INTO THE WOODS:

RESTORING A LOGGED PRIVATE FOREST

by

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A THESIS

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In this thesis, I outline the multi-year project of replanting my family's 20 acre parcel of land that had been logged in 2023. This property, once pastureland, was planted as a Christmas tree farm in the 1980s. After die-offs in the 2010s, the land was clear-cut in 2023. I was asked to create a plan to replant the area and grow a new, sustainable forest. I began by researching Oregon forestry regulations and meeting with representatives from local and government organizations for advice. Then, I gathered information on the property's soil types, determined tree species that would thrive in the area and mapped these species to the different regions of the property. My family and I planted 500 seedlings in the Winter of 2023. I performed a seedling survivorship survey during that Summer to inform us which species were thriving. The following year, we used the results of the survey to purchase seedlings and do a second planting. Despite challenges, my family and I remained true to our goals of sustainability and biological health of the property. In sharing our land management experience, I hope to help build knowledge of small land management for others facing similar circumstances.

Acknowledgements

I'd like to thank my family for letting me take the lead on this project. They sacrificed their weekends and vacation days to make this happen. Without them, I wouldn't have been able to accomplish a fraction of what I'd set out to do.

I'm grateful to the amazing representatives from the Oregon Department of Forestry, U.S. Department of Agriculture, Oregon State University, and Long Tom Watershed Council, who donated their time to give me and my family advice and encouragement.

The Oregon Small Woodlands Association has helped us — and countless others — build sustainable forests. The resources they provided were invaluable.

Finally, to my thesis committee, Drs. Jeff Diez and Daphne Gallagher, who saw potential in this unorthodox thesis and let me explore my own path: thank you.

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Introduction

My thesis examines the multi-year project of replanting and managing a recently logged private forest from the ground up: beginning with little experience or knowledge, going through the process of learning how it's supposed to and can be done, then finally putting that experience to work—all with the goal of ecosystem health and sustainability.

There are hundreds of small woodlot owners in Oregon, many of whom plan to make biodiversity a priority (Forest Service & U.S. Department of Agriculture, 2018). These owners are constantly performing experiments while managing their land—testing hypotheses, pivoting, and collecting data to perfect their practices—but this valuable information is rarely publicly documented. Documenting these experiments can help others trying to learn and make decisions, especially decisions that aren't necessarily traditional. At the beginning of this project, a representative of the U.S. Forest Service handed us a copy of the Forest Practice Administrative Rules. These regulations, while informing how to keep your land up to code, only give certain perspectives on land management, and it's clear that there is a status quo of economics first, ecology second—which makes sense in some ways (land takes a lot of money to maintain), but that's only one path. This is where the literature is thin: implementation of ecologically-minded policy and guidance for small forest owners. The feasibility, labor requirements, and outcome for these cases is mostly undocumented, especially for anyone without millions of dollars and thousands of acres. My project aims to provide documentation about how I used these guides in a practical and beneficial way as a small landowner focused on creating a sustainable and biodiverse forest.

For those like me and my family entering the realm of land stewardship with little practical knowledge on the subject, having access to the experiences of other landowners can be

invaluable. Understanding their processes in light of both regulation and practical application, along with advice from other professional sources, saves time and resources in the long run. With this project I hope to provide a glimpse into the processes and resources involved in forest management and illuminate the scientific curiosity and ingenuity driving them.

Background

Land Survey

Figure 1: Jennifern Farm Feature Survey

Traversable roads are marked in white, water features in blue, blackberry-dominated areas in red, 2024 replanted plots in yellow, and outbuildings in brown. The image is oriented with North being up and the southern property boundary is 1,100 feet long. (Google Earth, n.d.)

My family's property was officially named "Jennifern Farm" by my grandmother—after my aunt Jenny and the ferns that covered the forest floor when she purchased the property in 1991. Everyone in my family just calls it "the farm," so that's what I'll be calling it, too.

It's a total of about 20 acres in a valley just southwest of Eugene. The east five acres are a flat, grassy lawn with a house, barn, and shed. The land is cut by streams that leave steep valleys,

sometimes ten feet deep. They only run from fall to spring, so it's difficult to imagine how many rainy seasons it took to carve the gulleys. The major stream cuts the property in two from west to east with a pond a quarter of the way across—when I refer to the "North Plot" or "South Plot," this is the dividing line between them.

The North Plot has a steep slope tilted towards the stream. It's the most difficult area to traverse, with no formal road and no vehicle access. A few tributary streams flowing down the slope have made their own valleys and add to the difficult terrain.

