

IMAGES

NEWS



PROPERTIES



NATURE



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

Cover photo: Heil Valley Ranch, Benjamin White-Patarino

Kids Hiking, Pascale Fried

Log House Cooking, Natalia Bayona

Otter Illustration, Carol Tuttle

Rabbit, Sue Cullen

Note: Uncredited photos are from the POS collection.

NATURE DETECTIVES

Katherine Young and Deborah Price

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CALENDAR OF EVENTS

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Volume 41, number 4

Anne U. White Trail Opens Again

by Justin Atherton-Wood

As you may know, the Anne U. White Trail has remained closed since it was damaged significantly by the September 2013 flood. If you don't know about this gem, it is located just west of North Boulder. The trail is a unique, natural surface hiking trail about 1½ miles in length that traverses up a narrow canyon through relatively pristine riparian montane forest, hopscotching back and forth across Fourmile Canyon Creek.

A CHANCE FOR IMPROVEMENT AND CELEBRATION

We have appreciated your patience during the extended closure that has allowed Parks & Open Space to take advantage of opportunities the flood recovery process presented to better manage parking and construct a more resilient trail. This process also gives us the opportunity to reflect on and celebrate the legacy of Anne White and the valuable contributions she, and other early open space advocates, have made to our community that we are fortunate to enjoy today.

Flood recovery in the area has been multi-faceted, including reconstruction of Wagonwheel Gap Road and restoration of the adjacent stream. Two parcels on Pinto Drive adjacent to the Anne U. White Trail were acquired through the flood buyout program and property was donated from another neighbor. Used in combination with some road right-of-way, the parking area is being expanded from five spaces to 29 to better meet the demand on weekends. With funding assistance from GOCCO, the new trailhead project will be more resilient to future flooding and hasten recovery of the stream. A new, permanent restroom is also planned for the trailhead.

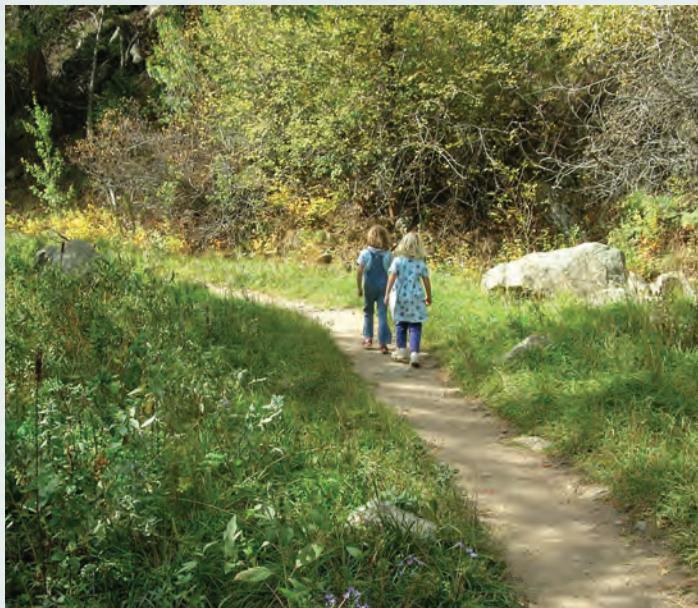
Work to reconstruct the trail itself has also been on-going. Our trails crew and Youth Corps teams have worked to build 28 stream crossings, construct nearly 3,500 feet of new trail, and repair approximately 2,500 feet of trail. All work has been done by hand! Volunteers also participated in flood clean-up efforts, trail work, and revegetation projects. In addition, generous community members contributed more than \$20,000 to the Parks & Open Space Foundation to support stream restoration along the trail.

A BIT MORE ABOUT ANNE U. WHITE

Anne White was a champion of open space in Boulder County and an early member of the Parks & Open Space Advisory Committee, serving from 1976 to 1982. She and her husband, Gilbert White, known for his contributions to federal floodplain

management policy, were instrumental in helping Boulder County acquire the rights to the informal footpath that became her namesake trail when construction of a road through the canyon was being proposed. The Whites donated a parcel of land to the county that was key to the successful protection of the trail. The trail was dedicated to her in 1988.

Parks & Open Space is excited to reopen this trail to the public, provide an improved experience along the trail and at the trailhead, and celebrate the legacy of Anne White. See you on the trail, friends!



Anne U. White (right) was presented with a plaque of commendation by the Commissioners on December 20, 1988 during dedication ceremonies for the recently completed Anne U. White trail in Fourmile Canyon. Shown applauding White are (l to r): Commissioners Stewart, Smith, and Heath.

"I want to make a note, though, of the preservation of this trail for another reason. That is, we often preserve trails as important environmental preservation areas or preserve a critical wildlife habitat, as a place to contemplate or as a place to recharge the spirit; but I think one other thing that we do with a very busy population, is that we find the trails a place to meet friends and to visit with them as we hike.

