





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.

COVER ART: Sunrise with farm in the distance: Rob Alexander

PHOTOGRAPHS & ILLUSTRATIONS

Conservation Award..... Nik Brockman Betasso Dedication....BCPOS Collection Hikers at Betasso Preserve ...Pascale Fried Honey bee Lauren Golten Trout....USDA Forest Service Southern Research Station Archive, USDA Forest Service, SRS, Bugwood.org Walker Ranch VolunteersPascale Fried HorsesJim Drew

NATURE DETECTIVES

Katherine Young and Deborah Price Illustrations: Michelle Durant

DISCOVER BOULDER COUNTY Larry Colbenson and Sheryl Kippen

PRINTING

Boulder County Printing Department

EDITORS Rachel Gehr and Pascale Fried

Images is a quarterly publication. Subscriptions are free to Boulder County residents or \$4 annually. Contact us at 303-678-6222 or swilliams@bouldercounty.org

RECEIVE IMAGES ONLINE

Go to www.BoulderCountyOpenSpace.org/ images and enter your email address in the space provided. You will receive ONLY four emails per year with the issue of Images.

NOTE: To stop receiving the printed version, send an email to swilliams@bouldercounty.org.

Non-credited articles are by the editors. Suggestions and comments are welcome; please contact us at 303-678-6201 or pfried@bouldercounty.org.

BOARD OF COUNTY COMMISSIONERS

Cindy Domenico Deb Gardner Elise Jones



Printed on recycled paper

Reflections on 40 Years

Facilities and Recreation

As department milestones are noted, such as the current 40th anniversary, it is always good to reflect on where we have been. The department started slowly, opening Walden Ponds Wildlife Habitat to the public in 1975. Even with limited facilities, 300 people showed up that first day at Walden Ponds to enjoy trout fishing and bird watching. Over the next decade, several other parks opened including: Bald Mountain Scenic Area in 1976, Betasso Preserve in 1977, Legion Park in 1978, Flagg Park in 1979, Walker Ranch in 1979, and Rock Creek Farm in 1983. The department even leased additional properties to enhance recreational benefits for county residents in the late 1970s until the early 1990s which included Buckingham Park in Left Hand Canyon, Boulder Falls, 4th of July Campground, and the Barker Reservoir roadside pullouts that have restrooms.

The Plan for Parks and Open Space

The 1978 Boulder County Comprehensive Plan laid the foundation for the type of recreation that Boulder County Parks and Open Space would offer. The plan is based on the idea of providing passive recreational opportunities to interact with the natural environment (with limited development of facilities), no motorized use, and no organization or rules of play needed. Management plans for each property are then used to provide specific direction for where facilities will be provided for the public to access and enjoy county open space. This has generally equated to development of trailheads with parking and picnic facilities, and trails that provide access to the various resources offered by our open space that include the natural environment, historic buildings and structures, and agriculture.

From those first parks and trails, the number of our facilities has grown to accommodate the growing population and visitors to open space. Our facilities have evolved from wood-routed signs, square-shaped parking lots, and trails comprised of mostly old roads to sustainably-built trails with well-designed trailheads and signage.

Staff has played a large role in development and maintenance of our facilities, as depicted in the picture to the right showing the construction of our first large picnic shelter at Walker Ranch in 1985.

The Recreation and Facilities Division provides the expertise and skilled employees that design, construct, and maintain a variety of recreation facilities. The division also maintains historic



structures located on our properties and manages the Boulder County Fairgrounds.

Facilities in Place

Current department recreation-related facilities include 863 parking spaces, 21 restrooms, 20 kiosks, 15 picnic shelters, and over 116 miles of trails. A lot of effort goes into providing these facilities. We have over 35 full-time staff that is augmented with a large number of seasonal workers and volunteers. Daily activities for the division include restroom cleaning and trash pickup, building maintenance and construction, trail maintenance and construction, tree care, trailhead maintenance, mowing, facility design, and project management.

At first glance, providing facilities for passive recreation may seem like a very minimal proposition, but in fact these more rustic facilities demand a lot of effort. During my career, I have participated in building and maintaining these structures, and have learned that there is considerable value in doing it to a high standard so they hold up well to heavy use and Colorado's ever changing weather. Next time you visit one of our open space properties, please take the time to appreciate the fine facilities there. Look at the trailhead and notice how its design blends into the surrounding landscape. Enjoy the picnic facilities, restrooms, and parking areas. Appreciate the craftsmanship of our trail construction and the rock work along them. Enjoy seeing some of the historic structures located near our trails.

Keeping Pace

As the Front Range population continues to grow, we assume that more and more people will be using our facilities to connect with open space. Nature is never static and we too will continue to adapt to the needs of our open space and visitors. When I started with the department 31 years ago, mountain bikes were just starting to come into existence, but it is now one way a significant number of visitors enjoy open space. Each of us may have a different way to connect with open space (hike, walk the dog, ride a horse, bike, fish, picnic, view wildlife, rock climbing, run, family gathering, etc.), but that means ultimately more people get to benefit from our open space and learn to value and treasure it.

By Al Hardy, Recreation and Facilities Division Manager

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



Visit the webpage dedicated to the 40th anniversary for information.

Recreation-related Milestones

- Anne U. White Trail opened in 1985
- Rabbit Mountain opened in 1987
- Walker Ranch Loop Trail completed in 1989
- Lagerman Reservoir opened in 1990
- Boulder Canyon Trail to Fourmile Road opened in 1993
- Hall Ranch Bitterbrush, Nelson, Nighthawk, and Buttonrock trails construction occurred 1996 to 1998
- Pella Crossing opened in 1996
- The Agricultural Heritage Center at the Lohr/McIntosh Farm opened in 2000
- Heil Valley Ranch's Ponderosa Loop and Wapiti trails opened in 2001
- Pella Crossing's western side opened in 2004
- Caribou Ranch opened in 2004
- Mud Lake opened in 2005
- Twin Lakes upgraded in 2007
- Heil Valley Ranch's Wild Turkey and Picture Rock trails opened in 2007 and 2008
- Betasso Preserve's Benjamin Loop Trail opened in 2011
- Niwot trail system construction took place from 1986 to 2012
- Coal Creek Trail completed to Erie in 2013

One Webpage—40 Years of History

Boulder County Parks and Open Space is celebrating its 40th anniversary throughout the year with multiple opportunities for public participation.

The webpage **BoulderCountyOpenSpace.org/40** provides opportunities for the you to:

- Complete any of 40 adventures, including hikes, bike rides, bus tours, and fishing events.
- Share memories and photos of visits to county open space, special events and volunteer work projects.
- Learn about 40 years of department milestones.
- Purchase anniversary print and notecards.

Land Conservation Awards

by Vivienne Jannatpour

On April 16, the Boulder County Parks and Open Space Department held the annual Land Conservation Awards ceremony. Here are highlights from the special gathering.

