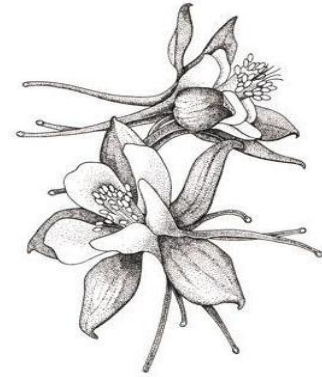


Aquilegia

Newsletter of the Colorado Native Plant Society

Dedicated to furthering the knowledge, appreciation and conservation of native plants and habitats of Colorado through education, stewardship and advocacy



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CONSERVATION CORNER

THE POWER OF THE CITIZEN SCIENTIST

By Mo Ewing

In recent years there has been increasing discussion in environmental circles about the concept and use of “Citizen Scientists”. It is a relatively simple concept, that average citizens with the proper training can support the scientific community by doing work that advances scientific knowledge.

The idea of the citizen scientist is not new. In New Hampshire in the late nineteenth century, vacationers in the White Mountains spent their leisure hours looking for and documenting rare plant populations. Botany was one of the hottest avocations of the day. As a result, an impressive amount of scientific data was accumulated about rare flora in the region. Many of the Element Occurrence reports that one uses when looking for rare plants in the White Mountains indicate initial discoveries made by non-botanically trained people as early as the 1880’s.

One of the most compelling stories about citizen scientists came out of Japan after the earthquake and tsunami resulting in the Fukushima Daiichi nuclear crisis. There was a great deal of uncertainty and anxiety because of conflicting information about nuclear contamination from the Japanese government, nuclear watchdogs and the Japanese Electric Power Company.



Ipomopsis ramosa

Photo: Al Schneider
<http://www.swcoloradowildflowers.com>

Fed up with the inability to get good data on radiation, a like-minded group of citizens in Japan and the United States banded together to take matters into their own hands. This group called SafeCast, lead by an American named Sean Bonner, trained volunteers in Japan to use hand-held radiation detectors with GPS receivers. The volunteers took measurements and uploaded them to an internet mapping program. By August 11, 2011 the volunteers had taken over 500,000 radiation data points providing the most comprehensive data maps of nuclear radiation levels in Japan (see *SafeCast.org*).

Today, in Colorado as in the rest of the United States, it is abundantly clear that public and private organizations simply do not have the resources to collect the amount of scientific data needed to make the best decisions about environmental policy. Nor do they have the resources to do on-the-ground conservation programs. This is especially true in our current economic crisis where budgets for national, state and local organizations charged with protecting our natural resources are continually being slashed.

In Colorado the Colorado Natural Heritage Program (CNHP) has nowhere near enough staff to visit all of the rare plant populations in the state. In order to try to overcome this problem, CHNP set up the Colorado Rare Plant Technical Committee, pulling together all of the botanists and naturalists in the state who are employed by local, state and federal organizations. Each year at the CoNPS Annual Meeting, they review the status of all of the rarest and most endangered plant species in the state, and try to coordinate their efforts to monitor and protect these species. But since they all have full-time jobs with scores of other responsibilities, only a small percentage of these plant communities are monitored each year. There are some rare plant communities on the list that haven't been visited for ten or fifteen years.

Here is where the Colorado Native Plant Society comes in. In addition to having members who are the best trained botanists in the state, our membership is filled with classic examples of talented citizen scientists. These are people who are not professionally trained botanists but who, over the years, because of their love of native plants, or of hiking, or of photography, have developed superb botanical skills.

Wonderful examples of this are Al and Betty Schneider, who in 2011 described two totally new native plant species in southwestern Colorado: *Packera mancosana* (Mancos Shale Packera), and *Ipomopsis ramosa* (Coral Ipomopsis). (See the full story of their discovery on our web-page at <http://www.conps.org/> on the Committee/Conservation page).

Neither Al nor Betty are trained botanists. Al was a college English professor, among several other diversions, and Betty a paramedic fire fighter. Al tells the funny story about one of the first hikes he and Betty took in Petrified Forest National Park in Arizona when they first met many years ago. Betty didn't know anything about native plants and during the walk she kept pointing out the same plant, rabbitbrush, asking Al what it was. Finally at the end of the hike, she pointed to a plant and said, "I know what that plant is! It's....um....bunny-bush!"

