Boulder County Nature Association



"Our mission: To educate, inform, and inspire for the purpose of conserving and promoting resilient natural ecosystems in our region."

Volume 33, Number 4 Autumn 2015

Three Northern Harrier Nests Fledge Young in Boulder County

Steve Jones

For the first time in recent memory, three northern harrier pairs successfully fledged young in Boulder County during the 2015 nesting season. A pair nesting on Boulder Open Space and Mountain Parks property at Boulder Valley Ranch fledged four young in late June, and a second pair nesting on OSMP property near Hygiene Road fledged three young. A pair nesting in a wetland on Boulder County Parks and Open Space property near Lagerman Reservoir fledged at least two young in early July.

Sadly, the harrier pair nesting in the Little Dry Creek drainage west of Boulder Reservoir lost their young to coyotes on June 7. Several BCNA/Boulder Parks and Recreation volunteers witnessed the successful depredation of this nest after the male harrier disappeared a week earlier. Despite two and a half hours of valiant aerial defense from the female, the coyotes eventually got the young.

Nest monitors at Boulder Reservoir also witnessed the successful fledging of two young from an osprey nest on the west side of the reservoir. No burrowing owls nested around Boulder reservoir this summer, but a total of four pairs nested successfully throughout Boulder County, fledging 17 young.



Northern Harrier by Claudia Van Wie

We thank all our nest monitors, including the following Boulder Reservoir volunteers:

George Alexander, Sharon Anderson,
Linda Andes-Georges, Stu and Yvonne Bader,
Ginger Beske, Barbara Brandt, John Dietrich,
Carol Dozier, Haylen Gregory, Greg Holden,
Kumiko Iwata, Shirley Jin, Chuck Klomp,
Viki Lawrence, Melissa Lester, Elizabeth Litkowski,
Nancy Ries Morrison, Kitty Noonan, Linda Palmer,
Michael Patterson, Carly Pierce, Jeanine Pow,
George Rosborough, Gary Rabourn,
Gretchen and Peter Ridgeway, Mary Sandmann,
Darin Toohey, and Robin Youngelman.

Coming in our Winter Issue: the schedule of speakers for the March 2016 Ecosystem Symposium on Agriculture in Boulder County.

Message from our President, Sue Cass The Recreational Shooting Issue

The cool and wet of our protracted spring gave way to hot and dry in July and August when I recorded a total of .18 inch of rain for the entire month of August in my central Longmont landscape. Alan and I attempted to escape to our mountain property at 10,200' in the high subalpine straddling the southern boundary of the Indian Peaks Wilderness Area near Caribou. We successfully escaped the heat, but could not escape the constant sound of gunfire which has become an ever present aggravation and cause for concern . . . actually . . . fear! What has been a sanctuary for four generations of my husband's family, where we have educated our sons (5th generation) and our grandson (6th generation) in the ways of wilderness and wildlife, is now a deafening, dirty, dangerous shooting range! This has to end and we may have one last chance to influence the outcome!

The Northern Front Range Recreational Sport Shooting Management Partnership, of which Boulder County is a member, has identified five potential target shooting sites along the Scenic Peak to Peak Byway in western Boulder County, one of which may become an authorized target shooting range. The five sites are the Allenspark dump, Bunce School Road, Beaver Reservoir Road, Ruby Gulch and West Magnolia Road areas. The goal of the "Partnership" is to select a site in each of several Front Range counties where target shooting can legally occur in the National Forest and would, theoretically, be restricted elsewhere, a laudable yet problematic goal!

These areas are not remote and uninhabited! People reside in and recreate within range and earshot and all the undesirable aspects of target shooting--traffic, noise, litter, stray bullets, increased risk of fire--will be concentrated in whichever area is chosen. Further, critical wildlife habitat and migration corridors delineated in the Boulder County Comprehensive Plan are put at risk. Affected residents, recreationists and interested parties have formed the Peak to Peak Scenic Byway Coalition to influence the decision making in a positive way. You can access their website at www.peaktopeakcoalition.com for a well laid out synopsis of the situation and an opportunity to comment and sign the coalition's petition.

