

IMAGES

NEWS

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HISTORY

EVENTS



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

Bike Riders on Picture Rock Trail,

POS Collection

Student and Buried Letter,

Chelsea Zaniboni

Students Making Paper, *Maria Pezza*

Chorus Frog, *Colorado Parks & Wildlife*

Agricultural Heritage Center, *Rachel Gehr*

**Uncredited photos from BCPOS Collection*

NATURE DETECTIVES

Katherine Young and Deborah Price

Illustrations by Carol Tuttle

IN CLOSING

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PRINTING

Boulder County Printing Department

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Volume 44, number 1

Letters of Promise

by Carrie Cimo

Many years ago, an eastern Oregon plant monitoring crew I worked on was desperately trying to catch a lizard. In the frenzy, one of my crewmates stomped her foot down as she tried to catch it, causing the lizard to drop its tail. Being a conservation biology major still in college, I knew how energy intensive it would be for that lizard to grow its tail back, and that this loss posed a significant detriment to its life. Lizards do that only when fleeing for their lives. I was so saddened that my teammate was willing to cause this animal harm just for a fleeting closer look. In that moment, I promised myself I would never again try to catch wildlife just for the sake of catching it. More than 10 years later, I've kept that promise. At this point in my career, I think it's safe to say that I've doubled down on it. It's my life's work to protect nature and help make it better every chance I can.

We make promises to friends, our families and to ourselves all the time, but how often do we make promises to that one "Giving Tree" that helped us through a hard time? How often do we promise to take care of the river we love to fish in, or the rock wall we love to climb? How often do we actually give thanks and praise to the ecosystems and critters that sustain our lives and give us joy? Perhaps this is something you do regularly. Perhaps you've done this once or twice. Or perhaps you've never thought about it that way before.

KEEPING PROMISES

Promises are not made to be broken. In today's world though, keeping promises can sometimes feel hard to do. There are so many things vying for our time and attention. We are often tired, stressed, or spread too thin. For so many of us, moments in nature help us clear our minds, gain perspective, and fill us with joy. The earth gives us food, clothing, and shelter. She gives us awe, inspiration, and solace. Nature gives us so much, time and time again. Our relationship with nature is deep rooted and rich, but like all (non-parasitic) relationships, this bond must be reciprocal for all to thrive.

If nature gives us so much, how can we give back to nature? We can give back to nature through active restoration, composting, or buying products from companies that cause as little harm as possible. Another way to give back is to make a promise—and to keep it.

Boulder County Parks & Open Space (BCPOS) is trying to get at just that—a promise full of heart! This "Letters of Promise" project started in 2021. We worked with the Boulder Watershed School to make homemade paper sown with locally collected native seeds using recycled paper from the administrative office at BCPOS headquarters. After the paper was made, the students joined me for a field trip to a recently completed stream restoration project. Standing by the stream, we discussed riparian ecosystems, interconnected relationships, and

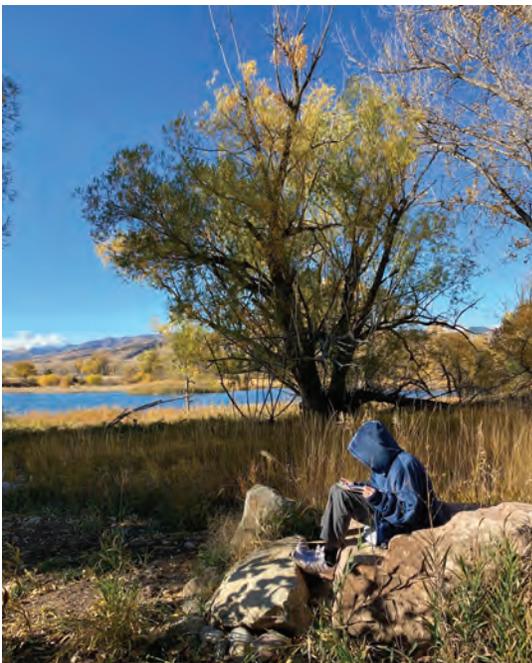
reciprocity. The students spent time reflecting on their relationship with nature and then wrote a “Letter of Promise” to their favorite plant, animal, trail, rock wall, creek, or to the earth as a whole, making a promise to take care of it with specific action. Then we planted these letters, sown with native seeds and love, into the earth.

This small action carries a lot of meaning by literally and figuratively sowing seeds of reciprocity and gratitude into the hearts and minds of students and into the landscape at the same time. Like feeding two birds with one worm!

There’s an emerging body of scientific research that suggests a deep connectedness to nature can increase one’s happiness, health, and well-being. Although the body

of research is emerging, this concept has been in practice for millennia across the entire planet. In fact, it’s only in recent history that humans have created a significant distance between us and nature. This new type of distanced-relationship takes its toll on us humans, as well as the ecosystems that we need—not only for natural resources, but for all the intangibles this wonderful earth offers.

Rebuilding a broken relationship can be hard. It can be a long road full of twists and turns, ups and downs, detours, and back tracking. But all good relationships require work, diligence, care, and compassion. The “Letters of Promise” project is just one step on this road, and although it’s a marathon, not a sprint, it all starts with that first step.



Clockwise from top left: a student composes a letter of promise; a letter placed in the earth surrounded by leaves laid out as a heart; a class making the seed paper that will be planted



RELATED PROGRAM

Letters to Nature: A Promise Made

Saturday, April 22, 1-3 p.m.

Near Boulder. Location provided to those registering.

This earth day-themed program will lead participants through conversations and activities that help us become better protectors of the wildlife and natural resources we’ve come to appreciate. Short walk included. All materials included. Register at www.BoulderCountyOpenSpace.org/register.

iNaturalist: Citizen Science and Identification All in One

by Andrea Van Sambeek

Walking or riding along a trail on a summer morning you spot the most amazing wildflower. You've packed lightly and don't have a guidebook to look up this little wonder. What do you do?

Chances are you have your phone or a camera, which means you can take advantage of a remarkable tool for identification—iNaturalist. This website/phone app can help you not only identify what you've seen, but will also add your observation to an international database for scientists to access.

