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# IMAGES

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

## PHOTOGRAPHS & ILLUSTRATIONS

Cover: *Water Drops on Aspen Leaf*, Mike Lohr  
*Shrub Monitoring*, Dave Hoerath  
*Aspen Grove*, Pouria Montazeri  
*\*Uncredited photos from POS Collection*

## NATURE DETECTIVES

Cindy Hutchins and Pam Sherman.  
Illustrations, Carol Tuttle

## EDITORS

Summer Alameel and Pascale Fried  
*Suggestions and comments are welcome.*  
*Please contact us at [salameel@bouldercounty.org](mailto:salameel@bouldercounty.org).*  
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Volume 45, number 3



**Parks &  
Open Space**

# Scientists Don't Always Wear a Lab Coat...

by Andrea Van Sambeek

Sometimes scientists wear Carhartt's and a winter coat. At least that is true for our wildlife biologists and volunteers who measure the impact of elk on shrubs at the Ron Stewart Preserve at Rabbit Mountain Open Space (RSP@RM).

The team specifically measures mountain mahogany plants. This native shrub is an important food for elk when grass is under snow. Vegetation monitoring showed significant impact when the elk herd reached its peak of 360 elk in 2016. Shrubs that have been chewed by elk exhibit a "clubby" growth pattern and will show very little new growth. That is why the department uses them as an indicator of how much impact elk have on their environment. We are tracking the impact over time as the elk management plan on the property takes effect.

In late fall and throughout winter, teams of volunteer citizen scientists and our biologists trek out 11 transects on the property. We go at this time of year for several reasons — it is a time when we will have less impact on the shrubs since their seasonal growth is complete and it is also when we are least likely to encounter an abundant resident, the prairie rattlesnake. Six of our transects are in an area identified as a high-use area for elk, while the other five are located where elk are not typically found.

Once the start of a transect is located, one researcher will walk 75 meters along a tape while the rest of the cohort gives direction to keep that person on bearing. In some of our control transects, the tape walker is pushing through shrubs over six feet tall. It's easy to get a little off track when you can't see out! Last year I joined in the fun and discovered what a challenge it can be to stay on course when navigating through shrubs that were taller than I am. Mountain mahogany is quite resistant to humans trying to walk in a straight line. Perhaps that is why we found so many bobcat tracks among these dense stands. The shrubs provide excellent habitat for the bobcat as well as the rabbits they hunt.

## LET'S REVIEW THE DATA

We measured individual shrubs every five meters on each side of the tape until a total of 50 individual plants were examined. Each shrub has an approximate age, height, and clubbiness quotient recorded. Then we used a cover blanket to measure how much area is covered by mountain mahogany. We placed the blanket at 15-meter intervals so that a photo can reveal percent of

coverage by the shrubs. The cover blanket shows how full and healthy plants may be against a measurable backdrop: lush and tall in the control area; short and clubby in the treatment area. Measurements over time will show how the shrubs in the treatment area recover. Of course, all of this is made nearly impossible if the wind doesn't cooperate. Our cover blanket becomes a sail in the wrong conditions. The data is compiled by wildlife biologists to determine what impact the elk have in areas where elk are known to feed versus the areas where the elk are absent.

Trends in data over the years are promising. According to wildlife biologist Dave Hoerath, "The subunit harvest is working. Population numbers are down, occupancy in the elk core use area at RSP@RM is much reduced, and there are some indications of healing in trail corridors, bedding areas, and heavily browsed shrub stands."

If you are interested in becoming a volunteer shrub monitor this year, apply by Sept. 30, at [boco.org/volunteer](http://boco.org/volunteer).

**A BRIEF HISTORY OF ELK AT RON STEWART PRESERVE AT RABBIT MOUNTAIN**

You may be thinking to yourself, "Wait, I've been to Rabbit Mountain loads of times and I've never seen an elk. How can we possibly need to manage the elk population there?"

It's true, that the elk herd is often difficult, if not impossible, for the casual visitor to see, especially without binoculars. However, the animals are there. Historically, and until about 2010, this open space hosted a herd of about 25

to 75 elk. In the summers the herd sized diminished down to about 30, and elk migrating down from the mountains would swell the herd up toward about 75 in the winter season.

Around 2010, the herd started a dramatic increase, reaching a peak of more than 350 elk in 2016. The animals were causing significant impacts to vegetation, both on the preserve as well as in neighboring farm fields. There was also damage to infrastructure and an increase in collisions with vehicles.

All these factors led to the necessity of a management plan for this herd. Boulder County Parks & Open Space partnered with Colorado Parks and Wildlife to create a hunting subunit that included RSP@RM along with mostly privately held lands. The goal was to bring herd size back down to the 30 to 75 elk so that vegetation and habitat could recover to sustainable levels. Not only would hunting bring numbers down, but it would also influence the behavior of the herd so that not as many elk would stay on property year-round.

And it's working! Our native plants are starting to bounce back. We are close to the target number. This year, there will be only two hunters on property per week (in years past there were three). In addition, hunting will start later in the year and be allowed only on Mondays and Tuesdays rather than three days a week. The department will continue to partner with Colorado Parks and Wildlife to conduct annual counts, and our shrub monitors will keep checking to observe the impacts of elk on our native plants.



# The Rundown on Rodents

by Anne Cooper

## What is a rodent?

A gnawing mammal of an order that includes rats, mice, squirrels, hamsters, porcupines, and their relatives, distinguished by strong constantly growing incisors and no canine teeth. They constitute the largest order of mammals.

If you search the term “rodent” on the internet, it’s telling. Besides a dictionary definition (above), the web pages include health cautions, extermination services, how-to traps, and more. Apparently, lots of people regard these animals as unwelcome, dirty pests. Dig deeper, and you’ll find a rich wild world of amazing animals with intriguing lifestyles.

Four out of 10 species of mammals are rodents in Colorado and worldwide. In sheer numbers of mammals alive at one time, rodents probably outnumber all other mammals combined, including people.

