# Nature Trails

## Published by the Eugene Natural History Society

### Volume 58, Number 7, October 2024

The Eugene Natural History Society is based out of the traditional homelands of the Kalapuya peoples who stewarded this land for millennia. Today most Kalapuya people are citizens of the Confederated Tribes of Grand Ronde and the Confederated Tribes of Siletz Indians and continue to play an active role in local communities and in the stewardship of this land.



Chesnimnus Vista, Wallowa-Whitman National Forest, Oregon. Dave Jensen

# An Enduring Conservation Vision for the Blue Mountains Ecoregion

## David Mildrexler, Ph.D.

**Systems Ecologist** 

Eastern Oregon Legacy Lands and Wallowology Natural History Discovery Center Joseph, OR

## Friday, 18 October 2024, <u>7:00</u> pm

This month's meeting will be a hybrid of in person and real-time Zoom. The in-person lecture will be held at <u>7:00</u> in <u>221 Allen Hall</u>, University of Oregon campus. The Zoom lecture link is <u>https://zoom.us/j/97499095971?pwd=eE9sdG9hSHMvOHhIUEJuU21wT20rdz09</u> or see our website at <u>https://eugenenaturalhistorysociety.org/</u>

#### This Month's Speaker: David Mildrexler



You've heard the proverb "A rolling stone gathers no moss," initially attributed to the Latin writer and actor Publilius Syrus (85–43 BCE) and meant to imply a certain rootless freedom from encumbrances. Although Dr. David Mildrexler is a native to Oregon's wet side, a place that celebrates a propensity for growing moss, you aren't likely to find any growing on him. He is a world traveler, conservationist, and climate studies Ph.D. Nevertheless, he is happily encumbered at his home in the Blue Mountains region of Oregon, where he is passionate about applying his global experience and local perspective toward the betterment of the planet. Would you expect anything less from someone who once aspired to become a professional tennis player?

Like many Eugene Natural History Society speakers before him, David developed an appreciation for the natural world at an early age. His explorations of the forests, farms, mountains, and coasts of Oregon produced a strong connection with the lands, waters, and wildlife of his native home. So after traveling the nation for years pursuing tennis dreams and a collegiate career that started on athletic scholarship at Georgia Tech, David naturally decided to return home to refocus his efforts on academics. He received his B.S. degree in environmental science and resources from Portland State University in 1999. It was at PSU that David was drawn toward the study of vegetation-climate interactions, biodiversity, and old-growth forest ecology.

Following his undergraduate work, David once again became a rolling stone but with a different purpose. He traveled extensively in Central America, backpacking and volunteering in national parks. Later he worked at the Luquillo Long-term Ecological Research site in Puerto Rico. During his travels he met friends who suggested he apply for graduate study at the University of Montana. He followed their advice and began working with Nobel Peace Prize Laureate Steve Running, a leader in the filed of global ecology and in communicating the science of global warming to the public. Under Running's tutelage David earned an M.S. degree in forest science, studying global climate change through satellite-based land surface temperatures.

Although David's career was definitely off and rolling, he was anything but rootless. After completing his M.S. degree, he acquired a cabin on a few acres in Wallowa County in the heart of the Blue Mountains physiographic province. Although the acreage that he personally stewards is small, David's research and work has remained at the level of regional and global landscapes. He was the conservation director for the Greater Hells Canyon Council, an organization dedicated to protecting the land, waters, and wildlife of the Blue Mountains. He has also worked on travel planning and the Blue Mountains Forest Plan Revisions. These landscape-scale policies remain in progress today.

In 2012 David entered the doctoral program in Oregon State University's College of Forestry as a Provost's Distinguished Scholar. At OSU he worked with Dr. Warren Cohen, expanding his research on global temperatures while developing a forest vulnerability index to describe drought and high temperatures. This work led to a Ph.D. degree in forest ecosystems and society.

In 2015 David was honored as a Wilburforce Fellow in Conservation Science. In 2022 he became a Voices for Science Advocate for the American Geophysical Union, an organization dedicated to training scientists to communicate the value of earth and space science to decision makers, journalists, and public audiences. Clearly David's science communication skills are excellent, which is good news for our audience! His research has been published in journals such as *Remote Sensing of Environment*, *Bulletin of the American Meteorological Sciences, Ecological Applications*, and *Frontiers in Forests and Global Change*.

