

# Boulder County Nature Association



*"The Boulder County Nature Association is a private, non-profit membership organization. Our mission is to educate, inform, and inspire for the purpose of conserving and promoting resilient natural ecosystems in our region."*

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## My Colorado Springtime

Ann Cooper

Fifty years ago, I arrived in Colorado from England in mid-July, to searing heat and shimmering and burnt-ochre landscapes. By September, I'd begun to acclimatize to unaccustomed 80°s and 90°s when the temperature plummeted 50 degrees in thirty minutes and rain turned to snow. Next spring . . . well, I couldn't find spring in Colorado, at least not my slow green misty version of it. Instead, over three days in early May, we transitioned from deep winter to too darned hot and the whole cycle began again. What *had* I come to?

How much I have learned since then! Spring is a delicious time in the Rockies—but never blatant. It begins with small magic in late January to mid-February, between snows. On the gray shale beds north of town, Easter daisies shine from their mounds of grayish leaves, alongside tiny purple pea flowers of three-fingered milk vetch. Outdoing all, the brilliant yellow rosettes of Bell's twinpod plants stand out like beacons—easily seen at highway speeds. Later, in the ponderosa pine needle litter on the ridge behind home, come pale pink spring beauties and delicate lavender pasque flowers. This unexpected spring-between-storms is reassuring. The twenty-below of winter did no lasting harm to plants that belong here. By the time meadows fill with wild plum and golden banner, my every outing becomes a challenge to see what's new—from the arrival of mountain bluebirds, to the first chattering cries of baby raccoons or the appearance of garter snakes warming on the blacktop.

What I experience here is not in-your-face like an English spring—no hawthorn hedges heavy with blossom, no bluebell woods filled with thrush song. Instead, it's a time to relish an incremental menu of tiny delights—what I like to call Colorado's subtle season.



*Prunus Americana*  
Wild Plum



*Astragalus tridactylus*  
Three-fingered Milk Vetch



*Physaria bellii*  
Bell's Twinpod

**Stop Lead Poisoning!**

Peter Kleinman

The Boulder County Nature Association is concerned about the toxic effects of lead on wildlife, particularly scavenging birds such as the California Condor and the Bald Eagle, but also on humans who may come in contact with lead-based food, plants, or soil at shooting ranges or through eating contaminated meats.

Lead has been a public health concern for some time. In 1978 lead paint was banned; in 1986 lead in plumbing was banned; in 1991 lead shot for waterfowl was banned; in 1996 lead in gasoline was eliminated; and now the military is developing a green ammunition program that eliminates lead. However, it remains common in most states for hunters to use leaded ammunition. Lead, being a soft material, easily fragments upon impact, and can remain in significant concentrations, especially in the wound channels, but also in surrounding meat and surrounding soil. When lead is ingested or breathed in it remains in situ for very long periods and because it is closely related chemically to calcium, it can cause problems in numerous body systems.

In humans, signs of lead poisoning are lethargy, weakness, altered stools, weight loss, prolonged suffering and ultimately a painful death. Major concerns are with a decline in IQ, an increase in violent crimes, and possible increased ADHD. Children are of special concern because of their developing nervous systems. The same can be said for scavenging animals such as the Condor or Bald Eagle, to name only two species. Blood lead levels can be measured. A background level considered to be non-toxic is less than 0.1 parts per million (ppm). Toxic levels are now defined as 0.2 ppm.

There is no question that scavenging animals are a real concern. In California a major and expensive project to save the California Condor from extinction has been remarkably successful. This is a majestic bird living in remote areas of California and northern Arizona. It has a nine-foot wing span and soars over the cliffs, living off of carcasses, particularly remains from hunting. They are particularly prone to lead poisoning from bullet fragments. They develop many of the same symptoms as humans, and their population had been almost eradicated from high lead concentrations until recently. Chelation therapy that binds lead to other chemicals can lower lead levels to safe levels, but has to be repeated every several years in a "hospital" situation. Condors are therefore totally dependent on human intervention for survival. Lead poisoning from fragmented ammunition is probably solely responsible for their current endangerment.

