



# The DiPPER

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EVERGREEN AUDUBON NEWSLETTER

[www.EvergreenAudubon.org](http://www.EvergreenAudubon.org)

## 2017 CHRISTMAS BIRD COUNT – THE NO-SNOW YEAR

CHUCK AID



Brown Creeper © Marilyn Rhodes

The 2017 Christmas Bird Count (CBC), on Dec. 16, was a bit of a mixed bag. For starters, we had fewer people in the field, down to 56 from an all-time high last year of 80. Nevertheless, even with fewer people in the field,

we set an all-time high of 152 total field party hours. Incidentally, the average for our total field party hours over our 49-year history is 103. On another positive note, this year we had an all-time high of 34 feeder-counters helping us to achieve 245 total party hours (field and feeders) – another all-time high. Two years ago, we had only 12 feeder-counters, and last year we had 23, so we are headed in the right direction in that regard.

As for the birds, for the second year in a row we tallied 49 species, a definite contrast to the 57 species we were so euphoric about on the 2015 CBC. The last two autumns have been comparatively dry – perhaps contributing to less diversity. However, we did manage to get good numbers on the birds that were there. We had 6063 individuals, with

high numbers for Red-tailed Hawk (47), Hairy Woodpecker (81), and Black-billed Magpie (413). We also had very good numbers for Mountain Chickadee (729) and Pygmy Nuthatch (823). We appear to be well set for maintaining our global dominance as the Mountain Chickadee Champs of the World, as

*continued on page 3*



Mountain Chickadee © Alistair Montgomery

**Membership renewals  
are due by March 31.  
Thank you!**

**Starting with this issue, the  
Dipper Newsletter will be  
published quarterly: January,  
April, July, and October.**

**See the President's Message  
for further details.**

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Chapter Meetings first Thursday, 6:30 p.m. except January, at the Audubon Education Center, 29997 Buffalo Park Road.

## PRESIDENT'S MESSAGE

KATHY MADISON

Happy New Year! Like most people, Evergreen Audubon will start out the year with some changes. Starting with this issue of the Dipper, we will be publishing the Dipper quarterly instead of monthly. The Dipper will include more interest-articles and less about upcoming events. Events and other announcements will be communicated via a new electronic newsletter that we plan to send out twice a month. We also plan on upping our social media presence and will continue to post articles on the website. If you don't want to miss anything, consider following us on Twitter or Facebook or using the feed-burner service which will email when a new article is posted on our website. The social media links can be found at the top of our website; the "feed" icon looks like radio signals.

For those who missed the Annual Banquet and 2018 Kick-Off Party, here's what you missed! Brad gave us a humorous review of the birding year, ending with presenting hats to the new folks that achieved the 2017 birding challenge (New cap-getters) and acknowledging those who were repeat achievers (Salty crows). He ended his talk with naming Chuck Aid as our Birder of the Year!

Colleen honored the Nature Center volunteers, including a special call-out to Sylvia Robertson, Donald Randall and Cindy Barge. Her Volunteer of the Year award was given to Melissa Leasia for her dedication to both the Nature Center and the Education Center.

I continued the celebration by thanking our other volunteers, including those who help with our bird studies, build and sell bird boxes, help with the Dipper newsletter, provide snacks and greet guests for our chapter meetings, and I added a special thanks to our hard working board members. I also thanked Mendhi Audlin, Jenna Audlin and Eva Fuse for being such good ambassadors for Evergreen Audubon. I finished up the evening by giving the President's Award to Marilyn Rhodes for her hard work on our annual Wreath Sale and for her special knack bringing new members to Evergreen Audubon. She has been selling wreaths on behalf of Evergreen Audubon for 23 years bringing in over \$46,000 for our fund-raising efforts! Marilyn has also contributed many years of Bird Business articles to the Dipper.



Chuck Aid, Birder of the Year Award winner. © Heather Johnson

For those who missed the December Chapter Meeting, the motion to eliminate term limits for Board Members was passed. In February we will be voting to elect returning board members and to add Dwight Souder to the Board. Look for an email prior to the meeting with details on how you can do a proxy vote.

If you haven't heard, National Audubon and National Geographic have partnered to make 2018 the Year of the Bird. And, JeffCo Open Space is having their own Big Year. We will do our best to keep you posted on the various events. And... Stay tuned for details about our own 2018 Birding Challenge.

Whatever your New Year's resolutions are, I hope you'll make room for a few more... 1) Become a member of Evergreen Audubon or renewed your membership. Membership letters will go out shortly or you can join online at: [www.evergreenaudubon.org/get-involved/membership/](http://www.evergreenaudubon.org/get-involved/membership/). 2) Start thinking of Evergreen Audubon as a co-op and find the time to volunteer in some capacity during 2018.



