

A voice for education and conservation in the natural world
Rogue Valley Audubon Society
www.roguevalleyaudubon.org

Deadline for the June 2022 issue is May 20



May IN PERSON Program!
Tuesday, May 24, 2022 at 7:00 pm
Pandemic Birding with Jim Livaudais

Perhaps the COVID-19 pandemic kept you at home for most of the past two years. You got a lot of backyard birding in. Or, you drove all around Jackson County and took great photos of local birds. Then, when things started getting better and your trips weren't being canceled, you hopped on a plane and went to Ghana or Ecuador or Costa Rica. That's what Jim Livaudais did, and he's here to share some of his best photos with us...(cue the air horns)...LIVE AND IN PERSON!



Orange-collared Manakin
Credit: Jim Livaudais

About the Speaker

Jim Livaudais is an active local birder. His photos are prevalent on eBird, and you can most likely run into him birding somewhere in Jackson County on any given day of the week. He has seen half of the world's birds and can tell you anything and everything you ever wanted to know about photographing birds. He's also a really nice guy.

Location: Medford Congregational Church of Christ- Lidgate Hall, 1801 E. Jackson St., Medford
Time: 7:00 pm (coffee/tea/cookies will be served beginning at 6:30 pm)

OFFICERS and DIRECTORS

President: Erin Ulrich, 408-499-0315,
eulrich44@gmail.com

Vice-President: George Peterson,
sgpeterson1@msn.com

Secretary: Carol Mockridge,
mockridge50@hotmail.com

Treasurer: Kay Simmons,
mwsimmons1@verizon.net

BOARD MEMBERS

Jon Deason jdeason39@gmail.com

Kate Halstead katherine.elspeth@gmail.com

Jamie Trammell trammelle@sou.edu

COMMITTEE CHAIRS

Archivist: Vacant

Annual Picnic: Wendy Gere, wendy.gere@gmail.com

Birdathon: Vacant

The Chat Editor: Kate Halstead, chateditor@gmail.com

CBC-Ashland: Carol Mockridge, mockridge50@hotmail.com &
Emmalisa Whalley

CBC-Medford: Bob Hunter, 541-826-5569

Conservation: Pepper Trail, ptrail@ashlandnet.net &
Juliet Grable, julietgrable@gmail.com

Education: Erin Ulrich, eulrich44@gmail.com

Field Notes: Frank Lospalluto,
fdlospalluto@gmail.com

Field Trips: Frank Lospalluto, fdlospalluto@gmail.com & Kristi
Mergenthaller, coprolitemergie@yahoo.com

Holiday Party : Lynn McDonald,
junelynnjacobs@gmail.com

Hospitality: Jon Deason, jdeason39@gmail.com

Outreach & Tabling: Vacant

Membership: George Peterson, sgpeterson1@msn.com

Programs: Vacant

Project FeederWatch:

MaryPat Powers, marypat@ashlandhome.net

Publicity: Vacant

Swift Monitoring, Erin Ulrich, eulrich44@gmail.com

CHAPTER COMMUNICATIONS

Email: info@roguevalleyaudubon.org

The Chat: chateditor@gmail.com

Webmaster: Tom Pratum, tkp9551@gmail.com

Website: www.roguevalleyaudubon.org

Facebook: Erin Ulrich,

<https://www.facebook.com/RogueValleyAudubonSociety/>

Mailing Address

RVAS

P. O. Box 8597

Medford, OR 97501

Letter From The Board

Ever wonder if anyone ever uses all the Christmas Bird Count (CBC) information? If you've ever participated, you'll know that those observations can be hard won (especially with weather like we experienced this past year!). You're likely aware that the National Audubon Society collects and compiles all of the data to track changes in abundance over time across the nation (you can read all about how it's used for scientific analysis at <https://www.audubon.org/content/american-birds-annual-summary-christmas-bird-count>).

However, you may not know that local scientists are using the CBC data as well. Over the past couple of years, students at Southern Oregon University (SOU) have analyzed the CBC data in my Introduction to Geographic Information Systems (GIS) course. With the help of Carol Mockridge and Bob Hunter, SOU students have been able to not only examine the overall numbers of birds per count area, but have also been able to look within the specific areas (Areas A-N for Medford, Areas 1-10 for Ashland).

