The Heron Herald



Rainier Audubon Society

January 2018

Rainier Audubon Membership Meeting

The Birds of New Zealand: Past and Present by Kim Adelson

7:00 PM January 15, 2018

any of New Zealand's birds are *strange*: they evolved in profound isolation, in a land without mammals and with few flying insects. Facing little competition and predation pressure, they slowly changed. As a result, they include the largest..., the smallest..., the heaviest..., the rarest..., the most ancient..., the most mammalian, and the only... species of many types of birds. New Zealand has penguins and parrots and kiwis and wattle birds, and 80% of its land birds can't be found anywhere else. Come hear a discussion about the fascinating birds, both living and extinct, that roam (or roamed) New Zealand.

Kim Adelson is Treasurer and Climate Change Initiative Coordinator for the Black Hills Audubon Society. She regularly writes a column for The Echo, BHAS' bimonthly newsletter. She was a college professor for more than 30 years, teaching at the University of Minnesota, Ohio Wesleyan University, and Canterbury University in Christchurch, New Zealand. She has a master's degree in evolutionary biology and a doctorate in psychology from the University of Pennsylvania. Kim got the "birding bug" about 30 years ago, when she and her husband moved into a house in the woods, and had 42 species of birds in their yard. She travels extensively to see birds – highlights include Namibia, Australia, and Indonesia to bird watch. Kim moved to Washington 2 years ago, fulfilling a life-long dream to





do so. She is passionate about preserving our beautiful habitat and the wildlife in contains.

Join us at 6:30 for conversation and refreshments.

RAS Mission Statement

To conserve and restore natural ecosystems and protect birds and other wildlife for the benefit of humanity and biological diversity in South King County and the world we live in.

Rainier Audubon programs are held at 7:00 PM at the Federal Way United Methodist Church 29645 - 51st Ave. So. 98001 (in unincorporated Auburn)

New Rainier Audubon Facebook Page

https://www.facebook.com/rainieraudubonsociety/

New Rainier Audubon Google Group / email list

We are combining the old Rainier Leaders email list with the ras-activities list into a new RainierAudubon google group.

The [ras-activities] group has been renamed to [RainierAudubon]. So if you were previously a member of this list, then you are still a member of the renamed group. The only difference being that when you send an email to this group, the address is RainierAudubon@googlegroups.com

If you did not get an invitation, you may request to join the group by going to groups.google.com and searching for "Rainier Audubon". You can then request to join the group.

Alternatively, you can sign up on the RainierAudubon.org website.

Upcoming Programs

Dale Meland

- February 2018 "Elwha Dam Removal and Recovery Update" by Jeffrey Duda
- March 2018 "Wolf Haven International: World of Wolves"
- April 2018 "Washington Birds and Climate Change" by Trina Bayard and Jen Syrowitz
- May 2018 "Bees and Wing Nut Honey" by Emmy Scharnberg



Rainier Audubon Society Directory Position Name **Board Member** Phone email President Heather Gibson Yes 206-226-2050 hedder swedder@yahoo.com Vice President Jay Galvin Yes 253-939-3094 gjgalvin@comcast.net Open Secretary 253-941-7372 Treasurer Laura Lavington Yes laura.lavington@gmail.com 206-767-4944 Membership Chair Pat Toth Yes h2opat@msn.com 253-941-3933 **Education Chair** Cindy Flanagan Yes camcalcin@hotmail.com Program Chair Dale Meland No 253-946-1637 dmeland@hotmail.com Barbara Petersen Field Trip Chair Yes 253 389 3204 bpbatfan@aol.com Publicity Chair Jay Galvin Yes 253-939-3094 gjgalvin@comcast.net Backyard Habitat Chair Marie West-Johnson Yes 206-817-8754 crgrie123@yahoo.com Conservation Chair 253-796-2203 Dan Streiffert No dan streiffert@hotmail.com Newsletter Editor Dan Streiffert No 253-796-2203 dan_streiffert@hotmail.com Webmaster Treesa Hertzel No 253-255-1808 Autumn207@comcast.net Member at Large Stephen Feldman Yes 360-802-5211 stephanfeldman@gmail.com No 253-517-3633 sandra.embrey@gmail.com Hospitality Sandra Embrey Mailing Debra Russell No debrarussell@comcast.net 425 829 4008 425-432-9965 Lifetime Members Max Prinsen Yes