Red Crossbill © Mick Thompson

We had a very nice morning at Bear Creek Lake Park (BCLP), though we only tallied five species of ducks. The wintering ducks have pretty much moved into our area again, and generally you can expect to see twelve or more species in a morning at this time of year. So, it continues to be an interesting puzzle as to why some places seem to have a greater diversity, e.g. Harriman Lake and the South Platte River out in Commerce City, while BCLP often seems to not have as many individuals or species.



American Tree Sparrow © Bill Schmoker

It was a treat to work our way through identifying three species of Sparrows: American Tree Sparrow, White-crowned Sparrow, and Song Sparrow. On the Tree Sparrow note the bi-colored bill, long tail, rufous crown, white wing-bars, rufous coverts (shoulders), central breast spot, and almost no streaking on the breast and belly.

The definite highlight of the morning was getting to see three Red Crossbills hanging out in some cottonwoods. The question is, what were they doing there? Maybe just on their way to the next grove of ponderosa pine.

A record of the sightings can be viewed on the website at [www.evergreenaudubon.org/highlights-from-dec-6-bird-walk-to-bear-creek-lake-park/](http://www.evergreenaudubon.org/highlights-from-dec-6-bird-walk-to-bear-creek-lake-park/). 📍

## 2017 CHRISTMAS BIRD COUNT

(CONTINUED FROM P1)

well as being excellently prepared to regain our global dominance for Pygmy Nuthatches. Wahoo! Unfortunately, we have to wait until next November to find out, because it takes National Audubon awhile to determine these things.

There are a few species whose numbers dropped this year. In 2016, over a third of the birds we recorded were Dark-eyed Juncos, with 2171 individuals, and we had great numbers for all the various Junco subspecies. This year our grand total was down to 671, again perhaps due to the lack of snow. After all, they are also known as “Snowbirds.” Species that we failed

to find this year included: Great Blue Heron, American Kestrel, Horned Lark, Cedar Waxwing, Bohemian Waxwing, Common Redpoll, and Spotted Towhee. Finally, two years ago we had 639 Rosy-Finches with good numbers for all three species. Last year we had a total of 53, and this year we had 38. It definitely takes some snowy weather to bring them down out of the high country, and we have not had that the last two years.

Thanks to all section leaders, participants, and Barbara Jean Gard for coordinating the feeder-counters. A huge thanks, once again, to the Walds

for hosting the Tally Rally, to JoAnn Hackos for making the meat chili, to Lisa and David Wald for providing the veggie chili, to Megan Fuse for organizing the dinner, to all of you for contributing to the potluck, and to Brad Andres and David Wald for compiling our data.

A summary of birds observed compared to the average number seen from 1969 to 2016, and the high count/year recorded can be viewed on the website at [www.evergreenaudubon.org/2017-christmas-bird-count-the-no-snow-year/](http://www.evergreenaudubon.org/2017-christmas-bird-count-the-no-snow-year/). 📍

## Big Milestones to Celebrate!

Can you believe it... Evergreen Audubon, formally known as The Evergreen Naturalist Audubon Society (TENAS), is about to start its 50th year of existence! And when the Evergreen Nature Center opens for the season, it will mark its 10th Anniversary!

Hope you can join us as we celebrate our own milestones through-out the year.



By far my favorite time to explore the forest and alpine areas in our western mountains is during the snow season on my lightweight cross-country skis. Then, the mountains always seem wilder, more pristine and I can quietly glide through the winter haunts of wildlife knowing my tracks will be erased by the next snow. To paraphrase John Muir, when the snow comes, "... the rough places are made smooth, the death and decay of the year is covered gently and kindly, and the ground becomes as clean as the sky..." After a snowfall, those snow-covered meadows and slopes become a clean palette, which records the presence, activities, and survival strategies of the active wildlife species that have not migrated or are not asleep in their hibernacula. This is when deep snow and low temperatures limit food resources, impede movement, and require metabolic and behavioral adaptations.



Snowshoe Hare tracks. © Larry White

A few days ago, I headed over to Jim Creek near Winter Park. There, a recent light snowfall had created ideal conditions for easy skiing and observing animal tracks. As soon as I traveled a short distance up from the trailhead I started to encounter tracks of a very abundant resident mammal that was scampering on top of the fresh snow in

darkness a few hours earlier. On almost every winter ski tour in the spruce-fir and subalpine zones, I see **Snowshoe Hare** tracks, but actual sightings of the animals are infrequent. They're usually active only at night. During the day they remain still in shallow depressions under the dense cover of brushy areas. Except for their black ear-tips they are well camouflaged from predators by their snow-white winter pelage. On those few occasions when I have skied too close to their hiding place, they shoot off like rockets using their enormous hind feet and strong leg muscles to seemingly fly over the snowpack. A key to their abundance is their ability to survive on poor quality woody forage that protrudes above the snow. They have evolved a very efficient gastrointestinal track with bacteria that can digest really tough stuff. And, as with other lagomorphs (rabbit family), they practice "zero waste" by eating their own fecal pellets, which gives them a second chance to digest a source of concentrated protein. Near timberline I have seen tracks that indicate they will venture out from the cover of subalpine spruce thickets onto windblown alpine areas where they relish exposed tender alpine plants and grasses.

