The Heron Herold



Rainier Audubon Society October 2014

October 20 2014 RAS Membership Meeting

Jen Syrowitz

Chapter Associate
Audubon Washington

Meeting begins at 7:00 PM.

Washington, a state field office of the National Audubon Society, located in Seattle. Jen coordinates the conservation and advocacy efforts of the 25 independent Audubon Chapters in Washington State. She spends much of her time thinking about how collaborative action can be harnessed to meet the conservation needs of birds at local, regional, state, and flyway scales.

Jen will discuss the science, policy, and education work happening at Audubon Washington, her role in engaging the Audubon network, and how chapter-state collaborative efforts can benefit and augment local, regional, state, flyway, and national bird conservation, with specific examples regarding bird friendly communities, sagebrush conservation, and climate change. Jen will also showcase Audubon Works – Audubon's powerful new online community built to facilitate collaboration across the entire Audubon network; a place for all of Audubon's staff, chapter leaders, volunteers, and trained activists to come together to share ideas, experiences, best practices, and information.

Jen has been with Audubon since February 2013. She holds a Master of Environment from the University of Manitoba, and worked for a zoological society, a wildlife rehabilitation center, and a





municipal park system before finding a home for her interdisciplinary academic and occupational background at Audubon Washington.

Join us for refreshments and conversation at 6:30 PM.

Rainier Audubon programs are held at

Federal Way United Methodist Church, 29645 - 51st Ave. So. 98001 (in unincorporated Auburn)

Directions: In Federal Way, take 320th St. EAST past The Commons, crossing over I-5 and Military Rd.

At 321st St, turn left. Stay on 321st as it becomes 51st Ave. So. Follow 51st Ave. to 296th. Church will be on

Audubon's new study reveals the devastation global warming will likely bring down on birds—and identifies the habitat strongholds they'll need to hang on.

Western North Dakota is famous for its birds. The land here is checkered with neat squares of farm fields and native prairie overlying a scatter of pothole lakes, their curving shorelines shaped tens of thousands of years ago by chunks of melting glaciers. This rich landscape provides critical breeding grounds for millions of birds, from the Mallards and Blue-winged Teal that pour out of the so-called "duck factory" to the Bobolinks of the tallgrass prairie.

But the region is changing fast. Even as birds continue to flock here every summer, expanding agriculture has eaten away at their habitat, and since 2008 the area has

witnessed an energy boom of global proportions. Today the fields, prairies, and badlands are punctuated with hundreds of rectangles of raw, orange dirt, each studded with its own set of trailers, storage tanks, and nodding pumpjacks. Every day, companies use hydraulic fracturing to extract nearly a million barrels of oil from the Bakken formation, a layer of shale that lies about two miles beneath the prairie. Roughly 8,000 wells are operating already, and an additional 40,000 could be drilled and fracked in the next 20 to 30 years. In line at one brand-new convenience store, a woman carrying a hardhat sums up the prevailing attitude: "Patience are for doctors." In the Bakken, the time is now, and the future is a long way off.

Yet the Audubon Report, a groundbreaking new study by Audubon scientists, suggests that this place will become even more important for birds as the planet warms. For the 26 grassland bird species whose breeding ranges are projected to decrease dramatically by 2050, North Dakota will become an increasingly rare island of viable habitat

Brown Bag Auction

Lisa Mesplay has been the Auctioneer for our annual Brown Bag Auction at our November meeting. She is not available for this year, so we need someone to coordinate this event. This is an important fund raiser for the group, so please contact Lisa or another Board member if you can do this for us.

and suitable climate conditions, one of their few remaining refuges. Protecting a portion of the region for birds could mean the difference between survival and extinction for some species.

That's just one of the critical findings from Audubon's seven-year investigation into the expected effects of climate change on North American bird populations. And taken together, the news is grim indeed. By 2080, the climate model projects, dozens of avian species across the country could be hurtling toward extinction-and not just birds that are already in trouble.

