

# *Nature Trails*

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Photo credit to Science & Memory 2015

## **Copper River Salmon**

**Mark Blaine**

**Senior Instructor, School of Journalism and Communication  
University of Oregon**

**Friday, 20 May 2016, 7:30pm,  
Room 100 Willamette Hall, UO Campus**

Mark Blaine, our speaker for the month of May, is not a fish biologist. He is not a salmon fisherman. Yes, salmon will have a starring role in his talk, but the real stars are his students and the Copper River ecosystem: the river, the mountains, the glaciers, the sea, and all the myriad living things on and in it.

Blaine is a journalist. More specifically, he teaches journalism in the University of Oregon School of Journalism and Communication (SOJC). He is committed to being part of the change that journalism is undergoing. He also has a deep love of and connection to the natural world – almost a prenatal connection. Blaine’s path to his present position is about as convoluted as the river course in an undisturbed delta. His visceral ties to the outdoors and to adventure began shortly before he was born. His parents were avid canoeists. When his mom was nine months pregnant with him they were on a river and got caught in a sweeper (a tree that has fallen into the river). She almost drowned. That episode and the stories it must have generated may be part of the basis for Blaine’s continuing love of water sports. He has several kayaks, a drift boat, a Hobie Cat sailboat, has recently gotten into rowing, and one of his books is entitled *Whitewater: The Thrill and Skill of Running the World’s Great Rivers*.

Another unusual connection to nature for Blaine resulted from his dad’s work. A physiologist specializing in the effects of salt intake on kidney and heart function, the elder Blaine took his family to Australia so he could study a mammal with minimal salt intake: wild kangaroos in the Snowy Mountains. They lived in the bush, with no electricity or running water. How could this not have had a profound impact on a young boy?

That project completed, they left Australia and went to Pennsylvania, where his dad had taken a faculty position at the University of Pittsburgh, and then to Philadelphia, where his dad worked for Merck. Finally, the family moved to St. Louis. Blaine finished high school there and studied biochemistry at Washington University. Just shy of all his premed requirements he decided he wanted to pursue a writing career. He’d written things for years before that and had almost enough credits for a double major in English, so this wasn’t that radical a step. He switched to the University of Missouri because it has one of the best schools of journalism in the country, if not the best, and it was about one fortieth the cost of Wash U. But his Wash U chemistry and biology

courses were now simply electives so he had to spend another three years to finish.

With a journalism bachelors in hand, Blaine became a reporter for the Asheville (NC) Citizen-Times. He got to do stories on the most polluting paper mill in the country, on the Eastern Band of Cherokees as they developed their first casino, and on the Great Smoky Mountains National Park. In our interview Blaine waxed almost lyrical about the western North Carolina region, comparing it to mountainous regions of the West in its ruggedness and remoteness.

After a few years on the paper Blaine decided to further his education. He chose the University of Oregon for at least two reasons, one professional, the other personal. He told me that as a child he loved maps, and when he was seven he decided Oregon would be a nice place just based on how it looked on his map of the country. On a professional level, Blaine chose to pursue his graduate study at the University of Oregon’s SOJC because of its program in narrative journalism. He had grown tired of “newspaper brain”, a condition arising from the continual struggle against twelve-hour deadlines, and yearned for a journalism in which his love of writing magazine- or book-length pieces could be expressed and appreciated. He finished his M.S. in 2001 and worked part-time as an Adjunct Instructor in the School while editing a magazine dedicated to issues related to public land policy.

Now a Senior Instructor, Blaine has been on the SOJC faculty for a dozen years. He has taught many classes (including The Journalistic Interview, which fact caused me no little trepidation before *our* interview) and has assumed administrative duties as the school deals with its redefinition in the digital era.

