

BOULDER COUNTY PARKS AND OPEN SPACE

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Images

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

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NATURE DETECTIVES

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Reflections on 40 Years

Agricultural Resources

by David Bell, Agricultural Resources Manager

Think of Boulder County Parks and Open Space and what comes to mind? Maybe hiking at Walker Ranch, birding at Walden Ponds Wildlife Habitat, biking at Heil Valley Ranch, fishing along South Boulder Creek, or the stunning views along the Peak to Peak Highway. These are just some of the benefits that come from the last 40 years of preserving land in Boulder County, but there is one open space value that is often overlooked—agriculture.

From the early concept of an open space program, to the County's Comprehensive Plan, the preservation of agriculture in Boulder County has been a priority for its citizens. Agricultural land was viewed as a non-renewable resource that was rapidly being lost to development up and down the Front Range, and Boulder County led the charge to retain this valuable resource. From 1959 to 1974, over 60,000 acres of agricultural land in Boulder County was gobbled up by development. Since 1975, due to the passion, dedication, and visionary efforts of our citizens, Boulder County has preserved 100,000 acres of open space, 25,000 of which is agricultural lands of local, state, or national importance.

Farmers and Ranchers: Partners in the Plan

Preservation of the land was a critical component of the vision, but the direction set forth in the Comprehensive Plan and within the open space program included much more. The ultimate goal to preserve agriculture and an agrarian lifestyle in Boulder County was accomplished by finding qualified individuals to maintain and keep the lands productive. Starting with the first agricultural purchase of Rock Creek Farm in 1980 (renamed the Carolyn Holmberg Preserve at Rock Creek Farm in 2000), the department began leasing land to local farmers and ranchers.

The Agricultural Resource Division now works with nearly 80 local farm and ranch families to keep our agricultural lands productive and act as stewards for future generations. These men and women come from diverse backgrounds; there are fifth-generation farmers, farm families who have been here since before Colorado was a state, and others who just arrived from around the U.S. And some brave people have changed careers to try their hand at producing food. All have a unique story to tell, and all share a passion for farming and ranching.

Our primary production continues to be beef, corn, sugar beets, wheat, and hay. These historic crops helped feed the people and build the community. Most original settlers in the Boulder area came here to strike it rich in the mines, only to realize that it was not going to be the pick ax and pan that would make their fortunes, but the plow and their farming skills. It is said that Longmont was built on sugar beets and beef—and that tradition continues today.

The county's revenue from agricultural production is around \$1.4 million annually. This revenue is "plowed back" into property improvements, which in turn helps to generate revenue. To support the producers and increase long-term sustainability of the land, the Ag Division has grown to meet that need. The original division staff of two now includes eight full-time and two half-time employees. This group manages the agricultural lands not only for today, but also with an eye to the future. Management of the land includes range management, capital improvements like center pivots, small market farms, GPS towers, tours, and public outreach.



Growing and Conserving

In addition to keeping our land as productive as possible, another focus of the Ag Division is how to sustain the land for future generations. To this end, we've undertaken a number of conservation projects. Installation of center pivots provides immediate economic and environmental benefits, while other projects focus on long-term returns. Currently we are involved in soil monitoring programs that look at the nutrients required to grow crops and the overall health and structure of the soil. The combined teams of Ag and Water work together to monitor the quality of the water as it enters and then leaves our properties to insure that quality is maintained or improved.

Sometimes we recognize that the best use of marginally-productive agricultural land is to return it to a more native state. This year we are converting 50 acres of dryland wheat to native grasslands, bringing the total converted acres to 1,300. Whether it's finding a way to incorporate a trail on an Ag property, or setting aside land for nesting raptors, the Ag Division works to balance the goals and objectives of the Department while supporting our agricultural lands and heritage.

Meeting Challenges

As we move into the future, we recognize that agriculture in an urban interface is challenging. There are no longer any John Deere dealerships, dairies, grain elevators, parts suppliers, or livestock sales barns left in the county. Neighbors who love local food and agriculture often have little patience for farm equipment

on county roads, or the smell of the manure that fertilizes an organic farm field. Put this together with a growing demand for commercial and residential water, and the future of agriculture may seem rather dismal, but creative and passionate agricultural producers are still working the land.

So, the next time you drive down Hwy 287 or travel the back roads of Boulder County and see fields of corn, kale, wheat, or grazing cattle, you can be grateful that 40 years ago a program was created to preserve that view and help support the dedicated people who continue to produce food, fiber, and forage in Boulder County.

Note: This is the third installment in a four-part series about the department's 40th anniversary. You can read the first two articles at www.bouldercountyopenspace.org/i

Water Ways

In addition to Ag Division staff, the division includes water resources staff. This group is responsible for the protection and delivery of the county's large water portfolio. Without this important resource, agriculture in Boulder County couldn't exist as it does today. Explorer Major Stephen H. Long called the region "The Great American Desert" and he considered the area "... almost wholly unfit for cultivation, and of course uninhabitable by a people depending upon agriculture for their subsistence." All that changed when settlers devised ways of diverting water from snow-fed rivers and streams to man-made irrigation ditches. The development of this water infrastructure allowed the "Great American Desert" to transform into the "Great American Breadbasket."

The water resources staff manages the quantity and quality of water required to irrigate our fields and sustain our livestock. From participating in the Governor's Regional Water Plan to holding elected positions at local ditch companies, this group works with numerous stakeholders to ensure this vital resource is used efficiently and effectively.



Flight in Autumn: Migration

by Cindy Maynard

This time of year, I notice my neighborhood going silent. Trees, bushes, wetlands, and grasslands seem less filled with the energetic darting, purposeful activity of birds. Have you ever wondered, “Where do they go? What do they find when they get there?”

People have always been fascinated by the disappearance of avian neighbors when the weather begins to change. In less scientific times, people theorized that birds flew to the moon in winter, hibernated in caves and trees, or even buried themselves in mud. But really, why do so many birds desert us in winter?

Migration can involve a long-distance journey to other continents, or a mere move down to lower elevations. In the northern Rockies and northern Great Plains, more than 75 percent of nesting land bird species winter in areas south of the Mexican border. What the birds find there is as critically important to their survival as their northern nesting habitats.

Migration is very expensive in terms of energy consumption, and holds many perils. Some don't make it to their destination, and some reach the end of their journey in seriously depleted condition, but something in their evolutionary biology makes this huge expenditure of time and energy worth it.

We think of our summer avian friends as “our birds,” but like the spy with a secret identity, they lead a double life. Most migrants make brief sojourns to our northern climates for breeding, and then retreat back to lower latitudes for the majority of the year. Migrants might better be considered “their birds,” who only grace us with their presence during their crucial breeding cycle. The benefits of heading north might include more daylight hours in which to feed, better or different seasonal food sources, better nesting locations or less competition for resources. I thought it would be fun to see where a couple of our local species travel.



A Swainson's hawk and broad-tailed hummingbirds.

A Long-distance Migrant

Swainson's hawks are birds of wide open spaces. This graceful, slender buteo (hawks with broad rounded wings and relatively short tails) with its brown hood and long, pointed wings soars over 13 countries and two continents, from the prairies of North America to the pampas of Argentina. They log an astounding round-trip mileage of 11,000 to 17,000 miles, averaging over 100 miles per day for about three months.

Because they are borne along on thermals, seldom flapping, they must fly by day, their route staying primarily over land. The constricted corridor over the Isthmus of Panama forces flocks of thousands, called kettles, to share the air space with thousands of other land migrants, like turkey vultures and broad-winged hawks. These blended flocks create a river of hawks, and is one of the world's greatest migratory spectacles. They prepare for this epic journey by layering on fat. They are unique in switching their summer diet from mostly small mammals while nesting, to a winter diet primarily of insects.



