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.

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Tree Caddy and Felling, *Cathy Thiltgen*
Pella Crossing, *Kristin Turner*
Aspen Trees, *Lucy Haggard*
Cooper's Hawks, *Ann Cooper*
Rabbit Mountain, *Rich Koopman*

NATURE DETECTIVES
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Boulder County

Volume 42, number 3

Notes from the Field: Urban Forestry

by Mary Tiernan and Cathy Thiltgen

The work of the department's urban forestry group involves many different facets, but the main purpose of our work is to care for the trees found at our trailheads and along trails in the eastern half of the county. This team's responsibilities have evolved to include many duties associated with tree care such as planting, irrigation installation, pruning, and removals.

PLANTING

It all begins with planting. We plant everything from very small container trees that can be hand planted to very large balled and burlaped (B&B) trees that can be planted only with specialized equipment. Over time, the tools we use to install these larger trees have evolved. In the beginning, it was a single person using a large dolly and human strength to maneuver trees into place. Now we use a tree caddy built in the weld shop that attaches to the forks or bucket on a Toolcat machine. It then hooks directly onto the wire cages that encase the base of B&B trees to safely and easily transport them. Using this tool, we can get the larger trees unloaded, transported across planting sites, and set in place without having to overexert staff or volunteers. It also means we can plant more quickly, getting more large trees in the ground in a day than when using the dolly method.

TENDING

Once the trees are planted, it is urban forestry's job to ensure that they get enough water to establish roots. In some places we have permanent irrigation systems that run year after year. Other systems are temporarily installed with the intention of removing them once roots have been established. We check the irrigation systems each spring to ensure water is flowing properly after a winter of freezing and thawing cycles, and run every system on a timer that controls the watering schedule. Over the course of the year, we adjust those timers to account for seasonal changes in temperature and precipitation. Once watering season is over and the plants go dormant, we blow all the water out of the systems with an air compressor to ensure water will not freeze and expand in the system, causing it to rupture and break. We will also temporarily hand-water trees in locations without irrigation until they are established. To supplement our watering efforts and to incorporate organic matter into the soil over time, we also put mulch rings around the base of the trees to prevent water loss from evaporation after watering and rain events.

DIRECTING GROWTH

After trees have been in the ground for a year or longer, we prune them in ways that will encourage growth in the directions we want, based on where that tree is planted. For example, we prune trees planted in parking areas to grow up, instead of out, to avoid branches interfering with parking spaces. We will also prune to improve airflow through the crown of the tree, to remove branches growing at odd angles or into neighboring branches, and to mitigate the risk from dead or dying branches falling on the trail below. If a tree experiences substantial dieback or experiences a traumatic event (like frost damage) that kills it, we might remove the tree if it is in a place where it could fall and cause injury or if it was originally planted to provide shade by a picnic table or bench. If it can safely be left alone and doesn't need to be replaced, we leave the tree as is and let it die to become valuable habitat for wildlife.

While this article doesn't cover all of urban forestry's functions, which also include things like educational outreach and invasive species management, it is a pretty good look at what we do for the trees in open space. Caring for the trees is our job but it is also our passion, and we are glad to do our part to make our trailheads and trails spaces everyone can enjoy.

"Caring for the trees is our job, but it is also our passion, and we are glad to do our part to make our trailheads and trails spaces everyone can enjoy."

Clockwise from top, the co-authors at work: Cathy Thiltgen performs bucket truck work and wood chipping; Mary Tiernan uses the tree caddy for planting at the Agricultural Heritage Center, and she fells a tree

Bees in the High Plains

by Karissa Courtney

Bees are very important animals (yes, animals) that contribute to the natural ecosystems around us. Colorado has more than 900 native bee species; about 562 of those live in Boulder County. Colorado is ranked the state with the fifth highest diversity of bees in the nation. Our neighbor, Utah, is ranked first.

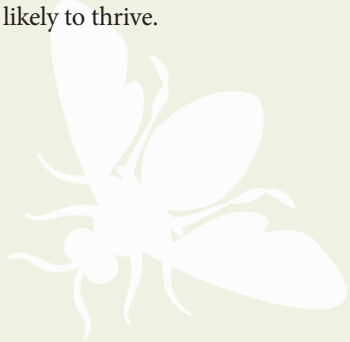
Bees are important pollinators, meaning that they move pollen from flower to flower, resulting in the fruiting of that plant. This is a key element in producing many of our foods—think apples, berries, almonds, etc.

The honey bee, however, is not native to the United States, although many now live in the area. About 70 percent of Colorado's bees are actually solitary, with each female building her own nest. There are six main families of bees that live in Colorado: Colletidae (plasterer bees), Halictidae (sweat bees), Andrenidae (mining bees), Melittidae (pretty rare, small family), Megachilidae (leaf-cutter, mason bees), and Apidae (honey, bumble, cuckoo, digger, and carpenter bees).

In Colorado, bees are active from late March through mid-October. Temperature has a big impact on their activity, as well as flowers available for pollen gathering. For honey bee keeping, this is especially true. Since honey bees aren't native, they aren't naturally drawn to the Boulder County native plant species, so managed crops are critical for their success. Many hives in Boulder County like to access alfalfa, sweet clover, linden, Russian olive, apple, and crabapple. Of course, the extreme weather changes here also present challenges such as limiting forage in the spring and cold spells that sometimes lead to starving hives. Like most other locations, Boulder County honey bees are susceptible to disease, virus, and the Varroa mite.

