:15 pm Contributed Papers (Session **22** - ACC, 209-Pecos)

2:00 pm - 3:30 pm Discussion Session: Presidents' forum: federal funding for botanical research (Session **D1** - ACC, 101-Brazos)

3:30 pm - 4:30 pm Discussion Session: A feeling for the organism (Session **D2** - ACC, 209-Pecos)

4:15 pm - 5:00 pm Business Meeting: Pteridological Section, BSA (ACC, 209-Pecos)

### TUESDAY, 14 AUGUST

8:30 am - 12:00 pm Symposium: Evolution and adaptations of pteridophytes in dry climates (Session **32** - ACC, 209-Pecos)

12:30 pm - 2:00 pm Posters (Session **36** - ACC, SW Exhibition Hall)

2:00 pm - 3:30 pm Discussion Session: Presidents' forum: federal funding for botanical research (Session **D1** - ACC, 101-Brazos)

3:30 pm - 4:30 pm Discussion Session: A feeling for the organism (Session **D2** - ACC, 209-Pecos)

3:30 pm - 4:30 pm Discussion Session: The future of botany at the undergraduate level (Session **D3** - ACC, 201-La Cienega)

### WEDNESDAY, 15 AUGUST

3:30 pm - 4:30 pm Discussion Session: Why botany? (Session **D4** - ACC, 60/62-Nambe/Navajo)

3:30 pm - 4:30 pm Discussion Session: Scientific publishing in an electronic age (Session **D5** - ACC, 52-Apache)

## AMERICAN SOCIETY OF PLANT TAXONOMISTS (ASPT) / SYSTEMATICS SECTION, BSA

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### SUNDAY, 12 AUGUST

- 8:30 am - 4:00 pm ASPT Council Meeting and Luncheon (Hyatt, Fiesta 1)  
7:30 pm - 8:30 pm Plenary Address (Hyatt, Pavilion IV-VI)  
8:30 pm - 10:00 pm All Society Mixer (Hyatt, Pavilion I-III)

### MONDAY, 13 AUGUST

- 8:00 am - 11:00 am Plenary Symposium: Comparative and functional genomics: evolutionary implications (Session **1** - ACC, 101-Brazos)  
8:00 am - 12:00 pm Papers: Phylogeny of plant and major plant clades (Session **2** - ACC, 205-San Miguel)  
8:15 am - 11:45 am Papers: Biogeography (Session **3** - ACC, 215-Mesilla)  
8:15 am - 11:45 pm Papers: Early-diverging asterids and euasterids II (Session **4** - ACC, 103-Galisteo)  
1:00 pm - 5:00 pm Symposium: Linnaean taxonomy: a viable system for the new millennium? (Session **14** - ACC, 101-Brazos)  
1:00 pm - 5:00 pm Papers: Molecular characters in phylogenetic analysis/Rare species and conservation genetics (Session **15** - ACC, 205-San Miguel)  
5:15 pm - 6:00 pm Business Meeting: ASPT / Systematics Section, BSA (ACC, 205-San Miguel)

### TUESDAY, 14 AUGUST

- 8:00 am - 12:00 pm Papers: Asteraceae I (Session **25** - ACC, 101-Brazos)  
8:00 am - 12:00 pm Papers: Paleoherbs, magnoliids, Ranunculales and Caryophyllales (Session **26** - ACC, 205-San Miguel)  
8:00 am - 12:00 pm Papers: Monocots (Session **27** - ACC, 103-Galisteo)  
8:00 am - 12:00 pm Papers: Molecular evolution and polyploidy (Session **28** - ACC, 215-Mesilla)  
12:30 pm - 2:00 pm Posters (Session **36** - ACC, SW Exhibition Hall)  
1:15 pm - 5:45 pm Papers: Asteraceae II and Deep Achene: The Compositae Alliance (Session **37** - ACC, 205-San Miguel)  
2:00 pm - 4:30 pm Colloquium: Evolution, biogeography, and systematics of Begoniaceae (Session **38** - ACC, 215-Mesilla)  
2:00 pm - 5:00 pm Papers: Commelinid monocots / Hybridization and speciation (Session **39** - ACC, 103-Galisteo)

