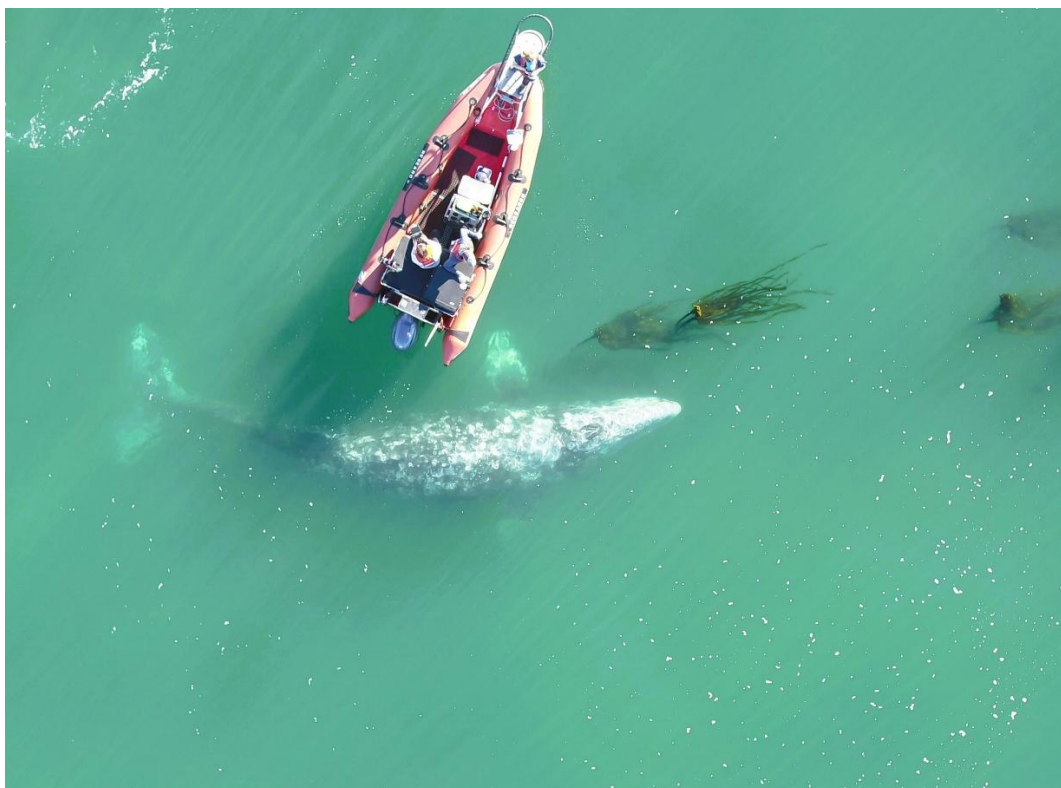


Nature Trails

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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.



Drone photo of gray whale foraging. *Clara Bird*

A Drone's-Eye View into Patterns of Gray Whale Foraging Behavior and Morphology off the Oregon Coast

Clara Bird, Ph.D.

Marine Mammal Institute, Oregon State University

Friday, 16 May 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. **Snacks provided!** The Zoom lecture link is <https://zoom.us/j/97499095971?pwd=eE9sdG9hSHMvOHhIUEJuU21wT20rdz09> or see our website at <https://eugenenaturalhistorysociety.org/>

This Month's Speaker: Clara Bird



This is a short story about how a Midwesterner ended up in Oregon. This month's speaker, Dr. Clara Bird, grew up in Michigan where her father worked for Ford Motor Co. and her mother taught high school Spanish. Clara's mother is from Barcelona, so Clara spent many summers in Spain, snorkeling in the Mediterranean, learning to love the ocean, and getting her SCUBA certification. Her first inspiration for being a scientist came when she was 10 years old. While watching a NOVA program, she was delighted to learn that a woman could be a marine biologist! From then on, with the wholehearted encouragement of her parents and teachers, Clara took every opportunity she could find to learn about what is involved in being a scientist.

One summer during high school, she attended a summer course at the Sea Education Association in Woods Hole, MA. After 9 days in the classroom learning about oceanography, marine biology, and sailing, she spent another 9 days on SEA's tall ship studying oceanography, including collecting zooplankton samples and measuring temperature and salinity. The best part of those 3 weeks was collaborating with people who shared her passion and enjoying the sea wind.

