

images

OF BOULDER COUNTY PARKS AND OPEN SPACE



summer 2010

Images

volume 32, number 2

The mission of the Boulder County Parks and Open Space Department is to conserve natural, cultural and agricultural resources and provide public uses that reflect sound resource management and community values.

COVER PHOTO: Come see the annual vintage baseball game that is part of the special event at Walker Ranch Homestead on July 25. (See page 14 for details.) Photo by Rachel Gehr

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Field Notes Russ Nanney
Roche Project Matt Bruce
Walker Ranch Rachel Gehr

NATURE DETECTIVES

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What's out there anyway?

Biodiversity in Boulder County

by Ron West

Hypothesis: There's a lot we don't know. Aldo Leopold, perhaps the greatest ecological thinker of the 20th Century, said, "The first rule of intelligent tinkering, is to save all the pieces."

Unfortunately, humankind has been tinkering with the world for a very long time without recognizing, let alone saving, some of the pieces. Fortunately, we're trying to improve.

We recently asked the professional "Recognizers of the Pieces" to look at Boulder County. They may not agree with my moniker here, but those professionals are the wide-ranging ecological scientists of the Colorado Natural Heritage Program (CNHP) in Ft. Collins. We asked them to look for rare species and "biodiversity hot spots" across the county.

I'll back up a moment, and start at the beginning. In 2005, Parks and Open Space (POS) realized that the county's existing database on rare species was not only dated, but deficient in several ways. Some of the data was only captured on paper maps; some data was only in various file cabinet drawers; some of the known sites hadn't been re-visited in decades; and large swaths of the county hadn't been examined for rare species at all.

So we began by putting together grant proposals to find funding. In 2006 we secured a federal EPA grant for \$82,000 to look for rare wetland areas. But we also needed to look at uplands ("upland" meaning anything that isn't wetland). So we gathered \$20,000 from County Land Use, \$20,000 from Boulder's Open Space & Mountain Parks, and \$95,000 from POS, which built a good kitty for the project.

Study Methodology: Who, What, When, Where, How

So we had the money, but who had the time and expertise to tromp across the county's entire 475,000 acres looking at plants and critters? There was really only one choice. CNHP specializes in just this thing, and they've been doing so for decades. In fact, every state in the country has its own version – a group of field scientists and data specialists who know what rare things to look for, where best to look for them, and how to store the bushel baskets of field data that is gathered. All we needed was the when, which turned out to be the "summers" of 2007 and 2008. I say summer because field season truly begins in April on the plains and goes into October in the mountains, depending on, say, when a rare flower blooms, what the snow conditions are like, and how many other sites you need to squeeze in a day.

The team sat down with CNHP's lead, Dr. Stephanie Neid, to specify which plant community types, plant, and animal species we wanted to target, and we also needed to specify where to send teams.

It was a complex task to maximize our odds of being successful. Is it more efficient and successful to look for species X in this canyon or that one? On north-facing slopes or south? At 6,000 feet or 9,000? Long story short, we prioritized a list of over 200 elements, and almost 200 circles on a map where we wanted to visit. We call these physical locations Targeted Inventory Areas, (TIAs).



A view from the Little Thompson Trail at Rabbit Mountain Open Space.

Results and Conclusions – The Best Part

So what's so special about Boulder County, anyway? It's quite small as Colorado counties go—about 33 by 24 miles. It's part of the soon-to-be Front Range megalopolis. And it's got mountains and plains. OK.

Well, there are actually astonishing things about each of these ho-hum items. Although quite small, Boulder County has the highest diversity of plant species of any county in the state, more than Western Slope counties, some of which are the size of Connecticut! We have 1,650 plant species—52 percent of all known Colorado species. We also have the highest diversity of breeding birds —102 species.

And yes, it's part of the Front Range megalopolis, but unlike other Front Range counties, 67 percent of our lands already have some level of conservation protection, a large chunk of which is due to local efforts alone. And yes, we have mountains and plains, but we include the eastern-most arc of the Continental Divide, and the western-most arc of Colorado's Great Plains. In other words, the entire elevational gradient of the Rocky Mountains, from 5,500 feet to the top of the Divide, is squeezed into a mere 18 miles.

Yet we already knew these amazing things. So back to the CNHP survey, for the extra-amazing things. After two years in the field, with a dozen ecologists searching for over 200 different needles in who knows how many haystacks, we can now say that Boulder County also has the highest density of rare elements of any Colorado county. The county database now includes 450 sites for rare elements, and of these, this study added a full 225, doubling our knowledge base.

Additionally, the survey found three sites of global conservation significance. To quote from the report, they are “indispensable” and “irreplaceable.” Two of these sites are Rabbit Mountain and Heil Valley Ranch.

These two particular sites have CNHP's highest importance rank, B1—of outstanding biodiversity significance—and they contain plant communities of such size and quality as to be of worldwide importance. These communities are “critically imperiled” globally. We know of less than five sites like them in the world. At both areas, these unique associations include mixed prairie, shrubland and woodland, with dominant species of needle-and-thread, big bluestem, and New Mexico feather grasses, mountain mahogany, skunkbrush, and ponderosa pine.

We also share with Larimer County, the world's entire population of two rare plants, Bell's twinpod and Larimer aletes. Obviously, these sites also are of global significance. Finally, CNHP grouped the individual element sites into a total of 55 areas of high-to-outstanding biodiversity importance, across the county.

Over a lot of effort during these two field years, about 56 percent of the original TIA's were examined. This may at first seem like a low percentage. Consider, though, that we were descending a prioritized list, emphasizing the most-rare elements or the most-likely sites, and that we were trying to cover all of our 742 square miles—a tough goal.

And besides, it gives our future scientists another 44 percent of the TIAs to seek and find. Maybe these places are waiting for you?

The complete 415-page report can be found at www.cnhp.colostate.edu/download/reports.asp under “2009 Documents and Reports.”

Celebrate the 35th Anniversary of Boulder County Parks and Open Space

As part of our 35th anniversary celebration, we came up with 35 ways for you to learn more about Boulder County Parks and Open Space - from exploring the web to participating in a volunteer project. Hang on to this list, mark off 10 check boxes from the 35 choices and win a laminated field guide for the plants and animals of Boulder County. Full instructions are below!



Your Passport to Boulder County

Instructions: Complete and check off at least 10 of these 35 activities as you explore Boulder County Parks and Open Space. To receive a special prize, send completed checklist to:

Boulder County Parks and Open Space
5201 St. Vrain Road, Longmont, CO 80503
You can also fax it to 303-678-6177

Bonus: Post photos of yourself doing these activities to Facebook for a chance to win a weekly prize.

