

BOULDER COUNTY NATURE ASSOCIATION



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Ecosystem Stewardship Initiative

Imagine a wild place in Boulder County that you visit several times a year, learning the names of the beetles and butterflies; following the blooming cycles of wildflowers and the breeding cycles of songbirds; quietly observing coyotes, foxes, and elk. Imagine this peaceful place being permanently monitored and protected through your efforts and the efforts of those who follow you.

This is the vision of the Boulder County Ecosystem Stewardship Initiative, a new volunteer project being launched by BCNA. The project has three goals:

1. Monitor natural processes in Boulder County native ecosystems.
2. Use data collected to improve management and influence policy-making.
3. Recruit a cadre of naturalists to monitor and protect natural areas in perpetuity.

We invite everyone who cherishes the peace and beauty of natural places to consider becoming a steward. The only qualifications are an interest in nature, a desire to learn more, and a willingness to spend 4-6 mornings a year recording observations in a protected part of Boulder County. You might choose a canyon in the foothills, a prairie wildlife area such as Sawhill Ponds, or a favorite meadow or forest grove in the Indian Peaks Wilderness Area.

Volunteers will receive training in forest inventory, breeding bird and butterfly survey techniques, and wildflower identification. However, no volunteer will be expected to carry out all these tasks; instead, each will receive a "menu" of things to monitor. You might start out by tracking recreation impacts in your area and initiate other surveys as you become more knowledgeable. As much as possible, experienced naturalists will be paired with beginners so that we can all learn and share our knowledge on site.

We are planning organizational meetings for January and February with a series of 4-6 optional trainings to follow in the spring. Meanwhile, start dreaming

about that special place, and let us know right away if you would like to adopt it.

- Steve Jones (stephen.jones@earthlink.net; 303-494-2468), for the stewardship steering committee

Note: Due to my clerical incompetence, I've lost the name of a volunteer who called last spring. So if you haven't heard from me, please give me another call.

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BCNA Board Nominations

At the January annual meeting we will elect seven board members, including a new president and vice-president. We value new voices on the board, so if you have been thinking of becoming more involved, please give a member of our nominating committee a call. The board meets five times per year, generally on Sunday afternoons.

Nominating Committee: Jan Carnes, John Carnes, (303-827-3024), Steve Jones (303-494-2468).

BCNA Fall Calendar

Saturday, November 6: Winter Raptor Survey and Volunteer Training. Sue Cass (cass@colorado.edu) and Jim McKee (303-494-3393) will lead a morning of observing hawks, falcons, and eagles while reviewing raptor survey protocol. New volunteers, old volunteers, other hawk-lovers welcome. Meet at Lagerman Reservoir picnic shelter, Prospect/Pike Road between North 63rd and 75th St., at 10 a.m.

Sunday, November 7, 4-7 p.m.: BCNA Board Meeting and potluck dinner at Vickie and John Flower's house in Longmont. All members are invited. (Sure, the meetings are boring, but the food is great!). Call Scott Severs (303-684-6430) for carpool information.

December 2, 7-8 p.m.: "Peaks and Wildlife of East Africa," with Dave Hill. George M. Reynolds Branch Library, 3595 Table Mesa Drive. Dave will discuss climbing and wildlife viewing in Kenya and Tanzania. He and Elaine climbed Mount Kilimanjaro (Africa's high point at 19,332 ft) and Point Lenana (a subpeak of Mount Kenya). The wildlife parks included Nairobi, Ngorongoro Crater, and Tarangiri National Park.

Saturday, December 18: Boulder Christmas Bird Count. All eyes, including beginners', are helpful on this annual event that contributes to conservation of North American bird populations. Expect an invigorating day in the field, followed by a convivial potluck. Bill Schmoker (303-702-9589).

Tuesday, December 21, 7-10 a.m.: Winter Solstice Sunrise Hike and optional breakfast at the Garden Gate Cafe in Niwot. Join us for this annual BCNA tradition. You may bring a thought or poem to share at a brief sunrise ceremony at the Boulder Creek bridge. Meet at the Teller Farms Open Space north parking area, on the south side of Valmont Road about a half-mile west of 95th St., at 7 a.m. Contact Steve Jones (stephen.jones@earthlink.net; 303-494-2468) to reserve a place for breakfast.

