

Nature Trails

Published by the Eugene Natural History Society

Volume Fifty-four, Number Six, September 2020



Kiger Gorge on Steens Mountain. Photo by J.F. Helmer

Steens Mountain: Sharing a Sky Island

John F. Helmer

**Former Chair and
Recreational Representative
Steens Mountain Advisory
Council**

Friday, 18 September 2020, 7:30 p.m.

Welcome to the 2020-2021 Eugene Natural History Society speaker series! This year will necessarily be different than any other, but despite our inability to gather in person, we are thrilled to still offer monthly talks from an exceptional slate of speakers. We are excited at the potential to broaden our audience through the convenience offered by virtual meetings. Plus, this year, we won't have to compete with PAC-12 sports. Thank you for joining us, and we'll keep our fingers crossed that we can come together again in spring.

Here is how to become a member of the audience for the September presentation. Note that 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: September ENHS Meeting

Time: Sep 18, 2020 07:00 PM Pacific Time (US and Canada)

Join Zoom Meeting

<https://zoom.us/j/98294246568?pwd=RmZkb09yblp2NS9NeEh6T0U2aFRkOT09>

Meeting ID: 982 9424 6568

Passcode: 767120

As mentioned in the previous issues of *Nature Trails*, our annual business meeting for election of officers was postponed. It will be held at the beginning of our September Zoom meeting. Below is the proposed slate of candidates for 2020-2021 ENHS offices. The election will be held via the chat function in Zoom. The Zoom host will ask members to type a simple "yea" or "nay".

Proposed Slate of Officers and Board Members

President: August Jackson

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Secretary: Monica Farris

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Website Webmaster: Tim Godsil

Nature Trails: Editor: John Carter; Support Staff: Reida Kimmel, Kim Wollter.

From the hamlet of Frenchglen, sixty miles south of Burns on Highway 205, looking to the east one notices a gradual uplift, with snow-covered land in the distance, but no sign of a peak such as one of the Cascades. The newcomer can be excused for wondering what the fuss is about. Where is the mountain? But if instead of taking 205 one goes southeast on Highway 78 out of Burns and after about forty miles turns south on the Fields-Denio road (most of which is gravel) it becomes abundantly clear that Steens Mountain is indeed a mountain. From the arid flats of the Alvord desert the jutting mountain rises abruptly, the top about 5000 feet above the desert floor and over 9000 feet above sea level. This fault mountain is a jewel hidden in plain sight, protected from the masses by the great expanse of desert that surrounds it.

Since I've been a member of ENHS, three of our field trips have been to southeastern Oregon, and on each of those trips one full day has been dedicated to circumnavigating this glorious piece of real estate. A personal regret is that I have never visited it in late summer—after the roads are clear of snow—or in early fall—before the roads are again covered with snow. So I have never seen the view from the top looking east over the desert, nor the glacier-carved valleys high up on the western side. This oversight must be rectified.

John F. Helmer, our September speaker, has been going to Steens Mountain each year for several years and has become a critical member of organizations developed to protect it. Helmer wears many hats, but the one most relevant to his talk is his activity on the Steens Mountain Advisory Council.



West side Steens Mountain. Photo by J. F. Helmer

This group is made up of landowners, environmentalists, ranchers, the Burns Paiute tribe, and others advising the BLM on creative approaches to managing 428,000 acres of public land in Harney County. Helmer has served as the SMAC's Chair and Recreational Representative. The SMAC was created as a

part of an Act of Congress, which shows they occasionally get things right. The 106th Congress passed Public Law 106-399: the Steens Mountain Cooperative Management and Protection Act of 2000. Two of this Act's purposes were to designate the Steens Mountain Wilderness Area and the Steens Mountain Cooperative Management and Protection Area. Prior to 2000 there was considerable energy around the idea of declaring the mountain a national monument, which on the surface sounds good. But after more thoughtful consideration together with research about what happens when areas receive national monument status the powers that be were successful in arguing against this action.