Yet after all of the travel and all of the research at regional and global levels, David remains at home in the Blue Mountains. The hats he currently wears are numerous. He is employed as the systems ecologist with Eastern Oregon Legacy Lands, where he focuses on terrestrial systems science, global change biology, and large-landscape conservation. He can also be found developing educational programs at Wallowology Natural History Discovery Center in Joseph, Oregon. David is a founding member of the Camas to Condors Partnership, a Nez Perce-led multidisciplinary organization focusing on applying indigenous knowledge and resilience to landscapes in the face of climate change. In his "spare time" he serves on the board for the Wallowa Land Trust.

Following are David's own words on what we can expect from his upcoming lecture:

The Blue Mountains cover a huge area of majestic mountain ranges interspersed with verdant valleys, rugged canyons carved by free-flowing rivers, expansive forests and grasslands, and rural place-based communities that together compose the largest ecoregion in Oregon, extending into western Idaho and southeastern Washington. There is a lot at stake in this large, diverse region where big

#### **Marster Spring**

by Tom Titus

The writing workshop I am facilitating is into its third day traveling around a basin once filled by Paleolake Chewaucan. Our group has moved steadily through time, from nearly 15,000 years before present (YBP) at Paisley Caves to 3,000– 500 YBP at ancient campsites on Lake Abert. Together we have imagined how humans might have interfaced and integrated with their world in a time when people and nature were not the duality they are today. In our minds we have spent the winter eating dried *tui* chub, thought through the possibilities for excretion while riding out a storm inside a rock shelter, and wondered about the ancient and present reality of migration enforced by climate.

This morning we focus on the present, a young October day gilded and warm in the way that syrup and butter melt over hotcakes. My butt rests on a small beach of basalt cobbles, the small of my back set against a larger rock smoothed by eons of water tumbling through dry trees are crucial for carbon storage, mountains supply the region's abundance of cold water, and forests stretch from the Cascades to the Rockies forming a connection of continentalscale importance for plants and animals. Yet there is no regional conservation vision that responds to the many threats this area faces. Eastern Oregon Legacy Lands is developing a holistic vision to secure region-wide resilience for the Blue Mountains. I will speak about why the Blue Mountains are so important and present a new landscape-scale conservation vision for this region.

You get the picture. Dr. David Mildrexler is educated, passionate, eloquent, and dedicated to his place in the world. Please join us in person at 7 p.m. on Friday, October 18 in 221 Allen Hall on the UO Campus. The title of David's talk is "An Enduring Conservation Vision for the Blue Mountains Ecoregion." Yes, there will be cookies! If you can't make the trip, by all means Zoom in at https://zoom.us/j/97499095971?pwd=eE9sdG9h

<u>SHMvOHhIUEJuU21wT20rdz09</u> or find the Zoom link on the ENHS website at <u>https://eugenenaturalhistorysociety.org/</u>. One way or another, we look forward to seeing you there. —Tom Titus

country. The Chewaucan River burbles past my outstretched legs, transecting an island of cottonwood and Ponderosa pine skipped over by the Bootleg Fire of 2021. On the ridge above the river, skeletons of juniper and pine rise black against a mountain bluebird sky. A down-canyon breeze gathers and gentles against my right cheek, carrying the scent of mint sprigs into nostrils searching for the smell of winter. Dragonfly flutters and tips downstream, perhaps hoping for a last mating in this closing window of autumn. To my left lies a deer pelvis, stark against charcoal basalt, its oval cavity pierced by sedges the size of golf pencils. The bones are an outcome of starvation or coyotes, or both, a harbinger of a hungry reality looming on the horizon.



Even in the warm wither of mid-October, the stream lacks clarity. I'm not sure why. This morning I'm no more willing to explain this turbidity than I'm willing to think through my own ongoing lack of clarity. Actually, I'm suspicious of clarity. The real world has very little of it. In fact, I became a biologist because of the comforting messiness of living things and their various continua that defy definitions. Definitions are human constructs. They provide a false sense of security in the fuzzy flux and flow of a living world. At worst, misplaced clarity can become the mother of dogma. The splish of a feeding trout in the riffle in front of me means certain death for a floating insect. A subdued roar of ATVs reaches me from across the creek, people probably returning from a morning deer hunt. I find the sound obtrusive, even though my group drove two cars to get here. All of these eaters and eaten seem to affirm my point: reality is messy.



Tom Titus

My eyes close into the late-morning sun. For a moment, the swirl of October drifts away on the current. Some find it a conundrum that my favorite month is also the most emotionally taxing. It's the month before hunker time, the weeks left to gorge on transiency. Vine maple leaves shot through with yellow and red. Chanterelles fresh up from the first rains. Chinook salmon thrashing into coastal streams to perform their life-perpetuating death rite. Our family apple cider day at the Smith River orchard. Mom died last summer, reminding me that I am now of an age where I can see an end to my own Octobers. I'm not afraid, exactly. Just trying to drink them in as best I can. The breeze picks up, rattling and twirling golden cottonwood leaves still clinging to their branches. I can relate.



