

The Field Press



A PUBLICATION FROM THE COLORADO NATURAL AREAS PROGRAM

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From the Desk of the Coordinator

By Raquel Wertsbaugh, CNAP Coordinator

Greetings CNAP volunteer stewards and partners. I hope the start of 2017 has been treating you well. 2016 marked another great year for CNAP. The program experienced many successes and accomplishments this last year, which I attribute to our cadre of dedicated volunteer stewards, partners, staff, and Natural Areas Council.

We began our season last spring with a volunteer gathering at Garden Park Natural Area near Canon City. We had over 30 participants and were very fortunate to have knowledgeable staff from the Bureau of Land Management and National Natural Landmark Program to help guide an outstanding field tour of the natural area.

Our field season was outstanding last year and I continue to be impressed by the many “hidden jewels” we have in our natural areas registry as I continue to visit new sites. We were very fortunate to have a new field technician this year, Lisa Merkhofer, whose background in geology and paleontology was incredibly beneficial to our team. We’re also lucky to retain the expertise of Jessica Smith, who is now a botanist for the Colorado Natural Heritage Program (CNHP), and continues to help CNAP through our contracts with CNHP.

Our volunteer stewards continue to be an invaluable asset to the program. They conducted monitoring at 35 of our natural areas this year and contributed over 1,300 hours! Both CNAP staff and our partners depend on the great information that the volunteers bring forth each year.

We’ve been very busy working with the Colorado Natural Areas Council on updating the program’s selection criteria for new natural area designations. Our updated criteria will not only help us prioritize and move forward on new designations, but will be very helpful in evaluating our designated and registered sites as well. Speaking of new designations, we expect to have two new designations this year; Corral Bluff Natural Area in El Paso County and Pagosa Skyrocket Natural Area in Archuleta County.

As we move into 2017, we’re excited celebrate the 40th year of CNAP. Stay tuned for details on a tentative 40th celebration event this fall.

I’ll end with one more piece of exciting news on the personal side. My significant other and I are expecting our first child in early March. I’ll be on maternity leave through the spring and returning to work full-time by summer. Please contact CNAP through our general CNAP email account, dnr_cnap@state.co.us, and we’ll get back with you promptly. Here’s to an exciting and successful 2017!

CNAP Staff at Treasurvault Mountain Natural Area



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New Colorado Natural Area Designations in the Works for 2017

CNAP has been working hard on two new natural areas designations, both expected to be completed in 2017. We're in the final stages of designating Corral Bluffs Natural Area in El Paso County. Corral Bluffs Natural Area is 598 acres and is owned by the City of Colorado Springs. It is a world-class paleontological site and is one of the best places in the world to

find mammals from the early Pleistocene. At least 12 mammalian taxa have been found there and the site showcases exemplary floral response to the K-Pg event. Corral Bluffs is an extremely valuable site for the continuation of paleontological research and education.



Corral Bluffs Natural Area.
Right: Fossil resources at Corral Bluffs Natural Area



The second site, which will be called the Pagosa Skyrocket Natural Area, is in the beginning stages of designation, and we hope to have it completed towards the end of 2017. This property was recently acquired by Colorado Parks and Wildlife (CPW) in order to protect the federally endangered Pagosa skyrocket plant. CPW received funding from the U.S. Fish and Wildlife Service to help acquire the property. Over half of the world's known population of Pagosa skyrocket exists on the 88 acre property, located near Pagosa Springs. CNAP was integral to the acquisition and is working closely with CPW staff to designate the site and develop a management plan for the property.



