

# On The Wing

Volume 43, Number 5 Boulder County Audubon Society Newsletter

Mar-Apr 2014

#### **BCAS 4th Tuesday Program Series**

Tuesday, March 25, 7:15

Jo Evans and Petcha Kucha

#### Colorado Water Knowledge and Alaska Fun

In March we will be trying out a unique format for the BCAS monthly meeting.

First, we will welcome Jo Evans, president of the Audubon Colorado Council and Chair of the Audubon Water Task Force, will present a short talk on basic water law in Colorado as well updating us on the Colorado Water Plan (CWP). The CWP attempts to balance the statewide gap between water supply and water demand. It is important that we protect the health and sustainability of our streams and rivers.

Jo Evans has had a long term relationship with Colorado Audubon Chapters. She was the lobbyist to the state legislature for years, and has single handedly created educational materials to help novices understand the complicated water laws in Colorado. Jo is currently the president of the Audubon Colorado Council.

Next, we will be entertained by Petcha Kucha-like presentations of Alaska. Six of our members will show 20 slides for 10 seconds each. The slides will be accompanied by narrative and perhaps even music. Knowing how many talented photographers are in the membership prepared to be dazzled.





Tuesday, April 22, 7:15

Dave Hoerath

#### Abert's Squirrels and Forestry Operations at Heil Valley Ranch

Dave will discuss some basic biology of Abert's squirrels at Heil Valley Ranch, and the impact on the squirrels of changes in the forest due to forestry operations. The point of the Abert's monitoring is to see if Abert's, as a keystone species, is able to thrive with different fire mitigation treatments.

Dave Hoerath has worked for Parks and Open Space

for the last 13 years after 9 years with the Federal BLM in the Arizona desert. He likes to hike in the high country, attend live sporting events and live music, play golf, and rock climb. He loves his job and sometimes thinks he gets paid to go hiking. He blogs his outings on his Twitter account @biologistdave3. He finished high school at Fairview and attended CSU,



before going to Auburn University for his Master's degree (while watching football).

Heil Valley Ranch forest

Abert's Squirrel — G. Oetzel

Program Meetings at Unitarian Universalist Church of Boulder, 5001 Pennsylvania Ave. (west off 55th St. between Arapahoe and Baseline)

#### **Rough-legged Hawk Surge this Winter**

#### Linda Andes-Georges

One of our most attractive winter season hawks, the Rough-legged Hawk, has been declining in numbers in recent years, so much so that many of us have been growing worried about them. "Our numbers of raptors have declined in the past 20 to 30 years," said Kristen Philbrook, a wildlife biologist with Pawnee National Grassland has said. "[Rough-legged] hawks are very sensitive to disturbance. That's the one species that I am most concerned about."

While there are some genuine reasons for concern, this year's numbers of these colorful raptors has been a cause for joy in Boulder County, if only a temporary reprieve. Mike Tincher of the Rocky Mountain Raptor center comments that this year severe cold in their arctic circle home forced the birds to migrate south about a month before they normally do. "We usually don't start seeing rough-legged hawks until January," he said.

One of our local expert bird monitors, Ted Floyd, noted in mid-January, "I've now seen in the past 14 days almost as many Rough-legged Hawks in Boulder County (n=7) as I had during the entire seven-year period 2007-2013 (n=9). What's up with that?"

Another theory for the irruption is that perhaps a bumper crop of voles (from the unusual moisture of our 2013 growing season) has drawn these hungry birds to Boulder County this year. Since its breeding grounds are far to the north, the "Allen's rule" of adaptation suggests that the hawk's bill, tail (and generally speaking, all body extensions) should be small, to conserve heat. Precisely because of its small beak and talons, the Rough-legged hawk must hunt mostly small prey, like voles.

In connection with this momentary influx of hawks there is a corresponding surge in injuries and deaths of these and other grassland hawks. In the Pawnee Grasslands, for example, according to an article in *The Coloradoan* (Jan. 6, 2014) by Ryan Maye Handy, vehicle-hawk collisions are on the rise as the Niobrara shale boom and population growth bring more people to the prairies.