- ☐ Have a picnic at Lagerman Reservoir, Bummer's Rock, or the Ethel Harrold Trailhead
- ☐ Look for dragonflies at Pella Crossing
- ☐ Run a figure eight at Twin Lakes
- ☐ Attend a sunset hike lead by volunteer naturalists
- ☐ Pick up trash you see while hiking an open space trail
- ☐ Bike the entire Coal Creek/Rock Creek Trail
- ☐ Take a child for a hike on the Lichen Loop Trail at Heil Valley Ranch
- ☐ Visit the James F. Bailey Assay Office Museum in Wall Street this summer
- ☐ Fly a kite at the summit of Bald Mountain Scenic Area
- ☐ Identify two kinds of ducks at Walden Ponds Wildlife Habitat
- ☐ Look for animal tracks and scat at Hall Ranch
- ☐ Watch the vintage base ball game at the Walker Ranch Special Event on July 25
- ☐ Visit South Boulder Creek at Walker Ranch
- ☐ Volunteer for a Wild Work project such as National Trails Day on June 5
- ☐ Attend a special event held at the Boulder County Fairgrounds
- ☐ Draw a picture of the Continental Divide from the Eagle Wind Trail at Rabbit Mountain
- ☐ Visit "U Pick 'Um" pumpkin patch at Carolyn Holmberg Preserve at Rock Creek Farm in October
- ☐ Request a group tour of the department's biomass plant
- ☐ Go fishing at Pella Crossing, Lagerman Reservoir or Walden Ponds Wildlife Habitat
- ☐ Attend a public meeting about open space
- ☐ Subscribe to the department's free quarterly newsletter, Images (see page 15 for details)
- ☐ Look for the golden eagles while hiking/biking at Rabbit Mountain
- ☐ Count sheep at the Agricultural Heritage Center
- ☐ Find a great blue heron at Twin Lakes
- ☐ Listen for elk bugling at Caribou Ranch in September
- ☐ Take your kayak or canoe out on Lagerman Reservoir
- ☐ Take a photo of wild turkey at Heil Valley Ranch
- ☐ Smell a ponderosa pine tree at Betasso Preserve
- ☐ Visit the Boulder County Farmers' Market at the Fairgrounds. Bonus: Name two farmers: _____, _____
- ☐ Find a nice spot along an open space trail and contemplate what open space means to you
- ☐ Join a Parks and Open Space email listserv
- ☐ Sketch or paint a scene from a county open space area
- ☐ "Like" us on Facebook, or follow us on Twitter
- ☐ Find one of the geocaches hidden for the 35th anniversary.
- ☐ Hike, bike, or horseback ride the Picture Rock Trail

For more information, write to POSinfo@bouldercounty.org.
Valid until December 31, 2010

Research on Boulder County's Open Space Lands

The Boulder County Parks and Open Space Department offers grants for research on county open space lands each year. All proposals are reviewed by a team of resource specialists, and awarded research projects are monitored during their activities on open space. The following is a summary of a 2008 study conducted by Janet Chu. Her project focused on inventories of butterflies in Boulder County.

Abstract: Butterfly inventories continued by this team during the 2009 seasons. Ten Boulder County Open Space and three Boulder City lands were sites studied. Numbers of species of butterflies were diminished in 2009 as well as the overall populations. Much of this change was due to cloudy, cold and drizzly weather. Warm days returned in August inviting the team to explore areas previously unvisited by us, resulting in two new county records Rita Blue *Euphilotes rita* and Texanus Blue *Plebejus 'lupini' texanus*. Also Christian Nunes, OSMP, added Two-spotted Skipper *Euphyes bimaculata* raising the records of proven sightings from 198 to 201 species for Boulder County. Ten Boulder County Open Space properties were visited during 40 days and this team recorded 87.5 research hours in the field. In August 2009, we explored OSMP properties eight days for 11.5 research hours.

In 2007, while conducting our research on these lands we observed an average of 39 individuals per research hour on seven sites, and also noted seven Rio Grande River - Mexican butterfly species not normally found in our area. In 2008 the number of individuals per research hour on the same seven research sites was 46; and in 2009 it was 37.

Detailed studies of natural resources are being provided by this team and other lepidopterists, to help with ongoing efforts to identify local effects of regional and global climate change and provide additional information regarding this phenomenon. Local interest in butterflies has reached an all-time high as we are coordinating with more local naturalists.

Conclusions: Ten Boulder County Open Space properties were visited during 40 days and this team recorded 87.5

research hours in the field. In August 2009, we explored OSMP properties eight days including about 11.5 research hours. Ray Stanford encouraged us to find new species. He predicted that the likely new species will include: *Euphilotes rita coloradensis* on its caterpillar plant the buckwheat *Eriogonum effusum*, *Megathymus yuccae* a large skipper butterfly on yucca, *Lycaena editha* in the high elevation along trails, *Phyciodes picta* in town or along roads along the eastern part of the county, often associated with bindweed, and *Oeneis polixenes* in highest wet tundra grasslands just east of the continental divide. We did indeed find the Rita Blue on its caterpillar plant the buckwheat *Eriogonum effusum*. We did not locate the Arogos Atrytone arogos or Ottoo Skippers *Hesperia ottoo* as we had in 2008. Weather in 2009 was a main factor resulting in fewer species and populations than in 2008. June, July and August had an average temperature of 67.4 °F compared with a normal of 70.2. These summer months in 2009 were 3°F cooler than the same three summer months of 2008. There were 13 days in the 90s compared to a normal of 33 days. Butterflies are strongly affected by weather. Their emergence from chrysalids, mating and ovipositing, and finding sunlight's energy to consume host plants building successful adults, are all dependent on favorable weather. It follows that we experience considerable differences from one year to the next. It is therefore difficult to detect short-term trends. Nevertheless, continuing and/or expanding studies should make long-term trends more recognizable. If global climate is indeed changing, then continued, long-term studies should help document the shifts. Butterflies are fairly easy to observe and monitor and are excellent indicators of healthy environments and therefore should have continued support for research.



If you want to read the full report, or other funded research, visit the department's website at www.boulder-county.org/openspace/resources/res_funding/res_fund.htm.

Four projects that received 2010 funding include:

Changes in avian species composition and vegetation structure in a riparian habitat: analysis of 50 years of bird banding data from the Allegra Collister Nature Preserve in Boulder County.

Effects of mechanical thinning, fire, and mastication on the spatial structure of the forest floor.

Potential effects of mountain pine beetle in ponderosa forests of Boulder County.

Quantifying bat species usage, abundance, diversity and foraging patterns in relation to thinned forest mosaics at Heil Valley Ranch.

A Rescue Step by Step

by Rik Hendrikson

It is a beautiful afternoon at Heil Valley Ranch—the temperature is warm, the trail is dry, and there isn't a cloud in sight. The trail ahead doesn't look too technical, but a last second distraction puts you over the handlebars and onto the ground. Ouch! Your helmet saves you any head injury, but you have road-rash, bruises, and possibly a broken leg. What now?

If You Are Injured: First Things First

The first thing to do is assess your situation. Is someone with you? Are you breathing OK? Are you light-headed? Can you walk? Is it getting dark? Are you prepared for a weather change? Do you have a cell phone and does it have a signal?

Even if your phone does not show a signal, try 911 anyway. A 911 call may go through on a different service that does have a signal.

Also, our Boulder County Parks & Open Space trails are heavily used so it's likely that someone will come along and assist you if you are alone.

If You Need Professional Assistance

If you do need professional assistance you are fortunate, as here in Boulder County we have some of the best rescue folks in the country. Your emergency call will go to the Boulder County Sheriff's Communications Center. These dispatchers will ascertain your location and situation and then send the closest appropriate agencies. In the case described above, the closest Fire Department, Rocky Mountain Rescue Group, a Sheriff's Deputy, an ambulance, and a County Park Ranger will all respond. All of these professionals (both paid and volunteer) are highly trained, and due to the high number of rescues that occur locally, highly experienced.

The Fire Department will most likely arrive first, followed quickly by members of the Rocky Mountain Rescue Group, and



Members of Rocky Mountain Rescue Group evacuate an injured hiker on a Boulder County trail.

Help Us Help You

Here are a few things you can do to help us help you:

First: go with a friend or at least let someone know where you are going and when to expect you back.

Second: know where you are; I know this sounds simple, but you'd be surprised how quickly added stress can confuse you. Mentally check off landmarks as you pass them to ease confusion in the event of an accident.

Third: if on a bicycle, carry appropriate tools, spare tube, and a pump.