Field Trips - Barbara Petersen



Weekly Birdwalks at Nisqually

Wednesdays 8 am to 11 am Leader: Phil Kelley

Join Phil Kelley on his weekly bird walks as he counts the birds at Nisqually NWR. The group walks over to an area near the visitor's center to view the entry road estuary, and then takes the boardwalk/trail loop out to the Twin Barns, and the Nisqually overlook area. From there, the group walks the dike, and back to the Riparian Forest.

Bring: Good walking shoes or boots, rain gear, water, snacks, and \$3 for entry fee unless you have a pass. Scopes are welcome.

Meet: At the Visitor's Center Pond Overlook.

Directions: Take I-5 south from Tacoma and exit to Nisqually NWR at exit 114. Take a right at the light.

Sign-up is not necessary. Call or email Phil Kelley if you have questions. Phil Kelley, Lacey, (360) 459 1499, scrubjay323@aol.com

Carnation and the Snoqualmie River Valley

Saturday, January 6th, 2018 8 AM - 5 PM Leader: Jim Flynn

The still rural country around Carnation is a great King County winter birding destination. Various locales such as Told-McDonald Park, Carnation Marsh and Sikes Lake provide the opportunity to find a wide array of birds such as swans and geese, raptors, sparrows, woodpeckers, etc. Some target birds for our day will include Northern Harrier, Red-breasted Sapsucker and American Dipper.

We will likely have a lunchtime break at the QFC/Starbucks in downtown Carnation for a winter warm up - since this is a local trip we can start a little later than normal too - should be a civilized trip, though hopefully one with a few wild moments! Meet at 8 AM at the South Renton Park & Ride (205 S. 7th St), just north of Grady Way and Renton Village Shopping Center.

Bring the usual warm clothes and rain gear, binoculars, snacks and water. Lunch will be available in Carnation if needed or pack your own.

E-mail Jim Flynn at merlinmania@comcast.net or call/text 206-399-6418 to sign up.

Lake Wilderness Arboretum

Saturday, January 13th Time: 9-11:30 am

Leaders: Calen Randall & Cindy Flanagan

We are excited to offer a new field trip in our Rainier Audubon circle. Come explore the Lake Wilderness Arboretum in Maple Valley. The Arboretum has a great variety of native plants, a 23-acre forest to find woodland birds, and easy lake access to watch waterfowl.

Meet at the Lake Wilderness Park main entrance parking lot which is to the left of the Lake Wilderness Arboretum.

Lake Wilderness Park 22520 SE 248th St. Maple Valley, WA

To sign up contact

Cindy Flanagan Email: camcalcin@hotmail.com

Cell: 253-315-0799



Rainier Audubon Partnering with King County Renton Area Library

Presentation "Rafting the Marsh Fork of the Canning River" by Dan Streiffert

January 11th 11:00 AM Fairwood Library 17009 140th Ave SE, Renton, WA 98058

Dan will present his 12-day rafting trip through the Arctic National Wildlife Refuge—which under the current Federal Administration is under threat, as the Senate has introduced a bill that would open up drilling rights in the Arctic National Wildlife Refuge in order to pay for some of the administrations tax reform proposals.

Presentation "Backyard Birds and Plants to Attract Them" by Marie-West Johnson

January 27th 10 AM Renton Public Library 100 Mill Avenue South, Renton, WA, 98057

Marie will present a slide show of native plants to plant in the backyard and the birds that will come to indulge in these wonderful plants.

