Nature Trails

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Of Ravens, Wolves and People

John Marzluff

James W. Ridgeway Professor of Wildlife Science School of Environmental and Forest Sciences University of Washington

Friday, 11 December 2020, 7:30 p.m.

Here is how to join the audience for the December presentation. The Zoom meeting will open at 7:00 but our meeting will begin at 7:30. This is to make sure everyone has enough time to get properly connected. August Jackson is inviting you to a scheduled Zoom meeting.

Topic: December ENHS Meeting

Time: 11 Dec. 2020 07:00 PM Pacific Time (US and Canada)

Join Zoom Meeting

https://zoom.us/j/97499095971 We plan to use this Zoom link for the remainder of ENHS meetings. However, please double-check each time to make sure the link hasn't changed.



John Marzluff's research has been the focus of articles in the New York Times, National Geographic, Audubon, Boys Life, The Seattle Times, and National Wildlife. PBS's

NATURE featured his raven research in its production, "Ravens," and his crow research in the film documentary, "A Murder of Crows." If you check out his TED talk at

http://www.youtube.com/watch?v=0fiAogwsc9g, in which he captivates his audience while educating them about how smart corvids are, you'll understand why we are so excited that he will be speaking to us again. When Marzluff speaks to us this December remotely because of the ongoing pandemic—it will be the third time ENHS and LCAS have heard from him. Those with long memories will recall the icy December meeting in 2009, when even though getting to Willamette Hall was a hazardous journey there were still close to 200 of us in the audience. The next time he ventured into enemy territory (he remains a devoted University of Washington Husky fan in spite of their rough treatment by the Ducks recently) was in 2014, when his talk was based on his book Welcome to Subirdia: Sharing Our Neighborhoods with Wrens, Robins, Woodpeckers, and Other Wildlife. In what follows I am borrowing from his 2014 introduction.

Marzluff was born in California, but most of his formative years were in Kansas. His high-school biology teacher in Lawrence, who took his classes on many field trips, turned Marzluff on to wildlife science. The University of Montana's strength in wildlife biology drew him there for his undergraduate studies. His graduate (Northern Arizona University) and initial post-doctoral (University of Vermont) research focused on the social behavior and ecology of jays and ravens. He studied pinyon jays for his PhD thesis project (one of his six books is entitled *The Pinyon Jay*). Late in his thesis work a crow came to a nest he was monitoring and ate most of the chicks (an astonishingly original excuse; "My dog ate my homework" cannot compare. He says that

roughly half of an avian researcher's study subjects are eaten before the study is complete.). So began his interest in crows. He continues to investigate the intriguing behavior of crows, ravens and jays, and brings his behavioral approach to pressing conservation issues including raptor management, management of pest species, and assessment of nest predation. He has led studies on the effects of military training on falcons and eagles in southwestern Idaho, the effects of timber harvest, recreation, and forest fragmentation on goshawks and marbled murrelets in western Washington and Oregon, conservation strategies for Pacific Island crows, and the effects of urbanization on songbirds in the Seattle area. In 1997, after six years in Idaho, Marzluff became a faculty member at the University of Washington, where he now holds an endowed chair: the James W. Ridgeway Professorship of Forest Sciences. His classes at UW include Ornithology, Governance and Conservation of Rare Species, Field Research in Yellowstone, and Natural and Cultural History of Costa Rica. Together with his teaching and research efforts, Marzluff has mentored over 40 graduate students.

Not content simply to recount the amazing abilities of his birds, Marzluff is gaining an understanding of how they do what they do. The titles of some of his recent papers—such as *Distinct* Neural Circuits Underlie Assessment of a Diversity of Natural Dangers by American Crows—reveal that his interests now include neurobiology. Marzluff has authored over 165 articles on various aspects of bird behavior and wildlife management. He has edited and co-authored treatises such as Avian Ecology and Conservation in an Urbanizing World; Radiotelemetry and Animal Populations; Avian Conservation: Research and Management; and Urban Ecology: An International Perspective on the Interaction Between Humans and Nature. He is an editor for Ecological Applications. He is a member of the U.S. Fish and Wildlife Service's Recovery Team for the critically endangered Mariana crow, a Fellow of the American Ornithologist's Union, and a National Geographic Explorer. In the Company of Crows and Ravens, co-authored by Marzluff and Tony Angell, won the 2006 Washington State Book Award for general nonfiction. Gifts of the Crow: How Perception, Emotion and Thought Allow Smart Birds to Behave Like Humans, again by Marzluff and Angell, appeared in 2013; Welcome to Subirdia: Sharing Our Neighborhoods with Wrens, Robins, Woodpeckers, and Other Wildlife in 2014. In February of this year his latest book came out: In Search of Meadowlarks: Birds, Farms, and Food in Harmony with the Land, in which he explores the