December 1-February 28: Indian Peaks Winter Bird Count period. Join a group of experienced birders or adopt your own area. For information, contact Bill Kaempfer (Kaempfer@colorado.edu; 303-443-3175).

Note: Additional events will be posted on the Nature-Net (nature-net-subscribe@yahoo.com).

Sightings

Helen Eisner reports that on the afternoon of August 27 a Northern Saw-whet Owl materialized in her neighbor's living room! Helen suspects a cat. The little owl spent the night at Helen's before being taken to the Birds of Prey Rehabilitation Foundation in Broomfield, where it is recovering from a shoulder injury.



Northern Saw-whet Owl

While walking up the Bluestem Trail in South Boulder on June 25, Cindy Carlisle found her path blocked by a female Bighorn Sheep. Several hikers waited patiently while the ewe foraged her way across the trail and up a hillside.

We received a photo of a northern river otter basking on a rock in a lake a few miles northwest of Boulder. That's all we can disclose at this time.

Gregory Canyon was the scene, as usual, of several interesting bird sightings this summer, including Wood Thrush (Merrill Gilfillan, July), Blue-winged Warbler (multiple observers, June and July), and Hooded Warbler (multiple observers, June).

Drought relief? Here are 365-day percentage of average precipitation numbers for cities in Colorado and adjacent states through September 25:

Colorado: Alamosa 76, Boulder 127, G. Junction 97.
 Kansas: Goodland 89, Dodge City 98, Wichita 123.
 Texas: Amarillo 100, Lubbock 111, Wichita Falls 92.
 New Mexico: Albuquerque 127, Farming. 102, Roswell 63.
 Utah: Cedar City 92, Salt Lake City 110.
 Wyoming: Casper 74, Cheyenne 68, Lander 107.
 Nebraska: N. Platte 100, Omaha 127, Scottsbluff 70.

Source: NOAA global precipitation monitoring site.

Boulder County Bats

By Lauren Golten

This year's annual Bats of Boulder County class, offered in early August through BCNA and taught by Dr. Rick Adams, was again a big success. We spent the first night in the classroom, learning about the fascinating world of bats, and then headed out into the field on the second night to see bats interacting with their habitat. Our field trip took us to Bear Canyon Creek on City of Boulder Open Space/ Mountain Parks, which is typically an active and diverse drinking area for local bats. We set up mist nets, and caught nine individuals of five different species. Class participants were able to view these bats up close, and were all taken by how amazing and CUTE (really) these creatures are. Anyone who wasn't already a full-blown bat lover had become one by the end of this class.

After recording basic data for each individual, bats were released, and we recorded their echolocation calls as they flew away. These calls are being compiled to create a call library for Boulder County bats, housed at the CU Museum of Natural History. This project (being done by Lauren Golten as part of her Master's at CU) has been funded in part by BCNA small research grants (thank you, BCNA!).

The 2004 field season was challenging because of the many rainy, overcast days (in order to get data on bats, we need to catch them drinking at water holes, which they will only visit after a hot, sunny day). Despite these challenges, we succeeded in getting a good number of productive field nights. Perhaps it was the strange weather, but some roosts that have typically housed bats during the breeding season were vacant, and overall numbers seemed to be down. We will be keeping tabs on these trends in the coming years. Additionally, Rick is beginning a study to see how West Nile Virus may be affecting local bat populations. All these data are being used to better protect bat populations in Boulder County.

Please join us next year for the bat class—keep your eye on the BCNA course listings!

And, if you haven't seen Rick Adam's new book, *Bats of the Rocky Mountain West*, definitely check it out!

Note: The catalog for BCNA winter-spring classes will be inserted into the winter newsletter, with the summer-fall catalog to follow three months later.



Townsend's Big-eared Bat (*Corynorhinus townsendii*).
<http://www.batcon.org/>

Fall Natural Events

Mid-October: Listen for the trumpeting of Sandhill Cranes and the cries of Pinyon Jays flying south.

October 27: Full moon
"When Elk Bellow" (Ponca)
"Snow Goose" (Cree)

November 5: Venus and Jupiter 0.6° apart at dawn.

November 17: Leonid meteor shower.