The South Plot is mostly flat, high ground. A road running by the stream and another up the middle of the area makes it easy to walk or drive. Compared to the North it is fairly monotonous but does have a small stream running down the south side.

Property History

Before the Trees

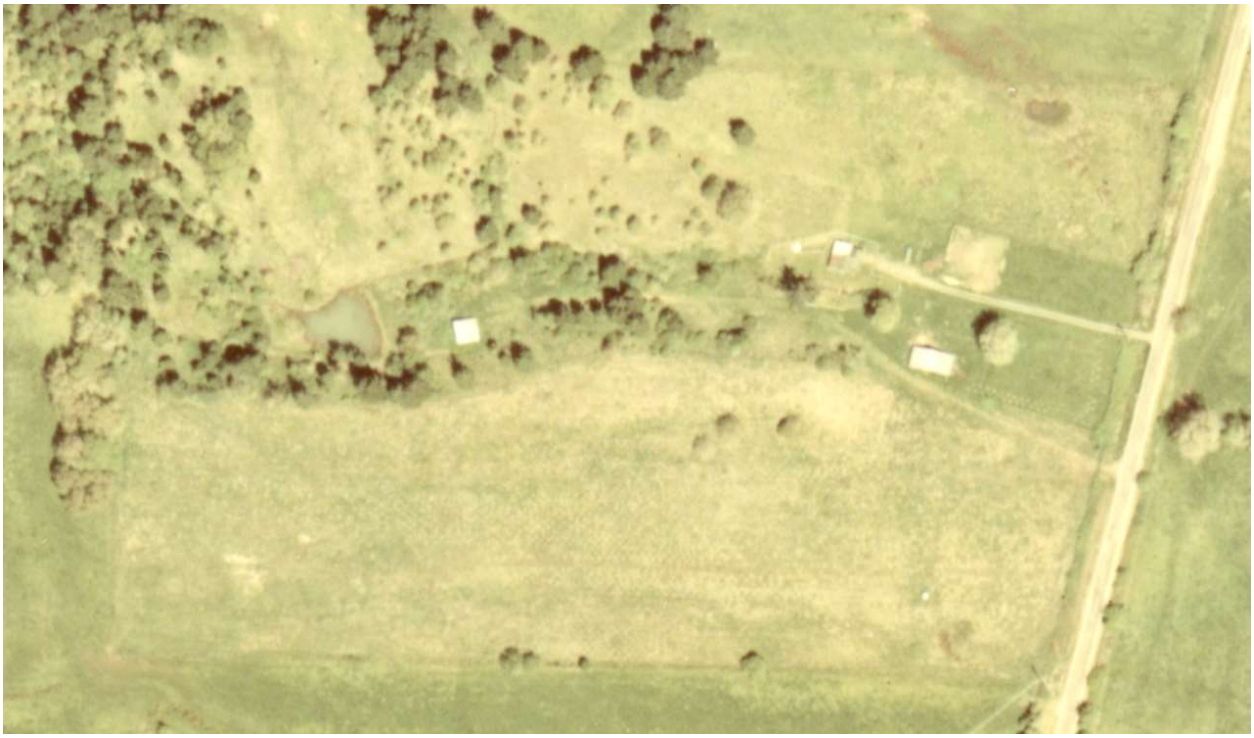

Figure 3: Jennifern Farm, 1979

Ponds, outbuildings, and trees are very clear in this photograph. You can barely see the modern property lines. (University of Oregon Aerial Photography Collection, n.d)

Figure 4: Jennifern Farm, 1984

This is the first instance of the modern borders and a view of the original Christmas tree planting. (University of Oregon Aerial Photography Collection, n.d)

The farm hasn't always been a forest. Figure 3 shows the state of the land for most of the 20th century: grassy pasture with trees around the streambanks. Much of the surrounding land has stayed pasture, mostly for beef cows and goats. In the 1980s, the former owner planted Douglas firs in tight rows with the intention of starting a Christmas tree farm. A decade later, my grandmother bought the property and rented it out to friends and family. There wasn't any work done on the land for the next 40 years, so the trees kept growing.

Figure 5: Jennifern Farm, 2008

The current roads and buildings are now in place. There is also another planting of Christmas trees in the Southeast. (University of Oregon Aerial Photography Collection, n.d)

Figure 6: North Road, December 2011

This photograph shows the north road surrounded by incredibly dense Douglas fir canopy — notice the moss, ferns, and fungi (white blotches). Also pictured are the multiple ages of the trees — those in the sun are much younger.