- 2:00 pm - 3:30 pm Discussion Session: Presidents' forum: federal funding for botanical research (Session **D1** - ACC, 101-Brazos)  
3:30 pm - 4:30 pm Discussion Session: A feeling for the organism (Session **D2** - ACC, 209-Pecos)  
3:30 pm - 4:30 pm Discussion Session: The future of botany at the undergraduate level (Session **D3** - ACC, 201-La Cienega)  
6:00 pm - 7:00 pm ASPT / IOPB Mixer (New Mexico Museum of Natural History)  
7:00 pm - 10:00 pm ASPT / IOPB Banquet (Ticketed Event) (New Mexico Museum of Natural History)

### WEDNESDAY, 15 AUGUST

- 8:00 am - 12:00 pm Papers: Euasterids I, Part I (Session **43** - ACC, 206-Ballroom A)  
8:00 am - 12:00 pm Papers: General rosids and eurosids I (Session **44** - ACC, 204-Ballroom B)  
8:20 am - 12:00 pm Symposium: Biogeography and phylogeny of Caribbean plants (Session **45** - ACC, 202-Ballroom C)  
1:00 pm - 5:15 pm Papers: Euasterids I, Part II (Session **53** - ACC, 206-Ballroom A)  
1:00 pm - 5:45 pm Papers: Eurosids I and eurosids II (Session **54** - ACC, 204-Ballroom B)  
1:00 pm - 5:15 pm Papers: Poaceae and Cyperaceae (Session **55** - ACC, 50/78/80-Acoma/Tesuque/Zuni)  
3:30 pm - 4:30 pm Discussion Session: Why botany? (Session **D4** - ACC, 60/62-Nambe/Navajo)  
3:30 pm - 4:30 pm Discussion Session: Scientific publishing in an electronic age (Session **D5** - ACC, 52-Apache)

## BOTANICAL SOCIETY OF AMERICA (BSA)

### BSA-WIDE EVENTS

#### SATURDAY, 11 AUGUST

- 3:30 pm - 6:00 pm Financial Advisory Committee Meeting (Hyatt, Enchantment A-B)
- 6:00 pm - 10:00 pm Executive Committee Meeting (Hyatt, McGrath's)

#### SUNDAY, 12 AUGUST

- 9:00 am - 3:00 pm Council Meeting and Luncheon (Hyatt, Fiesta 3-4)
- 7:30 pm - 8:30 pm Plenary Address (Hyatt, Pavilion IV-VI)
- 8:30 pm - 10:00 pm All Society Mixer (Hyatt, Pavilion I-III)

#### MONDAY, 13 AUGUST

- 8:00 am - 11:00 am Plenary Symposium: Comparative and functional genomics: evolutionary implications (Session **1** - ACC, 101-Brazos)

#### TUESDAY, 14 AUGUST

- 2:00 pm - 3:30 pm Discussion Session: Presidents' forum: federal funding for botanical research (Session **D1** - ACC, 101-Brazos)
- 3:30 pm - 4:30 pm Discussion Session: A feeling for the organism (Session **D2** - ACC, 209-Pecos)
- 3:30 pm - 4:30 pm Discussion Session: The future of botany at the undergraduate level (Session **D3** - ACC, 201-La Cienega)
- 4:30 pm - 5:30 pm Business Meeting (ACC, 113-Dona Ana)

#### WEDNESDAY, 15 AUGUST

- 12:00 pm - 1:00 pm *American Journal of Botany* Editorial Board Meeting and Luncheon (Hyatt, Fiesta 1-2)
- 3:30 pm - 4:30 pm Discussion Session: Why botany? (Session **D4** - ACC, 60/62-Nambe/Navajo)
- 3:30 pm - 4:30 pm Discussion Session: Scientific publishing in an electronic age (Session **D5** - ACC, 52-Apache)
- 6:00 pm - 7:00 pm Mixer (Hyatt, Sendero Lobby)
- 7:00 pm - 10:00 pm Banquet (Ticketed Event) (Hyatt, Sendero Ballroom)