Continued on

http://climate.audubon.org/article/stor m-gathers-north-american-birds

Volunteers

- Auctioneer for December meeting.
- Door Greeters for Membership Meetings
- Articles for Heron Herald—send to dan streiffert@hotmail.com
- Conservation Chair.
- Projection & Sound setup person for meetings.

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 Officers			
President	Dan Streiffert*	253-796-2203	
Vice President	Steve Feldman*	360-802-5211	
Treasurer	Laura Lavington	253-941-7372	
Secretary	Heather Gibson*	253-856-9812	
Program Chair	Dale Meland	253-946-1637	
Field Trip Chair	Michele Phiffer	206-246-0873	
Membership Chair	Pat Toth*	206-767-4944	
Backyard Habitat Chair	Open		
Conservation Chair	Dan Streiffert*	253-796-2203	
Mailing Chair	Debra Russell	425-271-0682	
Hospitality	Sandra Embrey	253-517-3363	
Newsletter Editor	Dan Streiffert*	253-796-2203	
Webmaster	Treesa Hertzel	253-255-1808	
Education Chair	Annette Tabor*	253-927-3208	
Christmas Bird Count Coordinator	Alex Juchems	253-529-8996	
Board Member	Max Prinsen	425-432-9965	
Board Member	Erin Wojewodski-Prinsen	425-432-9965	
Board Member	Lisa Mesplay	253-946-3820	
Board Member	Ed Stanton	206-870-3107	
Publicity	Tom Sernka	253-529-8970	
Volunteer Coordinator	Janet Williams	503-851-7721	
*Also serves as Board Member			

Board meetings are held the 2nd Tuesday of each month at 6:30 PM at the Federal Way United Methodist Church, and are open to all members.

Seen & Heard by Calen Randall

es, fall is here! And while I personally have enjoyed summer birding, fall brings much excitement to the world of birding. I anxiously await the first v's of migration that bring on the Greater-white Fronted Geese. It's time to reacquaint ourselves with our regulars the chickadees and juncos. I love watching them hopping around the yard caching away and talking in their chirpy voices. Ironically, I am even excited to watch a coot cruising along and bobbing its head to an unheard beat.

Since last fall, much has changed in our valley. It is exciting to see the return of farming in many fields along West Valley Highway, especially in the large field formerly owned by Smith Brother's

Farms. As well, the flower and vegetable stands are thriving, as every time we pass them, there seems to be an ample number of people buying from their stands. I did

stands. I did
notice a significant increase in corn crops.
I wonder what the effect of all of the corn
will be on the number of trumpeter
swans that we have this year. After a late
arrival last year (last year the first
trumpeter swan sightings were on
November 26th; in 2012, they were
sighted on October 25th), it will be
interesting to see when the first few
arrive. Will they prove that last year was
an anomaly and arrive earlier, or will
arriving late to the valley be the new

theme? Last year, we regularly saw about

twenty-five adults and two juveniles

around Elliot Farms on Frager Road. I wonder how many adults will be returning to the valley with their young this year?

I read an interesting article about a farmer named Jim Lawrence and his late wife, Sheila "The Swan Lady" of Monticello, Minnesota. Both Sheila and Jim had been feeding the swans for over 25 winters and have played a major role in helping repopulate Trumpeter Swans in Minnesota. Every day, the Lawrences spent ninety minutes feeding corn to the Trumpeter Swans and other ducks and geese species that winter at "Swan Park". In the beginning there were only fifteen or twenty Trumpeter Swans, now the flock numbers well over 2,000. This is one



of the largest flocks of migratory Trumpeter Swans in the world. You can view the Monticello swans during the winter on the "Swan Cam" on the city of Monticello website monticellocci.com/pages/swans.

Let me know when you hear those first trumpets!

Recent Bird Sightings:

Thanks to this month's reporter Mary Frey.

August 15th Mary Frey reported of



routinely seeing **Fox Sparrows** and **Pine Siskins** at her feeders.

