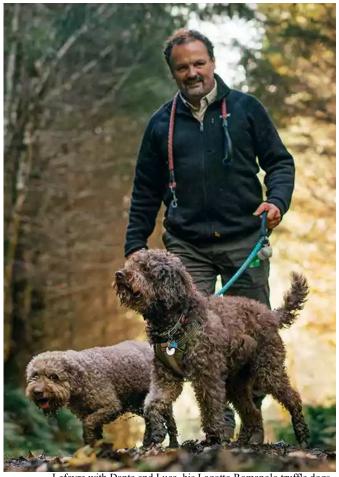
Nature Trails

Published by the Eugene Natural History Society Volume 59, Number 1, January 2025

The Eugene Natural History Society is based out of the traditional homelands of the Kalapuya peoples, most of whom are citizens of the Confederated Tribes of Grand Ronde and the Confederated Tribes of Siletz Indians. These Indigenous people stewarded this land for millennia and continue to play an active role in local communities. We commit to supporting the many Tribes and Indigenous scholars and organizations working to shape the future of these lands and waters that we mutually cherish.



Lefevre with Dante and Luca, his Lagotto Romanolo truffle dogs

Diversity and Domestication of North America's Native Truffles

Charles Lefevre, Ph.D.

New World Truffieres and the Oregon Truffle Festival, Eugene

Friday, 17 January 2025, 7:00 pm

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

This Month's Speaker: Charles Lefevre



There are several members of ENHS who have already met Dr. Charles Lefevre, our January speaker. He led a field trip in the Hardesty Mountain area for us on Saturday, 16 November. Our field trips usually follow a speaker's talk, but in this case it made more sense to schedule the field trip when weather was more likely to be amenable. That Saturday was rainless, but snow was expected in the mountains in January.

I volunteered to write the speaker's introduction for Charles for the January issue of *Nature Trails*. It is a delight and privilege for me to do so, as Charles is a former student with whom I've stayed in close touch for over 25 years. The difficulty for me is that the field trip report by Tom Titus in the December issue *NT* covered most of what I would want to write about. Tom's review of their truffling experience is wonderful. Now would be a good time to revisit that issue:

 $\frac{https://eugenenaturalhistorysociety.org/wp-content/uploads/2024/12/NT202412.pdf}{}$

With Tom's description of a good field experience, I'll take up a discussion of Charles's personal, academic, and work background. Where he was born and grew up is very simple: born in Sacred Heart Hospital in Eugene and lived all his life in southeast Eugene, where he now lives, except for perhaps 4 years of travel in his younger days.

His interest in fungi showed up at an early age. When he was 8 years old he, took advantage of a half-price sale at a shopping center, using his \$1 to buy two sleeves of petri plates for 50¢ each and using those plates to try to grow mushrooms. In high school, he was taught mushroom hunting by an Italian family, who loaned him a car to go out on forays. Another high school friend still collaborates with him in his current truffling activities.

Charles started college at Reed, majoring in physics with an eye on astrophysics. However, after a disappointing experience, Charles dropped out and returned to Eugene, where he attended the University of Oregon and received a degree in biology. That was when he turned up in my botany class, a singularly bright student interested in chanterelles. Graduation was followed by a few years doing molecular biochemistry work at Molecular Probes. It was interesting work with good colleagues.

Again, however, he was not happy in the work environment and returned to his love of fungi, enrolling in a Ph.D. program at Oregon State University. In 2002, he finished his Ph.D. degree in forest mycology with a dissertation titled "Host Associations of Tricholoma magnivelare, the American Matsutake." In addition to ecological characters, he studied the ability of volunteers to detect the smell of the critical fungal associates of matsutake. I call that foreshadowing! During that time his interest in truffles developed dramatically thanks in part to a special interest by people at OSU such as Jim Trappe, who promoted an appreciation of truffles as important for the nutrition of forest animals, especially squirrels. Trappe initiated the development of a truffle collection that is the best showcase of truffle diversity in North America and that Charles has continued building.

While a student in 1998, Charles attended a conference on mycorrhizal associations in Sweden, where he sat for lunch with some of the foremost truffle farmers from France. (They thought he should speak French with a name like Lefevre.) A truffle conference in France the next year lit his fires permanently. He had already begun inoculating hazelnut seedlings with European truffles, seeing the future of this in the marketplace. At that time, native Oregon truffles

were considered second rate and sold at a tenth of the price of traditional European truffles. He knew that was an issue that needed serious attention because when he opened a refrigerator holding both European truffles and Oregon truffles, the overwhelming, wonderful aroma mostly came from the Oregon truffles.