It has been shown that Bald Eagles have peak concentrations of lead in the months October through January, correlating with the hunting season. In humans research has shown that Inuit people who consume game shot with lead ammunition are significantly at risk. The research also showed that there are decreased lead levels in umbilical cords of mothers after non-lead ammunition is introduced. Other research has shown high concentrations of lead in shooting ranges in the US Military, putting people in danger from contact with soil and dust.

From a public health point of view this is a problem which has solutions. Introducing other forms of ammunition is feasible and preventative. Cost can be contained, and we would argue is a justifiable expense, just as vaccinations for certain diseases have a cost which is justifiable.

From a policy point of view, public engagement and awareness is necessary. Some would argue that Second Amendment rights would be violated. Of course, we all are part of the same society and ecosystem, and there are always compromises made between individual rights and the good of the whole.

We strongly urge concerned citizens to stand up for banning lead ammunition and preserving the treasured health of our natural environment, as well as the health of the human population. There are petitions available for signing and contacts with legislators to be made (see page 3). We hope you will join us in making our voices heard.

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**Petition for Lead Ammunition Ban in Colorado**

Paula Brown: *I see far too many birds suffering from lead poisoning at the raptor-rehab facility where I work. In the space of just two weeks, we received a bald eagle and two turkey vultures with lead poisoning. The good news is that after pumping one of the turkey vultures' stomachs, we are almost ready to release both back into the wild! Sadly, the bald eagle was not so lucky. The day I had to help euthanize her was the day I decided to work towards getting lead ammunition banned in Colorado.*

At its November meeting, the Parks and Wildlife Commission considered the Citizen Petition requesting that the Commission pass a regulation prohibiting the use of lead ammunition for hunting all game wildlife within the State of Colorado. The Commission denied the request.

The Audubon Colorado Council discusses, and refutes arguments against the ban; see [http://www.socobirds.org/PDFs-2014/lead\\_ammunition\\_ban.pdf](http://www.socobirds.org/PDFs-2014/lead_ammunition_ban.pdf)

To sign the Citizen Petition, go to [www.care2.com/go/z/COlead](http://www.care2.com/go/z/COlead).

**Center for Biological Diversity  
Get the Lead Out Campaign**

*At least 75 wild bird species in the United States are poisoned by spent lead ammunition, including bald eagles, golden eagles, ravens and endangered California condors. Thousands of cranes, ducks, swans, loons, geese and other waterfowl ingest spent lead shot or lead fishing sinkers lost in lakes and rivers each year, often with deadly consequences.*

*In the United States, an estimated 3,000 tons of lead are shot into the environment by hunting every year, another 80,000 tons are released at shooting ranges, and 4,000 tons are lost in ponds and streams as fishing lures and sinkers — while as many as 20 million birds and other animals die each year from subsequent lead poisoning. See [http://www.biologicaldiversity.org/campaigns/get\\_the\\_lead\\_out/index.html](http://www.biologicaldiversity.org/campaigns/get_the_lead_out/index.html) for more information about the Center for Biological Diversity's "Get the Lead Out" campaign.*

Have you renewed your membership for 2015?  
The strength in BCNA  
lies in active membership support!

**American Bird Conservancy**

*An estimated 10 million to 20 million birds and other animals die each year from lead poisoning in the United States. This occurs when animals scavenge on carcasses shot and contaminated with lead bullet fragments, or pick up and eat spent lead-shot pellets or lost fishing weights, mistaking them for food or grit. Some animals die a painful death from lead poisoning while others suffer for years from its debilitating effects. "The science on this issue is massive in breadth and unimpeachable in its integrity," said George Fenwick, president of American Bird Conservancy.*

*Despite being banned in 1992 for hunting waterfowl, spent lead shotgun pellets continue to be frequently ingested by swans, cranes, ducks, geese, loons and other waterfowl. These birds also consume lead-based fishing tackle lost in lakes and rivers, often with deadly consequences.*

See <http://www.abcbirds.org/abcprograms/policy/toxins/lead.html> for additional information about their campaign for a National Ban on lead-based ammunition and fishing tackle.

**22nd Annual Boulder County  
Ecosystem Symposium:  
Recovery and Resiliency!  
Preparing for the Future**

The 2015 Boulder County Ecosystem Symposium will be held on **Saturday, March 14** between 9 am and 2:30 pm at the Boulder County Parks and Open Space offices (5201 St Vrain Rd in Longmont). As usual, registration will begin at 8:30 and a complimentary lunch will be provided. Donations will be accepted in support of BCNA's Research Grants program.