In their wintering grounds of Argentina and Brazil, they seek out open savannah (pampas) habitat, but also do well in bird-friendly agricultural areas. Swainson's hawks faced extinction from toxic pesticides and destructive agricultural practices, but a combination of effective international cooperation and farmer education has restored their numbers. They are now rated as a species of concern, but are not immediately threatened.

Hummingbirds Migrate Alone

Unlike Swainson's hawks, broad-tailed hummingbirds migrate alone, not in huge flocks, and not on the backs of geese, as folklore would have us believe. In winter they trade their summer habitat (the open pine woodlands of the Rocky Mountains) for the thorn oak forests of the Mexican and Guate-

malan highlands. To accomplish this feat they must almost double their weight by supplementing their rich diet of nectar, which is almost pure sugar, with insects. But body fat alone cannot compensate for the phenomenal amount of energy needed to maintain their heart rate (up to 1,260 beats per minute) and extreme metabolism. An average bird weighs about 1/10 of an ounce and eats 10 calories per day. That translates to 1,000 calories per ounce. The average 150 pound person would need to eat 240,000 calories per day to equal the energy intake of a hummingbird. It would be impossible for them to travel over 1,300 miles on body fat alone, so they must stop to eat during their one-to-four week migration.

Unfortunately their destination habitat, the thorn oak forests of the central highlands of Mexico, is seriously threatened. Deforestation is a grim reality in Mexico because culturally, it is still seen by some as a sign of progress. Poverty, population growth, and cattle ranching add to the problem. About 50 percent of Mexican farmers cannot grow enough food to feed their families, so they either move to the city or further into the forests. Mexico loses about 1.3 million acres of forests per year. It's an intractable problem that threatens many species.

Serious international effort to protect bird habitat both in their southern homes and northern breeding habitats is required to keep our colorful summer migrants coming back to visit us.

Research on Boulder County's Open Space

The Boulder County Parks and Open Space Department offers grants for research on county open space lands each year. All proposals are reviewed by a team of resource specialists, and awarded research projects are monitored during their activities on open space. The following is a summary of a 2014 study conducted by Edward Gage and David Cooper from the Department of Forest and Rangeland Stewardship at Colorado State University. Their project focused on pre- and post-flood assessment and monitoring of Boulder County riparian areas.

Abstract

The September 2013 floods in Boulder County caused extensive damage to property and infrastructure, but the effects on riparian ecosystems remain poorly understood. To improve basic understanding of the effects on riparian ecosystems, an approach combining remote-sensing and GIS analyses along with field sampling to map riparian forests, quantify changes within the riparian corridor, and document conditions in BCPOS riparian areas was developed. This report summarizes these analyses for riparian areas occurring along major streams on Boulder County Parks and Open Space (BCPOS) properties.

Lidar and multispectral imagery were used to develop pre-flood and post-flood maps of riparian areas along selected study area streams. Height information from lidar data sets were used to characterize structure and maps were compared to evaluate changes to riparian zone and channel topography and surface morphology. Lidar analyses identified a variety of impacts to riparian corridors including changes in channel plan form and cross-sectional geometry.

Image and lidar canopy models revealed changes in riparian tree canopy cover. To complement these analyses and provide site-specific measures of riparian condition, a spatially-balanced statistical sampling design was used to identify points for field sampling.

Points were drawn from areas of BCPOS properties with riparian frontage along Boulder and Lefthand Creeks, the

St. Vrain River and their major tributaries. Field metrics of geomorphic characteristics, vegetation and soil cover, canopy structure, exotic plants, and channel condition were evaluated at sampled stream reaches and data were combined with extensive photo points to provide a baseline for assessing riparian corridor recovery.

There were significant differences between the nature of impacts between stream reaches located in dissimilar geomorphic process domains such as bedrock-confined foothills streams and unconfined alluvial rivers on the plains. The extent and magnitude of changes were spatially variable within and between study area streams and individual BCPOS properties. Field data also revealed variable impacts at the site level. Localized changes included channel and bank erosion, and extensive areas of sediment and debris deposits. Depositional deposits of coarse alluvium, ranging in size from sand and gravel to cobbles and boulders, characterized many stream reaches, especially along the St. Vrain River.

Data from field sampling also revealed significant flood effects on the geomorphic characteristics of stream channels and banks. Of particular importance to riparian communities are impacts to streambank stability, cross-sectional elevation profile, and the creation of extensive areas of sparsely-vegetated substrates. A variety of exotic species were common in field plots, but field data also documented extensive cottonwood (*Populus spp.*) and willow (*Salix spp.*) seedling emergence. Seedling density in excess of 60 seedling/m² were observed along all major rivers on the plains and on a variety of geomorphic surfaces from depositional bars to high riparian terraces. The high abundance of seedlings suggests that the establishment of a new cohort of riparian trees will be among the more important ecological effects from the 2013 flood on BCPOS properties.

Visit www.BoulderCountyOpenSpace.org/research to read the full report and other research articles.

A Day in the Life of a Park Ranger

by Graham Fowler

It started out as a normal day for me as the resident ranger at Betasso Preserve. It was Friday May 1, 2015. The clouds were starting to gather and the Weather Service was predicting showers, possibly heavy, in the afternoon. I was at the park finishing up my lunch. Rudy, my neighbor stopped by. He'd been out walking his dogs. Today he seemed a little excited, not his usual calm self. He told me about a wire of some sort that was down in the park and had started a little fire. He thought the fire was out, but said it would be best if I check it right away. He gave me directions to the location, but I wasn't exactly sure where he meant. He didn't have time to show me as he had to get to work. Luckily the ground was pretty damp but the idea of a fire up here was a little concerning.

The Telegraph was Back

I know the park pretty well and was able to find the wire and the area that had burned. It was about 100 feet long and two feet wide. The wire was still on the ground over the burned area. It was a small copper wire. What to do? There was burnt grass, there had been a fire, so I guess you call the fire department. Sugarloaf Volunteer Fire Department responded and confirmed the fire was out and suggested Xcel Energy be notified. Xcel responded very quickly and I showed them where the fire was. The small copper wire turned out to be an old telegraph line that hadn't been taken down. Telegraph line? When was the last time a message was sent over those wires? But the fire was still a mystery as the telegraph wires were no longer in service and carried no current.

Xcel said the wire wasn't causing a problem, but that they would take down as much as they could and return the following week to remove it. By now the storm had moved in; it was raining hard and quarter-inch hail was falling. Xcel said they didn't need any further help from me and that I could leave.

A 14,000 Volt Discovery

About 45 minutes later, dispatch radioed and advised me to return to Betasso Preserve since Xcel had found an electrocuted bear. An electrocuted bear!? Now it all made sense. The black bear must have climbed up a pole and touched the live wires and somehow contacted the old telegraph wires causing a fault. I turned around and headed back up to Betasso Preserve. Xcel was waiting for me and took me to the bear. It was about a quarter mile from the site of the original fire. I wasn't allowed to get near the bear since the telegraph wire was wrapped around the live wire (14,000 volts) and was still "hot." Xcel showed me where the telegraph wire had touched the ground in several places and had been so hot it melted the

decomposing granite into glass. Several other spot fires were pointed out to me including some that involved large trees. These too were out. So where was the pole the black bear had climbed?