Again quoting Mr. Handy, in late fall inexperienced young hawks migrating south are suddenly faced with eking out an existence in a changed prairie—not their grassland ecosystem of yore. There are 63 active oil and gas wells across the Pawnee Grassland, three of which were drilled in 2013, according to the U.S. Forest Service. The area surrounding the grassland is home to more than 1,800 state-approved wells on public and private land, according to state data.

While the oil and gas industry oversight agencies, and the industry repre-

sentatives, all claim to have had no complaints about injured raptors (mostly trafficrelated), the raptor rehab employees tell a very different story. The raptor program receives calls about injured birds almost weekly. If the birds are not immediately euthanized, they are taken to an outdoor barracks. There, they are placed in individual cages where they are cleaned, weighed and fed at least once a day. They are given a chance, but many cannot recover.



Rough-legged Hawk — Bill Schmoker

Boulder County Audubon Society

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Next issue deadline: (May 2014 issue) Apr 15

Contact editor via link at: www.boulderaudubon.org/newsletter.htm

#### **Neonics in Global Bee Controversy**

Linda Andes-Georges

Neonicotinoid pesticides have been raising environmental concerns primarily because of their perceived effect on bees, and a new study is credibly documenting the effects.

Controversy has been particularly intense in Canada, which has not banned the pesticide.

Neonics, as they're commonly called, hit the market in the early 2000s, but sales have soared over the past five years. They're used on a wide variety of crops such as corn, soybeans, wheat, oats, barley, potatoes and fruit. In western Canada, neonics are most commonly found on canola. Virtually all of the 8.5 million hectares of canola planted in the central provinces are now treated with them.

Based on confidential data obtained from the federal government, biologist Christie Morrissey of the University of Saskatchewan said recently that her conservative estimate is 44 per cent of cropland in the Prairies was treated with neonics in the year she reviewed. "We're not talking about a little regional problem. We're talking about something that's happening over tens of millions of acres... The impact on biodiversity could probably be bigger than we've ever seen before if we keep going at this rate."

"In some cases we have peak concentrations that are 100 times or more higher than those benchmarks of safe levels." Morrissey said. She and her fellow researchers have sampled hundreds of wetlands and have found that "upwards of 80 to 90 per cent of the wetlands are contaminated."

Bees in Europe recently won against the pesticide, after the EU decided to impose a two-year ban on the pesticide in Europe from April, 2013. That ban, some people say, is based on little evidence.

Now, Professor Dave Goulson from University of Sussex has found that the pesticides can affect many organisms, including fish and birds. Data for the study came from agrochemical manufacturer Bayer on the persistence of neonicotinoids in the soil.

Neonicotinoids, if used consistently, can result in accumulation of the chemical in soil at far higher levels, where it can be dangerous to soil organisms, according to the data.

"Any pesticide that can persist for many years, build up in soil, and leach into waterways is likely to have effects far beyond the pest insects it intends to target. This is particularly so when the pesticide is highly toxic to nontarget organisms. For example, less than one part per billion of the neonicotinoid imidacloprid in streams is enough to kill mayflies," Goulson said in a news release.

References: http://tinyurl.com/n4sty9m

http://tinyurl.com/qfymxoc

#### **Eurasian Collared-Dove Nesting Study**

As the breeding season gets underway in the southern and western parts of the country, we are asking you to be on the lookout for Eurasian Collared-Dove nests this year. As you may be aware, a few Eurasian Collared-Doves were introduced to the Bahamas in the 1970s. They made their way to Florida by the 1980s and then rapidly colonized most of North America, especially areas converted to agriculture and urban uses. However, 30 years later, we still know very little about their breed ing habits in North America.

In warmer regions, Eurasian Collared-Doves can nest year round, which may help explain their success as colonizers. But many questions remain unanswered, such as where, how often, and how successful is its breeding? Is there any change in its breeding strategies in this new range? And what are its effects on native species, particularly other doves?

