Quadra Hill Baseline Report

August 2024

Photo credit: Mira Martini

Prepared by

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Assisted by

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Territorial Acknowledgement

We acknowledge that we live on, research in and write on the unceded traditional Coast Salish territory of the lək̓ʷəŋən and W̱SÁNEĆ peoples who have historically, and to this day, cared for and nurtured this land.

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1.0 Summary

This report presents empirical data on the site characteristics of Quadra Hill (District Lot 58), Galiano Island. Historically, the site was impacted by extensive logging, and subsequent reforestation efforts have resulted in predominantly young seral forest stands of mixed broadleaf and conifer species.

These data will be used to evaluate the site's above-ground carbon storage capabilities, and act as a baseline to monitor the effectiveness of restorative thinning in enhancing forest resilience and accelerating the transition of these stands into mature forests exhibiting old-growth characteristics.

The data was gathered using provincially standardized mensuration techniques outlined in the *Field manual for describing terrestrial ecosystems, 2nd edition*, (BC Ministry of Forests & BC Ministry of Environment, 2010), according to the guidelines laid out by the ecological forest prescription prepared by Herb Hammond, Adam Huggins, and Keith Erickson (Hammond, Huggins & Erickson, 2024). The focus is on tree metrics, coarse woody debris (CWD), and broad site characteristics.

Key findings suggest that selective thinning interventions could significantly increase forest complexity and carbon storage over time.

2.0 Introduction

2.1 Site History

Quadra Hill (QH) is located on the ceded traditional territory of the Tsawwassen First Nation, and within the shared, asserted, unceded and traditional territories of the Penelakut, Hwlitsum, Lelum Sar Augh Ta Naogh, and other Coast Salish Peoples who hold traditional rights and responsibilities in and around Galiano Island. Pre-contact, the land was likely used for hunting and harvest (Huggins & Thompson, 2023). Following European settlement, a large portion of the property was clearcut in the 1940s and 1990s by forest company MacMilan Bloedel and other ownership (Huggins & Thompson, 2023). In 1993, the property was sold to private owners. Various small-scale disturbances occurred on the land, such as subsistence gardening and goat grazing.

The property provides a critical link to the mid-Island conservation corridor. It is adjacent to other GCA-owned properties, such as the Millard Learning Centre and Vanilla Leaf Land (see Figure 1). When the property was put up for sale in 2022 (Huggins & Thompson, 2023), the Aqueduct Foundation secured funds to purchase the property for the GCA in 2023. The GCA later received the Environment and Climate Change Canada Nature Smart Climate Solutions grant.

Currently, the site shows significant forest regeneration. Surveys conducted in 2022 and 2023 revealed that more than half of the property is currently Douglas fir - Salal ecosystems (Huggins & Thompson, 2023). Keith Erickson (R.P.Bio), GCA ecologist and consultant on the Quadra Hill project, assessed that the site shows evidence of tree planting by the MacMilan Bloedel logging company, as stands display homogeneity

in tree species, diameter and height (personal communication, June 26, 2024). Natural regeneration is also present throughout the site, though most of these trees display symptoms of suppressed growth due to the crowded canopy restricting access to sunlight.

