Promoting the appreciation, conservation, and restoration of ecosystems, focusing on birds and other wildlife, through education, participation, stewardship, and advocacy.

May 2011

Volume 42, Issue 5

FCAS and Northern Colorado Native Plant Society Present:
"Bats and Why They Matter" by Dr. Rick Adams, UNC
Thursday, May 12
Fort Collins Senior Center — 1200 Raintree Dr.

Social Time: 7 p.m.; Program: 7:30 p.m.



Photo provided by Rick Adams.

Join us as Dr. Rick Adams, explores the natural history and diversity of bats as well as the ecology of bats in terms of global, regional, and local importance to ecosystem function and health. He also will discuss the major influ-

ences on the mass-extinctions of bat populations and species, and what this means for the future of plant and animal food webs of which humans are an integral part.

Dr. Rick Adams is a professor of ecology and evolution at the University of Northern Colorado. His research integrates development, ecology, and evolution of bats by addressing a diverse array of research questions including climate change and bats in western North America, alterations of forest structure by humans and its effect on bat foraging habits in Colorado, and the development and evolution of flight in bats.

The program is free and open to all.

FCAS Hosts "Honeybee 101"

Presented by Beth Conrey , President of the Colorado State Beekeepers Association Thursday, May 19

Loveland Museum — 503 N. Lincoln Ave. Loveland Social Time: 7 p.m.; Program: 7:15 pm

We invite you to join us for an introductory education opportunity on honeybee society and physiology. In addition, Beth Conrey will speak about integrated pest management strategies for home gardeners and swarm season.

Beth Conrey, known as the "Bee Lady," is the current president of the Colorado State Beekeepers Association, director of the Western Apicultural Society, and the owner of Bee Squared Apiaries.

The program is free and open to the public.



Photo provided by Beth Conrey.

President's Corner

by Bill Miller

"We must face the prospect of changing our basic way of living. This change will either be made by our own initiative in a planned way, or forced on us by chaos and suffering by the inexorable laws of nature."

-- Jimmy Carter (1976)

At the end of March, I was gratified to receive an email from a former member of FCAS, Ginger Faust, who currently lives in Loveland. In that email she related how she and her young son, Patrick, had walked in an undeveloped grassland parcel between the newest Wal-Mart store at Hwy. 287 and West 65th Street. Patrick took a picture of some birds that happened to be moving through that area during their visit, and was curious as to what species they were.

In the ensuing email exchange, I provided an identification of the bird species and a brief description of the migratory habits of Mountain Bluebirds as they return to Colorado—they travel northward across the plains of Colorado before turning west into the mountains. Ginger indicated that Patrick was 10 years old and would be glad to share his photo with readers of

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For other FCAS contacts visit www.fortnet.org/ audubon/leadership.htm the *Ptarmigan*. Ginger also indicated that she may renew her membership as her, "young children are interested in local birds and may want to join."



Mountain Bluebird by Patrick Faust, age 10.

I am gratified to learn that there is yet another young person out there who is interested in nature and birds, and has the inquisitiveness that could lead him to become one of the environmental leaders of tomorrow. Because, as I wrote in a later email, that piece of property will eventually become developed since it appears that there are not sufficient natural attributes of the land to warrant its preservation, nor is there sufficient public will or money to protect the land.

When I look around the room during our program meetings I see very few spring chickens in the crowd. That is why it is important for us to encourage younger people to become interested in and to pursue careers in nature and science as well as to encourage all citizens to become better informed about current issues and to exercise their right to vote.



"All our efforts to defeat poverty and pursue sustainable development will be in vain if environmental degradation and natural resource depletion continue unabated."

-- Kofi Annan, UN Secretary-General, 2005 report for the UN's 60th anniversary summit.

"Modern man no longer regards Nature as in any sense divine and feels perfectly free to behave toward her as an overweening conqueror and tyrant."

