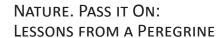




QUARTERLY

Spring 2015



by Gary Miller Retired RMNP Wildlife Biologist



In assessing the status of wild-life populations, biologists employ the concept of a "recruitment standard" — that level of production and survival of young that offsets losses to death or emigration, and allows a species or population to maintain its numbers. Exceed the recruitment standard, and a population grows. Fall short, the average age increases, the proportion of young decreases, and you've got a population in trouble.

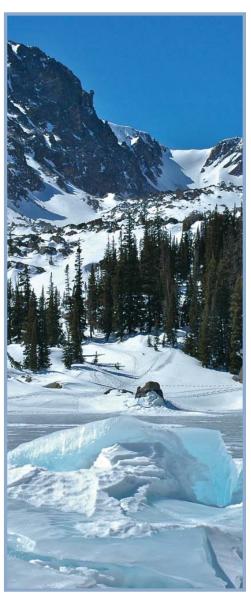
This is pretty simple in concept. Think about the pair of peregrine falcons that reclaimed their nesting eyrie in Rocky Mountain National Park a few years ago. What is the most important job they have? It is, over

the course of their lifetime, simply to replace themselves, to leave behind 2 offspring that will survive to adulthood and, in turn, successfully rear their own replacements. That's their recruitment standard.

Simple in concept, not so simple in practice. With peregrines, as with all wildlife species, it takes many "initial attempts" to reach that objective. This pair must successfully negotiate many potential mortality factors. Predation, hailstorms or human disturbance may cause a total nest failure (luckily, cliff formations with nest sites at Rocky are closed to human activity during the nesting season); young starve or are taken by predators. Even those young that successfully fledge suffer high (up to 70%) mortality before reaching breeding status. Calculations from Colorado studies suggest that, on average, it may take 12 to 16 "initial attempts" (i.e., eggs) over the course of three to five nesting seasons for a pair to reach their recruitment standard.

So, how about that older-age-skewed population of nature enthusiasts I observed that evening? What about me? What about you? How many attempts must you or I make to meet our recruitment standard? What must we, who treasure nature and Rocky Mountain National Park, do to at least replace ourselves?

How many hikes with our chil-(Lessons continued on page 2)



(Lessons, continued)

dren, grandchildren, and their friends (studies show they'll usually stop griping after the first quarter-mile!) will it take to recruit a committed adult conservationist? How many trips to listen to elk bugle, or to attend Ranger programs and help them earn their Junior Ranger Badge? How much support must we give to fostering connections between nature and those coming after us such as (and you KNOW what's coming, don't you?) the Rocky Mountain Conservancy's Next Generation Fund? Or to the many other conservation groups sharing this same objective — the National Wildlife Federation's Ranger Rick magazine series, the Colorado Wildlife Federation and the Children and Nature Network, for a few examples. What must we do to have more brown, black, or backward ballcaps at future Ranger programs?

We might keep in mind the Chinese proverb George Schaller recounted in his book, A Naturalist and Other Beasts (2007), All the flowers of all tomorrows are in the seeds of today.

Happy recruiting!



Taking the first step: introducing young kids to what excites YOU about nature.



In the early days of peregrine restoration, a biologist prepares to take a pic-a-nic basket full of chicks to a cliffside eyrie to be reared by an adult pair.

A Tale of Peregrine Falcon Recovery

At the population level, peregrine falcons certainly have been exceeding their recruitment standard, both in Colorado and throughout North America. In the early-mid-1970's Colorado had just 4 nesting pairs; that number now has grown to an estimate of more than 100 pairs. Among the earliest species listed as endangered in 1970 under the Endangered Species Conservation Act of 1969, even preceding the current Endangered Species Act of 1973, peregrines had rebounded enough to be removed from that listing by 1999. Current estimates place the North American population at two to three thousand breeding pairs.

Frequently highlighted as an Endangered Species Act success story, another key factor in peregrine falcon recovery was a 1972 act of Congress authorizing the Environmental Protection Agency to ban the widespread use of the pesticide DDT. As DDT (which, when ingested by the falcon, causes eggshell thinning and reduced hatching success) became less prevalent, successful peregrine nesting gradually increased.



While artificially incubated, the thin-shelled peregrine eggs were constantly monitored for proper temperature, humidity and gas exchange to ensure hatching.

Eggshell thickness did not immediately rebound upon the ban of DDT, how-

ever, and biologists employed various measures to help recovery. One particularly interesting technique in Colorado was for biologists to rappel into eyries when eggs were first laid, before they were crushed or dessicated, and replace them with plastic "dummy eggs." The thin-shelled eggs were transported to be artificially incubated while the adult peregrines "incubated" the replicas. Later, biologists again rappelled into the nest site and replaced the replicas with downy young from the artificial incubation. Amazingly, the adults immediately switched their activities from incubating eggs to feeding and brooding young that might be 2 or more weeks old.

In Rocky, most of the effort went toward "hack boxes," a process in which young were placed in a box on a cliff and artificially fed quail (by biologists that the young couldn't see) until the young fledged and fed on their own.

