



© Mariene Borteman | Bighorn Plate and Never-Summer Range



QUARTERLY

Summer | 2021



Look Inside

LETTER FROM OUR EXECUTIVE DIRECTOR

A challenging year with some surprising successes, and we are in a strong position to help the park with fire preparedness as the fire season looms.

PG. 2

ASK NANCY COLUMN

*Hummingbird sounds
Dogs on park trails
Wandering goats in Rocky*

PG. 3

FEATURED STORIES

*Preserving Rocky for the Future
Rocky's Year of the Tundra
Photo Ambassador Highlight
Forest Response Post-Fires*

PG. 4-11

CROSSWORD PUZZLE

Hone your Rocky smarts!

PG. 12

OUR AMAZING DONORS

Members and donors are the backbone of the Conservancy's success

PG. 13

A Search and Rescue Tribute

by Nathan Dick

I owe my life to the search and rescue teams of Rocky Mountain National Park — the men and women who serve in this role are true heroes, coming from multiple divisions within the park, and from the community at large, working behind the scenes at a moment's notice. Despite the intensity of these events, it's not likely that you would be aware of specific individuals on this team, as their mission is to operate as a unit without seeking individual recognition.

Every accident requires a victim, and on July 14, 1996, I became that person when I climbed Mount Meeker and attempted to glissade down Lamb's Slide. I had previously successfully descended Lamb's Slide a total of eight times in the past, including three times on skis, and I prepared to descend using my ice axe as a tool for self-arrest. While testing the snow conditions, I was able to control my descent and self-arrest twice and felt confident. On the third try, however, I found myself hurtling totally out of control. During the 1,000-foot slide, my ice axe became a brutal weapon while tethered to my wrist, and during the fall the pick of the ice axe penetrated my neck and partially severed my subclavian artery. This type of wound is no small thing — under "normal" conditions, the majority of individuals with this injury will not make it to a hospital for treatment.

Two climbers, Vlado and Reid, who had intended to climb one of the technical routes on Longs Peak, witnessed my fall. They immediately rushed to my aid and found me conscious but bleeding profusely from the wound in my neck. I told to them that I had a cell phone in my pack, and while Vlado applied pressure to my neck, Reid placed a call to 911, explaining that they had just witnessed a serious accident on Longs Peak. He informed them that the victim was bleeding severely, needed oxygen, and requested a helicopter be flown to the scene for rescue.

The 911 call was received by a Greeley operator who called the Estes Park emergency dispatch to explain that they were getting a call from bottom of Lamb's Slide above Chasm Lake in RMNP, and they were inquiring into how long it would be to get an ambulance to the scene!

The Estes Park operator immediately contacted the park's Chief Ranger's office in RMNP, and a search and rescue effort was initiated, with information including the location and seriousness of the accident. The first park employee on the scene was Medical Officer Mike Pratt. That morning Mike was at the former Chasm Lake Patrol Cabin which was used

Continued on page 18

This year, the Rocky Mountain Conservancy celebrates its 90th Anniversary; we have been partners and BFFs of Rocky Mountain National Park since we were teenagers!



A Message from our Executive Director



Board of Directors

BRIAN ROSS (PRESIDENT)

Denver, CO

HOWDY FRY (VICE PRESIDENT)

Denver, CO

CHRISTINA KRAFT (TREASURER)

Estes Park, CO

WALTER BORNEMAN (SECRETARY)

Estes Park, CO

DOUG CAMPBELL

Greeley, CO

CHARLES COFAS

Estes Park, CO

TIMOTHY DAVIS

Denver, CO

KATHERINE DINES

Denver, CO

LYNNE GEWEKE

Estes Park, CO

CHRISTINA KRAFT

Estes Park, CO

JOEL MAYO

Centennial, CO

JIM PICKERING

Estes Park, CO

JAN ROBERTSON

Boulder, CO

KIM SKYELANDER

Loveland, CO

ZACHARY WIEBE

Fort Collins, CO

Dear Friends,

Before you continue reading this Quarterly publication, please take a moment to first go find a piece of cake (a cupcake or slice of coffee cake will suffice, but the more frosting the better), as we have some birthday milestones to celebrate. Today, as I write this, is the 105th birthday of the National Park Service (NPS). And this year, the Rocky Mountain Conservancy celebrates its 90th Anniversary; we have been partners and BFFs of Rocky Mountain National Park (RMNP) since we were teenagers! We have much to celebrate as we look back at the wonderful projects we have accomplished together in last 9 decades, and much to look forward to as we anticipate the Conservancy's centennial in the decade ahead.

As we nervously anticipate the autumn season ahead, recalling the horrific historic fire season of 2020, we remain steadfast in our commitment to help the park recover from the Cameron Peak and East Troublesome fires. This summer, as the park demand for ready-to-work wildland firefighters who require very specialized training and credentials was high, the Conservancy hosted the first-ever RMC-Fire Conservation Corps, which provided a working crew for on-the-ground fire mitigation in the park that would double as training while serving in the Conservation Corps. The coup for these recruits is that next year, they all will be eligible to be hired at Rocky or at other national parks as official wildland firefighters. The program was such a success, that we plan to expand the crew size in 2022 to further meet the park needs.

Additionally, along with the park Trails Crew, the Conservation Corps also helped repair access and trails in the Fern Lake area that had been damaged by the fire. And, for the safety of gateway communities, we have also made significant commitments to supporting the park in conducting large-scale controlled burns in critical areas, at this time primarily around the Deer Mountain area, to help mitigate fire risks to nearby homes. Fire recovery and forest-health improvements will be underway at least until the Conservancy's 100th birthday, and we are so very pleased to see your contributions at work and making serious headway in Rocky already.

Warmly,



Estee Rivera Murdock

Estee Rivera Murdock
EXECUTIVE DIRECTOR



Quarterly Editor Nancy Wilson attempts to unearth answers to any questions asked by Conservancy members and park visitors. If you are curious about something in or about the park, email nancy.wilson@rmconservancy.org or write: Nancy Wilson, Rocky Mountain Conservancy, PO Box 3100, Estes Park, CO 80517.

Shop Conservancy Nature Stores

For ALL Your RMNP Memorabilia

What makes the sounds of the broad-tailed and the rufous hummingbird so different when they are flying? The different hums, buzzes, trills, etc., made by different hummingbird species and sexes is primarily the result of differences in the shapes and stiffness of their wing feathers. — *Retired RMNP Wildlife Biologist Gary Miller*

Why is there a regulation against dogs on the trails in Rocky? People are accustomed to picking up their dogs' waste, so wouldn't that solve the main problem? A national park is not always the best place for pets. Rocky Mountain National Park is a designated natural area, and its purpose is to preserve and protect the park's natural conditions, scenic beauty, and wildlife. The presence of dogs can readily disrupt the native ecosystem. Dogs are predators that can chase, scare, and transmit diseases to wildlife. Dogs leave behind a "predator" scent typical of all wild canines, like wolves and coyotes. This scent can linger in an area for long periods of time and can disrupt or alter the behavior of the native wildlife. Dogs can also become prey for wildlife like coyotes, mountain lions, bobcats and Great Horned Owls and can be injured by other wildlife such as large ungulates. Dogs can bite humans, and some people are uncomfortable around dogs. Park visitors should be able to enjoy native wildlife in their natural environment at Rocky Mountain National Park without disruption from other visitors' pets. — *RMNP Management Specialist/Public Affairs Officer, Kyle Patterson*

When a mountain goat wanders into Rocky, like the one spotted at Rock Cut earlier this summer, what is the park's approach to management? Mountain goats are a definite favorite in the animal kingdom, but sadly, they didn't co-evolve with Rocky's native plants and animals. In fact, extensive historical and archaeological research has found that mountain goats are not even native to Colorado. Additionally, the habitat used by mountain goats and bighorn sheep have substantial overlap. Larger and more dominant than bighorn sheep, non-native mountain goats would ultimately displace the native sheep from these areas, and if mountain goats become established, modeling estimates that the overall bighorn sheep population in the park would decline by almost half, with the smaller Mummy and North Saint Vrain herds at risk of dying out. Mountain goats also can carry Johne's disease, which is readily transmitted to bighorn sheep herds. This is a fatal disease with no live definitive test, and there is no cure. In combination with other diseases such as pasteurellosis, Johne's disease could cause the loss of the park's entire bighorn sheep population. And, not insignificantly, Colorado Parks and Wildlife does not accept mountain goats for relocation, so the park holds the policy of lethal removal of mountain goats to protect the native animal and plant communities. — *RMNP Natural Resource Program Manager Chris Clatterbuck*



CUDDLY PLUSH ELK
This plush elk by Wild Republic is authentically colored and shaped, making it great for both bedtime and playtime. Handcrafted with

all new, child-friendly materials, this cuddly friend will be a favorite.

Price: \$12.95; **Member Price: \$11.01**



RMNP VINTAGE -STYLE LONG-SLEEVED TEE

This forest green RMNP vintage-style long-sleeve Tee-shirt features a small elk and mountain design on the front with the slogan "Let the Adventure Begin"

and a classic mountain scene graphic on the back. 100% cotton

Price: \$26.95; **Member Price: \$22.91**



LONGS PEAK AUTUMN CERAMIC ELK MUG

The perfect mug for your morning cup of coffee or hot chocolate, featuring a majestic Longs Peak behind a grove of brilliant yellow aspen

trees, along with the iconic elk. 4-1/2 inches tall; 3 inches wide. Dishwasher and microwave safe. Price: \$12.95; **Member Price: \$11.01**



RMNP MAP STAINLESS WATER BOTTLE

Clean stainless with no plastic aftertaste, this sturdy 25-ounce bottle will serve you well. Available in black or blue; hand wash only.

Price: \$28.95;

Member Price: \$24.61

More memorabilia at
RMConservancy.org or
Call 970-586-0121 to order.

Ed Menning and Larry Collins look out over their restoration work at Gore Range Overlook. A series of braided and eroded trails had led to Forest Canyon Pass.



by Kurt Menning,
Conservancy
Member and Donor

Preserving the Park for the Future

For two longtime friends who shaped Rocky's resource management decades ago, the definition of success means something different.



Larry and Ed at a restored site where a ski lift operated at Upper Hidden Valley.

Career success can be measured in many different ways. For two longtime friends who shaped Rocky's resource management decades ago, the definition of success means something different.

Larry Collins, who grew up in Minturn, near Vail, started working in Rocky in 1954, fresh out of high school. He returned every summer — after teaching biology, math and physics during the year — for 35 years. He began his park career working on white pine blister rust control, led by the Forest Service, as the park did not have staff to coordinate a project like that in those days. In the following years, he began leading a multipurpose crew that focused on resource restoration as well as diverse activities like climbing rescues on Longs Peak, and elsewhere throughout the park. Larry was a ranger in the day when there was less planning and more action: "If there's a problem, just go fix it."

Twenty years later, Ed Menning arrived as one of the NPS's earliest Resource Management Specialists. He had grown up in an industrial area near Chicago and, as a child, had sought escape in the small patches of nature remaining in corner lots. He began his career in the NPS upon finding a "Rangers Wanted" sign on a bulletin board in Yosemite.

In 1974, the nascent field of resource management was just being defined, and Ed's job was to identify key resources of the park, determine their impending threats, and develop plans

to protect or restore, as needed. From 1974 to 1984, these two dedicated men worked together to preserve and protect Rocky's natural resources from a variety of effects: overuse and erosion in concentrated-use areas; invasions of alien weeds such as woolly mullein, Canada thistle, and others; beetle outbreaks; hazardous trees threatening camping and recreation areas; and even exploitable water rights.