Helmer, his wife Normandy, and their Kiger mustang (that's a horse not a car) spend the entire month of July each year as caretakers of the Riddle Brothers Ranch, which is on Steens Mountain and is listed as a historic district on the National Register of Historic Places. He said he enjoys the isolation: being without electricity and the intrusion of electronic devices can be a good thing.

Other Helmer activities: he works for The Nature Conservancy, leading walking tours at the confluence of the Coast Fork and Middle Fork Willamette Rivers. He also does a similar tour for those with limited mobility and will do one in the near future for Centro Latino Americano (he volunteered to do one for ENHS members). TNC has honored him as



Volunteer of the Year. He has been a Court Appointed Special Advocate (CASA) for seven years, just finishing up his third case. He is a safety lead at one of the Egan Warming Centers. He has been involved with the Friends of Buford Park since its founding. He heads up a neighborhood organization in the Seavey Loop area. Under this last hat he has dealt with the controversy over large music events out there. He was also a voice in the discussion about expanding Springfield's urban growth boundary. He's a volunteer for Historicorps, concentrating on fire lookouts in the area. He's a member of the McKenzie River Trust. He retired as Executive Director of a higher education consortium in 2016.

Helmer is originally from the San Francisco Bay area, growing up in Menlo Park. He went to the University of California San Diego as an undergraduate, getting a BS in mathematics and economics. Midway through a Princeton mathematical economics PhD program he changed his career path and set out to become a librarian. He

got an MLIS in library science from UCLA. His first position was in the University of Oregon library system, during the 1980s and 90s, where he specialized in technical areas. He helped found Orbis, which in 2013 merged with Cascade to become the Orbis Cascade Alliance, a consortium of academic libraries in the Pacific Northwest.

In his talk, **Steens Mountain: Sharing a Sky Island**, Helmer will share his knowledge of the natural history of the area. He will delve into the human history: Basque shepherders, cattle ranchers, miners, and sightseers, among others. Indigenous peoples were there first, of course, and have used the area for millennia, but the local tribes have made it clear they wish to tell their stories themselves. Helmer will respect their wishes. He will cover the Steens Mountain Cooperative Management and Protection Area, including its origins, history, recreational highlights, and management. Join the Zoom meeting and hear about this unique and wild Oregon treasure and how you can influence its future. You have to provide your own cookies. John Carter

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 Godsfil know at tgodsfil@gmail.com

Legacy by Tom A. Titus

A no-frills August sunrise presses above the eastern hills. No nuanced orange, no pink feathers spreading softly westward, just the hot silver dollar glare of Lady Liberty promising to deliver a triple-digit high temperature. Today is our grandparenting day, an indulgence new to us after the return of our son and his family from the east coast. We struggle a bit over what to do with two grandsons, ages seven and two, on a hot weekend in Covid times. Local rivers and lakes would be inundated with people more anxious to cool off than keep their distance.

Even though the headwaters of Upper Smith River are limited in terms of child-friendly water, the kids love the Johnny Gunter place. We load up a soccer ball, swimming trunks, and a few indoor games and start toward the back roads into the Coast Range. People escaping Eugene for cooler temperatures at the beach cause a minor traffic jam on westbound Highway 126, dispelling any nagging notions that we should head for the coast. Traffic evaporates when we turn south toward Lorane, and the Carpenter Bypass, winding like a dark artery into the heart of the mountains, is vehicle free. Edmund thinks he's getting carsick. We pull off, and he makes

a gangly run down a shady gravel spur, overly long arms and legs flailing. Chris is happy to pick and eat a few ripe salal berries. He is my little forager, my bear cub.