Photo: The Peregrine Fund



From September 4, 2014, through September 4, 2015, Rocky Mountain National Park, along with local and national communities, is celebrating the park's 100th Anniversary. Speakers, special activities, and community events are in the works to commemorate this momentous event. Join us to say "Happy Birthday, Rocky!"

Centennial Events Highlight Celebrating the Centennial with the Colorado Mountain Club

The Colorado Mountain Club was instrumental in the formation of Rocky Mountain National Park 100 years ago. Original members participated in a 1914 pack trip organized to give Arapaho names to area peaks and features. James Grafton Rodgers, who began lobbying for designation as a national park in 1907, became the first president of the Colorado Mountain Club in 1912. Activities with the Colorado Mountain Club this summer, include:

Climbs, Hikes, and Snowshoes of 100 of the 125 Named Peaks in the Park

100 Mile Hike Combo

Wildflower Hikes led by Colorado Native Plant Masters

For more details and information, visit www.cmc.org/About/YearoftheMountaineer/ RMNPCentennial.aspx

Cover photo credits

(Upper): "Sharp-shinned Visitor" by Conservancy Member Marlene Borneman, Estes Park, CO; (Lower) "Lake Haiyaha Ice," NPs photo by Jon Olsen.

Please send high-resolution images to nancy.wilson@RMConservancy.org by December 1 for publication in the 2015 Summer *Quarterly*.

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

What is the bear population in the park and how many of them are on the west side? The bear research conducted between 2003 and 2006 by Roger Baldwin and Lou Bender estimated 20-24 bears parkwide. During this study, 6 bears were observed on the westside of the park and 15 on the eastside.— RMNP Biologist Mary Kay Watry

I've heard that the park entrance fees are changing - what's the scoop? Because of Rocky's proximity to the populated Colorado Front Range, the park is proposing to add a single day pass to the existing option of fees. This "Day-Use Pass" would remain at \$20 while the weekly pass would increase to \$30 for those visitors who intend to enjoy the park for multiple days. The park is proposing that the annual park pass increase to \$50 and eventually increase to \$60 by 2017. Additionally, the park is proposing that campground fees increase from \$20 a night to \$26 a night in 2016.

While basic operations of the park are funded by direct appropriations from Congress, the fee program is intended to provide for various enhancements to visitor services and facilities.

The Federal Lands Recreation Enhancement Act (FLREA) is the legislation under which the park currently collects entrance and amenity fees. This law allows parks to retain 80 percent of the fees collected for use on projects that directly benefit visitors. The remaining 20 percent is distributed throughout the National Park System. The current park entrance fees have been in effect for the past nine years, although the park's annual pass increased in 2009. A decision on the proposed fee change is not expected until early June, 2015. — RMNP Information Office

Help! I've got a Clark's nutcracker in one of the upper windows of my house, pecking and scratching at the glass. It goes away and then comes back to attack, but it has a relentless quality that is both annoying and disturbing.

This is not uncommon. The bird is seeing its reflection in the window and is reacting to its image like a parakeet seeing its image in a mirror. Some birds are more territorial and it may be trying to drive the other bird away, like some birds do at feeders. Removing the reflection is the best course of action. You can buy clear, anti-reflecting sheets of plastic on the Internet to cover a window on the inside. Additionally, as thousands of birds annually die in window crashes, this product also is effective in keeping birds from flying into windows.— *Retired RMNP Biologist Jeff Connor*



Of Wood and Water

by Paul McLaughlin RMNP Ecologist

If you wander to the banks of Rocky's waterways this summer, you might see Dr. Ellen Wohl of Colorado State University standing in the water making measurements of in-stream logs. Dr. Wohl and her colleagues are investigating the effects of logjams and beaver dams on the dynamics of the park's river systems. From the gentle meadow walks of Moraine Park to the remote bushwacks of Forest Canyon, there are few sections of the park's streams and rivers that Ellen and her team of scientists have not visited in their quest for information.

From studies like Dr. Wohl's, park scientists are gaining an ever-increasing appreciation for the important

roles that channel spanning obstructions, including beaver dams and logjams, play in storing sediment, distributing groundwater and storing nutrients that would otherwise quickly wash downstream.

For millennia, beavers have played an important role in capturing sedi-

ment and maintaining high water

tables along western mountain streams.
Over the centuries, sediment and nutrients accumulated, creating fertile wetlands. These "beaver meadows" promoted lush riparian communities providing optimum habitat for many species.

Logjams are formed

when trees growing in the riparian areas adjacent to streams fall into the river and are washed downstream.

Without the impound-

ments that beaver dams

and logiams provide,

park researchers and

scientists have witnessed

a change in the

appearance of park river

systems and a decline

in water, sediment and

nutrient storage.

These logs wedge into stream banks and interlock with other logs to form logjams which also impound the river's flow to create valuable habitat for aquatic species.

During the past couple of centuries, there has been a dramatic decline in

beaver populations throughout the west, including in Rocky Mountain National Park. In many areas of the west, logging, mining and other disturbances have reduced the size and quantity of trees available to form logjams. Without the impoundments that beaver dams and logjams provide, park researchers and scientists have witnessed a change in the appearance of park river systems and a decline in water, sediment and nutrient storage.



Underwater logjam view

As Dr. Wohl would say, our rivers have become more "leaky".