BCNA, through action of the Board of Directors, has conveyed opposition to the five proposed sites wedged between the Peak to Peak Scenic Byway and the Indian Peaks Wilderness Area to the Boulder County Commissioners and has requested further search for a safe, secluded, easily supervised site that does not destroy quality of life or jeopardize critical wildlife habitat and migration corridors.

Additionally, BCNA urges increased scrutiny and enforcement by Boulder County and National Forest law enforcement when shooting is no longer allowed beyond the legal site chosen. If you have strong feelings, please make them known to the Boulder County Commissioners. Thank you and we'll keep you informed!

Sue Cass, 524 Henry Court, Longmont, CO 80501-2585, 720-684-6922 (home) 303-641-4809 (cell), suecass@comcast.net

The purpose of the Northern Front Range Recreational Sport Shooting Management Partnership is to develop a landscape-level, multi-jurisdictional strategy to provide safe, responsible and accessible recreational sport shooting opportunities while addressing conflicts near residential areas and with other recreation users across the northern Colorado Front Range.

Partners include the U.S. Forest Service, Arapaho & Roosevelt National Forests and Pawnee National Grassland; Colorado Parks & Wildlife, Northeast Region; Boulder County, Clear Creek County, Gilpin County, and Larimer County.

See http://www.sportshootingpartners.org/ for additional information.

Impacts of Sports Shooting on Wildlife

Boulder County has carefully mapped important wildlife migration corridors and spawning grounds in the county, as part of its 2014 Comprehensive Plan Update. Remarkably, the majority of the five proposed sites are situated directly within these migration corridors. There is simply no way to reconcile these sites with the letter or spirit of Boulder County's long-standing conservation goals with respect to protecting wildlife habitat for the benefit of all citizens and visitors to Boulder County. It is well-known that constant noise affects wildlife in numerous ways, including causing substantial changes in foraging and antipredator behavior, reproductive success, population density, and community structure.

Excerpted from letter to the Boulder County Commissioners, Peak to Peak Scenic Byway Coalition, www.peaktopeakcoalition.com

Objections to the Proposed Shooting Range Sites in Boulder County Cindy Maynard

Four of the five proposed sites are near Peak to Peak National Scenic Byway. This scenic corridor is not only significantly populated, but introduces thousands, if not millions, of visitors to the natural beauty of this area.

If any of the proposed sites is a poster child for the deleterious effects of recreational shooting, the Allenspark Dump is certainly a prime candidate. The Allenspark Dump Site is a small Forest Service in-holding, surrounded by private property and other public owners. It was closed to recreational shooting in April 2010 after nearby residents filed dozens of complaints. They suffered near misses from bullets whizzing by (remember these are deadly weapons), feared leaving their homes when shooters were about, and were exposed to incessant noise pollution. The site is too small. The proposed buffer area is pocked with private owners, making them and their properties a de-facto buffer zone. The site is too close to the Peak to Peak Highway, well within the range of stray bullets. For many years the site was an unregulated dump, and shooting at this location poses health risks.

The **Bunce School Road** is very close to the Allenspark Dump site and shares all of its defects with the exception of having a dump. The map appears to show an even denser concentration of buildings.

The **Beaver Reservoir Road** is equally dangerous and inappropriate. It is just a few hundred feet from private land. The heavily-used Sourdough Trail, Peaceful Valley Campground, Boy Scout's Camp Tahosa, and a residential development are all very nearby. Who will guarantee that no stray bullets will eventually cause a catastrophe? Who will assure any of these users peaceful enjoyment of these popular places? Who is prepared to provide the strict enforcement needed?

The **Ruby Gulch** site is inappropriate for another suite of important reasons. It is less than a mile away from University of Colorado's Mountain Research Station, and directly downhill from it. There are no topographic barriers. The Mountain Research Station was founded in 1908 and has become an integral part of the academic experience of many CU students in many disciplines. For over 90 years it has been dedicated to the advancement of scientific study of mountain ecosystems. It is crucially important to scientific research and education.

It conducts over three million dollars in federally-funded research each year, and hosts up to 100 students (K12, undergrad, and grad), researchers, and staff. A nearby open-air shooting gallery will have a significant negative impact. The researchers and students are already suffering from bullets whizzing over their heads. They are entitled to a safe and quiet place to study and learn.