So, I like to think about this as a friendship trail." – Commissioner Josie Heath



To learn more about the project, visit BoCo.org/AnneUWhite

Care for Public Lands

by Karen Imbierowicz

The Boulder County Parks & Open Space Partnership Program engages businesses and organizations in stewardship projects. Our partner businesses and organizations care deeply for our county public lands. Partners participate in trails, forestry, plant ecology, weed management, facilities maintenance, and wildlife habitat projects. Being involved with the department in this manner produces a constituency that understands and appreciates the nurturing needed to care for over 104,000 acres of open space and 120 miles of trails.

THANK YOUS AND WELCOMES

The department currently works with 50 partners in annual stewardship projects. Some partners have been involved in the program since its inception in 2008, including: Boulder Area Trails Coalition, Boulder Mountainbike Alliance, Boy Scouts, Boulder Trail Runners, Century Link, Corden Pharma, Mapleton Public Schools, NEO Tech, NetApp Solidfire, Redstone Cyclery, Singletrack Mountain Bike Adventures, Tetratech, the University of Colorado MBA Leeds Program, and Wildland Restoration Volunteers.

Many of our partner organizations have been involved for five years or longer, including the Alexander Dawson School, Alpha Phi Omega, Boulder Country Day School, the Defenders of Wildlife, Dell EMC, Google, New Vista High School, Qualcomm, the University of Colorado Program for Writing and Rhetoric, Volunteers for Outdoors Colorado, and Zeal Optics.

In 2019 we welcome AES Distributed Energy, Analytic Partners, the Boulder High School Mountain Bike Team, and Genscape, Inc. to the program.



Crocs, Inc. at Heil Valley Ranch.

This year we also welcomed a new type of partner to our program: citizen science groups who complete a variety of educational research and stewardship projects such as wildlife camera monitoring and data collection, fishing line collection, and dark sky data collection. New partners of this type include the Altona Middle School, Roarie Bummlers Homeschool, Westview Middle School, and Longs Peak Middle School.

2019 HIGHLIGHTS

Plant Ecology: Youth groups removed invasive plants and decaying coyote willow stands. Clearing these helps stimulate new willow growth, and strategically staging the cleared material creates native pollinator nesting habitats. Organizations helped plant prairie cone flowers at Peck Native Seed Garden. Volunteers did the arduous work of hand-cutting invasive, thorny black locust trees and staging them for chipping.

Trails: At Hall Ranch, volunteers built new drainage systems to address serious erosion issues. At Heil Valley Ranch, teams completed rock-armoring and built new trails to connect climbing turns on pedestrian/equestrian trails.

Buildings and Historic Preservation: Employees from local businesses worked on historic preservation projects involving the unglamorous work of staining and painting bathrooms, kiosks, and shelters at Walden Ponds Wildlife Habitat, Carolyn Holmberg Preserve at Rock Creek Farm, and Heil Valley Ranch. Some fortunate groups helped paint the railroad train cars at the new Corral Trailhead at Heil Valley Ranch. We very much appreciate our partners that are willing to help with all types of projects whether the work is exciting or not.

Grounds: Grounds projects have included fencing work on the Longmont-to-Boulder (LoBo) Trail and planting projects at Heil Valley Ranch and the Agricultural Heritage Center at the Lohr McIntosh Farm.

The success of the Partnership Program would not be possible without the talented and energetic volunteer coordinator team which includes Ari Addes and Mike Rutter in Recreation and Facilities and Carrie Cimo, Shane Milne and Amanda Hatfield in Resource Management.

To see a list of our partner businesses and organizations or for more information about how your organization can partner with us, please visit: www.BoulderCountyOpenSpace.org/partners. We greatly appreciate every partner and all the work that has been accomplished through their efforts!

RESEARCH ON OPEN SPACE

The Boulder County Parks & 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 2018 study conducted by Paul Millhouser and Paige Singer of Rocky Mountain Wild. Their project focused on habitat fragmentation analysis of Boulder County.

Introduction: Over the last twenty years, research on the effects of human changes to the landscape has increasingly emphasized the impacts of habitat fragmentation on the continued viability of wildlife populations. Development, in the form of roads, trails, and other infrastructure, can have negative effects on habitat suitability and wildlife more generally. Impacts include changes in wildlife behavior and activity due to an increase in human presence; negative effects on species abundance; loss of habitat and spread of invasive species; increased forms of pollution, including noise and light; species' loss of access to crucial habitat and resources due to road and human avoidance; decreased population viability; increased potential for human-wildlife conflicts; and direct wildlife mortality. See, for example, Benítez-López et al. 2010; Bennett et al. 2011; Gelbard and Belnap 2003; Jaeger et al. 2005; Jones et al. 2015; Mortensen et al. 2009; Trombulak et al. 2000.

It is core to Boulder County Parks & Open Space's (BCPOS) mission and goals to balance resource management and conservation with meeting the needs of the public. Yet, with more and more people coming to Colorado and settling on the Front Range, those in charge of managing our public lands are feeling an ever increasing pressure to accommodate the needs of wildlife while at the same time ensuring satisfactory experiences for the recreating public. Thus, effective planning for parks and open spaces must balance the needs for recreation and wildlife conservation, informed by accurate knowledge of the increased pressure on wildlife by habitat fragmentation caused by infrastructure development and recreation.