#### THURSDAY, 16 AUGUST

- 8:00 am - 9:30 pm Executive Committee Meeting (Hyatt, Fiesta 1)
- 9:30 am - 5:00 pm Strategic Planning Meeting (Hyatt, Fiesta 1)

### DEVELOPMENTAL AND STRUCTURAL SECTION, BSA -

#### MONDAY, 13 AUGUST

- 9:00 am - 11:15 am Papers: Roots and shoots (Session **8** - ACC, 113-Dona Ana)
- 1:30 pm - 4:00 pm Papers: Fertilization, embryos, endosperm, and developmental genetics (Session **19** - ACC, 103-Galisteo)
- 5:30 pm - 7:30 pm Mixer and business meeting (ACC, 103-Galisteo)

#### TUESDAY, 14 AUGUST

- 8:30 am - 12:00 pm Papers: Reproductive and dispersal structures and cell biology (Session **33** - ACC, 113-Dona Ana)
- 12:30 pm - 2:00 pm Posters (Session **36** - ACC, SW Exhibition Hall)

#### WEDNESDAY, 15 AUGUST

- 8:25 am - 12:00 pm Symposium: Why leaves turn red: the function of anthocyanins in vegetative organs. Part I. (Session **46** - ACC, 66-Picuris)
- 9:00 am - 11:00 am Papers: Vasculture, wood, and ecological anatomy (Session **49** - ACC, 54-Cochiti)
- 1:00 pm - 4:00 pm Symposium: Why leaves turn red: the function of anthocyanins in vegetative organs. Part II. (Session **52** - ACC, 66-Picuris)
- 1:15 pm - 6:00 pm Symposium: Structural botany in systematics: a symposium in memory of William C. Dickison (Session **57** - ACC, 202-Ballroom C)
- 4:30 pm - 5:30 pm Reception: Anthocyanin Symposium participants (ACC, 60/62-Nambe/Navajo)

## ECOLOGICAL SECTION, BSA

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### MONDAY, AUGUST 13

- 8:15 am - 12:00 pm Papers: Life history and phenotypic plasticity (Session 5 - ACC, 107-Aztec)
- 1:00 pm - 5:00 pm Symposium: Plasticity of integrated phenotypes (Session 16 - ACC, 107-Aztec)

### TUESDAY, AUGUST 14

- 8:15 am - 11:30 am Papers: Evolutionary ecology and conservation biology (Session 30 - ACC, 107-Aztec)
- 12:30 pm - 2:00 pm Posters (Session 36 - ACC, SW Exhibition Hall)
- 2:00 pm - 4:30 pm Papers: Genetical and physiological ecology (Session 40 - ACC, 107-Aztec)

### WEDNESDAY, AUGUST 15

- 8:30 am - 12:00 pm Papers: Seed ecology and reproductive biology (Session 47 - ACC, 76-Taos)
- 1:00 pm - 4:00 pm Papers: Mostly reproductive biology (Session 56 - ACC, 76-Taos)
- 4:00 pm - 4:45 pm Business meeting (ACC, 76-Taos)

## ECONOMIC BOTANY SECTION, BSA

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### MONDAY, 13 AUGUST

- 9:00 am - 9:45 am Papers (Session 10 - ACC, 203-Tijeras)
- 10:00 am - 11:00 am Business Meeting (ACC, 203-Tijeras)
- 11:30 am - 1:00 pm Luncheon (Ticketed Event) (Hyatt, Fiesta 3-4)

### TUESDAY, 14 AUGUST

- 12:30 pm - 2:00 pm Posters (Session 36 - ACC, SW Exhibition Hall)

## GENETICS SECTION, BSA

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### MONDAY, 13 AUGUST

- 8:30 am - 12:00 pm Papers: Population and conservation genetics and molecular evolution and genetics (Session 6 - ACC, 201-La Cienega)
- 1:30 pm - 3:45 pm Papers: Molecular evolution and genetics (Session 20 - ACC, 201-La Cienega)
- 4:00 pm - 5:00 pm Business Meeting (ACC, 201-La Cienega)

### TUESDAY, 14 AUGUST

- 9:00 am - 11:00 am Posters (Session 36 - ACC, SW Exhibition Hall)

