



Alpine Diversity: Adapted to the Peaks

July 31 – August 5, 2004

Snowbird, Utah

www.botanyconference.org

FULL PROGRAM AT-A-GLANCE

FRIDAY, JULY 30

6:00 pm - 9:00 pm Informal Forum Welcoming Reception (Cliff Lodge, Atrium Patio)

SATURDAY, JULY 31

Morning

8:15 am - 9:15 am Letting students design their own investigative laboratories (Forum Session 1-1, Cliff Lodge, Wasatch A)
8:15 am - 9:15 am Reforming undergraduate education in botany in light of the National Research Council's *Bio 2010* report (Forum Session 1-2, Cliff Lodge, Wasatch B)
9:30 am - 10:30 am Building the Tree of Life (Forum Session 2-1, Cliff Lodge, Wasatch A)
9:30 am - 10:30 am Exotics in the wilderness: A version of "citizen science" at Rocky Mountain Biological Laboratory (Forum Session 2-2, Cliff Lodge, Wasatch B)
10:30 am - 11:00 am Forum Break (Cliff Lodge, Atrium Patio)
11:00 am - 12:00 pm NSF funding opportunities that support undergraduate research and education (Forum Session 3-1, Cliff Lodge, Wasatch A)
11:00 am - 12:00 pm What are the most important things for students to learn in our introductory courses? (Forum Session 3-2, Cliff Lodge, Wasatch B)

Afternoon

12:00 pm - 1:30 pm Lunch Break (On your Own)
1:30 pm - 2:30 pm Digital imaging for the plant biology laboratory (Forum Session 4-1, Cliff Lodge, Wasatch A)
1:30 pm - 2:30 pm Laboratory instruction in economic botany (Forum Session 4-2, Cliff Lodge, Wasatch B)
1:30 pm - 2:30 pm Botany in the pre-college classroom: Setting up professional development workshops for K-12 teachers (Forum Session 4-3, Cliff Lodge, Maybird)
2:45 pm - 3:45 pm Non-majors botany: An interdisciplinary approach incorporating literature and art (Forum Session 5-1, Cliff Lodge, Wasatch A)
2:45 pm - 3:45 pm Image analysis software: A useful tool for learning and analyzing cellular and anatomical structures (Forum Session 5-2, Cliff Lodge, Wasatch B)
2:45 pm - 3:45 pm Meeting the challenge posed by Botany 2003 Keynote speaker (Dr. Bruce Alberts) and the Sci- π Adventure (Forum Session 5-3, Cliff Lodge, Maybird)
3:45 pm - 4:15 pm Forum Break (Cliff Lodge, Atrium Patio)
4:15 pm - 5:15 pm Forum Keynote Address: Eugenie C. Scott (Cliff Lodge, Superior)

Evening

5:15 pm - 7:00 pm Forum Reception (Cliff Lodge, Atrium Patio)
7:00 pm - 10:00 pm BSA Executive Committee Meeting (Cliff Lodge, Aerie Dining Room)

SUNDAY, AUGUST 1

Morning

8:00 am - 10:00 am BSA Financial Advisory Committee Meeting (Cliff Lodge, Board Room)
8:30 am - 4:00 pm ASPT Council Meeting and Luncheon (Cliff Lodge, Wasatch B)
10:30 am - 1:00 pm BSA Centennial Planning Committee Meeting and Luncheon (Cliff Lodge, Board Room)
11:30 am - 1:00 pm BSA New Committee Chair Meeting and Luncheon (Cliff Lodge, White Pine)

Afternoon

1:00 pm - 5:00 pm BSA Council Meeting (Cliff Lodge, Superior B)
5:00 pm - 6:00 pm Student Projectionists Meeting (Cliff Lodge, Ballroom 1 & 2)
5:00 pm - 6:00 pm UMEB Undergraduate Student and Mentor Orientation Meeting (Cliff Lodge, Wasatch A)