Some rodents are vegetarian, gnawing away at everything from tree bark to cattails to succulent seeds. The grasshopper mouse — a carnivore — consumes a wide variety of insects. Some rodents, alas, make meals of bird seed from feeders, trash from carelessly filled garbage cans, and insulation from wiring. That’s in part why they get a bad rap.

Colorado is home to almost 60 rodent species. Many of them are small, secretive, and seldom seen as they scurry along runways through the grass, tunnel beneath snow, or den underground. Some small rodents were recognized as living here only after their teeth or bones turned up in the scat of predators and the pellets of owls.

Rodent teeth are remarkable. They grow continually, and the animal gnaws all the time to sharpen and trim their chisel-like incisors. One weather-whitened skull revealed still-orange-coated incisors, but the teeth were loose and when pulled, came out of the tooth sockets as semicircles of teeth in reserve.

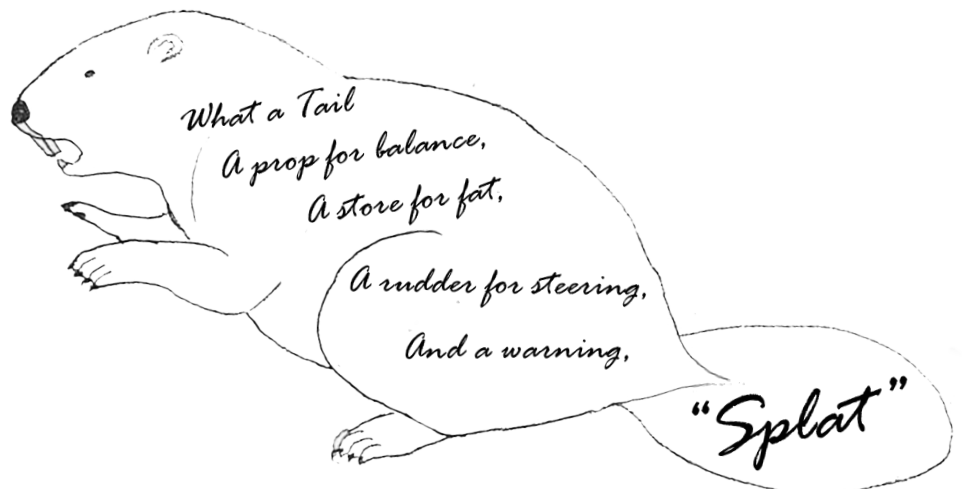
Rodents have been around for roughly 65 million years. Globally, they live everywhere except Antarctica. In Colorado they’re found from tundra (think of yellow-bellied marmots) to wetlands (beavers and muskrats); from woodlands and treetops (fox squirrels, chickarees, Abert’s squirrels, chipmunks, and porcupines) to grasslands (prairie dogs, voles, and mice).

Small rodents — mice, voles, and chipmunks — occupy the lowest rungs of the “food chain,” a prey

for foxes, coyotes, badgers, weasels, owls, hawks, and snakes. If it were not for this predation, ecosystems would be overrun with small rodents. Deer mice can produce from one to 11 babies (they average four to six) in each litter, and litters are produced year-round, from five to 10 litters a year; do the math!

## WHAT FOLLOWS IS A SAMPLER OF WATCHABLE LOCAL RODENTS:

Our largest rodent (up to 50 lbs.) is the beaver. It mainly eats bark, buds, and leaves and twigs of aspens and willows. Its flat tail is amazingly versatile. (Note: the similar but smaller muskrat has a skinny, side-to-side moving tail.) The beaver’s legendary dam building skills slow up water runoff and help prevent deep gullies from forming.



The porcupine is Colorado's second-largest rodent. Active year-round, it lives by eating the bark, buds, and foliage of shrubs and saplings.

Look for map-shaped patches left after bark-stripping. Their quills serve as a superb defense against most predators, but porcupines cannot "throw" their quills; they merely detach easily.

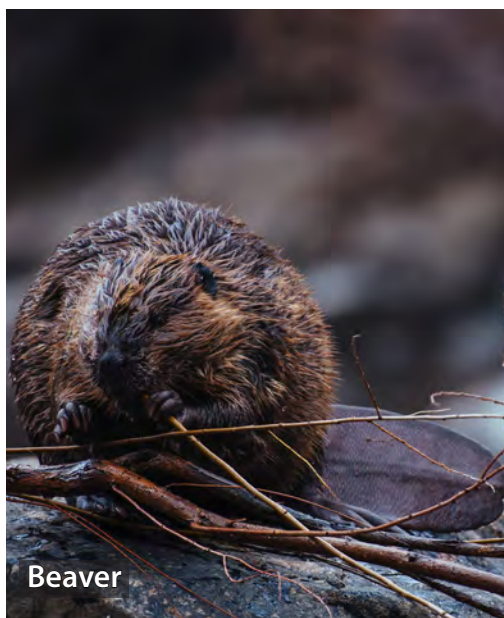
Arguably the cutest rodents are chipmunks. They may hold seeds in their front paws as they eat, or stuff seeds into their pouchy cheeks and scurry away to hideouts safer than open ground to chow down.

The tassel-eared Abert's squirrel inhabits ponderosa pine woodlands, where it feasts on inner bark from the pines' tender terminal branches, scattering tell-tale short, peeled twigs

beneath favored eating trees.

Colonial black-tailed prairie dogs, whose extensive underground tunnels are habitat for various other creatures, is a "keystone species" vital to its ecosystem. Without prairie dogs the whole grassland web of life might collapse. Prairie dogs are vocal, using a complex language of yips and barks to keep the group cohesive and warn colony-mates in detail of predators and intruders.

Smart, agile, and devious, the fox squirrel is an immigrant, having trekked here from the east along treed waterways. It's now at home in people-places. Watch it tight-rope along wires to cross highways, scurry down trees with amazing agility (it rotates its hind feet to aid swift descents), and raid almost every bird feeder ever invented.



