# Schedule

### 12th ANNUAL COLORADO RARE PLANT SYMPOSIUM & CoNPS FRIDAY EVENING SOCIAL
**FRIDAY, SEPTEMBER 11th**

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<th>Time</th>
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| 8:30 a.m. – 4 p.m. | 12th Annual Colorado Rare Plant Symposium – Lunch on your own  
Location: American Mountaineering Center, 710 10th St., Golden, CO, Conference Rooms C,D (lower level) |

### CoNPS Friday Night Pizza and Beer Social **FRIDAY, SEPTEMBER 11th**

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| 6:00 – 8:00 p.m. | CoNPS Friday Night Pizza and Beer Social  
Location: American Mountaineering Center, Conference Room A (Must register by August 15th to attend) |

### COLORADO NATIVE PLANT SOCIETY 2015 ANNUAL MEETING
**SATURDAY, SEPTEMBER 12th**

<table>
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<th>Time</th>
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| 8:00 – 8:50 a.m. | Registration - Entrance at back (N. side) of building, lower level across from climbing wall  
Book sale, Vendors, Silent Auction , Photo Contest, Snacks/Drinks in Conference Rooms A-C on lower level. |
| 8:50– 9:00 a.m. | Welcome/Programs   
Foss Auditorium, 2nd floor of AMC |
| 9:00 – 9:30 a.m. | Native Plant & Pollinator Conservation  
Carol Kearns, Faculty, University of Colorado, Boulder; Author: *A Natural History of Bumblebees* |
| 9:30-10:00 a.m. | Gardening for Pollinators  
Amy Yarger, Horticulturist, Butterfly Pavilion |
| 10:00-10:20 a.m. | How to Make a Flower Color: Do Red Flowers Use Red Pigments?  
Julienne Ng, Postdoctoral Researcher, UC Boulder; Red Flower Evolution in Solanaceae |
| 10:20-10:40 a.m. | BREAK (20 minutes) Bookstore, Silent Auction, Vendors’ Tables, Photo Contest (Conf. Rms A, B, C, lower level) |
| 10:40 – 11:10 a.m. | Evidence of Climate Change from a Century’s Worth of Herbarium Specimens  
Anna Sher, Associate Professor, Biology, University of Denver |
| 11:10 – 11:40 a.m. | Butterfly Use and Pollination of *Eriogonum* (Buckwheat) Species  
Paul Opler, Professor of Entomology, Colorado State University; Author: and Evi Buckner-Opler |
| 11:40 – 1:00 p.m. | LUNCH ON YOUR OWN (1 hour & 20 minutes) See page 14 for a list of restaurants near the AMC  
Book Sales, Silent Auction, Photo Contest, Vendors (Conference Rooms A, B, C, lower level) |
| 1:00-1:30 p.m. | Year in Review & Awards  
Charlie & Jan Turner, Presidents of the Colorado Native Plant Society |
| 1:30-1:45 p.m. | Accessing CoNPS Field Trip Records on SEINet: A Demonstration  
Melissa Islam, Associate Head of Research & Head Curator of Herbaria, Denver Botanic Gardens |
| 1:45-2:15 p.m. | Wild for Monarchs  
Susan Crick Smith, President, Front Range Wild Ones |
| 2:15-2:40 p.m. | Rare Plants and Pollinators  
Dave Anderson, Director & Chief Scientist, Colorado Natural Heritage Program |
| 2:40 - 3:00 p.m. | BREAK (20 minutes) Book Sales, Silent Auction, Vendor’s Tables, Photo Contest (Conference Rooms A, B, C, lower level) |
| 3:00–3:20 p.m. | Choosy Plants: Do More Chromosomes Mean More Bees?  
Rob LaPort, Postdoctoral Fellow, UC Boulder and UN Lincoln; Evolutionary Ecologist |
| 3:20 – 3:50 p.m. | Sex in the Garden and the Field  
Irene Shonle, Director, CSU Extension Gilpin County |
| 3:50– 4:15 p.m. | National Strategy to Promote the Health of Honey Bees and Other Pollinators  
Tyler Johnson, Regional Botanist (Region 2), U.S. Forest Service |
| 4:15-4:40 p.m. | Southern Rockies Seed Network  
John Giordanengo, Executive Director, Synergy Ecological Restoration |
| 4:40-5:00 p.m. | National Wildlife Federation’s Gardening for Wildlife Program  
Brian Kurzel, Executive Director, National Wildlife Federation, Rocky Mountain Regional Center |
| 5:00 - 5:10 p.m. | Closing Remarks & Instructions for Tomorrow |
| 5:10-5:20 p.m. | Pay for and pick up Silent Auction Items |

### FIELD TRIPS SUNDAY, SEPTEMBER 13th

For Field Trips & carpools, meet at the American Mountaineering Center parking lot to the East (right) of the building at 8:00 a.m.

<table>
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<tr>
<th>Field Trips Options</th>
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<tr>
<td>Bee-Watching, Grasses, Lichens, Lookout Mtn. Wildflowers, Plants of Red Rocks, Aquatic Plants, DBG Chatfield</td>
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Whether you are a serious botanist, nature lover, gardener, or simply want to learn more about plants and pollinators, the Colorado Native Plant Society (CoNPS) 2015 Conference has something for everyone. It is being held at the American Mountaineering Center in Golden.

On Friday, September 11, from 8:30 a.m. to 4:00 p.m., the serious botanists will meet for the Colorado Rare Plant Symposium in Conference Rooms C & D. Of course, you don’t have to be a professional botanist to enjoy the slide show that will be presented showing rare plants.

The pizza and beer (or soft drink) social will take place on Friday night from 6 p.m. to 8 p.m. at the American Mountaineering Center in Conference Room A. Pizza will be available, including meat, vegetarian (no meat), and gluten-free. For only $19 you can enjoy pizza and beverages.

