



MAKING MEMORIES THROUGH THE SEASONS IN ROCKY

by Zachary Weibe

As spring yields to summer in Rocky Mountain National Park (though some may doubt its return), I find it meaningful to contemplate the joys of seasonal transitions, reminisce about experiences I've had in the park, and revel in gratitude for how the park has guided and molded my life.

My connection to the park began long before I was born when, in the 1950s, my grandparents bought a cabin in Grand Lake and started spending their summers there. My childhood was filled with visits to the cabin, and spending entire summers there with my family upon its passing to the next generation. This was a cabin in the true sense of the word — it was not winterized and use of the cabin was restricted to one of the best seasons in the park — summer.

I remember my first backpacking trip on the East Inlet Trail on the park's west side when I was barely big enough to carry the external-frame backpack that we rented in town. As my parents, younger brother and I plodded up to the Cat's Lair campsite, the intensity of my burning calves was matched by the burning wonder I felt exploring the natural world, and the intense desire to pursue more outdoor adventures. Catching my first trout, seeing my first pine marten, and visiting Lake Verna for the first time clinched it, and, in hindsight, it all represents a momentous milestone for how my life evolved from that point. I had no idea the impact this trip would have on my future.

Hello summer — hello summits! While challenging to pick a favorite, one summit stands out of the crowd and that is Mt. Baker in the Never Summer Mountains. Located at the southern end of the range,

Mt. Baker is stark and stunning from every angle, with its steep slopes and pointed summit. I've climbed it several times, but the most memorable ascent of all was with my future wife. Together we climbed Baker during a three-night backpacking trip early in our relationship — not a bad way to test compatibility, as it turned out. That trip was a catalyst that nurtured both our growing love for each other and our appreciation for the mountains as well. When our now-two-year-old son was born, we bestowed upon him the middle name of Baker, unabashedly hoping the name will forever connect him to this shared love of place. It will be a few years, but we can't wait to climb the mountain with him.

And then there's autumn. Brilliantly colorful aspen and tundra, cool temps, and the echoing bugles of elk in rut are just a few highlights of this magnificent time of year. To add to the abundance, September

(Memories continued on page 12)

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Dear Friends,

At the Conservancy, we spend a lot of time thinking about visitation at Rocky Mountain Park. Once again, the park is on track to break last year’s record-breaking numbers, retaining its dubious claim to fame as the third-most-visited national park in the country. While the NPS staff has diligently been working to manage this surge in visitation during the last few years, not a day goes by that we don’t see the impact of high visitation on park resources, whether it’s a long line at the entrance gate, more trash on the trails, or erosion on the roadside from visitors pulling off to take a coveted wildlife shot. The park is bulging at the gills with humans enjoying their public lands. Where’s a park-lover to go to escape the crowds? Hello Florissant Fossil Beds National Monument (FFBNM)!

Do I detect a quizzically raised eyebrow? With fewer than 80,000 visitors to the monument in 2018, Florissant Fossil Beds NM is one of the lesser-known public lands sites, and a great destination where you won’t have to fight the crowds. The Conservancy has had a long partnership with FFBNM, and while the organization doesn’t actively fundraise for the site, the Conservancy operates the Nature Store in the monument’s visitor center, and in 2018, we gave \$23,000 back to Florissant Fossil Beds NM from Nature Store proceeds. The funds ultimately supported youth interns, scientific research on the magnificent fossils the site protects, and more.

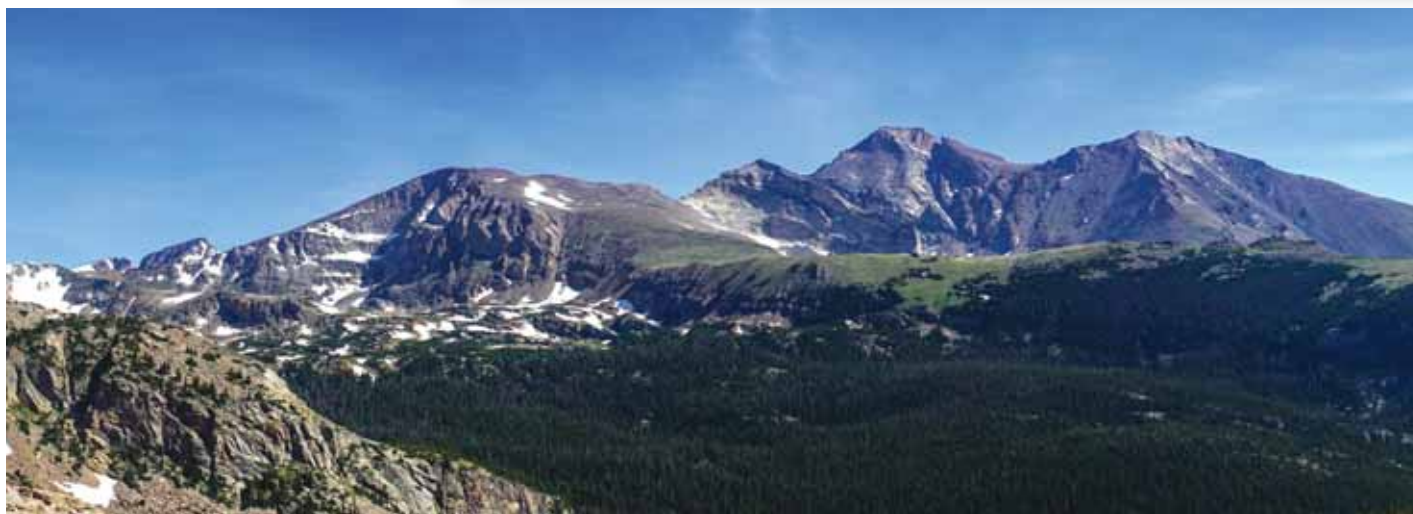
And if you need another reason to visit the monument this year, in 2019 the park is celebrating its 50th anniversary, and the NPS staff, along with its philanthropic partner, Friends of Florissant, are throwing one heck of a party to celebrate. Visit www.nps.gov/fffo/50th-anniversary.htm to see a full list of events happening there this summer and fall.

And for some immediate gratification, hike all of Florissant’s trails before Labor Day and you’ll win a special prize. Sound daunting? Not to worry, there are only 15 miles of trails, and some monument visitors have checked off the challenge in a single (sweaty) day. Make a day of it and explore the inspiring story of Florissant Fossil Beds NM where scientists and local residents fought to protect one of the most diverse fossil deposit sites in the world while setting an important legal precedent that still affects our country’s ability to protect national treasures for the greater good.

Happy Birthday, Florissant Fossil Beds!

Best,

Estee Rivera Murdock
Executive Director



Wild Basin panorama

Photo: Madeline Wilson

Welcome to New Rocky Mountain Conservancy Board Members



Christina Kraft, Estes Park, CO
A Colorado native, Christina graduated with honors from the University of Colorado–Boulder with a degree in Business Finance. Since 2013, after nearly a decade away, she returned to Colorado, and she currently is the President of Bank of Colorado in Estes Park, serves as the Vice Chair of the Estes Park Economic Development Corporation, Treasurer of Estes Valley Investment in Childhood Success, and is a volunteer for Junior Achievement at the Estes Park Elementary School.