Pagosa Skyrocket Registered Natural Area



Colorado Natural Areas Program

6060 Broadway
Denver, Colorado 80216
cpw.state.co.us

John W. Hickenlooper, Governor

Bob Randall, Executive Director
Department of Natural Resources

Bob Broscheid, Director
Colorado Parks and Wildlife

COLORADO NATURAL AREAS COUNCIL:

Tom Nesler, Chair

Ken Strom, Vice Chair

Michelle Zimmerman, Colorado Parks & Wildlife Commission

Gary Butterworth, State Board of Land Commissioners

Denise Culver, Member

Julia Kintsch, Member

Melissa Smeins, Member

PROGRAM STAFF:

Raquel Wertsbaugh
Natural Areas Program Coordinator
303-291-7267
raquel.wertsbaugh@state.co.us

Colorado Natural Areas preserve some of the finest examples of Colorado's original and unique landscapes for the benefit of present and future generations. Sites qualify as Colorado Natural Areas when they contain at least one unique or high quality feature of statewide significance:

- Native plant communities
- Geologic formations and processes
- Paleontological localities
- Habitat for rare plants and animals

CNAP Contracts and Partnerships Support the Conservation of Globally Imperiled Plants

Budding Monkeyflower Conservation

CNAP is partnering with the U.S. Fish & Wildlife Service and U.S. Forest Service on a project for the budding monkeyflower, *Mimulus gemmiparus*, with contractor Mark Beardsley of EcoMetrics. The assisted migration project is taking place on USFS lands and Staunton State Park. This globally critically imperiled species, with the unique reproductive system of an asexual propagule called a “bulbil” forming in leaf petioles, was estimated at only 125,000 individuals at the start of 2016. During the course of this project, Mark discovered four new populations of the plant, including the largest population now known, with an estimated ten million plants!

Online Rare Plant Guide and Rare Plant Roadside BMPs

Rare plant education and promoting conservation measures for roadside populations of globally imperiled plants continues through CNAP-funded contracts with the Colorado Natural Heritage Program (CNHP). New and updated profiles for rare plants found on Natural Areas and State lands, with identification, habitat, and distribution information, will be available on the CNHP Rare Plant Guide on their website in June at <http://www.cnhp.colostate.edu/download/projects/rareplants/index.asp>. Guides to Best Management Practices (BMPs) for roadside plant populations are under development for more globally imperiled species.

Find guides to the species chosen in 2014 and look for new profiles, coming this summer at <http://cpw.state.co.us/aboutus/Pages/CNAP-NewsResources.aspx>.



CNAP and BLM staff monitor the Dudley Bluffs bladderpod, *Physaria congesta*

Rare Plant Monitoring Partnerships

In 2016, CNAP worked with BLM staff in Rio Blanco County to continue twenty years of data collection for the Dudley Bluffs bladderpod, *Physaria congesta*, at Duck Creek Natural Area. As part of a larger BLM-led effort, a new monitoring plot was established for the clay-loving wild buckwheat, *Eriogonum pelinophilum*, on Wacker Ranch Natural Area. At Logan Wash Mine Natural Area, CNAP, CNHP, Western Water & Land Inc., and the BLM Grand Junction Field Office partnered to collect data on the *Parachute penstemon*, *Penstemon debilis*. CNHP is contracted by CNAP to establish monitoring plots for critically imperiled plants on state lands, including Brandegee’s wild buckwheat, *Eriogonum brandegeei*, and Cushion bladderpod, *Physaria pulvinata*.



Cooperative monitoring of the Parachute penstemon, *Penstemon debilis*.
PHOTO BY SHELBY GOODWIN



NEW TOOLS AVAILABLE:

CNHP Online, Interactive Colorado Maps! Find Rare Plants by County with links to species profiles, and the Colorado Wetland Inventory Mapping Tool at <http://www.cnhp.colostate.edu/download/maps.asp>



CNAP & SLB Staff at High Creek Fen Natural Area (SLB parcel)

Colorado Natural Area Highlight: High Creek Fen Natural Area

High Creek Fen Natural Area, located in Park County, is home to one of the best examples in Colorado of an extreme rich fen. What is an extreme rich fen you ask? An extreme rich fen is a very rare wetland type, fed by groundwater which flows over limestone or dolomite rock. These rocks are high in calcium carbonate and give water a high pH, making it alkaline. High Creek fen was formed about 12,000 years ago when glaciers retreated and left behind gravelly outwash material on the valley floor. Snow melt from the high country seeps through the gravel and creates large springs when it surfaces at the toe of the outwash.