The Land Conservation Award honors individuals, families, and organizations whose contributions demonstrate notable achievements in preserving Boulder County's agricultural lands. Founded in 1959, PLAN-Boulder County has been one of the leading citizens' organizations working to ensure environmental sustainability in the city and county of Boulder. PLAN-Boulder County members have advocated for growth controls, comprehensive planning, flood plain regulations, and regional bike trails. PLAN-Boulder advocated for the county open space program, and members were among those first appointed to the Parks and Open Space Advisory Committee to help formulate a plan for preserving open space throughout Boulder County. It was fitting that on the occasion of the department's 40th Anniversary, the department would honor PLAN-Boulder County for its vision and continuing leadership promoting the stewardship of Boulder County and preserving its quality of life for all of its inhabitants.

The **Environmental Stewardship Award** recognizes individuals, families or organizations that make significant contributions in land protection and/or management. Sue Cass has volunteered for and helped coordinate a diverse array of environmental research and environmental stewardship projects in Boulder County for more than 15 years.

Currently, she trains and works with more than 200 volunteers each year including Boulder County Audubon Society and Boulder County Nature Association burrowing owl monitoring program; Boulder County Nature Association wintering raptor surveys; Boulder County Nature Association President; Boulder County Parks and Open Space Advisory Committee; Boulder County Parks and Open Space volunteer naturalist; organizing

committee, Boulder County Ecosystem Symposium; and volunteer field worker, Colorado Breeding Bird Atlas II. Sue has been an inspiring environmental leader to all involved in these very meaningful environmental programs.

The **Heritage Award** honors individuals or organizations whose contributions demonstrate notable achievements in preserving Boulder County's heritage through privately funded historic preservation projects. Boulder County acquired the Swanson property in 2001. Over the following 13 years, the barn suffered from frequent vandalism and the effects of Mother Nature. Without a viable use for the barn, the department offered the barn to anyone willing to move the barn and restore it. Rob Alexander purchased and relocated this barn to preserve the historic structure. Alexander faced many challenges. Costs included expensive county-required commercial insurance, moving utility lines out of the way during the move, Land Use permit fees, and constructing a new custom foundation at the barn's new location. The 2013 Flood caused a one-year delay, but finally on December 19, 2014, the Swanson Barn was moved and looks like it always belonged on Rob Alexander's land.

The **Partnership Award** recognizes alliances with businesses and organizations around the county to foster a communitybased stewardship ethic for the preservation and care of open space. Redstone Cyclery has been a partner since 2008 and has maintained over 4,050 feet of existing trail and helped construct 27 grade reversals and drainages. Most of their events took place on Tuesday evenings when members usually met at the Lyons bike shop and rode up to the work site. Redstone has shown their dedication to the department with their willingness to take on these projects far beyond the trailhead—always going above and beyond the amount of work we believe can get done.

The **Outstanding Volunteer Awards** honor individuals whose leadership and support of the Parks and Open Space volunteer programs have enhanced our community partnerships and improved public service. This year, there were three recipients.

Todd Van Dyke has volunteered as a raptor nest monitor at Rabbit Mountain for over 20 years. Van Dyke became a volunteer for the Raptor Nest Monitor program in the 1990s when he established the Friends of Rabbit Mountain group helping the county secure and protect the top of the mountain with open space purchases in 1993 and 1994. Van Dyke provided consistent, meticulous, and thorough documentation. Through his long-term commitment, he has helped the department understand the relationship between enduring places and how the department manages them.



Commissioner Elise Jones; Dave Chase, owner of Redstone Cyclery for Partnership Award; Pat Shanks (back) and Raymond Bridge (front), PLAN-Boulder County, Land Conservation Award; Liz and Rob Alexander (back), Heritage Award for Swanson Barn; Sue Cass (front), Stewardship Award; Annie Conry, Volunteer Award; Sherri Rasmussen, Volunteer Award; Todd Van Dyke, Volunteer Award; Commissioner Cindy Domenico

Annie Conry has been on the Extension Advisory Committee for 13 years. She served as the chairperson for two years from 2005 to 2006. She has also been a Master Gardener and Advanced Master Gardener since 1999. As a member of the Advisory Committee, Annie has been a strong advocate for Extension programming throughout her time on the Committee. Sherrie Rasmussen has been on the Extension Advisory Committee for 14 years. She has been involved in 4-H since 1998. Sherrie was a 4-H leader for three years and served on the Boulder County 4-H Council. She is a strong supporter of agriculture in the county by both farming and working for the Farm Service Agency. Sherrie has also been involved in the Colorado water industry through her work at Northern Colorado Water Conservancy District.

Mapping Out Adventures

by Ilene Raynes

From hiking Boulder County's trails and open space, to picnicking in one of the many parks in the area, to exploring the history of Boulder or its surrounding mining towns, there is certainly no shortage of outdoor activities in our county. Did you know that there's a great local resource to make your outdoor explorations even more interesting, enlightening and entertaining?

Visit the University of Colorado Boulder's Jerry Crail Johnson Earth Sciences & Map Library in the Benson Earth Sciences building on CU's campus, and you will come away with many new ideas for your adventures in and around our region. Here you will find books on a variety of topics, such as geology, hydrology, paleontology and environmental studies. You can browse a copy of *Geology Underfoot along Colorado's Front Range* by Lon Abbott and Terri Cook, or learn about Nederland's beginnings by reading *Nederland: a Trip to Cloudland* by Isabel M. Becker.



This 1888 map of Boulder County is displayed in the Jerry Crail Johnson Earth Sciences & Map Library. (only a portion of map is shown)

Maps—200,000 and Counting

But there's still more to discover in the library. The Map Library is home to over 200,000 maps and over 1,000 atlases and reference books. You can find a lot of new and exciting information about Boulder County by taking a few minutes to look around.

There are National Geographic Trails Illustrated maps for all sorts of Colorado hiking areas, including trails in Boulder, Indian Peaks, and Gold Hill just to name a few. The library also collects trail maps from private publishers such as Latitude 40 and Sky Terrain. You can check out our maps if you have a CU library card or copy and scan the sections of the map you'll need for your excursions. If you're interested in some serious hiking and need to see detailed contour lines, the library has all of the United States Geological Survey's most detailed topographic maps. They can also show you how to access these USGS maps online.

Maybe hiking isn't your thing. Maybe you want to read about Boulder's past or learn about the mining history of Lafayette. For the history buff, the Map Library collects many of the books from the Images of America series, such as Boulder, 1859-1919 by Mona Lambrecht and the Boulder History Museum. You'll also find a full collection of Sanborn fire insurance maps for Colorado. These very detailed block-level maps show details of towns across Colorado from the 1880-1930s. You can use these maps to see where the town's general store was located or if your house was always a residence (maybe it was the local barber shop or drug store). The library also has historic aerial photos for much of Boulder County. It's easy to view these if you make an appointment with a librarian. And that's just scratching the surface. If there's a map or book you need to better acquaint yourself with all Boulder County has to offer, stop by with questions to make your adventures memorable!