This report outlines our efforts to increase the understanding of the effect of human-caused change, including roads, trails and other infrastructure, on wildlife habitat in Boulder County by conducting an assessment of habitat fragmentation. Through this research, we have identified areas of quality and connected wildlife habitat in Boulder County and are providing BCPOS staff with a tool to inform future planning efforts that will balance the needs of conservation and recreation in the County.

Discussion: With an ever-growing population along the Front Range in Colorado, BCPOS faces an increasingly difficult task in meeting the needs of nature and wildlife while also ensuring the

public has the best possible experience while enjoying BCPOS lands. Through this research, we have provided the staff of BCPOS with a snapshot of the current state of fragmentation in Boulder County, as well as where less fragmented areas and connected wildlife habitat currently exists in the County. Most importantly, we have developed a tool that will allow staff to update this analysis as new data and information become available over time. This will help with future planning decisions, giving them the knowledge they need to make the most informed decisions possible, allowing them to balance the needs of conservation and recreation in the County as best as possible.

Visit the website at www.BoulderCountyOpenSpace.org/research to read a full report.

ACCEPTING SMALL GRANT PROPOSALS FOR 2020

Each year, the Boulder County Parks & Open Space Department awards small grants for research and biological inventories on Boulder County open space lands. Research projects and inventories provide valuable data to monitor management practices and improve resources and visitor experiences.

- The deadline for proposals is Monday, January 13, 2020.
- Grants are awarded up to \$10,000.
- We strongly encourage you to contact appropriate staff members to discuss research topics in advance of the deadline.
- Research proposal requirements, priority research topics, and past research project reports can be found on the department's webpage at www.BoulderCountyOpenSpace.org/research

Below are five of 14 topics identified by staff as priority needs for natural resource and visitor management. This list is not exhaustive, and we encourage you to submit research topics that are not listed.

- Evaluate the previously recorded multiple stone circle clusters at Ron Stewart Preserve at Rabbit Mountain and how their presence indicates the area's possible use by indigenous peoples.
- Utilize aerial imagery, LiDAR, and tree dendrochronology to analyze native and non-native tree distribution relative to stream channel morphology.
- Study the effect of riparian cattle exclosures on groundwater depth, hydric soils, and carbon sequestration at the Gage Open Space property.
- Conduct a moose population survey on Boulder County Parks & Open Space lands.

A Winter Snake's Tale

by Emily Goodman Wier

While we finally have some snow sticking to the ground, you may (or may not) have noticed that the snakes have vanished from sight. That's because snakes are ectothermic, or cold-blooded, and rely on the surrounding environment to regulate their body temperature. As the days become shorter and the weather gets colder, snakes must be free from frost to survive the winter.

WAYS TO SLEEP THROUGH WINTER

Many animals hibernate or migrate during this time. Bears gorge on food to store in their bodies and then go into a deep sleep to survive the long winter. Snakes also enter a state of winter dormancy called *brumation*.

During brumation, a snake's metabolism and heart rate slows down as its body temperature lowers with the weather. This means that the energy they need from food also decreases. Brumation is not a complete hibernation; whereas bears will sleep for months during their hibernation, snakes are awake but more lethargic. Their bodies don't completely shut down to sleep the winter away. Being ectothermic, they also do not need fat reserves. Their metabolism slows down so much that they barely use any energy over the entire winter.

When a snake decides to bed down for winter, it prepares by clearing out its entire digestive system. If they continue to eat until brumation, that food in their system will rot inside of them, and they will not survive due to poisoning. Snakes usually eat more leading up to the winter months so they can use the stored energy to survive the cold season. Additionally, they rely on a type of sugar stored in their bodies that can also be used as energy. This allows them to save the energy from their stored fats and gives them a head start on reproduction come spring.

A SNAKE SLEEPOVER

Snake brumation can begin anytime from September to December and last until March or April, depending on weather patterns. So where do snakes go when they disappear for the winter?

Before snakes enter brumation in the wild, they will look for a nice hideout, often getting below the frostline. Typically, this can be hollow logs, tree stumps, caves, deep caverns, rock crevices, and abandoned woodwork—places unlikely to be disturbed by the elements. Snakes also seek shelter in warm, secure places such as old or active prairie dog burrows and dens made by squirrels, other rodents, or even other snakes.

That's right. Snakes may share the den with other snakes. Sometimes there will be as many as 100 snakes in one cave den. Their group site is called a hibernaculum, and what better way to keep warm than by using the body heat from other snakes to better survive the winter? Males, females, babies, and even different species are welcome to share the den! There is no discriminating when the main goal is survival.

Once in hiding, snakes will stay there most of the time. They are technically still awake, but you won't see them moving around. Snakes are more vulnerable in consistently cold weather than during the changing of seasons. Just like hikers want to take advantage of a warm spell in the winter, brumating snakes may come out of their dens to bask in the sunshine. They might pop their head out, have a look around, find some water to drink, and then go back to where they were hiding again.

Snakes play an important role in our ecosystem, keeping it healthy by being both predators and prey. In the springtime when the temperature is consistently warm, our Colorado snakes poke out of their winter resting spots and embrace the days ahead. They will resume normal activity and start looking for a mate and some grub.