For example, this year Nolan Richard and Shelby Young found that Acorn Woodpeckers (along with American Robins) were found in every area in both CBC circles for the last three years. They were also able to describe the dominant vegetation types within each area, allowing us to monitor species trends in specific habitats. For example, 87% of the Mountain Chickadee observations have been in Area 10 of Ashland, which is primarily higher elevation evergreen forest.

Not only can your frozen finger birding help national monitoring, but we're using it right here in the Rogue Valley to better understand our local environment, with the help of some amazing SOU students.

Jamie Trammell

RVAS Board Member

Chapter Program meetings are held on the fourth Tuesday of the month, September through April, at 7:00 pm. Meetings take place at 1801 E. Jackson St., Medford, in Lidgate Hall of the Medford Congregational Church of Christ.

NOTE: If deemed unsafe for gathering, chapter meetings will be held on Zoom.

Status of upcoming events

Field trips: Denman Bird Walk is back! May 4, June 1, July 6, August 3

May Chapter Meeting:
Tuesday, May 24 at 7:00 pm

Field Notes for Jackson County

April 2022

By Frank Lospalluto

A few highlights from the last few weeks as spring migrants arrive:

A male **Blue-winged Teal** was at Kirtland Ponds Apr. 14 (GS). A male **Eurasian Wigeon** was spotted on one of the ponds on the Hall Tract Unit of Denman Apr. 19 (JK). A **Redhead** was celebrating the first of April at Agate Lake (LW).

Eight **Horned Grebes** molting into breeding plumage were on Whetstone Pond Apr. 20 (BH).

Pied-billed Grebes are in their very understated breeding plumage and highlighted by the black bar on their bill.

Two **Common Poorwills** were seen and heard on BLM lands outside Ruch Apr. 3 (FE).

Vaux's Swifts have been spotted migrating north by numerous observers. Some extraordinary numbers have been visiting the chimney at Hedrick Middle School recently.



American Avocet
Credit: Jim Livaudais

A lone **American Avocet** was in the Hall Tract Unit at Denman Apr. 14 (JL, JK). **Black-bellied Plovers** have been seen at Kirtland Ponds recently with a high of eighteen Apr. 13 (JK). A **Long-billed Curlew** was found at Kirtland Rd. Ponds Apr. 22 (JK, TM). A **Lesser Yellowlegs** was observed at Agate Lake Apr. 6 (AD).

A small flock of eight **Bonaparte's Gulls** briefly alighted at Kirtland Ponds Apr. 16 (DG).

Green Herons are beginning to be seen regularly, with a pair at Whetstone Pond Apr. 11 (VL).

A **White-tailed Kite** was reported near highway 66 near Emigrant Creek Apr. 7 (MG). A migrant **Swainson's Hawk** was seen over Lower Table Rock Apr. 21 (WG).

The challenging and sometimes frustrating (to birders) Empidonax flycatchers are returning. **Hammond's Flycatchers** have been observed at a number of locations, as they are usually the first to show. A **Dusky Flycatcher** was at Rogue River Preserve Apr. 16 (GS, HS). Another was along Little Butte Creek Apr. 20 (BH). A **Pacific-slope Flycatcher** was first reported Apr. 9 along the Enchanted Forest Trail in the Applegate Apr. 9 (SP, RA). These small active birds are some of the most abundant of our neotropical migrants, but are more often heard than actually seen. A **Gray Flycatcher** was reported from Denman near Pruett Rd. Apr. 22 by a visiting birder.

Cassin's Vireos have arrived with their start and stop song. Eight were seen and heard in Ashland's Oredson-Todd Woods Apr. 22 (TK). **Warbling Vireos** are just beginning to trickle in, with one being reported from Beekman Woods in Jacksonville Apr. 21 (JK).

A **Purple Martin** was observed near Old Touvelle Rd. in Denman WMA Apr. 14 (JL).

Blue-gray Gnatcatchers are back, with one of the earlier one being reported from the south end of Emigrant Lake Mar. 26 (VZ).

House Wrens are back in force, enough said.