The spring of 2020 was particularly hard for local beekeepers and their hives, primarily because of the sudden freezes in April, which damaged much of the early spring bloom. The summer forage also depends on how the weather unfolds.

And if you have been curious about those mysterious Asian giant hornets, there is presently little to worry about. This species prefers low elevation, moist, woodland areas, and does not hitchhike well. While our wetter, lower beehives in other parts of the nation might be affected, Boulder County is currently not a place where this wasp is likely to thrive.



Bees vs. Wasps: How to tell the difference

Bees

- 4 short wings
- Hairy bodies
- Flattened plates used as pollen baskets on hind legs (called corbiculae)
- Pollen-carrying hairs on hind legs/abdomen (called scopa)

Wasps

- Body length usually 2-25mm
- 4 long wings—long and slender
- Not distinctly hairy
- Many have a slim waist, called a "wasp waist"
- Narrower bodies
- Do not carry pollen loads

How to protect our bees:

- Plant bee-friendly flowers and herbs in your garden/yard
- Don't use chemicals or pesticides on your garden/lawn
- Buy local honey
- Create a bee bath—bees get thirsty!
- Teach others!

Plants that attract bees:

- Blue Flax (*Linum lewisii*)
- Blue mist and firecracker penstemon (*Penstemon eastorii and P. virens*)
- Yarrow (*Achillea millefolium*)
- Showy milkweed (*Asclepias speciose*)
- Blanket flower (*Gaillardia aristate*)
- Rabbitbrush (*Chrysothamnus nauseosus*)
- Goldenrod (*Solidago spp.*)
- Common sunflower (*Helianthus annuus*)
- Hairy False Goldenaster (*Heterotheca villosa*)
- Rocky Mountain bee plant (*Cleome serrulata*)

Pella and Hygiene: What's in a Name?

by Pete Lundskow

The towns of Pella and Hygiene have an historic connection that started long before they were two adjacent dots on the Colorado map. They share a history of being places where people expressed their freedom of religion and improved their health and wellness.

The word "Pella" derives from two languages. In Greek it means "stone." In Hebrew it has two meanings: "city of refuge" and "marvel of God." The first settlement named Pella was in Mesopotamia, the birthplace of Alexander the Great. Second, Pella is a female name in Hebrew meaning "marvel of God."

The word "Hygiene" was first used in the English language in the late 17th century and comes from the Greek root, "the art of health." Hygieia was the daughter of the God of Medicine, Asclepius. Hygieia practiced the art of health, cleanliness, and sanitation. During the Reformation in Germany in the early 18th century, a religious group, called the Church of the Brethren, was persecuted for its beliefs. This group was also known by the nickname "Dunkers," for their baptism ceremony, in which people are 'dunked' three times. Dunkers first immigrated to Holland, where they experienced more tolerance. Unfortunately, by the 1840s, the Dutch persecuted them as well.

A Dunker group left for America, settled in Iowa and named the town Pella. With more than 10,000 residents today, it is a vibrant, well-established community with an annual tulip festival and the largest Dutch-style windmill in the United States. The town grew quickly, causing land to become scarce and expensive. In the 1870s, three groups left to make new settlements in Nebraska, Iowa, and Texas, which they named Pella, mostly likely because of the name's religious connection and/or desire for refuge. The towns in Texas and Nebraska no longer exist except for a road name or cemeteries. Our own Pella was absorbed by Hygiene in 1916.

The Reverend Jacob S. Flory was the leader of the group that came to Colorado. He chose the area for its rich farmland, and the water source of the St. Vrain. He also must have had a good eye for developing business opportunities. Within 10 years, Flory built the Hygienic House, a sanitarium located close to the area that became Hygiene. At the time, people from all over were taking advantage of Colorado's climate that brought relief to those suffering from tuberculosis. It is said that in 1900, up to 30 percent of residents were here for treatment. Flory moved on to California; the sanitarium became a hotel and was torn down 10 years after Hygiene and Pella consolidated in 1926.

View of Long's Peak from Pella Crossing Open Space

This brings us to the current part of the story: what's in a name? Because Hygiene was passed by for railroad expansion and it has no major highway intersection, the town has stayed about the same size, but has gained interest for weekend scenic drives and bicyclists often stop for refreshment during their rides. An art gallery, quaint café, and organic market also draw in visitors.

Pella represents another part of that long history of getting out to enjoy nature. The McCaslin family owned the Crane Hollow Ranch, where many people came to watch and hunt the great blue heron. In fact, Mr. McCaslin warned he would, "Prosecute the next fellow who shot one of the birds." It was also a favorite spot for the Longmont Bird Club and the largest and possibly oldest (120 years plus) cottonwood tree in America, which survived near Pella until 2012.

The opening of Boulder County's Pella Crossing Open Space, and its renovation after the 2013 Flood, reflects its meaning of refuge on many levels: as a sanctuary for the wildlife of the area, and for people, a place to exercise, contemplate, and meditate. Since March 2020, it is (when safe health protocols are practiced) a refuge to manage stress and find relief.

