

IMAGES

NEWS



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NATURE



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IMAGES

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

PHOTOGRAPHS & ILLUSTRATIONS

Cover: Flowers at sunset, Michael Lohr
White-nose Syndrome: Healthy tricolored bat, Pete Pattavina/USFWS. Tricolored bat with WNS, Darwin Brock.
Monarchs, Milkweeds, and More, Ann Cooper
*Uncredited photos from BCPOS Collection

NATURE DETECTIVES

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Ancient dragonfly scale reference provided by prehistoric-wildlife.com

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Boulder County's Lifelines: Restoring Streams and Riparian Habitats for the Future

by David Hirt and Mac Kobza

Seven creeks flow across Boulder County, shaping the landscape and sustaining life along the way. Rock Creek, the only stream to originate on the plains, marks the southern boundary of the county, while Little Thompson Creek marks the northern county line at the Ron Stewart Preserve at Rabbit Mountain. In between, Coal Creek, South Boulder Creek, Boulder Creek, Lefthand Creek, and the St. Vrain Creek all flow from the mountains, with the latter four originating at the Continental Divide. Eventually, these waterways feed into the Boulder Creek and St. Vrain Creek watersheds, which in turn flow into the South Platte River.

In Colorado's arid climate, streams are true lifelines — narrow ribbons of habitat that support both biodiversity and human needs. Although riparian areas cover only about 1% of the eastern plains, they provide habitat for 80-90% of native wildlife at some point in their lives. These areas also support unique plant communities found nowhere else and host the highest remaining biodiversity of small, native fish on the Front Range.

A LEGACY OF CONSERVATION AND A FUTURE OF RESTORATION

For more than 50 years, Boulder County Parks & Open Space (BCPOS) has recognized the vital importance of these riparian corridors. The department has prioritized acquiring land along streams, implementing protective management practices, and restoring degraded waterways impacted by past human activities.

Historic land uses — including beaver extermination, agriculture, and gravel mining — altered the natural flow of streams. Once-meandering creeks were straightened, increasing flow velocity and erosion, disconnecting streams from their floodplains. The absence of beavers eliminated naturally complex systems of ponds, marshes, and overflow channels. Irrigation diversions reduced streamflow, while dams and reservoirs altered seasonal fluctuations. Livestock grazing often degraded streambanks and removed riparian vegetation, which shades and cools streams and supports aquatic food webs. These cumulative impacts led to the decline of many native species, such as the common shiner and the federally threatened Preble's meadow jumping mouse.

Now, climate change adds new pressures: warmer temperatures and drier conditions that further reduce stream flows and raise water temperatures.

INNOVATIVE SOLUTIONS FOR A CHANGING LANDSCAPE

In response, BCPOS has significantly expanded its restoration efforts. Much of the St. Vrain Creek corridor between Lyons and Longmont has been protected, with the City of Longmont stewarding lands farther east toward Weld County. Boulder County and the City of Boulder have also conserved large portions of the Boulder Creek watershed.

Restoration has accelerated through partnerships with organizations such as Mile High Flood District, the Army Corps of Engineers, Colorado Parks & Wildlife, U.S. Fish & Wildlife Service, Natural Resources Conservation Service, and local nonprofits like The Watershed Center, The Boulder Watershed Collective, Ocean First Institute, and Trout Unlimited. The 2013 flood, which caused widespread damage but brought new funding and urgency, became a turning point for larger, collaborative projects — especially on St. Vrain Creek, which experienced a 500-year flood event.



St. Vrain Creek after the 500-year flood event in 2013

For the first time in BCPOS' history, multi-objective restoration designs were implemented to balance irrigation needs with ecological goals. Innovative engineering approaches, like replacing dams with natural rock ramps, helped facilitate fish passage and improve habitat complexity. Overflow channels and reconnection to historic floodplains restored natural functions while supporting downstream resilience.

BCPOS has also embraced cutting-edge ecological research to guide restoration. Pollinator experts highlighted the importance of vertical streambanks for native ground-nesting bees. Bioengineering specialists helped design structures using natural materials — such as root wads from whole trees — that protect infrastructure while enhancing aquatic habitat.

Thousands of native trees, shrubs, and willows have been planted to improve conditions for wildlife, including the Preble's meadow jumping mouse, which has rebounded in restored areas. Meanwhile, beaver populations are naturally expanding, and

BCPOS continues to develop coexistence strategies to let these ecosystem engineers do what they do best — enhance habitat, slow water, and create wetlands.

LOOKING AHEAD

Restoration is ongoing. From reintroducing habitat complexity to building fish-friendly passageways, BCPOS is committed to reconnecting streams to their natural floodplains and bringing life back to these vital waterways. With continued collaboration, science-based design, and a deep-rooted conservation ethic, Boulder County is working to ensure that our creeks remain lifelines for both people and wildlife — today and for generations to come.



Active construction on St. Vrain Creek in 2018, installing large wood as bank protection and aquatic habitat



Same site five years later

POST-2013 FLOOD RESTORATION

- Linear feet of stream restored on BCPOS land: 27,253 (5.2 miles)
- Number of native willows and shrubs planted: 73,206
- Wetland plants planted: 35,670
- Riparian and upland acres reseeded: 141
- Fish Passage Structures Constructed: 2

Bats and White-nose Syndrome in Boulder County

by Wesley Dixon

We live in a world of bats. Bats are in the order Chiroptera (no, they are not rodents), are very long-lived (up to 40 years), are slow reproducers (only one or two pups per year), are highly social, and are the only mammal species capable of powered flight. They are found flitting across the skies of every continent except Antarctica.