Following on the heels of the last Ecosystem Symposium that examined extinctions and species in peril, the 2015 symposium will feature success stories of species recovery and habitat restoration. Come learn about Colorado's lynx reintroduction program, the change in bald eagle populations, the conservation of greenback cutthroat trout, Front Range grassland restoration and much more.

The Boulder County Ecosystem Symposium is supported by BCNA, Boulder Audubon, the Colorado Native Plant Society, and city and county open space departments. Contact Megan Bowes at [megan.bowes@yahoo.com](mailto:megan.bowes@yahoo.com) or 303-561-4883 with questions.

**WINTER PROGRAMS**

Tuesday, January 27, 7:15pm: ***There's No Sex Like Insects.*** Sponsored by Boulder Audubon. Take an entertaining look at the wild, wondrous and often wacky world of "bug sex." Colorado entomologist Dr. Mike Weissmann will present this special Valentine's Season peek into the fascinating and bizarre sexual practices of insects and their relatives. *NOTE: This program includes topics of an adult nature and is not quite appropriate for children.* Mike is a co-founder and former curator of the *Butterfly Pavilion and Insect Center* in Westminster, Colorado. He is currently an adjunct curator at the *University of Colorado Museum*. Socializing begins at 6:45 PM with the program following at 7:15 PM at the Unitarian Universalist Church of Boulder, 5001 Pennsylvania Avenue, off 55th St. between Arapahoe and Baseline.

Sunday, March 1st. ***Winter Tree and Shrub ID hike,*** 9:00-11:30 at OSMP's Enchanted Mesa/ McClintock Trailhead (just south of Chautauqua Auditorium, at end of 12th St.) Join Megan Bowes on a hike to 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. To register, contact Megan Bowes at 303-561-4883 or [megan.bowes@yahoo.com](mailto:megan.bowes@yahoo.com).



Purplish Copper, Female photo by Steve Jones

"Like" us on Facebook. Quick, colorful updates on all types of "nature in the news" items.



**BCNA Call for Research Proposals 2014**

The Boulder County Nature Association has supported several research grants for many years which deal with the natural history of Boulder County. From its outset, this has been an important mission of the Nature Association and a unique contribution to community participation in local science activity.

Grants are available again in two categories this year: First, the Evenson Memorial Grant offers up to \$400 and supports research on our native cats. Second, general BCNA grants up to \$1000 (or more if funds allow) to fund projects adding to our understanding of the natural history of Boulder County or documenting the County's ecosystems. Past projects have included a survey of butterflies, a study of recolonization of prairie dogs after a plague outbreak, a study of the effects of urban habitat fragmentation on grasshopper species richness and diversity, and many others.

Proposals should include a detailed methodology and a complete budget and be limited to five pages. No institutional overhead will be allowed. Successful applicants sign a contract specifying they will complete the project in 2015 and share results with the Nature Association. We ask for electronic submission of a final report.

Criteria by which grant applications will be judged include: (a) a clear and concise statement of the purpose and goals of the project; (b) contain sound scientific principles – that is, a statement of the research hypothesis, or, if a qualitative study, a concise description of the phenomena to be observed; (c) well-defined objectives, methods, and measurable outcomes; (d) a methodology for collecting and analyzing data; (e) a description and a timeline of the tasks necessary to complete the proposed project; (f) a management plan for carrying out the project including responsibilities for carrying out each component of the plan; (g) a budget with reasonable estimates of costs for each part of the project and supporting information to support these estimates; and (h) clearly demonstrate direct benefits to natural resource conservation and management in Boulder County.

Applications should be submitted by Saturday, February 7, 2015, either to BCNA, P.O. Box 493, Boulder, Colorado 80306, c/o Peter Kleinman, Chairman, or by e-mail to [peterk218@gmail.com](mailto:peterk218@gmail.com).