There were no poles in the area around the bear, just the old telegraph wire. Xcel surmised that the last heavy snow we got on April 17 had built up on the telegraph line until it snapped, springing up over the 14,000 volt line and in the process becoming energized. Thank goodness we had over 10 inches of heavy wet snow that day. Xcel was going to have to turn the power off to the main line in order to remove the telegraph wire, so we returned to our vehicles to wait for more crew members to respond. While talking over the plan we noticed a fox checking us out. It didn't seem too bothered by all the commotion and was probably curious about what we were up to.

This was one of the most memorable days in my career as a park ranger.



A curious fox checks out the commotion.



Granite was melted by the live telegraph wire.

Jamestown: Then and Now

by Alice Albert

Jamestown, located 12 miles northwest of Boulder, is one of the oldest mining towns still thriving in the United States. The town's welcome sign indicates it was established in 1863 and incorporated in 1883. At an elevation of over 7,000 feet, Jamestown is a lovely little town surrounded by high canyons. Two creeks, the Big and Little Jim (James) Creeks run through town. There is no clear documentation of the origin of the town name. A previous resident claims the town, as well as the two creeks, were named after James Arbuthnot who diverted the water in 1860 from the St. Vrain River to create a pond which supplies James Creek. A more established finding credits a gold miner by the name of George Zweck as the founder and first settler in the area in 1860.

Booms One, Two and Three

Veins of galena, the main ore of lead, were discovered in 1864. As word spread and prospectors raced to the area, the camp was named Elysian Park in 1865. The population reached 400 at the height of the boom. A sawmill had to be constructed to supply materials for all the housing for the new arrivals. Unfortunately, about three years after establishing the town, the boom ended.

The town remained deserted for 10 years. It was not until 1875 that Jamestown saw a second boom. Frank Smith and Indian Jack found some gold surface float with a content as high as 50 percent gold. Their claim, the Golden Age, was sold for a measly \$1,500, and went on to be the most productive mine in the district.

The townspeople wanted to establish the town as Jimtown, but the post office personnel deemed this name not "respectable" enough, and Jamestown it became.

A third boom in 1882 necessitated the need for a school house (Jamestown Elementary), two hotels, 33 saloons with dance halls, and a church. The school house is one of the only one-room schools remaining in the United States. The town hosted weekly dances, a tradition that continues. On Thursdays, Fridays, and Saturdays, you will find live music and dancing at the town Merchantile or Merc, as it is affectionately called. The Merc is not just the only restaurant in town, but also the gathering place for townspeople to hold meetings and social events.

Many mining towns perished in fires, but Jamestown did not suffer from such a fate. However, a huge flood in June of 1894 devastated the town. Many folks witnessed homes and buildings engulfed into the roiling waters of the overflowed river. Jamestown would rebuild and be free from natural disasters until another flood of equal magnitude more than a century later.



Golden Age Mine Jamestown

Photograph was taken between 1890 and 1920.

By World War I, mining turned mostly to fluorspar or fluorite, used in the production of steel, aluminum, glass, and enamel—materials needed for the war. The Golden Age Mining and Milling Company operated until 1915, producing over 5 million pounds in gold, silver, lead, copper, and fluorspar. Some very pure gold was found and sent directly to the Denver Mint. Another mine, the Wano, was shut down in 1940, but reopened to mine fluorspar and still operates today.

Several small camps opened up around Jimtown in the seventies including Blarat, Gresham, Camp Enterprise, and Camp Providence, but are no longer inhabited. Jamestown's one claim to fame is 1920's cinema icon Douglas Fairbanks of Zorro and Robin Hood.

Recent Events and Resiliency

On September 11, 2013, rain poured down into the valley for three days straight, destroying 17 homes in Jamestown and damaging 45. The town patriarch and former owner of the Mercantile, John Howlett, was found crushed to death when his home collapsed from the rushing waters. Ninety percent of the population had to be evacuated via military helicopters. About 10 percent of the population is still displaced today. The firehouse was destroyed and the church suffered much flood damage. Total cost of infrastructure destruction was about 9.5 million.

Jamestown is rebuilding. The resilience of the townspeople and the dedicated volunteers will no doubt restore this vibrant community to what it once was.

Autumn Transition: Trees, Bears and Bats

by Leslie Brodhead

That first morning you awaken to a cool nip in the air. That first aspen leaf tinged gold on the tip. Geese flying south in formation across a clear blue sky. A dusting of snow sprinkled atop Longs Peak. These are all signs that fall is in the air, and winter is coming soon. Autumn in Boulder County is a time of transition and a time of preparation. All of the natural world around us is changing—getting ready for the harshness of winter.

When you think of autumn in the Rockies, the image that comes to mind is the vivid gold and orange hues of the aspen sprinkled along the foothills. It seems entire groves reach peak color all at the same time, which is no coincidence. Aspen have the unique ability to propagate by sprouting or cloning new trees, so that one parent tree can send out hundreds of sucker trees, spanning several acres. Because they all share the same DNA, the entire grove will reach peak color at the same time. But what causes the trees to turn such brilliant shades of gold and orange?

Color is Revealed

Chlorophyll is constantly produced in a tree while it is growing during spring and summer months, making the leaves green. But underneath the chlorophyll are the oranges, yellows and reds of carotenoids. In fall, the shorter days of sunlight cause the chlorophyll to eventually stop producing, unmasking the yellows, reds, and oranges we associate with fall foliage. What makes for the perfect peak colors of fall? Ideally, a succession of warm, sunny days interspersed with crisp, cool (not sub-freezing) nights brings out the most intense colors.

But the trees aren't the only ones changing colors in preparation for winter. Much of the wildlife found in our county parks are also getting ready by changing their coats. Foxes and coyotes grow thicker, denser coats, adapting to the colder temperatures, while some animals even change the color of their coat in an attempt to disguise themselves from predators during the winter. If you are lucky enough to spot an ermine (a winter weasel) or a snowshoe hare in mid-color change from brown to white, you've seen something truly special.

For me, a particular vivid image of wildlife preparing for fall is the black bear I spied in Boulder Canyon one September day in full pig-out mode. He'd found himself an apple tree and was sitting on his butt, legs spread out in front of him, shoveling apples into his mouth as fast as he could. That was one happy bear! But it's not surprising to see a bear so obsessed by eating during fall, as bears put on a lot of weight prior to winter denning. An adult black bear can consume up to 20,000 calories a day while in the midst of this obsessive eating—that's like eating 400 Oreo cookies!

A Long Sleep

Bears are not alone in preparing for a long period of sleep during the winter. Unlike bears that actually den for long periods, bats truly hibernate during winter, sinking into such deep sleep that they appear dead. During hibernation, their heart beat drops from 400 beats per minute to as few as 25 beats per minute and their body temperature may drop as low as 44 degrees. Bats begin their hibernation sometime in September or October, and can sleep for as many as 80 days straight. You never know when you might encounter a hibernating bat, as they like old barns and attics as much as caves and trees. We even found one hanging off a beam in our house one fall day!

Like the wildlife and plants around us, we as visitors to county parks, must be prepared to change as well during autumn. In autumn, weather conditions change quickly, bringing snow and subfreezing temperatures as early as September to our higher elevations. But a walk or bike ride in autumn also offers a chance to glimpse the beauty and marvel of nature in transition, reaching its finest moments.



"Fall has always been my favorite season. The time when everything bursts with its last beauty, as if nature had been saving up all year for the grand finale."