With 1,480 species identified worldwide, these animals have evolved a dazzling diversity of physical characteristics and lifestyles, ranging from large fruit-eaters to acrobatic hunters taking prey on the wing.

Good vision, in conjunction with their powers of echolocation, makes bats astute navigators — helping them find their way through complex environments and catch prey in complete darkness.

Bats play an invaluable role in benefiting human lives. Many bat species are prolific insect predators, foraging nightly and consuming up to 4,000 insects in a single night. Their voracious appetites contribute an estimated value of \$3 billion to the country's agricultural industry through natural, free pest control. In addition, some bat species' taste for mosquitoes reduces the spread and severity of harmful pathogens to humans, pets, and livestock.



Healthy tricolored bat, *Peromysotis subflavus*

Sadly, while bats may help us live safer, healthier lives, the same cannot be said in reverse. Bats in North America have been dealing with a variety of human-induced pressures, such as habitat loss, climate change, extermination, and collisions with wind turbines. However, arguably the greatest threat they now face is a non-native fungus (*Pseudogymnoascus destructans* — Pd for short), which is known by the disease it causes: white-nose syndrome.

Originating in Asia and Europe, Pd was likely transferred to North America by people traveling abroad, hitching a ride on their caving equipment when they came home. White-nose syndrome was first detected in New York in 2006 and has since spread west throughout 39 states and seven Canadian provinces. While harmless to humans, pets, and livestock, the spread of Pd has been devastating.

Thriving in cold, damp locations, the fungus is perfectly adapted to the caves, mines, and abandoned buildings that hibernating bats choose for roosting and resting. As the bats sleep, they become infected by the fungus, with its white, fuzzy spores growing on their wings, chest, and face — causing irritation and damage to their skin and respiratory systems. This stresses the bats and forces them to wake up earlier than normal, depleting their energy reserves and leading to starvation, freezing, and ultimately, death.

Of the 47 species of bats found in the United States and Canada, 12 have experienced a staggering 95-100% population decline because of the fungus. Of those 12 vulnerable species, six reside within Boulder County. White-nose syndrome was first detected in Boulder County in February 2024, and its range continues to expand. There are 20 species of bats in Colorado, and 12 of them are found within Boulder County — necessitating proactive measures. This includes implementing several management practices to “make bat lives easier,” such as identifying and protecting historic structures used by bats, constructing bat-friendly water features known as “bat troughs,” and working closely with our partners at Colorado Parks & Wildlife.

This is where you can help. By following state and county recommendations, you too can make bat lives easier and slow the spread of white-nose syndrome. Please respect and follow all signage regarding bat habitat and exclusion sites, never disturb bats that are roosting and showing no signs of stress, and thoroughly clean and disinfect any caving equipment between excursions.

Report any bat-related concerns to the Colorado Parks & Wildlife bat hotline at 303-291-7771, and email sightings to wildlife.batline@state.co.us. For additional information on bats and white-nose syndrome, visit whitenosesyndrome.org.

Through science, education, and working together, we can do our part to ensure that bats — incredible and vulnerable animals with complex lives — can continue to survive and remain an integral part of Boulder County's natural heritage.



Tricolored bat, *Peromysotis subflavus*, infected with Pd

Park Rangers: Connecting Communities to Open Space

by Ranger Bevin Carithers

The park ranger program is deeply rooted in the history of the Boulder County Parks & Open Space (BCPOS) department. Early in the program's growth, it was not uncommon for staff to moonlight as park rangers while working as park planners, educators, and trail builders. Today, county park rangers are highly trained professionals in resource protection and representatives of their communities. While they all share the same passion for the job, park rangers have different interests, skills, cultures, and lifestyles — making the park ranger group a dynamic community resource.

Park rangers work closely with the Boulder County Sheriff's Office through the Park Deputy program, and many community events, like National Night Out. They train community members to be volunteer rangers as part of the Volunteer Ranger Corps and engage teens as outdoor leaders through the Left Hand Outdoor Challenge. Park rangers patrol open space trails on foot, mountain bike, snowshoes, and horseback to ensure that visitors feel safe and welcome. And when you are lost on open space, a member of the park ranger search and rescue K-9 team will sniff you out!

As Boulder County Parks & Open Space celebrates its 50th anniversary, park rangers are reaching more communities by bringing their shared cultures, lifestyles, and languages to the job. Park rangers work with Boulder County's Latinx communities to create outdoor memories at family events. Spanish-speaking park rangers provide critical access to park information and environmental learning. You may even see park rangers at community gatherings like PRIDE celebrations, Cinco de Mayo, Trunk or Treat, and the Boulder County Fair.

When you see a park ranger on the trail or in the community let them know how you are celebrating BCPOS' 50th anniversary.



Rangers pause for a snowy photo while patrolling on snowshoes



Rangers grill burgers at a community camping event

Join Us in Celebrating World Ranger Day!

World Ranger Day is celebrated worldwide on July 31 to commemorate rangers killed or injured in the line of duty and to celebrate the work rangers do to protect the planet's natural treasures and cultural heritage. Learn more at internationalrangers.org/world-ranger-day/



Monarchs, Milkweeds, and More by Ann Cooper

Monarch butterflies regularly make the news, perhaps because they are everyone's favorite butterflies. Their epic migrations capture the imagination. It seems improbable that such fragile insects would even attempt to wing it from Canada to Mexico, or from the Midwest to the California coast, to find a winter hibernation haven. But they do! In 2023, some promising data showed that their plunging counts on the hibernation grounds reversed to show very slight gains. Let's hope we can keep that trend going by maintaining and enhancing habitat for these travelers, and by planting more, and the right kind of plants. The right plants — if your intention is to support entire and uncompromised insect communities — are native plants raised locally.