Part of this redefinition is a recognition of the need for and worth of stories with greater depth and complexity. Blaine had an idea of a large project that could serve as a model for a new approach. The idea came in part from a fishing trip (I love this). He had gone with his dad and a few of his dad’s biologist friends on a river trip on the Copper River, in Southeast Alaska. While there he noticed several things. The town of Cordova is physically isolated – you get there either by plane or boat.

Everyone in the town depends on the salmon fishery and on each other. If you work in Cordova you either catch fish, clean fish, can fish, study fish or provide services for those who do. The ecosystem has been affected by two huge events, the Exxon Valdez oil



spill and the 1964 earthquake, and it is increasingly affected by global warming. These changes have altered the lives of almost everyone in the community, leading to nostalgic recollections of the old days as well as a realization that survival of the community necessitates adapting to change. Besides the town's residents there are also scientists there – ecologists, wildlife and fisheries biologists, probably a few geologists – who are monitoring various aspects of the Copper River system. Blaine saw that the whole caboodle represented a unique model for how a community deals with change, and thus was born the Science and Memory project.

So for the past three years Blaine and SOJC students have been doing a different kind of journalism. Their project involves a multi-faceted, multi-media approach to a broad topic: how the

Copper River ecosystem in general and the Alaskan community of Cordova in particular have been affected by major impacts on the salmon industry. Some of their results are available on line ([scienceandmemory.uoregon.edu](http://scienceandmemory.uoregon.edu)), and looking at them will definitely not be a waste of time. There are compelling stories, images, videos of artwork being made, interviews of townsfolk and scientists, and students telling in their own beautiful words how this model of experiential education has changed them.

We will be treated to awe-inspiring scenery, gut-wrenching stories of loss, and wonderful examples of resilience. This is a must-go-to talk. Join us at 7:30pm on Friday, 20 May in room 100 Willamette Hall on the U of O campus. As always, save room for a cookie or a brownie. John Carter

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## Junk Trees by Reida Kimmel

Turning pasture into woodland is awfully hard work unless you have all the time in the world and are willing to let nature take its course for thirty years. If you are impatient to experience your creation, you have to plant trees. We dreamed of creating a shady grove of beautiful maples, oaks and dogwoods. We splurged and purchased potted little trees, because in the past we have had poor luck keeping transplanted starts from nearby woods alive. However you do it, the babies need protection from deer, mulching and weeding to prevent the grasses and cleavers from choking them, and watering, at least for the first summer. Chuck works hard to keep our little proto-woodland alive.

But when I am trudging around uprooting cleavers (*Galium aparine*), I see that the old pasture is really filling up with volunteer trees. Junk trees: ash and willow and prickly pesky hawthorn. Part of me wants to rip out these less-than-charismatic species and turn our intermittent creek into a little pond, destroying the wetland that ash and willow demand. But my wiser self tells me to learn to appreciate and live with the species that naturally thrive in the pasture's terrain. I can't imagine myself making proud remarks about the gangly ash trees and scrubby willows, but these "junk tree" species do have some wonderful qualities.

I found three new volunteer hawthorns today. They and Nootka rose, [Got several of those too, about eight feet tall.] are common pioneers in abandoned grasslands. If the situation is sunny, they are soon joined by incense cedar and madrone. Hawthorns in Oregon are a bit tricky. There are two native species, black hawthorn, *Crataegus douglasii*, and Columbia hawthorn, *C. columbiana*, easily distinguished by

thorn length and the color of their fruits, the thornier former bearing black fruits, and the latter red fruits. Introduced European species, characterized by highly dissected leaves and greater susceptibility to diseases, are equally attractive to birds and have spread their genes abundantly. Many of the shrubs and trees we know as hawthorns are hybrids. Ours certainly are. All our hawthorns are more like huge shrubs than trees, have short thorns, dissected leaves and red berries. They have traits resembling any or all of the wild and introduced species. No matter what species they are, they are a wonderful plant for wildlife. The thorny shrubs provide shelter and nesting sites for birds. The unpleasantly musky flowers attract flies, bees, butterflies and hummingbirds. Birds feast on the fruit in the fall, as can humans, as hawthorn jams and jellies and teas are very tasty.

