

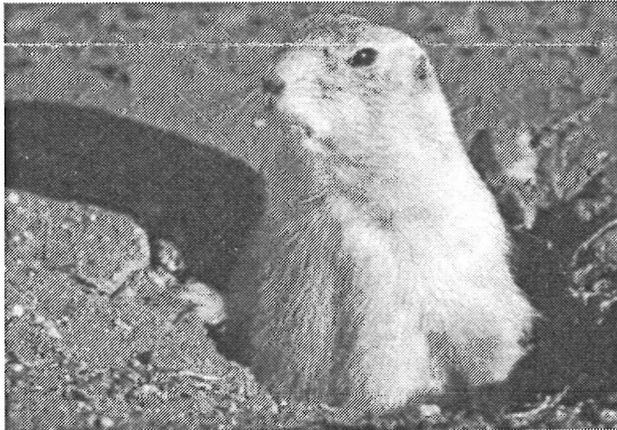
**Boulder County  
Nature Association  
Volume 16, Number 4  
Fall 1999**

***EFFORTS TO GAIN PROTECTION  
FOR THE BLACK -TAILED PRAIRIE DOG***

As the "War in the West" rages on, momentum seems to be building for providing protection for the black-tailed prairie dog under the US Endangered Species Act (ESA). The following is a chronology of some of those efforts.

Petitions for listing the Black-tailed Prairie Dog (*Cynomys ludovicianus*) under the ESA were filed by the National Wildlife Federation in July, 1998 and later by the Biodiversity Legal Foundation, the Predator Project, and Jon Sharps in August, 1998. In January, 1999, the president of the Central Mountains and Plains Section of the Wildlife Society sent a letter to the president of the Western Association of State Fish and Wildlife Agencies recommending that these agencies take the lead in developing a pro-active strategy, aimed at enhancing and protecting black-tailed prairie dog populations, and thus eliminate or forestall the need for listing.

In March, 1999 an Interstate Conservation Strategy group was formed. This group met at the Colorado Division of Wildlife headquarters in Denver on March 17 and again on April 22 and agreed to produce a rangewide conservation strategy. The group consists of representatives from the US Fish and Wildlife Service (USFWS), the US Forest Service (USFS), The Bureau of Land Management (BLM), several of the Native



American Tribes in the region, all of the state wildlife agencies in the region, at least some of the state departments of agriculture in the region, and the National Wildlife Federation. And finally, before the end of March, a positive "90 day finding" was issued, requiring the US Fish and Wildlife

service to conduct a nine-month study to determine whether ESA listing is warranted.

The April 22 meeting resulted in the outline of a management plan to, "proactively ensure the viability of prairie dog populations while minimizing conflicts between prairie dogs and other land uses, and including willing participation and support." The strategy group intends to have an umbrella plan for the region completed by the end of July, 1999. A working group met on May 18 to refocus the effort, and on May 27, distributed a draft Memorandum of Understanding (MOU) to the participants. Since they have no assurance from the USFWS that this effort will negate the need for listing, the Strategy Group intends to have a completed plan in place by the fall of 1999, with some degree of implementation already in process in order to influence the USFWS decision.

***(Prairie Dogs continued on page 3)***

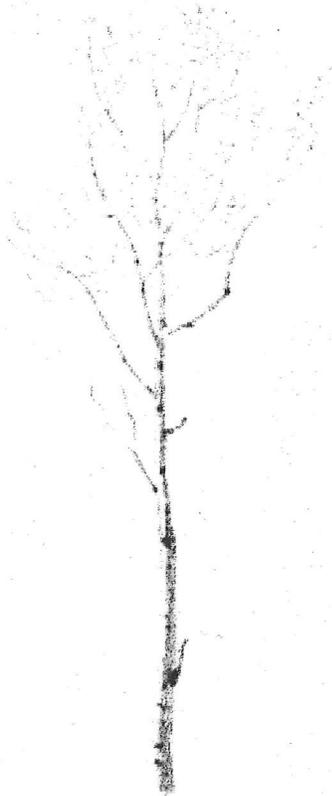
## BCNA Fall 1999 Calendar

Saturday, October 9: the 1999-2000 **Winter Raptor Survey organizational meeting** will be held at 1p.m. at Holly Devaul's house. Location is 3970-O Colorado Avenue. Please call her at 303-415-0464 (evenings) if you plan to attend the meeting or for directions. If you plan to participate in the survey, but cannot make the meeting, please call Holly and let her know, and arrange to pick up or receive data forms and maps. The survey period is October 15 to March 15, and volunteers are asked to conduct a minimum of 5 surveys (one per month ) during this time period.

Saturday, October 16: **Autumn at Sawhill Ponds** with *Colorado Nature Almanac* authors Steve Jones (303-494-2468) and Ruth Carol Cushman. 7-10 a.m. Meet at Sawhill Ponds parking area, west from 75<sup>th</sup> Street between Valmont and Jay roads. If you wish, bring munchies or finger food for impromptu picnic breakfast.

Saturday, October 23: **Sunset/full moon hike in Skunk Canyon**. Leader Steve Jones (303-494-2468). Bring food or drink to share for moonlit potluck picnic. About 3 miles, round-trip. Meet at Skunk Canyon trailhead (intersection of Deer Valley and Hollyberry, off Kohler Drive) at 5 p.m.

Thursday, October 28. **BCNA Board Meeting** at Naseem and Mike's residence (303-673-0933). Simple dinner 6-7p.m., followed by meeting 7-9p.m.



Saturday, November 6: **Bonfire, Potluck, Potlatch, Guy Fawkes and Halloween Party**, 6p.m. - 10p.m. at Naseem and Mike's residence (303-673-0933). The potluck theme: Pies, sweet and savory. Bring a gift to give and burn; bring an effigy of your pet peeve to burn; come costumed; bring candles, poems, music and dance!