Kim Skyclander, Loveland, CO
Kim's love for Rocky started when she worked as a trail guide for the Moraine Meadows stables when she was 19 years old. She worked as a wildlife biologist for the U.S. Forest Service for 16 years, and left to pursue a career in teaching. She taught natural resources classes for eight years at the Salish Kootenai College on the Flathead Indian Reservation in Montana, and environmental

education and interpretation classes at the University of Idaho. Kim has served as the executive director of Wolf Ridge Environmental Learning Center. Currently, she is the Associate Director for the Center for Collaborative Conservation at Colorado State University.



Walter Borneman, Estes Park, CO
Walt is the co-author of *A Climbing Guide to Colorado's Fourteeners*, and he served as the first chairman of the Colorado Fourteeners Initiative, and as president of the Colorado Mountain Club Foundation. Walt received his law degree from the University of Denver, and he is the president of the Walter V. and Idun Y. Berry Foundation, which funds post-doctoral fellowships in children's health

at Stanford. He is also the author of many books and articles about mountains, railroads, and the American West, as well as American military and political history.

Cover photo

Mummy Range High Country by Conservancy Donor Erik Stensland, Estes Park; ImagesofRMNP.com

Photos are always appreciated! Scenery, wildlife and wildflowers greatly enhance this publication, so get out there and take a hike!

Please send high-resolution images to nancy.wilson@RMConservancy.org by September 1 for publication in the 2019 Autumn Quarterly.

Thank You!

Ask Nancy

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.

Is Cabin 13, that is featured in the Conservancy publication *Bob Flame: Rocky Mountain Ranger, real? And does it still exist?* Cabin 13 (also known as the Cache la Poudre Cabin, the Poudre Creek Shelter Cabin, and the South Cache la Poudre Shelter Cabin), located at the confluence of Hague Creek and the Cache la Poudre River, was built about 1917. The sloped-roofed log cabin was about 12 x 12-feet in size and had a stone fireplace at one end. It has since been removed. Author Dorr Yeager's description of the cabin is an accurate one and he had undoubtedly visited Cabin 13 (as does his main character, Bob Flame) before he left Rocky Mountain National Park in 1935. His description corresponds with what we know from a 1927 photograph, though the size he gives us, "not more than ten feet square" is a bit smaller than in other sources. — *James Pickering, Estes Park historian.*

Are there any studies regarding the effects of global warming on white-tailed ptarmigan? The park has quite a few research projects that consider climate change effects on plants, animals and ecosystems. Colorado State University and U.S. Geological Survey researchers have been studying white-tailed ptarmigan in the park since 2010. Prior to this, annual surveys were conducted along Trail Ridge Road from 1966 to 2000. A severe population decline (over 66%) had been observed from the mid-1970s to 2000, during which time the number of young produced per female also declined. Since then, the numbers have remained low without any sign of population recovery. Many climate-related factors could be contributing to the low ptarmigan population seen in the park. Spring snow depth and timing of snow melt can alter breeding phenology (such as the when ptarmigan begin to lay eggs) which may lead to eggs hatching outside of times of peak food availability. Additionally, the timing and quality of snow and spring melt can also affect ptarmigan — their molt patterns are influenced by the amount of daylight, and earlier springs can mean their white plumage will stand out and make them more visible to predators. Other factors, including changes in habitat conditions and over-browsing of willow by ungulates may also be contributing to the low population numbers. At this time, ptarmigan in Rocky are now nesting on average 12 days earlier than they did in the 1960s (Wann et al. 2016). — *Continental Divide Research Learning Center Science Communication Coordinator Carissa Turner.*

Do trees pollinate to different degrees depending on the various weather and water conditions effecting them? Since cone-producing conifers do not produce flowers, they are not pollinated by insects; instead, they rely on wind and the open-air dispersal of pollen to fertilize cones. Like most plants, drought stress or competition with other plants for light or nutrients can reduce pollen production. Rain and temperatures can alter the volume of pollen production, but will not alter the beginning or end of a tree's pollen season. Abundant moisture (such as this spring of 2019) can spur a high yield of pollen and a banner cone crop, noteworthy on the coniferous trees as I write this now in late July. As we observe most every year, pine trees produce a lot of pollen — we see it blowing on the wind early every summer. This abundance is necessary because it is wind pollinated; the vast majority blows away, landing on our cars, decks and dressertops, and due to its buoyancy, on the shorelines of lakes and puddles. Only a small percent of the pollen produced by male cones lands on the female cones. — *RMNP Forest Ecologist Brian Verhulst.*



Townsend's big-eared bat

Photo: NPS

Researching Bats in Rocky: Exploring the Hard Questions of Survival

by Continental Divide Learning
Specialist Ashley Dang

If you're ever outside around dusk in Rocky Mountain National Park, you may catch a rare glimpse of one of the park's more mysterious evening residents. Holding the distinction of being the world's only mammal capable of self-powered flight, bats perform a nightly airborne ballet that surprises and delights summer park visitors who are lucky enough to spot them. For those willing to wait until the sun goes down, this incredible display of aerial acrobatics performed over park lakes and ponds in search of flying insects can be a magnificent and unique experience set against a breathtaking twilight landscape. Despite the beauty and magic that Rocky's bats can lend to the park's evening landscape, however, very little is known about these important mammals.

So why all the mystery? Bats are nocturnal, which means that the researchers studying them must work in the dark — literally. They use infrared video and acoustic bat detectors to monitor and document bat population densities, species diversity and behaviors. Meanwhile, well-placed mist nets allow researchers to temporarily capture bats to record physiological data, assess reproductive status and success, and check for disease. These techniques in turn allow researchers to monitor population health, movements, and other vital signs for bat populations. Despite the existence of solid research practices, however, very little bat research has been conducted in the park — until now.

In order to expand our knowledge of these enigmatic nocturnal creatures,

Rocky Mountain National Park is currently working with researcher Jeremy Siemers, a zoologist with the Colorado Natural Heritage Program at Colorado State University.

Initiated in 2018, Siemers' research approach is threefold, and aims to fill some of our existing knowledge gaps concerning bats within the park. Specific questions of bat diversity, abundance and health are of special interest to Siemers and his team, who began their research in the park this summer.

Other potential effects from climate change are not yet well-studied, but it is possible that changing climate conditions may increase the severity and frequency of extreme-weather events, which in turn impact bats' ability to fly, hunt, migrate or hibernate safely.

