

Perspectives on a Community Forest: A Practice in Nature Writing

by

Lucia C. Hadella

A THESIS

submitted to

Oregon State University

University Honors College

in partial fulfillment of  
the requirements for the  
degree of

Honors Baccalaureate of Science in Natural Resources  
(Honors Scholar)

Presented May 16, 2016  
Commencement June 2016



AN ABSTRACT OF THE THESIS OF

Lucia Hadella for the degree of Honors Baccalaureate of Science in Natural Resources presented on May 16, 2016. Title: Perspectives on a Community Forest: A Practice in Nature Writing

Abstract approved: \_\_\_\_\_

Michael P. Nelson

The McDonald Forest is one of the Oregon State University Research Forests, owned by the College of Forestry and located approximately seven miles northwest of the heart of Corvallis. I took four hikes on the McDonald Forest at four major recreation destinations: Oak Creek, Dimple Hill, Lewisburg Saddle, and Peavy Arboretum. I wrote four creative nonfiction essays, each set at a main area of the forest. In these essays, I explored different environmental and natural resource issues associated with each location and used those issues as microcosms for broader natural resource challenges facing the world today. Some of these include climate change, forest management practices, cleaning up after other people, and environmental justice and racism. Major themes explored in the essays are responsibility, ownership, uncertainty, anger, and absence. This personal, interdisciplinary approach to examining environmental challenges allows for deep reflection on the issues at hand, as well as internal reflection by the writer – resulting, hopefully, in self-reflection among readers. These pieces should provoke questions and inspire conversations.

Key Words: creative nonfiction, climate change, forest management, environmental justice, environmental racism, ownership

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May 16, 2016.

APPROVED:

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I understand that my project will become part of the permanent collection of Oregon State University, University Honors College. My signature below authorizes release of my project to any reader upon request.

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Lucia C. Hadella, Author

## Acknowledgements

I would like to thank the great nature writers I have read over the years and do not pretend to name all of them here: Edward Abbey, Derrick Jensen, Rachel Carson, Kathleen Dean Moore, Annie Dillard, John Muir, Aldo Leopold, Henry David Thoreau, Ralph Waldo Emerson, Richard Louv, and William Stafford.

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And of course, thank you to my parents for introducing me to nature and to writing – my two favorite things.



Fallen tree on Old Growth Trail

## **Introduction**

This project is a collection of nature writing I did after taking hikes on the Oregon State University McDonald Research Forest, where I have worked as a student employee for three years. I started the project planning to write about the concept of ownership, wishing to explore some of its many manifestations – in the way people might feel about a certain trail, in the names given to places on the forest, in the attachments made to particular trees, benches, and scenic views. However, as I started taking my hikes and drafting my essays, I found myself needing to write about the issues that troubled me most, as a Natural Resources student preparing for a life of professionally caring about the natural world.

I needed to write about what scared and confused me. Therefore, by reading these essays, you will come to learn some of my greatest fears and uncertainties. I cannot help but write about myself in the introduction to the project, because creative writing is about understanding one's own thoughts. These essays are my thoughts, though I have many people to thank for them.

In some instances, I hope I have also captured the perspectives of my readers, and not simply my way of thinking. Other readers will disagree with what I have written. In this way, I hope my essays provoke self-reflection and inspire conversations about ethics, social norms and patterns, and opportunities for change.

While I thought I was abandoning my focus on ownership and moving instead to other concepts in my essays, I later concluded that most things I wrote about are indeed related to ownership. In these pieces, look for themes of responsibility, sense of place, uncertainty, absence, and cleaning up the messes left behind by other people. I think you will agree, after reading, that ownership underlies all these themes.

## Taking Out the Trash

As a student in natural resources, I've grown accustomed to environmental doom and gloom. Professors know that about the major, and I can only assume they gathered together, maybe ten years ago, and drafted The Universal Natural Resources Student Pep Talk, which each of our professors shares with us at least once a term. It goes something like this: "There are a lot of problems with the world right now, as far as natural resources are concerned. The big issues of your lifetime are climate change, biodiversity loss, water scarcity, catastrophic fires, energy production, deforestation, desertification, overfishing, GMOs, invasive species, and more. No matter what you end up doing with your education, I can guarantee *you* will be affected by these problems, and it will be *your* job to decide what to do about them. It won't be my job. Old fogies like me are retiring, and we aren't the ones who will have to live through all this stuff. *You* will be making the decisions that affect your children and grandchildren, and their grandchildren." Some professors admit, "My generation and the one before me are the folks who screwed everything up. Sorry. Now all I can do is help give you the tools to try and fix it." A few even go so far as to insert a joke warning us not to expect to get paid a lot for saving the planet. Ha. Ha.

I can only imagine what graphic design students hear from their professors. Maybe something like, "This is a great time to study graphic design! It's used in everything now, from advertising and album art, to movie production and website design. There is nothing depressing about graphic design, and you'll most likely find a job after you graduate. Hoorah!"

Engineering students probably hear something like, "Well, you made a good choice. The world always needs engineers, and you're all going to be rich if you want. Who wants to be rich? Oh, all of you? Cool, no problem. Now, let's learn how to build a bridge."

Meanwhile, I've been told for four years that I'm majoring in ecological damage control, and a main theme of any path I take will be cleaning up other people's mess. I'm basically going to school to become a garbage woman.

I have memories of changing out garbage bags at the Oak Creek kiosk in the McDonald Forest. It was the heat of the summer, and the bins were filled beyond capacity with thinly wrapped dog turds and the remnants of hiking snacks, left to bake for a week in a black plastic bag. I would pull the white work truck into the cramped parking lot, snap on some gloves, and hold my breath while I tied the bag shut and tugged toward the sky. Every breath I drew welcomed into my nose and mouth the hot stench of baking dog turds.

I'll also mention these were tall trash cans, reaching at least to my waist, and that I am *not* tall, having peaked at 5'5". My legs are strong, but my arms are pretty weak, and a week's worth of dog shit at Oak Creek is pretty heavy. My failed attempts to tug the monstrous bag from the plastic bin were so embarrassing that I would wait until nobody was walking by in the parking lot before tugging again. My biceps and shoulders would quiver and strain, and I would marvel in a sort of fascinated disgust at the weight of dog poop.

Once I'd finally extracted the hot, lumpy bundle from the bin, I then had to lift it into the truck bed. This was the worst part. By this point, the bag had often torn, making it impossible to ignore its contents, and I was doing all I could not to end up smeared or dripped on by dog excrement while I worked to hoist the heap of hound dung into the pickup.

The over-the-shoulder method was out of the question for a number of reasons, so I would jump into the truck bed, reach down, and try to pull the massive bag upward. I felt like the anti-Santa, hauling around a black sack full of poop in the middle of the summer. Eventually I would manage to drag my haul into the truck bed, lock the tailgate, and drive off to my next stop. Most trailheads didn't have trash bins, so all I had to do, when performing what are called "rounds," was check for vandalism and restock the brochure boxes. When my circuit was complete, I returned to the Arboretum office, backed the truck up to the dumpster, and pushed the bags in one by one with squeamish satisfaction.

Although the job of taking out the trash was messy and unpleasant, it was straightforward. The people after whom I was cleaning had done their duty by sticking their garbage in the designated receptacle. The trash was icky, yes, but it was contained. There was a system in place, and a plan, and as long as everyone remained committed to his or her particular task, crisis was averted. This may be the best we can hope for, as ecological damage controllers – to stave off crisis. It turns out, now that four years of college have taught me what it means to be an environmental steward and natural resources manager, this experience of struggling to haul away bags full of other people's waste was good preparation, in principle and in practice, for what's in store for anyone who does not want to see our planet degrade toward inhabatability.