Charles and his wife Leslie Scott started the Oregon Truffle Festival in 2006, which was hosted by the culinary department at Lane Community College. I can vouch for it being an extraordinary feast. The next year, all the chefs at the festival were previous James Beard Foundation Award winners. Charles and Leslie have continued to produce the Oregon Truffle Festival; as a result, the reputation of Oregon truffles has been well launched, and this culinary commodity continues to increase in value.

Charles has created a business of growing and distributing truffle trees and merged it with his love of training truffle-sniffing dogs and surveying the landscape for native truffle diversity. He now operates New World Truffieres, where he grows and inoculates seedlings to be used to create truffle orchards (truffieres). Inoculation of tree seedlings while still in the nursery gives the truffles a competitive advantage over other fungi that may try to colonize the roots of the planted tree. Over 40 truffle farmers across the country now use inoculated seedling starts from NWT to cultivate European truffles, and many more orchards are up and coming. Truffle dogs are also becoming more popular. By 2015, there were over 1,000

dogs in the Pacific Northwest trained to find truffles; by now, that number is probably several thousand.

Truffle farming is beginning to show economic benefits for forest management that will contribute to conservation policies. Charles's presentation will be of interest to forest lovers and fungus lovers alike.

Join us in person on Friday, 17 January, in 221 Allen Hall on the UO campus to hear about Dr. Lefevre's work with truffles. There will be cookies. If you can't make the trip, you won't get the cookies, but you can Zoom in at https://zoom.us/j/97499095971?pwd=eE9sdG9hSHMvOHhIUEJuU21wT20rdz09 or find the Zoom link on the ENHS website at https://eugenenaturalhistorysociety.org/

—Dave Wagner

A note about Zoom. The ENHS presentations have been livestreamed via Zoom since the pandemic, and this approach has been mostly successful, with occasional glitches. We continue to work at improving the digital feed for our online audience.

Winter in Three Parts by Tom Titus

Precarious

At the edge of the continent at the edge of normal, a Sitka spruce clings precariously from a wave-crashed cliff. The spruce is small but not young. Needled fingers implore the sepia sunset for one more day. Just one more day above this crescent moon beach of crushed shells, of kelp no longer holding fast, of frayed and wooly drift logs ravaged by beach stones. The stones are smooth, gentling in the curl of my hand.

Tomorrow the highway going north will be closed. On that stretch where it loops like an asphalt snake around basalt headlands, a piece of pavement has slid toward the gaping ocean. Again. As if the road knows by rite of gravity

and flush of late winter rain where it belongs. More rebar, more asphalt, more human energy devoted to hanging on. Maybe just for one more day.

Eighty or so sanderlings and I follow lines of cloud, sand, surf. Our similarities end here. Their short black legs churn in unison with one another, a choreographed flock of baseball-size bodies dancing with incoming waves. I'm solitary, with legs long and loping and pale. One bird dives exuberantly into the surf, needle beak churning the spreading saltwater. Ten others follow her. I keep my white running shoes dry by jogging diagonally to incoming waves. I love sanderlings. They exploit this narrow space that

separates the safety of our landed lives from certain death in a cold ocean.

Circling of predators. Bald eagle hovers osprey-like above the surf. Waiting. Waiting. Diving. Talons spread and plunge into surging water and emerge wet and empty. A fisherman stands waist-deep in waves, casting baited hooks. His bag is empty. The dark driftwood head of a sea lion bobs twenty yards offshore. Is her stomach empty? A cluster of food fish has likely drawn everyone together, all of these fervent and unrelinquishing eaters and eaten. All of this ebb and flow.

High tide line is littered with sea jellies. Some are ten translucent inches in diameter, every one of them long since dead. Did they die at sea and wash up postmortem? Or did they cluster in this same parcel of the Pacific where fisher and sea lion and bald eagle now search for sustenance, only to be cast ashore in the regurgitation of a storm? An infinite gulf of dry sand separates their ignominious decomposition from churning waves on which they so gracefully drifted. I cannot step on them.