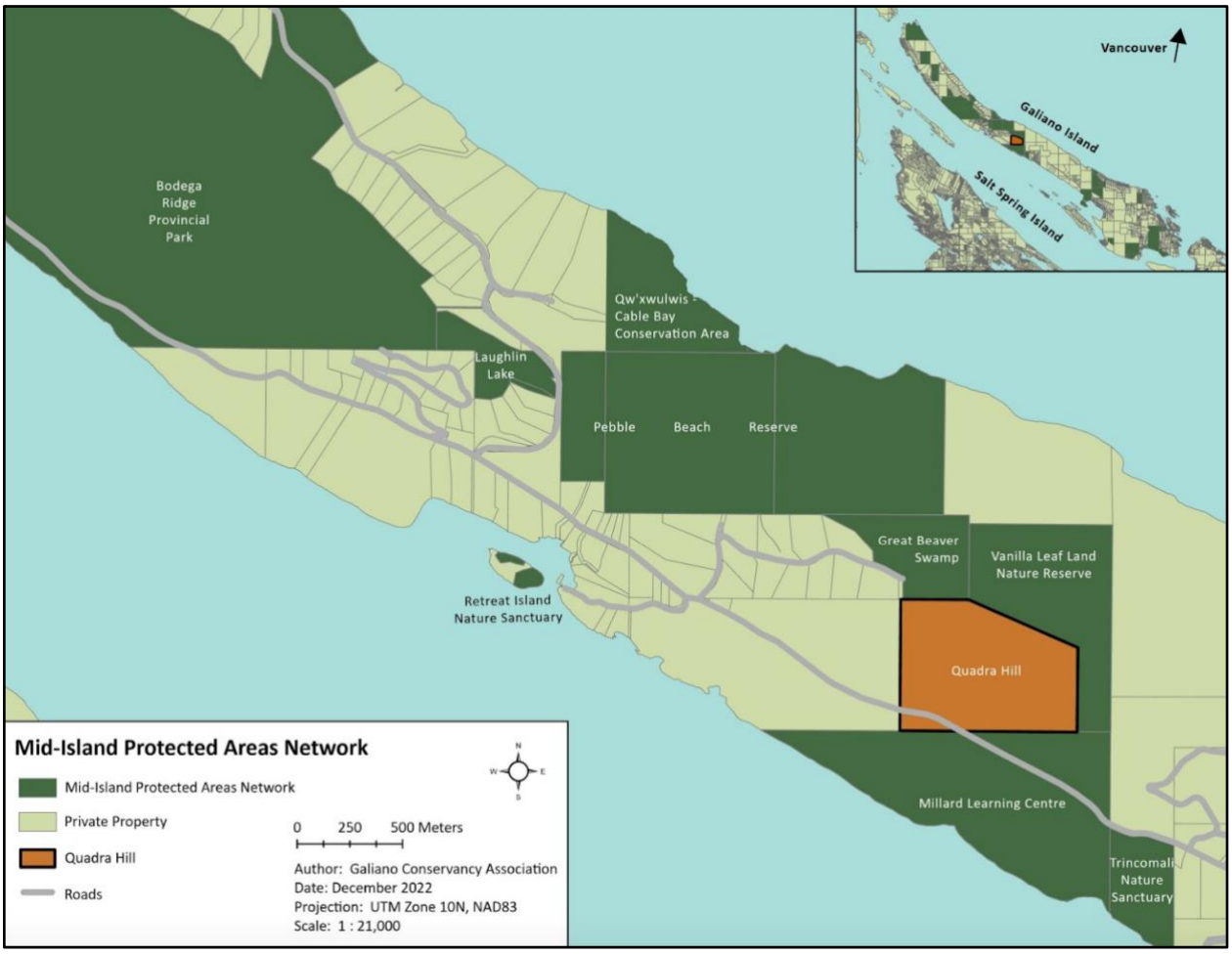

Figure 1*: Map of QH property relative to nearby protected areas, spanning the middle portion of Galiano Island. The map was created by the GCA, and retrieved from Thompson & Huggins, 2023.*

2.2 Goals

The goals of this restoration project are outlined in the "Quadra Hill forest: Ecological restoration prescription" (Hammond, Huggins & Erickson, 2024). These goals are to:

1. accelerate the transition of the young Douglas fir (*Pseudotsuga menziesii*) plantation to a mature Douglas fir forest with old-growth characteristics, including associated species composition, ecological structures, and ecological processes
2. promote biodiversity
3. promote carbon sequestration and increase stored carbon over time
4. incorporate measures to mitigate risks of wildfire

5. provide empirical baseline data to monitor the effectiveness of restoration treatments in achieving goals 1 through 4.

2.3 Objectives

The objectives of this project are to support the five goals by identifying existing species and habitat types, assessing stand features such as tree diameter, height, and the size of the live crown, and assessing coarse woody debris features such as the diameter and decay class. These data will be analyzed to assess the health of the forest and the capability of the current stand to capture carbon. A general site description will provide data on the location itself, such as the moisture regime and volume of fine woody debris, which can be used to assess wildfire risk, and identify areas suitable for thinning to promote forest maturation, such as trees suppressing understory vegetation or trees species of different age or species.

2.4 Carbon Sequestration

One of the main goals of this site, and part of the reason this project received funding from Environment and Climate Change Canada (via the Nature Smart Climate Solutions Fund), is to increase carbon sequestration. Three of the eight objectives provided by the government for this fund focus on carbon (Government of Canada, 2024):

- Avoid GHG emissions by halting or reducing the conversion of carbon-rich ecosystems to another less carbon-rich ecosystem (e.g. from a forest/grassland/wetland to cropland or an urban development).
- Restore carbon storage and biodiversity in converted or degraded ecosystems.
- Reduce GHG emissions caused by natural resource use, including by implementing new forest harvesting management practices.

As noted in the baseline report (Thompson & Huggins, 2023), “Forests within the Islands Trust area of the CDFmm [Coastal Douglas-fir moist maritime] have been shown to sequester more carbon per hectare than anywhere else in BC, most likely due to ‘the high density of maturing forests, which store and take in more carbon to support their growth’”. This quote is in reference to the matured forests of the Island trust, but Quadra Hill is not yet included in that category.

Restorative or “selective” thinning is the method prescribed by the GCA to assist in forest maturation. The forest at QH has an average of 950 stems per hectare, and it’s said that an optimal density for a stand of similar age is approximately 300–500 stems (Hanson & Zuckerman, 2024). Thinning 40–60% of the stems would improve both the site’s carbon sequestration as well as the health and longevity of the forest. An overly dense stand of trees is more susceptible to both disease and fire due to competition over increasingly limited resources (Hanson & Zuckerman, 2024). In the GCA’s approach to thinning, there are a two key facets: removing fine woody debris to reduce wildfire risk and leaving coarse woody debris on the forest floor. In the Quadra Hill ecological restoration prescription (2024), the thinned stems left on site will likely serve to “increase total carbon stores as CWD in the short term (10 to 50 years)” and “contribute to longer term soil carbon pools and soil biomass capacity.” A forest that has a lower risk of both fire and disease, combined with reduced competition, will likely result in a healthy, mature forest in the long-term.

Mature forests sequester significantly more carbon than young ones. In Coastal Douglas fir forests, young stands (<50 years old) at the optimal density capture approximately 75 metric tons of carbon per hectare, while a mature old-growth stand (>300 years old with a density of 80–130 stems/hectare) can capture north of 250 metric tons of carbon per hectare (Hanson & Zuckerman, 2024). The long-term goal is to assist the forest in achieving full capacity carbon sequestration.