Until then, if you're gathering wood for fire this winter and stumble across a hibernaculum, thinking "why did it have to be snakes!?", just remember that all snakes want is to be curled up and left alone to sleep. So be a friend and just put the log back.



As many as
100 brumating
snakes may share
a den.

Racer at the Boulder County Fairgrounds.

NATURE DETECTIVES



Winter 2019

River Otters Inhabit Local Waters

The river otter pups were seven months old now, and this chilly morning was the first time they saw cold, white stuff on the ground. Snow! They quickly discovered they could slide on their bellies on snow just like they slid on mud. It was much easier and faster to slide than to run on their short legs. The girl pup slid down the river bank into the stream, and the two boy pups quickly followed. It was fun!

The pups climbed out of the water and ran back up the river bank. Their dark chocolate brown fur glistened with water drops. One by one they slid down the snowy slope into the current. The cold snow and chilly water didn't bother them in their thick, water-resistant fur coats. They tobogganed down the bank for a few runs before turning to the important business of learning to catch a fish or dig up a dozing turtle for breakfast.

Welcome River Otters!

River otters like these pups are starting to show up in ponds along the St. Vrain Creek, and a few have been spotted in Boulder Creek. For a long time, there were no river otters *anywhere* in Colorado.

Over a century ago, Colorado otters had vanished, mostly because of unlimited trapping. Luxurious, thick fur made otter skins worth lots of money. But caring people in our state in the 1970's decided, "[We have the water, let's get the otters.](#)" During a period of fifteen years, wildlife officials brought more than a hundred otters from other states, and those otters liked it here just fine.

Scarce and Still Threatened

Young otters gradually began ranging to new places. Most otters live west of the Rockies, but some are making their homes in rivers and ponds in Boulder County. Their scarcity keeps them listed as a Threatened Species in Colorado. Colorado Parks and Wildlife wants to know if you catch sight of one.

CPW is really happy if you can send them your photo of a local river otter.



The Best Water for Otters

Wetlands where beavers live (or used to live) are the most likely places to find river otters. The rivers, streams, ponds, and marshes must be pollution-free, deeply flowing year-round, and full of the prey that river otters eat. Otters prefer habitat with jumbles of logs in the water and lush vegetation on the banks. Tall trees to shade the water are important too.

Otters often repurpose old beaver or muskrat dens by cleaning and widening them. The entrance tunnel is under water for safety from predators, but the living room is in the riverbank above the water line, dry and warm. Females use grasses and other vegetation to make a cozy bed for themselves and their pups.

Pups Grow Up

Usually a mother otter will give birth to two or three babies in March or April. They are born with fur but no teeth, and their eyes don't open for five weeks. For the first couple months, they stay in the den and drink mom's milk. After emerging from the den, they taste solid food and start exploring the water. Pups are natural swimmers, but their mom has to encourage them into deep water at first. She will carry a reluctant pup to the water in her mouth.

Otters may live alone or in small groups of yearlings and pups led by their mom. Once the pups are out of the den, their dad might join the family to assist in showing them how to catch prey. Other adults may be part of the group at times. In good habitat river otters can survive 14 years or more.



Otters communicate with each other through scent, calls and whistles, touching and body language. They leave scent marks with urine and by rubbing rocks, logs, and other surfaces with stinky musk from glands near the base of their tail.

Play Promotes Learning

Pups play tag and hide-and-seek. They wrestle with their siblings. Such activity helps them develop their muscles and learn skills they will use to catch prey. It also strengthens family bonds.

Young otters like to slide on their bellies, often pulling themselves along with their front paws. Sliding on mud, ice or snow is an easy way to travel on land. Sliding also helps otters slip into the water quietly when hunting for prey.

Otters have been observed playing with objects such as a pebble, dead fish or old bone. They use their paws in a similar way to hold their food steady while they chew. Otters of all ages seem to frolic in the water at times for pure enjoyment.

Amazing Aquatic Acrobats

Watch an otter run, and their humped-back posture makes clear they are in the weasel family. Like weasels, otters are long and lean with short legs that result in that weasel posture when traveling on land. Water is where they excel, and they are considered semi-aquatic for the amount of time spent there year round. Otters are the fastest fresh-water mammal in pond or stream with the ability to twist, turn, swim forward or backward, float, and dive with amazing flexibility.

Flaps of skin keep water from their nose and small ears, and transparent extra eyelids aid underwater vision. They propel their streamlined body through the water by undulating body and tail. The muscular tail is tapered from a thick base and is also used for balance on land and steering in the water. They can “dog-paddle” with their front paws, or thrust against the water with back paws stretched behind them for real speed. They can stay submerged for four minutes or longer. Their eyes are near the top of their head so they can see well when they surface.

Lively Otters Snack Often

Otters need a lot of nutrients to fuel their active lifestyle. They eat a variety of foods from the water, but their main source of calories is fish. They mostly catch slow-moving sucker fish and cat fish.

Crayfish and insects are a tasty addition to their fish menu. They sometimes eat frogs, salamanders, snakes, mussels and water plants. Turtles are another prey item. More rarely, they will eat birds and small mammals.