Beaver



Porcupine



Chipmunk



Abert's squirrel



Prairie dog



Fox squirrel

# The Hidden Messages of Aspen Trees: A Contemplative Look

by Pouria Montazeri

My early connection to nature was based on a symbiotic relationship. I was fortunate to have never been exposed to an anthropomorphic perspective and relationship with the more-than-human world. Rather, my experience was one of poetic and spiritual resonance with all I observed — the unity that a youngster experiences before labels are introduced and his ways of seeing are irrevocably altered. What I witnessed in nature were not external objects separated from me, but rather reflections of myself bringing me back home in moments of life when the sense of personhood eclipses one's essence. Thus, everything seen has a hidden message accompanying its external appearance. I was taught to attune with nature, viscerally, rather than just observing it voyeuristically.

My childhood love affair with aspen trees, which continues to this day, is an example of ways I have heeded nature's hidden messages:

## MAKING VISIBLE WHAT IS INVISIBLE (LEAVES)

I love how aspen leaves, resembling the shape of a human palm, make the sound of rain in the presence of wind, symbolizing selflessness, flexibility, and adaptability.

I will never forget the day I was captivated by the trembling leaves of an aspen grove at a young age. I suddenly had a realization: my perception shifted from merely seeing how the leaves were trembling to noticing the invisible breeze that caused them to move. I recognized that their movement was simply making visible what was invisible.

This subtle, yet profound realization gave me the choice to shift my focus to either seeing the form or allowing the form to inform me of the invisible — the presence of wind. Since then, I've been looking for deeper significance in everything I encounter.

*Who would I be if I could see and feel the invisible as clearly as I do the visible?*

## SEEING UNITY IN THE MIDST OF MULTIPLICITY (ROOT SYSTEM)

A few years back, I went on the Pilgrimage to Pando, sponsored by Pando Populus, at Fishlake National Forest in Utah. Pando is a clonal organism representing an individual male quaking aspen. On this contemplative journey to the home of the world's largest living organism, I spent quality time in the Pando groves, where over 47,000 aspen trees share the

same genes. The trees in this clone have identical features and a common root structure. They are essentially the same tree.

This was a humbling reminder that despite appearances, in essence, everything is interconnected — different forms through which the same source expresses — a reality that the naked eyes fail to see; a bluff of the mind since only the form it sees.

*Who would I be if I viewed every-thing and every-one in this manner, and worked on unification and not differentiation — the principle of interconnectedness?*

## PRUNING AWAY (ASPEN EYES)

Walking through the aspen groves, I always have the feeling that I am being watched by God's eyes.

Aspen trees go through a rigorous self-pruning process. As they become overtopped, the amount of light reaching the lowest branches decreases substantially. So, aspen eyes are actually dark markings on the main trunk where side branches once lived.

Their self-pruning wisdom reminds me that true insight comes only when I too choose to prune away all that no longer serves me and prevents my light — the superficial levels that are shaped by social conditioning, fears, judgments, and forgetfulness. Such conscious self-pruning has the power of unfolding the kind of inner eyes that can truly see life as it is.

*Who would I be if I weren't burdened by the accumulation of all that doesn't serve my heart's longing?*

I invite you to discover, with an open heart and mind, the messages embedded in everything around you the next time you're out in nature.



# NATURE DETECTIVES

Fall 2023



## Please Pass the Peas!

### What's a Pea?

Everyone knows that! It's a round green thing you stab with a fork or balance on a spoon and eat. But did you know that a pea is also a bean? What?

### It's All in the Name

Peas and beans are actually like first cousins in the same family. Their family name is "Legumes." When we say "The Legume Family" we are talking about peas or beans or both.

### Where Do Beans and Peas Grow?

Did you know that peas and beans grow naturally in the wild as well as in our farm fields? The Pea/Bean Family – The Legume Family – is one of the biggest plant families on earth! It's found on every continent except Antarctica. It includes tiny plants in alpine areas to gigantic trees in the tropics. We have plenty of wild ones in Boulder County, too.

### How Can You Tell It's a Member of the Pea/Bean Family?

Whether you are on a farm or in the forest, you can tell a member of the Legume Family by its beautiful flower, which looks like butterfly wings.

And yes, peas are usually round and green and beans are usually oblong (but not always). Beans come in wider range of colors and patterns than peas. There are other differences, too, but here we will focus on their similarities as members of the same family.

The part we eat is the plant's fruit! The fruit we harvest—the bean or pea—is actually next year's seed! When we plant it, we call it the seed.



## True Story



A shopper in a store selling bulk beans and peas once brought a pound of beans and a pound of peas to the checkout counter and asked the clerk, "Where do you have bean and pea seeds? I want to plant some." What do you think the clerk said? ("You just bought them!")

## How do Beans, Peas, People, and Land work together?

People have been growing legumes for at least 8,000 years to eat and feed cows, pigs, and chickens. In our county farmers and gardeners

grow all kinds, including pinto beans, soybeans, alfalfa, clover, garden peas, field peas, green beans, runner beans, butter beans, and broad beans (favas).

Our many native wild peas/beans in Boulder County are members of wild habitats. You might know them as vetches, clovers, wild peas, lupines, locoweeds as well as honey locust, licorice, lead plant, golden banner, and more. One of our favorite pollinators – native bees – really likes legume flowers.

## The Legume Family Does Something Very Special and Unique

It's something most other plants cannot do. Animals and people can't do it.

It all starts with a gas called nitrogen.

Humans, animals, and all other plants need this gas, nitrogen, to grow, live, and be healthy. We can't grow and live without it.

There's lots and lots of nitrogen in the air around us. But we humans, animals, and other plants can't just take it from the air and "eat" it. Just like we can't eat a raw pinto bean. Water has to boil and soften the bean so our bodies can digest it.

So how on earth do humans, animals, and other plants get to "eat" all that free nitrogen?





## Bean and Pea Plants to the Rescue!

The roots of legume plants develop special bumps on them that are hollow inside. These bumps are home and workplace for a very special kind of bacteria. Bacteria are itsy bitsy organisms. These particular ones are our nitrogen heroes. They find air flowing through tiny passageways in the soil. In that air is nitrogen. The special bacteria pull the nitrogen into the bumps where they live and then . . .