Evening

6:00 pm - 7:00 pm AFS Council Meeting (Cliff Lodge, Board Room)
7:00 pm - 9:00 pm ABLs Executive Committee Meeting (Cliff Lodge, Wasatch B)
7:30 pm - 8:30 pm Plenary Lecture: Rita R. Colwell (Cliff Lodge, Ballroom 1 & 2)
8:30 pm - 10:00 pm All-Society Mixer (Cliff Lodge, Conference Center Terrace)

MONDAY, AUGUST 2

Morning

- 7:00 am - 8:30 am ABLS Breakfast (Ticketed Event) (Cliff Lodge, Golden Cliff)
8:00 am - 12:00 pm Developmental and Structural Papers: Homology, genes and ontology (Session 1 - Snowbird Center, Alpine A)
8:00 am - 12:30 pm Systematics Papers: Aquatics, paleoherbs, and monocots I (Session 2 - Snowbird Center, Cottonwood A)
8:00 am - 12:45 pm Systematics Papers: Asterales (Session 3- Snowbird Center, Cottonwood B)
8:00 am - 11:45 am Symposium: After the book - Progress in parasitic plant research since Kuijt's *Biology of Parasitic Flowering Plants* (1969), Part I (Session 4 - Cliff Lodge, Ballroom 2)
8:10 am - 12:00 pm Paleobotanical Papers (Session 5 - Cliff Lodge, Maybird)
8:20 am - 11:00 pm Plenary Symposium: Seed plant gametophytes: Still the forgotten generation?!? (Session 6 - Cliff Lodge, Ballroom 1)
8:30 am - 12:15 pm Symposium: The biology of rarity; conservation of bryophytes and lichens, Part I (Session 7 - Cliff Lodge, Ballroom 3)
8:30 am - 11:00 am Tropical Biology Papers (Session 8 - Cliff Lodge, Peruvian)
8:45 am - 12:00 pm Teaching Papers (Session 9 - Cliff Lodge, Superior A)
9:30 am - 11:30 am Pteridological Papers (Session 10 - Cliff Lodge, Superior B)
10:00 am - 12:00 pm Physiological Papers (Session 11 - Cliff Lodge, White Pine)
11:00 am - 12:00 pm *Annals of Botany* Special Lecture: Karl J. Niklas (Session 12 - Cliff Lodge, Wasatch)
11:00 am - 12:30 pm Systematics Papers: Fabales (Session 13 - Snowbird Center, Cottonwood C)
11:00 am - 12:00 pm Tropical Biology Section Business Meeting (Cliff Lodge, Peruvian)

Afternoon

- 12:00 pm - 1:30 pm AFS Luncheon (Ticketed Event) (Cliff Lodge, Golden Cliff)
12:00 pm - 1:00 pm BSA Membership Committee Meeting and Luncheon (Cliff Lodge, Amphitheatre Lobby Terrace)
12:00 pm - 1:00 pm Physiological Section Business Meeting (Cliff Lodge, White Pine)
12:00 pm - 1:00 pm Teaching Section Business Meeting (Cliff Lodge, Superior A)
1:00 pm - 4:15 pm Symposium: Discerning homologies: Gene expression, development, and morphology (Session 14 - Cliff Lodge, Ballroom 1)
1:00 pm - 3:00 pm Symposium: The biology of rarity; conservation of bryophytes and lichens, Part II (Session 15 - Cliff Lodge, Ballroom 3)
1:00 pm - 4:45 pm Symposium: After the book - Progress in parasitic plant research since Kuijt's *Biology of Parasitic Flowering Plants* (1969), Part II (Session 16 - Cliff Lodge, Ballroom 2)
1:15 pm - 5:00 pm Ecological Papers: Pollination biology and autecology (Session 17 - Cliff Lodge, Wasatch)
1:15 pm - 3:30 pm Systematics Papers: Gentianales and Dipsacales (Session 18 - Snowbird Center, Cottonwood A)
1:45 pm - 5:30 pm Colloquium: Rupert Barnaby and his legume legacy (Session 19 - Cliff Lodge, Magpie)
1:45 pm - 5:30 pm Systematics Papers: Monocots II (Session 20 - Snowbird Center, Cottonwood B)
2:00 pm - 3:00 pm Economic Botany Papers (Session 21 - Cliff Lodge, Maybird)
2:00 pm - 4:00 pm Pteridological Papers (Session 22 - Cliff Lodge, Superior B)
3:00 pm - 5:00 pm Bryological and Lichenological Papers: The biology of hornworts and liverworts (Session 23 - Cliff Lodge, Ballroom 3)
3:45 pm - 5:45 pm Systematics Papers: Floristics and collections (Session 24 - Snowbird Center, Cottonwood A)
4:00 pm - 6:00 pm Economic Botany Section Business Meeting (Cliff Lodge, Maybird)
4:15 pm - 5:15 pm Pteridological Section Business Meeting (Cliff Lodge, Superior B)
4:30 pm - 5:30 pm Discussion Session: The evolving *AJB* - The journal for all botanists (Session D1 - Cliff Lodge, Superior A)