Betty was the one who first identified *Packera mancosana*. She didn't know what it was, but because of a practiced eye, she knew that it was something that they had never seen before. When they took the plant to a couple of well known botanists in Colorado, they were told that it was another packera, *Packera werneriifolia*. But that didn't sit right with them because *Packera werneriifolia* supposedly grew on rocky alpine and sub-alpine ridges and they were on somewhat barren Mancos shale at 7,600 feet.

The next season they went back to the packera population, but this time they took Loraine Yeatts. Loraine is another excellent example of a citizen scientist. She is actually a physicist for whom botany is an avocation. When she first came to Colorado in 1964 she says that she didn't know anything about native plants except what grew in her garden. Over the years of hiking around Colorado and photographing plants, she has developed superb skills. In addition to writing an excellent key to alpine wildflowers, called "The Alpine Flower Finder", she is one of the go-to people for plant identification at the Denver Botanic Gardens Herbarium.



Packera mansosana

Photo: Al Schneider
<http://www.swcoloradowildflowers.com>

Lorraine agreed that Al and Betty might have a new species. Working with Guy Neesom, an aster specialist in Fort Worth, Texas, they dissected and described the plant. The description was reviewed by several expert botanists and then when they agreed that it was a new species, it was published in the on-line publication, *Phytoneuron* on June 3, 2011.

The story for their discovery of *Ipomopsis ramosa* is similar. They first saw the plant in 2006, couldn't identify it, went back again and again over the years to see it, and finally decided to put it through the description-peer review process. On September 14, 2011 their peer-reviewed description was published in *Phytoneuron*. (The full story of their *Ipomopsis* discovery is also on the Committee/Conservation page at <http://www.conps.org/>).

Another excellent example of CoNPS citizen scientists in action was provided by the Southeast Chapter last fall. Garden Park Natural Area, located about eleven miles north of Cañon City, is one of the premier Late Jurassic dinosaur fossil sites in the United States. Some of the fossils collected there are housed in the Smithsonian Institution in Washington, DC., but less known is the fact that the area also contains three globally rare plant species, Brandegee's Buckwheat (*Eriogonum*

brandegeei), Dwarf Milkweed (*Asclepias uncialis*) and Golden Blazing Star (*Nuttallia chrysantha*).

In 2009, the Bureau of Land Management (BLM), which owns the site, revised its Travel Management Plan. Because it is so close to Cañon City, Garden Park is a hotspot for off-highway and 4-wheel drive vehicle enthusiasts, and over time unauthorized roads were created, threatening the rare plant populations. The new Travel Management Plan recommended the closure of the unauthorized roads but didn't indicate how this should be done. The problem with "social roads", as they are sometimes called, is that if they are visible, they attract new motorized vehicle use.

Jim Backstrand, a wildlife biologist in the Cañon City BLM office, had a special affection for the Garden Park area. Wanting to make sure that the job was done right, he met with Brian Kurzel who works for the Colorado Natural Areas Program (CNAP) and also was responsible for the Garden Park area because it had been designated as a State Natural Area in February 1991.

Brian decided that the best way of accomplishing what they wanted was to obliterate the illegal roads completely. The problem was that this plan was extremely labor-intensive and costly to do. Under normal circumstances the BLM would hire construction companies, environmental consulting firms and professional botanists to deconstruct the roads and return them to their natural state. But the BLM did not have the staff to do that.

Neither did CNAP. In the mid-1990s CNAP had five employees to oversee its 89 natural areas. But budget cuts over the years reduced that number to one, Brian Kurzel. In order to continue to accomplish his job, Brian has had to create a group of (you guessed it!) citizen scientist volunteers called Rare Plant Monitoring Stewards. Trained by staff at the Denver Botanic Gardens, these stewards conduct most of the monitoring that was formerly done by CNAP staff. There are presently 37 trained Rare Plant Monitoring Stewards.

To implement the project, Jim secured a small grant from the National Fish and Wildlife Service, and Brian went to the president of our Southeast Chapter, Ann Zielinski, to try to find some volunteers to help with the

project. In addition, he went to a terrific organization called the Wildlands Restoration Volunteers (WRV). Located in Boulder and Fort Collins, the WRV organizes groups of volunteers to do about 40 ecological restoration projects each year in Colorado. Their projects include everything from trail reconstruction to native seed collecting to wetland restoration.

In early 2010, the Wildlands Restoration Volunteers accepted Brian's proposal to obliterate the Garden Park roads. WRV had done a similar project of road obliteration in the Geneva Basin Iron Fen, in Clear Creek County in 2009. John Giordanengo, the Projects Director at WRV, surveyed the site and in the spring of 2010 conducted seed collecting training for a small group of CoNPS members recruited by Ann Zielinski.