3.0 Methods

3.1 Plot Logistics

The 116-acre area was divided by ecological community into 39 plots. The baseline prescription (Huggins & Thompson, 2023) selected five pole-sapling conifer communities and one pole-sapling mixed community for treatment. Two 200m^2 circular plots with a radius of 7.98 metres (size based on the density of the trees in the treatment area) were assigned as sampling sites in each ecological community (10 plots in total, see Figure 2). The locations of these plots were randomly determined, then located with a high precision GPS (Arrow 100+). The centre of each plot was marked with a rebar stake by Adam Huggins.

Treatment area 4 and its two plots were set aside as a control group in order to track the progress of the restoration in other plots and study the effect of leaving the forest untreated. The data from six treatment plots were collected June 26–28, 2024 by the authors of this report and the Galiano Conservancy Association summer staff members Eve Ruth, Clem Castagnas and Thomas Heinrich. The two remaining treatment plots were completed the following month, July 9–10, by the same Galiano Conservancy Association summer staff members.

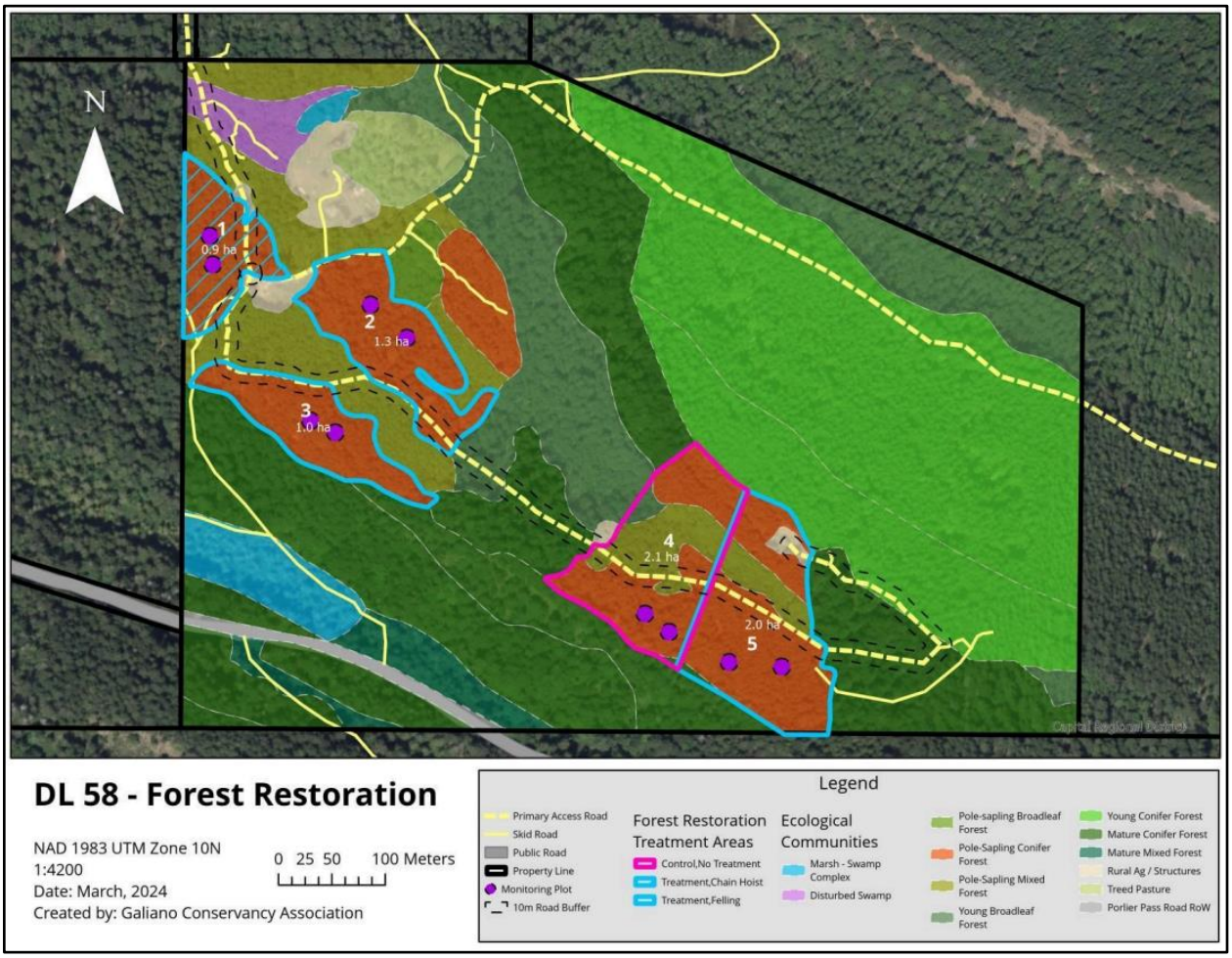

Figure 2: *Forest restoration treatment areas, including the eight treatment plots and two control plots (Monitoring Plots in legend) represented as purple circles. Map created by the Galiano Conservancy Association. Retrieved from Thompson & Huggins, 2023.*

3.2 Tree size

The data collected on trees included the number of trees, the species (identified according to Pojar & MacKinnon's *Plants of Coastal British Columbia* (1994)), the diameter at breast height (DBH) measured with a Lufkin artisan DBH tape, the tree's height as well as its crown height, and the crown class (dominant, co-dominant, intermediate, or suppressed). Stems within each plot, alive or dead, were measured only if they had a DBH greater than or equal to 7.5 cm.