Autumn's Kaleidoscope of Color

by Lucy Haggard

If you've lived in Colorado for more than a year, you've likely seen the brilliant color display that occurs in autumn. Countless leaves change to yellows, oranges, and reds before falling off with winter's arrival. Other trees keep their leaves for the whole year and don't change color at all. Have you ever wondered why this color change happens for some trees and not for others?

To answer that question, let's talk about the leaf's job: to create food for the tree. During warm months, a leaf performs photosynthesis, gathering the sun's rays and using that solar energy to convert carbon dioxide and water into sugars and starches. This occurs in large part thanks to chloroplasts—organs within a leaf's cells that contain lots of chlorophyll, which gives a leaf its green color and helps it absorb solar energy. During this growing season, a leaf's chlorophyll regenerates almost constantly to ensure that it can continue to do its job.

As autumn arrives in Colorado, shorter days (and less sunlight) signal to a leaf that winter is approaching. At this point, a tree has two options: keep its leaves and put in energy to keep them healthy or get rid of the leaves and wait to regenerate new ones until the conditions are right for photosynthesis again. Trees that take the second route are called deciduous, a word which means "to fall down or off." For these trees, it's more energy efficient to go dormant, or hibernate, during the winter than to try to keep leaves alive during the cold, dark season. This process closes the connections between a leaf and its stem to preserve the tree's water for when it's resting. Ultimately, this kills the leaf and causes it to fall.

Once a tree begins going dormant, depriving the leaf of water, regenerating chlorophyll becomes almost impossible. As that bright green fades, it opens up visual opportunities for yellows and oranges that have been in the leaves all season but are less vibrant compared to chlorophyll's green. As the chlorophyll dies off, chemical changes form new pigments, including those brilliant reds and even purples. Here, then, is where we find those brilliant autumn colors!

COLOR SPECTRUM

Different species of trees display different colors based on their unique combinations of pigments. For example, aspens are known for their daffodil yellow, while maples display brilliant reds. The weather also plays a significant role in how vibrant the colors are. Rainy and overcast autumn weather make the colors more vibrant, and lower temperatures will bring out more reds, but an early freeze will dull that vibrance.

STAYING GREEN

What about the trees that don't change colors at all? Those are evergreen, or coniferous trees, meaning they are leafed the entire year. We call their leaves 'needles,' due to their pointy, poky shape, but they function the same as deciduous leaves. Evergreen trees grow new needles at roughly the same speed that they get rid of old ones, so we humans don't notice the turnover. One needle can stay on an evergreen tree for as long as four years!

BETTER TO KEEP OR DROP LEAVES?

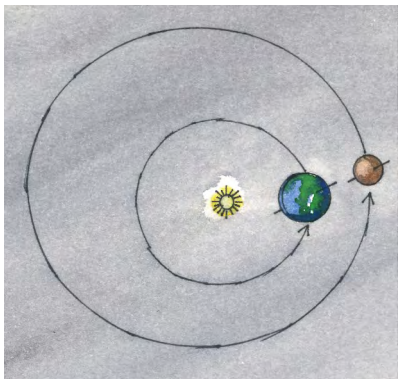
There are benefits and drawbacks to keeping leaves or dropping them. By keeping leaves around for a long time, evergreen trees don't have to put in as much effort to grow needles from scratch; they just need to keep them alive and healthy. However, this makes a tree vulnerable to the dangers of strong winds and heavy snowstorms which can use the extra surface area of a tree's needles to bend and even break branches. In contrast, deciduous trees can weather an intense winter storm better without leaves, as snow and wind can move around and slide off their curved branches, protecting the main structure of the tree.

For a socially-distanced adventure this autumn, take a drive along the Peak to Peak Highway to see a beautiful patchwork of reds, oranges, and yellows mixed in with the various shades of evergreens. Can you figure out which trees show which colors?

NATURE DETECTIVES

Fall 2020

Be Seeing You, Mars!



Mars doesn't shine very bright in our night sky usually, but this fall the planet will rival glowing Jupiter for brilliance. Mars gets a chance to shine big every couple years, and this year is one of those times. The reason Mars is growing brighter now is because Earth is about to race past it. As the distance between the two planets shortens, Mars will gradually appear brighter. Earth will draw next to Mars in October 2020, then Mars will start to fade again as Earth moves ahead.

Earth and Mars race around the sun in their separate orbits, and Earth always wins the race. Mars' path is longer because Mars is farther from the sun than Earth. And, because Mars is farther from the sun, Mars travels slower too. Earth circles around the sun almost two times for every single Mars orbit.

Mars and Colorado

Colorado and Mars have a lot in common. Mars is often called the Red Planet because it glows slightly red in the night sky. The name Colorado is a Spanish word meaning colored red. The names came from the color of the rusty iron found in reddish rocks on Mars and in Colorado.

Pull Out and Save

Colorado and Mars both have mountains, ancient volcanos, some dry riverbeds, and canyons. One canyon on Mars is as long as the whole width of the United States. Mars has the tallest mountain in our solar system. It's much taller than Mount Everest, but because it has a huge base and slopes uphill gradually, you probably could walk up it like any hiking trail. If it wasn't on Mars, that is!

