## Nature Trails

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Mosses,
Liverworts,
and Hornworts

David Wagner

Consulting Scientist
and Head of

Northwest Botanical
Institute

Friday, 15 May 2020, 7:30 p.m.

Part of the collective effort to limit the far-reaching effects of the coronavirus pandemic is the elimination of large gatherings. But rather than an outright cancelation of our May meeting we will have it virtually.

President Dean Walton is inviting you to a scheduled Zoom meeting. Topic: Eugene Natural History Society - Liverworts with Dave Wagner

Time: May 15, 2020 06:30 PM Pacific Time (US and Canada)

Join Zoom Meeting

https://uoregon.zoom.us/j/93469522170?pwd=K1REckhpSVhBOUU4WkJBT3FQTlNidz09

Meeting ID: 934 6952 2170

Password: 013433

One tap mobilephone connection

+12532158782,,93469522170# US (Tacoma)

Here are instructions for how to be a part of the audience:

Download the Zoom app by going to zoom.com. We suggest doing this at least 24 hr prior to our meeting. The zoom session will be open an hour before our lecture starts, to provide the opportunity for folks who have not used zoom to trouble shoot if needed. To join the session, open the zoom app. Click Join. Enter the Meeting ID (934 6952 2170). Enter the Password (013433). Follow the prompts to: Allow entry to the session, Join with Computer Audio and enable video. Once you have the zoom window, in the lower left corner of your screen, click the mike icon to unmute and click the video to enable the host to see you.

David Wagner, who will be our presenter this month, last spoke to ENHS in September of 2011. Most of the introduction I wrote for that issue of Nature Trails is still applicable, so I will plagiarize my earlier self and use it again.

Wagner was born in Detroit, Michigan. Two months after his birth, his Methodist Missionary parents took their infant son to India, where he lived until he graduated from high school.

In his words, "I was a nature nerd as soon as I could walk, even before I could read." He got to explore forests and jungles that most of the rest of us have only seen pictures of and read about. His interests were broad at first: "I loved nature. I wanted to know everything about it." But he found that others had been over much of the ground he initially covered. Only when he began a serious study of ferns, while still in high school, did he start finding things not already written about. Thus began his lifelong career as a botanist.

From age five until he finished high school, except second and eighth grades, Wagner went to Woodstock. Not the one in New York, the one in the foothills of the Himalaya, near Mussoorie in northern India. The school was an 80-plus-hour train ride from his parents' home, close to Hyderabad in central India, and he spent nine months a year at the school. His three months a year with his parents were the winters; the school wasn't heated, and at 7000 feet elevation, winters there are cold.

In 2010 Wagner was invited to participate in the Mussoorie International Writer's Festival sponsored by the Winterline Centre for the Arts at Woodstock School, where Dave made a presentation. He and his wife Connie spent several days in the area and visited some of his childhood haunts. He said the biggest change he

Another liverwort.
Photo by D. Wagner.
Bar = 1 mm

noticed since he was last there, almost 50 years ago, is the number of vehicles. When he was a student the roads were so rudimentary most travel was on foot. Many of the school buildings, though, were essentially the same as when he left.

Wagner grew to love mountains, growing up in their midst. He and his friends thought nothing of hiking many miles just for fun. When he was 16, he and three friends took a 4-day holiday, covering 100 miles on foot. Judging from the pictures he showed me, very little of that distance was level. Although he was too young and poor to climb in the Himalaya he learned all he could about the exploits of earlier climbers. Woodstock's library had a wealth of mountaineering books, of which he read hundreds.

This love of mountains figured large in his decision to attend the University of Puget Sound, in Tacoma. His parents were satisfied because the school was (loosely) affiliated with the Methodists; the proximity of the Cascade peaks slaked his thirst for mountains; and UPS gave him a scholarship so he could afford it. His BA degree was in biology and chemistry, with a geology minor and one credit of figure skating. That's right.

As soon as he got to Tacoma, Wagner got into climbing. Within months he and some of his new climbing friends had summited Mt. Rainier. He went on to learn technical rock climbing. He has some scary pictures from those days, with lots of vertical relief. But after he got married and had a child he put away the ropes and carabiners and went off to graduate school.

Wagner earned his Ph.D. in botany at Washington State University, in Pullman, Washington, working under Marion Ownbey. His

love of the outdoors and all those years in India making collections influenced his studies: what most sparked his curiosity was field botany. He says 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.

Wagner started at the University of Oregon in 1976, and became Director of the

Herbarium. When it was taken over by Oregon State University, he began his career as a consulting scientist; his firm is called Northwest Botanical Institute.