Fourth: remember the 10 essentials

1. Map
2. Compass (supplemented with a GPS)
3. Sunglasses & sunscreen
4. Extra food & water
5. Extra clothes
6. Headlamp/flashlight
7. First aid kit
8. Fire starter
9. Matches
10. Knife

an ambulance. Others will continue to arrive depending upon how far they are away when the call is dispatched. Many things happen within minutes of your call: your location and best access will be determined, a command post will be established at the closest trailhead and rescue personnel will begin hiking to your location (usually from at least two different directions in case you weren't exactly sure of your location).

Once with you, these rescuers will assess your injuries and situation, explain your options, treat your injuries, and take you to the hospital if needed. You will most likely get a ride in Rocky Mountain Rescue's "wheeled litter." This is a stainless steel litter mounted on an ATV wheel, which gives it a smooth ride. You will also be packaged in a bean-bag mattress that forms to your body to keep any broken bones immobilized and keep you secure in the litter—it is also much more comfortable than the old "back-boards."

Most of the rescuers that come to your aid will be volunteers who give up personal or work time to assist you in your time of need. You will not receive a bill for any of these services, with the exception of the ambulance, which is a private, for-profit service. An advantage of the (mostly) volunteer emergency system in western Boulder County is that in many cases, the volunteers come from their homes which can be closer than the nearest fire station or rescue building. Volunteer rescuers may also just happen to be on the same trail as you—this happens with surprising frequency!

Krummholz: A Barometer of Climate Change

by Cal Orlowski

The sub-alpine ecosystem can be a wonder to explore in the summer months, providing views of lush forests that fade away as the land rises into the alpine tundra. The line at which the standing green trees end, called the timberline, marks the edge of the sub-alpine ecosystem, but certain forms of trees can extend beyond this line. Krummholz is a German word meaning “crooked wood,” and is used to describe the dwarfed and deformed coniferous vegetation of the transition zone between the sub-alpine forest and the treeless alpine tundra.

Surviving Above Timberline

The attempts of these trees to survive above the timberline have been thwarted by punishing winds and deep snow that have warped the trees almost beyond recognition. While we may view krummholz as stagnant pieces of art sculpted by Mother Nature, these trees have been sprouting new life and have begun to establish themselves at higher elevations over the past few decades. Because timberline is closely associated with krummholz, the sub-alpine forests have also been migrating beyond what used to be the timberline. But why is the timberline increasing in elevation? A closer look at krummholz and climate change reveals a whole forest of answers.

Believe it or not, the last ice age in North America, which spanned over several centuries, ended only 150 years ago. This “Little Ice Age” was not a true ice age, but it did bring cooler temperatures caused by a combination of reduced solar activity and large volcanic eruptions. These harsh conditions may have formed some of the krummholz that we see today, which serve as relics of an unfavorable past. Since then, we have experienced slightly warmer temperatures with increased levels of carbon dioxide in the air. This should produce warmer winters with more heavy snow, which could protect timberline trees from wind damage and provide more water for spring growth. For the trees struggling to survive and reproduce, these conditions are much more favorable, promoting the growth of rooted plants as well as seedling establishment at higher elevations. As a consequence, how has the krummholz and sub-alpine vegetation responded?



Krummholz trees have begun to establish themselves at higher elevations over the past few decades.

More Krummholz, Less Tundra?

With change comes new life, or in the case of the krummholz, change can regenerate life. Many trees that have exhibited krummholz formations in the past have begun to grow more upright, producing normal vertical trunks. Researchers have noted that tree trunks hugging the ground for as much as eight to ten feet suddenly sweep upward into the vertical mode. When we see many krummholz trunks turning upright and their offspring all growing upright, we can infer that climatic conditions have somehow moderated or ameliorated to allow this upright growth.

Thus, if krummholz are able to grow in new ways and places, how will the sub-alpine vegetation respond to this more favorable environment? If the wind and soil allow seeds to establish themselves at higher elevations, the sub-alpine vegetation will likely ascend further into the alpine tundra, with some research models predicting that

the tundra could be eliminated from Rocky Mountain National Park in 50 to 100 years. As krummholz trees thrive, their canopies may block sun from the low-lying plants of the tundra, and their root systems may dominate the nutrient supply of the soil. The advancing tree line could have important implications for the global carbon cycle and for biodiversity of the alpine ecosystem, possibly ousting rare species and disrupting alpine plant communities. Although the trends point to the end of a treeless tundra, only time will tell who will win the battle of survival in one of the most difficult growing environments on earth.

Taking Note

The effects of climate change, whether natural or human caused, are beginning to sprout up around the globe with plants being one of the primary beneficiaries. Increased temperature, carbon dioxide, and moisture promote plant life, even in plants that have been perceived as dead for some time. Krummholz can be an indicator of both past and present environmental conditions, and may even provide a glimpse into the future. Therefore, as you explore the sub-alpine and alpine ecosystems of Boulder County, take note of the intricate ways that Mother Nature has shaped those environments. What do you think She has in store for the future?

Why Should I Care about Frogs?

by Michelle Bowie

I have always been fascinated by *anurans*, the scientific name for frogs and toads. I fondly remember summer evenings as a child when I was serenaded by the musical chorus of the croaking toads that resided in the pond behind my house. I now realize that I took this simple pleasure for granted, as in recent years amphibian populations have drastically declined in many regions, silencing their symphony forever.

You are probably aware that various animal species are endangered throughout the world. However, did you know that amphibians are declining at a rate greater than any other vertebrate species? In Colorado alone, nine out of 16 native species of frogs and toads are protected species, and each is an integral part of the food chain. Who doesn't love an amphibian that eats mosquitoes, biting flies and other predatory insects that would otherwise be feasting on us?

Good Environmental Indicators

Anurans have the ability to thrive in both aquatic and terrestrial environments. Toxic chemicals in both soil and water are absorbed into the bodies of toads and frogs through their permeable skin. This makes them good bioindicators—their sensitivity to the environment makes them a useful scientific tool for determining the health of an ecosystem. Physical mutations in frogs and toads can be a warning sign of environmental pollutants that may also affect humans, making them prime candidates for environmental research. In fact, approximately 10 percent of Nobel Prizes in physiology and medicine are the result of research on frogs.

In Boulder County, loss of habitat, infectious diseases (such as the chytrid fungus) and biological invaders could all account for the decline in the anuran population. In Colorado, one of the most common biological threats is the presence of the invasive bullfrog. The bullfrog is able to out-compete native species like the northern leopard frog and the boreal toad because it is better adapted to survive in a wide variety of conditions.

Even if the bullfrog does not force out native species of frogs and toads, infection with the chytrid fungus is still a danger. This disease became a global concern in the 1990s

when unprecedented numbers of frogs began dying in Australia and Central America. Today the chytrid fungus is found on every continent and is one of the most important factors in the mass extinction of frog species worldwide. These amphibians, which were able to survive past mass extinctions including the extinction of the dinosaurs, are dying at record rates.

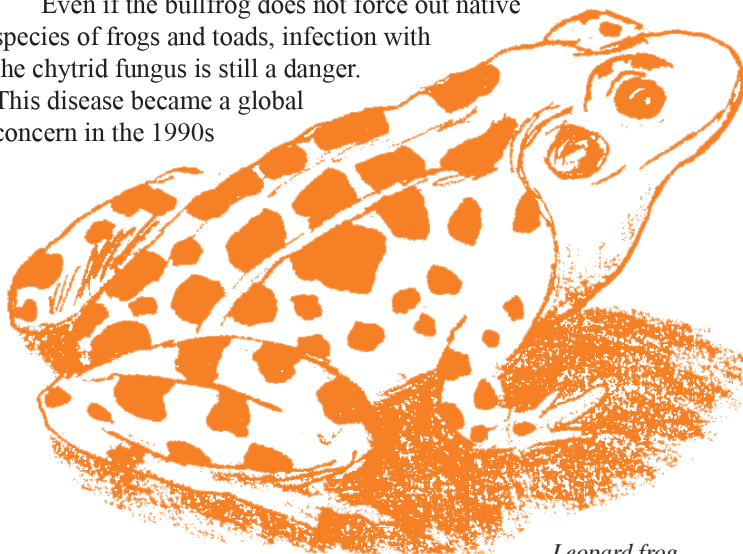
In Colorado alone, nine out of 16 native species of frogs and toads are protected species, and each is an integral part of the food chain.