Clara's parents and high school biology teacher, a fellow ocean lover, supported her passion and encouraged her career development. As she explored undergraduate programs, she was fortunate to receive advice from a variety of people, including Dr. Meagan Dunphy-Daly,

who she reconnected with when she arrived at Duke University.

Clara did not set out to study whales. One of her goals at Duke was to become more familiar with scientific research and methodology. After her sophomore year, connections that she had in Spain helped her obtain a summer research internship studying algae in the Mediterranean. She loved getting to actively participate in research every day and enjoyed spending time in the field. Back at Duke, she conducted her first independent research project on juvenile Venus flytraps, where she learned how to manage a project from start to finish. During this time, she was also taking her first geographic information science (GIS) class with Dr. Patrick Halpin at Duke's Marine Geospatial Ecology Lab. She learned how GIS could be applied to marine science, especially drone data. This led her to an independent study with Dr. David Johnston at the Duke Marine Lab where she developed a method to automatically detect and count Adelie penguins in Antarctica based on drone images. She would later use these same data for her undergraduate honors thesis.

During the summer between her junior and senior years at Duke, she went to the Bigelow Laboratory for Ocean Sciences in Boothbay, ME as a National Science Foundation Research Experience for Undergraduates (NSF REU) intern. There, she learned to code with Python and discovered that she loved coding! With Python, Drs. Catherine Mitchell and Barney Balch (her REU mentors) used satellites to measure ocean color and to learn about how suspended sediment affects phytoplankton growth.

After graduating from Duke, Clara joined Dr. Johnston as a research assistant at the Duke Marine Lab assisting other staff with GIS analysis. During this year she travelled to Antarctica to help collect drone data on humpback whales, helped develop methods for measuring whales from drone imagery (including developing her own software package), and led her own analysis projects.

She then had the opportunity to work with Dr. Leigh Torres, who had received her Ph.D. at Duke. In 2019, Clara joined Dr. Torres's Geospatial Ecology of Marine Megafauna



Clara piloting her drone. Lisa Hildebrand

(GEMM) Lab as a graduate student at the Marine Mammal Institute at Oregon State University. Clara completed her Ph.D. in August 2024, and her dissertation was focused on the behavior, morphology, and energetics of the Pacific Coast Feeding Group (PCFG) gray whales off the Oregon coast. She loves everything about Oregon: the weather, the trees, and her friends.

Best of all, she can see whales right off the coast as opposed to having to take a long plane flight and boat ride to see them in Antarctica.

During her talk she'll share what she has discovered about how the PCFG gray whales feed. The GEMM Lab has been collecting drone footage of PCFG gray whales since 2016. This footage has provided a new perspective and the opportunity to study individuals and how patterns of behavior and energetics differ across habitat types and between whales of different body condition, age, and size. By gaining insight into what factors may affect gray whale behavior in their foraging habitat, we can better understand how they are being affected by a changing environment.

Join us for a lively overhead view (literally!) into the world of gray whales on Friday, May 16, at 7 pm in 221 Allen Hall on the UO campus (there will be cookies!) or directly from this Zoom link: <https://zoom.us/j/97499095971>

—Monica Farris

A Tribute to David Wagner by John Carter

David Wagner is retiring from the board of the Eugene Natural History Society as of this month. Dave has been a member of ENHS since 1976. That's 49 years, folks; more than half of his life. He's been a member of the board since 1978. He was president of the society of and on for a total of 11 years and wrote many articles for *Nature Trails*, for which he served as editor also for a total of 11 years.

Dave created the ENHS education booth. Its first use was at the first Mt. Pisgah Arboretum (MPA) Wildflower Festival in spring 1980. Dave singlehandedly amassed the collection of posters that line the booth's walls twice each year. (Without fail, interested attendees will ask where they can get one of the posters.) With Dave Stone's help, Dave put together the Please Touch table, an irresistible attraction for attendees of all ages but especially for the youngsters. The wonderful, interesting collection of nature objects? Dave's. For years, Dave was the booth master. He had it organized so it all fit in the bed of his little pickup truck. The booth could be erected and filled with tables, posters, and objects of interest in about an hour. It has been

the most popular educational booth at the MPA for many years.

A word about Dave's early life. Many of you have read or heard this before, most recently in a 2019 issue of *Nature Trails*, but his upbringing was unusual enough that some details bear repeating.