On Saturday, September 12th, we hope you join us for an exciting and informative annual conference at the American Mountaineering Center in Foss Auditorium. For only $45 (or $35 special early bird discount - August 15 deadline) you get Saturday’s programs AND a Sunday field trip! The topic this year is native plants and pollinators. We have been hearing a lot about the plight of pollinators and climate change in the news lately. Here is a chance to learn the latest from local experts. Are you interested in helping pollinators? Speakers will provide information about gardening with native plants to help pollinators and how you can provide milkweeds for monarchs. You will learn what scientists and citizen scientists from a number of organizations are learning about the state of Colorado’s pollinators.

On Saturday, in Conference Rooms A-C, there will be a book sale, silent auction, and vendors with information about their organizations. There will also be the CoNPS Photo Contest. You get to vote for your favorite photos in 4 categories!

Sunday you will be able to choose from a variety of field trips. Some are for beginners and others are for the more serious botanists. Some cover moderate to difficult terrain and others are easy ambles.

To get an early bird discount, sign up by August 15th! You will save $10 on the conference!

Please take time to vote in the CoNPS Board of Directors election. The ballot is on page 17.
12th Annual Colorado Rare Plant Symposium
Conservation Efforts and Status Review
G2 & G3 Plants of Southwest Colorado

Friday, Sept. 11, 2015  8:30 a.m. - 4:00 p.m.
American Mountaineering Center, 710 10th St, Golden, CO 80401, Conf. Rooms C & D, Lower Level

Join fellow botanists and members of the Colorado Rare Plant Technical Committee (RPTC) for the 12th Annual Colorado Rare Plant Symposium. The RPTC is an ad-hoc group of agency, academic, and NGO botanists that has been working for years to advance rare plant conservation efforts in the state.

The symposium will provide a photo presentation of the imperiled and vulnerable (G2 & G3) plant species known from southwest Colorado. This presentation features a diverse group of rare species including *Astragalus*, *Eriogonum*, *Physaria* and *Townsendia* from alpine, cliff and canyon, and shale barren habitats. Discussion of their relationship to Colorado's important plant biodiversity areas, current conservation status, and potential threats will be emphasized. Come prepared to exchange your knowledge of some of our rarest plant species with other amateur and professional botanists from throughout the state!

This one-day symposium will be held Friday Sept. 11th, in collaboration with the Colorado Native Plant Society’s Annual Conference (Sept. 12-13, 2015). The symposium is open to anyone with an interest in the rare plants of Colorado. Contact Jill Handwerk for more information at 970-491-5857 or jill.handwerk@colostate.edu. Registration is $10. To register, visit the CoNPS website www.conps.org or register at the door. To get to the conference rooms, enter from the back (North side) of the building.

8:30   Registration
9:00   Introduction and ground rules – Jennifer Neale, DBG
9:15   Review of Colorado T & E, and G1 plant species: Status review, current conservation efforts and priority conservation action needs - Jill Handwerk, CNHP
10:30  Break
10:45  Continue review of G2 & G3 plant species of Southwest Colorado
11:30  Lunch (on your own)
1:00   Announcements – Jennifer Neale
1:15   Review of G2 & G3 plant species of Colorado: Status review, current conservation efforts and priority conservation action needs – CNHP
2:15   Field Season Highlights: New locations of *Salix arizonica* - Gwen Kittel
2:30   Rare Plants: what they are, why they are important, and what you (and your government) can do about them. - Tyler Johnson, USFS Region 2 botanist
2:45   Break
3:00   Update on the Rare Plant Conservation Initiative and priority conservation actions for coming year – Group discussion led by Susan Panjabi, CNHP
4:30   Adjourn
6:00   CoNPS social hour - Pizza & Beer - see next page
2015 Colorado Native Plant Society
ANNUAL CONFERENCE
Native Plants and Pollinators

Friday, Sept. 11, 2015  6 - 8 p.m.
Pizza & Beer (or soft drinks) Social
American Mountaineering Center, 710 10th St, Golden, CO 80401
Conference Room A

Visit with your old friends and make new friends at the CoNPS Beer & Pizza social in Conference Room D. Mountain Options include vegetarian and gluten-free pizza. There will be beer, soft drinks, and water. $19 includes pizza and drinks.

Saturday, September 12, 2015
Registration 8:00 a.m. - 8:50 a.m.      Presentations 8:50 a.m. - 5:00 p.m.
American Mountaineering Center, 710 10th St, Golden, CO 80401, Foss Auditorium, 2nd Floor

We hope you join us for an exciting and informative annual conference at the American Mountaineering Center in Golden, Colorado. For only $45 (or $35 special early bird discount - August 15 deadline) you get Saturday’s programs AND a Sunday field trip!

We are delighted to have such an interesting selection of talks from experts in the fields of botany, entomology, and horticulture. Concern about pollinators is well-publicized in the news and the speakers at this conference will help inform and update you on the issues and current research. Bumblebee researcher, Carol Ann Kearns, will begin the conference with an overview of native plant and pollinator conservation. Botanists Julienne Ng and Rob LaPort will tell us the latest on flower color and pollinators and the relationship between plant genetics and bee visitation. These researchers are from University of Colorado, Boulder.

Anna Sher, Associate Professor, University of Denver, has been able to document climate change during the past century from herbarium specimens and its affect on pollination and conservation of the rare plants of Colorado. Also speaking on the topic of rare plants and pollinators is Dave Anderson, Director and Chief Scientist of the Colorado Natural Heritage Program. Another rare plant expert and the new US Forest Service Botanist for our region, Tyler Johnson, will speak about the US government’s national policy to promote the health of honey bees and other pollinators.

Noted Colorado State University Entomology Professor and butterfly and moth expert, Paul Opler, and his wife, Evi Buckner-Opler, will present fascinating information about butterfly use and pollination of Colorado buckwheats (Eriogonum). Also speaking about butterflies will be the President of the Front Range Wild Ones and gardening expert, Susan Crick Smith, who will report on the Wild for Monarchs campaign to plant milkweed for monarchs. Amy Yarger, Horticulture Director at the Butterfly Pavilion, will give us tips on gardening for pollinators.