Mystery Bird of the Month

Over the late summer there were many of these birds fluttering around the Green River Valley. Can you guess the bird? Here are the clues:

- A group of me is called a "charm", "rush", "treasury", or a "vain"
- I breed later than most North American birds, waiting for several species of plants to produce seeds before I nest.
- My diet is based solely upon vegetable items.
- My nest is a poor choice for the Brown-headed Cowbird to dump its eggs. Cowbird chicks are unable to survive on the all-seed diet that my chicks eat.
- I am the only finch that molts my feathers twice, once in late winter, once in late summer.
- I am one of America's birds

Who am I?

Send your sightings/hearings to calenbirds@hotmail.com I love reading your reports!

Answer: American Goldfinch

info@rainieraudubon.org

Bio: Calen is a 15 year old birder. He enjoys birding around Lake Fenwick, Frager Road, and Boeing Ponds—especially with Charlie Wright. Calen is thrilled to revive Charlie's 'Seen and Heard'. When not birding, Calen can be seen flying up and down the ice at Kent Valley Ice Center

Field Trips by Michele Phiffer



Weekly Birdwalks at Nisqually

Wednesdays 8:00 am to Noon 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.

Some may choose to continue on the new boardwalk extension which goes out toward the mouth of McAlister Creek. It has benches and covered viewing areas.

The walk totals 2.0 miles roundtrip to the boardwalk extension. In winter the estuary boardwalk will add an additional 1 3/4 miles total, so the whole walk including the boardwalk extension is up to 3 3/4 miles.

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,

Beaches And Parks -Fall Color and Fall Birds

Saturday, October 11 8:00 AM to Early-afternoon

Leader: Steve Johnson.

Visit picturesque beaches and parks in King County and Pierce County during a great time of year to look for returning fall birds. We'll travel to Lake Fenwick, Weyerhaeuser Pond, and to local parks and beaches along Puget Sound, searching for many species of sea birds and forest birds. This a good time of year to see scenic views and fall color. Expect to walk short distances from the cars.

People who wish to leave early may do so.

Bring: Lunch, a thermos and drinks, and warm clothes. A scope is very welcome.

Meet: 8:00 AM at the Star Lake P&R north of Federal Way.

Directions: Take I-5 to exit 147 north of Federal Way. Exit onto S. 272nd St, and go west one block to the light. Turn right and go one block into the P&R on the right.

Sign-Up: Call or email Steve Johnson, (253-941-9852), johnsonsj5@msn.com

Vashon Winter Water Birds

Wednesday, December 10 8:25 am to mid-afternoon

Limit 12

Leader: Ed Swan

We'll check out birds off the ferry aiming for several alcid species, all three kinds of cormorant and many types of ducks. We'll then head to Tramp and Quartermaster Harbors, the most reliable locations for Eared Grebe in King County and find more waterfowl and hopefully three to four species of loon. Time allowing, we'll go to Fisher Pond to see the freshwater ducks such as Wood Duck, Ring-necked Duck and Hooded Merganser.

Meet: On the 8:25 am ferry leaving from Pt Defiance ferry dock.

Directions: From I-5: Take exit 132 (Hwy 16). Proceed west on Hwy 16 approximately 3 miles and exit on the 6th Avenue exit (signed Vashon ferry). Turn left onto 6th Avenue at the stop light. Turn right at the next stop light onto Hwy 163 (Pearl Street). Proceed north, approximately 3.5 miles, to the stop sign at the entrance to Pt. Defiance Park. Stay in the right lane and bear to the right. Do not enter the park. Auto toll plaza one block on right. Ferry terminal located at end of street. Parking to the left of terminal.

Sign-Up: When you sign up, give your phone and email and indicate whether you can drive or not. Then we'll figure out ahead of time who should park and where you should park and who will drive participants around the Island. Participants who park should plan to park first, get a ferry ticket second and meet up with the group on the ferry.