The fifth proposed site, **West Magnolia Road**, is barely a mile from of Nederland and Nederland High School. As of the 2010 census, Nederland had a population of 1,445, not counting visitors who come in great numbers in all seasons. This significant population would be subjected to the constant noise and danger of an unsupervised outdoor shooting range.

In addition to the safety hazards, the Forest Service cannot ignore that recreational shooters routinely leave behind significant litter, pose a serious fire hazard, and routinely disrespect private property.

Autumn Hike at Caribou Ranch Open Space

October 20, Tuesday, 5:00 pm until dusk,
Autumn Hike at Caribou Ranch Open Space led by
board members Sue Cass, Howard Witkin and
Megan Bowes. We'll hike about 1.5 miles to the old
homestead area, where we'll enjoy a snack around
sunset; please bring something to share. We'll look
for late-flying birds and the changing colors of the
aspen leaves. If we're lucky, we'll hear the elk
bugling! Meet to carpool at 4:15 pm at the Settlers
Park parking area just off Canyon Boulevard near the
mouth of Boulder Canyon. Return around 8:00 pm.
For information, contact Megan Bowes:
bowesm@bouldercolorado.gov or 303-561-4883.



Aspens at Caribou Ranch, by Carol McCasland

Boulder Rights of Nature 2015 Film Festival

November 5th thru 8th

The second annual Boulder Rights of Nature Film Festival will take place November 5th thru 8th, at the Boulder Dairy Center for the Performing Arts. Last year's inaugural festival, the first of its kind in the world, attracted more than 525 attendees and received financial support from 40 business, group, and individual sponsors. This year sponsors include Boulder County Nature Association, Boulder County Audubon, Boulder Rights of Nature, Terra Foundation, and Wild Earth Guardians.

Interest generated last year by showing of the poignant film "Green" enabled us to raise nearly \$10,000 after the festival to support orangutan conservation in Sumatra. We hope to use proceeds and post-festival donations from this year's event to support efforts to support and restore native wildlife populations in Colorado.

We hope you can attend one or more of the sessions, listed below, and we invite you to consider becoming a sponsor of this year's festival. Individual sponsors receive:

- 1. Tickets and preferred seating at each of four sessions on November 5th thru 8th and weekend workshops on prairie dog ecology and beekeeping.
- 2. An invitation to our "Meet the Filmmakers" wine and vegetarian hors d'oeuvres reception at 1498 King Street, in Boulder, on Thursday afternoon, November 5th, from 4 to 6 pm.
- 3. A Boulder County Nature Association or other local field guide of your choice.

Here's a tentative schedule of this year's films and free workshops:

Thursday evening

6:30: "Thomas Berry: The Great Story" (Intimate profile of the "father" of the modern North American Rights of Nature movement)

7:30: "The Sagebrush Sea" (Dazzling photography portrays life in and threats to one of our seminal ecosystems)

Friday evening

6:00: "Commoner" (Starling geometry)

6:30: "Inhabit" (Enhancing our ecological footprint through permaculture)

Saturday morning

Morning workshop: Honeybees and pollinators (time yet to be determined)

Saturday evening

6:00: "Sticky" (Animated film about rediscovery of an "extinct" species)

6:30: "Chasing Water" (Following the Colorado River to the sea--local filmmaker)

7:00: "When Giants Fall" (Intelligent, compassionate elephants fight for survival)

Sunday morning

Workshop: Prairie dog puppet show

Sunday afternoon

Workshop: Native-American grass dancers

Sunday evening

6:00: "Stillness" (Quiet, pristine images of Antarctic and Arctic ice floes)

7:00: "Watermark" or "The Pearl Button". The spirit and energy of water in the Earth's ecosystems.

Greater Sage-Grouse Male

Steve Jones, Boulder Rights of Nature, BCNA, and BCAS, 3543 Smuggler Way, Boulder CO 80305, 303-494-2468; curlewsj@comcast.net

AUTUMN CALENDAR

The following programs are sponsored by Boulder Audubon. All programs are free and open to the public. See www.boulderaudubon.org for further details.

October 9, *Birding at Rabbit Mountain Open Space*. Leader: Carl Starace.