We have three large willows on the farm, and with so much wetland it is no wonder that planted and volunteer willows have done so well. But willows have their problems. They are short lived unless you pollard them every ten or twenty years. That involves removing all the branches about ten feet above the ground and forcing the tree to regrow from there, which it does quite happily. Large portions of old willows' trunks die from time to time, and there is nothing to be done with the wood. It is soft, too punky to use for woodwork, and anyone who has ever built a campfire with willow logs knows why it is not suitable for firewood. It is not just the poor heating qualities of the very soft wood, it is its special smell. We call it p---willow in our family. Still, the little willows that grow in our creek bed slow the waters that flood down from the hills in big rainstorms. Our older willows, when they are in a healthy frame of mind, are glorious in the spring.

When the pussy willow buds are mature and covered with bright yellow pollen, honeybees and myriad tiny insect species gather for the feast. Deer, and our horses and sheep, all browse on the lower branches. The big black willow near the pond has come to look as if it is wearing a green skirt as its lower branches re-sprout over the years. Hidden in the leafy branches there is always a paper wasp nest, while birds chatter, feed, and nest there, too. This year a pair of tricolor blackbirds have made it their home. We have one weeping willow and one Scouler's willow on the farm. The rest are black willows, *Salix lasiandra*, quite colorful in spite of the name. When in full leaf, in the wind, the silver undersides of their leaves are exposed and positively glitter, a cheering sight on a hot summer day! The young willows, because their branches and twigs never really go dormant, are stunningly bright yellow on any sunny winter day.

And then there is Oregon ash, *Fraxinus latifolia*, our most common volunteer in spite of the fact that ash trees do not start to reproduce until they are about thirty years old. Seedlings come up in every sunny place: in the garden, amongst the blueberries and in all the fields. I think the deer and our livestock browse them, as they never grow above ankle height in the pastures, but along the driveway and in our proto-woodland the seedlings appear and grow rapidly. I find it hard to appreciate this particular volunteer. Its tiny green flowers are hard to see, and its clusters of winged seeds are a dreary tan. In the autumn the leaves turn brown and fall early. It is a common associate with all the other volunteers in our

pasture, including serviceberry and snowberry bushes, and thrives in our heavy waterlogged clay soils where the graceful, sweet smelling black

cottonwoods, which we would rather have, cannot survive.

We were dreaming of Nature Perfected when we bought and planted our tiny pretty trees, the maples, dogwoods and oaks. What we are seeing is Nature Rampant, a jumble, a mass, a confusion. We



Oregon ash. Photo from tree-pictures.com

dreamed of a manicured grove and are being given a thicket, not all of its parts to our liking, but the whole fitting together because all of the parts belong. Our old pasture is becoming an early seral community, one of the richest and most bio-diverse of all the Pacific Northwest landscapes. We are providing feasts and homes for wildlife, and if we are patient, we will see the community change as our trees grow, shading out shrubs, creating new niches and food sources. Managing the aliens, the grasses, blackberries and cleavers will keep us busy, while Nature will be busy managing and taking care of itself.

## Quamash

By Tom Titus

Morning light often comes as I stand at the kitchen counter making coffee. On one particular morning I was struck by sun streaming in after days of clouds and rain. Beyond my front window a thick patch of camas was flowering beneath a blooming Spitzenburg apple tree.

I was compelled to go outside for a closer look. This is saying a lot, because I am not compelled to do much of anything before my morning coffee. Each six-inch camas inflorescence glistened with drops of leftover rain. The flowers rocked in the small breeze, casting their dancing shadows onto one another. I'm not sure I've ever looked closely at an individual camas blossom. Each one was a six-petaled lavender star, the petals forming exclamation marks with longitudinal ridges thrown wide open to the morning, radiating outward from a golden pistil. Six pollen-laden anthers were suspended from their filaments like tiny yellow planets orbiting the pistil, casting their own small shadows onto the petals.