Adult monarch butterfly

Milkweeds are the plants that immediately come to mind when you think of monarch butterflies, although adult butterflies nectar on other species as well (rabbitbrush seems like a late season favorite). Milkweed plants are known for their sticky white sap that contains cardiac glycosides. These chemicals are toxic to many animals, including us, but milkweed caterpillars and butterflies have adapted to handle the deadly-to-many brew. When the caterpillars munch on milkweed leaves, the toxins they ingest endow them with some protection from being eaten by would-be predators.



Showy milkweed

Boulder County is home to several species of milkweed, some of them flashier than others. Showy milkweed, the best-known of our local milkweeds, is a good species to plant in sunny spots if you want monarchs. This plant is distinguished from others with its chunky pale green leaves, pink nearly tennis-ball-sized pink blossoms, and knobby curved pods that split to release more seeds than you would ever think could fit inside. You may see it growing in relatively unfussy locations: roadsides and medians, ditch banks, the edges of agricultural fields, and along waterways. A second species, also eye-catching, is the swamp milkweed. It has

narrower leaves and darker pink blossoms. Its pods are thinner and smoother. It is a wetland lover, sprouting in swampy ground.



Swamp milkweed

The other five local milkweed species are less commonly seen, unless you deliberately hunt for them, and their flowers are less showy. All seven of the local species used to be classified in a plant family of their own but have been reassigned to the dogbane family, which makes sense if you compare pod forms.



Showy milkweed pods



Swamp milkweed pods

When you come upon milkweeds, you have before you an entire and enticing assembly of fascinating life to explore. Look under the plant's broad leaves to find minute yellowish ridged monarch eggs — the start of it all — or the tiniest early instars (starter caterpillars) mere millimeters long. Roaming



Monarch instar

about the plants, the striped late instar caterpillars would seem to be a potential feast, except with the sequestration of yucky and toxic chemicals, they are a nasty mouthful for predators.

Story continues on page 7

NATURE DETECTIVES

Summer 2025

Text by Angela Borland
Illustrations by Emily Lark

The Superpowers of Dragonflies

Summer is here, and the amazing dragonflies are emerging to show off their beauty and superpowers. You can watch them dart across ponds, lakes, wetlands, and open meadows as they hunt — moving forward, backward, up, down, and hovering in a beautiful dance right before your eyes.

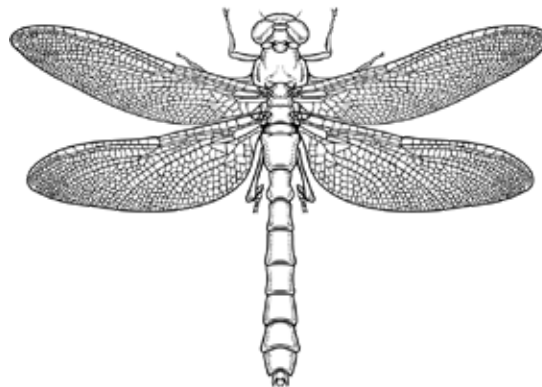
Ancient Dragonflies: Older Than the Dinosaurs

The ancestor to the dragonfly, called a griffonfly, lived 350 million years ago. Most dinosaurs roamed the earth between 250 and 65 million years ago — that's 100 million years after the first dragonflies appeared. Only a few other animals, such as crocodiles, sharks, and horseshoe crabs, still look like their ancient ancestors.

The griffonfly looked very much like today's dragonfly only much, much bigger! A griffonfly could have a wingspan, from the tip of one wing to the tip of the other wing, of more than 2 feet long (24 inches). That would be about the same size as a magpie's wingspan. The common green darner, the biggest dragonfly in Colorado today, has a wingspan of about 3 inches.

Ancient dragonfly superpower: Dragonflies have changed very little over 350 million years.

Ancient dragonfly
compared to 6-foot-tall
person.



Reconstruction based on a dragonfly.

Pull Out and Save



Beginning Life in the Pond

We may see many colors of adult dragonflies flying around, but they begin life in the water.

Dragonflies lay their eggs on plants in the water, also known as aquatic plants. When the eggs hatch, they become larvae — also called nymphs — that breathe underwater with gills.

The nymphs begin hunting by lying in wait to ambush their prey. They grow as they eat other water insects, tadpoles and even small fish. As they grow, they get too big for their skin, like how you outgrow your clothes. The skin of insects is called an exoskeleton; it's a hard outer layer that protects their body. As dragonfly nymphs outgrow their exoskeletons, they shed the old hard shells. Then they let a new soft skin underneath harden. Each skin shedding is called a molt, and dragonfly larvae may molt five to 15 times while living in the water from a few months to over five years. The nymphs are great predators and have these superpowers to help them eat:

- Larva Superpower #1: They have excellent sight under water.
- Larva Superpower #2: They have hairlike structures on their legs and antennae. So, when prey passes, they can sense the water moving nearby.
- Larva Superpower #3: Their extendable lower jaw can reach out and grab prey.
- Larva Superpower #4: Some dragonflies capture prey, or escape enemies, with jet propulsion, using squirts of water.

The Change Begins

So how does a dragonfly go from living at the bottom of the pond to being a bright flyer above the pond? They go through metamorphosis. Metamorphosis is a series of physical changes an animal goes through to become an adult.

When the time is right, the dragonfly nymph crawls up the grass, cattail, or log and leaves the pond. Once the nymph leaves the pond, it goes through metamorphosis and molts one last time.

This time, when it breaks out of its skin, it doesn't look like a larger nymph — it looks completely different. The new adult has two sets of wings, a longer and more colorful body, and large eyes.

Once its wings and body dry, it's ready to fly.