Stem height was determined using trigonometric formulas, shown in Table 1, based on the observer's angle of view, measured with a Suunto clinometer, and their horizontal distance from the given stem, measured at the standard forestry height of 1.3 metres using a Keson long line reel tape (see Figure 3). Measurements included the angles between the observer's eye level and a) the tree's apex, b) the bottom of the live crown, and c) the base of the tree.

***Table 1**: Trigonometric formulas used to calculate tree height, live crown, and live crown ratio of trees sampled in each plot.*

Calculation	Formula	Variables
Tree height	**h=(tanA1)+(tanA2)*d** for when the angle to tree base is negative **h=(tanA1)-(tanA2)*d** for when the angle to tree base is positive	**h** = tree height **A1** = angle (degrees) between eye level of observer and tree apex **A2** = angle (degrees) between eye level of observer and tree base **d** = distance of observer from tree
Live crown foliar mass	**h=(tanA1)-(tanA3)*d** for when the angle to tree base is positive **h=(tanA1)+(tanA3)*d** for when the angle to tree base is negative	**h** = live crown height **A1** = angle (degrees) between eye level of observer and tree apex **A3** = angle (degrees) between eye level of observer and bottom of live crown **d** = distance from tree
Live crown ratio	**LRC = LCh / Th**	**LRC** = live crown ratio **LCh** = live crown height **Th** = tree height

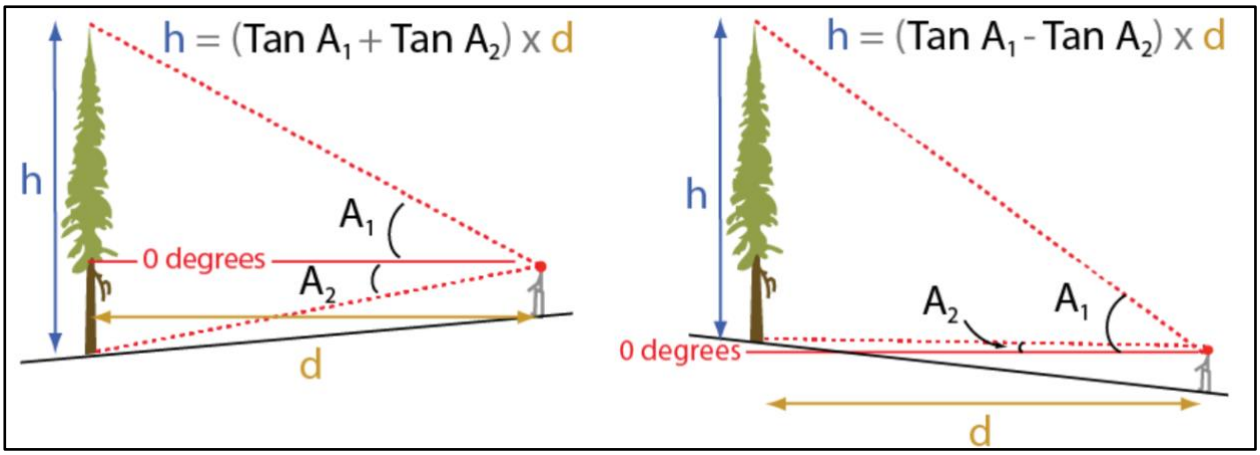

Figure 3. *A visual representation of the trigonometric formulas (University of British Columbia, n.d.), where h = tree height, A1 = angle (degrees) between eye level of observer and tree apex, A2 = angle (degrees) between eye level of observer and tree base, and d = observer distance from tree.*

3.3 Tree Age

Stand age was assessed by coring three trees from each plot that represented the standard (median) DBH size of the plot. Douglas firs were the primary choice due to their dominance in the plots and their wood's minimal resistance to the borer, though one grand fir (*Abies grandis*) was also cored as an exception in a plot where it had a wider distribution.

A standard 12-inch forestry increment borer was set at breast height (1.3 metres). It was aimed at the pith, its auger was aligned perpendicular to the tree, and it was twisted until it reached a point a few inches beyond the center, coring approximately 55–65% of the tree's diameter. The lighter or darker rings were counted from the pith to the last ring before the bark, resulting in the “breast height age.”

To account for the time required for trees to reach breast height, an age adjustment was applied: 6 years were added to the counted age for both Douglas fir and grand fir, reflecting the typical growth period required for these species to attain breast height.

3.4 Coarse Woody Debris

Coarse woody debris (CWD) sampling took place over two perpendicular line-intercept transects, each 24 metres long. The first transect was oriented along a random azimuth determined with a Brunton Truarc 15 magnetic mirror compass. The second transect was positioned perpendicular to the first by adding 90 degrees to the azimuth of the first transect. The data collected included diameter, length, height of the end from the ground, species, decay class, angle of the ground under the transect line, and the tilt angle of the CWD under the transect line (see Figure 6). The diameter of each CWD piece along the transect was measured and recorded at the point where the CWD intersects with the transect line. CWD was counted only if it met the minimum diameter requirement of 7.5 cm. The length of the CWD was measured only within the area where the diameter was greater than or equal to 7.5 cm (see Figure 4). The decay class was measured using a ranking system from 1 to 5, based on the 2nd Edition of the *Field manual for describing terrestrial ecosystems* (see Figure 5).