October 24, *Birding at Walden Ponds*. Leader, Richard Pautsch.

October 27, *Birds of Brazil's Mata Atlantica*. Presented by Eric DeFonso.

November 14, *Rare Divers of the Eastern Plains*. Leader: Bill Kaempfer.

December 3, **Behind the Scenes at the CU Museum Ornithology Collection**. Leader: CU Collections Manager Emily Baker.

December 20, Boulder County Audubon Christmas Bird Count. Bill Schmoker

December 22, *Winter Solstice Sunrise Hike*. Leader Steve Jones.

Winter Tree and Shrub ID: What? No leaves, no flowers?

November 11 and 14, Megan Bowes, Instructor

This two-day class will closely examine woody plants—without their more readily identifiable leaves and flowers! We will focus on the structure of buds, twigs and bark that are visible during the winter and uncover any supplementary characteristics like seeds, fruit, nuts or dried leaves that may persist on the plant or on the ground beneath. Native and nonnative woodies (as well as a few herbaceous species!) will be featured.

For additional information and to register, visit www.bcna.org/summerfallclasses.html.

Connect with nature:

nature-net-subscribe@yahoogroups.com

BCNA Memberships renew on January 1, 2016
The strength in BCNA lies in
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Anne U. White Trail: Evolution of a Beloved Butterfly Trail Janet Chu

Peer over the green steel barricade today to see a full stand of tall alien yellow sweet clover and a gaping bare rocky streambed. Both the Anne U. White Trail and several homes below were devastated by the flood of September 2013. The trail has been closed since then.

This trail was a little-known biological treasure. In 2005 it was described as "a deep and well-preserved small Foothill's canyon" by butterfly researchers. Its lush well-covered slopes and large variety of plants support high counts of butterfly species. During six field days in 2005, 53 butterfly species were recorded, comparable to butterfly diversity in much larger areas, such as Heil Valley Open Space. It is one of the most productive sites among eleven Boulder County Open Space research areas.

In 2007, the researchers wrote, "The total numbers of butterfly species remained relatively constant on the Anne U. White Trail. This, our primary Foothills research location, is a stable habitat. This productive narrow canyon is rich in its number and diversity of butterfly host and nectar plants." (Host plants provide food for the caterpillars, while butterflies feed on flower nectar.)

The Anne U. White trail usually provided one of our earliest secluded warm spots. Researchers were always eager to begin the season with early butterfly searches there. However, in 2010 twelve inches of snowpack continued to melt on the slippery trail on March 30. The Hoary Commas and Mourning Cloaks roused out of hibernation and swirled around each other over the stream. The trail had become popular with hikers, long-distance runners, and dog owners who tended to impact some of the vegetation. On June 16, there were sixteen dog-walkers and two dogs off leash. The bare ground continued to be exposed on their social trails.



American Lady on Monarda by John Barr

During 2011 "Heavy foot traffic and off-leash dogs continue to disturb trailside vegetation. On April 15, there were 14 dogs and three off-leashes. Their claws cut the undergrowth, destroying blossoming and possible nectar producing plants for butterflies." Even so, it remained a productive valley. On May 8, we observed Western Pine Elfins nectaring on Wild Plum and Oregon Grape-holly, with the Echo Azures on Willows.

In late spring 2011 rich vegetation and optimal weather conditions were conducive to butterfly life cycles resulting in *the highest numbers of individuals seen during nine years of observations*. Butterflies were numerous and active in June with many blossoms evident. Four species of Swallowtails and Common Ringlets were flying above the trail.



Hesperis Fritillary by John Barr

On August 12, 2011, Amy Chu wrote in her field journal, "The trail was just opened after a five-foot flood washed through here from the Fourmile burn area. It was rebuilt by staff and 12 Youth Corps volunteers after flooding took many trees down and snapped willows. The stream was previously topsoiledged and about two to three feet wide, but now is sanded in five foot widths. The detritus is full of charcoal with at least two drowned orange Aphrodite Fritillaries among the black chunks." She did comment that the 12 species and 123 individuals had returned on that day, after this small disruption. It was the first day hikers were allowed to revisit after one month of trail work following the Fourmile Fire.