In the summer of 2010 and again in the summer of 2011 the CoNPS citizen scientists collected seed from the Garden Park site to provide revegetation material for the project. The road obliteration was scheduled for October 21, 2011.



“An Obliterated Road”

Photo: John Giordanengo

Ann made the Garden Park project her major chapter conservation project for the year. She not only recruited CoNPS members but reached out to the community to recruit the larger number of volunteers needed. She set aside a monthly chapter meeting in February to promote the project and then organized three field trips to the site in March, May and July to familiarize people with the area and project.

On October 21st over 50 citizen scientists showed up. They came from CoNPS, from the Wildlands Restoration Volunteers, from Brian's rare plant monitors, from local hiking groups and from the Gold Belt Tour Highway Association. In addition, eight students of the Cañon City High School Environment Conservation Club, with faculty adviser came to pitch in.



“Obliterating the Roads”

Photo: John Giordanengo

Under the supervision of the WRV team leaders, the volunteers were split into three teams and worked for two days on the project. They were fed hearty meals by volunteer cooks from the local community and camped nearby. They mulched and stabilized over a third of an acre, and closed three roads more than a mile long. They sowed 2.25 million seeds, built 25 rock structures and placed 14 yards of mulch. Not only did everyone have a great time, but the weekend was a great success. (For the full Garden Park story as well as the tragic story about BLM staffer Jim Backstrand go to the Committee/ Conservation page at <http://www.conps.org/>)

The Colorado Native Plant Society is a perfect vehicle to find, train and employ citizen scientists. Our members include the best professional botanists in the state as well as talented native plant enthusiasts. With further support from and coordination with the Wildland Restoration Volunteers, the Colorado Natural Heritage Program and the Colorado Natural Areas Program, all of which use citizen scientists extensively, we can become a force to advance scientific knowledge and con-

servation of native plants and plant communities in Colorado.

Mo Ewing is Chair of the Conservation Committee, as well as Treasurer of CoNPS. He recently retired from Colorado Open Lands as its Land Stewardship Director and now volunteers for a variety of organizations including the Colorado Natural Areas Program and the Denver Natural Areas Program.

HELP CONSERVE SOME OF OUR RAREST SPECIES

Have you ever wanted to hit the open road armed with only your map, a GPS, and a good description of a rare plant species? By joining the Adopt-a-Rare-Plant program in 2012, you will get your chance to help track down some of Colorado's rarest plants to aid in their conservation.

The Colorado Native Plant Society, Denver Botanic Gardens and the Colorado Natural Heritage Program have teamed up for the Adopt-a-Rare-Plant program. The Colorado Natural Heritage Program tracks more than 500 plant species in Colorado. By doing so, they maintain information on the number of populations, number of individuals, threats to populations and other information on rare species.

Through the Rare Plant Conservation Initiative, professional conservation biologists have been updating records on our rarest species, however additional data is needed on hundreds of other species to update their conservation status. Records for some species have become "Historic" which means no one has seen that population in more than 20 years! This is your opportunity to participate in conservation by helping to determine if these populations still exist. Your travels will help ensure that all agencies/organizations have up-to-date data on some of our rarest species.

Once you choose a species, you will be provided with all necessary data. You will be given information for

both a reference site as well as sites not visited in years. This way, you will be able to visit a known population of representative habitat so that you can become comfortable with both identifying the target species and the habitat before you head out to look for the unseen populations. Some of the historic sites will be easy to find and will simply involve the updating of numbers. Some of them however, will be more like a treasure hunt where finding the rare plant at the end of the road will be even more rewarding.

The data collected through this program will prove invaluable for updating records on some of our rarest species.

Adopt-a-Rare Plant Program Training will be held at the Denver Botanic Gardens, 1007 York Street, Denver, CO 80206. On Thursday, February 23, 2012 from 6:00 - 9:00pm. There will be a second training in Steamboat in either late April or early May. Call in for details.

Register at <http://catalog.botanicgardens.org/> or call (720) 865-3580. You may be interested in taking some other related courses offered at the Gardens this winter/spring: Feb 16: Finding and Documenting rare plants; Feb 28: Art and science of plant collections; and April 12: Introduction to GPS mapping.