Tom Titus

Sometimes I ask too much of a place. Often I sit looking for a window into consciousness, as though my attention in any liquid moment isn't conscious enough, as though somehow the place needs to conform to my human expectations around awareness, as though I need approval from the Transcendentalists. It's silly, really. Because the very act of trying to "elevate" my thinking is sometimes as much a distraction as wondering what to fix for lunch when I return. This is partly why I hesitated to pull out my journal and begin writing this morning.

Most of my time is spent in a headlong plunge through life that keeps me from thinking too deeply. I'm not a student of mysticism, although the mystics have been there to bail me out when my brain wandered too far afield. Nor am I a student of quantum theory, even though I have sometimes coopted those wriggly, wavy, entangled ways of matter and energy to shore up my intuition. But the physicists have recently grabbed my attention. Using a combination of radiotelescopic technology and astrophysics they have detected an underlying "hum" in the universe caused by low-frequency gravitational waves. This tonal energy is shared by all things, living or not, animal or not, human or other-thanhuman. Everything. The rock that is becoming uncomfortable against my back, the water whose lack of clarity I have chosen as my own, the insect in the gullet of that trout, and the misguided dragonfly searching for fall sex.

No, the hum does not explain away my tinnitus. The low frequency of human hearing is about 20 hertz, and these instruments are "listening" in the range of a nanohertz, about one thousand millionth of a hertz. This means I can't

tune directly into this hum without the technology and mathematical whizz-bang that was used to discover it. Nevertheless, I'm ready to go out on a limb. Experiencing the hum will be a matter of intense attention to the comings and goings of the moment coupled with a commitment to the idea of this unifying lowfrequency resonance. I can know the hum is here with a brain that is ready to accept that this unifying reality makes sense. Seems a little idiosyncratic, right? Yet it strikes me as more reasonable than trying to overlay my strictly human version of consciousness, all riddled with impatience, and ADD, and neurological turbidity, onto a given time and place. In reality, all I have to offer is sitting. Attention. Maybe some words. The rest is already here. All this yellow and breezy whirling toward winter needs no help from me whatsoever.

The dragonfly, thorax holding rattling wings, its black darning needle abdomen trailing along behind, circles around one more time as if to say, "What of it?" I reach to pluck a mint leaf. Crumple it beneath my nose. Have I told you how much I love the music of mint?

[This essay appeared previously on Tom's blog *Words on the Nature of Life*, https://tomtitus.substack.com/]

Keep your copies of *Nature Trails* coming and support our efforts to provide fascinating natural history presentations every month and occasional field trips. Annual dues for ENHS memberships are used to pay modest honoraria to our speakers and to print and mail *NT*. Dues are payable in September. You can also renew and pay electronically at <u>Join/Support</u> (eugenenaturalhistorysociety.org)

<u>Go Paperless!</u> When you choose to receive your issue of *NT* as an electronic document, you help us save paper and postage, can access the live links, and can view all of the awesome photos in color!

#### Volunteers needed for ENHS booth at the Mt. Pisgah Arboretum Mushroom Festival Sunday, 27 October, 10am–5pm.

See announcement in the calendar below. No experience necessary; you will be paired with a trained volunteer. Booth sitting is a great way to learn interesting things and meet interesting people! We usually work in 3-hour shifts, but other time slots are possible. Contact Kim Wollter to sign up: kwollter@comcast.net

#### ENHS TRUFFLE FIELD TRIP

<u>Stay tuned</u> for information on a **truffle field trip** with our January speaker, Charles Lefevre. Rather that go out in January (brrrr!), he would prefer to lead us to truffles when they are more abundant in November. Date and time to be determined!

#### **Upcoming Events**

(for complete listings and details, see individual websites)