Presentation "Bird Identification and Etiquette" by Jay Galvin

Saturday, February 24 11 AM Renton Public Library

Jay's presentation covers the basics of bird ID, (tools needed, ID through color, flight patterns, body shape, etc.). He will also cover proper techniques for bird approach, personal space, and photo technique.



inter is an exciting season here at the Rainier Audubon. Our terrific wintering birds like swans, loons, and Varied Thrush are back and the start of winter is punctuated by our annual Rainier Audubon Christmas Bird Count, one of my favorite days of the year. While every December, I look forward to the holiday season of birding, this year I've been even more eager due to the return of the Rainier Audubon Christmas Bird Count (CBC4Kids). Last fall, after starting the Rainier Audubon Youth Naturalists, we tested out the idea of a kids CBC based around family participation. In a shorter version of our CBC, we assigned families to three different areas led by Rainier Audubon volunteers and got out for a couple hours of birding before returning to the meeting hall for hot chocolate and birding stories. The first CBC for Kids turned into a wonderful success and all the families made sure that we would continue in 2017.

This December, parents, kids, and leaders alike congregated for the 2017 edition of the CBC4Kids and once again it was well attended. In total, 21 people spread over four families and six leaders all ventured out on the count. That's about a third of the participation we get for our full scale CBC! After meeting at the Rainier Audubon room in the church, we split into our three groups. Area 1, led by the duo of Barbara Petersen and Steve Johnson, trekked out to Redondo Pier (Des Moines) to find some seabirds. Area 2, guided by Cindy Flanagan, checked out North Lake (Federal Way) in search of Redheads and other ducks. Last, but not least, Area 3, aided by leaders Dan Streiffert, Jay Galvin, and myself, stopped along Frager Road and West Valley Highway (Kent/Auburn) for some Green River Valley specialties.

As always, each group came back with some good birds and some entertaining stories were shared over hot cocoa. The

Seen & Heard by Calen Randall

Redondo Pier group got lots of great looks at a pair of Red-tailed Hawks and a plethora of seabirds. Many of the seabirds were new species for the kids and parents including several Rednecked Grebes and a Common Loon. "I liked the Harlequin Ducks," stated Drake, one of the Area 1 birders, "they're my favorite duck because they're so colorful." The Area 1 party also spent some time on a challenging task-identifying the gulls on the pier. The group managed to pick out several Mew Gulls, some California Gulls, and even a Ringbilled Gull. Great job Area 1!

Area 2 happily reported that North Lake was "full of ducks" and though the



Redheads were nowhere to be found (possibly on Lake Killarney), the group got good looks at a Ruddy Duck, some Ring-necked Ducks, and hundreds of American Wigeon. Said five-year old participant Milo, "some of the lake was frozen, so we got to watch ducks swimming in an ice hole!" Another highlight of the day came when Milo's mom Brittany called out about a purple and orange bird at the North Lake meadow. The bird, a Varied Thrush, turned out to be a lifer for Brittany and her family!

The Area 3 party first started the count on 285th street in Auburn. Last year, we had spotted a Wilson's Snipe in the ditch on the far side of the road; however, this year 285th went snipeless. That said, we were nonetheless surprised to count over fifty Killdeer in the plowed fields. "It seems like every time we finish counting them

more start moving," commented youth naturalist, Declan. Mixed in with the Killdeer was an American Pipit which everyone got good looks of through the binoculars. A Spotted Sandpiper also popped up. On Frager Road, we found two new birds for mom Christine and her three kids Declan, Thalia, and Colin. First, we pulled over at Elliott Farms and I told them how ten years ago, no Eurasian Collared Doves were in the area, but now the entire farm is flooded with them. No sooner did we hop back in the car after watching the dozens of doves when two California Scrub Jays popped up next to us. Again, I recanted the story of the scrub-jays which, like the doves, were never found in the area until the past decade.