-- Aldous Huxley, author (1894-1963)

More on Fracking

In the last issue of the *Ptarmigan*, I gave some of the history of "fracking," dating back to the early days of the Bush-Cheney administration and the cloak of secrecy that developed when the Energy Task Force convened. I also gave a brief explanation of the techniques employed in the

relatively new drilling method—known as high-volume horizontal hydraulic fracturing, or hydrofracking. This month I will try to shed some light on some of the environmental hazards associated with fracking.

Much information has come to light in the past

few years as increased instances of hazardous material spills and drinking water contamination are reported, generally in association with nearby oil and gas drilling. Much of the spills and contamination are the result of leaking fluids that are added to the fracking mixtures and pumped into wells to stimulate increased production. Many of those fluid additives are poisonous and/or cancer-causing.

The *New York Times* recently released a bombshell piece on natural gas fracking¹ after reviewing over 30,000 pages of documents over the past nine months. The documents were obtained through open records requests of state and federal agencies. Some of the documents were leaked by state or federal officials.

Some important points brought out in the *Times* piece include¹:

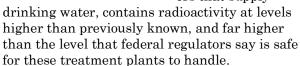
Hydrofracking carries significant environ-

mental risks. It involves injecting huge amounts of water, mixed with sand and chemicals, at high pressures to break up rock formations and release the gas.

•A fracked well can produce over a million gallons of wastewater, which often is laden with highly corrosive dissolved salts, carcinogens like benzene, and radioactive elements like radium,

> all of which can occur naturally thousands of feet underground. Other carcinogenic materials are often added to the wastewater by the chemicals used in the hydrofracking itself.

> •Wastewater, often hauled to sewage plants not designed to treat it and then discharged into rivers that supply



•Some EPA scientists are alarmed, in that some sewage plants are incapable of removing certain drilling wastes, which then pass through treatment processes and are emptied into rivers and streams that become the source of municipal domestic water supplies further downstream. The *Times* also found never-reported studies by the EPA as well as a confidential study by the drilling industry. These studies concluded that radioactivity in drilling waste cannot be fully diluted in rivers and other waterways.

Some other information located while roaming the Internet included the following:

•An exception in the 2005 energy bill, called (Fracking continued on Page 4)



Gas well southwest of Hereford, Colo. by Bill Miller.



(Fracking continued from Page 3)

the "Halliburton loophole," allows the fracking process to be implemented without regulation. Because of this loophole, gas companies are not required to report the chemicals used in their fracking processes, even though scientists suspect at least 65 of the compounds are hazardous to human health.

· Fracking injects millions of gallons of water, sand, and proprietary chemicals into wells under high pressure to fragment the shale layers and open fissures to release natural gas. More than 80,000 pounds of chemicals are injected at each drill site, and about 70 percent of the fracking fluid stays in the ground and is not biodegradable. An individual well can be fracked up to 18 times. Each time it is fracked it requires between one and eight million gallons of water, to be transported by hundreds of water haulers. Water aquifers are relatively shallow in comparison to the depth of the gas-bearing shale layer. Any leaks in the well casings and cement seals means that both natural gas and fracking fluids can enter the aquifers and contaminate them.

Wastewater is derived from three sources: fracking fluids that return to the surface. fracking fluids that are not used, and naturally-occurring fluids and fracking fluids recovered when gas flows out of the well. Large tanks often are found at a natural gas well site and are used to hold the liquids that are brought up by the natural gas flows. These liquids should be taken to a hazardous waste disposal site for processing, but often are taken to local waste water treatment plants that were never designed to handle the materials contained within such liquids. So, the corrosive salts, radioactive materials, and other toxic chemicals pass through the waste water treatment facilities and end up in someone's drinking water supply.

Fortunately, the nation is waking up to the risks presented to drinking water supplies, and, hopefully, some regulations will be enacted before a real crisis develops on a national scale.

