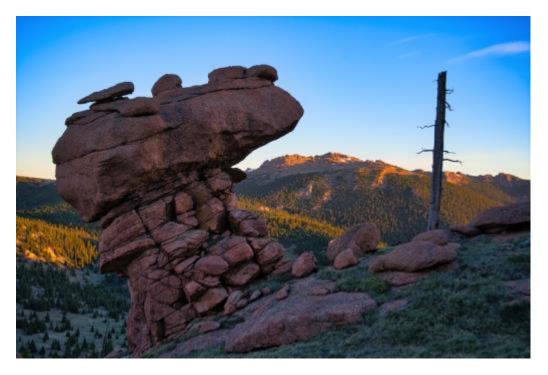
Friends of Mount Evans and Lost Creek Wildernesses





May Photo Contest Winner: Peter Kulvete
"Sunrise on Bison Peak." Taken off the Brookside/McCurdy Trail.
Congratulations!

May Newsletter 2021

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FOMELC Board Members

Chairman: Peter Vrolijk peter@fomelc.org

Secretary: John Kruse john@fomelc.org

Membership: Kay Hoisington

kay@fomelc.org

Web Information Tech Lead: Deb Grass

lildeb@fomelc.org

Newsletter/Annual Spring Training: Dee Lyons

dee@fomelc.org

Forest Service Liaison: Ralph Bradt

ralph.bradt@usda.gov

Trail Projects Coordinator: Steve West

steve@fomelc.org

Deputy Trails Coordinator: Wyatt Stanland

wyatt@fomelc.com

Noxious Weed Projects Coordinator: Alan Rockwood

alan@fomelc.org

Marketing/Education Team Lead: Gordon Brown

gordon@fomelc.org

Treasurer: Matt Komos <u>matt@fomelc.org</u>

COVID-19 PRECAUTIONS:

The safety of our community is our top priority, and we are committed to doing our part to limit the spread of COVID-19 (aka coronavirus). We are closely monitoring guidelines from the Center for Disease Control (CDC) and Colorado Department of Public Health and the Environment (CDPHE), and how these might affect our programs. We are also coordinating with our US Forest Service partners to remain in compliance with their COVID-19 response guidelines. Stay Safe and Healthy!

FOMELC Mission Statement:

The Mount Evans and Lost Creek Wildernesses encompass 194,400 acres with over 170 miles of trails in Colorado's Pike and Arapaho National Forests.

We work in partnership with the US Forest Service, engaging in education, outreach and stewardship activities to preserve the wilderness character of these lands for current and future generations.

Friends of Mt Evans & Lost Creek Wildernesses PO Box 3431 Evergreen, CO 80439

https://fomelc.org/



By very definition, this wilderness is a need. The idea of wilderness as an area without man's influence is man's own concept. Its values are human values. Its preservation is a purpose that arises out of man's own sense of his fundamental needs.

Howard Zahniser

Note from the Chair — By Peter Vrolijk



Gearing up for the Season

The last significant snowfall may be behind us now (fingers crossed), and activities for the upcoming field season are gearing up. This month's newsletter is full of information about volunteer opportunities that we hope many readers will take advantage of. Few things are more satisfying than spending a day in the Wilderness and coming home with a sense of accomplishment from work completed.

We are especially excited about our new training materials. Because current health conditions prevent us from offering the in-person course offered in previous years, we have put considerable effort into trying to offer the same information in an online learning format. There are three elements in our training course: (1) discovering the value and history of Wilderness and how Leave No Trace provides a framework for respecting Wilderness character; (2) FOMELC programs (i.e. volunteer opportunities)



The Pasque flower is an early reminder that spring has arrived with the promise of more wildflowers tucked away in unexpected spots in Wilderness.

that help sustain the essential Wilderness qualities; and (3) taking the steps to become engaged as a volunteer. The intent is to prepare volunteers for work in the Wilderness and to allow them to continue their learning there.

Opportunities for that more specialized training already appear in this newsletter. For example; training supported by USFS experts on how to use herbicide in Wilderness to attack invasive plants is coming soon. FOMELC has also committed to concentrated trail maintenance efforts on the Payne Creek trail this summer with the first project completed by the time this newsletter is published. The Payne Creek projects planned for the summer offers volunteers abundant opportunities to develop and practice trail maintenance skills.

While some volunteers prefer to focus on a particular set of skills in a summer season — either working on trails or joining weed treatment projects — others like to sample different kinds of projects. Please sign up early and often because the one thing we can never control is the weather in a too-often short summer season.