In some areas, such as Moraine Park, river channels have deepened, reducing the supply of groundwater and nutrients available to riparian communities. In combination with other factors, this has led to a decline in riparian shrubs and a conversion to open meadow species tolerant of drier soils. Ironically, this loss of riparian habitat makes it difficult for beaver to re-colonize these areas.

Dr. Wohl and her companions have searched out the most remote sections of the park's waterways, including several trips into rugged Forest Canyon, to measure and monitor logjams in areas of old growth forest. In these areas, the park serves as a reference for conditions that would have been found more extensively across the state in earlier times. The research crew will map the locations of these logjams, measure the length and diameter of the logs in the jam, and note how the logjams change after high water events such as the annual spring snowmelt and rarer events such as the 2013 Colorado Front Range flood.

The massive logjams of the Pacific Northwest have been extensively studied. Their value in providing critical aquatic and riparian habitat has been well documented. Dr. Wohl and her team are pioneers in studying the



Logjams provide critical aquatic and riparian habitat.

smaller logjams of the Colorado Rockies. In general, they have found that the Colorado logjams are less massive and more mobile than logjams in the Pacific Northwest, but still play an important role in providing vital aquatic and riparian habitat.

The research of Dr. Wohl and her colleagues helps us to appreciate the valuable services that beaver dams and logjams provide. Through storing water, sediment, and nutrients, and creating a variety of habitats, these impoundments are vital to supporting healthy aquatic and riparian ecosystems.

Ellen Wohl's colleagues and students involved in this research in the park:

From Colorado State University:

Nicholas Sutfin, Bridget Livers DeAnna Laurel, Dana Winkelman (faculty), Adam Herdrich, Tim Covino (faculty), Pam Wegener

From University of Wyoming:

Bob Hall (faculty), Hilary Madinger Natalie Day

From the US Geological Survey: David Walters, Mike Venarsky

From Montana State University: Geoff Poole (faculty), Sam Carlson



Your Shop for Official Rocky Mountain National Park



Centennial Products

www.RMConservancy.org

Or, give us a call at 970-586-0121



RMNP Centennial Film Wilderness, Wildlife, Wonder

Fall River Productions

Marking the park's centennial year, this stunning film explores the grandeur and mystery of Rocky through historic images and interviews with national park rangers sharing their provocative insights on

the value of national parks to our generation and those to come. Celebrate and enjoy the park's anniversary with this special keepsake film. 23 minutes.

DVD Item# 9849 \$12.95

Member price: \$11.01

Blu-ray Item# 9850 \$16.95

Member price: \$14.41



The Living Dream: 100 Years of RMNP

Nick Mollé Productions

Journey into Rocky's past with current-day historians, anthropologists and mountain enthusiasts who share the stories and events that shaped Rocky Mountain National Park in 1915, and discover the passion

that protects the park today – for the future. 90 minutes.

DVD Item# 9847 \$19.95

Member price: \$16.96
Blu-ray Item# 9848 \$24.95
Member price: \$21.21



Centennial Mug 1915-2015

The front of this ceramic mug features a picture of the RMNP iconic elk and includes the dates of the centennial (1915-2015). On the back of the

mug is printed the centennial slogan of Wilderness, Wildlife, Wonder. The mug is 4-1/2 inches in height. It is dishwasher and microwave safe.

Item# 779 \$12.95 Member Price: \$11.01

RMNP Centennial Hooded Sweatshirt

This centennial sweatshirt features a picture of Longs Peak with the Centennial dates 1915-2015 on the front of the sweatshirt . It's perfect for those cool weather hikes. Heather Blue color, long sleeved. 50% cotton/50% polyester. Machine washable,

tumble dry low. Available in unisex S, M, L, XL and XXL $\,$

Item# 9871 \$29.95 Member Price: \$25.46

RMNP Centennial Poster

by James Disney

Specially selected by Rocky to represent the park's 100th anniversary, this dramatic depiction of the park's iconic animal measures

16" x 20" and is shipped rolled in a protective poster tube.

Item# 791 \$7.95 Member price: \$6.76

Signed by artist copy

Item# 991 \$9.95

Member price: \$6.76

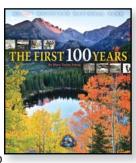


RMNP: The First 100 Years

Mary Taylor Young

A century has passed since Rocky
Mountain National Park was established in 1915. An award-winning
writer tells a story that stretches from the dawn of time into the future. As
America lights the candles for Rocky's
100th birthday, discover why there is so much to celebrate. Hardcover, 166 pages.
Item# 9799 \$39.95

Member price: \$33.96



SAVE THE DATE! Rocky Mountain Conservancy Picnic in the Park!

When: August 8, 2015 Time: 11:00 AM to 2:00 PM Where: Hidden Valley in RMNP!

Members \$15.00; Guests \$20.00 Kids 6-12 \$5; Kids 5 and under free!

11:00 - 12:15 Activities & mingling

12:15 - 1:00 BBQ picnic lunch

1:00 - 2:00 Program

Stay tuned for this year's Centennial celebration of food and frivolity!

SIMPLIFY YOUR GIVING WITH A SUSTAINING MEMBERSHIP

Becoming a sustaining member is an easy and affordable way to support the activities of the Rocky Mountain Conservancy.

