EVERGREEN AUDUBON NEWSLETTER

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Holiday Wreaths Delivered before Thanksgiving



She often orders a few extra, so it may be possible to buy one of the surplus if you missed the ordering deadline. Email her if you want to claim one of these 'extras' at CloverLane@aol.com.

Chapter Meeting: Darwin's First

THEORY

ED FURLONG

Everybody knows—or thinks they know—Charles Darwin, the father of evolution and the man who altered the way we view our place in the world. But what most people do not know is that Darwin was on board the HMS Beagle as a geologist—on a mission to examine the land, not flora and fauna. Or about Darwin's seminal role in demonstrating and exploring the ups and down of the Earth's crust. This is the story told in Rob Wesson's book, *Darwin's First Theory*,

and that he will share with us at our next Chapter Meeting on Thursday, November 2, 2017. Doors open at 6:30 at the Evergreen Audubon **Education Center** (29997 Buffalo Park Road). Plan to come early, grab a good seat, and visit with vour fellow

members

and Ev-

ergreen

neighbors.

After brief

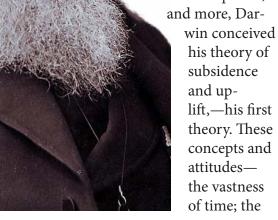
announcements at 7 pm, the presentation will begin, and it is one you won't want to miss!

Retracing Darwin's footsteps in South America and beyond, Rob trekked across the Andes, cruised waters charted by the *Beagle*, hunted for fossils in Uruguay and Argentina, and explored sites of long vanished glaciers in Scotland and Wales. As he followed Darwin's path—literally and intellectually—he experienced the land as

Darwin did, engaged with his observations, and tackled the same questions

Darwin had about our ever-changing Earth.

Upon his return from his five-year journey aboard the *Beagle*, after examining the effects of earthquakes, tsunamis, volcanic eruptions,





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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

It's is hard to believe Thanksgiving is just around the corner which means most of us are thinking of families, friends, what we are thankful for and of course turkeys. I've been lucky enough to see turkeys in the mountains of central Pennsylvania, in the high desert outside of Moab and just recently on North Turkey Creek Road! It is amazing how diverse their habitat can be. Just as diverse as our own Bear Creak Watershed which brings me back to thinking about what I'm thankful for.

I am extremely thankful for getting involved with Evergreen Audubon. I started as a volunteer at the Nature Center back in 2009 but didn't get involved with Evergreen Audubon until 2012 when I joined the board. It took me awhile to venture out on field trips or volunteer for various project, but once I did I was hooked. Because of my involvement I have learned an unbelievable amount of new things about our area habitat and I've made many new friends. I truly believe there is a family-feel to the organization. We are all fortunate to have such an organization in our community and I encourage all non-members reading this article to become members.

Our membership size has increased to approximately 230 individuals, our donations continue to increase each year as does the variety of sources outside the membership that provide those donations. Our programming for children has increase and we have our wonderful new space for programs, chapter meetings, offices and storage. What's not increasing is the number of volunteers, especially at the Nature Center. I am thankful for all those folks that do volunteer, including those contributing to the Birding Breed Atlas and the Nest Box studies, those leading Christmas Bird Counts, those that help with fund-raisers like the Bash, the Triple-by-Pass and the wreath sales, those who build and sell bird houses in the spring, those who educate us on invasive weeds, those that help with the website and the Dipper, and the core folks, usually the board members, who seem to volunteer for everything. The list of people to thank seems long but we still need help and we struggle with how to get more folks involved. If you have some ideas on how we can increase volunteerism, please let me know.

That said, before the December chapter meeting, we will have a meet-n-greet for our newer members so they can get a better picture of all we do at here at Evergreen Audubon. We hope to start doing these meet-n-greets quarterly. More details to come.

Have a Happy Thanksgiving and I hope you get to spot your own turkeys here in the watershed!

-Kathy

CHAPTER MEETING CONT.