Along the way, Ed wrote the park's first trail management plan and backcountry plan. With the approval of the superintendent, he created a resource management committee of all division heads so that concerns could be raised and prioritized by park managers with different experiences and perspectives. He cultivated the park's first Youth Conservation Corps program (YCC) to get kids involved in stewarding the resources of the park. One notable example of their endeavors is the YCC crew's removal of old telephone wires from Hidden Valley all the way up to Ute Crossing. During the work, one such crew found an elk skeleton with antlers entangled in abandoned telephone wire. Clearly, there was ample reason for removing archaic and unsightly debris other than for human aesthetics.

Forty years later, as these two longtime colleagues and friends looked out at the results of their toil at Gore Range Overlook and Lava Cliffs, they were pleased that visitors would have little idea how trampled and eroded these



Ed Menning and Larry Collins at Lava Cliffs, where they restored a broad and eroded social trail that ascended to the top of the cliffs.

sites had been decades ago. Behind the still-extant buck-and-rail fences they installed had been braided paths running down to Forest Canyon Pass and up to the crest of Lava Cliffs. Too many visitors, lacking guidance, had devastated these areas. Under Ed's coordination and Larry's crew leadership, they covered eroded trails with restoration material, called excelsior blanket, erected fences to direct and constrain visitors, and added signs explaining why staying off restoration areas was important.

Communication with visitors was key. Ed was always adamant that crews take time to engage with the public and let them know what they were doing and why. He pioneered small and friendly, but detailed resource signs, still found in the park near many trailheads. It was more important to help visitors understand than to just tell them what to do, he felt.

The tundra along Trail Ridge is primarily a green sward due to their persistent efforts. Toll Memorial trails were heavily braided; the resource crew restored tundra in place of eroding side trails (work that has recently resumed). A heavily used snowfield just past Rock Cut had an elevated boardwalk extended to it to protect tundra as the snow melted yet allow visitors to play. At Ute Crossing, a historic cabin and research trailer were removed and the site restored; today, one has to search hard to find a trace of the original location. Upper Hidden Valley hosted a pair of ski lifts. Early restoration efforts were ruined by scrambling visitors at this site. Fences and signs were installed, and today's visitors see lush and untrampled vegetation behind a fence, instead.

The park's natural resource management in the seventies and eighties focused on far more than the subalpine and tundra. A national program had targeted creating accessible locations for people with mobility challenges. Ed, Larry, and their resource crew rose to the challenge. They planned and completed Sprague Lake's easy-access loop trail and the "handicamp," a wheelchair-accessible "backpacking" location just off the main trail. This innovative camp that enables mobility-impaired people to have their first backcountry camping experience was probably one of the first in the nation. Decades ahead of most, they worked to make the park accessible to all.

Hollowell Park, a pleasant place to picnic and begin a hike, was the site of a series of historic cabins. The resource crew removed these cabins, restoring the area to a more natural landscape for contemporary visitors.

Future potential impact was addressed, as well. Ed took water law classes on his own time to pioneer the acquisition of water rights for the park. Many water rights that were held privately could have led to future development inside park boundaries. His work may have prevented many water diversions from occurring.

I asked Ed and Larry to reflect on a simple question with the benefit of a lifetime of experience: Why was this work important? Why did it matter? The men cited the rareness and fragility of the alpine tundra. As an exemplar of this biome, and with the crowds it draws, keeping it in stable and enduring condition was a priority. When visitors arrive now, and gaze out over Forest Canyon Pass or Lava Cliffs, they are unaware of the effort put into restoring

these areas for them — they were "the future generation" for whom park resources were protected. They are now the generation benefiting from the work of the past, with the responsibility to carry this stewardship forward to protect it for the next generation.

Among many challenges the park will face in coming decades, Ed and Larry anticipate that the surge in visitation will remain a priority. For example, when they were working in the early eighties, the park reached a million visitors. In recent years that has ballooned to around five million. The impact on the park resources cannot be avoided. At the same time, they worry about the changing nature of visitors. Will they, Ed wonders, continue to appreciate the backcountry? Will they have direct wilderness experiences or will visitation shift even further to front country scenery viewing? As if to prove his point, shortly after this interview, Ed's own grandchildren chose to forgo a backpacking trip to stay home to read books and play video games. How will future visitors value this park and its wilderness beyond the reach of roads?

When we visited Gore Range Overlook for this article, we were seen taking pictures near the restoration area at which Ed and Larry had worked, and several visitors asked about the work they'd done. Due to the success of Ed and Larry's efforts, the results of their labor were all but invisible. For men like Ed and Larry, well into retirement, this is a worthwhile measure of success: living and protecting for current and future generations yet doing so in a way that becomes unnoticed over time.

Visitors enjoying the panoramic views of the tundra on the Tundra Communities Trail.



by Aubry Andreas,
Conservancy
Graphic Designer

It's Rocky's Year of the Tundra!

Known as the land above the trees, this unique ecosystem is a distinct aspect of the park. From pika to alpine forget-me-nots, the alpine tundra offers an other-worldly experience.

Did you know that 1/3 of Rocky Mountain National Park is alpine tundra? Known as the land above the trees, this unique ecosystem is a distinct aspect of the park. From pika to alpine forget-me-nots, the alpine tundra offers an other-worldly experience. However, with a steady increase in visitation, this hardy yet fragile world has suffered from the creation of social trails and repeated trampling. As a result, vegetation has died off, leading to soil erosion in heavily trafficked areas of the park. To combat these issues, the park has launched a year-long campaign to better inform visitors and highlight efforts to revitalize affected areas of Rocky.

It's Rocky's Year of the Tundra!

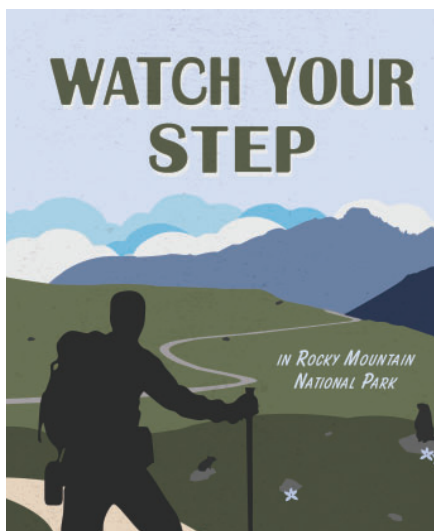
While the campaign was originally slated for 2020, the COVID-19 pandemic pushed the rollout one year later. Originally, it was a way to highlight changes made to the superintendent's compendium. This summary of park specific rules and regulations outlines areas of the park that are closed to off-trail travel. These areas were formally referred to as Tundra Protection Areas. With the new changes, the entirety of the alpine tundra adjacent to Trail Ridge Road is now referred to as a Tundra Protection Area, while areas closed to off-trail travel have been redesignated as Tundra Closure Areas. Within these areas, off-trail hiking is prohibited within 100 yards of trails and parking lots. The six closure areas are found at:

Forest Canyon Overlook, Rock Cut, Lava Cliffs, Gore Range Overlook, and the Alpine Visitor Center.

With the relaunch of the campaign, the park is also focused on fostering a deeper appreciation and understanding of this unique ecosystem. The campaign kicked off with the seasonal opening of Trail Ridge Road and has since been focusing on educating visitors both virtually and in-person. On social media, the park has been rolling out a detailed plan that informs visitors about the unique weather, plants, and animals that can be found up there. On the ground, interpretive rangers and volunteers rove the areas between Medicine Bow curve on the west side and the Ute Trail on the east side to interact with visitors directly.

While visiting the tundra this year, visitors can earn a special tundra-themed sticker. However, the only way to get one is by having a meaningful interaction with a park ranger or volunteer. This can be anything from exemplifying proper tundra etiquette to learning to be a steward of the land. Junior Rangers can also complete a tundra-themed Bingo card to present to a ranger at the Alpine Visitor Center to earn their sticker.

In addition to park efforts, the University of Kansas Design School brought a group of students to the park for a week of exploring and artmaking, teaming up to create art inspired by the tundra. Upon their arrival, they





A panoramic perspective of Tundra Curves and Lava Cliffs on the alpine tundra.

NPS/Ann Schonlau

were given an extensive orientation by Caryn Ling, an interpretive park ranger stationed at the Alpine Visitor Center. Armed with a newly found love for the land above the trees, students created unique works encompassing a wide range of themes and mediums. Their work will be shared on the park’s social media pages to inspire a similar appreciation.

To date, the campaign has received many positive reactions. Social media followers have enjoyed learning about the ecosystem and regularly comment on how they did not know about many of the unique characteristics of the tundra. Likewise, the park has also provided trip-planning content to better serve

first time visitors. Now, visitors are much more informed when deciding what areas of the park to visit.

While the Year of the Tundra campaign is temporary, the park hopes to continue emphasizing its message into the future. The park is currently working to update park maps to reflect tundra closures and protection areas. In addition, a Watch Your Step logo is being used to highlight important information both on the website and in the visitor information guide. Lastly, the park has been developing retro-themed graphics to further call attention to recreating responsibly. These products will continue to be shared digitally in the coming years.

“With the relaunch of the [Year of the Tundra] campaign, the park is focused on fostering a deeper appreciation and understanding of this unique ecosystem.”



NPS/Nicholas Guarino

Visitors with a ranger at the top of the world.

Support Rocky’s education programs by donating to the Rocky Mountain Conservancy at RMConservancy.org, or call 970-586-0108

Winter mountain fog
by Cody Allen Rogers



by
Cody Allen Rogers

Opportunities for growth in public lands...

A Dream Assignment as the Conservancy's Photo Ambassador



Bridal Veil Falls
by Cody Allen Rogers

Through the course of my life, my love for the natural world has become tightly intertwined with my love for film and photography. This summer, I was granted the incredible opportunity to be a photo ambassador for the Rocky Mountain Conservancy while working at the YMCA of the Rockies as a kindergarten camp counselor and teaching photography to youth.

I grew up in Coal City, Illinois, just outside of Chicago. Most of my childhood was spent travelling around the country with my dad's television show *Midwest Bass Fishin' and Huntin' Adventures*. I remember countless times when I begged my father to let me mess around with his massive cameras. As I grew older, we continued to travel, and my infatuation with cameras grew. When I was about 6, I was given my first camera for a family trip to Mexico, and when I was 16, I started my own media production company.

At the time, my dream was to become the next Shark on Shark Tank; I wanted to run a massive studio and become a billionaire. All of that changed when I went on my first international documentary trip to Guatemala. Here, I learned the power of storytelling to create positive change in the world. I decided to attend American University in Washington, DC, where I am majoring in film and media, and minoring in political science. I'm also working towards certificates in community-based research and Spanish translation.



More recently, I have traveled both domestically and abroad, capturing incredible stories. Some of my documentary work has highlighted worker exploitation in Guatemala, while others I've made have spoken to the importance of public lands in the United States, raising awareness of environmental issues. I have been fortunate enough to have my work featured by Hyatt, Openlands Conservation, Enjoy Illinois, in promotion for Yellowstone National Park, and numerous other nonprofits and groups across the country.

Although my time in Estes Park is coming to an end, I couldn't be more grateful for the experiences I have had and the people I have met here. I am looking forward to coming back next year! And for the next nine months at school, I will be working on a documentary about clean energy and energy democracies.