*special bacteria are at work inside these special bumps, called nodules, fixing up nitrogen gas for the plant – and the rest of the world – to use.*



Then they fix up the “raw” nitrogen so the pea and bean plant whose roots they live on can “eat” it. That’s how nitrogen gets into the pea and bean plants! Then animals eat the bean and pea plants. People harvest, then boil and eat the beans and peas or we eat animals that ate the plants.

Other plants get their nitrogen when the bean and pea plants die back in the winter, decay, and the nitrogen (and other good stuff) in them goes back to the soil. The other plants can then slurp up the nitrogen from the soil.

This way, everyone can have nitrogen. This makes the legume family a very important family! We are very lucky the pea and bean family is everywhere on earth, including our home, Boulder County.



## Activity: Be a Legume Family Gardener!

**In the fall, ask a farmer or gardener** (at school or in your community) if you can harvest a bean or pea from a legume plant. Or go to a farmers' market and buy a few beans or peas.

**Ask the farmer**, "what was it like growing peas and beans this year? What time of year do you plant these beans/peas? Do they need anything special to grow?"  
Save one bean or pea (or one of each) all winter in a safe, dry place.

**In late spring**, plant your pea or bean in a plastic food-grade bottle with some good garden soil. Or plant one of each in separate bottles. Ask an older person to help saw the top off the bottle first so you have a little planter for each seed.



**Transplant** your new little plant into a big pot or directly into good soil outdoors. You could ask a gardener friend if they would let you transplant– or plant directly– one bean or one pea in a garden, then let you come back and tend your pea or bean plant for the season and watch it grow.

**At harvest time** next year, you get to pick lots of new beans or peas from your pea or bean vine or bush. What do you think of this: that one small pea or bean turned into many peas or beans! How many did you get? From one small pea or bean, with careful tending and watering, you can (with the help of an older person when cooking) feed your family a main dish!

# Shaping the Land

by Carol Beam

Carolyn Holmberg Preserve at Rock Creek Farm (CHP@RCF) Open Space is a story within a story. A story of human history spanning 5,500 years Before Present wrapped inside the larger story of life on Earth as part of the fossil-rich upper Cretaceous Laramie Formation — all on 1,124 acres.

This amazing combination of fossil potential and human history resulted in Parks & Open Space completing a 2021 paleontological resources survey on part of the property as well as nominating the property to the National Register of Historic Places with the assistance of a Colorado State Historical Fund grant.

Located in the southeast corner of Boulder County, CHP@RCF is named after Carolyn Holmberg, the Parks & Open Space director who promoted the property's acquisition. She strongly believed the property embodied open space values where people could connect, farmers could lease agricultural land, grassland resources and their associated wildlife would be protected, and its cultural resources would be forever preserved.

Although much of the surrounding land has been urbanized, CHP@RCF remains an oasis and a link to the past. Today, visitors to the property have access to hiking and riding trails across the property and Stearns Lake, which provides access for fishing and wildlife viewing.

Since time immemorial, the rolling semi-arid short-grass prairie in the entire Front Range was home to numerous Indigenous people. Archaeological evidence of early human presence on the property dates to as far back as 5,500 years Before Present at a well-preserved Early Archaic Period and Ceramic Period site. Through excavation of the site, along with analysis of floral and faunal remains, archaeologists determined that the site was an Indigenous camp used to procure and process resources and to manufacture stone tools. Due to the well-preserved condition of the site and the quality and quantity of cultural material, the site was listed on the State Register of Historic Properties in 1993.

More recent historic features on the property include the Goodhue Farm/Stearns Dairy Farm No. 2 farmstead, two railroad corridors, a wagon road, and a former coal mining site. The Goodhue Farm/Stearns Dairy Farm No. 2 is an extensive complex of historic agricultural buildings dating from the early to middle decades of the twentieth century. The centerpiece of the farm complex is the 1916 craftsman bungalow house. Constructed during the ownership of the Goodhue family, the house exhibits classic stylistic elements that include wood frame construction, one-and-a-half-story low massing accentuating its horizontal lines and a full-width front porch. The first Euro-American owners of the property include the Foote, Miller, and Goodhue families, who grew crops that included hay, corn, alfalfa, and raised beef and dairy cattle as well as horses. Parks & Open Space continues the property's agricultural tradition by leasing the property and many of its buildings to a tenant farmer.

All the locations and features on the property weave a story of human occupation shaping the land that together contribute to the historic significance of the property unlike any other open space property managed by the department. In recognition of the property's historic significance, the National Park Service officially listed Rock Creek Farm on the National Register of Historic Places on April 20, 2023.

The National Register of Historic Places is the official list of the nation's historic places worthy of preservation. Authorized by the National Historic Preservation Act of 1966, the National Park Service's National Register of Historic Places is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archaeological resources. The more than 96,000 properties listed represent 1.8 million contributing resources — buildings, sites, districts, structures, and objects. Almost every county in the United States has at least one place listed in the national register!

## BOULDER COUNTY PARKS & OPEN SPACE PROPERTIES IN THE NATIONAL REGISTER:

- Denver, Boulder, and Western Railway Historic District (aka Switzerland Trail of America) segments on Boulder County Parks & Open Space properties (1980)
- Walker Ranch Historic District (1984; boundary increase 1988)
- Wall Street Assay Office (1989; boundary increase 1992)
- Rocky Mountain Mammoth Mine (2010)
- Cardinal Mill (2011)
- Carolyn Holmberg Preserve at Rock Creek Farm (2023)



# Calendar of Events

Registration is required unless otherwise noted. All ages welcome unless otherwise noted. Children must be accompanied by an adult.  
**NO PETS, PLEASE!**



## FALL IN THE FOOTHILLS

**Saturday, Sept. 9, 2–3:30 p.m. Longmont Public Library, 409 4th Ave., Longmont.**

Join us in celebrating autumn through an exciting indoor slide and activity program! Explore the beauty of our county’s open spaces virtually and discover the best spots to enjoy the vibrant colors of this season’s beautiful plants. Whether you’re looking for a scenic picnic spot near a trailhead, a hike along picturesque paths that showcase fall’s splendor, or a leisurely ramble to study the diverse birds and flora of our area, we’ve got you covered!

