# **Boulder County Nature Association**



"The Boulder County Nature Association is a private, non-profit membership organization committed to preserving the natural history of our region through research, documentation, and public education."

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# REMEMBERING JOYCE Naturalist, teacher, writer, friend

Joyce Gellhorn contributed her many talents to the Boulder County Nature Association since its founding 30 years ago. She served on the Board of Directors and the Education Committee, taught popular classes on fire ecology, orchids, aspen, ptarmigan, and spring wildflowers, and wrote articles for the newsletter. She was an ardent advocate for protecting wild lands.

Just before she died this past July she said: Without the natural world I would be lost. With the natural world I gain balance. A lot of the troubles of the world just fade away and I can get lost in nature's beauty. Joyce shared her passion for the natural world in three books: Song of the Alpine (2002), White-tailed Ptarmigan: Ghosts of the Alpine (2008), and Aspen Dreams: A Memoir, which is scheduled for publication this October (see the Foreword to the book on page 3).

Joyce first visited Colorado as a young child and spent many happy summers at her family's cabin near Meeker Park. She studied at the University of Colorado in Boulder, completing her undergraduate and doctoral degrees there. In addition to teaching at Boulder Senior High School for 20 years, she taught field classes in Boulder County for nearly 30 years. She will be missed by all who knew her.



Joyce in Bhutan, April 2012, photo by Leslie Hopf

Joyce is quite at peace with her impending death and is happy to hear from and see friends. Her positive approach is certainly an inspiration for all of us. Our long-standing Wednesday Ladies hiking group is getting together with her tomorrow on Trail Ridge to spend time on her beloved tundra, looking for wildflowers and ptarmigan. She's amazing! Carol Kampert, Chair, BCNA Education Committee

Joyce, Dear Joyce, one would have thought we would have steeled ourselves for this moment, but, alas, the feeling of profound loss still washes over us. I can think of no better tribute than to promise to live out the rest of my days reflecting upon and attempting to replicate your calm, reverent and good-natured approach to the wondrous and intriguing world that surrounds all of us. You opened my eyes wider on so many occasions and, for that, I thank you!

Sue Cass, BCNA Board of Directors

Joyce will be greatly missed. As my botany teacher at Boulder High, her inspired teaching gave me a great head start as I pursued wildlife biology at CSU and led to the rewarding (and busy) work life I have today.

Scott Severs, BCNA Board of Directors

What a loss, what a wonderful life. Joyce completed the circle with a gold crown. She was taught and learned to see. She taught herself and learned to see more, and learned to teach others. She taught others and so many have learned to see. Her life ripples outward forever.

Pat Murphy, Plant Ecologist

To hear a podcast of a field trip with Joyce, go to www.bcna.org, on the home page scroll down to "Nature Almanac" and click on "subscribe to Nature Almanac podcast," and select "Orchids."

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### **RESEARCH GRANTS FOR 2012**

Peter Kleinman, Chairperson, Grants Committee

This year we are again fortunate to be able to offer small grants to support local research on our ecosystems, and privileged to have a number of fine proposals. We will certainly update you next spring as final reports become available. At this point you will be interested to hear of four fine projects which your dues and additional grants support.

Ana Lisette Arellano's project will compare the intestinal parasites and microbial endosymbionts of wild and domestic canines in Boulder County. Lisa will be taking wild and domestic scat samples in the Boulder area to study pathogen transmission to further our knowledge of potential health risks to humans from spillover, but also to get a look at spillover in the reverse direction which may have implications for wildlife management decisions at the interface between domestic and wild populations.

Caitlin Kelly of the Department of Ecology and Environmental Biology will conduct a study on "Chemical Mediation of Penstemon-Herbivore Interactions." The focus will be on the chemical defenses of two species of penstemon native to Boulder County. Frequently used in landscaping projects, it is important understand how these chemical mediators may influence the ecosystems they inhabit by attracting or deterring certain insects. Caitlin will be looking specifically at iridoid glycosides, especially bitter compounds known to be potent mediators of plant-insect interactions. Looking at a particular herbivore, the butterfly Euphydryas anicia, do the females induce a change in chemical defenses, and is there differential survival of larvae on two co-occurring penstemon species?