challenge of providing sustainable food for our growing human population while also conserving nature on the farm.

Marzluff's research group has been monitoring raven populations in and around Yellowstone
National Park for several years. They addressed the question of how the wolf reintroduction to the Park in

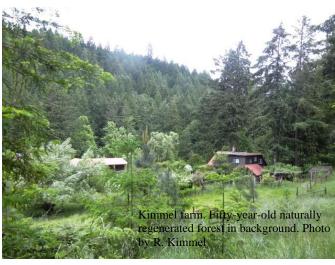
1995–1997 has affected raven population abundance and distribution on the Yellowstone River's Northern Range specifically. They found that the wolf recovery in the Park has helped stabilize raven populations by providing a regular food supply, regardless of winter severity.

Marzluff recently finished a sabbatical leave during which he continued his work in Yellowstone National Park. In his talk he will report on the travels of common ravens as they forage among wolves, pumas, and people. Some ravens in the Park commute long distances to exploit human and canine hunters, agricultural subsidies, sewage ponds, and dumps, travelling over 100 miles per day. Others beg at picnic grounds and pullouts.

The Lane County Audubon Society is cosponsoring this lecture. Both LCAS and ENHS urge you to take advantage of this opportunity. Please join the Zoom meeting, and invite your friends and neighbors, to hear Professor John Marzluff present "Of Ravens, Wolves and People", at 7:30 p.m. on Friday, 11 December 2020. John Carter

Reimagining Our Forests by Reida Kimmel

When we moved to Oregon in 1969 the tall, dark Douglas-fir forest was overwhelming. Dark. Gloomy. Now when I think of reimagining a forest, it is those trees of a half century ago that I long for: soft needles brushing my face, fog coating the drooping branches, ice and snow melting from the tree tops, diamonds in the ephemeral winter sun. I remember summer heat too, how firs' lower branches drooped in the dry late summer, the hot resiny smell of 'red brush'. But I do not remember fear, not of branches and trees felled by huge unpredictable winds, nor of fires starting and destroying before escape was possible. Now I try not to let my beautiful memories be erased by sadness or fear.



Imagining does not have to be fantasizing. If we become well acquainted with the facts of a situation, then imagination can be the springboard for creative change and a guide for how to press for the changes that will help to restore the healthy forests we love. The first question to face is can the forests of fir, spruce, cedar and hemlock, which have dominated the West Coast since the end of the last ice age, survive in the hotter, drier climate of our future? Climate change is here. The extent of the warming and how much time it will take—probably centuries—to return to a cooler earth, is the problem. Our state has been experiencing drought, sometimes severe drought, for twenty years. But never has there been a warning of Extremely Critical Fire Weather for almost all of western Oregon and western Washington as there was on September 6th and 7th, 2020. We all know the tragic results. Will this new type of weather occur repeatedly in the future? Experts think it's a strong possibility. University of Oregon forest researcher Melissa Lucash estimates that under current hotter and dryer trends, 30% of the marginal forests of southwestern Oregon and northwestern California will be shrubland in thirty years. None of us want to see that. This year's horrible fires were mostly in the Cascades, but the Coast Range is equally vulnerable. In recent decades recurring drought in the Pacific Northwest has left soils less saturated, starving the water table. The forest trees and their mycorrhizal connections so

necessary to forest life, have been starved too. When the incredible, delicate system of symbiosis between trees and their soil partners—one supplying sugars, the other water and mineral nutrients—is disrupted, the visible partners, the trees, are weakened and succumb to pests and diseases that they could otherwise tolerate. The Douglas-firs are dying. We've seen this all over our county and the Coast Range for several years now.