My position at the forest has since evolved so that my job no longer includes doing rounds. This means students who are taller and/or stronger than I am are now in charge of emptying garbage bins, while it is my job to write and talk and create – tasks I am better adapted to perform. Still, the memory of those struggles remains, and I experience a complicated mixture of resentment and pride every time I pass through the Oak Creek parking lot and see that plastic bin.

A sense of ownership is a funny thing if it can make someone nostalgic over a heavy bin of dog feces, but those are the feelings welling up inside me today as I walk past the garbage can, the kiosk, and the port-a-potty (thank God we aren't responsible for cleaning that out!) and step onto Homestead Trail. I had intended to bike here from my apartment near campus, but barely a minute on the road convinced me that the low air pressure in my tires and my broken left pedal would create more hazards than I wished to risk. Therefore, I turned around and hopped in my car, driving about twelve minutes to the Oak Creek area.

To get to the Oak Creek area of the McDonald Forest, head northwest on Harrison Boulevard, which turns into Oak Creek Drive. After you pass the Bald Hill Natural Area, continue for about another mile and a half and turn right to stay on Oak Creek Drive. In another mile, you'll find yourself parking near the Oak Creek gate, leading into the McDonald Forest. From my apartment, this is a five mile trip.

There is something special about “having” a forest so close you can bike there. In a study conducted on the McDonald Forest and published in 2011, 21 percent of visitors surveyed lived within a mile of the forest, while 43 percent lived no more than five miles away (Needham and Rosenberger, vi). Many folks consider the forest as an extension of their own backyards, and for some people it really is; some neighboring residents have made paths leading from their properties onto the forest.

I set out on Homestead Trail, thinking about dogs. I was recently involved in a campaign at work to address problems with dog (and dog owner) behavior on the forest; the Oak Creek area was one of our focus spots. The gist of the problem is this: As the number of visitors to the McDonald Forest has increased in recent years, the number of dog-related incidents and complaints has also risen. About half of the visitors bring at least one dog when they recreate on the forest, and this amounts to quite a few canines on the trails (Needham and Rosenberger, iii). Dogs can scare horses. Some chase mountain bikes, prompting anger and even causing injuries. Sometimes dogs jump on strangers, and even when the dog isn't covered in creek water, mud, or poison oak, the jumping is often unwanted. Dogs fighting other dogs is another concern, and if a dog strays from the trail (which they often do), it might traipse through a research plot and distort somebody's data.

In addition, dogs poop, and their humans, it seems, don't always clean it up. This becomes an unsightly addition to a well-loved trail, and it can make people and other dogs sick, as well as interrupt ecosystem dynamics. Dog feces are not the “natural fertilizer” that some people assume they are. As cute as canines can be, they are not native to our forest environments, so nature lacks a seamless way of managing their waste – especially when it is loaded onto a trail in such high quantities. Parvovirus, giardia, roundworms, tapeworms, and hookworms are just a few of the organisms you, your family, and your pets probably don't want to encounter on a hike, yet dog feces can carry all of these parasites and pathogens, along with many others. Bacteria in the feces may leach into nearby waterways (i.e. Oak Creek), tampering with fragile aquatic ecosystem, and the nutrients in the poop can spur algae blooms, which deplete water oxygen levels and threaten fish.

Now, one or two turds probably is not going to do much harm. Nature can send her own team of microbes to the scene of the crime and break down any harmful fecal offenders. Still, this takes time. If the ecosystem is overloaded with crap, nature's microbial garbage collectors simply can't work fast enough. To gain a better sense of how much poop I'm talking about, please consider for a moment the number 98. That is how many pounds of turds were collected from the Oak Creek area in October of 2016, when a team of 25 brave volunteers and three Research Forests staff members snapped on latex gloves and spent their Saturday doing very dirty work. In total, they collected 231 pounds of poop from four locations on the forest in a single day. News of the Tails on Trails campaign reached the local paper and then spread across the country, and people wrote angry messages to my boss for trying to clean shit up.

The first time I wrote this essay, I tried to be careful. I was writing about dogs, their humans, and the issues they caused on the forest, but I was trying to do so in a way that was as inoffensive as possible. This habit I've developed through my job and various classes is useful in a public relations context, but it will make for a pretty lifeless paper. Still, realizing the difference between how I felt I *should* write (politely) and how I *wanted* to write (angrily) led me to reflect on *why* I was so angry about the dog poop problem on the McDonald Forest.

I'm angry because this is just another example of people failing to clean up their own environmental messes, taking part in the collective mindset that may be at the root of many of today's most terrifying environmental predicaments. If the nature-loving folks of Corvallis can not even manage to bend down with a bag and bundle up a few dog turds, how are all the humans on the planet going to drastically reduce their fossil fuel consumption, stop



231 pounds of dog poop  
Photo by Ryan Brown

wasting water, and use less plastic? The reality is they likely will not, and I – someone who has learned too much about climate change *not* to be scared into action – will feel a moral obligation to do all in my power to clean up after everyone else. But that doesn't mean I'll like it.

If you haven't caught on, the underlying matter here, and what is fueling my anger, is the issue of responsibility. Or, rather, the lack thereof. As I walk along Homestead Trail and observe pile after pile of dog waste, I ponder: if a dog shits in the woods and no one is there to see her, did she still shit? Does it make a difference whether or not she did the deed on a trail, versus somewhere in the woods amongst the false-brome and the ferns? Does it make a difference if her owner saw it happen, but no one was around to watch him leave it on the ground and walk away? Does it make a difference if a few days later, someone else's dog eats that left-behind poop and contracts roundworms? Or parvovirus? Or another disease or parasite that will cause the dog much discomfort and the owner more than a modest vet bill? Does it make a difference if somebody's child is the pathogen's next host instead?

There is no difference, in my mind, whether the mess left behind is conspicuous or camouflaged, expensive or merely annoying. The fact remains that somebody chose to become the guardian of a dog but did not commit herself to the responsibilities of protecting that dog from the public, and the public from that dog.

Adults do not like being told their actions are irresponsible. To those at fault, this message is more demeaning than being told they're doing something wrong. To be wrong implies an opinion and questions of morality that may easily be disputed, ignored, dismissed. Yet to be irresponsible implies a duty unfulfilled, and the ever-so-uncomfortable feelings of uncertainty, guilt, and shame may haunt the subject of such an accusation no matter how persistently that person makes excuses to reduce his or her accountability.

As the Tails on Trails campaign began to gain traction, it became apparent we had cracked open a whole new can of worms (roundworms, perhaps?) by attempting to tackle what turned out to be a subject almost as touchy as election year politics or religion at the holiday dinner table. The campaign launched in early fall, coinciding with a few campus back-to-school events I attended as a representative for the forest.

Most people who came to my table and checked out the display had nothing but praise for one of their favorite sites for outdoor recreation in Corvallis. However, plenty of people wanted to tell me they saw the signs we staked up along the most poop-prone trails (there were nearly twenty different signs for each trail, containing information about off-leash behavior, the health and environmental impacts of dog waste, and other etiquette tips), and not everyone was happy. Some folks were thankful for the awareness campaign. Others, I could see, were guilty. Thankfully, no one said anything rude to me – instead, people had more passive ways of expressing themselves. Some wrote not-so-nice things to my boss. One person told her he was an OSU alumnus who frequented the forest but would not be returning for a while, due to the offensive signage. I probably would have written back: “Woohoo! One less person leaving a mess on the trails!” which is the reason why I will never be able to do my boss’s job.

Someone else took it upon him- or herself to leave a homemade sign next to our signs. It read: “Did you know? Sometime animals shit in the woods!” If I could track that person down, I would ask him or her to come up with the wording for some permanent signs about dog waste, suggesting others of a similar tone. Maybe “Have you heard? Humans are freakin’ lazy!” and “Hey, guess what? This is not your lawn!”