## ASTRONOMY: THE BIG PLANETS

**Friday, Sept. 15, 7:15-9:30 p.m. Ron Stewart Preserve at Rabbit Mountain.**

Discover the wonders of our solar system’s largest planets, the gas giants, and their intriguing moons. Join us to learn more about these fascinating planets that are just past the asteroid belt. The presentation takes place at the picnic shelter and is followed by stargazing with telescopes provided by the Longmont Astronomical Society.

## EXPERIENCE SEPTEMBER

**Saturday, Sept. 16, 10 a.m.-12:30 p.m. Meyer’s Gulch Trailhead.**

Take a leisurely walk along the first part of the Meyer’s Gulch trail with volunteer naturalists. We will experience a less-visited county open space, identify plants, enjoy the fall colors, from muted to brilliant, and talk about what makes this place unique, as summer transitions to winter. Total length of walk is up to two miles with rolling terrain.

## ASTRONOMY SLIDE PROGRAM

**Tuesday, Sept. 19, 6:30-7:30 p.m. Lafayette Public Library, 775 Baseline Road, Lafayette.**

There is much to learn about the cosmos. The night sky has brought wonder to all for millennia, and we have only started to see what’s really out there. Join us for an interactive slide presentation about our universe and the stars, moons, and planets in our galaxy. Learn about the latest discoveries and how you can observe the big night sky for celestial bodies!



## STOP, SEE, HEAR & FEEL

**Saturday, Sept. 23, 10 a.m.-noon.**

**Walden Ponds Wildlife Habitat.**

**For ages 12 and older.**

Discover techniques developed by John Muir Laws to help you better observe nature and record it for yourself. Participants are encouraged to bring their own sketchbook and art supplies if they wish; however, supplies will be provided. No art experience necessary!

## 10 YEARS AFTER: LOOKING BACK AT THE 2013 FLOOD

**Saturday, Sept. 30, 10 a.m.-noon. Pella Crossing.**

In September of 2013, we witnessed a 100-year rain and flood event that devastated areas around our county, including some of the open spaces and parks we love. Join us for a leisurely walk around one of those parks as we look back at all the work that has gone into restoring it and other open spaces and making them more resilient to natural disasters of this kind.

## LOS OSOS ASOMBROSOS – CAMINATA GUIDA

**sábado, 7 de octubre, de 10 a.m.-mediodía. Betasso Preserve.**

Todas las edades bienvenidas. Registro requerido.

Durante esta temporada, los osos se atiborran de bayas y otras comidas en preparación para su sueño profundo. Únase a nosotros para una caminata de 1.5 millas mientras aprendemos sobre la población local de osos y cómo podemos coexistir con ellos en los espacios abiertos. Regístrense llamando al 303-678-6214.

## DEEP TIME WALK

**Saturday, Oct. 14, 9 a.m. – noon. Pella Crossing.**

**For ages 12 and older.**

Join Boulder County Volunteer Naturalists for a “journey” where we walk the 4.6-billion-year age of the Earth in 3 miles. In this “Deep Time Walk,” each step walked corresponds to 1 million years, therefore, the whole of human history, from Homo Sapiens to now, happens in the last few inches! The Deep Time Walk enables people to learn from and connect to their own short-lived experience of time on Earth with the vast expanse of geological time right here in Boulder County.

## ALTONA SCHOOL OPEN HOUSE

**Sunday, Sept. 10, 11 a.m-2 p.m.**

**Altona Schoolhouse at Heil Valley Ranch Open Space.**

**Registration not required.**

Drop by anytime during the open house to go inside the historic schoolhouse where students studied and played from 1880 to the World War II era. Volunteers will be on hand to share the school’s history and restoration with visitors. If time allows, you can take part in a game or spelling bee.

## ASTRONOMY: LIGHTS IN THE NIGHT SKY

Friday, Oct. 20, 6:15-8:45 p.m. Ron Stewart Preserve at Rabbit Mountain.

There are so many amazing objects in the night sky, from Venus to meteors whizzing by. Learn more about some of the amazing lights we can see in our night sky. The presentation takes place at the picnic shelter and is followed by stargazing with telescopes provided by the Longmont Astronomical Society.

## COLORADO FALL: FAMILY PROGRAM

Saturday, Oct. 21, 10 a.m.-noon. Mud Lake.

For ages 8 and older.

As the days get colder and shorter have you ever wondered how the plants and animals of the mountains prepare for the winter ahead? Explore the stories of how they prepare to survive freezing temperatures with activities and fun information. Join us to learn more about Colorado in the fall.

## FLYING SOUTH FOR THE SUMMER

Sunday, Oct. 22, 8-10:30 a.m. Walden Ponds Wildlife Habitat.

After a busy summer of raising chicks and gorging themselves, our summer residents are off to their wintering grounds. Walk with us as we look for late fall migrants and learn about the harrowing journey our feathered friends must endure to reach greener pastures. This birding walk will be slow paced and focused on observing and learning together.

## WHOOO ARE THE OWLS? OWLS OF BOULDER COUNTY

Tuesday, Oct. 24, 6:30-8 p.m. Parks & Open Space Building, 5201 St. Vrain Road, Longmont.

Over half of the owls recorded in the U.S. have been seen in Boulder County, and most of those owls nest here. Join volunteer naturalists for an indoor slide program to explore these fascinating and diverse creatures and learn about the adaptations that make them such expert hunters.



## FULL MOON HIKE: SPOOKY TALES ON THE TRAIL

Saturday, Oct. 28, 6-8 p.m. Ron Stewart Preserve at Rabbit Mountain.