Saturday, December 18: **Longmont Christmas Bird Count**. To participate contact Virginia Dionigi (303-776-2609).

Sunday, December 19: **Boulder Christmas Bird Count**. To join a group call Bill Kaempfer (303-939-8005).

Wednesday, December 22: **Annual Winter Solstice sunrise hike** on White Rocks Trail. Enjoy frosted trees, Canada geese and bald eagles sailing through the mist, and the coldest temperatures in the Boulder Valley (last year it was -20° F at the Boulder Creek bridge). Participants can bring a poem, song, or thought to share during an informal (and often short) solstice celebration at the bridge. Breakfast follows at Karen's in Louisville (you may note a repetitive theme, here). Meet at Teller Lakes Open Space parking area, Valmont Road approximately one-half mile west of 95<sup>th</sup> Street, at 7 a.m. Call Steve (303-494-2468) for directions. 2 miles, round-trip.

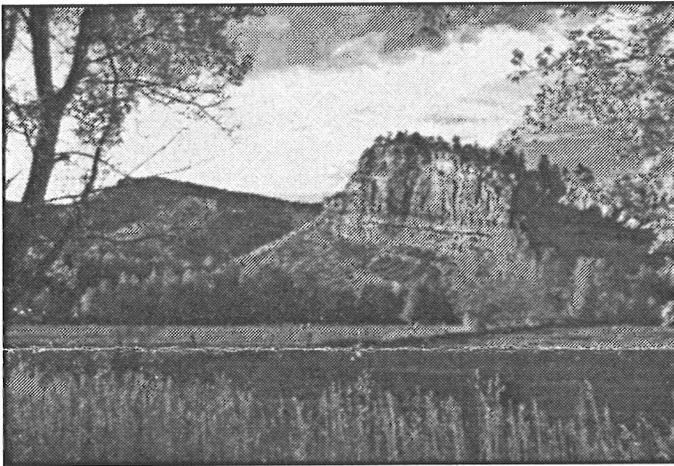
**Please note: spontaneous field trips may be announced on the BCNA Nature Net.**



Coming in January and February: Indian Peaks winter bird count and field trip into the North St. Vrain canyon.

## ***Boulder County Open Space Tax Extension***

The Board of County Commissioners has placed this issue (1A) on the ballot, which will, if passed, extend the current .25 cent sales tax from the current expiration date of December 31, 2000 to December 31, 2019. The current tax now raises about \$9.5 million annually. This sum has increased from 5 to 10% each year during the past five years depending on the state of the local economy. In 2002, the amount collected will decrease about \$1 million annually as a result of Broomfield's departure from Boulder County. The issue (perhaps even more urgently) also authorizes \$35 million in bonding authority to be issued now which will enable the County to purchase valuable lands before the price increases or the land is sold for development. At the \$35 million amount, the County will be able to purchase 5,000 to 8,000 acres of Open Space lands. A subsequent bond issue could potentially double the number of acres. The money will be used to purchase lands to preserve and protect wildlife habitat, to protect urban buffers, riparian and wetland areas and agricultural lands. Any recreational use will be limited to non-motorized passive use. It is important to note that this is not a new or additional tax, but only an extension of the existing tax.



The Land Use Coalition, a private property rights organization, is in opposition to the ballot issue. Citizens for Open Space, chaired by Ruth Wright, is supporting the passage of the issue. They are requesting letters of support to all the newspapers and help with a phone bank and mailings. Contributions can be sent to: Citizens for Open Space, Box 1442, Longmont, CO 80502. The e-mail address: [citizens.openspace@juno.com](mailto:citizens.openspace@juno.com). They can be contacted by phone at 303-442-7071 or 303-449-4031. Additional information will be posted on the nature-net.

## ***Prairie Dogs (continued from page 1)***

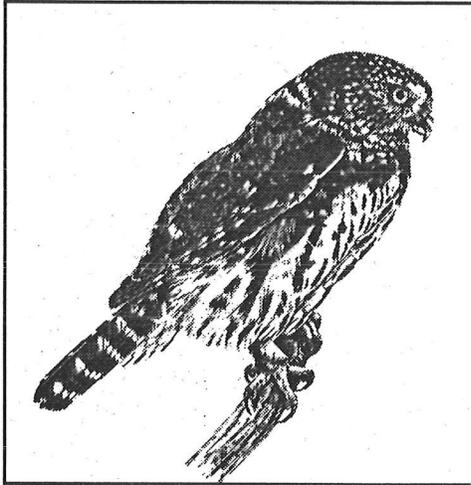
The elements of the plan will include some or all of the following: (1) an increase in target acreage on National Grasslands and tribal reservations, (2) closed seasons for part of the year and daily bag limits for hunting, (3) restrictions on poisoning throughout the region, and (4) financial incentives to landowners to offset grazing losses for maintaining prairie dog populations on dry grasslands.

An initial victory occurred on May 28, when the USFS National Forest System acting deputy chief, Gloria Manning, ordered her staff to immediately stop poisoning black-tailed prairie dogs on all public lands administered by the USFS.

Thus far, as near as we can tell, the state wildlife agencies seem sincere about doing the things that are needed to avoid listing. We do have some reservations, however, whether the state departments of agriculture are committed to facilitating the process. Some of them may be stalling to ensure that financial incentives are realized for the farmers and ranchers who are involved. Or perhaps they are simply stalling to see if a new administration in Washington, D.C. after the year 2000 elections can provide a political solution and relief for them. *(See related article on page 7.)*—Submitted by Jim McKee. *(This article was previously published in the Colorado Wildlife Alliance Quarterly Newsletter.)*

# ***Greenwood Wildlife Rehabilitation Sanctuary A Wonderful Resource for Nature Lovers!***

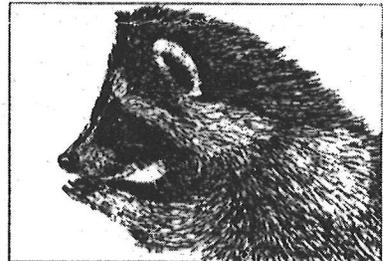
Have you ever been out hiking, found an injured animal and not known what to do? Or, while working in your yard, witnessed a domestic cat capture a songbird? Or seen a prairie dog, coyote or raccoon injured on the side of the road? Or a nest of baby birds apparently abandoned by their parents?