Mid-November: Look for Trumpeter Swans and Common Loons on prairie lakes. Snow geese may pass through.

November 26: Full moon
"Rivers Start to Freeze" (Arapaho)
"Baby-Bear" (Osage)

Mid-December: Early Easter Daisies (*Townsendia* spp.) may begin blooming on shales in Bear Canyon.

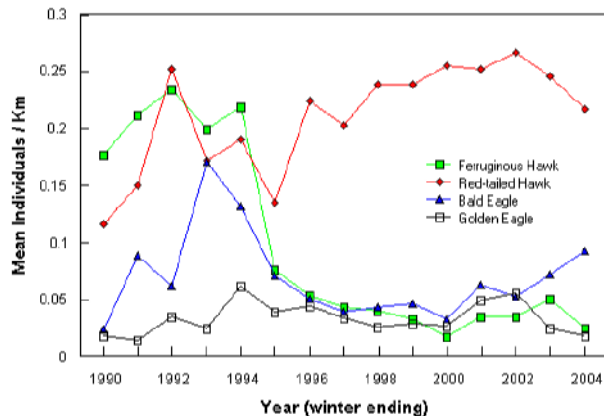
December 21: Winter Solstice occurs at 5:42 a.m. t this time of year, many cultures celebrate virgin mothers who gave birth to sons.

December 26: Full moon
"Popping Trees (Arapaho)
"Frost on the Lodge (Lakota)

Wintering Raptor Survey

Sue Cass, Coordinator

The 2004-2005 Wintering Raptor Survey will begin October 15th. On Saturday, November 6th at 10 a.m., Jim McKee and I will meet at the picnic shelter at Lagerman Reservoir to review survey protocol and share experiences and techniques. We will also be on the lookout for early migrants and resident raptors. I hope you can join us. I have already observed two Ferruginous hawks, one south of Boulder Res. on N. 51st and another in western Weld County on Highway 7. I hope this is a sign of things to come!



Mean numbers of selected raptors that prey on prairie dogs observed on six Boulder County survey routes. Graph by Randy Gietzen. More graphs on www.bcna.org.

Raptor Ecology Class with Steve Jones

Improve your raptor identification skills while observing wintering eagles, hawks, and falcons on the plains of Boulder County. We should see Golden and Bald Eagles; Red-tailed, Ferruginous, and Rough-legged hawks; Northern Harriers; and American Kestrels. Discussion will focus on raptor behavior, habitat use, and conservation.

Thursday, Feb. 3, 6:30-9 p.m., indoor class
 Saturday, Feb. 5, 8 a.m.-1 p.m., field class
 Saturday, Feb. 19, 8 a.m.-12 p.m., field class

Tuition: \$70 (\$60 for BCNA members). Limited to 12 participants.

To register: Call Steve at 303-494-2468 or email Stephen.jones@earthlink.net

Books: Lessons from the Dunes

Great Sand Dunes National Park: between Light and Shadow, by John B. Weller. Westcliffe, 2004. 128 pages with 80 color plates. \$19.95

Near the end of his three years' solo exploration of the Great Sand Dunes, Boulder's John Weller found an old set of footprints and realized they were his own. Moisture and debris had settled into the prints, and blades of spring green grass had sprouted.

"By stepping out onto the dunes," he writes, "I had become a part of them."

John's first book is a meditation on our fragile, often ambivalent relationship with nature. His intimate, impressionistic photos reveal a wilderness of swirling storms, golden sunflowers, and Coyote tracks on blue-frosted sand; all illuminated by the kind of ethereal, glowing light that draws our eyes tearfully toward the heavens.

Plants of South Dakota Grasslands Reborn

Grassland Plants of South Dakota and the Northern Great Plains, by James R. Johnson and Gary G. Larson. S. Dakota State University Agr. Exp. Station, Brookings, SD, 1999. 288 pages. \$19.95.

For years prairie lovers have scoured old bookstores and web sites for remaining copies of *Plants of South Dakota Grasslands, a Photographic Study*. This booklet contained the best available introduction to prairie grasses, with striking photographs and detailed descriptions of 50 species.

The revised edition contains even better photographs and a more detailed wildflower section. I carry this book with me on all my prairie trips, along with Jon Farrar's *Wildflowers of Nebraska and the Great Plains* (soon to be reprinted), and Doug Ladd and Frank Oberle's *Tallgrass Prairie Wildflowers*.