SOCIETY OF ETHNOBIOLOGY

35th Annual Conference
“Conservation and Communities”
April 11-14, 2012 Denver Botanic Gardens

Ethnobiology.org

Wednesday April 11
Field trips, Garden Tours
Registration, Reception

Thursday April 12
Registration
Scientific program

Friday April 13
Scientific program
Slow Food, Local Farmers,
Grassfed food extravaganza

Saturday April 14
Field trips, Garden Tours



Pediometum esculentum (Fabaceae) The edible root of this plant, native to the central North American Plains, was an important food for the Lakota, Crow, Cree, Blackfoot, and other tribes. This scene represents a sustainable harvest method. After a root is harvested, the ripe seeds from the harvest plant are planted in the harvest hole. Roots are braided and stored for use during the winter.



REMINDER -- REQUEST FOR PROPOSALS -- THE JOHN W. MARR AND MYRNA P. STEINKAMP FUNDS

The Colorado Native Plant Society supports research projects in plant biology from the John W. Marr and Myrna P. Steinkamp funds. These separate funds honor the late Dr. John Marr, Professor at the University of Colorado and the first President of the CoNPS, and Myrna Steinkamp, a founding member of CoNPS who worked on behalf of the Society for many years in a variety of capacities. Both funds were established to support research on the biology and natural history of Colorado native plants by means of small grants. The Steinkamp Fund targets rare species and those of conservation concern. Both field and laboratory studies are eligible for funding. Thanks to the generous contributions of many members and supporters, a total of nearly \$3,000 is available, although individual awards will not exceed \$1,000. Recipients of the awards must agree to summarize their studies for publication in *Aquilegia*.

The Board of Directors is now soliciting proposals for a February 15, 2012 deadline. Information on guidelines and requirements for proposals may be obtained at http://www.conps.org/research_grants.html.

For additional information, contact the Chair of the Research Grants Committee, Catherine Kleier at ckleier@regis.edu.

CHAPTER NEWS and ANNOUNCEMENTS

Please note: The CoNPS website (www.conps.org) contains current information on planned chapter and Society activities. In many cases, more detailed information about the programs and guest presenters that could not be included here because of space limitations is contained on the website.

BOULDER CHAPTER

Boulder Chapter programs are held on the second Thursday of each month (September through April) from 6:30 p.m. to 8:30 p.m. All meetings, except as noted, are held at the Community Room at the Boulder REI Store at 1789 28th Street (between Canyon and Pearl). For more information, please e-mail boulderconps@gmail.com.

BORN TO BURN

Thursday, February 9, 2012, 6:30 pm

Presenter: Paula Fornwalt, PhD

Location: Boulder REI

Colorado's ponderosa pine forests have experienced a marked increase in the frequency, size, and severity of wildfires in the last decade. How might understory plant communities be expected to respond to these fires in the years that follow? In this talk, Paula Fornwalt will explore this question, using the results of

studies conducted following the 2002 Hayman Fire as a foundation.

DETERMINING SOIL TYPE AND VEGETATION BEST SUITED FOR MAINTAINING, REGEN- ERATING, AND WORKING WITHIN NATIVE ECOSYSTEMS ON YOUR PROPERTY

Thursday, March 8, 2012, 6:30 pm

Presenter: Sylvia Hickenlooper, NRCS Soil Scientist

Location: Boulder REI

Sylvia Hickenlooper will talk about basic field technical information for landowners using Websoil survey information, soil texturing, recommending soil tests (if needed), formulating grass seed mixes, and providing recommendations on native plant re-vegetation work. We'll look at infiltration rates of different soils, as well as showing some comparisons of soil health through immersion tests.

OPEN SPACE AND MOUNTAIN PARKS VEGETATION STUDIES

Thursday, April 12, 2012, 6:30 pm

Presenters: Megan Bowes and Marianne

Details forthcoming.

GORE RANGE CHAPTER

Colorado Native Plant Society

A Letter from the President of CoNPS' Newest Chapter --

Hello to all the native plant people hibernating in the mountains!

Thanks to Emily Schwier's hard work this summer, a new chapter of the Colorado Native Plant Society has been formed. The hope is that having a chapter closer to where people live, there may be more interest and greater participation in field trips, master classes and workshops.

Previously, those of us that lived in the mountains were members of the Plateau Chapter, with Gay Austin as President. Gay has done a fantastic job arranging great field trips as well as helping with last year's annual convention in Carbondale. I am hoping that the Gore Range and Plateau chapters can collaborate events in the future - especially since our summers here in the mountains are shorter!