The people who took offense to the messaging must have had a lot of pent up guilt on the topic of cleaning up after one’s dog in order to respond so strongly to a good-natured campaign about keeping trails clean.

We should have set up a confessions booth at our Arboretum office and taken turns relieving the shame of those people who had seen the errors of their ways and were prepared to set out on a new path of dog bag-toting reform. For those souls – astonished to learn that dog poop is not native to the landscape, does not serve as fertilizer, and in fact alters ecosystems – we could have cleansed them of their sins, handed them a leash (a staple for any responsible off-leash user) and a roll of little plastic poop bags and sent them back out into the world to spread the message of dog owner reform. The world would be better off with more of those people – quick to

accept the error of their ways and ready to make amends in the name of helping the planet and being a good neighbor.

I walk along Homestead trail and think about dogs and their poop. I think about messes that people leave behind, and I think about why they leave them. Where have humans acquired this idea that we can create and perpetuate messes that we then leave behind for someone else to deal with? Everybody has heard the expression, “kids these days...,” meant to point out the moral degeneration of today’s youngest generations. However, I’m ready to go around, spreading the word about “adults these days,” who left us clouds of hydrofluorocarbons and DDT in the ‘70s. Adults these days who manufacture SUVs and Hummers, and the many who drive them. Adults these days who continue to use replaceable plastic and Styrofoam products as if they were necessities, because they can’t be bothered to wash dishes after a party or switch to a different take-out box. Adults these days who say climate change is a myth, who waste water on chlorinated swimming pools, who leave their cars running when it’s more convenient to do so. Adults these days who buy into the mass production of cows and chickens, who buy boats and ATVs and spew recreational fumes into a warming atmosphere.

My head is spinning as I trudge along the trail, staring blankly ahead and seeing my own whirring thoughts instead of the ground below me. My foot slides a bit to the right with my next step, and I falter. Lifting my boot to hover over the soil, I can tell I’ve walked in something gooey. Looking down, my fears are confirmed. “Crap!” I mutter, and look for a place to wipe my shoe. I wish the people who don’t pick up after their dogs would step in poop a little more often. Maybe this would jump-start the empathy process that would in turn lead to better stewardship. Maybe. But if I’m holding my breath, it’s only to avoid the smell of dog excrement on my hiking boot – it isn’t while I wait for stubborn people to do the right thing.

## Works Cited

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## Feeling Lost and Out of Time

On May 9<sup>th</sup>, 2013, the Mauna Loa Observatory recorded carbon dioxide levels surpassing 400 parts per million for the first time. This was considered a symbolic benchmark for our planet, which had remained comfortably below 300 ppm in the preindustrial era (noaa.gov). It took the invention of the automobile and the growth of industrialization in the 20<sup>th</sup> century to change that trend, and in a little over a century, levels rose by one third (climatechange.gov).

Also in May of 2013, I hiked Dimple Hill for the first time. I was a freshman, still living in the dorms on campus, and I had spent most of the year with limited transportation. It was only after I took the job at the Research Forests, right before spring break, that I drove my clunker car up from home in southern Oregon. As spring term began, my ability to explore the Willamette Valley was no longer dependent on my bike or somebody with a vehicle. I had the power to go where I wanted, when I wanted.

I made adventurous friends that year, and this had served me well. With them I saw waterfalls in the woods, a snowstorm on Marys Peak, sunsets from Bald Hill, stars from Finley Wildlife Refuge, and sun shining on the coast. It was only fitting that we also set out to see the view from Dimple Hill, on the McDonald Forest. I don't remember whose idea it was to take the hike, but I suspect it was my boyfriend at the time, Ryan. He was the one who navigated while I drove to the Chip Ross parking lot, and he was the one who dismissed all of our concerns about how exactly to reach the top of the hill.

There were six or seven of us on the excursion that day and, true to our college student ways, we took a ridiculously long time to leave for our hike. By the time we pulled into the Chip Ross parking lot, it must have been three o'clock. A warning bell should have sounded in my head when the discussion broke out about which trail we were supposed to take from the parking lot, but the trip was already out of my hands. There was no point in worrying.

Today, more than two years later, I pull my new (to me) car into the potholed parking lot and sit, enjoying the AC for five more seconds before I push the button that turns off the Prius. It's 91 degrees, on July 19<sup>th</sup>, and all I could think as I drove here today was how brown the valley looked and how dumb I was for choosing today to hike Dimple Hill. It was two o'clock in the afternoon, and I was exhausted. My boyfriend, Scott, kept me up most of the night vomiting from food poisoning he contracted after eating something that did not fare well in our camping cooler from last week's trip to the coast. We had been trying to beat the heat by leaving the valley and pitching a tent near the ocean.

Today, I don't question which trail to take when I hoist my backpack over my shoulders and lock my car. I know now that both paths lead to the main trail, and I choose the one to the left. I pass a young couple heading down the trail. They are finished with their hike, and I have barely started mine. Their faces are red and sweaty, and I should really turn back now. I press on.

I'm frustrated, because I was supposed to have a restful night's sleep, wake up early, and hike before the valley began to cook. Instead, I cleaned vomit from my kitchen sink, gave Scott glasses of water, and hardly slept. I wanted to hike today. Tomorrow I have to work, and the more I think about sitting at my desk, the more I *need* to hike.

As dumb as I feel, I am driven by a sense of purpose. Where I grew up, 91 degrees is a normal summer day, and either you brave the heat and have your adventures, or you stay inside. When it's above 85 degrees in Corvallis, the town goes into shock, and everybody melts. I'm determined not to be that way. Global temperatures are rising, so I might as well get used to days like this one.

I walk along, kicking up dust from the compacted, cracking soil. The oak savanna landscape seems the most convincing in the summer. I can imagine much of the valley covered in knotted oaks and brown grass, and out here, if I blur my vision to eliminate the sights of distant houses, power lines, roads, and invasive Scotch broom, I don't even have to imagine.

Maybe most people don't think this way, but my education in natural resources has led me to wonder, when I look out on such a landscape, *What have we done to this world?* It's not the houses, or the strip malls, or the roads, or the power lines, or the radio towers, or the gas stations, or the noisy trucks, or the electric fences, or the invasive blackberries, or the tractors that evoke this thought. It is all of those things, put together, like a layer of toxic paint spread over the landscape with a rolling brush, smothering whatever existed there before.



A hot hike to Dimple Hill

It's also not the absence of a variety of birds and mammals, and it's not the absence of native prairie grasses, or wild camas, or native shrubs, or people who know how to manage the land with arrows, hands, and fire. It's not the unprecedented stifling summers of the past few years, or the fact that our tap water tastes musty from algae blooms in the increasingly shallow Willamette River. It is all of those things, put together to weave a heavy blanket of absence, laid across the land. It's a blanket that many people today do not even realize is there.

Last summer, this place was threatened by fire. In September of 2014, I was walking out of a gas station in Arizona, wondering if the soles of my shoes would melt into the sweltering asphalt, when my phone picked up a weak signal and

delivered a handful of messages that had been impatiently waiting for my family to drive out of one of the middle-of-nowhere dead zones so common in the desert. I examined the messages.

*Is your forest on fire?* My boyfriend had texted me this. There was a similar message from one of my friends. Understandably anxious, I held my breath while my phone sluggishly conjured up a Gazette Times article from earlier that day. From what I could decipher out of the early reports, the Chip Ross and Timberhill areas were most affected by the fire, sparked by two teenagers. I texted people back to assure them “my forest” wasn’t on fire, but it had come pretty darn close to burning – within a quarter mile, I was later told.