There are ways to help animals in these situations. Sometimes our intervention means that the animal will get a second chance in a world where human presence makes their lives increasingly difficult. Other times, the best course of action is none. Greenwood Wildlife Rehabilitation Sanctuary can help by offering guidance on what to do and also by providing a place where injured, sick or orphaned animals can recover.

Greenwood's mission is to rescue and offer medical care and a quiet sanctuary for recovery to wild animals that are injured, sick or orphaned. Once animals have recovered, they are released back into their natural, wild habitat. Greenwood also provides educational programs to schools and various special interest groups. A great deal of education is also given over the phone and in person.

In 1998, Greenwood treated almost 3,000 animals, a number that increases each year. The Colorado Division of Wildlife and the U.S. Fish and Wildlife Service license Greenwood in wildlife rehabilitation for all avian species (except birds of prey), reptiles, and mammals (except large cats, ungulates and bear). Most of Greenwood's animals come from Boulder County, but the Sanctuary also receives animals from all of the Denver metropolitan counties, Larimer County and other counties around the state of Colorado.

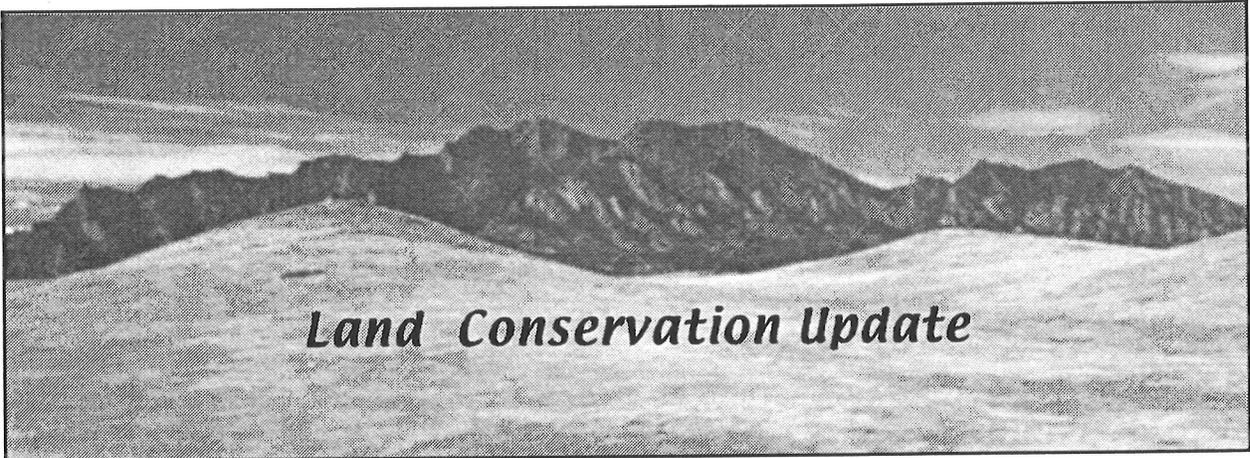


Greenwood's success in treating and releasing injured, sick and orphaned wild animals matches the national average for wildlife rehabilitation organizations. This accomplishment is noteworthy in that Greenwood is almost entirely volunteer-run (with only one paid staff member). Greenwood's important work in the community was recognized by the Boulder County Commissioners in 1998, when they decided to give Greenwood a permanent home on nearly two acres of Open Space. Greenwood leases the land from the County, and has an option to buy it.

Greenwood's success is dependent on volunteers and donations from the communities that it serves. If you are interested in volunteering, offering a donation, finding out more about Greenwood, or requesting an educational program, please call 303-545-5849. Greenwood also has an emergency phone number, to be used when one finds an injured or ill animal: 303-823-8455. Greenwood's mailing address is P.O. Box 18987, Boulder, CO 80308-1987. --Submitted by Rachel Lee.

## ***Forest Planning Web Site***

The Arapaho and Roosevelt National Forest web site maintains an electronic reading room that posts ongoing projects ([http://www.fs.fed.us/r2/arnf/ipmg/nepa\\_docs/nepa\\_calendar.html](http://www.fs.fed.us/r2/arnf/ipmg/nepa_docs/nepa_calendar.html)) in each Ranger District. The NEPA calendar is useful for tracking projects and knowing when to submit comments on individual projects here in the Boulder Ranger District.



### Boulder County

Boulder County, with the help of Great Outdoors Colorado, has acquired an important conservation easement on the 320 acre Ochs property located on the west side of Heil Valley Ranch. This property, with three separate parcels, represents the largest private property between Heil Valley Ranch and the Forest Service land to the west and is an important elk migration corridor. On the east-central side of Heil Valley Ranch is a 560 acre State Land Board parcel. The State Board of Land Commissioners has placed this parcel in the Stewardship Trust which provides maximum protection for these state lands. These two land conservation developments add additional protection for the entire North Foothills Open Space, totaling over 11,000 acres, and including land from Lefthand Canyon on the south, to Lyons and North St. Vrain Creek on the north.