We want to restore the forests, but there are no perfect, or even suitable, replacement species for the present dominant mix. Cedar prefers moist soils, as do Amabilis (silver) fir, Sitka spruce, and hemlock. None are as drought-tolerant or fire-resistant as Douglas-fir and Ponderosa pine. Grand fir is very drought tolerant but burns easily. We should learn more about tree species and the growing conditions they require. Douglas-fir thrives in far more southerly places: in the Klamath Basin, Northern California and the Sierras. Perhaps there is a more droughttolerant Douglas-fir gene pool in the forests of southern Oregon that could help restore our iconic species. Interestingly, centuries ago, before European colonization, Ponderosa pine was a major forest species in western Oregon. There are several strains of Ponderosa pine, and it is important to plant the right one for the region. The strain native to the Willamette Valley and environs, both planted and naturally occurring, has done very well during recent decades. In the Klamath Basin area, Ponderosas do better if planted. Seedlings of Ponderosa pine from the strain native to eastern Oregon do not thrive in western Oregon and die very young.

Whether we like it or not, we have to think of planting trees to recover much of our charred forestland because so much of the woods that burned were monoculture plantations of Douglas-fir on private industrial timberland. Even if the companies could be weaned from Douglas-fir, even if more drought-compatible strains were found, even if the industry would consider planting other species, they probably would not plant mixed forests, which would be the healthiest and most fire-resistant choice. The industry wants to harvest in uniform blocks.

What can we do to restore healthy forests ready to face the challenges of a hotter, dryer world? First,

and perhaps most important, we should support doing nothing! The price of logs was high before the fires. It doubled when the fires struck. There will be huge pressure to get the public lands—and that includes the O&C lands—salvage-logged, a process that exacerbates soil damage, increases erosion, and prevents natural regeneration of the plant and soil communities damaged or killed by fires. The oldest trees of whatever species are the most in danger, whether from collateral "salvage logging" or loss of protection such as the giant Ponderosas face in eastern Oregon. Spring will see a resurgence of plants and fungi. Birds will come to feed on the insects foraging on the still-standing trees. Mammals will return, seeking the tender new foliage. Predators will surely follow. The forest will have entered another stage of its being. Seedling trees will emerge, perhaps naturally, perhaps gently planted among the standing dead. And so, the "nothing" you can do is actually a very big something. Get political. Write Governor Brown and appropriate state and county officials and ask them to protest salvage logging. Keep posted on proposals to log the fire-damaged lands. Remember, the fires spared many acres whose trees, shrubs and forbs are a seedbank for regeneration in the neighboring burns. It is a common tactic for companies to request to log intact, healthy woods to make it worthwhile to do the salvage, as if the salvaging were a favor they are doing! Remember the record high price of timber. All logging is worth their while. Surely there will be tree-planting projects. Participate if you can. Be aware, both newly planted and naturally sprouted trees are much more vulnerable than the older surviving trees, but some will survive. It's worth the effort.

Sometimes I let my imagination take over. What if the Oregon Forest Practices Act mandated the planting of certain numbers of cedar, spruce and forest hardwoods like Chinquapin (*Chrysolepis chrysophylla*) in reforestation projects? What if timberland owners experimented with planting trees quite new to Oregon? How would *Sequoia gigantea* fare? We may not be able to recreate the ideal forests of our memories, but there will be trees, new forests diverse in new ways for us to cherish and protect.

The Eugene Natural History Society website has moved to a new host at: http://eugenenaturalhistorysociety.org/ This is a new site under old management. Changes and improvements to the site will be ongoing. If you have any questions or concerns, please let Tim Godsil know at tgodsil@gmail.com

The Fire and the Dipper by August Jackson The Rogue River churns and boils through Mule

Creek Canyon more than it roars. This is a canyon in the Western Oregon sense—green-gray rock walls not much taller than an overpass. Dark walls that pale



in comparison to the canyons of the Southwest, but a canyon nonetheless and perhaps even moreso in that it has something to prove, and in a strictly human perspective, an anxious perspective, it proves in upending boats and lives. In spite of appearances, the river has settled into a comfortable path slipping in between time and space, charting a course along a fault line with younger rock on the left, older, more tortured rock on the right. I can't tell the difference. Either edge is rough but smoothed over enough so that it's questionable whether the river has shaped the land more, or the land the river.