HOW TO RECORD AN OBSERVATION

Take a photo (or two) of what you've observed. If you have cell phone coverage on your hike, you can immediately get suggestions about what you've seen from the iNaturalist app. No coverage? No problem. You can always upload the photo later to the app or directly to the iNaturalist website. The website offers a more comprehensive format. If you uploaded your photo to the app first, you can log into the website and add more detail. What's next? After choosing a possible ID from the list generated by iNaturalist, other observers from around the world will confirm your identification. The observation is also loaded into databases so scientists can utilize this data.

You're now a citizen scientist! You've just participated in a huge crowd-sourced citizen science project in addition to finding a name for your new favorite flower.

ONGOING INATURALIST ACTIVITIES

Of course, there is more to iNaturalist than just a one-time photo and identification experience. You can join projects to help scientists on specific missions. At Boulder County Parks & Open Space we have two ongoing projects: Boulder County Wildlife and Flora of Boulder County. By joining these projects you make observations that are automatically added to our databases, enabling our wildlife biologists and plant ecologists to track what's happening all over Boulder County.

There are also other specific projects and challenges you can join. For example, the Fire Followers project recruits volunteers to track the response of vegetation after fire. Plant ecologists lead volunteer projects designed to take a plant bioblitz of burned areas, recording evidence of as many species as they can on burn scars.

iNaturalist describes a "bioblitz" as a "communal citizen-science effort to record as many species within a designated location and time period as possible."

You can also join in the annual City Nature Challenge. During this four-day event, cities around the world compete to see how many different species can be found by their iNaturalist teams. In 2021, the Denver-Boulder team made 4,362 total observations of 735 different species by 365 observers. This year we hope to beat those numbers, and you can help! The challenge takes place April 20-May 3.

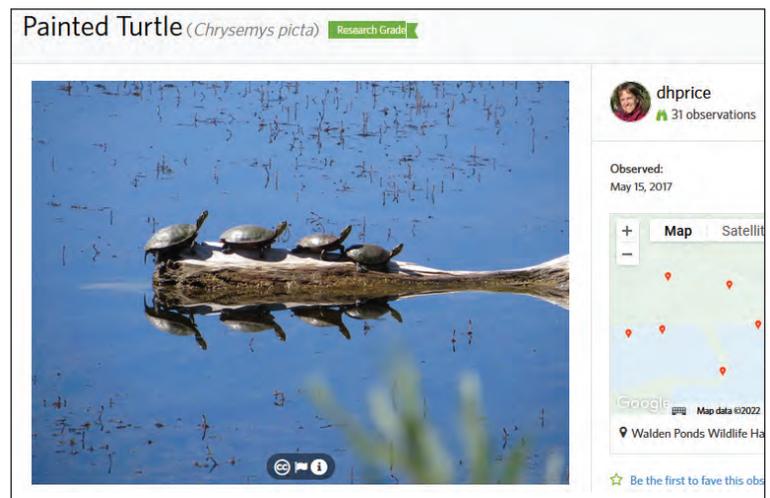
INATURALIST FOR ALL

One of the best aspects of iNaturalist is that it is available for everyone. It's free to join, and you don't need to be an expert on anything, including photography or computers. Although you can find some incredible photographs on the website, your photos don't need to be fancy. There are simple and helpful training videos on the website that walk you through everything you need to know. Getting started is fun and easy.

Uniting technology and nature is a fantastic way to get kids and grandkids looking closely at the natural world. Recruit your own iNaturalist team and get outside! We look forward to seeing your observations.



Join the 2022 iNaturalist City Nature Challenge taking place April 20-May 3.



This screenshot shows a photo contribution to iNaturalist. Photos are called "observations" in the website. Other contributors can confirm the identification of an observation or suggest an alternate.

Mountain Biking for Beginners

by Trace Baker

Spring is here! Snow is melting, trail surfaces are drying, and it is time to get on your mountain bike to explore trails in the Boulder County Parks & Open Space (BCPOS) system. If you are new to mountain biking, here are some tips for a safe and enjoyable experience on our trails.

GET READY

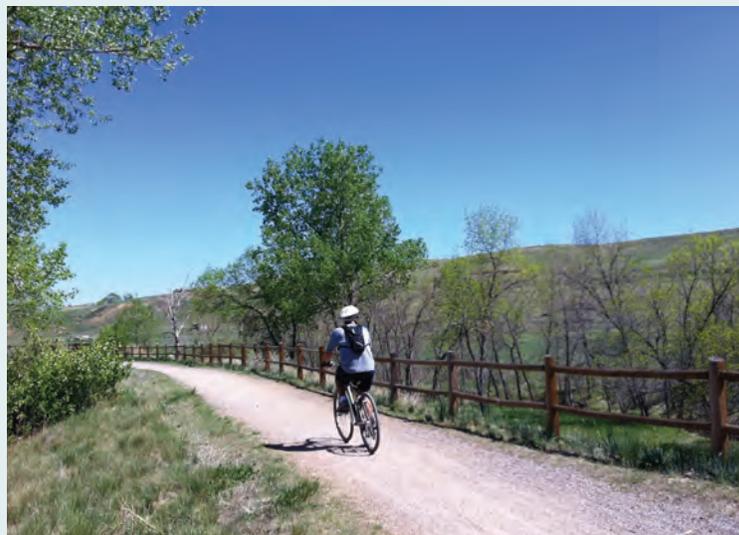
Before leaving home, make sure you and your bike are ready for the ride. Check your personal equipment: helmet (look for cracks, make sure the chin strap is adjusted and the buckle works); gloves; bike pack with tools, spare tire or patch kit, extra clothing, water, and snacks; and shoes appropriate for your pedals. Get your bike in shape. If you haven't ridden since last summer, clean your bike and lubricate the drive train. Check the pressure in your suspensions, and add air if necessary. Inflate your tires to the proper pressure. If your bike has tubeless tires, you may need to add sealant.

BCPOS, like all public-land agencies, has regulations governing trail use. Review and understand the rules, and then follow them on your ride. Be particularly sensitive to other users. Bikes always yield to equestrians and pedestrians. Downhill riders yield to uphill riders. Some trails have directional requirements for mountain bikes.