## HISTORICAL SECTION, BSA

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### MONDAY, 13 AUGUST

- 11:30 am - 12:00 pm Papers (Session 12 - ACC, 203-Tijeras)

## PACIFIC SECTION, BSA

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### WEDNESDAY, 15 AUGUST

- 7:00 am - 8:30 pm Business Meeting and Light Breakfast (Hyatt, Fiesta 1-2)

## PALEOBOTANICAL SECTION, BSA

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### MONDAY, 13 AUGUST

- 8:40 am - 11:30 am Papers: Isabel Cookson Student Award Session (Session 7 - ACC, 207-Ruidoso)
- 1:00 pm - 2:15 pm Papers: Early land biota, paleobotany of New Mexico (Session 17 - ACC, 207-Ruidoso)
- 6:00 pm - 6:30 pm Mixer (New Mexico Museum of Natural History)
- 6:30 pm - 10:00 pm Banquet and Auction (Ticketed Event) (New Mexico Museum of Natural History)

### TUESDAY, 14 AUGUST

- 9:00 am - 11:45 am Papers: Paleozoic and Mesozoic plants (Session 34 - ACC, 207-Ruidoso)
- 12:30 pm - 2:00 pm Posters (Session 36 - ACC, SW Exhibition Hall)
- 2:00 pm - 3:15 pm Papers: Phylogeny, ferns, and flowering plants (Session 41 - ACC, 207-Ruidoso)
- 3:30 pm - 4:30 pm Business Meeting (ACC, 207-Ruidoso)

### WEDNESDAY, 15 AUGUST

- 9:00 am - 12:00 pm Papers: Tertiary fossil plants, informal presentations (Session 50 - ACC, 50/78/80-Acoma/Tesuque/Zuni)



## **PHYCOLOGICAL SECTION, BSA**

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### **MONDAY, 13 AUGUST**

4:00 pm - 5:00 pm Business Meeting (ACC, 113-Dona Ana)

### **TUESDAY, 14 AUGUST**

12:30 pm - 2:00 pm Posters (Session 36 - ACC, SW Exhibition Hall)

## **PHYSIOLOGICAL SECTION, BSA**

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### **MONDAY, 13 AUGUST**

1:30 pm - 3:00 pm Papers (Session 21 - ACC, 113-Dona Ana)

### **TUESDAY, 14 AUGUST**

9:00 am - 11:30 am Papers: Stress Physiology (Session 35 - ACC, 203-Tijeras)

### **TUESDAY, 14 AUGUST**

11:30 am - 12:30 pm Business Meeting and Luncheon (ACC, 203-Tijeras)

12:30 pm - 2:00 pm Posters (Session 36 - ACC, SW Exhibition Hall)

## **PHYTOCHEMICAL SECTION, BSA**

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### **MONDAY, 13 AUGUST**

3:00 pm - 3:45 pm Papers: Phytochemistry (Session 23 - ACC, 203-Tijeras)

4:00 pm - 5:00 pm Business Meeting (ACC, 203-Tijeras)

### **TUESDAY, 14 AUGUST**

12:30 pm - 2:00 pm Posters (Session 36 - ACC, SW Exhibition Hall)

### **WEDNESDAY, 15 AUGUST**

8:25 am - 12:00 pm Symposium: Why leaves turn red: the function of anthocyanins in vegetative organs. Part I. (Session 46 - ACC, 66-Picuris)

1:00 pm - 4:00 pm Symposium: Why leaves turn red: the function of anthocyanins in vegetative organs. Part II. (Session 52 - ACC, 66-Picuris)

4:30 pm - 5:30 pm Reception: Anthocyanin Symposium participants (ACC, 56/58-Isleta/Jemez)

## **PTERIDOLOGICAL SECTION, BSA**

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See AFS

## **SYSTEMATICS SECTION, BSA**

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See ASPT

## **TEACHING SECTION, BSA**

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### **TUESDAY, 14 AUGUST**

8:00 am - 11:15 am Papers: Teaching and learning plant biology (Session 29 - ACC, 201-La Cienega)

11:15 am - 12:00 pm Business Meeting and Luncheon (ACC, 201-La Cienega)

## INTERNATIONAL ORGANIZATION OF PLANT BIOSYSTEMATISTS (IOPB)

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Also see ASPT / BSA Systematics Section program for contributed paper and poster sessions.