- Metamorphosis Superpower #1: Changing from breathing with gills underwater to breathing with their body in the air.
- Metamorphosis Superpower #2: Changing from hunting under the water to hunting in the air.
- Metamorphosis Superpower #3: Using daylight and water temperature to know when to change.

Ready to Fly

Once its body and wings dry, the new adult dragonfly takes flight. Dragonflies are amazing flyers! They are the fastest of all the flying insects — some dragonflies can fly up to 35 miles per hour. Dragonflies can also hover, staying in one place above the ground or water for a long time.

Activity: The next time you're in the car with your parents, ask them when they are driving 35 miles an hour to see how fast that is.

This ability to fly makes them great predators, and we are very lucky they are good hunters. Why? Dragonflies eat other flying insects. One adult dragonfly can eat a huge number of flying insects a day. Lucky for us, one of their favorite foods is mosquitoes. So, if you are sitting at a park in the evening, you can be very happy to see dragonflies zooming around you.



- Adult Superpower #1: They can fly forward, backward, up, down, and even upside down! Each of their four wings has its own muscles, allowing each wing to move on its own. Which means they can stop fast, then turn in place.
- Adult Superpower #2: Their large eyes can see almost in a full circle. They can see more colors than humans and can even see ultraviolet light like bees.
- Adult Superpower #3: Some kinds of dragonflies migrate south for the winter. Like Monarch butterflies, it is their children or grandchildren that migrate north again.

Even More Reasons to Appreciate Dragonflies

Dragonfly nymphs prefer to live in cleaner water. So, if you see dragonflies living near a wetland or pond, you know that water is not highly polluted.

They are good pest control. They hunt flying insects like mosquitoes, wasps, and midges. They also are a valuable food source for other animals like birds, fish, frogs, and spiders.

They come in many sizes, colors, and patterns — and are wonderful to watch as they fly over ponds and parks.

Just like many birds, many male and female dragonflies of the same species look different. Not only can the males be bright colored and the females duller colored, but some dragonfly males are one bright color, and the female of the same species is another bright color.

Dragonflies are related to damselflies. Both dragonflies and damselflies are in the order of insects Odonata. Damselflies are as beautiful as dragonflies but look more delicate and are not such strong flyers.

DRAGONFLY AND DAMSELFLY

SCAVENGER HUNT:

1. How Can You Tell the Difference?

Dragonfly	Damselfly
Bigger	Smaller
Thick body	Thin body
Spread wings when they land	Most fold wings when they land

2. As you go for walks this summer, look for dragonflies and damselflies. Or, sit quietly by the water and let them fly by you!

3. Record how many different colors of dragonflies and damselflies you find this summer. Here are some colors to get you started.



4. Do you see different colors of dragonfly early in the summer vs. later in the summer?

5. Can you see different patterns on their wings? Look for dots, spots, stripes, or clear wings.

6. Try making a dragonfly or damselfly with objects you find in nature. Be sure to only use natural items found in the area. Please do not pick living plants. Leave it by the side of the trail to let people know what they look like!

Monarchs, Milkweeds, and More, Cont.

Later in the season, look for pupae — dangling green and unmoving, ornamented with gold dots — butterflies to be.



Monarch pupa

Just as there are several milkweed species that thrive here, all possessing toxic juices, there are also several insect species besides the monarchs that have developed a tolerance for the milky sap. As you inspect the milkweed clumps, look for the rosy-colored milkweed longhorn beetles peering out at you, their long, black-and-white-striped antennae waving comically.



Milkweed longhorn beetle

Or notice the small milkweed bugs, with their striking black and red coloration and “X” shapes on the upper abdomen that show the under wings tucked neatly beneath the upper wings.



Small milkweed bug

There's only one snag to finding milkweed plants, whether monarchs are laying eggs on them or floating on by: The plants tend to be addictively time-consuming! There's so much interlocking life in each of these plants that your brisk hike might morph into a very slow amble.



Swamp milkweed

Double SNAP at the Farmers Market

The Double Up Food Bucks program helps families receiving Supplemental Nutrition Assistance Program (SNAP) benefits by doubling the amount of food benefits that can be used to purchase fresh fruits and vegetables. Double Up Food Bucks provides families with more healthy, fresh produce from local farmers. Visit Boulder County Farmers Markets this summer to take advantage! For every dollar you spend with your SNAP benefits at the market, you will receive one Double Up Food Buck (up to \$20 per market), which can be used to buy additional fresh fruits and vegetables. Look for the information tent at the market to get started. For more information on this program and to locate participating farmers markets, visit boco.org/doubleup.

BE SURE TO VISIT BOULDER COUNTY PARKS & OPEN SPACE'S LEASE-HOLDER STANDS AT THIS SUMMER'S MARKETS

Did you know Boulder County Parks & Open Space leases more than 20,000 acres of farmland to local farmers and ranchers? Support local by visiting our lease-holder booths! You may see:

- Aspen Moon Farm
- Off Beet Farm
- Black Cat Farm
- Boulder Beef
- Boulder Better Wagyu

Calendar of Events

Registration is required unless otherwise noted. All ages welcome unless otherwise noted. Children must be accompanied by an adult. NO PETS, PLEASE!

A MINDFUL EXPERIENCE IN NATURE

Wednesday, June 11, 10-11:30 a.m.

Betasso Preserve, Boulder

Adults (18 & Older)

Join volunteer naturalists at Betasso Preserve for an introduction to a meditative nature experience. We will practice mindful observation among the ponderosa pines, enjoy the quiet, take time to reflect, and appreciate the natural world. Participants will find a sit spot or engage in contemplative walking — on nearby gravel, mostly flat trails. We'll reflect together on what we've observed, and what we can still learn from nature.