If you find a Eurasian Collared-Dove nest, please report it to NestWatch (http://tinyurl.com/ld59fev). Eurasian Collared-Doves build a platform nest similar to that of our native Mourning Doves. The key to telling these two doves apart is the black crescent on the nape of the Collared-Dove's neck, which is absent in the Mourning Dove. Be our eyes on the ground, and help us describe the species' breeding biology in its newly colonized range!





Collared Dove

Mourning Dove

(NestWatch Web site)

# Save the Date!! The Boulder County Audubon Society will celebrate its 40th anniversary August 23, 6:00 p.m.. The featured speaker will be Scott Weidensaul, a Pennsylvania-based naturalist and author. He has been nominated for a Pulitzer Prize in the non-fiction category for his book *Living on the Wind: Across the Hemisphere With Migratory Birds*. Location: Lone Hawk Farm, 49<sup>th</sup> Street, Longmont, CO, Limit 150 people for dinner.

#### Field Trips — March 28—May 17

CRANE WATCHING AT THE OLD LEWELEN BRIDGE Friday, March 28, 7-9 p.m. Two years ago we began having this rendezvous on the last Friday of March to share the peaceful ambience of the North Platte River just south of Lewellen, Nebraska, while 10,000 or more greater sandhill cranes float down to their evening roosts on river sandbars. There's no particular planning. Just bring something to share for a potluck dinner and a contemplative, reverential spirit, and plan to arrive at the south abutment of the Old Lewellen Bridge (1 mile west of Ash Hollow Cemetery) a half hour or so before sunset. Lodging is available at the Gander Inn in Lewellen or the Shady Rest Motel in Oshkosh (both rustic but friendly places). Camping is available at Lake McConaghy and Clear Creek Wildlife Area, just to the east. Contact Steve Jones (curlewsj@comcast.net) for more information or to set up a Boulder carpool. Steve will lead an interpretive hike at beautiful Ash Hollow State Historical Park Saturday morning beginning at 8:30.

**SAGE GROUSE TOURS**, March 28<sup>th</sup>—April 13<sup>th</sup>, sponsored by Conservation Colorado. This is a wonderful opportunity to visit a private ranch whose owners have done all that they can to conserve and protect this endangered species. This superb outing will not be arranged by Boulder County Audubon, but go here to make your own reservations: http://conservationco.org/2014/02/2014-sage-grouse-tours/

Dress warmly and bring your camera!!! \$\$

IS IT SPRING YET? Saturday, April 19th, With the "Nunn Guy"

8:30 a.m. - 2:00 p.m (or later). Join Gary Lefko, the "Nunn Guy" for an early spring migrant trip around Nunn and beyond. We'll do the north central Weld County "water tour" (includes Latham, Loloff and host of others) and we could also venture out to Pawnee National Grasslands (Crow Valley Campground, Bird Driving Tour) to look for early birds. Meet 0830 at Honey's Cafe aka Nunn Cafe (south side of Nunn) along Hwy 85--come earlier for "fueling up" (breakfast)! Bring a lunch and water.

**QUEST FOR 100 SPECIES** Saturday, May 3<sup>rd</sup>, Join John Vanderpoel for this most promising time of spring when the migration of the waterbirds and passerines overlap. You will explore many hot spots in Boulder County, including a wonderful private estate adjoining Panama Reservoir. Species expected include the sandpipers, stilts, avocets and perhaps a Long-billed Curlew, as well as early warblers, grosbeaks, tanangers and ducks in their brilliant breeding plumages. Meet at 7 a.m. at Walden Ponds on 75<sup>th</sup> Street. Bring a lunch and water.

**BIRDING BY BIKE AND BREAKFAST** Sunday, May 25, 2014. Join Pam Piombino at her north Boulder County home on St. Vrain Road, for an easy 12-15 mile birding by bike loop. After meeting at 7 a.m., we will proceed to ride the usually quiet St. Vrain and Hygiene Road areas, where we can hear and see returning breeders and lingering migrants. After our ride, we will share a potluck. Please bring something nutritious to share. Limited to 10 bikes. Drop Pam an email for details and to reserve a spot: piombino.pam@gmail.com.