Boulder County is doing its part to prevent anuran extinction in Colorado. Dave Hoerath, a Parks and Open Space wildlife biologist, has been helping the Colorado Division of Wildlife survey for boreal toads for the past four years. In the Boulder County Parks and Open Space properties that have been checked, only chorus frogs were found—if any frogs were found at all. When found, frogs were swabbed and tested for the presence of chytrid fungus. If the test is negative, it may be possible for the county to reintroduce native species of frogs and toads in the future.

The Search Is On

Although the northern leopard frog, a native species that has suffered dramatic population declines in recent years, has thus far not been found on Boulder County properties, research is underway. In 2007 and again this year, Parks and Open Space approved university research to check water bodies on the plains for the presence of northern leopard frogs. Like the boreal toad, the decline of the northern leopard frog is attributable to changes in environmental conditions. They also have been displaced or preyed on against by bullfrogs, which have established themselves all across North America, far beyond their historic distribution. It is uncertain what type of recovery efforts can be implemented other than eradicating bullfrogs in these non-native areas. However, as of yet the county has not identified any important properties for existing threatened anurans.

The question remains: with the undeniable decline in anuran populations worldwide, can we spread the word about the importance of frogs and toads as bioindicators and work together to reduce our environmental impact? If we can, there is still time to reintroduce species into suitable habitats and stop this decline. Boulder County is doing its part to reverse this disturbing trend through conservation of land, support of university research, and restoration of the riparian habitats that these small creatures call home.



Leopard frog

NATURE DETECTIVES

Summer 2010



What's the Big Deal about Nature? Plenty!

Nature provides air, water, food, shelter and space. We survive because of nature. All animals do. Here is how it works, at least in part, starting with the air we breathe.

Amazing air. Plants produce the oxygen in the air we breathe so without plants we'd turn blue and die. Moving air (wind) helps spread seeds for new plants. Cold air forms clouds so rain and snow will fall back to earth providing vital water for plants, animals and all other living things.

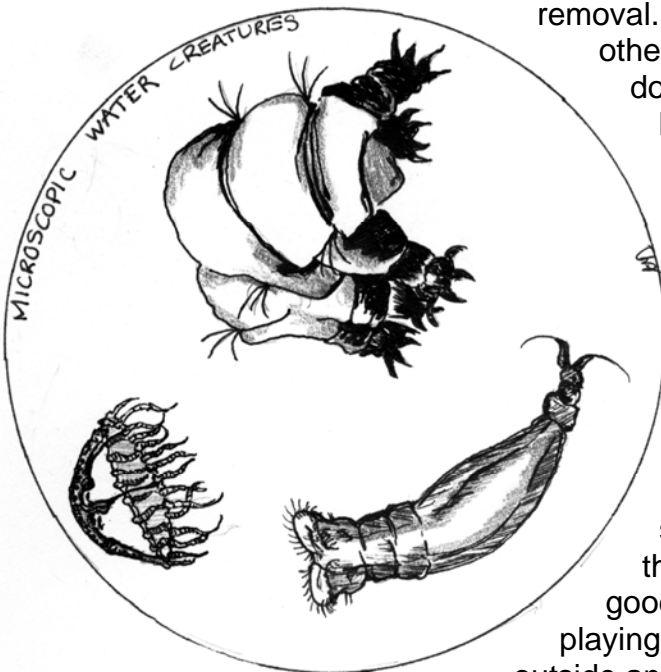
Wonderful water. Microbes in the soil remove pollutants from water as it percolates down to the underground water table. Along with streams and reservoirs, this underground natural "storage tank" is where we draw much of our clean drinking water. Nature's wetlands also scrub out pollutants from water, and they help prevent floods.

Fantastic food. Humans' first foods were simply gathered from nature. Now that we farm foods, we still need nature's bees to pollinate many of our crops. Micro-sized critters in the dirt help plants absorb nutrients making them healthier for us to eat.



Along with eating comes the necessity for regular rubbish removal. Lucky for us, bugs, bacteria, worms and other scavengers eat decaying things so we don't have yucky stuff piling up higher and higher around us.

Hooray for carrion beetles!



Secure shelter. Trees provide the lumber in a large portion of the homes that shelter us. Building materials come from rocks and metals found in nature, too.

Splendid space. For many kids some of the best times in life are spent outside, simply fooling around. Most people agree that being in natural spaces makes them feel good. It is hard to explain why we feel happy playing outside so you just might want to go outside and try it out.

Discovering Fun, Naturally

Sometimes the most fun thing to do in the outdoors, surrounded by nature, is...nothing. Really...just...sort of...nothing. For example, have you ever leaned against the rough bark of a tree and gazed up into the branches? Have you idly listened to the wind or birds or crickets? Did you lie on the grass and feel the sun on your face as you stared at clouds? Have you smelled sun-warmed dirt or the air after a rainstorm?

Few people ever witness the kinds of exciting animal scenes shown on TV, but if you spend enough time in nature, you'll make discoveries that will be all your own.

Dirt under your fingernails is often one sign you had fun just being outside.

Explore Rocks, Clouds and Water

Look for your own special rock. It should fit in your pocket and be easy to carry with you. Every time you touch it, it will remind you of outdoor adventures. You might enjoy reading *Everybody Needs a Rock* by Byrd Baylor for rock hunting inspiration.

Turn over rocks to see what's underneath, then turn them back again in respect for the critters whose shelter you just disturbed.

Follow a beetle or ant. What are the sights and sounds in the beetle's world?

Look for shapes in the clouds or watch the clouds race across the sky and guess which will be fastest.

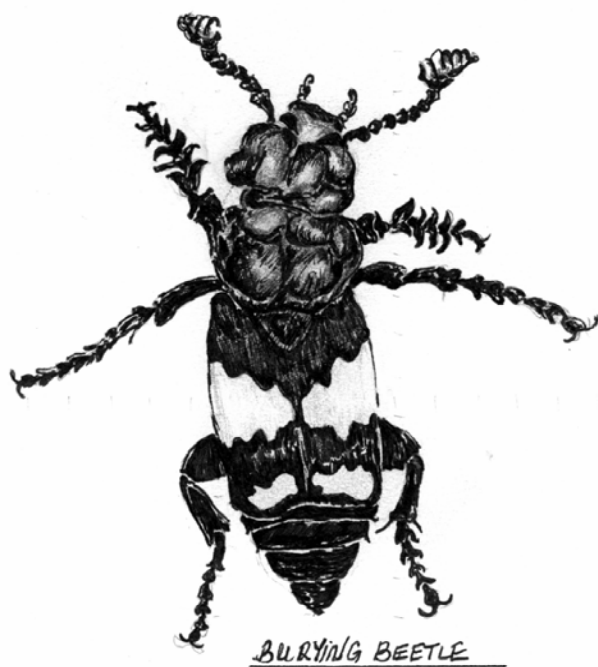
Make stick or leaf boats and float them in the runoff after a rainsquall.

Start a Nature Project

Plant a garden or even a single flower in a pot to tend, or fill a dish with clean water for songbirds every day.

