

# 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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## Greetings from your BCNA Board of Directors!

As I write, the pooled perspiration perpetrated by a hot, seemingly endless summer has barely dried and already the first dusting of snow has fallen on the highest peaks. By the time you read this, let's hope we are all basking in the golden glow of early autumn.

In our last communication, we told you about BCNA's support of the Boulder County Parks and Open Space (BCPOS) 2011 Burrowing Owl Survey, working alongside our sister organization, Boulder County Audubon Society (BCAS), which worked with the County early on to formulate the survey's approach and scope. Thank you, BCAS! Well, the results are in and some pretty interesting observations were made along with one remarkable accomplishment.

Three nesting pairs were confirmed on BCPOS property, all on the Carolyn Holmberg Preserve/Rock Creek Farm. One of these nests led to the closure of the Cradleboard Trail for an extended period of time during the nesting season. Though fewer in number than last year, these three nests were fairly productive, producing and successfully fledging what appear to be 13 or 14 young. The nest responsible for the closure of the Cradleboard Trail was located in tall grass, unusual for this species and making observation and tracking of the young a challenge. In addition to the monitoring done on BCPOS properties, City of Boulder Open Space and Mountain Parks (OSMP) staff monitored a total of six successful nests that fledged 18 or 19 young, all on OSMP properties. This brings the total for the season on all open space to 31 to 33 fledged Burrowing Owls.

Like many of our birds of prey, both diurnal and nocturnal, young Burrowing Owls return to their natal areas to breed, occasionally as yearlings but more often as two year olds, and many factors are in play as their reproductive success or failure is determined. The mortality rate for first year Burrowing Owls is high, approaching 75%, particularly for our exclusive migratory subspecies *Athene cunicularia hypugaea*. This species' proclivity for nesting in rodent burrows, especially prairie dog burrows, requires a better

understanding of its prerequisites for successful nesting and a commitment on our part to create and preserve the habitat that meets these needs if the Burrowing Owl population is to become and remain viable in Boulder County. I would like to believe the commitment is there. The understanding is acquired through research projects like the BCPOS Burrowing Owl Survey which would be nearly impossible without the support of dedicated County staff and the engagement of volunteers like those listed below. Only time will tell if this partnership and the determination of a little owl will produce the desired results.

Other interesting observations made during the 2011 Burrowing Owl Survey include:

A solitary, late migrating Snow Goose stopped over at Western Mobile on 26 April; a Great Egret observed at Suits on 29 May; nesting Bald Eagles fledged two young on Keyes in July.

A Red-headed Woodpecker at Flagg Park on 31 May, a formerly common species that has not nested in the County since 1990.

A nesting pair of Brown Thrashers at Dowe Flats on 22 June, the first confirmation in Boulder County for this species since the mid-twentieth century.

Other significant sightings include a Great-tailed Grackle at Rock Creek Farm; migrating Northern Parulas at Western Mobile; Loggerhead Shrike at Western Mobile North; Lark Buntings at Rock Creek Farm and Western Mobile; the latter two species haven't been confirmed nesting in Boulder County for two decades.

Oh, and about that "one remarkable accomplishment"...., every single volunteer completed every single survey he or she committed to for the four month duration of the project. For those of us who have been coordinating efforts like this for many years, this is a first! Thank you, volunteers!

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The 2011 BCPOS Burrowing Owl Survey volunteers are: Linda Andes-Georges, Linda Berti, Julia Bond, Barbara Brandt, Kerri Bryan, Ryan Carpenter, Sue Cass (BCNA, volunteer coordinator), Charley Chase, A.D. Chesley, Karen Clark, Jen Clink, Holly DeVaul, Martin Gerra, Sallie Greenwood, Bob Grossman, Renée Haip, Paula Hansley, Scott Harvey, Phyllis Hasheider, Brinda Hensley, Leslie Hopf, Stephen Jones (Boulder County Audubon Society, compiler) Elena Klaver, Peter Kleinman, Carolyn Kuban, Catherine Labio, Lark Latch, Sandra Laursen, Maureen Lawry, David Lucas, Joe Lupfer, Petrea Mah, Janet McLachlan, Jim McKee, Carol McCasland, Ruth McCarrison, Jean Morgan, Tina Nielsen, Steve Noud, George Oetzel, Marti Oetzel, Beccy Pem, Joe Pem, Chris Petrizzo, Tom Skinas, Tim Smock, Joel Such, Marcel Such, Oak Thorne, Alan Vajda, Kevin Winseck, Kristi Winseck, Lysa Wegman-French, Mort Wegman-French, Howard Witkin.