Very soon I cross another set of very common tracks left by a mammal that is active and chattering during the day. The **Chickaree** (aka pine squirrel) is a feisty little arborist that has solved his food availability problems by harvesting and storing conifer cones in larder caches or "middens" during the previous summer and autumn. These caches, sometimes used for generations, are piled high up to 50' wide and 3' deep. They are located on the ground at the base of a standing large tree or deadfall log. I often encounter chickaree tracks leading from the base of a conifer, heading back and forth across a stretch of snow, and disappearing down an opening in the snowpack. I'm sure that they have been traveling from the bedroom

to kitchen. High up in tree crotches they build nests lined with twigs and grasses, which provide insulation and cover. I believe that during exceptionally cold sub-zero periods they will seek cover down with their caches where the snowpack provides greater insulation and some heat is created by composting of their cone piles. They often start their territorial chattering when I ski under an occupied tree. Now I hear their chattering off in the distance, and wonder if they are sending out warning alarm calls because of a nearby predator.



Long-tail Weasel. © Tracy Doty

As I glide across a streamside meadow interspersed with willows and alders, I'm not surprised to see the dime-sized tracks of a hungry little predator associated with this habitat. A **Long-tailed Weasel** has been zigzagging over the snow after emerging from a snow-hole. Like his smaller cousin, the **Short-tailed Weasel** (aka Ermine), this weasel turns completely snow-white except for the black tail tip. Due to their thin small size and corresponding large surface to volume ratio, they radiate and quickly lose body temperature. To maintain a constant high body temperature they must consume up to one third of their body weight each day. Their diet is mostly mice, voles, gophers, and shrews that are active under the snowpack. When weasels sense their prey,

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# FOUR TALES FROM THE FRONT LINES OF THE 2017 CHRISTMAS BIRD COUNT

MARILYN RHODES, MARK MEREMONTE, BEN LAGASSE, AND CHUCK AID

## Evergreen East – Marilyn Rhodes



The Evergreen East CBC gang. © Bagelry staff

I had a total of eight on my team this year, including four new recruits who were wonderful additions. One of these, Amanda Wilkinson, has recently moved here from Florida and was excited at the prospect of seeing an American Dipper, a life bird for her. Fortunately, we found three in the creek near Highland Haven and two more in by Baskin-Robbins. Each exhibited a different behavior, singing, preening, diving for food, calling while flying down the creek, and resting on a white-washed covered rock. Before seeing the dippers, we toured the Rodeo Grounds looking for raptors and shrikes. Amanda called out that she had just seen two Woodhouse's Scrub-Jays, which we'd never had on one of our CBCs. I doubted her, thinking perhaps she had seen a Steller's Jay instead. However, she was 100% sure as she had done Scrub-Jay monitoring in Florida. She was so confident, I decided to chase the birds, and we found two Woodhouse's Scrub-Jays...and a Northern Shrike while we were at it!

Bob Santangelo recruited Julie Berkman, the environmental science teacher at Evergreen High, for our team. She had collaborated with Nature Center Director, Colleen Kulesza, on a grant to provide binoculars for her class, and on the day of the CBC brought her two children along, seven-year old daughter, Joss, and five-year old son, Finn.

Julie thought they would get tired after a couple of hours and planned to leave when we broke for lunch. However, the kids had such a good time watching hawks, creepers, shrikes, dippers, calling for snipes, riding with Santa (Bob Santa-Angelo), and wearing Christmas headgear that they birded with us the entire day. I enjoyed teaching Finn how to locate dippers in a creek. He looked for their white wash on the rocks near Baskin-Robbins and sighted the two we saw there. The kids enjoyed watching the dippers so much, they hated to stop.

## Elk Management Area – Mark Meremonte



The Elk Management CBC gang. © Mark Meremonte

Initially Susan Krause, Cindy Barge, and I missed each other in the morning. They went up Yankee Creek, finding several Turkeys, while I had a few Mountain Chickadees up Bear Creek. Eventually, we found one another and drove-walked up to the Ranger's home. From that point, we piled into their Subaru, or boobaru as I like to call them, with me sitting in one of the two child seats, which suited me fine. At Homestead Meadow, we split into two parties and combed the surrounding grassland and woodland. The highlight was hearing the high peeps of Pine Grosbeaks and, finally, getting a view of them eating the seeds of spruce cones. Then, they were gone.