Wagner's tenure with the Eugene Natural History Society also began in 1976, and in those 44 years he has contributed countless hours to us. He's been a member of the Board since 1978, has served three stints as Editor of Nature Trails for a total of 11 years, and has served three 'terms' as President for a total of 11 years. He has been the overseer of the ENHS education booth since the

mid-1990s, and he has written many articles for Nature Trails.

In his Zoom presentation Wagner will share his love of the little plant folk, complete with wonderful photomicrographs. Follow the instructions above to be in the audience for his talk, "Mosses, Liverworts, and Hornworts," at 7:30 p.m. on Friday, 15 May. No need to look for that parking place or to find a seat in our normal gathering place. Dress is optional. Make sure you have at least one cookie before the show begins, and several after it's over. John Carter

#### The Challenge by Dean Walton

It was a new discovery for me: a nearby road with an overview of some woods and a small pond. It was also just up the road from my house, right on the river. Yes, it was surrounded by the metastatic growth of new apartment buildings, but for the moment, it was a wonderful little place shaded by nice Oregon white oaks (*Quercus garryana*), not the open field spreading branched ones, but ones that competed for light, ones that shoved their trunks and branches more upward that outward. There were also many bigleaf maples (*Acer macrophyllum*).

The find was timely, because I was just starting the 2020 City Nature Challenge. This is an event that works to get people outside and looking at nature. It is very similar to a generic event called a bioblitz that has occurred for many years. The goal in both cases is to document as many species as possible for a specified area, in a set time period. What is different now is a tool called iNaturalist. This phone

app allows users to take a photo of a plant or animal and the app will work to identify the species in just seconds. If it finds a match and the user agrees to the match, a GPS record is attached to

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Photo by D. Walton

the known range of the organism for researchers and natural-resource managers. It allows anyone with cellphone access to help with a bioblitz or nature challenge and has opened the doors for people easily to learn about a myriad of organisms including slugs, spiders, and even single-celled organisms. The tool is available for desktop computers too, where you can upload photos from other cameras.

Well, I am all game for this type of activity, and it filled a hole for a now-canceled bioblitz I was going to help with the following week. As I scanned this sliver of natural habitat, I probably got too close to a Bewick's wren's (*Thryomanes bewickii*) nest, for a wren stared me down, chastising me, beak open, non-stop for a good two minutes about my intrusion. Camera in hand, I took a few pictures to document our meeting. This little site gave me my first 30 species for my challenge list.

The challenge is a fun event, particularly for someone like me. It becomes a quest, not just of

seeing things, but planning things places to go and when to go. On Saturday I found myself up early and out the door by 6 a.m. I wanted a decent picture of a Wilson's snipe (Gallinago delicata), out by a part of the West Eugene

Wetlands. I was greeted by something much more

the image and it goes into a database to help inform

surprising. A flock of 25+ great egrets (*Ardea alba*) were eating at a small vernal pond just off the bike trail and it was early enough that they posed for me and me alone. I felt a mix of irony and vindication. I had spent the last four months traveling out to the city's new parcel system, Amazon Prairie, trying get a good picture of these guys. But each weekend day I went, I would see them and they would see me, and somehow an agreed upon portrait was never settled upon. One day I came close, but someone controlling geese near the airport sent a huge flock of Canada geese (Branta canadensis) toward my location. The dark wave moved as though it were a cloud of locusts in a cacophonous fury. This black, horizontal band before me grew wider and taller and then engulfed me and the egrets. I did get a few pictures, which look great of the geese but not the larger whitefeathered friends I wanted. Anyway, on this challenge morning a contract was accepted by the egrets and the portrait taken. I also got a photo of the snipe, well at least one decent one of the 20 or so I saw. I felt it was going to be a good day.

My journey took me to the west Eugene Wetlands, to Delta Ponds, back to the Wetlands, and then back to Delta Ponds. The sun had come out later in the afternoon and was shining strongly. Strong sun meant one thing to me—turtles, western pond turtles (Actinemys marmorata) if I was lucky—and I was. At the time. I had seen two of the five mammal species tabulated and noted at the end of the survey. Of these, neither was native. One was a fox squirrel (Sciurus niger), and like the red-eared slider it is from my home area out east in the mid-Atlantic states. The other was a nutria, also known as coypu (Myocastor covpus), from South America. I had to accept that my only documentation of native mammal was likely going to be just a gnawed-on branch with telltale beaver-tooth scars—not a very satisfying documentation, but a valid one by the CNC/iNaturalist Organizers. As more luck would have it, I did see a native species. I got the picture the second a Townsend's chipmunk (Tamias townsendii) flicked its tail and disappeared from a log where I had just parked.