(continued from Page 1)

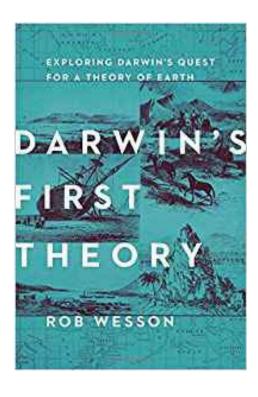
enormous cumulative impact of almost imperceptibly slow change; change as a constant feature of the environment—underlie Darwin's subsequent discoveries in evolution. And this peculiar way of thinking remains vitally important today as we enter the human-dominated Anthropocene age.

As the New York Time Book Review wrote, Rob's book "dares, thank goodness, to work some of the rare Darwinian territory that is actually under-explored. Tracing the young Darwin's tracks ... Wesson relates how Darwin hatched his first, favorite, and most overlooked substantive theory, on the origins of coral reefs. In both method and vision—imagining forms changing slowly over time in response to changing conditions—this precocious, even audacious idea anticipated and possibly inspired the theory of evolution Darwin would publish two decades later."

As a kid growing up in the Pacific Northwest, Rob Wesson became fascinated by mountains and glaciers. This interest led to a BS in earth science from MIT, and an MS and PhD in geophysics from Stanford University. His career in earthquake research with the U.S. Geological Survey (USGS), where he is currently a Scientist Emeritus, spans four decades. In retirement, his research has turned to Chile where he is collaborating with a team exploring large earthquakes, tsunamis, and associated tectonic questions. This work has been supported in part by grants from the National Science Foundation. When not traveling to South America or elsewhere, Rob divides his time between his home in Evergreen, Colorado, and the cabin he built near McCarthy, Alaska.

Rob first became interested in Darwin and his geology through reading *The Voyage of the Beagle* on a vacation trip to Patagonia. He became captivated by Darwin's

prodigious powers of observation and his insatiable need to understand and explain. Whatever rock, fossil, landscape, rodent, bird, or beetle that he found, Charles Darwin wanted to tell its story. At our November Chapter meeting, Rob Wesson will tell us how it all started. Don't miss it!



AUDUBON COLORADO COUNCIL

JoANN HACKOS

Evergreen Audubon was pleased to host 20 members of the Audubon Colorado Council (ACC), representing 10 Audubon chapters, at the Council's fall meeting on Saturday, October 21. JoAnn Hackos, Evergreen Audubon's ACC representative, Kathy Madison, and Brad Andres welcomed the ACC members to the Education Center. Later, Nature Center Director, Colleen Kulesza, shared how we came to establish the Education Center, in

addition to the Nature Center, and our goals for both. We were especially pleased to showcase the newly redecorated classrooms and offices at the Education Center.

The Council works to promote coordination of chapter activities across the state, to assist each chapter in finding the best ways to meet their individual goals and to support regional and national Audubon initiatives. Other items

on the Council's agenda included discussing how chapters can support Audubon's efforts to eliminate lead ammunition; what chapters can do about the possibility of the Arctic National Wildlife Refuge being opened to oil and gas drilling; and what can be done to prevent the sage-grouse agreement from being dismantled.

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From pre-historic times, the turkey has provided Americans with a reliable source of food. There are only two species of turkeys in the world — the Ocellated Turkey of the Yucatan Peninsula region and the Wild Turkey of western Mexico and the U.S. In the U.S., six subspecies of Wild Turkey (Meleagris gallopavo) historically occupied a range that was basically south and east of a line between Las Vegas and Grand Forks, North Dakota. Their genus name comes from the Greek word for the African guinea fowl, and the species name comes from Latin gallus (rooster) and pavo (peacock). Pavo is also the turkey's Spanish name. If you have seen the tail-spreading, gobbling-strutting antics of male Wild Turkeys (toms) during their spring mating rituals, you will probably agree that these names are good descriptors.