First, Siemers and his team are using acoustic monitoring techniques to assess bat diversity and assemblages at the landscape level within Rocky Mountain National Park and directly adjacent areas. Previous research in the park suggests that Rocky Mountain National Park is home to at least five species of bats. In

2012, retired NPS Regional Wildlife Ecologist Cay Ogden and her team of biologists surveyed bat species living within the park, documenting the presence of the long-legged myotis (*Myotis volans*), little brown bat (*Myotis lucifugus*), hoary bat (*Lasiurus cinereus*, one of Colorado's largest bats), the silver-haired bat (*Lasionycteris noctivagans*, arguably the state's most distinctive and attractive bat species), and the long-eared myotis (*Myotis evotis*).¹ Three more species, including Townsend's big-eared bat (*Corynorhinus townsendii*, a Colorado species of concern) are thought to be present, but still unconfirmed in the park. By using non-invasive techniques, Siemers will be able to provide the park and scientific community with a clearer picture of the diversity and abundance of bats without interrupting their natural behaviors and activities.

Second, Siemers and his team are using mist nets to capture and evaluate bats for white-nose syndrome (WNS) within the park. Nationwide, concern about bats is growing due to WNS, a disease caused by the dark- and damp-loving fungus *Pseudogymnoascus destructans* (*Pd*). *Pd* infection can be most readily observed by the fuzzy white growth this fungus causes on infected bats' faces and wings,² though in the early stages of infection, *Pd* cannot be detected through observation alone. Therefore, Siemers and his team will also use cotton-tipped swabs to sample the wings of each bat captured, after which the swabs will be sent to a lab and tested for *Pd*.

Though WNS has been blamed for millions of bat deaths nationwide since its initial detection in New York state in 2006 (with up to 90-100% fatality rate at some sites), no cases have been reported in Colorado to date. The rapid westward spread of the disease, however, has already brought WNS uncomfortably close to home. In 2016 and 2017, WNS was reported in our neighboring states of Nebraska and Kansas, and unconfirmed cases were documented in southeastern Wyoming. Bats that hibernate in large colonies are most susceptible to *Pd* infection, which disrupts the hibernation cycle of affected bats. This results in starvation, freezing and death when bats come out of hibernation before normal life-sustaining environmental conditions are met. The park's only known maternity colony, which houses more than 200 individuals, is composed of two species known to be susceptible to the *Pd* fungus: long-legged myotis and little brown bats.³ WNS and the fungus *Pd* are under study nationwide, but researchers have so far found no cure for WNS in bats. Siemers' efforts will provide valuable information about the presence (or lack thereof) of *Pd* in the park, as well as other measures of bat health.

Finally, Siemers and his team are utilizing infrared video to estimate the current abundance of bats in the park's maternity colony. With the effects of climate change becoming more pronounced, it is possible that changing climactic conditions may soon pose a real threat to bat populations



Researchers setting up a mist trap in the park. Photo: NPS

on a global scale. In 2010, University of Northern Colorado biologist and professor Rick Adams (who is also one of the country's leading experts on bats) performed research studying bat reproductive success. Adams' results, which utilized mist netting techniques within the park and surrounding Front Range region, correlated lowered stream discharge rates with diminished reproductive success in several Rocky Mountain bat species.⁴ His results indicate that regional climactic change that increases drought conditions and lessens snowpack could have negative effects on local bat populations. Siemers' current work with the park's maternity colony will provide the park with information on the existing abundance and success of reproductive females within the park, which will ultimately help to inform park management decisions.

Other potential effects from climate change are not yet well-studied, but it is possible that changing climate conditions may increase the severity and frequency of extreme weather events, which in turn impact bats' ability to fly, hunt, migrate or hibernate safely. As global temperatures change, regions that formerly provided hospitable places for bats to undergo their winter hibernation may begin to shift.⁵ It is currently thought that most Rocky Mountain bats likely hibernate locally

during the winter, but little is known about western bat populations' winter habitats in general. Such gaps in our understanding must be addressed if bat conservation efforts are to be successful.

While much about the park's resident bats might still be shrouded in darkness and mystery, dedicated park partners and researchers such as Jeremy Siemers are stepping up to answer the call for deeper examination into the lives of our local bats. In the meantime, keep your eyes on the skies for these beautiful, elusive creatures!



A Harp Trap set up behind the Holzwarth Mama Cabin. Photo: NPS

Along with assisting with science communication and research programs at the RMNP Continental Divide Learning Center, Ashley Dang also leads learning programs including the park's Pathways to Parks internship program, the Costa Rica Science Exchange (in partnership with the Estes Park Environmental Center), and the Parks as Portals to Learning environmental history workshop.

References

- 1 Colorado Bat Working Group. *Bats of Colorado*. <https://cnhp.colostate.edu/cbwg/batList.asp>
- 2 U. S. Fish and Wildlife Service. *What is WNS?* <https://www.whitenosesyndrome.org/>
- 3 Adams, R. A. and M. Willey. 2011. *Site visit and census of bats at Never Summer Ranch, Holzwarth Historical Site, 1 June and 9-10 August 2010*. Report to Rocky Mountain National Park. University of Northern Colorado, Greeley, CO.
- 4 Adams, R. A. 2010. Bat reproduction declines when conditions mimic climate change projections for western North America. *Ecology* 91(8). 2437-2445.
- 5 Sherwin, H. A., Montgomery, W. I., & Lundy, M. G. 2013. *The impact and implications of climate change for bats*. *Mammal Review*, 43(3), 171-182.

Support research in Rocky by donating to the Conservancy's Research Fund at:
RMConservancy.org, or call 970-586-0108



Photo: Joan Nesselroad

Rocky Mountain Conservancy — Field Institute Celebrate Summer with a Class in the Park!

A Grand Lake Area Class

Wild Mushrooms & Fungi of RMNP

Jon Sommer August 10 \$80 per adult ages 16 and up
Learn the basics of mushroom identification, their important role in the ecosystem, and a brief overview of the fungal kingdom.

Write Your RMNP Story

Mary Taylor Young August 10 \$80 per adult ages 16 and up
Explore those special memories of Rocky through writing, and spend the day outdoors at a beautiful setting in the park. Have fun writing a story, a memoir, a poem, or even a kid's book, with a professional writer.

Sketching with Colored Pencil

Suzie Garner August 10-11 \$160 per adult ages 16 and up
Enjoy a day field sketching with colored pencil in a sketchbook. Learn the different types of colored pencils and how to use them to their fullest potential.

Aquatic Mammals of Rocky: Beaver, Muskrat & Moose

Jared Gricoskie August 16 \$60 per adult ages 16 and up
Explore the eastern side of Rocky Mountain National Park's lakes and riparian habitats, and learn how beavers have shaped Rocky, and why they have declined. We will also look for muskrats and moose!

2019 Field Institute Catalog



Need a class catalog?

Send us an email at:
info@fieldinstitute.org.

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A Grand Lake Area Class

The History of Moose in RMNP

Jeff Connor August 17 \$80 per adult ages 16 and up
Learn about the natural history of this large ungulate, and its history in the park management story, along with the natural history of the Kawuneeche Valley, and how moose fit in.

You can help!

Research Survey on Single-use Plastics in National Parks and Protected Lands

A group of MBA students from Colorado State University that is researching innovative ways to reduce single-use plastic food packaging in the outdoors has requested your input. The team is working to develop a reusable alternative to address the issue around plastic waste produced by trail foods, and they are currently researching business and consumer willingness to adopt more eco-friendly behaviors.