Figures 5 and 6 depict the farm I grew up experiencing. The trees had grown to maturity—80 to 100 feet—which shaded out the meadow. We still cut our Christmas trees here, but it was very difficult to find any small enough to fit in the house. Some folks have told me that this is called a "runaway Christmas tree farm," and it's apparently more common than I had thought. At this point, the vegetation was remarkably thriving, considering it was never meant to be a forest. Most of the trees were alive and well, there was very little bramble growth. The forest was so dense that there was practically no understory except for sword ferns, jelly fungi, and mosses. The ground was almost constantly cool and damp from the shade.

Figure 7: Jennifern Farm, 2016

This photograph captures the major die offs experienced during the 2010s, which are circled in red. (Google Earth, n.d.)

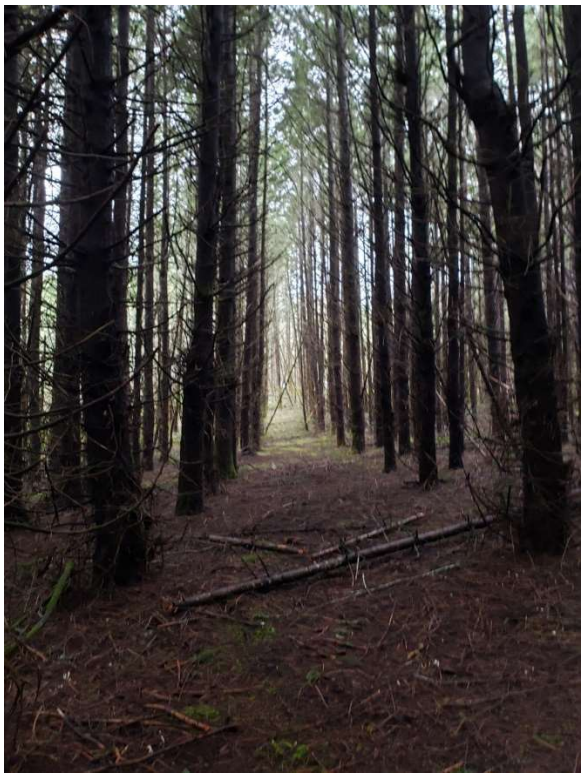

Figure 8: South Plot, 2020

Note the dead branches and close planting, as well as the litter density.

A decade passed, and the trees began to tower above us. We stopped coming to get our Christmas trees at the farm—they were all too big, and no new seedlings could grow in the dense shade. Large swaths of trees started to die, as you can see in Figure 7, and the opened canopy allowed blackberry vines to grow into dense patches that were nearly impossible to traverse. All of these dead trees (known as ‘snags’) were a real hazard. They could fall and hurt someone, but they were also a fire danger, especially with the number of dead branches running up the trunks that you can see in Figure 8 that act as a fire ladder.

Clearing Land

Figure 9: Jennifern Farm, 2023

This photograph shows the period in which some selective clearing was being done. Note that the die-off areas in Fig. 7 are now treeless. (Google Earth, n.d.)

Figure 10: South plot, Southwest corner, 2024

The black tarps are covering the slash piles created when this area was cleared in 2022. Blackberry brambles and grasses have replaced the bare ground seen in Figs. 8, 9.

During 2023, my brother began thinning trees on the property. It was slow and laborious, and only cleared the areas shown in Figure 9. The property continued to degrade—even the cleared areas quickly filled with brambles (like in Figure 10), making future work on the property progressively more difficult. The risks of fire and injury on the property were becoming imminent, so the family decided that the property should be logged.

Figure 11: Stream road, 2024

Slash made this road undrivable and difficult to walk. Note the bending “widow maker” (dangerous snag) on the right side of the road.

Figure 12: Pond, 2024

In the aftermath of logging, the pond was filled with slash and fallen trees.

Figure 13: The North Road, 2024

This photograph, taken from the same place as Fig. 6, shows the land about six months after logging ended.

This logging project took more than a year and changed the land's ecology dramatically. Large machinery tore up roads and further eroded streambanks and slopes. As you can see in the contrast between Figures 6 and 13, the landscape instantly turned from shaded and damp to dry meadowland. This was an emotional and difficult process, but it forced improvements to be made to the land. My family decided that the property should be replanted for both financial and personal reasons. As part of this process, I was tasked with drawing up a plan to create a new, healthier forest that could be sustainable long term.

