“24 Hours of Reality”
Presented by: Camille DeMarco-Hay
Thursday Evening Program – April 12, 2012
Fort Collins Senior Center-Multi-Use Room
1200 Raintree Drive, Fort Collins

Social Gathering: 7 p.m.—Program: 7:30 p.m.

The subject of global warming has been in the news for almost two decades. FCAS has been a long-time supporter of efforts to counter global warming. To that end we contacted The Climate Reality Project to give us a presentation on global climate change and its implications.

Cami Hay left her career as a registered nurse to raise a family. After seeing “An Inconvenient Truth,” and having a hard science background, she was able to see that climate change was going to impact virtually everything. She received training from Al Gore in June 2006, and since then has spoken out on environmental issues to enlighten people about preserving our world and its inhabitants. More recently, Cami created and produced her own puppet presentation that went into grade schools encouraging environmental awareness and recycling for kids. She now works with various environmental youth groups supporting their goals. Currently Cami is developing a program called “The Peace Forest” intended to build community and preserve creation.

Upcoming Field Trips

April 1, 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 are welcome.

April 21, Saturday, Birding the Big Thompson. Leader: Connie Kogler, zblueheron@gmail.com. Meet at 8 a.m. at Simpson Ponds—off County Road 9E in Loveland.

April 21, Saturday, Earth Day Fort Collins. Civic Center Park, Fort Collins. All trips are open to the public.
President’s Corner

“There can be no greater issue than that of conservation in this country.”
—Theodore Roosevelt (1858 - 1919) - Confession of Faith Speech,
Progressive National Convention, Chicago, IL, Aug. 6, 1912

"To waste, to destroy, our natural resources, to skin and exhaust the land instead of using it so as
to increase its usefulness, will result in undermining in the days of our children the very prosperity
which we ought by right to hand down to them."
—Theodore Roosevelt (1858 - 1919) - Seventh message to Congress, Dec. 3, 1907

Birdathon Coming in May

It’s getting closer! The annual Birdathon—our principal fund-raiser each year. Prior to this
event we encourage our members to financially support their chapter with tax-deductible contributions. For the Birdathon, volunteers: (1) form teams of counters to go hunt down elusive bird species, (2) donate 24 or more hours of their own time, (3) donate their own gasoline and vehicle wear-and-tear, and (4) generally make their own generous financial donations to the chapter.

As Birdathon Coordinator I’m trying something new this year. I have asked board members to seek five pledges each. I also would like to ask every FCAS member to solicit at least two pledges each beyond their own. If we are all successful in this effort we will be closer to establishing a meaningful scholarship endowment fund.

Please note that if you solicit pledges, we need you to collect the funds, then turn them over to either me or our Treasurer, John Waddell.

Also, please consider volunteering to serve on a team. If you don’t know a team leader, let me know and we’ll assign you to a team. This is a fun event and more eyes spot more birds!

The Birdathon will be conducted on Friday and Saturday, May 11 and 12, to be followed with an informal “Beer and Brag” get-together at 6 p.m. on Saturday, at Panhandler’s Pizza, 1220 W. Elizabeth in Fort Collins—BYOP (Buy Your Own Pizza!). We hope to see you then.

Welcome New National Members

FCAS welcomes new National Audubon Society members by sending complementary copies of our newsletter for one month. Join us at our monthly programs on the second Thursday of the month. National dues do not cover the cost of printing and mailing the newsletter, so if you’d like to receive the Ptarmigan after the complementary issue, please join FCAS. Visit our Web site at: www.fortnet.org/Audubon.
Education Corner  by Joann Thomas

Refuge

In Monte Vista, a south Colorado ranching community, reside 4,045 citizens, and in the spring and fall of each year that population expands to include 20,000 Sandhill Cranes. Monte Vista National Wildlife Refuge provides food, water, and safe respite to the migrating cranes as they travel 850 miles from New Mexico to Idaho. The town celebrates their arrival each spring with a festival featuring displays by artists, tours of the refuge with interpretive guides, and volunteers who can answer any question about the cranes.

After arriving on Saturday afternoon, we took the evening crane tour and learned many surprising facts about the refuge. For example, the Monte Vista refuge is a completely artificial environment created in response to the Migratory Bird Act of 1953. The cranes did traditionally stop over to feed in the barley fields that are the cash crop for the San Luis Valley—Coors being the major purchaser. Using careful management and grooming, the refuge was built using artesian wells, pumped wells, and irrigation to create wetlands and barley plantings that provide food to coax the cranes to congregate and rest awhile on the refuge’s 14,084 acres.