This land is waiting to burn. She’s begging for it, and we deny her of her needs – all the while piling on more fuel and cranking up the heat. It seems we have trapped our valley in a perverse pattern of temptation and denial, irritating her skin with invasive plants, thick tangles of understory vegetation and ladder fuels, weed-like Douglas-firs creeping over her meadows, and then when she tries to scratch at the itches, breathing life into a lightning strike or even a smoldering cigarette (that *we* dropped!), we stampede in with our water and our fire retardant, and we swat her scratching fingernails away. She must be going mad over the pain.

I reach the kiosk marking an entrance to the McDonald Forest. Chip Ross Park, where I left my car, is owned by the city and is really the best place to park a car if you are planning to hike Dimple Hill. Then, you have to walk along a trail in the park for a while before you enter the university-owned McDonald. While this kiosk is meant to orient hikers and clarify their upcoming route, it is another place where I have found myself lost.

A few months ago, I convinced Scott to hike with me to Dimple Hill. We made it this far and then stood at the trailhead to Dan’s Trail, staring at two paths. In our minds, neither one was clearly marked. It seemed as though the path to the left might eventually loop into the path to the right, but we couldn’t be sure. It was briefly suggested we split up, each trying one of the trails, but that idea was quickly abandoned. We were already a little lost; we didn’t need to become lost *and* alone.

It was hot on that day as well. A hot spring, foreshadowing this blistering summer. We eventually chose one path and, after ten minutes, became unsure of our choice and turned around. We took the other path and wound up on the 600 Road leading down to Jackson Creek. Here, I spent some time looking at the map, and Scott fussed over a dog who was running around without his owner. This set us back for at least twenty minutes, as we worried about the dog's wellbeing and I called the number on his tag, leaving a voice message. As always seems to happen when I set out to hike Dimple Hill, we were running out of time and water. We had some snacks (the most memorable of which was a bag of "natural" Cheetos), but we didn't have real food.

We were hot and thirsty, wandering around at the base of a hill without enough water or food and unable to find a definite route to the top. My map wasn't matching up to the signs we were passing, and now we had acquired a new responsibility – this dog – that was distracting us further from our original mission. My map was crinkling, and my eyes were glazing over. Would a few more signs along the way have killed anyone? Gosh!

The only people around to ask for directions were a cluster of dog walkers heading up the 600 Road, calling for the dog we'd found. We handed off the pooch to what turned out to be his babysitters. He was notorious, they said, for running around the forest by himself, like he owned the place. They weren't sure how to reach the top of Dimple Hill either. We pressed on, unsure if we were choosing the right direction.

This feeling of uncertainty is familiar. I feel it on science tests that turn out to be far more specific than I'd expected. I feel it when I look at my long list of things to do in a week and cannot decide which task to tackle first. I feel it when somebody asks me what I plan "to do with my life," and when it's time to find myself a new apartment. Maybe life becomes more certain as we age, and maybe it doesn't. Any patterns that may exist in that regard, however, are being thrown to the wind as atmospheric carbon dioxide levels rise. Grandparents who aren't ignoring the problem of climate change are grappling with the implications this global phenomenon has for their grandchildren. Parents who take a minute to pause from

packing lunches and driving to soccer games are glancing at their progeny and hoping their children will “stop” this impending catastrophe.

What does “stop” mean? As a member of the generation who is supposed to be resolving this calamitous situation, I can safely say that I, along with many of my peers, have no clue where to begin. Maybe legislation is the area to focus on, but not much seems to be moving in that arena. Political disagreements and selfishly partisan tactics appear to override the importance of ensuring drinkable water, arable soil, and breathable air do not become a thing of the past. So, what paths of action are my generation left with? Protests? Demonstrations? Letters to our senators? Somehow I believe our parents and grandparents have grander notions when they say it’s now up to us to sort this thing out.

My generation has news for those folks: We are lost kids, wandering around on a planet we were promised, when we were born, was ours. It’s hurting, and we can see the sores. It’s burning and melting and cracking and cringing, and we’ve been told that one day, maybe within our lifetimes, it will be substantially and irrevocably altered. How are we, the generation who is meant to “fix this mess,” supposed to make any real changes when actions need to be taken now (or better yet, yesterday), but the unyielding people still in power in Congress, the Whitehouse, Shell, Exxon, BP (the list goes on for pages) are *not* members of my generation? Do not tell us this matter is urgent, requiring immediate action, and then deliberately obscure and block our paths toward brightening our own futures.

Here I must refrain from going on for pages and pages about crimes against humanity. To continue down that path would be to wander along a trail I had no intention of taking today. I have to make it to the top of Dimple Hill.

Scott and I gave up on our pursuit the first time we set out to reach the elusive viewpoint. Not long after the dog distraction, we opted for going home and trying another day, after I had conducted additional research on how to reach the top. You will remember that I’d hiked Dimple Hill before, with my adventurous freshman year crew. However, we retraced our steps so many times on that hike, I had no idea, as I wandered around with Scott, how we’d reached the top.

Still, we reached it. I recall sitting in the grass with two of my friends, seeing the sun begin to set. I was observing the valley from a new angle, not yet worried about lost oak savannas and fire oppression. We had no idea this was the month in which carbon dioxide levels would exceed 400 parts per million, although as students in natural resources, environmental engineering, biology, and sustainability, we may have been some of the most disheartened, had we heard the news.

As for today, I am trudging along, past the point where Scott and I turned around the first time we tried to hike the hill together. By this point, I am pretty sure I won't be making it to the top on this hike. I'm dizzy from lack of sleep, and my water is running out. I hit an incline on the trail and begin to fantasize about cold fruit juice and ice cream. I've been on hikes in Arizona where I stuck ice from the cooler down my shirt and felt it melt and fully evaporate in less than five minutes. At home in the Rogue Valley, I've played soccer when it was 112 degrees. This is worse. I'm under the cover of conifers and broadleaves, on the edge of the Willamette Valley and the Coast Range. I wasn't prepared to be this warm.

Of course, days like this are not unheard of here. It's July, after all, and if the valley is going to heat up, this is the time to do it. I think what's making me uneasy is the relentlessness of this heat – and I am talking about the long run. It is easier in the winter to swallow scientists' predictions about the earth warming considerably in the next century, but right now, when the official recorded high for today is 98 degrees Fahrenheit, the prospect of a hotter planet seems horrifying possible.

The issue here, of course, is not proving climate warming is occurring, but rather grappling with this reality. I want to do something to slow the rate of warming, but I feel heavy, weighted down with knowledge I wish was false. No clear path has been marked before me, saying *walk this way to stop climate change*. No precedent exists, and this leaves me feeling lost.

I reach the part of Dan's Trail that turns into switchbacks for more than a mile and a half and finally deposits the hiker at the top of Dimple Hill, after climbing 800 feet. This is the roughest part of the hike, and I would have to be deranged to proceed today. A convenient stump serves as my resting place for ten minutes while I steady my spinning head and think about fruit juice. The second time Scott and I set out to

hike Dimple Hill, we made it to the top. Still, this stretch of trail ahead of me nearly did us in as a couple. It was yet another hot day, a few weeks after our first attempt, and the switchbacks were more than Scott realized he had signed up for. I eventually grew sick of his complaints and told him, more than a few times, he was welcome to turn around. He didn't.

Finally, we'd made it to the top. Our mouths stuffed with celebratory sandwiches, we sat in the grass and observed the valley below. We took some goofy pictures to prove we'd been there and then remarked on the blueness of the sky and the smallness of the cars below. From up where we were, it seemed as though we could reach down and peel away the asphalt. We could pluck cars, two by two, from the roads and scrape away the invasive Scotch broom and false-brome smothering our valley's diverse vegetation. "I'm getting cold," I told Scott. The sun was no longer beating on our backs, and our bodies were cooling after the climb. With one last glance at the view, we pulled ourselves up from the grass and started home.