Dr. Irene Shonle, plant sex therapist (and also Director of CSU Extension, Gilpin County) will keep us laughing with her talk on sex in the garden and the field. We are also delighted that Melissa Islam, Associate Research Director at the Denver Botanic Gardens, will give us a demonstration of the SEINet database and show us how to find plants and their photos from CoNPS field trips!

Popular speaker and writer, John Giordanengo, Executive Director, Synergy Ecological Restoration, will talk about the Southern Rockies Seed Network and challenges in meeting the production needs of FORBS (Friends of Ravenous Bees) followed by Brian Kurzel of the National Wildlife Federation, who will tell us about the NWF’s gardening for wildlife programs. Sunday, there will be a number of choices of field trips. They will be offered concurrently so only choose one. For garden lovers, Larry Vickerman, Director of Denver Botanic Gardens at Chatfield, will offer a tour of the native plant gardens at DBG at Chatfield.

Don’t miss the book sale, silent auction, photo contest, and vendors: Conference Rooms A-C, lower level!
How to Make a Flower Color: Do Red Flowers Use Red Pigments?
10:00-10:20 a.m.
Julienne Ng
Flowering plants exhibit a stunning diversity of flower color. Red flowers, in particular, can be found in many plant groups, but whether they all use the same strategy to make red-colored flowers is not well known. Julienne will talk about how plants color their flowers and discuss her research on red flower color evolution.

Julienne Ng, PhD, is a postdoctoral researcher at the University of Colorado Boulder. Her research focuses on why there is such a diversity of colorful signals that plants and animals use to communicate to one another, and is currently studying flower color evolution in the tomato family (Solanaceae). Julienne has been in Colorado for two years after earning her PhD at the University of Rochester, NY. Having grown up in Australia, she has enjoyed hiking the foothills of the Rocky Mountains, and getting to know the local flora.
Evidence of Climate Change from a Century’s Worth of Herbarium Specimens and its Implications for Pollination and Conservation of Rare Colorado plants 10:40-11:10 a.m.

Anna A. Sher

The timing of flowering is of critical importance for the survival of many species, given that it must correspond to availability of pollinators. Recently published research from my lab using label data from over 600 flowering herbarium specimens of Colorado plants collected from 1870 to 2009 from herbaria across the country found that common ephemeral species significantly bloomed earlier with a change of nearly three weeks. In contrast, specimens at this herbarium taken as a whole showed no change over time, suggesting that these changes were not due to collector behavior. We then used data from herbaria across the country to determine if a set of 12 Federally Listed Colorado species showed any pattern over time; these showed a similar, significant slope of earlier collection in recent years. Flowering cues for these rare species had not yet been documented, but our analyses using climate data suggested strongly that most of these were affected by temperature and/or precipitation, which have both changed dramatically over the last century. These findings suggest that both spring blooming and rare species are highly sensitive to the major climate changes observed in the center of the country, with changes likely more than twice as dramatic as those observed on the East Coast. Shifts as large as this could have major conservation implications depending on how pollinators respond to the same climatic cues.

Dr. Anna Sher, PhD, is the author of more than 40 scientific publications on plants and plant management, including four books. Her most recent book is an edited volume on the genus Tamarix in its invasive range, published by Oxford University Press in 2013. Dr. Sher earned her doctorate in Biology from the University of New Mexico studying tamarisk and plant competition. Today, Dr. Sher is a tenured associate professor at DU. One current focus of her lab has been the investigation of plant phenological shifts, as documented by herbarium specimens. She has just published her first paper on this topic in the American Journal of Botany.

Butterfly Use & Pollination of Colorado Eriogonum (Buckwheat) Species 11:10-11:40 a.m.

Dr. Paul Opler and Evi Buckner-Opler

Renowned Lepidoptera expert, Paul Opler, PhD, along with his adventure partner and wife, Evi Buckner-Opler, will share knowledge of butterfly use and pollination of Colorado Eriogonum species.

The focus of Dr. Opler's research for much of his life has been the members of the insect order Lepidoptera. His work involves a number of separate projects that relate to the systematics, biological diversity, distribution, and ecology of several groups of Lepidoptera. This includes surveys of the diversity of public lands, notably national parks and military lands. Dr. Opler is involved with the systematics of Lycaenid butterflies and many moth families, including Notodontidae, Arctiidae, Geometridae, and Tortricidae. He is also quite passionate about conservation efforts that benefit butterflies and moths.

Learn more at http://bspm.agsci.colostate.edu/people-button/faculty-new/paul-opler

CoNPS Field Trip Records on SEINet: Demonstration 1:30-1:45 p.m.

Melissa Islam

CoNPS sponsors field trips every year throughout the state. During the trips, leaders write checklists of the species that are encountered. These lists have been held by CoNPS but were not easily accessible. Over the last few years, CoNPS volunteers have strived to make these publicly available and also useful to the larger community by connecting descriptions, distributions and images to the species. By making all the checklists public, CoNPS hopes to encourage an interest in re-visiting these areas and updating the lists, and possibly, generating targeted floristic studies. Using the tools already available within SEINet, CoNPS volunteers have and will continue to upload checklists. I will demonstrate how to access the checklists, key features, and how one can create their own checklists.

Melissa Islam, PhD, is the Associate Director of Research & Head Curator for the Herbaria at Denver Botanic Gardens. Her work focuses on documenting and researching plant biodiversity in Colorado.
**Wild for Monarchs 1:45-2:15 p.m.**

**Susan Crick Smith**

Our wildflower gardens can be vital to the survival of butterflies. News of the dramatic decline of Monarchs makes it all the more urgent that we plant with purpose. We will learn more about the life cycle of this amazing butterfly, including when to look for their arrival in Colorado and learn what you can do to help monitor their population. We will explore how to design your yard to attract a plethora of butterflies and highlight native host plants for Monarchs and other species.

Susan has worked at nature centers and parks for over 20 years, helping connect people of all ages to nature. She has been trained as a Master Gardener, Native Plant Master and is President of the Front Range chapter of Wild Ones, a non-profit that promotes native plants and natural landscaping for wildlife.