During February, 2012, there was heavy snowfall and rain, which was a precursor to a spectacular spring and early summer flower crop. The warmth of early summer and the numerous blossoms triggered butterflies to disperse more widely. We anticipated a fine season with many immigrants arriving, and this was so until early July. Twenty-nine species were observed in Open

(Continued on page 7)

(A. U. White Trail, continued from page 6)

Spaces properties outside of their predictable habitats. However, when a ten-day blistering heat wave began on June 22, it was enough to stop much flower production in the Foothills. Drought followed in July and caused blossoming to cease, and butterflies to emerge much less often from then on.

On May 19, 2013, the seldom seen Spring Whites and Julia Orangetips were flying. One of the two Uhler's Arctics during this season was seen here. This meadow butterfly is usually more common. In August the Northwestern Fritillaries, Taxiles and Woodland Skippers were flying by the dozens and nectaring on Heterotheca, Fremont Geranium, Canada Thistle, Bull Thistle and Solidago. An abundance of nectarenergy provided for great butterfly activity, including Skippers chasing up and around the Fritillaries. During August fifteen species were observed, including the rare Dusted Skipper, the welcome Monarch, and Red Admiral.

Even though July 2013 was the third wettest in Boulder, the temperatures were so high (about 74 days above 90 degrees), the summer butterfly populations didn't recover. By mid-August some late summer butterflies had emerged, but populations were smaller than seen in the past. "This continues to be an ideal trail for close-up nature study with the stream beside and often below the observers, and canyon



Dusted Skipper—a rare butterfly that has colonized in this area from the eastern U.S. by John Barr

walls close to the trail. It is heavily used by picnickers, trail runners, people with dogs (mostly on leash). The newly instituted noon closure (in fear of further flooding) has actually allowed some vegetation to recover."

On August 7, 2015 we entered the canyon with two rangers. A lively Monarch greeted us at the barricade, joined by American and Painted Ladies, Aphrodite Fritillaries, Taxiles and Woodland Skippers. One ragged Gray Hairstreak spent its last day quietly on a rock in the streamlet. A Mourning Cloak was our last butterfly sighting as we left the rubble.

To conclude, the riparian flowers have not recovered. Monarda has minimal blooms and the Melilotus clover fills monoculture spaces. Some Oxeye-daisy invasives are showing along with many aggressive Mullein. During that August, 2015 day of exploration, only ten species and 33 individual butterflies were counted. This compares with

2012, the highest count year, with 50 species and 509 individuals.

The trail has been closed since the remarkable flood of September 2013. Some work has occurred to clear timbers from the creek to prevent further debris accumulation. Volunteers and staff have begun some trail recovery that is projected to be complete at the end of the 2016 season. The recovery is very slow. There is no trail. Further research will necessarily have to wait.

Note: This is a shortened version of Jan's report. To read the complete report visit www.bcna.org/library/
ButterfliesAnnWhiteTrail-Chu.pdf. The Anne U. White Trail was established in 1983 and is managed by the Boulder County Parks and Open Space Department.

Moss' Elfin - a rare butterfly found only in the spring by John Barr

We invite you to report your sightings to www.coloradofrontrangebutterflies.com

Boulder County Audubon Environmental Awards 2015

We offer our deep gratitude and hearty congratulations to Jan Chu, Steve Jones, and Carol McCasland for their many contributions to the understanding and protection of our diverse and beautiful natural environment. This version of the award citations has been slightly shortened. See the September issue of the Audubon newsletter for the award citations in their entirety – www.boulderaudubon.org/wp-content/uploads/2015/04/e-OTW_Sept2015.pdf.

Jan Chu: Lifetime Achievement Award by Pam Piombino

Most of us know Jan as the "butterfly lady," an association that is well deserved. Her passion for these exquisite creatures started almost 40 years ago. Jan taught high school biology for 30 years. She was integral to the establishment of the Cal-Wood Education Center and still sits on its Board of Directors. It is on that species-rich property that she organizes the annual 4th of July butterfly count.