Methods

Planning

I started my preliminary research with the single most important collection of information on Oregon's private forest regulations: "Forest Practice Administrative Rules and the Oregon Forest Practices Act," which lays out all the legal requirements for forest management as they currently exist (Oregon Department of Forestry, 2024). This document is written by the Oregon Department of Forestry (ODF) and managed by ODF's Board of Forestry. It is an overarching document covering everything from logging and replanting to watershed management.

The section most relevant to my project was the Forest Practices Reforestation Rules. I was fortunate to have a Forester from ODF guide me through and explain the rules and regulations as they related to our particular plot of land. The most important definition we encountered was for the term "Free to Grow." This concept regulates the number of living trees needed on a property within three years of being logged. It's a complicated rule dependent on the "class" of the land, which is a reference to the number of trees a piece of land can support and is generally determined by ODF. Any preexisting trees count towards that total. With help from our friendly forester, we found that, for us, it meant that we needed 125 to 200 seedlings per harvested acre, but decisions about species selection and planting location fell to me.

One of the most confusing regulations I encountered during this part of the project was that each species I selected had to be "marketable in the foreseeable future"—a concept that I needed to research and that sometimes conflicted with my ecological goals. Luckily, marketability is not the most important rule to ODF, and talking with our forester made me feel more confident that it needn't exclusively inform my choices. Essentially this rule is to ensure that the tax breaks given to forests are repaid using the sale of the timber. In the last few

iterations of these regulations, more information has been added on the ecological side, such as rules pertaining to waterways and snags (dead trees). For instance, there was recently the introduction of an entire section called "Adaptive Management" about a program to help landowners meet biological goals. Although this section did not overlap with my work on this project, it's worth noting (Oregon Department of Forestry, n.d.).

As logging progressed, I began creating a map of distinct features such as roads, impassible areas, and buildings using Google Earth satellite data (see Figure 1). I then continued collecting information on Oregon forest policy and met with a steward from the Oregon Department of Forestry (ODF) on the property to ensure that legal requirements were achieved, and that no fees would be incurred from any future work. The major issues were around zoning; because the land is currently zoned as forest there are requirements for it to continue in this designation. The most important of these requirement was the "Free to Grow" regulations about tree density that we'd already gone over.

My family and I also spoke with representatives from the Long Tom Watershed Council (LTWC), the US Department of Agriculture (USDA), and the Oregon State University Extension Service (OSU ES) to provide multiple perspectives on possible plans moving forward. LTWC and OSU ES are non-governmental organizations and more ecologically focused. They gave us a wide range of paths for the property, expressing the ways that others in the area have used their land for oak savannah restoration. Although we thought very hard about trying to turn the property into oak savannah—which would be closer to the original state of the property as seen in figure 3—there were a few things that made us come back to our mixed conifer forest plan. It would be very expensive to buy oak seedlings, which tend to cost ten times more than conifers,

and such an open canopy would mean that the brambles could take over and require constant and intensive management.

USDA and ODF often work with commercial timber producers, but the representatives we met were happy to help with our ecologically-focused plans and provided resources for us to consider, such as a comprehensive soil map of the property, legal information, and names of local groups that could help in our process. All of this was done for free, and we kept in touch throughout the process.