A **Brewer's Sparrow** was found in the Military Slough unit of Denman Apr. 12 (JH). A **White-throated Sparrow** was found during a Bear Creek survey in Ashland Apr. 19 (PT, BH). Five **Oregon Vesper Sparrows** were noted at Lily Glen Park Apr. 7 (VL). It has been a great winter for **Lincoln Sparrows** along the Bear Creek with numerous birds on a recent Ashland survey (PT).

Field Notes continued on page 4

Field Notes continued from page 3

A **Bullock's Oriole** was seen at Riverwalk Park in Ashland Apr. 9 (LH, DA). A **Great-tailed Grackle** was in the Hall Tract of Denman Apr. 20 (BH).

Many of our familiar warbler species are moving through our region and returning to raise a new family. **Orange-crowned Warblers** are quite abundant as they glean insects along with the numerous **Ruby-crowned Kinglets**, especially in riparian willow patches and oak buckbrush patches. **Nashville Warblers** can be heard singing again in the mixed hardwood conifer woodlands. A Nashville was heard singing in Lithia Park Apr. 9 (KM, SR). A **MacGillivray's Warbler** was observed in the Little Butte Creek area of Denman Apr. 17 (JH, TMc). A **Yellow Warbler** was at Cantrall-Buckley Park Apr. 22 (AG). Two **Black-throated Gray Warblers** were seen in the south end of Colestin Valley Apr. 6 (KM). A **Hermit Warbler** was in Liberty St. Park in Ashland Apr. 17 (NT). A **Wilson's Warbler** was along Bear Creek during a

Bear Creek Survey at the north terminus of the greenway Apr. 10 (NT).

A **Western Tanager** was observed in Medford near the Asante Medical Center on the morning of Apr. 20 (AA).

A **Black-headed Grosbeak** was in the Little Applegate Apr. 10 (MH).

Thank you to all including: Sammie Peat, Rene Allen, Gary Shaffer, Janet Kelly, Jim Livaudais, Norm Barrett, Bob Hunter, Brian Barr, Jim Hostick, Tom McEntee, Tanner Martin, Terry Karlin, Kate McKenzie, Shannon Rio, Nate Trimble, Kristi Mergenthaler, Anne Goff, Leslie Hart, Pepper Trail, Barry Harris, Dick Ashford, Vince Zauskey, Marion Hadden, Timothy Sorby, Amanda Alford, Linda Wagner, Wink Gross, Michael Guss, Alyssa DeRubeis, and Dave Garcia.

All errors and omissions are mine. Peace.

BIRDCENTRIC EVENTS FROM AROUND THE REGION

RVAS

Bear Creek Ashland Bird Walk

Join ornithologist and birding guide Nate Trimble to encounter the many amazing birds who breed along Bear Creek, and their changing habitats along the creek as it recovers from the Alameda Fire. We will meet at the parking area at the end of Wastewater Treatment Plant Rd., right off of Oak St. near the intersection of Oak and Eagle Mill Rd. This will be a great opportunity to see the ongoing recovery of vegetation along Bear Creek so far, and to find colorful breeding riparian migrants such as Yellow-breasted Chats, Bullock's Orioles, and Yellow Warblers. This walk will also be a good opportunity for those wishing to practice birding by ear, as Nate will focus much of the walk on pointing out bird songs and other sounds. We will walk out and back on the paved Greenway path, along the transects of the Ashland section of the Bear Creek Community Bird Survey. For more information, contact Nate Trimble at nateltrimble@hotmail.com.

DATE: Saturday, May 21

TIME: 8:00-10:00 am

COST: Free

Birding Cantrall Buckley Park

Join Applegate resident Anne Goff at one of Jackson County's lesser known gems, Cantrall Buckley Park. Located at 154 Cantrall Road, the park fronts the Applegate River. Let's meet at the first parking area on the right after the entrance, where we'll begin our exploration. A Jackson County Parks Pass or day use fee will be required. We'll walk about a mile in all, on grass and gently sloping roads. Limited to 10 participants. For more info and to register, contact Anne Goff at annegoff58@gmail.com.

DATE: Sunday, May 22

TIME: 9:00 am

Things With Wings Walk

Walk the Rogue River Preserve near Eagle Point with the Binosaur: Norm Barrett, Gary Shaffer, Jim Livaudais, and Howard Sands. We will chase and discuss anything that flutters, zips, or soars. Birds, butterflies, dragonflies, and other bugs are fair game. Binos, cameras, and nets are welcome. Good walking shoes are needed. Limit of 12 people. For more info and to reserve a space for this free walk: 541-326-1424, ndbarrett@centurylink.net.