The "Merriam's" Turkey is native to Colorado and is found in the mid-elevation forest and shrublands around Evergreen and Conifer. The subspecies was named after the first chief of the Division of Economic Ornithology and Mammalogy, C. Hart Merriam. Historically, Merriam's Turkeys occurred primar-

ily south of I-70, and human expansion, habitat loss and unregulated hunting dramatically reduced numbers by the 1930s. Beginning in the 1940s, the precursor to Colorado Parks and Wildlife began trapping and re-locating Merriam's Turkeys to other areas within the central mountains. In the 1980s the state also began introductions of the Rio Grande subspecies to the forested river drainages of the eastern Col-

orado plains. The introductions were highly successful. Today, Wild Turkeys are more widely distributed in Colorado than in the past and are found in every U.S. state. Their success is due to their ability to use a wide variety of foods, high reproductive output, and low adult mortality rate. Wild Turkeys were

first recorded on the Evergreen-Idaho Springs Christmas Bird Count in 1978 and averaged 78 birds between 1990 and 2005. In the last decade, we have recorded an average of only 38 birds. Perhaps increased development in our area has forced the turkeys out.

If you want an odd and perhaps grotesque Halloween costume, you might model your headgear after the tom turkey; the tom's head is an elaborate structure of flaps and protrusions. A long, cylindrical appendage known as the snood dangles downward from nostril



Beard of a Wild Turkey tom © Raymond Clark (CC BY-NC 2.0)



Fleshy face of a Wild Turkey © Paul VanDerWerf (CC BY 2.0)

area. The fleshy wattle, or dewlap, is used to produce the tom's characteristic gobble. The globular, colored bumps on the neck are caruncles. These adornments appear to advertise the fitness of a tom, as captive female wild turkeys prefer to mate with long-snooded males. On the tom's breast, modified feathers form a 'beard', and his feet have spurs that are used in sparring with other toms.

A young male that lacks a developed beard is called a jake, an adult female a hen, and a young female a

jenny. Hens nest on the ground and lay 10-14 eggs. After the poults (turkey chicks) are two weeks old, the hens will join a flock of other hens with poults, forming a large nursery flock or crèche. Perhaps you can pass around some of this turkey trivia along with the cranberry sauce this Thanksgiving.

Colorado Gives is a statewide initiative to encourage online philanthropy to local non-profit organizations. Evergreen Audubon/Evergreen Nature Center is proud to participate once again in Colorado Gives Day.

When you donate to us through *Colorado Gives Day* on December 5, we receive additional dollars from their Incentive Fund, amplifying your contribution and making your donation go further!

It's easy to make a donation. Visit Evergreen Audubon's Colorado Gives website and pre-schedule your donation for December 5th or visit the site on December 5th. Once there, click "Donate Now".



www.coloradogives.org/evergreenaudubon/overview

GUIDED BIRDING TRIP TO BOSQUE DEL APACHE WILDLIFE REFUGE

We are partnering with Reefs to Rockies to offer you a fantastic birding trip to Bosque del Apache National Wildlife Refuge in New Mexico, one of the world's premier birding destinations in winter. You'll be spending 4 days with other birders and your guide, Chip Clouse from Front Range Birding Company, while you seek the large flocks of snow geese and sandhill cranes, as well as finding rosy finches and many other great winter migrants in the Sandia Mountains. The detailed itinerary for the trip is on Reefs to Rockies website, http://reefstorockies.com/destinations/north-america-2/united-states/winter-birding-weekend-new-mexico/

DATES: December 7-10th

Cost: \$1079 per person; additional \$230 for single

occupancy

WHERE: Sante Fe, Albuquerque, and Socorro, NM -

an many birding stops along the way



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Poor Nest Box Production for Bluebirds in 2017

BRAD ANDRES & RACHEL HUTCHISON

We continued our regular monitoring of nest boxes at Elk Meadow and Alderfer/Three Sisters Open Space Parks in 2017. We made 10-11 visits to each park between March and mid-August to check the progress of boxes, spending a total of 29.0 survey hours at Elk Meadow and 16.5 hours at Alderfer/Three Sisters. We appreciate the assistance of Tom Kresse, Melissa Leasia, Kristin Michalski, and Chris Pfaff. Thanks to Jefferson County Open Space for their continued partnership with the next box monitoring. If you would like to participate in nest box monitoring efforts in 2018, please contact Rachel Hutchison (bluebirdrachel2@comcast.net) or Brad Andres (baandres 1@yahoo.com).