Comparisons between Colorado and Mars are limited because Mars is a cold, rocky desert where life as we know it doesn't exist.
Mars is a truly out-of-this-world, inhospitable place. It will take an amazing amount of research, effort, and invention to get people to Mars and back to Earth safely. Living on Mars would be even more challenging.

Canyon Valles Marineris on Mars is almost four times longer than the Grand Canyon.

Scoping Out Mars

Humankind has been studying the Red Planet for at least 4000 years. Today, robotic spacecraft are orbiting the planet, and robotic all-terrain vehicles called rovers are exploring Mars and sending back photos and data. We've learned a lot about Mars.

Mars tilts at about the same angle as Earth as it rotates on its axis, so like Earth Mars has seasons. Because the planet takes twice as long to go around the sun as Earth, its seasons are longer. Mars also has weather, including wind. Mars rotates on its axis at about the same speed as Earth so Mars experiences one day and one night in about 24 hours, nearly the same length of time as on Earth.

Mars has almost no atmosphere with no breathable oxygen. The lack of an atmosphere makes Mars even colder than its fourth place location from the sun would make it. Earth's atmosphere holds heat from the sun's radiation, but Mars doesn't have enough atmosphere to keep the sun's warmth. The average temperature on Mars is minus 81° Fahrenheit.

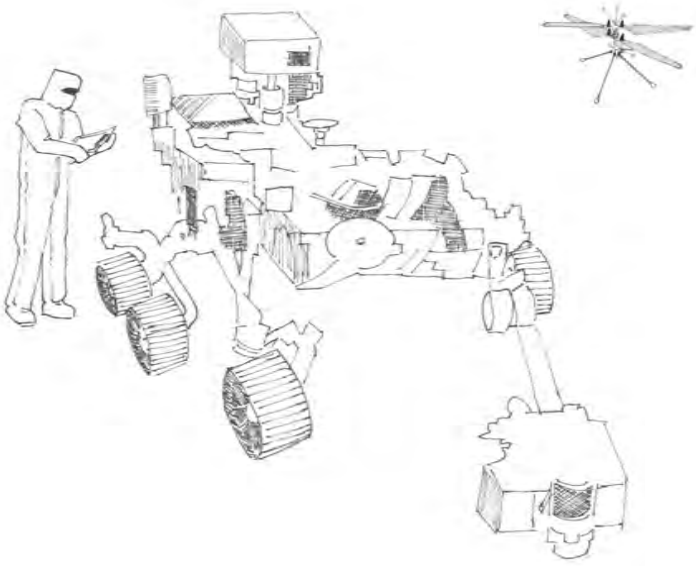
The data from Mars shows evidence the planet once had more atmosphere and flowing rivers and even lakes. Now there are only the thinnest clouds holding moisture, and perhaps some salty water remains underground. Any surface water would freeze and evaporate.

Smaller Yet Bigger…What?

Mars is half the size of Earth, but it has about the same amount of land surface. Remember Earth has a lot of water in oceans, lakes, and rivers covering the surface. Exploring the entire land mass of Mars is the same as exploring every mile of every country on Earth. The robotic rovers on the Martian surface have covered a tiny fraction of the total planet. Now NASA hopes to test a machine on Mars that might lead to future flying machines capable of exploring vast areas including mountain tops and canyons.

Hello Perseverance, the New 2020 Rover

Perseverance is a car-sized rover designed to explore Martian rocks, dirt, and air in an area that has some of the oldest rocks on the planet. Looking for signs that teeny microscopic life once existed on Mars is part of its mission. Perseverance carries a small robotic helicopter to try out on Mars. The little helicopter might give insight into ways of exploring longer distances and rougher terrain in the future.



Travel to Mars…Want to Go?

It is a long way to Mars so the trip would be best planned for a time when Earth and Mars are closest together in their orbits around the sun. At the speed of our fastest spacecraft flying today, it will take six months to reach Mars.

An opportunity for a return flight to Earth, when the orbits of the two planets are again close, would be at least a two-year wait. The return flight would take another six months. Human health is a worry during all that time away from Earth's normal gravity and atmosphere.

Hazards of Being on Mars

Without a protective atmosphere and magnetic field, Martian hazards include dangerous radiation from the sun, and space matter such as asteroids and comets hurling to Mars' surface instead of burning up as they do in Earth's atmosphere.

The Martian climate is unkind to humans and to equipment. Wind on the planet kicks up a lot of dust, and that dust even colors the sky. The particular way Earth's atmosphere scatters the rainbow hues of light from the sun makes our sky appear blue. Without a light-scattering atmosphere, the Martian sky often looks reddish with the sun shining on wind-blown reddish dust in the air. Other times the sky may appear tan in areas where there is brown dust. All that dust can be a hazard. Dust storms and whirling dust devils on Mars may clog sensitive equipment and coat space suits. Astronauts could track dust on their boots inside their spacecraft.

Extreme cold would be a challenge. The temperature on Mars can be as warm as 70º Fahrenheit, but it can be as unimaginably cold as minus 225º Fahrenheit.

Stories of Martians

One hazard humans won't have to worry about on Mars is running into a Martian. Stories of intelligent beings on Mars began with an imperfect new invention combined with people's creative guesses.