Trail surface conditions change with weather, and trails may be closed for safety or to prevent damage. A good source of information on closures and other restrictions is the Boulder Area Trails smartphone app. (Update the data before you get out of cell service range.) The BCPOS web site also has information about current closures. Check the weather forecast to choose proper clothing and to make sure you are back at the trailhead before the trail gets muddy or lightning moves in.

GET SET

Pick a trail suitable for your skill and level of conditioning. Beginner trails are wider and have stable surfaces, with few rocks and little loose dirt. Although there may be steeper sections, there are no sustained climbs. Total elevation gain and distance are low. There are usually no sections on steep sidehills. Obstacles, such as larger rocks, logs, or roots, may be present but are usually avoidable. (If you have to bypass an obstacle, don't ride off the trail, dismount and carry your bike.) Turns are not tight, and step-ups and drops are usually less than two inches.



A bicycle rider travels along the Mayhoffer Trail in south Boulder County.

Several BCPOS trails are suitable for beginners. The Schoolhouse Loop at Heil Valley Ranch contains small technical features that can be ridden or bypassed while staying on-trail. The Overland Loop, also at Heil Valley Ranch, is a little more difficult, containing some intermediate sections. The loops at Mud Lake can be ridden in several combinations. Meyers Homestead Trail has a wide, mostly solid riding surface but is loose and steep in a few places. The nearby Josie Heath Trail is a true singletrack, adding two switchbacks that are good practice for beginners. On the plains, the Coalton Trailhead has access to the Coalton, Mayhoffer Singletree, and Meadowlark trails, which have solid riding surfaces and sections of singletrack.

Some intermediate trails have long sections of beginner terrain. If you pick one of these trails, don't hesitate to dismount and walk on more technical sections if you feel uncomfortable riding. The Boulder Area Trails app gives information on difficulty, distance, and elevation to help you choose a ride. A number of online sources give more detail. Enjoy your ride!

Note: Some parks mentioned in this article are slated to reopen this spring, but please check the www.BoulderCountyOpenSpace.org/trails for the latest information.

A Chorus of Frogs

by Ann Cooper

Years ago, as I wandered Walden Ponds Wildlife Habitat in spring, the seething energy of life after winter seemed intensely joyous. That walk inspired a kids' poem. My delight never waned. There's a magic in the first signs of spring, a sense of gratitude, and relief at the renewal ahead.

Nothing represents that feeling more than hearing chorus frogs. Stop alongside a cattail-edged pond, especially a place too shallow for fish. Listen! That rasping, insistent sound is often likened to running your fingers along the teeth of a comb. It is loud and incessant, until you step too close when it abruptly stops.

Where on earth is the sound coming from? You'd expect a largish creature—maybe of bullfrog proportions—but no. If you're lucky enough to find these tiny frogs, perhaps by seeing ripples in open water between cattails, you'll see that they are merely an inch or so long and well camouflaged. Wait until the frogs start chorusing again, and you'll see an almost translucent amphibian, its throat pouch swelling with air like a mini balloon, as it calls to find a mate. Sounds are audible, around 65 decibels (comparable to a vacuum cleaner or hair dryer) and can be heard from up to a half-mile away.

The frogs call by pushing air from lungs to the throat sac and back over their vocal cords. Frogs don't hear through external ears as we do. They have eardrums (a flat round patch behind each eye) and inner ears.

PREDATOR VS. PREY

Once males find partners and mate, the cycle begins. Females lay clusters of eggs (frogspawn) that they attach to vegetation. In two to three weeks eggs hatch into tiny tadpoles, which feed on algae and grow apace. At this stage, tadpoles breathe through gills. Only later when they begin to morph into froglets do gills shrink and lungs take over. It takes 12-15 weeks for tadpoles to become frogs. Adult frogs are carnivores feeding on insects, spiders, worms, and snails. They catch food with a long tongue and swallow it whole (their eyeballs press downward to aid swallowing).

Meanwhile, tadpoles and frogs are trying not to become food for other animals. They may become prey to skunks, raccoons, herons, snakes, shrews, and fish. Even bullfrogs, a non-native species that has changed the frog dynamics in many wetland areas, will eat them.



No wonder chorus frogs are constantly alert to movements and sounds around them. How do they avoid becoming prey? First, they stay hidden and silent when necessary. Second, frogs have poison glands in their skin and may taste bad, an off-putting, if not lethal, deterrent. The best defense for small frogs is probably escape by leaping. With luck, their powerful hind legs can propel them far enough to avoid becoming dinner.

Life is precarious. Frogs are lucky if they survive five years in the wild; most don't make it that long. To survive to winter, frogs must hibernate beneath the ground or in mud at the bottom of ponds, completely still and scarcely breathing. There they'll stay until the nights warm, and spring finally comes. To survive for the long haul (they have been around since dinosaur times), frogs need fresh, untainted wetlands and unspoiled habitat. They need to survive the chytrid fungus that threatens amphibians worldwide and has already decimated frog populations in many places.

JOIN THE ARMY!

Collective nouns are always fun—a gaggle of geese, a murder of crows—and now think of “an army of frogs.” As you enjoy the army of frogs this spring, join the army of people championing their well-being!

Opera of Spring

Ten bullfrogs croak the bass
In their harsh ribbits deep.
Twenty leopard frogs are tenors
Peep, peep, peeping as they leap.

Five mallards quack the alto
As they swim across the pond,
While a robin sings her descant
From a lacy willow frond.

What's this rhythmic, lilting lullaby
The marsh dwellers sing
In the mossy, musky evening?
It's the opera of spring.

By Ann Cooper

NATURE DETECTIVES

Spring 2022



Black Bear Cubs' First Year Cocoa and Ted Are Born in the Den

The two black bear cubs were born at the end of January during hibernation. Bear cubs are born amazingly small compared to the adult female bears they snuggle against. Ted and Cocoa each weighed about as much as an orange while their mom was close to 150 pounds. Like all newborn cubs, they had unopened eyes and no fur on their little bodies. Their first sensations were their mom's soft fur, and the taste of her thick, warm milk as they nursed. Cocoa, Ted, and mama bear learned each other's voice as they communicated in the darkness of the den in bear talk--grunts, whines, snorts, and rumbling hums. They also memorized each other's individual smell.