**Rare Plants and Pollinators 2:15-2:40 p.m.**

**Dave Anderson**

David G. Anderson, Director and Chief Scientist, Colorado Natural Heritage Program (CNHP)

Colorado is home to over 500 species of plants of conservation concern that are tracked by the Colorado Natural Heritage Program. Most of these species rely on the services of pollinators to reproduce. We have some fascinating examples of co-evolution among our rare plants and pollinators, and also quite a few species of rare plants that are generalists. We’ll look at some examples, and discuss these in the context of pollinators and their conservation.

Dave grew up in Aurora, where his parents made him passionate about biology, and went to CU, where his wonderful professors turned him into a botanist. He went to graduate school at the University of Washington back when it had a Botany Department, and studied the influence of frost heave on plant community ecology in the Arctic. After then going to the equator for two years as a science teacher in the Peace Corps, Dave found his happy place in Fort Collins at CNHP, where he has been since 1999. Dave served as a CoNPS board member and Vice President in the 2000’s.

**Choosy Plants: Do More Chromosomes Mean More Bees? 3:00-3:20 p.m.**

**Rob Laport**

Flowering plants are incredibly diverse, and much of this diversity is the result of evolutionary pressures to ensure pollination. One way plants alter their physical appearance is to acquire multiple copies of genes responsible for flower color, size, shape, and rewards. Until recently it has been unclear how this phenomenon influences pollinator visitation. Robert will talk about his research on how chromosome duplication may influence bee pollination in the SW desert creosote bush.

Robert Laport is a postdoctoral researcher at the University of Nebraska, Lincoln and the University of Colorado, Boulder. Moving west after earning his PhD at the University of Rochester, he has enjoyed exploring the flora of the Great Plains and Rocky Mountains. He conducts research on creosote bush (Larrea tridentata) in the desert southwest to better understand the ecological and evolutionary consequences of genome duplication (polyploidy) on plant-pollinator interactions and plant biodiversity.

**Sex in the Garden and the Field 3:20-3:50 p.m.**

**Irene Shonle**

Flowers have an agenda that goes beyond looking beautiful. In this session, plant psychologist, Dr. Irene Shonle, will host a lively therapy session designed to help curious or concerned plants cope with their botanical sexuality. This session is rated PG-13 due to the steamy, alluring, and gluttonous nature of the world of pollination biology.

Irene Shonle is the Director of CSU Extension in Gilpin County, and the Vice President for CoNPS. She is passionate about native plants, and has taught all over the state, including for the Native Plant Master® Program, for the Denver Botanic Gardens, the Colorado Weed Management Association, and for various landscaping conferences.
National Strategy to Promote the Health of Honey Bees and Other Pollinators

3:50-4:15 p.m.

Tyler Johnson

In May of 2015 President Obama issued the National Strategy to Promote the Health of Honey Bees and Other Pollinators in response to severe declines in high profile pollinators and pollinators in general. The National Strategy outlines how federal agencies, including land management agencies such as the Forest Service, National Park Service, and Bureau of Land Management, will take actions to promote pollinator health. This talk will be an overview of the National Strategy, with emphasis on pollinator-friendly best management practices for federal lands and a discussion on how citizens can be involved.

Tyler is the new Regional Botanist for the U.S. Forest Service's Rocky Mountain Region. He was previously a NEPA Specialist and Botanist on the Bridger-Teton National Forest in Jackson, Wyoming and the Forest Botanist on the Lincoln National Forest in Alamogordo, New Mexico. He holds a MS in Forestry and a BS in Botany both from Northern Arizona University in Flagstaff, Arizona. His Master’s work focused on tamarisk on the Verde River in central Arizona. Tyler is a third generation Forest Service employee and is looking forward to meeting the people and plants in the Rocky Mountain Region.

Southern Rockies Seed Network: Challenges in Meeting the Production Needs of FORBS (Friends of Ravenous Bees) 4:15-4:40 p.m.

John Giordanengo, Executive Director, Synergy Ecological Restoration

Thanks to the dedication of over 50 agency, industry, and non-profit collaborators in Colorado and Wyoming, the Southern Rockies Seed Network formed in 2014 to develop ecotypic native plant materials for the restoration industry. Our pooled demand process for plant materials development resulted in a priority list of species for increase, including several Friends of Ravenous Bees (FORBs). While there is an important overlap between the function of forbs in a restoration project, and the importance of forbs for pollinators, challenges in the collection, production, distribution cycle will need to be overcome in order to bring our friends of ravenous bees to the marketplace in a quantity and quality that meets partner needs. The business model and key activities of this seed network will be described, as well as the organizational structure, accomplishments to date, technical and logistical constraints, and the collaborative nature of this budding seed network as it relates to pollinators.

Few finer days exist beyond those spent keying out plants. Much of John’s time doing so has been in association with his work restoring Colorado habitats—from alpine to plains. After 18 years of experience in Ecological Restoration, John still marvels over the secrets our native flora share (when we are patient enough to observe) that help us gain insights into the underpinnings of ecological restoration. Enjoying membership in CoNPS for 16 years, and serving as a board member for two years, John enjoys steering budding restoration ecologists to the society for a lesson or two. Today, somewhere between the botanizing and the restoration work, he is pleasantly busy growing the Southern Rockies Seed Network, a seminal program of Synergy Ecological Restoration. John is the Program Director, Southern Rockies Seed Network. John received an MS in Range Ecology (Ecological Restoration Emphasis) from Colorado State University in 2000.

National Wildlife Federation’s Gardening for Wildlife Programs 4:40 - 5:00 p.m.

Brian Kurzel, Regional Executive Director, Rocky Mtn. Regional Center, NWF

Whether you have an apartment balcony or a 20-acre farm, you can create a garden that attracts beautiful wildlife and helps restore habitat in commercial and residential areas. NWF’s programs can help develop habitat for wildlife where people live, work and play through Schoolyard Habitats, Community Wildlife Habitats and other programs.

Brian Kurzel is the Regional Executive Director, Rocky Mountain Regional Center of the National Wildlife Federation. He has also been the Supervisor for Policy and Planning for Colorado Parks and Wildlife and the Natural Areas Program Manager for the state of Colorado. Brian has a Masters in Biogeography from the University of Colorado at Boulder. He has spent several years as a professional environmental educator and enjoys interpreting the natural world to get people excited about science and conservation. Brian served on the CoNPS Board for a number of years.