Two months after Wagner's birth, his Methodist missionary parents moved with their infant son from Detroit, MI to India. He became a nature nerd as soon as he could walk. He got to explore forests and jungles that most of us have only seen pictures or read about. His interests were broad at first: "I loved nature. I wanted to know everything about it." From age 5 until he finished high school, except for 2nd and 8th grades, Wagner went to Woodstock. Not the one in New York, the one in the foothills of the Himalaya, near Mussoorie in northern India. He began a serious study of ferns while in high school there, the beginning of his lifelong career as a botanist.

The school was close to Hyderabad in central India, an 80-plus-hour train ride from his parents' home, and he spent 9 months each year at the school. The remaining 3 months spent with

his parents were in the winter; the school wasn't heated, and at 7000 feet, winters were cold.

In 2010, Dave was invited to participate in a writers' festival. The theme of the festival was mountain literature. The location? Woodstock, the school he attended in northern India. He was delighted to have the opportunity to revisit the place he had last seen 47 years earlier. Dave's contribution was "Mosses and the Meaning of Life." It is a fascinating bit of autobiography, revealing Dave as a young man, full of energy and daring and a burning curiosity about nature. Dave has graciously made his piece available to us. To get to it, go to fernzenmosses.com. You'll find a link there. Do not skip this invitation. You will meet a Dave Wagner you didn't know.

Dave developed a love of mountains, growing up in their midst. When it came time to go to college, this love figured large in his decision to attend the University of Puget Sound in Tacoma, WA. His parents were satisfied because the school was (loosely) affiliated with the Methodists. The proximity to the Cascade peaks slaked his thirst for heights, and he received a scholarship so he could afford it. His B.A. degree was in biology and chemistry, with a geology minor and 1 credit of figure skating. That's right.

Dave earned his Ph.D. in botany at Washington State University in Pullman. His love of the outdoors and all those years in India making collections influenced his studies, but what most fed his curiosity was field botany. His goal "was to learn enough botany so when I walked into the woods I would know everything I saw." Although his dissertation work was on ferns, he became acquainted with and entranced by mosses and liverworts through a course he took at WSU. This introduction led him to what would become his specialty.

Dave took a position at the University of Oregon as curator of the University Herbarium in 1976. He held this position for 17 years, becoming director of the Herbarium in 1979. When the Herbarium was moved to Oregon State University, to be merged with its herbarium, he and the UO parted ways. At that point, in 1993, he established the Northwest Botanical Institute and has operated it happily as an independent scientist, writer, and artist.

Dave's answer to the question "What are you most proud of?" was a single word: Service. He said his parents' examples led to his early realization that serving others was a path to personal fulfillment.

Had the young Dave Wagner become a faculty member at a land-grant university such as OSU or WSU with a Cooperative Extension Service, his appointment might have required him to devote a certain amount of time sharing his expertise with the public, in addition to research and teaching. But the UO, which is not in the land grant system, does not have Extension as a formal responsibility; thus, service was not a requirement of Dave's position there. Therefore, many of us in this town and region owe him a huge thanks for his voluntary public outreach.

His service during those years was legion. He led public plant walks once each week for 15 weeks in the spring (March–June) and 11 weeks in the fall (October–December). People would show up Thursday noon, rain or shine, spend an hour with Dave, and see what was happening with the local flora. He gave several talks every year to clubs, churches, etc. on such topics as the ferns of Oregon and endangered species. He wrote public relations articles and news releases and gave interviews on TV and radio advertising plant-related programs at the UO. He led two or three field trips and workshops open to the public in each of his 17 years. He guided the MPA through a period of expansion and growth, serving as president of its board of directors from 1980 to 1985. As part of his efforts with MPA, he wrote development guidelines, saw the first major grants obtained, hired the first paid staff members, and started the elementary school outdoor education program. He organized the local Emerald chapter of the Native Plant Society of Oregon, serving as its president from 1979 to 1981, and was president of the statewide organization from 1981 to 1982. He also worked on county and state advisory committees, such as the Natural Heritage Advisory Council. This is by no means a complete list of the ways Dave has served and continues to serve his community, but you get the idea.

Here are Dave's answers to a few more questions:

What has changed the most in ENHS during your 49-year association?

The connection with the UO. We still meet on campus and still have one board member who's a current faculty member, but the thread is not as strong as it once was.

What was the average attendance at ENHS talks back in the 1970s?