**Butterfly Inventories, Boulder County 2014**  
Janet Chu

Butterfly Inventories on Boulder County Open Space properties continued in 2014, completing eight years of data collecting in Southeast Buffer, Heil Valley Ranch (Geer Watershed), Walker Ranch (Meyer's Homestead Trail), and Mud Lake-Caribou. Of these there were lower numbers of *species* in 2014 (15% to 26% lower) when compared with each area's eight-year average on these four properties. On the other hand Heil-Geer had higher numbers of *individuals* than its eight-year average; Southeast Buffer and Walker-Meyer's had lower numbers of individuals. The Mud Lake-Caribou complex had numbers of individuals equal to its eight-year average. In the four preceding open space study areas the habitat remained intact following the 2013 flood. There was a loss of three open space study areas because of the flood.

Heil Valley Ranch had two rare butterflies: Dusted Skipper (*Atrytonopsis hianna*) in the Geer Watershed and Hops Azure (*Celastrina humulus*) in Plumely Canyon. Dusted Skippers also flew in Rabbit Mountain, and the rare Ottoo Skipper (*Hesperia ottoe*) was sighted in Southeast Buffer.



Hops Azure – Heil – Plumely

Subsequent to our designated inventory dates, March through August, late-flying Purplish Coppers (*Lycaena helloides*) were numerous this year at the Walden Lake (Duck Pond), on Boulder City Open Space Teller Lake (October 19) and Shanahan Ridge (October 25) nectaring on gumweed and white aster.

The Butterfly Inventories project was completed by volunteer naturalists who drove a total of almost 1,200 miles and contributed about 110 research hours on site in 2014.



Dusted Skipper – Anne U. White Trail

**BCNA 2014 Board of Directors Retreat**

Sue Cass

Every so often your BCNA Board of Directors feels the need to escape the constraints of regularly scheduled Board meetings to gather in a peaceful place where organizational horizons can be pushed out a little through broad discussion and an open exchange of ideas. On October 26th the Board retreated to just such a place for just such a purpose. We were the guests of Dr. Oakleigh Thorne, founder in 1954 and lifelong mentor of the Thorne Nature Experience at Sombrero Marsh in Boulder and we quickly realized the common thread that was woven into the missions of these two amazing organizations . . . BCNA and the Thorne Nature Experience. "Oak's" presence throughout the day was inspiring for all of us.

One of the most significant outcomes of the retreat may have been the updating and clarification of BCNA's mission statement which now reads Our Mission: *"To educate, inform and inspire for the purpose of conserving and promoting resilient natural ecosystems in our area"*. This mission statement will appear on the masthead of each newsletter and on every page of BCNA's newly updated and expanded website at [www.bcna.org](http://www.bcna.org).

The Board determined that a program depicting BCNA's long and rich history and its many accomplishments will be an asset that can and will be used to keep current and new members apprised of the benefits of membership and to communicate BCNA's value to our community. This program will premier at our Annual Meeting on February 21, 2015. Don't miss it!

The perennial conundrum addressed at nearly every Board meeting and retreat--how to get our wonderful members more engaged in the day to day activities required to keep a 501C(3) nonprofit corporation growing and fulfilling its mission--was a topic of discussion. We're working on it and, in the meanwhile, if you have great ideas and energy to burn let us know. We'd love to hear from you!

We invite you to report your sightings to [www.coloradofrontrangebutterflies.com](http://www.coloradofrontrangebutterflies.com)

**BCNA Education Committee News**

Mary Stuber, New Committee Chair

The Education Committee met in early October, excited about the addition of four new members (Kerrie Bryan, Cindy Maynard, Mary Stuber, and Claudia Van Wie) . Steve Jones told us how he and Joyce Gellhorn began the program in 1998. At that time the small cadre of instructors did everything involved in registering students, collecting fees, teaching, and gathering evaluations. And during those early years this worked just fine. As the program and number of instructors grew, administration became more complex and passed to an Education Committee. But, as is so often the case, the actual “doing of the thing” came down to a few exceptional people. Carol Kampert shouldered the load for eight years. Then Steve took it on in 2014.

Class planning for the 2015 session began. Some committee members offered to contact potential instructors, asking for commitments, class descriptions and proposed dates. A list of tasks necessary to put on the classes was divvied up between other members and a sample timeline was reviewed. But the BIG NEWS was the need for a new Committee Chair to replace Steve Jones. It was suggested that there might be both a Chairperson and a Coordinator to assist the chair. The meeting ended with these desperate needs in limbo.