Jerry Crail Johnson Earth Sciences and Map Library, CU Boulder

Wesite: http://ucblibraries.colorado.edu/earthsciences/ Email: maplib@colorado.edu Phone: 303-492-6133

A Family's Backyard: Betasso Preserve

by Sally Wier

Perched above Boulder and Fourmile Canyons, Betasso Preserve is an open space property covering over 1,100 acres. Today the preserve provides a beautiful foothills environment for hiking, biking, horseback riding, and wildlife viewing. But not so long ago the land was home to members of the Betasso family, the source of the preserve's current name.

In the early 1900s, people settled in Boulder County to establish homesteads or to work in the area mines they hoped would provide lucrative incomes. One such settler was Walter Blanchard, who in 1907 paid 10 dollars to file a homestead claim on some of the land that is within today's Betasso Preserve. Blanchard began a ranch on the land where he specialized in stock raising. In 1915, Stephen Betasso purchased the ranch from Blanchard and so began the family's long history of life on the land in Boulder's foothills.

Originally from Italy, Stephen Betasso came to the Unites States in 1883 and moved to Boulder in 1915 after leaving behind the coal mines of Pennsylvania. He worked in coal mines in Louisville and Marshall before moving into the foothills to work at the Logan No. 2 Mine. He briefly returned to Italy, but came back to Boulder in 1894 with his new wife, Mary Pastore Betasso. The family grew in size over the years as the couple had five children: Raymond, Julius, Mabel, Richard and Ernest.

Turning his attentions from mining to ranching, Betasso bought "thirteen head of cows" when he acquired the Blanchard Ranch, and a new life began for the Betasso family. As the children grew up, the younger boys, Dick and Ernie, left school in the eighth grade to work full time on the ranch. As adults, the two brothers expanded the ranch by purchasing surrounding homesteads. From 1924 to 1966 they acquired more and more property until they owned nearly 2,000 acres.

Ernie eventually became the sole surviving Betasso to own and manage the property. In 1964, he sold some property for subdivision development, and in 1976 he stopped ranching and sold the remaining land to Boulder County. He lived out his life on the ranch until he passed on in 1983 at the age of 75.

Today as we walk or ride the trails at Betasso Preserve, we can enjoy the ranching legacy of an Italian immigrant and his family, and their commitment to preserving open space so we can all enjoy what was once a family's backyard.



Left: The dedication of Betasso Preserve in 1977. Right: Visitors explore the trails.

Wildflowers at Betasso Preserve

- Aspen daisy
- Blanket flower
- Chiming bells
- Common harebell
- Curlycup gumweed
- Field mouse ear chickweed
- Fringed sage

- Mariposa lily
- Miner's candle
- Nodding onion
- Oregon grape

Rocky Mountain

juniper

Snowberry

- Purple milkvetch
 Yarrow
 - Yellow stonecrop

• Spreading fleabane

Western wallflowerWild geranium

Twolobe larkspur

Yucca

6 www.BoulderCountyOpenSpace.org



Celebrate National Pollinator Week — June 15 to 21

If you ate food today or put on clothes, thank a pollinator. Worldwide, approximately 1,000 plants that provide food, beverages, medicines and fibers require pollination. Overall, 75 percent of all flowering plant species require pollination. Pollination is carried out by over 200,000 animal species.

When we think of pollinators, we typically think about the managed honey bee and maybe the lumbering bumble bee. However, honey bees are only a very small part of the pollination system. Other insects such as

butterflies, moths, flies, native bees and beetles provide the majority of pollination along with animals, such as bats and birds. While honey bees are considered social insects, many native bees are solitary. They nest in wood, masonry or in the ground.

So when we want to preserve habitat, look beyond flower beds and alfalfa fields to large open spaces, fence posts and dead trees. **What can you do to protect pollinators?** Like most living things they need food, water and shelter. You can provide forage

by planting native and flowering plants, leave uncultivated areas and old wood snags to provide nesting sites, and build nesting structures. Use pesticides wisely and always and follow the label.

Research on Boulder County's Open Space Lands

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 Laura Backus and Susan Sherrod to assess post-flood conditions.

Abstract: Boulder County Parks and Open Space (BCPOS) creeks sustained significant damage in the historic floods of September 2013. This report summarizes surveys in August and September, 2014, of BCPOS properties along Left Hand, Boulder, and St. Vrain Creeks nearly one year following the major disturbance. Our evaluation included (1) changes in and recovery of riparian vegetation, including Boulder County Noxious Weed infestations; (2) Hydrology; and (3) Erosion Potential. Scores for these parameters were compared to similar scores collected in 2008 before the flood. In addition, we took photographs of riparian areas for descriptive purposes as well as to compare to pre-flood photographs of the same areas taken in 2008. Despite considerable variability among reaches and creeks, St. Vrain Creek appeared to sustain the most dramatic damage from the flood, particularly downstream of Lyons as breaching ponds augmented already high water volumes. Weeds listed on the Boulder County Noxious Weed List and/or on the State of Colorado Noxious Weed List were relatively rarely encountered in 2014. However, the potential for larger and more widespread infestations of these species as well as other non-native species is high in coming years. In nearly all reaches, the extent and species richness of non-native colonizers were much greater than for native colonizers. Seedlings of native cottonwood and willow are present in many areas of damp sand and cobble. Exposed and/or deposited cobble is a recurring feature of a majority of these reaches, presenting both an energy-dissipating function as well as opportunities for colonizing plants. Bank cutting and incision was also frequently observed, again, presenting opportunities for colonization and increased vulnerability to additional erosion.

Findings: Flood effects and post-flood natural revegetation along St. Vrain, Boulder, and Left Hand Creeks varied with the type of inundation. In reaches of scouring flows, such as South St. Vrain Creek canyon and areas immediately downstream of dam breaches, fast-moving floodwaters removed all or nearly all riparian vegetation, caused major channel changes, and, over very large areas of the floodplain, both deposited cobble and exposed the cobble substrate. In Boulder Creek's eastern channelized reaches and in St. Vrain Creek reaches which were bypassed when high flows avulsed into new channels, slower moving inundation flows submerged the riparian zone, leaving most mature trees intact, but covering the understory with sand and silt as well as jumbles of woody debris. Where available comparison to 2008 pre-flood conditions, 2014 observations of the channel generally included increased evidence of and potential for erosion as well as improved hydrology. The width, structure, and diversity of riparian communities generally decreased, as did the supply to the channel of woody debris and leaves. In some sites, the presence of woody seedlings increased the number of age classes.