We look forward to seeing many of you on the trails and among the project groups this summer. Please join us in sharing the deep satisfaction that arises from a job well done.

-Peter

Payne Creek Adopt-A-Trail Project

Steve West and Wyatt Stanland

Have you hiked any trails in the Mt. Evans or Lost Creek Wilderness areas? Or for that matter, anywhere in the state of Colorado? Come out and work one day on a trail maintenance project and you are entitled to hike guilt free, since you know what it takes to maintain trails. With 170 miles of trails within the two Wilderness areas, trail maintenance is a continuous effort to maintain sustainability.

FOMELC is planning a new concept of trail maintenance for 2021. The Payne Creek trail will be adopted by FOMELC volunteers. The plan will be to have a once-a-month workday to clean and possibly build water bars or dips, and to clear corridor. No experience is necessary, and all tools will be provided.





Trail maintenance workdays:

- May 22
- June 12
- July 17
- August 21
- September 4



To register, contact: steve@fomelc.org or wyatt@fomelc.org

Where: Payne Gulch Trailhead, County Rd 64 Bailey.

Directions: US Hwy285 South to Bailey, Turn left onto CR64 go across bridge. Go 1.9 mi to trailhead on South side of road.

Work Day Plan: Trail work 8-12:30, lunch 12:30-1:00, trail work 1:00-3:00

What to Bring/Wear: Long pants, sturdy hiking boots, gloves, long sleeve shirt, lunch, 2 quarts water. Be prepared for all kinds of weather conditions (raincoat, jacket)



Wilderness Camping



New Forest Service Food Storage Regulations

Ralph Bradt – Clear Creek Ranger District

As of April 16, 2021, new food storage regulations are now in effect in the Pike National Forest. The new regulation will cover the entirety of the Lost Creek Wilderness and the south half of the Mount Evans Wilderness. The order is an expansion of a previous regulation, dated March 18, 2020, which applied only to specific areas of the forest, generally roadside corridors with heavy dispersed car camping use. The new regulation applies to all of the Pike National Forest but, unfortunately, the new regulations are

based on the previous regs and do not address the needs of backpackers and equestrians well. The order, maps, and definitions can be found at https://www.fs.usda.gov/detail/psicc/alerts-notices/?cid=fseprd644152 as Order 2021-10.

The regulation prohibits, "Possessing or leaving unattended any food, refuse, or other bear attractants as defined in Exhibit B, unless it is stored in a bear-resistant manner, is being eaten, or prepared for eating, or is being transported in a motor vehicle."

Storage in a bear resistant manner includes, "inside an approved bear-resistant container; or suspended at least ten (10) feet above the ground and four (4) feet from any tree, post or other vertical support.", While most of us who backpack use a bear hang for our food, which does not require an approved bear-resistant container, transporting that food does. Further, a bear resistant container (suitable for backpacking) is defined as, "a securable container or vehicle constructed of a solid, non-pliable material, that when secure or under stress will not have any cracks, openings, lids or hinges that would allow a bear to gain entry by breaking, biting or clawing."

So what is an "approved bear-resistant container"? Presumably, although not stated, it has been certified by the Interagency Grizzly Bear Committee (IGBC). While there are others, the three most common and locally available containers on that list appear to be the Garcia Bear Resistant Container, the Bearvault, and the Ursack Bear Sack. For the 10ish liter versions of the three, they run between \$75 and \$90. The Garcia and BearVault are both hard plastic and weigh about 2¾ lb. each. The Ursack, the most expensive of the three, is a bag sewn of Spectra fabric and weighs about ½ lb. Although the definition specifies "solid non-pliable material", I asked Mikele Painter of the South Platte district whether the Ursack would be acceptable, and she indicated she felt it would.

An alternative to purchasing a bear resistant container might be to call around and inquire about renting one. A number of places do rent them out.

The Arapaho and Roosevelt National Forests have a food storage order in the works also, but it has not been released yet. It will not include any areas in Wilderness except on the Boulder Ranger District in the Indian Peaks Wilderness.

FOMELC Training Program Now Online! For New and Returning Volunteers

Dee Lyons

Spring Training has transitioned to a new title: **The FOMELC Wilderness Training Program**. A virtual online program for our new and returning volunteers.

Many people come to this training with an appreciation for wilderness and a desire to help preserve it, and we hope this training provides you with a better opportunity to launch your involvement and contribution to the mission of sustaining Wilderness character.