Pick a specific thing to study such as the summer activity at a bird nest or the number of bees you can count in 10 minutes on a certain flower.

Write a poem or draw a picture while you are outside, or keep a log of what you observe when you are outdoors.



Get a Friend Involved

Go on a scavenger hunt with one friend or more. Make a list of things to find. Check them off as you see them. Your list might include: a feather, a sparkly rock, an old bone, a bug, something red, a bird song, a bird nest, an animal track.

Make a circle on the ground with a jump rope and see how many interesting things are within the circle such as bugs or unique rocks or teeny plants.

Go for a hike and count all the animal homes you see. Remember that some can be very tiny such as insect galls on leaves.

Build a make-believe, miniature fairy town from sticks, rocks, pinecones, leaves and other natural objects.

Build a fort or hideout. Trees are good for climbing, hiding behind and making into forts. Bushes often make good hiding places too.



Celebrating Dirt and Open Spaces

When you are exploring nature, look for a place with plants and dirt. Seek an area not covered with pavement or other hard surface. We often think of providing space for wildlife, but people need to have natural spaces, too.

When you are outside, remember to take care of nature. Every inch shelters living things. Every inch is important for all of us.

*I'm glad the sky is painted blue,
And the earth is painted green,
With such a lot of nice fresh air
All sandwiched in between.*

Anonymous

Find Nature – Join Nature Detectives Club

Where do you find nature? Maybe you could investigate the yard around your house or apartment. Nature discoveries can also happen in a city park or in a public open space park or forest. Boulder County Parks and Open Space has awesome places to explore from the prairie to the mountains.

Kids, ages 11 and under - join the Boulder County Parks and Open Space Nature Detectives Club! To be a member, all you have to do is visit the Open Space properties that are part of the Detectives series, find the Nature Detectives Mystery Guide for that park, and follow the guide's fun sleuthing activities as you explore.

After you have completed 3 of the 6 Mystery Guides in the series, you can send them to Parks and Open Space and receive a special prize – a sleuthing tool to use in your future nature adventures.

Visit the website, http://www.bouldercounty.org/openspace/Nature_Detectives.htm
-or-

Look for the **Nature Detectives Club Mystery Guides** at:

- Walden Ponds Wildlife Habitat
- The Agricultural Heritage Center
- Meyers Homestead at Walker Ranch
- Carolyn Holmberg Preserve at Rock Creek Farm
- Caribou Ranch (closed until July 1)
- Betasso Preserve



Field Notes

A Day in the Life of the Walker Ranch Caretaker



Left: Amanda gets qualified with the shotgun which is used only for hazing (non-lethal control) animals that have become a nuisance in parks—mainly bears and mountain lions.

Above: Amanda demonstrates how to operate a portable pump during her wildland fire refresher course.

A lot of people ask me about what a caretaker does from day to day. The best part about this job, besides living on-site of the historic Walker Ranch, is that no two days are ever the same. It's a great job for someone with a short attention span! As caretaker, we are part of the Resource Protection Team, meaning we are park rangers. Patrol makes up approximately 75 percent of our weekly duties. While I patrol at Walker Ranch as much as possible, I am still responsible for patrolling and responding to our other open space properties. For example, I could be hiking the Meyers Homestead trail and get called to an emergency at the Carolyn Holmberg Preserve at Rock Creek Farm. We all patrol our areas differently. I mostly hike the areas and occasionally, when I'm feeling brave, break out the mountain bike. Getting more comfortable on the bike is one of my goals for this year. During the winter months I snowshoe or strap on the skis if the conditions are right.

Open Space caretakers have other duties that vary depending on what property you are on. However, there are constants, such as making sure the bathrooms are clean and well stocked. We all take a lot of pride in making sure our trailheads are clean and presentable. Trailheads are your first impression, not only of that property, but also of Boulder County Parks and Open Space.

I also get to be involved in numerous volunteer projects that I either lead or participate in. Working with volunteers is one of the best parts of my job as well. I've had students help

me build some wildlife friendly fencing, while others have done forestry and trail maintenance projects. These projects are fun and rewarding. We have a lot to take care of and we wouldn't be able to do it without the help of volunteers.

Another perk of the job is participating in our Walker Ranch Homestead events. I trade my ranger uniform for a bonnet and calico dress and teach people about life on the late 1800's cattle ranch. The natural history of Walker Ranch is what first drew me to this area, but learning about the history is what has made me passionate about it.

The highlight of my career came this spring. As part of the Front Range Cougar study with the Colorado Division of Wildlife, we trapped and collared a 5-year old female mountain lion behind my house. I helped the researchers set the trap and do measurements on the cat as well. It makes me wonder how our chickens will fare this summer. Will they be an easy snack, or will they not be worth the risk to a skilled predator? It is a sobering reminder that we are visitors on this landscape and must do our best not to interfere with their daily lives—they were living here long before we or any of our predecessors have lived on this land. Hopefully, they will be here long after we are gone.

I take a lot of pride in my job. I have been chosen to take care of this very special place called Walker Ranch. The Walker family lived on this land for generations and left a rich history. I hope to protect and care for this area the best that I can so that many more generations will be able to enjoy it.

Amanda Hatfield is one of four department caretakers who reside on open space properties.

Getting Muddy for Good

by John Tayer

Director of Public Affairs and Communications, Roche Colorado Corporation

The chemistry and pharmaceutical manufacturing work at Roche Colorado is a pretty clean business. We always have to make sure that the medicines we develop meet exacting purity standards. There also is a special responsibility we have, when handling pharmaceutical production materials, to ensure that our procedures are protective of the environment.

With all of that attention to cleanliness during our day jobs, it sometimes is refreshing to discover an outlet that lets you throw those hygienic concerns to the wind . . . or in this case, the mud.

A Partnership Begins

Beginning last year, Roche Colorado engaged in a partnership with the Boulder County Parks and Open Space Department at the Mud Lake Open Space. The partnership began when a wonderful Parks and Open Space representative approached us with a menu of open space properties that need attention. Naturally, the chance to work at a place called Mud Lake appealed to our interests, and a partnership was formed.

The actual partnership agreement commits Roche Colorado to two work outings a year. In exchange, the great staff at Boulder County Parks and Open Space offers a nice breakfast to kick-start the day, some enlightening information regarding the natural environment, and all the tools you need. The staff also provides ongoing guidance and support throughout the day, never pushing anyone to work beyond their natural inclinations.

There are many things that make our volunteer days so appealing. The beautiful and ever-changing surroundings certainly make each trip up to Mud Lake special. There also is a good mix of projects during each day, ranging from trail maintenance to seed collection. This leads to a good balance of volunteer activities that satisfy a broad spectrum of interests and physical abilities.



Everyone Benefits

What is most rewarding, though, is the sense of accomplishment our Roche Colorado volunteer teams feel after a day of work. It is impressive to look back at what you achieved after only a few hours. It is especially gratifying to watch as other park visitors enjoy the fruits of your work and you know we made lasting improvements to this natural setting.

Another side benefit of the outings to Mud Lake is the opportunity they create for employees to get better acquainted with their co-workers. These personal connections are further enhanced by the ability to invite employee spouses, kids, and friends to participate. The personal relationships employees form through the Mud Lake projects help to build stronger workplace teams.

Down and Dirty

Oh, and one other nice thing . . . you can get as down and dirty as you want at Mud Lake.

Whatever the draw is for you, Roche Colorado encourages other companies to join in this wonderful partnership opportunity through the Boulder County Parks and Open Space Department. The work is rewarding, from both a personal and business perspective. Most importantly, it is a chance for your company and employees to help maintain the natural assets that make Boulder County such an attractive place to live and work.