A third project will be conducted by Jennifer Wilkening, also with the Department of Ecology and Evolutionary Biology. She is studying the effects of climate change on the American pika. She is interested in pika behavior and survival rates at several sites within the Wilderness. She will continue her study of the role of micro-habitat use in explaining apparent anomalies in the shifting distribution of the pika in Boulder County. Some predictions are that 80 percent of pikas will disappear from their current range over the course of this century, so data about these distribution and survival patterns can help inform decisions about adding pikas to the endangered species list. Jennifer will be using a technique which measures fecal cortisone as a measure of stress as an important consideration in a declining species.

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### **MESSAGE FROM THE BOARD**

Peter D. Kleinman, President

This has been an exciting year for BCNA with some new challenges to address. The ecosystem conference in April was a strong success, dealing with issues of water conservation and ecosystem research. Challenges for us involve making the conference relevant for more people, perhaps through better advertising to expand our audience, and finding a better date when it won't be so beautiful outside and have us competing with all that is great in Colorado.

Next year we are planning to talk about alpine ecosystems, and, of course, we invite ideas about the conference from everyone. Sadly, Joyce Gellhorn died this summer, and we will dedicate the Conference to her memory and contributions to BCNA.

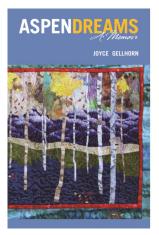
Our classes continue to be vibrant and interesting. I recently joined a class on Arapaho notions of their ecosystem and the way it is intimately integrated with their notions of the universe and their spirituality. Andy Cowell, a professor at the University of Colorado, led the class and I'm anxious to participate in more of the same high quality presentations. One challenge we face is somewhat spotty enrollment in courses, so that we need to make sure we have enough fresh material and are appealing to a younger generation which may have newer interests.

We continue to support civilian research and have an impressively large group of volunteers participating in projects such as the burrowing owl count on Boulder County lands and our wintering raptor survey. It seems to me that active participation in such programs keeps our relationship with Nature alive and meaningful. Maybe there are ways we can reach out to younger people, teenagers especially, and have their involvement become a habit and not just a strange thing that retired people do.

Finally, as people finish their terms on the Board of BCNA (there are at least two coming up this winter) we have a chance to bring on new, enthusiastic people. Adding new perspectives and ideas will keep the organization vital in the future. Please help us with your ideas about people who might make strong contributions to our future, and volunteer yourselves. A further issue involves expanding our membership. We hope you will all talk up your good experiences with BCNA. For me, it has made moving back to Colorado, after a long absence, one of the pleasures of my life.

# Foreword to Aspen Dreams by Joyce Gellhorn Steve Jones

In summer of 1975 I took a Rocky Mountain Nature Association field class taught by legendary alpine ecologist John Marr and his assistant Joyce Gellhorn Greene, a young ecologist and schoolteacher from Boulder. Early on, Dr. Marr's wife was hospitalized, and he excused himself for a major part of each class day. Joyce took over, leading us enthusiastically across the alpine meadows, tussock bogs, and boulder fields.



She asked each of us to undertake a research project, and she didn't even blink when I said I wanted to study vegetation and soil characteristics of obscure frost hummocks. In fact, she got down on her knees beside me in the dank, spongy ground and reveled over my miniscule discoveries--assenting enthusiastically when I noted that soil temperatures are lower and vegetation

more scarce on the west side of the hummocks, which are shielded from the sun's rays by afternoon thunderstorms.

That was my first experience with field ecology. Thirty-seven years later, I stood with Joyce in a verdant seep on Green Mountain, west of Boulder, admiring a patch of northern green bog orchids. Ruth Carol Cushman and I had invited Joyce to be a special guest on our monthly nature spot for KGNU public radio. Just a few days before, Joyce had sent out a frank and remarkably upbeat e-mail telling friends that her cancer had invaded her digestive system and that she didn't have much longer to live.