#### WALK IN THE WILD ON INTERNATIONAL MIGRATORY BIRD DAY

Saturday, May 17 from 9 a.m. to 1 p.m. Location: Walden Ponds, on 75<sup>th</sup> Street

Environment for the Americas and Wild Bird Center of Boulder will host the 4th annual Walk in the Wild in celebration of International Migratory Bird Day. Boulder County Audubon Society will be on hand with an education table. We will also lead several Bird Walks, with extra binoculars to share. This is a one-of-a-kind nature event that introduces people of all ages to one of Boulder's premier sites for birds. There will be a special trail with education stations to teach participants how to use binoculars and spotting scopes, how to identify birds, which insects they eat and the raptors that help control small rodent populations, as well as many other interesting activities.

At the same time, everyone is encouraged to donate to habitat restoration at Walden Ponds by purchasing wildflowers, a shrub, and/or a tree that will be planted for the birds and other wildlife. Information will become available at www.birdday.org, call 303-499-1950 for more information, or email Cara at cascarrunz@birdday.org. Find 75 Street at about 1 mile N of Valmont Road.

**SECRETS OF GILPIN COUNTY** Saturday, June 14, 2014: Join Bill Kaempfer on this all day excursion to explore under-birded Gilpin County. We will cover the various habitats present in this tiny, high-country county. Expect to see many of the regular, high-country nesters including woodpeckers, warblers, vireos, flycatchers, swallows and more.

We will meet at 7:00 a.m. in Northwestern Jefferson County at the parking area 1.7 miles west of CO 93 on CO 72 (Coal Creek Canyon Road) at the intersection with Plainview Road. The trip will involve some minor hiking, but we will mainly be driving from spot to spot. Please be willing to carpool for this full day trip with a return in the late afternoon. Bring lunch, water and clothing to prepare for unexpected changes in mountain weather. Please note, we may visit a private nature area where a small fee is charged. Contact Bill Kaempfer at Kaempfer@colorado.edu to reserve a spot. Bring a lunch and water.

#### **BOULDER COUNTY WILDLIFE INVENTORY, AUGUST - OCTOBER 2013**

Gillian and Alex Brown, 4560 Darley Avenue, Boulder, CO 80305.

August is often considered rather a slow summer month for birders and the lack of reports in 2013 reflected this. However, careful observation can be rewarding as migrants begin to move southwards. New birds for the year were **Black Tem** and **Great-crested Flycatcher**, both of which were seen in 2012. Many birds were on the move as witnessed by a few observers hearing the steady overnight stream of flight calls. Only 129 bird species were reported in August with several common species, such as **Wilson's Snipe**, **Brown Creeper**, **White-crowned Sparrow** and **Red Crossbill**, not being reported.

September 2013 will long be remembered as the time of a1000 year rain and the resulting 100 year flood. The time period for the Indian Peaks Fall Count had to be extended, and there was diminished participation. With most of Boulder's Open Space lands closed, including many of our favorite birding areas, it was to be expected that September's bird sightings would be much fewer than usual. However, it is hard to tell how the birds in our area were affected by this event, and how permanent the aftereffects might be. Certainly there were reports of many birds dying of hypothermia because of waterlogged feathers. Diving ducks seem to have been reported in particularly low numbers. September was a good month for terns with Black Tem, Common Tern and Arctic Tern all being new for the year. The previous sighting of Arctic Tern had been in October 2011. Pectoral Sandpiper was a new shorebird sighting for the year. There were two new warbler sightings: Magnolia Warbler and Blackpoll Warbler. Magnolia Warbler was last seen in May 2009. Other good sightings for the month included Black-bellied Plover, Sanderling, Sabine's Gull, Eastern Phoebe, Bewick's Wren, Northern Waterthrush and Chestnut-sided Warbler. Altogether 157 bird species were reported in September, much lower than last year's record 181 species.