At left: Volunteers remove a tree as they help to close a social trail at Mud Lake.

Above: The team from Roche Colorado at Mud Lake in summer 2009.

Discover Boulder County

A CALENDAR OF NATURAL AND CULTURAL HISTORY EVENTS

Sunset Hikes

Discover your Boulder County open spaces! Boulder County Parks and Open Space is again offering weekly nature hikes this summer. These slow paced hikes cover an array of topics. Volunteer naturalists interpret each park's history, geology, ecosystems, plants and wildlife, and current resource management projects.

Sunset hikes begin at 6:30pm, conclude at sunset, and involve about 2 miles of easy to moderate hiking. Sunset hikes are suitable for all ages. An adult must accompany children and no pets are permitted.

For more information or directions to a park, call Larry Colbenson at 303-678-6214.

Monday, June 7	Rabbit Mountain Open Space
Tuesday, June 15	Carolyn Holmberg Preserve at Rock Creek Farm (meet at Stearns Lake Trailhead)
Wednesday, June 23	Heil Valley Ranch Open Space (Lichen Loop Trail; meet at group picnic shelter)
Thursday, July 1	Pella Crossing Open Space
Friday, July 9	Betasso Preserve
Monday, July 12	Mud Lake Open Space
Tuesday, July 20	Bald Mountain Scenic Area
Wednesday, July 28	Heil Valley Ranch Open Space (Lichen Loop Trail; meet at group picnic shelter)
Thursday, August 5	Caribou Ranch Open Space
Friday, August 13	Betasso Preserve
Monday, August 16	Walker Ranch Open Space (meet at Meyers Homestead Trailhead)
Tuesday, August 24	Bald Mountain Scenic Area

Wildflowers of Bald Mountain Scenic Area

Saturday, June 5; 10:00am to noon

Bald Mountain Scenic Area; 5 miles west of Boulder on Sunshine Canyon Drive (Mapleton Ave. within Boulder city limits)

Join us on a one-mile loop trail to the summit of Bald Mountain, where you will be rewarded with views from the Continental Divide to the Boulder Valley. Along the trail, volunteer naturalists will help you identify and enjoy the variety of wildflowers found in June.

Fish Hawks of Boulder County

Saturday, June 12; 9:00am to 10:30am

Lagerman Reservoir; off Pike Road, between North 63rd and North 75th Streets; meet at the picnic shelter

What hawk-like bird has a white head, eats fish, and spends the summer and nests in Boulder County—and is not a bald eagle? The answer could only be osprey. Join volunteer naturalist Cindy Maynard to learn about this bird of prey. An osprey pair has nested at Lagerman Reservoir for over 10 years, and we may see adults and young looking for food and trying out new wings. Bring a bird field guide and binoculars if you have them.

Fire and Flowers of Walker Ranch

Sunday, June 13; 9:30am to 11:30am

Walker Ranch; approximately 7 miles west of Boulder on Flagstaff Road; meet at Meyers Homestead Trailhead

Walker Ranch is home to abundant wildlife, ponderosa pine forest, and meadows full of wildflowers. Walker Ranch is also the site of a wildfire that occurred in September of 2000. We'll identify and enjoy the flowers as we see evidence of the fire along our hike and talk about fire ecology in ponderosa pine ecosystems. Volunteer naturalists will lead this easy one-mile hike.

I Spy Animal Builders

Tuesday, June 15, 2010; 9:30am to 10:30am

Pella Crossing Open Space; about one mile south of the town of Hygiene, on the east side of N. 75th Street (meet at the picnic shelter east of the parking lot)

Busy beavers and other animals use creative techniques to produce structures from materials in their environment. You can too! Join volunteer naturalist Diane Faigen and design an object inspired by nature. We will take a short hike before we start our project. This program is for preschool children and their families.

Discover Boulder County

A CALENDAR OF NATURAL AND CULTURAL HISTORY EVENTS

Birds and Rocks of Rabbit Mountain

Thursday, June 17; 6:30pm to 9:00pm

Rabbit Mountain Open Space; NE of Lyons on north 55th Street; meet at group picnic shelter

Join volunteer naturalist and geologist Dick Pratt for an evening hike to learn about the interesting geology underfoot, and the birds overhead. Be prepared for 2 to 3 miles of moderate hiking. This hike is geared for adults and older children.

The Wonder of Walden: A Write & Sketch Hike

Saturday, June 19; 9:30am to 11:30am Walden Ponds Wildlife Habitat Area; 75th Street between Valmont Road and Jay Road; meet at group picnic shelter near Cottonwood Marsh

Engage with the outdoors through nature writing. Volunteer naturalist Ellen Orleans will introduce sketching and writing techniques that anyone can do, and then we will take off for a sensory walk through the wetland ecosystem sketching cat-tails, clouds, birds or anything else that catches our eyes, noting sounds, smells, and textures we encounter. All ages and experiences are welcome. We will supply paper and pencils.

Circle of Stones Hike: A Woman's Journey to Herself

Saturday, June 26; 9:30am to Noon

Meeting location will be provided to registered participants

Boulder County volunteer naturalist Louise Alderson will lead a walk with nature to experience inner wisdom and honor the feminine within us, each other, and in the world. This nature program, based on the book *Circle of Stones* by Judith Duerk, will include reflection, writing, and sharing time. For women of all ages. Be prepared for a moderate 1.5-mile hike. **Register by calling 303-678-6214 by Thursday, June 24.**

Night Hikes

Join volunteer naturalists for an evening of exploring nature under cover of darkness. We'll hike about 2 miles roundtrip on a moderate trail, enjoying the starlight, listening for night sounds, and learning about some of the nocturnal habits of the critters that live here. Bring suitable clothing for the weather, a flashlight, and your night vision. (See the map on the back page for location of parks.)

Monday, June 21; Heil Valley Ranch; 8:30pm to 10:30pm

Wednesday, July 14; Walker Ranch 8:00pm to 10:00pm

Tuesday, August 10; Bald Mountain Scenic Area; 8:30pm to 10:00pm

Barnyard Critter Day

Sunday, June 27; 10:00am to 4:00pm

**Boulder County's Agricultural Heritage Center
8348 Highway 66, between Lyons and Longmont**

Come to Barnyard Critter Day and learn about the roles of chickens, pigs, horses and other animals on a farm. Animals have always been part of our lives. Join us as we explore the roles of domestic animals and even wildlife found on the ranch. See demonstrations of sheep herding and horse-shoeing, visit with chickens and pigs, and take a ride on a horse-drawn wagon.

Please leave pets at home so our working animals will not be disturbed. For more information, call 303-776-8848 or email tmcmichen@bouldercounty.org



Wildflowers of Mud Lake

Sunday, June 27; 10:00am to noon

Mud Lake Open Space; 2 miles north of Nederland on County Road 126; meet at parking lot kiosk

Celebrate the beginning of summer by searching for the first wildflowers of the season. We will hike two easy miles through beautiful montane forests and meadows identifying and learning about the flowers as we go. Be prepared to hike at an elevation of about 8,500 feet, and bring a rain poncho.

I Love Bugs!

Tuesday, June 29; 6:30pm to 8:00pm

George Reynolds Branch Library; 3595 Table Mesa Drive, Boulder

Join volunteer naturalist Ann Cooper for a colorful slide show introduction to the wild world of mini-beasts. Meet the local creepy-crawlies and see how they fit into the natural scene. Whether you love them or hate them, they are hard to ignore, because they're everywhere, so come and get acquainted!