If you'd like to follow along on Cody's adventures and upcoming documentaries, visit codyallenrogers.com and Instagram @cody_rogers555



RMNP Resource Management Considers Impact of Moose in Rocky

by Hanem Aboulez, RMNP Landscape Ecologist

The best information available to park managers supports that prior to the artificial introduction of moose outside the park in 1978, moose were rare, transient visitors to Rocky Mountain National Park. Records indicate that young, often male, moose may have dispersed through from time to time, but that established, breeding moose populations did not exist in the park until after their introduction by the Colorado Division of Wildlife in 1978, which transported animals from Wyoming and Utah into several areas of Colorado.

Moose populations have since increased rapidly, and moose are now frequently seen in all riparian drainages and wet meadows in the park. Many of the large riparian areas in the park were ecologically damaged prior to the moose introduction, due to human-driven actions over the last century and a half. These actions include the draining and ditching of wetlands, the removal of willows, the extirpation of apex predators (i.e. wolves and grizzly bears) that would normally regulate large herbivore populations, the loss of beaver, that would normally create conditions where riparian plants could thrive, and the overabundance of elk, all of which resulted in high levels of willow browsing.

The combined result of these stressors on riparian habitat has been the decline of willow and aspen and the inability of these plants and the communities they support to regenerate without implementing management actions. The poor habitat condition leaves many

of these areas even more susceptible to overbrowsing by large herbivores.

To restore the healthy wetland systems in the park which are important to a wide range of species, such as migratory birds, native trout, beaver and pollinators, park scientists and resource managers collect data to inform decisions and implement science-supported management actions. Data collection includes assessing vegetation condition and calculating moose and elk numbers.

In 2017, scientists began studying the moose population size, composition, and habitat selection, and will use this information to determine if they are affecting the park's native ecosystems and species. Measurements on willows, aspen and upland shrubs are collected every five years to determine how these plant communities are faring over time. The overwintering elk population numbers are calculated every winter, and moose were counted in portions of the park in 2019 and 2020.

Currently, the park is building a scientifically based understanding of the local moose population to determine if any future additions or modifications to management may be needed to ensure wetlands can be maintained and restored. As we are currently compiling data that will help inform these decisions, we are not exploring moose management options at this time.

Conservancy Seeks Funds to Support Rocky's SAR Efforts

The Conservancy is seeking support to fund a new Search and Rescue (SAR) vehicle for the Rocky Mountain National Park SAR Team. The team currently has an aging ambulance as its primary vehicle. Built in 1993, the ambulance has more than 120K miles on it and has become less reliable over its lifespan. With the exponential growth of SAR incidents at Rocky due to increased visitation, this vehicle is no longer able to reliably respond.

On average, Rocky's Search and Rescue Team responds to 160 – 175 incidents each year — the third-highest compared to other national parks. These incidents include a full range of rescues, from broken ankles and heat exhaustion to technical rope rescues and swift-water recoveries, and even large-scale multiday searches. Some rescues also involve helicopter extractions that require a reliable support vehicle to make the rescue possible.



Replacement SAR vehicle concept. The new vehicle will be a mobile platform that is outfitted with all equipment necessary for various rescues. Meeting our goal of raising \$75,000 will help us fund this critical life-saving project.

Donate today to provide the SAR Team with critical life-saving equipment for managing complex rescue operations within the park. Gifts to this project will help to fund the base vehicle, conversion and markings.

RMConservancy.org/sar/



Burned lodgepole pine on the hillsides above the Green Mountain Trail on the west side of the park.



by **Koren Nydick, Ph.D.**,
Chief of Resource
Stewardship, RMNP

Forest Response Post-wildfires in Rocky



A lodgepole pine seedling emerges from the ash of the East Troublesome fire.

Wildfire is a natural process in Rocky Mountain National Park (RMNP). We know through research using tree rings and fire scars, as well as ash found in lake sediments, that fires have occurred here for millennia. The park's lower-elevation montane woodlands are mainly composed of ponderosa pine and Douglas fir trees. These open forests occur on the eastern side of the park and experience mostly ground fire occurring every 40 or more years. Lodgepole pine forests are naturally dense and support fires about every hundred years or more that spread across the canopy and kill most of the burned trees. Higher up on the slopes, Engelmann spruce-subalpine fir forests also experience stand-replacing fires, but less frequently, on the order of 300 years or more between fires due to the cool and moist conditions. These lofty forests only burn during severe drought.

But conditions are changing, and climate change is pushing some forests into a new type of fire regime. Subalpine forests in the Rocky Mountains, which include both lodgepole pine and spruce-fir varieties in RMNP, now burn more frequently than at any time in the past 2,000 years. In addition, any tree seedlings attempting to grow

in the park's burned landscapes will experience warmer conditions than their predecessors did a hundred or more years ago. After some forest fires in the western U.S., few or no tree seedlings are establishing, suggesting that some forests may be replaced by shrublands or grasslands. Wildlands lovers must come to grips with the idea that areas burned in wildfires may no longer recover to the same type of vegetation that existed before the fires hit. Even where they do, this recovery will take a long time. Trees grow slowly.

What factors affect forest response after wildfire? Research on 150+ forest fires across the western U.S. suggests that responses vary by tree species and can be affected by distance to seed source, water stress, elevation, slope, aspect and competition from other plants. The predominance of beetle-killed trees prior to a forest burning may also impact seedling regeneration. Low-elevation and dry-forest types, like those dominated by ponderosa pine, had the most common instance of little to no post-fire regeneration. Some subalpine forest types had troublingly low seedling densities post-fire as well. Predictions of increasing water

**Support Rocky's
Greenhouse program at
RMConservancy.org, or
call 970-586-0108**

stress and more frequent extreme drought years in the southern Rocky Mountains points to a future with generally harsher conditions for tree seedling establishment.

So, what about Rocky Mountain National Park? Our forests have a few things going for them. First, the ponderosa pine forests in the park are at the higher elevation range of that forest type so they generally do not experience as dry an environment as the ponderosa woodlands in the foothills below. The park's lodgepole pine forests have a generous degree of serotiny, which aids in regeneration after high-severity fires. These cones only open after experiencing heat, which protects the seeds during the fire and provides a viable seed source immediately after. The topography of the areas burned in the 2020 fires covers a range in elevations, slopes and aspects, which suggests there will be a mix in post-fire growing conditions. Not to be forgotten are the rains. While the lack of monsoon moisture factored into the severe drought that fed fires last summer and fall, this year, we have been getting rained on — a lot.

What do we see thus far in the park's burned landscapes? Wildflowers, grasses, and sedges have grown back with a vengeance. Undergrowth in burned montane forests is generally lush and wet meadows and riparian areas are overflowing with herbaceous plants. Lupines, wild roses, yellow banner, and horsetail ferns line lower elevation trails and wet areas. Aspen sprouts are seen in some areas already, where they can escape the hungry mouths of elk and moose. Aspen and many of the herbaceous plants have an advantage, in that they sprout from underground roots. Soil samples evaluated after the fire found that despite the large amount of aboveground biomass consumed by

flames, soils in many areas retained intact fine roots and soil structure. Wildflowers, grasses and sedges are thriving in the sunny, but wet conditions that a rainy, burned area provides. Whether or not ponderosa pine or Douglas fir tree seedlings are among this regrowth is yet to be seen. These trees reproduce by seed and do not have the shortcutting benefit of sprouting from roots or stems. Will the moist, post-fire conditions help these conifers regenerate or will the competition from dense undergrowth thwart their development?

The greenness of the Kawuneeche Valley is truly stunning after all the rain. If you look closely, however, you'll notice something different. The willows and other woody wetland vegetation that persisted before the fire are gone, burned down to black stumps in most of the burned wetland areas on the west side of the park. More mixed results are found on the eastern side. I say persisted, because tall willow ecosystems already are in decline in some areas of the park, due to elk and moose browse and other factors. Willows, alders and birch can resprout, but will they — and if they do — will they survive the feeding frenzy of elk and moose searching for these nutritious shoots? Lessons from the Fern Lake Fire suggest that regrowth may be tenuous, even in areas protected from large ungulate browse within fenced exclosures. This is of concern because the park has been working on restoring these ecosystems for the past 12 years while implementing the Elk and Vegetation Management Plan. Because of this, we hope to be able to plant willows, alders and birch within exclosures that burned. Only with restored tall willow habitat will beaver once again be abundant in the park. Beaver in turn, engineer a wetter environment that pools and slows water, improving the hydrologic conditions for the growth



This summer's wet conditions may be helping vegetation rebound after the fire, but heavy rains also have caused some flooding, erosion, and sediment deposition. Here is debris along Trail Ridge Road on the west side of the park.



Yellow banner is abundant in burned areas along trails and riparian corridors. It spreads by root sprouts and can quickly rebound after a fire.

Continued on page 19



Rocky Mountain Conservancy Park Puzzler

Across

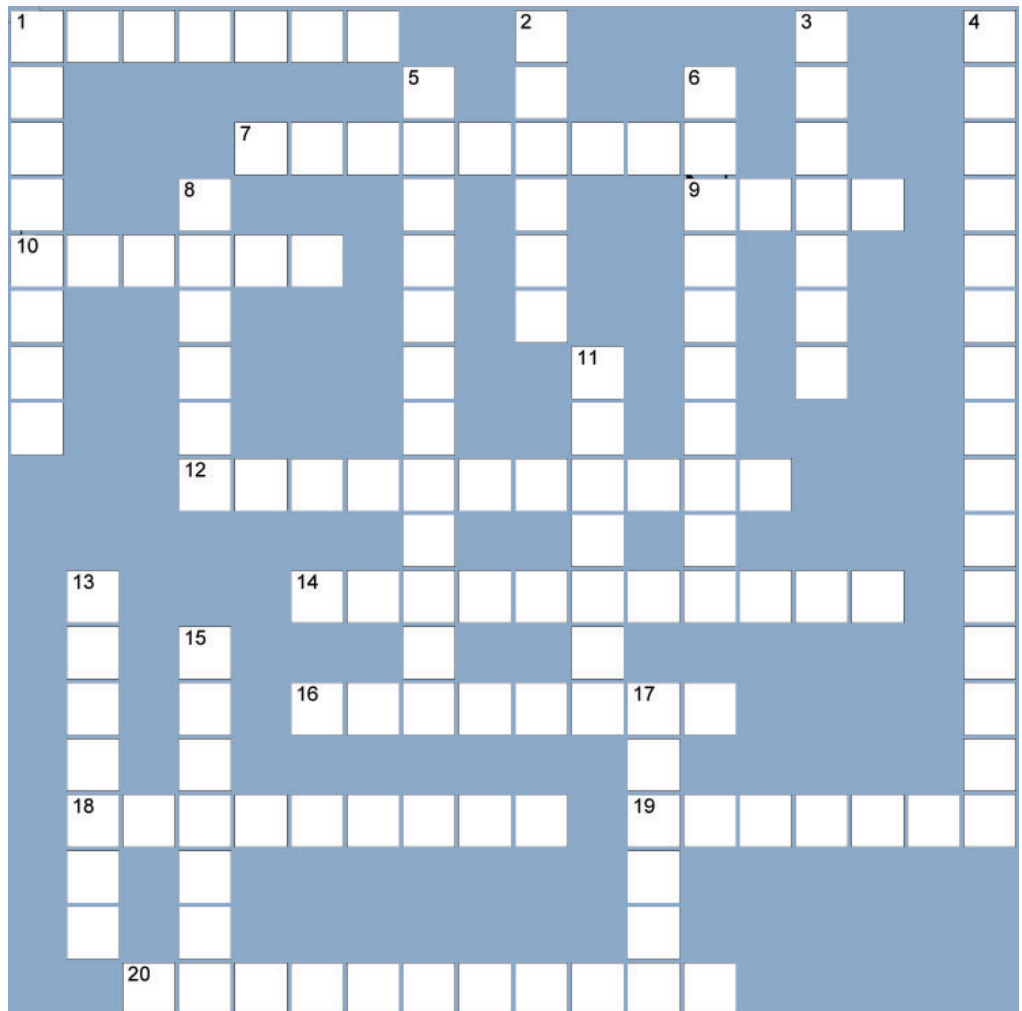
- Climate is a general term to express broad environmental patterns. _____ applies to specific movements of air masses, precipitation and temperature fluctuations at specific times of the year.
- Each year, from approximately February through August, Rocky initiates temporary closures, such as bighorn lambing areas in the spring, and _____ falcon nesting areas around Lumpy Ridge.
- To visit the park this summer, you'll need to get your head around the timed-entry system, which involves making a reservation AND obtaining the park entrance _____.
- A total of 18% of park _____ have been affected by the East Troublesome and Cameron Peak fires, which will require extensive work in the next few years.
- More than 24 million years ago, erupting volcanoes spewed lava across the present-day west side of RMNP, forming the ancestors of today's _____ Mountains.
- The Conservancy welcomes Ian Stafford as the new _____ Director who will be managing the Conservancy's Conservation Corps program and volunteer crews.
- Rocky's _____ Learning program that was established in 2019 was a life-saver for this school-based program during the pandemic.
- Like all wildlife, bird species have evolved attributes, such as _____, that allow them to recover from periodic high mortality — *periodic* being the operative word.
- At least 20 _____ were lost in the East Troublesome Fire of 2020, which the trail crew has prioritized for replacement in 2021.
- Even though there are restrictions at Rocky's visitor centers, the Conservancy continues to offer _____ at all the visitor center locations, as well as online at our website.

