

Ecosystem Symposium 2003: Saving our Native Grasslands

By Bruce Bland

This year BCNA's Ecosystem Symposium will focus on our fascinating but often overlooked grasslands. Dr. Carl Bock of the CU's EPO Biology department will give the opening address and provide an overview of the state of our grassland ecosystems. His talk will be followed by a number of researchers presenting talks on a variety of grassland-related topics. As always, the symposium is free and open to the public. The talks are tailored to a general audience and are not overly technical. This is a great opportunity to learn about cutting edge research from Boulder County's prairies. Be sure to mark your calendar for **Friday, April 4th** (main library auditorium).

See next page for a full schedule of presentations.

Introducing . . .

Jan Carnes became the new secretary for BCNA in February 2003. Jan was born and raised a westerner (Laramie, Wyoming) and has resided in the Boulder area since 1964. Seven years ago she retired from her practice as a clinical psychologist, leaving her more time to pursue a long-time interest in ecology and conservation. The last 2 years she and her husband, John, have participated in the raptor survey and are also BCPOS volunteer naturalists. Jan's retirement plan is to learn something new every day.

Scott Severs was selected as President by the board in March 2003. Scott has lived in Boulder since 1984. Scott has been on the BCNA board as a member-at-large and as President, as well as participated in many volunteer projects including the small owl project, winter raptor project, Coal Creek survey, and the Christmas Bird Count. His professional experience includes a degree in Wildlife Biology and extensive work on wildlife studies (primarily birds) in Colorado, Florida, Arizona and Vermont. He has also been an active member of the Boulder County Audubon Society since 1998. While birds are his primary interest, Scott also enjoys botany, butterflies, and dragonflies. He believes in the continued protection of our open spaces from overuse and further fragmentation from road/trail construction. He believes BCNA greatest strengths are its volunteer/member based ecological studies to enhance the quality of Boulder County's wild places.



Inside . . .

Spring Calendar

Female Song Sparrows Know it's All in His Family

BCNAers Highlighted for Their High-Reaching Accomplishments

Book Review: "Proceedings of the Symposium on the Ecology and Management of Dead Wood in Western Forests"

Around Town

BCNA Directory

Extra copies of the newsletter are available from the BCNA or sometimes at the Wild Bird Center.

To submit BCNA-related material to the editor, email susanwinter@qwest.net or call 303-581-0783.



Friday, April 4, 2003

9 am - 2 pm

Boulder Public Library Auditorium Canyon Blvd between 9th and 10th Streets

9:00-9:30

Welcome, sign-in and coffee.

9:35-10:10

Keynote address: Carl Bock – Overview of our local grasslands. (30 min. + 5 min. Q&A)

10:10-10:35

Kathleen Keeler – Effect of chromosome duplications on the reproductive ecology of regional big bluestem populations. (20 min. + 5 min. Q&A)

10:35-11:00

David Buckner – Effects of grazing on local tallgrass plant communities. (20 min. + 5 min. Q&A)

11:00-11:25

Patrick Murphy – Native plant revegetation of prairie dog colonies. (20 min. + 5 min. Q&A)

11:25-12:15

Complimentary Brunch (50 min)

12:20-12:45

Steve Armstead – Butterfly composition, distribution and monitoring on OS&MP lands. (20 min. + 5 min. Q&A)

12:45-1:10

Whit Johnson – Effects of prairie dogs on other rodents and the effects of urbanization on prairie dogs. (20 min. + 5 min. Q&A)

1:10-1:35

Tim Seastadt – Control of local knapweed populations using non-native insects. (20 min. + 5 min. Q&A)

1:40-2:00

Steve Jones and Dave Sutherland – "Saving our Native Grasslands", wrap up.

Saturday, March 22:

Spring welcoming breakfast hike at Sawhill Ponds. Meet at the Sawhill Ponds main parking area, west of 75th Street between Valmont and Jay roads, at 7 AM. Bring finger food to share at a potluck breakfast along Boulder Creek. Return around 10 am. Steve Jones, 303-494 2468; stvjones@peakpeak.com).

Friday, April 4:

Ecosystem 2003: "Saving Our Native Grasslands." 9 am -2 pm. at the Boulder Public Library Auditorium. See cover article for more details and this page for a full schedule.

Sunday, April 6:

Compilation gathering for wintering raptor survey. At Steve's place (3543 Smuggler Way (off Greenbrier 5 blocks west of Fairview High School) from 4-5:30 pm. We will map our survey results and plan next year's work. New volunteers are welcome. 303-494-2468; stephen.jones@earthlink.net.