Sign up with Ed at: edswan@centurytel.net

Don't forget the link to the Tahoma Audubon Field trips:

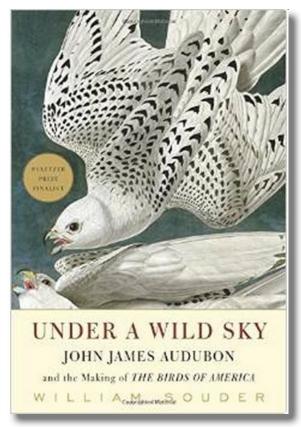
fieldtrips@tahomaaudubon.org



Book Reviews by Laura Lavington

his month I read a biography of John James Audubon: William Souder's 2004 Under a Wild Sky: John James Audubon and the Making of The Birds of America. When I first opened it, I was not sure that I was going to go ahead and read the whole book, but I found the writer's style to be engaging, and I was quickly wrapped up in the book. Under a Wild Sky begins at a turning point in Audubon's life: he was 38, extremely broke, and traveling from Louisiana to Philadelphia to try to get his drawings of birds published. Ultimately, Audubon was rejected by the scientific community of the east, and in the next few chapters William Souder interweaves information about Audubon's earlier years with a short history of Alexander Wilson's life. I did not know much about Scottishborn Alexander Wilson, other than that he published a book about American birds before Audubon created his famous The Birds of America. What I found out was that, although Wilson was already dead when Audubon got to Philadelphia hoping to publish his work, the American scientific community of the 1820s was loyal to Wilson and his American Ornithology, and it thus saw Audubon, who was straight from the backwoods, as some sort of imposter. In fact, in the eyes of the American establishment, not only was Audubon treading on Wilson's legacy, but Audubon had also appeared with highly untraditional animal drawings (before Audubon, animals were not depicted in motion or amidst vegetation). In the end, Audubon had to gather what money he could and take his work to England to be published.

Audubon was a businessman for some years, but he was never particularly successful—and instead was often in debt—because, since he was a teenager first-arrived in America from France, his passion was traveling around the countryside shooting birds to draw them. It is not entirely clear when Audubon first thought of publishing his work: he did not pursue publication until he desperately needed the money. As the reader quickly finds out, it is often difficult to know the truth about Audubon, for he had a tendency to lie. Often the lies are a little endearing, particularly when one imagines a buckskin-clad Frenchman living on what was then America's western frontier telling tall tales about his time in the woods. Good or bad, Audubon's tendency to not stick to the strict truth must have made his biographer's job a little more difficult.



Naturally, Audubon's lies and tall tales also sometimes fueled his detractors.

I saw a surviving copy of The Birds of America when I visited the Huntington Library in Los Angeles (it was behind glass, of course). I noticed that the book was quite large, but I did not particularly think about the size of it until I read Under a Wild Sky. Souder tells the reader that Audubon always drew life-size birds (when advised to scale down his work for publication, he refused). Audubon thus used huge paper—what was referred to as "double elephant." As one might imagine, The Birds of America was quite expensive. Not only was it huge, but each engraved picture had to be hand-colored (not by Audubon himself). William Souder is confident that fewer than two hundred copies of the book were ever created, partially due to its high price. The creation of the book took Audubon fifteen years (the pages were done in installments), and I think the following suggests that the book's true importance was not initially realized: some years after Audubon's death, his long-suffering widow sold the original copper engraving plates as scrap metal (she tried to sell them for what they were and could not). As they were being thrown into the furnace, the teenage son of the metal factory's manager realized



what they were and saved a few. Jump forward to today: according to William Souder, the last time (as of 2004) that an original complete *The Birds of America* came up at auction, it sold to someone from Qatar for \$8.8 million.

Audubon came to see his drawings as more than a favorite pastime or a means out of debt. Souder says that, while working on The Birds of America, Audubon began to describe it as a kind of divine mission. Souder quotes an Audubon letter: "I know that I am engaged in an arduous undertaking: but if I live to complete it, I will offer to my country a beautiful monument of the varied splendour of American nature, and of my devotion to American ornithology."