This survey is part of their research efforts. Take a minute and help advance knowledge and best practices in public lands.

https://colostate.az1.qualtrics.com/jfe/form/SV_6PahaMzJyMcokHb

Jeremy Worrell

Graduate Research Team Member

MBA Candidate in Global, Social, and Sustainable Enterprise (GSSE)

Colorado State University



Park Puzzler

by RM Conservancy Member Joel Kaplow

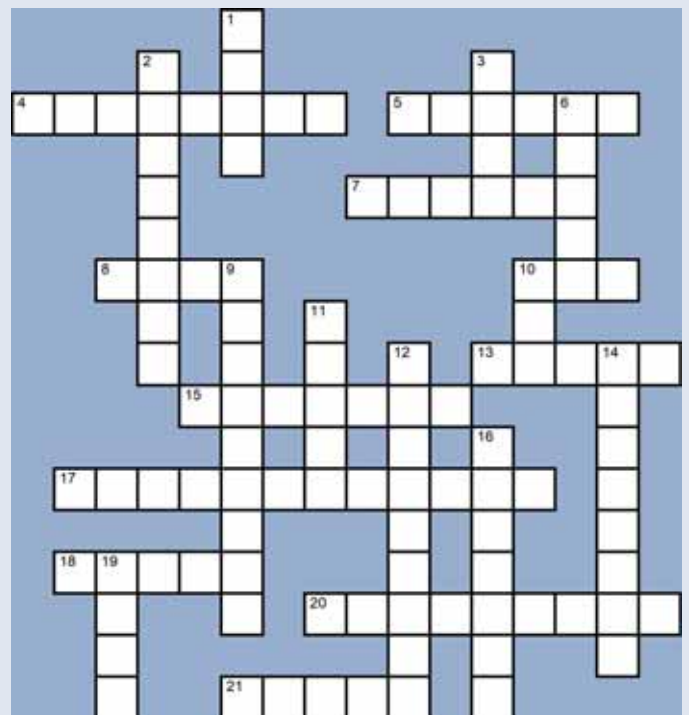
Across

4. Roughly one-third of RMNP is above _____. *Rocky Mountain High*, indeed!
5. The park's snowball saxifrage, not surprisingly, has a white rounded flower cluster. Surprisingly, the Latin *saxifraga* means "rock-breaker," possibly named such for its medicinal use for breaking up kidney ____.
7. The eerie, otherworldly morning mist that hangs over Grand Lake easily explains why the Ute name for it translates to _____ Lake.
8. Both bull and cow moose have a dangling, fur-covered flap of skin hanging down from their chins called a dewlap, also known as a _____. It may come into play during romance.
10. The current one-day entry fee into Rocky for an auto is \$25. For another _____ bucks, you can get a one-week pass.
13. There are six officially named glaciers in Rocky, though they are just runty remnants of the monsters they were during the Pleistocene Epoch. North to south they are Rowe, Sprague, Tyndall, Andrews, Taylor and _____. The last one is next to Eagles Beak on the west end of Wild Basin.
15. All of RMNP's squirrels and chipmunks have something in common with (most) humans; they are active during the day, and sleep at night. They are not nocturnal, but _____.
17. This term refers to the different varieties of living organisms in an area, and Rocky has lots of it! What is it?
18. Colorado is home to at least 20 peaks that are officially named "_____ Mountain." RMNP claims one, and it is found about three miles due north of Grand Lake.
20. Colorado had a load of late-season snow in June 1995 in the high country, forcing Longs Peak to be closed all year to non-_____ climbers. You could give it a shot only if you were armed with crampons, ice axes, etc. Will 2019 maybe a rerun?
21. During the Great Depression of the 1930s, FDR instituted a program that employed workers for building trails, roads and buildings all over the U.S., some of which are still in use in the park. These hardworking folks comprised the Civilian Conservation _____.

Down

1. "Keep close to Nature's heart ... and break clear away, once in awhile, and climb a mountain or spend a week in the woods." — naturalist John _____
2. When a river flows slowly and unsteeply, it is said to be "at grade." Due to a quirk of physics, these rivers tend to form a serpentine pattern with many consecutive S-curves. This is easily seen in sections of the park's Colorado and Fall rivers from a satellite view. What are these curves called?
3. Colorado is home to eight national monuments, which were signed into existence solely by a POTUS, and _____ national parks, which also needed tandem approval by Congress.
6. Who is the executive director of the Rocky Mountain Conservancy? It's _____ Rivera Murdock.
9. The giant chunk of real estate that Thomas Jefferson bought for a song from France included the land of present-day RMNP. The _____ Purchase of 1803 was such a deal!
10. Some of the oldest rocks in the U.S. can be found in Rocky, and are almost _____ billion years old. Rock on!

11. The park's sparrows, finches, wrens, dippers, thrushes, warblers, crows, jays and swallows belong to a group known as passerines, which are perchers. These birds can grasp thin branches because each of their claws has _____ toes facing forward, and one important toe that faces backward.
12. Pikas, those cute critters hopping all over boulders around treeline, do not hibernate. To survive the winter, they forage for munchies (mostly non-woody plants) during the short growing season on the tundra, and store the goodies in piles in sheltered spots. What are these piles called?
14. Traditionally, Rocky's snowplow crew tries to clear Trail Ridge Road by _____ Day Weekend. The target was missed this year, as TRR opened on June 5. Then the middle section was closed due to snow and ice on June 21, the first day of summer. Then it was reopened later that day. Then it was reclosed on June 22, the second day of summer, due to snow and ice. When did summer really start?
16. "Every green natural place we save saves a fragment of our sanity and gives us a little more hope that we have a future." — writer/environmentalist Wallace _____.
19. The first mention by a European of the present name of our wondrous peaks was by Jacques Legardeur de Saint-Pierre, who called range the "Montagnes de Roche," or "_____ Mountains" in his 1752 journal.





One of the four captive toads being measured and evaluated prior to receiving its radio-telemetry belt transmitter.

by NPS writers; photos: NPS

Lead Agency: Rocky Mountain National Park
Collaborators: U.S.G.S., Colorado State University, F.W.S., Colorado Parks and Wildlife, Colorado Natural Heritage Program and the Rocky Mountain Conservancy

The boreal toad (*Anaxyrus boreas boreas*) is currently listed as an endangered species in the state of Colorado, and is one of five amphibians native to Rocky Mountain National Park (RMNP). Only four amphibians are still present in the park, with the northern leopard frog last seen in 1974. Boreal toad populations and breeding success in their native habitat have declined over the last 30 years, and the species is now absent from much of its historic range within the park. Amphibian surveys and park records collected since 1915 document boreal toads breeding at 20 sites and present through observation at four additional sites (Corn et al. 1997, park files). During the past 15 years, breeding has only been documented at six sites within the park.