Relatively few plants have begun to colonize cobble areas. Native cottonwood and willow seedlings are concentrated where sand and are cobble just above the water table. Vegetation in the drier cobble areas is very sparse; most colonizing species are non-natives, including State of Colorado Noxious Weeds. Woody species that are late summer seed producers were rarely encountered in the post-flood seedling assemblages. We infer that due to the September timing of the floods, most of these seeds had washed out of the riparian zone. Beginning in 2015, late summer seed producers, mainly non-native locust, Chinese elm, Russian-olive, and possibly tamarisk, likely will begin to dominate the woody revegetation. Restorationists have a narrow window of opportunity to develop techniques for massive plantings of native species into cobble and to remove nonnative species before weed infestations become very difficult and expensive to control. Visit www.BoulderCountyOpenSpace.org/research to read the full report and other research articles.

Prospecting for Gold: Brook Trout in Boulder County

by Lucas Hayne

I looked upstream. Boulder Canyon banked left and the road, the river, and the canyon walls vanished beyond the bend. A white ash loomed over my head. The tree seemed to be watching me as I cast upstream to a pool of rising trout. The water was a cool blue-green, reflecting pine trees and a perfectly blue sky. As I cast, my fly line rolled out in lazy loops over the gurgling water. With one final forward flick, I let the line drop from the sky.

My fly was a carefully woven bundle of feather and thread. And it now lay on the water's surface. In the blink of a moment it had disappeared. Where the fly had been, water swirled and splashed. Tensely, I pulled the line and set the hook. From under the water a golden token flashed, like buried treasure caught briefly in the light of the sun. The fish I pulled to the surface danced on the water, tail flailing, before I scooped it up with one gentle hand. I had never seen a trout so beautiful. Its belly was a thick golden ribbon, rich, and dripping with color. It looked like molten gold, yet cool to the touch. Along its back there were crimson dots with white haloes like little planets.

Not Native, but Thriving

This was a brook trout that I caught on Boulder Creek in October of last year. Brook trout are native to much of the eastern United States, but they weren't introduced to Boulder County until some time in the 19th century. While rainbow and brown trout can live in low altitude habitats, brook trout require high altitudes to survive. At low altitudes, water temperatures become too warm in the summer for brook trout to thrive. So Colorado is the perfect habitat for this illustrious fish. Brook trout feed on a number of water-dwelling invertebrates including caddisflies and stoneflies. During the summer and fall when these bugs emerge from the water, trout eat them off of the surface. Brook trout spawn in the fall and can travel miles to spawning locations.

Colorful Attraction

During spawning, the males turn truly fantastic colors: crimson, gold, tangerine, olive, and white. This coloration, no doubt, attracts female brook trout and fisherman alike. Brook trout usually live to four or five years of age, but in colder water conditions they have

been known to live for more than a decade. At around the same time the brook trout was introduced to Colorado, gold was discovered in Boulder County. In 1858, settlers from the east established a base camp at the mouth of Boulder Canyon. A small party set out panning for gold in the waters of Boulder Creek. It didn't take them long to find what they were looking for. In the first half of 1859, gold was discovered near Gold Hill, hence the name. Soon prospectors came from across the nation to pan and mine for gold, dreaming of wealth and fortune. As quickly as it had swept the nation, gold mining lost its luster.

Still in Search of Gold

Many of the gold mills that were once in use now lie dormant. The golden bellies of the brook trout remain as relics of the gold rush. Prospectors no longer line the banks of Boulder Creek. Fishermen have replaced the mountain men of the past. Armed not with pans, but with fly rods, fishermen walk the banks in search of a different kind of gold. Today, at least 150 years later, brook trout still thrive in Boulder Creek. These trout may not be native to the west, but they are deserving of a place in Boulder County's history, and as a legacy of gold in Colorado.

NATURE Summer 2015 DETECTIVES

Questing for Kestrels

As a nature detective you know some types of birds hunt other animals to eat. It's how they make a living. The birds that chase down their prey and grasp it with their powerful talons (long, clawed toes) are called raptors.

If you were to draw or describe a raptor, you could start with the sharp, curved talons, which are important for striking, seizing and carrying prey. Maybe you would think of the hook-shaped beak first. The knife-like beak is certainly a useful tool for a meat-eating bird. Don't forget the fierce raptor eyes, capable of zeroing in on prey with telescopic vision.



What Raptor Comes to Mind?

Do you visualize a bald eagle or a great-horned owl when you think of the word *raptor*? Perhaps you picture a peregrine falcon because of their impressive flying skills and their ability to dive at breath-taking speeds to catch their prey. Maybe you've read about peregrines and how they seize other birds in mid-flight.

What about the American kestrel?

Did this raptor, actually the most common falcon in our area, enter your thoughts?

Kestrels live in our area all year. Kestrels are fierce, territory-guarding predators with dramatic coloring. They hunt in plain sight and in daylight, and they show off awesome flying techniques.

A kestrel isn't as big as an eagle or even a red-tailed hawk. These falcons are petite. They are only the size of robins, yet they pack all the exciting qualities of bigger raptors into their small bodies.

If you haven't watched this little falcon, maybe it's time to go questing for kestrels. They tolerate human activity so once you learn where they prefer to hunt, it is pretty easy to observe these colorful predators in action.



Open Habitat for Kestrels

Despite being small raptors that hunt in broad daylight, kestrels are not secretive. They prefer wide-open spaces with low vegetation plus a few tall perches. These falcons use perches as a lookout to scan open areas for prey. Scattered tall trees, utility poles, signposts, fences or even highway signs may be perches. Kestrels live from the plains grasslands to alpine meadows. They can be spotted near open farm fields, along roadways, in meadows and in parks.

Country roads are great places to search for kestrel activity. Look for them on utility wires next to farm fields. Often a kestrel will be bobbing its head and pumping its tail as it stares around. It might be zeroing in on prey or on the watch for intruder birds in its territory.

Useful Coloring and Extra "Eyes"

Dazzling black and white coloring on their heads is a good identifier for kestrels. They sport black bars on either side of the their white cheeks. Like the dark smear under football players' eyes, black feathers cut down on glare to



make it easier to see what they are trying to catch.

Male kestrels stand out with their blue-gray wings and red-brown tails set off by a creamy belly. White dots show on their dark wing feathers in flight. Females are slightly paler with less colorful, red-brown wings. They both wear a cap of blue-gray feathers with a reddish top.

Kestrels have two black patches on the back of the head. These dark spots look almost like eyes, and might trick or startle another animal into thinking the kestrel is watching it with "eyes

in the back of its head." The tricky eyespots may help protect kestrels from bigger predators.

Windhover

In flight kestrels look slim with long wings and tail. They have a remarkable ability to hover in place to scan for prey on the ground below them. It takes a lot of energy to spread their tail feathers and flutter their wings to remain like helicopters in one place. When they face into a breeze, the wind helps hold them up and makes hovering much easier. Kestrels have earned the nickname *windhover* from this hunting technique.

What Prey Do Kestrels Hunt?