¹<u>http://www.nytimes.com/</u> interactive/2011/02/27/us/natural-gasdocuments-1.html#document/p1/a9895

Additional articles on fracking:

http://www.shell.com/home/content/zaf/aboutshell/shell businesses/e and p/karoo/fracturing.html http://en.wikipedia.org/wiki/Hydraulic fracturing

GUNNISON RIVER 3-DAY TRIP Escalante and Dominguez Canyons

Join FCAS on August 12-14, 2011 as we partner with Centennial Canoe Outfitters for a spectacular trip through the Escalante and Dominguez Canyons. *Centennial donates \$50 to FCAS for each member of Audubon who signs up.* Help us build our resources while you enjoy an educational, family-friendly, and fun experience!



Spark your sense of adventure.
Canoe through canyons of red sandstone.
Camp along the Gunnison River's edge.
Free-float down river in your life jacket.
Walk where dinosaurs walked.
View huge nests of herons, hawks, eagles.
Hike into Colorado's newest wilderness.
Wonder at ancient Indian petroglyphs.
Soak in cool swimming pools and waterfalls.

Dr. Gigi Richard, Mesa State College geology professor, and Joann Thomas, FCAS education chair, will provide interpretation and discussion around the campfire on this trip. For more information and to register, please consult

www.CentennialCanoe.com or call toll free, 1-877-353-1850.



Education Corner

by Joann Thomas

Hummingbirds

My first intimate association with hummingbirds occurred five years ago at Pingree Park. The hummingbird feeders were filled with migrating hummers. All I could do was stare. What

were they? Which ones were male; which female? Why were they here? Then I registered for a hummingbird seminar with the Rocky Mountain Nature Association. Steve and Debbie Bouricius are hummingbird banders who have done the work for many years at Steve's family cabin on the St. Vrain River.

That experience captured my heart for good. I fell in love with these tiny birds who migrate 2,500 miles round trip each year. I learned that we have three species that are common to our area: the Broad-tailed, Rufous, and Cal-

liope. Only the Broad-tailed nests here—mostly in the mountains—although some do nest in Fort Collins. The only other hummingbird nesting in Colorado is the Black-chinned, which nests around Palisade.

The Broad-tailed nests mainly on the ends of Lodgepole branches, covered by the branch above. This hummingbird is often thought by Easterners to be the Ruby-throat as it does resemble it with its bright red throat. The colorful throat feathers of hummingbirds are called the gorget and are specific to the males. Some females and immature males have throat spangles, making it challenging to differentiate.

The Rufous is the feistiest hummer, chasing other birds away from feeders. This tiny creature migrates from Mexico to Alaska and back. Going

north along the west coast, they can arrive in Alaska as early as March. We see them only on their south return as they migrate along the Rocky Mountains. The deep rufous color of the male makes it easy to identify.

The Calliope make up only two percent of any

hummers you will see. They pass through Colorado on their way to and from Montana, their nesting grounds. This bird is only 2-3/4 to 3-1/4 inches long with a short tail and long wing extensions. Its gorget is a beautiful reddish purple.

Most amazing are the female's challenges in ensuring the continuation of the species. She lays two jelly bean sized eggs in her tiny nest, incubates the eggs, and feeds the hatchlings as they grow to fledge, all while building a second nest and doing it over again. Two broods of two chicks each in two months



Broad-tailed Hummingbird in Joann's hand.

time.

As I read about these birds' challenges, I wondered that we have any alive at all. What I can say for certain is that the day Steve laid the female Broad-tailed in my hand after he had recorded the statistics and banded it, I felt my heart surge. There was no weight at all, just the rapid beating of her tiny heart as she paused a moment before flying.

As she sat there, I thought of what this tiniest of creatures does. She flies off without a ticket, without a guarantee she'll arrive, without a meal plan, without Gortex, without luggage, without a weather report, with only her internal GPS for guidance. And, the oldest recorded hummingbird is a female Broad-tail who was banded and recorded for 12 years. You go girl!