### Boulder County and the City of Louisville

The County and the City of Louisville have worked together to purchase the 220 acre Warenbourg property at Dillon Road and 96<sup>th</sup> St. This property serves as urban buffer in the rapidly growing southeastern portion of Boulder County and also includes a portion of Coal Creek and associated riparian habitat. This project also has been financially supported by Great Outdoors Colorado.

### Boulder Mountain Parks

The City of Boulder Mountain Parks has developed a land acquisition program to protect the west side of the Mountain Parks. Some acquisitions are to buffer the Parks from residential development east of Flagstaff Drive. Other acquisitions will establish a corridor of protected lands west from the Mountain Parks to the Forest Service lands north of Walker Ranch. To date, the Mountain Parks Division has acquired 165 acres of conservation easements at a cost of \$126,500, and acquired in fee 212 acres at a cost of \$1,410,500.

## ***Lepidoptera Websites***

What amounts to an online field guide is found at the Butterflies of North America web site (<http://www.npwrc.usgs.gov/resource/distr/lepid/bflyusa/bflyusa.htm>). This comprehensive site is being continually updated and contains information on individual species including photos, identifying characteristics, life history, distribution maps by county (for all of the conterminous 48 states and northern Mexico), conservation status, and management needs. There is help provided for identification, and instructions on how to report a new county record. If you don't object to commercial content, another source of online photos is found at The Butterfly Website (<http://butterflywebsite.com>).

A sister website, providing similar comprehensive information, is Moths of North America (<http://www.npwrc.usgs.gov/resource/distr/lepid/moths/mothsusa.htm>). Web images of 1,400 of the approximately 10,500 species of moths in North America are available at <http://www.furman.edu/~snyder/leplist/>.

# ***Wild Steps: Milestones in Boulder County Resource Management***

## **City of Boulder Open Space Visitor Plan**

The Open Space Board of Trustees has approved the creation of a citizens Advisory Committee that will assist staff in the development of the Visitor Plan. Staff has encouraged extensive public comment, and one public workshop, facilitated by Advisory Committee members, has been held. The discussion at this workshop centered on the following four questions:

1. How should passive recreation be managed in relation to the other purposes of Open Space?
2. How would you define passive recreation?
3. What general guidelines or approaches would be useful to manage passive recreation?
4. What criteria should be used to evaluate whether additional recreational activities are appropriate on Open Space?

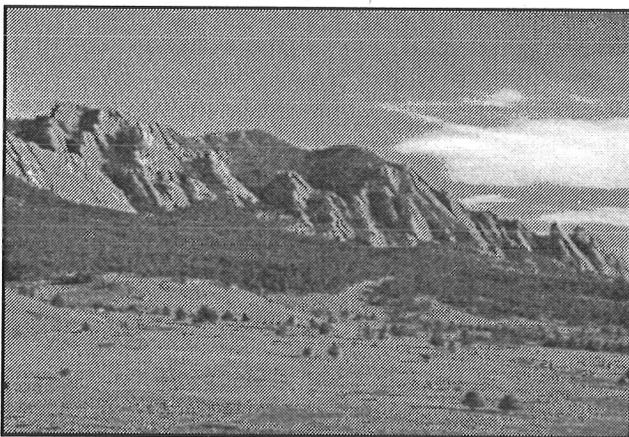


A second public workshop will discuss various options to address these four questions, and the options will be further refined into draft management policies. A draft plan should be completed by early 2000. To be notified of upcoming meetings or submit comments on the plan, visit the website at <http://openspace.ci.boulder.co.us>, leave a recorded message at the Visitor Plan hotline 303-441-4024, e-mail [VisitorPlan@ci.boulder.co.us](mailto:VisitorPlan@ci.boulder.co.us), or Call Brent Wheeler at 303-441-3440.

In conjunction with the Visitor Plan, Open Space staff hired a consultant to conduct a telephone survey of registered voters to document their attitudes regarding Open Space issues. This is the most comprehensive survey of this type conducted to date, and it will be reported on in the next newsletter. The survey results may also be posted in the near future on the Open Space web page.

## **City of Boulder Mountain Parks Management Plan**

After a public comment period this past winter and spring, a draft management plan has been completed and can be downloaded at <http://ci.boulder.co.us/bmp/>. Some highlights of the plan include the following statements:



*According to the most recent estimates, over 1.7 million people visit the Boulder Mountain Parks core area annually. Due to the park's relatively small size, this impact is concentrated and translates to an average of 285 visitors per acre, one of the highest demands placed on a natural area across the country. In comparison, Rocky Mountain National Park receives approximately 12 visitors per acre, while Yellowstone National Park receives 1.5.*

*Visitor uses should be low impact, high quality, and be compatible with maintaining important natural functions. (continued next page)*

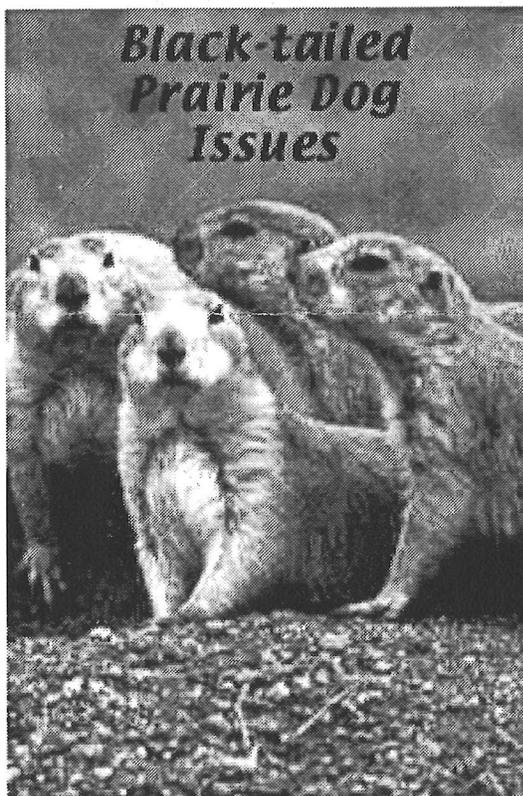
## **Mountain Parks Management Plan (continued)**