Around 80, depending on the speaker. Once we had a colleague of Dian Fossey, the gorilla guru. For that talk it was standing room only, upwards of 150, in a small venue. I had to leave the room for a few minutes before the talk began and had to fight my way back in so I could give the introduction.

How many lectures have you given to the ENHS?

Four: about one per decade.

What about field trips?

I began leading field trips shortly after becoming a member. You can guess the focus: mosses.

How has the ENHS membership changed?

We've aged.

Can you name a high point for the ENHS since you joined?

Hard question. I guess it would be the interaction with MPA and its education program. This started in the early 1980s.

How long had ENHS existed before 1976?

The society started in 1941, so it was a going concern long before I joined in 1976.

Will you continue to be active in the Northwest Botanical Institute?

Yes.

How do you want future ENHS members to remember you?

As a naturalist.

There you have it: David Wagner in a nutshell. A tireless missionary for plants, especially the tiny, oft-overlooked ones such as mosses. If you ask him a question about a plant, be prepared for an enthusiastic response, one that will almost certainly contain parentheses. And no doubt parentheses inside parentheses.

Dave, for almost half a century you have given unselfishly of your time and energy to make the ENHS what it is today. Thank you for your kindness, for your dedication, and for being so willing to share your wealth of knowledge about the plant kingdom. We will always be in your debt.

Going Salamandering

by Tom Titus

Long before April showers bring May flowers, a wet warm spring in the Oregon Coast Range is a terrific time to search for salamanders. On Saturday April 5, Stan Sessions and Tom Titus were joined by 34 people for a field trip to the Whittaker Creek area about 36 miles west of Eugene. Our participants were ages 10 to 80 and included many people new to ENHS.

Following a rain-filled March, the clouds broke into a blue and beautiful morning. Our first stop was at Austa, an old mill site at the confluence of the Siuslaw River and Wildcat Creek. After rumbling across the historic covered bridge spanning the creek, participants listened to a short discourse from Stan and Tom on what we expected to see and why and then ambled up a gravel road along the north side of Wildcat Creek.

Our first stop was a shaded seep dribbling through rubble on the steep uphill side of the road. This is perfect habitat for southern torrent



Stan Sessions

salamanders (*Rhyacotriton variegatus*). Because these salamanders have very small lungs and the larvae have reduced gills, they require cold well-oxygenated water. True to expectations, we found a larva about the size of a pinky finger with characteristic salt and pepper spots and tiny pink stubs for gills.

Our two youngest participants flew ahead up the road and returned with a beautiful western red-backed salamander (*Plethodon vehiculum*)

about 3 inches long. These are in the lungless salamander family that contains most of the salamander species in the world, a group that has jettisoned their lungs and must acquire oxygen through the skin and lining of the mouth.

Although this individual had a classic brick-red back, the common name “red-backed salamander” is an oversimplification; many individuals have green, yellow, or even black dorsal stripes.

On the return walk we discovered several rough-skinned newts (*Taricha granulosa*) in a water-filled ditch along the road. These highly toxic newts can breed here because the ditch is fed year-round by a perennial spring, which ensures that the water remains throughout the summer, allowing the larval newts to grow and metamorphose in late summer or early fall.

We reconvened at the parking area for lunch then walked back over the covered bridge toward an old mill pond. Before we arrived at the pond, an adult ensatina (*Ensatina eschscholtzii*), another lungless salamander species, was found beneath an old log. This adult was the color of strong tea on the back and had the characteristic patches of intense yellow where the legs attach to the body.

At the pond, we discovered that northwestern salamanders (*Ambystoma gracile*) had bred there. A soft-ball-size jelly mass was attached to a twig in about 3 feet of water. The mass contained perhaps 80 embryos hunkered like black and cream commas in their individual egg capsules. Each capsule was green because of a

symbiotic alga growing inside. The algae photosynthesize and produce oxygen that is used by the developing embryos, and the embryos provide nitrogen-containing waste products that fertilize the algae.

Some folks then headed for home, while others finished the trip by driving up Siuslaw River Road to visit seeps and small streams along the road cut. Here we found a tiny Dunn’s salamander (*Plethodon dunni*) no longer than a large paper clip and sporting an olive green dorsal stripe. Like its close relative, the western red-backed salamander, this species is also lungless. It hatches from the egg into a fully terrestrial juvenile with no intervening aquatic larval stage.