Okay, so now I had seen plants, birds, and one native mammal. A wonderful hike up Spencer Butte added many more plants, including the most beautiful grasswidow flower (*Olsynium douglasii*), to my list, and two more birds, but not other groups of species. It was a return to the eastern edge of Fern Ridge that gave me the most excitement for the day. As I walked past a brush pile, I saw the dash of an object, a fence lizard or possibly an alligator lizard, I thought. This would be worth a five-minute rest with the camera primed. Within just three minutes, I had

my image: a wonderfully spikey-scaled, dark, almost black, western fence lizard (*Scleoporus occidentalis*) came back out to sun. It stared and me and I stared at it in mutual agreement that we both could be there if neither moved. I also noticed another log nearby with loose bark. Awesome, I thought: snake habitat! But to my surprise there was no snake; instead, a wonderful little Pacific tree frog (*Pseudacris regilla*). In the span of 5 minutes and 10 feet, I had two groups of vertebrates. The day earlier my daughter spotted a garter snake (*Sirtalis thamnophis*) as we explored a park in Springfield; we got a wonderful image of that species too.

All I needed now was a fish. How hard could that be? I thought of stalking people along the river with their poles hanging over the water, but in these days of social distancing that didn't seem like a good idea, in fact stalking anglers at any time is probably not a good idea. So, I found myself stopping at creeks' edges, at small bridges, at bigger bridges by the Mount Pisgah Arboretum, but all to no avail. Clouds and rain came in and it was getting late in the afternoon. I was basically out of time for the challenge and was now ready to go home. Along the way I had one final thought about the little bridge over a canal in our local Alton Baker Park. It was on the way. I pulled in, walked to the wooden pedestrian bridge, and there it was, one very large fish, but as I leaned over to take the image, the slack of my camera strap fell forward and the fish darted away. A salmon! I was positive I had seen a salmon, or a trout. I had heard trout were stocked there, so it made sense. I stepped away to check a few other spots hoping that where there was one, there could be many, but I saw nothing else. Damn, a lost opportunity.

Given the hour—it was getting dark—and the rain, I went back to that first spot. Now my luck had multiplied. Now there were four, or maybe even five 20-inch-long fish in that same spot. These were BIG fish and I could see they were not trout, but what were they? Making sure I didn't repeat my camerastrap disaster, I slowly and carefully raised the camera and took a picture. This single image also showed me the power of iNaturalist, because within seconds of posting the image of this unknown aquatic beast, I had a name to go with it. It was my very last entry of the city nature challenge on the last night of the event. I now knew a new fish, not a salmonid but something in a completely different fish family. This I learned was the large-scaled sucker (Catostomus macrocheilus). It was awesome.

In the end, I was able to find and identify species from five of six classes of vertebrates (mammals, birds, reptiles, amphibians, and fish) found in the Eugene area. I did miss out on finding any of our local lamprey, a jawless class of vertebrates known as the agnatha. I also found organisms from three other kingdoms and within the animalia, in three other phyla: Mollusca (bivalvia and gastropoda), Arthropoda (insecta and Arachnida) and Annelida. Tools like iNaturalist open the world to amateur and professional naturalists alike. It's a wonderful feeling to step outside and no longer guess at what you are seeing, and I could not have done what I did without it.

### Out and About

Text and photography by David Stone

#### **Proposed Douglas-fir National Monument**

Has cabin fever finally gotten to you? Social distancing is easy when you drive yourself through the proposed Douglas-fir National Monument along the paved Quartzville Creek Backcountry byway. Spring runoff will fill the numerous creeks, and wildflowers will line the roads and trails. Stop at the Dogwood or Yellowbottom Recreation Site for access to the creek (and convenient restrooms). Late June is a great time to spend the day visiting the area. Or hike our crown jewel, Iron Mountain, in July for one of the finest wildflower displays in the Cascades. Go to the website <a href="http://www.douglasfirnationalmonument.org/">http://www.douglasfirnationalmonument.org/</a> for maps, descriptions of and directions to this unmatched area.



#### **Events of Interest in the Community**

# IF YOU ARE INTERESTED IN ANY POTENTIAL EVENTS THAT ORGANIZATIONS IN THIS LIST MIGHT HOLD YOU SHOULD CONTACT THE ORGANIZATION OF INTEREST TO FIND OUT IF THEIR EVENT(S) WILL BE HELD AND IF SO WHERE AND HOW.