Soil Types

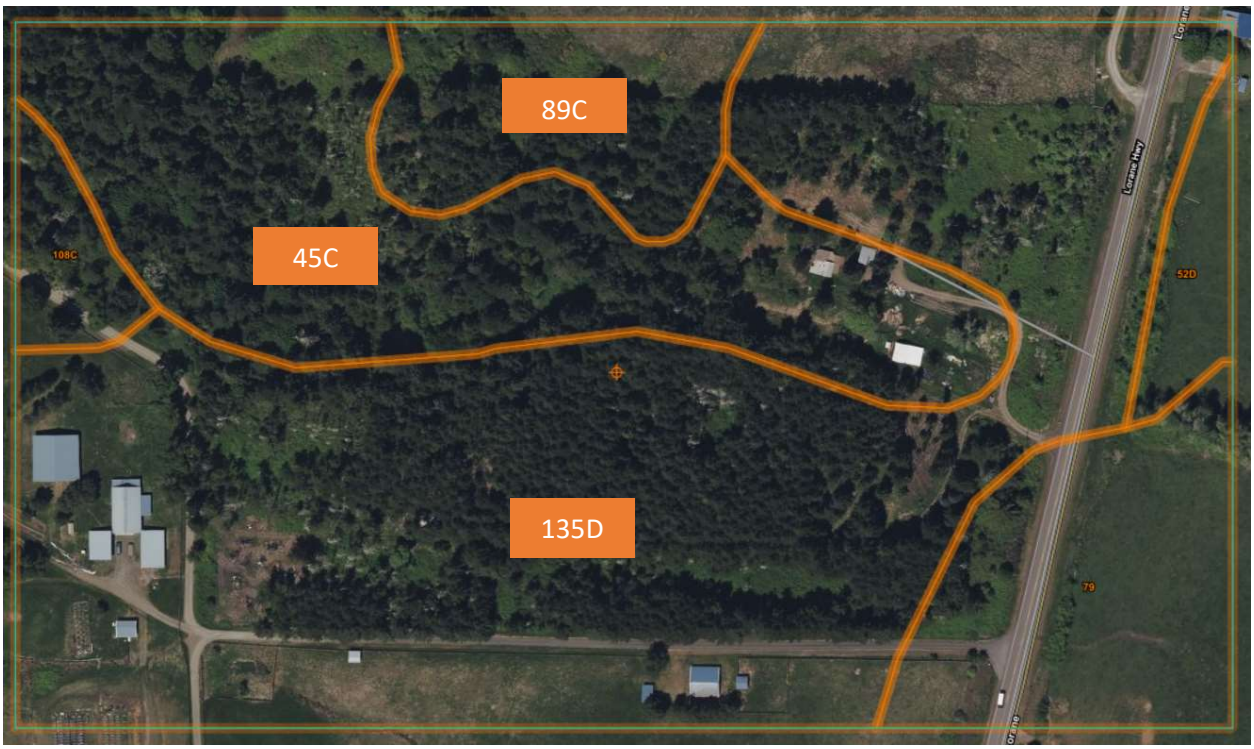

Figure 14: USDA Soil Map

This is a copy of the map I was given by the USDA during our meeting with our soil types highlighted. (U.S. Department of Agriculture, n.d.)

One of the best resources I was given by our USDA representative was a soil survey packet outlining the different soil types found on the farm and other properties.

The flatter south side is mainly clay loam (135D). It's well draining with relatively slow permeability; basically ideal gardening conditions. Our forester informed us that it's perfect for tree growth, especially Douglas fir.

The riparian area in the valley is boggy with thick clay soil (45C). It's the wettest and shadiest area on the property post-logging—although the streams cutting through are seasonal, it tends to retain its moisture year-round.

On the high ridge in the north, the soil is dry and sandy (89C). It's also on a south-facing slope—meaning it gets lots of sun—and is the highest part of the property.

Tree Species

With the information gathered from land surveys, I had a general map of the eco-regions on the property. The next step was to find native tree species that would be adapted to each area of the property – so I got to researching. In my opinion, this is the most fun—and important—part of the process. In a natural forest, species find their niches over generations. When you're replanting, you've got to do it before they're even in the ground. There were a few things I knew we needed in order to start a sustainable forest:

Biodiversity: It's no secret that mixed species stands (groups of trees) are more resilient. "Mixed-species Forests: Ecology and Management" by Pretzsch, Forrester, & Bauhus (2017) tells how they can withstand pests, weather, and water stress better than a monoculture. But the authors also explain that this diversity can't just be taxonomic. They often use the term "functional diversity," calling to attention the need for trees to fulfill different roles in the

ecosystem. Having a mix of wood type, habit, or environmental tolerances helps to boost ecosystem function. Although I was limited by the species we had available to us, I still strived towards functional diversity.

Succession: We want this forest to last as long as possible, so I had to be sure to set it up for success. By including slower growing species and understory plants, once the species that lived fast and died young were out of the picture, there could be another phase of growth (Kohm & Franklin, 1997). With the Douglas fir plantation, once trees began to die there was nothing to replace them, letting brambles take over in the open canopy. Natural succession should come with biodiversity, but I wanted to help out as much as possible to ensure that things go smoothly.

With these common themes in mind, I considered native tree species in the Pacific Northwest. I knew that conifers were going to be the cheapest and most available species, so I looked at those first. I eliminated any that would be exceptionally difficult to purchase (from previous gardening experience) and paid special attention to trees that I saw thriving in the area. Other than personal observation, my main source of information was *Northwest Trees: Identifying and Understanding the Region's Native Trees* by Arno and Hammerly.

Douglas Fir already proved that it could do well on the farm. It's a fast-growing species that can help to quickly close the canopy and shade out invasive plants. They're also great at adapting to many environments and weather patterns, making them a good generalist species.

Grand and Noble Fir are similar to Douglas fir in terms of fast growth and adaptability. Since they're apparently not too fussy and readily available, I thought I'd add them to the mix for the sake of biodiversity despite their functional similarities to Douglas fir.