Down

- Classified as *Arachnida*, a _____ is a member of the spider family that requires a blood meal to complete its complex life cycle.
- Greenback cutthroat trout and the _____ toad are two declining species that are the focus of RMNP conservation biologists' efforts to reintroduce these species to reestablish populations.
- The Conservancy is pleased to fund the hiring of a graphic designer for the park who has been assessing and reviving interpretive _____ panels throughout the park.
- Now listed on the National Registry of Historic Places, _____ was gifted to Rocky through the Conservancy and other partner agencies.
- Junior Ranger _____ is the go-to place for young kids to become a Junior Ranger!
- _____ Couloir is a climbing route that was first led by John Wesley Powell on

the southwest face of Longs Peak.

- A towering rock formation on the south side of the park known as _____ Falls is a popular ice-climbing site in Wild Basin.
- The East Troublesome Fire and the _____ Peak Fire together burned more than 30,000 acres in RMNP in 2020.
- The yellow-rumped _____ was among a collection of birds that were adversely affected by the cold snap in the Rocky Mountains in early 2021.
- A dominant igneous rock found in Rocky composed mostly of quartz, alkali feldspar, and plagioclase is called _____.
- In 1925, the NPS installed almost 200 feet of bolts and line along the lower technical section of the north face of Longs Peak. Known as the _____ Route, it was removed in 1973 as part of the park's "Leave No Trace" policy that had been established.



The Rocky Mountain Conservancy expresses special thanks to the following people for their donations supporting Rocky Mountain National Park: April 17, 2021 – August 12, 2021

Total gifts: 711 | Total donations: \$692,268



**Rocky
Mountain
Conservancy**

Perry Abbott, Longmont, CO
Michael Adams, Lafayette, CO
Yvonne and Jay Adron, Spearfish, SD
Roberto Aguilar Pilar, Thornton, CO
Leslie and Neil Alexander, Nashville, TN
Mary and James Alfred, La Grange Park, IL
Joe Aliota, Ridgway, CO
Allstate: The Giving Campaign, Norfolk, VA
Cathy and Stephen Alper, Estes Park, CO
Maria Altepeter, St. Louis, MO
Anne Ambler, Silver Spring, MD
Ameriprise Financial Gift Matching Program, Princeton, NJ
Andrew and Rachel Ames, Estes Park, CO
Richard and Mary Andes, Jacksonville, FL
Apple, Inc.
Timothy Asfazadour, San Diego, CA
Michael Atkins, Katy, TX
William and Ann Ault, Fort Collins, CO
Scott Awender, Hudson, OH
Tamara Barner, Longmont, CO
Stuart and Cathy Barnes, Longmont, CO
Robert and Paula Barrick, Morton, IL
Thomas and Laurie Barthold, Silver Spring, MD
Heather Beadle, Boulder, CO
Dale and Peggy Beck, Estes Park, CO
Judith Beechy, Estes Park, CO
Ron and Kathy Bell, Estes Park, CO
Michael Bell, Evergreen, CO
Toby and Stephen Bell, Vienna, VA
Veronica Benduski, Seattle, WA
J.D. and Rose Marie Benisek, San Angelo, TX
Charley Bennington, Greenwood, IN
James Bernard, Estes Park, CO
Deborah Berry, Longmont, CO
Jan Christoph Bessler, Golden, CO
Belinda Biddle, Loveland, CO
Debra Bidwell, Fort Collins, CO
Jeff Biegert, Fort Collins, CO
Robert Bird, Westminster, CO
Coral and Richard Bishop, Madison, WI
Kim Bitner-Drottz, Liberty, MO
Pat Blue and Jeff Kaas, Denver, CO
Regina Bock, Boulder, CO
Joel and Sarah Bogosh, Littleton, CO
Kevin Bogue, Wheat Ridge, CO
Joel Bolduc, Arvada, CO
Kathryn Bolinsky, Loveland, CO
Tanner Booth, Colorado Springs, CO
Savannah Boyles, Windsor, CO
Brandon Brandon, Schaumburg, IL
John and Jennifer Brandt, Arvada, CO
Betty Branstiter, Lakewood, CO
Laura Brayton, Highlands Ranch, CO
John Brennan, Denver, CO
Adin Brenner, Calabasas, CA
Bright Funds Foundation, Oakland, CA
Toni Brown, Berkeley, CA
Karina Brusletto, Lakewood, CO
Donald and Kathy Bryson, Estes Park, CO
Mark Buckley, Broomfield, CO
Tristan Buja, Broomfield, CO
Linda and John Burchinal, Broomfield, CO
Danielle Burden, Severance, CO
Carmen Burr, Elkhorn, NE
Julian Callin
Capital Group Companies Charitable Foundation, Los Angeles, CA
Leonel Cardenas, Denver, CO
Cargill Corporation, Minneapolis, MN
William Carle, Golden, CO
Mary Carraher, Loveland, CO
Elliott Carson, Aurora, CO
Robert and Mary Ann Carter, Longmont, CO
Janet Casterton, Caledonia, MI
Caterpillar Foundation, Peoria, IL
Kathleen Cejka, Redlands, CA
Center for Interactive Learning Collaboration, North Mankato, MN
Kimsua Chay, Las Vegas, NV
Don and Carole Cheley, Denver, CO
Chevron Corporation, Princeton, NJ
Joe Christ and Lauren Schaefer-Christ, Freeburg, IL
Tom and Jean Christen, Fort Collins, CO
Laura and Keith Claghorn, The Woodlands, TX
Debora Clark, Colorado Springs, CO
Doug and Roxanne Clayton, Council Bluffs, IA
Todd and Susan Clayton, Framingham, MA
Jonathan and Cindy Cohen, Closter, NJ
Madelynn Coldiron, Frankfort, KY
Mary Colleran, Lincoln, NE
Anita Conner, Berthoud, CO
Joyce Conrey, Evergreen, CO
Vicki and Steve Constable, Phillipsburg, KS
Kathleen Conway, Jensen Beach, FL
Eric Corson, Littleton, CO
Julisa Cosio Delgado, Thornton, CO
Brian Counterman, Littleton, CO
David and Debbie Courtney, Chickasha, OK
Walt and Sandra Cox, Blue Grass, IA
William Craighead, Colorado Springs, CO
Pamela Cramer, Loveland, CO
Joanie Crockett, Estes Park, CO
Clark Cyr, Bellevue, WA
Glen Dallas, Loveland, CO
Thomas Daly and Margaret Fitzgibbons, Boulder, CO
Mary Dancer, Deerfield, MA
Devan Daniels, Milwaukee, WI
Marie Dante, Aurora, CO
Heather Daoust, Dripping Springs, TX
Andrea Davis, Englewood, CO
Susan Day, Estes Park, CO
Bradley Deats, Franktown, CO
Catie Deines, Aurora, CO
Erik Deines, Fort Collins, CO
Paloma Delgadillo, Broomfield, CO
Deira and Jaime Delgado, Alamosa, CO
Daniel Delgado, Avon, CO
Gregory and Margaret DeReus, Fort Collins, CO
David Derr, Littleton, CO
Sallie Dickinson, Estes Park, CO
Melanie Disbrow, Castle Rock, CO
John and Dolores Dolan, Mahwah, NJ
Billie Donegan, Woodland Park, CO
Justin Dory, Littleton, CO
Randall Douty, Silverthorne, CO
Barbara J. Dowd, Cedar Falls, IA
Stephen and Susan Dowdy, Broomfield, CO
Theresa Doyle, Glen Burnie, MD
Donald Draper, Denver, CO
Frank Drumm, Wheat Ridge, CO
Lee Dunlap, Blairsville, PA
Joan Eaton, Milliken, CO
Robert and Pamela Eichelberger, Boulder, CO
Stephen Ekman, Denver, CO
Lawrence Ellis, Centennial, CO
Tiffany Englander, Greenbelt, MD
The Miriam Felsenburg Estate, Hygiene, CO
Equitable Foundation Inc., Syracuse, NY
Casey Erb, Arvada, CO
Cassidy Erickson
Patrick Esparsen, La Jara, CO
Tony and Beth Fabrizio, Broomfield, CO
Facebook Payments Inc., Menlo Park, CA
Fagan & Schindelheim Giving Fund
Moira Fallon, Penfield, NY
Gregory Farrington, Santa Barbara, CA
Michael Faught, Westminster, CO
Ann and Steve Fedders, New Richmond, WI
Carol Felici, Ogden, UT
Mary Lou Fenili and Karen Hansen, Denver, CO
Robin Finegan, Denver, CO
Steven M. Fishburn, Austin, TX
Dan Fitch, Boulder, CO
Brian Flansburg, Safety Harbor, FL
Mark Floyd, Loveland, CO
Robert Frame
Anna Frazier, Boulder, CO
Nancy French, Niwot, CO
Eric Froehlich, Severn, MD
Eric Frydendall, Denver, CO
Colleen and James Fullbright, Fort Collins, CO
Gloria Gardiner, Portland, OR
Nora Gardner, Loveland, CO
Robert and Jocelyn Gebhardt, Broomfield, CO
Amy S. Gendler, Golden, CO
Vincent Gerber, Estes Park, CO
Lynne and John Geweke, Estes Park, CO
Erin Glaspy, Centennial, CO
George and Ann Glynn, Fort Collins, CO
Jason Golden, Larkspur, CO
Evan Goldon, Lincoln, NE
Jose Gonzalez, Boulder, CO
Adan Gonzalez, Northglenn, CO
Diane Goodwin, Lakewood, CO
Google Matching Gifts Program, Princeton, NJ
Joel and Ellen Gordon, Denver, CO
Bruce Gottwald, Denver, CO
Melanie Grant, Denver, CO
Marcia Greenblatt, Boulder, CO