Then there were the cranes. Fossils of this primitive bird have been found dating 10 million years ago. The late afternoon viewing proved we were in Colorado—first hail pummeled us, then snow chilled us, then rain soaked us, making it hard to concentrate on the birds. We wearily fell into bed that night promising ourselves to arise early to go view the dawn crane flight. Sandhill cranes travel throughout the day. After spending the evening standing in two to three feet of water for protection from predators, they rise at dawn to gorge themselves in the barley fields. Full and content, they then fly to fields with grass about two to three feet tall where they rest until late afternoon when they return to feeding, flying at dusk to the wetlands. Expecting to see a cloud of 20,000 cranes rising over our heads the next morning, we were disappointed by the flight consisting of groups of 10 to 20 birds sporadically taking off for the barley fields.

However, the morning bus tour was glorious! Brilliant blue skies and warmer weather made crane viewing a birder’s paradise. The cranes were close to the road and volunteers had many scopes up for our pleasure. My personal goal was to see, up close, the perforate nostril of the Sandhill Crane. Saturday’s weather had made that impossible, but the light on Sunday created the perfect conditions for viewing this feature. I whooped for joy when I spotted it the first time with my binoculars and swooned when I viewed through the scope—two cranes slowly raised their heads in unison, side by side, giving me the perfect view through the perforate nostrils.

There is much more to write about these intense two days. Learning about the national wildlife refuge program from the rangers, viewing these fascinating birds, watching the courtship dances, all would take more space than our newsletter offers. But, I encourage you to Google the cranes, Monte Vista’s festival, and the national wildlife refuge program that your taxes support. After our intense educational weekend, I took refuge in my favorite chair and cogitating on the experience. I promised myself a return—from refuge to refuge.

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FCAS Welcomes New and Renewing Members

Roger Alexander  James & Ruth DeMartini  Joel Hurmence
Irene Briggs  Beth Dillon  Sue P. Kenney
Susan Degutz  Georgia Doyle  Cheri Orwig

PTARMIGAN  www.fortnet.org/audubon
Conservation Corner  by Bill Miller

Climate Change—It’s Worse Than We Thought (Part 4)

The subject of climate change has been discussed for at least two decades, but hasn’t gotten much traction for several possible reasons: 1) The subject is extremely complex and perhaps beyond the comprehension of many people who don’t have strong backgrounds in the natural sciences; 2) confusion has been sown among the general public by those who, either through ignorance or more deliberate and sinister motives, deny that climate change has human causes; and 3) the general public as well as our government have been distracted by economic, employment, and housing conditions that are of greater immediate importance than global climate change.

Climate change is real, regardless of its causes. Among the scientific community there is general consensus that global climate change has anthropogenic (human-caused) origins. A University of Illinois survey of several thousand leading scientists found that 82 percent believe that human activity has been a principal factor in changing mean global temperatures; 97 percent of research climatologists agreed. Only 47 percent of petroleum geologists and 64 percent of meteorologists were of similar belief. The survey concluded that, “The more you know about the field of climate science, the more you’re likely to believe in global warming and human-kind’s contribution to it.”

To determine the causes of today’s rapid global warming, scientists have examined all the potential contributing factors. Topping the list are sun activity, a decrease in earth’s reflectivity, and an increase in greenhouse gases.

The sun has caused little warming since 1750. A study of more recent solar activity\(^1\) has shown that, since about 1985, the amount of energy striking the earth has actually decreased even as global temperatures have been rising.

Scientists have measured and calculated how Earth’s reflectivity has changed over time, using satellite and land-based observations and computer models. Human-produced particulate pollution reflects sunlight back into space, resulting in a slight decrease in global temperatures between 1945 and 1975. Efforts to curb particulate pollution resulted in a slight warming after 1975. Land use changes, such as forest clearing for agriculture, reflect more sunlight back into space and have a cooling effect.

That leaves the greenhouse effect as the only remaining scientific explanation for the rise in global temperatures in recent decades. We have direct measurements of CO\(_2\) concentrations in the atmosphere going back more than 50 years, and indirect measurements (from ice cores) going back hundreds of thousands of years. These measurements confirm that concentrations are rising rapidly.