> Thankfully, the request for fine weather was fulfilled, as we luckily placed the count on a crisp clear day sandwiched between a week of fog and a week of drizzle. We all froze a little less than on the chilly first edition and we even managed to increase our total species on the count from 44 to 53! On a personal note, I greatly enjoyed hearing each family talk about what great birds they saw and the fun stories that went with the birds. Since starting at the University of Washington, I have only seen everyone from the youth group

once on my November Nature Walk, but it was quite apparent how much everyone has learned from identifying the birds to bird behavior. Above all, the second annual CBC4Kids was a wonderful opportunity to see the kids, parents, and leaders get out in our local environment and watch the amazing birds that inhabit it. One thing is for sure, I, like the rest of the Kids CBC crew, can't wait for next December for the next Rainier Audubon CBC4Kids!

Recent Sightings

Kent, King County

Red Crossbills have been scarce this year, but way back at the beginning of November, Marie and Craig West-Johnson had a surprise flock at their feeders. Not only were the crossbills a (Continued on page 5)

Calen is an 18 year old birder entering his seventh year writing the Seen and Heard. Currently attending the University of Washington, Calen enjoys birding in the South King County and coastal British Columbia region.



or the past 16 months, the
Rainier Audubon has been
working in coalition with the
Save Weyerhaeuser Campus group
to seek better development solutions
on the historic Weyerhaeuser
Campus than the current 1.5 million
square feet of industrial warehousing

Save Weyerhaeuser Campus Group Meets with Governor

proposed by new owners, IRG. Our focus is to protect North Lake's undeveloped west shoreline and watershed, wildlife habitat, the Rhododendron Species Botanical Garden and Pacific Bonsai Museum; to preserve the forests, meadows and trails and public access to them; and to maintain the campus character through high-quality low-impact development that blends with the environment and brings living-wage jobs to the region.

"Save Weyerhaeuser Campus President Lori Sechrist and Board Member Richard Pearson attended a December 6 roundtable meeting with Governor Jay Inslee and 30th District State Representative Mike

Pellicciotti that focused on climate change and the environment.

Governor Inslee listened as Sechrist briefly shared the Save Weyerhaeuser Campus vision for the historic Weyerhaeuser Campus in Federal Way, along with SWCs concerns about impacts to the North Lake/Hylebos Watershed, loss of urban forest and open green space, and increased traffic if IRG builds is proposed 1.5 million square feet of warehouses.

The governor communicated his understanding that the Weyerhaeuser Campus redevelopment project "is a huge concern for the city of Federal Way and the entire region," Sechrist said. He also committed his help and support when Sechrist stated the need for a cumulative study of the impacts, in addition to her request for help from the state's economic development agency in finding a better use for the property than industrial warehouses.

Thank you to State Representative Mike Pellicciotti for making sure the Save Weyerhaeuser Campus representatives were included in this small group of community members who met with Governor Inslee in Federal Way." -excerpt from Save Weyerhaeuser Campus Facebook

Seen & Heard (Continued from page 4)

first time feeder bird for Marie, but she also got some great photos. Thanks for the report Marie!

Highline College, Des Moines

While walking around the Highline College pond trail Lonnie Somer spotted a couple surprises including two of three wintering warbler species in **Yellow-rumped** and **Townsend's Warblers**. Lonnie also glimpsed a **Cooper's Hawk**, a **Pileated Woodpecker**, and **Double-crested Cormorant**. The last time a cormorant had been sighted at Highline was 2016, by Lonnie himself.