Seeing the bog orchids, Joyce rushed forward, beaming, and exclaimed, "Aha, here we have one!" When we came upon a rare golden coralroot orchid (an albinistic variant of spotted coralroot) growing under the pines nearby, she described its seed capsules as resembling "small yellow bananas drooping from a bright yellow stem."

I realized then what made Joyce uniquely Joyce. She didn't love nature, she reveled in it. And she was always moving forward, always eager to find whatever natural wonder lies beyond the next bend in the trail. Her students tell, lovingly, of field trips extending far beyond the appointed hour and of hearing the expression "just a little farther" way

too many times. One friend remembered, "We were reassured when Joyce insisted that the group would turn around by 2 p.m.--until we noticed that she wasn't wearing a watch."

It's these qualities--an intense love affair with the natural world coupled with forward-looking optimism and physical resolve--that enabled Joyce to survive the premature deaths of two sisters, a brother; and a son; the drifting away of a husband of 26 years; and two bouts with cancer. They inspired her to conduct groundbreaking research in the lives and adaptations of aspen trees, write poetic books about white-tailed ptarmigan and the alpine life zone, and introduce several thousand students, age 5 to 85, to field ecology.

These qualities enabled her to backpack for 17 days through Alaska's trail-less Brooks Range, climb 20,000-foot-high Island Peak near Mount Everest, and complete countless solo ski treks across the Continental Divide. At age 77, just a few weeks before entering hospice care for her non-treatable cancer, she completed an 80 mile trek through the high mountains of Bhutan, climbing all the way up to 14,600 feet.

"The physical activity felt good for my body, and the exertion stimulated my mind," she writes. "I gained strength with each passing day. Gradually a peacefulness enveloped me--I loved Bhutan, its diversity, its physical beauty, and its gentle people. Concerns regarding my own health slipped away and I gained a feeling of wholeness with the world."

These qualities also helped her to forge a personal relationship with quaking aspen, whose leaves glistened "like green rain" around her family's summer cabin in the Colorado Rockies. She tells of how aspen clones (groves of genetically identical trees--the largest and oldest beings on earth) create a world of their own. damp, musky, and filled with life--from the mushrooms and wildflowers poking out of the leaf litter to the deer



Northern Bog Orchid Photo by Steve Jones

and elk who munch on the powder-white bark, perhaps attracted by compounds related to aspirin. Through her words and experiences, we feel the soft light filtering down through the trembling

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# Boulder Rights of Nature Group Takes Off Steve Jones

In March, partly in response to concerns about fracking, GMOs, and recent threats to native wildlife populations in Boulder County, several of us organized a new voice for nature called *BORN:* Boulder Rights of Nature group. In the coming months we'll be talking to various local organizations, including Boulder County Nature Association, about passing a Rights of Nature ordinance in Boulder County.

The rights of nature movement has taken off around the world since Ecuador recognized nature's rights in its constitution in 2008. Under current structures of law around the world--including in the United States-nature is treated as property: it's been commodified. As a result, our environmental regulatory laws, such as the Clean Air Act and the Clean Water Act, regulate our *use* of nature. That is, they regulate how much it can be exploited and by whom.

In the United States and in Colorado, the result has been that after nearly four decades since these major environmental laws were enacted, the natural world is much worse off than before. Here in Boulder County we designated clear protections for native ecosystems and native wildlife species in the County comprehensive plan. But the plan has no legal clout, and recently local officials have ignored its goals in favor of expediency. As a result, we're on the verge of losing much of our native prairie ecosystem. including species like American badger, white-tailed jackrabbit, ferruginous hawk, and burrowing owl. In the mountains, a proliferation of trails, along with expansion plans for the Eldora Mountain Ski Resort, threaten critical habitat for boreal owls, Canada lynx, and other species.

Here are a few excerpts from the ordinance we have drafted:

<u>Section 2. Preamble and Purpose</u>. We the People of the County of Boulder declare that all human and non-human beings are part of nature and that living in balance and harmony with nature is essential for life, liberty, and the pursuit of happiness – both for people and for the ecological systems that give life to all species. We further declare that we have the duty to secure and enforce the inalienable Rights of Nature, upon which all life depends.