Aquilégia Volume 39, No. 2 Annual Conference 2015
ANNUAL MEETING FIELD TRIPS

Sunday, September 13

Signing Up for a Sunday Field Trip  8:00 a.m. - noon

For all field trips, meet at the parking lot to the East of the AMC at 8 a.m.

FIELD TRIPS: All of the field trips take place at the same time so field trip participants will only be able to choose to go on one field trip. On the Registration Form on page 11 you can indicate your first, second, etc. choice of field trips. On Sunday morning at 8:00 a.m., we will meet at the parking lot to the East of the American Mountaineering Center to receive instructions, and carpool to your hike. You may drive your own car but you will need instructions. Be sure to bring water and snacks or lunch. You may also want sunscreen and a hat, a hand lens, and a copy of Weber & Wittmann and/or Ackerfield.

Bee-Watching at DBG at Chatfield  8:30 -11:00 a.m.
Carol Kearns  

For Everyone!

Join us for an easy walk in a local park to watch bees and to learn to identify some common bee species. No equipment needed, although a hand lens can be useful.

Meet at American Mountaineering Center (East parking lot) at 8 a.m. and carpool, or drive separately. This will be an easy hike. Bring a hand lens, hat, water and walking shoes.

Limit: 15 people maximum.

Carol Ann Kearns is a conservation biologist and pollination biologist with a faculty appointment at the University of Colorado Boulder. She is co-author (with James Thomson) of The Natural History of Bumblebees, and (with David Inouye) Techniques for Pollination Biologists.

Grasses of William F. Hayden Park at Green Mountain  8:30 -11:30 a.m.
Jessica Smith  

For Intermediate Botanists

Identify and learn about grasses at Green Mountain Park. We will observe 10-15 species of grasses, as well as identify wildflowers and shrubs. The hike will cover about one mile along a moderate trail at the base of Green Mountain. This hike is geared toward intermediate botanists.

Please bring Colorado Flora and a hand lens (if you have one), snacks, water, rain and sun gear. There will only be a restroom at the beginning of the hike. A species list and grass identification material will be provided.

Meet at American Mountaineering Center (East parking lot) at 8 a.m. and carpool, or drive separately. This will be an easy hike. Bring a hand lens, hat, water and walking shoes.

Limit: 15 attendees

Jessica Smith holds a master’s degree in Environmental Science, Ecology concentration from the University of Maryland. She has been in the field of plant ecology for 15 years, and has assessed plant communities and populations in a variety of ecosystems across the country. Currently, she is a field technician with the Colorado Natural Areas Program and serves on the CoNPS Board of Directors.

Above: Purple Three-Awn Aristata purpurea
Photo by Jan L. Turner

Right: Jessica Smith
Photo courtesy JPS

Bumblebee on Calochortus gunnisonii
Photo © Jan L. Turner
Lichens of Beaver Creek Trail  8:30 am - 12:30 p.m.

Erin Tripp

Why limit your natural history experience to flowering plants? Plants are great but lichens are too! …and represent important constituents of ecosystems worldwide, especially in western North America. Come learn some of the common and rarer species of lichens in the Front Range Mountains. Beaver Creek Trail in Stapleton Park hosts a diversity of habitats, including rich, mesic, and steep north-facing slopes as well as unusual hardwoods communities that host unique assemblages of lichens. In addition to identification, we will learn basic terminology in lichenology.

Depending on our collective dispositions on this fine Sunday morning, we can do as much or as little of the hike as desired.

LIMIT: capped at 10 people; suitable for beginners as well as experts.

TO BRING: Lichenizing absolutely requires a hand lens. Put this thing on the night before to get into the mood! Don’t forget ample water and whatever else you need to be happy.

DIRECTIONS: Meet at American Mountaineering Center (East parking lot) at 8 a.m. and carpool. or drive separately.

Questions? Erin can be reached at erin.tripp@colorado.edu or 909-532-6075

Erin Tripp is a botanist, specializing in tropical plant biology but also experienced in the North American plant and lichen biota. She holds a PhD from the Department of Ecology and Evolutionary Biology at Duke University, and currently serves as Assistant Professor of EBIO as well as Curator of Botany of the Museum of Natural History at the University of Colorado, Boulder.

Native Plant Master® Discover Wildflowers at Lookout Mountain Nature Center

8:30-11:30 a.m.

For Everyone - Especially beginners!

Irene Shonle

Get a taste of the Native Plant Master® program in this class especially targeted towards the beginner. In this non-intimidating class, we will get to know some blooming flowers, demystify botanical terms and scientific names, and learn how to recognize some plant families so you can go on to learn more! No experience necessary - newcomers to Colorado and beginners welcomed and encouraged! Lookout Mountain is in Golden.

Limit: 15 attendees

For beginners and newcomers

Meet at American Mountaineering Center (East parking lot) at 8 a.m. and carpool. or drive separately.

Irene Shonle is the CSU Extension Director for Gilpin County. She has a passion for native plants, and has been teaching about native plants in classes around the state since 2003. She maintains a native plant demonstration garden at the Gilpin Extension Office, and uses them extensively in her own garden.
Plants of Red Rocks Park’s Trading Post Trail
8:30 a.m. - noon

Jennifer Ackerfield

Join Jennifer Ackerfield, author of *Flora of Colorado*, for a wildflower hike at Red Rocks Park, a Denver Mountain Park. The Trading Post Trail is a loop 1.4 miles in length, and goes through spectacular rock formations, valleys and a natural meadow. Some of the terrain is rough, so hiking boots/ shoes are recommended. There are some steep stairs along the trail. Also, hikers should be prepared for adverse weather conditions as the weather can change very quickly.

Bring water, a hat, sunscreen, and a snack or lunch. If you have Ackerfield’s *Flora of Colorado*, bring that along, too!

This hike is for both beginning and advanced botanists.