This hybrid landscape of apple tree and camas did not result from planning. We like to eat Spitzenburgs, camas are lovely in the spring and grow well in the foothills around our house, and our lot is small. We put them together. But the metaphor is not lost on me; this native food plant is forced to coexist with a European interloper because of circumstances and limited useable space. The tree makes plenty of apples, and the camas blooms prolifically, producing many seeds. The two species seem to have worked it out.

On the other side of the house lies another patch of camas. These backyard plants came from stock growing on the Willamette Valley floor just north of Eugene. They are not lavender, but blue. True blue. Perhaps cobalt. The flowers tend toward the color of western larkspur. They are the hue of that last barely-lit band of sky during a clear sunset that chases the daylight over the western ridge. When I seeded these camas, I wondered if their blue really was true, whether the blue would breed true into the next

generation. After fifteen years they have made more of themselves—a lot more of themselves—and all of the offspring have flowered true blue. So the color isn't just the result of growing in the deep black soils of the Willamette Valley floor. It has a genetic basis that carries over into garden beds beneath an ornamental dogwood in suburban South Eugene that is transmitted to the next generation.

The genetics of this heart-rending blue most likely lie in the accumulation of anthocyanins. Presumably these Willamette Valley camas have figured out a way to concentrate anthocyanins to a greater extent than the lavender plants in the front yard. Making anthocyanins is an energy-intensive process, so there must be some positive evolutionary tradeoff for making or concentrating that extra pigment. Perhaps true blue more effectively attracts a group of pollinators unique to the valley floor. There are many to choose from; crickets, ladybugs, ants, and most importantly native bees all visit camas flowers.

My camas patches are a small study in beauty and genetics, and an opportunity to wedge some tiny fragments of native landscaping into a suburban world full of grass, azaleas, and Japanese maples. But in places where extensive swaths of camas still exist, the blooms have a collective splendor quite different from the exquisite individual flowers. Over 200 years ago (June 12, 1806), Meriwether Lewis was captivated by these vast expanses of blooming camas: "*The quawmash is now in blume and from the colour ... at a short distance it resembles lakes of fine clear water, so complete is this despection that on first sight I could have sworn it was water.*" I suppose camas is like most other things in the universe to which we pay careful



attention, where each scale of observation provides its own unique beauty.

Everyone who writes about camas is duty bound to mention the dietary importance of the bulbs to subsistence humans. In pre-colonial North America the bulbs were a premier source of carbohydrate. I have not eaten them, but when I do it will be in small quantities. When the half-starved Lewis and Clark expedition emerged from the Bitterroot Mountains of Idaho onto the Weippe Plain, they gorged on camas and dried salmon generously provided by the Nez Perce. The entire crew became so ill with gastrointestinal upset that they were barely able to function for a week. This spring I dug up some wayward camas in my garden beds and was impressed with how deep the bulbs were buried. I can scarcely imagine the amount of work necessary to harvest with digging sticks those large piles of bulbs shown in old photographs.

Can there be any doubt that camas is the iconic angiosperm of the western valleys and foothills? You need only imagine a time before jobs or retirement accounts or supermarkets.

You emerge from a winter of long nights into the stretching daylight of spring. From an open hillside above a flat valley, a blue-egg morning cracks open before you. The rising sun breaks between puffy clouds, sending light to earth at that sweet angle that draws long shadows from the oak trees. Vast swaths of lavender camas erupt in meadows kept

open and productive by your own burning. You stretch your arms wide to gather in the splendor, knowing that you will be fed. Imagine the gratitude engendered by all that beauty, all that food, gathered together into one species.