High Creek Fen is known to be the most ecologically diverse and floristically rich fen in the Southern Rocky Mountains. The fen supports numerous “calcareophilus” (calcium-loving plants) that occur only in this type of fen. The fen also supports several ice age relict plants, their populations being isolated from their normal range in the arctic. Fourteen rare plant species are known from this property, including pale blue-eyed grass (*Sisyrinchium pallidum*), Greenland primrose (*Primula egaliksensis*), and slender cottongrass (*Eriophorum gracile*). In addition, several interesting wildlife species can be observed at the fen including Wilson’s phalaropes and spotted sandpipers. Mountain plovers, a species of concern, have been documented using the uplands adjacent to the fen.

The Natural Area consists of two separate parcels. A parcel owned by The Nature Conservancy was designated in 1994 and is 1,147 acres. The other, owned by the Colorado State Land Board, was designated in 2001 and consists of 2,401 acres.

The Nature Conservancy parcel is open to the public and information on the site can be found on: <http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/colorado/placesweprotect/high-creek-fen-preserve.xml>. If you plan to visit, please tread lightly and be prepared for boggy conditions. The State Land Board parcel does not have general public access but is leased by Colorado Parks and Wildlife (CPW) for public hunting and fishing access. Please refer to the most current CPW Recreational Lands brochure for regulations.



CNAP staff and volunteer steward, Tyler Johnson, observing slender cottongrass (*Eriophorum gracile*) at High Creek Fen Natural Area (TNC parcel)

Volunteer Corner

Volunteer Perks

As CNAP is a program within Colorado Parks & Wildlife, your volunteer hours are entered into the CPW volunteer database. Being a part of CPW's volunteer program has many advantages, including the reward of an annual State Park's pass for over 48 hours of service within a 12-month period and liability insurance coverage for volunteers. CPW has emailed out an updated volunteer manual, which includes updated policies and benefits information. CNAP staff will be reaching out to volunteers this spring to ask that you sign an updated CPW Volunteer Agreement and Waiver. If you don't receive the new manual, or you have any questions, please contact us at dnr_cnap@state.co.us. We encourage you to still email us directly if you have a change in status or contact information. We appreciate your hard work not only in the field, but also at home, as you prepare and wrap-up your visit. Please make sure you report these hours in addition to your field and travel time.

Thanks to all who attended the 2016 volunteer steward gathering at the Garden Park State Natural Area in Canon City. You can check out the video created from the event at: <http://cpw.state.co.us/about/Pages/CNAP.aspx>. 2017 marks the 40th anniversary of CNAP, and we will



*Duchesne milkvetch,
Astragalus duchesneensis at Raven Ridge
- Larry Allison*

Curt Cole and Nan Daniels join CNAP staff at a rainy visit to Saddle Mountain.

be hosting a celebration this fall (location and date to be determined). We would love to have our volunteer stewards and other partners join us there!

A Warm Welcome to our New Stewards

CNAP was fortunate this year to gain several new stewards, including Sara Ungrodt, a landscape architect in Montrose, taking on Fairview Natural Area; Tyler Johnson, a USFS regional botanist in Golden, taking on High Creek Fen; Bob Clarke, a botanist in Grand Junction, taking on a floristic inventory project at Badger Wash; Tony Romano, a biologist with ERO in Denver taking on Mount Emmons, and John Leonard, an expert

photographer, taking on Cross Mountain. Additionally, we have had several active stewards take on new or additional sites, including Tom Nesler at Jimmy Creek, Jannette Wesley at Park Creek Hogback, Denise Wilson at Hurricane Canyon, and John Vickery at Chalk Bluffs.

....and a Thank You! to those Stepping Down:

We have also had several stewards "retire" this year, including John and Lynn Cleveland, Mike Galloway, Tyler Morrison, Mary Mourar, Linda Smith, Susan Spackman-Panjabi, and Steve and Andrea Storrs. Thank you for your years of service and efforts towards the conservation of some of Colorado's most special places!