Most CONPS chapters have an annual organizational meeting in the fall to plan field trips, master classes and workshops for the next year. Since our chapter is not quite up and running as yet, and winter has set in, I am hoping we can organize via email, and then plan a chapter meeting for fall 2012.

Laurel Potts and Dan Schroeder, Extension Agents for Eagle and Summit Counties, have organized Native Plant Master Classes, Laurel for 8 years. Laurel has sent out an email to previous instructors to poll interest in Native Plant Master Classes for 2012. If you have interest in helping with classes, please contact her at Laurel.Potts@eaglecounty.us .

I hope that the new chapter has volunteers willing to put together field trips and possibly a workshop or two. Many of you have local expertise and we all want you to share it with us. Please forward your interest to me so we can put a calendar of events together. You don't have to be a botanist - just take us to your favorite places!

Finally, please consider joining the Colorado Native Plant Society at <http://conps.org> if you have not done so. This is a small group of dedicated volunteers working to encourage the appreciation and conservation of the native plants and ecosystems of Colorado - one of the highest priorities for all of us. The website has information on activities of the other chapters and a great bookstore to provide reading through the long winter so you can hit the field running in the spring. If you have friends who are interested in native plants, encourage them to join our group.

Thank you for doing all you can to make our local chapter and state society thrive. There is so much to learn - share what you know!

Nanette Kuich
President, Gore Range Chapter CONPS

METRO-DENVER CHAPTER

Monthly meetings of the Metro-Denver Chapter are typically held on the fourth Tuesday of the month (September through April) at the Denver Botanic Gardens, 1007 York Street, Denver. The Metro-Denver Chapter welcomes everyone, members and non-members, to attend its free programs and field trips. For more information, please contact Jannette Wesley at metrodenverconps@gmail.com.

ROADSIDE ECOLOGY OF COLORFUL COLORADO

January 24 , 2012, 7pm

Presenter: Alan Carpenter

Location: Gates Hall, Denver Botanic Gardens, 1007 York St.

Alan Carpenter is writing a book tentatively titled *Roadside Ecology of Colorful Colorado*. The book describes the scenery and explains its underlying science along major highways using principles of ecology to help people understand natural landscapes across Colorado and enrich their experience of traveling. *Roadside Ecology of Colorful Colorado* covers the entire state and includes 72 segments of 35 federal and state highways, totaling 3,732 miles.

The presentation will feature several highway segments that are, hopefully, less well known to Denver residents. Tentatively, the list includes State Highway 10 from Walsenburg to La Junta, State Highway 12 from La Veta to Trinidad, State Highway 14 from Cameron Pass to Muddy Pass, State Highway 141 from Naturita to Whitewater, State Highway 145 from Placerville to Dolores, and State Highway 149 from South Fork to Blue Mesa Reservoir. While the presentation does include plants, it emphasizes broader natural history aspects pertinent to the respective highway segments.

RARE PLANT STEWARDSHIP: DOCUMENTING AND PROTECTING COLORADO'S RAREST PLANTS

February 28, 2012, 7 P.M.

Presenters: Jenny Neale and Brian Kurzel

Location: Gates Hall, Denver Botanic Gardens, 1007 York St, Denver

Join Jenny Neale, Director of Research & Conservation at Denver Botanic Gardens, and Brian Kurzel, Natural Areas Coordinator at the Colorado Natural Areas Program to learn how you can help protect Colorado's rarest plants. Jenny and Brian will discuss the Rare Plant Monitoring Steward program, a volunteer program designed to get citizen scientists into the field collecting data. In the first five years of the program, more than 70 people have been trained in the theory and practice of rare plant conservation. Learn how the RPM Stewards are positively impacting rare plant conservation within the state while also learning more about the research and conservation work done at Denver Botanic Gardens and the Colorado Natural Areas Program.

GARDENING WITH NATIVE PLANTS

March 27, 2012, 7 P.M.

Presenter: Panayoti Kelaidis

Location: Gates Hall, Denver Botanic Gardens, 1007 York St, Denver

COLORADO WETLAND PLANT FIELD GUIDE

April 24, 2012, 7 P.M.