Sparrow hawk is a common nickname for kestrels, but unlike windhover it isn't quite as accurate. Kestrels do hunt small birds, but they eat lots more insects than sparrows or other birds. Grasshopper falcon is a better nickname.

Grasshoppers may be their favorite prey. They also hunt crickets, beetles, butterflies, moths and dragonflies. Mice, voles and other small rodents are part of their diet, especially in winter. Small snakes, lizards, frogs and even spiders are an occasional meal.

When more prey is caught than eaten, kestrels hide (cache) the extra food in clumps of grass or twigs on the ground and on bushes, trees or fences. Later the hidden snacks will be retrieved and eaten.

What Hunts Kestrels?

Bigger raptors such as red-tailed hawks, prairie falcons or barn owls may snatch a kestrel for dinner. Newly fledged kestrels are in the most danger. The falcons are also in danger of getting hit by cars or running into windows. Kestrel eggs and chicks are at risk from nest robbers such as crows and raccoons.

Chick Protection

Kestrel parents form strong partnerships and will usually raise a family together every summer. They look for old woodpecker holes or natural tree cavities as a secure spot to lay their eggs. Crevices on cliffs or buildings will work, too. They also are the only raptor species that will use human-made nest boxes.

Mostly the mom sits on the nest while the dad hunts, but dads will take a turn at tending eggs and hatchlings too. After the chicks are about ten days old, both parents hunt to provide enough meals for the rapidly growing nestlings.









Go Fly a Kestrel!

Kestrels are light birds that are tossed about in strong winds despite their incredible flying skills. When winds are gentle, they have an amazing ability to flutter in place to look for prey. Here are two tricks they use:

Hovering—Kestrels can beat their wings very fast to stay above ground in one spot. This takes a lot of energy.

Kiting--If a kestrel faces right into the wind, the breeze helps it float in the air and takes a little less effort.

Make the small kite from the directions below (or use a kite that you already have). The kite can be your paper kestrel. Watch how the wind helps hold up the kite. If the wind changes direction or stops, what happens to the kite? What do you think happens to a kestrel in the wind? What happens when the wind is very strong?

Directions for a Simple Kite

Step 1: Gather materials (one piece of paper, a ruler, a pencil, some kite string, a stapler, and a hole punch).

Step 2: Fold paper in half.

Step 3: Along the folded side of your paper, measure and mark off at 2 1/2 inches (point A) and at 3 1/2 inches (point B).

Step 4: Take two corners of your paper and staple them together at point A.

Step 5: Punch a hole at point B.

Step 6: Tie a long piece of kite string through the hole you've just punched.

Step 7: Fly your kite on a windy day.



Kestrel Sightings

Look for kestrels sitting on wires near a road or on fence posts, and if you're lucky you might just see one hovering above a tasty meal in the field below!

Come to the Nature Detectives In the Field Kestrel Program listed in the calendar of events near the end of this IMAGES. A live kestrel may make an appearance too!



Don't crease these folds.







Double SNAP at the Farmers' Market

by Jennifer Kemp

Any good farmer knows that in order for seeds to successfully take root and thrive, a number of factors must be present: good soils, consistent water, and the right growing temperatures. Similarly, some good ideas only come into fruition when surrounded by an inspirational mixture of passionate leaders, good funding, proper timing, and luck. Such was the case with the implementation of the Double SNAP, or Harvest Bucks, program at the Boulder County Farmers' Market (BCFM) last year.

The seed for this idea was first planted when a number of Boulder County and City of Boulder representatives attended a conference in Santa Fe, New Mexico in 2014. Conference participants had the opportunity to visit that city's thriving farmers' market, where they met with the market manager to better understand how the Double SNAP program was implemented there. By the end of the conference, Boulder County Parks & Open Space and the City of Boulder had committed \$10,000 each, while Boulder County Public Health and BCFM had committed personnel, to pilot a program at all of the BCFM markets in Boulder and Longmont beginning in August, 2014.

During the pilot period, the Harvest Bucks Program provided customers enrolled in the Supplemental Nutrition Assistance Program (or SNAP, formerly known as the Food Stamp Program) with an incentive to purchase locally grown fresh fruits and vegetables from area growers. The program provided a doubling of benefits up to \$20 per SNAP customer per market visit. Participants in the Women, Infants and Children (WIC) program also received Harvest Bucks to spend at BCFM markets.

Benefiting Farmers and Customers

Along with increasing the purchasing power of underserved residents at the markets, the Harvest Bucks program aims to remove barriers that might otherwise keep participants in federal nutrition assistance programs from attending the farmer's markets. Similar programs throughout the country have shown that once SNAP participants feel more comfortable at the farmers' markets and more familiar with using seasonal produce, they tend to become repeat customers. The program also increases the financial viability of small acreage fruit and vegetable vendors by diversifying their customer base. For Boulder County Parks & Open Space, the opportunity to further help area farmers made supporting the program an easy decision. However, beyond that goal, there was an even bigger reason for providing initial funding. David Bell, Agricultural Resources Division Manager, explains, "Everyone who lives, works or visits Boulder County pays into the sales tax that supports and maintains our extensive open space program. We felt it was important that all people, regardless of income, also have a chance to enjoy the bounty of those lands."

Numbers Prove Positive

Results from the pilot program were extremely positive. SNAP and Harvest Bucks redemption at the Boulder-based farmers' markets were 225 percent higher than SNAP sales the year prior, while SNAP and Harvest Bucks redemptions at the Longmont-based farmers' markets increased by 506 percent. Furthermore, surveys showed that 88 percent of participants increased their consumption of fruits and vegetables, 94 percent agreed that is was easier to purchase fresh fruits and vegetables, and more than 80 percent said that they would not have come to the farmers' market without the incentives.

Funding the Future

While the Harvest Bucks program did not receive a large grant from the United States Department of Agriculture that would have provided funding for the next four years, additional funding has been secured for the 2015 season. The City of Boulder has committed \$15,000 towards the project, while the Boulder County Department of Housing and Human Services is providing \$30,000 for this year. This increase in funding means that the program will hopefully last the entire farmers' market season. It also has prompted program coordinators to increase the Harvest Bucks match to \$40 per SNAP customer per market visit. While the Harvest Bucks program grows and flourishes at the market, organizers are hoping to find more secure sources of both public and private funding that will ensure its success for many years to come.

Early Miners of Boulder County

by Cindy Maynard

The first European-Americans who arrived in the Boulder Valley in 1858 and settled in the Southern Arapahoe Indian wintering grounds did not come for the view of the Flatirons. Rather, they came in search of gold. It did not take them long to find both gold and silver in areas near Boulder Canyon such as Caribou, Eldora, Salina, and Gold Hill. By 1861, lacking any formal government, miners had set up several mining districts.

Who were these miners and where did they come from? Early arrivals of men came from across America—farmers, clerks, and former soldiers, inexperienced but optimistic. They panned for gold or set up early placer mines, gleaning the heavy gold nuggets that settled from flowing streams or accumulated in alluvial deposits. Their ethnicities were varied, but most were of northern European ancestry.