Jan started working on surveying butterflies in Boulder and the surrounding county as early as 1978. She participated in a 10-year study of Lepidoptera in RMNP. She was the first to begin documenting the habitats, nectar sources, and diversity of the Lepidoptera here. She continues to monitor butterfly populations on Boulder County Open Space, for whom she has produced annual reports for the past 13 years. Among her many accolades are: Outstanding Biology Teacher, from the National Association of Biology Teachers; the Amgen Company Award for Outstanding Science Teaching, and the 2012 Pacesetter Award, bestowed by the Boulder Daily Camera. Jan continues to teach butterfly classes for Boulder County Nature Association, through which she and Steve Jones published *Butterflies of the Colorado Front Range*. As her dear friend Jean Morgan insists, Jan's last breath will be drawn to identify a butterfly for a novice. It has been an honor and a privilege to have her as a member of both BCAS and the broader scientific community.

Steve Jones: Lifetime Achievement Award by Ray Bridge

It could be fairly said, without dispute, that Steve Jones is a born naturalist and teacher. He taught for seven years at Southern Hills Junior High School and for 25 years as a part-time Adult Basic Education instructor; he has remained a challenging and innovative teacher for all ages, while continuing his commitment to young people as the mainstay for Boulder Audubon Society's Young Naturalist program. Above all, Steve has been the most visible face for the major nature associations in Boulder County: the Boulder County Audubon Society, the Boulder County Nature Association, and, most recently, Boulder Rights of Nature. For all of them, Steve has provided inspiring leadership, and he has been a tireless workhorse for day-to-day tasks. To the extent that these organizations are vibrant and functional today, it is due in no small part to Steve's efforts.

At the same time, Steve has become the pre-eminent authority on our wildlife and ecosystems, and the resource to whom our planning departments address their first inquiries when the conservation of natural habitats is at stake. He has contributed enormously to our understanding: devising, supervising, and promoting citizen science projects in addition to his own notable contributions as a consultant, advisor, and occasional (reluctant) member of citizen management planning committees. Steve is also unfailingly generous in sharing his knowledge, as everyone who has been on a field trip or in a class with him can attest. He is encyclopedic in his knowledge of our ecosystems, deeply analytic, and innovative in sharing his understanding. In addition, Steve is a remarkable photographer and author. Finally, Steve has been an indefatigable and passionate advocate for species and ecosystems in Boulder County and around the world.

Carol McCasland: Community Conservation Award for Exceptional Volunteerism by Pam Piombino Five years ago, Carol, who had lived in Texas most of her life and has the accent to prove it, decided that she would prefer to enjoy retirement in Colorado. She packed up and made the big jump to Louisville. In this short time period, she has become one of the most active and dedicated volunteers to ever grace the Front Range. Currently, her role in Boulder County Audubon is as the B.C.A.S. Treasurer, which is nearly a half-time job. Carol and Brinda Henley organized our very successful silent auction at the 40th Anniversary party in 2014, a huge job. Her voice on the Board of Directors is thoughtful, insightful, and always accompanied by an easy laugh. Further abroad, Carol is a docent at the Denver Zoo, which is the highest of three levels to be achieved in the zoo's very rigorous training protocols. This leaves her free to design her own teaching programs, which she does regularly, with her usual deft sense of humor and imaginative curriculum. Her contributions to our citizen science programs have been significant: she does nest monitoring for the City of Louisville, as well as for a bluebird trail; runs a burrowing owl transect, and a winter raptor transect; and she leads tours for City of Boulder Open Space as a Volunteer Naturalist. In her spare time, she travels the natural world, visits family in Texas, and is one of the two women who produce the Boulder County Nature Association newsletter. We take this opportunity to thank and acknowledge Carol McCasland for the consistently positive, can-do attitude that she brings to BCAS and all of the other organizations that are blessed by her participation. If she says she will do something, it gets done!

Support the Boulder County Nature Association

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The membership year is January 1 to December 31. Those who join after October 1 are considered members in good standing through the following year. All members receive this quarterly newsletter. Supporter-level members and higher also receive a complimentary copy of each BCNA publication.

Please make checks payable to "Boulder County Nature Association" or "BCNA" and mail to: P.O. Box 493, Boulder, CO 80306.

Boulder County Nature Association P.O. Box 493 Boulder, CO 80306