BIGFOOT OF BOULDER COUNTY

Friday, June 13, 8:30-10 p.m.

Heil Valley Ranch – Wapiti Trailhead, Boulder

With recent Sasquatch sightings near Longmont, Boulder County Parks & Open Space has brought in seasoned Bigfoot trackers to look for answers. Join this team of investigators as they attempt to track and locate the legendary creature known as Bigfoot — under the cover of darkness — at Heil Valley Ranch. You'll participate in various activities aimed at luring in the elusive beast, such as wood knocks, howls, and other proven techniques. Fun for the whole family!

PRIDE IN THE PARKS: BIRDING WETLANDS

Saturday, June 14, 8-10 a.m.

Near Boulder

This program is for anyone who enjoys looking at birds or simply wants something fun and different to do outdoors. We welcome those who identify as LGBTQIA+, allies, families, or anyone who wants to enjoy an inclusive outdoor experience. This will be a slow hike covering 1.5 miles on a wide, relatively flat trail. This free event is for all ages and skill levels — no prior birdwatching experience necessary. Loaner optics will be provided.

THE YIP ABOUT PRAIRIE DOGS!

Tuesday, June 17, 6:30-7:30 p.m.

Lafayette Public Library, 775 Baseline Rd., Lafayette

These fascinating creatures are more than just cute little rodents that chew up the grass. This fun and informative presentation explores the history, ecology, social structure, life cycle, behavior, and language of this keystone species — a true pillar of the prairie.

LONGEST DAY CELEBRATION: TWILIGHT HIKE

Friday, June 20, 7-9 p.m.

Heil Valley Ranch – Wapiti Trailhead, Boulder

Welcome summer with a 1.5-mile hike on the longest day of the year. Discover twilight wildlife activity and hear solstice stories from around the world. This program is for adults and families with children ages 6 and older.

COOL GRASSES OF HEIL VALLEY RANCH

Saturday, June 21, 10 a.m.-noon

Heil Valley Ranch – Wapiti Trailhead, Boulder

Have you ever wondered about the grasses that grow along Boulder's trails? Join volunteer naturalists for a 1.5-mile hike — with 250 feet of elevation gain and loss — at Heil Valley Ranch to learn about early season grasses of the foothills. We'll search for different species, discuss the vital role grasses play in healthy ecosystems, and explore wildfire impacts and management activities. Look closely, and you might develop a new appreciation for our beautiful — yet often overlooked — grasses.

PRIDE IN THE PARKS: FOOTHILLS BIRDING

Saturday, June 28, 8-10 a.m.

Near Boulder

This all-ages event welcomes LGBTQIA+ participants and allies. Join us for a morning of birding as we look for nesting foothills bird species. Together, we'll traverse approximately 1.2 miles with only 60 feet of elevation change. There are bathrooms, benches, and shade along parts of the trail, but the route includes uneven, narrow dirt trails. This free event is open to all skill levels — no prior birdwatching experience necessary. Loaner optics will be provided.

ART IN THE PARKS: SIGHTING & MEASURING

Sunday, June 29, 2-4:30 p.m.

Heil Valley Ranch – Wapiti Trailhead, Boulder

Adults (18 & Older)

Join us for another installment of our Art in the Parks series. We'll use the awe-inspiring landscapes of open space as our backdrop and inspiration while exploring the rules of perspective, proportion, angles, and relative size and positioning. Build on concepts covered in the first program — or jump right in and join the fun. This program is open to all experience levels. Supplies and art instruction will be provided.

MEDITATING WITH THE EVERGREENS

Friday, July 11, 5:30-7 p.m.

Walker Ranch – Ethel Harrold Trailhead, Boulder

Adults (18 & Older)

Meet us at the nexus of learning and appreciation as we set out on the Ethel Harold trail in search of the conifers found in the foothills and experience them in a new light. Practice using your senses and breathing techniques to feel embodied, relaxed, and peaceful while being in nature. Learn how to identify trees commonly found in this area and appreciate them on a deeper level.

THE BIRDS AND THE BEES AND BEYOND: THE INSIDE STORY OF POLLINATION

Saturday, July 12, 9-11 a.m.

Louisville Recreation & Senior Center, Louisville

Pollinators play essential roles in our food supply and the health of ecosystems. While many of us think of honeybees as the primary pollinators, much of the work is done by other surprising sources — including beetles, butterflies, moths, wind, and water. Discover the many pollination strategies of plants during this family-friendly slideshow and outdoor walk. We'll explore how plants and animals work together to create a bountiful world — and what we can do to help them thrive.

CELEBRATING CARIBOU RANCH

Monday, July 14, 10 a.m.-2 p.m.

Caribou Ranch, Nederland

Caribou Ranch closes during early spring and summer to allow elk, deer, and now moose to raise their young undisturbed. It's a magical place to see a wide range of flora and fauna, and we are celebrating its reopening to two-legged mammals with a 4-mile hike to explore the property's history, geology, and plant and animal life. The group will stop for lunch during the program — please pack a lunch!



RESTORING THE PRAIRIE: CONSERVATION AND HABITAT PART 1

Friday, July 18, 9-10:30 AM

Agricultural Heritage Center, 8348 Ute Highway 66, Longmont

Adult (13 & Older)

Join us for a workshop to learn how the grassland prairie ecosystem functions and how it has transformed over time. Participants will gain practical knowledge about implementing conservation practices that promote habitat restoration and sustainable ecosystems.

POETS IN NATURE AT SUNSET

Saturday, July 19, 7-9 p.m.

Bald Mountain Scenic Area, Boulder

Join our community in celebrating self-expression and moments of deep connection through poetry and nature. Participants will explore a local outdoor space — Bald Mountain — engage their senses, and use observation, mindfulness, and guided prompts to create original poetry. This program is designed to foster creativity and community, environmental awareness, and self-expression for all ages and skill levels.