It's time for me to go home now, too. I will myself to stand up from the convenient stump seat and slide into my sweaty backpack straps. My water bottle is almost empty. I'm disappointed in my failure to make it to the top today, and I can't even blame a lack of trail signs or a crinkled map. Walking back toward the parking lot, I realize the factors to blame in this case are my late start, my lack of preparation, Scott's unforeseen illness, and the damn heat.

Are these not similar to reasons that could interfere with our ability to combat climate change, even as we may begin to see clearer paths of action? We humans are *all* late in addressing this problem, and in many ways we are unprepared to put all of our might into this cause. In addition, unexpected individual circumstances, such as personal or family illness, may take priority in our day-to-day lives over our efforts to contribute as global citizens. And finally, the world is growing warmer and fiercer. Floods, hurricanes, and droughts will be only some of the distractions pulling us away from the social and scientific work that must be done to stop, not clean up after, climate change.

Sweating, I reach the parking lot and stumble into my car. Pressing a button to turn on the silent engine, I breathe a sigh of relief as cool air blows on my armpits. I

direct the flow to my face, put the Prius in gear, and ease onto the paved road. I feel safe, in my air conditioned shell of plastic and metal. The fields I pass look the same – as flammable as before. A meager cloud hovers in the distance, and I pray it will bring rain. *Cool us down*, I beg.

The cloud is defiant. *I've been trying*, she seems to say, *but that's your job now. I'm hoping for lightning. I'm ready to roar. I hope you are preparing to burn.*

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### **It's Not About Taking Sides, It's About Asking Questions**

When you set out to hike the connected New Growth and Old Growth trails from Lewisburg Saddle, you have the choice of hiking one before the other. I prefer to hike New Growth before Old Growth, and not only because its trailhead is closest to the parking area. If I wished to hike through old, uneven-aged trees first, I could walk along the 580 Road to the Old Growth trailhead and wind my way through massive Douglas-firs until the trail meets up with New Growth, where fading signs along the trail indicate the spacing of each carefully measured and planted stand. I choose instead to walk through here first, because I prefer to end my hike in a grove of giants rather than a planted stand. Both trails are lovely, though, for different reasons.

It's sunny on New Growth Trail, with plenty of gaps in the canopy of middle-aged trees to serve as skylights on my hike. The canopy is open enough to give promise to Douglas-fir saplings and chokecherries with their peeling bark and gobs of resin luring me in to poke the amber colored bumps and determine their consistency. The one I poke today is hard, serving as a band-aid or scab to plug up some abrasion on the tree's flesh that I cannot see. And then I check both ways on the trail for onlookers before sliding my tongue through my lips and tasting the resin. Nothing. I quickly pull away from the tree, admonishing myself: *What were you expecting, Lucia? Maple syrup?*

Sort of, yeah.

The stands of Douglas-firs I'm passing have been planted in rows, much like corn or sugarcane. To the untrained eye this may appear to be a "natural" forest (because they are out in "nature"), but it is in fact a plantation created for research. Each stand I pass was planted with a different spacing. In the most tightly packed stand, trees are planted only eight feet apart, while others are spaced at ten, twelve, or fifteen feet ([therighttrail.org](http://therighttrail.org)). These trees are part of a study to explore how different spacing influences tree growth by monitoring their survival and development. This could mean measuring the stand's total biomass, as well as the diameter and height to live crown of trees within each stand. Timber that would be harvested off of stands such as these would likely be sold for high quality products, such as exposed beams in buildings. In the meantime, though, they continue to line this lovely trail, offering shade and a pleasant atmosphere for runners and hikers. They also provide habitat for squirrels, deer, rodents, birds, insects, mosses, lichens, and fungi. These trees are dynamic. They are beautiful in many ways and useful in many others. Sometimes the ways overlap.



Resin on a chokecherry tree

The trail is about half a mile in length and near the end becomes gradually steep before connecting to the second leg of the journey: Old Growth Trail. At this transition the forest switches to mood lighting, and the trees transform from an army of straight-backed soldiers to a band of miscreants and giants. Here, Douglas-firs bend and swell, thrusting forth their burl bellies, and their children and younger siblings grow, gangly, in the understory, gritting their teeth at one another as they compete for light and space. Some will kill the others.

The color green gains new meaning as countless shades of it shimmer in, or hide from, the patchy sunlight. Shrubby vine maples rest happily in the shade, their palms open. They extend a few leafy hands to test a sunray and quiver, surprised at the heat. Many of the big trees along this trail have lived here for more than two hundred years. Some have lost their footing to disease and rot, toppling over in the wind. Their root wads add another layer of complexity to the forest structure, sitting huge (much taller than I am) and spiderlike along the trail with red, oxidized soil imbedded between each root.

When I reach this part of the hike with friends or family, conversation often turns to wood elves and hobbits in Tolkien's *The Lord of the Rings*. Today, my mind drifts from the science of growing evenly spaced trees, to the scene for my next novel. I require both ways of thinking to satisfy my logical, imaginative, curious and chaotic brain, and trees – whether they are young, old, even-aged, or mixed – invite me to do just that.

Some of my favorite places on this planet are home to old, or even ancient, trees. There is Cape Perpetua on the Oregon coast, where hikers can wander along trails surrounded by giant sequoias in a landscape straight out of the 1992 animated film *FernGully: The Last Rainforest*. Only a daytrip away from my home in Talent, Oregon are the Redwood National and State Parks and their humbling groves of living skyscrapers. Four years ago, I left a piece of my heart atop Nevada's Wheeler Peak in Great Basin National Park, where I sat, hunched over, against the smooth, weathered trunk of a bristlecone pine and was convinced the trees in that grove – some of them older than 4,000 years – stored enough wisdom to answer all the questions of the universe.

If humans were to destroy these irreplaceable places, I would be enraged, and I would mourn. I would declare injustice, curse humanity for its callousness, and sign petitions to incarcerate the perpetrators. I would hike to other sacred places and hug trees, both to sooth my troubled soul and to show support for what was left of the world's natural beauties. The songs I write would transform into weepy ballads and despondent blues, and I would bite the head off of any person who tried to tell me the loss of my sacred place was anything less than tragic.

These are my views on destroying old trees. My views on logging are much more complicated.

My hairdresser in Ashland (Talent's neighbor) is a conversationalist and an ex-yoga instructor with opinions that may be described as quintessentially Ashland. When I get my hair cut during a visit home, she likes to ask me about school. "You're studying what, again? Forestry?"

I always explain to her that I'm studying Natural Resources, within the College of Forestry. She goes to grab something off of the wooden table by the mirror and then returns to my wet hair. "I went to the coast the other weekend, and there is this area along I-5, not long before the coastal exit, where they've logged the entire hill. It used to be a really nice drive through there, but now I can't stand to see it. It's terrible what they've done."

We've had this conversation more than once as I sit, captive, wrapped in an unflattering body bib, the Velcro digging into my neck. She swivels me in the chair just a tad, sliding her feet on the beautiful hardwood floor and checking the length of my bangs. I tell her I don't know the area she's talking about, but I've seen some clearcuts along Interstate-5 as well and no, they aren't very nice to look at. Then my hairdresser wants to know if "that" is what my college teaches, and I say "well, we do a lot more than clearcutting."

She considers this (or ignores it – I can't tell) and then asks, "Are things changing? What are people at your school doing about it?"

She could mean many things by "that" and "it," so I'm not sure if she is referring to the unsightliness of the clearcut, the loss of trees to the landscape, environmental consequences such as soil erosion and compaction, silt runoff into

streams and loss of diversity and habitat, or the high levels of fossil fuels required to power the operations and transport the timber.