- Steve Jones

Virtual Bookstore: Now you can buy nature books and other titles online while benefiting BCNA. Just go to the BCNA web site and click on the virtual bookstore. Every book you order through Powell's Bookstore results in a contribution to our organization. Powell's is a large Oregon bookstore that has both new and used titles. Often cheaper than Amazon!

Mountain Lion Research in Colorado

Jim McKee

For the past several years there has been serious controversy regarding lion hunting quotas in Colorado. Non-hunting (carnivore protection) groups feel that the quotas and the attendant take are too high and are seriously jeopardizing lion populations throughout the state. Hunters and outfitters, on the other hand, feel that lion populations have never been higher. Both groups, however, agree that better science regarding lions is needed to define lion habitat needs and hunting quotas. Last year, the Colorado Division of Wildlife (CDOW) hired Kenneth Logan, arguably the leading active lion researcher in the country, to undertake research to resolve these and other questions relating to lion management in Colorado. Dr. Logan has completed the initial planning for a ten-year research program centered on 870 square miles of the South Uncompahgre Plateau.

The intent of the plan is to address specific management needs and lines of inquiry as follows:

I. Improve our ability to manage lion hunting with enhanced scientific bases, strategies, and tools.

- Lion population characteristics (i.e., density, sex, and age structures).
- Lion population dynamics and vital rates (i.e., birth rates, survival rates, emigration rates, immigration rates).
- Methods and models for assessing and tracking changes in lion populations.
- Relative vulnerability of lion sex and age classes to hunter harvest.

II. Improve our understanding of lion habitat needs and interrelationships of lion management units.

- Lion habitat use, movements, and use of landscape linkages.
- Lion recruitment patterns (i.e., progeny, immigration, emigration).
- Models for identifying lion habitat, and landscape linkages.

III. Improve our understanding of the lions role in the ecology of other species.

- Relationships of lions to mule deer, elk, and other natural prey.
- Relationships of lions to species of special concern, e.g., desert bighorn sheep.

IV. Improve our understanding of lion-human interactions and abilities to manage them.

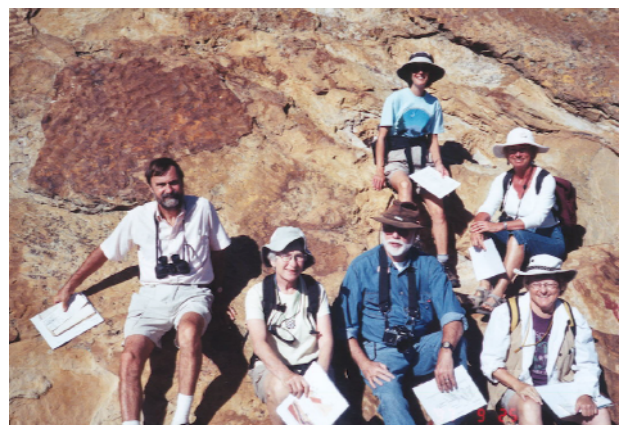
- Behavior of lions in relation to people and human facilities.
- Lion predation on domestic animals.
- Effects of translocating nuisance lions.
- Effects of aversive conditioning on lions.

To achieve these objectives it will be necessary to annually capture, mark, radio collar and release as many lions as possible in the study population. Adult and sub-adult lions will be marked by radio collar, ear-tag, and tattoo. The radio collars will be GPS units which will fix and store lion locations four times per day at six hour intervals, as well as VHF transmitters to enable researchers to find the lions on the ground in real time. At least one cub of each sex in each litter will be fitted with a small VHF transmitter mounted on an expandable collar.

During the first five years of the study, hunting will be prohibited in the area and hunters will be asked to not shoot collared lions that leave the area. Lion population trends will be monitored as well as those of prey populations. During the second five years, lions will be heavily hunted in the study area and their populations will again be monitored.

Several hundred people live in the study area and this study will provide some information on lion-human interactions, but further study in areas such as the urban Front Range interface is needed. Assuming that funding is available, these studies could be initiated within two years. Funding sources for this effort might include GOCO and grants from foundations as well as contributions from cities and counties along the Front Range. The Colorado Wildlife Heritage Foundation would also accept donations from interested individuals and organizations in the area.