Willamette Valley Ponderosa Pine was recommended to us by our Forester. Ponderosas are better adapted to dry and sandy soils, but the Willamette Valley variety can grow in damp

conditions, too. This species would do well in the North, where the south-facing slope receives more sun, and the sandy soil dries out fast. Hopefully, the fact that they shed their needles will help both restore nutrients to the soil and act as a mulch to prevent weed growth. They grow all along Lorane highway, so I decided that they'd probably do well on the farm.

Western Red Cedar and Incense Cedar need boggy soil, making them ideal for the riparian areas. There had been some growing on the property before logging began, so I postulated that they would do well. These evergreens tend to grow more slowly and have a dense canopy, making them different from the firs and pines I'd already picked and adding to the functional diversity of our future forest.

Western Hemlock is another damp- and shade-loving tree, but they have the unique ability to grow in the understory of a forest for decades, waiting for the canopy to open so they can reach their full height, creating a second phase that will keep the forest going. This would help prevent the canopy from staying open too long and allowing weed growth. It also helps that they're beautiful, dainty trees, and one of my favorite conifers.

Replanting

Figure 15: Preparing for replanting in the North plot, 2024

Pictured is a box of seedlings and bags of Vexar tubes with their bamboo stakes. You can also see the team that went ahead to create a bridge over the ravine from slash and logs—the culvert was destroyed by heavy machinery. The large oak on the right marks the beginning of the stream valley.

In February 2024, we purchased 500 trees from the Oregon Small Woodland Association's tree sale on the day of replanting. The species purchased, based on my research and availability at the sale, were Douglas fir (x100), Grand fir (x50), Noble fir (x50), Incense

cedar (x50), Western redcedar (x50), Western hemlock (x100), and Ponderosa pine (x100). This means that there were 200 “generalist” trees (firs), 200 clay soil trees (cedar and hemlock), and 100 sandy soil trees (pine). I chose this ratio because of the relative abundance of the three soil types on the property. I also grabbed ten willow cuttings to place around the northern stream valley in hopes to help stabilize it, and ten flowering red currant cuttings.

Two plots were outlined on the property based on the accessibility of different sections of land, one in the North and the other in the South totaling three acres (See Figure 1). This square footage and our number of seedlings allowed us to plant with a density of 160 trees per acre, just in the middle of the required range. We used dibble bars for planting—basically heavy shovels with a rectangular, wedge-shaped blade. To protect them from herbivory, we used Vexar tubes. They’re cylinders of plastic mesh that you put around seedling and stake into the ground to keep animals from easily getting a hold on the leaves. We also tied on neon flagging tape to make visible the seedlings that would be under threat from the continuing logging process. Although the plan had been to wait until logging was completed, we needed to plant as soon after purchasing the seedlings as possible to avoid casualties. The tree sale was our one shot at getting the seedlings that year in the quantity we wanted because the only other option was placing an order at a specialty nursery a year in advance.

The seedlings were planted approximately 12 feet apart. This spacing is more generous than recommended (more in the 10 ft. range) but made it possible to have the necessary tree density to constitute a forest – our “Free to Grow” stand discussed in the regulations (ODF, 2024). Not only did this distance make it cheaper to cover a greater area, it was also recommended by the folks at the USDA to improve species diversity in the understory.

Seedlings were assigned areas based on the soil map (Figure 14). Ponderosas were planted in 89C because of the dry, sandy soil. Cedar and Hemlock, which need wet, clay soil, were planted in 45C. The firs were planted in 135D, mainly, but were also used to fill in any gaps in other regions because of their adaptability. I stuck the willow twigs into the stream bank, and we planted the currants up on the North hill. They don't count towards our total, but I'm still looking forward to seeing them grow.

Experience

The day of the sale, six of us went out to the farm to start planting. Logging machinery had churned up the clay soil and heavy rains created a thick, sticky mess that made walking difficult. Limbs and shredded logs were scattered over the ground and in massive piles, making it not only more difficult to move but also impossible to plant in certain areas. In the North, there was the steep stream valley you can see in Figure 15. Machinery had crushed the only bridge across the ravine, so we had to improvise by using leftover logs to make a temporary bridge to reach the western half. In that first day, we covered less than an acre.

But it wasn't all hard labor. I had put together a motivating musical playlist and we used the time to laugh and chat as we worked. It was warm and sunny most of the days we worked even though it was the middle of winter. We planted all 500 trees within a week.