Presenter: Denise Culver

Location: Gates Hall, Denver Botanic Gardens, 1007 York St, Denver

Tools for Colorado Wetlands: Essential Information for Identification, Assessment, and Conservation, will develop a Colorado Wetland Field Guide that will contain botanical descriptions of over 520 wetland plants as well as information on priority wildlife species and other wetland-dependent animals, wildlife and vegetation ecology, and rare and/or sensitive plants. The Guide will serve as the ultimate resource to determine a wetland plant's identity, wetland indicator status, coefficient of conservation, rarity, and ecology. The project will also develop an easily accessible Colorado Wetland Website that will present a) information on wetland ecosystems and their conservation status, b) a database to calcu-

late the overall conservatism of species present in a wetland, c) reports on Colorado wetland and wetland assessment tools, and d) links to other wetland projects and programs—a virtual “one-stop shopping” for wetland information in Colorado.

NORTHERN COLORADO CHAPTER

MONTHLY MEETINGS NIGHTS HAVE CHANGED

The Northern Chapter meetings are the first Thursday of the month (unless stated otherwise), November through May, 7:00 pm, at The Gardens on Spring Creek, 2145 Centre Ave., Fort Collins, CO. For further information, contact Northern Chapter President, Jennifer Ackerfield, at jackerfield@gmail.com.

Meetings and field trips are free and open to all.

Prior to meetings, we meet for dinner with the speaker at Café Vino, 1200 S. College Avenue, Fort Collins at 5:30 p.m. Please join us.

EDIBLE WILD PLANTS OF COLORADO: AN ARCHAEOLOGICAL PERSPECTIVE

Thursday, February 02, 2012, 7 p.m.

Presenter: Meg Van Ness, Regional Historic Preservation Officer/Archaeologist, US Fish & Wildlife Svce,
Location: The Gardens on Spring Creek, Fort Collins

With a little bit of knowledge and a good digging stick, resourceful Americans were able to find plenty to eat among the wild plants of Colorado. Whereas this virtual cornucopia of seeds, berries and roots would never be mistaken for a Big Mac, it did provide a year-round supply of nutrients and calories to sustain the native populations for thousands of years. Some of these plants, such as wild plums and pinion nuts, require only a slight stretch of the modern imagination to be considered for tonight’s dinner. Others, such as the slime covered cattail root, stinking gourds, nauseous rabbit-brush and the aptly named pincushion cactus, take a bit more thought.

Thankfully, the collection and preparation of these plants is often described in ethnographic accounts from the late 1800’s and early 1900’s. These accounts provide great reading and valuable analogies for the interpretation of plant remains from archaeological contexts.

Meg’s 45-minute PowerPoint presentation will cover the excavation and extraction of botanical remains from archaeological sites, the interpretation of the remains and a review of some of the plants and their uses. Many of the plants discussed are common in our yards and open landscapes.

RESTORING NATURE

Thursday, March 01, 2012, 7 p.m.

Presenter: Jim Tolstrup, Executive Director High Plains Environmental Center

Location: The Gardens on Spring Creek, Fort Collins

Join Jim Tolstrup on a virtual tour of the High Plains Environmental Center. Jim will share the strategies involved in designing, funding, building, vegetating and maintaining the center’s extensive native plant gardens and restored natural areas, as well as the center’s mission to educate the public about the propagation, conservation and use of native plants and the corresponding benefits to wildlife.

Colorado Wetland Field Guide

Thursday, April 05, 2012, 7 p.m.

Presenter: Denise Culver, Ecologist, Colorado Natural Heritage Program

Location: The Gardens on Spring Creek, Fort Collins

Many of you have heard about the project to create a field guide for Colorado wetlands. It is our great pleasure to present the project leader and lead author, Denise Culver. Denise will give you a summary of her new guide and share her adventures as she embarked on this three-year odyssey to create a great tool for our state.

KEEPING UP WITH TECHNOLOGY – USING ONLINE AND ELECTRONIC KEYS

Thursday, May 03, 2012, 7 p.m.

Presenter: Ernie Marx

Location: The Gardens on Spring Creek, Fort Collins

Ernie Marx will facilitate as we come together for this workshop-style program. Ernie will have plants for us

PLATEAU CHAPTER

The Plateau Chapter generally encompasses the west-central and north west area of Colorado from Grand Junction to Montrose to Gunnison to Glenwood Springs to Craig. Wherever you are in Western Colorado, come join us for meetings and field trips.

Chapter activities are scheduled throughout the year. For more information, visit www.CoNPS.org or contact Chapter President Gay Austin at austin-ceae@frontier.net.

SOUTHEAST CHAPTER

Activities of the Southeast Chapter are scheduled throughout the year and include field trips and meetings. Regular chapter meetings (always with an educational focus) will begin in October in both Pueblo and Colorado Springs. Those wishing more information can e-mail us as SEtrips@gmail.com and we will add you to our distribution list.