Lauren DiStefano

NATURE DETECTIVES



Fall 2015

Grasshoppers Have An Age-old Bad Reputation

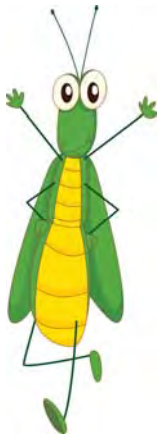
Grasshoppers have a reputation for making a nuisance of themselves on farms and in gardens. Not all grasshoppers are pests, but none are welcomed.

General dislike for grasshoppers may have inspired a long-ago storyteller who created a tale about a lazy grasshopper and a tireless ant.

You probably remember this fable: the ant toils hard all summer to store food for the winter while grasshopper doesn't do a lick of work. Instead of working, grasshopper sings away the days with no thought for the approaching cold.



The fable is supposed to teach us to think ahead and prepare for the future. In some happier versions of the tale, it's clear by the end that grasshopper's singing is important too.



No Need for Grasshoppers to Prep for Winter

Grasshoppers don't prepare for winter because the simple truth is grasshopper adults don't live through cold weather. Grasshoppers lay eggs in clusters in the ground in late summer. When the weather turns cold, the adult grasshoppers die. But the eggs can survive winter to hatch into baby grasshoppers when the weather warms in spring.

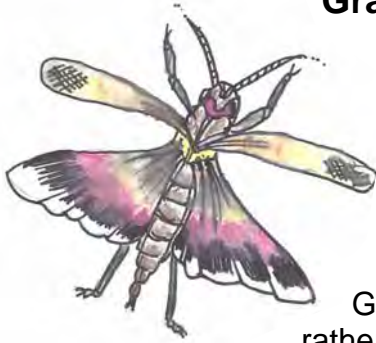
A few kinds of grasshoppers lay eggs in summer that hatch in fall instead of spring. Those baby grasshoppers survive freezing temperatures by hiding under leaf piles for protection. They don't eat until warm days arrive.

Grasshopper Singing Is Really Fiddling

Male grasshoppers make noise using their legs and wings -- sort of like playing a violin or a fiddle. They don't fiddle to entertain the neighborhood ants. They fiddle to attract female grasshoppers and warn off competing males.

For an entertaining picture book version of the ant and grasshopper fable, check out [Ant and Grasshopper](#) by Luli Gray, illustrated by Giuliano Ferri.

Grasshoppers Are Insects



Like all other insects, grasshoppers have six legs. They use all six for walking. The front two legs are also used to hold food. The muscular back two legs are extra large and made for jumping. Most kinds of grasshoppers also fly as adults, but even with two sets of wings, they aren't great fliers.

Grasshoppers tend to have rather short antennae.

Antennae give the insects their senses of touch and smell.

Hearing comes from a small area on each side of their body that works similar to the eardrum inside our ears.

Grasshoppers have five eyes. Three small eyes only detect light and dark. Two large eyes have many lenses and are called compound eyes. Their view is in color and they work especially well for seeing movement. We have only one lens in each eye, but if we look through a kaleidoscope, we get some sense of the image a grasshopper sees with its big eyes.

The outside of their bodies is hard because they have an exoskeleton, which means their skeletons are on the outside instead of the inside. Little holes in the exoskeleton allow grasshoppers to breathe.



Hatching Egg to Molting Nymph to Flying Adult

When it is time to hatch, a baby grasshopper (nymph) emerges from its egg looking like a teeny adult grasshopper. Most kinds of grasshoppers hatch in the spring and immediately begin to eat and eat. Really wet weather is hard on tiny nymphs. They thrive when it is hot and dry.

As the nymph grows, its exoskeleton stays the same size. When that hard outer skin gets too tight, it splits at the back and the nymph climbs out. The "naked" nymph swallows air to swell its body as much as possible before the soft outer skin hardens to become its new exoskeleton. This happens 5-7 times before a nymph is an adult grasshopper. On most kinds of grasshoppers, little wing pads gradually grow into adult wings by the final molt.

Find Them Where They Live

Grasshoppers are easy to find. There are over one hundred different kinds jumping around Colorado during summer and early fall. They like areas with soil that's easy for the females to push into to lay their clusters of eggs. It is easiest to find them on prairie grasslands and farm fields, but grasshoppers can be found all over Boulder County, except in the mountains above treeline.

Grasshopper Munchies

Despite their name, not all grasshoppers eat grass. Grasshoppers are picky about which kinds of plants they eat. Some eat many different greens and some eat only one particular type of plant. Grasshopper leaf chewing creates holes with ragged edges. Be a detective to see if you can find leaves that a grasshopper likely nibbled.

Our Grasshoppers Have Funny Names

Out of all the grasshoppers that live in Colorado, there are three groups or kinds that are most common around Boulder County.

Slant-faced grasshoppers eat grass and are typically small. In summer you can hear them singing in grassy meadows. **Spur-throated** grasshoppers are the hoppers most often seen, and they eat leafy plants and some eat grasses too. **Banded-wing** grasshoppers munch grasses or other plants. They readily fly and like to sit in the sun. Some make clicking sounds with their wings when they fly.

Grasshoppers For Dinner...Or Not

Grasshoppers are high in protein and vitamins and are an important food source for many animals. Coyotes, foxes, skunks, wild turkeys, kestrels, owls and other birds and mammals eat grasshoppers. In many parts of the world, so do people. We tend to grow up thinking all bugs are dirty and just plain yucky, but more than half the people in the world recognize insects as an important food source. If we cooked them properly, we just might find them tasty too.

Grasshoppers avoid becoming dinner by having bodies that match the colors of the plants they eat. They jump or fly as soon as their big eyes notice something moving beside or behind them.

Some grasshoppers can produce a stinky dark fluid to gross out possible predators.



Grasshopper joke:

What do you call a grasshopper that squirts stinky stuff on you as it hops away?

(Turn the page to find the answer.)

Eye-to-Eye with a Grasshopper



Grasshoppers may be much smaller than we are, but they can get away fast! Part of the reason they get their jumping legs moving so quickly has to do with their eyesight.



Most grasshoppers have three small eyes that just see light and dark. Their two big compound eyes work very differently than ours, and they are also very good at detecting motion. This helps them make those fast getaways!

See how close you can get to a grasshopper before it jumps away. Go outside where there are grasshoppers. If you are very patient and very slow, you might be able to get pretty close. Look carefully at its big eyes and long legs.

There are over 70 species (or different types) of grasshoppers along the Front Range in Colorado! See how many different types you can find. How do they differ from each other?



Think about grasshopper eyes compared with your eyes. Imagine if you had compound eyes. When might they be useful to have?

Oh Fiddlesticks!

Grasshoppers usually make sounds by rubbing their legs and wings together, kind of like using a bow on a fiddle.

Look for different objects you can rub together to see if you can make different sounds.

Be **careful** to not use something that might break or hurt you. Make grasshopper music!



Joke answer: A **gross**-hopper!

Helpful Harvest: Gleaning for Good

by Elizabeth Etzel

To many of us today, gleaning refers to the gathering or garnering of knowledge, but historically gleaning refers to gathering leftover produce after a harvest. The Boulder County Parks and Open Space Department is bringing back the historical meaning of the word gleaning. Through a mutually beneficial relationship with farmer lessees of county land, Parks and Open Space is sponsoring volunteer events to glean leftover produce to supply a food bank with healthy, fresh food.

More than 20,000 Households Benefit

Last fall, Dave Asbury, an organic farmer and county agricultural land lessee, first had volunteers participate in gleaning produce. Volunteers tromped through muddy fields still fertile with pumpkins and squash, choosing the whole and clean fruit from an array of colorful produce. Community Food Share also came out to help, bringing with them crates atop a trailer to tow the squash back to their Louisville-based food bank. Serving Boulder and Broomfield counties where one in six people live in poverty, Community Food Share provided food to more than 20,700 households in 2014. Parks and Open Space is proud to partner with Community Food Share as they supply many meal and grocery programs in the area.