FCAS Welcomes New and Renewing Members

Shirley J. Dandy Carol F. Bergersen Al Trask Margaret Grant Paul H. Husted Cheri Orwig Judy Scherpelz

Thank You for Your Membership. Your support makes our programs and conservation efforts possible and helps us achieve our mission of connecting people to the natural world.



Changes in Chapter Membership Policy

Because of our limited resources and to simplify things, FCAS is switching to an annual basis for our membership. This means that renewals will now be due at the beginning of the year. This change will reduce the time and expense of mailing out renewal notifications on a monthly basis. If you took out a chapter membership or renewed in the months of September through December of 2010, your renewal date will be January 2012. All other chapter memberships are due for renewal in January 2011. If you have any questions about your status please send an email to fortcollin-saudubonmembership@gmail.com or phone 484-4371.

Upcoming Field Trips

All field trips are free of charge (unless otherwise noted) and open to the public. All experience levels are welcome. Participants should dress appropriately for the weather. Bring snacks or lunch, water, binoculars, and spotting scopes. Carpooling is encouraged. A \$3.00 (unless otherwise specified) contribution per passenger to the driver is suggested. Visit www.fortnet.org/Audubon for more information. For all field trips and surveys, please contact the trip leader for signup and trip details

May 7, Saturday, Running Deer Natural Area. Leader: Nancy Howard,

nancy.e.howard@gmail.com, 970-237-2581.

May 8, Sunday, Bobcat Ridge Natural Area Bird Survey. Leader: Denise Bretting, dbretting@swloveland.com, work: 970-669-1185, home: 970-669-8095. Call for any change. Meet at 6:30 a.m. in the parking lot. FCAS performs a monthly bird census for the city of Fort Collins. All levels welcome.

May 13 - 14, Friday and Saturday, FCAS 2011 Birdathon. Leader: Bill Miller, 5mcorp@comcast.com, 970-493-7693.

May, various evenings. What's That Bird? And Become a Better Birder classes. Leader; Connie Kogler, <u>zblueheron@gmail.com</u>, <u>www.birdsothemorning.com</u>. Classes are at the Chilson Center from 7 to 9 p.m. A \$36 fee is required. Contact Connie for details.

June 12, Sunday, Bobcat Ridge Natural Area Bird Survey. Leader: Sol Miller, eagleye1029@yahoo.com, 970-461-4940.Call for any change. Meet at 6:30 a.m. in the parking lot. FCAS performs a monthly bird census for the city of Fort Collins. All levels welcome.

June 25, Saturday, Burrowing Owl and Mountain Plover Field Trip. Leader: Bill Miller, 5mcorp@comcast.com, 970-493-7693. Meet at 6 a.m. to carpool from the north end of the Harmony Transportation Center (I-25 and Harmony). Reservations required with a limit of 15 participants. \$4/person to the driver for fuel costs. Will travel to the Pawnee National Grasslands to view burrowing owls, mountain plover, and more. Bring hats, water, snacks, sun screen, binoculars, and scopes. Return around 1 p.m.

Equalizer Lake Bird Watching



Join the monthly bird watch at Equalizer Lake in Loveland. High Plains Environmental Center (HPEC) manages the lake and our monthly observations contribute to HPEC's land management plan and to the Breeding Bird Atlas. Because bird activity often increases in the evening, our schedule includes both morning and evening viewing during the summers. HPEC bird watches are on Thursdays at Equalizer Lake:

May 26: 7 a.m.; June 23: 7 a.m. & 6 p.m.; July 28: 7 a.m. & 6 p.m.; Aug. 25: 7 a.m. & 6 p.m.; Sept. 22: 8 a.m.; and Oct. 27: 8 a.m.

