

Nature Trails

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Ten Mile Creek, Oregon Coast

Conservation Strategies: Seabirds and Forage Fish

Paul Engelmeyer
Manager, Ten Mile Creek Sanctuary

**Friday, 20 March 2015, 7:30pm, Room 100
Willamette Hall, University of Oregon Campus**

Growing up in a large mid-western family, as one of ten children Paul Engelmeyer was a typical outdoors-loving kid. He was into team sports to keep up with his brothers – soccer was his favorite – but his real loves, fishing and hunting, came from outings with his father and brothers. Engelmeyer grew up in St. Louis, Missouri. He received his MS in Educational Psychology at Eastern Illinois University, and using that training did social work in Newport, Oregon for two years. He then embarked on a lifestyle he described as alternating among travel, adventure, and work. His home base was still Oregon, and his work was in the woods. When he had earned a bit of money he would take off to see another part of the world, such as South America or the Caribbean, with the inevitable accompanying adventure. When the money ran out it was back to the woods. Eventually he found himself spending more and more time working in the woods and less time in the travel/adventure mode. Getting married and helping with his family contributed to this change, but the major factor was his growing recognition of the need for protecting and restoring Oregon coastal areas.

For Oregonians the phrase “working in the woods” has special meaning. If you work in the woods you’re a choker-setter, a faller, a donkey-puncher, or you drive a log truck. And you don’t usually die in a bed. But Engelmeyer did none of those things in the woods. What really led him to move out here in the 70’s was steelhead fishing, and after his stint as a social worker he earned his living working with the Hoedads Cooperative, collecting cones, planting trees, and surveying streams. He also spent four years with the Oregon State University Wildlife Research Unit Marbled Murrelet research team, climbing old-growth trees, gathering data about nesting behavior and attempting to photograph this elusive seabird that forages in the near-shore but nests in the upper canopy of old-growth trees.

As he became familiar with the coastal area Engelmeyer realized how special, how fragile, and how in need of protection it was. He became a fierce advocate and a force in the drive to maintain and enhance the health of this unique ecological system, with its signature endangered species, such as coho salmon, northern spotted owl, marbled murrelet, silverspot butterfly, and eulachon (candlefish). In 1990, with Engelmeyer working to make it happen, the National Audubon Society bought a 116-acre



parcel surrounded by the Siuslaw National Forest lands and located between Cummins and Rock Creek Wildernesses. This marked the genesis of the Ten Mile Creek Sanctuary, and Engelmeyer became its manager. While maintaining this managerial post Engelmeyer has continued to find other ways to help the area. For instance, in 1995 he helped form the MidCoast Watersheds Council, which works with the local basin planning teams, federal and state partners, and local timber and agricultural interests to protect and restore over a million acres in five different watersheds in the coast range bioregion.

Engelmeyer keeps several irons in the fire. For instance, he has a long-standing relationship with the Audubon Society. He is the Coastal Important Bird Area Coordinator for the Audubon Society of

Portland. He also was Conservation Representative on the Ocean Policy Advisory Council, helping to develop a system of marine reserves along the Oregon coast. Thanks to efforts by Engelmeyer and fellow activists the Heceta Perpetua Marine Reserve, Marine Protected Area, and Seabird Protection Area, about which we will learn more in his talk, recently became one of Oregon’s five Marine Reserves. He also does environmental consulting for the Native Fish Society and The Wetlands Conservancy, helping to

advance watershed restoration. He has been a part of the Siuslaw National Forest Stewardship Group, which in 2010 got a national award from the U.S. Forest Service and the USDA Natural Resources Conservation Service in recognition of the Group’s efforts promoting conservation and forest stewardship.