*Desert Bighorn Sheep
at Escalante Canyon
-JeanMarie Harahush*



*Roundleaf sundew, Drosera rotundifolia,
at Mount Emmons - Tony Romano*

2016 Volunteer Steward Field Visit Highlights

Volunteer stewards traveled the state this year, contributing over 1,300 hours of time to the Natural Areas Program. Because our limited staff only makes triennial site visits, we rely on volunteers for the annual observations which build a long-term record of the site. This year, stewards visited 27 Natural Areas which staff were unable to visit. We recognize stewards as a valuable partner in the monitoring of these sites and appreciate learning from our stewards.

Lee Cassin, Dave Tolen, and Larry Allison at Raven Ridge Natural Area

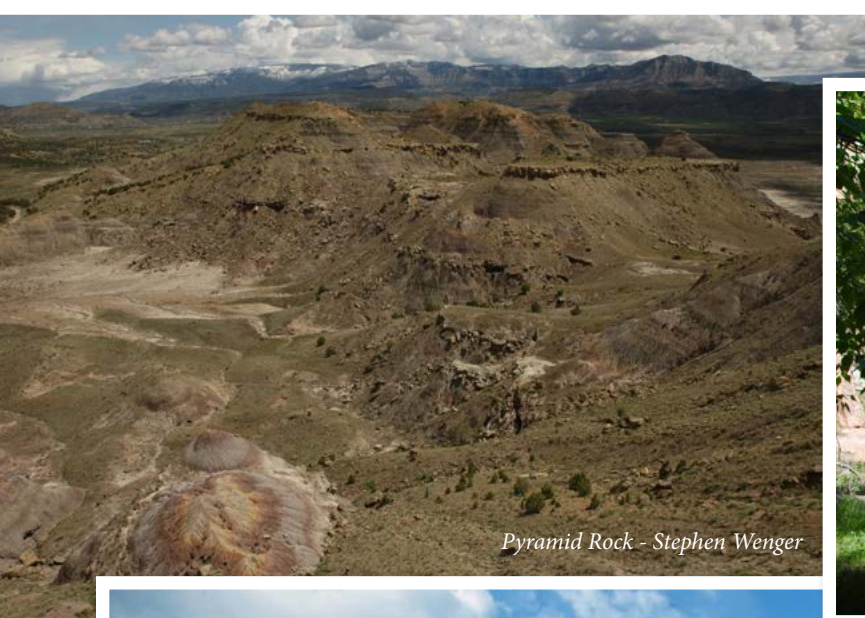


Volunteer highlights from the 2016 season included new and updated records of rare plants or plant communities on state Natural Areas. Records were submitted to the Colorado Natural Heritage Program.

Larry Allison recorded *Phacelia incana*, a state critically imperiled species, and *Astragalus duchesnensis*, a globally vulnerable species, at Raven Ridge. Mo Ewing recorded two rare plant communities, *Pseudoroegneria spicata* - *Carex filifolia* Herbaceous Vegetation (the first record in the state) and *Leymus cinereus* Herbaceous Vegetation, at Lookout Mountain. Denise Wilson and Jack and Deborah Darnell expanded the known population of *Telesonix jamesii* at Staunton. Loraine and Dick Yeatts submitted nine years of GPS data on the location of rare plants at Gateway Palisade. Stephen Wenger made observations of the elusive, federally-listed *Phacelia submutica* at Pyramid Rock, and Scotty Smith traveled to Yank's Gulch and identified several rare lichen species. Thank you for these and the many additional observations reported by others, which were sent on to our agency partners and landowners. Additional highlights are pictured on these pages.

SAVE THE DATE!

Please plan to join us for a fall 2017 CNAP 40th Anniversary Celebration. Date and location to be determined. Information coming soon in an email to you!



Pyramid Rock - Stephen Wenger



Rough Canyon - Barbara Galloway



Lookout Mountain - Mo Ewing

Need a field form? Find an updated fillable PDF field form and other materials at the CNAP website:
<http://cpw.state.co.us/aboutus/Pages/CNAP-CurrentVolunteers.aspx>

Results of the 2016 CNAP Volunteer Steward Photo Contest

2016 marked the 2nd year of the annual CNAP volunteer steward photo contest. Thanks to all the volunteers that submitted photos and congratulations to our contest winners! Photo judging was completed by the Natural Areas Council at our December 2016 meeting and winning photos are printed below. We look forward to many more beautiful photos next year!



