WATER: PURE AND NOT SO SIMPLE!

18th Annual Boulder County Ecosystem Symposium
Saturday April 21st, 2012
8:00 AM - 3:00 PM
University of Colorado, Ramaley Auditorium

Free and open to the public, this year donations will be accepted for the Boulder County Nature Association’s Research Grants program.

Water is a hot issue here in Colorado and this year’s symposium addresses the complexities of this issue as it relates to the Front Range area. Following is an outline of the speakers, presentations, and panelists. See www.bcna.org for additional information.

8:00 AM - Free registration in Ramaley Auditorium--in the Ecology Department building opposite the main (east) entrance to Norlin Library.

8:30 AM - The symposium begins with announcements and an overview and will continue with the following presentations and Q & A, each lasting 30 minutes.

8:40 AM – Overview of Boulder Valley Water Issues, Mark Gershman, City of Boulder Open Space and Mountain Parks

9:00 AM - Save Our Snow, Dr. Mark Williams, Fellow at the Institute of Arctic and Alpine Research and lead scientist on the Niwot Ridge Long-term Ecological Research Program: Climate change, snow, ski areas, fracking, and water security.

9: 30 AM - Landscape History of Hybrid Ecosystems, Bob Crifasi, Water Resources Administrator, City of Boulder Open Space and Mountain Parks: Survey of Boulder Valley’s streams and lakes and modifications by human activities.

10:00 to 10:15 AM - Break

10:15 AM - Stream Contamination, Dr. David Norris, Department of Integrative Physiology: How the environment modulates nervous and endocrine systems, affecting humans, fish, and other wildlife.

10:45 AM - Lower Boulder Creek Aquatic Ecosystem Restoration Project, Ernst Strenge, Resource Planner for Boulder County Parks and Open Space: Feasibility study of restoration of stream channels, riparian habitat, and other associated habitats.

11:15 AM - Ode to Riparian Floodplains: Protect and be Protected, Julie Ash, Engineer, Walsh Environmental: Factors involved in managing riparian areas and floodplains.

11:45 – 12: 45 – Complementary Lunch. If you are going to stay for the free lunch, please bring your own plate, cup, and utensils so we can eliminate paper waste.


1:15 PM – Gross Reservoir Panel and Discussion with Audience Participation, moderated by Bob Crifasi. With Travis Bray, Denver Water Board, James Newberry, Grand County Commissioner, Drew Beckworth, Western Resource Advocates, and Elizabeth Brown Morgan, Stop Gross Dam Campaign

2:45 PM – Closing Remarks by Mark Gershman

There will be an information table devoted to “fracking” (hydraulic fracturing for natural gas), another important local water and environmental issue.

Many thanks to the sponsors who make this symposium possible: Boulder County Nature Association, Colorado Native Plant Society, Boulder County Parks and Open Space, City of Boulder Open Space and Mountain Parks, Boulder County Audubon Society, and University of Colorado Boulder.

Parking is available at the UMC lot on Euclid Avenue and at the CU Recreation Center lot north of the library. Please consider taking public transportation. Several Broadway buses stop near the auditorium.

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Animal tracks seem to radiate from this small pond, but it is not a prairie oasis. This pond in Weld County, Colorado, is a holding pond for flow-back fluid from a somewhat new technique of drilling for natural gas, referred to as “hydraulic fracturing” or “fracking”. This pond, like thousands of others, is probably lined with plastic so that the fracking fluid will not seep into the surrounding countryside. You wouldn’t want it to do so.

Ian Urbina, writing for the New York Times, described storage ponds as “containing highly corrosive salts, carcinogens like benzene, and radioactive elements like radium.” The fluid might taste salty and therefore appeal to wildlife. Deer, and other wildlife, might be drinking from storage ponds or from runoff. As wellsites multiply, the exposure of wildlife populations to fracking fluid may become inevitable. There are usually No-Trespassing signs posted near holding ponds. Deer don’t read. Nor do birds pecking on the ground near, or in, glistening but toxic sludge. There should be a law! Yes, there was a law and there might be again. Among the unsettling consequences of the 2005 energy bill was one dubbed “the Halliburton loophole.” It stripped the Environmental Protection Agency (EPA) of its authority to regulate fracking. Two bills now in Congress—S. 587, sponsored by Robert Casey (PA) and H.R. 1084, sponsored by Diana DeGette (CO)—would close the Halliburton loophole. The EPA’s rightful authority to regulate hydraulic fracturing would be restored. These Bills are lingerling in Congressional holding ponds, referred to as Committees. Let’s act to move them out of Committee. Please write your representative with your support for these bills.