Federal Way & Des Moines Coasts: Dash Pt./Dumas Bay/Redondo/Saltwater/Des Moines Marina

Through November and December I frequented these hotspots and the birds came out in droves. I viewed **Red-throated Loons** at Dumas Bay along with **Common** and **Pacific Loons** at the other four. In addition to loons, the grebes have been plentiful from **Western** to **Horned** to **Red-necked Grebes** which were especially abundant at Des Moines Marina. One of my favorite alcids to watch, the **Rhinoceros Auklet**, can be spotted at both Des Moines Marina and Dumas Bay. Also, if you are in search of the vibrantly coloured **Harlequin Ducks**, Saltwater State Park is your place to go as up to a dozen have been sighted there. All four parks provide ample opportunity to practice differentiating between **Common** and **Barrow's Goldeneyes** and if you want to practice identifying **White-winged Scoters**, Dash Point has hosted a flock of them.

Bird of the Month: Steller's Jays

Reprint Courtesy of Wild Birds Unlimited, Burien

Steller's Jays are large songbirds with large heads, chunky bodies, rounded wings and a long, full tail. Their bill is long, straight and powerful. They have a prominent crest that often stands nearly straight up from their head.

Steller's Jays are very dark birds. The head is black and the body is blue. The lightest blue is on the wings. They have white markings above their eyes that are fairly inconspicuous.

Steller's Jays are bold, inquisitive, intelligent and noisy. They are social birds traveling in groups and sometimes playing with each other or chasing each other. They move by hopping on their long legs and at times, cocking their heads in order to observe their surroundings.

Steller's Jays are found in the evergreen forests of western North America. They are often seen at campgrounds, picnic areas, parks and backyards.

Steller's Jays eat insects, seeds, berries, nuts, small animals, eggs and nestlings. They will come to feeders for peanuts, sunflower seeds and suet. They will also eat garbage and unguarded picnic items. Because these birds have excellent spatial memories, they will often bury food items such a whole peanuts for a winter food source.

The nest of the Steller's Jay is a bulky cup of stems, leaves, moss and sticks held together with mud. The inside is lined with pine needles, soft rootlets or animal hair. Both members of the pair choose the nest site and both gather nest material. The nest is built on a horizontal branch close to the trunk and often near the top of a conifer tree.

The female will lay 2 - 6 eggs that will be bluish-green with dark brown, purple or olive spots. She will sit on them for 16 days. After the eggs hatch, the chicks will leave the nest after another 16 days.

Other cool facts:

Steller's Jays and Blue Jays are the only North American jays with crests.



Steller's Jays have the most frequently misspelled names in all of bird watching. They are named after George Steller, a naturalist on a Russian explorer's ship, who discovered them on an Alaskan island in 1741. He also discovered the Steller's Sea Lion and the Steller's Sea Eagle.

The Steller's Jay and the Blue Jay are the only New World jays that use mud to build their nests.

The Steller's Jay shows a great deal of variation in appearance throughout its range with some populations featuring black crests and others blue.

Steller's Jays are habitual nest robbers.

The Steller's Jay can imitate other birds, squirrels, cats, dogs, chickens and some mechanical objects.

The oldest recorded Steller's Jay was a male at least 16 years 1 month old. He was found in Alaska in 1987 and had been banded in that same state in 1972.

Audubon's New Native Plants Database

National Audubon has a new online Native Plants Database that can be accessed at https://www.audubon.org/native-plants.

Enter your zip code to use Audubon's native plants database and view a list of the best plants for birds in your area, as well as local resources and links to more information. By entering your email address, you'll receive an emailed list of the native plants you've selected, get additional tips on creating your bird-friendly habitat, and help us keep track of your contributions to our efforts to get 1 million native plants for birds in the ground.



he time is upon us when everyone is thinking about new beginnings. It got me to wondering about baby birds. What kind of condition are they in when they hatch and how long does it take before they take that first big leap of leaving the nest?

Let's take a look at some of our most common backyard birds and find out.

The American Robin begins its life in a beautiful sky blue or blue-green egg. The chicks are helpless at birth, mostly naked with sparse whitish down. It will be thirteen days before they leave the nest.