Just choose an amount that fits your budget and your contribution is charged to your credit card each month.

Join the growing number of sustaining members today!

For as little as \$10 a month, your ongoing contribution makes a difference!

Park Puzzler

by RM Conservancy Member Joel Kaplow

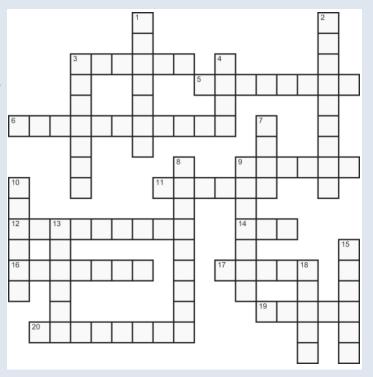
Across

- 3. The source of the Cache la Poudre River is the park's Poudre Lake, just a stone's throw east of ____ Pass.
- 5. The Ute and Arapaho Indians built temporary wooden shelters, mainly for sleeping, called ____. They were smaller than tepees, but had the same conical shape. Some can still be found within RMNP.
- 6. To help drum up support in the 1910s for establishing Rocky Mountain National Park, promoters touted it as "America's ____."
- 9. Located inside RMNP, the ____ Valley ski area was in use from 1931 to 1991. In its heyday, it boasted a lodge, cafeteria, ice rink and a 400-car parking lot.
- 11. Black bears don't go into "true" hibernation as marmots do. It's more a state of light hibernation, or deep sleep, known as ____.
- 12. In the Mummy Range you'll find a mountain named for the third woman known to have climbed Longs Peak. Anna E. ____ tackled the park's monarch in 1873.
- 14. Surprisingly, snow can make a good insulator for animals. Once dug in below ____ inches, they're in the subnivean zone where the temperature does not dip below 32 °F.
- 16. Rocky Mountain National Park straddles three counties: Boulder, Grand and _____
- 17. Frozen Lake, not to be confused with Frigid Lake, is found at the southern end of Glacier ____.
 19. The Meadows Patrol Cabin was built in 1931 below Longs Peak's east face.
- 19. The ___ Meadows Patrol Cabin was built in 1931 below Longs Peak's east face. Despite its stone walls, it was completely swept away by an avalanche in 2003. A new one was built in 2008 with some salvaged material from the original, and hopefully out of the avalanche zone.
- 20. The ptarmigan, a year-round high-country dweller, will grow extra ____ on its feet that act as insulating snowshoes in the winter.

Down

- 1. RMNP's centennial anniversary was on ____ 25, 2015, exactly 100 years after Woodrow Wilson signed the park into existence.
- 2. Legend has it that in the 1820s, French fur trappers needed to lighten their load, so they hid a stash of a certain supply of ____ near what became known as the Cache la Poudre River.
- 3. The three life zones found in RMNP are alpine, subalpine and _
- 4. Frigid Lake, not to be confused with Frozen Lake, is found at the west end of Basin.
- 7. During a chance encounter with a man on a San Francisco beach in 1889, a young Enos Mills got an earful of advice and encouragement for his efforts to create Rocky. The man he spoke with became his role model. It was naturalist/conservationist John ____.
- 8. There are many "parks" found within RMNP, such as Moraine, Hollowell, Tuxedo and Horseshoe. The original meaning is derived from the French "parc," which is a valley or basin surrounded by ____.

- 9. There are over 100 IHCs scattered across the U.S., but only two are stationed inside national parks. The Arrowhead team is in California's Kings Canyon, and the Alpine team is here in RMNP. They are the "Top Gun" of firefighters, with each team comprised of 20 of the best of the best, and known as Interagency Crews.
- 10. RMNP's Kawuneeche Valley is a tongue of the vast ____ Park located to the west of 15-Down.
- 13. At the end of the Pleistocene Epoch, the region's valley glaciers receded for the last time, and presently only tiny remnants are found. Located in the rounded bowls of high valley heads, they hardly flow at all and are known as glaciers.
- 15. The range on the park's west side was called "ni-chebe-chii" by the Arapahos. The Colorado Geographic Board decided to go with its English translation, the Never ____ Mountains.
- 18. Mountain goats are not native to Colorado. If you spot one in RMNP, it most likely is a descendent of a herd that was transplanted to the Mount ___ area in the 1930s or one that has wandered in from afar!





Rocky Turns 100!

On January 26, 2015, Rocky Mountain National Park turned 100 years old. Join us in celebrating just some of the top reasons to celebrate the past 100 years — looking forward to the next 100 for Rocky Mountain National Park.

by Vaughn Baker RMNP Superintendent

It's no small thing to celebrate a centennial, and it's truly a momentous occasion to recognize 100 years of wilderness preservation. Take a look at some of the highlights of the more recent decades:

Wilderness Designation

Just as the park was created from the grassroots efforts of Colorado-ans, so was the effort to finally go from "Recommended" to "Designated" wilderness in 2009. This was primarily due to the efforts of our neighboring communities, counties and the Colorado Congressional delegation. Like a fine wine, good things take time. In this case, it only took 35 years! The park now has a greater level of protection than it had when it was created as a result of this designation.