Limited access to most of our Open Space and to the mountains continued into October, although trails were beginning to re-open by the end of the month. New sightings for the year were **Little Gull** (last seen in 2011), **Blueheaded Vireo**, **Winter Wren** and **White-throated Sparrow**. Perhaps the most spectacular event of the month was an estimated 42 thousand **Common Grackles** coming in to roost each evening near Sombrero Ponds. By the end of the month these numbers had diminished to only a few birds as the grackles migrated southwards. Other good sightings for the month included several sightings of **Sandhill Cranes**, three **Sabine's Gulls** on Boulder Reservoir, an **Eastern Bluebird** and the **Golden-crowned Sparrow** that reappeared at the Teller Lakes trailhead. Only 95 bird species were reported in October, continuing the trend of the lowest monthly totals that we have on record.

#### **Audubon Rockies Water Projects**

Audubon Rockies has received a very generous funding opportunity through the Terra Foundation to help fund Colorado Audubon Chapters in projects that assist local Colorado communities on water-related issues.

In the arid West we are all connected by rivers; they are the lifeblood of our land, our economy, and our way of life. Western rivers, like the Colorado River and its tributaries, provide water for tens of millions of people.

The goals of these Colorado Audubon Chapter projects are to expand community knowledge on the importance of and ways to achieve water conservation and the overall connection to the Colorado River Basin. These projects will ultimately enable Audubon Rockies to build a stronger local, grassroots network that will be informed and motivated to advocate for the long-term protection and restoration of the Colorado River Basin as well as achieve tangible on-the-ground conservation projects in local communities. When it comes to our rivers, please apply today so we can act locally and think globally!

Audubon Rockies hopes you will take advantage of this funding opportunity and further river conservation in your area! Questions? Please feel free to reach out to Alison Holloran at: aholloran@audubon.org

## CONTRIBUTORS TO THE AUGUST, SEPTEMBER AND OCTOBER INVENTORIES

Jack Adam, Julia Bond, Maggie Boswell, Kitty Brigham, Alex & Gillian Brown, Peter Burke, Carol Cushman, Raymond E. Davis, Todd Deininger, David Dowell, Ted Floyd, Bryan Guarente, Paula Hansley, Thomas Heinrich, Indian Peaks Fall Bird Count, Steve Jones, Bill Kaempfer, Elena Klaver, ? Knight, Petrea Mah, Marcia Marvin, Mark Miller, Steve Miodinow, Lynn Monroe, Nick Moore, Michael Morton, Christian Nunes, Laura Osborn, Beth Partin, Dick Pautsch, Nathan Pieplow, Shelley Schlender, Scott Severs, Oakleigh Thorne, John Tumasonis, David J. Waltman, John Vanderpoel, Wild Bird Center.



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http://tiny.cc/ez7v6

#### **Climate Change — IPCC 2013**

There are senators and others in high places who continue to deny anthropogenic contributions to climate change and that we should be concerned about it's effects on the future climate on earth. Below are excerpts from the executive summary of the IPCC report of Jan 20, 2013, slightly edited.

The following are highlights of the most confident and severe statements from the very recent "state of climate science" report by the Intergovernmental Panel on Climate Change. Note that the data are given by the authors with increased certainty and confidence in the magnitude of global warming. Please keep in mind also that we are examining unfathomably vast land surface areas and ocean volumes while necessarily including such inter-annual variables as El Nino conditions, redistribution of heat within the oceans, volcanic eruptions, etc.

"Warming of the climate system is unequivocal, and since the 1950's, many of the observed changes are unprecedented over decades to millennia. The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, sea level has risen, and the concentrations of greenhouse gases have increased."

"It is extremely likely that human influence has been the dominant cause of the observed warming since the mid-20th century".

"Most aspects of [anthropogenic] climate change are irreversible for many centuries even if emissions of CO2 are stopped."

"It is now *very likely* that human influence has contributed to observed global scale changes in the frequency and intensity of daily temperature extremes since the mid-20th century."

Global surface temperature change for the end of the 21st century is *likely* to exceed 1.5°C. The Arctic region will warm more rapidly than the global mean. (very high confidence)"

"It is virtually certain that there will be more frequent hot and fewer cold temperature extremes over most land areas for daily and seasonal time frames. It is very likely that heat waves will occur with a higher frequency and duration. Occasional cold winter extremes will continue to occur."