While the majority of produce had already been harvested, there were still plenty of good-looking squashes to glean. The variety of fruits included squashes such as acorn, delicata, turban, red kuri, and Cinderella pumpkins.

Some volunteers giggled at the unique varieties of squash rarely seen in the big box grocery stores, posing with the produce for pictures, while others dreamed of delicious soups to be made of the squashes, all the while working diligently to fill the crates. The fruits quickly accumulated and smiling volunteers filled Community Food Share's crates to capacity. The goal was completed more quickly than anyone expected, and soon everyone left with the knowledge that the beautiful squashes would provide hundreds, maybe thousands of meals for families with food insecurities.

In total, the gleaned produce weighed 2,200 pounds. When you consider that an average person eats about three pounds of food each day, that's a lot of squash!

Volunteers Needed for 2015 Projects

The department has gleaning projects scheduled for October and we need your help! Volunteers will use various hand tools to harvest, glean and clean remaining produce. Register at: www.BoulderCountyOpenSpace.org/wildwork.

For more information about the department's gleaning program, contact Craig Sommers at 303-678-6216 or csommers@bouldercounty.org.



A gleaning project in 2014 involved a lot of hard work and inspired the invention of a new sport, "squash ball."

Betasso Preserve: Projects that Protect

by Ashley Garrison

The Boulder County Parks and Open Space Department will soon be thinning 90 acres at Betasso Preserve Open Space. The project will take place on county land adjacent to the City of Boulder's Betasso Water Treatment Plant beginning in fall 2015, and is expected to be completed in winter 2016. This is the first of two forestry projects planned for the open space property over the next several years.

The hazardous fuels reduction treatment is planned as part of the Betasso Preserve Management Plan, and funded through a Federal Emergency Management Agency (FEMA) Pre-Disaster Mitigation Grant. The management plan sets forest management objectives including thinning of the forest to reduce risk from catastrophic wildfires. Hazardous fuels reduction is also recommended by the Sugarloaf, Four Mile Canyon and Boul-

der County Community Wildfire Protection Plans as part of a community-wide effort to reduce risk from wildfire and protect critical infrastructure.

Hazardous fuels reduction treatments decrease possible fire intensity during a wildfire and increase safe access for fire fighters. The treatment will decrease forest density and address the fuels management goals of the Sugarloaf Fire Protection District, Four Mile Fire District, City of Boulder, Boulder County Land Use Department, and Boulder County Parks and Open Space.

The treatment will reduce density of ponderosa pine by 50 to 70 percent, implement the principles of ponderosa pine restoration whenever feasible, create a mosaic of forest cover and open spaces, utilize a wide variety of stand densities, and reduce hazardous fuels enough to allow protection of significant

resources including the City of Boulder Betasso Water Treatment Plant and associated infrastructure including residences at Betasso Preserve.

Other valuable resources protected include: 200 private residences within two miles of Betasso Preserve, the City of Boulder Hydro-Electric Plant, the historic Betasso home-stand, the Blanchard cabin, sedimentation and loss of water quality in Boulder Creek, and critical wildlife habitat (as defined in the Boulder County Comprehensive Plan).

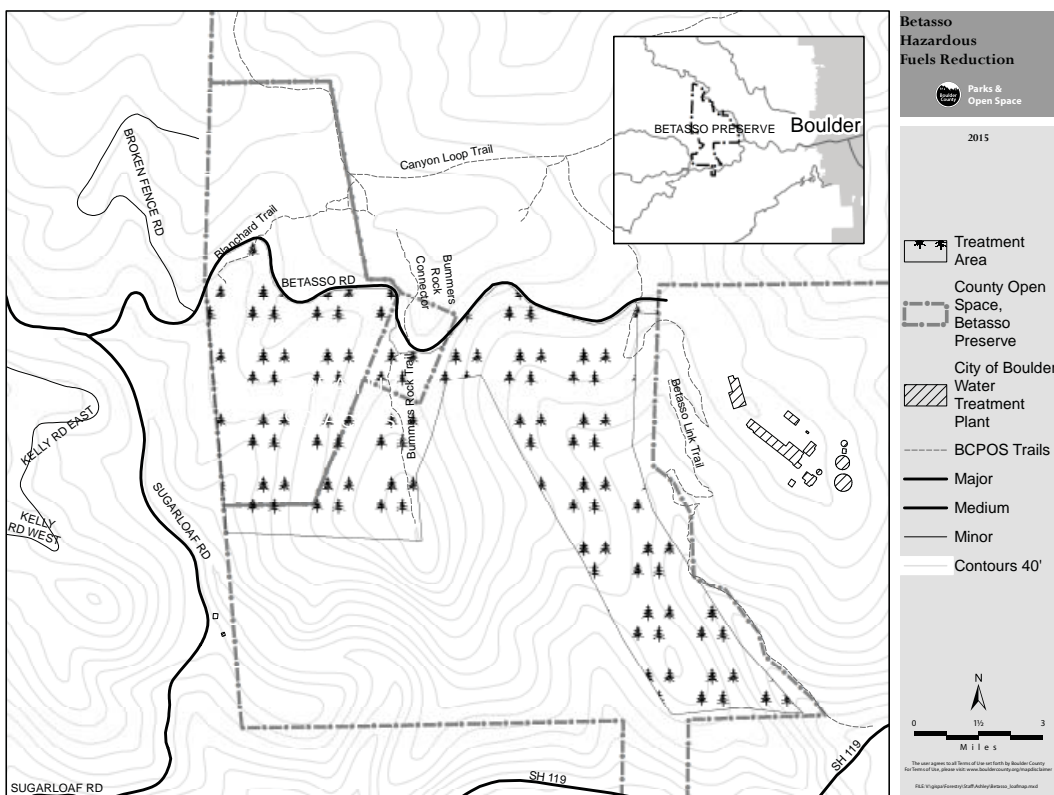
What to Expect

Treatment will be visible from the Bummers Rock trail and Canyon Link trail. Park visitors will see the treatment from the main access road as they drive to the main parking area. There may be noise from chain saws,

helicopters, wood processing, and log trucks. Operations are weather-dependent and will only be conducted during daylight hours.

Specific park closures have not yet been determined, but are contingent on ensuring the safety of staff and visitors.

More information about the treatment, including location and times of trail closures and impacts to visitors and residents, will be available prior to the start of the project.



For more information:

- Maps are available at www.BoulderCountyOpenSpace.org/betasso
- Email bcforestry@bouldercounty.org to receive email updates for this project.
- Contact Forestry Supervisor Stefan Reinold at sreinold@bouldercounty.org or 303-678-6202.

CALENDAR OF EVENTS

Horseback Ride at Caribou Ranch

Saturday, September 5, 10 a.m.–2 p.m.

Meeting location will be given to registered participants

Join two park rangers for a scenic ride through Mud Lake and Caribou Ranch open space properties. Please be sure your horse is well mannered and comfortable riding on multi-use trails with other horses. Horses should be up to date on all vaccines. Register at www.BoulderCountyOpenSpace.org/register

Hard Rock Mining Tour

Saturday, September 5, 10:30 a.m.–1:30 p.m.

Meeting location provided to registered participants

For 100 years, mining was a leading industry in Boulder County. Explore former mining towns and operations as this guided driving tour brings to life the stories of men and women who mined these hillsides. Tour is free and open to ages 10 and up. Some walking required. Registration opens one month before each tour.