From the Railroad to Mining

As mining progressed, it attracted homogeneous groups from specific countries. Chinese workers, brought to San Francisco to lay tracks for the Transcontinental Railroad, had to look for other employment when the road was completed. Some of these workers went to Central City and worked in the mines for 35 dollars per month. Eventually some struck out on their own, drifting to various streams in Boulder County to try their hand at placer mining. They were industrious, saved their money, and often found success. Chinese immigrants set up camps from Orodell to Sunset. A prominent camp was in Wall Street where they stayed until the late 1890s despite ethnic prejudice. Chinese workers were part of the influx of ethnic groups attracted to Colorado's many types of mines.

When easily-retrieved gold became scarce, big money interests began hard-rock mining operations using heavy equipment and hard labor to tunnel directly into the mountains, searching for seams of ore-bearing deposits. Hard-rock mining required experienced miners, so the first skilled workers were recruited from Cornwall and Wales where skilled miners had been extracting minerals from hard rock since the Bronze Age.

From Scandinavia to Lyons

In the Lyons area, Scandinavian immigrants from Finland and Sweden labored in the sandstone quarries. Many came from the Upper Peninsula of Michigan when the copper mines failed, and some came directly from Finland. After John Gust Luokonen, a tanner, had a "disagreement with authorities" and had to leave his homeland, he came to Lyons and went to work in the quarries. He saved his money and brought over three sons who also saved their money and soon became important mine owners themselves. After 125 years, Loukonen Brothers Stone is still a family-owned business in Lyons. Their ethnic heritage is evident in quarry names like Helsinki, Soumi, and Kuipo.

Black Gold

In eastern Boulder County, a different kind of gold was discovered—coal, also called black gold. As early as 1859, coal was being extracted near Marshall. Coal deposits in the Northern Coalfield ran underground in a wide swath from northwest Denver through Marshall, Louisville, Lafayette, and Erie. In 1880, 80 percent of coal miners were English-speakers from England, America, Scotland, Ireland and Nova Scotia. Thirty years later that percentage was reversed as Italians, Greeks, Croats, Russians and Poles arrived in coal mining towns of eastern Boulder County.

Mining remained the backbone of Boulder County's economy for many decades. Boulder County's mineral wealth was crucial to its development. For example, 100,000 dollars in gold was washed from the placer mines of Gold Run in the summer of 1859. During their existence from 1870 until 1955, over 25 million tons of coal came from the Louisville mines. These types of riches drew all kinds of people from near and far to Boulder County. The diversity of the miners has added vitality to Boulder County's culture and has been essential to who we've become.



More about Mining: Visit the Nederland Mining Museum

Get a glimpse into the world of hard rock mining days during the late 19th and early 20th centuries. Learn about the lives of the miners of yesteryear.

Open: June 5 through October 31 on Friday, Saturday, and Sunday from 10 a.m. to 4 p.m.

Location: 200 N. Bridge Street, Nederland

Phone: 303-258-7332

Admission: free

Learn about all of the museums of Boulder County Parks and Open Space at www.BoulderCountyOpenSpace.org.

Sunset Hikes

Every summer you can enjoy weekly nature hikes at sunset. Bring your family and friends for an evening exploring your local parks. At each hike, volunteer naturalists interpret each park's history, geology, ecosystems, plants and wildlife.

- Hikes begin at 6:30 p.m. and conclude by sunset
- · Consist of two miles of easy to moderate hiking
- All ages welcome. An adult must accompany children.
- No pets are permitted

Monday, June 8	Walden Ponds Wildlife Habitat Area (meet at picnic shelter near Cottonwood Marsh)
Tuesday, June 16	Heil Valley Ranch (meet at the picnic shelter near the Lichen Loop trailhead)
Wednesday, June 24	Mud Lake Open Space
Thursday, July 2	Bald Mountain Scenic Area
Friday, July 10	Betasso Preserve
Monday, July 13	Caribou Ranch Open Space
Tuesday, July 21	Heil Valley Ranch (meet at the picnic shelter near the Lichen Loop trailhead)
Wednesday, July 29	Mud Lake Open Space
Thursday, August 6	Bald Mountain Scenic Area
Friday, August 14	Walker Ranch Open Space (meet at Meyers Homestead Trailhead)
Monday, August 17	Caribou Ranch Open Space
Tuesday, August 25	Heil Valley Ranch (meet at the picnic shelter near the Lichen Loop trailhead)



Civil War Fashions Made In Your Backyard Tuesday, June 2, 6:30-8 p.m. Boulder County Parks and Open Space Headquarters; 5201 St. Vrain Road, Longmont

What does it take to make authentic, wearable reproduction Civil War clothing using only technology that was available then? Learn from Ben Jenkins of Erie who makes period clothing for reenactments, movie and TV productions. This event is open to teens and older.

Wildflowers of Mud Lake Hike Saturday, June 6, 9:30-11:30 a.m. Mud Lake Open Space; 2 miles north of Nederland on County Road 126; meet at parking lot kiosk

Join volunteer naturalists for an easy 1.5-mile hike through the montane forest to search out and enjoy the beautiful spring wild-flowers. Along the trail, we will also learn about some of the local ecology and watch for signs of wildlife.

Backcountry Hike at Heil Valley Ranch Sunday, June 7, 4:30-7:30 p.m. Meeting location will be given to registered participants

Hike through the open country of the Red Hill Conservation where sensitive plant species and wildlife habitat occur. The landscape is dominated by foothill shrub lands of mountain mahogany and open meadows. It is also a winter range habitat for elk and hunting grounds for golden eagles and coyotes. Dress for hiking off trail.

Register at www.BoulderCountyOpenSpace.org/register

l Spy Bones

Wednesday, June 10, 10-11 a.m. Betasso Preserve; Boulder Canyon (Highway 119) to Sugarloaf Road; follow signs to Betasso Preserve; meet at group picnic shelter

The bone detectives are on the prowl! Help volunteer naturalists search for evidence, including skulls, bones, and antlers of some of the animals that live here. This program is for preschool children and their families and will include plenty of hands-on fun for all.

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.

Kids Gone Fishing

These clinics are a fun way to for kids 5 to 15 to enjoy fishing. Kids go through stations to learn about casting, baiting a hook, fish handling, and more and then get to practice their new skills. This is a great opportunity for both kids who have never fished and those who want to learn more about fishing.

Dates for 2015:

Clinics take place from 9 a.m.-noon

Saturdays; June 20, and August 8

Sign up at: www.BoulderCountyOpenSpace.org/register

Got questions? Contact Michelle Bowie at mbowie@bouldercounty.org

Walking Tour of Pella Crossing Friday, June 11, 2–4 p.m. Meeting location will be given to registered participants

Join a guided tour of Pella Crossing, a property that is currently closed due to damage from the 2013 Flood. You'll hike on the eastern side (east of 75th Street) of the property to see the flood's impact on this beloved open space.