But in our interview it was clear that Engelmeyer’s chief passion is working as a team member to help move the gradual changeover in the central Coast Range from an extractive economy to a protection and restoration strategy. He takes pride in their efforts over many years to protect and restore conservation priority areas. The latest triumph is a parcel at the mouth of Big Creek, a beautiful stream just north of Carl Washburne State Park. Other coastal activists initiated this effort, which began over thirty years ago, and now, finally, this parcel is in the public domain. The team approach once again was successful: Engelmeyer, The Nature Conservancy and funding from multiple sources finally protected this parcel that touches the wilderness, marine protected area, Siuslaw National Forest and a state park. In this way, piece by piece, Engelmeyer’s vision of a conservation management

plan for the central coast range, which will result in the area being permanently protected and at the same time accessible to you and me, is becoming a reality.

Engelmeyer still goes steelheading sometimes, but his love affair with fish has evolved from what it was when he first became an Oregonian. Now instead of trying to catch them with a hook he tries to catch sight of them. He does spawning surveys and snorkels in the streams he has come to know so well. He said sometimes coho swim right up to you as if they are your friends. You can crush up some caddisfly larvae, hold them out, and have the fry literally eating out of your hand. He gets to watch them grow from fresh out of the gravel to two-year-old smolts, then sees the mature fish when they come back out of the salt. This sounds like great fun, and from the enthusiasm in his voice it was clear he could hardly wait for next summer so he can get in the water with his friends again.

Engelmeyer's talk will focus on the area from Cape Perpetua to Heceta Head. This landscape encompasses two basalt headlands and two wildernesses. It holds the largest coastal temperate rainforest of Sitka spruce and western hemlock in the lower 48 states. It is home to marbled murrelet, silverspot butterfly, coho salmon, eulachon, and northern spotted owl, all on the federal list of endangered species. Contained in the area are both the Ten Mile Creek and Pine Tree Sanctuaries. Having managed the Ten Mile Creek Sanctuary for over twenty years Engelmeyer knows the region perhaps better than any other person. He will share his knowledge and infect you with his passion in his presentation "Conservation Strategies: Seabirds and Forage Fish." Please join us on 20 March at 7:30pm in room 100 Willamette Hall on the U of O campus. See you there.

On Sunday, 22 March 2015, there will be two events on the coast. Evelyn and Bayard McConnaughey watched over Mile 186 (http://www.oregonshores.org/mile_tour.php5?mid=186) for many years, and in honor of Eve's dedication to our Society ENHSers are invited to spend the morning on her beach picking up what foreign objects we come across. To take advantage of the low tide we want to arrive by 9am. We'll meet in the NE corner of the South Eugene High School parking lot, Patterson and 19th, at 6:45 am to arrange car pools. When we get to the coast we'll park at the Stonefield Beach State Wayside, just south of the bridge over Ten Mile Creek, and decide how best to access the clean-up area, which starts north of the mouth of Ten Mile Creek. Dress for the weather and you might want to bring knee-high waterproof boots in case some wading is involved, and a change of footwear in case your feet get wet. Also bring gloves, a sack lunch, and water. Garbage bags will be provided. We'll finish by noon at the latest, leaving an hour or more between our morning's work and our afternoon event.

The second event of the day is a tour of the Ten Mile Creek Sanctuary, led by Paul Engelmeyer, who will have spoken to us about the sanctuary at our monthly meeting on 20 March. The tour will begin at 1 pm at the Cape Perpetua scenic overlook. The road to the overlook turns off Highway 101 a mile north of the turnoff to the Cape Perpetua Visitor Center. Those who brought lunch but haven't eaten it yet can do so while Paul introduces us to the Sanctuary. After the introduction we will head up to Ten Mile Creek – no toilet and minimal parking. The whole tour will take about three hours. If you want to come just for the afternoon tour and not the morning beach cleanup that's fine, just be at the overlook at 1pm.