For lunch, we enjoyed a nice rest on rocks near the best preserved of the

old homestead houses overlooking the meadow. It was here in 2011 that Bud Weare, Kent Simon, and I enjoyed watching several moose trudge past in the snow. For the remainder of the day, we slowly worked our way back finding most of the expected birds, except for Dark-eyed Juncos. We did come across several Gray Jays, an elusive Brown Creeper, a Downy Woodpecker, and a single Black-capped Chickadee – a first, I believe, in the Elk Management area for a CBC. It was a beautiful, warm day and I was glad for a couple of brave birders to stalk the open woodlands with me.

## Idaho Springs West – Ben Legasse

Idaho Springs West was uncharted territory for the three of us that met in the early morning to make light of its riches. From Chicago Creek to Clear Creek, Soda Creek, Little Bear Creek, Barbour Fork and Beaver Brook, the hills, their forests and the birds that call them home kept us on our feet and excited to see what was around the bend. From the Pygmy Owl we had listened for with no success, only to see one later on the very top of a blue spruce, to the Golden Eagle being harassed by a

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Northern Pygmy Owl. © Bill Schmoker



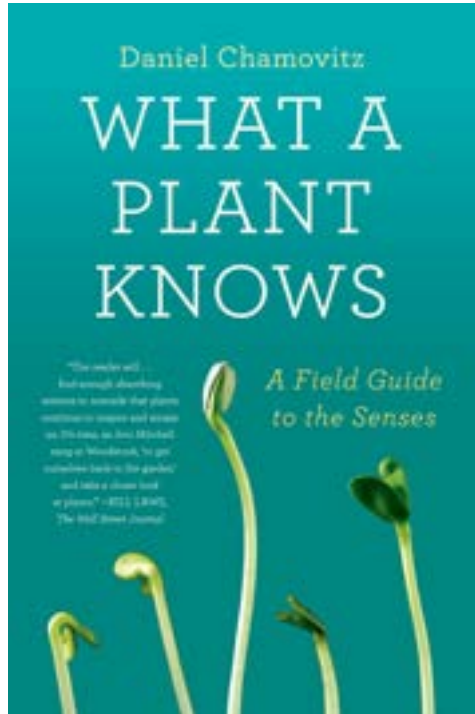
According to Daniel Chamovitz's research, plants are more like animals than we've been led to believe. In *What a Plant Knows*, Chamovitz, director of the Manna Center for Plant Biosciences at Tel Aviv University, makes a strong scientific case that plants do indeed see, smell, feel, remember, and know where they are. The only sense that he finds insufficient evidence to support is hearing, but he's hopeful. He has come to realize that genetic differences between plants and animals are not as significant as he once believed.

Plants can **see** us. They know when we come near or if we're wearing a red or a blue shirt. They measure the amount of light they take in, determining the best time to begin flowering. They know when to open and close their leaves. If we change their light-dark cycle, they go through jet lag.

Plants can **smell**. They know when their fruit is ripe or if a neighbor is being attacked by a bug. One noxious weed can smell a nearby tomato plant, using the scent to siphon off sugars from its stem. Damaged plants send off odors to warn neighboring plants that attackers are near.

Plants know when something **touches** them. A Venus flytrap knows exactly when it is being touched by the right size fly. The fly must touch two hairs in the trap within exactly 20 seconds for the trap to close. Some plant leaves stop growing if they are touched too often. Others react then they're sprayed with water. When a researcher burned a tomato leaf, she detected an electrical signal in the stem a distance from the wounded leaf. The tomato responded to the attack by warning its other leaves about the danger.

Despite referencing a fair number of scientific experiments, Chamovitz concludes that nothing indicates that plants can **hear**, despite popular claims that plants love classical music. Darwin



monitored his plants response to his bassoon playing, with no success. Most other experiments claiming success have not been replicated when conducted with scientific controls.

Plants are rooted in place; they can't run away to escape threats, but they **know where they are**. They know where up is, toward the light, and they can send roots down, even from high up in trees. A plant turned upside down will reorient itself. This ability is a sixth sense, called **proprioception**.

Using proprioception, we know where the parts of our body are without looking at them. The semicircular canals in our inner ears tell us if we are upright or upside down. The proprioceptive receptors through our body tell us where our limbs are.

Plant roots respond to gravity, even to simulated gravity imposed through a scientific experiment. Darwin discovered that if a root lost 0.5 mm of its tip, it could no longer respond to gravity. However, the root tip passes information to the rest of the plant even after it is cut. Plant stems, in contrast, know which direction is up.