Public Support

Rocky enjoys strong support from our neighbors, Coloradoans, and from people throughout the country and, indeed, the world. Since 1996, our visitors have contributed more than \$60 million through their entrance and camping fees for improvements throughout the park, including new restroom facilities in campgrounds, in picnic areas and along Trail Ridge Road, as well as reconstructing many sections of trails, and removing beetle-killed hazard trees from high visitor-use areas.

The fee program has been extended through 2016 at this moment, but we hope to see it extended well into the future so we can continue to provide enhancements to services and facilities.

Infrastructure Improvements

In addition to visitor fees, the park has received close to \$70 million from the Federal Lands Highway Program administered by the Federal Highway Administration. Did you know that a small portion of the federal gasoline tax goes to places like Rocky?

Since 2000, we have been able to reconstruct or repave all of the park's major roads. When roads are as old as Rocky's, that's critical!

The most recent project was the final phase of reconstruction on Bear Lake Road. Check it out if you haven't already.

A few unplanned projects this past year were due to the 2013 flood event. Once again, the Federal Highway Administration stepped in and Old Fall River Road has been repaired. We anticipate opening it this year on time for the 4th of July weekend. We also made good progress on repairing many of the stream crossings in the park's backcountry that were damaged by the flood.

Repair work on trails will continue for the next three to four years, and we appreciate your patience!

Biodiversity

A park like Rocky can't rest on its laurels or internal management actions if it is to be here for future generations. Actively engaging with our neighbors, the State of Colorado, the US Forest Service and many others is crucial if we are to maintain the biodiversity of this special place.

An example of this interaction includes the collaborative Nitrogen Deposition Reduction Plan adopted by the State of Colorado to reduce the amount of nitrogen being deposited in our high mountain lakes from a variety of activities, mainly along the Front Range. Colorado is the first state in the nation to adopt an air quality standard specifically designed to protect a national park and Rocky is among very few parks to partner with the

parks to partner with the agricultural industry to find sustainable solutions for our communities.

Working with the Colorado Division of Parks and Wildlife, the park continues to implement the elk and vegetation management plan designed to restore biodiversity to important winter range areas in Moraine Park, Upper Beaver Meadows, Horsehoe Park and the Kawunenchee Valley.

New discoveries in diversity in the park are continually being made. Stay tuned for an especially big concern on the horizon – you guessed it! Climate change. The park will need your support to protect biodiversity in the face of this particularly challenging issue.

Partners

For a national park like Rocky to be successful, it takes the support and efforts of a whole lot of other people and organizations. This includeds groups like the Estes Park League of Woman Voters, which lobbied Congress to pass a scenic overflight ban at Rocky in order to preserve the natural sounds of the park's wilderness; and the Towns of Grand Lake and Estes Park, and Boulder, Grand and Larimer Counties who have been supportive with a variety of issues, including the park's wilderness designation.

We have concessioners who serve our 3-million-plus visitors. Xanterra operates Trail Ridge Store, the Colorado Mountain School offers guided climbing, and we have a variety of local stables that provide guided horseback trail rides. We also have a whole host of other guided services permitted to



operate in the park.

Others, like the Estes Valley Land Trust and our official park partner, the Rocky Mountain Conservancy, are working to protect land near and adjacent to the park from incompatible development.

And a special thanks to the Rocky Mountain Conservancy, our official park partner for eighty-four years. They have raised more than \$20 million since the mid-1980s to support a variety of projects for the park, including educational programs, trails restoration, land acquisition, historic preservation and the construction of the Fall River and Kawuneeche visitor centers and exhibits.

A big thank you to all of our

wonderful partners!

Volunteers

We often say that we couldn't operate the park without our volunteers, and it's true! Volunteering in the park dates back to its origins with the Estes Park Woman's Club and campers at Cheley camps. Since 1984, volunteers have served more than 2.13 million hours at Rocky. That's over \$48 million in

donated labor (at today's rate).

Staff

We have so many committed and dedicated people who take pride in being the public servants for this park, who take seriously their responsibility of being stewards of this special place for present and future generations.

Visitors

Last but not least, all of you. The reasons people visit now are the same as they were 100 years ago

 to experience nature, to seek solitude, to enjoy scenic grandeur, to watch wildlife, and to partake in outstanding recreational activities.

We face many challenges and opportunities as we move into the next century — including a warming climate, crowding in popular areas during the summer and fall, and the need to engage the next generations of Americans in support of their national parks.

With your continued support and devotion, it is our hope that Americans will be able to gather 100 years from now to celebrate Rocky's 200th birthday.

Let it be so!



Celebrating That Which Doesn't Exist in Rocky Mountain National Park

by Diane Burkepile

People come to Rocky for many reasons, whether it's the amazing wildlife, the inspiring scenery or the trails that lead to stunning backcountry jewels. But what would any of these experiences be without the gift of silence that underlies the quality of all of these activities? What would it be like to reach a high mountain lake to find a commercial helicopter flying overhead? Or to watch a herd of elk in the fall be dispersed by the noise of an approaching aircraft.

The sound of no sound is fundamentally important, but it's often not appreciated until it's gone. This is what motivated the League of Women Voters in 1995 to engage in their efforts to ban helicopter tours in Rocky Mountain National Park.