A wilderness patrol with a FOMELC mentor is a part of the program. The training is designed to be accomplished at your own pace.

Are you registered?

Contact: dee@fomelc.org

If you are a returning FOMELC previous member and would like to brush up on a few training opportunities, we would love to see you back!

We Want to Hear from You!

Help us make this Newsletter educational as well as informative. Send us your suggestions for articles or subjects that will educate us on the way to our mission for Mt Evans & Lost Creek Wildernesses.

Please let us know what you would like to see in the Newsletter and whether the articles we've been publishing have been helpful. dee@fomelc.org

Purchasing Items from Amazon?

Go to https://smile.amazon.com/ and order from that site. Before ordering, select your charity to be "Friends of Mount Evans & Lost Creek Wilderness." From then on, all of your shopping will generate 0.5% of the purchase to FOMELC. Thank you!

More News:

Mt Evans Scenic Byway

Some folks will enter the Mt Evans Wilderness via the Mt Evans Scenic Byway. The road was closed in 2020 due to Covid19 restrictions. For 2021, the road will open tentatively on June 4, 2021. Access on the road is by reservation vehicle ticket only. There is a fee. Without a vehicle ticket, you will be turned away. Vehicle tickets will be available through Recreation.gov https://www.recreation.gov/

Attention Volunteers!

2021 Friends of Mount Evans and Lost Creek Wildernesses Membership

In order to volunteer on projects with The Friends of Mount Evans & Lost Creek Wildernesses (FOMELC) there are requirements by the Forest Service, COVID-19 Safety Guidelines and Volunteer Forms for you to read.

We have new paperwork that must be signed this year and every year that you volunteer. Before your first outing of the season, please go here:

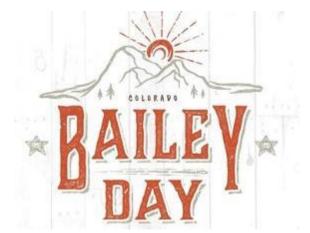
https://fomelc.org/volunteer-agreements

Members – Which trails still need a patrol report?

The FOMELC website has an interactive map which shows all the Survey123 reports that have been submitted. Check here and you will see what trails still need patrols for trail maintenance needs and weed identification:

https://www.arcgis.com/apps/webappviewer/index.html?id=835c79113d8649f39c24eeac76e3dc5d

Any trail you see that does not have activity (dots/GPS points) will need a patrol Survey123 Report.



Gordon Brown – Marketing & Education

Once again, FOMELC will staff a booth at Bailey Day on Saturday, June 19, 2021.

This is also an awesome way to contribute to the FOMELC organization if you are unable to hike the Wilderness trails.

We need 2-3 volunteers per shift. Come out to volunteer and enjoy a fun day.

The Platte Canyon Area Chamber of Commerce welcomes all to Bailey Day 2021. Take a step back in time and experience the history of Bailey, Colorado! It's an Olde West, mountain town, family-friendly Street Fair!

- Over 100 artisans, vendors, food carts and local organizations will line Bailey's Main Street with their booths.
- Enjoy good timin', heel tappin', and boot scootin' LIVE MUSIC from 10a-8p. Wild West
- Cowboy Action shows will take place throughout the day, featuring The Park County Regulators!
- Get your picture taken at the Olde Tyme Photo Booth as a unique and lasting memory of the day.
- Grab your partner for the Downtown Hoe Down street dance!

Vendor setup is Saturday to get our booth ready.

Event time is 10am - 8pm.

First shift is 8am - noon

Second shift is Noon to 4pm

Third shift is 4pm - 8pm.

Contact Gordon to sign up for a shift 713 725 5318 or: gordon@fomelc.org

Our **booth location** is Main Street, Bailey, in Zone 4 close to the stage.

Parking: Crow Hill Bible Church and Platte Canyon Community Church 75 Bulldogger Road, Bailey and 4954 Co Rd 64, Bailey, Colorado

FROM THE WEED PATCH

Alan Rockwood

We have set a tentative date for our first project which is a "Kick Off" event to calibrate our equipment, discuss herbicide mixes, and then get some treatment experience at an infested area. The session will be led by the "Weed Team" for Arapaho National Forest – Boulder and Clear Creek Ranger Districts. If you are new to our program, we hope you can attend:



Training: Wednesday, June 16th, 9:00 AM, Cub Creek Trailhead

From Hwy 73 in Evergreen: take Brook Forest Road for approximately 5.9 miles. From Hwy 73 in Conifer: take Shadow Mt Drive to Black Mt Drive for approx. 6 miles. Trailhead is on the West side.