Here are two contacts in case you have a last-minute question:

Reida Kimmel: 541-285-4887 Saturday and Sunday only

Tom Titus: 541-510-2500

Fish Tales by Reida Kimmel

As our planet warms, many of the streams and rivers west of the Cascades and south into California will become too warm to support salmon. But superb habitat for the species' continued survival exists in Canadian tributaries of the Columbia and in the mountainous, wilderness tributaries of the Snake and Salmon Rivers. Our native anadromous fish, salmon and steelhead, need cool water and clear, chilly, gravel-bottomed pools to produce the next generation. If they can get to those pools at all. There are four dams on the Columbia before the Snake joins it. On the Snake, there are the infamous first four

dams, and three more dams further south. On the Columbia, as it winds northward through Washington and into Canada, there are even more dams. The oldest, the Grand Coulee, was built without any fish ladders. It still completely blocks the passage of anadromous fish.

Why aren't we acting to improve fish passage? That is a vexing question and the answers, if there are any, are complex.

The dams were built to provide power, and water for farmers and industry, as well as to mitigate flood damage. The tribes were not consulted. I do not think the dam builders were any more concerned about the

First Nations people than they were with habitat or conservation. Fish were just so abundant. What could be the worry? Yet salmon have the highest importance to the Northwest Native Peoples. Salmon are not just a food, their spiritual and cultural significance is so profound that they are at the very core of tribal identity, and it has been so for millennia. The iconic photo of native fishers at Celilo Falls reminds us tragically of all that the First People lost when the lake that formed behind the Dalles Dam in 1957 buried the falls forever. Since 1855 tribal people have had the legal right to fish at their traditional sites even if those sites were not part of reservation land. Did anyone imagine that fishing sites could disappear?

In 2008, the tribes made a deal with the Bonneville Power Administration called the Columbia Basin Fish Accords by which the BPA distributes one billion dollars in funding for habitat restoration over ten years' time. Even Oregon and the Nez Perce Tribe, which did not sign the Accords, have received funding. But in return the signatories agreed to stop advocating for dam removal or increased spill over the dams to help juvenile fish return to the ocean. Fish runs have increased greatly after habitat improvement on the Deschutes and John Day rivers. In Idaho, where there has also been habitat improvement, and where the Snake runs through the Bob Marshall Wilderness, there has been little increase in fish populations. Ben Goldfarb in "The Great Salmon Compromise" in *High Country News*, 8 December 2014, concludes that the culprits are the many dams that fish must navigate along the Snake. But that is not the whole story.

Hatcheries were going to mitigate the dams' devastating effects on salmon and steelhead. Besides, policy makers assume that fish need hatcheries to keep population levels as high as the public demand requires. Both the states and the tribes operate many hatcheries. Fish returning to spawn provide sustenance, both spiritual and corporeal, to tribal members. In a banner year like 2014, thousands more fish came than were needed for fresh food, and these

were food-banked, not wasted. Wild fish would indeed be preferable to hatchery fish, but to abandon the hatcheries and not have enough fish is unthinkable. So fish are spawned and raised in hatcheries, set out in acclimatization ponds to get used to the wild and sent on their way to the ocean. Of course, part of that journey is often in trucks, because the dammed lakes are almost as inhospitable to smolts as are the dams' turbines. Research has shown that hatchery fish are not as fit as wild-spawned fish. Though they may look great, they do not produce nearly as many offspring. They might not produce many babies, but they still compete for scarce resources with the native wild fish. At the 2015 Hatchery Versus Wild Salmonid Symposium, hatchery managers, many of them representing the tribes, detailed all the strategies they use to insure that only wild native fish are allowed to breed. They use only the eggs and sperm of returning wild fish. Returning hatchery fish are captured and harvested. But even if their genes are the most correct for the habitat, the hatchery offspring are still not as fit as their truly wild cousins. Something is going wrong in the hatcheries: too much food, or perhaps crowding and stress. Hatchery-raised fry have self-selected to thrive in that environment, not necessarily the wild. The changes that researchers see occurring in a single generation might someday be explained as epigenesis. We do not know the exact causes for the loss of fitness in hatchery fish, but we do know that hatcheries are contributing to the continuing serious decline in native salmonid populations.