We the People recognize that the species and ecosystems of the earth have been degraded by human use to the point where many will not recover. We recognize that human activity is causing changes

to climate systems which are accelerating species' extinction and destroying ecosystems and natural habitat.

<u>Section 4. Statement of Law: Rights.</u> Natural communities and ecosystems possess inalienable and fundamental rights within the County of Boulder, Colorado. These rights include:

The right to exist, flourish, and evolve;

The right to habitat in order to exist, flourish and evolve in harmony with the ecosystem;

The right to maintain their identity and integrity as distinct, self-regulating beings;

The right to be free from degradation, pollution, and contamination of their natural genetic systems:

The right of each species and natural community to play its particular role in the natural ecosystem;

River systems have the right to flow and have water quality necessary to provide habitat for native plants and animals, and to provide clean drinking water;

Aquifers and ground water resources have the right to sustainable recharge, flow, and water quality; and have the right to be protected from harmful contamination

Species naturally occurring in Boulder County, Colorado prior to 1850, excepting pathogens and other organisms posing a direct threat to human health, have the right to exist, flourish and evolve in their natural environment.

Will you join us in helping to ensure legal protection for all natural communities in Boulder County? Our group meets monthly at rotating locations. Give me a call if you'd like to get involved. (303-494-2468 or curlewsj@comcast.net)



Photo by Scott Severs

# Upcoming Decisions about Dogs Off-leash on City of Boulder OSMP Lands

Karen Hollweg

The Boulder City Council has expressed concern about sustainability with respect to the City's Open Space and Mountain Park (0SMP) lands, observing that we are "loving to death" some lands and need to plan for the future. The evening of **Tuesday**, **November 27**, OSMP staff will present to the Council options regarding dogs off-leash, including their impact on visitors' experiences and possible revisions to the Green Tag program.

If you are concerned about dogs off-leash -- their impact on natural habitats and the native species that depend on them, plus their impact on your enjoyment of open space walks and observation of wildlife -- now is the time to make your views heard! For specific details, go to www.bouldercolorado.gov and click on Government, City Council. There you will find Council e-mail addresses for sending your views to Council members. You will also be able to read the background information packet provided to Council by OSMP staff in late November. At www.osmp.org you will find OSMP staff's "Voice and Sight Tag Program Evaluation."

Just as those who originated our open space program about a half-century ago paved the way for the development of our current Open Space and Mountain Parks program, it's our collective responsibility – as today's stewards of these natural areas – to speak out for the conservation of natural resources for future generations.

## **BCNA RETREAT**

Your BCNA Board of Directors has scheduled an all-day retreat to discuss important issues and to map strategy for the upcoming year. The retreat will be held Sunday, October 21, 2012 from 9:00 until 4:00 at the City of Boulder Open Space and Mountain Parks offices at 66 South Cherryvale Road. All BCNA members are welcome to attend. The final agenda for the retreat will be posted on BCNA's website, www.bcna.org, in the near future.

Connect with nature:

nature-net-subscribe@yahoogroups.com

# **Volunteer Naturalist Training Program**

Boulder County Parks and Open Space is now accepting applications for the 2012 Volunteer Naturalist training class. We are looking for people with a passion for nature, some knowledge of local natural history, and a strong desire to learn more and share their knowledge and enthusiasm with others.

Volunteer Naturalists lead interpretive nature hikes in county parks, present public natural history slide programs, and provide hands-on environmental field experiences for Boulder County schools.

A 10-week training program is required. Training includes an overview of the Boulder County Parks and Open Space Department, including history, mission, and resource management; Native American history; geology; plants and ecosystems; forestry; wildlife and birds; interpretive programming and resources. Training classes take place on Thursdays, January 1 through March 14, 2013 from 8:30 am to 4:00 pm in Longmont.

Participants must be at least 18 years old and attend all training sessions. Because many of our requested programs are scheduled Monday through Friday during daytime hours, applicants must have some ongoing weekday availability. Please Contact: Larry Colbenson at 303-678-6214 or Icolbenson@bouldercounty.org for information. Application deadline is November 16, 2012. Since there is limited space in the training course, all applicants will be interviewed.