Mistaken Identity in River Otter Habitat

Dark-furred muskrats, minks, and beavers are sometimes mistaken for otters, especially if the critter is in the water at a distance. If the animal is on land or up close, there is no comparison. The four mammals differ greatly in size, body shape and tail type.

Muskrats and beavers are plant eaters with similar lifestyles, but muskrats are much smaller with narrow, rat-like tails. Beavers have larger, fuller bodies and wide flat tails. Beavers have big, tree-cutting front teeth.

Minks are half the size of otters with thinner tails. Minks are black with white patches under their chins. Otters have a tapering, thick tail. The otter's chocolaty, sleek, three-to-four-foot body has a light gray underside.

River Otter



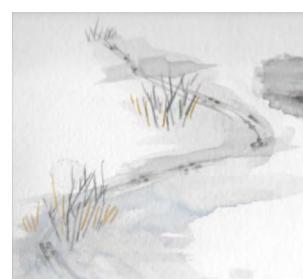
Beaver



Muskrat



Mink



Looking for Signs of River Otters in Winter

The tracks of land predators often wander, circling around trees and bushes as they hunt for food. Otters mainly search for prey while swimming so *their* paw tracks tend to go in a straight line. When otters are out of the water, they are just traveling directly from place to place. The otter's five-toed foot prints are two inches or bigger. The webbing between their toes is sometimes visible in the tracks, especially in the back feet tracks.



Near water, look for six to ten-inch-wide slide marks on snow, ice or mud followed by tracks where the otters loped for a bit. Sometimes there is a line between the tracks where the otter's heavy tail marked the snow.

From a river or stream bank, scan for tracks where there is a hole in the ice. Also look on the bank for slides on mud, grass or snow where otters entered the water.

Sensing Things in the Dark

River otters use their long, sensitive whiskers to identify prey and other things in dark or cloudy water. They also use their webbed front paws to grasp things. How do you feel your way in a dark room?

Gather a few common objects, and test a friend or family member's ability to identify them in the dark. You could use a blindfold, trust them to keep their eyes closed, or put the objects in a paper bag.

Keeping Warm



One way mammals keep warm is with hair or fur. Humans don't have much hair. Can you think of ways people keep warm in cold water or in cold air?

River otters have up to 850,000 hairs per square inch on their skin. Their underfur is dense, with air between the hairs for added insulation. People often wear clothes in layers in winter, with lighter coats or sweaters covered by larger coats. How does this relate to the way an otter's fur works?

Outer guard hairs on an otter are oily, providing water resistance to help keep the underfur dry.

Try this: Get two small pieces of fabric (if your mom or dad sews, they can get this for you). Spread a little cooking oil on one piece of fabric. Dip both pieces quickly into a bowl of water and lift out to examine. Which piece of fabric has less water?



Text by Katherine Young and Deborah Price
Illustrations by Carol Tuttle

What a Difference a Year Makes

Every year, various work groups at Parks & Open Space finish projects. Some, like trails and property openings, are very visible to the public. Others are less prominent, but no less important. Here are a few projects that were finished up in 2019 to show what a difference the efforts of the department make.

Plant Ecology



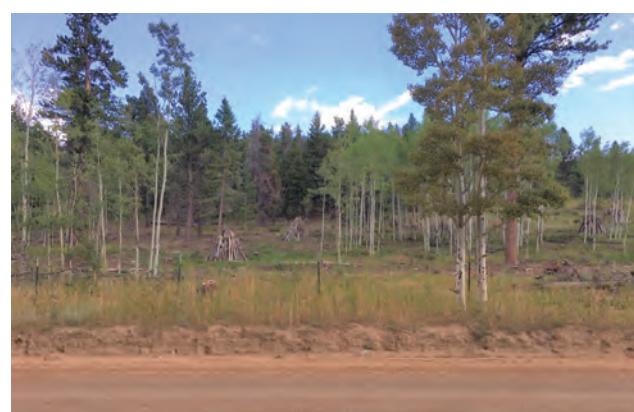
The department partnered with North State Environmental to reconstruct approximately 2,000 feet of stream at the Brewbaker Sorenson property. Work included creating a more sinuous channel alignment, bank stabilization using large wood and boulders, constructing riffles and pools, and floodplain grading. The project will improve the quality of the aquatic, riparian, and wetland habitat, restore stream function, and reduce future flood risk to the open space and neighboring properties.

Weed Management



This is a 28 ½ acre cheatgrass treatment site at Hall Ranch. The picture on the left shows the site prior to being treated with 7oz. per acre of Esplanade + 12oz. per acre of glyphosate and nonionic surfactant at a 1% solution. The picture on the right shows the amazing results approximately six months later.

Forestry



A forest management project at Reynolds Ranch Open Space promoted the enhancement of aspen trees which were slowly being overtapped by conifer species. Aspen enhancement is important because aspen forests generally have a lower fire risk than conifer species, but aspen stands also foster an incredible diversity of flora and fauna.

Raptors in Winter

by Sue Cass

Benjamin Franklin had a disdain for bald eagles, declaring the species “a bird of bad moral character... and a rank coward.” Would you be surprised to learn, in 1840, John James Audubon characterized our national symbol as “exhibiting a great deal of cowardice?” In 1936, the founder of the Connecticut Audubon Society, Mabel Osgood Wright, wrote in *Birdcraft* that one could help songbirds by “shooting some of their enemies,” including several kinds of hawks.