The egg of the Black-capped Chickadee is white with reddish-brown spots. The chicks are born with eyes closed and naked except for six small patches of mouse-gray downy feathers on the back and the head. They will leave the nest in twelve to sixteen days.

Northern Flickers lay eggs that are pure white. The chicks hatch naked with pink skin, eyes closed and sporting a sharp egg tooth at the tip of their bills. They are very clumsy and it will take twenty-four to twenty-seven days for them to fledge.

The egg of the striking Steller's Jay is bluish-green with brown, purplish or olive spots. The just-hatched babies look like tiny plucked chickens! They will leave the next in sixteen days.

The Red-breasted Nuthatch lays a white, creamy or pinkish-white egg speckled with reddish-brown. The chicks are born naked and helpless but will take off on their own in eighteen to twenty-one days.

Mewsings from Millie

Reprint Courtesy of Wild Birds Unlimited, Burien

The Bewick's Wren begins life in a white egg with reddish-brown or purplish spots. The chicks only weigh 1.4 grams, have their eyes closed and have pink skin with sparse down. They'll be ready to take that giant leap though in fourteen to sixteen days.

House Finches lay eggs that are pale blue to white speckled with fine black and pale purple. The babies are naked except for sparse white down along the feather tracts. Their eyes are closed and they are also clumsy. They'll be ready to fly though in twelve to nineteen days.

The colorful eggs of the Dark-eyed Junco can be white, gray,pale bluish-white or pale greenish-white speckled with brown, gray or green. The chicks are naked except for dark gray down on the back. Their eyes are closed. They will be ready to leave the nest in ten to thirteen days.

The American Goldfinch lays eggs that are pale bluish-white sometimes with faint brown spots around the large end. The chicks are helpless with wisps of grayish down. They will fledge in eleven to seventeen days.

Spotted Towhees begin life in an egg that is white, gray, green or pinkish spotted with reddishbrown, purple or gray. The babies are naked except for tufts of grayish down, they are clumsy and their eyes are closed. They will leave the nest in ten to twelve days.

Downy Woodpeckers lay pure white eggs just like the flicker. The chicks are naked with pink skin and they also have a sharp egg tooth at the tips of their bills. Their eyes are closed. They will be ready to fly in eighteen to twentyone days.

Anna's Hummingbirds lay coffeebean sized eggs that are white. The tiny hummers hatch with eyes closed, very little down and are virtually helpless. They will be ready to say goodbye to mom in twenty days. The American Crow lays eggs that are pale bluish-green to olive green with blotches of brown and gray toward the large end. The chicks are naked except for tufts of grayish down. Their eyes are closed and they, too, are clumsy. It will take twenty to forty days before they are ready to leave the nest.

So, as you contemplate new beginnings or perhaps life-style changes, think of these tiny beings and the miracle that is their survival. Then come spring, join with nature and celebrate the magic that is the life of birds.

Until next time,

Millie, the Muse of Mews



Watching for Red-breasted Nuthatches

Rainier Audubon participating in new citizen science project to help understand how birds are reacting to climate change.

ed-breasted Nuthatches are among the 189-bird species in Washington whose ranges are expected to shift and shrink due to a changing climate according to Audubon's Birds and Climate Change Report released in 2014. A new Audubon citizen science project is taking flight to understand how birds are reacting to climate change and how humans can prepare for these changes.

To test predictions of the report, Audubon is running a new citizen science project called "Climate Watch." *Climate Watch* aims to document species' response to climate change by having volunteers in the field look for birds where Audubon' climate models project range expansion and loss by the 2020s.

Climate Watch focuses on species with the strongest predictions in the climate models. The Climate Watch survey will focus on specific species for which Audubon climate models have indicated strong predictions and which are easily detected in the field. For 2018, Audubon will focus



on two groups of species: bluebirds and nuthatches. Specifically, in our Rainier Audubon Area, we will survey Redbreasted Nuthatches.