The den was at a spot where an old aspen tree uprooted in a gusty wind years earlier. Mama bear had dug down to enlarge the hole where the roots pulled out of the ground as the tree toppled. The space inside was just big enough for mama bear to turn around. The bears' body heat kept the cubs snug despite the winter weather outside.

Ted and Cocoa Play and Nap While Mama Bear Sleeps

Although mama bear was often deep asleep to save energy, she would rouse to take care of her cubs' needs. Hibernating adult bears don't eat, drink, urinate or defecate. Bear moms must lick their cubs to groom them and keep the den clean.

Ted and Cocoa soon grew furry and their eyes opened. After five weeks, they could walk. As they gained strength, they started to move around more and tussle with each other.

One early spring day, mama bear left her cubs alone to check out the area outside. Curious, the cubs ventured just beyond the entry, but their outing was brief as mama bear returned and shoed them back to safety.

A few days later, mama bear led her cubs from the winter den to begin learning all the things a black bear needs to know.

By then the cubs weighed almost eight pounds.



A Bear's Life Isn't Easy in the Spring

During winter denning, adult bears sleep soundly. Their breathing and heart rate slow down, but their body temperature drops only a little. They might wake and even walk around on warm days. By spring they are hungry but not yet ready to gorge on food. Their digestion needs to slowly ramp up after not eating all winter. They nibble tender green shoots and buds on trees and shrubs to rebuild their strength after a winter of inactivity.

Mama bear emerged from hibernation into a habitat where food was almost as scarce as in winter. She was still mostly dependent on body fat she accumulated the previous fall. With the cubs trailing along, mama bear sampled a few sprouts of green grass, and Ted and Cocoa continued to nurse. The trio napped when they were tired wherever they were.

Cubs Climb to Safety

Female bears urge their cubs to climb up a tree when threats such as a mountain lion or humans are nearby. The mother bear may flee alone and return later to call her cubs down from the tree when it is safe. In other cases, the female may stay to fiercely defend her cubs.

Sometimes danger is a male black bear, new to the area. Some male bears will kill cubs, especially cubs they didn't father. A father bear's large home range overlaps several female ranges, and he usually is able to chase off any newcomer males. Keeping dangerous male bears away is the only thing father bears do for their cubs.

Bears identify the presence of other bears by smelling their scent in urine sprayed on plants and in the scent left on tree trunks used as scratching posts. Claw slashes on tree trunks made by a bear on its hind legs show the size of the bear that marked the tree.

Summer Brings an Abundance of Food

A bear's dinner menu is mostly plants. When plants are tender and growing, bears feast on plant leaves, flowers, stems, roots, berries, nuts and seeds.

Black bears are classified as carnivores (meat eaters) but bears are not active predators. They are really omnivores because they will eat almost anything they stumble upon. Sometimes they kill fawns and small mammals like mice and rabbits when they happen to find them. They feed on dead animals (carrion) and the kills of mountain lions. They raid nests for baby birds and eggs.



Their claws tear into logs and dirt to find beetles, ants, and ant eggs.

They eat wasps and wasp larvae. They raid bee hives for the honey and eat the bees too.

They seem unbothered by the insects' stinging defenses.

Fall Is Time to Get Fat

Bear cubs are weaned and eating the same food as adults by eight months of age. During the long days of summer and into fall, adult bears and youngsters eat and eat. One bear might eat 2,500 cups of berries a day, if they could find them. They can spend as many as 23 hours a day eating! They must pack on enough fat to get them through the no-food days of winter and meager fare of early spring. When natural food is scarce, bears will seek any source of calories.



Unfortunately in a dire search for food, some bears become garbage bears. Like humans, bears crave sugar and fat, and human garbage reeks of both. Bears can smell it miles away. While eating garbage, bears may swallow rotten food and harmful, non-food items such as foil and plastic.

Bears are smart and have excellent memories plus a powerful sense of smell so once they find garbage, pet food, bird seed, or picnic supplies they will return to the source again. Repeat offenders lose their fear of people and can become dangerous problem bears.

Den Up Now -- Winter's Cold and Food Is Scarce!

Part of mama bear's range included a forest of large trees, good for climbing to safety and also good for locating den sites. Cocoa and Ted were nearing their first birthday, and they spent their first hibernation in a new winter den with mama bear. Each bear curled in a ball, its head between its front paws.

Come spring the cubs were one and a half years old, and it was time to wander off to find their own home range. Cocoa could share part of her mom's range, but Ted had to find a home away from any mature male bears so he traveled much farther. Like all females with cubs, mama bear had stayed with her cubs until their second spring because it takes a whole year to learn black bear survival skills.



Threats to Black Bears

Bears can run 20-30 mph for short distances, but they can't outrun dangers such as parasites, disease, and starvation. Habitat loss is a big concern as more people move into bear habitat.

Adult bears have little to fear from predators, but mountain lions and wolves may attack weak or sick bears. Other bears may likewise attack and kill another bear.

Black bears are not endangered in Colorado, and bear hunting is carefully regulated here. With luck, Ted and Cocoa could live almost 20 years.

Amusing Things About Bears

Black bears in Boulder County are typically black, brown, or a cinnamon reddish-brown. Cocoa's fur was brown and Ted's fur was black. Mama bear was black too.

Their fur can bleach lighter if they spend a lot of time in the sun, just as human hair can lighten in the sun.

The tongue of black bears is long and their lips are very flexible for nibbling the smallest berries and insects.

The pads on their feet are sensitive, and they don't like walking on sharp stones. Hibernating bears grow new skin on the pads after the old skin peels off in winter.

Standing up on their flat back feet is easy. Upright, they get a better view of things, but to us they look huge and scary. Bears see details and colors about the same as humans.

Bears are very strong, and can push over rocks twice their weight. They search underneath rocks and logs for insects and grubs.