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## Beach Cleanup Report

At 10am on a rainy and windy Saturday morning, 23 April 2016, seven volunteers, each with a 5-gallon bucket and clad in rain gear, spread out along Eve's mile and began picking up trash. They were Nan Ahnert, Kate Shapiro, Connie Berglund, Phil Johnson, John Carter, and Reida and Chuck Kimmel. We ended up with an assortment of tidewrack ranging in size from pieces smaller than a dime to a plastic hose about 20 feet long. We filled several large, heavy-duty plastic bags even though we did not make it to the far north end of our mile. After we called it quits we went a few miles further north to Strawberry Hill where we had an untrammled view of the ocean while eating our lunches.

## Announcements

1. A good place to park for our meetings is the Physical Plant lot: turn north (away from campus) from Franklin onto Onyx, go about a block and you will be in the lot. After 6 pm it's open to the public.
2. Our meeting this month is back in **100 Willamette Hall**.
3. We need booth sitters for the ENHS booth at the Mt. Pisgah Arboretum Wildflower Festival on 15 May. No experience necessary. If you can do it, contact a board member. See the list on the last page of NT for contact info.
4. The May meeting is our annual Business Meeting. Members will be asked to vote on whether to accept the slate of officers and at-large Board members.

**REMINDER: Our meeting in September 2016 is on the second Friday, not the third Friday.  
That's the 9<sup>th</sup>, not the 16<sup>th</sup>.**

## Events of Interest in the Community

### 350 Eugene

**Monday, 16 May, 7pm. HOW TO LET GO OF THE WORLD AND LOVE ALL THE THINGS THAT CLIMATE CAN'T CHANGE.** A film by Oscar-nominated Josh Fox. The film appeared in the 2016 Sundance Film Festival. First Methodist Church, 1376 Olive St. Free admission, \$10 suggested donation.

### Lane County Audubon Society

**Saturday, 21 May, 8am-noon. Third Saturday Bird Walk.** Expert birder Jim Regali will lead the monthly bird walk to Skinner Butte. We have a couple of pairs of binoculars to loan if needed. To carpool, meet at 8am at the SEHS parking lot (corner of 19th and Patterson). You may also meet the group in the parking lot at the top of Skinner Butte at about 8:20 a.m. Parking space is limited at Skinner Butte. Remember that it's not a good idea to leave valuables or your vehicle registration in your car. A \$3 donation is appreciated to help support Lane County Audubon's activities. For more information, contact Jim Maloney at 541-968-9249 or jimgm@comcast.net.

**Tuesday, 24 May, 7:30pm. Gabon: Africa's Eden.** In July 2015 Jim Regali and Bob Fleming journeyed with eight others to Lope and Loango National Parks in Gabon. Fleming and Regali are both excellent photographers, so in their natural history overview the audience can expect to see wonderful renditions of the wide variety of birds and mammals that are residents of one of Africa's most amazing countries. The meeting is at The Eugene Garden Club, 1645 High St.

### Mt. Pisgah Arboretum

**Sunday, 15 May, 10am-5pm. Wildflower Festival.** Hundreds of local wildflower species on display, live music, nature walks, a plant sale, food booths, and local arts and craft vendors. Suggested donation \$8, Arboretum members free.

**Saturday, 21 May, 1-3pm. Butterflies and Dragonflies Walk.** Join nature guide Dave Hagen on a walk for kids and families. Explore the diversity of butterflies and dragonflies found at the Arboretum. This will be a gentle walk through the meadowlands. Nets and bug boxes are provided to get a closer look at these amazing organisms. Meet at the Visitor Center. Don't forget your parking pass. \$8 per family, \$5 individual, members free.

**Sunday, 22 May, 8-10:30am. Late Spring Bird Walk.** Join Chris Roth and Julia Siporin for another monthly bird walk intended for people with all levels of birding experience. We'll use vocalizations, habitat, and behavior clues for identification of our spring and year-round residents. Come discover the Arboretum's avian diversity. Please bring binoculars. Option to continue the walk until noon for those who are interested. Rain or shine. Meet at the Visitor Center. \$5, members free.