—Sue Cass, BCNA President

### **Stalking the Wild Mushroom** by Carol Kampert

Where can you find truffles in Colorado? Why are Stinkhorn mushrooms so stinky? What is a mushroom hoot? These are just some of the things participants learn about in “Wild Mushrooms”, a BCNA class taught by mycologist Jennifer Frazer for the past two summers.

Jennifer loves teaching for BCNA and helping participants discover the diverse life forms all around us, such as some of the thousands of species of mushrooms that lurk in the woods and yards of Colorado. She is a trained mycologist, with an undergraduate degree from Cornell in biology and a Master's Degree from Cornell in plant pathology with a concentration in mycology. She gained experience teaching as a teaching assistant for General Biology and Biochemistry at Cornell. A member of the Colorado Mycological Society, she has participated as a group leader in two scientific surveys of the fungi of Rocky Mountain National Park. Next year, she will also teach a course on wild mushrooms for the Rocky Mountain Nature Association.

But Jennifer has never wanted to be a specialist. She's always been intrigued by some of earth's less visible organisms that are often overlooked or hard to detect, such as slime molds and mosses, amoebas and snow worms. She also loves earth and atmospheric sciences, as well as deep sea science.

Jennifer says: “I'm passionate about the diversity of life and about sharing that enthusiasm with a sense of humor.” So after graduating from Cornell, she went to MIT where she got a Master's Degree in science writing, a field that has allowed her to research and write about all aspects of science.

Born in southeast Tennessee, Jennifer developed a love of nature during her childhood wanderings in the woods around her house, something her parents encouraged. Colorado vacations during her childhood planted the seeds of love for the open spaces of the west ([The Solace of Open Spaces](#) by Gretel Ehrlich about Wyoming was an inspirational book for Jennifer). In 2004, she was hired as the health and environment reporter for the *Wyoming Tribune-Eagle* in Cheyenne. Then she moved to Boulder in 2007 and worked as a science writer for NCAR for nearly four years, developing on-line training courses on various earth and atmosphere topics such as weather and health, fire fuels, and tsunamis.

Jennifer now has a blog on the *Scientific American* network entitled “The Artful Amoeba: A Blog About the Weird Wonderfulness of Life on Earth” ([blogs.scientificamerican.com/artful-amoeba](http://blogs.scientificamerican.com/artful-amoeba)). Her informative and humorous blogs about various natural history subjects are a delight to read. One is about “rock snot”, a mat-forming diatom that is invading western rivers. In it she writes: “A diatom! The glass art of the oceans – a vast class of photosynthetic unicellular pillbox-shelled organisms with a lineup of cute species rivaling the cast of Pokemon and the reproductive issues induced by life – quite literally – in a glass house.” Jennifer is also developing a proposal for a book on slime molds and plans to spend the next few years writing the book, if the proposal is accepted.

Jennifer's career goal is to make a living as a full-time writer and teacher – and perhaps to one day have her own TV show - so that she can stimulate people's curiosity and increase their knowledge about nature's diversity. In the near future, she would like to teach a course on plant diversity and evolution and to learn more about Colorado's insects and other small invertebrates. A certified SCUBA diver, her big dream is to descend to the deep sea some day in a submersible vehicle. Good luck, Jennifer, in achieving all your goals and dreams. We're lucky to have you as a BCNA instructor.