Unfortunately following on the pattern of last year, 2017 also turned out to be one of the least productive years for bluebirds since we began

Western Bluebird © Rachel Hutchison

monitoring in 2009, although Tree Swallows filled some of the void left by lack of bluebird nesting (Table 1). In Elk Meadow, 30% fewer Mountain Bluebirds and 90% fewer Western Bluebirds completed nests and laid eggs in 2017 than in an average previous year. In Alderfer/ Three Sisters, 35% fewer Mountain Bluebirds and 38% fewer Western Bluebird completed nests and laid eggs in 2017 than in an average year in the past. Loss of eggs (those that did not hatch) in 2017 was greater than loss of chicks from nests where eggs hatched in both Mountain and Western Bluebirds at both sites combined. This lack of nest initiation and egg-laying resulted in a 65% reduction in productivity (chicks fledged per pair) in Mountain Bluebirds and a 69% reduction in Western Bluebirds for both parks combined.

In contrast, nesting by Tree Swallows was 60% higher in Elk Meadow and 24% higher in Alderfer/ Three Sisters (Table 1). Tree Swallow productivity was 66% higher than average in Elk Meadow but 42% lower than average in Alderfer/ Three Sisters. In contrast to bluebirds, Tree Swallow chick loss was three times greater than egg loss. For these three species combined, only 75 total young were produced in Elk Meadow compared to an average of 141 young, and only 25 young were produced in Alderfer/ Three Sisters compared to an average of 58 young. The lack of nest initiation by bluebirds likely lead to above average numbers of House Wrens and Mountain Chickadees using the boxes. Productivity in

both of the species was higher than bluebirds or Tree Swallows.

Weather may have affected productivity in bluebirds and Tree Swallows. Although maximum and minimum monthly temperatures were close to average throughout the nesting period, monthly precipitation deviated substantially from normal conditions. Evergreen received 37 inches of snow in April and May, which was 68% above average, whereas rainfall in June and July was 53% below average. Heavy snow in April and May may have negatively affected nest initiation and hatching success of bluebirds. Dry conditions in June and July may have reduced food availability and increased chick loss in Tree Swallow nests. It will be interesting to see how bluebirds respond in 2018. We certainly hope they will return and begin to recover their



Mountain Bluebird © Rachel Hutchison

In Elk Meadows and Alderfer/Three Sisters in 2017...



30% to 90% FEWER bluebirds completed nests and laid eggs

24%-60% MORE Tree Swallows completed nests and laid eggs



Tree Swallows perched on bluebird nest box © Rachel Hutchison

					Po-	
	Bluebirds		Swallows		House	Mountain
	Mountain	Western	Tree	Violet- green	Wren	Chickadee
Elk Meadow				Win		
Nests with eggs in 2017	12	1	13	4	8	
Average nests with eggs	17	10	8			
Successful nests in 2017	9	1	13	2	6	
Clutch size in 2017	5.3	5	5.4	4.3	6	
% hatched of eggs laid in 2017	59	100	90	61	69	
Average % hatched of eggs laid	73	85	75			
% fledged of eggs laid in 2017	39	80	66	54	60	
Chicks fledged/pair in 2017	2.1	4	3.5	2.3	3.6	
Average chicks fledged/pair	3.3	3.8	3			
Young produced in 2017	25	4	46	7	29	
Average young produced	62	51	28			
Alderfer/Three Sisters						
Nests with eggs in 2017	4	4	6	1	3	3
Average nests with eggs	6	6	5			
Successful nests in 2017	2	3	5	1	3	2
Clutch size in 2017	4.8	5	4.5	5	7	4.5
% hatched of eggs laid in 2017	37	70	81	60	100	100
Average % hatched of eggs laid	71	69	69			
% fledged of eggs laid in 2017	26	60	30	60	100	89
Chicks fledged/pair in 2017	1.3	3	1.3	3	7	4
Average chicks fledged/pair	3.3	3.1	2.7			
Young produced in 2017	8	12	8	3	21	8
Average young produced	22	22	14			