Back in the 1800s telescopes were invented, giving people a closer look at the surface of Mars. But the view through early scopes wasn't exactly sharp. A few people thought they saw straight lines on Mars that looked similar to irrigation canals. What a discovery… farmers on Mars! Well, no–just a fuzzy view of natural features of the Martian landscape that excited the human imagination.

Birthdays on Mars?

Our year is based on the length of time it takes Earth to orbit the sun. Mars takes almost twice as long to orbit the sun. Hmmm. Does that mean you would be half as old on Mars, and could only celebrate your birthday every other year?! How old are you right now in Martian years?

Stars Appear to Stay in Place, and Planets Seem to Wander

Stars are so incredibly far away, even though they are always moving, they appear to stay in place in our sky. As the Earth turns and orbits, our view of them changes during the day and the season, but their places seem fixed in relationship to each other. Constellations and star patterns don't wander around, bumping into other star patterns in our view of them. Planets do appear to wander through different star patterns over time in the night sky. Planets seem to wander because they are so much closer to us than stars, and they are orbiting the sun along with Earth.

The same stars we see from Earth are visible in the Martian night sky, except Earth would appear similar to a star just as on Earth the planet Mars looks starlike.

Tracking Mars

You can keep an eye on Mars, and see how it moves through its orbit around the Sun. Go to this website: www.skymaps.com and download the latest issue of the evening sky map. It will show you where Mars is in the sky. Keep an eye on Mars each week, and in a month, notice where Mars is in relation to the stars around it. How much has it moved? What direction is it going? Look for Jupiter and Saturn too. Which planets seem to move faster? Remember that Jupiter and Saturn are much farther from the Sun.

Nine Planets in Order from the Sun

Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune. Can you quickly recite their order from the sun from memory? A saying to help remember something is called a **mnemonic**.

Here are a couple mnemonics to help remember the planets. Every upper case letter (capital letter) represents a planet in both of these mnemonics.

My **V**ery **E**ducated **M**other **J**ust **S**erved **U**s **N**oodles (or if you prefer, **N**achos)
or another one...
My **V**ery **E**asy **M**ethod: **J**ust **SUN** (Remember every upper case letter is a planet.)

What mnemonic would **you** create to remember the order of the planets in our solar system?

Text by Katherine Young and Deborah Price
Illustrations by Carol Tuttle

RESEARCH ON 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 2019 study conducted by Thomas Seth Davis, Ryleigh Gelles, Boris Kondratieff, and Camille Stevens-Rumann at Colorado State University in Ft. Collins. Their project focused on the effects of fire and thinning disturbances on biodiversity of wild bee communities in the Front Range of Colorado.

Introduction

Wild pollinator species, especially native bees, have important impacts on the assembly and genetic structure of plant communities, maintenance of ecological networks (Loveless and Hamrick 1984), and provisioning of ecosystem services (Kremen et al. 2007). For instance, an estimated 75% of crops rely on pollination by insects for sustained yield or crop quality (IPBES 2016), and wild pollinator communities are often equivalent or superior to managed bees for crop pollination services (Winfree et al. 2009). It is increasingly recognized that pollination services are driven by landscape factors, and proximity of natural ecosystems including forests and rangelands enhances pollination services in nearby agricultural systems (Ricketts et al. 2008, Carvalheiro et al. 2010). This is because natural systems often contain specific nesting and foraging resources that may drive site occupancy by native bees in adjacent land cover types (Walther-Hellwig and Frankl 2003, Potts et al. 2006) and promote overall pollinator population growth (Williams et al. 2012). However, variation in structural characteristics of natural systems can alter bee foraging and nesting habitats, and these resources are directly affected by ecosystem management practices.

Disturbances, both anthropogenic and natural, are key drivers of ecosystem structure, function, and composition (Franklin et al. 2002). In coniferous forest systems of western North America, fire is one of the most prevalent and dramatic natural disturbances. Although it is increasingly recognized that fire disturbances are an important process for maintaining desirable ecosystem structures, many forest management efforts are also aimed at mitigating fire risk in wildland-urban interfaces (Cohen 2000). The Front Range region of central Colorado has experienced considerable population growth in recent decades and is probably one of the largest and most continuous wildland-urban corridors in the western United States (Manfredo and Zinn 1996). Dominant vegetation in forest landscapes on the eastern slope of the Front Range (where the majority of population centers are located) is generally distributed along an elevational gradient, with spruce/fir forests occurring at elevations >2500 m, and pine forests typically predominating below this threshold (Peet 1978). In particular, ponderosa pine forest is widespread in the region, and stands are often heavily managed for multiple use values but also with the specific goal of decreasing surface fuel loads to reduce wildfire risk near population centers (Liu et al. 2015).

Reduction of forest density and basal area (i.e., 'thinning') is the primary approach by which ecosystem managers address this goal. Recent studies have demonstrated that high forest basal areas are negatively correlated with bee abundance and species richness (e.g., Rhoades et al. 2018), likely via cascading effects whereby removal of canopy cover facilitates increased penetration of sunlight to the forest floor, favoring the growth of forbaceous species that are resources for pollinators including native bees (Eltz et al. 2002, Jha and Vandermeer 2010). However, very few studies have examined the effects of thinning on forest bee communities (Hanula et al. 2016), and no studies have yet examined the effects of thinning or fire disturbances

If you want to read the full report, or other funded research, visit www.BoulderCountyOpenSpace.org/research.