Hunting for Bear Sign

Most black bears occupy a home range as far from humans as possible. A nearby creek or other water source is a necessity. Boulder County bears inhabit the foothills and mountains below tree line, in areas with a variety of vegetation.

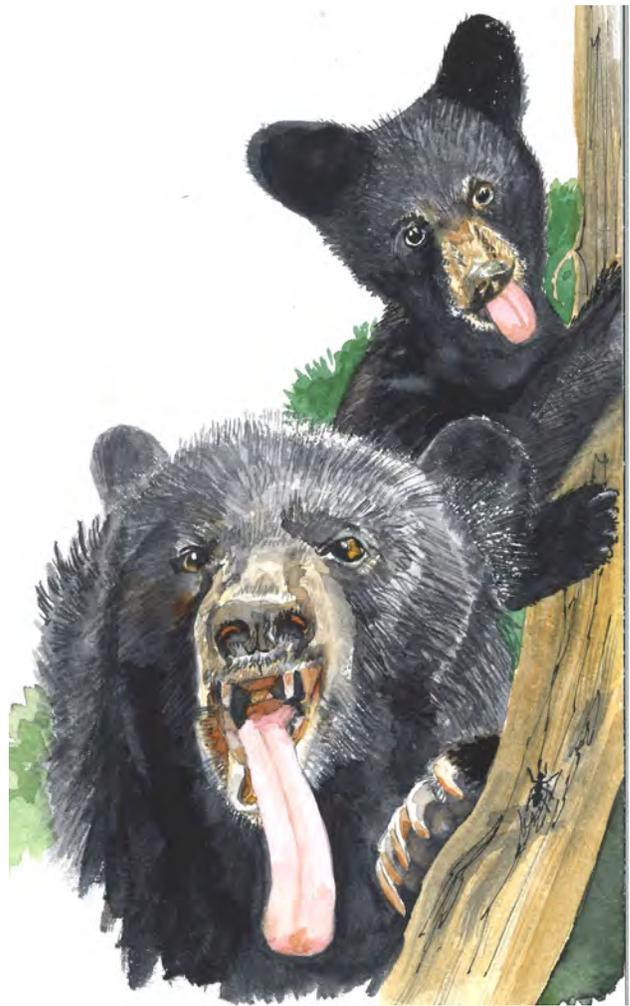
Explore a place where bears might live, and look for these signs of bears.

(Remember to be safe—stay with an adult and don't run down the trail by yourself.)

- Claw scratches on tree trunks
- Long black or brown hair caught on the bark of trees
- Broken branches on fruit trees where a feeding bear might climb
- Turned over rocks or logs
- Scat in a big pile, dark colored, and often with fruit skin, seeds, or pits
- Tracks that look a little like short, wide human footprints with five fat toes

Bears Are Unpredictable

If you see a bear, remember to stop and back away, a long way away. A surprised bear or mother bear or even a bear eating a snack could attack. Bears look like big, shaggy dogs, but they don't consider people their friends.



Native Grasslands of Boulder County

by Ellen Harris

Though grasses may look like a uniform blanket of green, native grasslands play an important role in Front Range ecosystems. Wherever grasses grow, they provide important forage for grazing animals. Their seeds also provide food for birds and small mammals, and taller grasses provide cover from predators for small animals. Native grasslands also come in several varieties that differ based on elevation, precipitation, and soil type.

Shortgrass prairie once dominated the flatlands of Boulder County. Today, nearly 50% of this ecosystem has been lost to agriculture and other disturbances. Because Colorado's high plains are often subject to drought, the grass species of the shortgrass prairie are typically compact, helping them to conserve water. These grasslands once supported vast herds of grazing animals like bison, pronghorn, elk, and deer, as well as prairie dogs and even wolves and grizzly bears. You can still see this ecosystem at Coalton Trailhead in Superior, though without the wolves, bears, bison, and pronghorn.

PLANTING NATIVE SPECIES

People who replace their lawns with drought tolerant, native species still use the primary species of this ecosystem: blue grama grass and buffalo grass. Besides being tolerant of drought, these grasses are also well-adapted to fire and grazing, making them some of the toughest plants around.

In addition to the shortgrass prairies on the plains, the foothills often support areas of grassland between shrubs and woodlands. A quick meteorology lesson: warm air can hold more water vapor than cold air. As moist air from the Gulf moves toward the Front Range, it's forced upward and begins to cool, causing some of that water vapor to fall out as rain, which is why in summer we often get afternoon thunderstorms. Much of this precipitation falls in the foothills, which are a bit cooler than the plains. This combination of cooler temperatures and slightly increased precipitation creates ideal conditions for the Western Great Plains Foothill grasslands.

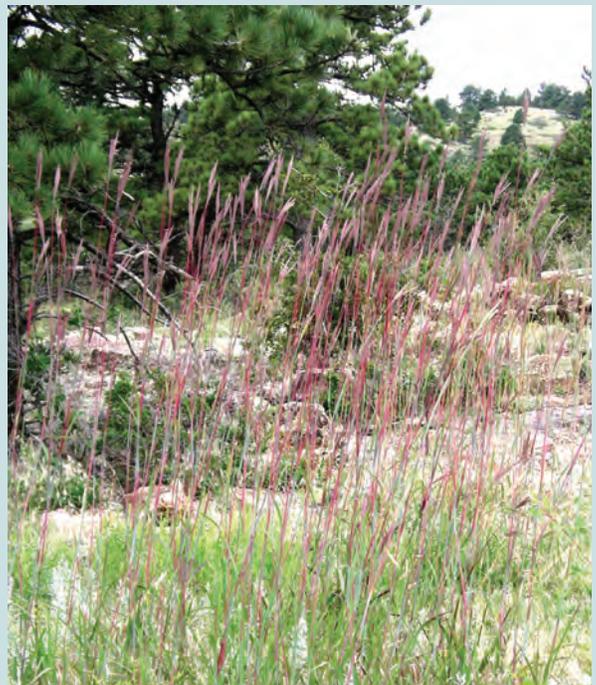
Many of the grass species here are significantly taller than the species of the shortgrass prairie. Big bluestem, which dominates the tallgrass prairies of the east, but occurs in patches in the foothills, often lives up to its name, averaging four to eight feet tall! Many of the grass species here occur in large swaths in the middle of the plains where precipitation is higher but decrease to patches in Colorado's plains, where precipitation is low. The species then appear more frequently again in the wetter foothills. Although a smaller proportion of the Western Great Plains foothill grassland has been lost compared to the shortgrass prairie, residential development, overgrazing, fire suppression, and invasive species have degraded much of this

ecosystem. You can check out the Western Great Plains Foothill grassland at Betasso Preserve.