FCAS Pocket Guide to Local Birds

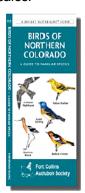
Is available at the following retailers who support our organization with the sales:

Wild Birds Unlimited 3636 S. College Ave Ste. C (970) 225-2557 Bath Garden Center & Nursery 2000 E. Prospect (970) 484-5022

Jax Outdoor Gear 1200 N. College (970) 221-0544 Jax Mercantile 950 E. Eisenhower Loveland (970) 776-4540

Jax Farm & Ranch 1000 N. Hwy. 287 (970) 484-2221 The Matter Book-Store/Bean Cycle Coffee

144 N. College (970 472-4284





Summer bird camps offer outdoor fun and learning for ages 4 to 15

Rocky Mountain Bird Observatory (RMBO) is once again offering several summer nature camps for youths from age 4 to 15.

On the Wing, for ages 13 to 15 will be July 11-16 at Camp Chief Ouray at Snow Mountain Ranch near Granby, Colo. Campers will design an outdoors research project and present their findings to U.S. Forest Service and RMBO staff. Outdoor recreation such as rafting, hiking, horseback riding, and a ropes course will add to their appreciation of nature.

Young Ecologists is a

day camp for ages 11 to 13 from June 27 through July 1, 8 a.m. to 3 p.m. Campers will use investigation techniques to discover the secrets of Colorado habitats.

Young Naturalists, ages 4 and 5, will gather every Tuesday in July from 9 to 11 a.m. to learn about nature through hands-on discovery crafts, games, and hikes.

Nature Investigators, ages 6 and 7, will enjoy hikes, scavenger hunts, and games each Wednes-

> day in July from 9 a.m. to noon, while they learn how habitats provide for animals' needs.

Habitat Explorers meet Thursdays from 8 a.m. to 3 p.m. in July. These 8 to 10 year olds will explore habitats that make wonderful homes for Colorado wildlife.

Day camps are held at RMBO's Old Stone House at Barr Lake State Park near Brighton. Information on costs, registration, and

Young birders courtesy of RMBO. scholarships is available by contacting Cassy

Bohnet at cassy.bohnet@rmbo.org or 303-659-4348, ext. 15.

RMBO is a Colorado-based, nonprofit organization working to conserve birds and their habitats from Montana into Mexico through science, education, and stewardship.

2011 Birdathon

Birdathon pledges are way down this year. Several months ago we decided that our Scholarship Program primarily would be funded by the revenue generated by the Birdathon. To that end, we are asking everyone to get behind this effort and make a pledge to this year's Birdathon effort.

The dates of the Birdathon are Friday and Saturday, May 13 and 14. This annual event is a challenging and fun-filled day for participants, and is a good way for less-skilled birders to go out with more experienced birders to enjoy a day in the field, experience good camaraderie, and also benefit the chapter financially as a result of their efforts.

Please consider becoming a team member and/or a donor. More details will follow at the May pro-

gram meeting.			
2011 FCAS BIRDATHON PLEDGE SHEET			
Please fill out and mail to: FCAS, P.O. Box 271968, Fort Collins, CO 80527-1968			
Name: N	Mail Address:		
Tel. No.: Email	·		
Pledge Amt: (per species) \$ OR fixed amt) \$			
Team Leader: Team Member:	Donor Only:		





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Membership Application				
Join Fort Collins Audubon Society (FCAS), National		Name:		
Audubon Society (NAS), or both. Check all applicable::				
□ New or renewing FCAS Chapter Member	\$20	Address:		
(Receive the <i>Ptarmigan</i> by email)				
□ New or Renewing FCAS Chapter Member	\$30	City:	State:	
(Receive the <i>Ptarmigan</i> by postal mail)				
□ Additional Support for FCAS's Mission	\$	Zip:		
□ New NAS Member	\$20			
(Receive Audubon magazine by postal mail)		Phone #:		
□ Renewing NAS Member	\$35			
(Receive Audubon magazine by postal mail)		Email:		
Total Enclosed	\$	-		
Please make your tax exempt checks	s payabl	e to FCAS and mail w	vith this form to:	

Fort Collins Audubon Society, P.O. Box 271968, Fort Collins, CO 80527-1968 Membership applications may be completed online at: www.fortnet.org/Audubon