"There is *high confidence* that permafrost **temperatures** have increased in most regions since the early 1980s. Observed warming was up to 3°C in parts of Northern Alaska (early 1980s to mid-2000s)"

"Best estimates of ocean warming in the top 100m are about 0.6°C to 2.0°C, and about 0.3C to 0.6°C at a depth of about 1000 m by the end of the 21st century."

"Ocean warming accounts for more than 90% of the energy accumulated between 1971 and 2010 (high confidence). It is virtually certain that the upper ocean

(0-700 m) warmed from 1971 to 2010."

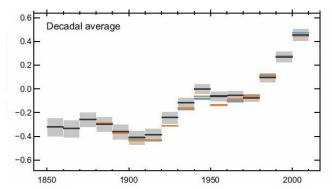
"It is *very likely* that the Arctic sea ice cover will continue to shrink and thin and that Northern Hemisphere spring snow cover will decrease during the 21st century."

"The rate of sea level rise since the mid-19th century has been larger than the mean rate during the previous two millennia (*high confidence*). Over the period 1901 to 2010, global mean sea level rose by 0.19m" [7.5 inches] "Under all scenarios, the rate of sea level rise will *very likely* exceed that observed during 1971 to 2010."

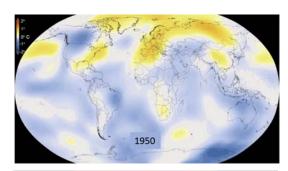
"The atmospheric concentrations of carbon dioxide, methane, and nitrous oxide have increased to levels unprecedented in at least the last 800,000 years."

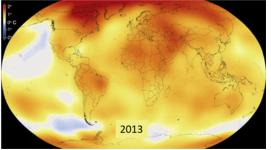
"Depending on the scenario, about 15 to 40% of emitted CO2 will remain in the atmosphere longer than 1,000 years."

"Climate change will affect carbon cycle processes in a way that will exacerbate the increase of CO2 in the atmosphere (*high confidence*)."



Above is from IPCC. Below, two frames from an animated NASA GIF of global climate change since 1950 (better in e-OTW). http://tinyurl.com/ktp3yuw





#### **Migratory Bird Program**

American Bird Conservancy (http://www.abcbirds.org/)

The annual spring and fall migrations of billions of birds are a natural wonder that marks the changing of the seasons. These migrations also connect different peoples and regions across the Americas, from the Canadian tundra to the rainforests of the Amazon to the tip of South America.

Recently, considerable attention has been paid to migratory birds due to surveys documenting their declining populations. The situation is dire for many species, such as Golden-winged and Cerulean Warblers, Buffbreasted Sandpiper, Long-billed Curlew, Reddish Egret, and Bicknell's Thrush. In fact, more than 140 American migratory bird species are declining, restricted to small ranges, or facing population-level threats. Sixty species (including 29 songbird species) are in severe decline, with population decreases of 45 percent or more in the past 40 years.

Habitat loss and poor habitat management hemispherewide are impacting the annual migration cycles of these and many other species. Billions of additional birds are killed each year by colliding with windows, towers or other structures, or are poisoned by pesticides and other environmental contaminants.

In the face of these threats, American Bird Conservancy has launched a Migratory Bird Program—a concerted effort to address the full life-cycle conservation needs of these species. We envision that this program will spearhead comprehensive international partnerships and launch conservation actions that effectively address the true reasons for population declines of migratory birds.

#### The goals of ABC's Migratory Bird Program are to:

- Capitalize on extraordinary recent advances in science to unlock the secrets of bird migration routes,
- Identify critical wintering and breeding habitats,
- Protect and manage those sites for multiple species, and
- Resolve the greatest threats to migratory birds in the Western Hemisphere.