Sunday, May 4:

BCNA Board of Director meeting and potluck. All members are welcome at these bi-monthly meetings. Business meeting begins at 4 pm, potluck at 6 pm. Vicki's place; call 303-684-9030 for directions.

Tuesday, May 20:

Welcoming the spring wildflowers and birds along the Ann White Trail. Meet at 5 pm at the Four Mile Parking lot on Lee Hill Road about 1/4 mile west of Broadway and Lee Hill to car pool to the trail head. Bring binoculars, hand lenses, and food to share for a potluck supper. Return about 7:30 pm. Joyce Gellhorn (303 442-8123; jgellhorn@sprynet.com).

Saturday, June 28:

Dawn warbler search in the Boulder Mountain Parks. Led by Steve Jones (303-494-2468). Meet at Chautauqua Ranger Cottage, 9th and Baseline, at 5:30 am; return around 9 am.

Don't miss this education opportunity

Bird banding is an indispensable technique for studying the movement, survival and behavior of birds. There are still spaces available in our **Introduction to Bird Banding** class to be held **May 15 and 17**. In this handson class, you will learn the basics of bird banding; including how to band and release your first bird.

For more information, contact Joe Harrison at AvianPursuits@comcast.net or view our website at www.bcna.org/education.



Female song sparrows know it's all in his family

By Bruce Bland

Scientists have long known that the melodious songs of many male songbird species display local dialects, and that females strongly prefer the song dialects of males from the females' home territory. The standard theory that evolutionary biologists use to explain this "local girl prefers local boy" effect is that the local males probably come from a long line of ancestors that have survived and successfully reproduced in the local environment. Therefore they undoubtedly bear genetic traits that are better suited to surviving in the home range than do males from different locales.

However, new research involving song sparrows is putting some interesting wrinkles in this theory. The problems with the theory began when field investigators learned that song sparrow females never travel far enough from home to hear the song of a non-local guy. In nature, unlike in controlled experimental situations, females always prefer the local male dialect because that's the only dialect they ever hear. So, the problem for the theory is that dialect preference can't provide any benefit if it is never needed or used by females.

This leads to a new theory that perhaps what female song sparrows are really listening for is the male who can reproduce the local dialect most accurately. The non-local male (from the experimental situations) who doesn't even know the local dialect is the first one the song sparrow bachelorette would eliminate. The remaining bachelors are then judged based on how well they reproduce the local dialect. Because reproducing a difficult song accurately requires a lot of complex brain activity and neuro/muscular coordination with the vocal and respiratory systems it is a good measure of male health and genetics.

A testable prediction of this theory is that males who are malnourished during early development will not sing the song properly because their brains and/or neuro/muscular systems would not have developed properly. In experiments where competing song sparrow males were raised in fully nourished vs. under-nourished environments, researchers have shown that indeed, the female strongly prefers the songs of the fully nourished males.

If this theory holds up to further testing it indicates that the male's song tells the female not only about his genetic endowment but also how well his parents did at keeping him fed when he was young. In human terms, she's hedging her reproductive bet by not only looking for the best guy but also for the right family to marry into.

Source: Science, Jan. 31, 2003, p. 648.



BCNAers highlighted for their high-reaching accomplishments

Elaine and Dave Hill were recently in an article by Bob Martin in the January-February 2003 issue of "Trail and Timberline." The article, "Beyond the Thirteeners" speaks on Mr. Martin's effort to stimulate others to hike the high points of the Colorado mountain ranges. He had written an article in a 1997 issue listing forty-five high points (that he eventually completed). Mr. Martin had hoped others would report back to him after completing the list themselves.. No one responded until 2002 when Dave and Elaine reported completing their climbs on July 29, 2002. They began hking the list (before there was a list) in 1970 on Mt. Elbert. Their last mountain from the list was Twilight Peak on West Needle Mountain. Dave remarked in the artcile that they "found all the climbs to be very interesting, and . . . had most of the peaks to [them]selves, except for the 14ers." To read the full article, go to http://www.cmc.org/cmc/tnt/975/beyond13ers.html.



Proceedings of the Symposium on the Ecology and Management of Dead Wood in Western Forests, November 2-4, 1999, Reno, Nevada.

U.S. Department of Agriculture Forest Service General Technical Report PSW-GTR-181. August 2002. W.F. Laudenslayer, Jr., P.J. Shea, B.E. Valentine, C.P. Weatherspoon, and T.E. Lisle, Technical Coordinators.