Experiments done on the space station showed that plants do an oscillating dance throughout the day, influenced by gravity. For plants in the space station, lacking gravity, the spiral patterns slow down but don't disappear. Plants have a built-in cyclical movement, strengthened by gravity.

Finally we learn that plants **remember**. If you cut a growing bud from a plant, the plant remembers where it was cut and responds by growing in the injured direction. We can plant "winter" wheat in the spring simply by freezing the seeds, convincing the wheat that it has been through a winter. Young plants remember if their parents were stressed. A plant's procedural memory helps them know what to do to be successful.

In a brief 140 pages, Chamovitz demonstrates that **plants are truly aware**. We share an evolutionary biology even if the mechanisms each has evolved followed different paths.

If you have children who enjoy setting up science experiments for the school science fair, *What a Plant Knows*, is a terrific resource. The experiments are explained clearly, with sufficient detail to suggest any number of interesting experiments the children could try. Perhaps they could add to our understanding of how plants interact with their environments.

Scientific American Press, 2012



## 2018 - THE YEAR OF THE BIRD

LISA WALD

The National Audubon, National Geographic, Cornell Lab of Ornithology, and Bird Life International are co-hosting The Year of the Bird for 2018. Information is at [www.audubon.org/yearofthebird](http://www.audubon.org/yearofthebird).

Jefferson County is celebrating The Big Year with a variety of events throughout the year. A year-long effort is to identify by sight or sound the largest number of species of birds within Jefferson County between January 1 through December 31, 2018. You can register for this on their website and follow the Jefferson County Big Year events at [www.jeffco.us/3440/The-Big-Year-2018](http://www.jeffco.us/3440/The-Big-Year-2018).

They had a kick-off event in early January with representatives from Denver Audubon, Lakewood Parks & Rec, HawkQuest and Evergreen Audubon. JoAnn Hackos and Kathy Madison manned the informational table, and Brad provided the latest check-lists and information about our citizen science projects.

There were 179 people in attendance, and Kathy and JoAnn spoke to almost all of them and even recruited some new members.

2018 | YEAR OF THE BIRD

Be sure to see the Evergreen Audubon "Year of the Bird" display in the Evergreen Library display case during the month of February! 🗨

## CHAPTER REPORT TO AUDUBON COLORADO COUNCIL

JOANN HACKOS

Evergreen Audubon concluded the year with several significant achievements. We achieved another high level of contributions through the Colorado Gives program, we concluded a successful albeit slow Christmas bird count, and we scheduled a members' banquet and a showing of the Audubon Photography Winners for early in 2018. We are joining forces with the Center for the Arts Evergreen to host the photography show. We will send out notices to all the Colorado chapters when the event is ready to open.

We are planning to attend the kickoff meeting of the Jeffco Open Space "Big Year" event for 2018. We have also asked to receive information about the Year of the Bird from National Geographic and the North American Bird Conservation Initiative. We hope that these activities will give us ideas about outreach to perspective members and increase interest in our activities, especially those associated with the Evergreen Audubon Nature Center.

In 2017, we completed work on the Bear Creek Bird Atlas. Brad Andres and Chuck Aid should have a report of the results early in 2018. We have just completed our tenth year of gathering data on the local breeding bird community throughout the Bear Creek Watershed – from Mount Evans to the South Platte River. Within that vast area we have focused on 43 parcels of public land where we have looked for any signs of breeding: from singing males setting up territories, to courtship behavior, to nest building, to finding recently fledged youngsters. The 2017 season focused intensively on 14 main areas where we spent at least 10 hours of observation, and an additional 12 areas were visited more briefly. With the 398 hours put in this year, that brings our total volunteer hours over the ten-year period to 2515 hours!

A representative from Evergreen Audubon will attend Excel Energy's Public Utilities Commission Hearing on February 1, 2018 at the Department of Regulatory Agencies Building in Denver to support Excel's efforts to replace coal generated energy with renewables. 🗨

## MOUNTAIN LION WATCH!

ANN DODSON



Mountain Lion © Ann Dodson

On January 2, this (presumably) female mountain lion with two young cubs, still with spots, killed a deer across Bear Creek from our home, about 40 feet from our back door. We weren't aware of it at first, but early in the morning on the 3rd we saw a cub cross our yard. We were so excited just to see the cub! While we were eating breakfast, we noticed four magpies fussing around across the creek. We thought it was odd until we saw one fly off with meat dangling from its mouth. About 20 minutes later, the lion showed up and began the work to cover her kill. That's when we realized there was a carcass. The lion spent the entire day watching us watching her and guarding her prize. It felt weird to be the ones in a "cage!"

That night we could see movement around the kill but were unable to see exactly what was going on. The next morning, we watched the lion escort her cubs back to the den at about dawn. Ed even saw one of the cubs fall through the ice into the creek and scramble out again. Mom just kept on going! The den must be on Elephant Butte across Upper Bear Creek Road. That is the direction they headed.