Are there solutions? Funding for habitat restoration, which has done so much to improve water quality and flow, must continue after the Accords expire in 2018. It's unlikely that the four lower Snake River dams will disappear in the foreseeable future, but these dams, and the Grand Coulee on the Columbia, must be retrofitted to improve fish passage. There must be spills through the dams at appropriate times of the year, however unpopular these flushes are with the BPA. The BPA, and we its beneficiaries, owe these reforms to the nation.

Gwynn Creek by Tom A. Titus

Astrophysicist Janna Levin knows a lot about the universe. She says that it formed from a Big Bang that might have been one of many big bangs but this one banged just right and formed billions of galaxies with gargantuan black holes at their centers, galaxies that occasionally eat one another while moving apart with increasing speed until eventually they will be separating faster than the speed of light and will become unseeable and unknowable. Mind-boggling.

And in the vastness of this unlikely universe travels a tiny smidgeon of coalesced stardust we call Earth, carrying upon it an even smaller bit of matter, the North American Plate, that creeps inexorably toward the northwest, throwing up mountains, capturing sea stacks, and absorbing the brunt of weather and waves coming off the not-so-pacific Pacific Ocean.

A small wrinkle of a canyon is etched onto the lip of the continent by a rushing strand of tarnished silver. Gwynn Creek hurries downward through two

and a half miles of what has become one of the rarest commodities in the universe—an undisturbed coastal forest. The creek begins on a ridge a little southeast of Cape Perpetua, one of the most inappropriately named landmarks along this tectonically active and eroding coastline. The upper reaches of the drainage are mostly dry-tolerant Douglas fir that give way to Sitka spruce and western hemlock closer to the ocean where moisture is more persistent.

Someone in this universe thought that Gwynn Creek Canyon might hold something worth knowing. The federal government designated Gwynn Creek and nearby Cummins Creek as a Research Natural Area. In bureaucrat-speak, the place will serve “as a monitoring area to determine effects of management techniques and practices applied to similar ecosystems.” Put more bluntly, in our rush to dismantle the coastal forests we have left very few places like Gwynn Creek. Now we can’t even know what we’ve lost.

You don’t need a degree in forest ecology to know that Gwynn Creek holds secrets. When you, a mobile wet bag of star particles, begin walking up the trail from Highway 101, noise from cars quickly disappears beneath the sound of rushing water. Even in this driest of winters, the canyon bottom remains moist. There is a healthy odor of decay, of living things returning to dark matter. Okay, not *the* Dark Matter, but soil is dark and it does matter. Here, what matters is that the Big Bang has coalesced and become organized into living, breathing organisms interacting with one another to form a larger living, breathing thing. We should be finding out how all this synchronic living and breathing works. But intuition says there is something else living here, something perhaps beyond the purview of ecology.

We think we know about four percent of the “known” universe. That doesn’t sound like much. What might the huge spruce know, their trunks covered in square gray alligator lizard scales with fine green moss creeping upward toward nesting places of marbled murrelets? What of the Douglas fir, beings of unutterable magnificence daring us to stretch our short arms around trunks several hundred years in the making, brown bark etched by wavering

longitudinal canyons bearing black fire scars? These giants must have survived the conflagration that 150 years ago turned their kin on the ridges into gushing plumes of elemental orange flame, “back to normal” as James Cassidy would say. Maybe the trees know about a different four percent of the universe. Heck, maybe they understand Dark Energy.

These enormous trees that are only pinches of matter are keepers of the shady rain-fed damp that holds the salamanders, silent ones who keep their secrets close. We could learn a thing or two from salamanders. Where are those giant Coastal Giant Salamanders who made the not-so-giant gill-breathing baby living beneath a small rock in the trickling spring, the collected rain that whispers incessantly over tree roots on its way down to Gwynn Creek? Salamanders keep to themselves, inviting us

to learn on their own quiet terms. We talk constantly, baring all of our small secrets while holding our big ones close, like old trees we can’t wrap our arms around.