The Southeast Chapter welcomes your participation, no matter where you are in southeast Colorado. Activities will be scheduled throughout the year with most meetings in Pueblo and field trips to a variety of sites throughout the area.

Southeast Chapter meetings are held from 6:30 p.m. to 8:00 p.m. All meetings, unless otherwise noted, will be held at the 701 Court Street in Pueblo.

to key using some of the newest programs like XID for keying plants on your computer. These keys can be easier to use than typical dichotomous keys, especially if you don't have both fruits and flowers or all the parts. Once you become familiar with these keys they offer a totally different keying experience. You may bring in a plant if you like and we can investigate your plants too as time allows.

For more meeting information, please call Warren Nolan: (719) 543-6196.

AQUILEGIA

Newsletter of the Colorado Native Plant Society

Aquilegia is the newsletter of the Colorado Native Plant Society, and is available to members of the Society and to others with an interest in native plants. Four regular issues are published each year, plus a special issue for the annual Society meeting held in September

Announcements, news, articles, book reviews, poems, botanical illustrations, and other contributions should be sent to the editor at bh.prairieink@gmail.com.

All contributions are subject to editing for brevity and consistency, with final approval of material changes by the author.

Articles from Aquilegia may be used by other native plant societies or non-profit groups, if fully cited to author and attributed to Aquilegia.

Deadlines

Submissions to Aquilegia are accepted throughout the year, although the usual deadlines for publication are:

February 15 (Spring issue, published March 1)

April 15 (Summer issue, published May 15)

June 15 (Annual Meeting issue, published July 15)

July 15 (Fall issue, published Aug. 15)

October 15 (Winter issue, published November 15)

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The Board of Directors is now soliciting proposals for a February 15, 2012 deadline. Information on guidelines and requirements for proposals may be obtained at http://www.conps.org/research_grants.html. Additional information is needed, contact the Chair of the Research Grants Committee, Catherine Kleier at ckleier@regis.edu.

CoNPS BOARD AUTHORIZES PAID POSITION FOR WORKSHOP COORDINATOR

The CoNPS board of directors is looking for an entrepreneurial person to run our workshop program. The Workshop Coordinator will work with the Workshop Committee to develop, organize, publicize and run workshops on the Front Range and possibly in other chapter areas of the state. 50% of the profits generated by the workshops will be shared with the workshop coordinator.

The workshop coordinators duties will be as follows:

1. Meet with the workshop committee to develop ideas for workshops, suggest workshop presenters, identify locations to hold workshops and decide how workshops will be run.
2. Sign up instructors to present the workshops
3. Publicize the workshops in *Aquilegia*, on our web site and other media.

4. Working with the CONPS administrative assistant, make sure that the registration process runs smoothly and assure that all registration fees are collected.
5. Develop entry level workshops that are open to the public to introduce members and non-members to Colorado flora.
6. Attend all workshops to monitor attendance, provide food and drinks, assist with book sales, make announcements about the Society and provide microscopes, audiovisuals and other supplies and equipment as necessary.

Interested parties should contact CoNPS president Crystal Strouse at csnativeplants@gmail.com, or at Colorado Native Plant Society, P.O. Box 200, Fort Collins, CO 80522. Resumés should be submitted to Crystal by February 15, 2012.

WELCOME NEW MEMBERS!

In recent months, we've added a large number of new members.

Welcome!!!