Figure 4*: Photo showing the process of measuring the length of CWD using a 30-metre open reel tape measure. Ruth (right) holds the end of the tape at one end while Kyle (left) reads the length at the other end. Both ensure that the places they hold the tape align with the start and end of the section of the log whose diameter is at or greater than 7.5 cm.*

	Class 1	Class 2	Class 3	Class 4	Class 5
Wood Texture	Hard	Sap rot (but still hard, thumbnail penetrates)	Advanced decay (spongy/large peices)	Extensive decay (crumbly-mushy)	Small pieces, soft portions
Portion on Ground	Elevated on support points	Elevated but sagging slightly	Sagging or broken	Fully settled on ground	Partly sunken
Branches	Hard branches with twigs	Soft branches	Branches/stubs absent	Absent	Absent
Bark	Firm	Loose	Trace	Absent	Absent
Wood Appearance	Fresh/recent	Colour fading	Fading colour	Light or brown	Reddish brown
Wood strength	Supports person	May not support person	Breaks easily. Pieces snap	Collapses with weight. Pieces do not snap	Feels firm like ground
Invading Roots	None	None	In sapwood	In heartwood	In heartwood

Figure 5. *Coarse Woody Debris decay class categorization chart (BC Ministry of Forests & BC Ministry of Environment, 2010)*

Figure 6*: *Photo showing CWD being measured at the point of intersection with the transect. Nick (left) uses a clinometer to measure tilt angle of the log and the ground while Ruth (right) notates the data. They used the Field manual for describing terrestrial ecosystems (open in the centre of the photo) to assess rot class.

3.5 Site Description

The site characteristics were described as seen from the centre of the plot, and chosen using the *Field manual for describing terrestrial ecosystems* (BC Ministry of Forests & BC Ministry of Environment, 2010). Notated features included those that influenced on-site moisture and nutrient regimes (slope angle and direction, as well as the plot's placement within a site series), general stand density and dominant species, as well as the understory density and dominant species. Additionally, the density and species of both coarse and fine woody debris were noted.

4.0 Results

The surveyed forest sites exhibited general uniformity in tree size, with trees generally falling within a similar range of DBH and height, with short live crowns. For example, the average tree height for each plot was calculated to be around 20 metres tall, as seen in Figure 7, with plot 2 having the highest average height at 25.92 metres, and plot 3 having the lowest at 17.42 metres. Similarly, a trend of uniformity was observed for the average canopy height (live crown), as seen in Figure 8. The live crown ratio of all trees averaged a 26.35% of the tree's height — about a quarter of each unbroken tree had live foliage.

Coarse woody debris predominantly clustered in a consistent decay class across most sites, with occasional variations in age. The coarse woody debris observed was primarily composed of decay classes 2 and 3, each class accounting for around 30% of total observed CWD. Class 5 was the least observed decay class, only accounting for around 10% of total observed CWD. Sites differed significantly in the quantity of CWD present. The total volume of CWD per plot varied, as seen in Figure 9. Plot 4 had by far the most CWD, with a total volume of 23.8 cubic metres, and plot 6 had the least CWD, with a total volume of 7.8 cubic metres.

The forest ecosystem was primarily comprised of Douglas fir, salal (*Gaultheria shallon*), and sword fern (*Polystichum munitum*), with a dense canopy resulting from the second-generation clearcut harvest. Douglas fir accounted for 77 percent of the overall tree species composition over all sites, and the next most commonly seen species, red alder *(Alnus rubra)*, which accounted for 10.4% of overall tree species composition, shown in Figure 10. The forest displayed a dual age structure, featuring planted stands aged 30–40 years and a younger class of approximately 25 years. The average rings counted amongst all sites was 28.7, with 6 years added afterward to account for growth up to breast height, resulting in an average age of 34.7 years. Secondary species such as Western redcedar (*Thuja plicata*), grand fir, and alder play subdominant roles, while the understory vegetation is sparse except in areas with canopy gaps that foster greater diversity.