BEAUTIFUL BUTTERFLIES OF BOULDER COUNTY

Thursday, July 24, 6:30-8 p.m.

Ron Stewart Parks & Open Space Building, 5201 St. Vrain Rd., Longmont

Are you curious about butterflies, or have you ever wondered where monarchs go during their incredible migration? Join volunteer naturalists for a beginner's guide to our colorful local butterflies. This slideshow program will explore the amazing life cycle of butterflies and cover basic information on behavior, host plants, identification tips, and more.

SHARING OUR BACKYARDS WITH BOBCATS

Saturday, Aug. 2, 2-3:30 p.m.

Louisville Public Library, 951 Spruce St., Louisville

Bring your family to explore the fascinating behavior of bobcats that venture into suburban backyards in Boulder County. Families will learn about these elusive predators, their adaptability to urban environments, and how they coexist with humans. Volunteer naturalists will reveal the bobcat's hunting behavior, diet, and territorial habits. You will gain insight into the delicate balance between our wildlife and urban development, fostering a deeper appreciation for these mysterious creatures right in our own backyards.

DRAGONS & DAMSELS SLIDESHOW PROGRAM

Friday, Aug. 8, 6:30-8 p.m.

Ron Stewart Parks & Open Space Building, 5201 St. Vrain Rd., Longmont

Have you ever been curious about those colorful gems flying over ponds and streams? Join volunteer naturalists to learn about the amazing lives of dragonflies and their damselfly cousins, including their acrobatic flying, huge multi-faceted eyes, convoluted mating schemes, and behavioral quirks.

DRAGONS & DAMSELS HIKE

Saturday, Aug. 9, 10 a.m.- noon

Pella Crossing, Longmont

Have you ever been curious about those colorful gems flying over ponds and streams? Join volunteer naturalists to learn about the amazing lives of dragonflies and their damselfly cousins, including their acrobatic flying, huge multi-faceted eyes, convoluted mating schemes, and behavioral quirks.

RESTORING THE PRAIRIE: CONSERVATION AND HABITAT PART 2

Friday, Aug. 15, 9-10:30 a.m.

Agricultural Heritage Center, 8348 Ute Highway 66, Longmont

Adult (13 & Older)

Join us for Part 2 of this program series to learn more about the grassland prairie ecosystem. We'll cover practical ways to restore habitat for beneficial insects and bird populations, including effective methods for selecting, planting, and maintaining native plants. Attendance at Part 1 is not required to register for this workshop.

SOME (GRASSES) LIKE IT HOT: WARM-SEASON GRASSES

Saturday, Aug. 16, 8:30-10:30 a.m.

Hall Ranch, Lyons

Adults (18 & Older)

Have you ever wondered about the grasses that grow along Boulder's trails? Join us for a 2-mile moderate hike at Hall Ranch to learn about warm-season grasses and the diverse foothills ecosystem. We'll search for different species, explore their importance, and discuss how geology and human history influence local vegetation. We hope you'll gain a new appreciation for our beautiful — yet often overlooked — grasses.

COBBLES OF TIME

Sunday, Aug. 17, 9 a.m.-1 p.m.

Caribou Ranch, Nederland

Adults (18 & Older)

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 naturalists on this 4.5-mile moderate hike to learn about the evidence firsthand. We will also learn about some of the oldest rocks in the area and the valuable minerals that formed and were mined nearby.

STORY IN THE ROCKS: THE GEOLOGIC HISTORY OF BOULDER COUNTY

Tuesday, Aug. 19, 6:30-7:30 p.m.

Lafayette Public Library, 775 Baseline Rd., Lafayette

The geological history of Boulder County's remarkable landscape goes back nearly two billion years! Rocks contain a record of Earth's history that can be read like the pages in a book. Join volunteer naturalists for this slide program and learn how to read this fascinating story in the rocks.

BIRDING BIG SIT

Saturday, Aug. 23, 7:30-10:30 a.m.

Walden Ponds Wildlife Habitat, Boulder

We're excited to host our quarterly Birding Big Sit at the Lagerman Reservoir shelter! This inclusive event allows park users to both stand or sit to watch birds. Spotting scope and optics will be available to borrow and use. This is a drop-in event for anyone who wants to see birds. All skill levels are welcome.

ART IN THE PARKS: ARTISTIC STYLES

Thursday, Aug. 28, 2-4:30 p.m.

Walker Ranch – Meyers Homestead Trail, Boulder

Adults (18 & Older)

Join us for the third installment of our Art in the Parks series. We'll use the awe-inspiring landscapes of open space as our backdrop and inspiration while exploring different artistic styles — including representative, impressionist, expressionist, surreal, and abstract. Discover which style best fits your personality and interests. This program is open to all experience levels. Supplies and art instruction will be provided.

BIRDING BOULDER COUNTY THROUGH THE SEASONS

Friday, Aug. 29, 2-3:30 p.m.

West Age Well Center, 909 Arapahoe Rd., Boulder

Seniors

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

NATURE DETECTIVES IN THE FIELD: SUPER DRAGONFLIES

Saturday, Aug. 30, 9:30-11:30 a.m.

Walden Ponds Wildlife Habitat

Families (Ages 6 & Older)

Take a walk around the ponds as we learn about the super colorful and acrobatic dragonfly. While searching in the pond and the air, we will learn about these superheroes and just how amazing they are. Using hands-on activities, stories, and crafts, we will learn about the dragonfly's life cycle and habitat.

BARNYARD CRITTER DAY

Sunday, June 22, 9:30 a.m.-2 p.m.