Batrachochytrium dendrobatidis (*Bd*), a fungal pathogen which causes a fatal skin disease in amphibians, has been credited as the cause of the recent and rapid declines of boreal toads within RMNP. The populations in the North Fork Drainage (Kettle Tarn and Lost Lake) were considered consistent breeding sites until a significant decline was recorded in toad

Boreal toad populations and breeding success have declined over the last 30 years in their native habitat, and the species is now absent from much of its historic range within the park.

reproduction and survival between 1995 and 1998 (Muths et al. 2003, Scherer et al. 2005). *Bd* was first detected in the North Fork Drainage in 1998 and is likely responsible for this decline.

RMNP is a member of the inter-agency Boreal Toad Recovery Team. The Team produced the Boreal Toad Conservation Plan and Agreement that addresses specific guidelines for collection of toads, toad transport, captive-rearing, reintroduction, pre-restoration surveying, and post-restoration monitoring (Loeffler 2001). RMNP is following guidelines outlined in this plan for any actions taken related to boreal toads.

Following the guidelines in the plan, in 1995, RMNP started contributing toad stock to the captive breeding program at the Colorado Parks and Wildlife (CPW) Native Aquatic Species Restoration Facility in preparation for potential restoration activities. Initially, 23 sites were considered. During the spring and summer of 2004 through 2007, Rocky and the U.S.G.S. surveyed eleven of the most promising historic boreal toad sites in order to choose a suitable reintroduction location. These efforts fulfilled the requirement of three years of surveys prior to reintroduction for

Research in Action: Reintroducing Boreal Toads in Rocky Mountain National Park



One of the captive toads is evaluated after receiving a Passive Integrated Transponder (PIT) tag that allows for individual toads to be identified.

the sites that were found to be suitable. Of the eleven sites, five were eliminated due to the presence of *Batrachochytrium dendrobatidis* (*Bd*): one was too close to an existing boreal toad population, one was eliminated because of the presence of known predators, and one was eliminated because of its high elevation. Two of the three remaining sites, Glacier Basin and Boulder Brook, are in close proximity and have thus been combined into one reintroduction site.

Red Mountain was chosen as the reintroduction site in 2007, and reintroduction efforts took place in this site until 2017. This site is still monitored, but results to date indicate that this reintroduction attempt was not successful. The most likely cause is the presence of *Bd* which was first detected in 2008.

Once the Red Mountain reintroduction concluded in 2017, the park needed to identify the next site for reintroduction, and in 2016, efforts to re-evaluate the

Boulder Brook/Glacier Basin site began. One survey was conducted in 2016 and an additional four surveys were conducted in 2018. During these surveys, no chorus frogs were captured for disease testing. The amphibian chytrid fungus is recognized as one of the largest drivers in whether boreal toad reintroductions in Colorado will succeed or fail. An alternative way to sample for *Bd* is to filter water from the site and then test the filters for *Bd*. Twenty filter samples were collected from the Boulder Brook/Glacier Basin area in 2018 and no *Bd* was detected. Water filter samples are imprecise in detecting *Bd*; therefore, before tadpoles are reintroduced additional sampling using sentinel boreal toads (excess hatchery stock) will take place. Site visits with multiple collaborators during the fall of 2018 identified two specific locations to reintroduce tadpoles, both in the Boulder Brook site. Toads are expected to expand throughout the Boulder Brook and Glacier Basins sites if the reintroduction is successful.

2019 Actions: In May and June, 2019, four excess captive boreal toads of Larimer County origin from the Colorado Parks and Wildlife Native Species Aquatic Restoration Facility were fitted with radio-telemetry belt transmitters and then introduced into the Boulder Brook site. At least two times per week, toads are being relocated and swabbed to test for *Bd*. If *Bd* is detected, reintroduction efforts will be suspended, and an alternative site will be identified. If *Bd* is not detected, up to 5,000 tadpoles will be reintroduced into two separate ponds at the Boulder Brook site.

Prior to reintroduction of the tadpoles, site temperature and pH will be communicated to the hatchery. During the drive to the reintroduction site, tadpoles will begin the acclimation process to site temperature. Once the hatchery truck arrives onsite, tadpoles will be transferred to five-gallon bags with approximately one gallon of water and super saturated oxygen. Bags will be loaded into backpacks or hand carried less than ¼ mile to the reintroduction site. Bags will be opened for air exchange and partially submerged in the site so that the temperature acclimation process will continue. The pH in the bags and site water will be measured and if

there is more than a 0.5 difference, small amounts of water will be exchanged until the bag and site conditions are within 0.5 pH and 5° Fahrenheit.

Once these parameters are reached, a test release of five tadpoles will occur. If no distressed behavior is observed, then the remainder of the tadpoles will be released. Released tadpoles will be monitored for up to one hour on the day of release and two times per week for the first month following the release. Then monitoring will continue one time per week through metamorphosis.

2020-2025: In future years, the site will be checked for one-year old toads and reintroduction will proceed for three years, with monitoring occurring for at least four years after the last year of reintroduction.

Boreal toads continue to decline in the park. The amphibian chytrid fungus is present at five of six breeding sites. Once a breeding site fails to breed for five consecutive years it is no longer considered an active breeding site. One breeding site will likely officially be “lost” this year as the last time breeding was confirmed was in 2014. Two of the remaining sites have unreliable breeding and will likely be lost in the next five years. Despite these challenges, reintroduction of toads can work and lead to robust populations.



Rocky Mountain Conservancy staff Carolyn Carlson (left) and Sue Pinkham (right) with NPS project manager RMNP Biologist Mary Kay Watry (center), attend the preparation for the introduction of four boreal toads in Rocky in June.



One of the four captive boreal toads after being fitted with its radio-telemetry belt transmitter.



Members of the project team visit the reintroduction site prior to the release of the captive toads.

There is also encouraging research efforts that target the primary cause of decline, *Bd*. Reintroduction efforts are a worthwhile investment to maintain a boreal toad presence on the landscape and a part of park ecosystems until longer-term solutions to address the disease are found. The four boreal toads introduced at the restoration site on May 31 continue to do well and are checked one to two times per week. These toads are swabbed to identify whether or not there is *Bd* at the site and the swabs were submitted for analysis in mid-July.

If *Bd* is not found in these samples, we will reintroduce tadpoles in early August and for the next several years. If evidence of disease is found, we will determine the next suitable sites for reintroduction and work toward additional reintroductions in the future.

The Rocky Mountain Conservancy has donated \$15,000 to Rocky's Boreal Toad Reintroduction project.

Rocky's Education and Outreach Intern Class of 2013: Where Are They Now?

by Katie Phillips, RMNP Education and Outreach Program Manager

"Rocky Mountain National Park seeks interns of exceptional ability, who think and act creatively, who have demonstrated communication and problem solving skills, and who are fully computer literate. Candidates must be dedicated to and experienced with learner-centered education," reads the recruitment flier. "Internship duties include preparing and facilitating environmental education activities, such as leading snowshoe hikes and outdoor ecology-based school programs, to a variety of diverse audiences."

Does this sound like a great internship opportunity? In 2013, these exceptional young women thought so too, and they challenged themselves by beginning their careers as interns with Rocky Mountain National Park's Education and Outreach program.