After some serious soul-searching and talks with Carol and Sue Cass, President of the Board, I offered to take on the job of Committee Chair. This would not have been possible without the creation of the position of Instructor Liaison, the “go-to” person for everyone involved in the BCNA Field Ecology Class program, and Kerrie Bryan’s offer to fill it. Both Carol and Steve graciously offered to help us learn on the fly.

I began by trying to meet face-to-face with as many people as I could who were directly involved in the class program, both as administrators and instructors. My goal was to form a mental map of the program’s landscape. What had worked well? What hadn’t? What was on people’s wish-lists? Then we set to work formalizing our procedures, defining job descriptions for various positions, and initiating needed changes. We are producing a vibrant, growing program that can be handed off and easily duplicated in the future.

The Winter/Spring Class Schedule is enclosed. We hope you like our idea of bringing back a separate class insert you can take out and carry with you as you plan which classes to take. We are also giving members a brief advantage in registering. You will

(continued on page 7)

**BCNA Board of Directors**

President Sue Cass 720-684-6922  
 Vice-President Megan Bowes 303-561-4883  
 Treasurer Howard Witkin 303-789-4950  
 Secretary Shirley Jin 303-499-1574  
 Kerrie Bryan 303-834-8151  
 Peter Kleinman 303-554-5320  
 Cindy Maynard 720-203-8211  
 Mary Stuber 303-644-9773  
 Claudia Van Wie 303-494-2250

**Committees and Contacts**

- *Avian Species of Special Concern*  
 Dave Hallock [dheldora@rmi.net](mailto:dheldora@rmi.net)  
 Steve Jones [curlwjsj@comcast.net](mailto:curlwjsj@comcast.net)
- *Conservation*  
 Chair Position Open
- *Ecosystem Stewardship*  
 Steve Jones 303-494-2468
- *Education*  
 Mary Stuber, Chair, 303-644-9773  
 Kerrie Bryan, Instructor Liaison, 303-834-8151
- *Indian Peaks Bird Counts*  
 Dave Hallock 303-258-3672  
 Bill Kaempfer 303-954-8998
- *Membership*  
 Cindy Maynard 720-203-8211  
 Terry Stuart 303-449-2232
- *Newsletter*  
 Dianne Andrews, content editor 303-823-6779  
 Carol McCasland, layout 303-635-6433
- *Publications*  
 Sue Cass 720-684-6922
- *Research Grants*  
 Peter Kleinman 303-554-5320
- *State and Regional Wildlife Issues*  
 Peter Kleinman 303-554-5320
- *Wintering Raptor Survey*  
 Sue Cass 720-684-6922
- *Nature Net Moderator*  
 Scott Severs [scottesevers@gmail.com](mailto:scottesevers@gmail.com)
- *Website and Support for Newsletter*  
 Claudia Van Wie 303-494-2250,  
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 George Oetzel 303-543-3712
- *Facebook Page and BCNA Buzz*  
 Cindy Maynard 720-203-8211,  
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**Connect with nature:**  
[nature-net-subscribe@yahoogroups.com](mailto:nature-net-subscribe@yahoogroups.com)

**BCNA's Annual Meeting*****Preserving Boulder County's Natural Treasures:  
A History of the Boulder County  
Nature Association  
1982 to the Present***

BCNA's Annual Meeting will be held at 6:00 PM on Saturday, **February 21, 2015** at the Arapahoe Ridge HOA Clubhouse, 1750 Powell Street in Erie, where we have gathered in recent years. Our program will chronicle BCNA's storied history and achievements and, hopefully, will stir fond memories for all of you who have supported BCNA through the years.

A potluck supper will be followed by announcements and elections to the Board of Directors. Please bring your own drinks and a main dish, side dish, salad or dessert to share and your own table service and serving utensils.

To reach the Arapahoe Ridge HOA Clubhouse drive east on Arapahoe Road to North 111th Street (the first light east of US HWY 287), turn left (north) on 111th Street to your first right at Morris Court then immediately left on Hughs Drive to Powell Street (second stop sign). Turn left on Powell (you will see a large park, pool and the clubhouse on the left) a short distance to the clubhouse entrance on the left. Drop offs may be made at the entrance, but no parking is allowed in the circular drive. All are welcome!