Wellsites are becoming common along the Front Range. Weld County, alone, has more than 13,000 natural gas wells. Wells are also planned for Boulder County Open Space. During hydraulic fracturing, millions of gallons of chemical koolade, water mixed with sand and proprietary chemicals, are pumped into each well. Colorado is a semi-arid region and can’t afford to sacrifice so much water. Nor can any place else.

Recall one of the first questions asked about other planets: “Is there evidence of water?” Why should we risk polluting the water and destroying life on our planet?
**SPRING CALENDAR**

Thursday, April 12, 6:30 p.m.  **Update on Open Space and Mountain Parks Vegetation Studies.** Megan Bowes and Marianne Giolitto, City of Boulder Open Space and Mountain Parks, sponsored by the Boulder Chapter of the Colorado Native Plant Society. An overview of projects to inventory rare plants, evaluate the effectiveness of resource management strategies, monitor weed populations, and track the long term health of vegetation on OSMP managed lands, including studies of vegetation in Long Canyon and the response of plants in prairie habitat to prairie dog occupation. REI Boulder Community Room.

Saturday, April 21st. **Boulder County Ecosystem Symposium: Water Pure and Not So Simple.** The event is free and open to all. See details on page 1. Saturday, April 28, 8:00 a.m. to 1:00 p.m.

**Walking Tour of Carolyn Holmberg Preserve and a visit to the Birds of Prey Center at Rock Creek Farm.** We will look for migrating and returning birds at Stearns Lake and visit Rock Creek Farm for a guided tour of the Birds of Prey Center. As we return to Stearns for a picnic lunch we will keep our eyes open for raptors, aquatic fowl and other interesting birds and animals. This trip should be especially interesting to families as we get to see the birds at the Birds of Prey Center up close and personal. Trip limited to 15 participants. Be sure to bring water, sunscreen, hats and footwear for walking a little over two miles. To reserve a space, contact Petrea Mah at petreamah@comcast.net or 303-494-4121.

June through August, **Summer Camp Programs.** Thorne Ecological Institute, after many decades, has changed its name to THORNE NATURE EXPERIENCE. Their Summer Camp program for kids three to fifteen years of age begins on June 4 and runs through August. This is their 55th year of offering these camps. Parents can register on line at www.thornenature.org.

**Exploring Colorado’s Lichens.** Join Ann Henson in a leisurely walk to learn about lichens of trees, soil, moss and rocks. Bring your hand lens and be prepared to crawl around and get close to small things! **The April and June classes are full.** Classes will also be held on September 22 and November 4, 2012. For further information and to register contact Ann: 2henson@kwabena.us or call 303-772-8962.

**BCNA PUBLICATIONS REPORT**

**By Sue Cass**

The BCNA Publications Committee is in the process of determining which projects to pursue next in our Boulder County Nature Series. After two years of perseverance and hard work by this committee, especially the authors, the first in the series, *Butterflies of the Colorado Front Range: A Photographic Guide to 80 Species* by Janet R. Chu and Stephen R. Jones, is on the store shelves and available on Amazon.com. This was an amazing undertaking for an organization the size of BCNA and was not entirely without risk. Your Board of Directors approved the single largest capital expenditure in BCNA’s history to bring this project to fruition. Members of this committee, in particular Jan Chu, Steve Jones, George Oetzel and Lysa Wegman-French, contributed tirelessly to the tasks of production, digitization, layout, editing, publishing, distribution, advertising and promotion. The end result is a beautiful field guide filled with easy to digest accounts and glorious photos taken by local nature photographers. Knowing the butterflies featured in this book were likely residents of Boulder County makes it all the more special. Now the good news! After only four months in circulation, sales of our little field guide have exceeded production costs and are now producing revenue for BCNA... monies that can be directed toward future educational efforts..., toward the fulfillment of our very mission. The gamble paid off!

Another undertaking that grew out of a class taught for BCNA by Steve Jones is the CD, "Dawn Chorus in the Rocky Mountains". This venture, happily, is also producing revenue for BCNA. Thank you, Steve!

This year, the Publications Committee hopes to initiate projects that will include a field guide to the dragonflies and damselflies of the Colorado Front Range and a monograph similar to Boulder County Avian Species of Special Concern that will represent the thirty year history of BCNA’s Wintering Raptor Survey. This monograph will dissect the data collected, identify trends and attempt to define the dynamics that have produced those trends..., another entertaining and informative project! We’ll keep you posted!