*Volunteers: Marian Rohman; Peter Rohman at
Narragunnep Natural Area*



*Wildlife: Steve Jones: Swift fox at Comanche Lesser Prairie
Chicken Natural Area*



*Landscape: Loraine Yeatts: Triton at Gateway Palisade
Natural Area*



*Plants: Travis and La Donna Ward: Yellow lady slipper at
Haviland Lake Natural Area*

Become a Volunteer Steward and help protect Colorado's best natural features!

The Colorado Natural Areas Program hosts volunteer stewards to monitor some of the most spectacular and sensitive areas in the state! Natural Areas are designated either because of rare plants, wildlife, unique geology, fossils or a combination of these features. The Natural Areas Program needs help from volunteers to get out and visit these sites regularly to ensure the rare and sensitive elements on these sites are preserved for future generations. If you are interested in any of these opportunities, even if you are a current steward looking to take on an additional site or needing a change in scenery, please let us know at dnr_cnap@state.co.us.

SITE NAME	COUNTY	OWNER	ACRES	HIKING	ATTRIBUTES	SKILLS
East Lost Park	Park	USFS	6,200	Moderate	Large population of Porter feathergrass, a USFS sensitive species found only in mid-elevations wetlands in South Park.	Botany, Ecology
Fourmile Creek	Park	SLB	960	Moderate	An extreme rich fen in South Park with beaver ponds, willow stands, and many rare wetland plants.	Botany, Wetland Ecology, Wildlife
Garden Park	Fremont	BLM	2,640	Moderate	Important site for Jurassic dinosaur and early mammal fossils, rare plants, shale badlands, and pinyon-juniper community.	Four-wheel driving, Ecology, Botany, Paleontology
Mishak Lakes	Saguache	TNC	2,040	Moderate	Historically a series of natural playa lakes with rare plant, <i>Peritoma multicaulis</i> ; currently dry in all but the wettest years. Important wildlife habitat.	Botany, Wildlife ID, Four-wheel driving
North Park	Jackson	BLM	310	Moderate	Large population of the federally-listed North Park phacelia on sandstone bluffs of the Coalmont Formation.	Botany, Ecology
Owl Canyon	Larimer	SLB/CPW	658	Moderate	A 150-mile isolated pinyon pine grove, 300 - 500 years old, located on a hogback ridge of Ingleside limestone.	Birding, Ecology, Weed ID
Rajadero Canyon	Conejos	BLM/SLB	4,305	Moderate	Large population of the volcanic endemic <i>Astragalus ripleyi</i> in a pinyon - ponderosa/Arizona fescue savanna.	Botany, Ecology, Wildlife ID
South Beaver Creek	Gunnison	BLM	4,000	Moderate	Gunnison Basin endemic plant <i>Astragalus microcymbus</i> , and a second rare milkvetch, <i>Astragalus anisus</i> , and Gunnison sage grouse habitat.	Botany, Ecology, Wildlife ID
Treasurevault Mountain	Park/Lake	SLB	320	Difficult	Federally threatened Mosquito Range mustard in alpine communities typical of the Mosquito and Sawatch ranges.	Botany, Birding, Four-wheel driving
Yank's Gulch	Rio Blanco	BLM	2,687	Difficult	Examples of four types of Great Basin plant communities and plant species endemic to Green River shale, with oil and gas development.	Four-wheel driving, Off-trail hiking, Botany

BLM = Bureau of Land Management; CPW = Colorado Parks and Wildlife; SLB = Colorado State Land Board; TNC = The Nature Conservancy