I would be happy to talk to anyone who is interested in more details regarding the planned research.



BCNA geology class watches mountain lion on Dinosaur Ridge.

A View from the Top

Joyce Gellhorn

With the state's capitol one mile above sea level, Colorado boasts diverse habitats and spectacular scenery. The Rocky Mountains divide the Great Plains on the east from intermountain plateaus in the west, creating fifty different mountain ranges and thousands of individual peaks. More than 1,000 peaks exceed 10,000 feet, 300 exceed 13,000 feet and 54 rise above 14,000 feet. Colorado boasts the title "Crown Jewel of the Rockies" and it is hard not to feel smug about our state's beauties. But the stunning scenery comes with a price.

People have long used the mountains, but attitudes have changed from living in harmony with the land, to exploiting their riches, to using wilderness for recreation. Our increased use threatens the very fabric of the land, requiring that we become wiser to prevent destroying the lands we cherish.

The first use of Colorado's high country dates back almost 12,000 years when prehistoric Native Americans followed game up mountain passes. Archaeological sites along the Continental Divide show evidence of game-drive walls built to lead elk or bighorn sheep toward blinds where hunters waited. Game drives were the easiest and best way for these hunters without horses to obtain large quantities of protein, and it appears that all prehistoric native groups in western North America used them.

Probably the first white people to gaze upon the Rocky Mountains were members of Vasquez de Coronado's party. They crossed the southern Rockies and discovered the Continental Divide, but when possible, they avoided the "hostile mountains." One of the first explorers to embrace the lofty peaks was Zebulon Pike, who in 1806 from a camp on the Arkansas River near Pueblo, attempted to climb the peak that would later bear his name. The mountain, farther away than he thought, defeated Pike, who estimated its height as 18,000 feet and proclaimed, "No human being could have ascended to its pinnacle."

Edwin James, a member of Major Stephen Long's expedition, finally climbed the peak fourteen years later and described the alpine as a "region of astonishing beauty." James' accomplishment captured the imagination of people in all walks of life--from explorers to surveyors, miners, and recreationists. Government survey crews in the 1870s scaled many peaks, describing their geographical and geological myster-

ies. Being proud of their work, Hayden proclaimed that his maps would never have to be redone since "Colorado will never support so dense a population that a more detailed survey will be required."

The "gold rush" in the later half of the nineteenth century brought more people to Colorado. Miners prospected and extracted mineral wealth from the mountains, destroying entire mountainsides, producing huge slag piles, creating large settling ponds, and polluting streams. Pack trails, wagon roads, and rail lines built to support the mining industry later became highways over mountain passes. The lonely high country was now accessible to all people during all seasons.

Today, local newspapers, regional magazines and guidebooks extol out-of-the-way places to explore, hikes where the most colorful wildflowers grace the landscape, and new rock climbing routes. More and more people participate in activities such as mountain biking, hiking, backpacking, horseback riding, climbing, skiing, kayaking, rafting, or driving through the wondrous scenes in this exquisite state. Our wilderness environment provides solace, a place to unwind from everyday hectic activities, a time to reconnect with nature, and a place of peace and quiet. But when backcountry parking lots become full of cars and too many people crowd popular trails, the tranquil experience becomes compromised.

Even more disconcerting is the degradation of the natural beauties themselves. The prize of our mountains, those peaks above 14,000 feet, often have myriad trails leading to their summits. These trails crisscross fragile alpine ecosystems, whose plants, though tough in withstanding fierce winds, copious snows, and short growing seasons, regrow slowly when the turf is disturbed. Studies on the effects of human trampling in Rocky Mountain National Park led to paving the trails along Trail Ridge Road to save the vegetation from being "loved to death."

The lure of the high country invites the land's eventual destruction if we don't act quickly. We need to develop a new land ethic, leaving some areas wild and untouched. This hardy, delicate land--the crown of the Rocky Mountain chain--is not only a barometer of the physical vitality of our state but also of ourselves. Let us work together to preserve Colorado's unique natural heritage.