Discover Boulder County

A CALENDAR OF NATURAL AND CULTURAL HISTORY EVENTS

Wildflowers of Caribou Ranch

Saturday, July 3; 9:00am to 11:30pm

Caribou Ranch Open Space; 2 miles north of Nederland on County Road 126; meet at parking lot kiosk

Escape the summer heat and enjoy beautiful wildflowers! We will hike two easy miles through the beautiful montane forests and meadows, learning about the wildflowers as we go. Participants should be prepared to hike at an elevation of about 8,500 feet, and bring a rain poncho.

Fabulous Flora and Fauna of the Montane Wetlands and Forests

Saturday, July 10; 10:00am to noon

Mud Lake Open Space; 2 miles north of Nederland on County Road 126; meet at parking lot kiosk

Escape the summer heat and join volunteer naturalists Nancy Beaudrot, Roger Myers and Therese Pieper for a moderate 2-mile hike through scenic open space while learning about animals, trees, shrubs and wildflowers and some of the geologic features of the Mud Lake area that affect this ecosystem. The hike ends at a spectacular site for a picnic! Bring binoculars if you have them.

Recreating History: The Adventures of a Modern-day Range Rider

Saturday, July 17th, 2010; 6:00pm to 7:30pm

Agricultural Heritage Center, 8348 Ute Hwy 66, Longmont, 1.4 miles west of the intersection of Hover St. and Hwy. 66.

In early 2008, cultural history volunteer, Fred Thrall put together a three-week, mostly-solo trip on horseback covering 300 miles of some of the most remote open range in the continental U.S. He recreated a mid-19th century frontiersman's ride along the portion of the Oregon Trail that lies between Ft. Casper and Ft. Bridger, Wyoming. Join us as Fred and his equine companion Skywalker share highlights of the trip, showing us the gear he took, telling us about his average camp, what he ate, where they found shelter during inclement weather, and other details.



Butterflies and Other Flying Creatures

Sunday, August 1; 9:00am to 11:30 am

Heil Valley Ranch Open Space Lichen Loop Trail; North of Boulder off Lefthand Canyon Drive; meet at group picnic shelter

Volunteer naturalist Jan Chu will lead this walk along trails and meadows in search of late summer butterflies, birds, and other flying insects. See how creatures in the foothills find the food, water, shelter, and space needed to survive. We'll talk about butterfly behavior and life cycles, and learn some tips on identification. Bring field guides, binoculars, and a snack, if you choose.

Living in Lion and Bear Country

Saturday, August 21; 9:00am to 11:00am

Heil Valley Ranch Lichen Loop Trail; North of Boulder off Lefthand Canyon Drive; meet at group picnic shelter

Join Boulder County volunteer naturalists for a moderate 1.5-mile hike and learn about the ecology and behavior of our local mountain lions and black bears. As we hike along the loop trail, we'll talk about why the foothills of Boulder County are such good habitat for lions and bears. We'll also discuss hunting and feeding habits, and what to do if you meet a lion or bear.

All That Glistens Is Not GOLD

Saturday, August 21; Noon to 2:00pm

Meeting location will be provided to registered participants

Although you won't strike it rich at this introduction to the art of gold panning, if you do find gold, you get to keep it. Join us for a fun afternoon as we explore one of the primary activities that led to the development of Boulder County. This program is free and open to all ages, but space is limited to the first 25 people who register. For more information or to register, call 303-776-8848. Please leave your full name and phone number.

All Programs

All ages are welcome unless otherwise noted. NO PETS PLEASE! Be prepared for summer temperatures. Bring drinking water and wear closed-toe walking/hiking shoes. See the back cover for park locations. For information about these programs, or to arrange a volunteer-led program for your group, please call 303-678-6214.

Discover Boulder County

A CALENDAR OF NATURAL AND CULTURAL HISTORY EVENTS



Summer at Walker Ranch

Sunday, July 25; 10:00am to 4:00pm

Walker Ranch Homestead; 7701 Flagstaff Mountain Road, approximately 7 miles west of Boulder on Flagstaff Road

Summer is the height of the growing season for those who make their living raising crops and cattle. At this event, volunteers will tend to things like weeding the garden, making shingles, and cutting hay.

We will take a break in the afternoon to enjoy a vintage base ball game where the Walker Ranch Boys will take on their rivals, the Denver Bluestockings.

Join us at the homestead as costumed volunteers demonstrate various chores associated with rural living in the late 1800s. Try your hand at beating a rug, planting potatoes, or churning butter.

Activities demonstrated also include doing laundry the old-fashioned way, woodworking, wood stove cooking, blacksmithing and children's games. Guided tours of the homestead will be offered each hour.

This event is free and open to all ages. For more information, please call 303-776-8848 or send an email to tmcminen@bouldercounty.org.

Please note: Dogs and bicycles are not permitted on the site.

Visitors are invited to bring a picnic lunch to enjoy at nearby Walker Ranch Open Space picnic sites.

Summer Catfish Nights

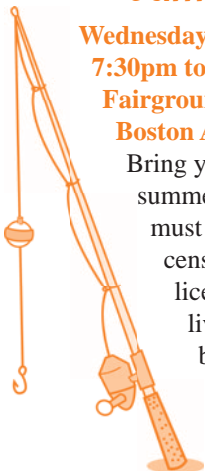
Wednesdays, June 16, July 14 and August 11

7:30pm to 11:00pm

Fairgrounds Lake, Hover Road & Boston Avenue in Longmont

Bring your family and friends and enjoy a summer night fishing at the lake! Anglers must have current Colorado fishing license (kids under 16 years don't need a license). Open to shore fishing only. No live bait (however worms and stink bait are okay) Check-in required at parking lot area off Boston Avenue.

For more information, call 303-678-6204.



Nature Hikes for Seniors

Boulder County Parks and Open Space hosts a nature hike for seniors every month. Programs include information about an area's history, wildlife and current resource management projects. For more information, call 303-678-6214. Please call in advance if you plan to bring a large group, so we have enough naturalists at the program. **Programs begin at 10:00am and end at noon.**

June 24; Mud Lake Open Space

July 29; Bald Mountain Scenic Area

August 26; Caribou Ranch Open Space

Caribou Ranch Open Space Opens with Ribbon-Cutting on July 1

Caribou Ranch Open Space will reopen to visitors on Thursday, July 1 after the annual spring closure to protect spring migratory birds and elk activities.

The Parks and Open Space Department will also open the Blue Bird Mine that afternoon.

A ribbon-cutting ceremony will take place at 2pm at the Blue Bird Mine complex -- 1.3 miles from the trailhead.

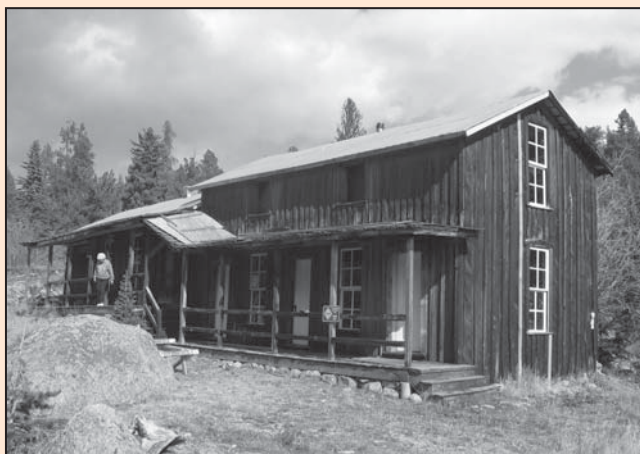
Visitors will be able to walk around the mine complex where several buildings were restored by the department – providing a window into Boulder County’s hard rock mining history. The site also was a ‘whistle stop’ on the Eldora Line of the Switzerland Trail of America in early 1900s.

