As a headwater state, Colorado’s water is some of the most sought after and hardest working in the West. Colorado’s rivers provide a lifeline for birds, other wildlife, agriculture, communities, and economies, both in and downstream of Colorado. A persistent drought, overuse, and climate change have pushed states to reach for new water solutions, right now. There is a lot at stake for people and the environment. The more we understand how Colorado’s water and the Colorado River are managed, the better decisions we’ll make. This year, 2020, will be a landmark year for Colorado water management. Join Abby Burk, western rivers regional program manager for Audubon Rockies, for an entertaining and conversational primer on Colorado water and the “Law of the River.” Learn more at http://rockies.audubon.org/rivers.

As the western rivers regional program manager for Audubon Rockies, Abby promotes cultural change in water use and river conservation through interacting with government representatives, state and federal agencies, conservation organizations, businesses, and by recruiting and training community leaders.

Join us on Feb. 13 at the Fort Collins Senior Center for this program that is free and open to the public.

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**Renew**

It is time to renew your annual membership. FCAS chapter memberships run for the calendar year from January through December. Dues are $20 to receive the *Ptarmigan* electronically or $30 for a printed copy through the mail.

Please renew either by mail or online at our website: www.fortcollinsaudubon.org. Remember, your membership and contributions are tax deductible.
President’s Corner
by John Shenot

At the FCAS annual meeting on January 9, the membership elected a new slate of board members for 2020. As chapter president, and with the approval of the Board, I also appointed some people to chair our most crucial standing committees for the coming year. This year’s officers, directors-at-large, and committee chairs follow. Please note that we still have some vacancies and would welcome additional volunteers. Also, you can contact me or the listed chairperson if you would like to serve on one of our committees.

President: John Shenot; President-Elect: vacant; Vice President: Liz Pruessner; Treasurer: Joe Polazzi; Secretary: Darla Anderson; Director-at-Large: Alan Godwin, Ron Harden, Larry Sherman, Hank Thode, two vacancies; Conservation Chair: Bill Miller; Membership Chair: Harry Rose; Education Chair: Sheila Webber; Finance Chair: vacant; Program Chair: Jessie Meschievitz; Field Trip Chair: Sirena Brownlee; Publications Chair: vacant; Hospitality Chair: Chandriée Davis; Public Relations Chair: vacant; and Audubon Colorado Council Delegate: Larry Sherman.

The Great Backyard Bird Count (GBBC) is an annual birding and citizen science event for people of all skills. This year it runs from Friday, February 14 through Monday, February 17. Participants are asked to watch for birds at any location for at least 15 consecutive minutes, then submit a checklist of their observations on a website. More information about the GBBC can be found at http://gbbc.birdcount.org/about/. Last year, GBBC participants reported observing 93 species in Larimer County during the four-day period. The top hotspot in the county was Fossil Creek Reservoir, where 40 species were observed. Please consider participating this year. Even your observations of House Finches at a backyard bird feeder can contribute to better scientific understanding of bird distribution and abundance.

Upcoming Field Trips

All field trips are free (unless otherwise noted) and open to the public. All experience levels are welcome. Contact the listed trip leader prior to the day of the trip or visit fortcollinsaudubon.org for more information and updates.

Saturday, Feb. 1, CSU Environmental Learning Center (ELC). Leader: Robert Beauchamp, tyrannusb@gmail.com. The ELC offers a variety of habitats to discover a variety of bird species. This will be a 1.5—2-mile walk around the area. Meet at 8 a.m. in the parking lot.

Sunday, Feb. 9, Bobcat Ridge Natural Area Bird Survey. Leader: Denise Bretting, dbrettting@swloveland.com, 970-669-1185 or 669-8095. FCAS performs a monthly bird census for the City of Fort Collins on the second Sunday of each month. All levels are welcome. Meet at 7:30 a.m. in the parking lot.
Conservation Corner

“Politicians and diapers have one thing in common. They should both be changed regularly, and for the same reason.” –José Maria De Eça De Queiroz

Methane, is a Real “Gasser,” But Not in a Funny Sense

Gases that trap heat in the atmosphere are called greenhouse gases. In listed order, the most abundant greenhouse gases in Earth’s atmosphere are: water vapor (H₂O), carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), ozone (O₃), chlorofluorocarbons (CFCs), and hydrofluorocarbons (includes HCFCs and HFCs).

Methane is the simplest hydrocarbon and is found naturally in small quantities in the earth's atmosphere. It is the principal component of natural gas, is flammable, is used as a fuel worldwide, and is a powerful greenhouse gas. If methane leaks into the air before being burned it absorbs the sun's heat, warming the atmosphere. While it doesn't linger in the atmosphere as long as carbon dioxide, it is initially far more devastating to the climate because of how effectively it absorbs heat. In the first two decades after its release, methane is 84 times more potent than carbon dioxide. About 25 percent of the manmade global warming we're experiencing is caused by methane emissions.