DATE: Saturday, June 4

TIME: 9:00 am - 12:00pm

COST: Free

Birdcentric Events continued on page 5

Birdcentric Events continued from page 4

RVAS, cont.

First Wednesday Bird Walks: May 4, June 1, July 6, August 3

Join RVAS for our monthly outing to Denman Wildlife Area. Walks begin at 8:30 am and end before noon, and are led by Jim Hostick. The gate will be open from 8:00 - 8:20 am. Participants need to purchase an ODFW Area Parking Permit at the ODFW Office, Sportsman's Warehouse on Delta Waters and Highway 62 in Medford, or at Bi-Mart. We request that all participants be vaccinated for COVID-19.

Directions to meeting spot: We will meet at the entrance off Agate Rd. between 1/4 and 1/2 mile past the fire station on the left side of the road. Coming out Table Rock Rd., turn right on Antelope Rd. and go to the light on Agate Rd. and turn left. The fire station will be on your left at the corner of Ave. G and Agate Rd. Go 1/4 to 1/2 mile past the fire station and the gate will be on your left. Coming out on Highway 62 to Antelope Rd., turn left and go to the next light. Turn right and continue to the gate on Agate Rd.

Wild Birds Unlimited

Mingus Pond Walks

WBU will be hosting two bird walks at Mingus Pond along the Bear Creek Greenway in Central Point this month. Each limited to 9 participants. Call the store at (541) 772-2107 or come in to register and get directions on where to meet, etc.

DATES: Wednesday, May 4 (led by Erin Linton)

Saturday, May 21 (led by Erin Ulrich)

TIME: 9:00 am

COST: Free

Wild Birds Unlimited, cont.

Educational Talk: Saving Our Songbirds

Erin Linton will be giving a talk about the alarming decline of our songbird populations and let you know a few simple steps you can take to help. Limited to 25 participants. Call the store 541-772-2107 or come in to reserve your seat. Current CDC Covid protocols will be in place. This talk will also be streamed on Facebook at www.facebook.com/wbumedfordor.

DATE: Thursday, May 5

TIME: 5:00-6:00 pm

COST: Free

Southern Oregon Land Conservancy

Petals & Feathers at Pompadour Bluff

Bird biologist Frank Lospalluto and Southern Oregon Land Conservancy Stewardship Director and botanist Kristi Mergenthaler will lead hikers on an exploration of Pompadour Bluff with a special focus on birds and flowers. This location hosts raptors and songbirds like Western Bluebird and Western Meadowlark, and special plants like native oaks, grasses, and wildflowers with a view of the valley.

Pre-registration is required for these hikes, which are free, open to the public, and led by local experts. For more information and to register, visit

www.landconserve.org/events or call at 541-482-3069.

DATE: Sunday, May 8

TIME: 9:00 am - 12:00 pm

COST: Free

Courtesy: SOLC



Klamath Bird Observatory

Bird Connigo

Join Klamath Bird Observatory for a bilingual bird walk at Holmes Park in Medford. We will be exploring local parks highlighting that you do not need to travel far to enjoy birds. For each bird walk, we will cover the basics of birding and introduce you to birds of the Rogue Valley. You will be able to take the skills and knowledge learned to bird watch in your own backyard. KBO will be providing binoculars and bird guides during the event. An adventure for the whole family! A take-home Spanish Bird Brochure is available. Due to COVID-19 masks are required.

DATE: Saturday, May 7

TIME: 10:00 am - 11:00 am

COST: Free

The Conservation Column

By Pepper Trail

For this month, some exciting news of species survival – and a disease threat to bird populations.

California Condors!

Let's start with the good news: California Condors are returning to the "State of Jefferson." Sometime in the month of May, four adolescent (2-3 year-old) condors will be released on the wild redwood coast of northern California near the mouth of the Klamath River. This is the result of a long-term collaboration among the Yurok Tribe, the National Park Service, the Oregon Zoo, and the Peregrine Fund (the latter two groups hatched and captive-reared the young condors).