I definitely found John James Audubon to be an interesting figure, but I am otherwise a little uncertain about how I feel about him. Audubon killed a lot of birds. Yes, perhaps he was just a product of his times, but I guess it is my inability to understand that aspect of those times that makes me feel a little mixed about Audubon. Souder reports that Audubon "sometimes said a day in which he killed fewer than a hundred birds was a day wasted." Of course, Audubon shot birds so that he could draw them, but he also shot birds simply because he liked shooting them. I had had some exposure to the reality of nineteenth-century America's ability to shoot vast numbers of birds when I read the book about the passenger pigeons, but ultimately, it is still something I can't grasp.

I never found any dryness or boring minutiae in *Under a Wild Sky*, so if you are interested in knowing more about the (second) father of American ornithology, I recommend the book.

Mewsings from Millie

FIRE! No one likes to hear that and we all know that a forest fire can be devastating to both humans and wildlife alike. Surprisingly, however, wildfires can be beneficial as well.

The biggest effect fire has on wildlife is the change in their habitats. Fire changes the proportion, arrangement and characteristic of habitats across the landscape. Immediately after a fire there can be a temporary loss of food and shelter. Animal populations may shift from ones that prefer cool, moist conditions to species that prefer warm, dry conditions.

Often after a fire, grassy habitats or broad-leafed forests become established. In some cases, the nutrition content and digestability of plants will increase as well. Fire-killed trees become food for millions of insect larvae and snags provide perches for raptors. Snags and woody debris also provide habitat for cavity nesters, reptiles, small mammals and even bears.

Here in the United States, there are six birds that rely on the restorative nature of wildfires to create the habitat they need to survive. These so-called "firebirds" are the Kirtland's Warbler, the Mountain Plover, the Brown Thrasher, the Black-backed Woodpecker, the Red-cockaded Woodpecker and the Wrentit.

Kirtland's Warbler is one of the rarest songbirds in North America. it can only be found in small areas of Michigan, Wisconsin and Ontario during breeding season. They nest primarily in large stands of young jack pine which are created by regeneration from seed after intense fires. A new forest can become a suitable home for the Kirtland's Warbler after about five years.

The Mountain Plover is a species of shorebird but it doesn't live near the shore or in the mountains as its name may imply. It lives on the Great Plains! This bird is highly dependent on disturbances such as grazing and fire. In Colorado's Pawnee National Grassland, controlled burns are used to create habitat for the Mountain Plover whose numbers are in decline.

Brown Thrashers thrive in areas that have had wildfires. They prefer shrubby habitats, forest edges and other types of second-growth or regenerated vegetation.

The Black-backed Woodpecker can be found in northern North America, the Rocky Mountains and the Sierra Nevada/Cascades. They love recently burned forests because there they can find their favorite treat: wood-boring beetle larvae. With their black backs they are perfectly camouflaged on the bark of burned trees as they forage for food.

The Red-cockaded Woodpecker was once common in the longleaf pine forests of the southeast. Historically, this forest type burned at least once every few years. This created widely spread trees that allowed the sun to nourish a great variety of forest plants. Today, longleaf pine is reduced to only 2% of its historic range, the frequency



of fires has been reduced and the Redcockaded Woodpecker has suffered as a result.

Fires create mosaics of shrub diversity. On the West Coast near the Pacific Ocean, the Wrentit thrives in habitat known as chaparral which is dominated by shrubs such as manzanita, huckleberry and salal. They can nest, find food and be protected from predators such as snakes and Western Scrub-jay.

So, fire CAN be a good thing!

Until next time,

Millie, the Muse of Mews

FREE DISCOVER PASSES FOR MEMBERS OF RAINIER AUDUBON SOCIETY

To support our state parks – and to boost membership - the local chapter of the Audubon Society, called the Rainier Audubon Society, is giving away free Discover Passes to any new member who joins Rainier Audubon during 2014.

All you have to do is come to a meeting, join up and get your free Discover Pass. The cost of joining is \$25.00/individual and \$30/family. The cost of a Discover Pass is normally \$35.00 dollars so you've just saved \$10.00 and you have a year's membership in the Audubon Society and a year's free access to all of the state parks in Washington.