It is a large area where social distancing is easy. Returning volunteers are always welcome. Also included in the Newsletter is a preliminary "calendar" for our summer treatment projects. As we get closer to the treatment season, dates can be better defined and always subject to weather. Watch for Constant Contact messages confirming the projects.

In the past, most of our larger projects were scheduled on Saturdays. The smaller projects (2 to 3 volunteers) were conducted on weekdays. In 2020 everything changed, no one wanted to come out on weekends. Please give us some information on your preferences in 2021 to help us schedule projects.

- 1) I/we prefer: weekdays, weekends, or no preference.
- 2) I/we am not available on these days: Mon Tues Wed Thurs Fri Sat
- 3) I/we are most likely to volunteer for projects in: Lost Creek Mt Evans Doesn't Matter
- 4) Name: _____ (responding does not commit you to any date)

As always, we have an ambitious program and welcome all volunteers. Thank you for your interest in FOMELC's Noxious Weed Program. Questions and Responses

See page 10 for FOMELC Invasive Weed Schedule – Volunteer Projects Schedule will be updated monthly.

2021 FOMELC Invasive Weed Schedule - Volunteer Projects (Tentative as of May 15th)

Week of:	Treatment 1 (Mon-Wed)	Treatment 2 (Thur - Sun)*	
14-Jun	Kick Off - Calibration, Cub Creek TH East		
21-Jun	Rolling Creek/Colorado TH (LCW)		
28-Jun	Goose Creek/Hankins Gulch (LCW)		
5-Jul	Indian Creek/Grass Creek (MEW)		
12-Jul	Captain Mt. South (MEW)	Beaver Meadows (MEW)	
19-Jul	Wigwam Creek #1 (LCW)	Captain Mountain TH (Joint)	
26-Jul	Beartrack Lakes Hawkweed #1 (MEW)		
Week of:	Treatment 1 (Mon-Wed)	Treatment 2 (Thur – Sun)*	
2-Aug	Resthouse Hawkweed (MEW)	Magic Valley Bear Creek (MEW)	
9-Aug	Pedee Cre	eek (MEW)	
16-Aug	Beartrack Lakes Hawkweed #2 + "Burn Area" Wilderness (MEW)		
23-Aug	Lower Goose Crk + Hankins Gulch #2 (LCW)		
30-Aug	Upper BTL & "Burn Area" Wilderness (if necessary) (MEW)		
6-Sep	G-Sep Captain Mt. South - Canada thistle(MEW)		
13-Sep	.3-Sep Wigwam Creek #2 (Canada thistle) (LCW)		
TBD	Projects on Payne Creek (LCW) and Cub Creek (MEW) will be schedule separately.		
*In 2020 USFS <u>discouraged</u> projects on Saturday, Sunday or holidays. Pike NF prohibited weekend projects. Most of the 'Treatment #2' projects likely will be on Thursdays and Fridays.			

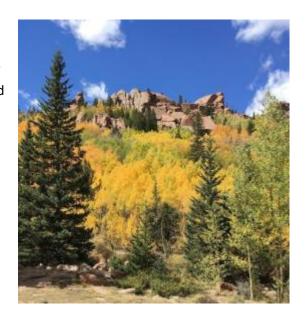
Geologic Processes and Landforms in the Lost Creek Wilderness

Peter Vrolijk

Hikers often wonder what causes the distinctive landforms in the Lost Creek Wilderness, and for me that curiosity begs the question – which aspect of the landforms? To see the complete picture requires considering more than a billion years of Earth history.



One aspect of the unique character is the color – the striking brick-red color set against the dark green of the forest, the yellow and orange color of aspens in fall, and the deep blue sky. That red color results from the minerals that make up the rock, mainly potassium feldspar, quartz, and biotite. While those are the main minerals in the rock, iron-bearing minerals like hematite are responsible for the red color, even though hematite is present in far lesser abundance. Quartz is sometimes recognized with careful examination as the gray, lusterless blobs that seem to fill in between other mineral grains, and biotite has a dark platy appearance viewed from the side and a dark, shiny, appearance viewed from above.



Looking closely at the rock, the large crystals that often appear dramatic; these are the potassium feldspar crystals. Where the trail resembles a crushed-rock path, many of the granular pieces are potassium feldspar grains that have survived the weathering processes that have disaggregated the rock. Looking closely at the trail gravel, you might find regular crystal faces on some of the grains.