Each Rainier Audubon team will go out to a designated square (6.2 mile by 6.2 mile) in the Rainier Audubon area. Each square consists of 12 survey points that must be covered. (5 minutes per each survey point).

Join the Watch

- Sign up Contact Calen Randall at <u>calenbirds@hotmail.com</u>
- 2. Hone your Red-breasted Nuthatch identification skills
 To learn more about Red-breasted Nuthatches, visit the National Audubon online field guide:
 http://www.audubon.org/field-guide/bird/red-breasted-nuthatch
- 3. Get ready for the survey Participant Orientation: Thursday, January 11 7-8:30 PM Webinar

Key survey dates (choose 1 or both): Saturday, January 20th: 8:30-11:30am Sunday, February 11th: 8:30-11:30am

Yellow-breasted Chat Song

By Thomas Bancroft

he morning opened calm but suggested it would be hot before long. Cottonwoods lined Lower Umptanum Creek in Kittitas County, and patches of quaking aspens grew along the trail. The morning bird chorus would start in a half hour and the trail seemed sublime in the subdued light of my headlamp. On this mid-June morning, the aspens smelled sweet, and the grass lapped at my waist. Except for the nearby creek, the valley was quiet as I sat down under some aspens to wait.

The first squawk came from the far side of the grove. Whistles, mews, catcalls, cackles, and rattles then penetrated the trees. The song seemed more rapid than I remembered from western Pennsylvania, but definitely, a yellow-breasted chat had begun to declare that morning had arrived and this part of the valley was his. After twenty minutes, when nothing else had started to sing, I began to work slowly around the aspen grove. He sang from the opposite side of an elderberry bush and was down out of sight.

My first yellow-breasted chat was on our neighbor's farm when I was in junior high in Western Pennsylvania. The neighbor had not mowed his field down over the back hill for many years, and the bushes had grown

thick. I was trudging up the dirt lane through the patch when this series of whistles, cat-calls, clucks, and rattles came spilling out of the thick bushes. I went home and immediately put my mother's LP of Peterson's Birds of Eastern North America on the phonograph in the dining room. Eventually, the yellow-breasted chat call came through the speakers. I never did see the bird on several return trips to the abandoned field.

This spring the American Ornithologist Union removed this bird from the wood warbler family, Parulidae, and put it into a monotypic family, Icteriitae. The two "i" in Icteriitae keeps it from being with blackbirds, meadowlarks, and orioles. Scientists now think it is more closely related to the tanagers and old world buntings than it is to the wood warblers. The reality is that it still is an enigma. The call seemed different from any wood warbler I knew and different from almost anything else too.

Dr. Donald Kroodsma once answered a question about how he learned to identify bird songs by saying that he listened with his eyes. Here is a sonogram movie of 10 minutes of this yellow-breasted chat's song.

https://vimeo.com/221848178

His calls are shown by intense red, and where the sonogram becomes almost white, it is showing the loudest notes. Individual calls, songs, and screeches range from 1,500 kilohertz to about 15,000 kilohertz. He constantly shuffled his different notes in the sequence. A lazuli bunting and an American goldfinch can also be heard in the background.

The male chat sang non-stop for more than an hour along Umptanum Creek, never taking more than a few second pause in his rattling. Finally, I left to hike farther up the canyon.

Tom is on the Board of Washington Audubon and a member of Washington Ornithological Society.









Auburn, WA 98071

"It is horrifying that we have to fight our own government to save the environment."

- Ansel Adams

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Rainier Audubon Membership Subscription or Renewal Form

One-year Membership in Rainier Audubon \$25—Individual Membership / \$30—Family Membership

Circle one New / Renewal For new members:

How did you hear about Rainier Audubon Society?

To join or renew, mail this application with your payment to: Rainier Audubon Society - Membership

> PO Box 778 Auburn, WA 98071

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RAS Chapter membership includes 9 issues of the Heron Herald annually but does not include AUDUBON magazine.