### SUNDAY, 12 AUGUST

7:30 pm - 8:30 pm Plenary Address (Hyatt, Pavilion IV-VI)  
8:30 pm - 10:00 pm All Society Mixer (Hyatt, Pavilion I-III)

### MONDAY, 13 AUGUST

8:00 am - 11:00 am Plenary Symposium: Comparative and functional genomics: evolutionary implications (Session **1** - ACC, 101-Brazos)  
1:30 pm - 4:45 am Symposium: Origin and biology of desert flora (Session **18** - ACC, 215-Mesilla)  
5:30 pm - 7:00 pm Reception / Mixer (Ticketed Event) (Hyatt, Enchantment A-B)

### TUESDAY, 14 AUGUST

2:00 pm - 3:30 pm Discussion Session: Presidents' forum: federal funding for botanical research (Session **D1** - ACC, 101-Brazos)  
3:30 pm - 4:30 pm Discussion Session: A feeling for the organism (Session **D2** - ACC, 209-Pecos)  
3:30 pm - 4:30 pm Discussion Session: The future of botany at the undergraduate level (Session **D3** - ACC, 201-La Cienega)  
6:00 pm - 7:00 pm ASPT / IOPB Mixer (New Mexico Museum of Natural History)  
7:00 pm - 10:00 pm ASPT / IOPB Banquet (Ticketed Event) (New Mexico Museum of Natural History)

### WEDNESDAY, 15 AUGUST

3:30 pm - 4:30 pm Discussion Session: Why botany? (Session **D4** - ACC, 60/62-Nambe/Navajo)  
3:30 pm - 4:30 pm Discussion Session: Scientific publishing in an electronic age (Session **D5** - ACC, 52-Apache)  
4:30 pm - 5:45 pm Business Meeting (ACC, 66-Picuris)

# MEETINGS AT-A-GLANCE

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## SATURDAY, 11 AUGUST

- 2:00 pm - 5:00 pm *Flora of North America* Management Committee Meeting (Hyatt, Enchantment C-D)
- 3:30 pm - 6:00 pm BSA Financial Advisory Committee Meeting (Hyatt, Enchantment A-B)
- 6:00 pm - 10:00 pm BSA Executive Committee Meeting (Hyatt, Boardroom North)

## SUNDAY, 12 AUGUST

- 8:30 am - 4:00 pm ASPT Council Meeting and Luncheon (Hyatt, Fiesta 1)
- 9:00 am - 3:00 pm BSA Council Meeting and Luncheon (Hyatt, Fiesta 3-4)
- 3:00 pm - 6:30 pm AFS Council Meeting (Hyatt, Enchantment C-D)
- 5:00 pm - 7:00 pm ABLS Executive Committee Meeting (Hyatt, Enchantment A-B)

## MONDAY, 13 AUGUST

- 10:00 am - 11:00 am Economic Botany Section Business Meeting (ACC, 203-Tijeras)
- 4:00 pm - 5:00 pm Genetics Section Business Meeting (ACC, 201-La Cienega)
- 4:00 pm - 5:00 pm Phycological Section Business Meeting (ACC, 113-Dona Ana)
- 4:00 pm - 5:00 pm Phytochemical Section Business Meeting (ACC, 203-Tijeras)
- 4:15 pm - 5:00 pm Pteridological Section Business Meeting (ACC, 209-Pecos)
- 5:15 pm - 6:00 pm ASPT / BSA Systematics Section Business Meeting (ACC, 205-San Miguel)
- 5:15 pm - 6:00 pm Bryophyte Flora of North America Meeting (ACC, 111-Cimarron)
- 5:30 pm - 7:30 pm Developmental and Structural Section Mixer and Business Meeting (ACC, 103-Galisteo)