I suspect that, like many logging nay-sayers who have failed to do their research, she hasn't thought a whole lot about what she means – she simply knows the harvest's aftermath is ugly, and the trees are, sadly, gone. I spend a few minutes explaining to her that not all harvest operations involve clearcuts, and that more and more, forest scientists (yes, *scientists* work on this stuff) are learning how to harvest timber in ways that are more mindful of needs for habitat maintenance, aquatic ecosystem health, and biodiversity. Even as I say this, however, I have my doubts. Just because the science is being done to understand how to log in a less impactful manner does not mean these practices are being implemented anytime soon. At least not in very many places.

Aloud, I go on to acknowledge that yes, clearcutting is still alive and well as a forest management practice. Yet I point out to her that it might not be so terrible to designate particular plots of land for this practice, just as we set aside cropland to grow food, so that other areas – the ones we love to visit – can be spared from harvesting.

If I knew she was really listening to and caring about what I'm saying, I would go on to point out the importance of wood as a material that can be grown rather than mined, that biodegrades rather than persists, and that bends and sways during seismic events rather than crumbling. Wood is everywhere, from the utility poles holding up your power lines and much of the furniture in your house, to the paper you scribble on and the bark mulch you spread around your yard. Your fence, your deck, your picture frames and toothpicks – at one point it all lived in soil, and at a later point it died to be the product you wanted or needed.

Before I became a Natural Resources student, I too was upset at the sight of clearcuts along the road. Now, I see them and have questions. I want to know who is working the land (Private? Federal?), the age of the harvested stand, the proximity of the stand to water bodies and sensitive habitats, whether or not residences or recreation sites were affected. I want to know how far the hauling trucks had to drive – how much oil they burned – in order to transport their loads. Were new logging

roads built, or were existing ones used? Why did the landowners choose clearcut as the prescription, and did they consider alternative models when planning the harvest?

In other words, how expansive is the impact of this clearcut, and can the choice to cut most of the trees, rather than thinning, be well justified? The answers to these questions help me decide how I feel about the eyesore on the ridge. I may ultimately decide it isn't all that bad.

I've also found that I'm glad, as I've stared through the car window at a bald hill, surrounded by other hills of even-aged Douglas-firs likely on the chopping block for, well, chopping, that I'm looking at a tree plantation and not a complex forest. These trees were planted to be cut, and this land will be cut time and time again. My sequoias and my redwoods and my bristlecone pines will, under current law, never succumb to the blades of the harvester.

My hairdresser fusses over a tangle somewhere in the depths of my mane, and the text message tone chimes, bell-like, from my phone, buried in my purse. "Would you like me to hand you your phone?" asks my hairdresser, glancing at the tall wooden chair in the corner, where I set my purse when I walked in. I tell her no thanks, it's just my boyfriend responding to a message I sent him earlier. It can wait. Her eyebrows elevate. "And how is *that* going?" she asks. Our logging talk is over. I've been saved by the bell.

It isn't as though I dislike discussing environmental issues. I enjoy doing so, and I also consider it an act of responsibility. My education has taught me to question messages coming from all sides of an environmental debate, and it has given me the tools to do so, including an understanding of environmental history and law, ecological principles, knowledge about various land practices and energy sources, and exposure to basic economic and statistical concepts. I also enjoy talking and writing. For all these reasons, I feel morally obligated to help others broaden their understanding of the natural world and the contention surrounding how we humans explore, exploit, and protect it.

In turn, I expect people to listen, learn, and continue to develop their perceptions of environmental issues so that they can eventually have constructive conversations with others about matters of logging, dams, herbicide and pesticide

application, genetically modified organisms, water use, endangered species protection, fossil fuel consumption... the list goes on.

I do not pretend to be an expert on any of these subjects, and I do not pretend to have hard-set opinions on them. If I said I did, I hope you would know better than to trust me, because when ecology is concerned (as it so often is), a topic such as logging is best analyzed on a case-by-case basis rather than with a blanket statement proclaiming “logging is bad,” or “logging is great.” Come on. It doesn’t take a scientist to tell you the world doesn’t work that way.

This summer at work I was invited to join the forest manager, business manager, and her intern on a visit to the site of an oak savanna restoration project taking place on the McDonald Forest. The goal of the project was to remove the Douglas-firs that had encroached on what was, before Euro-American settlement, oak savanna dominated by Oregon white oaks and native prairie grasses. This habitat supports threatened and endangered species, such as Fender’s blue butterfly and Kincaid’s lupine. The Kalapuya people used fire to keep the Douglas-firs at bay, and now the OSU Research Forests are using a team of contracted loggers.

As we approached the harvest area, I saw in the distance a tree, now severed from its stump, being plucked haphazardly from the earth by a massive claw on the end of a long metal arm and fed through two rotating parts. The tree was pulled through the spinning pieces in a matter of seconds. Just like that, branches were gone, and much of the bark was also cleaned off. A chainsaw blade at the end of the mechanical arm made a swift gesture of decapitation, and the tree was cut to its desired length and placed in the appropriate pile of its dead, naked brothers and sisters on the ground. The tree was now a log. The tree was now money.

Or I should say, it was now money in the pockets of the College of Forestry, once the lumber companies to whom the Research Forests were selling the logs assessed the loads and paid us their worth. The trees, however, had always been some kind of money for someone. Those seedlings, planted decades ago, cost money to grow, purchase, and plant. Then they sat, rooted in the soil, and made us (the residents of Corvallis) better off by cleaning our air, cooling our tiny piece of earth, and making us smile and wonder at their green beauty. Maybe they made money for

the Research Forests' Recreation and Engagement Program because a runner came by here early one morning and had a spiritual awakening as he passed by these stands of Douglas-firs. Maybe he had so much appreciation for this recreation resource that he funded the placement of a new sign, or some gravel for a trail. Now when these trees are removed, they may leave behind them a view of the valley that will be treasured by recreationists to come. The newly-created edge habitat will benefit deer and encourage the growth of hardwoods, such as oaks, that attract woodpeckers and songbirds.

But passers-by only see trees disappearing from the landscape, and they often jump to conclusions. I ask that instead of raging on about the unsightliness of the harvest, the inconvenience of trail closures, or the “wrongness” of logging, these folks instead start asking questions. What are the tradeoffs of managing this land the way it is being managed? Consider ecology, fossil fuels, economy, and methods. Consider all of this, but yes, hold onto the instinct that uprooting hundreds of trees in a day with gas-guzzling machines is a process to question. Uphold the caution we New World Americans are only beginning to foster after our ancestors of the 1800s and 1900s tore across the land with saws and dams and poisons and dynamite. We would be blind, today, if we did not question everything that disturbed soil and seed, water and air. In many cases, we still are blind.

This is why I also ask forest managers and decision makers in the timber industry to reflect on the impacts of their work – and not just the economic returns. In school we learn about Gifford Pinchot, the first chief of the Forest Service and the person (in his time, at least) to popularize the notion of leaving enough of a natural resource behind for future generations to use. We students are presented this history in a way meant to make us think Pinchot's ideas have been implemented, his will met. Yet today poisons are still a go-to in many harvest operations to treat invasive plants. Glyphosate (Roundup) beats back crops of false-brome after a harvest, but it's also carcinogenic. Sometimes it's sprayed aerially. Sometimes it's applied by a worker with a backpack sprayer, right onto the soil. Sometimes there are streams nearby. If we contaminate our air and our streams, how sustainable are our practices? We still dam many of our rivers, and how sustainable is it to rid our waters of

salmon? In place of the saws that took down forests in Pinchot's time, we now have blades with engines driving them. How sustainable is a harvest that takes everything for miles?