To make a gift to support Rocky Mountain National Park, visit RMConservancy.org, or call 970-586-0108

Janet and Charles Greiner, Lakewood, CO
Elizabeth Greisiger, Maumee, OH
Jay Groce, Castle Rock, CO
Stephen Gross, Boulder, CO
George Grove, Boulder, CO
John Grove, De Pere, WI
Tim and April Gruber, Oviedo, FL
Michael Guerin, Upland, CA
Cheryl Gummere, Grand Junction, CO
Timothy and Wendy Haight, Johnston, IA
Gary Haight, Westminster, CO
Shelley and Gregory Hall, Vail, CO
Chris Hallden, Lake Park, FL
Richard and Gail Hanna, Overland Park, KS
Robert and Karen Hardwick, Colorado Springs, CO
Cyndi Harron, Brookfield, CT
Bruce Harshberger, Loveland, CO
Payton Hartley, Colorado Springs, CO
Janene and Steven Hawkins, Burnsville, MN
Taru and William Hays, Englewood, CO
Gary Heath, McLouth, KS
Keith and Beth Heaton, Eden Prairie, MN
Carolyn and Larry Hejtmanek, West Des Moines, IA
Pamella Herbert, Vienna, VA
Armando Heredia, Colorado Springs, CO
Joe Hietpas
Elizabeth Hill, Asheville, NC
Hintz Targeted Marketing, LLC, Asheville, NC
Bradley Hise, Denver, CO
Nancy Hodder, Boulder, CO
Gregory Hoggatt, Centennial, CO
Arthur Hogling, Evergreen, CO
Mary Holmes, Fort Collins, CO
Honeywell International, Washington, DC
Kate Horan, Lakewood, CO
Steven and Donna Horwitz, Lincolnwood, IL
Dianna Hulbert, Estes Park, CO
Kevin Inderhees, Boulder, CO
Laird and Carol Ingham, Hollywood Park, TX
Bill and Jane Jackson, Fort Collins, CO
Rick and Julie Jacobs, Fort Worth, TX
Dillon Jacobs, Lakewood, CO
Beth Jenkins, Mentor, OH
Nicholas Jensen, Longmont, CO
Carolyn Johnson, Arvada, CO
Dean and Kathryn Johnson, Estes Park, CO
Richard K. Johnson, Kenosha, WI
Pamela Johnson, Westminster, CO
Kenneth P. Juengst, Loveland, CO
Kim Kanas, Longmont, CO
Ruth Kantorowicz, Highlands Ranch, CO
Michael Kaufman, West Lafayette, IN
Natalie Kelce, Denver, CO
Larry and Janet Kilgore, Estes Park, CO
Peter and Brenda Kimble, Champaign, IL
Barry and Sharon Knapp, Rochester, MN
Gilbert and Mary Knapp, Spencer, NY
Elizabeth and Max Knees, Fort Collins, CO
Melissa Knight, Cascade, CO
Corine Knudsen, Estes Park, CO
Kurt and Lisa Knutson, Vernon Hills, IL
Angie and Troy Koehlar, Estes Park, CO
Toni Koenig, Newport Beach, CA
Chris Kopel, Denver, CO
Louise and John Koss, Fort Collins, CO
Danielle and Nicholas Krenz, Windsor, CO
Charles and Laurel Krider, Lawrence, KS
Blair Kristy, Colorado Springs, CO
Dan and Diana Kubik, Denver, CO
John Kuzan and Patti Vocker, Tampa, FL
Matthew Laderwager, Charleston, SC
Gail Lambert, Arvada, CO
Mary Lamy, Hygiene, CO
Jacqueline Landahl, Prairie Village, KS
Chris Lasky, Westminster, CO
Adam Lehman, Fort Collins, CO
Michael Lenoir, Charlotte, NC
Bud and Kelly Lester, Georgetown, TX
Michael Levin, Fort Lauderdale, FL
Hanna Lewallen, Arvada, CO
Margy and Thomas Lininger, Greeley, CO
Paul and Erin Link, Firestone, CO
Live West Realty, Boulder, CO
Jeffrey Lodewick, Mahwah, NJ
Karl Long, Houston, TX
Laura Lucas, Fort Collins, CO
Keith Lucey and Michelle Macey, Arvada, CO
Liz Lucke, Loveland, CO
Mary and Phil Lyon, Lakewood, CO
Dani and Phil Magistro, Reading, PA
Mitchell Maitland, Windsor, CO
Bruce Mann, Fort Collins, CO
Frank Marics, Chicago, IL
Ruben Martinez, Commerce City, CO
Ann Martinson
Stephen Massad and Laura Devitt, Houston, TX
Lee Matuszczak, Commerce City, CO
Barbara Maynard, Fort Collins, CO
Douglas McCallum and Diana Neff, Longmont, CO
Scott McClure, Denver, CO
David McCormick, Denver, CO
Stephen McCraw, Denver, CO
Graig and Janet McHendrie, Palo Alto, CA
Michael and Patricia McKinney, Estes Park, CO
McKinsey & Company
Donna McMillan and Steve Bayne, Northfield, MN
James McReynolds, Loveland, CO
Craig McWhirter, Greeley, CO
Ruth E. Medak, Portland, OR
Graham Meech, Aurora, CO
Mary Meier, Des Moines, IA
Kathryn L. Meyer, Boulder, CO
Jessica Meyer, Colorado Springs, CO
Microsoft Matching Gifts Program, Princeton, NJ
Todd Miklos, Fort Collins, CO
Cynthia Miller, Centennial, CO
Dennis Miller, Dacono, CO
Betty Miller and Mia Johnson, Elizabeth, CO
Suzanne and Alan Miller, Fort Collins, CO
Molly Miller, Lone Tree, CO
Raza and Patricia Minhas, Lakewood, CO
Jennifer Moeller, Louisville, CO
Michael Monahan, Longmont, CO
Jennifer Mondragon, Colorado Springs, CO
Nancy Moor, Erie, CO
Dylan Moore, Colorado Springs, CO
Jerry S. Moore, Fort Collins, CO
Randy and Nancy Morgan, Fort Collins, CO
Judd Moritz, Broomfield, CO
Nancy and Connor Morris, Leawood, KS
Otis and Terri Morrow, Arkansas City, KS
Brian Mortakis, Overland Park, KS
Annetta Moses, Northbrook, IL
James and Connie Mueller, Oelwein, IA
Mary Murdock, Lakewood, CO
Carol Murin, Longmont, CO
Maia Murphy, Brooklyn, NY
Nancy J. McDevitt Estate
John and Janet Nelson, Longmont, CO
Doug and Marcia Nelson, Rock Island, IL
Lynne Niemeyer, Loveland, CO
Kenneth Noel, Fort Collins, CO
Vern Norviel, San Diego, CA
Christopher Odekirk, Manitou Springs, CO
Ginger Okada, Westminster, CO
Mike Oline, Estes Park, CO
Jesus Olivas, Longmont, CO
Madison and Jonathan O'Neill, Golden, CO
Julia Oppy, Aurora, CO
Chad and Rebecca Orwig, Aurora, CO
John Ostrom, Grand Junction, CO
Tanja Pajevic, Boulder, CO
Richard and Pamela Palmer, Estes Park, CO
Panorama Global Impact Fund, Reston, VA
Michael and Maureen Parks, Dallas, TX
Parks Project, LLC, Marina Del Rey, CA
Kent and Dawn Paschal, Fort Collins, CO
Virginia Passoth, Denver, CO
Paul and Donna Payne, Garland, TX
Susan and Bill Pedrick, Erie, CO
Jane Penoyer, Fort Collins, CO
Omar Pereyra, Pagosa Lakes, CO
Merike Philips, Kenosha, WI
Jessie and Christopher Pierick, Boulder, CO
William Pirraglia, Pueblo, CO
Jason Pitre, Broomfield, CO
Paul and Joan Poston, Lakewood, CO
Joel and Linda Prehn, Lakewood, CO
Edgar Quinonez, Trinidad, CO
Deborah Race, Loveland, CO
Rebecca Raddick, Orlando, FL
Walter and Jane Rainey, Galloway, OH
Pooja Rao, Durango, CO
Jenifer Rawlings, Denver, CO
Kerri Reinsch, Estes Park, CO
Erin Reno, Denver, CO
Thomas Reznik, Fort Collins, CO
Larry and Melinda Richards, Longmont, CO
Leslie Richardson, Loveland, CO
Michael Riegel, Highlands Ranch, CO
Pamela Riggs, Georgetown, TX
William and Norma Riley, Omaha, NE
William Robertson and Mary Rezetka, Fort Collins, CO
Aime and Carl Robicheaux, Estes Park, CO
Ruth Rodden, Baldwin City, KS
Stanley and Cynthia Rosenberg, Centennial, CO
Randall Roskamp, Edgerton, MN
Rotary Club of Estes Park, Estes Park, CO
Nancy and Robert Ruby, Grand Junction, CO
Melvin and Leonora Rueppel, Estes Park, CO
Jill Rumley, Hygiene, CO
Ronald Rutherford, Englewood, CO
Glen Salomon, Ellisville, MO
Robert and Karen Sanders, Houston, TX
Mark Sassman, Granby, CO
Ted Schaefer, Evergreen, CO
John Schaefer, Highlands Ranch, CO
Derek Schmidt, Omaha, NE
Constance Schmidt, St Louis, MO
Nancy and John Schneider, Glenwood Springs, CO
Anna Schonlau, Estes Park, CO
Terry Schriver, Loveland, CO
Ellen Schroeder, Estes Park, CO
Viloya Schweiker, Los Alamos, NM
Keith Scoggins, Aurora, CO
David and Jenny Seely, Marine On Saint Croix, MN
Ekaterina Semina Janson, Littleton, CO
John and JonAnn Shackford, Englewood, CO
Jody Shaddock-McNally, Loveland, CO
Nancy Shanks, Englewood, CO
John and Patricia Shearer, Johnstown, CO
Shell Employee Giving Program, Princeton, NJ
Robert and Kathlyn Sherrrod, Estes Park, CO

To make a gift to support Rocky Mountain National Park, visit RMConservancy.org, or call 970-586-0108