Local Landmark: Legion Park

by Carol Beam

In October 2019, the Board of County Commissioners listed Legion Park as a local historic landmark. The park is a 23.07-acre property located on the north side of Arapahoe Road, just west of 75th Street in Boulder. Situated on top of Goodview, or Hoover Hill, it possesses a commanding view of the greater Boulder Valley and entire Front Range. Today the property is Boulder County's oldest park and serves as a World War I veterans' memorial.

The foundation for the establishment of Legion Park began in 1917, when John Howard Empson deeded the land to Boulder County for one dollar and other good and valuable considerations. Empson was a well-known local businessman who pioneered the development of the canning industry in Northern Colorado, using locally grown produce.

It was not until 14 years later, in 1931 that Boulder County commissioners requested the construction of a new scenic road to the top of Goodview Hill to provide a vantage point from which visitors will get an "unparalleled panoramic view."

The property's future as a veterans' memorial was decided with the lease agreement signed between Boulder County and the American Legion Post #10 in 1932.

THE GREAT DEPRESSION AND THE CCC

In response to the rampant unemployment and economic chaos that gripped the country during the Great Depression, President Franklin D. Roosevelt established the Emergency Conservation Work Act, more commonly known as the Civilian Conservation Corps (CCC) in 1933. In what would later be called "The Hundred Days," President Roosevelt revitalized the faith of the nation with the creation of several emergency relief programs. With this one bold and innovative move, Roosevelt brought together two wasted resources, the young men and the land, in an effort to save both.

Locally, the City of Boulder's first CCC camp was established in July 1933, at Boulder Creek and Sixth Street, with the second camp established in October of that year at Baseline and Sixth Street. Some of the projects completed by the camps included dead tree removal and replanting, erosion control, road grading, clearing fire lanes, building swimming holes, constructing trails, and building a rock garden at the entrance to Chautauqua. Most notable were the Flagstaff Mountain projects that included road improvements, construction of the Sunrise Circle Amphitheater, Chapman Drive, Green Mountain Lodge, Halfway House and restroom, and Morse Well.

LEGION PARK CONSTRUCTION AND DEDICATION

Approximately 25 men began construction of the memorial in January 1934. The rock used to construct the wall outline came from Valmont Butte and had to be carefully matched in size during the wall's construction, since the volcanic rock could not be shaped or chipped down to size. At the same time, they constructed a new access road to the memorial from the west, and improvements were made to the existing road to the east.

The dedication ceremony for Legion Park took place on June 22, 1934. The day after the dedication ceremony, an article in the "Daily Camera" reported on the success of the previous evening's event and how the newly completed park adds "to the many points of interest in and around Boulder."

A closeup of the wall built by the Civilian Conservation Corps.

LOCAL HISTORIC LANDMARKS

Boulder County local historic landmarks are buildings, structures, sites, or districts that have been designated by the Board of County Commissioners because of their historic significance and importance to the county. The county began its formal historic preservation program in 1992, although efforts to preserve our cultural resources began years earlier. Boulder County is a leader in historic preservation through its stewardship of numerous historic properties and by encouraging private property owners to preserve their historic resources.

To see the full list of county designated sites, visit www.bouldercounty.org/property-and-land/land-use/historic-preservation/designated-historic-sites/

Black Walnut Wonders: The Ramey Homestead Woodworking Exhibit

by Karen Imbierowicz

Top photo: The Ramey tree before succumbing to disease.

Right: Crafted by Howie Guitars with black walnut from the tree, the company named this model "Ellen," after two women in the Ramey family. The Ramey brand (inset) is featured on the guitar.

From mid-November through the end of December, the Parks & Open Space Department and local woodworking community will exhibit creations such as functional art, turned bowls and vases, furniture, musical instruments, wood sculptures, and folk art. The work exhibited will celebrate the history of the Ramey Homestead, one of the county's now-protected riparian landscapes just west of the Town of Hygiene.

The tree used for the creations, estimated to be 140 years old, succumbed to the thousand cankers disease and was cut down in 2018. It lives on through the creativity and talent of a diverse group of woodworkers.

Woodworkers consider black walnut wood to be one of the finest North American lumber species, one that is both beautiful and workable. In 2019, the department reached out to the woodworking community to offer it to the public at no cost and was overwhelmed with requests from more than 350 interested woodworkers. A lottery system whittled down the number of recipients to 84.

THE STORY OF THE TREE

For hundreds of years before the area was homesteaded, the land on which the black walnut tree thrived was home to numerous indigenous peoples that included, but was not limited to, the Ute, Arapaho, and Cheyenne.

The story of the Ramey Homestead black walnut tree begins in 1861, when George W. Webster and his friend, Charles C. True, traveled from Iowa to the Pella area of Boulder County to farm and raise livestock on the 160-acre property. Webster made numerous journeys to and from California to visit relatives and purchase nursery stock to sell and plant in the area, including the black walnut tree.