There must be other secrets. What of Gwynn Creek herself? Her water is clear and cold, protected from erosion and sun by all those big trees. She also talks constantly, but not in the

way people talk. She is the collected amplified whisper of rain, speaking in gurgling ripples, small plunges, and other tiny leaps of gravity-driven faith that carry her home to the white surf. Along the way she washes the flanks of cutthroat trout seeking refuge from an ocean agnostic to the place of fish in this small corner of the huge universe of which we know so little.

What of the people? Hundreds of generations of laughing, crying, living, dying humans preceded us in this very canyon. Five different bands of folks knew and kept secrets that are now all but lost, reduced to a few relics and old photos by people who pushed them from present and future consciousness, new people with no use for mystery. We hike the trail, our incessant talking keeping old secrets at bay, preventing new ones from forming. We have much to learn.



Photo by John Postlethwait

ENHS FIELD TRIP TO THE COAST, 5-7 JUNE

We are planning a weekend field trip to the Coast, Friday-Sunday 5-7 June, staying at the Oregon Institute of Marine Biology in Charleston. We will travel in cars; carpooling is encouraged.

Accommodations: We will spend the nights of Friday and Saturday 5-6 June in the Institute's cottages, apartments and dorm. Most of the beds are twin sized, plus a few queens and futons. The cottages have fully equipped kitchens, but we must bring our own bedding and towels. We will fend for ourselves Friday night, cooking there or eating somewhere in Charleston or Coos Bay. Breakfast, sack lunch and a special seafood dinner on Saturday plus breakfast on Sunday will be provided at the marine station cafeteria. Vegetarian and other dietary options are available, if reserved in advance.

Activities: After breakfast on Saturday we will explore the tide pools at South Cove, Cape Arago. The low tide is - 1.3 at 9:36am. Getting to the tide pools involves walking up and down hills. The path and tide pools can be slippery. Besides the pools that we will be visiting, there are also quite accessible, though somewhat less exciting, pools at South Cove for those who would like to explore but do not want to clamber over rocks. Saturday afternoon and Sunday are unstructured to allow time to explore South Slough National Estuarine Research Reserve (open dawn to dusk every day) and Interpretive Center (10am-4:30pm on Saturday), beaches, North Spit's dunes, the gardens at Shore Acres, ... so much to see, so hard to choose.

Costs: Expenses for the weekend will total \$93 per person. Rooms will cost \$40 per person for two nights and 4 meals will cost \$53.

To participate: Participation is limited to 25 people. Your name(s) will be added to the list when we receive payment. Make out checks to the Eugene Natural History Society and give them to Kim Wollter at the monthly meeting or mail to Kim Wollter, 3550 Mill St., Eugene, OR 97405. Be sure to provide participant name(s), phone numbers, snail mail addresses, e-mail addresses, and any dietary restrictions. All payments must be received by 1 **May**. Refunds may be made only in the case of emergencies. For more information, contact Kim Wollter at 541-484-4477, kwollter@comcast.net.

JOIN US. IT WILL BE GREAT FUN!

Events of Interest in the Community

Lane County Audubon Society

Saturday, 21 March, Third Saturday Bird Walk. Lane Community College, led by Jim Regali. Carpool from the corner of Patterson and 19th or meet in the northeast area of the main LCC parking lot at 8:20am.

Tuesday, 24 March, 7:30pm. Birding Thailand. Anne and Dan Heyerly. Eugene Garden Club, 1645 High St.

Mt. Pisgah Arboretum

Sunday, 15 March, 8-10:30am. Early Spring Bird Walk. Rain or shine. Meet at the Visitor Center. \$5, Members Free.

There are many other events at MPA in the coming month. Go to <http://www.mountpisgaharboretum.org/festivals-events/> for the complete listing and accompanying details.

Friends of Buford Park and Mt. Pisgah

Monday Morning Regulars. 9am-noon. Contact volunteer@bufordpark.org for more information.

Tuesdays and Thursdays, 9am-noon. Nursery Work. Meet and work at the Native Plant Nursery at Buford Park. Enter Buford Park from Seavey Loop Road. Turn LEFT after crossing the bridge and drive 1/4 mile to the nursery.