California Condors, the largest flying birds in North America, once ranged widely in Oregon, and were described (and shot) by Lewis and Clark as they descended the Columbia. The last credible record of the species in Oregon was from Douglas County in 1904. The remnant population in California declined precipitously through the 20th century due to shooting, poisoning, and loss of wilderness habitat, and the species was reduced to 23 birds by the 1980's. In 1987, the controversial decision was made to capture all the surviving wild condors in an attempt to save the species through captive breeding. This has been very successful, and today the population numbers about 500 condors, with approximately half flying free in Arizona, Utah, Baja California, and southern and central California, and the rest in the captive population. The hope is that the birds being released along the Klamath coast will form a new population that could eventually return this magnificent species to the Pacific Northwest.



This will be a long process. More about the reintroduction plan can be found in this article in the Medford Mail Tribune: <https://www.mailtribune.com/top-stories/2022/04/17/condors-in-the-redwoods/>. The Yurok Tribe and Redwood National Park plan to release 4-6 condors per year for the next 20 years. Condors don't breed until 6-8 years old, and lay only a single egg per year. Therefore, establishment of a new population will take time. But there is good reason to hope that the wild coast of northern California and southern Oregon will provide excellent condor habitat, with a good supply of marine mammal carcasses for food and less risk of lead poisoning than in more populated areas. Poisoning by hunters' lead ammunition in deer carcasses and gut piles is the major obstacle to establishing self-

sustaining wild condor populations.

It is only about 85 miles as the condor flies from the mouth of the Klamath River to Ashland. That is trivial for a California Condor, which can travel 150 miles a day in search of food. So keep your eyes on the sky – you could be the first to spot a California Condor in Jackson County!

Avian Flu

Unfortunately, the young condors could face a challenge not anticipated by the recovery program: an outbreak of severe "avian flu" – officially, Highly Pathogenic Avian Influenza (HPAI). In the age of COVID, let me be very clear - this disease is NOT a threat to humans.

HPAI undergoes periodic outbreaks, and in January was confirmed in three species of wild ducks in the Carolinas, belonging to a strain originating in Europe. Since then, HPAI has spread rapidly throughout the eastern US, and is moving westward. As of this writing (April 19), the disease has not yet been confirmed in Oregon, but has reached Utah and Montana and will almost certainly reach our state. The USDA provides updated data on HPAI in wild birds at this website:

<https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/avian-influenza/hpai-2022/2022-hpai-wild-birds>

Different groups of birds vary greatly in their susceptibility to HPAI. Waterfowl and gamebirds are most vulnerable, which is why the disease is of great concern to poultry producers. Millions of chickens in the East and Midwest have already

Conservation Column continued on page 7

Conservation Column continued from page 6

been destroyed in an attempt to control the spread of the disease in captive flocks.

The vast majority of wild bird deaths documented on the USDA website are waterfowl. If the outbreak had reached Oregon while large numbers of migratory ducks and geese were passing through, the impact could have been severe. Fortunately, most of these birds have already moved north, and hopefully will avoid infection. The next most numerous victims are birds of prey, particularly Bald Eagles, which often feed on dead and dying waterfowl. The disease seems to pose little risk to songbirds: a single American Crow is the only passerine fatality on the extensive USDA list at the time of this writing.

Therefore, there is no reason to take down bird feeders as a precaution against HPAI. As the website of Seattle Audubon states: "...with passerines being the most common visitors to bird feeders, and the frequency of infection in these species being very low indeed, the risk may safely be considered remote. Of much more concern are other easily transmitted infections such as salmonellosis (a bacterial infection), avian pox, and various fungal infections. It is important, therefore, to clean feeders frequently and disinfect them with bleach or vinegar at least once a month."

Could this HPAI outbreak threaten California Condors? It is conceivable: a number of Black Vultures are listed on the USDA wild bird fatality list. However, the likely route of infection into birds of prey, including vultures, is when those birds feed on dead or dying waterfowl. Condors feed almost exclusively on mammal carcasses; a dead duck would be just a light snack for these huge birds. Thank goodness. California Condors don't need any other obstacles to their recovery!