The property became known as the Ramey Homestead in 1923, when the son of Charles C. True sold the property to Charles and Ellen Dawe. Their daughter, Ellen, married Edwin Ramey in 1923, and one of their sons, Charles Ramey, farmed the property until his death in 1998. Charles Ramey's nephew, David Sevier, sold the property to Boulder County in 2001.

For more information, including how to view the exhibit and purchase items, please visit BoulderCountyOpenSpace.org/woodworking.

The department completed numerous historic preservation projects since 2001 to provide future public access to the exteriors of the buildings as part of the proposed St. Vrain Greenway Trail, a planned multi-use trail between Lyons and Longmont.

The September 2013 Flood severely damaged the property and the buildings. The barn partially collapsed, and the granary completely dislodged and floated approximately 130 feet east of its original location, losing the entire east wall. In 2016, the department restored the granary and barn to its preflood condition. In a testament to the property's historic significance, the Ramey Homestead was listed as a Boulder County Historic Landmark.

BOULDER COUNTY PARKS & OPEN SPACE FOUNDATION

A portion of the sales from the exhibit will be donated to the foundation, which supports the department. The foundation relies on the generosity of individuals, other foundations, corporations, and proceeds from events, such as Walnut Wonders, to reach its goals. To learn more or to donate, visit www.PreserveBoulderCounty.org.

Cooper's Hawks: Little Birds, Beware!

by Ann Cooper

The bird feeders have been busy all morning, then, suddenly, they're empty of life. Nothing! Then you notice a swift shadow arrow through the trees, weaving through branches at high speed—above 30 miles an hour. (David Sibley, in his book, "What It's Like to Be a Bird," likens these hawks to gray-brown missiles.) Then squawking begins. In the wake of the speeding shape, magpies, grackles, and a mass of smaller birds become agitated and frantic. They're mobbing something. What's going on?

Chances are it is a hunting Cooper's hawk. These crow-sized birds of prey are forest hawks but have taken to town fringes in recent years, lured by the increase in small birds drawn to bird feeders and enticed by the increasing tree cover in our neighborhoods. For the hawks, it's fast food in a "forested" setting. Perfect!

Cooper's hawks, and almost lookalike sharp-shinned hawks are accipiters: raptors with shortish, rounded wings that help them navigate with agility through dense woodland using their long tails as rudders. Both species have long legs and sharp talons with which to snatch prey. Size tells the two species apart. Sharp-shinned hawks are robin-sized. Don't be fooled, though. Female raptors are typically larger than their males. Ranking from small male sharpies to large female Cooper's, there's a baffling size range that can offer bird watchers a real challenge.

UNFUSSY EATERS

Cooper's hawks are also known as "chicken hawks," although they mainly prey on medium-sized birds, such as woodpeckers, doves, and robins. Birds make up most of their diet. They'll also eat small rodents, rabbits, and even bats and snakes—they are opportunists, not fussy eaters. They consume about 12 percent of their body weight in a day, equivalent to us eating about four or five pizzas. These stealth hunters move from perch to perch in dense woodland, watching . . . listening . . . waiting for dinner on the wing. Then with a burst of speed, they'll overtake and subdue their prey. A quick squeeze of the talons is all it takes.

HAWKS CLOSE BY

In our area, Cooper's hawks are seen year-round. They tend to be faithful to the same nesting territory year after year.

This year, a pair of Cooper's hawks nested in our yard. The first hints were high-pitched *ack ack ack* calls breaking the silence at dawn. One early evening we watched the two birds as they mated. Our quest was then to see a nest site. Research told us that nests are usually found in evergreens or deciduous trees, typically 25 to 50 feet high in a crotch or horizontal branch. We found ours about 40 feet up in a weedy elm.

Nesting began before the tree leafed out, and by chance the site they chose for the nest was atop an old squirrel nest much augmented with sticks—all rather untidy. As the year advanced, the nest seemed to have insufficient shade and we worried on the birds' behalf. The nest was far too high to check progress, but the birds came and went regularly.

These hawks typically lay three to five eggs and begin incubating the eggs when the last one is laid. Incubation takes 30 to 36 days, and it's about a month more before the chicks fledge and fly. Sadly, in mid-July, one nestling, not yet feathered, plummeted from the nest, and didn't survive. We didn't know the cause but wondered if it was the "runt" pushed out of the nest by larger and hungrier nest mates. If food supplies dwindle, younger, frailer chicks succumb. As I write, the outcome is unknown. Fingers crossed!

Where Is the Calendar?

The COVID-19 pandemic has brought many changes to our lives, and Boulder County Parks & Open Space is no different. Because of the situation, we decided not to include a calendar of events, museum hours, or volunteer opportunities in this issue. In doing so, we will avoid publishing information that would be incorrect if things change in fall months. We want to adjust programs to remain in step with health and safety guidelines.

Where to find up-to-date information about hikes, special events, volunteer opportunities, and museum hours:

- Outdoor and indoor programs and special events: www.BoulderCountyOpenSpace.org/events
- Museums: www.BoulderCountyOpenSpace.org/museums
- Volunteer Opportunities: www.BoulderCountyOpenSpace.org/volunteer
- Boulder County's response to COVID-19: www.BoulderCounty.org

Please continue checking these online resources since we are continually monitoring the COVID-19 guidelines and will begin adding activities as we can. We look forward to again offering a wide range of opportunities. We've missed you!