Motion sickness averted, we soon arrive at the shady angle of the driveway to the house and stop to clatter open the gate. Kim and the boys walk the rest of the way. From the center of the rutted driveway meadow knapweed, bloomed-out wild iris, and grasses swoosh the underside of our low-slung car. Then the dim two-track opens into a sun-scoured meadow, browned and brittle by drought. On the right, the orchard droops with unripe apples. Outbuildings collapsed by the heavy snow of February 2019 remain as they fell, a jumble of rough-cut lumber and rusting corrugated roofing. The house remains standing only because Dad reroofed it 20 years ago, but the paint and siding shakes are giving way to weather and gravity. I turn the car around in the grass parking area and switch off the ignition. Silence. That familiar deep breath slides into my chest, a bit of peace in a tumultuous world.

My quiet interlude dissolves two minutes later when Kim and the boys arrive. Let the games begin. The kids eat all the ripe blueberries they can reach.

They “zing” windfall apples over the fence for the deer and bears in honor of the book *Mr. Putter and Tabby Pick the Pears*. Chris taste-tests every apple.

On the front porch, the needle on the blue dial of the Douglas County Electric thermometer presses beyond 100. Edmund and his grandmother retreat inside to play a made-up dice game. Chris and I drag out a bucket and hose and wash the car. He sprays with reckless abandon while I sponge down hot metal. Washing a vehicle with a two-year-old is not the purview of efficiency experts, but the car ends up extraordinarily clean. Then everyone is outside, boys squealing and chasing grandparents and each other with hose and nozzle. The afternoon sizzles past in a spray of cool spring water, a gravity-fed gift from the mountains to parched grass, two young boys, and their grateful grandparents.

On the drive home, Edmund plays arithmetic games in his head while Chris sleeps. The freeway between Cottage Grove and Goshen is straight as split cedar, leaving me space to slip into the ridges and valleys of my brain. I must be a grandparent because my thoughts turn to legacy. Although we usually address legacy as a singular thing, in most cases it is a diverse ecosystem of heritage composed of interrelated material and cultural hand-me-downs. Kim and I are the “biologist grandparents” to these newly freed New Jersey apartment boys and feel duty-bound to connect them to places with no walls: big trees, blackberry picking, calling geese, the cool squeeze of a rubber boa. Richard Louv coined the term “nature deficit disorder” in his 2005 book *Last Child in the Woods*, which sent cross-cultural ripples over a nation increasingly bent on protecting kids from nature. Even without Louv’s insights, we would have assumed the responsibility of taking the boys into wilder landscapes. Edmund sometimes asks why we don’t have video games. Answer: we didn’t allow your father to have video games because they take time away from being outside. And that was before 2005.

The cure for nature deficit disorder has nothing necessarily to do with the material side of legacy. Yet I’ve grown to love the Johnny Gunter place even more than my home place in the McKenzie River

valley. It was built by my paternal grandfather and maternal great-uncle and is the last Gunter family property on Upper Smith River, where my great-grandfather settled in 1888. For over two decades this small Coast Range property has been an important interface between my built and unbuilt worlds. From the porch I can walk into drippy winter old-growth, pick dewberries in summer, forage for chanterelles in autumn, and have easy access to a roadless canyon with coho salmon spawning in the creek. I’m planning to rehabilitate the decaying house with lumber milled from the surrounding forest, a facelift that might keep it standing for another generation.

Legacy can also include things to be rid of. My grandsons are pigment bookends. Edmund carries the outcomes of oculocutaneous albinism, a genetic disorder resulting in complete loss of melanin: snow-white hair, pale skin, pinkish-blue eyes. Sunscreen and sunglasses are integral to his summers. Chris has obsidian eyes, latte skin, and dark hair that curls like fast water, a LatinX and African portfolio melded in Puerto Rico. In this summer of racial awareness, I have seen the pictures of Confederate flags and hangman’s nooses on pickup trucks at a swimming hole not far from Smith River. Despite our commitment to getting the kids outside, I’m afraid to take them to these public places. I’m angry that I’m afraid. This the present they face, a piece of their future we must expunge.