*With over 50 miles of developed trails...access to almost every part of the park or point of interest is possible. Thirty recognized access points and countless informal portals along the Park's periphery and Flagstaff Road feed the trail corridors.*

*The management of the parks should seek to channel and influence recreational use and protect the quality of recreational opportunities, but not to promote growth in use.*

*Where there are real or potential conflicts between nature and people in the Boulder Mountain Parks, preference will be given to sustaining nature.*

Staff is in the process of editing the draft, and the tentative schedule is to mail the revised draft plan on September 28, hold a public workshop on October 12th, and submit the plan to the Parks and Recreation Board on 25<sup>th</sup>, unless public comments indicate more work is needed.



After reviewing, "THE BLACK-TAILED PRAIRIE DOG CONSERVATION ASSESSMENT AND STRATEGY," I found this umbrella document for the region to be very well written and a strategy that will, if followed by all of the states, federal agencies, and tribal governments in the area, ensure the protection and survival of the black-tailed prairie dog and the species which depend on it for food or for habitat. It won't, of course, satisfy either the animal rights folks or agricultural interests, which probably means that it is a good compromise.

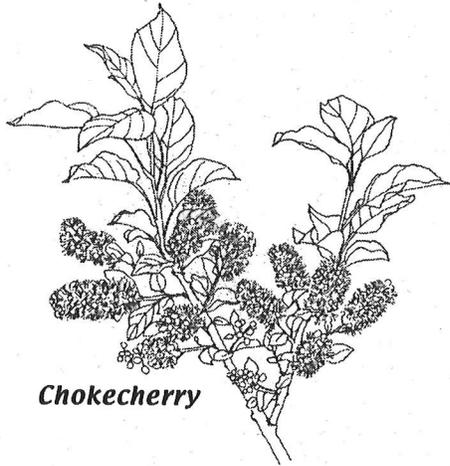
On August 19, I attended a meeting on the Memorandum of Understanding regarding Prairie Dog Management in Colorado. With the exception of some specific language changes to satisfy agency regulations, this document seems complete and acceptable. It creates a Work Group made up of representatives of the various signatory agencies in the state. The primary goal of the group is to: "Develop and implement a program that achieves conservation of the black-tailed prairie dog in Colorado while recognizing that control is necessary and appropriate in areas where prairie dogs compete with agriculture and other human activities." The following principles will guide the work group:

1. The long-term viability of the black-tailed prairie dog in Colorado is an important objective. Some prairie dog towns and complexes must be protected to ensure survival of prairie dogs.
  2. Conflicts between prairie dogs and agriculture and other human activities will continue to occur. Control of prairie dogs in these situations is a necessary and appropriate alternative.
  3. Voluntary, incentive-based approaches are needed to maintain habitat for the black-tailed prairie dog on private lands.
  4. Numerous stakeholders have a role and interest in the management black-tailed prairie dogs.
- (continued on page 12)**

## Book Reviews

*Native American Ethnobotany* by Daniel E. Moerman. Timber Press, 1998.

This exhaustive tome is the result of 25 years of research. Not actually an ethnobotanical publication, it is a review of all of the known ethnobotanical literature in North America, north of Mexico. Most of the 600 pages are devoted to the catalog of plant species, their usage, and the tribes that used them. All information is linked to the bibliography. There is also an index of tribes and an excellent index of usages, helpful in the case of wanting to know what plants would make, for example, a green dye. There are 186 usage categories that fall under five principal usages: drugs, foods, fiber, dye and other.



**Chokecherry**

If you are starting an ethnobotanical project, this publication will be invaluable. The only catch is the \$80 price tag. Thankfully, there is a copy in Norlin Library. Of the 10 plants with the greatest number of documented usages, 7 of them occur in Boulder County. Can you name them? They are *Achillea millefolium*, yarrow; *Prunus virginiana*, chokecherry; *Typha latifolia*, cattail; *Urtica dioica*, stinging nettle; *Artemisia tridentata*, big sagebrush; *Amelanchier alnifolia*, Saskatoon serviceberry; and *Cornus sericea*, red osier dogwood. And yes, there is an index of synonyms for scientific names as well as for common names.--Submitted by Mike Figs.

*Land Mosaics: The Ecology of Landscapes and Regions* by Richard T.T. Forman. Cambridge University Press, 1998. \$45.00.

The field of landscape ecology has come a long way in the past 14 years, and Forman, professor of Landscape Ecology at Harvard University, has often been at the forefront. This publication updates and expands upon the theory and application of landscape ecology, by urging planners and policy makers to consider regions in their thinking, rather than local landscapes. He is clear that human dominated landscapes must also be factored into regional landscape analysis and planning. He states in the preface: *It is simply inept or poor-quality work to consider a patch as isolated from its surroundings in the mosaic. Designs, plans, management proposals, and policies based on drawing an absolute boundary around a piece of the mosaic should be discarded. Moreover, because we know this is wrong, i.e., we know ecological context is as important as content, the practice is unethical...It is time to aim higher, to make those linkages from landscape to landscape and region to region, now based on a foundation of general patterns and principles. Natural resource reserves are not the goal; rather, they are important pieces in a mosaic where every piece counts...Indeed, a spatial solution is emerging that will protect the bulk, though not all, of the species, soil particles, mineral nutrients, and clean water in any landscape* Slow reading but a ton of good information. Natural resource planners and managers will want to have this publication. Land conservation and environmental activists should familiarize themselves with the basic concepts and principles described by Forman. The copy at Norlin Library is currently missing; however, the publication is stocked at the Boulder Bookstore.--Recommended by Dave Hallock; submitted by Mike Figs.