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Coming in Summer Issue:
Meet our new Board Members
Where Have All the Prairie Dogs Gone?

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Loggerhead Shrike at Stearns Lake
Photo by Bill Schmoker
2011 BCNA Volunteer Projects Summary

More than 200 BCNA volunteers contributed close to 4000 hours to various monitoring and education projects during 2011. To sign up for any of these projects, contact the volunteer coordinator listed at the end of each summary. Beginners are always welcome. Great work everyone!

Allegra Collister Preserve Bird Banding: The spring season got off to a late start with nets up and open on May 13th. While we added no new species in spring, we did band 9 Willow Flycatchers, the most since 2005 when we banded 15. Breaking last year’s record number, we banded 31 Dusky Flycatchers. Western Wood-Pewees put in appearances with 7 banded in spring and 6 in fall. This fall we banded 3 Cordilleran Flycatchers, the first since spring 2009. Of the expected, but not common warblers, 4 Northern Waterthrush were netted in spring and 2 more in fall. The last season we caught more than one was fall of 2007. This was the third spring in a row that we captured Brown Thrashers. We’ve now banded four birds after ten years without one.

Fall brought us two new species for the gulch: a Sage Sparrow and a Harris’s Sparrow, and a surprise Rose-breasted Grosbeak x Black-headed Grosbeak! Two American Redstarts, a male Black-throated Blue Warbler and a Virginia’s Warbler added to our species count for the season. Lazuli Buntings used to be regular, so it was nice to band 6 this spring and 2 more in fall after 5 seasons without them. During the 9 days this spring we banded 226 individuals of 38 species and in fall, our longer season, we banded 302 individuals of 46 species. 8 volunteers, 407 hours. Maggie Boswell: picab@qwest.net.


Birds of Special Concern Monitoring: Long-eared Owls and Lewis’s Woodpeckers continue to nest at Heil Ranch. A Red-headed Woodpecker (rare and declining) nested southeast of Eldorado Springs. Burrowing Owls (isolated and restricted) nested at 8 Boulder County locations. Bald Eagles (isolated and restricted) nested at 5 locations, Golden Eagles (isolated and restricted) at 12 locations, and Peregrine Falcons (isolated and restricted) at 4 locations.

A nesting confirmation of Brown Thrashers (rare and declining) at Dowe Flats was the first in Boulder County in more than 100 years. Four Eastern Phoebe nests along South Boulder Creek were the first ever documented in Boulder County. Cassin’s Sparrows were also documented nesting in the county for the first time. Several Lark Buntings (rare and declining) and a single Mountain Plover (extirpated) were seen during May and June, but no nesting was confirmed. 18 volunteers, 200 volunteer hours. Steve Jones: curlewsj@comcast.net.

Observers Submitting Reports: Linda Andes-Georges, Sue Cass, Mike Figgs, Steve Jones, Nan Lederer, Janet MacLachlan, Christian Nunes, Chris Peterizzo, Joel Such, Marcel Such.

Burrowing Owl Survey: Volunteers searched prairie dog colonies on Boulder County Parks and Open Space land in this study jointly carried out with Boulder County Audubon. Three nests, all at Rock Creek Farm, produced at least 14 young. 50 volunteers, 546 volunteer hours. Sue Cass: suecass@comcast.net.


(continued on page 5)
**Butterfly Inventories**: Butterfly inventories continue to contribute substantial data to the Boulder County Open Space natural history records. In 2011, field inventories during 50 days clocked 133 research hours. Walking surveys were conducted on each of seven properties, in 2011: Southeast Buffer (7 surveys); Anne U. White (10); Heil Valley - Geer Watershed (5), Heil Valley - Plumley Canyon (7), Heil - North (4); Walker Ranch - Meyer’s Gulch (4) Caribou Ranch and Mud Lake (4) Rabbit Mountain (3) and Steamboat Mountain (1).

In addition, annual totals of butterfly Individuals per Research Hour (I/RH) were charted for five years. The calculated I/RH average for the five-years from 2007 to 2011 was 86 I/RH. The greatest numbers were found in 2007 (112) with 2010 and 2011 (62 and 61 respectively) showing the lowest numbers. Common Ringlets were most numerous (94 I/RH) followed by Variegated Fritillaries (37 I/RH), Cabbage Whites (35 I/RH), Checkered Whites (11 I/RH) and Painted Ladies (9 I/RH). Annual totals of Species/RH were 4.4 in 2007, higher than the 5-year average of 3.4, and totals were lower than average in 2009 and 2011 (3.3 and 2.7 respectively).