This precarious edge. Of a continent battered by storms, sliding submissively toward the center of the earth. Maybe snagging on the way down in the big hiccup of a subduction earthquake. Maybe descending smoothly, becoming molten, emerging fiery from an inland volcano, cooling to rock and soil that subtend a forest. This flux of tide and passion where humans persist with highways and hotels, small birds swing to and fro, fish and fishers swirl together. Where waves thin as window glass separate the living from the dead-but-about-to-live-again-in-another-form. Where life tips on edge, trying to fit. Just one more day.



Relationships

In January I was compelled to go winter steelhead fishing on the North Fork of Smith River, 15 miles inland from Gardiner. But the Coast Range was still gushing gravity-driven water from every gash and pore, and the stream was too high. I thrashed my way in heavy waders through prickly salmonberry canes and tripping vine maple. I was feeling stretched as thin as those conifer-caught clouds that couldn't quite clear the ridge. My plan was to spend the night in the pickup canopy, a little scrunched but dry. I'm not an accomplished steelhead fisher even under the best of circumstances. So I chose to abort the mission and swim myself upstream by driving the entirety of Smith River Road to the Johnny Gunter place. There lived a woodstove, electric lights, hot dinner, bourbon, and a bed.

This winding 45 miles is a long drive any time of the year. But in midwinter the trip can be an adventure. Jeffrey Foucault's lyrics poured fast and loud from the speakers: it's too late to go home early anymore.... I sang along at high volume as crystal curtains of runoff leapt hellbent over roadside cliffs. Smith River Falls was a muddy torrent plunging the eroded skeleton of the mountains toward the sea. Darkness chased the pickup down with miles still to go. I had the uncomfortable feeling of being engulfed by a black esophagus of asphalt that carried me ever deeper into the guts of the mountains. I swerved around the broken bodies of trees stretched prone across the road. Large impetuous raindrops pummeled the cab and bounced from glistening pavement into my headlights like little incandescent frogs. Just when it seemed I was running out of steam on this inclement adventure, the driveway was there, slanting hard uphill to the left. Rarely have I been happier to unlock that gate, get into the house, and build a fire. Culinary expediency called for canned chili and instant mashed potatoes for dinner. Rain hammered the metal roof, beating me into a warm and senseless sleep.

Silence roared in on the dawn. Thirty-four-degree daylight sifted over a tentative skiff of snow on the meadow. Conifers drooped under their midwinter weariness of slush. Moon was hanging half-full in a blue window framed by clouds, becoming translucent as she relinquished the night sky to Sun. In the living room, the

woodstove grumbled with the effort of keeping the drafty house warm.

This was pruning season, but I was in no hurry to go to work on fruit trees still clinging to shawls of sloppy wet snow. Instead, I pulled an old chair up to the stove and read a short Barry Lopez essay from the collection Crossing Open Ground entitled "Children in the Woods." In 1982 Lopez was, as usual, far ahead of his time. He recognized that the most important gift we can give kids in wild spaces is a heart sense of relationship rather than the mindy minutiae of names and facts. Barry describes a deeper experience of the living world that can be found by expanding a specific instance such as finding a raccoon jaw to include all the relationships, including those of humans, that nestled the bone into that place at that time.

The warmth of Barry's words mingled with heat from the woodstove and radiated into my chest. Within the context of the natural world, he gave credence to an idea I've championed for years—that the job of raising kids, the job for all of us who continue to grow up and grow older, is to become less self-centered, more inclusive. We can measure the quality of our lives to the extent that we become invested in our connections with others. To me, this is our investment in all beings, human or not, animate or not. This has become a life-long personal process for me. Men reared on an up-by-your-bootstraps mythology, those who were taught that interdependence is a weakness, are especially challenged. My family heritage is a merging of twin streams of maternal and paternal independence that challenge me to live more inclusively. Sometimes I succeed with this wider vision for people and the world. Then an even deeper complication kicks in. I'm fundamentally an introvert and need solitude to recharge my personal battery.

Humans are the outcome of many formative forces, including our evolutionary past. We are the living story of a 2.5-billion-year history of life driven by the need for individual survival. Survival has been predicated on the need for belonging to a group only for the last 50 million years of our primate ancestry. No wonder we are so easily swayed by the purveyors of self-serving, individual freedoms at the expense of the full flower of interrelatedness within which we actually exist. No wonder we are in constant

conflict between self-centered desire and meeting the needs of others. And yet I wonder. Might we focus on that eye-blink of the last 50 million years and embrace our relationships? Could we look past our momentary desires into the eyes of our children who will continue when we are gone? Please. Show me the wisdom contained in a raccoon jaw.