Register at www.BoulderCountyOpenSpace.org/register

Junior Ranger Adventures Summer Challenge Kickoff Saturday, June 13, 11 a.m.-1 p.m. Heil Valley Ranch; North of Boulder off Lefthand Canyon Drive; meet at group picnic shelter

Calling all Junior Rangers! Practice your junior ranger skills as you learn how to be prepared for all the surprises the great outdoors can throw your way. The kickoff event is perfect for kids aged 5-12, but all family members are welcome. A parent or guardian must be present. Pre-registration is required at www. bouldercountyopenspace.org/jr. If you can't attend this event, don't worry—Junior Ranger Adventures continues all summer! Sign up for the summer challenge and earn points and badges by completing fun outdoor activities. Then, track your progress on our website.

To learn more, visit www.bouldercountyopenspace.org/jr

Fish Hawks of Boulder County Saturday, June 13, 9-10:30 a.m. Boulder County Fairgrounds; Cattail Pond; North Entrance off Boston Avenue, Longmont

What hawk-like bird has a white head, eats fish, spends the summer and nests in Boulder County? Osprey! Join volunteer naturalists to observe and learn about this remarkable bird of prey. An osprey pair has nested at Cattail Pond for several years, and we may see adults and young looking for food and trying out new wings. We will also keep our eyes out for other birds frequenting the area. Bring a bird field guide and binoculars if you have them.

Moon, Saturn, and Summer Skies Friday, June 19, 8:45-11 p.m. Beech Open Space; Neva Road and Hwy. 36; meet at the picnic shelter (Note: weather backup date is June 20. Call 720-526-9154 or 303-906-7391 for updates)

Enjoy the open space in the sky! Join Dave Sutherland (City of Boulder Open Space and Mountain Parks) and Deborah Price (Boulder County Parks and Open Space) to explore our Moon, Saturn, and summer constellations, followed by sky-gazing with telescopes provided by the Longmont Astronomical Society.

Fun on the Farm

The second Friday of each month June through September from 9:30-10 a.m. Agricultural Heritage Center 8348 Highway 66, between Lyons and Longmont

Do your kids get excited about animals, tractors, and playing in the dirt? Fun on the Farm is designed for children ages 2-6 with parents/guardians to hear stories and take part in fun activities on a specific topic. Afterwards, you can explore the Agricultural Heritage Center. Bring lunch or snacks to enjoy at the on-site picnic tables.

(Note: these topics can be provided for groups as well, but please call to arrange a separate time.)

Friday, June 12—This Little Pig Friday, July 10—Tractors Big and Small Friday, August 14—How Does Your Garden Grow? Friday, September 11—The Chicken and the Egg

Left Hand Outdoor Summer Challenge Saturday, June 20, 10 a.m. – 2 p.m. Meeting location will be given to registered participants

Ever wonder what it takes to become a wildland firefighter? Boulder County's Left Hand Outdoor Challenge Program has partnered with the Boulder County Wildland Fire Crew to put you through a wildfire challenge. You'll be introduced to actual firefighters, learn about the tools they use, train like a firefighter, and complete an obstacle course using actual wildland firefighting equipment. Please bring a lunch, lots of water and dress for the weather. Be prepared to run, hike, and get a little wet! This is open to Boulder County area teens ages 14 to 18. No parents please! Register at www.BoulderCountyOpenSpace.org/register

Celebrate Summer Hike at Mud Lake Saturday, June 20, 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 to celebrate the coming of summer to the high country! On this easy 1.5 mile hike we will explore the natural history of the area including wildflowers, wildlife, and forest ecology. We will also talk about summer weather patterns and safety in the mountains.

Wildflowers of Boulder County Slide Program Monday, June 22, 7-8:30 p.m. Louisville Public Library, 951 Spruce Street, Louisville

Join volunteer naturalists for a slide program to kick off the summer wildflower season! You'll learn about the variety of wildflowers found in Boulder County from the plains to the alpine tundra, where and when to look for them, and interesting facts about some of our native plants.

Artist's Morning Saturday, June 27, 9- 11:30 a.m. Meeting location will be given to registered participants

Meet a flower, interview a rock, or discover three ways to see a tree. Join volunteer naturalist, Ellen Orleans for a morning of outdoor, creative play. The program includes some moderate hiking (your choice), a full hour of on-your-own art or writing time, and the opportunity to share drawings, paintings, and stories. Bring your own writing and art supplies. This program offers ideas for outside creativity but not specific drawing or writing instruction. Recommended for adults and children 8 and above. Register by emailing lcolbenson@bouldercounty.org, or 303-678-6214 by Thursday, June 25.

Geology Walk at Sandstone Ranch Saturday, June 27, 10 a.m.-noon Sandstone Ranch Open Space Visitor Center; south of Highway 119, one mile east of Weld County Road 1

Join volunteer naturalist Roger Myers to explore and learn about the geology of Sandstone Ranch and Boulder County. From a scenic overlook, we will learn about this dramatic and diverse landscape, from the Great Plains to the Continental Divide. After a short and easy walk exploring geologic history, you can visit the historic Sandstone Ranch house to learn about some of the human history associated with this site.

Wildflowers of Caribou Ranch Sunday, July 5, 9 a.m.-noon Caribou Ranch Open Space; 2 miles north of Nederland on County Road 126

Escape the summer heat and enjoy the beautiful wildflowers of Caribou Ranch Open Space! Volunteer naturalists will be available along the 4.2 miles (roundtrip) of easy to moderate trails to help you identify and learn about the wildflowers as you explore the beautiful montane forest, meadows, and wetland landscape.

Summer Heritage Evening at Walker Ranch Homestead Saturday, July 18, 5-7:30 p.m. Walker Ranch Homestead; 8999 Flagstaff Mountain Road, approximately seven miles west of Boulder

Bring your family, a picnic supper and enjoy an evening at the homestead. Visit with costumed volunteers as they demonstrate late 1800s rural games and chores such as doing laundry the old-fashioned way, woodworking, meal preparation, and blacksmithing. All visitors can participate in chores and games! Please bring a blanket if you plan to picnic since there are no tables at the homestead.



Square Nails and Rust Historical Photography Workshop Saturday, July 11, 10 a.m.-1 p.m. Walker Ranch meadow above the homestead; 8999 Flagstaff Road, approximately 7 miles west of Boulder

Through photography, explore James Walker's mountain homestead. The Walker Ranch Homestead was built in this location for a reason; everything done at the ranch was purposeful. This workshop is for teens and older with minimal photography experience. Please bring a camera (digital or otherwise). Register online at www.BoulderCountyOpenSpace.org/register

Flora and Fauna of the Montane Wetlands and Forests Saturday, July 18, 10 a.m.-noon Mud Lake Open Space; 2 miles north of Nederland on County Road 126; meet at the parking lot/trailhead

Escape the summer heat and join volunteer naturalists, Therese Pieper, Roger Myers, and Leslie Larson for a moderate 2-mile hike. We will learn about the plants and trees that make up this ecosystem and the wildlife that depends upon them. We'll discuss how animals survive and thrive, identify trees, shrubs, and wildflowers, and observe the geology behind this landscape.