8348 Ute Highway 66, Longmont

The Agricultural Heritage Center is hosting Barnyard Critter Day, a free and family-friendly event focused on history and farm critters. Come visit our normal complement of chickens, goats, sheep, pigs, mini mules, cows, and horses. In addition, there will be demonstrations of sheep herding, sheep shearing, wool washing and spinning, 4-H groups with animals, a ranger with a horse, and more. There will also be fun activities like butter making, corn cob doll making, calf roping, flower pressing, and more! A food truck will be there for lunch if you are looking for something delicious to eat. Please leave pets at home so working animals will not be disturbed. **Registration is not required for this activity, but you can still sign up to be notified in case the event is unexpectedly canceled.**



HIKES FOR SENIORS

Join volunteer naturalists for hikes around the county. We'll explore and learn about the special geology, history, plants, and wildlife of these beautiful places.

A STROLL WITH THE BIRDS

Thursday, June 19, 9-11 a.m.

Lagerman Agricultural Preserve, Longmont

Join us for an easy 1.6-mile walk around Lagerman Reservoir. Take a glance at what ducks are on the water and the shorebirds that line the reservoir's edge. The trail is flat, with a shelter and benches to sit and rest.

A WALK BY THE LAKE

Thursday, July 17, 9-11 a.m.

Mud Lake, Nederland

Join us for an easy 1-mile walk around Mud Lake. Discover the history of Mud Lake and the diversity of the upper montane life zone as you meander through the pines. The trail is flat and rocky with a few benches.

A HOP AROUND THE PONDS

Thursday, Aug. 21, 9-11 a.m.

Walden Ponds Wildlife Habitat, Boulder

Join us for an easy 3-mile walk around the wetlands. Enjoy a peaceful stroll around tranquil ponds teeming with life and surrounded by serene scenery. A few benches are available on the trail.

FRIDAY NIGHT IS ASTRONOMY NIGHT

Join volunteer naturalists and astronomers from the Longmont Astronomical Society for a series of summer night astronomy programs. Together, we'll learn about the night skies and view the celestial bodies residing in our galaxy and beyond.

MERCURY: A PLANET OF EXTREMES

Friday, June 27, 8-10:30 p.m.

Ron Stewart Preserve at Rabbit Mountain, Lyons

Mercury, the smallest planet in our solar system, may be small, but it has some big secrets. Join us to learn more about this mighty planet that closely orbits the sun and all of its surprising qualities.

AURORA BOREALIS

Friday, July 25, 8-10:30 p.m.

Ron Stewart Preserve at Rabbit Mountain, Lyons

What are the auroras? We don't often see the auroras in Colorado, but this may be a good year for them to show their colors. Join us to learn about what they are and how to have a chance to catch the show.

A PLANETARY LINEUP

Friday, Aug. 29, 7-9:30 p.m.

Ron Stewart Preserve at Rabbit Mountain, Lyons

What does it mean when planets are in conjunction with each other? And how do these conjunctions happen? Join us as we explore these interesting alignments of celestial bodies.

ALTONA SCHOOL OPEN HOUSE

Sundays, June 8, July 13, Aug. 10, 11 a.m.-2 p.m.

Altona Schoolhouse at Heil Valley Ranch Open Space

Drop by anytime during the open house to go inside the historic schoolhouse where students studied and played from 1880 to the World War II era. Volunteers will be on hand to share the school's history and restoration with visitors. If time allows, you can take part in a game or spelling bee. **Registration not required.**

HAMMERING ON THE FARM

Friday, June 13

Friday, July 11

Friday, July 25

Friday, Aug. 8

Friday, Aug. 29

10 a.m.-noon. Agricultural Heritage Center

8348 Ute Highway 66, Longmont

Drop by anytime from 10 a.m. to noon to watch the blacksmith work his craft. Listen to the clang-clang-clang of the hammer and the hum of the coal forge blower. Learn about blacksmithing tools, such as hammers, tongs, anvil, swage blocks, and more. All ages welcome. **Registration is not required for this activity, but you can still sign up to be notified in case the event is unexpectedly canceled.**



SMALL ENGINE DAYS

Saturday, June 14, Noon-3 p.m.

Saturday, Aug. 9, Noon-3 p.m.

Nederland Mining Museum, 200 N. Bridge St., Nederland

Step back in time and explore the fascinating world of early small engines — also known as hit-or-miss or skip motors — that once powered farms, mines, and more. Watch these historic machines in action, including a museum model that's more than 100 years old. Learn how they worked, what made them so reliable, and why they were essential to everyday life. **Drop in anytime during the event — no registration required!**

James F. Bailey Assay Office Museum Open Houses

Saturdays, June 21, July 19, Aug. 16, 11 a.m.-3 p.m.

Assay Office Museum, 6352 Fourmile Canyon Dr., Boulder

Stop by the unique Assay Office Museum on these open house days. Learn about assaying, hard rock mining, and the families in the area from long ago. **Registration not required.**



SUMMER HERITAGE MORNING

Sunday, June 1, 10 a.m.-1 p.m.

Sunday, July 20, 10 a.m.-1 p.m.

Walker Ranch Homestead, 7001 Flagstaff Mountain Rd., Boulder

Embark on an unforgettable journey to the past with this immersive historical event that will transport you back in time. Talk with costumed volunteers as they demonstrate late 1800's ranch tasks. You will also be invited to do some chores and play historical games. Free and fun for all ages. If you like, bring a picnic (and a blanket)! All ages welcome. **Registration is not required for this activity, but you can still sign up to be notified in case the event is unexpectedly canceled.**



MINING PROGRAMS

GOLD PANNING

Saturday, June 28, noon-2 p.m.