## TUESDAY, 14 AUGUST

- 11:15 am - 12:00 pm Teaching Section Business Meeting and Luncheon (ACC, 201-La Cienega)
- 11:30 am - 12:30 pm Physiological Section Business Meeting and Luncheon (ACC, 203-Tijeras)
- 3:30 pm - 4:30 pm Paleobotanical Section Business Meeting (ACC, 207-Ruidoso)
- 4:30 pm - 5:30 pm BSA Business Meeting (ACC, 113-Dona Ana)
- 5:00 pm - 6:00 pm ABLS Business Meeting (ACC, 111-Cimarron)

## WEDNESDAY, 15 AUGUST

- 7:00 am - 8:30 am Pacific Section Meeting and Light Breakfast (Hyatt, Fiesta 1-2)
- 7:00 am - 8:30 am 2002 Education/Outreach Meeting - Planning Committee Meeting and Light Breakfast (Hyatt, Fiesta 3-4)
- 12:00 pm - 1:00 pm *American Journal of Botany* Editorial Board Meeting and Luncheon (Hyatt, Fiesta 1-2)
- 12:00 pm - 1:00 pm Project Kaleidoscope (PKAL) Informational Meeting and Light Lunch (Hyatt, Fiesta 3-4)
- 4:00 pm - 4:45 pm Ecological Section Business Meeting (ACC, 76-Taos)
- 4:30 pm - 5:45 pm IOPB Business Meeting (ACC, 66-Picuris)

## THURSDAY, 16 AUGUST

- 8:00 am - 9:30 pm BSA Executive Committee Meeting (Hyatt, Fiesta 1)
- 8:00 am - 5:00 pm Deep Time Research Coordination Network Meeting (Hyatt, Fiesta 3)
- 8:00 am - 5:00 pm Deep Gene Research Coordination Network Meeting (Hyatt, Fiesta 4)
- 9:30 am - 5:00 pm BSA Strategic Planning Meeting (Hyatt, Fiesta 1)

## SOCIAL EVENTS AT-A-GLANCE

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### SUNDAY, 12 AUGUST

8:30 pm - 10:00 pm All Society Mixer (Hyatt, Pavilion I-III)

### MONDAY, 13 AUGUST

7:00 am - 8:30 am ABLS Breakfast (Ticketed Event) (Hyatt, Fiesta)

11:30 am - 1:00 pm Economic Botany Luncheon (Ticketed Event) (Hyatt, Fiesta 3-4)

12:00 pm - 1:30 pm AFS Luncheon (Ticketed Event) (Hyatt, Fiesta 1-2)

5:30 pm - 7:30 pm Developmental and Structural Section Mixer and Business Meeting (ACC, 103-Galisteo)

5:30 pm - 8:00 pm IOPB Reception / Mixer (Ticketed Event) (Hyatt, Enchantment A-B)

6:00 pm - 6:30 pm Paleobotanical Section Mixer (New Mexico Museum of Natural History)

6:30 pm - 10:00 pm Paleobotanical Section Banquet and Auction (Ticketed Event) (New Mexico Museum of Natural History)

8:00 pm - 9:00 pm *Flora of North America* Reception (Hyatt, Enchantment A-B)

### TUESDAY, 14 AUGUST

7:00 am - 8:30 am Missouri Botanical Garden Breakfast (Ticketed Event) (Hyatt, Fiesta 1-2)

7:00 am - 8:30 am Miami University of Ohio Breakfast (Ticketed Event) (Hyatt, Fiesta 3-4)

6:00 pm - 7:30 pm ABLS Social (Hyatt, Enchantment A-D)

6:00 pm - 7:00 pm ASPT / IOPB Mixer (New Mexico Museum of Natural History)

7:00 pm - 10:00 pm ASPT / IOPB Banquet (Ticketed Event) (New Mexico Museum of Natural History)

### WEDNESDAY, 15 AUGUST

7:00 am - 8:30 am Pacific Section Meeting and Light Breakfast (Hyatt, Fiesta 1-2)

4:30 pm - 5:30 pm Anthocyanin Symposium Reception (ACC, 56/58-Isleta/Jemez)

6:00 pm - 7:00 pm BSA Mixer (Hyatt, Sendero Lobby)

7:00 pm - 10:00 pm BSA Banquet (Ticketed Event) (Hyatt, Sendero Ballroom)



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