Register online at www.BoulderCountyOpenSpace.org/register

Bears in Our Backyard

Saturday, September 5, 10 a.m.–noon

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

-- and --

Sunday, October 11, 10 a.m.–noon

Heil Valley Ranch Open Space, North of Boulder off Lefthand Canyon Drive, meet at group picnic shelter

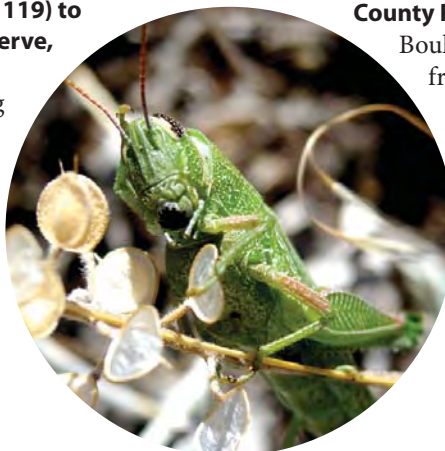
As fall approaches, Boulder County's black bears are busy gorging on berries and other food in preparation for their long winter sleep. Join volunteer naturalists on a moderate one-mile hike to learn about the natural history of our local bruin and how people and bears can share our wild places.

Nature Detectives in the Field: Jumping Grasshoppers!

Tuesday, September 8, 10–11 a.m.

Betasso Preserve, Boulder Canyon (Highway 119) to Sugarloaf Road, follow signs to Betasso Preserve, meet at group picnic shelter

There are over 70 species of grasshoppers along the Front Range! These jumping insects have fascinating characteristics and remarkable abilities. Young children ages 3–7 and their parents/guardians will enjoy activities and exploration at this interactive program. Younger and older siblings are welcome, but the program is geared to ages 3–7.



Fun on the Farm—The Chicken and The Egg

Friday, September 11, 9:30–10:30 a.m.

Agricultural Heritage Center, 8348 Ute Highway, Longmont

No matter which came first, chickens and eggs are fun to learn about. Children ages 2–6 with parents/guardians will hear stories, take part in activities, and visit live chickens. Afterwards, take time to explore the farm and bring a lunch or snack to enjoy.

Rattlesnake Hike

Saturday, September 12, 10 a.m.–12:30 p.m.

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

As fall approaches, rattlesnakes become more active as they prepare for hibernation. Join volunteer naturalists on a moderate 1.5-mile hike and learn about the western rattlesnake, including habitat, ecology, behavior, and how to be safe in rattlesnake country.

Foraging on the Farm

Saturday, September 12, 4–5 p.m.

Agricultural Heritage Center, 8348 Ute Highway, Longmont

The Agricultural Heritage Center is home to many uncultivated, forageable plants that can be both tasty and nutritious. Come join us on a walk around the farm and learn how to identify these plants in your own backyard and discover interesting ways to incorporate them into meals at home.

I Spy Critter Clues

Wednesday, September 16, 10–11 a.m.

Heil Valley Ranch Open Space, North of Boulder off Lefthand Canyon Drive, meet at group picnic shelter

The nature detectives are on the prowl! Help volunteer naturalists search for evidence of who lives in the woods. We'll look for tracks, scat, nests, bones, and antlers of some of the animals that live here. This program is geared toward preschool children, but siblings are welcome.

Grassland to Glacier Hike

Saturday, September 19, 10 a.m.–noon

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

Boulder County is a dramatic landscape, rising from the Great Plains to the Continental Divide and supporting a diversity of biological life zones. Join volunteer naturalists on an easy one-mile hike to celebrate fall and explore the montane life zone where you will learn how different plants and animals have adapted to this mountain landscape.

CALENDAR OF EVENTS

On the Trail of Laura Ingalls Wilder Tuesday, September 15, 6:30-8 p.m.

Parks and Open Space Headquarters, 5201 St. Vrain Road, Longmont

Hitch up your wagon and follow the true trail of America's favorite pioneer girl, Laura Ingalls Wilder. Connie Ryle Neumann will be your guide for an interactive journey through the classic *Little House on the Prairie* books. Best for adults and families with school-aged children. Wear your best pioneer duds for fun!



Heil Valley Ranch Mountain Bike Ride Friday, September 18, 10 a.m.-12:30 p.m.

Meeting location will be given to registered participants

Join Ranger Denny Morris for a 7.5 mile ride in the foothills. Learn about forestry management, fire ecology, and the natural history of the area. You must bring your own bike. Register at www.bouldercountyopenspace.org/register

Play Ball! Vintage Baseball Clinic Saturday, September 19, 5-7 p.m.

Walker Ranch Homestead, 8999 Flagstaff Mountain Road, Boulder

Join the Walker Ranch Boys' practice for the big game. This will be a fun baseball skills clinic and practice game for all ages and genders. In the 19th century, ballists (players) didn't use baseball gloves, but feel free to bring yours.

Register at www.BoulderCountyOpenSpace.org/register
Contact Craig Sommers at csommers@bouldercounty.org for more information. Youth under age 18 must be accompanied by an adult.

Story in the Rocks—The Geologic History of Boulder County Wednesday, September 23, 6-7:30 p.m.

Lafayette Public Library, 775 west Baseline Road, Lafayette

The geologic history of Boulder County's remarkable landscape goes back nearly two billion years! Rocks contain a record of earth's history that can be read like the pages in a book. Join geologist and volunteer naturalist Roger Myers for this slide program and learn how to read the story in the rocks in your backyard.

Geology and Landforms of Hall Ranch

Saturday, September 26, 9:30 a.m.-noon

Hall Ranch Open Space, one mile west of Lyons on Highway 7, meet at the group picnic shelter near the upper parking lot

Join volunteer naturalists Dick Pratt and Roger Myers to learn about the dramatic geology and landscape of Hall Ranch. This moderately strenuous 2-mile hike (roundtrip) will cover igneous, metamorphic, and sedimentary rocks that span over 1.7 billion years of geologic history. This hike is geared to adults.

Watch the Moon Disappear

Sunday, September 27, 7-11:30 p.m.

Beech Open Space Shelter, Neva Road and Highway 36 north of Boulder

Join us to see a full lunar eclipse (weather permitting) in our own backyard. See live demonstrations and view the eclipse through telescopes provided by the Longmont Astronomical Society. For questions or weather updates, call Deborah Price at 720-526-9154 or Dave Sutherland at 303-906-7391.

AUTUMN HERITAGE AND VINTAGE BASE BALL GAME DAY

Sunday, September 27, 10 a.m.-3 p.m.

Walker Ranch Homestead 8999 Flagstaff Mountain Road, approximately 7 miles west of Boulder on Flagstaff Road

See how autumn was spent on a working ranch in the late 1800s. Costumed volunteers will demonstrate autumn chores such as root-cellar, sausage making and doing laundry with a washboard and wringer. Watch the blacksmith make hinges, nails, and other hardware needed around the ranch and attend a one-room school session or take a guided homestead tour. A highlight of this event is the vintage "base ball" game that will begin at noon.

For more information, contact Sheryl Kippen at skippen@bouldercounty.org or 303-776-8848. Please note: Dogs and bicycles not permitted at the homestead.



JUNIOR & SENIOR FISHING DERBY



**Sunday, October 11,
9 a.m.-noon
Wally Toeys Pond at Walden
Ponds Wildlife Habitat
off of 75th Street between Jay**

Road and Valmont Road, Boulder

Create a fishing dream team! Boulder County Parks and Open Space is hosting a Junior and Senior Fishing Derby. This special event is for pairs of one senior and one junior fishing together as a team. Seniors must be age 64 or older and juniors must be age 15 or younger.