PERENNIALS: ROOTS GO DEEP

Both the shortgrass prairie and the taller grasses of the foothills provide services to humans as well as animals. Unlike domesticated food grasses you might be familiar with, like corn and wheat, most native grasses are perennial bunchgrasses, meaning they come back year after year in the same place. Their perennial nature allows them to build large root systems over their lifetime, digging deeper and wider. As their root systems get bigger, native grasses can capture more water, making them more drought tolerant than the average lawn. They also suck up carbon dioxide from the air and send it into the soil, making grasses one organism that helps mitigate the effects of climate change. Finally, their extensive root systems also trap soil in place, preventing erosion. Although they may not look like much above ground at this time of year, native grasslands do a lot for humans and animals.

Big bluestem (*Andropogon gerardii*) is a native grass. Its range stretches from the eastern tallgrass prairies to the western foothills. Last year's wet summer created excellent conditions for big bluestem; many stands grew to over six feet tall. In the late summer, the foliage of big bluestem turns a beautiful burgundy color.



DISCOVER BOULDER COUNTY

Calendar of Events

BIRDS OF PREY DRIVING TOUR

Saturday, March 12, 9 a.m.-noon

Near Longmont. Location provided when registering.

Join volunteer naturalists for a driving tour to view birds of prey. We will carpool from our meeting place to learn about habitat and work on identification skills. Bring lunch, water, binoculars, a spotting scope, and field guide if you have them. Tour is geared for adults and older children. Register at www.BoulderCountyOpenSpace.org/register.

THAT'S A HOOT! OWLS OF BOULDER COUNTY

Monday, March 14, 6:30-8 p.m.

Near Longmont. Location provided when registering.

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 this slide program to explore these fascinating and diverse creatures and learn about the adaptations that make them such expert hunters. Register at www.BoulderCountyOpenSpace.org/register.



VIRTUAL LEARNING: TALES FROM A MINER

Wednesday, March 16, 6:30-7:30 p.m.

Zoom program

Volunteer and miner, Evan, will talk about the full mining cycle, which consists of drilling, blasting, mucking, ground support, and more. He will describe both conventional and modern mechanized mining. Register by March 14 at www.BoulderCountyOpenSpace.org/register.

SPRINGTIME IN BOULDER COUNTY

Saturday, March 19, 1-3 p.m.

Near Boulder. Location provided when registering.

Join volunteer naturalists on a leisurely 1.5-mile hike to celebrate the beginning of spring by looking and listening for signs of new life along the trail. Learn the importance of the sun at equinox. Register at www.BoulderCountyOpenSpace.org/register.

BIRDING THROUGH THE SEASONS SLIDE PROGRAM

Tuesday, March 22, 6:30-8 p.m.

Near Longmont. Location provided when registering.

This slide program will explore where to go and how to identify some of our local birds, from the plains to the alpine. You will also learn about challenges birds face and how they adapt. Register at www.BoulderCountyOpenSpace.org/register.

RISE & SHINE HIBERNATORS! KIDS HIKE

Saturday, March 26, 10 a.m.-noon.

Near Boulder. Location provided when registering

In spring, adult bears and their cubs emerge from winter dens. Hungry marmots wake up, too. Learn about the animals that go to sleep in the winter and awaken to join us again. For children 8 years and older and their families. Register at www.BoulderCountyOpenSpace.org/register.

Great for kids!

HIKE FOR SENIORS: EAGLES & EAGLETS HIKE

Tuesday, March 29, 10 a.m.-noon

Near Lafayette. Location provided when registering.

Eagles nest through the winter months and in the spring are seen feeding and interacting with their young. Join volunteer naturalists to observe resident eagles at their nests and learn more about their habitat needs. Easy hike. Register at www.BoulderCountyOpenSpace.org/register.

ASTRONOMY: LIONS AND DOGS AND BEARS!

Friday, April 8, 7:15-9:30 p.m.

Near Lyons. Location provided when registering.

The spring sky is filled with all sorts of hidden constellations, including some fun animals. Discover how to find these pictures in the sky at a short program, and then enjoy viewing the sky with telescopes provided by the Longmont Astronomical Society. All ages. Registration required at www.BoulderCountyOpenSpace.org/register.



THE MYSTERY OF BIRD MIGRATION SLIDE PROGRAM

Tuesday, April 12, 6:30-7:30 p.m.

Near Lafayette. Location provided when registering.

Join volunteer naturalists and explore the mysteries surrounding the world of bird migration. Find answers to your questions and learn where you can observe birds in migration. Register at www.BoulderCountyOpenSpace.org/register.





INTRODUCTION TO iNATURALIST

Wednesday, April 13, 6:30-7:30 p.m.

Near Lafayette. Location provided when registering.

iNaturalist Saturday, April 16, 12-1 p.m. (optional) over Zoom.

Join volunteer naturalists on a short hike to introduce you to iNaturalist and prepare you for the City Nature Challenge (taking place April 20-May 1), an international event that encourages people to share observations of nature near their home. Register at www.BoulderCountyOpenSpace.org/register.

DO BIRDS OF A FEATHER FLOCK TOGETHER?

Saturday, April 16, 1-3 p.m.

Near Boulder. Location provided when registering.

Join volunteer naturalists to explore the ponds and wetland that many waterfowl call home. Learn about ducks, geese, and herons and what makes them unique. This program is for children ages 8 and older and their families. Register at www.BoulderCountyOpenSpace.org/register.

great for kids!

NATURE DETECTIVES: BLACK BEARS RULE

Monday, April 25, 1:30-2:30 p.m.

Near Boulder. Location provided when registering.