Bones

Earlier in the week, my bones felt unusually anxious. I'm a little high-strung, but generalized anxiety isn't generally my jam. Yet I couldn't ignore that amorphous troglodyte rising from the dark caverns of my marrow, its cold fingers groping the space beneath my sternum, searching for my heart. My heart tried to run but was trapped. My heart needed me to speak the nameless into the light, but I had no voice. I thought a nap would help. But when I woke, the anxiety continued to circle a racetrack in my chest.

My bones needed an infusion of unfiltered spring water. Uncounted weeks had passed since I visited that quiet space in the Coast Range, a room-size basin where forest water burbles into dim light. With evening light making its gentle transit toward nightfall, I walked up the easy slope to the spring and was greeted by a thin slice of chaos. A recent storm had toppled an old

Douglas-fir, who in her rush to the ground had broken off a big leaf maple 20 feet up. Now a compound fracture of bared wood stabs a new gash into the canopy, bleeding fading daylight onto sword ferns.

This brief violence of falling wood tipped my drinking cup from its resting place on an old brick into the two-gallon pool where water gathers for its trip to the valley floor. I retrieve the cup, polish the accumulated minerals from white ceramic, dip, and drink in cold steady pulls. From the pool I scoop out a crumble of sandstone, bones of the mountains. Pebble grit, slippery mud, and aching water impregnate the skin of my bare hand, breaching the partition between my inner and my outer. Dissolved rock percolates into my bones, bearing witness against any illusion of separateness.

A burrow four inches in diameter is bored into the slope above the seep. In front of the burrow lies an orderly stack of lanceolate fern fronds, their snipped stems gathered and pointing together into the hole. A mountain beaver is a rodent that isn't a beaver. Some folks call it a boomer, except that it doesn't boom either. I can't remember how I know that this excavation and fern harvest are the doings of a mountain beaver. At this point in my life, some things just are.

Sunset. Back on the porch. A vapor of frog song and creek music rises from the valley floor. The gentle trill of a Screech Owl falls from the forest behind my right shoulder. Lavender clouds gape above conifer silhouettes. A scant breeze out of the southwest speaks of nothing but rising

darkness. Dinner is a warmed-up tamale and last fall's apple. Bourbon for dessert.

Inside the house, tree bones mumble in the woodstove, warming the front room. Beyond the window, clouds swing open to three-quarter Moon, ivory-skull face averted. She stares off toward some celestial object in the north that I cannot see. Moonlight drifts in like new snow. I exhale, search deeply beneath my sternum. There is only a contented wetness of lungs.



[All pieces excerpted from *Dancing with an Apocalypse*, Tom A. Titus, 2021]

Upcoming Events

(for complete listings and details, see individual websites)