Natural Areas Council News

By Tom Nesler, Council Chair

New Year's greetings to all our volunteer stewards and partners and other supporters! As the Chair of the Colorado Natural Areas Council, it is my privilege to let you know what the Council has been doing the past year. Despite having me as their "leader", the Council accomplished a major goal this year in reviewing and revising the criteria we use to select and evaluate new candidate sites as potential natural areas, as well as review and confirm (or question) the qualifications of designated natural areas already in our portfolio. A significant portion of our meeting time in 2016 was dedicated to this updating process. On behalf of the Council, I want to commend our Natural Areas Program staff for doing the groundwork required for us to spend our time most productively in discussion of potential revisions. I must say our existing selection criteria were pretty good and still provided an excellent framework for us to work from, but I am very happy with the results of our efforts. In December, Council approved the new guidance documents with the updated selection criteria. We will now use those criteria to evaluate our portfolios of designated and candidate natural areas and make certain we stay true to our goal of recognizing and protecting Colorado's highest quality gifts of natural landscapes, native plant and wildlife communities, and rare species.



CNAC members visiting Pagosa Skyrocket Registered Natural Area

I am also happy to announce that the Council has been blessed with retaining and recruiting two members. First, everyone should welcome Melissa Smeins as our newest member. She is a geologist for the BLM in Canon City and brings much needed expertise in geology and paleontology to our ranks. Melissa took the reins in helping conduct a successful volunteer steward appreciation day at Garden State Park in Canon City. Second, we are fortunate to retain Julia Kintsch as a council member for a second term. Julia has brought a much needed landscape perspective to our deliberations in strategic guidance, natural area review, and selection criteria. For those of you who just asked yourself this question, Council members are eligible to serve two four-year terms.

Other Council activities included attendance at the partner's meeting of the Colorado Natural Heritage Program to ensure the Natural Areas Program remains complimentary to their conservation programs. CNHP also served an important role in helping our Natural Areas staff meet its workload demands through providing a contract position. We were able to retain the crucial services of Jessica Smith as an experienced assistant and botanical expert. The Council also reviewed the strategic plan developed by Colorado Parks and Wildlife. Our goal was to make sure that the Natural Areas Program was recognized as an important piece of CPW's conservation mission during the drafting stage, and that our Program's strategic guidance dovetailed well with CPW's strategic priorities. The Council also made time to take stock of ourselves in addressing those strategic guidance objectives specifically needing our participation. Finally, the Council spent a valuable field trip touring the newly acquired CPW Pagosa skyrocket property near Pagosa Springs. We subsequently recommended articles of designation for the Pagosa Skyrocket Natural Area for consideration and approval by the Parks and Wildlife Commission. Last but not least, the Council took time at our December meeting to review the activities and accomplishments in the 2016 field season by staff. Once again, we are eternally grateful to have such a highly qualified and dedicated staff to administer this program.



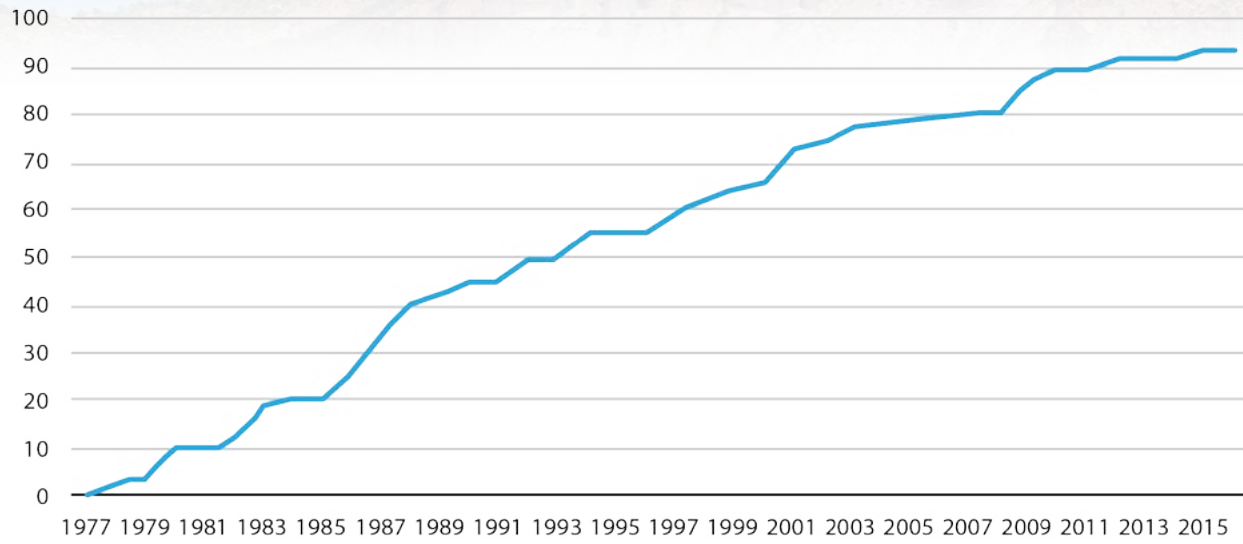
CNAC visit to Pagosa Skyrocket Registered Natural Area