July 18, 2015, is being set aside as a special day to celebrate the quiet of Rocky Mountain National Park. Rocky Mountain National Park is the only national park where commercial air tours are permanently banned by an Act of Congress.

On this special day and in conjunction with World Listening Day, the National Park Service, Natural Sounds and Night Sky Division, and the League of Women Voters of Estes Park, will be pre-

senting an entire day of activities built around the appreciation of silence and the celebration of this distinct honor.

The League of Women Voters of Estes Park (LWVEP) became actively involved in leading the charge to "ban the buzz" in 1995 when park and local authorities came under ever-increasing pressure to allow commercial sightseeing tours, primarily helicopters, within the park's airspace. Because the LWVEP had a long historical connection with Rocky, they quickly recognized the problem and stepped in to help.

They saw that helicopter tours would create noise that people who came to the park to camp, hike and relax, couldn't escape. They also saw helicopters as a safety hazard on many fronts, including for wildlife protection and increased fire risks, not to mention the changeable weather, which is always a variable in high elevation and mountainous areas. So, being an organization of concerned citizens who take their civic responsibility seriously, they developed a plan to prevent helicopters from being a part of the Rocky experience.

They were an indefatigable force. They began a letter-writing campaign, they wore t-shirts that blazed "Ban the Buzz", they surveyed tourists visiting RMNP and encouraged them to write their congress people, they talked to the governor, the state legislature, to Colorado's congress people, the county commissioners of both Larimer and Grand counties and the Department of Transportation.

They lobbied in all the ways they could imagine and, lo and behold, their efforts were rewarded. The ban on touring helicopters over Rocky Mountain National Park was part of a bill that passed Congress in 1998, signed by President Bill Clinton. Check out the plaque commemorating this event in Upper Beaver Meadows which will be a source of part of the ceremonies this summer.

It can't be stressed enough — Rocky Mountain National Park is the only national park to have a ban against helicopter overflights. Just think what a gift of silence this would be for other national parks — indeed, all of them! Now that's a gift to leave the next generation! For more information about this celebration, go to: www.lwv-estespark.org or the RMNP Centennial website at: www.nps.gov/romo/planyourvisit/100th-anniversary.htm

Following the Fellow:

An Olson Family Fellowship Experience

by Kara Wadenstierna

Olson Fellow, Rocky Mountain Conservancy- Field Institute
A little boy sprawled on his back in the snow, smiling triumphantly after finishing his first snowshoe hike; writing, researching, and learning in the quiet of my Field Institute office; adults kneeling over fresh tracks, excitedly piecing together the story an animal left unfinished. These are all scenes from my experience as this winter's Olson Fellow this season. My days certainly are varied.

But whether I am teaching an afterschool program, leading a winter ecology snowshoe hike, or catching up on the administrative tasks required to run a nonprofit educational program,

every task is centered around facilitating experiences for people of all ages to engage in the natural and cultural history of Rocky Mountain National Park in order to steward it well and pass it along to future generations.

My experience as an Olson fellow has been clarifying as I grow in my strengths and strengthen my weaknesses. My love for teaching experientially and connecting people to resources through information has grown, as has my appreciation for the National Park Service and all the programs embedded within it. Researching, designing, and planning my own programs for kids of all ages has been empowering.

Though I do not know what will come next when I finish this fellow-



ship in May, I am certain that I will leave a more confident, capable instructor and steward of public lands.

The Olson Family Fellowship is funded by Alan and Carol-Ann Olson of Boulder, CO, making opportunities for 2 fellows each year to dive into experiental education through the Rocky Mountain Conservancy - Field Institute.



Save the Dates! Rocky Mountain Plein Air Cenntenial Exhibit This Summer

As part of the park's centennial celebration, a partnership between the Rocky Mountain Plein Air painters and the Rocky Mountain Conservancy will present an exhibit of paintings created in the park in 2015.

The event will be held at the Stanley Hotel, August 13-16, 2015.

These creations will be available for sale for the duration of the exhibit with a portion of the procedes benefitting the Rocky Mountain Conservancy.

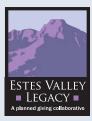
Stay tuned for more details about this event, coming soon!

Estes Valley Legacy: Planned Giving Collaborative Upcoming Courses Schedule

In early 2015, the Estes Park Nonprofit Resource Center launched the newly formed Estes Valley Planned Giving Collaborative to provide information and assistance to individuals who donate to Estes Valley nonprofits to help them maximize the tax benefit of current and future gifts, including estate gifts.

Estes Valley Legacy Upcoming Programs Calendar

Tuesday, February 3, 7 – 8:30 pm, Estes Valley Library **Giving Feels Good – Timing, Size and Method** – Marsha Yelick



Tuesday, May 26, 11:30 – 1:00 pm, First Western Trust Planned Giving for local CPA's Attorneys (Sphere of Influence) – w/CE credit (to include Fiduciary Review) – a collaborative approach to one's Estate Plan and What's New in Estate Planning.

Tuesday, May 26, 7 – 8:30 pm, Estes Valley Library **Giving Feels Good – Timing, Size and Method** – Marsha Yelick

Sign up early because classes are filling up! If you have questions about this new resource, or about estate planning in general, please contact: Julie.Klett@RMConservancy.org

Confused? Rocky Mountain Conservancy Memberships vs. Donations

We receive a lot of questions about the difference between Conservancy memberships and donations. After all, it's all going to the same organization, right?