By Clay Evans, Daily Camera Book Editor

Review by Dave Hallock

The dead wood symposium held in 1999 was a watershed event that brought together a wide variety of information about the importance of snags (standing dead wood) and logs (downed dead trees) to the health and production of forests. The last major effort occurred in 1983 (Snag Habitat Management: Proceedings of the Symposium. GTR RM-99). This recent report is a hefty 950 pages and most of the papers deal with areas outside of the Southern Rocky Mountains. However, locally found are many of the species of subject, including trees, agents of tree mortality, and animals depending on dead trees, which makes this a valuable resource for those interested in forest ecosystems. Humans tend to have a cultural bias against dead trees, which gets heightened during times of drought and high fire danger. The presented papers clearly show the benefits of snags and deadfall.

The various spatial patterns of dead trees on the landscape caused by the different agents of mortality are a fascinating aspect of this science. Root diseases tend to kill single trees or a small cluster. Epidemics of bark beetles, considered the most important cause of mortality in the West, will kill much larger clusters of trees. High intensity stand-replacing fires will provide an ecological pulse of snags and deadfall that generally last several decades while a new forest regenerates. Low intensity ground-fires often consume deadfall and may create a few scattered snags.

Dead wood is important to wildlife as it provides sites for denning, shelter, cover, perching, movement, and foraging. This has probably been best studied in birds, particularly the needs of primary and secondary cavitynesters. But new research is finding a host of other animals using dead wood, including bats, American martens, weasels, black bears, and tiger salamanders. Deadfall provides runways for small mammals, and access routes for predators, especially under snow cover. Trees that fall into streams increase aquatic habitat diversity and aeration by forming riffles, small waterfalls, and pools, thereby creating habitat for insects, amphibians and fish. Dead wood is also important to various types of lichen, fungi, and soil.

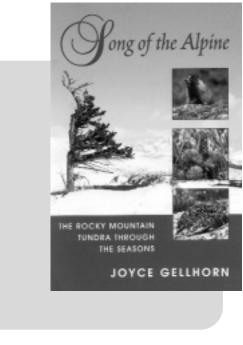
The symposium proceedings can be viewed electronically through the web site for the Pacific Southwest Research Station of the Forest Service (www.psw.fs.fed.us, go into Technical Publications, then under On-line Publications go into General Technical Reports). You may also order a free copy from the same web site.

Procession of the Species Celebration 2002

The annual Procession of the Species will be held Saturday, April 19th, from 10 AM to noon, on Chautauqua Green. The Procession is an artistic and environmental celebration of the natural world created by and for the community, using the media of art, music, and dance to give the natural world a greater presence in our community. Adults and children don masks and costumes, display giant streamers, display giant puppets, and play a variety of musical instruments in

order to celebrate the myriad life forms in Boulder County. Everybody is invited to participate. For more information, check out the Procession of the Species, Boulder Web Site http://www.boulderprocession.org/home.htm.





Song of the Alpine book tour:

Wednesday, April 16 Book talk and slides about "Song of the Alpine." Boulder Bookstore, 7:30 PM.

Tuesday, April 22 Book talk and slides about "Song of the Alpine." Audubon Society, at the Unitarian Church 7:30 PM.

Wildlands Restoration Volunteer Opportunities

Wildlands Restoration Volunteers is a non-profit organization that provides an opportunity for people to come together, learn about their natural environment, and take direct action to restore and care for the land. WRV organizes about a dozen volunteer projects per year, completing a wide variety of important habitat restoration and conservation work in the Northern Colorado Front Range area.

To register, please contact Wildlands Restoration Volunteers at wrv@ecomail.org or call 303-543-1411. Please tell us your name, address, work/home phone, e-mail address, which project(s) you would like to attend, how many people will be coming including yourself, and any special volunteer interests you have. You will receive full details abut each project approximately 3 weeks before the scheduled date.

Left Hand Creek – Brewbaker Property – Boulder County Parks and Open Space

Date: April 12; Rain date: April 26

Description: This project is part II of a riparian restoration plan we began last year. This open space area has been heavily impacted by cattle grazing that reduced vegetative cover combined with periodic flooding. Our aim is to continue to restore riparian habitat important for wildlife and reduce erosion potential. Activities will include: planting of native shrubs/trees; removal of nonnative plants; and various bioengineering techniques to stabilize the stream banks. Lunch served. Number of Volunteers: 40.

Mammoth Reservoir – Arapaho Roosevelt National Forest (near JPW)

Dates: June 28-29, 2003; plus evening of Jun 27; Rain dates: Aug 23-24

Description: The Mammoth Reservoir area is simply spectacular, with classic Rocky Mountain views up a glacially carved valley lush with forest. The reservoir has been drained and the Forest Service is reclaiming the area. Many spur roads have been created by motorized recreation in the area. After heavy equipment is used to prepare the site, volunteers will seed multiple areas, apply erosion matting, transplant native trees and other subalpine vegetation, install buck'n'rail fencing, and install interpretive signs to protect the reclaimed areas. Volunteers will car camp near the reservoir. Number of Volunteers: 50.