Ground Squirrel Repels Bald Eagle

On the Co-Birds web site, Bill Schmoker described this showdown at Chatfield Reservoir on August 20:

"At the old heron overlook an adult Bald Eagle perched in a snag right alongside the viewing platform, surveying the lake as intently as any birder would. At one point the eagle stopped scanning and locked onto an area toward the river inlet. Then it took off, crossing right in front of us as it took a few powerful strokes and glided from the high ground straight toward a sandy point one-third mile away. It ignored the scattering ducks and gulls, maintaining a course for what I could see was a ground squirrel that had picked a bad spot to try for a drink.

"The squirrel saw the eagle coming and bolted for the sparse vegetation up the bank, reachable only by traversing 15 or 20 meters of open bare ground. It quickly became apparent that the eagle would easily win the race. Then events took several surprising turns...First, when the eagle was closing the final meters fast, the squirrel stood up on its hind legs facing the eagle and began chirping. I thought this was a brave way for the squirrel to leave this world, expecting the eagle to grab the little dude like a thirsty marathoner grabbing a cup of water from an aid station without even slowing down. But then the second big surprise happened. The eagle passed right over the squirrel without lowering a talon.

"The squirrel started scurrying up the bank again, while the eagle banked out over the lake and came back at the squirrel from the other direction. This time the squirrel was almost to the grass but still caught in the open. It repeated its stand-up, face-the-threat chirps (roars in its mind, I'm sure), and again the eagle declined the engagement, this time flying back in and landing on its perch alongside the old heron overlook. I guess the Bald Eagle wasn't too hungry and was willing to wait for something easy like a dead catfish. Anyway, that ground squirrel had a hero tale to tell its buddies that night."

BCNA Calendar Project

Let's make a 2006 BCNA calendar. This could be a fundraiser and/or sold to our membership and friends. All BCNA members are invited to submit up to two photos that portray the best of Boulder County ecosystems. Photos can be slides or digital images and may be sent to Joyce Gellhorn, 112 Deer Trail, Boulder, CO 80302 or emailed to jgellhorn@sprynet.com. Later, we can gather tidbits of nature information and fun quips to include.

BCNA Board of Directors

President.....Scott Severs (303-684-6430)
 Vice President....Steve Jones (303-494-2468)
 Treasurer.....Vickie Flower (303-684-9030)
 Secretary.....Jan Carnes (303-827-3024)

Sue Cass (303-494-5345)
 Joyce Gellhorn (303-442-8123)
 Kim Graber (303-494-7971)
 Barbara Hawke (303-527-1819)
 Jim McKee (303-494-3393)

Committees and Contacts

- Allegra Collister Birdbanding Site: Joe Harrison (303-772-3481).
- Education: Carol McLaren (303-530-9108) and Carol Kampert (303-499-3049).
- Indian Peaks Bird Counts: Dave Hallock (303-258-3672) and Bill Kaempfer (303-939-8005).
- Newsletter: Rebecca Hill (303-786-0553), Steve Jones (303-494-2468), and George Oetzel (303-543-3712).
- Website: George Oetzel (303-543-3712).
- Publications: Steve Jones (303-494-2468).
- State and Regional Wildlife Issues: Jim McKee (303-494-3393).
- Wintering Raptor Survey: Sue Cass (303-494-5345) and Jim McKee (303-494-3393).

VISIT OUR WEBSITE

For the calendar, class offerings, research results, publications, and other BCNA-related information: www.bcna.org

JOIN THE NATURE-NET LIST SERVICE

For the latest news and in-depth discussions of Boulder County natural history issues, go to: <http://groups.yahoo.com/group/nature-net>

E-mail BCNA at mail@bcna.org

Add Another Tree Hugger

Congratulations to newsletter co-editor Rebecca Hill and her husband Keric for the birth of their new son, Thomas, on August 31. Rebecca plans to be back editing the upcoming winter newsletter.

Support the Boulder County Nature Association

Name _____

Address _____

Phone and/or E-mail (optional) _____

_____ Type of Membership:

_____ Student/Senior (65 or over)	\$10
_____ General Member	\$15
_____ Family or Household	\$20
_____ Supporter	\$30
_____ Subscriber	\$50
_____ Founder	\$100
_____ Life Member	\$300

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

If your name is circled in red,
your membership has expired.