Table 1. Breeding success of birds using nest boxes in 2017 and average success in Elk Meadow (2009-2016) and Alderfer/Three Sisters (2011-2016) Open Space Parks, Evergreen, Colorado. Some nest boxes where eggs were laid were destroyed before outcomes could be determined.

On Sunday, Dec. 17, Evergreen Audubon will conduct the 49th Christmas Bird Count for the Evergreen/Idaho Springs area. This is one of about 2500 Christmas counts held each year throughout the Western Hemisphere.

On that day we will head out in small groups to find as many species and individual birds as we can in a 15-mile-diameter circle that extends from Robinson Hill Road on the north (north of I-70) to just south of the Brook Forest Inn; and from near Echo Lake on the west to the bottom of Kerr Gulch on the eastern side. Folks of all abilities and ages are encouraged to participate by joining one of our fifteen groups for all, or part, of the day.

If getting outside seems a bit daunting in mid-December, we also need people to stay at home and count the birds that come to their feeders. Barbara Jean Gard will be coordinating the feeder counters again this year, and feeder count forms are available when you sign up to help.

Each year we seem to have several interesting stories that emerge

from our day in the field. In 2014 it snowed all day and drove large numbers of Pine Grosbeaks and Cassin's Finches down from the

higher elevations. In 2015 we had gloriously mild weather allowing us to record almost 2000 more individual birds than the prior year, and to set a new record for our area of 57 species. Then, last year was the *Year of the Juncos*, with 2171 individuals of this one species, and with a great mix of all the various Junco sub-species.

As usual, this year we Mountain will continue to pay special attention to the Mountain Chickadees

Folks of all abilities and ages are encouraged to participate by joining one of our fifteen groups for all, or part, of the day.

and Pygmy
Nuthatches,
looking for high
counts in the
hope that we
can retain and/
or regain our
global dominance over
the other 2500
count circles.

After a full day of counting birds, participants are invited to one of Evergreen Audubon's premier events of the year – the Tally Rally. This is a traditional pot-luck supper, where we share our



Mountain Chickadee © John Breitsch (CC BY-NC-SA 2.0)

findings and adventures of the day. This year's hosts are Lisa and David Wald, who have once again generously made their home available for the occasion.

Please attend Evergreen Audubon's Dec. 7 chapter meeting where you can learn more about the Christmas Bird Count, talk with area leaders, practice identifying birds, and also sign up to bring a dish to the potluck.

You may register online for the bird counting portion of the day, and we will get in touch with you to help find a group for you to join, or, if you are an old hand at this, you may just get in touch with whatever area leader you have gone out with previously, or you can wait for an area leader to initiate contact. The bottom line - if you want to make sure that you are in the loop, register, and we will be in touch.



Pygmy Nuthatch © John Breitsch (CC BY-NC-SA 2.0)

HIGHLIGHTS FROM OCTOBER 21ST BIRD WALK TO WHEAT RIDGE

GREENBELT

CHUCK AID

The wind she did blow on Saturday morning, and the buffeting was plentiful, but twelve of us intrepid Evergreen Audubon birders persisted, and the results were most satisfactory (see bird list below)! Twelve waterfowl species (1 goose, 8 duck, 2 grebe, and 1 coot) gave us the opportunity for some easier identifications between wind gusts, the day being dominated by Gadwall.

One of the highlights was getting to see a late male Western Tanager. Note the slight bit of red-orange on the chin. These guys are mostly gone by the end of September, though a few stragglers, like ours, can be seen into early November.