Thankfully, many of us no longer view birds of prey through the jaundiced eye of our forefathers. Instead, we marvel at their powerful yet elegant grace in flight and the ease with which we can observe them in their struggles to raise a family or thwart the harsh wind and relentless cold winter. Bringing them into sharp focus with a camera lens or spotting scope is not nearly as frustrating as attempting the same with a tiny warbler or flycatcher. And, finally, we, the “apex predator” on planet Earth, are beginning to come to terms with the predator/prey relationship.

WINTER OBSERVATIONS

Winter in Boulder County is an ideal time to observe raptors for several reasons. Firstly, we have more buteonine hawks, both species/subspecies and individuals, in winter than we do in summer. We lose less common transequatorial migrants like Swainson’s hawk, peregrine falcon, and recently introduced osprey, and we gain rough-legged hawk, Harlan’s race red-tailed hawk, and ferruginous hawk, which mysteriously nests on Colorado’s eastern plains, but never in Boulder County! A recent comprehensive five-year study of telemetered ferruginous hawks that fledged on the Canadian prairie provinces indicates many in that population winter here, on Colorado’s Front Range.

Rough-legged, Harlan’s, and ferruginous hawks join our resident western race red-tails and their recently emancipated juvenile young along with numerous red-tails that vacate northern latitudes to winter in the balmier climes of the Front Range. And don’t forget the sharp-shinned hawk which migrates elevationally in winter to join the Cooper’s hawk which now nests near my bird feeders in Longmont. Smart!



Bald eagles nested in Boulder County for the first time in history in 2003 and, like our golden eagles, remain on and defend territory against conspecifics nearly year-round.

Next, we add our eagles, the long residing golden eagle and recently arrived bald eagle, which was not historically native to the area. Bald eagles are here today due to a combination of factors: miraculous recovery from decades of persecution and the banning of DDT in 1972, the Bald Eagle Protection Act in 1940, and multiple iterations of the Endangered Species Act. Upon recovery, the species’ range expanded into the historically unoccupied North American interior due largely to the human-altered landscape (reservoirs) and a newly expanded prey base, which includes prairie dogs. Bald eagles nested in Boulder County for the first time in recorded history in 2003 and, like our golden eagles, remain on and defend

territory against conspecifics nearly year-round. The winter population of bald eagles grows significantly with the influx of individuals, mostly juveniles and subadults, escaping the frigid north.

Northern harrier (a Boulder County avian species of special concern) remain in the area in winter, with females and juveniles observed most frequently. Having adopted polygyny as part of their breeding ecology, northern harriers do not form long-term pair bonds and males tend to prefer more open country in winter.

PICK A DAY AND HEAD OUT!

Now that you know about our winter raptor bounty, choose a field day that is clear (for obvious reasons), cold (reduces the availability of thermal assisted flight which large birds rely on to conserve energy), calm (wind assisted flight is not an option), and with a little residual snow (enhances contrast). As a bonus, winter defoliation denudes the landscape, revealing every perch. Keep an eye out for prairie falcon, American kestrel (our smallest falcon) and the “flying tiger,” otherwise known as great horned owl. Joining a regularly scheduled raptor driving tour puts you in the company of volunteer naturalists and others eager to share their knowledge of these magnificent birds (see page 10 for details). We learn from each other and, together, stand in awe of our stunning birds of prey..., no “cowards” or “enemies” here!

DISCOVER BOULDER COUNTY

Calendar of Events

PRAIRIE WINTER HIKE

Saturday January 18, 1-3 p.m.

Near Broomfield. Space is limited. Location provided when registered.

Learn how grassland and wetland wildlife adapt to winter on the prairie. Volunteer naturalists will lead this easy walk to explore and learn about the different winter strategies employed by wildlife that migrate through or live year-round in prairie ecosystems. Register at www.BoulderCountyOpenSpace.org/register.

THE WONDER OF WINTER SLIDE PROGRAM

Wednesday January 22, 7-8:30 p.m.

Louisville Public Library, 951 Spruce Street, Louisville

Winter is a great time to explore the natural wonders of Boulder County! Join volunteer naturalists to learn about the many wonders of winter and how plants and animals adapt to snow and cold, from the Great Plains to the Continental Divide.

Winter Heritage Day at Walker Ranch Homestead

Sunday January 26, 1-3 p.m.

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

What did pioneer settlers do in the winter? Learn about typical winter chores and indoor games when you explore the Walker Ranch Homestead. You'll see a working demonstration in the blacksmith shop and smell food being prepared on the wood-burning stove. Be prepared for cold, windy weather and to walk in snow. Please note: Dogs are not permitted at the site. Contact Sheryl Kippen at skippen@bouldercounty.org or 303-776-8848 for more information.



SIGNS OF LIFE—WILDLIFE & WINTER HIKE

Saturday February 1, 1-3 p.m.

Near Nederland. Space is limited. Location provided when registered.