Black bears are found throughout Boulder County. Discover more about these furry mammals and explore their lives from newborn cubs in spring to winter hibernation through stories and activities. For ages 5-10 with an accompanying adult. Registration required at www.BoulderCountyOpenSpace.org/register.

great for kids!

Seniors Fish-off



Friday, April 29, 6:30-10 a.m. Wally Toevs Pond at Walden Ponds Wildlife Habitat, 75th St, between Valmont Road and Jay Road, Boulder

The trout have fattened up and are biting! Prizes will be awarded for heaviest rainbow trout, most experienced (oldest) angler, best fishing hat, and first to catch the limit.

- Open to seniors 65 years and older.
- All anglers must sign in—no fishing before 6:30 a.m.
- Valid 2022 Colorado fishing license required.
- Live bait and artificial flies/lures permitted—bring your own fishing gear.
- Wheelchair-accessible fishing pier is available.

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

HIKE FOR SENIORS: SPRING MIGRATION HIKE

Wednesday, April 27, 1-3 p.m.

Near Longmont. Location provided when registering.

Spring migration is in full swing, and the wetlands and new vegetative growth make for perfect pit stops. Follow volunteer naturalists on a walk through the ponds as you look for familiar springtime flyers and listen to the songs that let us know warmer weather is on the way. Easy hike. Register at www.BoulderCountyOpenSpace.org/register.

NATURE JOURNALING: CONNECTING WITH THE SELF

Sunday, May 1, 10 a.m.-noon.

Near Boulder. Location provided when registering.

As nature awakens this spring, let's allow ourselves to bloom from this pandemic winter, too. We'll use observation, listening, and mindfulness techniques to interact with our natural surroundings, note what we experience, and reflect on how we, too, are natural. Short walk included. Materials available if needed. Register at www.BoulderCountyOpenSpace.org/register.



HIKE FOR SENIORS: FOOTHILLS GEOLOGY HIKE

Wednesday, May 4, 10 a.m.-noon

Near Longmont. Location provided when registering.

The Ingleside and Fountain Formations, along with the iconic, red slabs of Lyons sandstone, give life to the tapestry of landforms we find in many parts of the foothills. Explore how uplift, erosion, and time have uncovered these natural beauties and the unique nature these areas hold. Bring along hiking poles and sturdy boots as you hike up the trail with volunteer naturalists to observe the mesas and valleys from above. Moderate hike. Register at www.BoulderCountyOpenSpace.org/register.

ASTRONOMY: PREPARE FOR THE LUNAR ECLIPSE!

Friday, May 6, 7:45-10 p.m.

Near Lyons. Location provided when registering.

A total lunar eclipse will be visible from Boulder County on May 15. Discover how an eclipse happens and find out the best time to see our moon fading from view at a short program, followed by viewing the skies with telescopes provided by the Longmont Astronomical Society. Registration required at www.BoulderCountyOpenSpace.org/register.

SPRING MIGRATION BIRD WALK

Saturday, May 7, 8-10:30 a.m.

Near Lafayette. Location provided when registering.

Join volunteer naturalists to explore the joys of bird watching and learn to recognize different types of birds and raptors. Be prepared for a slow-paced walk of up to 2 miles. Bring water, walking shoes, and binoculars and a bird field guide if you have them. Register at www.BoulderCountyOpenSpace.org/register.

CAMINATA CON MAMÁ: BILINGUAL WILDFLOWER HIKE

Tuesday, May 10, 5:30-7 p.m.

Near Lyons. Location provided when registering.

This moderate 2-mile hike will take you from grassland to ponderosa pine shrubland in search of early bloomers. Come look for yourself! A bilingual naturalist can help you learn about and identify the unique vegetative biodiversity you will find in Boulder County. Register at www.BoulderCountyOpenSpace.org/register.

bilingual
program!



FUN ON THE FARM HOW DOES YOUR GARDEN GROW?

Friday, May 13, 9:45 – 10:30 a.m.

Friday, May 27, 9:45 – 10:30 a.m.

Agricultural Heritage Center
8348 Ute Highway 66, Longmont

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. Children must be accompanied by an adult.

WILDFLOWERS OF BOULDER COUNTY SLIDE PROGRAM

Saturday, May 14, 2-3:30 p.m.

Near Superior. Location provided when registering.

Join volunteer naturalists for a slide program to kick off the wildflower season! You'll learn about a diversity of wildflowers and where and when to look for them. Register at the Louisville Public Library website, <https://www.louisville-library.org/browse-find/test/calendar>.

FULL MOON HIKE: WHAT'S UP WITH THE MOON?

Sunday, May 15, 7:30-9:30 p.m.

Near Boulder. Location provided when registering.

The moon has many stories to tell. Come and learn about the beauty that lights up our night skies, the phases, eclipses, origin stories and legends. Listen to the stories and interpretation of its presence from then and now and observe the full moon from the peaceful stillness of open space after dark. Please bring a flashlight or headlamp. Register at www.BoulderCountyOpenSpace.org/register.

FOSSILS AND FLOWERS HIKE

Saturday, May 21, 9:30 a.m.-noon

Near Boulder. Location provided when registering.

Join volunteer naturalists Sue Hirschfeld and Linda Boley for a short, moderately strenuous hike to explore a landscape created by folding and faulting and see evidence of the seas that once inundated this area. Bring water and hiking shoes. Register at www.BoulderCountyOpenSpace.org/register.



HIKE FOR SENIORS: WILDFLOWER HIKE

Thursday, May 26, 1-3 p.m.

Near Boulder. Location provided when registering.

Wildflowers are blooming and showing their bright colors. Purples, yellows, whites, and reds dot the hillsides and valleys at higher elevations. Bask in the natural beauty that sprouts from the ground. Find these flowers along the trail as volunteer naturalists share stories and uses for some of our native plant species and learn more about their special relationships with the pollinators and insects that make up their micro community. Moderate hike. Register at www.BoulderCountyOpenSpace.org/register.

ALL PROGRAMS:

Be prepared for changing temperatures. Bring water, and dress in layers.

For information about these programs or to arrange a private program, please call 303-678-6214. NO PETS, PLEASE!