Aspen Dreams, (continued from page 3) leaves and begin to sense the beating heart of these wondrous beings, sometimes described as the "mothers of the forest."

Throughout this glowing memoir, Joyce compares her life experiences to those of aspen. And she's absolutely right. Her roots, acquired from loving and trusting parents, anchored her strongly to soil and rock. Her shoots, forged through relationships with family, friends, and students, engendered countless "clones," communities of supportive, like-minded folks who cherish nature. Her seeds, sprinkled across the full array of Rocky Mountain ecosystems, sprouted budding naturalists who will continue on with her work.

I'm honored to count myself as one of those Joycesprouted naturalists. And I know that when I face my final journey, Joyce's eloquent words will inspire and comfort me--like the morning sun nourishing a clump of alpine forget-me-nots or an autumn breeze caressing a hillside of shimmering aspen leaves. Research Grants, (continued from page 2)

Our fourth award will go to Megan Mueller, biologist. and Josh Pollack, Conservation Director, of Rocky Mountain Wild who will continue their work on the Front Range Pica Project. This is a citizen scientist effort in which volunteers will contribute to a growing database concerning these endangered animals. An estimated fifty to seventy volunteers will collect data ranging from identifying talus as evidence of pika habitat, looking for evidence of pika occupancy. measuring variables such as cloud cover. temperature, etc., which may affect occupancy, identifying habitat variables such as water availability and vegetation, and making GPS coordinate measurements. Rocky Mountain Wild also feels strongly that a benefit of projects such as these is that it promotes citizen dedication to conservation and appreciation of the delicate balance of nature.

## Seeking Your Ideas for Natural History Classes!

Is there a BCNA field class that you've taken or wanted to take that you would like to see offered again? Or do you have ideas for classes that we haven't offered? The BCNA Education Committee is in the process of planning our 2013 Field Class Schedule and we would appreciate your ideas for classes on Boulder County natural history topics. Classes in the past have included topics such as warblers, raptors, grasslands, dragonflies and damselflies, Arapahos, mountain trees and shrubs, hummingbirds, ptarmigan, butterflies, orchids, ducks,

lichens, wildflower sketching, and many, many more.

Please send your ideas to Carol Kampert, BCNA Education Committee Chair, at kampert@comcast.net. You can see copies of our 2012 Summer-Fall class schedule at www.bcna.org (click on Classes) for examples of class topics, instructors and class descriptions. Thanks for your valuable input.



Fairy Slipper Photo by Steve Jones

### **BCNA Board of Directors**

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Secretary....Sue Cass 720-684-6922

Megan Bowes 303-561-4883 Steve Jones 303-494-2468 Janet McLachlan 303-746-3619 Steve Ponder 541-822-3248 Howard Witkin 303-789-4950

#### **Committees and Contacts**

- Avian Species of Special Concern:
   Dave Hallock (dheldora@rmi.net) and Steve Jones (curlewsj@comcast.net)
- Ecosystem Stewardship: Steve Jones (303-494-2468)
- Education: Carol Kampert (303-499-3049)
- Indian Peaks Bird Counts: Dave Hallock (303-258-3672) and Bill Kaempfer (303-954-8998)
- Membership: Janet McLachlan (303-746-3619) and Terry Stuart (303-449-2232)
- Newsletter:

Dianne Andrews, content editor (303-823-6779) Carol McCasland, layout (303-635-6433) and George Oetzel, support (303-543-3712)

- Publications: Sue Cass (720-684-6922)
- Research Grants: Peter Kleinman (303-554-5320)
- State and Regional Wildlife Issues: Peter Kleinman (303-554-5320)
- Website: George Oetzel (303-543-3712)
- Wintering Raptor Survey: Sue Cass (720-684-6922)