As we swing into the Coffee Pot—an unassuming, boat-eating, whirlpool widening at the edge of a canyon constriction, I make and hold eye contact with an American dipper—a bird that is of land and river in a way that few others are. He's using this natural stone amphitheater to project his voice into the thick, purgatorial September air. There is no mate to be had this time of year. No territory to claim. This is either practice or song for the sake of song—fleeting beauty we shouldn't put past birds as quickly as we do. This is the most sincere belief in next year that I've heard in months and it straddles the space between reassurance and condescension as he hardly flinches while my face draws within feet of his. I dig my paddle deep while three strikes of a rubber mallet brute-forces back into its brass locks an oar knocked loose by the alcove walls. One more

spin around and we break free into the widening notcanyon and he belts forth again ten times his size. I look skyward and slightly south and see the sun for the first time in two days; stare at it guiltily through the orange-gray not-sky. He sings again.

> Labor Day is our first on the river and it's hotter than any in memory. But dusk comes early in the gorge, and the air cools rapidly as the sun settles behind a ridge cloaked in madrone, tanoak, and Douglas-fir. The coarse river sand is protective of the day's heat and I make like the western pond turtles dotting the shoreline, shuffling my feet into the warmth of the top layer, fresh cuts and all. I'm struck by the feeling that this is the very last of a summer that has been both too short and too long in the same way

everything this year has been too much and not enough. Summer sifts through my toes.

The night sky is crisply clear, and the Milky Way stretches a bridge between the two ridges. A strummed guitar from a camp fifty yards upriver lulls me to sleep as I stare skyward through the mesh of our tent. I stumble out of bed after midnight for the usual reasons and find the stars all but obscured by a bright half-moon diffused by a low cloud. When I wake in the morning the cloud is yellow, the sun is hidden, the air is cold, and it smells richly aromatic of wood smoke—a sweet mélange of the incredible conifer diversity in this region. In the afternoon it begins to rain small, almost imperceptible white flakes of ash; lives and livelihoods, and I can't help but think how we, I, don't yet know—haven't tried to learn—how to live in this place. I envy the dipper his gray life in between worlds. The fire and the dipper are endemic, but we (most of us, those of us without millennia of tradition) are tourists on both river and land.

It's hard to tell whether the river has shaped the land more, or the land the river. It's hard to say the same for us. We've now spent so long shaping the land in the name of progress that we are placeless and as amorphous as a monotonous forest understory choking on its own exuberance. We have made our forests in our image and we and they could use some shaping. These forests, especially here in the

Siskiyous, are born of fire. On day three we learn from a kayaker that Talent and Phoenix burned. On day six we pull off the river, and twenty minutes down the road our phones return to life with a flurry of texts and missed calls reflecting concern both from those who know we're on the Rogue River, and those who think we're still in Springfield—the latter more confusing and concerning to us. The extent of the fires in Western Oregon hits all at once. Historic. Unprecedented? Cyclical. The 1902 Yacolt Burn is eerily similar in dates and conditions. Strong east wind events in early September are a regular and preindustrial, pre-anthropogenic-climate-forcing

phenomenon, hitting the forests of the Western Cascades when they're at their driest. They often pass without too much fuss, but dendrochronological studies show that east wind firestorms in the Western Cascades are (at least at this scale) a once-in-a-lifetime event, and they've been memorialized in our legislating but not in our collective memory. Our memories die with us, and our memories die alone, and for that we don't really have a sense of where we live. Fire may force us to build a relationship with the land and we'd be better for it. Better if it's remembered and better if it's shared.

Events of Interest in the Community

McKenzie River Trust https://mckenzieriver.org/events/#event-listings
There are no upcoming events.

Lane County Audubon Society lanecountyaudubon.org

Friday, 11 December, 7:30 p.m. LCAS and ENHS are co-sponsors of John Marzluff's presentation. See pages 1, 2 and 3 of this newsletter for details.