#### Overreliance on Natural Gas: Risky for the Climate and the Economy

from *Union of Concerned Scientists* blog , 3 Feb 2014 http://tinyurl.com/mtfugk8

In State of the Union address, President Obama reiterated his support for climate science by unequivocally stating "The debate is settled. Climate change is a fact." He also should be commended for highlighting the urgency of the problem as local communities are already experiencing damaging and costly climate impacts like drought, wildfires, heat waves, and coastal flooding.

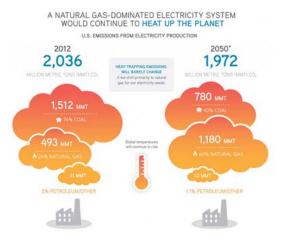
But the President's enthusiasm for increasing natural gas production and use as an important climate solution missed the mark. The President highlighted the economic benefits of increasing U.S. natural gas production, while failing to mention the economic risks of an overreliance on natural gas.

"If extracted safely," said President Obama, "it's the bridge fuel that can power our economy with less carbon pollution that causes climate change." However, natural gas is still a fossil fuel that emits CO<sub>2</sub> when combusted and methane when it's extracted and distributed, contributing to global warming in the process.

A recent UCS analysis shows that transitioning to a natural gas dominated electricity future would not be sufficient to meet U.S. climate goals as power plant carbon emissions would barely change between today and 2050. In addition to replacing coal, natural gas generation would grow to replace aging nuclear plants and help meet the projected growth in electricity demand.

To limit the worst consequences of climate change, a 2010 National Research Council report recommended an economy wide carbon budget that would cut U.S. power sector carbon emissions 90 percent from current levels by 2050.

While different technology pathways are possible for achieving these emission reductions, we found that a pathway relying on renewable energy to provide 80 percent of U.S. electricity by 2050 and energy efficiency to reduce electricity use by about one percent per year was the lowest cost.



#### Greater Northeastern Colorado Field Trip Feb. 22

#### Bill Kaempfer and Linda Andes-Georges

Shepherded by Bill Kaempfer,13 birders explored out east as far as Prewitt, North Sterling and Jackson Reservoirs. A lake trip in February, you might ask? Well, with 50 species, (though no super rarities) and thousands of waterfowl of all sorts, it was not too shabby.

We started at Boyd Pond SWA in Log Lane Village where the reported pair of Trumpeter Swans made themselves visible through hoarfrosted branches and dense fog-a really magical sight. Near Prewitt, we stopped at the US 6 marsh/pond just west of the reservoir entrance. It was full of geese with both Great Horned Owl and Red-tailed Hawk on nests in the trees behind the wetland. Someone called Greater Whitefronted Goose, but as our leader tried to move into position to see it, he managed to flush all the waterfowl off the water. ("Oh well, only a year bird..." he muttered). None of us yet realized that Greater White-fronted was stepping to the head of the class to be the bird of the trip. All of a sudden there was one overhead, then a few more flying over, then a whole flock of more than 50 with their strange un-goose-like sound.

At Prewitt Res. Itself—which had been totally frozen when scouted the previous week—the west end was now breaking up, thanks to lots of water pouring in through the canal. The birds were distant and spooky due to an imposing ring of Bald Eagles on the ice—a flock of 13—but again our view included both white-cheeked geese and scores more Greater White-fronted, as well as flocks of Mallard and Northern Pintail. The pond in the woods along the road out from the middle of Prewitt was full of waterfowl, again up to 50 Greater White-Fronted Geese and about 10 assorted duck species.

North Sterling Reservoir and State Park were next, via the back route up through Merino. Ferruginous Hawks (at least 4 with a nice display of different morphs) and Rough-legged Hawks on the poles and stumps put on a show; and just outside North Sterling a Prairie Falcon posed for photographs in the brightening morning light. At the west end of North Sterling there was a bit of open water with geese, mergansers and a couple dozen Ring-billed Gulls with one Herring Gull. From the west end Bill K counted 30 Bald Eagles. As we pondered the view, we began to hear snow geese overhead, and a mass of white and blue geese became visible through our bins-10,000 strong with a handful of Ross's candidates included. Exclamations of "Winter Serengeti!" popped up. On the reservoir's east side, which was totally frozen to our eyes, we found still more Bald Eagles

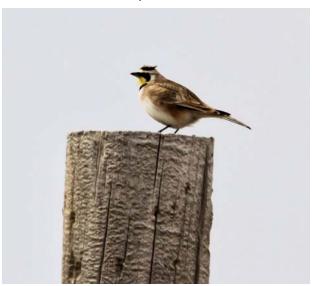
(44 total at NSSP), a Northern Shrike on the way in and a flyover Lapland Longspur.