Limit: 15 participants

Aquatic Plants of Colorado 8:30 a.m. - noon

Mari Majack

Come learn tips and tricks for collecting and identifying aquatic plants! We will conduct a mini bio blitz of a pond or lake where Mari will demonstrate her tools and techniques for collecting and creating herbarium specimens of aquatic plants. We will discuss best practices for pressing and documenting aquatics and walk through the keys discussing pitfalls and additional resources for identification. Due to the inherent difficulty of aquatic plant identification, this field trip is geared toward experienced botanists, but attendees of all backgrounds will have fun, learn about the most common families of aquatic plants in Colorado, and develop an eye for finding them in the field.

Location TBD by September 1st (in the Boulder- Golden area). Depending on which site has the best species diversity come September, we will be collecting from the shore or boat using Mari’s homemade tools, and/or by wading into the water and collecting by hand. We will park very close to the site (no hiking necessary), but participants should bring waterproof boots or waders if they would like to explore in or around the lake. Details will be emailed to attendees on September 1st. Please bring a Colorado flora, hand lens, binoculars, bug spray, extra layers, and a lawn chair (if you like). If you would like to help collect or see the plants in situ, bring waders and extra clothing (especially socks). Email Mari with any questions at marika.majack@icloud.com (cell 720-454-8922).

Limit: 10 participants

Mari Majack is a recent graduate of CU Denver, where she studied the distribution of the pondweed family (Potamogetonaceae). During two years of fieldwork for her master’s thesis and a Forest Service rare aquatic plant survey, Mari documented over 100 new populations of aquatic plants in 12 Colorado counties. She is currently working for the Colorado Natural Areas Program.

Tour of the Native Plant Garden at Denver Botanic Gardens at Chatfield 8:30-11:30 a.m.

Larry Vickerman

Join Director Larry Vickerman for a tour of Denver Botanic Gardens at Chatfield. The site features numerous native plant gardens, a 6 acre vegetable farm that supports a CSA and three farm stands, a historic ranch, and a large corn maze and pumpkin field.

Late spring through fall, the native plant gardens at Chatfield are a constant unfolding drama of butterflies, bees, beetles, hummingbirds, finches, swallows, sparrows and other creatures interacting with the amazing array of native plants.

The garden was named a Habitat Hero Garden by the Rocky Mountain Audubon Society in the fall of 2014 and it really illustrates how a planting can be so much more than just a somewhat random collection of plants.

Limit:: 20 participants

© Charlie Turner (above) Rabbitbrush at Red Rocks Park

© Jen Ackerfield To right: Jen Ackerfield

Photo courtesy Mari Majack

For Everyone!

For Serious Botanists

For Everyone!

For Serious Botanists

For Everyone!

For Serious Botanists

For Everyone!

For Everyone!
REGISTRATION FORM

Please fill out a new registration form for each person attending.
Registration is also available online at http://conps.org. Discounted Early Registration must be received by August 15, 2015. The membership application is also available online at http://conps.org.

Name (first, last): _____________________________________________________________________________________________

Phone:_____________________________      E-mail: _______________________________________________________________

Address (street, city, state or province, zip):________________________________________________________________________

You must be a member to attend. To become a member see the bottom of the page or go online.

MEETINGS REGISTRATION:
• The 12th Annual Colorado Rare Plant Symposium, Friday, September 11 ...................................................$10_____

Discounted Early Registration for 2015 CoNPS Annual Conference received on or before August 15th
• The 2015 CoNPS Annual Conference, Saturday, Sept. 12th & Field Trips, Sunday, Sept. 13th .......................$35_____

Registration for 2015 CoNPS Annual Conference after August 15th
• The 2015 CoNPS Annual Conference, Saturday, Sept. 12th & Field Trips, Sunday, Sept. 13th .......................$45_____

MEETING REGISTRATION TOTAL .. $________

PIZZA & BEER BASH: Friday, Sept. 11, 6 pm to 8 pm. Price includes Beer, Soft Drinks, and Pizza (Meat, Vegetarian, Gluten-free). If you have special dietary needs please contact Jan at JLturner@regis.edu ......................$19________

DONATION: To help defray CoNPS Annual Conference expenses (Optional) .............................................$________

TOTAL PRICE ..........................................$_______

FIELD TRIP OPTIONS Sunday, September 13th
See complete descriptions in Aquilegia and website. Trips operate concurrently. Rank your preference of field trip by number (1 through 7) with “1” being your first choice.

_______Bee-Watching at Denver Botanic Gardens at Chatfield - Carol Kearns
_______Grasses at William F. Hayden Park at Green Mountain - Jessica Smith
_______Plants of Red Rocks Park, Morrison - Jennifer Ackerfield
_______Lichens at Beaver Brook Trail - Erin Tripp
_______Native Plant Master® Discover Wildflowers at Lookout Mountain Nature Center - especially for beginners - Irene Shonle
_______Aquatic Plants - (Location TBD) - Mari Majack
_______Tour of the Native Plants Garden at Denver Botanic Gardens at Chatfield - Larry Vickerman

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MEMBERSHIP: JOIN THE COLORADO NATIVE PLANT SOCIETY (CoNPS)
Dues cover a 12 month period.
(If your membership has lapsed, you may renew by emailing Linda Smith at conpsoffice@aol.com)

_____Senior $17 (65+)  _____Student $17  _____Individual $25  _____Family $35

Indicate your preferred chapter affiliation. CoNPS members are invited to participate in any function, event or field trip offered by any CoNPS chapter, regardless of affiliation.