Of course the real highlight was getting to see a true Colorado rarity, a Surf Scoter. This is a "sea duck" breeding in the boreal lakes of Alaska and Canada, and then returning to the sea where they occur almost exclusively, wintering off the coasts of North America - on the Pacific coast from southern British Colombia to Baja California. They occur each fall in Colorado as a rare migrant. Note the broad-based bill, the the white cheek patches, and that there are no white wing patches (which distinguishes it from it's congener, the White-winged Scoter).

Historically it was thought that they were mostly on the eastern plains near the foothills (not a surprise that this is also where the majority of Colorado's birders are found), but as more birders investigate the intermountain parks we are seeing good numbers of migrant Surf Scoters there as well. Immature birds and females are very similar in plumage, though because our bird apparently lacked a whitish breast it was probably a female.

It was neat to see the Surf Scoter hanging out in a mixed-species group along with three Western grebes and several Ruddy Ducks. Note the white cheek on the male Ruddy and the striped cheek on the female.

Another great day of birding, and, oh yeah, the wind did finally start to abate some by late morning, and we found ourselves in the midst of another glorious fall day.



Surf Scoter © Howard Patterson (CC BY-NC-SA 2.0)

Wheat Ridge Greenbelt, Oct 21, 2017 30 species

Canada Goose (<i>Branta canadensis</i>)
Mallard (<i>Anas platyrhynchos</i>)
Surf Scoter (<i>Melanitta perspicillata</i>)
Bufflehead (<i>Bucephala albeola</i>)
Hooded Merganser (<i>Lophodytes cucullatus</i>) 9
Ruddy Duck (Oxyura jamaicensis)
Pied-billed Grebe (<i>Podilymbus podiceps</i>) 2
Western Grebe (Aechmophorus occidentalis)
Bald Eagle (Haliaeetus leucocephalus)
Red-tailed Hawk (Buteo jamaicensis)
American Coot (Fulica americana)
Ring-billed Gull (<i>Larus delawarensis</i>)
Rock Pigeon (Columba livia) 8
Mourning Dove (<i>Zenaida macroura</i>)
Belted Kingfisher (<i>Megaceryle alcyon</i>)
Downy Woodpecker (<i>Picoides pubescens</i>) 1
Northern Flicker (Colaptes auratus) 5
Blue Jay (<i>Cyanocitta cristata</i>)
Black-billed Magpie (<i>Pica hudsonia</i>)
American Crow (Corvus brachyrhynchos)
Black-capped Chickadee (<i>Poecile atricapillus</i>) 6
American Robin (<i>Turdus migratorius</i>) 9
European Starling (Sturnus vulgaris)
Song Sparrow (Melospiza melodia)
Western Tanager (<i>Piranga ludoviciana</i>)
Red-winged Blackbird (<i>Agelaius phoeniceus</i>)
House Finch (<i>Haemorhous mexicanus</i>) 8

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UPCOMING PROGRAMS & EVENTS NOVEMBER Wednesdays After School Program 3:30 pm - 5:30 pm **Education Center** Wednesday, 1st **Guided Bird Walk** 6:30 am -11:30 am **TBD** Thursday, 2nd **Chapter Meeting** 6:30 pm - 8:30 pm **Education Center DECEMBER** Wednesdays After School Program 3:30 pm - 5:30 pm **Education Center** Thursday, 7th Chapter Meeting - Prep for 6:30 - 8:30 pm **Education Center Christmas Bird Count** 7th thru 10th Birding Trip to Bosque del Apache Wildlife Refuge **Christmas Bird Count** Sunday, 17th All day JANUARY Thursday, 11th **Annual Banquet** Beaujo's Pizza Time and registration

MEMBERSHIP MATTERS!

coming soon

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)							
		Individual	Family					
	Annual dues	\$ 25						
	Additional donation	\$	\$					
	Total enclosed	\$	\$					
Enclosed is my check payable to	e: Evergreen Audubon, P.O.	Box 523, Evergree	n, 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.