Each Discover Pass can be used for any two vehicles you own. Just fill out two license plate numbers on the Pass, hang it from the rear view mirror of whichever car you're taking, and you're good to go for a full year of state park recreation.

The Rainier Audubon Society meets monthly at the United Methodist Church in Federal Way, and presents programs on all aspects of nature, birding, conservation, outdoor photography, and many other topics that adults and children who love the outdoors enjoy. For more information go to www.RainierAudubon.org.

Fun Facts About Woodpeckers

- Considering the pounding it takes, why doesn't a
 woodpecker's bill wear down to a ragged nub? Wear down it
 does, but special cells on the end of the bill are constantly
 replacing the lost material. This keeps the chisel-pointed bill
 strong and resilient, while actually allowing it to be sharpened
 with every blow.
- Woodpeckers use their stiff tail feathers for extra support when digging for insects or hollowing out a nest in a tree.
- A woodpecker's pointed tail feathers are especially strong and rigid. The tail bone, lower vertebrae and the tail's supporting muscles are also large in comparison to other birds. These modifications allow a woodpecker's tail to serve as a prop that supports their weight as they climb and cling to trees.
- Woodpeckers rarely climb down trees, their stiff tail feathers and relatively short legs are much better adapted for climbing upward instead of down.
- The contrasting black and white pattern found on the backs of many woodpeckers helps to conceal them from predators. Known as disruptive coloration, this sharp contrast in colors helps to break-up and conceal the shape and outline of a woodpecker as it climbs the side of a tree.
- The barbed tip of a woodpecker's tongue is very sensitive to touch and can both detect and impale insect larvae. The tongue is coated with sticky mucus that is secreted by large salivary glands; this coating helps to ensure that its prey does not slip away.
- Most woodpeckers' tongues are two to three times longer than their bills.
- The base of some woodpeckers' long, retractable tongues reach entirely around the back and top of the skull and end behind the right eye socket.
- To prevent small bits of debris from entering their nostrils while excavating trees, woodpeckers have tufts of stiff feathers growing over both nostrils.
- Woodpeckers have a third eyelid to help protect their eyes from debris while drilling into trees.
- Woodpeckers have a thicker skin than most other birds, an adaptation that has probably evolved from their constant contact with the rough bark of trees.
- Woodpeckers are among a very few birds that have zygodactyl feet – which simply means they have two toes pointing forward and two toes pointing backwards. Most birds have an arrangement of three toes forward and one backwards. Having two sets of opposing toes gives them a much better grip on the trees they land on and climb.
- While excavating a cavity, a woodpecker's head can strike a tree's surface at speeds up to 13- 15 miles per hour and do it at over 100 strokes per minute. This is equivalent to a person crashing head-first into a tree while running at top speed.

- In order for woodpeckers to survive the 10Gs of force that they can sustain with every blow against a tree, they have the following special adaptations:
 - The bones between the beak and the skull are joined by a flexible cartilage which cushions the shock of each blow.
 - The skull is made of spongy, air-filled bone and the brain is packed very tightly into the brain cavity with little room to rattle around during impacts.
 - The sheer force from each blow is directed not to the brain, but downward towards very strong neck muscles that act as shock absorbers.
 - A woodpecker's head and body are always in a perfectly straight alignment when hitting a tree to avoid breaking its neck.



- Woodpeckers' skulls and bills are incredibly strong and yet lightweight, due in part to the reinforcement provided by a meshwork of bony support struts. The portion of the skull nearest the tip of the bill is also bolstered by extra layers of tough calcification.
- Woodpeckers may find their hidden prey by sound and/or smell
- As the woodpecker strikes the tree, hollow sounds may echo
 off of the tunnels (galleries) of wood-boring insects (like
 thumping a watermelon).
- When feeding on wood, grubs make an audible sound that could be heard by a woodpecker.
- Woodpeckers have a better sense of smell than most birds and may be able to detect the strong odor of the formic acid that ants, bark beetles and termites excrete (smells like Sweet Tarts).
- During cold winter weather, tree-foraging birds such as woodpeckers do not increase their body fat as much as ground-foraging birds, probably due (Continued on page 9)

Field Guide to the Future: Nearly Half of North America's Birds at Risk from Global Warming

Many Washington State Species Including the Rufous Hummingbird the Mallard and the Bald Eagle Are On the Brink

early half of the bird species in the continental U.S. and Canada are threatened by global warming.