Supported by more than \$700,000 in donations to the Rocky Mountain Conservancy's Next Generation Fund since 2006, Rocky's Education and Outreach program has offered internship experiences to students and recent college graduates since 1993. To date, more than 150 interns have completed the program. And while the internship program has grown in capacity with the popularity of the program over time, the foundation of the experience has changed very little, and interns join the program fresh-faced, eager, wide-eyed, and ready to hit the ground running.

Internships always begin with training, and the training offered by the Education and Outreach program is rigorous and well-rounded. Whether for winter or the warmer-weather seasons, each intern experiences an orientation to the program, the park, student learning styles, multiple education techniques, group management, and team building. After training, interns are expected to perform at a high level — almost the same as the paid Education Ranger staff they work alongside. Following shadowing and mentor-feedback experiences, all of these enthusiastic young people rise to the occasion, and after completing their 6-10 – month internship, they confidently leave the program with the skills, knowledge and leadership abilities they need to excel at other education organizations or in their first paid ranger position.

The young women featured here are no exception — they have done some amazing things! They join the ranks of past interns who have gone on to be rangers, classroom teachers, nonprofit program directors, and park superintendents.



Meredith in the field with students

Julie Watson

After completing her internship at Rocky, Julie took a full-time permanent position as a naturalist at Land Between the Lakes National Recreation Area in western Kentucky. In that position she worked with captive animals, led canoe and kayak tours, led hikes, created interpretive materials, and was part of the Red Wolf Species Survival Program. A year later she relocated to the St. Louis area to work for the National Audubon Society as an environmental education manager at the Audubon Center at Riverlands. Three years later she was on the road again to Reno, Nevada, to be the statewide wildlife education coordinator and volunteer coordinator for the Nevada Department of Wildlife. In this position she has the opportunity to create new statewide wildlife education programming specifically to be used or facilitated in classrooms. She counts herself fortunate to still be working in conservation education and recognizes her internship at Rocky as having helped get her where she is today!



Julie leads volunteers on a wood duck nest box monitoring project.



Intern Rachel Brooks leads students on a winter ecology field trip.

ages 6-months – 8-years. The focus is to get kids outside and playing in nature, which helps with developing a variety of social and physical skills. This project is near and dear to her heart as she can also enjoy these classes with her 4-year-old son and 1-year-old daughter.

Lana Morris

Taking time to travel and climb was Lana's goal after her internship — something she did quite well while living in her van. More recently, Lana's focus turned to school and a professional career, with weekends of climbing and van camping. Lana just completed her Masters in GIS from North Carolina State, and has started her career as a GIS analyst for the California Department of Transportation (CalTrans) in Bishop, CA. Her work involves geospatial analyses, geospatial database management, and web map development for current and future projects. The majority of these projects are related to the potential environmental impact of transportation development.



Intern Lana Morris builds an ecosystem with a group of students.

Meredith Dennis

Meredith has just started her first permanent job as a physical science technician at Big Bend National Park. After her internship experience at Rocky, she went on to work at several other parks, including Dinosaur, Devils Tower, Zion and Craters of the Moon, gathering a wide range of experiences from this variety. During her park travels, she was involved with plant restoration, exotic plant management, museum curation, cave monitoring, bear management, elk and moose surveying and even bat catching. Meredith credits the communication skills she gained through the environmental education internship program at Rocky to be the bedrock of her success.

Rachel Brooks

Rachel is the curriculum manager at Cal-Wood Education Center near Jamestown, Colorado, where she has worked in multiple roles since completing her internship at Rocky. Cal-Wood hosts students and teachers from several Front Range school districts for 2-day, 3-night outdoor educational experiences. Their goal is to provide customized programs for each school to make sure they are connecting learning to the classroom and state standards. Rachel's role is to help teachers choose what program best fits their students and then prepare the program instructors. Rachel lives in Longmont, Colorado, with her husband and two kids, and her newest endeavor is becoming a Tinkergarten Instructor which is a nature play group for young children

High-country Drama: Meet Some Plow Operators in Rocky



A snowplow operator view in Rocky Mountain National Park near the Gore Range Overlook, May 14, 2019.

Photo: NPS

by Shelley Hall

It's summer, and as people make plans to hike or drive through the park, road access in Rocky Mountain National Park is an important element in planning a successful trip. Trail Ridge Road, of course, is a major player in most visitors' plans, and the opening of this road is watched closely by many people.

Handily, the park posts Trail Ridge Road conditions as well as webcams on their website www.nps.gov/romo/learn/photosmultimedia/webcams.htm, and the conditions are regularly updated on social media, newspapers and television.

In particularly snowy years, I found these updates very helpful with planning my winter activities in the park. As winter became spring and early summer, these updates continued to be just as important because of the widely variable conditions on Trail Ridge Road. As time went on, I became interested in what it was like for the park plow drivers in years with particularly high snowfall, or high drifting, so I asked two RMNP plow operators to share their stories. Doug Grice has worked for Rocky for 30 years; 18 of them with trail crew and road crew in Estes Park, and 12 years as an equipment operator in the Colorado River District. Arnie Johnson has worked for Rocky for 25 years as an engineering equipment operator. Here is what they told me:

What was your most interesting plow experience?

Doug: Most years we host a "media" day when most of the TV stations, photographers, newspapers and dignitaries come up to watch us work. Everything is carefully planned out. Several years ago, in mid-May, there was a large group that spent a couple of hours seeing how we plowed the road. As we worked, we could see storm clouds moving toward us, and the wind began picking up. RMNP dispatch informed us that a weather system was headed our way, so everyone was turned around and headed east to Rainbow Curve. The crew continued plowing, blowing and grading the snow, but within minutes a windstorm set in that

stopped us in our tracks. The RMNP road crew all had to stop working and park the machinery as visibility was reduced to zero, and what seemed like hurricane-force winds continued for almost two hours. Yet, the entire time you could look up and see blue sky. Eventually the storm passed, and we were able to regroup and make our way down. This is a great example of how quickly things can change at high altitude.

Arnie: Sliding sideways down towards the Alpine Visitor Center parking lot exit without a place to stop in – in a brand new snowplow.



Photo: NPS/John Marino

What was the scariest experience on the road?

Doug: I can honestly say that there have been few things I would call scary. Attention-getting, yes. But preparation, experience and patience keep most situations from rising to the scary stage.

Arnie: Operating a dozer behind the Alpine Visitor Center by the generator house and having a cornice break at my tracks and seeing light and the bottom of the canyon where they shouldn't be — below my feet.

What your most rewarding experience?

Doug: Always, the most rewarding experience is getting Trail Ridge Road open, whether it is the initial opening or reopening it after a closure. My coworkers and I are passionate about doing our job so that visitors can see what we

see every day. Nothing is more satisfying to me than watching them see what I see.

Arnie: Getting Trail Ridge Road open on time, safely and without injury while working as a team, with my fellow operators respecting each other's years of experience, and their knowledge of the road and weather conditions.