Heather Siebenaler, Fort Collins, CO
 Jesse and Brianna Silver, Broomfield, CO
 Lauren Simmons, King of Prussia, PA
 Karl Smith, Aurora, CO
 Zenda Smith, Estes Park, CO
 Stuart and Elizabeth Smith, Waco, TX
 Anne Sneed, Denver, CO
 Stephen and Mary Beth Snyder, St. Louis, MO
 Daniel Sotelo, Denver, CO
 Mark and Gwen Sparr, Boulder, CO
 Jessie Steckling, Madison, WI
 Jake Stegenga, Avon, CO
 Paula Steige, Estes Park, CO
 Debra Stevens, Denver, CO
 Archie and Una Stevenson, Longmont, CO
 Dennis Stoltenberg, Broomfield, CO
 Janice and Kevin Stout, Dillon, CO
 Steve Streff, Cedar Rapids, IA
 William and Jane Stuart, Estes Park, CO
 David and Debra Stull, Eagle, CO
 Christopher and Caroline Stull, Los Alamos, NM
 Wayne and Mary Sullender, Estes Park, CO
 Anna Super, Denver, CO
 Omar Tahir, Houston, TX
 Takeda Pharmaceutical Company
 Jeff Terrill, Lakewood, CO
 Caroline Tessler, Centennial, CO
 The Boeing Company Gift Match Program, Princeton, NJ
 The Wildland Trekking Company, Flagstaff, AZ
 Peggy L. Themar, Highland Village, TX
 Jonathan Thielen, Buffalo, MN
 Heather and Gregory Thorwald, Westminster, CO
 Joel Tjornehoj, Poolesville, MD
 Sherry F. Tooker, Benbrook, TX
 Marguerite Underhill, Topeka, KS
 Ellen and John VanDyk, Littleton, CO
 Sanjay Velamparambil, Loveland, CO
 Tiffanie Vialpando, Cortez, CO
 Miles Waite, Thornton, CO
 Ann Wall, Westminster, CO
 Sandra Wallway, Grand Junction, CO
 Linda Walsh and Terrell Dixon, Corrales, NM
 Walt Disney Company Foundation, Lake Buena Vista, FL
 Wenzheng Wang, Denver, MA
 Maurice Warner and Nancy Wick, Seattle, WA
 Andrew Warnock, Fort Collins, CO
 Rebecca Watts, Estes Park, CO
 Steve and Dena Ann Weatherly, Loveland, CO
 Robert Weidner, Fort Collins, CO
 Rob Weismantel, Boulder, DC
 Laura Weiss, Elgin, IL
 Alexander Weiss and Susan Rowley, Evanston, IL
 Cara and Eric Welch, Brighton, CO
 Benning and Judith Wentworth, Colorado Springs, CO
 Western Sod Installation, Loveland, CO
 Wayne and Helen Wexell, Windsor, CO
 Laura Whale, Fort Collins, CO
 Pete and Jane White, Bismarck, ND
 Chris Whitehead, Colorado Springs, CO
 Matthew Williams, Northglenn, CO
 Jack and Dee Willome, San Antonio, TX
 Jonathan Wise, Colorado Springs, CO
 Linda and Mike Wold, Estes Park, CO
 Jennifer and Charlie Wood, Austin, TX
 Jessica Wren, Riverside, CT
 Daniel Wyant, Aurora, CO
 Katherine and Mark Young, Boulder, CO
 Joseph Young, Wheat Ridge, CO
 Howie Youngman, Carbondale, CO
 Ray and Carolyn Zeisset, Lincoln, NE

MEMORIAL AND HONOR GIFTS

Mike and Patricia Aldridge, Estes Park, CO: In memory of Mary Ann Oehring
 Paul Apodaca, Albuquerque, NM: In memory of Kurt Zarbock
 Charlotte Artman, Aurora, CO: In memory of Richard Eugene Banes
 Edwin A. Austin, Rochester, NY: In memory of Harold G. Austin Jr.
 Patricia Azlin, Chino Valley, AZ: In honor of Mr. and Mrs. Black Bear
 Vaughn Baker, Estes Park, CO: In honor of Tim Phillips
 Lynn Barnes, Oklahoma City, OK: In honor of Jay Randall Thomas
 Wayne Bassett, Trimble, MO: In memory of Dianne Lee Bassett
 Diane and Robert Bassett, Denver, CO: In memory of Teresa Ruth Schwilke Shaner
 Lynda Price Bohager, Hanover, PA: In honor of ZQP Forestry Operations Specialist
 Linda Bourgeois-Williams, Colorado Springs, CO: In memory of Howard Mark Williams
 Curt Buchholtz, Estes Park, CO: In memory of Heidi Buchholtz
 Alexander Burkhardt, Aurora, CO: In honor of Dogbert
 Eric Cameron, Boerne, TX: In honor of Ginger Cameron
 Ross Cecil, Newburgh, IN: In honor of Doug Cecil
 Dave Coates, Aurora, CO: In memory of Kelly Coates
 Alan Collums, Ridgeland, MS: In memory of Rose Ellen Collums
 Matthew and Megan Cox, Davenport, IA: In honor of Walt Cox
 Lynne Cronin, Denver, CO: In memory of Louis W. Cronin DVM
 Jack Crystle, Middletown, DE: In honor of Bobbi Crystle
 Diane Darling, Pacifica, CA: In honor of Marilyn Gorman
 Daniel Denning, Estes Park, CO: In memory of Virginia Denning
 Marlene Detman, Allenspark, CO: In memory of Thomas Detman
 Mark Dickinson, Saint Paul, MN: In memory of Selden C. Dickinson, Jr. and Sr.
 Todd Evans, Ocean Grove, NJ: In memory of Joseph Canal
 Marie and Dan Fellows, Coralville, IA: In memory of Delmer F. Harris
 Wendy Fetterolf, Arvada, CO: In honor of Anita Moeller and Mark Cullen
 Melinda Mayo Finley, Edmond, OK: In memory of Brent Mayo
 Hope L. Flack, Estes Park, CO: In memory of Hope Worrell Flack
 Mary and David Fleurquin, Colorado Springs, CO: In memory of Ruth Freitag
 Mary Ann Franke, Estes Park, CO: In memory of Mocha
 Lou Celia and Don Frost, San Antonio, TX: In memory of Bernard and Bryan Kost
 Daniel Gallardo, Tucson, AZ: In memory of Andy Willis
 Angelica Ganser, Ambler, PA: In memory of Jessica Pfeifer
 Mary and John Gardner, Lakewood, CO: In memory of Barbara Ellen Gardner
 Geraldine and Patrick Gilmartin, Irvington, NY: In honor of Eddie Gilmartin
 James and Christine Glenski, Overland Park, KS: In memory of Jack Morgan
 Kit and TR Goering, Newton, KS: In memory of Terry Dean Janzen
 Elaine Goldbaum, Tucson, AZ: In memory of Caleb Goldbaum
 Benjamin and William Hamilton, Boulder, CO:
 In honor of the wedding of Zoe Zuker and Gene Allday
 Patrick and Jill Hardman, Prairie Village, KS:
 In honor of Joel, Rachel, Cassie, Micah, Bailey and Ally Hardman
 Delmer Harris, Gaithersburg, MD: In memory of Delmer F. Harris
 Pam Headley, San Jose, CA: In honor of Payton Perkins, the Graduate in Question
 Karla Henderson, Estes Park, CO: In memory of Harold B. Moser
 Karla Henderson, Estes Park, CO: In honor of volunteers in RMNP
 Karla Henderson, Estes Park, CO: In honor of May birthdays: Darry Spomor, Joan Paulbeck,
 Deb Bialeschti, Jan Jensen
 Julie Hendrickson, Evergreen, CO: In memory of Lynne Bieseemeier
 Fred and Sharon Henkin, Westerville, OH: In memory of Larry Carpenter
 Lynne Henry, Chicago, IL: In memory of Jack Ritchie McCurdy
 Glen and Barbara Herrington-Hall, Saint Paul, MN: In honor of Barbara Herrington-Hall
 Richard E. Hoffman, M.D., Denver, CO: In memory of Heidi Buchholtz
 James G. and Deborah L. Horst, Estes Park, CO: In memory of George F. Horst
 Todd Hull and Donna Bear-Hull, Jacksonville, FL: In honor of Edna "Mimi" Stockover Hull
 Dr. and Mrs. Wm. C. Jackson, Denver, CO: In memory of William W. (Peter) Grant III
 Stephanie Janke, Pewaukee, WI: In memory of Roy Heimbrock, Sr.
 Janice Jensen, Estes Park, CO: In honor of May birthdays: Darry Spomor, Joan Paulbeck,
 Deb Bialeschti, Jan Jensen
 Anna Jones, Erie, CO: In memory of Joe Yount
 Josip Josipovic, Zeeland, MI: In honor of Brendan Foley
 Josip Josipovic, Zeeland, MI: In honor of Briana Herrmann
 Daugherty Karen, Estes Park, CO: In memory of J. Graham Russell
 Ann Karnowski, Dallas, TX: In honor of Richard and Constance Somers
 Meri Kephart, Highlands Ranch, CO: In memory of Larry and Karen Blinn
 Frank and Monty Kugeler, Denver, CO: In memory of William W. (Peter) Grant III
 Sandra Kuhn, Naples, FL: In memory of Stephen L. Kuhn
 Greta Lindecrantz, Denver, CO: In memory of Dr. Paul Nelson
 Catherine Luce Plaster, Shelby, NC: In memory of Robert Luce

To make a gift to support Rocky Mountain National Park, visit RMConservancy.org, or call 970-586-0108

Patricia Lukens, Highlands Ranch, CO: In memory of Dave Nelson
 John and Linda Lungstrum, Lawrence, KS: In memory of Helen and Jack Lungstrum
 Adam Maier, Golden Valley, MN: In memory of George O. Hutchinson
 Mariposa Foundation, Breckenridge, CO: In memory of Michael Jensen
 Marilyn Maskell and Michael Pretz, Fort Collins, CO: In memory of John Dorenkamper
 Karen and Michael McQuiston, Camanche, IA: In honor of Betty Zimmer
 Kurt Menning and Keiko McKibben, San Francisco, CA: In honor of Jean Menning
 Joelle Milholm, Denver, CO: In memory of Irma Greene
 Melissa Miller, Aldie, VA: In honor of Carol and Richard Minker
 Catherine Millis Juvonen, Estes Park, CO: In memory of Ruth Sowell Millis
 Scott Minker, Los Angeles, CA: In honor of Carol and Richard Minker
 Andrea Moore, Poulsbo, WA: In honor of Alynn Stefanko
 Andrea Moore, Poulsbo, WA: In honor of Douglas Stefanko
 Kerry Morimoto, Denver, CO: In memory of Gordon Goff
 Peggy Murphy, Overland Park, KS: In honor of Harvey and Harriet Hare
 Beverly Ness, New Berlin, WI: In honor of Phil Anderson
 Letha Ochs, Niwot, CO: In honor of Slash Bar H
 David O'Farrell, Fort Collins, CO: In memory of Frank Shavlik
 William and Anita Ondr, Centennial, CO: In memory of Phil "Casey" Martin
 Stephen O'Rourke, Rapid City, SD: In honor of Robin Flick
 Paul Penn, Iowa City, IA: In honor of Jan Waterhouse and Dan Burbidge
 Eleanor Peterson, Louisville, KY: In honor of Karen Volunteer
 Chris Pridemore, Greenwood Lake, NY: In memory of Michael Paul Carmody
 Susan Quirarte, Elk Grove, CA: In memory of Erin Caldiero
 Gail and Phillip Raznick, Boulder, CO: In memory of Ashley Haarmann
 Lindsay Reich, Aberdeen, MD: In honor of Ronald Reich
 Alice and Peter Reuman, Estes Park, CO: In memory of Frank Shavlik
 Joan Russell and Chuck McElwain, Boulder, CO: In honor of Bob Jamieson
 Sunniva Russell, Bozeman, MT: In memory of Graham Russell
 Patrick Sandoval, Englewood, CO: In honor of Vanessa Sandoval
 Charles Schmidt, Oceanside, CA: In honor of Louise and Douglas Schmidt
 Jordan Smith, Longmont, CO: In memory of Jeremy Smith and CR Athey
 Anita Smith, Overland Park, KS: In memory of Sarah K. Kelly
 Kevin Soderman, Kokomo, IN: In honor of Josh and Kai Cisney
 Sue Sonner, Johnston, IA: In memory of Larry Sonner
 Robert Spelman, : In memory of Marvin Michael Richer
 Louella Stoever, Denver, CO: In memory of Jim and Mom
 Tess Swickard, Pine, CO: In memory of Peter McInerney
 Lynn Taulbee, Santa Fe, NM: In honor of Philip S. Taulbee
 Marcia Tavel, Estes Park, CO: In memory of George Hockman
 Marcia Tavel, Estes Park, CO: In memory of David Tavel
 Karen Teigland, North Liberty, IA: In honor of Bob Lundy
 Kathleen Terry, Aurora, CO: In memory of Edward and Pearl Terry
 Anastasia Thermos, Libertyville, IL: In memory of George Thermos
 Cheri Thomas, Estes Park, CO: In honor of Sheri Fedorchak
 Michael Trueblood, Cape Girardeau, MO: In honor of Cheley Campers John and Thomas Trueblood
 Louis Trujillo, Denver, CO: In memory of Louis Trujillo
 Matthew Tuttle, Richland, WA: In memory of James W. Tuttle
 Dale Valentine, Atlanta, GA: In memory of Eugene and Deane Valentine
 William Vanbark, Greenwood Village, CO: In honor of Joe Trey
 Terry Venard, Thornton, CO: In memory of Arthur Venard
 Jennifer Wagnon, Argyle, TX: In memory of Diane Irick
 Tracy Walker, Bedford, MA: In memory of Ruth Self
 Randall Weaver, Galt, CA: In memory of Thelma Saunders
 Hillary Weisman and Edward Scarvalone, Brooklyn, NY: In honor of Mira and Ori's anniversary
 Elizabeth and Kelvin Whited, Elkhorn, NE: In memory of Laura Allison Farris
 Jocelyn Whitworth, Colorado Springs, CO: In memory of Atlas Ilacqua
 Paula Willebrands, Newbury Park, CA: In memory of Ann Melva Racine
 James Williams, Opelika, AL: In memory of Meredith Williams
 Julie Wilson, Longmont, CO: In honor of Bruce and Sallie Brackman
 Susan Wingert, Kingwood, TX: In memory of Ashley Haarmann
 Sharon Winslow, Belvedere, CA: In honor of Carol Holden
 Harold and Andrea Wolf, Denver, CO: In memory of Donald and Connie Roy
 Donna Wood, Monument, CO: In memory of Jo Bourn
 Nicole Woods, Wichita, KS: In memory of Justin Louis Demand
 Jan Woodside, Lees Summit, MO: In memory of Everett and Corky Skinner
 Judith and Thomas Wright, Berthoud, CO: In memory of Nina Embich
 Patrick Wrobel, Naperville, IL: In honor of Jackson Wrobel
 Rosalie Yockey, Longmont, CO: In memory of Frank Dale Andersen
 Nancy York, Fort Collins, CO: In memory of Terry Palmer
 Jean Zerface, Minot, ND: In memory of Mark A. Reimers