Celebrating 40 Years of CNAP

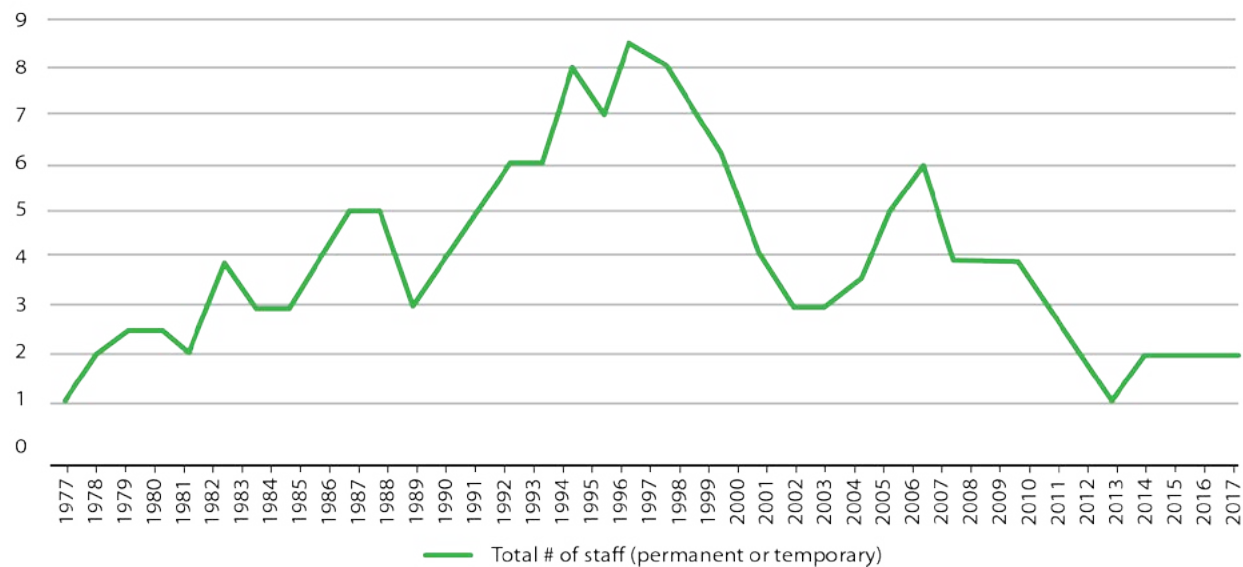
A Brief History of CNAP: From Then to Now

It's hard to believe that CNAP turns 40 this year! The program was created in 1977 when the Colorado Natural Areas Act passed through legislature. There have been many changes over the years; however, one thing remains the same: the program continues to successfully work with landowners to identify, recognize and help protect Colorado's most special natural places. With nearly 100 designated natural areas now within the statewide Natural Areas System, we can all truly be proud of what this program has accomplished, often times with minimal staff and funding. Our volunteer stewards, partners, Natural Areas Council members, and staff have helped keep the program alive and successful over the last 40 years.