**Yarrow**

## ***Habitats of Boulder County***

### **BOBOLINKS IN BOULDER: ICE-AGE RELICTS OR HUMAN ASSOCIATES?**

In 1909 University of Colorado museum curator Junius Henderson described "a big meadow just east of Boulder" where a dozen or more bobolinks nested each summer. Three decades later, Robert Niedrach and R. B. Rockwell (1939) wrote that bobolinks were found breeding in "a meadow 2 miles southeast of Boulder." Since the late 1970s, small numbers of these acrobatic and vocal grassland birds have been observed annually in irrigated hay meadows along South Boulder Creek between South Boulder Road and the Flatirons Country Club (Boulder County Audubon Society 1978-99).



Isolated bobolink populations breed in a few northern Colorado wetlands, from Craig to Wray (Kingery 1998). Some individuals may nest in native mixed-grass prairie, but most nest in irrigated hay meadows. No one knows whether these scattered breeding populations are holdovers from earlier, wetter times, or whether they became established after European-American settlers began irrigating arid western lands. Wittenberg (1978) concluded that genetic similarities among western and eastern North American bobolink populations, along with the propensity of western and eastern birds to migrate together, indicate a recent range expansion from east to west. However, observers reported breeding bobolinks in Utah as early as 1874, long before irrigated hay meadows became widespread in the Rocky Mountain region. Colorado's earliest documented sighting is from Huerfano County in 1873; earliest state breeding records are from Meeker in 1909 and Boulder in 1929 (Bailey and Niedrach 1965).

The bobolink is listed as a species of special concern in Boulder County (Hallock and Jones 1999). Local breeding populations are isolated and mostly confined to the South Boulder Creek and St. Vrain Creek floodplains. Breeding habitat throughout eastern North America has shrunk with the conversion of wetlands to agriculture. Wintering populations, which gather in immense flocks and feed on domestic grains, are frequently persecuted by South American farmers.

Richard Thompson and Joseph Strauch (1986) studied nesting bobolinks on the Burke, Gebhardt, EBCP, and Church Open Space parcels along South Boulder Creek. All nesting activity on these parcels occurred in irrigated hay meadows. Fledging dates ranged from 2-16 July. Meadows were typically mowed between 4 and 20 July. Thompson and Strauch concluded that these mowing practices seemed compatible with nesting success. Earlier mowing would destroy most nests. Later mowing might increase nesting success, but a cessation of mowing could reduce production of new grass and render the meadows unsuitable for nesting.

All this information leads to some intriguing questions. Are bobolinks native to Boulder County? If they are, why do they now nest almost exclusively in human-created environments (irrigated hay meadows)?

How hard should we work to maintain these artificial nesting habitats or to restore natural nesting habitats?

The City of Boulder Open Space Department has followed a policy of delaying haying until after 15 July, whenever possible, on parcels where bobolinks nest. Thompson and Strauch (1986) recommended that studies be carried out to determine whether the Open Space bobolink population is self-sustaining and to assess its degree of isolation from other populations. A long-term study of this nesting population might provide clues about its origins and help us to understand how to manage bobolink nesting habitat throughout Colorado.

In May 1999 the Colorado Bird Observatory circulated a request for information about the state's nesting bobolink populations. A half-dozen BCNA volunteers responded by conducting a one-day count at known Boulder County nesting sites. Here are the results:

<u>Site</u>	<u>Date</u>	<u>Males</u>	<u>Females</u>
Hygiene Rd. NW of N. 61 <sup>st</sup>	10/6	4	1
Hygiene Rd. at St. Vrain Creek	30/6	0	0
St. Vrain Rd. between 65 <sup>th</sup> and 60 <sup>th</sup>	30/6	6	1
City of Boulder Burke Property	26/6	14	1
City of Boulder Van Vleet 307	27/6	10	2
City of Boulder Cherryvale Center	28/6	17	5
City of Boulder Church	29/6	4	1
City of Boulder NU West*	30/6	0	0
City of Boulder Lousberg*	30/6	10	8

\*At corner of Jay Rd. and North 51<sup>st</sup>. All other Open Space properties are adjacent to South Boulder Creek near Cherryvale Rd.

Clearly, there are enough bobolinks out there to serve as subjects for future study. As we learn more about them, we will increase our understanding of how Boulder County grasslands have evolved over the past 10,000 years. Any takers? --Submitted by Steve Jones.

Thanks to volunteers Linda Andes-Georges, Mark Brennan, Ivan Getting, Bill Kaempfer, and Carrie Richardson.