Is This for Real? Ivory-billed Woodpeckers Back in the News

By Harry Fuller

The Ivory-billed Woodpecker used to be the largest woodpecker in North America. It may still be. There have been no widely accepted sightings or hearings of this species in the U.S. or Cuba so far this century. Until, maybe, now. Three widely acclaimed efforts to find living Ivorybills in the early 2000s disappointed the bird world.

The last widely accepted evidence of the Ivorybills' survival in the U.S. came from James Tanner's field work in a Louisiana forest in the 1940s, but that forest was soon logged to help satiate the hunger for lumber during World War II. Apparently, our species has always been a danger to this woodpecker.

The first color drawing of the bird was done by Mark Catesby in the 1730s. Of the bird he wrote: "The bills of these Birds are much valued by the Canada Indians, who make coronets of them for their Princes and great warriors, by fixing them round a wreath, with their points outward. The northern Indians having none of these birds in their cold country, purchase them off the southern people at the price of two, and sometimes three buck-skins a bill."

People's business (particularly post-colonial) and the Ivorybills were ever at odds. With the spread of farming, most of the old growth forest was cut in the southern states. This woodpecker lost its habitat. By 1840, the bird's dependence on old forests was clear. That year, Thomas Nuttall published his *Manual of the Ornithology of the United States*. It says "More vagrant, retiring, and independent than the rest of his family, he is never found in the precincts of cultivated tracts; the scene of his dominion is the lonely forest amidst trees of the greatest magnitude."

A 1933 *National Geographic* feature on American woodpeckers said of the Ivorybill: "So far as is known, its range was formerly confined to the Southern States...From nearly all this vast domain it has disappeared. We know of a very limited number in Louisiana, and there still are some in Florida." There was additionally a population in Cuba at least until the 1980s.

Now a team of field biologists have reported on three years spent in an undisclosed forest tract in Louisiana. Using current technology, they say they have images and sound recordings of Ivory-billed Woodpeckers. There are claims of visual encounters as well. The field work was sponsored by Project Principalis and the National Aviary in Pittsburgh.

Click here for the announcement of their findings: <https://www.aviary.org/new-findings-released-in-the-search-for-the-ivory-billed-woodpecker/>

Click here for National Aviary's summary of this species' history: <https://www.aviary.org/conservation/project-principalis/history-of-the-ivory-billed-woodpecker/>

Click here to read the full, pre-publication version of the research report, before it has been peer reviewed: <https://www.biorxiv.org/content/10.1101/2022.04.06.487399v1.full>



Ivory-billed Woodpecker fledgling
Credit: James T. Tanner, 1938
Courtesy: USFWS

Five Incredible Ways Birds Change Their Bodies for Spring and Fall Migration

By Kevin Johnson

Excerpted from National Audubon. Please find the article in its entirety [here](#).

Migration is perilous, but it's also wondrous. Here are some of the incredible ways birds sculpt their bodies for their journeys.

Double Their Body Weight

A bird's first inkling that it's time to shift into migration mode comes from seasonal changes in its surroundings, says Paul Bartell, professor of avian biology at Penn State University. When the days shorten at the end of summer, birds undergo hyperphagia: They eat excessive amounts of food for two weeks or more to store fat before migration. During this time, birds gorge on high-energy berries and fruits loaded with carbohydrates and lipids, which are stored as fat.

Birds' reliance on fat is unusual in the animal kingdom. "It's remarkable that they're using fats as fuel," says Scott McWilliams, professor of wildlife ecology and physiology at the University of Rhode Island. People, for example, rely primarily on carbohydrates for endurance activities because our system can efficiently convert them to usable energy. But for birds, fat makes sense. Fat is lighter and less bulky than carbohydrates and protein—important for lightweight, small-framed bodies that must stay aloft by wingbeat. Plus, fat contains more energy than carbs. "You get the most energy per gram that you store, if you want to fly long distance," McWilliams says. As they fly, birds can replenish fat by taking breaks to refuel. This is why it's so important to grow native plants that produce the lipid-rich berries birds need.