IN MEMORY OF DEBORAH A. ADAMS

Jerry and Ellen Anglim, Grove City, OH
 Jim and Diana Bernard, Grove City, OH
 Connie Capers, Grove City, OH
 Rita Cleary, Lexington, KY
 Donald and Janet Cope, Loveland, CO
 Marla and Robert Eal, Galloway, OH
 John and Joy Egan, Grove City, OH
 Beth Goforth, Lexington, KY
 Steven D. Jackson, Grove City, OH
 Sandy Leis, Kenton, OH
 Helen Luegge, Marcellus, MI
 Johnna Miller, Grove City, OH
 Rob and Judy Mugnier, Grove City, OH
 Barbara Shy, Munroe Falls, OH
 James and Carol Waugh, Grove City, OH

IN MEMORY OF WALTER BANFIELD

Vinton Arnett, Hays, KS
 Mike and Donna Egan, Estes Park, CO
 Robert and Roberta Howard, Estes Park, CO
 Jim and Kelley Jackson, Estes Park, CO
 Jennifer Pustilnik, Fort Collins, CO
 Christina Santagati, Estes Park, CO
 Fletcher Shields, Omaha, NE
 Ronald Thomas, Estes Park, CO
 Roger and Jane Truesdale, Estes Park, CO
 Peggy Welsh, Alexandria, VA

IN MEMORY OF MYRTLE LOUISE BATCH

Christine Cason, Lakewood, CO
 Francis and Nancy Lefler, Loveland, CO
 Lorena Taylor, Billings, MT

IN MEMORY OF DAVID BLILEY

Ken Kramer, Atlanta, PA
 David Paterson, Fort Collins, CO
 Jennifer and Benjamin Pedneau, Santa Fe, NM
 Mitchell and Christel Willis, Erie, PA

IN MEMORY OF PAUL CLATTERBUCK

Joseph Ancona, Shawnee Mission, KS
 James Bjerkan, Leawood, KS
 Erica Bollerud, Takoma Park, MD
 Boy Scout Troop 91, Prairie Village, KS
 Linda Clatterbuck, Prairie Village, KS
 Catherine Cleary, Norborne, MO
 Edmund Cytacki, Lenexa, KS
 Thomas and Marci Forbach, Overland Park, KS
 John Freiermuth, Olathe, KS
 GM Fairfax Salary Retirees Club, Roeland Park, KS
 Peter Gogol, Prairie Village, KS
 Candace Hargrove, Kansas City, MO
 Nicholas and Barbara Hockman, Shawnee, KS
 Jerry Hotujac, Troy, MI
 Jessica Ingram, Prairie Village, KS
 Marsha Jacobs, Lincoln, CA
 Ronald Johnson, Overland Park, KS
 Michael Kruse, Wauwatosa, WI
 Joseph Landwehr, Kansas City, MO
 Peter and Alice Levy, Leawood, KS
 Pat McNally, Stillwater, OK
 Charlaire Milliken, Lucas, TX
 Kyle Murdock, Overland Park, KS
 Richard Neuburger, Lenexa, KS
 Thomas and Janet Noonon, Overland Park, KS
 Norman and Connee Onnen, Belton, MO
 Kristi Puder, Kansas City, MO
 Dennis and Lauren Ross, Overland Park, KS
 Nancy Salcedo, Fulton, MO

To make a gift to support Rocky Mountain National Park, visit RMConservancy.org, or call 970-586-0108

Carolyn Sellers, Prairie Village, KS
Eldon Shields, Leawood, KS
Becky Tucker, Overland Park, KS
David Vermillion, The Villages, FL
Lois Wimpey, Prairie Village, KS
Bill & Sharon and Sharon Yohn, Olathe, KS

IN MEMORY OF YVONNE JERGINs

Steve Alexander, Longview, TX
Ken and Martha Anderson, Round Rock, TX
Tanya Bishop, Austin, TX
Lisa Goddard-Gikas, Cedar Park, TX
Michelle Greening, Lufkin, TX
Jay Johnson, Katy, TX
Shirley Killgore, Henderson, TX
Donna King, Georgetown, TX
Kimberly Nesmith, Lampasas, TX
Lisa Richardson, Round Rock, TX

IN MEMORY OF HENRY MATHESON

Louis Brucculeri, Houston, TX
Shannon Kelly, Omaha, NE
Robert McKay, Omaha, NE
Joseph Mullin, Omaha, NE
Janette Nelson, Milford, IA
Louis Riley, Austin, TX
Linda Riter, Philadelphia, PA
Jennifer Ross-Tyrrell, North York, ON
Steven Taylor, Odessa, ON
Holly Wallace, Louisville, KY

IN MEMORY OF ROBERT N. MOCKLER

Erin Dempsey, North Plainfield, NJ
Karen Mockler, Tucson, AZ
Barbara and J. R. Stark, Poulsbo, WA
Elizabeth Zaleski, Lincoln, NE

IN MEMORY OF BERNARD MULLIGAN

Saunders Bohan, Virginia Beach, VA
Terrence Day, Chevy Chase, MD
Carole Frances Lung, San Pedro, CA
Diana May, Fort Collins, CO
Susan Shirley, Longmont, CO
Daniel Walth, Washington, DC

IN MEMORY OF STEVE NELSON

Ronnae Berry, Loveland, CO
Tiffany Briseno, Denver, CO
Dawn Marshall, Denver, CO

IN MEMORY OF CONNIE ROBERTSON

Virginia Channell, Loveland, CO
Grand County Bridge Club
Nicky Kenney, Denver, CO
Betsey Krause, Columbus, OH
Martha Osecky, Fort Collins, CO
John Tippet, Fort Collins, CO
Tae Yamaki, Fort Collins, CO

IN MEMORY OF DAVID "KAVIKA" VOLLMAR

Roberta Loney, Cuyahoga Falls, OH
Erik Vogt, Boulder, CO
Lisa Wade, Niwot, CO

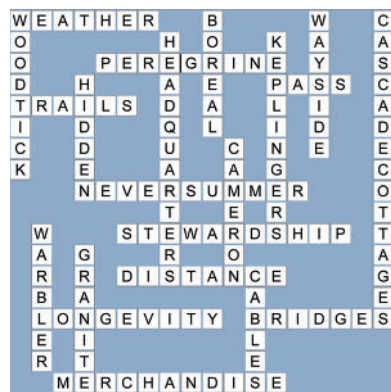
IN MEMORY OF JANE F. WHEELER

Joan Cox, Kersey, CO
Andrew Culver, Greeley, CO
Grace Pointe Continuing Care Senior Campus,
Greeley, CO
Chris Kindvall, Greeley, CO
Sharon Peters, Greeley, CO
Sylvia Verser, Parker, CO

ALL IN MEMORY OF MIKE WYGANT

Marla Becker, New Albany, OH
Cynthia Bowser, Sebring, FL
Rex Fenn, Columbus, OH
Muriel Mikelsons, Cape Coral, FL
Heather Reeder, Denver, CO
Steve and Kelly Szczepaniak, Whitehall, OH
Maureen and Melvin Wygant, New Albany, OH

Park Puzzler Solution



Florida: A COPY OF THE OFFICIAL REGISTRATION AND FINANCIAL INFORMATION MAY BE OBTAINED FROM THE DIVISION OF CONSUMER SERVICES BY CALLING TOLL-FREE, WITHIN THE STATES, 800-435-7352 (800-HELP-FLA) OR BY VISITING www.FloridaConsumerHelp.com REGISTRATION DOES NOT IMPLY ENDORSEMENT, APPROVAL OR RECOMMENDATION BY THE STATE. Florida Registration #CH47404. **Georgia:** A full and fair description of our programs and our financial statement summary is available upon request at our office and phone number indicated above. **Colorado:** Colorado residents may obtain copies of registration and financial documents from the office of the Secretary of State, 303-894-2860, www.sos.state.co.us/, Reg. No. 20063004207. **Maryland:** For the cost of copies and postage, from the Office of the Secretary of State, State House, Annapolis, MD 21401. **Michigan:** MICS #54862. **Mississippi:** The official registration and financial information of ROCKY MOUNTAIN CONSERVANCY may be obtained from the Mississippi Secretary of State's office by calling 888-236-6167. Registration by the Secretary of State does not imply endorsement. **New Jersey:** INFORMATION FILED WITH THE ATTORNEY GENERAL CONCERNING THIS CHARITABLE SOLICITATION AND THE PERCENTAGE OF CONTRIBUTIONS RECEIVED BY THE CHARITY DURING THE LAST REPORTING PERIOD THAT WERE DEDICATED TO THE CHARITABLE PURPOSE MAY BE OBTAINED FOR THE ATTORNEY GENERAL OF THE STATE OF NEW JERSEY BY CALLING 973-504-6215 AND IS AVAILABLE ON THE INTERNET AT: <http://www.state.nj.us/lps/ca/charfrm.htm>. REGISTRATION WITH THE ATTORNEY GENERAL DOES NOT IMPLY ENDORSEMENT. **New York:** Upon Request, Attorney General Charities Bureau, 102 Broadway, New York, NY 10271. **North Carolina:** Financial information about this organization and a copy of its license are available for the State Solicitation Licensing Branch at 919-807-2214. This is not an endorsement by the state. **Pennsylvania:** The official registration and financial information of ROCKY MOUNTAIN CONSERVANCY may be obtained from the Pennsylvania Department of State by calling toll-free within Pennsylvania 800-732-0999. Registration does not imply endorsement. **Virginia:** State Division of Consumer Affairs, Department of Agriculture and Consumer Services, PO Box 1163, Richmond, VA 23218. **Washington:** Secretary of State at 800-332-4483 or <http://www.sos.wa.gov/charities/>. **West Virginia:** West Virginia residents may obtain a summary of the registration and financial documents from the Secretary of State, State Capitol, Charleston, WV 25305.