**Saturday, 28 May, 1-3pm. Reptiles and Amphibians Walk.** Join Tom Titus, local biologist and author, on an exploration of the reptiles and amphibians that make their home on Mount Pisgah. From the forest and oak savannah to the riparian areas, Titus will open your eyes to these amazing creatures and perhaps capture a few for you to look at more closely. Meet at the Visitor Center. Don't forget your parking pass. \$8 per family (ages 8 and up), \$5 individual, members free.

### Friends of Buford Park and Mt. Pisgah

**Monday Morning Regulars. 9am-noon.** Contact [volunteer@bufordpark.org](mailto: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.

### WREN (Willamette Resources and Educational Network)

For current WREN events go to <http://wewwild.blogspot.com/>

**The University of Oregon's Museum of Natural and Cultural History**  
**Exhibit Hours: Tuesday through Sunday, 11am-5pm**

### Cascade Mycological Society

**Wednesday, 27 May, 7-9pm. Monthly Meeting.** Free and open to the public and held the 4<sup>th</sup> Wednesday of each month September through May, our monthly meetings include an identification session, a featured presentation, and seasonal mushroom tastings. Amazon Community Recreation Center, 2700 Hilyard St.

### Native Plant Society of Oregon, Emerald Chapter

**Friday-Sunday 15-17 July. NPSO Annual Meeting. Hosted this year by the Emerald Chapter.** The meeting will be held at the McKenzie River Conference Center in Rainbow, Oregon. See <http://emerald.npsoregon.org/2016mtg/> for details.

### North American Butterfly Association, Eugene-Springfield Chapter

**Saturday, 4 June, 12 pm. West Eugene Wetlands.** Join Alison Center and other NABA officers for a casual, educational exploration of Eugene's nearby wetland areas where butterflies are abundant in the early season. With these experts as guides, beginners and experienced butterflyers alike are sure to have an enriching natural-history experience – one that extends beyond butterfly identification. Free. Meet in the parking area by the Red House, West Eugene's Wetlands office, located on the NE corner of W 11th and Danebo (751 S. Danebo Ave., behind the Hertz car sales lot). Preregister with David & Lois Hagen (NABA-ES) by email [NABA.ES.trips@gmail.com](mailto:NABA.ES.trips@gmail.com). Go to <http://www.naba.org/chapters/nabaes/fieldtrips.html> for a listing of nine more summer field trips and events.

### Nearby Nature

**20 June-2 September: Summer Daycamps!** Nearby Nature 2016 Summer Daycamps are ready for registration. Adventure, art, discovery, science, and play! Click [here](#) for complete details. Go to <http://www.nearbynature.org/events> for information on NN events during the summer.

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**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:** Family \$25.00  
Individual 15.00  
Life Membership 300.00  
Contribution \_\_\_\_\_

Make checks payable to:  
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<p><b>Annual dues for renewing members are payable in September. Memberships run from September to September. Generosity is encouraged and appreciated.</b></p>
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**ENHS Schedule of Speakers and Topics for 2015-2016**

**20 May 2016**      –Mark Blaine                      – Copper River Salmon

**Tentative Schedule of Speakers and Topics for 2015-2016**

9 Sept. 2016	–Jim Furnish	–Toward a Natural Forest
21 Oct.	–Authors and Music	–Forest Under Story
18 Nov.	–Celeste Mazzacano	– More than Monarchs: Migration in Dragonflies & Other Insects
9 Dec.	– Claudio Mello	–Of Bird Genes and Bird Brains: What Science Can Teach Us About Avian Singing and Seasonality
20 Jan. 2017	–Kelly Sutherland	–Sea Jellies
17 Feb.	–Terry Hunt	–Easter Island Archaeology
17 Mar.	–William Cresko	–Sea Horses and Sea Dragons
21 Apr.	–Svetlana Maslakova	– Python of the Sea: Natural History of the Nemertean Worm
19 May	–Ed Alverson	–Natural Areas