Legacy seems at odds with the Buddhist teaching of impermanence. Accepting the temporary nature of our lives and our children’s lives seems the only rational way to proceed on this earth that for a short time holds the container of our existence. Still, my own bowl sloshes over with needs and desires. I hope that after I’ve moved on, two men who squealed and sprayed spring water across brown August grass can emerge from the conifer canopy of the driveway into the heat-shimmered meadow, find the house still standing, see big trees stretched against an arching blue sky above the orchard, and hear the chitter of barn swallows swooping into the garage. I hope they can know that some small part of their material world remains whole and good.

A Yard Apart by August Jackson

The first few weeks of April spanned an eternity the ensuing months have rushed to redress. In those early days of spring we sought refuge in our yard; fought uncertainty in spades and trowels. As spring progressed, our Adirondack chairs migrated across the yard, tracking the sun as it approached its zenith, and work-from-home was conducted amidst the promise of a June garden.

By the solstice, the chairs stop moving and stay put in front of hand-drilled homes for cavity-nesting bees. This June has been cooler and wetter than any in recent memory, but on this mid-morning near month’s end, the sun is strong and the air already thickening with heat. For the past week I’ve been eyeing a half dozen 5-mm holes capped with crystalline plugs of dried Douglas-fir resin, and now there’s some movement—half a head poking through,

bidentate mandibles methodically widening a hole in the hardened sap. His teeth are strong enough to chip away at the glassy material but much weaker than the robust mandibles of his sisters, who will need to mold resins and plant fibers into nests anew. Within minutes all the other resin plugs are being furrowed out as the precise environmental conditions for this annual emergence have been met.

Matte black and coarsely pocked with deep punctures, these little resin bees (*Heriades carinata/carinatus*) are easily overlooked at approximately 7 mm in size, and a paucity of historical records in the Willamette Valley belies their likely abundance. They are happily at home here where a few native aster species provide preferred forage and a Douglas-fir anchoring the southwest corner of our yard drapes heavy boughs laden with immature cones dripping in sap just a dozen feet from their nests. The species will readily use other plant resins, and they are not Douglas-fir associates per se. In fact, there is a tension here as this nearby source of nesting material is enabling a population expansion, but if it grows enough to shade their nest sites, all will be abandoned.

For now, they share their nest sites most conspicuously with a substantially larger mason bee in the genus *Osmia*.

This gorgeous species, *Osmia coloradensis*, (photo at right, by the author) is a dark, dully metallic olive-green with desert sunset reflections of copper and bronze and pale abdominal hairbands that are uncharacteristic of the genus. These too are lovers of native asters, and the males emerge in late May as the appropriately named Oregon sunshine (*Eriophyllum lanatum*) begins to flower, but the females have a much longer active season, stretching a month or more and pushing well into summer. Evenings in July are warm enough that bees are busy almost up to sunset and I can watch from my chair while I drink a post-work beer and wait in the anticipation of seeing something new. The majority of females have finished their nests and left to spend a short retirement in their favorite part of the yard, I assume, so it's easier to track those still laboring, and I'm pulled from my seat as I notice they're drawn to a spot near soil level beneath their nest box. The evidence left in tattered leaf edges is extensive enough that I'm surprised I haven't noticed yet that every one of them is harvesting pulp from a couple of dwarf checkermallows (*Sidalcea malviflora*



ssp. virgata). Mason bees are known broadly, when they're known at all, for using mud in the construction of their nests, but the majority of species in North America utilize masticated plant material, and those that do seem to have local preferences in the plant material they use—the decision here appeared to be unanimous. Presumably, these preferences are related to anti-fungal or anti-parasitic properties that offer another line of defense to their developing larvae, but little in that regard is known, and it leaves me wondering whether they were less successful here before we reintroduced checkermallow to the neighborhood. I don't think I'll ever know, because although this species is widespread in western North America, it has only been recorded in Oregon west of the Cascades on two other occasions—one of which was sixty years ago in Eugene.