Special Hours at Ron Stewart Preserve at Rabbit Mountain

The park will be closed Monday through Wednesday from Sept. 21 through Jan. 31 for elk management through limited hunting. The park is open Thursday through Sunday sunrise to sunset.

The park is also open on the following days:

Nov. 23-25 open

Dec. 21-23 open

Jan. 18 open

Note that recreational hunting at Ron Stewart Preserve at Rabbit Mountain or any other open space property is strictly prohibited.

For more information visit: www.bouldercounty.org/open-space/management/rabbit-mountain-elk-management-plan/

Help Keep Parks and Trails Open

Bring a face covering.
Face coverings are required at trailheads, when passing other visitors, and when six feet of distancing cannot be maintained.

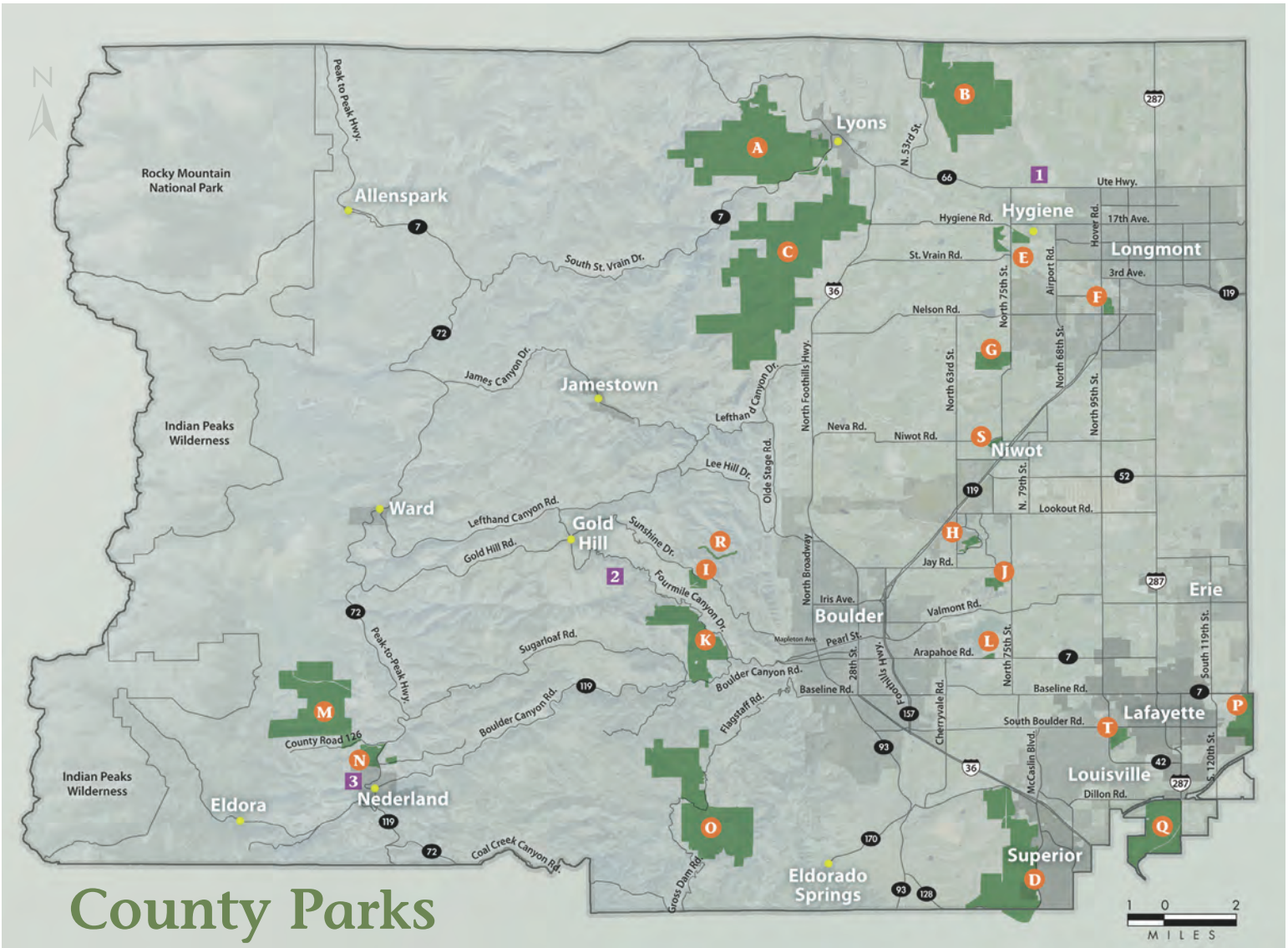
Give space to others on the trails.
Please visit in groups of four or fewer and stay at least six feet away from people who are not from the same household.

Follow all rules and regulations.
Park in designated spaces only and follow trail directional arrows. Rangers are issuing fines for violations.

Visit on weekdays to avoid crowds.
Parks and trails are generally less crowded on weekdays. Parking lots are full as early as 8 a.m. on weekends.

Arrive early to avoid crowds.
Parks and trails are generally less crowded in the early morning.

Parks & Open Space
5201 St. Vrain Road, Longmont, CO 80503
www.BoulderCountyOpenSpace.org



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