There will be prizes given to the senior and junior pair who catch the heaviest trout, have the largest age difference, and are first to catch the limit.

Event takes place rain or shine! The pond is stocked with rainbow trout. Artificial and live bait are both permitted at Wally Toeys Pond. Seniors must have a valid Colorado fishing license. For more information contact Michelle Bowie at 303-678-6219 or mbowie@bouldercounty.org.

Let's Talk Goats

**Saturday, October 3, 10:30 a.m.–12:30 p.m.
Agricultural Heritage Center, 8348 Ute Highway, west of
Longmont**

Join 4-H participants and their goats for a drop-in program all about goats. Why do people raise goats? Do goats really eat tin cans and tennis shoes? How do I get involved in 4-H with goats? Get answers and learn about raising goats, different breeds, housing and feed requirements, and see a live milking demonstration.

Quaking Aspen Hike

**Saturday, October 3, 10 a.m.-noon
Mud Lake Open Space, 2 miles north of Nederland on
County Road 126, meet at parking lot kiosk**

Join volunteer naturalists on an easy 1.5 mile hike to learn about aspen—the most widely distributed tree in North America. Along the way, we'll discuss the natural history of aspen, including its importance to wildlife, varied uses, response to fire, and threats to its health. We'll also keep an eye out for signs of wildlife.

BEFORE YOU GO - BE PREPARED

All ages are welcome unless otherwise noted. Be prepared for cool to high temperatures and afternoon thunderstorms. Bring drinking water, sunscreen, a hat, and a poncho. Dress in layers and wear hiking shoes or boots.

Oh Deer, Elk and Moose!

**Saturday, October 10, 9 a.m.-noon
Caribou Ranch Open Space, 2 miles north of Nederland on
County Road 126, meet at parking lot kiosk**

Join volunteer naturalists for a moderate three-mile hike in the high country to learn about the natural history, behavior, and ecology of the three members of the deer family that call Caribou Ranch home—mule deer, American elk, and moose. We'll also look for signs of wildlife along the trail.

Birding Boulder County Through the Seasons

**Wednesday, October 14, 6-7:30 p.m.
George Reynolds Branch Library, 3595 Table Mesa Drive,
Boulder**

Join volunteer naturalists to learn about year-round birding in Boulder County. This program will explore where to find and how to identify some of our local and migratory birds, and introduce you to an amazing range of ecosystems and habitats.

Geology of Rabbit Mountain

**Saturday, October 17, 9:30 a.m.-noon
Rabbit Mountain Open Space, NE of Lyons on north 55th
Street, meet at group picnic shelter**

Volunteer naturalists Dick Pratt and Roger Myers will lead a moderate 2-mile hike explaining the unusual geology of the area. We'll also look for wildflowers, soaring raptors, and other wildlife. This program is geared to adults.

Let's Talk Chickens

**Saturday, October 24, 10:30 a.m.–12:30 p.m.
Agricultural Heritage Center, 8348 Ute Hwy, Longmont**

Join volunteer Jessica Brunecky as she shares experiences and lessons learned from raising her own chickens. Learn why chickens have been popular as pets and livestock for centuries and how they are suited to your backyard. Bring your stories and questions about getting ready for winter, lifecycle, different breeds, and living arrangements.

Lions and Abert's and Bears

**Saturday, October 24, 10 a.m.-noon
Bald Mountain Scenic Area, 5 miles west of Boulder on Sun-
shine Canyon Drive (Mapleton Ave. in Boulder city limits)**

Join volunteer naturalists for a moderate one-mile hike to learn about some of the critters that call Bald Mountain home, including a handsome squirrel that lives only in ponderosa pine forests. Also see evidence of the 2010 Fourmile Canyon fire and learn a little about the natural role of fire in this ecosystem.

Story in the Rocks—Our Changing Landscape

Saturday, October 31, 10 a.m.-noon

Heil Valley Ranch Open Space, North of Boulder off Lefthand Canyon Drive, meet at group picnic shelter

Join volunteer naturalists for a 1.3-mile moderate hike to learn how this landscape has changed over time. The stories in the rocks span over 200 million years, from ancient sand dunes to tidal flats to riverbeds where dinosaurs roamed. The rocks also determine the landforms and ecology of the present landscape.

Whoo are the Owls?

Thursday, November 5, 7-8:30 p.m.

Louisville Public Library, 951 Spruce Street, Louisville

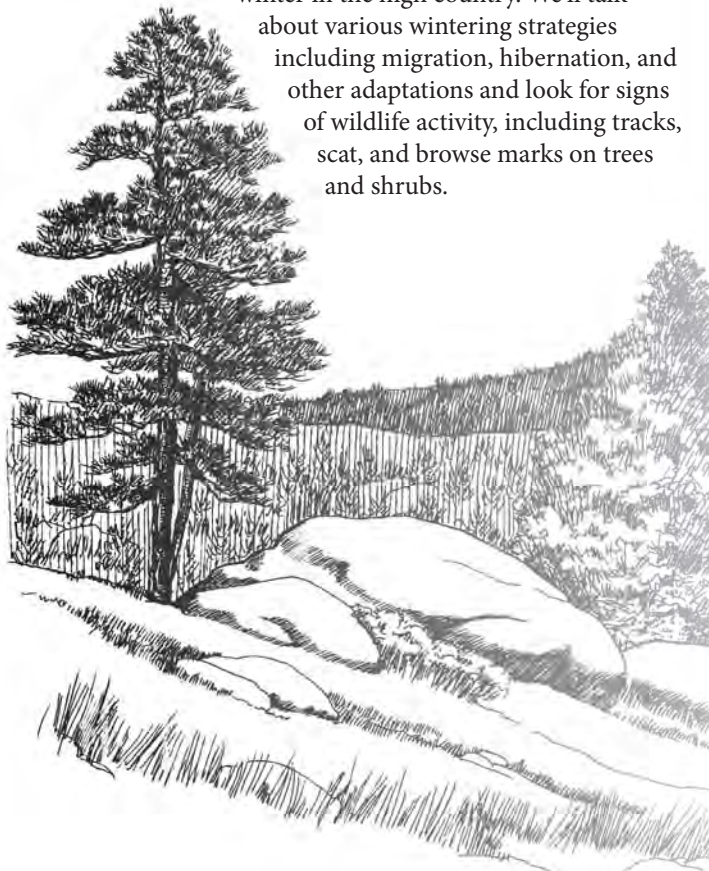
Owls have been regarded with fascination and awe throughout recorded history and across many cultures. Over half of the owls recorded in the U.S. have been seen in Boulder County, and most of those owls nest here. Join volunteer naturalists to explore these fascinating creatures, and to learn about the special adaptations that make them such expert hunters.

Wildlife and Winter Hike

Saturday, November 7, 10 a.m.-noon

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

Join volunteer naturalists for an easy one-mile hike to learn about the many ways that animals prepare for and survive winter in the high country. We'll talk about various wintering strategies including migration, hibernation, and other adaptations and look for signs of wildlife activity, including tracks, scat, and browse marks on trees and shrubs.



Snoods and Caruncles—Wild Turkeys of Boulder County

Saturday, November 14, 10-11:30 a.m.

Sandstone Ranch Open Space, the Visitor Center is located south of Highway 119, one mile east of Weld County Road 1. Take the east entrance to the Sandstone Ranch area, turning south on Sandstone Drive. Follow signs to the Visitor Center.