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

### **AUTUMN CALENDAR**

Tuesday, October 23, 7:15 pm, Rising from the **Dust Bowl: Sacred Springs and Enchanted** Canyons of Southeastern Colorado, Unitarian Universalist Church of Boulder, 5001 Pennsylvania Ave. (off 55th St. between Arapahoe and Baseline), presented by Steve Jones. Baca County, Colorado, lay in the heart of the fabled Dust Bowl where 1930s howlers scoured 850 million tons of topsoil from the prairie, depositing layers of grit as far east as New York and Washington, D.C. Today Baca County is carpeted with native prairie, and 90 percent of local income derives from environmentally sustainable ranching. Comanche National Grassland, encompassing nearly a half-million acres of lands acquired during the Great Depression, now supports thriving herds of pronghorn, elk, and even bighorn sheep. Mississippi kites, roadrunners, ladder-backed woodpeckers, eastern phoebes, scissor-tailed flycatchers, and painted buntings nest in spring-fed, rimrock canyons, where ancient pictographs adorn countless sacred sites. Teen Naturalist Skye Lewis will also be with us this evening to present a short PowerPoint on her experience at nature camp in Hog Island, Maine.

Thursday, October 25, 7 pm, Birding/Wildlife Viewing in Tanzania 2012, Boulder Reynolds Branch Library, Table Mesa Drive opposite King Soopers. Tim and Ann Henson will share their experience in Tanzania during March 2012. Accompanied by truly phenomenal guides from *Birding and Beyond*, they birded and toured northern Tanzania for 14 days. From the Usambara Mountains in the East to the vast Serengeti plains in the West, they toured five National Parks, as well as other life zones. 354 species of birds, 43 species of mammals along with other fauna, spectacular flora, and stunning scenery made it truly a trip of a lifetime.

Friday, December 21, 7 to 11 am, Winter Solstice Sunrise Hike on East Boulder-White Rocks Trail, with Steve Jones. Each Winter Solstice morning for over 25 years, BCNA members and fellow travelers have gathered on the banks of Boulder Creek to welcome the first sunrise of the new year. Many participants read poems or quotes to commemorate the occasion. Geese, ducks, and circling hawks provide accompaniment. Breakfast follows at the Golden Gate Café in Niwot. Dress warmly for this one -mile stroll down to the creek. It's the cold, mist, and hoar frost that attracted us to this venue in the first place! No RSVP is necessary, but for more information, contact Steve Jones: curlewsi@comcast.net; 303-494-2468.



Winter Solstice at White Rocks, December 2006

### **BCNA CELEBRATES 30 YEARS**

BCNA was founded in 1982 as a non-profit organization to "study and preserve the cultural and natural history of Boulder County and adjacent areas of the Colorado Front Range." Field research is the heart of BCNA. Ongoing studies include Indian Peaks bird counts, wintering raptor populations, cliff nesting birds of prey, small owl populations, elk migration corridors, old growth forests, and plains and riparian area restorations.

Educational activities include publications, field trips, seminars, and presentations to schools and interested community groups. Conservation Information gathered by BCNA is used to help local governments preserve natural areas, including critical plant and wildlife habitats. BCNA helped write and continually updates the Environmental Resources Element of the Boulder County Comprehensive Plan. We have also worked with the City of Boulder and other municipalities to develop comprehensive wildlife and ecosystem conservation plans.

As we begin our fourth decade, we want to thank all of our members for their support. We also extend our thanks to all of you who have volunteered over the years--many for the entire 30-year period--to further the goals of our organization, including our Board of Directors, all who serve on our committees, our course instructors, and all who participate in the field work that monitors Boulder County's wildlife and habitats.

The strength of BCNA lies in active member support. All members have a vote in the Association and can become involved in various committees. The membership also elects a Board of Directors that provides guidance for the Association and sets priorities. Visit our website for more information about our research, publications, classes, and history.

# **Support the Boulder County Nature Association**

Name		
Address		
Phone and/or E-mail (optional)		
Type of Membership:		
Student/Senior (65 or over)	\$15	
General Member	\$20	
Family or Household	\$30	
Supporter	\$40	
Founder	\$100	
Life Member	\$300	
Corporate	\$500	
Donation to General Research C	Grants	
Donation to Evenson Big Cat R	esearch Grants	
Donation to General Research I	₹und	

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