☐ Boulder    ☐ Gore Range    ☐ Metro-Denver
☐ Plateau    ☐ Southeast    ☐ Northern    ☐ Unaffiliated

Membership enclosed: _______    Total of membership, registration, bash and/or donation    ______

PLEASE mail this form and your check made out to “CoNPS” to: Linda Smith, 4057 Cottonwood Drive, Loveland, CO 80538.
THANK YOU! If you have questions, please call (970) 663-4085, or e-mail conpsoffice@aol.com.
**Restaurants in Golden**

**Restaurants in Downtown Golden**
(walking distance from AMC)

- Anthony’s Pizza & Pasta 600 12th St. (Pizza/Pasta)
- Blue Canyon Grill & BC Underground 1224 Washington Ave. (Sports Bar/Grill)
- Bob’s Atomic Burgers 1310 Ford St. (Burgers)
- Buffalo Rose 1119 Washington Ave. (Bar/Burgers)
- Cafe 13 1301 Arapahoe St. (Coffee, Sandwiches)
- Dagotto’s Panini Bistro 700 12th St. (Italian)
- D’Deli 1207 Washington Ave. (Sandwiches)
- El Dorado Mexican Restaurant 720 Arapahoe St. (Mexican)
- Golden Diner 700 12th St. (Breakfast)
- Golden Hotel/Bridgewater Grill 800 11th St. (Fine Dining)
- Golden Skillet 807 13th St. (Breakfast)
- Goozell Yogurt & Coffee 1200 Washington Ave. (Yogurt)
- Grappa Mediterranean Bistro & Cafe 1027 Washington Ave. (Fine Dining)
- Higher Grounds Cafe 804 14th St. (coffee, bakery items, burritos, sandwiches)
- Indulge Bistro & Wine Bar 1299 Washington Ave. (Fine Dining)
- Jimmy John’s 1299 Washington Ave. (Sandwiches)
- New Peach Garden (Chinese) 1111 Washington Ave.
- Old Capital Grill 1122 Washington Ave. (American)
- Sherpa House Restaurant & Cultural Center 1518 Washington Ave. (Himalayan; lunch buffet)
- Snarf’s 1301 Washington Ave. (Sandwiches)
- Starbuck’s Coffee Company 1301 Washington Ave.
- Table Mountain Inn 1310 Washington Ave. (Tex-Mex)
- Thai Gold Restaurant 714 14th St. (Thai)
- Windy Saddle Cafe 1110 Washington Ave. (Coffee)
- Woody’s Wood Fired Pizza 1395 Washington Ave. (Pizza)

**South Golden** - within short drive

- Blue Sky Cafe & Juice Bar 14403 W. Colfax Ave. (Breakfast & Lunch)
- Chipotle 14255 W. Colfax Ave. (Mexican)
- Garbanzo Mediterranean Grill 14740 W. Colfax Ave. (Mediterranean)
- Halu Sushi Asian Bistro 17525 S. Golden Rd. (Asian)
- Li’Ricci’s 16950 W. Colfax Ave. (Italian)
- Subway 17708 S. Golden Road (Sandwiches)
- Whole Foods 14357 W. Colfax Ave. (Deli)

**North Golden** - within short drive

- Ali Baba Grill 109 Rubey Dr. (Lebanese & Persian)
- Briarwood Inn 1630 8th St. (Fine Dining)

**Grocery Stores** - short drive

- Safeway 1701 Jackson St.
- King Soopers 17171 S. Golden Rd.
- Natural Grocers Vitamin Cottage 2401 Ford St.
- Whole Foods 14357 W. Colfax Ave.

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**Annual Photo Contest!**

**Enter Now!** One photo per category! First prize in each category is $50. Winning photos will be featured in *Aquilegia* and on the CoNPS webpage. Members will vote for their favorite photos at the Annual Conference.

**Categories:**
- Colorado Native Plant Landscapes
- Colorado Native Plants
- Artistic (Native Plants or Landscapes)
- Colorado Native Plants & Wildlife (including insects/pollinators)

Downtown Golden
American Mountaineering Center 710 W. 10th St. (corner of Washington Ave. & 10th St.)

Note: Please Google the restaurant locations for accuracy. Map from Google.
Hampden Inn, 17150 W Colfax Ave, Golden, CO 80401-4841  303-278-6600
Room rates include a hot breakfast with many different items that rotate on a daily basis such as omelets, scrambled eggs, sausages, bacon, various potatoes, waffles, yogurt, oatmeal, fresh muffins, pastries and fresh fruit to mention a few. They have complimentary cookies each evening. The coffee and tea station is available 24 hours also. The hotel offers a pool and hot tub.

CoNPS has a block of 10 rooms reserved at a discounted price from Hampden Inn. The price is $119/night for 1 king or 2 queen beds; Cut off for discount price is 30 days before conference (8/10/15); The Group Code is CNP. You can either call the hotel directly at 303.278.6600 and ask for your Group by name or code; or book online with the special rate code at the following link: www.denverwestgolden.hamptoninn.com

La Quinta, 3301 Youngfield Service Rd, Golden, CO 80401 303-279-5565
CoNPS has a block of 10 rooms:
Rooms with 2 double beds are $119.
Rooms with 2 double beds and with a refrigerator and microwave are $124
Rooms with 1 king size bed are $119.
Rooms with 1 king size bed and with a refrigerator and microwave are $124
Free continental breakfast; Outdoor pool.

If you want a microwave & small refrigerator in your room, let them know when you make the reservations. These rooms cost $124 per night. Be sure and let them know you are with CoNPS when you make your reservations to get the discounted rates.

For other options see visitgolden.com and golden.com
ELECTION OF AT-LARGE BOARD OF DIRECTORS

It’s that time of year again. We have two openings on the Board. Please follow the instructions.

Instructions: Vote for two candidates (listed in alphabetical order by first name) and mail your ballot to the Colorado Native Plant Society at P.O. Box 200, Fort Collins, CO 80522. It must be received by Tuesday, September 1, 2015. If you prefer, you may email your vote to Linda Smith, Administrative Coordinator at CoNPSOffice@aol.com. You do not need to use the form but may email Linda the names of those you select. Your vote must be received by September 1, 2015 to count.

Please vote for two candidates

_________Amy Yarger

Since Amy joined the horticulture department at the Butterfly Pavilion, the organization has increased its reach in habitat restoration and garden outreach. Each year, they plant native habitat gardens at local schools and senior centers, and they work with their neighboring communities to restore biodiversity in open space parks. Amy has been an active volunteer for CoNPS, teaching an Insects & Native Plants workshop, a Denver Chapter program on the NWF Habitat Stewardship program, writing an article for Aquilegia, and serving on the CoNPS Native Plants Gardening Guide Committee. Amy will be a speaker at the CoNPS 2015 Annual Conference. The goals of public outreach, research and conservation continue to be of utmost importance for CoNPS. Public-private partnerships allow organizations like ours to maximize expertise, resources and passion to conserve native plants and their habitats. As a board member, Amy would use her past experience and networks to increase our partnerships and our reach across the region.