Become A Volunteer Park Host

Do you enjoy being outdoors? Do you enjoy friendly conversations with other park visitors? Are you a Boulder County resident? If you answered 'yes' to these questions, you should consider becoming a Boulder County Park Host this year.

Park Hosts have many opportunities to make a difference while hiking, biking and riding at five premier Boulder County properties: Betasso Preserve, Hall Ranch, Heil Valley Ranch, Rabbit Mountain, and Walker Ranch.

After training, you'll be able to describe an area's natural and cultural resources, recreational opportunities and current resource management projects. You'll be given an official T-shirt, ball cap and nametag to wear whenever you're hosting a park. You will also be invited to Parks and Open Space trainings and special events.

Training will take place Wednesday, May 7th and Thursday, May 8th from 6 to 9 p.m. and either Saturday, May 10th or Sunday, May 18th (touring your new office: the parks!). Training will include information about Boulder County's recreational opportunities, local flora and fauna, department regulations, current resource management initiatives and communicating with park visitors effectively.

The application deadline is Wednesday April 16th. For more information and an application, contactMichael Bauer at 303-441-1645 or mbauer@co.boulder.co.us.

Thorne Summer Catalog Available

Thorne Ecological Institute has just published its 2003 summer catalog of classes for the Thorne Natural Science School. A copy can be requested by calling Sarah Garcia at 303-499-3647 or e-mail sarah@thorne-eco.org. It is also available to view on line at www.thorne-eco.org. These natural science day-camp field trips have been operated by Thorne for 47 years and are for children ages 6 through 14. Teaching Assistantships are also available for high school and college students who are interested in learning more about environmental education in the field.

Medicinal And Edible Plants And Their Native Homes

Dr. Jane Bunin, PhD in Plant Ecology, is offering an enjoyable, outdoor introduction to plant identification and the homes (the ecosystems) of wildland medicinal and edible plants. Learn how people, both indigenous and recent arrivals, use and interact with certain plants and ecosystems. Discover what kind of ecosystems are preferred by specific medicinals/edibles and the patterns of ecsosytems in the Boulder region. Discuss why these patterns exist and in which ecosystems certain wildland plants are living. Presentations, experiential exercises and discussion will be interspersed. Dates/times are as follows: Friday, June 6 and Saturday, June 7, 10 am to 5 pm. Cost is \$110 or \$5/\$10 for Friday night only. For more information, contact Naropa University School of Extended Studies 303 245-4800 or www.naropa.edu/extend.

Boulder Chapter of the Colorado Native Plant Society

Join us for free programs on the second Thursday of each month at 7:00 p.m. We will meet at the City of Boulder Open Space and Mountain Parks offices, 66 South Cherryvale Road. For more information, contact Chapter President Kathy Damas at 303.543.1492.

Thursday April 10, 2003 **Comparative Ecology And Botany Of Southern Peru**

Join local restoration ecologist Dr. David Buckner as he shares fascinating observations (through photos and discussion) made while working in Southern Peru. We'll learn about the current and ancient environments of Southern Peru, and floristic similarities to our Colorado conditions that contrast with lifeform differences as they relate to those environments (i.e. comparative ecology). Also he will discuss some things that we take for granted in the realm of technical botany and our Colorado native vegetation that were made apparent by his experience there.

Thursday May 8, 2003

Annual Picnic and Hike 5:30 p.m. Location and destination to be announced – Watch your Aquilegia newsletter or check the web site (www.conps.org) for details.

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Vice President	.Steve Jones	303-494-2468
Treasurer	.Vickie Flower	303-684-9030
Secretary	.Jan Carnes	303-823-5350

Members-at-large:

Bruce Bland	
Sue Cass	303-494-5345
Joyce Gelhorn .	
Barbara Hawke	720-974-7025
Jim McKee	



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

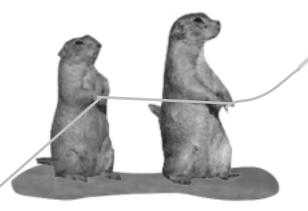
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For the latest news and in-depth discussions on issues of interest to BCNA members

For more information, go to: http://groups.yahoo.com/group/nature-net

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Artwork Credits, Acknowledgements, Etc.

"Procession of the Species" graphic, Earth & Spirit Council, Portland Oregon website

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General Member	\$15	through the following year.)		
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