The lion stayed for two days, bringing the cubs both nights. By noon on Friday she was gone and the magpies, fox, and a stray dog took over. Within a week or so, the only thing left is hair and some bone. It was an awesome experience! 🗨





Snowy Owl (courtesy of [dnr.maryland.gov](http://dnr.maryland.gov))

By now, you're probably aware of this winter's southward incursion of Snowy Owls

into southern Canada and the lower 48 states. Already in November, the website dedicated to Snowy Owl tracking, Project Snowstorm ([www.projectsnowstorm.org/](http://www.projectsnowstorm.org/)), was predicting a snowy blizzard for the winter of 2017-18. The Snowy Owl is Holarctic in its distribution, breeding from Scandinavia around the Arctic Circle to Greenland. There they build nests on peat hummocks, and sometimes rocky mounds, in grass-sedge or dwarf-shrub tundra. In winter, they often remain in the Arctic feeding on rodents, hunting seabirds and waterfowl along edges of open water (polynyas), or scavenging polar bear kills. Despite the fact that the Owl is a top-level predator, the lowly lemming drives its population ecology.

The irruption prediction of owls described above is based on the roughly four-year population cycle of arctic-breeding lemmings. To say the least, lemmings are prolific – females mature at 5–6 weeks of age, have a gestation period of 20 days, and can produce up to eight litters of 3-5 pups a year, including some during the winter. Lemmings build elaborate tunnel systems under a blanket of snow and remain active for most of the winter. Causes of their cyclic nature are not completely understood but is thought to be related to food depletion and recovery. As lemming numbers increase, they virtually eat themselves out of house and home, with the following results: 1) female fitness likely declines and fewer young are produced, 2) some individuals likely starve (cannibalism has been described in the brown lemming, according to the Alaska Department of Fish and Game), and 3) the population crashes. Snowy

Owls are major lemming consumers and are influenced strongly by the rodent's population fluctuations.

Although Snowy Owls were previously thought to be distributed rather uniformly across the Arctic, Eugene Potapov and Richard Sale, writing in their 2013 book *The Snowy Owl*, suggested that the global population was divided into segments, termed “loose boids,” which moved around within certain geographic regions, such as the central Canadian Arctic, in response to food availability. Finding areas of high lemming abundance trigger nesting by a large number of Snowy Owls in the boid. I recall finding owl nests almost every other mile one year in northern Alaska where hardly any owls and no

largest owl by weight and is densely feathered, including their tarsi. Males are pure white, whereas the females are peppered black and white. The female performs all incubation duties, perhaps the reason for the mottled plumage, and is fed by the male while on sitting on eggs and brooding young owlets. The female produces clutches of 3 to 11 eggs, in response to local conditions, and lays eggs at 1- to 3-day intervals. She begins incubating immediately after laying the first egg, which leads to staggered, known as asynchronous, hatching. I have seen a snowy nest where the oldest chick looked to be at least 10 days older than the youngest. The oldest (and largest) chicks get the first dibs on the food, and if there is enough



Snowy Owl (courtesy of [share.america.gov](http://share.america.gov))

nests were found the year before. This insight into the population structure and corresponding information on population declines lead to an increase in the conservation concern for Snowy Owls in the 2016 Partners in Flight Conservation Plan.

Snowy Owls are well-adapted to the Arctic environment and to lifestyle of up and down lemming food resources. The Snowy, as you may know as Harry Potter's Hedwig, is North America's

to go around the little guy gets to eat. This reproductive strategy likely arose in response to a wildly fluctuating food base. High lemming years can produce a lot of young owls.

Back to irruptions. The mass movements of snowy owls southward are currently thought to be a result of high reproductive output and birds dispersing away from their nest sites, which may be caused by either the adults evicting the young or perhaps by territorial

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## FOUR TALES FROM THE FRONT LINES (CONTINUED FROM P5)

crow as it teetered aloft riding the draft of Santa Fe Mountain, to the abundance of juncos, jays, and finches spending their days in and around the town of Idaho Springs, certainly it was a day well spent.

### Clear Creek – Chuck Aid

When a CBC area leader first delves into covering new territory, the first thoughts tend to be related to getting to know the lay of the land, where is it possible to have access to public lands, figuring out how to get around and get as much of the area covered as possible in a single day, and what bird species tend to be where. So, when I first signed on six years ago to help Dave and Elaine Mongeau cover the Clear Creek section of our circle, I first familiarized myself with some of that initial logistical information, and then went on to gain access to restricted properties managed by the Black Hawk/Central City Sanitation District, Colorado Parks and Wildlife, and Jeffco Open Space. However, there was an important logistical piece that eluded me year after year.