For the past 800,000 years, CO\(_2\) has varied from 180 to 300 parts per million (ppm); today’s CO\(_2\) levels are around 390 ppm or 30 percent more than the highest natural levels over the past 800,000 years. We also know the additional CO\(_2\) in the atmosphere comes mainly from coal and oil. As far as scientists are concerned human activity is causing the Earth to get warmer, primarily through the burning of fossil fuels, with a smaller contribution from deforestation. All other scientific explanations for why the Earth is getting warmer have been eliminated.

The obvious solution to the problem is to stop burning fossil fuels, but that is not easily forthcoming. We have become so fossil-fuel dependent that it will be extremely difficult to reduce greenhouse gas emissions.

Currently there are efforts to develop alternative energy sources. Harnessing wind energy is the technology receiving the most attention at this point. Solar energy is a rising star in the list of alternative energy technologies, but will not be economically competitive for a few years. Geothermal energy is not economically feasible on a large scale due to the corrosiveness of the earth’s superheated waters. The technology to derive electrical energy from oceans wave action is still in its infancy. And popular opinion for nuclear energy has waned, given the issues of radioactive waste disposal,

(continued on Page 5)
Birds of Colorado: An Exceptional Opportunity

Join FCAS for an exceptional opportunity to learn about the birds of Colorado from birding professionals through a series of one-day educational field trips. This exceptional program allows you to learn from the experts while traveling through Colorado life zones. Each trip is limited to six participants along with a leader and a driver. Trips are on the third Saturday and Sunday of months April through July.

**April 21 or 22: Chihuahuan Desert** (One spot left for each date)

South-central Colorado represents the northern margin of the 1,000-mile wide Chihuahuan Desert, with many bird species more typical of Texas and New Mexico.

Birds: Scaled Quail, Ladder-backed Woodpecker, Greater Roadrunner, Chihuahuan Raven, Juniper Titmouse, Curve-billed Thrasher, Canyon Towhee, and Rufous-crowned Sparrow.

Leader: Jeff Gordon, president, American Birding Association, both days.

**May 19 or 20: Eastern Plains**. (One spot left for each date)

The tour will visit a variety of birding hot-spots in Weld County. Birds: Flycatchers, Warblers, Vireos, Ferruginous Hawk, Mountain Plover, Burrowing Owl, Lark Bunting, and McCown’s Longspur.

Leaders: Nick Komar (19th), Cole Wild (20th).

**June 16 or 17: Rocky Mountains** (One spot left for June 16; four spots left for June 17)

An elevational tour of western Boulder County: foothill canyons to the alpine tundra.


Leader: Ted Floyd, editor, *Birding* magazine, both days.

**July 21 or 22: High Plains of North Park** (Two spots left for July 21; three spots left for July 22)

The best water bird nesting is found in North Park (Jackson County).


Leader: Chuck Hundertmark, president, Denver Field Ornithologists, both days.

**Cost:**

$75 per trip for FCAS members; $100 per trip for non-members. Payment due when reservation is made. For more information and/or reservations, contact Joann Thomas at 970-482-7125 or 970-222-0741, or jthomas91@aol.com.

(Climate Change continued from Page 4)

high construction casts, and the potential for both natural and human-caused catastrophic failures.

So, what to do? We must all try to reduce our carbon footprint through reduced driving, use of fuel-efficient vehicles, reduction of our waste streams by purchasing items with reduced packaging, making our homes as energy efficient as possible, and reducing our electrical consumption. Meanwhile, make offerings to the gods that will provide humanity with a technological breakthrough.

Please plan to attend our April program on climate change, presented by Camille DeMarco-Hay.

References:

1. [http://www.climatepath.org/aboutus/science](http://www.climatepath.org/aboutus/science)
3. [http://rspa.royalsocietypublishing.org/content/463/2086/2447.full](http://rspa.royalsocietypublishing.org/content/463/2086/2447.full)

**Looking Ahead: Help Wanted**

We will need a replacement newsletter editor after May 2012. Our current editor has given notice that she is “retiring” from that position, but is willing to train a new editor on the software. If anyone is willing to put in five to 10 hours a month in producing the *Ptarmigan*, please contact Bill Miller at (970) 493-7693 or at 8mcorp@comcast.net.
Membership Application
Join Fort Collins Audubon Society (FCAS), National Audubon Society (NAS), or both. Check all applicable:

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