Results

Seedling Survey

In September 2024, I returned to survey the health of the seedlings. Making a zig-zag pattern across the plots from west to east in the North plot and east to west in the South plot, I noted the species and health of each individual tree I passed. Seedlings were rated as either alive or dead. The criteria I used were chlorosis (the yellowing of leaves), needle dryness, and loss of limbs or needles. These determinations were a matter of personal judgement. With almost 500 trees to catalog and one day to get it done, I figured speed was going to be more important than long descriptions.

Species	# planted	% Survival	Notes
Douglas Fir	80	80%	
Grand/Noble Fir	100	70%	
Western Red/Incense Cedar	50	70%	Dried out
Hemlock	50	30%	Dried out
			Total survival of plot: 75%

Table 1: South Plot Survivorship

This is a breakdown of the percent of living seedlings in the South plot by species. I made note of any trends that I saw for each species – the cedars and hemlocks seemed to have died from desiccation. Seventy-five percent of all the seedlings planted in this plot survived to September.

Species	# planted	% Survival	Notes
Douglas Fir	20	100%	
Western Red/Incense Cedar	50	60%	Dried out
Hemlock	50	30%	Only survived in southern area of plot near stream
Ponderosa Pine	100	99%	The only loss was due to a seedling being knocked over
			Total survival of plot: 60%

Table 2: North Plot Survivorship

This is a breakdown of the percent of living seedlings in the North plot by species. I made note of any trends that I saw for each species – the cedars and hemlocks seemed to have died from desiccation as they did in the South. The Ponderosa pines did amazingly. Sixty percent of all the seedlings planted in this plot survived to September, which is a little less than in the South Plot—possibly because of the intense slope.

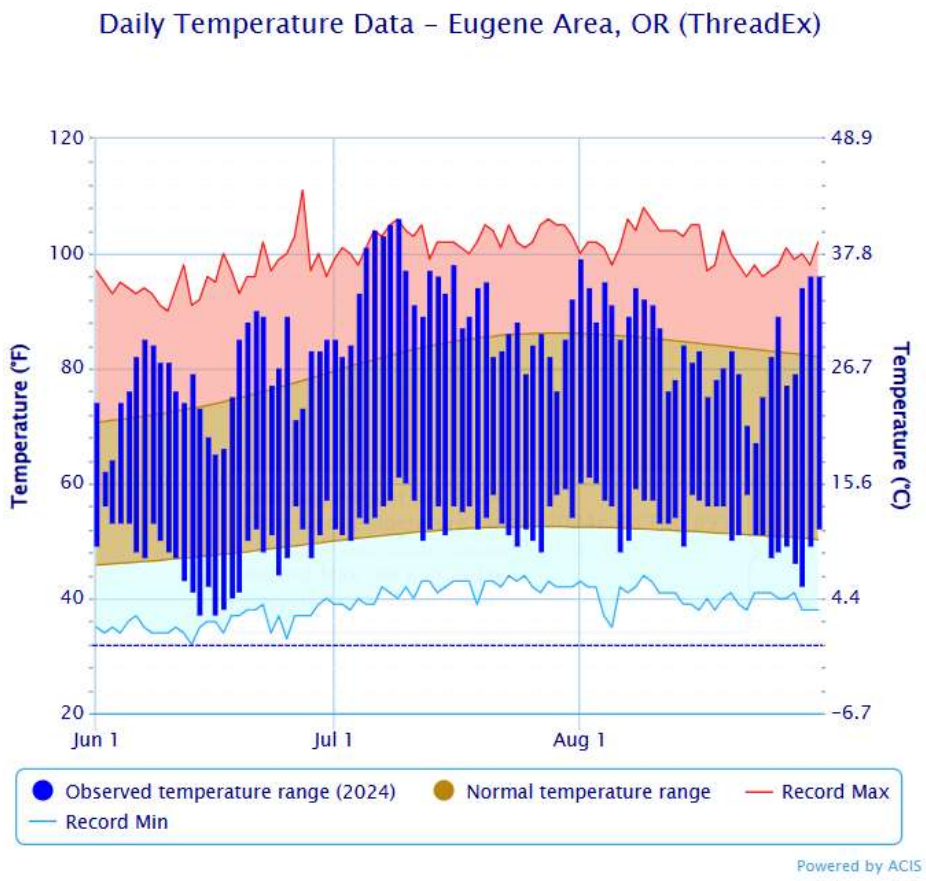

Figure 16: Summer Temperatures, 2024

The summer after we planted, there were record high temperatures (NOAA's National Weather Service, n.d.).