Here are answers to the questions at the beginning of this article:

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### Volunteer Aquatic Bird Monitors Needed

City of Boulder Open Space and Mountain Parks (OSMP) is recruiting volunteers with experience in bird identification to monitor waterfowl, shorebirds and other aquatic bird species on OSMP. Because this monitoring information will be used to inform management decisions, individuals familiar with local avian species, including waterfowl, shorebirds and wading birds are preferred.

After field and data-entry training, volunteers will be assigned a monitoring site. So far, 5 monitoring sites on OSMP have been identified. Interested volunteers should have some knowledge and skills in local wildlife species identification, enjoy working in the outdoors in all types of weather, and possess the ability to maintain computer records.

OSMP asks that individuals commit for at least one year of involvement in the project, with the goal of establishing this as a long-term monitoring project. Boulder County Parks and Open Space has been managing a similar volunteer effort at 4 sites for the past 3 years, so it would be beneficial to expand the project area to include OSMP water bodies.

Volunteers who are selected will collect data at least twice monthly, and will be able to work in early morning hours.

To learn more about this opportunity, contact Will Keeley, OSMP Wildlife Ecologist, at 720-564-2085 or [keeleyw@bouldercolorado.gov](mailto:keeleyw@bouldercolorado.gov)

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1. Where do you find truffles in Colorado? Answer: In the pine needle duff of the lodgepole pine forest. These fungi are adapted to dry conditions, and they grow underground where their strong smell attracts mammals – like squirrels – who dig them up, eat them, and then spread their spores in their scat. A rake is handy for poking around pine needle duff to find these prized mushrooms – but replacing the duff after looking is critical to keeping the soil healthy.

2. Why are Stinkhorn mushrooms stinky? Answer: Stinkhorns are decomposers that attract flies, which spread their spores. Stinkhorns are not poisonous and their underground “egg” is edible. (But don’t try to eat any mushroom you’re not sure about.)

3. What is a mushroom hoot? Answer: You have to take Jennifer’s class to find the answer to this one.

### BCNA Fall Calendar

**BCNA Wintering Raptor Surveys:** The 2011/2012 season begins on October 15<sup>th</sup> and a training session will be held for new surveyors on Thursday evening, **October 13<sup>th</sup> from 7:00 until 9:00 PM** at the North Foothills Nature Center at the Wonderland Hills Trailhead on North Broadway in Boulder. We will review field identification, protocol and methodology. Experienced surveyors are welcome to attend to share their experiences and techniques and welcome new surveyors.

**Saturday, November 5, 8:30 – 11:30 a.m.**  
**"Wetlands Bus Birding, Sombrero Marsh"**

With Petrea Mah and Boulder County Audubon. Please be on time – the bus will not wait! Meet at Scott Carpenter Park. Join us for a bus ride to the bird watching spot. We'll meet near the Long JUMP bus stop on Arapahoe on the north side of Scott Carpenter Park (30th and Arapahoe in Boulder), and bus out to Sombrero Marsh for an easy walk to look for ducks and other wetland birds. We will do a brief orientation to wetland birding on the bus as we ride to this alkaline salt marsh that is Boulder County's largest natural wetland. Please bring water, a snack, and footwear suitable for easy trail hiking; also bird guides and binoculars if you have them.

**Sunday, December 18, All Day, “Christmas Bird Count”** Come out and enjoy the annual Christmas Bird Count this year. Call leader Bill Schmoker, 303-702-9589 ([bill@schmoker.org](mailto:bill@schmoker.org)) to volunteer for this all-day event.

**Thursday, December 22, 7-11 a.m. “Winter Solstice sunrise hike on East Boulder-White Rocks Trail”** Each Winter Solstice morning for 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: [curlwsj@comcast.net](mailto:curlwsj@comcast.net); 303-494-2468.