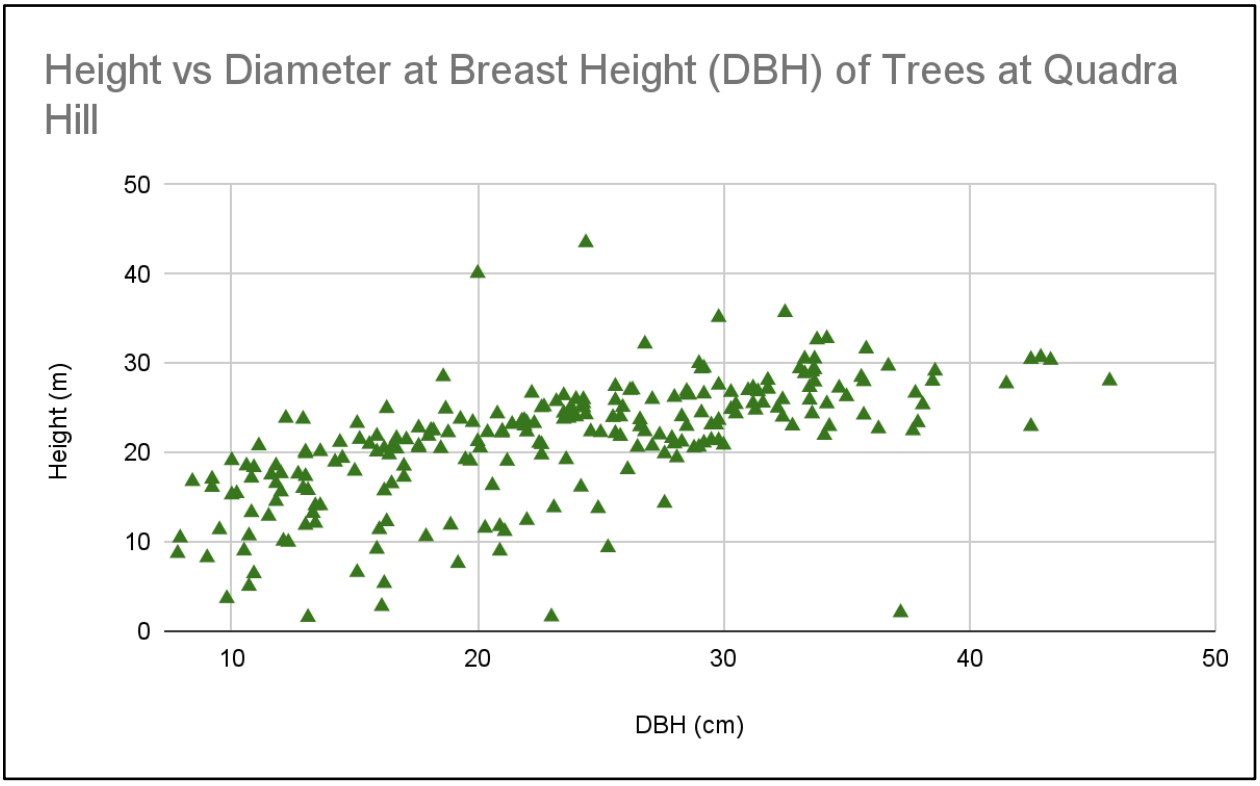

Figure 7: *Height and DBH of all trees sampled within the 10 plots at Quadra Hill. Raw data in Appendix 1.*

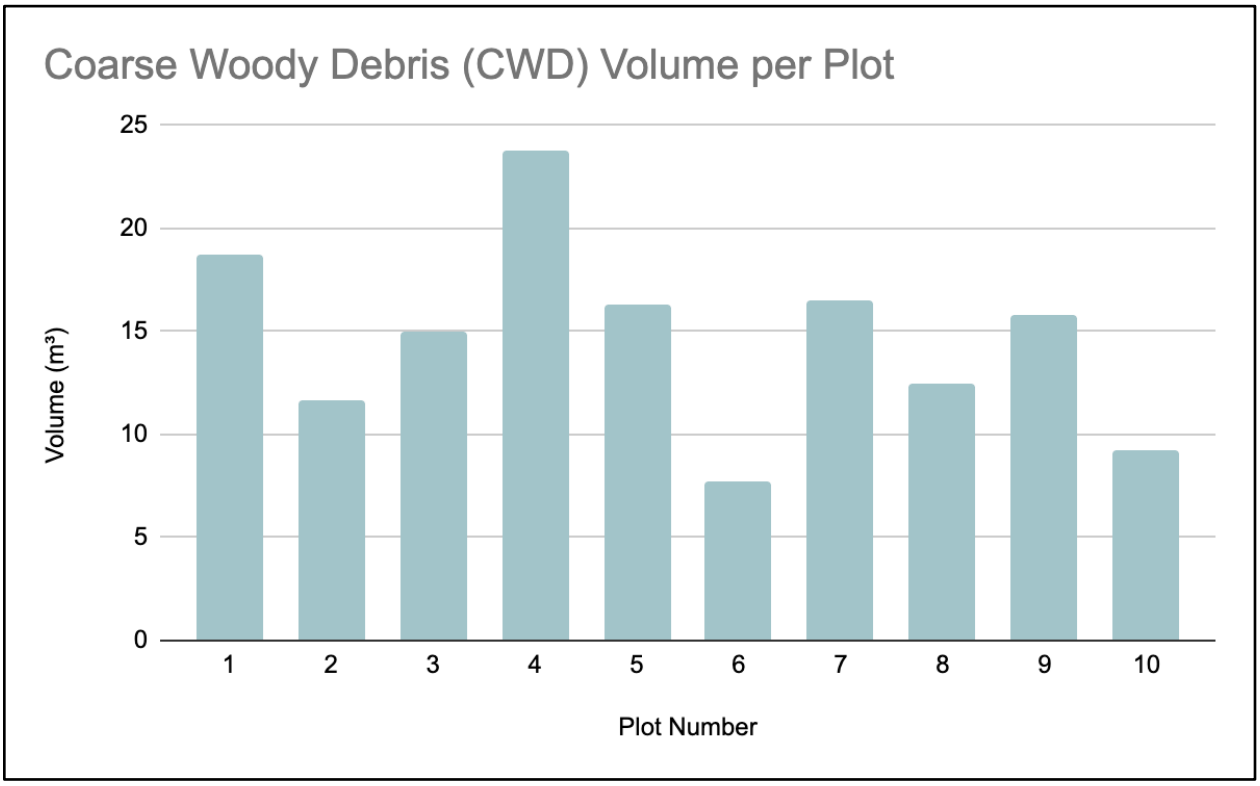

Figure 8: *Total volume of CWD at each plot in Quadra Hill. Raw data in Appendix 2.*