McKenzie River Trust

**Lane County Audubon Society** 

Mt. Pisgah Arboretum

Announcing the Virtual Version of the Mt Pisgah Wildflower Festival. iNaturalist Lane County Wildflower Show Bioblitz 2020. 13-17 May. Please participate in this event to observe and record our region's native wildflowers. Visit the website for details. <a href="https://www.inaturalist.org/projects/lane-county-wildflower-show-bioblitz-2020">https://www.inaturalist.org/projects/lane-county-wildflower-show-bioblitz-2020</a>

Friends of Buford Park and Mt. Pisgah

The University of Oregon's Museum of Natural and Cultural History

**Native Plant Society of Oregon, Emerald Chapter** 

**Nearby Nature** 

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P.O. Box 5494, Eugene OR 97405

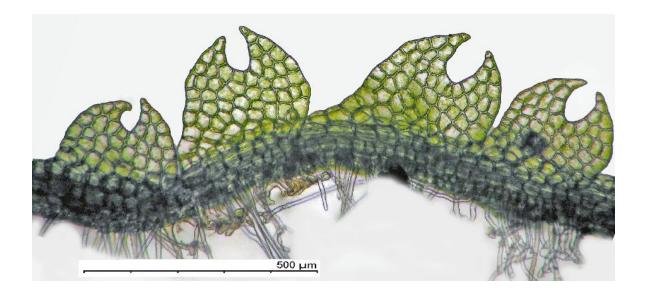
WREN (Willamette Resources and Educational Network)

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

MEMBERSHIP FORM			
Name			
Address			
City	State & Zip	Phone	
E-mail (if you want to receive annou	ncements)		_
I (we) prefer electronic copies of NT	rather than paper copies.	Yes No	
If yes, email address (if different from	n the one above):		
ANNUAL DUES: Family	\$25.00		
Individual	15.00		Annual dues for renewing members
Life Membersh	ip 300.00		are payable in September.
Contribution			1
			Memberships run from September
Make checks payable to:			to September. Generosity is
Eugene Natural History Society			encouraged and appreciated.

The Eugene Natural History Society meets on the third Friday of the month September through May except in December when the meeting is on the second Friday. Meeting time is 7:30 p.m. and our standard meeting location is room 100 Willamette Hall on the University of Oregon Campus. Any temporary changes will be noted in the newsletter for the current meeting and on our website: <a href="https://blogs.uoregon.edu/enhsuoregon/">https://blogs.uoregon.edu/enhsuoregon/</a>

As mentioned in last month's NT, our annual business meeting, normally held in May, is postponed until September. At the September meeting the board will present a slate of officers and at-large Board members. Those Society members who are at that meeting will be able to vote on whether or not to accept that slate.





Top: cealun shoot.

Left: calazu.

Photomicrographs by D. Wagner

#### ENHS. Officers and Board Members 2019-2020

President: Dean Walton <u>mailto:dpwalton@uoregon.edu</u> 541-346-2871 Vice President: Rebecca Hazen <u>mailto:rebeccahazen2011@comcast.net</u> Immediate Past President: Tom Titus <u>mailto:tomtitus@tomtitus.com</u>

Secretary: Kit Kirkpatrick <a href="mailto:kitkirkpatrick@gmail.com">kitkirkpatrick@gmail.com</a>
Treasurer: Judi Horstmann, <a href="mailto:horstmann529@comcast.net">horstmann529@comcast.net</a>

Board: Ruth BreMiller, John Carter, Tim Godsil, Rebecca Hazen, August Jackson, Phil Johnson, Reida Kimmel,

Kris Kirkeby, Dave Wagner, and Kim Wollter. Herb Wisner, emeritus

Website Webmaster: Tim Godsil, tgodsil@uoregon.edu

Nature Trails: Editor: John Carter, jvernoncarter@comcast.net; Support Staff: Ruth BreMiller and Reida Kimmel.

#### 2020-2021 Speakers and Topics

18 September	John Helmer	Steens Mountain
16 October	Bitty Roy	Madagascar Island Biogeography
20 November	Carol Paty	Moons of Saturn
11December	John Marzluff	Ravens and Wolves in Yellowstone National Park (Co-
		sponsored by Lane County Audubon Society)
15 January 2021	Patrick O'Grady	Archaeology in Southeastern Oregon
19 February	Dana Johnston	Polar Exploration: Ice, Geology, Whales and Polar Bears
19 March	Pepper Trail	Forensic Ornithology
16 April	Daphne Stone	Lichens (Co-sponsored by Native Plant Society)
21 May	Lauren Hallett	Siskiyou Serpentine Plant Communities