It seems a balance is yet to be found between using a natural resource and losing it as a result of our own nearsightedness and greed, but some concepts in our current system show promise toward this equilibrium. The plantations like that along New Growth Trail provide humans with a natural resource: wood. The forests like the one surrounding Old Growth Trail fuel our sense of adventure, beauty, and connection to this planet. We need both forest types, as well as those more structured and more wild than the ones I explored at Lewisburg Saddle. We need Nevada's bristlecone pines and California's redwoods. We may even need some of the clearcuts seen from Interstate-5, but on that issue, I have not yet made up my mind. I will let you know when I've asked a few more questions.

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### **Seeing Absence**

The sound of a mower breaks through the morning bird conversations and startles me as I squint into the murkiness of Randal Pond, looking for life. Something plops into the water, and I catch a glimpse of slimy legs. I know the bullfrogs are invasive and disrupt ecosystem dynamics around the pond, but they sure are fascinating to watch. I wonder what it sounds like here at night, between the croaking of fly-eating amphibians and the courting croons of crickets. It's hard to imagine right now, with an engine buzzing in the background. Leaning against the wooden railing, I

try to hear the birds through the mechanical din, but I think they've stopped singing, scared silent by the engine. After hearing them just moments ago, the absence of their songs is evident. But if I had showed up just as the mower began to buzz, and I never heard the bird calls, would I notice they'd gone quiet?

Peavy Arboretum is a place of tradition and transition, where some things remain for centuries, and others invade, almost overnight, leading to an exodus of whatever they've threatened. I've been told this is a place for discovery – the gateway to the McDonald Forest – yet I'm not sure exactly for whom. If you know how to look at the landscape, you can see windows of absence, painted over by layers of something new. Other empty spaces hanging among the trees and trails tell stories of people who have never been here but maybe should be. In fact, a person looking through the right lens may come to Peavy Arboretum and see nothing but empty spaces – nothing but the people who are absent. This is how I see the Arboretum today.

The lawnmower roars on. The grounds-keeping volunteers mow to keep invasive plants at bay, fuel loads low for fire season, and the area looking nice. However, they know not to mow a certain field in Peavy Arboretum. The modest expanse of what looks to be all grass spreads outward from the Firefighter Memorial Shelter and is bordered by an uninviting ditch on the side of the field that parallels the gravel road. This ditch keeps most people from taking a shortcut through the grass and trampling what, for most of the year, they cannot see.

For ten or eleven months it's just a grassy field that some people probably wish we would mow so they could sit there and eat a picnic or play fetch with their dogs. By the end of April, however, the field becomes the purple gem of Peavy Arboretum. For a few weeks, the place is filled with a new kind of color – different from the oranges and reds and yellows in the fall, different from the pinks and whites in the spring. The purple of flowering camas seems more like a gift than a given, and its appearance each year is anticipated with hope, not with expectation.

You see, camas is special. This member of the lily family has an edible root that is a culturally significant food source for tribes native to the Willamette Valley and other regions of the West. The root is harvested and often cooked (a long process if performed traditionally, using a pit) and dried into cakes (also time-consuming). When heated, the sugars in the bulb caramelize, sweetening and serving as a great source of starchy energy. The presence of the camas field at Peavy Arboretum suggests the area



Blooming camas

may once have been used as a summer camp for the Kalapuya people. The entire Arboretum is a cultural heritage site, and arrowheads, grinding stones, and other tangible evidence of pre-Euro-American civilization has been documented here.

But this is stolen land. White settlers took territory from the Kalapuya in order to plant crops, harvest trees, and set up homesteads, because they believed they had more of a right (a God-given one, no less) to live here. Now the tools these displaced people left behind are labeled as “artifacts” and tucked away in boxes and drawers. Visitors do not see them, and neither do many of the people whose ancestors made them. It’s frighteningly easy to forget about what we cannot see.

The Kalapuya people get a mention in a few of the OSU Research Forests brochures, and staff members often try to say a couple sentences about them when addressing groups of visitors for special events. For the most part, however, their influence on the land goes unappreciated by visitors. After all, it isn’t as though anything on the forest was named to commemorate its pre-settlement history. Mary *McDonald*, George *Peavy*, and Paul *Dunn* (the Dunn Forest is connected to the McDonald) all made significant contributions to the forests by gifting or acquiring

land that is now owned and managed by the College of Forestry. McCulloch Peak, the highest point on the Research Forests, is named after Dean Walter McCulloch, and Patterson Road is named after professor Harry Patterson. Davies Nettleton Road commemorates Bill Davies, a previous McDonald Forest Manager, and forestry instructor Harry Nettleton. Cronemiller Lake, Randall Pond, and Calloway Creek are a few other important features with white (mostly male) namesakes.

These names and many others appear in a document written by OSU alumnus Royal Jackson during his time spent in the College of Forestry. In the document he quotes a 1939 senior thesis paper by student Wallace Anderson that describes the movement of tribal members off their native lands, to reservations: “The tribes wandering in this vicinity were removed to the Grand Ronde and Siletz Reservations in 1857-1858, following the Indian Wars of 1855-1856” According to the quote, the tribal people were moved over the California pack trail, a part of which ran along Peavy Arboretum, to reservations. Anderson writes, “This was a colorful and memorable occasion as braves, squaws [sic], and families paraded down the trail built by settlers” (Jackson, 224).

Somehow, I doubt this “colorful” procession brought to the displaced people any of the celebration, excitement, or other happy descriptors usually associated with a “parade.” They were rounded up and forced to walk, in some cases hundreds of miles, only to be left on an unfamiliar reservation. Over time, the tribes lost aspects of their individuality, including pieces of their languages, as they became what is recognized by the federal government as the Confederated Tribes of the Grand Ronde. Not only that, they have a long history of losing and regaining that very reservation they were once forced to live on, all at the hands of the U.S. government.

Perhaps one reason why so little information readily exists at Peavy Arboretum about the Kalapuya people is the shamefulness of the whole screwy mess. Would scattered signs about camas gathering, cedar bark use (for clothes, baskets, boxes, etc.), oak savanna burning, and hunting and cooking techniques be depressingly futile attempts at paying tribute to a people who lost so many things we cannot, or will not, give back to them? Perhaps there is a graceful way to

acknowledge the history of the land and its people, but I am still waiting to see it put into action.

Today I walk away from the buzzing mower and meander toward the camas field, now in full bloom. Considering the white-man-take-all history of Euro-American settlement in the western United States, it's a wonder this field survived. If anything, there should be a sign here, at the edge of the field, congratulating the delicate flower for its firm determination to remain rooted in native soil. Under the Firefighter Memorial Shelter is a plaque commemorating the nine Oregon hotshot firefighters who died in the South Canyon fire in 1994. Nine ponderosa pine trees planted around the shelter were placed there in memory of the young lives cut short.

More than once, I have stood before the plaque and blinked away tears, imagining the horror that must have befallen the victims' families when they received the news. Not once have I stood here and cried over the deaths of Native American children,



Camas field in front of the Firefighter Memorial Shelter

mothers, siblings, and fathers who were overcome by European diseases or slain all across this country – some maybe even at the hands of my ancestors. Reminders of these tragedies are often subtler than the reminders of the deaths of white people who battled in the Civil War, the World Wars, Vietnam. Perhaps this is because the deaths of Native Americans are often marked not by memorials, plaques, museums and reenactments, but rather by disappearance. When the land fills in that disappearance with new plants, people, and traditions, the empty spaces are only empty to those who take the time to see them. The effort needed to see abandoned burial grounds, covered now with buildings and parking lots, is greater than the effort needed to see those

buildings and lots themselves. The camas field is effortlessly visible, yet how many visitors see it bloom for a few weeks of the year and think of the people who lost their land to foreigners?