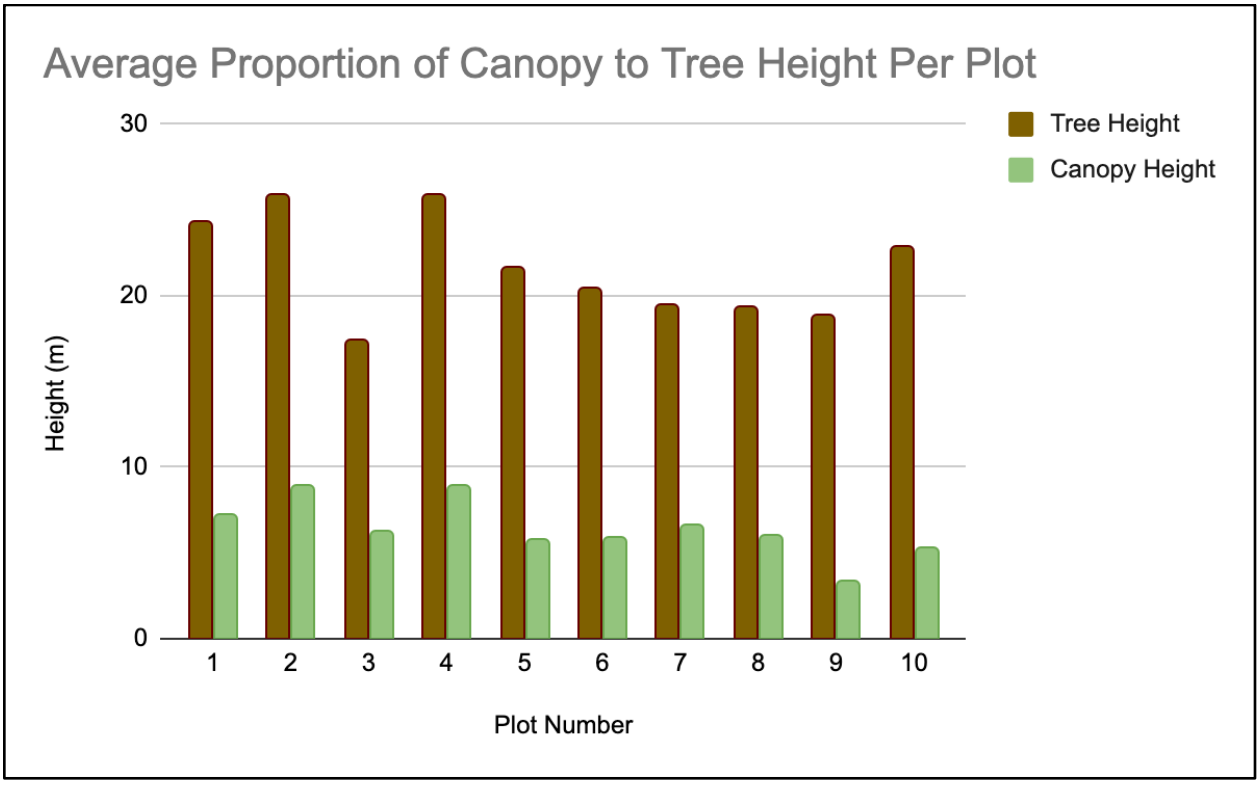

Figure 9: *Average proportion of canopy to tree height per plot of trees measured at Quadra Hill. Raw data in Appendix 1.*