- McKenzie River Trust https://mckenzieriver.org/events/#event-listings or 541-345-2799
 Wednesdays, 9–11:30am. Watershed Wednesdays at Green Island. Every Wednesday. Projects include invasive species removal, habitat care, planting, and tree establishment. Sign up
 - **First Fridays, 9:30am—noon. First Fridays at the Willamette Confluence**. Help care for this special area where the Middle and Coast Forks of the Willamette River meet. Projects vary season by season. Registration limited.
- Native Plant Society of Oregon, Emerald Chapter https://emerald.npsoregon.org/ Saturday, 18 Jan., 10am—noon. Westmoreland Park Wetlands Enhancement Work Party. 1545 W. 22nd Ave.. Eugene.
 - Monday, 20 Jan., 7–9pm. Rivers to Ridges Partnership: Past, Present, and Future. Speaker: Fraser McDonald. Amazon Community Center, 2700 Hilyard, 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 https://mountpisgaharboretum.com or 541-747-3817.
 - This 209-acre nature education facility is open daily until 3 pm. Visitors can explore the ecology of the southern Willamette Valley by wandering the many trails along the river and up the mountain.
 - **Saturday, 25 Jan., 10am-noon. Winter Moss and Lichen Exploration.** FREE for Arboretum members and kids; \$5 for nonmembers. Preregistration required.
- Lane County Audubon Society www.laneaudubon.org or 541-485-BIRD; maeveanddick@q.com or 541-343-8664
 - Saturday, 18 Jan. Third Saturday Bird Walk. Open to all. Contact tolalla@gmail.com.
 - **Saturday, 19 Jan. Midwinter Eagle Counts.** 9:30am–1pm at Dorena Reservoir; 2pm at Cottage Grove Reservoir. Contact GraceLovesBirds1@gmail.com.
 - Tuesday, 28 Jan., 7–8:30pm. Birding Is Good for You. Presenter: Dennis Arendt. Ruminations on birding and photos of local and exotic birds. Zoom and in person, Campbell Community Center, 155 High St., Eugene.
- Lane County Butterfly Club president@lanebutterflies.org
 - Wednesday, 12 Feb., 7:15pm. Native Plants: Creating Habitats for Birds and Pollinators. Presenter: Andrea Halliday. Hilyard Community Center, 2580 Hilyard, Eugene.
- Museum of Natural and Cultural History, University of Oregon https://mnch.uoregon.edu/museum-home
 Ongoing exhibits: Oregon—Where Past Is Present; Explore Oregon; Underwater Forests—Oregon's Kelp Ecosystems; Capturing the Cosmos: Images from the James Webb Telescope.
 - Sunday, 26 Jan., 2–4pm. Rumblings: Preparing for Cascadia. This documentary film explores the imminent threat of another large Cascadia earthquake and tsunami. Free. Art House Theater, 492 E. 13th Ave., Eugene.
 - Sunday, 2 Feb., 2—4pm. Outliers and Outlaws. This documentary film showcases the fabulous history of Eugene's large and vibrant Lesbian community. Free. 156 Straub Hall, UO Campus.
 - Thursday, 13 Feb., 6pm. The Past Is the Key to the Future: Oregon's Fossil Rodents and the Impacts of Environmental Change. Presenter: Samantha Hopkins. Free for members. Museum Galleria.
- Nearby Nature https://www.nearbynature.org/ 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.

ENHS MEMBERSHIP FORM

Name			
Address			
	State & Zip		
Phone			
	receive NT by e-mail or by USPS lectronic copies come to you in color with live r and postage!	links	
E-mail address	for electronic NT		
ANNUAL DU	ES:		
Ind	lividual \$15.00		
Fai	mily 25.00		
Lif	fe Membership 300.00		
Otl	her Contribution		
Make checks pa	ayable to ENHS or pay electronically on our web	osite →	
Mail checks to:	:		
ENHS			
P.O. Bo	ox 5494		
Eugene	e, OR 97405		

Fill out the form or go to our website (see QR code below) to join and pay by check or electronically. Membership payments allow us to give modest honoraria to our speakers and pay for the printing and mailing of Nature Trails. Find us at: http://eugenenaturalhistorysociety.org/and
https://www.youtube.com/channel/UCEryzVh9lw9y-nLS t94BVw

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

Monthly meetings:

When: September-May: third Friday;

December: second Friday

Where: 221 Allen Hall (UO campus)

and/or on Zoom at

https://zoom.us/j/97499095971?pwd=e E9sdG9hSHMvOHhIUEJuU21wT20rd

<u>z09</u>

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

President: Stan Sessions <u>sessionss@hartwick.edu</u> Vice President: Tom Titus tomtitus@tomtitus.com

Secretary: Monica Farris

Treasurer: Judi Horstmann horstmann529@comcast.net

Board: John Carter, Tim Godsil, August Jackson, Chuck Kimmel, Reida Kimmel, Kris Kirkeby, Alicia McGraw,

Dave Wagner, Dean Walton, Kim Wollter Website: Tim Godsil tgodsil@uoregon.edu

Nature Trails editor: Kim Wollter kwollter@comcast.net

2024–2025 Speakers and Topics

20 Sept	t. 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 G. Lewis	Tribal Histories of the Willamette Valley: Reconstructing Traditional Environments
13 Dec.	. Michael Murphy	The Modern Bird World Living for the City
		(co-sponsored with the Lane County Audubon Society)
17 Jan.	Charles Lefevre	Diversity and Domestication of North America's Native Truffles
21 Feb.	. David Paul Bayles	In Trees I Trust
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	v Clara Bird	Gray Whale Foraging Behavior