Volunteer Opportunities

Boulder County Parks & Open Space is recruiting for several ongoing volunteer programs. For details about these programs, visit www.BoulderCountyOpenSpace.org/volunteer.

Walker Ranch Living History Demonstrator

Application deadline: March 25

Volunteers dress in period costume to demonstrate daily chores of a working western ranch for school programs and special events at the Walker Ranch Homestead.

Agricultural Heritage Center Livestock Caretaker

Application deadline: March 31

Feed a variety of livestock on a consistent schedule (mornings and/or afternoons). Cleaning pens is not required, but highly appreciated.

Altona School Volunteer

Application deadline: April 1

Volunteers will lead fun, educational programs at the recently restored Altona Schoolhouse at Heil Valley Ranch.

Mining Museum Guides

Application deadline: May 1

Volunteers help visitors explore and learn about mining history at the Nederland Mining Museum and the James F. Bailey Assay Office Museum.

Agricultural Heritage Center Gardener

Application deadline: June 1

Volunteers manage the World War I era Victory Garden (heirloom) at the Agricultural Heritage Center at the Lohr/McIntosh Farm.



Clockwise from top: a volunteer tour guide leads a school field trip at the Agricultural Heritage Center; a volunteer at the Nederland Mining Museum teaches kids some facts about mining; a volunteer in costume at a Walker Ranch School day.



Agricultural Heritage Center Opens April 1

Come to the farm! Enjoy the rural setting and learn about the agricultural history of Boulder County. The farm includes two barns with exhibits, a milk house, blacksmith shop, and a furnished 1909 farmhouse.

During the busy season there are also animals on site including chickens, pigs, sheep, and other critters.

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

Admission: Free

Location: 8348 Ute Highway 66, west of Longmont

For additional information: Call 303-776-8688 or visit www.BoulderCountyOpenSpace.org/ahc.

Work Outdoors & Get Paid All Ages—All Interests

Rangers
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Trails
Forestry
Facilities

Plant Ecology
Education & Outreach
Wildlife
Grounds
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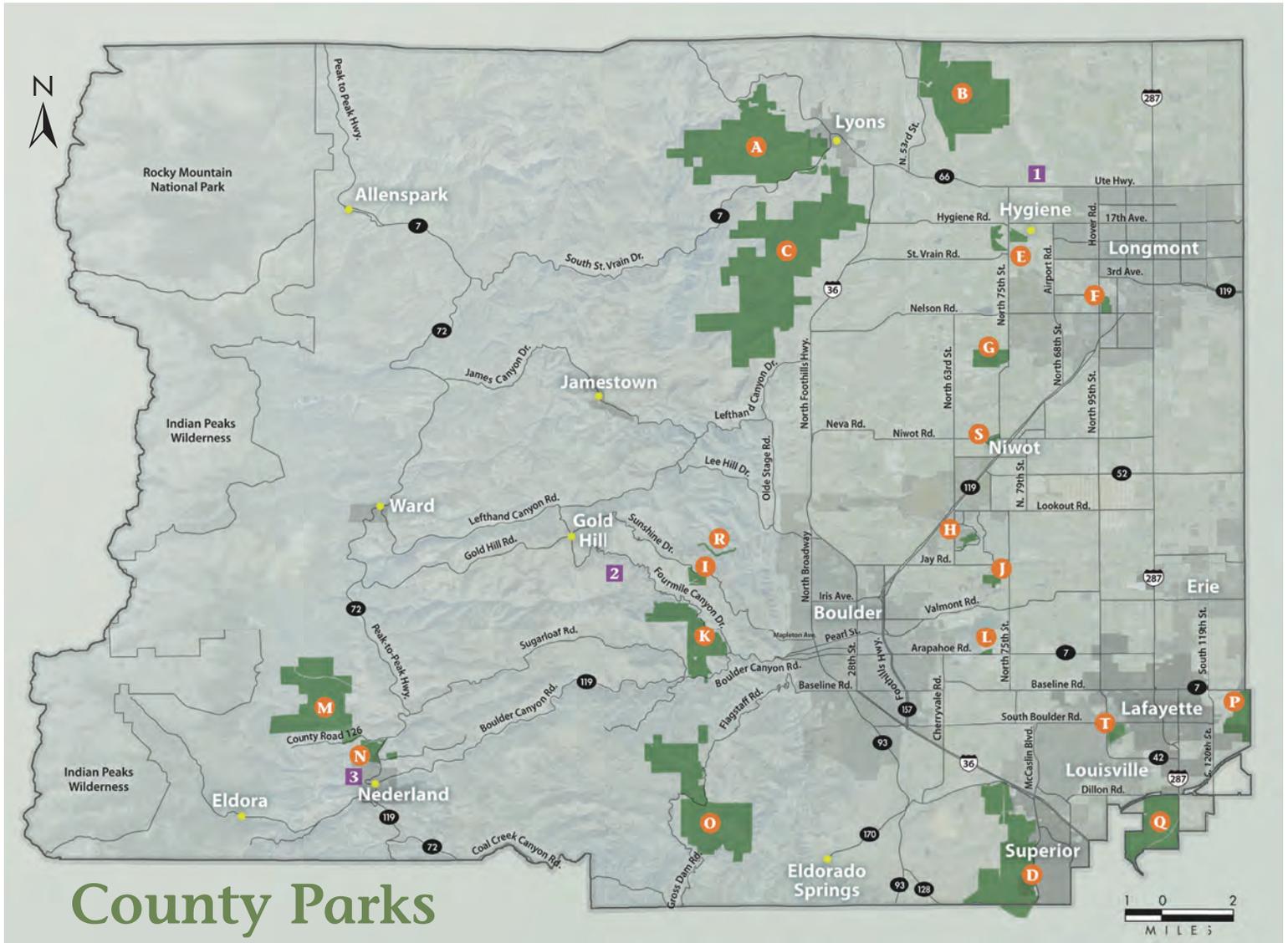
www.BoulderCounty.org/jobs



Parks & Open Space

5201 St. Vrain Road, Longmont, CO 80503

www.BoulderCountyOpenSpace.org



County Parks

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