### Stalking the Ovenbird

By Sandra Laursen

*There is a singer everyone has heard,  
Loud, a mid-summer and a mid-wood bird,  
Who makes the solid tree trunks sound  
again.* —Robert Frost, The Oven Bird

For three summers now, Betty Naughton and I have studied a male Ovenbird (*Seiurus aurocapilla*) singing on territory just west of the Mesa Trail in our eco-stewarding area on Shanahan Ridge in south Boulder. In 2009, the powerful song first caught our attention but the singer proved difficult to locate. We finally spotted and identified the bird with the help of Linda Andes-George. One of the larger warblers, the Ovenbird has an olive-brown back and white breast with well-defined black spots. A white eye-ring and black-bordered rusty crown stripe like a jaunty mohawk give him a generally natty appearance. And Robert Frost got the “loud” part right: the Ovenbird song, often written TEA cherTEA cherTEA cher, crescendos distinctively through several repetitions instead of falling away like many warbler songs. We relocated the bird in the same clump of trees several times over the weeks following that first ID.

When we shared our discovery, Steve Jones told us that breeding Ovenbirds had never been documented in Boulder County. Common in deciduous forests in eastern North America, the Ovenbird's range ends as the West begins. So we began a quest to discover whether the bird had a mate and a nest. In 2010 and again in 2011, we confirmed a singing male Ovenbird in exactly the same area—often in the same tree! Thus we suppose that the same individual returns each year.

His behavior is quite consistent, arriving at Shanahan in the second or third week of May and singing throughout June. He typically sits on a high, horizontal ponderosa branch, just a few inches from the trunk, and sings repeatedly from the same perch for 20 minutes at a stretch. The lack of flitting motion makes him hard to spot even though he sings so loud. We enjoy the suspense of listening for him to return each spring and the thrill of hearing his characteristic song. His whole body pulses with the effort to make that tremendous sound.

Ovenbirds feed by walking and searching for invertebrates that hide in leaf litter. They may reach high densities in eastern forests, preferring areas with tall trees and fairly continuous canopy cover. Because of this preference, they are considered

sensitive to habitat quality: ecological studies have examined the impact of habitat disruption, forest monoculture, cowbird parasitism, and egg predation on Ovenbird breeding success. Researchers identify breeding pairs by finding singing males and observing them to see if they tolerate a non-singing member of the same species—assumed to be a female—or engage in other courtship or nesting behavior. In one study, such observations successfully identified 77% of paired males within 30 minutes, and 95% of paired males within 60 minutes. So we have tried a similar strategy, visually locating the bird and observing him for periods of 20 to 45 minutes. But we have never seen him interact with another bird.

We have also walked the area to look for nests. The Ovenbird's ground nest is domed with a side entrance, like a pizza oven. One research paper describes favored nest sites as well camouflaged in heavy leaf litter, on slopes with few herbaceous plants and shrubs. Another paper mentions nests in fern patches and near trails or the base of trees. Images of Ovenbird nests from the east are difficult to apply to hunting nests on Shanahan Ridge because the ground is covered with pine duff instead of leaf litter: we're not sure what building material the bird would use or how the nest would look. Ovenbird nests in Jefferson County have been found in areas with Gambel oak, suggesting that deciduous leaf litter may in fact be important.

Behavior also helps researchers find Ovenbird nests. Before incubation, females will reply to the male song with a high “tsip” call. Once they have eggs or nestlings, they will feign injury to lead a predator away; pishing will elicit defensive behaviors. And the sound of begging babies—often Cowbird babies in the Ovenbird nest—can pinpoint nests. These behaviors makes family groups relatively easy to identify, wrote one researcher.

Even knowing these proven strategies for eastern forests, we have seen no evidence of a female or a nest. Yet the male Ovenbird continues to sing “mid-summer and mid-wood.” We cannot help but hope that he has found a mate, kept her well concealed, and will return next spring to “make the solid tree trunks sound again.”

#### Sources consulted:

Map: [http://fieldguide.mt.gov/detail\\_ABPBX10010.aspx](http://fieldguide.mt.gov/detail_ABPBX10010.aspx)

Sound: <http://xeno-canto.org/browse.php?>

(See *Ovenbird* . . . Continued on page 5)

(Ovenbird. . . Continued from page 4)

[query=ovenbird](#)

Nest in New Hampshire: <http://www.youtube.com/watch?v=SZvKdXYARyI>

Nest in Ontario: <http://www.uoguelph.ca/~wrs/ovenbirds.html>

Migration, breeding and conservation: J. Deo (2009). The Ovenbird, Nature's teacher. New York-New Jersey Trail Conference. <http://www.nynjtc.org/news/ovenbird-natures-teacher>

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D. Hallock & S. Jones (2011). Boulder Country avian species of special concern 2010. Boulder County Nature Series: No. 1. Boulder, CO: Boulder County Nature Association.