Halloween is just around the corner! Join us for a storytelling adventure full of myths and legends about the critters that rule the night. What's true and what's not? Join our volunteer naturalists for a 2.5 mile in and out hike as we try to figure out the mystery behind the stories we hear.

## GOBBLE! GOBBLE! WILD TURKEY PROGRAM

Saturday, Nov. 4, 10 a.m.-noon. Heil Valley Ranch.

For ages 8 and older.

How fast can a turkey run? Do they fly? Did you know that wild turkeys can be found all over the Front Range, including at Heil Valley Ranch? Come learn all about wild turkeys during this program, which includes a short hike, hands-on crafts, and games.

## BLACK BEARS IN OUR BACKYARDS

Wednesday, Nov. 15, 10 a.m.-noon. Betasso Preserve.

Black bears are busy gorging on berries and other food in preparation for their long winter sleep. Join volunteer naturalists on a moderate one-mile hike to learn about the natural history of our local bruin and how people and bears can share our wild places.

## BIRDS OF PREY DRIVING TOUR

Saturday, Nov. 18, 9 a.m.-noon. Near Longmont.

Join volunteer naturalists for a driving tour of some of the best areas to view birds of prey. We will drive in search of raptors, learn about habitat, and work on identification skills. Bring binoculars and a bird field guide, if available.

## BIRDS OF PREY SLIDE PROGRAM

Tuesday, Nov. 21, 6:30-7:30 p.m. Lafayette Public Library, 775 Baseline Road, Lafayette.

Learn to recognize birds of prey, including hawks, eagles, falcons, and owls, in the skies above Boulder County during this indoor slide program. Tips will be shared on how to distinguish among different raptors by identifying field marks, behavior, location, and time of year.

## Junior & Senior Fishing Derby

Saturday, Oct. 14, 9 a.m.-noon. Wally Toevs Pond at Walden Ponds Wildlife Habitat off of 75th St. between Jay Road and Valmont Road, Boulder. Registration not required.

Create your fishing dream team of one senior and one junior angler. The annual Junior & Senior Fishing Derby returns this year! You are invited to come enjoy a beautiful fall morning fishing together for prizes and fun. Participants need one senior, 65 or older, and one junior, 15 or younger, to fish together as a team. Prizes will be awarded to the team that catches the heaviest trout, has the largest age difference, and are first to catch the limit.

- Drop by anytime between 9 a.m.-noon.
- The pond is stocked with rainbow trout — artificial and live bait are permitted.
- Bring your own fishing gear and lawn chairs for seating.
- Seniors must have a valid Colorado fishing license.
- A wheelchair-accessible pier is available.

For more information contact Michelle Marotti at 303-678-6219 or mmarotti@bouldercounty.org.



## Ron Stewart Preserve 2023-2024 Closure Days

Ron Stewart Preserve at Rabbit Mountain will be closed Mondays and Tuesdays from Oct. 2 through Jan. 28 as part of the department's elk management plan.

The park will be open Wednesday through Sunday and on the following days:

Nov. 20-21 OPEN (Thanksgiving week)

Dec. 25-26 OPEN (Christmas week)

Jan. 15-16 OPEN (Martin Luther King Jr. Day)

For more information, please visit [boco.org/elk](http://boco.org/elk).

## HIKES FOR SENIORS

Join our volunteer naturalists for easy-pace hikes on open space to explore and learn about the unique geology, history, plants, and wildlife of these beautiful properties. Open to seniors 60 years and older.

### FALL AT THE GULCH

**Thursday, Sept. 28, 9-11 a.m. Meyer's Gulch Trailhead.**

Join us for an easy to moderate, 2-mile hike with some elevation gain right above Boulder and learn about the wildlife that calls this area home. We will look for signs of wildlife along the trail and keep a look out for any sightings of friendly critters. Be prepared for uneven terrain and changing weather.

### STUCK IN A RUT

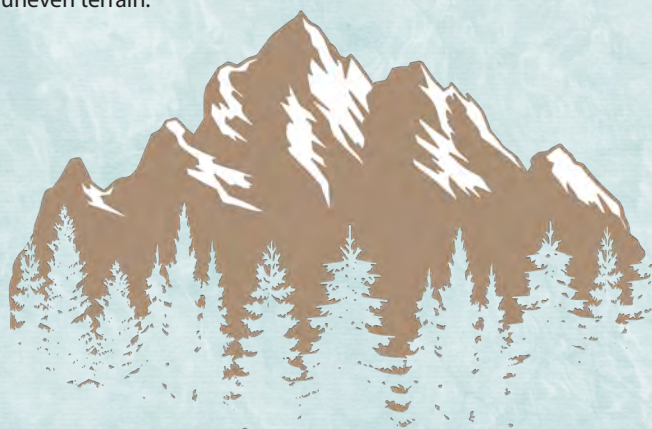
**Friday, Oct. 20, 10 a.m.-noon. Mud Lake.**

Join us for an easy-pace hike that's just over a mile long, as we explore the high country and learn about the ritualistic behaviors behind "the rut". Discover how elk, deer, and moose come together to select mates and prepare for the mating season.

### FIRE ECOLOGY

**Wednesday, Nov. 29, 9-11 a.m. Heil Valley Ranch.**

Join us for a moderate 1.5-mile hike with slight elevation gain in the foothills to discuss the intricacies of fire ecology and the impact of fire upon the landscape. We will be able to see firsthand impacts of both the Overland and Calwood fires. Expect uneven terrain.



## Play Ball! Annual Vintage Baseball Game

fun  
for all  
ages!

**Sunday, Sept. 24, noon-3 p.m.**

**Walker Ranch Homestead, 7701 Flagstaff Road, approximately seven miles west of Boulder. Registration not required.**

Drop by anytime between noon and 3 p.m. to enjoy an old-fashioned vintage baseball game in the picturesque and historic setting of Walker Ranch Homestead. The Walker Ranchers, local recruits, will play a team from the Colorado Vintage Base Ball Association.