On the drive down to Sterling we stopped at a charmingly sheltered and open roadside pond with at least 9 more Greater White-fronted Geese among 500 Cackling Geese and a few Canada Geese.

At this point we headed back across the plains toJackson Reservoir, seeing a Golden Eagle north of Ft. Morgan and a Northern Shrike outside Weldona. Jackson Res. SP was anticlimactic with little but a large flock of robins.



**Trumpeter Swans** 



Horned Lark, south of North Sterling State Park Photos by Ben Kemena

### Flammulated Owls in Central Colorado

Colorado College Professor Brian Linkhart has studied Flammulated Owls since the 1980s. He has recently turned his attention to what the owls can tellus about phenomena such as climate change and megafires.

"Flams" are challenging to study, because they are nocturnal and sing for only a short span of time during mating season, and even then guietly.

I the early 2000s, he first started seeing Colorado flams breeding earlier in the year than they used to. "That was one of my first clues," Linkhart says, that the owls were responding to changes in the climate. Then he began to notice fewer offspring and evidence of siblicide in broods. More recently, these changes inspired Linkhart to examine the larger trends that could be causing them.

Linkhart has found that the earlier breeding cycle has a direct correlation with warmer spring temperatures. Precipitation declines over many years in the Manitou Experimental Forest, one of his study areas in the Pike National Forest southwest of Denver, are likely a factor in the decrease in offspring. Flams usually produce two or three fledglings a year, but over the past 15, Linkhart has seen an average closer to one. With less moisture between January and June, he thinks the shrubs, flowers and vegetation that insects – the owls' primary food source – depend on, aren't growing as abundantly as they used to and support fewer insects. That makes for hungrier flams.

Small fires that clear young trees are key to maintaining ideal habitat for flams, which usually prefer older, spacious ponderosa and douglas fir stands. Megafires like the Hayman that level big swaths of forest send flams – and other wildlife – in search of new homes. Birds that came back to the Hayman burn scar are isolated in small pockets of surviving trees in between the most-severely charred areas.

One fire suppression method that could actually be a boon for the owls in this part of Colorado is tree thinning. Linkhart says that it's still unknown exactly how it affects most wildlife, though he's preparing to study its impact on flams. their journey, which covered a thousand miles or so between central Mexico and the U.S.

Edited from High Country News, February 15, 2014 http://tinyurl.com/ktpr3jh

#### Shell Oil Abandons 2014 Plans to Drill in the Arctic Ocean

From Audubon Action news (http://tinyurl.com/ly3tgzk)

In the past month, good news has come pouring in for the Arctic Ocean! A court ruled on January 22 that a federal lease for offshore drilling in the Chukchi Sea (off of Alaska's northwest coast) violated the law. Barely a week later, on January 30, oil giant Shell announced it was canceling its 2014 drilling season. These are both incredible victories for Arctic Ocean birds and wildlife.

Audubon has maintained from the beginning that science doesn't know nearly enough about the Chukchi Sea ecosystems to let international corporations drill in these hazardous, icy seas. The Arctic Ocean is crucial for marine birds and mammals, holding globally significant feeding and resting areas for dozens of species, and they need to be protected. A recent letter from Audubon and other groups called on President Obama to revise his "all of the above" energy strategy to be more consistent with his efforts to curb climate change. This court decision gives the White House a chance to reconsider drilling in the Chukchi Sea.

Shell's 2012 efforts to drill in the Chukchi proved what Audubon has said all along: drilling in the Arctic Ocean is dangerous and the oil industry just isn't capable of handling the icy, harsh conditions there safely.



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