We continued for a few more miles to a seep where southern torrent salamanders had been common. We were sad to discover that the slope immediately above the seep had been recently clearcut. Torrent salamanders are unlikely to survive this insult because they will not tolerate the inevitable increase in summer water temperature on this denuded south-facing hill.

Nevertheless, this outing overall provided excellent salamandering! Our turnout was great. People of all ages found 5 species representing 4 of the 10 salamander families worldwide. Stan and Tom were in their happy place—free to talk about anything and everything related to salamanders! Let’s do it again next year.

**Volunteers needed for ENHS booth at the Mt. Pisgah Arboretum Wildflower Festival
Sunday, 18 May, 10am–5pm**

See announcement below under Mt Pisgah. 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 2-hour shifts, but other time slots are possible. Contact Kim Wollter to sign up:
kwollter@comcast.net

ENHS Summer Potluck

2 pm, 30 August, at the Kimmel Farm, 30306 Fox Hollow Rd. All members and nonmembers are welcome. Bring a dish and beverage to share. If you need directions, contact Reida at rkimmel@uoregon.edu or call 541-345-4919. Check the ENHS website for last-minute changes of venue!

Upcoming Events

(for complete listings and details, see individual websites)

- **McKenzie River Trust** <https://mckenzieriver.org/events/#event-listings> or 541-345-2799
Weekly, 9–11:30am. Watershed Wednesdays at Green Island. Volunteer projects include invasive species removal, habitat care, planting, and tree establishment. [Sign up](#)
Second Saturdays, 8am–4pm, Mar.–Dec. Living River Exploration Day at Green Island. We open the gates to this conservation area and welcome our community to explore this special place. Free, no preregistration required. Please review the visitor guidelines: <https://mckenzieriver.org/living-river-exploration-days/>
- **Mt. Pisgah Arboretum** <https://mountpisgaharboretum.com> or 541-747-3817.
Sunday, 18 May, 10am–5pm. Wildflower Festival. Enjoy live music from local bands, ephemeral art installations, wildflower displays, guided nature tours, and information booths from local nonprofit nature organizations. Local vendors will sell native plants, crafts, and food. Advance tickets required: <https://events.humanitix.com/copy-of-mount-pisgah-arboretum-wildflower-festival/tickets>. Free for members. Free parking. No dogs.
- **Lane County Audubon Society** www.laneaudubon.org or 541-485-BIRD; maeveanddick@q.com or 541-343-8664
Saturday, 17 May, 8–11am. Third Saturday Bird Walk. Open to all. Contact tolalla@gmail.com.
Saturday, 17 May, 8–noon. Birding and Volunteer Day. Guided birding led by Ellen Cantor followed by volunteer session to help remove invasive species and refresh the park's natural beauty. Perkins Peninsula Park, 26647 OR-126, Veneta.
Tuesday, 27 May, 7–8:30pm. Living with Woodpeckers: Folklore, History, and Science. Join professional naturalist, woodpecker expert, and author Steve Shunk for an entertaining evening of woodpecker tales and taboos. Zoom (see website for link) and in person, Campbell Community Center, 155 High St., Eugene.
- **Museum of Natural and Cultural History, University of Oregon** <https://mnch.uoregon.edu/museum-home>
Ongoing exhibits: Roots and Resilience: Chinese American Heritage in Oregon; Hostile Terrain 94; Oregon—Where Past Is Present.
New exhibit: Transgressors; current and future Indigiqueer ancestors move beyond boundaries in life and art.
- **Nearby Nature** <https://www.nearbynature.org/> or 541-687-9699, 622 Day Island Rd., Eugene (Alton Baker Park)
See our website for various adult, youth, and family programs and day camps all summer!

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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/UCEr_yzVh9lw9y-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=eE9sdG9hSHMvOHhIUEJuU2lwT20rdz09>

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/>

The May meeting is our annual Business Meeting. Members will be asked to vote on whether to accept the changes in the officers for 2025–2026:

President: Tom Titus

Vice President: Alicia McGraw

Board members: Stan Sessions, Kaye

Downey, and Tim Downey

Board Member Emeritus: Dave Wagner

(All other officers and board members

continue as per 2024–2025, listed below)

ENHS Officers and Board Members 2024–2025

President: Stan Sessions sessionss@hartwick.edu

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.	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	The Oregon Kelp Forest Stewardship Initiative (co-sponsored with the Emerald Chapter of the Native Plant Society of Oregon)
16 May	Clara Bird	Gray Whale Foraging Behavior