The game will be played using Nineteenth Century rules. Base ball was two words back then. Those watching the game are cranks, rooters, or bugs; players are ballists. A hurler pitches the ball to the behind, or catcher. No gloves or helmets are worn, and a cloth ball and cloth bases are used. Listen for the players' nicknames and a bell ringing as players reach home plate.

Bring your own lawn chairs and blankets for seating. No food will be available on site, so please bring a picnic and drinking water for your household. Costumed volunteers will also share games and chores of the past for visitors to take part in.

## MINING PROGRAMS

### GOLD PANNING

**Saturday, Sept. 30, noon-2 p.m.**

**Nederland Mining Museum, 200 N. Bridge St., Nederland.**

**Program open to ages 5 and older.**

This activity led to the European settlement of Boulder County as people sought their fortunes. Do you have what it takes to travel back in time and search for gold?

### HARD ROCK MINING VAN TOUR

**Thursday, Oct. 5, 9:30 a.m.-1 p.m.**

**Nederland Mining Museum, 200 N. Bridge St., Nederland.**

**Tour open to ages 10 and older.**

Tap into the towns, tools, and characters of our hard rock mining heritage by visiting mining sites of years gone by. Some walking required.

### HISTORIC CARDINAL MILL OPEN HOUSES

**Thursday, Sept. 7, 9 a.m.-noon and 2-5 p.m.**

**Thursday, Sept. 21, 9 a.m.-noon and 2-5 p.m.**

**Nederland Mining Museum, 200 N. Bridge Street, Nederland.**

Visit the Nederland Mining Museum to learn about Boulder County's mining history, and then hop in a van to visit the Cardinal Mill site — newly open to the public as a standing reminder of the many mining operations that once existed here.

## AGRICULTURAL HERITAGE CENTER

8348 Ute Highway 66, Longmont

### FUN ON THE FARM

Friday, Sept. 15, All About Goats!

Friday, Oct. 20, Pigs Galore!

9:45-10:30 a.m.

Bring your 3-6-year-olds to the farm to learn about animals, plants, and agricultural life. Programs include a short-story time, hands-on activities, and a take-home craft. Afterwards, explore the farm. Registration not required.

### HAMMERING ON THE FARM

Friday, Oct. 6, Oct. 20, Oct. 27, 10 a.m.-noon.

Drop by anytime from 10 a.m. to noon to watch the blacksmith work his craft. Listen to the clang-clang-clang of the hammer and the hum of the coal forge blower. Learn about blacksmithing tools, such as hammers, tongs, anvil, swage blocks, and more. Registration not required.

### YOGA ON THE FARM

Friday, Sept. 8, Oct. 6, 9-10 a.m.

Ages 12 and up.

Join Andrea Van Sambeek (certified yoga instructor) for a gentle yoga class and take in the views from your mat. Pause, breathe, and revitalize in this idyllic setting. After connecting with breath and movement, stay to explore all the Agricultural Heritage Center has to offer. Please bring your own yoga mat. All levels are welcome!

### AGRICULTURAL HERITAGE CENTER DETAILS

Hours: April-Oct. 29, Friday, Saturday, and Sunday. 10 a.m.-5 p.m.

Admission: Free.

Tours are offered on open days at 11 a.m. No registration required

The farm includes two barns with interactive exhibits, a milk house, heirloom garden, and a furnished 1909 farmhouse. During the busy season there are also animals on site, including chickens, pigs, sheep, and other critters. For additional information visit [boco.org/ahc](http://boco.org/ahc).

## Wanted! Volunteers for National Public Lands Day

On Sept. 23, we will celebrate the 30th annual National Public Lands Day.

National Public Lands Day fosters community building by bringing together volunteers of all ages and abilities to work toward a common goal.

It's a chance for volunteers to roll up their sleeves and work side by side, while also enjoying the benefits of spending time outdoors and engaging in physical activity.

This is a national effort that fosters a collective sense of care and responsibility toward our recreational, historic, and cultural public land sites.

We will be hosting a variety of projects to give all ages and abilities a chance to participate. Please go to our website to sign up for a project.

[boco.org/volunteer](http://boco.org/volunteer)

## Be a Volunteer Naturalist!

If you enjoy nature and sharing your knowledge with others, apply to be a volunteer naturalist!

Volunteer naturalists lead nature hikes, present interpretive programs, and provide hands-on experiences to people of all ages. We highly encourage people interested in sharing nature with school groups, both on trails and in the classroom, to apply.

Volunteers are provided with a 10-week immersive training that covers local wildlife, plants, ecology, and geology. You will also learn interpretive techniques to connect audiences of all ages to nature.

**TRAINING INFORMATION:** Training classes take place on Fridays, Jan. 5 through March 8, 2024, from 8:30 a.m. – 4 p.m. in Longmont.

**Application deadline is Oct. 31, 2023, or until all positions are filled.**

**Please visit [boco.org/naturalist](http://boco.org/naturalist) for more information and to complete an application.**

## EVERY BODY BELONGS ON BOULDER COUNTY OPEN SPACE

People with diverse bodies and experiences work and recreate in the outdoors. This event series will focus on welcoming people to Boulder County Parks & Open Space that may feel out of place or struggle to find a sense of community when recreating on public lands. We will hike, bike, and provide community service. All bodies, all abilities, and all identities welcome!

### EVERY BODY BELONGS ON A BIKE!

**Saturday, Sept. 30, 9 a.m.–12:30 p.m. Lagerman Reservoir Picnic Shelter. Helmets required, e-bikes welcome.**

The joy of riding bikes is for everyone! Join Boulder County Parks & Open Space and All Bodies on Bikes Denver for an inclusive, “no drop”, bike ride around Lagerman Reservoir and the Open Sky Loop. Before rolling out we will discuss pre-ride bike maintenance, and post ride there will be time for snacks, socializing, and community building. The ride will be on gravel trails and roadways, so bring a bike you are comfortable riding on mixed terrain.