The greatest source of industrial emissions of methane is the oil and gas industry. Methane is so plentiful during drilling operations that millions of dollars’ worth are flared off (burned) at the drill site. Fugitive methane escapes from drilling operations from transmission pipelines and from oil and gas storage tanks. A study organized by the Environmental Defense Fund (EDF) and published in June of 2018 reported that the U.S. oil and gas supply chain is leaking about 60 percent more methane than previous Environmental Protection Agency (EPA) estimates, which relied mostly on industry self-reports. Fugitive methane now can be readily detected using an optical gas imaging camera that makes it possible to see plumes of emissions coming out of tanks and hatches that often could be contained if industry used available methane emissions control technology. But such devices are not required and are hardly the norm.

In May 2016, the Obama-era EPA finalized the first national rule to directly limit methane emissions from oil and gas operations, making it possible to reduce climate pollution. Then, on August 29, 2019, the Trump administration’s EPA announced a proposal to roll back key Obama-era methane emission regulations. Another source of methane is the enormous amounts of methane hydrates found beneath Arctic permafrost, beneath Antarctic ice, and in sedimentary deposits along continental shelves worldwide. It is thought these represent a larger hydrocarbon resource than all of the world’s oil, natural gas, and coal resources combined. Methane hydrates exist in very cold environs and are under great pressure due to being in very deep water or buried under thick sediments. As the earth warms up due to climate change, one has cause to be concerned that these methane hydrate deposits could melt and release their methane as a greenhouse gas.

Great Diversity Seen on Local Christmas Bird Counts

Fort Collin Audubon Society helped promote six local Christmas Bird Counts (CBCs) this year, more than ever before. The Fort Collins CBC was conducted on Dec. 14. This was the 73rd consecutive count in Fort Collins, the longest consecutively run count in Colorado. Despite a mini-blizzard that dropped three inches of snow during the middle of the day, 94 species were observed on count day, including record-high counts for Red-breasted Nuthatches and Lesser Goldfinches.

The Nunn CBC was held on Dec. 21. The weather was great, but the species count was about normal, and the total number of birds observed was a record low. This year did produce a record-high count of Common Ravens for this circle and an unexpected Ring-necked Pheasant.

The Rawhide Power Plant CBC was Dec. 28. Despite an overnight blizzard and snow forecasted throughout the day, the results were great. Hamilton Reservoir...
Behold the Gyrfalcon: Nobility Comes To Visit

In a nod to the month of February, which derives from the word “to purify,” the Dove, which symbolizes both purity and the romance of Valentine’s Day, should be mentioned. However, the subject of this article is the Gyrfalcon (GF) (pronounced Jer-falcon). The GF is a rare visitor to Larimer County as it is the most northern diurnal raptor whose usual winter habitat is northeastern Canada. The name GF is a corruption of the word hierofalco, which means sacred falcon. The GF is the largest falcon and has three color morphs: gray, dark sooty brown, and white. Most GFs are gray. Three percent of all falcons are GFs, and only one percent of those GFs are white. The U.S. Air Force Academy in Colorado Springs had a white phase GF mascot named Aurora who died in 2019 at the age of 23.

Gyrfalcons have had a long history with humans: ancient Egyptian rulers and other Asian royalty used them to hunt. As GFs were hard to catch and, thus quite expensive, they became an accoutrement of the wealthy upper class members of society who appreciated their beauty, nobility, and strength. Emperor Frederick II of Hohenstaufen in his 13th century treatise on falconry wrote that the GF “holds pride of place over even the Peregrine in strength, speed, courage, and indifference to stormy weather.” Physically, the GF differs from the Peregrine Falcon by being larger and, when perched, its wing tips do not reach tail tips.

Given the GF’s noble lineage, it is rather ironic that one of its favorite local places to perch was on one of the very tall brown metal power line poles along Trilby Road on the west side of Taft Hill Road overlooking the Larimer County Landfill. However, it was a good move on the GF’s part as the landfill attracts gulls, which are a favorite local GF prey. The GF is also capable of killing and consuming ptarmigan, ducks, geese, swans, as well as small mammals. It hunts by either flying low over the ground and surprising its prey on land, or by swiftly pursuing prey in flight. The GF usually flies with slow, powerful wing beats, but can reach a high speed. However, its large size makes it appear deceptively slow.

Although visually similar to the Prairie Falcon, there are significant differences: the GF is larger and has a greater wingspan, as well as a more dark-streaked breast and less distinct mustache mark.