_________ Cecily Mui

Cecily is a Noxious Weed Specialist with the Colorado Department of Agriculture. She augments the program with her adept knowledge and experience from degrees in Wildlife Ecology and Ag Education from the University of Wisconsin (BS) and Colorado State University (MS). Cecily uses her technical and facilitation skills to lead an array of projects in natural area management, upland restoration and river restoration. Recently, she completed a series of noxious weed outreach materials in partnership with the Denver Botanic Gardens. In the near future, she plans to work with the Colorado Natural Heritage Program to develop best management practices for noxious weed management on sites with rare plants. As a member of the CoNPS Board, Cecily intends to bring her collaborative relationships within each of the 64 Colorado counties to strengthen the understanding of both the public and land managers to the integral role that noxious weed management plays in preserving biodiversity.

__________Jim Tolstrup

Jim is the Executive Director of the High Plains Environmental Center (HPEC) in Loveland, CO, a unique model for preserving native biodiversity in the midst of development. Jim works to promote the conservation, restoration and landscape use of native plants. His past work experience includes serving as Land Stewardship Director of Shambhala Mountain Center in Red Feather Lakes, CO. Jim is currently chair of CoNPS’ Horticulture & Restoration Committee and served as chair of the Education and Outreach Committee. At the CoNPS 2014 Annual Meeting, Jim presented a program detailing strategies for restoring native plants in landscaping, open space, and storm water drainage, which were successfully implemented in the community where his HPEC is located. Jim is a member of the CoNPS Native Plants Gardening Guide Committee and has written articles for Aquilegia. At HPEC, he manages a native plant nursery. Jim wishes to continue working with CoNPS to promote the use of native plants in home landscapes and to give children the opportunity to connect with nature at home and at school by creating areas with native plants and biodiversity.

__________Renee Galeano-Popp

Renee received her B.S. in Botany in 1978 and followed it with 3 years of graduate work in Forest Ecology at Northern Arizona University. She is the former Regional Botanist for the Southwestern Region of the USFS where she specialized in management of rare and endangered species. In Colorado, Renee has worked as a consultant and field botanist for a number of companies including CDOT and has been a volunteer at the CSU Herbarium since 2007. She has also been donating time to the Gardens on Spring Creek. One of her longtime interests is the management of noxious weeds from her own backyard to the landscape scale. Despite our best efforts over the years, she sees us losing too much ground to invasives. She thinks this is due to a lack of comprehensive and coordinated strategies. Renee also has a strong interest in bridging the gap between horticulturists and botanists. Although both are botanists, there is much information about native plants, the herbarium as a resources, and plant sciences in general to share between the two.
The Colorado Native Plant Society is dedicated to furthering the knowledge, appreciation and conservation of native plants and habitats of Colorado through education, stewardship and advocacy.

Membership is open to all with an interest in our native plants and is composed of plant enthusiasts, both professional and non-professional. The Colorado Native Plant Society was founded in 1976.

**CoNPS Staff**

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CoNPS Membership & Marketing Coordinator  
Jennifer McGuire Bousselot  CoNPSPromote@gmail.com

CoNPS Workshop Coordinator  
Ronda Koski  CoNPSWorkshops@gmail.com

**2015 Annual Meeting Committee**

Jan L. Turner, Irene Shonle, Jessica Smith, Lenore Mitchell, Jannette Wesley, Tom Schweich, Cath Kleier, Steve Olson, Don Parker

Sales Committee  
Linda Smith, Patrick Murphy

**Aquilegia Special Issue Staff**

Jan Loechell Turner, Editor/Layout & Design, Linda Smith, Nan Daniels, Charlie Turner

**CoNPS Board of Directors**

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Secretary  
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Steve Olson (2015) ............................................sdolsonoslosd@aol.com

Jessica Smith (2016) ..........................JPSmith24@gmail.com

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**CHAPTER PRESIDENTS**

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Metro-Denver .......Samantha Clark ..........sam1130@hotmail.com

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Southeast ..........Richard Bunn ..........rbwildlife@gmail.com

**STANDING COMMITTEES**

Conservation ..........................Mo Ewing

Education & Outreach ........Sara Copp

Field Studies ............................Steve Popovich

Finance........................................Mo Ewing

Horticulture & Restoration  
Jim Tolstrup

Media .................................Jan L. Turner

Membership .............................Jen Bousselot

Research Grants ...................Catherine Kleier

Sales .................................Linda Smith

Workshops ............................Ronda Koski

Please help us advertise the conference! Tear out or copy the flyer on the next page and ask permission to hang it up on the bulletin board of your local library, garden center, etc. For additional copies, contact Jen Bousselot, CoNPS Membership & Marketing Coordinator at conpspromote@gmail.com.

Thanks for helping us promote the conference!

Photo on page 19 © Dave Ellin, Photo on back cover: Hummingbird with *Agastache* © Dave Ellin
Colorado Native Plant Society

Annual Conference 2015

Native Plants and Pollinators
September 11, 12, and 13

American Mountaineering Center
710 10th Street, Golden, Colorado 80401

Rare Plant Symposium September 11
Beer and Pizza Social September 11 Evening
Annual Conference September 12
Field Trips September 13

To Register and Get More Information
visit CoNPS.org or
This year’s Annual Meeting will once again feature a silent auction. We have limited space so we would like to restrict donations to quality items in excellent condition, such as live plants, posters, note cards, ecological / biological / botanical books, jewelry - whatever you think would bring in a good bid! Perhaps you could auction off a home-cooked meal at your house, movie tickets, or some other fabulous prize. For more information or to make a donation, please contact Jan Turner at JLTurner@regis.edu.

All auction proceeds will go to the Colorado Native Plant Society.