Finally though, this was the year that during pre-count scouting, a chance encounter with retired law-enforcement officer, Marsha Kiddoo, up on Robinson Hill Road, led to my meeting a wonderful group of enthusiastic home owners: Erika Daniels, Debbie Johnson, and Constance Reid, all excited by the prospect of counting birds at their feeders, and full of stories about turkeys, owls, and Rosy-Finches in the area. As a co-leader for this area, this was a wonderful treasure trove that opened up to me, and immediately yielded some great birds a few days later on this year's count, e.g wonderful close views of a feeding Clark's Nutcracker. Our count circle is so huge that it's a wonderful day when we get to pull in a few more folks to help with the task at hand, and who want to learn more about Evergreen Audubon. 🐦

## MEMBERSHIP RENEWAL

ANN DODSON



### Time to renew or join!

Evergreen Audubon memberships are on a calendar year basis. You will soon be receiving a renewal request in the mail. You may renew online at [evergreenaudubon.org](http://evergreenaudubon.org) or through the mail using the return envelope provided. **We appreciate renewals by March 31st.**

Your membership dollars go directly to fund Evergreen Audubon programs and events. Without our members, none of what we accomplish would be possible. As a member you enjoy many perks, but you also make a statement about your values. As a member you enjoy opportunities to join others and make a difference!

2018 marks the 50th year of Evergreen Audubon. Not only that, we celebrate the 10th anniversary of our Nature Center this year. Audubon is one of the oldest non-profits in our area dedicated to conservation. Each year we work to increase our opportunities to achieve our mission.

Please help us achieve a record number of members this year! Invite your friends, family, and neighbors to join. Together, we help conserve and restore our unique ecosystem. Your support also helps us provide a wide range of educational programs, undertake important citizen science projects and perhaps most importantly, it helps us promote contagious enthusiasm and lifelong respect for nature.

Thank you in advance! 🐦

## THE INVASION OF THE LEMMING SNATCHERS

(CONTINUED FROM P8)

squabbles of adult pairs over decreasing lemming food resources. Although Snowy Owls appearing in the south were previously thought to be pushed there by starvation, recent data on owls captured in the lower 48 states indicates they are in healthy condition (see [www.projectsnowstorm.org/](http://www.projectsnowstorm.org/)). Many of the owls seen south of Canada in the winter are juveniles.

Since we are discussing food, did you know coastal native Alaskans trap owls for food during their fall migrations and sometimes in winter? As long as they were fat, the owls would make a good soup, according to interviews conducted by the Alaska Department of Fish & Game. Subsistence harvest of Snowy Owls is allowed under the 1997 revision of the Migratory Bird Treaty with Canada and Mexico. The name of Barrow, Alaska, was recently changed to the Inupiaq name Utqiagvik, which means

“a place to gather wild roots,” and an alternative consideration was Ukpiagvik, for “the place to hunt Snowy Owls.”

There are great resources to discover more about Snowy Owl movements. You can subscribe to an email alert on eBird to get every posting made of a Snowy Owl in the lower 48 states in the last week ([ebird.org/ebird/alert/summary?sid=SN40647&sortBy=obsDt](http://ebird.org/ebird/alert/summary?sid=SN40647&sortBy=obsDt)). Project Snowstorm mentioned above provides lots of information on tracks of GPS-tagged owls. Here in Colorado, the Snowy Owl invasion has been reported by TV news channels, YouTube, the Denver Post, and, of course, CoBirds ([groups.google.com/forum/#!forum/co-birds](http://groups.google.com/forum/#!forum/co-birds)). Nearby owls have been reported around Stanley Lake in Jefferson County and Boulder Reservoir in Boulder County. Check CoBirds for recent updates on owl sightings and venture forth into the Snow Storm! 🐦



Marten tracks. © Larry White

they can slither or “swim” through the snowpack for their meal. Their thin “elastic” bodies can easily negotiate through underground rodent burrows to catch prey and use for shelter.

As I enter a dense old-growth spruce-fir forest I’m happy to see tracks of the “arboreal weasel” which I’ve seen in this area on previous trips. The **American Marten** is seen less frequently in the winter since he spends much of his time traveling up in the forest canopy hunting pine squirrels. Martens seek shelter and nest in abandoned squirrel nests, tree cavities and hollow logs. During their once-a-year molt in autumn, a dense patch of insulating fur grows on their feet, which gradually wears off in the summer. Historically, Martens were almost completely extirpated from our mountains by trappers for “sable” fur garments.