Evening

- 5:30 pm - 7:30 pm Developmental and Structural Section Mixer & Business Meeting (Snowbird Center, Alpine A)
5:30 pm - 7:00 pm Paleobotanical Mixer (Cliff Lodge, Eagle's Nest)
5:45 pm - 6:45 pm ASPT / BSA Systematics Section Business Meeting (Snowbird Center, Cottonwood B)
6:45 pm - 8:00 pm Producing the Second Edition of *The Jepson Manual* for California: A reception for editors, authors, and other interested parties (Cliff Lodge, Wasatch A)
7:00 pm - 10:00 pm Paleobotanical Banquet and Auction (Ticketed Event) (Cliff Lodge, Golden Cliff)
8:00 pm - 9:00 pm Herbarium Curators Meeting (Cliff Lodge, Wasatch B)

TUESDAY, AUGUST 3

Morning

7:00 am - 8:30 am	Missouri Botanical Garden Breakfast (Ticketed Event) (Cliff Lodge, Golden Cliff)
7:00 am - 8:30 am	Ohio State University Breakfast (Ticketed Event) (Cliff Lodge, Eagle's Nest)
8:00 am - 12:30 pm	Symposium: A century of seed ferns: A symposium to celebrate paradigm shifts in the understanding of seed plant evolution (Session 25 - Cliff Lodge, Ballroom 1)
8:00 am - 12:00 pm	Symposium: Don Kaplan - his legacy: Influencing teaching and research, Part I (Session 26 - Cliff Lodge, Ballroom 2)
8:00 am - 11:45 am	Symposium: Sexual dimorphism in bryophytes: Patterns and consequences (Session 27 - Cliff Lodge, Ballroom 3)
8:00 am - 12:45 pm	Systematics Papers: Lamiales and Apiales (Session 28 - Snowbird Center, Cottonwood A)
8:00 am - 12:00 pm	Ecological Papers: Community and population biology (Session 29 - Cliff Lodge, Wasatch)
8:15 am - 10:30 am	Systematics Papers: Linales and Malpighiales (Session 30 - Snowbird Center, Cottonwood B)
8:45 am - 12:45 pm	Colloquium: Methods and theory of phylogenetic Inference, Part I (Session 31 - Snowbird Center, Alpine A)
10:00 am - 11:30 am	Discussion Session: Discerning homologies: Gene expression, development, and morphology (Session D2 - Cliff Lodge, Superior A)
11:00 am - 12:00 pm	Historical Section Business Meeting (Cliff Lodge, Magpie A)
11:00 am - 12:00 pm	Phytochemical Section Business Meeting (Cliff Lodge, Magpie B)
11:30 am - 1:00 pm	Economic Botany Luncheon (Ticketed Event) (Cliff Lodge, Creekside Patio)
11:30 am - 12:30 pm	BSA Education Committee Meeting and Luncheon (Cliff Lodge, Atrium Patio)
11:30 am - 12:30 pm	UMEB undergraduate student and mentor Meeting and Luncheon (Cliff Lodge, Superior Terrace)