Join volunteer naturalists for a hike in the high country to look for signs of wildlife activity, including tracks, scat, feathers, fur, and browse marks on trees. We will also learn about the many ways that wildlife survives winter in the Rocky Mountains. Ski or hiking poles are recommended due to possible icy trail conditions. Register at www.BoulderCountyOpenSpace.org/register.



ALL PROGRAMS:

All ages are welcome unless otherwise noted. NO PETS PLEASE! Be prepared for winter temperatures. Bring drinking water and wear boots or hiking shoes with good traction.

For more information about these programs or to arrange a volunteer-led program for your group, contact Larry Colbenson at 303-678-6214 or lcolbenson@bouldercounty.org.

Calendar of Events



NATURE DETECTIVES: FOR THE LOVE OF OTTERS

Friday February 14, 10:30-11:30 a.m.

Near Longmont. Location provided when registered.

Did you know that river otters are making a comeback in Boulder County? Find out how these sleek, clever creatures might steal your heart with their playful antics, cute characteristics, and amazing adaptations in this hands-on, activity-filled program. For ages 5-10 with an accompanying adult. Register at www.BoulderCountyOpenSpace.org/register.

BIRDS OF PREY SLIDE SHOWS

Wednesday January 8, 6-7:30 p.m.

George Reynolds Branch Library, 3595 Table Mesa Drive, Boulder and

Tuesday February 4, 7-8:30 p.m.

Lyons Regional Library, 451 Fourth Avenue, Lyons

Learn to recognize birds of prey, or raptors—hawks, eagles, falcons, and owls—in the winter skies above Boulder County. During this slide presentation, you'll observe and learn how to distinguish between different raptors by identifying common field marks. You will also learn about the habitat requirements, behavior, and ecology of these magnificent birds.

BIRDS OF PREY DRIVING TOURS

Saturday December 14, 9 a.m.-noon

Saturday January 11, 9 a.m.-noon

Saturday January 25, 9 a.m.-2 p.m. (extended tour)

Saturday February 8, 9 a.m.-noon

Saturday February 22, 9 a.m.-2 p.m. (extended tour)

Space is limited. Location provided when registered.

Join volunteer naturalists for a driving tour of some of Boulder County's best areas to view birds of prey. We will carpool from our meeting place, searching for raptors, learning about habitat and behavior, and working on our observation and identification skills. Bring water, a snack or lunch, binoculars, spotting scopes, and a bird field guide if you have them. For ages 10 and older with an accompanying adult.

Register at www.BoulderCountyOpenSpace.org/register.

TRICKSTER TALES HIKE

Saturday February 15, 1-3 p.m.

Near Lyons. Space is limited. Location provided when registered. Coyotes live throughout most of North America, and coyote tales are found in many native cultures. Join volunteer naturalists for a moderate hike to learn more about this clever, adaptable character. Hiking poles are recommended due to possible icy trail conditions. Register at www.BoulderCountyOpenSpace.org/register.

Junior Ranger Adventures

Saturday February 15, 11 a.m.-1 p.m.

Near Nederland. Space limited. Location provided when registered.



Calling all snow-loving kids! Blizzards, snow drifts, frozen lakes, and icy trails are all part of the wintertime outdoor experience. The Boulder County Parks & Open Space rangers want to help you be safe and prepared for all the adventures the cold weather can bring. Your winter adventure day will include ice safety, building a snow shelter, and learning winter survival skills. Then warm up by the fire with hot cocoa and s'mores!

Be prepared for the weather by wearing warm clothing (snowsuits and snow boots are highly recommended), a winter hat, and gloves. Junior Ranger Adventures is perfect for kids ages 5-12, but all family members are welcome. An accompanying adult must be present. If you have questions, contact Ranger Erin Hartnett at 303-678-6211 or ehartnett@bouldercounty.org. Register by February 14 at www.BoulderCountyOpenSpace.org/register.

Now Hiring 2020 Seasonal Positions

www.BoulderCounty.org/jobs

All Ages — All Interests — Join Us!

- Rangers
- Youth Corps
- Trails
- Forestry
- Facilities
- Plant Ecology
- Education & Outreach
- Wildlife
- Grounds

Work Outdoors & Get Paid!

WINTER
HOURS

AGRICULTURAL HERITAGE CENTER

**8348 Ute Highway 66 west of Longmont
Open 10 a.m.-5 p.m. the first Saturday of
each month November through March**

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

Contact Jim Drew at jdrew@bouldercounty.org or 303-776-8688 for more information.



Critter Snap: Citizen Science

Wondering what to do this winter with the longer, darker days keeping you inside? Critter Snap is your chance to be a citizen scientist. Volunteers for this program view wildlife photos collected on Parks & Open Space properties and help categorize them.

The photos offer a glimpse into the world of wildlife right here in Boulder County. Our camera surveys contribute to the baseline knowledge gathered for properties currently under management review, closed for conservation concerns, newly acquired properties, and other special projects. It's easy to participate. You can access the wildlife photos from your home computer, and there is no required amount of time you need to spend. And you don't have to be a wildlife expert to contribute. As you identify animals in the photos, you'll have many choices and helpful tips to make your best guess. Visit www.BoulderCountyOpenSpace.org/wildlife and then click on "Critter Snap."