- **3 January 2021. Christmas Bird Count.** Unlike many traditional activities this year, the 2020 Eugene Christmas Bird Count (ECBC) will happen! It is set for Sunday, 3 January 2021, our normal date during the three-week Count Period. National Audubon Society (NAS) issued guidelines during the last week of September for conducting this year's unusual Christmas Bird Count, and we will abide by them. Our Coordinator, Dick Lamster, is working with the 27 Team Leaders and other Count volunteers to work out details, but the following will probably be the plan for this year.
- 1. Each Team Leader will determine how they want to organize and move their team around. If a Team Leader prefers not to go on the Count this year, a one-year replacement will be chosen.
- 2. We expect more Home Counters this year and will be prepared to handle that. To be a Home Counter you must live in the Count Circle.
- 3. Sadly, there will be no Chili Feed Countdown this year. This is unfortunate, because the Chili Feed is always fun for everyone. Instead, we may have a Zoom Countdown.
- 4. Teams that walk for most of the day will probably have fewer changes to consider than those that drive a lot.
- 5. We encourage all previous participants in the ECBC to do so this year. It will be our 79th! New people are always welcomed, and we will find a team for anyone who wants to go look for birds on January 3rd.

Please contact Dick Lamster at maeveanddick@q.com, or call him at 541.343.8664 if you are interested or have suggestions. The December-January Quail will include more details.

Mt. Pisgah Arboretum

For MPA activities go to https://mountpisgaharboretum.com/festivals-events/

University of Oregon's Museum of Natural and Cultural History https://mnch.uoregon.edu/museum-home
MNCH is now open to the public with new limited hours: Wednesday through Sunday 11 a.m. to 12 noon for seniors and COVID-vulnerable visitors. 12 noon to 3 p.m. for everyone. Current exhibits: Explore Oregon and Oregon—Where Past Is Present. Learn more.

Native Plant Society of Oregon, Emerald Chapter https://emerald.npsoregon.org/

Sunday, 13 December, 2 to 4 p.m. Field Trip: Plant Lover Ramble. Join Emerald Chapter members on a monthly casual plant meet-up in the Eugene area (location to be provided with registration). This is not a traditional plant walk led by an expert but a group adventure. Come ready to ask questions and share your knowledge of whatever plants we find. Due to public health concerns, we ask that attendees pre-register by emailing your name and contact number to em_president@npsoregon.org.

Monday, 14 December, 7 to 9 p.m. Online Program: Annual Holiday Social. Please join us for our annual show and tell about your botanical adventures. All are welcome! Settle into a comfortable chair with a warm beverage and enjoy sharing stories and connecting with friends. To participate, submit 3 to 5 photos. Instructions on how to submit will be determined soon and will be posted here: https://emerald.npsoregon.org/. Stay tuned!

Nearby Nature https://www.nearbynature.org/

Look at Nearby Nature's website for events in December and early January.

Friends of Buford Park and Mt. Pisgah https://www.bufordpark.org/

Because people and nature need each other, the Park is OPEN during the Coronavirus/COVID-19 pandemic. Please refer to Lane County for instructions about the park and updates.

ENHS welcomes new members! To join, fill out the form below. Membership payments allow us to give modest honoraria to our speakers and pay for the publication and mailing of *Nature Trails*. Our web address: http://biology.uoregon.edu/enhs

MEMBER	SHIP	FORM
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Name	
Address	
CityState &	Zip Phone
E-mail (if you want to receive announcements)
I (we) prefer electronic copies of NT rather that	n paper copiesYesNo
If yes, email address (if different from the one	above):

ANNUAL DUES: Family \$25.00 Individual 15.00

Life Membership 300.00 Contribution

Make checks payable to: Eugene Natural History Society P.O. Box 5494, Eugene, OR 97405 Annual dues for renewing members are payable in September.

Memberships run from September to September. Generosity is encouraged and appreciated.



Wolves, ravens and magpies at a kill in Yellowstone National Park. Photo by J. Marzluff.

ENHS. Officers and Board Members 2020–2021

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Wollter.

2020–2021 Speakers and Topics

11 Dec.	John Marzluff	Of Ravens, Wolves and People
15 Jan.	TBD	
19 Feb.	TBD	
19 Mar.	Pepper Trail	Fighting Crime with Feathers: The Casebook of a Forensic Ornithologist
16 Apr.	Daphne Stone	Lichens: How They Tell Us About Their Environment
21 May	Lauren Hallet	The Ultramafic Plant Communities of the Siskyous