How do you decide if it's safe to plow, and if not, what conditions prevent plowing?

Doug: The decision to plow or not plow largely depends on common sense, with safety always being the number one priority. Low - or no - visibility, high winds, black ice, or even a bad weather forecast are all factors that discourage our efforts to continue plowing. Additionally, RMNP policy requires a minimum of two operators working together, on both sides of the park. If anyone is not comfortable with the working conditions, then snow removable operations usually stop until the next day. There are times, however, such as during a reopening, when we will push the plowing parameters a bit if it can be done in a safe manner.

Arnie: Wind, visibility, and depth of snow are all factors, as is just seeing how far up the road we can drive in a plow truck. I'm on call year-round for plowing and anything else related to keeping the roads clear, be it flooding, rocks or emergency issues.

What is your favorite place in the park?

Doug: As far as my job is concerned, Old Fall River Road is in a class by itself. Its history fascinates me. The work put into this road more than 100 years ago gives everyone who drives the nine miles a chance to go back in time. And to think it used to be a two-way road, with people driving their Model As and Ts. I am so proud to be able to take care of this magnificent road.

Arnie: Hiking up to Little Yellowstone or Lulu City in the fall, and anyplace I can watch wildlife.

Shelley Hall is a resident of Vail and an enthusiastic supporter of the work the Conservancy, park employees and volunteers do.

(Memories *continued from page 1)*

also marks the anniversary of my wedding. Many years after our three-day backpacking trip, we held our ceremony in a meadow with backdrop views of the that first mountain we climbed together. It was a perfect fall day and we'll cherish that memory forever.

My first job after college was conducting elk and vegetation management research in the park, and each year autumn proved itself to be the best time of year. I was working primarily in elk habitat, and during that time had some remarkable encounters with this native ungulate.

On one particular day on the slopes above Horseshoe Park, I was collecting data on a ridge situated above a small drainage. I gradually became aware that the sound from an aggressively bugling elk was getting closer and closer. The topography was such that, before I knew it, the bull was thirty feet away with only a large ponderosa pine blocking his view of me. As I crouched behind the tree, I could literally feel the elk's bugle reverberate in my body. Lucky for me, while I think he caught my scent, the bull's more pressing agenda superseded his concern for my presence that day. He and his harem continued about their day and I breathed a sigh of relief, appreciating this unique experience of the elk rut.

After a second year of college I decided to take a semester off to live in Grand Lake. That semester turned into four incredible years and gave me the opportunity to enjoy the west slope during all the seasons, but my recollection of that time is framed by one season in particular — winter. During the winter, the park transforms into a magical place blanketed in snow and largely devoid of the throngs of summer visitors. It was especially quiet for me since I opted to live in the family (may I remind you — non-winterized) cabin, and, since the whole neighborhood was without water during this season, I had very few neighbors. The challenges that came with this housing decision were myriad, but certainly character-building, and only deepened my connection to the area.

Winter is when I revel in the back-



Zac on his first backpacking adventure.



Kawuneeche Valley views — home is where the heart is.

Photo: Joan Nesselroad

country skiing that's found in this park. I've logged many incredible miles on skis, from telemarking at the old Hidden Valley ski area to cross country

skiing in the Kawuneeche Valley, but one of the most distinct skiing memories took place at a parking lot. Upon returning to the Colorado River Trailhead after a ski tour with my brother, we spotted a moose cow and calf that were enthusiastically licking salt from vehicles in the parking lot. We climbed into our own car but decided to linger, with the hope that the moose would choose our car to slather next for that unforgettable wildlife experience. Unbeknownst to us, there was actually another cow and calf pair nearby, and lo and behold, they both began approaching the parking lot. We watched in awe as the two cows reared on hind legs and fought with their front legs before all four moose ran away. One of our ski poles was annihilated in the commotion, but it was a small price to pay for the opportunity to witness the wild nature of some of the park's winter inhabitants.

And spring, that elusive season. When it finally comes it's a magical time of new growth and excitement in the park. High-flowing rivers, warmer tem-

peratures, and the opening of Trail Ridge Road (eventually), and suddenly it's possible to pursue several outdoor passions in a single day. Here's a favorite marathon day for me: morning rock climbing at Lumpy Ridge on the east side, then driving over Trail Ridge, pausing to ski a run from the Gore Range Overlook, and finishing the day kayaking on Grand Lake, with idyllic views of Mt. Craig (Baldy). Days like this highlight the breadth of what the park has to offer, and spring kickstarts all kinds of possibilities for recreation and enjoyment.

My connection to the park seasons and its many facets has influenced and guided the direction of my entire life. The passion I have for land conservation and ecosystem protection was realized and nurtured in the park and led me to pursue a career in public land conservation and management. I hope to play a role in giving generations to come the same outdoor experiences I've been fortunate enough to have.

My love for the park has also led to another role I'm honored to have — I'm now serving as a board member for the Rocky Mountain Conservancy. The support that the Conservancy brings to the park in a multitude of ways reflects some of my most strongly held values, and it's a privilege to contribute to its success. With all that the park has given me, there is a debt that can never be paid, but I consider it my duty to try.



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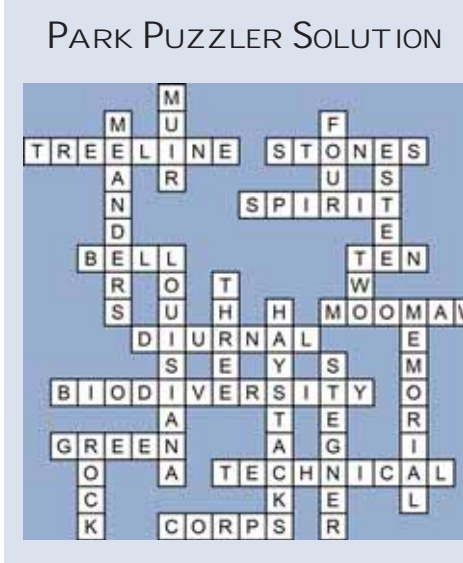
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Working (Oh-so Gently) to Protect Rocky's Delicate Resources

by RMNP Trails Staff

If you have been out hiking in Rocky Mountain National Park, you may have come across some unconventional park employees on the trail — llamas. While it may come as a surprise to some to see these four-legged staff members working alongside park two-leggeds, these splendid creatures are one of the oldest domesticated species in the world. Native to the “Altiplano” of the Andes Mountains in South America, a high-elevation ecosystem similar in many ways to the Rocky Mountains, llamas have been utilized as pack stock for thousands of years. Since the early 80s, these animals have assisted with operations in RMNP, and continue to be used throughout the park today.

Llamas were originally used in Rocky by the Custodial Division to remove human waste from remote privies on Longs Peak and at Gem Lake, as the volume of waste being removed from these sites was large enough to require pack stock to transport. Capable of comfortably carrying up to 28% of their body weight, or about 80 pounds, llamas are sure-footed in mountain landscapes, their

native terrain, and they are relatively low maintenance – they can sustain themselves for multiple days without water, if necessary. Additionally, llamas are a boon in areas of high resource concern (such as park backcountry areas) because



compared to other pack animals they are low impact and light-footed, causing less damage to the resource.