A bobcat caught prowling by one of our hidden open space cameras.

Support Colorado's Endangered Wildlife on Your Tax Return

Help threatened and endangered wildlife with a voluntary contribution through the "nongame and endangered wildlife cash fund" on your Colorado tax returns this year.

The voluntary contribution on your Colorado tax form supports wildlife rehabilitation and preservation of threatened and endangered species in the state through Colorado Parks and Wildlife programs.

Funds go to projects that manage or recover wildlife including birds of prey, lynx, river otter, black-footed ferret and others. The nongame and endangered wildlife cash fund will also help to support wildlife rehabilitation centers that care for injured and orphaned wildlife ranging from the Colorado chipmunk to the great blue heron.

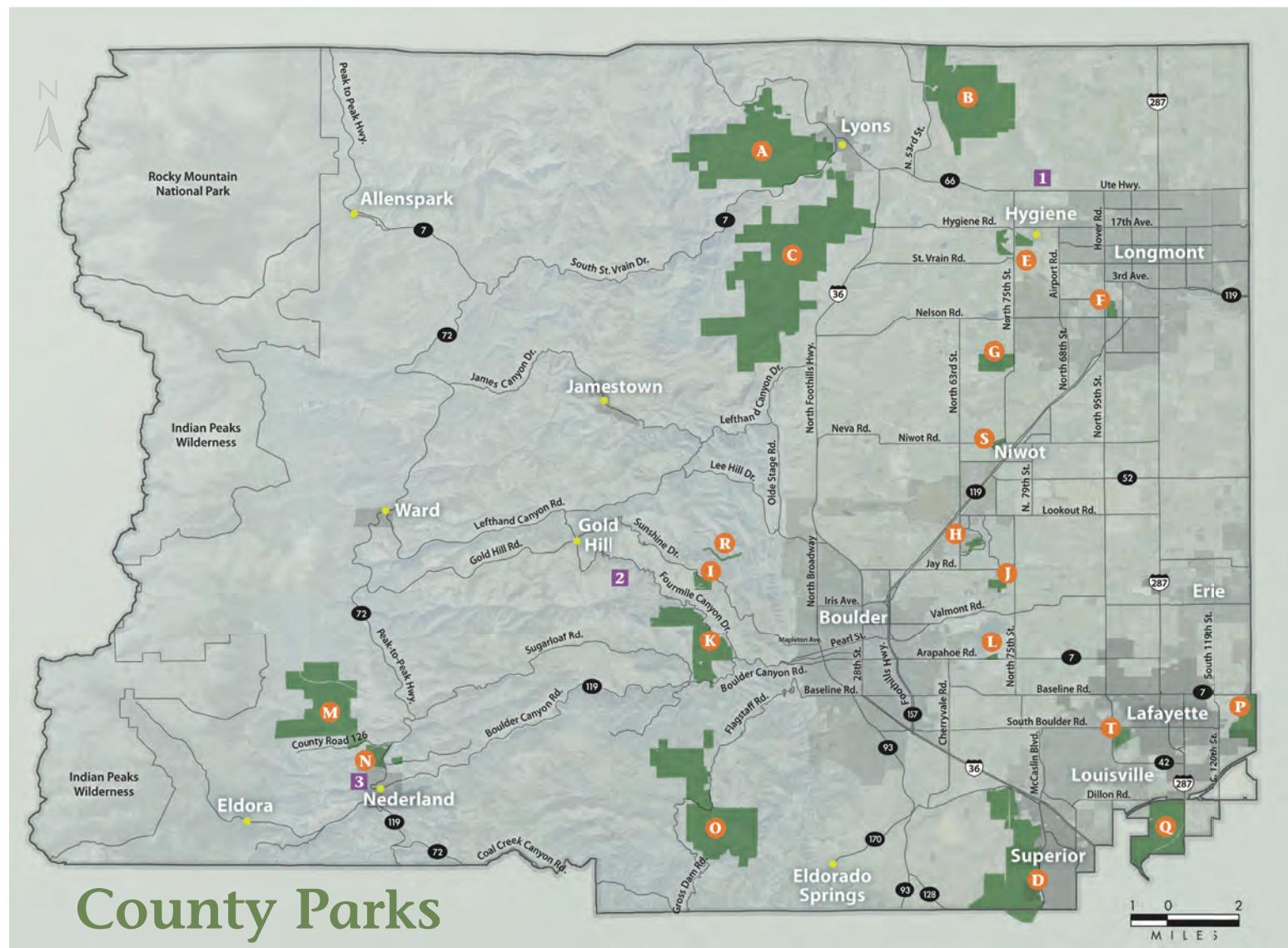


Parks & Open Space

5201 St. Vrain Road, Longmont, CO 80503

www.BoulderCountyOpenSpace.org

303-678-6200



County Parks

- | | | | |
|---|---------------------------------|--|---------------------------------------|
| A Hall Ranch | F Boulder County Fairgrounds | L Legion Park | R Anne U. White (closed) |
| B Ron Stewart Preserve at Rabbit Mountain | G Lagerman Reservoir | M Caribou Ranch | S Dodd Lake |
| C Heil Valley Ranch | 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 |