**Nominations to the BCNA Board of Directors**

The Nominating Committee is seeking nominations for a single at-large member to the BCNA Board of Directors. The Board is the heart, soul and lifeblood of BCNA and service offers an opportunity to form lasting friendships and shape and mold this vibrant organization. If you would like to learn more contact Sue Cass, [suecass@comcast.net](mailto:suecass@comcast.net) or Howard Witkin, [hwitkin@comcast.net](mailto:hwitkin@comcast.net). Elections will be held at the Annual Meeting on February 21, 2015.

*(Education, continued from page 6)*

see the classes here in the newsletter about one week before they appear on our website and on Nature-Net. So don't delay. Spots are limited and will fill up fast. It's an exciting schedule and we are proud to offer it to you.

And one last thing . . . remember, I said a vibrant, *growing* program? Watch for fun, new kinds of programs in future newsletters and on The Buzz. We're just getting started!

Education Committee Members: Mary Stuber (Committee Chair), Kerrie Bryan (Instructor Liaison), Megan Bowes, Shirley Jin, Peter Kleinman, Cindy Maynard and Claudia Van Wie.

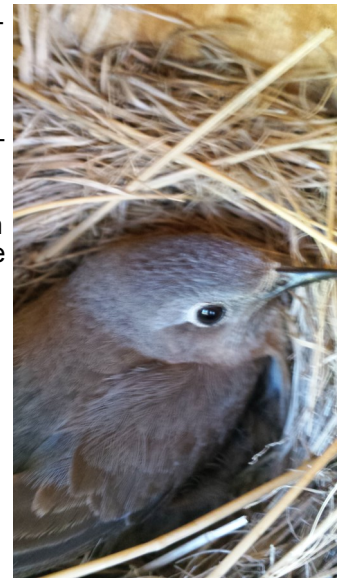
**Nest Box Newbie**

Cindy Maynard

Oh, I was so excited! The opportunity to legitimately play Peeping Tom and witness a new generation of birds using the nest boxes on Bald Mountain was a real thrill for me. I didn't know what to expect. I wondered if I could keep the records accurately. Would I damage something? Injure a baby bird? Break an egg?

The boxes at Bald Mountain are mounted on poles and are fairly easy to spot. Boulder County installed a collar at the entry holes intended to deter predators. From the first day it was fun to tramp up and down the slopes through the Ponderosa parklands where I would not encounter any other hikers.

At first the boxes were bare, unadorned and lonely. But by May the first small circles of woven grasses began to take shape. In mid-May I experienced my first breathless moment when I opened a box and a perfect Western Bluebird female looked me straight in the eye, steadfastly refusing to move. My heart sped up as though I was being pursued by the Highway Patrol. I apologized for disturbing her privacy and gently, quietly closed the box. From that moment on, I took ownership! These were MY birds, my eggs and my babies.



By the beginning of June pearly pink eggs in soft, feather-lined nests, slightly larger softly greenish-blue eggs, and tiny jelly-bean-sized pink eggs with maroon splotches materialized. It seemed like a miracle, these delicate drops of perfection, so vulnerable and so full of promise. By the end of June all seven boxes were in use. Three Western Bluebirds, three Violet-green Swallows, and one prolific White-breasted Nuthatch had chosen MY seven boxes. When I first opened the box containing tiny pink, featherless babies, tears actually fell from my eyes. The same experience of maternal emotion welled up when I opened the box a week or so later to see gaping yellow mouths, farcically oversized for their tiny, partially-feathered bodies, hopefully pointed up at me.

All of my nests fledged young, an outcome that fills me with wonder. Though I ardently look forward to another season of nest peeping, nothing will feel quite like the very first time.

**Support the Boulder County Nature Association**

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_

Email \_\_\_\_\_ required if you wish to receive the BCNA BUZZ

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 Grants
- \_\_\_\_\_ Donation to Evenson Big Cat Research Grants
- \_\_\_\_\_ 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.

For online renewals, please visit <http://bcna.org/member.html>

Boulder County Nature Association  
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