Most of the Ponderosa pines and firs made it through the summer drought. They're adapted to that sort of thing. But, unfortunately, many of the cedar and hemlock were killed, and that was disappointing to see. I may have let my personal admiration of these beautiful, shade-loving trees cloud my judgement, but the increase in sun exposure after logging was more extreme than I expected. Places once covered in damp moss and mushrooms became cracked clay spotted with wildflowers; a bittersweet change that meant the forest I grew up with was gone, but a new, and hopefully better, one could grow.

Discussion

Second Planting

The first weekend of February 2025, the Oregon Small Woodland Association had another seedling sale. We bought Ponderosa pine (x90), Douglas fir (x90), Grand fir (x47) and Noble fir (x50) for a total of 277 seedlings - these were our hardiest species according to the summer survey. Since they were generalists, we didn't make any specific plans for what species should be planted where, just that they should be planted at random throughout the plots to fill in any gaps or to expand the area.

Figure 17: Elk Damage

The pink tape marks all that remains of a fir seedling.

When we got to the property, we were shocked: our neighbor told us a herd of 200 elk had passed through sometime in the past month and ate nearly every seedling we'd planted in the South plot. We'd expected some herbivory, but elk had never come through the property before. Since they're bigger and stronger than deer, they had pulled out the protective Vexar tubes, nipped all the green shoots, and scraped the bark off, leaving bare sticks. Our guess is that they were attracted to the wide, open space left after logging and changed their normal route to come through.

Days of hard work and hundreds of dollars were gone. But there was nothing we could have done, and we had a truck full of new trees. So, we took a minute to reassess, then replanted the South plot in case the herd skips over it next winter. Any Vexar tubes left lying on the ground were reused, and markers were removed from dead seedlings. If the elk come back, we'll have to change our land management strategies. Luckily the North plot was in much better shape. However, the blackberry vines had continued to grow and spread, overtaking some seedlings and making it difficult to plant certain areas. We got to work there next, planting where we could, to fill in gaps.

Plans for the Future

Looking back on the last two years, I can see that there have been ups and downs. Events outside of our control have forced us to change course, but I think that having solid, foundational goals helped us get back on our feet. Planning and preparation were a part of this project's success, but community made it possible. Having people who cared about the farm despite its problems and wanted to see it thrive was the driving force.

This project is the beginning of a process that I will hopefully never see the end of. It's my hope that we'll keep planting trees each year until we reach a consistent, healthy cover. It will take decades for the trees we plant to grow tall enough to form a forest like the one I remember. We'll need to keep fighting against extreme weather, herbivores, and brambles until, hopefully, the land will be able to support itself. We'll continue to learn as the land changes and, as it changes, so will our management. By monitoring how our actions make an impact, we can adjust them to meet the needs of the ecosystem.

I can't know for sure what will happen at the farm—if this project has proven anything, it's this. But I can continue to give my time and thought to it, noticing its responses and putting in work to help create a sustainable landscape. Maybe, one day, somebody will be able to walk down the mossy paths of our forest again.

Lessons Learned

Every replanting situation is different, but I believe there are a few things that anyone faced with a similar project could take away from my experience:

First of all, ask for help. Look for local resources like ODF (or your state's equivalent), a local branch of the USDA, extension services, and environmental groups who have the knowledge you need to make good decisions—no matter how many books and papers you read, it isn't a substitute for experience. Laws and regulations are especially tricky. The Oregon Forest Practices document is nice for reference but what you really need is a Forester to help explain it. When it comes to volunteer labor—whether it's from family, friends, or people in your community—you'll be surprised at the amount of work people are willing to put in to make a positive impact. Try your best to make work parties fun. Bring soda, music, and snacks if you can. You and your crew will work harder and feel better, trust me.

Secondly, don't skimp on planning, but be ready to adapt. Being prepared for big decisions long beforehand is incredibly helpful, especially when it comes to species selection. Know your land and really think about how the trees will grow and interact with the ecosystem. Look at the forests around you to use as a guide. Know how many trees you'll need to plant to comply with regulations—be generous. When you get to the phase of actually ordering trees, you won't feel as overwhelmed by the sudden need for information. That being said, things will

happen that you can't plan for. There will be losses of seedlings and difficulties in planting. Come back to your understanding of the land and try to make the best decision you can in the moment.

And finally, remember what you're doing this for. This is a long, slow, difficult process—losing hope or passion is to be expected. But even if things are going poorly or you're worried that you've taken a wrong step, try to remind yourself that the effort you're putting into this project is worth it. You're not just growing a forest; you're growing yourself and your community.

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