Number of Natural Areas Designated, 1977-2016

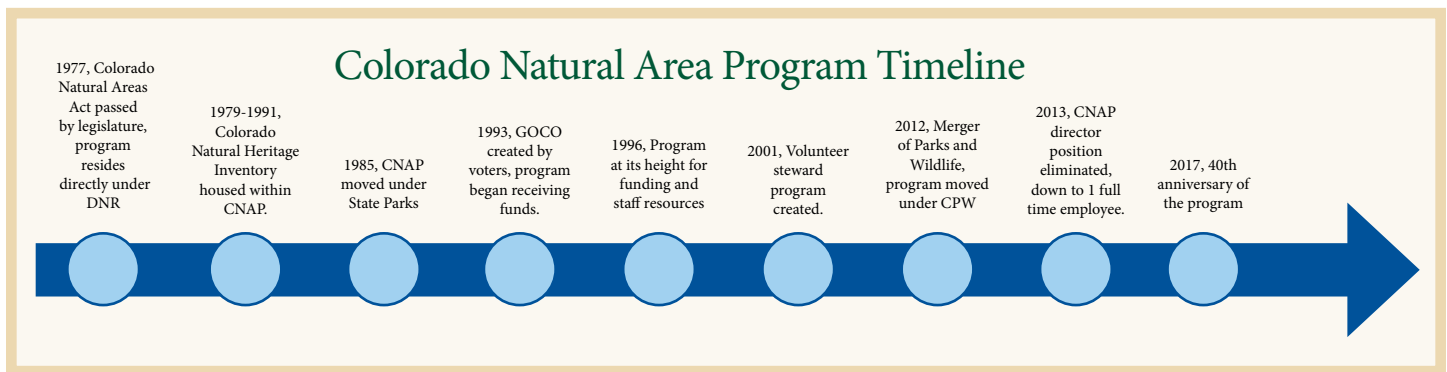


CNAP Staff Levels, 1977-2017



Major Accomplishments:

- 93 designated state natural areas as of 2016
- Cooperative agreement with USFWS for rare plants began in 1980 and has been renewed every year since
- Renewal of the Colorado Natural Areas Council in legislature in 1982, 1988, 1999, 2004, & 2014
- Completed a 12 year inventory of State Land Board properties (1991- 2004)
- Long-standing partnership and voluntary agreement with private industry (Oxy) to help protect the Parachute penstemon and preclude critical habitat designation (1987- present)
- Development and successful implementation of the volunteer steward program (began in 2001)
- A key player in the Colorado Rare Plant Conservation Initiative (2007)
- Rare plants included in the 2015 Colorado Wildlife Action Plan with the help of CNAP
- Acquisition of two properties to protect federally listed plants: Wacker Ranch for clay-loving wild buckwheat (2007) and Pagosa sky-rocket property (2016)
- Since 2006, volunteers have contributed almost 20,000 hours to the Colorado Natural Areas Program and on average visit 40 Natural Areas each year.



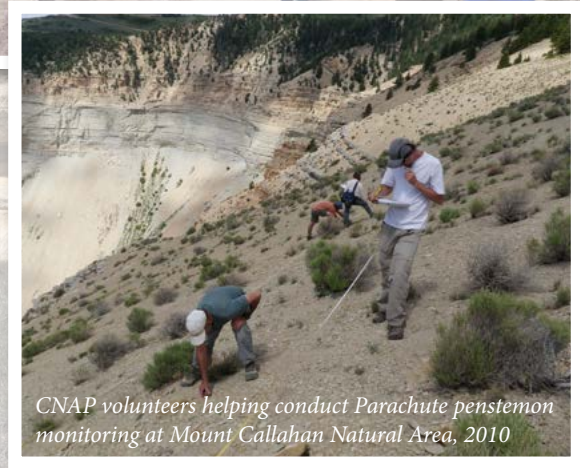
White Rocks Natural Area Designation Event, 1979



Volunteer Steward Event at Garden Park Natural Area, 2016



CNAP visit to Indian Springs Natural Area, 1987



CNAP volunteers helping conduct Parachute penstemon monitoring at Mount Callahan Natural Area, 2010