Afternoon

12:30 pm - 2:00 pm	Posters: All societies and sections (Session 32 - Cliff Lodge, Special Event Center)
1:30 pm - 5:00 pm	Symposium: Don Kaplan - his legacy: Influencing teaching and research, Part II (Session 33 - Cliff Lodge, Ballroom 2)
2:00 pm - 5:30 pm	Symposium: The power of two: Marrying phylogeny and biogeography to reconstruct the evolutionary history of pteridophytes (Session 34 - Cliff Lodge, Ballroom 1)
2:00 pm - 5:00 pm	Bryological and Lichenological Papers: Bryophyte phylogeny and the many uses of molecular biology (Session 35 - Cliff Lodge, Ballroom 3)
2:00 pm - 4:00 pm	Paleobotanical Papers (Session 36 - Cliff Lodge, Maybird)
2:00 pm - 5:30 pm	Systematics Papers: Ericales and Solanales (Session 37 - Snowbird Center, Cottonwood B)
2:00 pm - 5:45 pm	Systematics Papers: Rosales, Cucurbitales, Myrtales, Brassicales, Malvales, and Sapindales (Session 38 - Snowbird Center, Cottonwood A)
2:30 pm - 5:45 pm	Colloquium: Methods and theory of phylogenetic inference, Part II (Session 39 - Snowbird Center, Alpine A)
2:30 pm - 4:30 pm	Ecological Papers: Reproductive biology and microbial relationships (Session 40 - Cliff Lodge, Wasatch)
4:00 pm - 5:30 pm	Discussion Session: Curatorial consequences of databasing herbaria (Session D3 - Cliff Lodge, Superior B)
4:00 pm - 5:30 pm	Discussion Session: Women in science (Session D4 - Cliff Lodge, Superior A)

Evening

5:00 pm - 6:00 pm	BSA-wide Business Meeting (Cliff Lodge, Magpie A)
6:00 pm - 7:00 pm	BSA New and Prospective Member Social (Cliff Lodge, Creekside Patio)
6:00 pm - 7:00 pm	Ecological Section Business Meeting (Cliff Lodge, Wasatch)
6:30 pm - 7:30 pm	ASPT Mixer and Auction (Cliff Lodge, Amphitheatre Lobby Terrace)
7:30 pm - 10:00 pm	ASPT Banquet (Ticketed Event) (Cliff Lodge, Golden Cliff)

WEDNESDAY, AUGUST 4

Morning

- 7:00 am - 8:30 am Pacific Section Meeting and Light Breakfast (Cliff Lodge, Eagle's Nest)
7:00 am - 8:30 am Miami University of Ohio Breakfast (Ticketed Event) (Cliff Lodge, Golden Cliff)
8:00 am - 12:00 pm Genetics Papers: Population, conservation, and ecological genetics (Session 41 - Cliff Lodge, Peruvian)
8:00 am - 12:00 pm Paleobotanical Papers: Isabel Cookson student award session, Part I (Session 42 - Cliff Lodge, Maybird)
8:00 am - 12:45 pm Systematics Papers: Biogeography and phylogeography (Session 43 - Snowbird Center, Cottonwood A)
8:15 am - 11:30 am Symposium: Plant development and evolution: Lessons learned from candidate genes, Part I (Session 44 - Cliff Lodge, Ballroom 1)
8:15 am - 10:30 am Systematics Papers: Phylogenetic methods, genomics, and molecular evolution I (Session 45 - Snowbird Center, Cottonwood B)
8:20 am - 12:15 pm Symposium: Resolving the green branch of life: Current progress and future challenges, Part I (Session 46 - Cliff Lodge, Ballroom 3)
8:30 am - 11:15 am Bryological and Lichenological Papers: Biogeography and biodiversity of lichens and bryophytes from the alpine to geothermal vents (Session 47 - Cliff Lodge, Magpie)
9:45 am - 12:00 pm Symposium: Resistance, emigration, or adaptation? Phylogeography and ecology of European alpine plant species, Part I (Session 48 - Cliff Lodge, Ballroom 2)
10:45 am - 12:30 pm Discussion Session: Is morphology dead in phylogenetic analysis? (Session D5 - Snowbird Center, Cottonwood B)
10:45 am - 12:15 pm Systematics Papers: Gymnosperms (Session 49 - Snowbird Center, Cottonwood C)
11:30 am - 1:00 pm Discussion Session and Luncheon: What works for me: Undergraduate perspectives on professional growth (Session D6 - Cliff Lodge, Superior B)