Nearby Nature Go to <http://www.nearbynature.org/events> for information on NN activities, or call 541-687-9699.

Monday-Friday, 23-27 March, 8:30am-3pm. Spring Break Fun. Spring Wings and Crawly Things. Ages 6-9. Cost: \$210/child for members, \$250/child for non-members. Pre-registration required. Call 541-687-9699.

Saturday, 14 March, 9:30am-noon. Restoration Celebration.

Saturday, 4 April, 9am-noon. Learnscape Work Party.

Friday, 10 April, 1-4pm. Restoration Celebration. For this and the above two activities, meet at the Waterwise Garden patio. Dress for the weather in clothes that can get dirty, and bring water.

North American Butterfly Association, Eugene-Springfield Chapter

Monday, 13 April, refreshments 7pm, presentation 7:30pm. Monarch Waystations: A Milkweed Railroad along Migration Routes. By Tom Landis. Eugene Garden Club, 1645 High St. Free.

Native Plant Society of Oregon, Emerald Chapter

Thursday, 19 March, 7pm. Eugene Natural Areas through the Seasons. By Ed Alverson. For the past decade, Eugene botanist Ed Alverson has been making weekly visits to photograph Eugene natural areas, choosing a different site every calendar year. For each year-long project, Ed selected 15 to 30 scenes to re-photograph every week. The resulting time series provides a view of seasonal changes over the year for a wide variety of habitats. Ed will present a selection of his photo sequences, describe his techniques, and discuss the value of repeat photography for natural history and conservation purposes. Location: Conference Room at Lane County Mental Health. For more information call 541-349-9999.

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

Exhibit Hours: Tuesday through Sunday, 11am-5pm

Current Exhibits

- Explore Oregon: 300 million years of Northwest natural history.
- Site Seeing: Snapshots of Historical Archaeology in Oregon.
- Oregon – Where Past is Present. 15,000 years of northwest cultural history and 200 million years of geology.
- Highlights of the Jensen Arctic Collection.
- Tradition Keepers – Shayleen Macy. Artist Shayleen Macy is a Wasco/Yakima/Warm Springs member of the Confederated Tribes of Warm Springs and a graduate of the University of Oregon's BFA program.

Ideas on Tap. First Wednesday of the Month, 7-9pm at Sam Bond's Brewing Co., 540 E 8th Ave. Quench your thirst - for beer and for knowledge – at **Ideas on Tap**. Enjoy local craft beers and thought-provoking discussions about science, ecology, history, and more. Admission is free, food and drink available for purchase.

WREN (Willamette Resources and Educational Network)

Saturday, 11 April, 10am-2pm. Family Exploration Day at Meadowlark Prairie. This free family program provides unstructured observation, education and inspiration in our surrounding natural spaces. WREN staff and volunteers will be on hand to check-out nature exploration equipment and provide guidance for independent exploration of the wonders in the wetlands. Meet at the parking area located on Greenhill Rd, north of West 11th Ave. Bring water and wear sturdy shoes. For more information call 541.338.7047 or email info@wewetlands.org

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 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: Contributing 20.00
Family 15.00
Individual 10.00
Life Membership 300.00
Contribution _____

Make checks payable to: The Eugene Natural History Society
P.O. Box 5494, Eugene OR 97405

The following information is voluntary, but appreciated:

Would you like to: ___ lead field trips ___ teach informal classes ___ work on committees ___

What would you like to hear a talk on? _____

Do you have special experience in natural history: _____

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

ENHS OFFICERS AND BOARD MEMBERS 2014-2015

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ENHS Schedule of Speakers and Topics for 2014-2015

20 Mar. 2015 – Paul Engelmeyer – Conservation Strategies: Seabirds and Forage Fish

17 April 2015 – Marli Miller – Oregon Geology --one road at a time

15 May 2015 – Pat Ormsbee – Wings in the Night: A Glimpse into the Mysterious World of Bats