Transform Internal Organs

All that fat added on to a bird's small frame can't just sit anywhere—it must be distributed properly. To make it all fit, many birds are able to shrink and grow their internal organs. Take the Bar-tailed Godwit, one of the bird world's most intense migrators, flying 6,800 miles nonstop from Alaska to New Zealand each fall. To make room for energy-rich fat, godwits absorb into their body 25 percent of the tissue comprising their liver, kidneys, and digestive tract. This happens through a natural cellular process that lets the body recycle and clean up its cells and tissues called autophagy (which means "self-eating" in Greek). Godwits also increase the size of their heart and chest muscles to distribute extra energy and oxygen to these highly active areas mid-flight.

"Flying is the most energy-intensive form of locomotion," McWilliams says. "But it's also more efficient if you want to go farther, faster. You actually get better fuel economy when you use fat as fuel for a flying animal compared to a runner."

Greatly Reduce Their Sleep Time

The need for sleep might be a barrier to human endurance, but for birds it's just another physiological rule to break. During migration, a neurological shift instigated by the changing season forces birds to adapt to nocturnal habits and sleep less. How do birds rest while in mid-air? Very quickly. Swainson's Thrushes, which undertake 3,000-mile migrations from Central and South America to northern Canada and Alaska, enter a sleep-like state for about nine seconds at a time. They keep one half of their brain awake to avoid predators or mid-air collisions while the other half rests. The neurological change from breeding- and wintering-season sleep habits to migration sleep is as crucial to bird endurance as metabolic changes, says Bartell. "They are somehow resilient to all this increased fat and the detrimental effects of staying up almost all night," he says. "And they actually performed better than if they were in a non-migratory state."

Consume Their Own Muscles

When endurance athletes exhaust their carbohydrate and fat supplies, they face dehydration and starvation. For humans, those needs can put an end to any athletic performance. But birds have a last-ditch backup: They can burn their muscles for energy, a trick that some birds use to their advantage. Experiments done in a wind tunnel in 2011 revealed how Swainson's Thrushes—typically flying up to 200 miles in a single stretch during migration—even burn muscle unnecessarily so they can fly farther and reach the most beneficial stopover sites. It is risky, though, if they can't recover that lost muscle after migration.

Revert to Their Previous Form

Once birds reach their destination, they need to regain their organ function and shape, and refuel now-emaciated fat stores. It's an urgent task during spring migration because soon as they reach their breeding ground, birds must do the hard work of breeding: attracting mates, and producing and raising hungry young chicks—all while still taking care of themselves. "Essentially, they need to instantly start making territories and reproducing," Bartell says. "If they can't get food within a couple hours or are delayed after landing, they can actually starve to death."

It's an astounding balance to maintain while already undergoing spectacular trips across the world. But if we've learned anything about birds and migration at this point, it's that we shouldn't be surprised by anything.

NORTHWEST
nature shop 
SINCE 1985

Intriguing gifts,
toys, and tools
for discovering
the natural
world

Ziplines,
Ninjalines,
& Slacklines

Birdfeeders
Suet &
Seeds

\$5 OFF
with any purchase of \$25
or more with this coupon
Redeem at NW Nature Shop
or use at northwestnatureshop.com
Coupon Code:
welovebirds

Binoculars
& Field
Guides

Personalized Shopping & Curbside Service: 541-482-3241
Visit NorthwestNatureShop.com for online ordering
184 Oak Street, Ashland Oregon 97520



Cliff Swallow
Credit: Jim Livaudais

Don't forget to join us on May 24 for
more of Jim's beautiful photography!



Wild Birds Unlimited
Nature Shop

**20% OFF One
Regularly-priced Item**

*Valid 10/1/21 thru 6/30/22 at the Medford, OR WBU
store. One discount per member. Not valid on bird seed,
previous purchases, optics, gift cards, DSC
memberships, or sale items.
961 Medford Center, Medford, OR 97504
541-772-2107

ROGUE VALLEY AUDUBON SOCIETY

THE CHAT

Newsletter of the
ROGUE VALLEY AUDUBON SOCIETY

Post Office Box 8597
Medford, OR 97501

RETURN SERVICE REQUESTED



Sign up to receive easy notification of Chapter activities

Your Audubon Chapter wants to be sure you are aware of upcoming field trips, chapter meetings, the most recent edition of *The Chat*, and other items we post online.

At the bottom of every page on our website roguevalleyaudubon.org you will find a form where you can request to be added to our mailing list. And be assured, we will never share your e-mail address with any other organizations.