Jennifer Ackerfield, Mary and Tom Adams, Rosemary Allison, Angie Anderson, Brand Goeddel and Julie Applebury, Elizabeth Araki, Laura Atwood, Deanna Bertwell, Jeffrey Boring, Walter and Marlene Borneman, Tayvia Bourret, Judith O'Connor and Paul Briggs, Kathryn Brown, Debbie Buchanan, Nancy Campbell, Barbara Campbell, Leigh Castellani, Jonathan Chandler, Tom Chaney, Stephanie Cochrane, Margaret Tullis and Duane Conroy, Elizabeth Cook, Jennifer Cornell, Mrs. William Covert, Priscilla Craig, Matthew Cummings, Colleen Cunningham, Carla Deyoung, Barbara Dobbs, Ken Draves, Laurie Duke, Susan Fernald, Jan Fitzpatrick, Four Corners Natives, Carol and Clint Flynn, Janell Franci, Kristina Frandsen, Gil and Trish Gagnon, Eve Gasarch, Pamela Graves, Karen Nelson and Nancy Greaver, Michael Haaf, Carey Harrington, Kit McChesney and Susan Hofer, Noel Holmgren, Tom Hombs, Judy Huckleby, Josh Rumble and Hannah Irwin, Melani Jensen, Kenneth Johnson, Marion and Terry Jones, Carolyn J Jones, Lynn Joseph, Caroline Kauffman, Bruce Keith, Heather Koch, Linda Kothera, Chris Kulish, Brita Lancaster, Caprice Lawless, Michele LeMahieu, Francine Liebel, Noe Marymor, Lisa Matthews, Jillian Mauer, Michael Mauser, Jenna McAleer, S McCormick, Wendy McBride, Suzanne Michot, William Miller, Zoe Miller, Kailen Moone, Native Landscape Solutions, Jeneen K Nelson, Patricia Nichols, Robert Nold, Michael Park, Laurie Paulik, Craig Peterson, Jaclynn Peterson, Janice L Peterson, Corinna Photos, John Pommer, Christine Prah, Jessica Pratt, Mel Preusser, Gary Pritts, Elizabeth Pruessner, John Rabb, Matthew Rhodes, Jill Ricker, Claudean Roehmann, Steven Rolfsmeier, Nichole Rosmarion, Monica Rother, Jeanne V Russell, Susan Sass, Melissa Schiltz, Thekla Schultz, Rebecca Siegle and Matt Schweich, Emily Schwier, Marta Sedillo, Barbara Sheppard, Spencer Shipp, Karen Shupe, Sara Simonson, Colin Soper, Vanessa Stepanek, Patricia and Douglas Stephen, Carol Stringer, Danica Taber, Debora Tennant, Marci Thompson, Tess Thyer, Francesca and David Tordonato, Judy Trujillo, Martha Tullis, Brian Vanden Heuvel, Joy Von Guerard, Judith Ward, Jill Warner, Linda Warner, Kerry Miller and Peter Weckesser, Sherry Weinstein, Pamel Brown and Bryan Wender, Dawson White, Stuart and Pat Wier, Thomas Wilberding, Lois Witte, Suzanne Wuerthele, Royce Young, Rosa Venezia and Roy Young, Thomas Zeiner, Albert Zindel...

... and welcome to the Gore Range Chapter!

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CHAPTER

You are free to affiliate with any chapter you choose and to attend the meetings of any chapter. Chapters do not have drawn map boundaries; the locations below indicate the usual meeting place of chapter meetings.

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

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- \$ _____ John Marr Fund: research on the biology and natural history of Colorado native plants.
- \$ _____ Myrna P. Steinkamp Memorial Fund: research and other activities to benefit the rare plants of Colorado

Mail to: Eric Lane, P.O. Box 200, Fort Collins, CO 80522

Please make checks payable to "Colorado Native Plant Society"

Dues and contributions are tax-deductible.

IN THE NEXT ISSUE OF *AQUILEGIA*

In "Plant Games of Native American Children Inspire Research", Donald L. Hazlett, Ethnobotanist with the Denver Botanic Gardens, will describe Native American children's games played with plants of the grasslands, and how certain plants matched up with the children's imaginations.

Colorado Native Plant Society



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.

Please join us in learning about, enjoying and protecting Colorado's native plants.

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If you receive your newsletter by e-mail, this would save both postage and printing costs and you will receive each issue sooner – and in color!



CALENDAR 2012

NEXT BOARD MEETING

All of the following Board Meetings will be held at the Tracy Center, Regis University, Denver

- Saturday, January 28
- Saturday, March 31
- Saturday, May 26

BOULDER CHAPTER

- Feb 9 Born to Burn
- Mar 8 Determining Soil type and Vegetation Best Suited for Maintaining, Regenerating, and Working within Native Ecosystems on Your Property
- Apr 12 Open Space and Mountain Parks Vegetation Studies

METRO-DENVER CHAPTER

- Jan 24 Roadside Ecology of Colorful Colorado
- Feb 28 Rare Plant Stewardship: Documenting and Protecting Colorado's Rarest Plants
- Mar 27 Gardening with Native Plants
- Apr 24 Colorado Wetland Plant Field Guide

NORTHERN CHAPTER

- Feb 2 Edible Wild Plants of Colorado: An Archaeological Perspective
- May 3 Keeping Up with Technology – Using Online and Electronic Texts