Volunteers: John Barr, Amy Chu, Jan Chu, Larry Crowley, Venice Kelley, John Krieg, and Jean Morgan. This team has provided detailed studies of natural resources to increase awareness of the value of the Open Space habitats and support ongoing Boulder County management decisions. Coordinator: Jan Chu, chuhouse@hotmail.com.

**Ecosystem Symposium**: Last year’s symposium, focusing on fire in Front Range ecosystems, was attended by 105 enthusiasts. This was our 17th Boulder County Ecosystem Symposium, and talks were well received. 10 volunteers, 200 volunteer hours. Steve Jones, curlewsj@comcast.net.

Symposium Committee: Megan Bowes, Sue and Alan Cass, Steve Jones, Peter Kleinman, Jeff Mitton, Patrice Murrow, Tim Seastedt.

**Ecosystem Stewardship**: So far, we’ve received 2011 reports from just 10 adopted areas, down from 18 in 2010. Still, lots of significant sightings, including a singing Gray Flycatcher and a singing Ovenbird (for the third consecutive year) on Shanahan Ridge; a pair of Burrowing Owls and a Red-headed Woodpecker at Boulder Reservoir; an Olive-sided Flycatcher and a Rose-breasted Grosbeak in Skunk Canyon; fledged Wild Turkeys and American Dippers at Crescent Meadows; fledged Green Herons and a Marsh Wren nest (the first ever reported in Boulder County) at Sawhill and Walden Ponds; nesting American Avocets at Teller Farms; fledged Dusky Grouse and Red-naped Sapsuckers at Walker Ranch Meyers Gulch; and an unusually large herd of 20 White-tailed Deer at South Boulder Creek East. 30 volunteers, 600 volunteer hours. Steve Jones: curlewsj@comcast.net.

Volunteers reporting: Ron Butler, A.D. Chesley, Ruth Carol Cushman, Elaine Hill, Steve Jones, Carol Kampaert, Sandra Laursen, Maureen Lawry, Janet MacLachlan, Betty Naughton, Laura Osborn, Karen Swigart.

**Indian Peaks Bird Count**: During the 30th year of the Indian Peaks Four Season Bird Counts, Black-crowned Night-Heron, Redhead and White-throated Sparrow were seen for the first time on the breeding count. Cassin’s Vireo was seen for the first time on the fall count. Common Goldeneye was seen for the first time on the spring count. Evening Grosbeaks made a comeback on the winter count. 55 volunteers, 758 hours. Dave Hallock: eldoradh@rmi.net.


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Greetings from Board  (continued from page 2)

**Peter Kleinman:** I am delighted to be the new President of the Boulder County Nature Association. As a relatively new resident of Boulder County for the last four years, I have indulged in any number of courses offered by our organization, have represented our organization in state-wide activities, have helped with our educational curriculum as well as our important local research grants, and now am helping develop what I think will be an exciting ecosystem conference in April. I hope you will all take advantage of this conference which will concern water restoration and conservation research in Boulder County as well as discuss the pros and cons of the Gross Reservoir expansion.

We have a vigorous and active Board and we hope as many of you as possible will become or stay involved in as many of our activities as you are able. I would like to thank Sue Cass, our outgoing President, for providing such excellent leadership and organizational skills over the past year.

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**BCNA Board of Directors**

- **President**..............................Peter Kleinman 303-554-5320
- **Vice President**.......................Scott Severs 303-684-6430
- **Treasurer**..............................Terry Stuart 303-449-2232
- **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)

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We invite you to report your sightings to

**www.coloradofrontrangebutterflies.com**

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**Connect with nature:**

**nature-net-subscribe@yahoogroups.com**

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**LOST**

by Ann Cooper

Watching them . . .
Their map of scents
Leads them sweet and easy
Through the dank woods
They need no luggage
No anything except
An edible to crunch
A hole in which to curl

. . . Watching us
Crammed packs and poles
Sweaters and sustenance
Eyes set on the way out
Straying from tagged track
Checking moss on trunks
Assessing flow of streams
The fast-loomng dusk

Stresses that “lost”
Is a human construct
Anchoring us within
Territorial space jammed
With human packrat scraps—
Sheeted beds, cold beers,
Books and telephones—
Ensnared by trappings