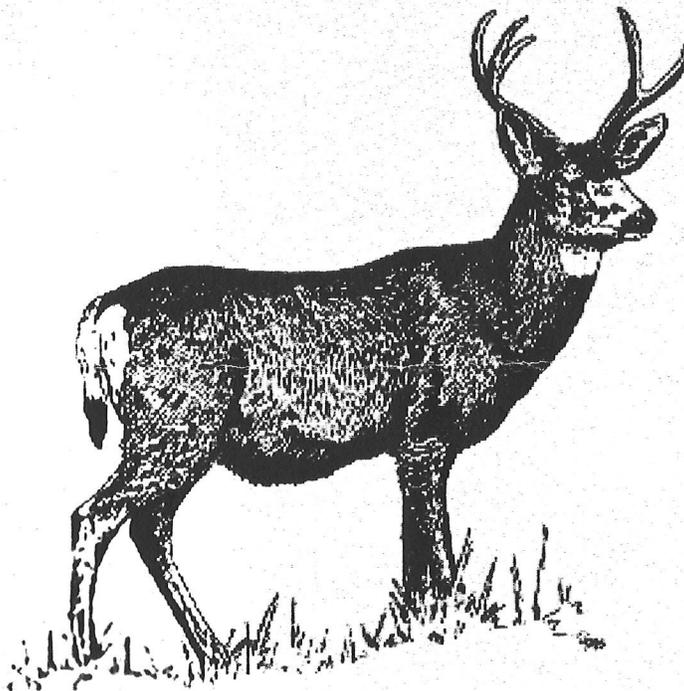
#### Literature Cited

- Bailey, A. M., and R. J. Niedrach. 1965. Birds of Colorado. Denver Museum of Natural History.
- Boulder County Audubon Society. 1978-99. Monthly wildlife inventories. P.O. Box 2081, Boulder CO 80306.
- Hallock, D., and S. R. Jones. 1999. Boulder County avian species of special concern. Boulder County Nature Association. P.O. Box 493, Boulder CO 80306.
- Henderson, J. 1909. An annotated list of the birds of Boulder County, Colorado. University of Colorado Studies 6:220-242.
- Kingery, H. E., ed. 1998. Colorado breeding bird atlas. Colorado Breeding Bird Atlas Partnership, Denver.
- Niedrach, R. J., and R. B. Rockwell. 1939. The birds of Denver and mountain parks. Denver Museum of Natural History, Pop. Ser. 5.
- Thompson, R. W., and J. G. Strauch Jr. 1986. Habitat use by breeding birds on City of Boulder Open Space. Boulder County Nature Association. P.O. Box 493, Boulder CO 80306.
- Wittenberg, J. F. 1978. The breeding biology of an isolated bobolink population in Oregon. Condor 80:355-71.

## PREDATORS AND MULE DEER (MULE DEER AND PREDATORS?)

Mule deer populations are down in Colorado and the inter-mountain west. That much is obvious, but the causes are not. Mule deer populations may be cyclic. A similar decline was observed in the 1970s. Any hunter, rancher, or Greg Walcher, the director of the Colorado Department of Natural Resources (DNR) will tell you that predators are (at least, most of) the problem. And Walcher's opinion may be critical, since the legislature made the Colorado Division of Wildlife a type 2 agency reporting to the director of DNR. Wildlife biologists are not so sure. Most feel that the problem is much more complex than just predators and that there are no simple answers.

Many possible causes for the mule deer decline have been discussed. Colorado has a huge elk population--the largest of any state in the country. Mule deer don't do very well when competing with elk for wintering grounds or fawning/calving grounds. Instead they are forced into more exposed habitats. Habitat has been taken or fragmented by human activities. Migration corridors have been disrupted. Where habitat is available, the quality may be inadequate for mule deer's needs. Some biologists feel that after the over-grazing of the late 1800s and early 1900s, plant succession has resulted in vegetation that is much less nutritious. This is a problem because mule deer have rumens for their smaller size than most other ungulates. For example, mule deer will starve to death on a diet solely of grasses. In many areas of the state, the buck:doe ratio can result in does being bred so late in the season that fawns are born too late to achieve the growth and strength necessary to survive the winter. And finally, in some areas, for any or all of the above conditions, the populations may be so low and the animals so weak that they are easy prey for the first coyote or mountain lion that comes along. In this case, both habitat improvement and some predator control may be needed to restore normal populations.



The real question that must be addressed then is, should predator control be done and, if so, when? In "A White Paper on Wildlife Related Predator Control," Dan Thiele of the Wyoming Game and Fish Department makes the following statement. "Studies of predation on wildlife have shown that predators take wildlife, that predators can be reduced in number, that predation is seldom the lone factor affecting a population, and that predator control to benefit wildlife is not cost effective. Hunting is currently tolerated by many because it is accepted that man (or woman) has replaced the role of the major predators he exterminated. To kill predators simply to produce more game for hunters is sure to give more support to anti-hunting groups." With this in mind, if I was a hunter today and wanted to continue to be able to hunt, I would strongly oppose any predator control done solely to improve hunting.

selected areas of the state. Again from Dan Thiele's paper, I quote the following statements. "The studies reviewed in this paper support the idea that where habitat is unlimited and in good condition, predator control is not needed. In fact, the reverse argument is supported - where predator control is needed, there is a habitat problem. Predator control will not reverse the situation for animal populations declining due to habitat deterioration or overuse."

If, as has been proposed by the directors of the state Departments of Agriculture and Natural Resources, responsibility for predator management is transferred back to the Colorado Division of Wildlife (CDOW), we (wildlife advocates) will have an opportunity to influence predator management in a positive way. There will certainly be intense pressure from ranchers, hunters and the state legislature to control livestock predators and, as a bonus, to reduce predation on game wildlife species. CDOW has already prepared a Mammalian Predator Management Policy directed only toward wildlife issues. If responsibility for controlling predators that cause agricultural damage is transferred back to CDOW, this policy will be expanded to encompass all predator management. The directors of both the Departments of Agriculture and Natural Resources have proposed creating a Predator Control Committee that will include environmentalists, biologists, and members of the Agriculture Department. We must see that the environmental members are both strong and vocal in defending sound biological positions with respect to these issues and in keeping public attitudes regarding predator control before CDOW staff. In this way, we can ensure sound wildlife management by biologists and not by public initiative.--Submitted by Jim McKee. (*This article is also being published in the Quarterly Newsletter of the Colorado Wildlife Alliance.*)

---

## ***Black-tailed Prairie Dog*** ***(continued)***

5. All black-tailed prairie dog populations, whether in urban or rural areas, may have value for conservation.
6. Sylvatic plague is an important disease issue that must be addressed in black-tailed prairie dog conservation.
7. Numerous wildlife species are dependent on black-tailed prairie dog colonies, and conservation of black-tailed prairie dogs will assist in the conservation of these associated species.
8. While the initial focus of this MOU and Work Group will be on black-tailed dogs, the broader concern for the health and sustainability of the shortgrass prairie ecosystem will also be addressed.