Many of these species could go extinct without decisive action to protect their habitats and reduce the severity of global warming. That's the startling conclusion reached by Audubon scientists in a new study.

Of 588 bird species examined in the study, 314 are at risk. Of those, 126 species are at risk of severe declines by 2050, and a further 188 species face the same fate by 2080, with numerous extinctions possible if global warming is allowed to erase the havens birds occupy today. 313 of these at risk species regularly occur in Washington State; 92 are considered climate endangered, and 97 are climate threatened. That means that over half of birds regularly occurring here are climate endangered/threatened including the iconic Bald Eagle, the Rufous Hummingbird and even the Mallard. These species are projected to lose as much as 75% or more of their existing range in coming years, threatening their long-term survival. The study, which identifies the future projected range of Washington's climate-endangered bird species, can be accessed at wa.audubon.org.

"The greatest threat our birds face today is global warming," said Audubon Chief Scientist Gary Langham, who led the investigation. "That's our unequivocal conclusion after seven years of painstakingly careful and thorough research. Global warming threatens the basic fabric of life on which birds – and the rest of us – depend, and we have to act quickly and decisively to avoid catastrophe for them and us."

To understand the links between where birds live and the climatic conditions that support them, Langham and other Audubon ornithologists analyzed 30 years of historical North American climate data and tens of thousands of historical bird records from the U.S. Geological Survey's North American Breeding Bird Survey and the Audubon Christmas Bird Count. Understanding those links then allowed scientists to project where birds are likely to be able to survive – and not survive – in the future.

The study also reveals areas that are likely to remain stable for birds even as climate changes, enabling Audubon to identify

"stronghold" areas that birds will need to survive in the future.

The result is a roadmap for bird conservation in coming decades under a warming climate. The study provides a key entry point for Audubon's greater engagement on the urgent issue of global warming. Responding to the magnitude of the threat to our birds.

Audubon is greatly expanding its climate initiative, aiming to engage a larger and more diverse set of voices in support of protecting birds.

The 25-strong Audubon chapter-network in the state and the Audubon Washington office are actively engaged in bird and habitat conservation. Some of these activities include community-science efforts to protect the sagebrush songbirds of Eastern Washington, advocacy work to safeguard food and habitat resources for marine birds, youth conservation leadership training, and advocacy

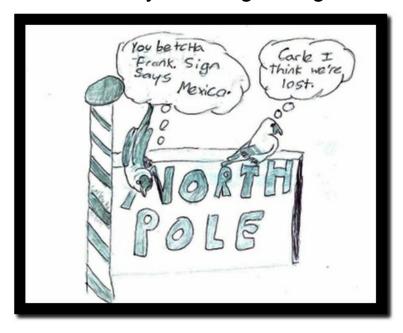
concerning oil and coal transport, contributing to a brighter future for birds and people in our region.

Solutions will include personal choices to conserve energy and create backyard bird habitat, local action to create community climate action plans, state-based work to integrate Audubon's climate science into work on marine bird conservation and sagebrush steppe habitat prioritization, and other efforts to identify and protect bird habitats.

For more information, visit wa.audubon.org or audubon.climate.org.

Bird Brainz By Carley R.

Directionally challenged migrator.



Fun Facts about Woodpeckers (Continued from page 7)

to the fact that they roost in cavities overnight and that snowfall rarely hampers their ability to find food in trees as compared with birds searching for it on the ground.