### EVERY BODY BELONGS ON A VOLUNTEER PROJECT!

**Saturday, Oct. 21, 9 a.m.–12:30 p.m.**

Boulder County Parks & Open Space staff will facilitate an inclusive service project where you can make a positive impact on our beloved open spaces. Location and project details will be emailed to registrants closer to the event date.

### EVERY BODY BELONGS ON A HIKE!

**Saturday, Nov. 19, 9 a.m.–12:30 p.m. Heil Valley Ranch, Corral Trailhead**

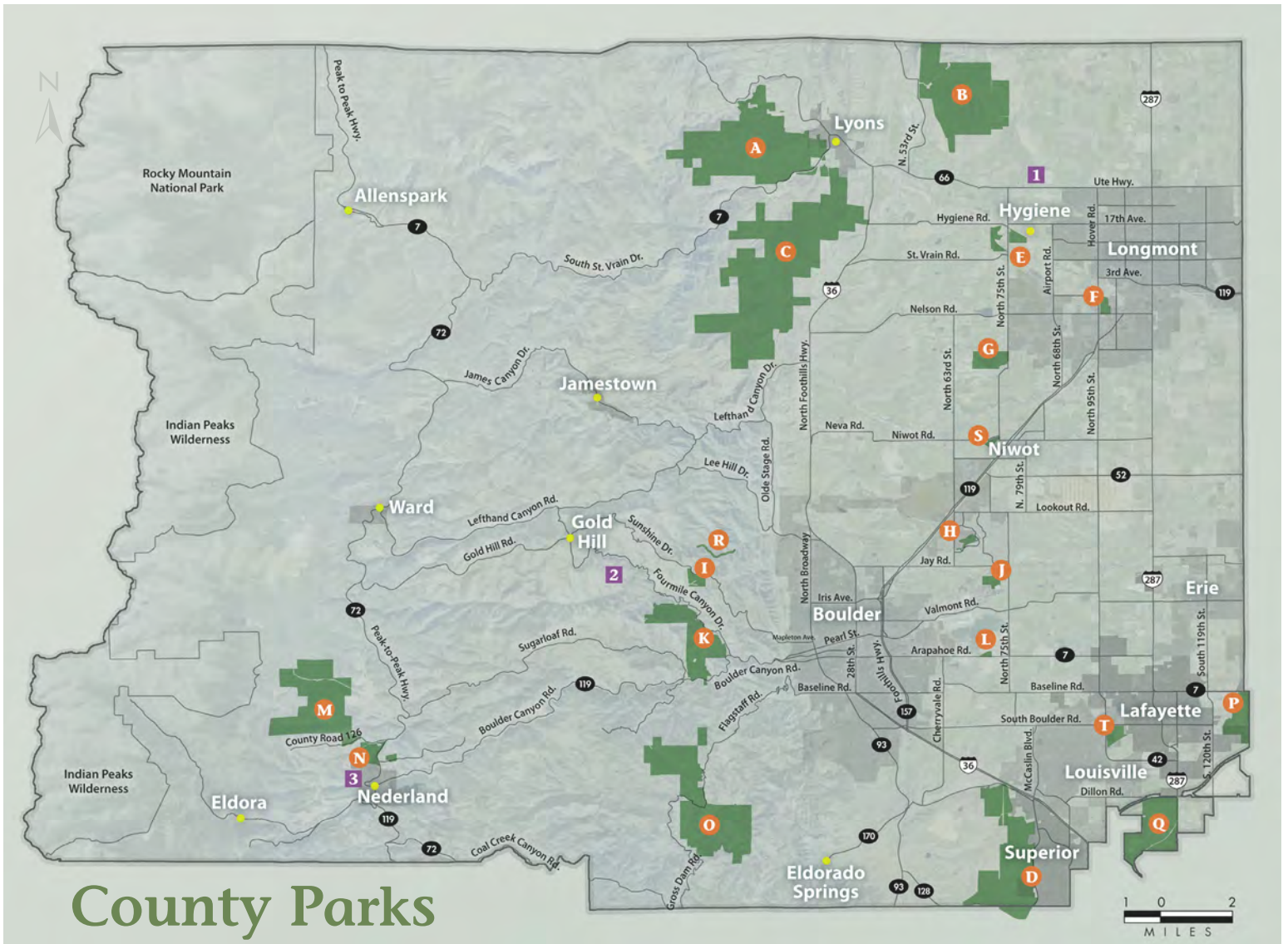
Join Boulder County Parks & Open Space staff for a cool weather hike at Heil Valley Ranch. This “no drop” adventure will follow the Grindstone Quarry trail to the picnic shelter, where we will enjoy pancakes and coffee, while having a conversation about gear and gatekeeping. Folks can decide between a few routes for their return to the trailhead.



## Parks & Open Space

5201 St. Vrain Road, Longmont, CO 80503

www.BoulderCountyOpenSpace.org



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|--|--|---|--|
| <b>A</b> Hall Ranch                              | <b>F</b> Boulder County Fairgrounds    | <b>L</b> Legion Park                                  | <b>R</b> Anne U. White                       |
| <b>B</b> Ron Stewart Preserve at Rabbit Mountain | <b>G</b> Lagerman Reservoir            | <b>M</b> Caribou Ranch                                | <b>S</b> Dodd Lake                           |
| <b>C</b> Heil Valley Ranch                       | <b>H</b> Twin Lakes                    | <b>N</b> Mud Lake                                     | <b>T</b> Harney Lastoka                      |
| <b>D</b> Coalton Trailhead                       | <b>I</b> Bald Mountain Scenic Area     | <b>O</b> Walker Ranch                                 | <b>1</b> Agricultural Heritage Center        |
| <b>E</b> Pella Crossing                          | <b>J</b> Walden Ponds Wildlife Habitat | <b>P</b> Flagg Park                                   | <b>2</b> James F. Bailey Assay Office Museum |
|  | <b>K</b> Betasso Preserve              | <b>Q</b> Carolyn Holmberg Preserve at Rock Creek Farm | <b>3</b> Nederland Mining Museum             |