Afternoon

- 12:00 pm - 1:00 pm *American Journal of Botany* Editorial Board Meeting and Luncheon (Cliff Lodge, Creekside Patio)
12:00 pm - 1:00 pm Botany 2006 Planning Meeting and Luncheon (Cliff Lodge, Atrium Patio)
1:00 pm - 3:45 pm Symposium: The Convention on Biological Diversity: What is it, and why should botanists care (Session 50 - Cliff Lodge, Wasatch)
1:00 pm - 2:45 pm Bryological and Lichenological Papers: Ecology and paleoecology of bryophytes and lichens; floras and collections (Session 51 - Cliff Lodge, Magpie)
1:00 pm - 5:00 pm Developmental and Structural Papers: Anatomy and development of reproductive and vegetative structures (Session 52 - Snowbird Center, Alpine A)
1:00 pm - 5:00 pm Genetics Papers: Chloroplast DNA, cytogenetics and genome size, molecular evolution, and crop-wild plant gene flow (Session 53 - Cliff Lodge, Peruvian)
1:15 pm - 4:00 pm Symposium: Plant development and evolution: Lessons learned from candidate genes, Part II (Session 54 - Cliff Lodge, Ballroom 1)
1:15 pm - 3:30 pm Symposium: Resistance, emigration, or adaptation? Phylogeography and ecology of European alpine plant species, Part II (Session 55 - Cliff Lodge, Ballroom 2)
1:30 pm - 3:30 pm Symposium: Resolving the green branch of life: Current progress and future challenges, Part II (Session 56 - Cliff Lodge, Ballroom 3)
1:30 pm - 4:00 pm Paleobotanical Papers: Isabel Cookson student award session, Part II (Session 57 - Cliff Lodge, Maybird)
1:30 pm - 5:45 pm Systematics Papers: Phylogenetic methods, genomics, and molecular evolution II (Session 58 - Snowbird Center, Cottonwood B)
1:45 pm - 5:30 pm Systematics Papers: Species delimitation, conservation, and hybridization (Session 59 - Snowbird Center, Cottonwood A)
2:00 pm - 5:00 pm Systematics Papers: Caryophyllales, Polygonales, and Saxifragales (Session 60 - Snowbird Center, Cottonwood C)
3:15 pm - 4:00 pm ABLS Business Meeting (Cliff Lodge, Magpie)
3:30 pm - 6:00 pm Discussion Session: Tools for success in interdisciplinary, collaborative research (Session D7 - Cliff Lodge, Ballroom 3)
4:00 pm - 5:00 pm Paleobotanical Section Business Meeting (Cliff Lodge, Maybird)
4:15 pm - 5:30 pm ABLS / Bryological and Lichenological Section Mixer (Cliff Lodge, Creekside Patio)

WEDNESDAY, AUGUST 4 (CONTINUED)

Evening

5:00 pm - 6:00 pm BSA Genetics Section Business Meeting (Cliff Lodge, Peruvian)
6:00 pm - 7:00 pm BSA Mixer (Cliff Lodge, Conference Center Terrace)
7:00 pm - 9:30 pm BSA Banquet (Ticketed Event) (Cliff Lodge, Ballroom 1 & 2)

THURSDAY, AUGUST 5

Morning

8:00 am - 12:00 pm BSA Executive Committee Meeting (Cliff Lodge, Board Room)
8:00 am - 12:00 pm Deep Time Research Coordination Network Meeting (Cliff Lodge, Maybird)