Yes, but an easy way to think of it is that your membership dollars directly support the Conservancy as a functioning business. Those monies are our oxygen mask, providing the resources we need to pay staff, keep the lights on, purchase office supplies and much more. Membership funds allow us to put most of our organizational energy into accomplishing our mission:

The Rocky Mountain Conservancy promotes stewardship of Rocky Mountain National Park and similar lands through education and philanthropy.

Your membership also entitles you to a host of member gifts, invita

tions to members-only events, our informative *Quarterly* newsletter. Your membership keeps you in touch with what's going on in the park and the good work we are doing together.

Your donations, on the other hand, usually directly support projects in Rocky Mountain National Park, such as trail construction and maintenance, youth education (through the Next Generation Fund), land protection, historic preservation and more.

Gifts to Best Use are the most flexible of donations, allowing park officials and our Board of Directors to apply the highest priority as needed.

Memberships and donations are different but important sources of funding that allow us to keep our doors open and to do all this - and more!

Annual Appeal Update

We hope you have received invitations to support the Conservancy through our Annual Appeal campaign. As of press time, we have received more than 913 gifts totaling \$229,693, which will fund a number of high-priority programs in Rocky Mountain National Park this year, including youth education, the Conservation Corps season, trail work and more.

Thank you!

If you have not yet made a contribution, there is still time for you to join us in reaching our fundraising goals for the year. For information and to make a donation, visit RMConservancy.org, or call 970-586-0108.



Join the Conservancy Team! Adopt a duck and win a trip to Hawaii!

Estes Park Duck Race gives all but \$1 of your donation to the charity of your choice. And the winnings this year are extravagant!

Dreaming of a trip to Hawaii? A cruise in the Caribbean or Alaska? This year's much-anticipated Estes Park Duck Race, organized by the Estes Park Rotary Club, is on May 2. Each duck you adopt gives you a chance to win one of the major prizes, which include several trips, including airfare and accommodations for two, valued at over \$11,000 total.

Or, perhaps, a four-night stay in Riviera Maya, Mexico, at an all-inclusive five-star resort or four-nights at Walt Disney World in standard resort accommodations with passes. This prize provides up to \$3,000 for two travelers.

Another prize is a three-night stay in San Francisco at a four-star hotel or three nights in New Orleans in a four-star hotel. This prize provides up to \$2,000 for two travelers.

The entry process is simple. You adopt a duck (or a flock of ducks) for a fee of \$20 each (\$21 for each online adop-

tion), select the Rocky Mountain Conservancy as your charity, and the Conservancy will receive 95% of your adoption fee. That's \$19 of the \$20 fee. The more adoptions we sell, the more money we raise, and it's a fun way to both donate to the Conservancy and have a chance to win a great prize, or even the vacation of a lifetime!

To learn more, see the complete prize list, and enter, visit: www.epduckrace.org (and be sure to select the Rocky Mountain Conservancy!).

The 27th Annual Duck Race continues a tradition started in 1989, and has returned more than \$2 million to Estes Park charities and groups. We thank the Estes Park Rotary Club for their ongoing support of our organization and our community.



The Rocky Mountain Conservancy expresses special thanks to the following people for their donations toward projects in Rocky Mountain National Park:

December, 17, 2014 – March 1, 2015 485 gifts ~ total donations \$191,600

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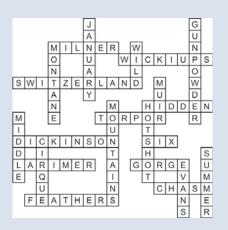
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PARK PUZZLER SOLUTION



Quick Fix Science

Natural Area Revegetation in Rocky

The Question: What is the most successful and cost-effective method to revegetate disturbed sites?

Many natural areas of the park are disturbed by human activities each year due to visitor use and construction or improvement of facilities, roads, trails, and parking lots. A primary goal of resource managers in Rocky Mountain National Park is to revegetate these disturbed areas back to predisturbed conditions. As both success and finances are important to park management, Todd Ontl and Edward Redente of Colorado State University conducted a research study in order to determine which of the current revegetation methods are most successful and cost-effective.

The Project: Determine the success and compare costs of each revegetation method.

During the summer of 2004 the researchers chose 20 sites that had been disturbed in previous years and had been subject to some form of manipulative revegetation. They compared three revegetation methods: (1) seeding for native plant species, (2) transplanting plants grown in a nursery, and 3) a combination of the two. They used three variables to compare the revegetation success of these disturbed sites to adjacent undisturbed areas including: (a) vegetative cover, (b) the number of species present (including exotic weeds), and (c) species and community similarity with respect to undisturbed areas. They then compared the revegetation success of each different approach to the entire cost of the given method to determine which scheme is the most successful at the lowest cost.

The Results: A combination of seeding and transplanting is the most successful; however, seeding alone is the most cost-effective method.

The researchers found that each of the three revegetation methods differed in effectiveness depending on which of the three variables was used to evaluate it.