A donation for the trail extension through the complex and four interpretive panels made by the family and friends of Paul S. Greenwald in his memory will also be celebrated at the opening ceremony.

Immediately following the ribbon-cutting, volunteer naturalists will lead a nature hike back to the main parking lot for anyone interested.

For those unable to hike or ride their horse to the Blue Bird Mine complex, a van shuttle will be available. Please contact Sukey Williams at swilliams@bouldercounty.org or 303-678-6222 for further details.

Caribou Ranch Open Space is located on County Road 126, approximately two miles north of Nederland. For additional information about the property, visit the department’s web page at www.BoulderCountyOpenSpace.org.



See the restored bunkhouse when you visit the newly opened Blue Bird Mine complex at Caribou Ranch Open Space. A ribbon cutting ceremony on July 1, 2010 celebrates the restoration of several buildings visitors can see.

Farm Tours This Summer

As part of the development of the Cropland Policy, Boulder County Parks and Open Space will offer tours of local farms this summer on the second Monday of each month, from 5:30-8:30pm.

Tours will show participants the spectrum of agricultural production systems, issues, challenges and opportunities on Boulder County open space lands. Each month highlights different farms, representing field and forage crops, vegetable crops and livestock. Farmers will be available to answer questions. If you’d like to join us, register by visiting the department’s web-page at www.bouldercounty.org/openspace/management_plans/cropland_policy/index.htm

The department’s mission is to conserve natural, cultural and agricultural resources and provide public uses that reflect sound resource management and community values. Boulder County Parks and Open Space manages 25,000 acres of agricultural land—18,000 of those acres are managed as cropland or irrigated pastureland. The Cropland Policy is designed to address the gap between the department’s daily management practices and the Boulder County Comprehensive Plan’s directives regarding the management of open space and agricultural land.

The policy will outline guiding principles that staff will use to make management decisions on open space properties managed as cropland. By defining these principles, we hope to streamline decision-making processes during planning and make it easier for our tenants and the residents of Boulder County to understand the goals of our cropland program.

The cropland policy will develop long-term strategies for continued agricultural production and management of the 25,000 acres of agricultural land. The policy will address topics such as sustainability, organic production systems, conventional production systems and carbon sequestration.

The Boulder County Commissioners will also appoint a citizen advisory group to help guide development of the cropland policy. Applications will be available late summer 2010.

Parks and Open Space is Online!

Don’t miss a nature hike or indoor program!

Sign up for a monthly email list of our events and programs!

1. Go to www.bouldercounty.org/openspace
2. Click on **Hikes and Events** on the left side of the page.
3. Scroll to the bottom of the screen and enter your email address in the box to receive our listing of programs.

Find Us On Facebook

“Like” Boulder County Parks and Open Space to get the latest news.

We’re on Twitter

Follow us from your Twitter account.

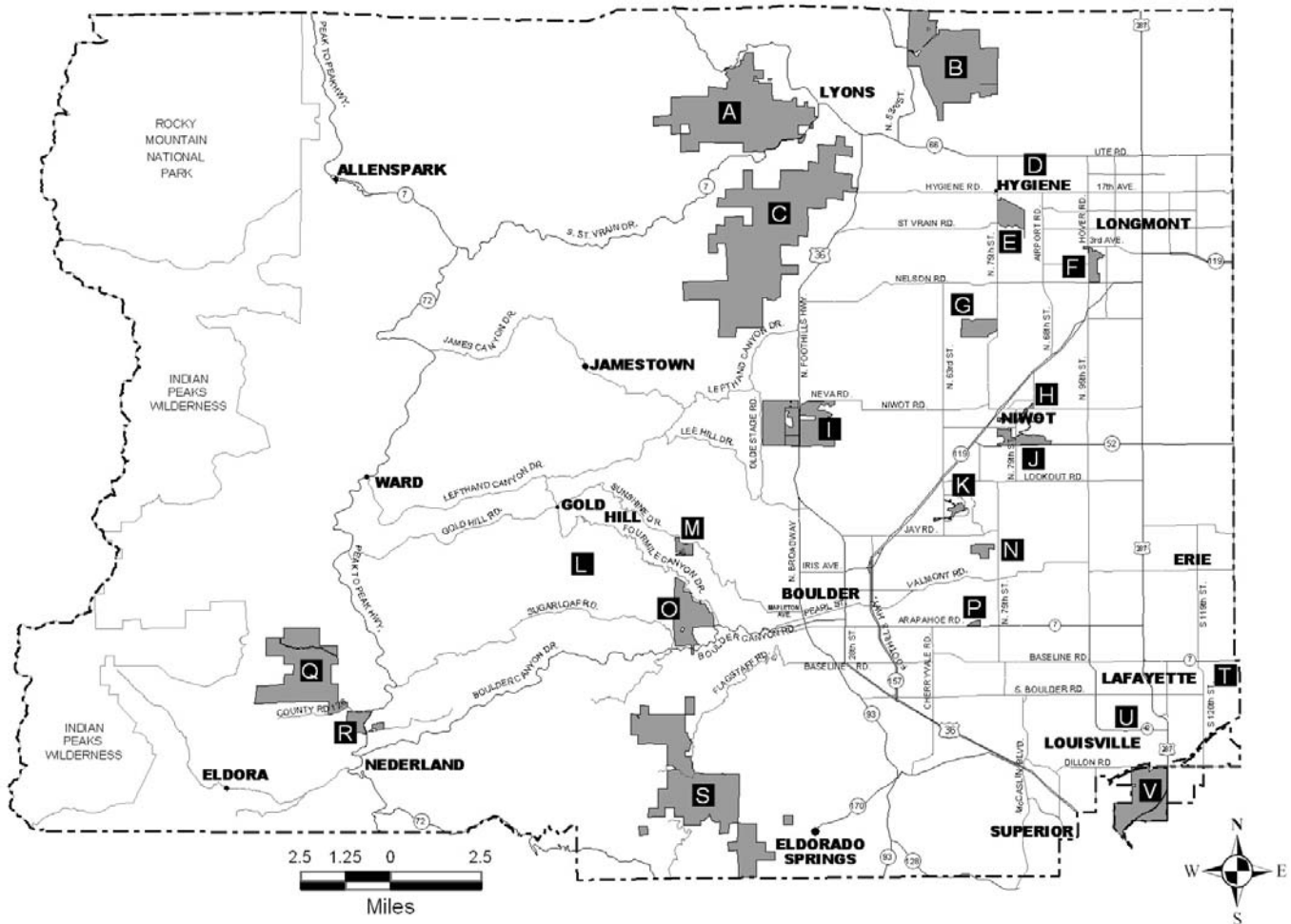




PARKS & OPEN SPACE DEPARTMENT
5201 St. Vrain Road
Longmont, CO 80503
303-678-6200

www.BoulderCountyOpenSpace.org

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| A. Hall Ranch | H. Lefthand Valley Grange | P. Legion Park |
| B. Rabbit Mountain | I. Beech Open Space | Q. Caribou Ranch |
| C. Heil Valley Ranch | J. Niwot Loop Trail | R. Mud Lake |
| D. Agricultural Heritage Center
at Lohr/Mcintosh Farm | K. Twin Lakes | S. Walker Ranch |
| E. Pella Crossing | L. James F. Bailey Assay Museum | T. Flagg Park |
| F. Boulder County Fairgrounds | M. Bald Mountain Scenic Area | U. Coal Creek Trail |
| G. Lagerman Reservoir | N. Walden Ponds Wildlife Habitat | V. Carolyn Holmberg Preserve
at Rock Creek Farm |
| | O. Betasso Preserve | |