Did you know there are wild turkeys in Boulder County? Join volunteer naturalists to learn about the identification, ecology, and behavior of these iconic birds. Also, find out why Benjamin Franklin thought the wild turkey should be our national bird instead of the bald eagle!

Birds of Prey Slide Program

Tuesday, November 17, 7-8:30 p.m.

Longmont Public Library, Meeting Rooms A & B, 4th Avenue and Emery Street

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

Birds of Prey Driving Tour

Saturday, November 21, 10 a.m.-1 p.m.

Registration is limited, meeting location will be provided to registered participants

Join volunteer naturalists for a driving tour of Boulder County's best areas to view birds of prey, or raptors. We will carpool from our meeting place and search for raptors, learn about habitat, and work on our identification skills. Please bring binoculars and a bird field guide if you have them. The tour is geared to adults and older children. Register by contacting Larry Colbenson at lcolbenson@bouldercounty.org, or 303-678-6214 by Thursday, November 19.

NATURE HIKE FOR SENIORS

Boulder County Parks and Open Space hosts a nature hike for seniors every month. Programs begin at 10 a.m. and end by noon.

Thursday, September 24

Mud Lake Open Space

Thursday, October 29

Heil Valley Ranch Open Space (Meet at the group picnic shelter at the south trailhead)

***Thursday, November 19,**

Walden Ponds Wildlife Habitat Area (Meet at the picnic shelter at Cottonwood Marsh)

* Early due to Thanksgiving holiday

Volunteer Naturalist Program Now Taking Applications

We are now accepting applications for the 2016 Volunteer Naturalist training class. We are looking for people with a passion for nature, some knowledge of local natural history, and a desire to learn more and share their knowledge and enthusiasm with others.

Volunteer naturalists lead interpretive hikes in county parks, present public natural history slide programs, and provide hands-on field experiences for schools.

Training Information: A 10-week training program is required. Training includes an overview of the department including history, mission, and resource management; geology; plants and ecosystems; forestry; wildlife and birds; interpretive programming and resources. Training classes take place January 7 through March 10, 2016 from 8:30 a.m.-4:00 p.m. in Longmont.

Requirements: Participants must be at least 18 years old, pass a background check, and attend all training sessions. Because many of our requested programs are scheduled Monday-Friday during daytime hours, applicants must have some ongoing weekday availability.

Contact: Larry Colbenson at 303-678-6214 or lcolbenson@bouldercounty.org for information.

Application deadline is November 20, 2015. Since there is limited space in the training course, all applicants will be interviewed.



40th Anniversary Bus Tours

Wednesday, September 9, 4-8 p.m.

Saturday, September 19, 1-5 p.m.

Tuesday, September 22, 3-7 p.m.

Meeting location will be given to registered participants

Tours will highlight unique stories about Boulder County history and properties. It may be hard to believe, but getting an open space program started in Boulder County was not easy.

Participants will learn about the early challenges, and hear stories about early efforts and players. Tours may include stops at properties that are not open to the public. Register at www.bouldercountyopenspace.org/register



Agricultural Heritage Center Open through October

8348 Ute Highway 66 west of Longmont

Open until October 31

10 a.m.-5 p.m., Fridays, Saturdays and Sundays

Tours start at 11 a.m.

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
- 1909 farmhouse furnished with items from the 1910s
- animals on site seasonally including chickens, pigs, sheep and others

We will continue to open the site on the first Saturday of each month November through March.

For more information, contact Jim Drew at 303-776-8688 or jdrew@bouldercounty.org.

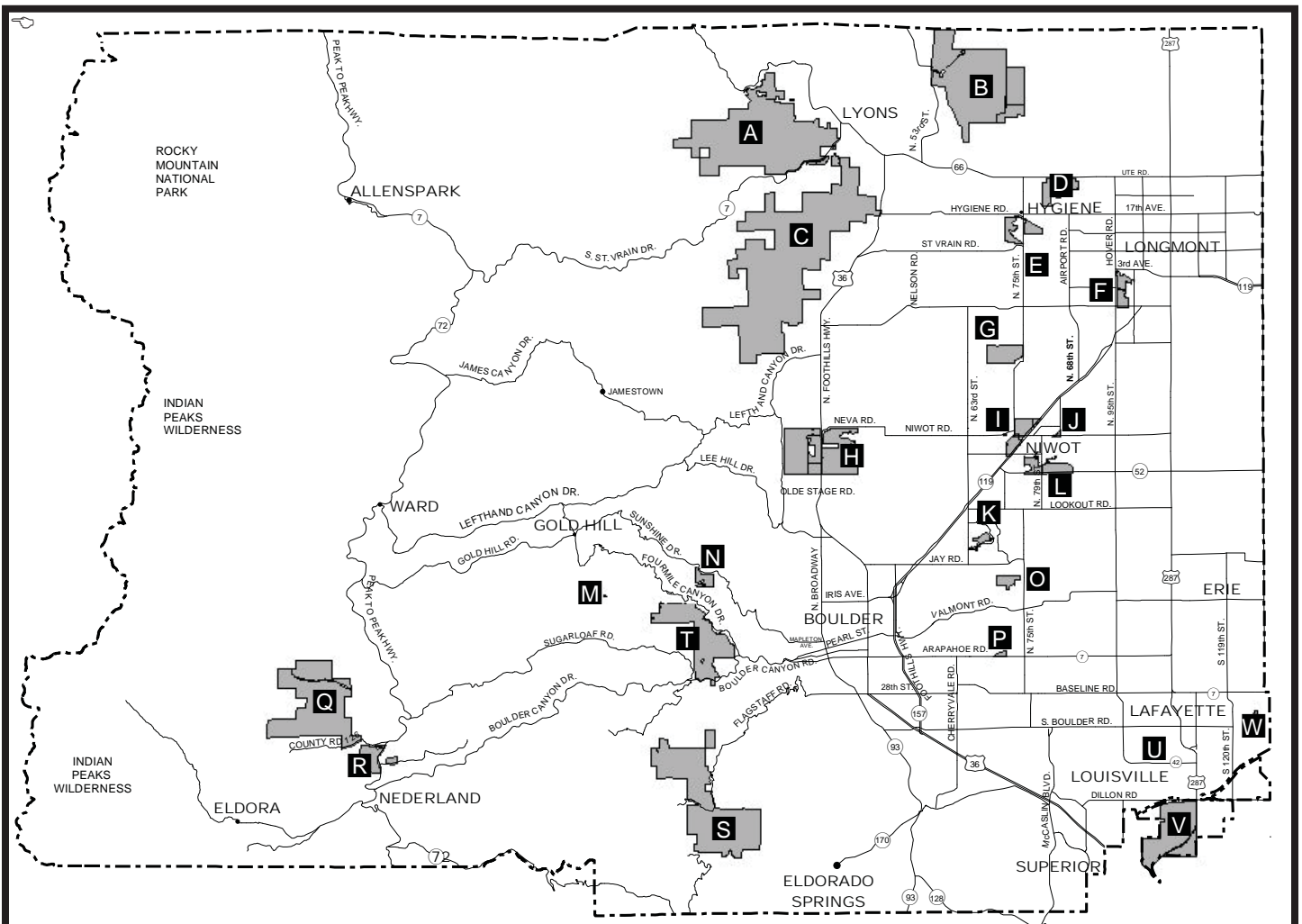




PARKS & OPEN SPACE DEPARTMENT
5201 St. Vrain Road
Longmont, CO 80503
303-678-6200

www.BoulderCountyOpenSpace.org

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