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D. Rodewald & R. H. Yaher (2000). Influence of landscape and habitat characteristics on Ovenbird pairing success. *The Wilson Bulletin* 112(2), 238-242.

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*Peregrine by S. Severs*

### New BCNA Publications Available

Our new butterfly field guide should be arriving from the printer in mid-October. We Also have a good number of the recently revised Boulder County Avian Species of Special Concern monographs on hand. Our Dawn Chorus CD continues to sell well, with about 1100 sold so far.

Chu, Janet and Stephen Jones. 2011. Butterflies of the Colorado Front Range: a photographic guide to 80 species. 112 pages, 80 color photos. \$12.50.

Hallock, David and Stephen Jones. 2010. Boulder County avian species of special concern list. 28 pages. \$3.00.

Boulder County Nature Association. 2007. Dawn chorus in the Colorado Rockies. 54 minute CD. \$11.

Members receive a 10% discount on all publications. Please include \$2 for postage and handling for the first booklet or CD, \$1 for each additional item. Send orders to Steve Jones: [curlewsj@comcast.net](mailto:curlewsj@comcast.net); 303-



Winter Solstice, 2006, - 12° F. Participation varies in inverse proportion to the temperature. Last year it was 43° and we had 50 participants. See page 3 for details on this year's hike.



**Lifelong Learning Through BCNA**

How do birds acquire songs? Where are the flowers located on grasses? Why do dragonflies fly in tandem over ponds?

Participants in BCNA’s Field Ecology classes learned the answers to these questions – and many more - while taking some of the myriad classes offered this year. Classes such as “Bird Song”, “The World of Grasses,” and “Dazzling Dragonflies and Damselflies” were full of enthusiastic learners. BCNA instructors, who are experts in their fields of study, provide in-depth, hands-on learning experiences in both their indoor class sessions and their field classes. Power point presentations, printed materials, reading lists, and other extras also make BCNA classes special.

“The World of Grasses”, a new class this year, was taught by well-known plant ecologist David Buckner. I was lucky enough to take this three-session class, during which we learned how to identify grass species – both native and non-native – using grass keys and hand lenses, among other methods. (By the way, grass flowers - which dangle down in rows from the tips of grasses -are amazingly beautiful when seen close up through a lens!). It was also fascinating to learn about the evolved adaptations of grasses to various soils, climate, and other environmental conditions along the Front Range.

Our Education Committee is now developing the BCNA 2012 Winter-Spring Field Class schedule, which will be mailed to members in the January BCNA Newsletter. You can also see the Schedule on the BCNA Web Site ([www.bcna.org](http://www.bcna.org) under Classes) starting in late December 2011. Be sure to sign up early for a BCNA class next year because they often fill up quickly. Also, please let us know if you have any suggestions for additional classes or instructors in the future...we are always looking for new ideas.

—Carol Kampert, BCNA Education Committee Chair  
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coyotes howl  
 beyond the fence line  
 this side the sirens

—Haiku contributed by Ann Cooper

### **Birds of Special Concern Update: New and Locally Threatened Birds Nest in Boulder County**

Unusually wet late spring and early summer conditions in northeastern Colorado, coupled with extreme drought in southeastern Colorado, may have contributed to the rash of uncommon birds nesting in Boulder County this year. Eastern Phoebes were documented nesting within the county for the first time, and remarkably, four nests were found, all under overpasses along South Boulder Creek and Boulder Creek (CN, TF). Great-tailed Grackles breeding at two wetland locations were the first Boulder County nesting records we've received (JC, CN).