Sunday, July 27, noon-2 p.m.

Sunday, August 17, noon-2 p.m.

Nederland Mining Museum 200 N. Bridge St., Nederland

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

HARD ROCK MINING VAN TOUR

Sunday, June 15, 9:30 a.m.-1 p.m.

Saturday, July 12, 9:30 a.m.-1 p.m.

Nederland Mining Museum 200 N. Bridge St., Nederland

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

AGRICULTURAL HERITAGE CENTER

8348 Ute Highway 66, Longmont

FUN ON THE FARM

Friday, June 13: The Village Blacksmith

Friday, June 27: A Green, Green, Garden

Friday, July 11: Goat-tastic!

Friday, July 25: The Chicken & the Egg

Friday, Aug. 8: Wiggle Worms

Friday, Aug. 22: Piggies in the Puddle

9:45-10:30 a.m.

Bring your 3-6-year-olds to the farm to learn about animals, plants, and agricultural life. Programs include a short story time, hands-on activities, and a take-home craft. Afterwards, explore the farm. Children must be accompanied by an adult.



AGRICULTURAL HERITAGE CENTER DETAILS

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

Admission: Free

Tours are offered on open days at 11 a.m. No registration required.

The farm includes two barns with interactive exhibits, a milk house, heirloom garden, and a furnished 1909 farmhouse. During the busy season, there are also animals on site, including chickens, pigs, sheep, and other critters. For more information, visit boco.org/ahc.

ALL PROGRAMS:

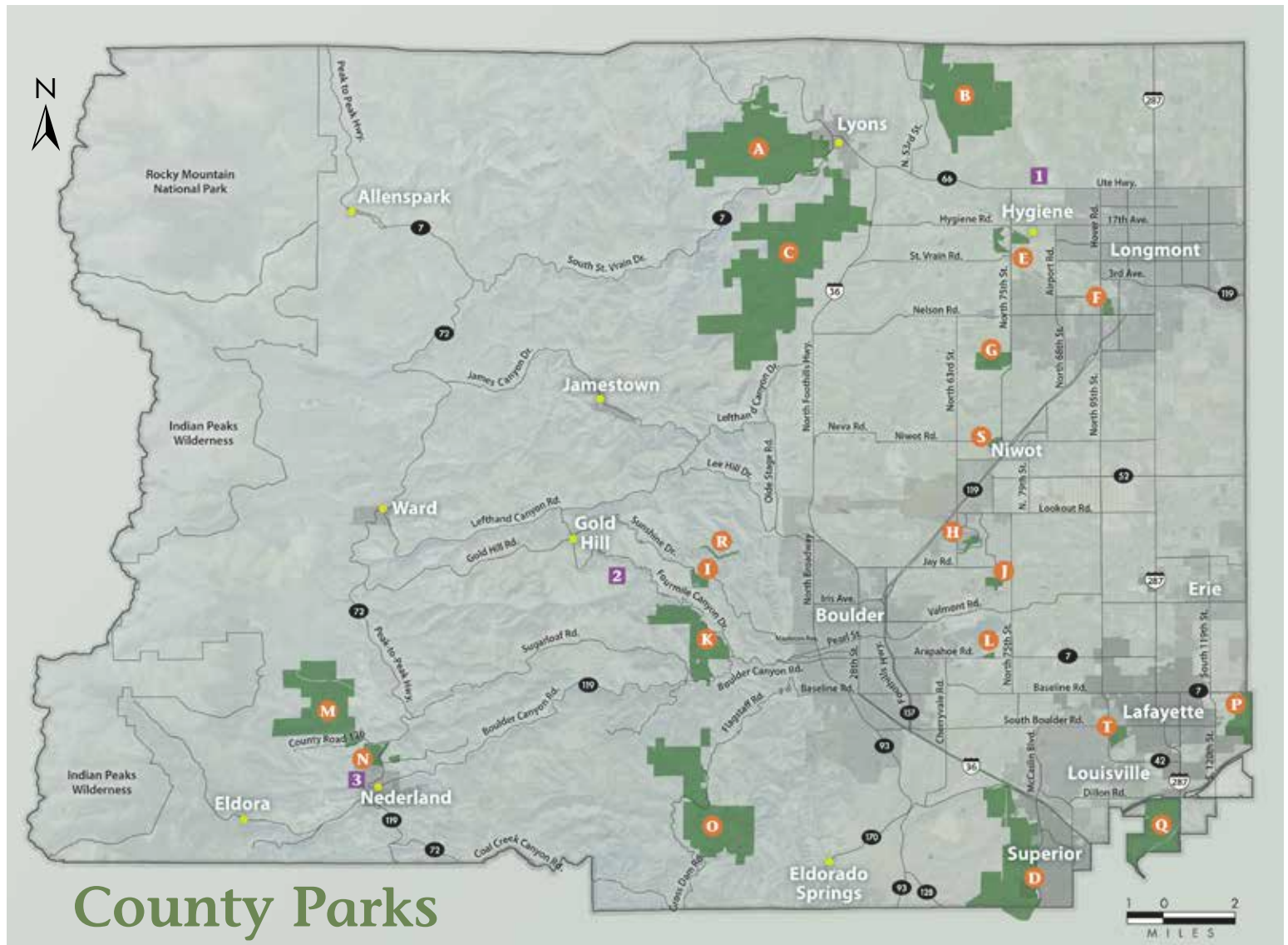
Be prepared for low to high temperatures and afternoon thunderstorms. Bring water, dress in layers, and wear appropriate shoes. For information about these programs or to arrange a private program, please call 303-678-6214.



Parks & Open Space

5201 St. Vrain Road, Longmont, CO 80503

BoulderCountyOpenSpace.org



County Parks

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