- McKenzie River Trust <a href="https://mckenzieriver.org/events/#event-listings">https://mckenzieriver.org/events/#event-listings</a> or 541-345-2799
   Wednesdays, 9–11:30am. Watershed Wednesdays at Green Island. Projects include invasive species removal, habitat care, planting, and tree establishment. Sign up
  - Second Saturdays, Mar.–Dec., 8am–4pm. Living River Exploration Day at Green Island. Free, no preregistration.
  - **Tuesday, 29 Oct., 5:30–7pm. Rivers to Ridges—Past and Future Partners Talk.** Join Rivers to Ridges partners, including Executive Director Joe Moll and local landscape architect Jeff Krueger as we celebrate the accomplishments of the past 20 years of partnership activity and look ahead to the future of conservation efforts in the Upper Willamette valley. The Shedd Institute, 285 E. Broadway, Eugene. Preregistration required.
- Native Plant Society of Oregon, Emerald Chapter <u>https://emerald.npsoregon.org/</u>
- Monday, 21 Oct., 7–9pm. Climate Warming Effects on PNW Prairie Species. Join Sarah Erskine, NPSO board member and PhD candidate in the UO Institute of Ecology and Evolution, as she shares results of her research and some beautiful plant photos! Amazon Community Center, 2700 Hilyard St., Eugene.
- **Anytime. Self-guided Tour of Laurelwood Bog.** Go south on Agate St in Eugene to the dead end at 29th. The entrance to the Bog is clearly signed, and the trails are covered with bark.
- Mt. Pisgah Arboretum <u>https://mountpisgaharboretum.com</u> or 541-747-3817. Sunday, 27 Oct., 10am–5pm. 2024 Mushroom Festival. Attendance is limited; tickets required.
- Lane County Audubon Society <u>www.laneaudubon.org</u> or 541-485-BIRD; maeveanddick@q.com or 541-343-8664

Saturday, 19 Oct., 8–11am. Bird Walk. For all participants. For more info, contact tolalla@gmail.com.
 Tuesday, 22 Oct., 7–8:30pm. Brazil's Atlantic Rainforest and Pantanal. Ram Papish and Roy Lowe will take us along on their recent adventures in Brazil. Meet wild jaguars and see the world's largest bird-feeding station. Zoom and in person, Campbell Community Center, 155 High St., Eugene.

• Museum of Natural and Cultural History, University of Oregon <a href="https://mnch.uoregon.edu/museum-home">https://mnch.uoregon.edu/museum-home</a> Ongoing exhibits: Oregon—Where Past Is Present; Explore Oregon; Underwater Forests—Oregon's Kelp Ecosystems; Capturing the Cosmos: Images from the James Webb Telescope.

Thursday, 10 Oct., 6pm. The Archeology and Ethnohistory of Oregon's Lost Sea Otters. Tribal researcher Peter Hatch (Siletz) of the Elakha Alliance and archaeologist Hannah Wellman discuss their work on this lost keystone species.

Monday, 14 Oct., 10am–5pm. Indigenous Peoples' Day. Come celebrate 14,000 years of Native culture in Oregon. Free admission in honor of the day.

• Nearby Nature <u>https://www.nearbynature.org/</u> or 541-687-9699, 622 Day Island Rd., Eugene (Alton Baker Park) Monday, Wednesday, Friday mornings. Wonder Keepers. Preschool program outdoors in our Learnscape. Tuesdays and/or Fridays afternoons. Natural Neighbors. After-school program outdoors in our Learnscape.

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https://www.youtube.com/channel/UCEr yzVh9lw9y-nLS\_t94BVw



Eugene Natural History Society P.O. Box 5494 Eugene, OR 97405

Monthly meetings: <u>When:</u> September–May: third Friday; December: second Friday <u>Where:</u> 221 Allen Hall (UO campus) and/or on Zoom at <u>https://zoom.us/j/97499095971?pwd=eE9</u> sdG9hSHMvOHhIUEJuU21wT20rdz09 Time: 7:00 pm

Parking for UO events is available at the UO Physical Plant lot: From Franklin, turn north onto Onyx, go 1 block to the lot. After 6pm, it's open to the public. See our website for more details. http://eugenenaturalhistorysociety.org/

#### **ENHS Officers and Board Members 2024–2025**

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#### 2024–2025 Speakers and Topics

20 Sept.	Patty Garvey-Darda	Why Did the Ecosystem Cross the Road?
18 Oct.	David Mildrexler	An Enduring Conservation Vision for the Blue Mountains Ecoregion
15 Nov.	David Lewis	Reconstructing Traditional Environments of the Willamette Valley
13 Dec.	Michael Murphy	The Modern Bird World Living for the City
		(cosponsored with the Lane County Audubon Society)
17 Jan.	Charles Lefevre	Northwest Truffle Diversity
21 Feb.	David Paul Bayles	Forest Photography
21 Mar.	Nina Ferrari	Into the Third Dimension: Understanding Vertical Distributions of Birds in
		Old-Growth Forests
18 Apr.	Sara Hamilton	Taking Care of Oregon's Kelp Forests
		(cosponsored with the Emerald Chapter of the Native Plant Society of Oregon)
16 May	Clara Bird	Gray Whale Foraging Behavior