Overall, llamas were identified as a versatile option to the traditional horses and mules that have long been used in the mountain West.

Other working groups within the park, notably the Wilderness and Trails divisions, also use llamas to accomplish work goals. Packing tools and supplies on the llamas reduces physical strain on park personnel, allowing crews to venture up the trail farther and faster, and minimizing the likelihood of chronic injury.

As for all pack stock, training is essential to good performance. Crews work with the animals early in the season to build their stamina and acclimate them to the rigors of packing. Additionally, after a winter at pasture, refamiliarizing the llamas to being saddled and handled is essential.

If you are out on the trail this summer keep a lookout for these intriguing animals helping park staff. Just remember, like all working animals, these are not pets. Approaching and especially petting them is not welcome. Give the animals plenty of space to pass, and try not to make loud noises or abrupt movements around them. Park crews may have a moment to answer questions, but these llamas have a job to do, just as they have been doing for thousands of years.



Rocky Mountain Conservancy

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A not uncommon sighting in Sheep Lakes this summer.

Photo: Marlene Borneman

Nature Notes

It's summertime! This highly anticipated time of year has been a rollercoaster of weather — some hot, some cold, and lots of rain. So much rain, in fact, that grasses are still green in late July, and snowpiles in the high country are doggedly hanging on in the shady places 🐾 Colorado River District Ranger **Christi Wilkins** noted that each day at 4:00 p.m., visitors can find a ranger walking to the back of the Kawuneeche Visitor Center carrying a large tube. The tube is used to collect daily precipitation at a weather site behind the building. Every day since 1940, the park has collected weather observations in partnership with NOAA, and since 1940, the March average snowfall for this site is 19.54 inches of snow. However, this spring they recorded a whopping 51.7 inches! 🐾 In early July, Conservancy donor and local photographer **Erik Stensland** was backpacking in the Mummy Range (*see cover photo*). Even though it was early July it felt very much like early June as it was a very wet and tardy summer in the high country. There was still snow on the trail and lots of snow around treeline. It was all very wet and soft, not the snow that one typically experiences at that time of year, and he mostly had to walk through it, leaving him soaked up to his knees or waist. At the same time, seasonal streams were coming down from nearly every slope, and the water gathering in the meadows was making them very marshy. The globe flowers and bog laurel were flourishing wherever there was a bit of drier ground 🐾 RMNP Distant Learning Specialist **Kathryn Ferguson** was hiking around Lumpy Ridge in early July and was elated to find several clumps of calypso orchids 🐾 RMNP Woodcrafter **Cory Johnson** was cutting through the grass on his walk to work below the Beaver Meadows Visitor Center when he encountered a fresh elk carcass. It appeared to have been killed by a mountain lion in the early morning hours as it was still a little bit warm on this frosty morning. Characteristically, the lion had tried to cover the kill with duff and grass, and some of the hair had been plucked off the elk's shoulder — it was clear that the lion had only just begun to feed on it. Cory hustled off in case it was hanging around nearby, and he notified the park's ranger and resources divisions in the park who dealt with it from there 🐾 On another day in mid-July, **Cory** was sitting in his favorite lunch spot down by a creek below the visitor center when he heard some rustling in the underbrush behind him. He turned to look, expecting a squirrel, but instead, a tiny, spotted mule deer fawn nosed out of the bushes not eight feet away. He froze, not wanting to scare it, and they just watched each other for a couple long minutes. Then he heard some more rustling and its twin emerged from the bushes! This one was more skittish, and the pair bounded away after it saw him 🐾 Cory and his wife Conservancy Development Assistant **Victoria Johnson** spotted a "mule deer" outside their home in Estes Park that suspiciously resembled a white-tailed deer, a species that occasionally is spotted mingling with the local mule deer herds in Estes Park. Retired RMNP Wildlife Biologist **Gary Miller** was not willing to confirm it as a white-tailed deer, but without a clear shot of the rump, he conceded that it could be a rare hybrid of the two animals 🐾 **Victoria** was walking around Lake Estes in late June when she came upon a small garter snake in the middle of the paved trail — with the tail end of a frog emerging from its mouth 🐾

Colorado River District Interp Ranger **Reghan Tank** and Conservancy Membership Manager **Alexis Arnold** saw two yearling moose browsing on aspens on their way out to Chicory Lake off the Onahu trail in late June 🐾 **Alexis** and friend **Jess Stip** were out for an early morning run on the Bridal Veil Falls Trail in mid-June when they suddenly came upon two skinny bull moose with small antlers hanging out in the wooded area. They were about 50 yards away, and the suprised runners slowly removed themselves from the scene 🐾 Conservancy Member **Marlene Borneman**



Peek-a-boo! Photo: Conservancy Member Deborah Price

was enjoying the west side of the park one morning in early June when she caught a glimpse of a beautiful great blue heron as it was flying over the Kawuneeche Valley meadows 🐾 Conservancy Executive Director **Estee Murdock** was chaperoning an Unplugged Club (a grades K-2 afterschool club at the Estes Park Elementary School) field trip hike on the Twin Sisters Trail in early June, when, from the parking lot, the students spotted a collared mother moose and her baby walking on the Lily Lake boardwalk 🐾 In mid-May, Conservancy Members **Richard** and **Phyllis Gilliland** spotted a flock of about 15 longspur in their neighbor's yard in Estes Park. This was the first they'd seen in Colorado. Based on their field identification, the species was most likely the McCown's longspur 🐾 In mid-July, **Richard** also reported the sighting of a rough-legged hawk flying about 75 feet above his house on two occasions. He was able to get a good view of the belly and side of the bird so he could definitively confirm the identification, with its speckled belly and longer tail, and overall larger size than a red-tailed hawk 🐾 Conservancy Conservation Corps Director **Geoff Elliot** reported that while working on the Young Gulch Trail in the lower sections of the Cache le Poudre River, the High School Leadership Corps encountered a rattlesnake sunning itself alongside the trail 🐾 **Geoff** also relayed that when he was driving over Trail Ridge Road to visit the Shadow Mountain Crew in the Williams Fork drainage, he came upon a fox trotting along the road, proudly holding a breakfast marmot in its mouth 🐾 Conservancy staff got a rare afternoon break when a turkey vulture was spotted sitting out on top of an old tetherball pole near the Conservancy office. it was not something to ignore, as its size was quite startling seen at such close quarters. It flew to a nearby conifer and allowed its admirers to ooh and aah for a while before it flew off, giving an impressive view of its massive wingspan upon its departure 🐾 Conservancy Development Assistant **Victoria Johnson** was walking around Lake Estes in late June when she came upon a small garter snake in the middle of the paved trail — with the tail end of a frog emerging from its mouth 🐾 Estes Park resident **Louise Smith** reported that in early spring a bear crashed down through their living room window from the slope behind their home. The bear shattered the window (obviously) before running off into the woods 🐾 May the Force of Nature be with you!