In a few weeks, these star-like flowers will lose their petals, and their stalks will stand bare once more. Right as the hundreds of camas blooms fade for the year, Peavy Arboretum welcomes in another wave of annual visitors whose brief stint of time spent on the forest makes the blooming of the camas seem like an eternity. They come in on busses for a couple of hours, filling the Arboretum with sounds of children yelling, parents calling after them, and hundreds of people asking about the free fishing. They make s'mores over a grill, look for birds through binoculars, scoop up newts and water bugs from Randal Pond with a net, snap a picture at the photo booth, and then catch the next bus out of the woods. For many of them, this is the only time they visit the McDonald Forest. Some will not return next year, but other new visitors will take their places. I hope a number of folks will decide, after attending our National Get Outdoors Day event, to start hiking with their families or come watch the leaves change at the Arboretum in the fall, but it is reasonable to predict the number of people who make this extra effort will be small. After all, these are not our typical visitors.

Our typical visitors earned an average household income of \$64,000 when last surveyed in 2009, and they are in their 40s or 50s. Most of them have completed a four-year degree, and an impressive 43 percent have gone beyond that, to earn an MS, MA, PhD, MD, or other advanced degree (Needham and Rosenberger, vi). In contrast, many of the people who come to GO Day earn a lower annual income and may not have four-year degrees. For plenty of them, English is not their first language. I know this because these are the people we intentionally recruit for the event, printing flyers in Spanish as well as English and reaching out to grade schools in Linn and Benton Counties, where many students come from low income families.

We do this because GO Day has a nationwide mission. The movement's official website explains the "[p]rime goals of the day are reaching currently underserved populations and first-time visitors to public lands, and reconnecting our youth to the great outdoors" ([nationalgetoutdoorsday.org](http://nationalgetoutdoorsday.org)). Okay, slow down. There is

actually a lot going on in that sentence, and people have devoted entire books to each topic it presents. Still, here are the alarming tidbits I take from it: First off, there are a lot of people who don't spend time recreating outdoors. Secondly, connections exist between "underserved" communities (this could mean low income, limited access to basic goods and services, ethnic and racial minorities, and a number of other factors) and less time spent in public, outdoor spaces as a form of recreation.

These trends have scientific backing from studies in environmental justice and racism, and some of that work is related to the displacement of people who, like the Kalapuya, were denied land at the hands of white people. In some instances of displacement, Euro-Americans stripped the land of trees and animals and took on slaves to build their fences and plant their foreign crops. In the South, they squeezed Africans on boats and shipped them to a strange place to live in filthy barns and grow cotton and tobacco. If the slaves ran into the woods bordering the fields, they were shot, raped, or hanged. Now, almost 200 years after Euro-American settlement in the West and 400 years after African slaves were shipped to the British colonies in North America, land managers sit around conference tables and classrooms and wonder why certain forms of outdoor recreation are dominated by white folks.

Historical displacement is only one factor at play in this whitewashing of public lands. Another aspect to consider are the *kinds* of resources made available on these lands, in comparison to the varying, culturally driven definitions of recreation. For example, for a day over the summer I hosted the Research Forests booth at Campeones de Salud ("Champions of Health"), a community health-themed soccer tournament in south Corvallis. As a resource for outdoor recreation, we were asked to set up an information booth at the tournament, alongside resource groups for good nutrition, preventative health services, and healthy lifestyles. Passersby were friendly, and I chatted with them in rusty Spanish about all the forest had to offer – trails, scenery, plants, birds, more trails... They could walk, ride horses, bring dogs, ride mountain bikes.

The responses I got were polite but generally lacked enthusiasm. Some folks asked if there were regular programs they could bring their kids to, so they could learn about the forest. Others wanted to know if there were guides who could take

their families on hikes and talk to them about the natural features. Someone asked if we allowed camping. Still others had been to GO Day in the past and wanted to know if they could fish at Cronemiller Lake on any other days besides the event. My answers to these questions were pretty disappointing, because they all boiled down to “no.”

Still, I stayed positive about what the forest *does* offer, and I threw in words like “exercise,” “relax,” “enjoy,” and “learn.” Overall, my conveyed excitement about walking around on trails, looking at trees and plants and maybe an animal or two fell a little flat with this audience. I cast my eyes around, and kids had started up their own game of soccer, next to the official games happening on the fields. An area was roped off for dancing, where a woman stood facing rows of smiling people and led them in energetic twists, wiggles, stomps, and spins. One of the teams scored a goal at the field nearest me. A whistle blew, and families and friends cheered. For many people here, *this* was outdoor recreation.

I’m not saying just because you’re a native Spanish speaker, you won’t enjoy a hike. What I’m suggesting (and this is something experts in environmental justice have also suggested), is that the folks sitting around conference tables and classrooms, brainstorming reasons why nonwhite folks are less likely to spend time in forests, need to consider more factors than the often thrown around “lack of knowledge about the resource,” “limited means of transportation,” “working longer hours, therefore less time to recreate,” and remember that, on top of those factors, culture and history play a huge role. Maybe local forests don’t offer the recreation resources some people value.

Maybe the people at Campeones de Sauld don’t often come to the McDonald Forest because all the signs are in English, or because they feel as though they will be stared at for being the only people on the trail or in the parking lot with brown skin. Maybe they don’t want to hike with an infant and a toddler, or maybe they don’t know there are meandering paths in Peavy Arboretum flat enough for a baby stroller. Picnic tables, flush toilets, and water fountains are scarce or nonexistent on the McDonald Forest, and maybe that keeps some people away.

I think the lesson here is there are many reasons why the McDonald Forest, and most other forests, attract a narrow group of visitors, and local decision makers and managers must be careful not to seem patronizing when they try to increase visitor diversity. Talk to the people who you feel are underrepresented in your forest and find out why they are, and whether or not that bothers them. Then listen to what they have to say.

The third part of the GO Day mission crosses racial boundaries, touching on what I consider one of the more disturbing social trends of this day and age: as a whole, children just don't go outside as much as they used to. Read a few chapters from author Richard Louv's books *Last Child in the Woods* and *The Nature Principle*, and you'll find this trend attributed to a plethora of modern developments, including perceived "stranger danger," the rise in social media and computer and video games (who needs green when you've got a screen?), and the elimination or shortening of recesses and physical education in schools across the country.

I say this is disturbing, because the last thing this planet needs as it undergoes climate change, biodiversity loss, and all the other environmental doom and gloom of this century is a cohort of new residents who could care less about dense forests, sparkling lakes, teeming tide pools, and the intrinsic value of polar bears. These non-nature lovers are also at higher risk of heart disease, obesity, diabetes, vitamin-D deficiency, attention deficit hyperactivity disorder (ADHD), and depression. They may also be at risk of missing out on crucial problem-solving and creative thinking opportunities.

An area like Peavy Arboretum could indeed be a safe, small place for these kids to combat what Louv calls nature deficit disorder, but are they using it? A few are (most visitors to the forest don't bring children), while others gain outdoor experience in school gardening programs, class field trips, and at city parks. Still, our country as a whole is seeing a decrease in children playing outdoors, and even if this trend is less dramatic in the Corvallis area, I see the absence of children here today in Peavy Arboretum as a metaphor for the pattern sweeping our country. The children's empty spaces seem the largest. Theirs is the absence I feel the most.

After snapping a few photos of the flowering camas field, I head up the gravel road to the beginning of the Forest Discovery Trail. It is an interpretive trail intended to introduce visitors to Pacific Northwest forests. After a few steps on the path, I stand to the side, allowing a man and a woman to pass. They must be in their fifties, and the man smiles at me as his wife calls over her shoulder for their muddy-pawed terrier. "Howdy," the man says, nodding. I nod back, and they walk off. Behind them, following, floats an empty space.

There will be many more absences to see during my hike along on the Forest Discovery Trail, because now I can't ignore them. I step again onto the path, take a deep breath, and brace myself for a walk through what this place is not.

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