REGISTRATION WITH A STATE AGENCY DOES NOT CONSTITUTE OR IMPLY ENDORSEMENT, APPROVAL OR RECOMMENDATION BY THAT STATE

To make a gift to support Rocky Mountain National Park, visit RMConservancy.org, or call 970-586-0108

Search and Rescue Tribute

Continued from page 1

The SAR team in action, pulling the raft out of the water, with Nate safely encased and secured, ready for the helicopter lift to the hospital.



The SAR rangers en route on Chasm Lake with Nate aboard

at the time as the base of operations for rescues on Longs Peak. Because of the proximity of the patrol cabin, Mike was able to arrive at the scene by noon — within 1½ hours of my fall.

While it was impossible to land a helicopter at the scene of the accident because of the steep terrain and windy conditions, Chasm Junction was acceptable, and after landing, they offloaded two rangers who were supplied with oxygen, morphine, IV fluids, a rope, and a litter, which would be used eventually to lower me 1,000' to the west side of Chasm Lake. After a challenging scramble around the rocky north side of Chasm Lake, the rangers arrived on the scene with their lifesaving supplies at 1 p.m.

Mike Pratt immediately hooked

me to the oxygen, injected me with morphine, and administered the IV fluids. I remember hearing Mike say “We got about 2 liters in him.” Mike continued attending to my needs as Vlado continued holding pressure on my neck. It was now 1:30 p.m., and Vlado had been holding pressure on my neck for a total of three hours by then. At one point, I said to Vlado, “My wife is going to kill me!” He told me later that he didn’t think she’d have the chance.

Vlado was finally able to release the pressure on the wound to assist Mike with wrapping bandages around my neck and under my arm.

I was loaded onto the litter, and to allow a controlled descent, the litter was attached to the climbing rope anchored above in the snow. I was lowered a total of 1,050' (600' across snow, then 200' over scree, with a final carry of 250' on snow and rock). This was a slow and tedious process, but efficient and well organized, taking about 1½ hours to arrive on the west side of Chasm Lake, at about 3 p.m.

As part of this well-coordinated rescue effort, at the same time, two rangers carried an inflatable raft weighing 80 pounds to the east side of Chasm Lake from the Longs Peak Ranger Station in just one hour — truly an amazing feat. The raft was inflated and rowed across the lake by one of the rangers, where I was loaded up and, accompanied by Mike, rowed to the east side of Chasm Lake. I’m told that this event makes me an official member of the Longs Peak Navy.

We arrived on the east shore at approximately 3:30 p.m. The winds had subsided, and another call was made for

the Flight for Life helicopter. I was flown to St. Anthony’s Hospital in Denver, which is a Level 1 Trauma Center. I was diagnosed with a partial tear of the subclavian artery that required five hours of surgery and 18 pints of blood (my total blood volume is 12.6 units). After surgery, the doctors explained that the next 12 hours were critical and that I was not “out of the woods” yet. There were three major concerns — ARDS (Acute Respiratory Distress Syndrome), infection, and rejection of the blood.

My wife, Karen, was notified about my accident at 3 p.m. by Sheridan Steele, the assistant superintendent of RMNP, who is a personal friend of ours. He intentionally minimized the extent of my injuries while explaining that a helicopter was being called. Sheridan called again at 6:30 p.m. to say that I had been flown to the hospital in Denver. Karen drove to Denver from Estes Park alone, fully expecting to bring me home, unaware of the seriousness or extent of the accident.

She was met at the hospital by the chaplain. Two hours into surgery, a nurse told her that it wasn’t going well and that she should prepare herself for the worst. I spent five days in intensive care and an additional five days in the hospital before being released on July 24, 1996.

I owe my life to the committed search and rescue staff of Rocky Mountain National Park and the park visitors who came to my rescue that day. The Rocky Mountain Conservancy supports the park’s Search and Rescue efforts by seeking funds specifically for Search and Rescue in the park. I can’t imagine a better way to support Rocky.

Wildfire Forest Response

Continued from page 11



Yellow banner is abundant in burned areas along trails and riparian corridors. It spreads by root sprouts and can quickly rebound after a fire.

of willows, alder, birch and aspen. Tall willow-beaver wetlands support higher biodiversity and increased sediment retention. They also buffer the effects of droughts and floods and are less flammable than drier riparian environments. (The section on riparian areas and willow could be its own story if this is too long).

In the burned lodgepole forests, wildflowers and other herbaceous understory are sparse, except in open areas along streams or in wet meadows. This is expected since these shady forests did not support lush understory before the fire to begin with. My non-scientific searches for lodgepole seedlings have shown me that they are there, but not plentiful in most of the areas I looked. While my curiosity gets the better of me whenever I visit burned areas in the park, I am withholding conclusions until we know more. Luckily, several scientific studies evaluating post-fire conditions have already begun. For one of these, we are working with Colorado State University to survey post-fire vegetation in burned forested areas, and evaluate the factors that aid in or suppress tree seedling regeneration.

While the studies go on, there is already one conifer species that is of

particular concern post-fire. Limber pine depend on Clark's nutcrackers to disperse seed and are a rare but important component of the forest. Limber pine populations are already stressed by beetle-kill and an exotic pathogen. Several limber pine stands burned in the 2020 fires, and if living neighbors do not exist within the caching distance of Clark's nutcrackers, then regeneration of these stands is unlikely. In these vulnerable areas, the park is pursuing planting of limber pine seedlings.

In the coming decades with climate change continuing and fires occurring more often, I expect what we see and experience in the park will change. The spatial scale of these effects could be immense, much of it inside wilderness areas. Park managers will likely need to accept most of the change regarding the post-fire ecosystems that develop and carefully prioritize if, and where, management actions are taken to resist or direct change.

Further reading:

Spatial and Temporal Variation in Historic Fire Regimes in Subalpine Forests across the Colorado Front Range in Rocky Mountain National Park, Colorado, USA on JSTOR

Rocky Mountain subalpine forests now burning more than any time in recent millennia | PNAS

A changing climate is snuffing out post-fire recovery in montane forests (colostate.edu)

Evidence for declining forest resilience to wildfires under climate change (umt.edu).

Tree regeneration following wildfires in the western US: a review | Fire Ecology | Full Text (springeropen.com)

Smokey the Beaver: beaver-dammed riparian corridors stay green during wildfire throughout the western United States (wiley.com)

Resist-Accept-Direct (RAD) - Climate Change (U.S. National Park Service) (nps.gov)

Resist-Accept-Direct (RAD)—A Framework for the 21st-century Natural Resource Manager (nps.gov)



Rocky Mountain Conservancy

Estee Rivera Murdock, executive director
Nancy Wilson, *Quarterly* editor
PO Box 3100
Estes Park, CO 80517
(970) 586-0108

This mink at Lake Estes was spotted enjoying a tasty trout that was bigger than itself for breakfast.

Visit RMConservancy.org
or call 970-586-0108

Nature Notes

A whirlwind summer is drawing to a close, and visitation in Rocky is through the roof. Still: elk and mule deer calves are losing their spots, house wrens are branching out on their own, tundra wildflowers have bloomed in profusion, and fireweed is taking hold in burn areas • Early one morning in June, in Horseshoe Park, Conservancy Member/Donor **Marlene Borneman** and her family observed several coyotes hunting for their breakfast, most likely a tasty selection of voles and mice that were hunkered underground. They sat and watched them for a while, and suddenly they started to howl and yelp loudly, almost melodically. The humans closed their eyes to listen to the captivating sounds, but the best part was when their 11-year-old grandson said “That was awesome grandma!” • Conservancy Member/RMNP VIP **Don Seedle** was opening his garage door in late July when he spotted a black-tailed weasel dragging a dead Wyoming ground squirrel across his driveway. The weasel ran off about 20 yards when the garage door noise frightened it, but then stopped, came back and continued dragging the dead ground squirrel away. The weasel was about half the size of the ground squirrel and while it wasn’t clear if it had been killed by the weasel or if it was roadkill, Don watched in amazement as the weasel managed something twice its size • In early August, RMNP Climbing Ranger **Jonah Durham** caught sight of a pine marten in the cliffs of the Narrows on Longs Peak at about 14,000 feet in elevation, while

assisting with a search-and-rescue effort • In June, RMNP Woodcrafter **Cory Johnson** was having lunch outside the Sign Shop in the park’s Beaver Meadows Utility Area where he saw a Cooper’s hawk fly into a tree and flush a surprised mourning dove out of the branches. The foiled hawk hung out watching nearby for a minute before it flew off to find another target • In early August, **Cory** also saw a pine sawyer beetle that was more than 2” in length, making it the largest insect he’d ever seen in this area • RMNP Park Interpretation Ranger, **Ricardo Escobar** noted that wild sunflowers are in full bloom in the montane meadows where lesser goldfinches can be seen feasting on wild sunflower seeds. If you hear the beautiful melancholic call of this goldfinch, he advises to scan the nearby wild sunflowers. Though they blend in well with their yellow plumage, the males’ black-crowned heads might just give them away • While on a summer trip to Wyoming, Junior Ranger **Sage Johnson** observed a garter snake eating a small mouse or vole in one gargantuan bite • RMNP Restoration Ecologist **Jim Bromberg** shares exciting news from the Ozone Garden! This specifically designed garden in front of the Beaver Meadows Visitor Center has been hosting monarch butterfly caterpillars that have been observed chomping on the milkweed plants in early August. Milkweeds are host plants for monarch butterflies as they lay their eggs on this plant and provide the primary food source for the caterpillars. While the species of milkweed at the park do not show visible signs of ozone damage,



*While hiking the North Inlet Trail from Bear to Grand Lake, Conservancy Member/Donor **Marlene Borneman** traveled through a lot of fire zones, and she found it eye-opening how devastating it was, but she also saw lots of new plant life, including fireweed. This large boulder got so hot during the fire that shards of rock starting “popping” off as seen in the layers scattered around the bottom of the boulder. To have witnessed the sight and sounds of this happening would have been phenomenal!*

some species of milkweeds in the U.S. are more sensitive to elevated levels of ozone. Monarch butterfly populations have been declining, likely due to loss of habitat, so it’s exciting that Rocky’s milkweeds are providing habitat for them. Stop by the garden to see if you can spot these visitors. Be sure to check out the exhibit next to the garden for more information on how ozone affects plants and you • **Be smart, and be well. Remember that nature grounds us in subtle but profound ways, so take time to notice the wild around you!**