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Abert’s Squirrel  photo by Carol McCasland
Projects Summary (continued from page 5)

**Nature Classes:** Thirteen classes were attended by approximately 120 participants. Dave Buckner's "The World of Grasses" and Ann Henson's "Mysterious Lichens" were new 2011 classes (Winter-Spring). Education committee members decided on instructors and classes; planning, developing and printing class schedules twice a year; working closely with the BCNA Treasurer and class instructors to track tuition fees, instructor payments, scholarships and class lists; communicating with instructors on a regular basis to help them with class registration, deadlines for sending in required forms, and other logistics; applying for permits to use OSMP trails; assessing participant evaluations; and finding venues for promoting BCNA classes. 8 volunteers, 300 hours. Carol Kampert: kampert@comcast.net.

Education Committee: Dianne Andrews, Joyce Gellhorn, Steve Jones, Carol Kampert, Peter Kleinman, Janet MacLachlan.

**Publications:** We printed 200 copies of *Boulder County Avian Species of Special Concern*, by Dave Hallock and Steve Jones, and 2500 copies of *Butterflies of the Colorado Front Range*, by Jan Chu and Steve Jones. At least 25 volunteers contributed to the latter effort, and by the end of February, revenue from sales of the butterfly book slightly exceeded our investment of $7500. 25 volunteers, 500 volunteer hours. Sue Cass: suecass@comcast.net.

Publication Committee: Sue Cass, Jan Chu, Steve Jones, George Oetzel, Karen Swigart, Tom Vanzandt, Lysa Wegman-French.

**Wintering Raptor Survey:** The 2011-2012 BCNA Wintering Raptor Survey season has revealed both heartening and disconcerting trends. Surveyor Chuck Hundertmark reported Bald Eagle nesting activity in the vicinity of Stearns Lake. This is a newly active pair in the area and we were hopeful it would be Boulder County's 7th recorded Bald Eagle nest. Unfortunately, it appears the nest is just inside Broomfield County. Regardless, it will be another chance for us to observe the amazing adaptability of this species recently returned from the brink of extinction. On the other hand, sightings of Rough-legged Hawks have been nearly non-existent and it appears we are about to have our lowest report in the nearly 30 year history of the survey. We will let you know when the data have been posted and report back.

Many thanks to all who participated this season! 70 volunteers, 750 hours. Sue Cass: suecass@comcast.net.

**2011-2012 Volunteers:** John Adams, Dale and James Ball, Ruth Beadman, Sarah Bexell, Maureen Blackford, Maggie Bowes, Barbara Brandt, Ron Butler, Leah Chandler, Sue and Alan Cass, Roberta Chase, AD Chesley and Paul Culnan, AI and Joan Clark, George Coffee, Jean and Michael Delaney, Bob Evans, Vickie and John Flower, Fern Ford, Robert and Sheila Frost, Linda Gathany, Bernie and Marilyn Gay, Phyllis Hasheider, Brinda Henley, David Hirt, Jess Hoyt, Chuck Hundertmark, Steve Jones, Cyndy Johnson, Will and Sean Keeley, Elena Klaver, Peter Kleinman, Skye Lewis, Joe Lupfer and Karen Clark, George and Petrea Mah, Cindy Maynard, Carol McCasland, Jim McKee, George and Marti Oetzel, Chris Petrizzo, Carly Pierce, Emi Roberts, Billy Schweiger, Jean Sobolik, Jerry Spangler, Joel and Marcel Such, Wendy Sydow, Darin Toohey, Tom VanZandt, David Waltman, Deanna Williams, Nan Wilson and Gary Stevens, Kristi and Sean Winseck, Howard and Pattiani Wilkin, George Young.

_PRAIRIE FALCON_  photo by Carol McCasland

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An _ANOTHER SPRING_

There is the daybreak that comes with every rising of the sun, and there is the yearbreak that comes with thaw and the unlocking of the ice. As I enter the newly opened water, I enter the year and, in a mingling of dream clearly remembered and new dream just beginning, start to wade again the streaming of its seasons.

. . . At another winter’s ending I have one more setting forth, one more initiation. Though I am always one year older, the year is ever new, renaissance. — DAVID M. CARROLL from his book *Following the Water*
Support the Boulder County Nature Association

Name ________________________________________________________________

Address _____________________________________________________________

Phone and/or E-mail (optional) __________________________________________

Type of Membership:

  ______ Student/Senior (65 or over) $15
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  ______ 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.