As usual during these deep-winter rambles, I see and hear relatively few passerine birds. To conserve energy during intense cold periods they are less active and rarely calling. Notable exceptions are the **Mountain** and **Black-capped Chickadees**. Even during the coldest, stormiest weather I’ve seen chickadees actively foraging amongst snow-covered conifers - even in the frigid Yukon and Alaska forests. It’s amazing that these tiny birds, in spite of their very high surface to volume ratio, can stay warm and survive the long winter nights. During the day they must eat continuously. In addition, they

shiver to produce heat and can lower their body temperature by 15° F at night to conserve energy and fat reserves. And they can start their early morning foraging with their lower body temperature. They are usually the first bird I see in the early morning. They also store seeds and insects that are high in fats and protein. Like the **Pygmy Nuthatch**, chickadees are known to roost communally. As a general rule many cavity nesters (woodpeckers, nuthatches, brown creeper, chickadees) do not migrate and fare better in winter than other resident birds.

Another small bird that sticks around all winter in the snowy spruce-fir zone



Golden-crowned Kinglet © Mick Thompson

is the **Golden-crowned Kinglet**. Less is known about their winter survival adaptations. However, the famous naturalist Bernd Heinrich has observed kinglets huddled together on open branches and that they prolong their foraging later into the twilight hours. He surmises that their high winter mortality during exceptionally cold winters may be compensated by their high reproductive rate. The reported recent increase in golden-crowned kinglets throughout their range may be related to climate change.

As I reach the end of my route and start to head downhill, the clouds are lowering and it is starting to snow again. A cold wind is blowing snow whirlwinds around the snowpack and I notice that my ski tracks as well as animal tracks are filling. In the unlikely event that I have to spend the night in the snow, I am equipped with extra clothing and food, a space blanket, matches, etc. But I hope I don’t! As I glide back to civilization, I think about all the forest animals that I’m leaving behind to survive the storms and cold as they’ve been doing for eons. 🐾

## Evergreen Audubon Summer Camps



HIKES 🐾 HANDS-ON LESSONS 🐾 CRAFTS 🐾 GAMES

### Feathered Frenzy

June 4-8  
ages 5-7

### Animal Architects

June 18-22  
ages 5-7

### On the Prowl

July 16-20  
ages 8-10

*Camps meet at the Evergreen Education Center on Buffalo Park Rd adjacent to Alderfer Three Sisters Open Space*



Learn more & register at [EvergreenAudubon.org](http://EvergreenAudubon.org)  
Questions? 303-330-0489 or  
[enctdirector@evergreenaudubon.org](mailto:enctdirector@evergreenaudubon.org)



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It costs you nothing and provides us needed funds to continue our projects.

**Thank you, Colleen Kulesza, for creating the newsletter for the last two years!**

**IMPORTANT DATES  
PUT THESE ON YOUR CALENDAR!**

<b>Chapter Meetings / Presentations</b>	
	<b>Monthly, 1st Thursday</b>
<b>Birdhouse Sale</b>	<b>March 3</b>
<b>Earth Day Fair</b>	<b>April 21</b>
<b>ENC Opening</b>	<b>April 21</b>
<b>Dawn Chorus</b>	<b>May 6</b>
<b>Audubon Photography Exhibit</b>	<b>June 8-27</b>
<b>Triple Bypass Volunteering</b>	<b>July 14 &amp; 15</b>
<b>Annual Picnic:</b>	<b>July 21</b>
<b>Annual Bash &amp; Benefit</b>	<b>August 24</b>
<b>ENC Closing</b>	<b>Mid October</b>
<b>Bird Seed Delivery</b>	<b>November 1</b>
<b>Christmas Bird Count</b>	<b>December 16</b>

**After-School Programs**

There is still room in the **Evergreen Audubon After-School Program for late Winter and Spring**

**February – May  
Wednesdays after school  
(3:30 pm)**

Children in Grades 1-5

Snacks, Nature Lesson, Crafts and Outdoor Exploration

See website for more information (\$100 a month)



**MEMBERSHIP MATTERS!**

**Evergreen Audubon Local Membership Application**

I/we would like to join the Evergreen Audubon. I/we may participate in all chapter activities, receive the newsletter electronically, and vote (two Family members may vote) on chapter issues. Dues remain locally.

Name \_\_\_\_\_

Family member name(s) \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_ Zip \_\_\_\_\_

Phone (optional) \_\_\_\_\_ Email \_\_\_\_\_

(include to receive electronic newsletter and updates)

	<b>Individual</b>	<b>Family</b>
Annual dues	\$ 25	\$ 40
Additional donation	\$ _____	\$ _____
<b>Total enclosed</b>	<b>\$ _____</b>	<b>\$ _____</b>

Enclosed is my check payable to: Evergreen Audubon, P.O. Box 523, Evergreen, CO 80437.

I DO NOT want solicitations from National Audubon.

If you would like to join or donate to the National Audubon Society directly and receive the AUDUBON Magazine, call 1-800-274-4201 and use chapter code C9ZD090Z.