Over the past few years, I've recorded over forty native bee species in my yard in downtown Springfield, with additional species added annually. In late July one in particular seemed to materialize from the ether while I paced the garden on a work call. *Dianthidium ulkei* had not been recorded in Oregon and Washington west of the Cascades—no *Dianthidium* are known from the Willamette Valley—and yet here suddenly was a female soon followed by a few males. They'll certainly prove to be more widespread, if uncommon, but this beautiful apparition had me wondering about the ins and outs of bee dispersal, the details of which are largely unknown and largely unknowable. With at least three individuals materializing, I can't imagine they had to travel too far, but where and what was their refugium as every vestige of native vegetation was removed from the neighborhood? These are compact, robust resin bees, aposematically colored like a yellowjacket, and they too associate strongly with native asters, particularly gumweeds (*Grindelia* sp.), which provide them with both pollen and nectar and the gummy resins for nest construction. Our gumweeds were shaded out this year by a gargantuan Douglas aster (*Symphiotrichum subspicatum*), which now towers over me, too, and it's the few dozen of these plants that seem to have drawn them into the yard, pumping out a critical mass of volatile organic compounds that could tickle their antennae from a distance.

It's not that I'm stealing my neighbors' bees, in fact I like to think that I'm holding them for safe

keeping. They can have their manicured lawns, I'll have their bees—for now. They're free to go when called away by a plant they recognize deep in their genetic code. Until then, this yard has bees in more concentrated abundance than almost any place I've been. There is nothing special about where I live, we've just worked to pack it full of native and nearly

native plants (sunflowers, for example). Native bees are known to persist and often thrive in urban areas, sometimes rivaling nearby natural areas in diversity and abundance, but that biodiversity is not spread evenly. Moving forward, I have hopes that fewer and fewer of our yards will be fly-over country.

Be Bee Friendly. Getting Serious About Neonics

by Reida Kimmel

Neonicotinoids are the chemicals that are wiping out bees. And other insect life, and probably doing harm to birds and mammals, including humans, who ingest the systemic poisons in treated plant matter.

Do not purchase or use any products containing these chemicals: Acetamiprid. Clothianidin. Dinotefuran. Imidacloprid. Thiamethoxam.

Here is a list of products containing one or more of the neonicotinoids that are doing such damage to our pollinators: Aloft. Arena. Allectus. Atera. Bithor. Caravan. Coretect. Derby. Dino. Dominion. Equil Adonis. Flagship. Flower, Rose, and Shrub Care. Gaucho. Grub-No-More. Grubout. Hawk. Imaxxpro. Ima-Jet. Imi Insecticide. Imicide. Imid-Bifen. Imida-Teb Garden SC. Imidapro. Imigold. Lada. Malice. Mallet. Mantra. Marathon. Meridian. Merit. Nuprid. Optigard Flex. Pasada. Pointer Insecticide. Premise. Pronto. Prother. Safari. Sacacity. Starkle: Bounty. Tandem. Temprid. Triple Crown Insecticide. Tristar. Turfthor. Xytect.

I believe that few of our readers use insecticides. Or maybe just sometimes. But now even "sometimes" is deadly, unacceptably too much. Neonics are systemic poisons meaning that they infect every tissue of the sprayed plants, even the germ tissue, rendering future generations toxic as well. Tell managers of garden stores just how dangerous these products are. Share a copy of the list of bee-toxic products with them. Even if you can't get products off the shelves, you will be raising awareness.

Bring this list when you buy plants. Ask salespeople and managers what, if any, pesticides they and their suppliers have used. Ask the nurseries that raise the plants. Refuse to buy suspect plants and say why. Buy from vendors at farmers markets or raise your own. Peoria Nurseries does not use neonicotinoids on any of their plants. Plant natives. You will be creating a mecca for healthy bees and butterflies.