I will provide information in future issues regarding further meetings and activities involving prairie dogs.--Submitted by Jim

McKee (*This article is also being published in the Quarterly Newsletter of the Colorado Wildlife Alliance.*)

### *A Message*

*The crescent moon sets*

*Star light*

*Wind light*

*Lightning*

*From the Galactic center in Sagittarius*

*A mosquito*

*On my nose.*

--Nanao Sakaki, *Break the Mirror*, North Point Press, ISBN 0-86547-298-X.

## **1999 BCNA Board of Directors**

President: Scott Severs (442-1322)  
Vice-President: Holly Devaul (415-0464)  
Treasurer: Chaya Nanavati (772-3659)  
Secretary: Mike Tupper (673-0933)  
Members-at-large:  
Dora Perry (652-3917)  
Tim Hogan (444-5577)  
Joan Ray (444-5011)  
Naseem Munshi (673-0933)  
Jacob Smith (443-5518)

## **BCNA Online**

BCNA's online access includes a web site: <http://www.bcna.org>, e-mail: [mail@bcna.org](mailto:mail@bcna.org), and the BCNA nature net. To post messages on the nature net: [nature-net@telelists.com](mailto:nature-net@telelists.com), and for subscribing, [join-nature-net@telelists.com](mailto:join-nature-net@telelists.com). If you have questions regarding online access, please contact Randy Gietzen at [randyg@boulder.net](mailto:randyg@boulder.net).

## **In Appreciation**

Many thanks to Dan Murphy for his two tours of duty as BCNA Treasurer, particularly this second time when Dan was juggling family and work commitments. Thanks also to Chaya Nanavati for agreeing to take on the Treasurer's position--also for the second time!

## **Committees and Contacts**

Allegra Collister Nature Preserve and Birdbanding Site--Joe Harrison 772-3481  
Cliff Nesting Raptors--Nan Lederer 447-1899  
Indian Peaks Bird Counts--Dave Hallock 258-3672 or Bill Kaempfer 939-8005  
National Forest Management--Tim Hogan 444-5577  
Newsletter--Mike Figs 447-1899  
Open Space Liaisons--Jacob Smith 443-5518, Scott Severs 442-1322  
Parties, Special Events--Naseem Munshi 673-0933  
State and Regional Wildlife Issues--Jim McKee 494-3393  
Trails--Leslie Glustrom 543-0302  
Winter Raptor Survey--Holly Devaul 415-0464

## **BCNA Research Grants**

BCNA regularly awards grants to fund research projects that will increase our understanding of local biodiversity and natural resource management. A typical grant is for \$250. Past grants have supported studies ranging from cowbird parasitism to old growth forest inventories. Grant recipients agree to provide BCNA with a written summary or the research results, and to participate in the Boulder County Ecosystem Symposium, if appropriate. Those interested in applying for a grant should submit a brief proposal describing their research project to Scott Severs (442-1322) or Tim Hogan (444-5577).

## **Artwork Credits and Acknowledgements**

Page 1: prairie dog photograph by Steve Jones. Page 2: aspen by Nan Lederer; chipmunk by Carl James Freeman, 2485 Herring Rd, Arcadia, MI 49613. Page 3: Hall Ranch from Old South Road west of the Town of Lyons, photo by Mike Figs. Page 4: pygmy owl from USDA Forest Service, raccoon by Carl James Freeman. Page 5: the Flatirons from the Kelsall parcel on City of Boulder Open Space by Mike Figs. Thanks to Tina Nielsen for the County land conservation info, and to Joe Mantione for the Mountain Parks info. Page 6: Eldorado Mtn. from the East Varra parcel; and, the Flatirons from the West Rudd parcel, both City of Boulder Open Space, and both by Mike Figs. Page 7: prairie dogs courtesy of Wind Cave Natl. Park. Page 8: chokecherry and yarrow line drawings by Margy Lanham from *The Enchanted Mesa* by Url Lanham. Page 9: bobolink by Denis Kania ([Denis.Kania@infores.com](mailto:Denis.Kania@infores.com)) and provided by the Fermi National Accelerator Laboratory web site. Page 11: mule deer provided courtesy of the Nebraska Game and Parks Commission. Page 12: Nanao Sakaki's *Break the Mirror* has been out of print twice, but probably can be found at used bookstores in Boulder.

## **Membership Application for Boulder County Nature Association**

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone, Fax or E-mail Address (optional) \_\_\_\_\_

<input type="checkbox"/> Student or senior citizen (65 and over)	\$10
<input type="checkbox"/> General Member	15
<input type="checkbox"/> Family or Household	20
<input type="checkbox"/> Supporter	30
<input type="checkbox"/> Subscriber	50
<input type="checkbox"/> Founder	100
<input type="checkbox"/> Life Member	300
<input type="checkbox"/> Corporate	500
<input type="checkbox"/> Stakeholder	1000

Membership year is January 1 to December 31. Members who have joined since October 1 are considered paid through the following year. Members receive a quarterly newsletter. Supporting members (and above) also receive a complimentary copy of each BCNA publication that is published during the membership year. Please make check payable to "Boulder County Nature Association" or "BCNA" and mail to P.O. Box 493, Boulder, CO 80306.

Extra copies of the newsletter are available from the editor or sometimes at the Wild Bird Center. To submit BCNA-related material to the editor, e-mail to [m.figgs@prodigy.net](mailto:m.figgs@prodigy.net) or send a 3.5" or zip disk Mike Figgs, 2635 Mapleton Ave. #77, Boulder, CO 80304.

**Boulder County Nature Association**

**P.O. Box 493**

**Boulder, CO 80306**