Cassin's sparrows were heard singing at several grassland locations in eastern Boulder County this summer. This is the third consecutive breeding season that Cassin's Sparrows have been recorded locally, but so far, nesting has not been confirmed. We also noted good numbers of Dickcissels singing in mixed-grass and tallgrass meadows this summer. A Mountain Plover in the South Boulder Creek drainage in June (CN) was the first breeding season observation for this locally extirpated species in several years. We received reports of larking Lark Buntings (rare and declining) at several locations during May and early June (mobs.).

Red-headed Woodpeckers (Boulder County rare and declining) nested southeast of Eldorado Springs and at Heil Ranch Open Space (CN, SS), the first documented breeding within the county since 1990. One was also seen in late May near Coal Creek east of Lafayette (JM). Surprisingly, these deciduous forest-loving woodpeckers nested in ponderosa pines. Lewis's Woodpeckers (rare and declining) nested successfully at Heil Ranch for the second consecutive year (MD, SS). Eastern Bluebirds nested southeast of Eldorado Springs for the third time in four years (CN).

An observation of a Brown Thrasher (rare and declining) carrying nesting material near Rabbit Mountain (RH, JS, MS) was the first nesting confirmation for the species in the county since the mid-20th century. A pair of Northern Mockingbirds (rare) nested successfully along Coal Creek, south of Boulder (PH, SJ, SS). Orchard Orioles, relatively new to Boulder County, nested along the White Rocks Trail and at Kenosha Ponds west of Erie (BBC, PM). A singing Ovenbird (Boulder County rare), apparently mateless, in the upper Shanahan Canyon tantalized observers for the third consecutive year (SL, BN).

A total of seven Burrowing Owl (isolated and restricted) nests were reported on City of Boulder and Boulder County open space lands this summer (mobs.). Three nests at the County's Rock Creek Farm Open Space, west of Broomfield, produced at least 14 young. It was also a productive year for American Bitterns (isolated and restricted), with nesting territories reported at Mesa Reservoir, Little Dry Creek and Dry Creek marshes west of Boulder Reservoir, Coot Lake, and Walden Ponds.

Bald Eagles (isolated and restricted) continue to nest at five locations within the county, all on open space properties or private lands protected from recreational encroachment. The oldest nest, near White Rocks, failed this year, but the four other nests fledged at least six young (mobs.). This appears to have been a subpar year for Golden Eagles (isolated and restricted), with several nesting locations in the foothills being abandoned or failing; but a bumper year for Peregrine Falcons, which nested successfully in four locations within the Boulder Mountain Park, alone, fledging at least 10 young (LD). Two Prairie Falcon (isolated and restricted) nests in the Mountain Park fledged seven young (LD).

Those are just some of the highlights. It was a remarkable year, and hearty thanks to all the observers who reported their observations--with apologies for anyone I've left off the list.

- Steve Jones

Observers reporting: Linda Andes-Georges, Kendra Brewer, Ryan Carpenter, Sue Cass, A. D. Chesley, Jo Clark, Karen Clark, Matt Claussen, Jen Clink, Merritt Deeter, Lisa Dierauf, Carol Dozier, Michelle Durant, Ted Floyd, Jim Glab, Karen Goodwin, Sallie Greenwood, Renée Haip, Paula Hansley, Scott Harvey, Leslie Hopf, Finnius Ingalls, Steve Jones, Elena Klaver, Chuck Klomp, Catherine Labio, Sandra Laursen, Liz Litkowski, Petrea Mah, Janet MacLachlan, Ruth McCarrison, Adam Massey, Joy Master, Betty Naughton, Christian Nunes, Laura Osborn, Linda Palmer, Chris Petrizzo, Gary Raybourn, Richard Reeves, Janetta Shepard, Tim Smock, Susan Spaulding, Gary Stevens, Joel Such, Marcel Such, Ingrid Thoenelt-Winter, Amy Tremper, Kevin Winseck, Kristi Winseck, Nan Wilson.

# Support the Boulder County Nature Association

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_____ Student/Senior (65 or over)	\$15
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_____ Life Member	\$300
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_____ Donation to General Research Fund	

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.

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