Currently the North American GF populace is stable as most nests are remote from human disturbance; however, global warming is concerning. The GF has a northern breeding distribution, it seeks narrow ecological niches, and it relies on Arctic habitats and prey.
While you are birding near the Larimer/Weld County line east of Timnath Reservoir on Weld County Road 76 on your way to Windsor Reservoir or the Pawnee, stop at the little wetland between WCR 13 and 15. There is a field to the north owned by the City of Thornton for its water rights and recently annexed by Windsor; unincorporated Weld County is to the south. Bisected by the road, it was one of June and Alex Cringan’s favorite spots. A little gem, it has brought joy to our neighborhood for nearly 50 years. You might see Mallards, Lesser Scaup, Northern Shovelers, Blue-winged and Cinnamon Teal, Buffleheads, a Canada Goose family, Red-winged and Yellow-headed Blackbirds, and a Red-tailed Hawk. Once three American White Pelicans took off from the south pond and flew directly in front of my windshield. Occasionally there are deer. For the past month, a herd of over 100 pronghorn have periodically visited just to the east. What you will never see on the hillside just north of the wetland is a 10-acre electrical substation proposed by Xcel, with equipment rising 75 feet into the sky and transmission towers 100 to 150 feet tall marching directly north.

Xcel will still construct the Avery Substation, but it will be located northwest of the wetland, with a shorter transmission route that will present less of a threat to birds flying between Timnath and Windsor Reservoirs. How did it happen that a major utility started over with the plan they had been working toward since 2014? From April 2018, when we first learned of the chosen site, until November 2019 when the Windsor Town Board approved the Conditional Use Grant for the new site, a small group of impassioned neighbors fought for this precious habitat and the rural character of our neighborhood that draws wildlife. We sent postcards and emails, made home visits, wrote to Xcel and the City of Thornton, contacted Xcel corporate headquarters, made our case face-to-face with Xcel’s site manager, requested help from Colorado Parks and Wildlife (which was denied), and met with activists against oil and gas. Most importantly, we spoke at every Windsor Planning Commission, Windsor Town Board, and Weld County public hearing for this issue and entered letters into the public record. Some neighbors told us our efforts were futile and declined to help. Xcel’s site manager told us and the town government that no change was possible. The mayor of Timnath kept telling Xcel and Windsor to keep the substation out of sight of the town. But we were relentless.

Fort Collins Audubon members joined our fight. Joan Glabach spoke to the town government about the abundant birdlife that would be threatened. John Shenot wrote to the town board, urging them to consider the impact on the nearly 250 bird species observed within two miles of this site, and Barbara Hyink read his letter at the public hearing in February.

The town board did indeed hear us! Instead of voting on the conditional use grant in February, they postponed the issue so that staff could meet with Thornton government about the abundant birdlife that would be threatened. The mayor of Timnath kept telling Xcel and Windsor to keep the substation out of sight of the town. But we were relentless. Mayor Kristie Melendez especially praised our citizen involvement.

Every day I look on the wetland with even greater appreciation. I hope you will too!

American White Pelicans by Bill Miller.

Bufflehead by Rick Viel.

CBC continued from Page 3
produced a great diversity and high numbers of waterfowl, including Barrow’s Goldeneye and Red-breasted Merganser, and a mixed flock of Rosy-Finches was observed in Livermore.

The Loveland CBC was held Jan. 1. Participants reported 97 species on count day, including six owl species and a brief cameo appearance by the Gyrfalcon that has been frequenting the area near the landfill.

January 2 was the date of the first-ever Pawnee National Grasslands (East) CBC. Highlights of this count included large numbers of Lapland Longspurs, thousands of Horned Larks, and building relationships with local farmers and ranchers. Results of the Rocky Mountain National Park CBC on Jan.4 were not available.

Thanks to CBC coordinators: Tom Hall (Fort Collins), Gary Lefko (Nunn and Pawnee National Grasslands), Doug Kibbe (Rawhide), Denise Bretting and Nick Komar (Loveland), and Scott Rashid (Rocky Mountain National Park).
Membership Application
Join Fort Collins Audubon Society (FCAS), National Audubon Society (NAS), or both.

☐ New or renewing FCAS Chapter Member $20 Name:______________________________________________________
Receive the FCAS Ptarmigan by email

☐ New or renewing FCAS Chapter Member $30 Address:_____________________________________________________
Receive the FCAS Ptarmigan by mail

☐ Lifetime FCAS Chapter Member $750 City:_________________________State;________Zip:______________
Receive FCAS Ptarmigan by mail or email

☐ Additional support for FCAS programs $___ Phone:_____________________________________________________

☐ Additional support for Alex Cringan Fund $___ (natural history education grants) Email:_____________________________________________________

☐ New NAS member $20 May we send you FCAS email alerts if updates occur for field
Receive the NAS Audubon by mail trips, programs, etc.? Yes or No

☐ Renewing NAS member $35 May we contact you for volunteer activities such as helping at
Receive the NAS Audubon by mail events or contacting legislators on important issues? Yes or No

Total Enclosed: $___

Please make your tax-exempt check payable to FCAS and mail with this form to FCAS, P.O. Box 271968, Fort Collins, CO, 80527-1968. Your cancelled check is your receipt. All renewals are due in January. New memberships begin after August 31 extend throughout the following year. Applications can be completed at www.fortcollinsaudubon.org.