- Most species of woodpeckers are born completely naked, unlike many other birds that are completely covered with soft down feathers when they hatch.
- To help distinguish the difference between a Hairy and a Downy Woodpecker visiting your feeders, look for the Hairy's chisel-like bill which is much longer than the Downy, which often equals the width of the rest of the head. The Downy's head is twice as wide as its very short bill.
- Beetle larvae and ants make up the largest portions of the Hairy Woodpecker's natural diet.
- While not a true sapsucker, the
 Hairy Woodpecker seems to
 enjoy a sweet drink on
 occasion as they have been
 reported to drink from sapsucker wells, hummingbird feeders
 and even sugar cane plants.
- The smallest North American woodpecker is the Downy Woodpecker at 6 inches in length.
- The Downy Woodpecker was first formally described by the Swedish biologist, Carolus Linnaeus in 1766.
- In winter, small birds tend to lose heat faster than larger birds due to the ratio of surface area to weight. As a result, Downy Woodpeckers in Alaska are about 12% larger than they are in Florida.
- The feather pattern on the back of head of Downy Woodpeckers is unique to every bird. Downies may use them to recognize other individual Downies.
- Scientific tests have determined that Downy Woodpeckers do actually use the presence or absence of the red patch on the back of other Downies head to determine whether they are male of female.
- Male Downy Woodpeckers are dominate over female downies and select the best feeding sites for their own use and defend them against the females.
- Female Downy Woodpeckers have slightly longer tails than
 do the males. This may be explained by the fact that they
 spend more time foraging on vertical surfaces, such as tree
 trunks, and thus use their tail as a brace more often than
 their male counterparts, which spend most of their time
 foraging on smaller horizontal branches.
- Downy Woodpeckers have been recorded to eat at least 44 different kinds of insects, including beetles, ants, weevils, aphids and the eggs of grasshopper, katydids and crickets.
- During the winter, Downy Woodpeckers have to peck deeper into trees to find insects and favor trees with rough bark since

they hold more over-wintering insects than smooth-barked trees.

- Downy Woodpeckers typically excavate new roosting cavities during the autumn months over a period of three to seven days.
- •In order to increase their security and feeding efficiency, Downy Woodpeckers will often flock and forage together with chickadees, titmice, nuthatches and Hairy Woodpeckers. They rely on the other birds for early warning of predators by recognizing their alarm calls.
- •When threatened by predators, Downy Woodpeckers will freeze motionless against the trunk of a tree and will not return to normal activities for up to ten minutes.
- •Studies have shown that Downy Woodpeckers with access to bird feeders are in better nutritional condition than their peers. This probably results in higher rates of winter survival, especially in the submissive females.
- •The Pileated Woodpecker is the second largest North American woodpecker at 19 inches in length; hopefully the Ivory-billed is still the largest at over 20 inches.
- •Sapsuckers can drill as many as 50 holes per hour into trees. After these holes fill up with sap, the sapsucker returns and soaks up the sap with its brushytipped tongue. They also feed on the many insects that are attracted to the sweet sap.
- Northern Flickers spend about 75% of their time foraging on the ground in search of ants.
- Northern Flickers will often roost at night on the side of a tree or structure instead of inside a nesting cavity.
- Red-bellied Woodpeckers will eat fruits, insects, an occasional frog or lizard and they have even been observed eating the eggs of chickens.
- If you want to provide good habitat for woodpeckers, consider leaving the dead tree snags in and around your yard. One study has shown that a Downy Woodpecker needs at least four to five snags per acre to meet its needs for nesting and foraging.
- Bird banding longevity records for woodpeckers recaptured in the wild:
 - o Downy 11 years 11 months
 - o Hairy 15years 11 months
 - o Pileated 12years 11 months
 - \circ Red-headed 9years 11 months
 - o Red-bellied 12years 1 month
 - o Northern Flicker 9years 2 months



Nonprofit Organization U.S. Postage Paid Kent, WA 98031 Permit No. 441



Rainier Audubon Membership Subscription or Renewal Form

One-year Membership in Rainier Audubon

- \$25—Individual Membership
- \$30—Family Membership

To join or renew, mail this application with your payment to:
Rainier Audubon Society - Membership
PO Box 778
Auburn, WA 98071



Renew Now! Prices are going up in September.

Name:			
Address			
City	State	Zip	
Email	Phone		

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