Geologically, this rock type is given the name granite in the broad sense of the term; a number of more detailed names are used in the geologic literature to account for small changes in



the proportion of minerals. However, the term granite used here is much more specific than its use in the building trades for things like kitchen countertops. While hiking, pay attention to things like the color, size, and abundance of potassium feldspar crystals; you will notice changes that may sometimes be abrupt. If you find one of these sudden changes, there is likely a geologic contact between two different ancient magma intrusions.

The granite seen in the Lost Creek Wilderness is part of the Pikes Peak series of intrusions that extend from Pikes Peak up into Lost Creek. The intrusions formed a billion years ago when magma was emplaced 6-10 miles beneath the Earth's surface. We know that emplacement occurred deep within the Earth rather than in an outpouring of lava like in Hawaii, based on the size of the crystals.

How are we seeing rocks emplaced deep within the Earth appear at the surface with an elevation more than a mile high? The answer lies in plate tectonics. While a billion years is a long time, the focus here is on two periods of significant events. The first is a period of plate collisions resulting in the ancestral Rockies in the Mississippian Period (359-323 Ma). The second period is that of the Laramide deformation that was caused by anomalous subduction of ocean plates in the Pacific beneath North America and ranging from Mexico all the way up to the Canadian Rockies (e.g., Banff). The American Museum of Natural History offers a good and more complete overview of the geologic history of Colorado.

The Mississippian ancestral Rockies deformation no doubt played a significant role in helping bring the Pikes Peak granite closer to the Earth surface, but it is hard to establish how much unroofing can be attributed to that event.

Part of the reason for this uncertainty is that the geologic record of this event is sparse – small areas of outcrops near Canon City, Colorado Springs, and along the Front Ranges near Littleton and Golden, as well as the Uncompanyer Mountains in the west. For lovers of national parks, the limestone reefs in Carlsbad National Park were forming at this time, too.

The <u>Laramide</u> deformation (roughly 80-55 Ma) provided a more certain definition of the current landscape. First, the Laramide deformation caused the high elevation of the Rocky Mountains. In addition to bringing the land surface far above sea level, it likely also contributed to bringing the Pikes Peak granite to the surface. A manifestation of that deformation present in every outcrop is the occurrence of fractures – steeply dipping surfaces that break the rock. Even though some fractures may be attributed to the older ancestral Rockies deformation, it is likely that many formed during the younger Laramide deformation. While fractures are common, large spans of unfractured rocks do occur, and these are hardly affected by weathering.



The fractures we do see probably initially formed as only hairline cracks in the rocks; therefore, to understand how the large gaps present in today's outcrops developed, we need to turn to more modern geologic processes.



The current form of the mountains was mostly shaped during the last few million years when the advance and retreat of continental-scale glaciers reflected a glacial-interglacial climate. While glaciers covering North America never extended this far south and the alpine glaciers that lead to the characteristic landscape around Mount Evans are absent from lower elevations, those glaciers do tell us that the overall climate was colder and wetter. This website https://www.pikespeak.us.com/learn/geology-of-pikes-peak/ describes how that colder wetter climate used the older fractures in the rocks to wedge them open through repeated freeze-thaw cycles, how those fresh rock surfaces became susceptible to weathering, and how that weathering smoothed off the corners of those rocks to create the characteristic rounded shape. The Pikes Peak website:

https://www.pikespeak.us.com/learn/geology-of-pikes-peak/ also describes how this ice-driven wedging changes with elevation, creating smaller fragments at higher elevations — look for this on your

hikes to see if you agree. These more recent processes – repeated freezing and thawing, mineral weathering from groundwater flowing through the enlarging cracks, and maybe even some microbial driven processes – put the finishing touches on the rounded and fractured outcrop forms we see today.

One last thought to consider during hikes in the Lost Creek Wilderness – some parts of the Wilderness have older rock outcrops, particularly along the north side of the Wilderness on the Ben Tyler and Brookside-McCurdy trails. There are fewer and smaller outcrops than might be observed along the Goose Creek trail. Some of these outcrops might occur along streams. The rocks will look more layered between dark and light rock types, and you might see waviness and folding in these rocks. These are the rocks that the Pikes Peak granite were intruded into and thus must be older, and in some cases these rocks can be as much as half again as old, up to 1.7 billion years old. Watch for these on your next hike and consider how the landscape changes with the rock types that underlie that landscape.