A Butterfly's Life Monday, July 20, 6-7:30 p.m. George Reynolds Branch; Boulder Public Library; 3595 Table Mesa Drive, Boulder

Are you curious about butterflies? Have you ever wondered where monarch's go during their migration? Join volunteer naturalists for a beginner's guide to butterflies. This slide program will review the life cycle of butterflies, and will cover basic information on behavior, host plants, identification tips, and more.

Backcountry Hike at Betasso Preserve Friday, July 24; 9 a.m.–noon Meeting location will be given to registered participants

Join Resident Ranger, Graham Fowler, for a hike in the backcountry of Betasso Preserve. This is a moderate to difficult hike with some elevation gain. Please wear hiking shoes or boots, and bring a snack, water, and sunscreen.

Register at www.BoulderCountyOpenSpace.org/register

Cobbles of Time—The Geology of Caribou Ranch Saturday, July 25, 9 a.m.-1 p.m. Caribou Ranch Open Space; 2 miles north of Nederland on County Road 126

The story of Glacial Lake Devlin and evidence of its catastrophic demise is a fascinating and little-known chapter in the geologic history of Caribou Ranch. Join volunteer naturalist Roger Myers and others on this 4.5-mile moderate hike to examine the evidence first hand. We will also learn about some of the oldest rocks in the area, as well as the valuable minerals that formed and were mined nearby.



Barnyard Critter Day Sunday, June 28; 10 a.m.-3 p.m. Agricultural Heritage Center 8348 Highway 66, between Lyons and Longmont

Animals have always been part of our lives. Come learn about the roles of chickens, pigs, horses and other animals on a farm. See demonstrations of sheep herding and horseshoeing, visit with chickens and pigs, and ride on a horse-drawn wagon.

Please leave pets at home so our working animals will not be disturbed.

For more information, call 303-776-8688 or email jdrew@bouldercounty.org.

Butterflies and Other Flying Creatures Sunday, July 26, 9:30 a.m.-12:30 p.m. Walker Ranch; approximately 7 miles west of Boulder on Flagstaff Road; meet at the Meyers Homestead Trailhead

Volunteer naturalist Jan Chu and others will lead this slowpaced 1.5-mile hike along trails and meadows in search of mid-summer butterflies, birds, and other flying insects. See how creatures in the foothills find the food, water, shelter, and space needed to survive. We'll talk about butterfly behavior and life cycles, and also learn some tips on identification.

The Nature and History of Caribou Ranch Saturday, August 1, 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 fascinating hike through geologic and historical time, as we explore ancient mountain-building, alpine glaciation, and the history of hard rock mining in the Caribou Ranch area. We will also identify diverse plant and animal communities and look for signs of wildlife on this moderate 4.2 mile (round-trip) hike.

Backcountry Hike at Caribou Ranch Saturday, August 8, 2 -6 p.m. Meeting location will be given to registered participants

Join Resident Ranger, Sarah Andrews, for a hike along the Switzerland Trail. We will be hiking in an area closed to the public, so don't miss this rare opportunity! This is a moderate to difficult hike with some elevation gain. Please wear hiking shoes or boots, and bring snack, water, sunscreen, rain gear, and clothing for changeable mountain weather above 8,500 feet. Register at www.BoulderCountyOpenSpace.org/register

Summer Catfish Night Friday, August 14, 7:30-11 p.m. Carolyn Holmberg Preserve at Rock Creek Farm; located north of Broomfield at the junction of south 104th St. and Dillon Road; meet at the Stearns Lake Trailhead.

Summer Catfish Night is a great opportunity for anglers to try their luck at night when the lake is usually closed and the catfish are biting!

Land Through the Lens Photo Exhibit August 14 through September 3 The Great Frame Up; 430 Main St, Longmont

Come see photography featuring the lands of Boulder County. Opening night reception: Friday, August 14 from 6 – 9 p.m.

To learn more, please visit

www.BoulderCountyOpenSpace.org/photoshow or contact Karen Imbierowicz at kimbierowicz@bouldercounty. org or 303-678-6268 for more information.

Living in Lion and Bear Country Saturday, August 22, 9-11 a.m. Heil Valley Ranch Open Space; North of Boulder off Lefthand Canyon Drive; meet at group picnic shelter

Join volunteer naturalists for a moderate 1.5-mile hike and learn about the ecology and behavior of our local mountain lions and black bears. Along the trail, we'll talk about why the foothills are such good habitat for lions and bears. We'll also discuss hunting and feeding habits, and how to be safe in lion and bear country.

Nature Detectives in the Field: Cool Kestrels Thursday, August 27, 10-11 a.m. Carolyn Holmberg Preserve at Rock Creek Farm; meet at the picnic shelter at the Stearns Lake Trailhead

American Kestrels are one of the smallest birds of prey, but they have great hunting skills and cool tricks. 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 will be geared to ages 3 to 7 years old.



Night Hikes

Tuesday, June 23, 8:30-10:30 p.m. at Heil Valley Ranch (trailhead off Lefthand Canyon Drive)

Wednesday, July 15, 8-10 p.m. at the Walker Ranch Meyer's Homestead Trail

Wednesday, August 12, 8-10 p.m. at Mud Lake

Join volunteer naturalists for an evening of exploring under cover of darkness. We'll hike about one mile roundtrip on an easy trail, enjoying the starlight, listening for night sounds, and learning about the nocturnal habits of the critters that live here. Bring water, closed-toe hiking shoes/ boots, a flashlight, and your night vision.

Ongoing Mining Programs

Hard Rock Mining Tours Saturday, July 11, 10:30 a.m. – 1:30 p.m. Saturday, August 1, 10:30 a.m.-1:30 p.m. Meeting location provided to registered participants

Tap into the towns, tools and characters of local hard rock mining heritage by visiting mining sites of years gone by. Tours are free and open to ages 10 years and older. Some walking required.

Register at www.BoulderCountyOpenSpace.org/register or call 303-776-8848.

All That Glistens Is Not GOLD The fourth Saturday of each month, 11 a.m.-1 p.m. Meeting location provided to registered participants

Try your hand at gold panning! This activity led to the settlement of Boulder County as people sought their fortunes. Do you have what it takes to travel back in time and search for gold in a stream? Programs are open age 5 years and older.



Register at www.BoulderCountyOpenSpace.org/register or call 303-258-7332.



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

www.BoulderCountyOpenSpace.org



NOTE: Pella Crossing and the Anne U. White Trail are closed due to damage from the 2013 Flood.