For more information about bees and neonicotinoids check out Friends of the Earth Bee Action.org. Northwest Center for Alternatives to Pesticides, right here in Eugene, has a wealth of factsheets to help solve weed and pest problems organically.

Events of Interest in the Community

The pandemic is still with us, which has led to many community events being postponed or canceled. Check the following websites to find out whether anything is happening.

McKenzie River Trust

<https://mckenzieriver.org/events/#event-listings>

Lane County Audubon Society

Tuesday, 15 September, 7 p.m. [Zoom Program Meeting--Dead Trees: Why We Need Them-- Tuesday, September 15, 7:00 pm](#) Check the LCAS webpage (lanecountyaudubon.org) for instructions on how to access the meeting.

Mt. Pisgah Arboretum

For upcoming activities go to <https://mountpisgaharboretum.com/festivals-events/>

Friends of Buford Park and Mt. Pisgah

<https://www.bufordpark.org/>

Because People & Nature Need Each Other—The Park is OPEN During Coronavirus/COVID-19—Please refer to [Lane County](#) for instructions about the park and updates.

The University of Oregon's Museum of Natural and Cultural History <https://mnch.uoregon.edu/museum-home>

Thursday, 24 September, 6 p.m. Virtual Workshop—The Art of Nature: Plant and Flower Illustration with Kris Kirkeby. Space is limited so preregistration is required. \$20 for MNCH members, \$25 for the public. Workshop material kits will be provided prior to the event and can be picked up from the museum Wednesday through Sunday, 12 noon to 3 p.m. 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 [Learn more.](#)

Native Plant Society of Oregon, Emerald Chapter

<https://emerald.npsoregon.org/>

Monday, 21 September, 7 p.m. From Extinction to Recovery? Reintroducing Golden Paintbrush to the Willamette Valley. Virtual program with Tom Kaye, Institute of Applied Ecology Executive Director. For program details:

<https://events.scenethink.com/online-program-native-plant-society-sep-21-2020> Virtual program links will be sent to NPSO members and posted on the NPSO Emerald Chapter website close to the date of the program. <https://emerald.npsoregon.org/>

Nearby Nature

<https://www.nearbynature.org/>

Tuesday, 13 October, 10 to 11:30 a.m. Green Start Play Day: Hide Outside. Enjoy outdoor nature play in our Learnscape plus toddler and preschool activities and stories. Celebrate the fall season this month as we learn about nocturnal animals, play camouflage games, and create colorful autumn leaf art. Kids 5 and under only, with an adult. Rain or shine! Members free, nonmembers \$7/family. Preregister online or call 541-687-9699.

WREN (Willamette Resources and Educational Network)

For WREN's upcoming events go to <http://wewwild.blogspot.com/> or info@wewetlands.org



Steens Mountain, east side. Alvord desert in background. Photo by J. Helmer

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>

MEMBERSHIP FORM

Name _____

Address _____

City _____ State & Zip _____ Phone _____

E-mail (if you want to receive announcements) _____

I (we) prefer electronic copies of *NT* rather than paper copies. ___ Yes ___ No

If yes, email address (if different from the one above): _____

ANNUAL DUES: Family \$25.00

Individual 15.00

Life Membership 300.00

Contribution _____

Annual dues for renewing members are payable in September. Memberships run from September to September. Generosity is encouraged and appreciated.

Make checks payable to:

Eugene Natural History Society

P.O. Box 5494, Eugene, OR 97405

ENHS. Officers and Board Members 2020–2021

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Treasurer: Judi Horstmann horstmann529@comcast.net

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

2020–2021 Speakers and Topics

18 Sept.	John Helmer	Steens Mountain: Sharing a Sky Island
16 Oct.	Bitty Roy	Madagascar
20 Nov.	Carol Paty	Moons of Saturn
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 Ultramaric Plant Communities of the Siskyou