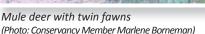
The park revegetation efforts rely on a host of voluteers who are involved in pulling weekds, seeding and transplanting seedlings from the park greenhouse. (Photo: NPS)

Vegetation cover data showed that sites that were revegetated using transplanting had the highest percentage of cover of native and perennial species. These results suggest that transplanting plants grown in a nursery will result in plant cover of native perennial forb and grass species most similar to undisturbed conditions. There was no difference in species richness for each of the revegetation approaches indicating that no one method is better at promoting biodiversity than the other. Sites revegetated by seeding were more similar in species and community structure to undisturbed sites than were those that were revegetated using transplanting suggesting the importance of seeding as a treatment for producing plant communities most similar to undisturbed communities. In terms of cost a combination of transplanting and seeding is the most expensive followed by transplanting alone. Seeding alone is by far the least expensive treatment.

Combining revegetation success with financial cost, the cost-effectiveness analysis revealed that transplanted sites had the highest ratio of cost to effectiveness while seeded sites had the lowest cost to effectiveness ratio. Overall these results suggest that when financial resources are not limited the combination of seeding and transplanting is the most effective revegetation approach. However when financial resources are limited seeding is the most cost-effective revegetation approach.

This summary is based on published, peer-reviewed and/or unpublished reports available at the time of writing and updated in 2008. For more information on the park's research program, see www.nps.gov/romo







Charles Money, executive director Nancy Wilson, *Quarterly* editor PO Box 3100 Estes Park, CO 80517 (970) 586-0108 Nonprofit Organization U.S. Postage PAID Permit #184 Estes Park, CO

Nature Notes

Whooohooo! Spring is in the air, and it feels like we've pushed past the last of deep winter at last. Of course, that could be gone in an instant when another front moves in, but for now, the sun is a little warmer, the air has whiffs of tree sap, and the snows are melting out to expose the fragrant dendritus of leaves and grass on the ground..... local bird rehabilitator and Director of CARRI, Scott Rashid, gets the official credit for seeing the first mountain bluebird in early March in Estes Park. If anyone would like to contest this, see me....RM Conservancy - Conservation Corps manager Geoff Elliot watched a coyote in hot pursuit of a small herd of bighorn sheep at the Field Institute in mid-January. He observed six lambs and three ewes running across the hillside for about 100 yards with their high-agility tactical moves. They kept running when the coyote stopped to smell the trail before following on behind the sheep. Eek!.....Conservancy member Marlene Borneman was treated to the rare visit of a sharp-shinned hawk to her feeder at her home in Estes Park (see cover picture of this publication). It sat for a long time just outside her window on the ledge of the feeder giving Marlene plenty of time to admire it. According to retired (ha!) RMNP naturalist Dick Coe, these are the smallest of the accipiters, which includes goshawk, Coopers and the sharp-shinned hawks. The "sharpie" is about 10-12-inches tall with a blunt-cut tail with a white terminal band and a rounded head. The Coopers hawk looks almost exactly the same as the sharp-shinned hawk, but it is about 16-inches tall with a rounded tail and a squarish head. The main diet of sharp-shinned hawks is small birds, so its perch on the feeder likely was more than for aesthetic appreciation.....RMNP Information Officer Kyle Patterson was delighted to report in late January that NASA astronaut Terry Virts Tweeted about Rocky's birthday! His second Tweet, on January 26, the 100th birthday of the establishment of Rocky Mountain National Park, showed a photo of the park from the space station. How cool is that??.....RM Conservancy Director of Donor Relations Julie Keltt spotted about 200 northern flickers concentrated in a small area on the ground on the east side of Estes Park in mid-March. They hung out there, pecking at the ground for days, most likely feasting on the first emerging ants of the season.....Julie also ob-

served a flock of horned larks as they swooped into a windswept field in her neighborhood, twittering (not Tweeting, mind you) their musical song. Found on the alpine tundra in Rocky during the summer, they have a very distinctive appearance when they fly in a flock as the tight-knit, undulating mass swoops down to the ground en masse.....On a still night in January, Julie heard an elk toot..... Retired RMNP Wildlife Biologist Gary Miller and RMNP Park Ranger, Interpretation, Kathy **Brazelton**, spotted a peregrine falcon flying over Prospect Mountain in early March..... So, the burning question is this: with all the mule deer and elk in Rocky, and all the antlers that theoretically are shed this time of year, shouldn't one expect



This endearing image was captured by Julie Klett, the Conservancy's director of donor relations, at her home in Estes Park. The elk stood there, licking the window, with drool running down the glass, seemingly unable to accept that this lush green thing was so close but so not in reach.

to find a few discarded racks just laying on the ground wherever one might wander in this general vicinity? I mean, one could reasonably expect DRIFTS of antlers piled around with the herds of ungulates that are here, but no! The "official" answer is that there are all kinds of rodents and other living creatures that eat and otherwise break down these tasty and nutritious calciferous growths. Hmm. If that's true, there must be many more of these rodents out there than I can see or fathom. The other explanation is that the antlers primarily are dropped in the forests where the elk and deer can rub against the trees to help loosen the irritating things. <Sigh> If anyone can give us a more convincing story to explain this mystery, we'll post it in the upcoming issue of the *Quarterly* newsletter. Somebody, *please*!