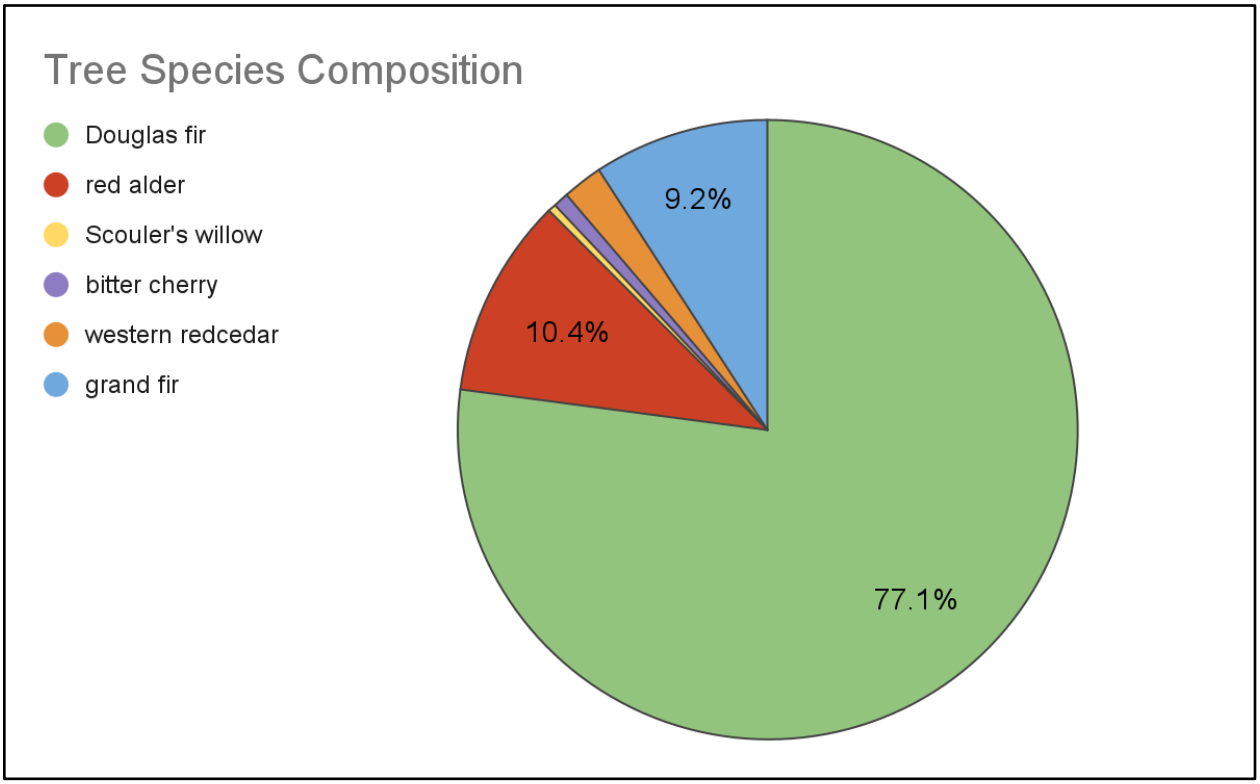

Figure 10: *Tree species composition of all Quadra Hill sample sites combined. Raw data in Appendix 1.*

5.0 Discussion

5.1 Observations

The data shows that the trees within the stand are experiencing stress from competition with surrounding trees, as the canopy consists of primarily Douglas fir trees in a similar age and height range with short live crowns, and the tree core samples (see Figure 11) revealed that the rings were more closely packed further from the pith, implying growth has slowed overtime—especially in the past 5 years.

Figure 11: *Example of a Douglas fir core, held by Mira.*

A notable amount of the snags were present at a suppressed canopy height, primarily Douglas fir and red alder. Their deaths were likely due to lack of light from the dense canopy. It is not a surprise that these species died while suppressed, as opposed to the more shade tolerant Western red cedar. Dominant Western redcedar trees in the canopy were remainders from earlier logging harvests.

Some large Western redcedar and Douglas fir stumps showed how the site had previously been more productive, i.e. capable of producing large trees. Tall stumps confirmed a history of pre-chainsaw harvest in the area. According to Keith Erickson, the need to cut the log at a higher point was likely due to a dense understory making working with saws difficult, also alluding to a historical ecosystem type with such an understory (personal communication, June 26, 2024).

5.2 Limitations

The use of multiple surveyors introduced a predictable margin of error due to variations in individual measurement techniques and interpretation of the data. While the use of a laser pointer improved the accuracy of tree height and live crown height measurements, the canopy was often obscured, making it challenging to identify the live crown and apex of every tree accurately. It was not always possible to measure a completely straight line from the person measuring tree height to the tree at breast height, potentially impacting measurement precision. Identifying the species CWD with a decay class of 4 or 5 was also problematic, as severe decomposition made misidentifications more likely. The terrain's tilt angle was difficult to measure accurately aw well, as the observer needed to position themselves close to the ground, which was not always feasible due to difficult terrain and dense patches of stinging nettle.

5.3 Recommendations

Selective thinning should mimic the natural windthrow processes, which leave snags and fallen trees to facilitate carbon recycling within the ecosystem. Retaining trees near stumps is important, as they are likely integrated into preserved mycelium networks (due to logging machines avoiding existing stumps and therefore keeping the soil around it intact), which enhance nutrient exchange and overall forest health. Thinning Douglas firs around non Douglas fir trees, especially early successional species like red alder, will maximize biodiversity. Additionally, reducing Douglas fir density around desired understory species, such as sword fern, will support their population growth and contribute to the recovery of the desired ecosystem communities.

6.0 Acknowledgments

We would like to acknowledge the project managers Keith Erickson (RPBio) and Adam Huggins, as well as Herb Hammond's contributions to the site's restoration prescription, and Michelle Thompson's contribution to the 2023 baseline report. We would like to acknowledge the Galiano Conservancy Association's summer workers Eve Ruth, Clem Castagnas and Thomas Heinrich for assisting in data collection.

We would like to thank the University of Victoria, the Continued Education Department, Dr. Eric Higgs and Emma Street for teaching and facilitating the Galiano field course (ER412/ES471).

7.0 References

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8.0 Appendix

Appendix 1: *Forest Mensuration Raw Data*

Plot 1

Plot Information				Tree Information					Tree Height							Stand Age	
Plot	Treatment	Date	Plot Size	Tree	Species	DBH	Basal Area	Crown Class	L -> Top	L -> LC	L -> Base	Distance	Height	Live Crown	LCR	Count Height	Count Age
#		sampled	m2	#		cm	m2		%	%	%	m	m	m	%	m	Years
1		26-Jun-24	200	1	Fd	36.3	0.1035	C	95.00%	50.00%	-13.00%	21	22.68	9.45	41.67%		
1		26-Jun-24	200	2	Fd	28	0.0616	C	92.00%	70.00%	-8.00%	21	21	4.62	22.00%		
1		26-Jun-24	200	3	Fd	32.5	0.0830	C	96.00%	23.00%	-9.00%	34	35.7	24.82	69.52%		
1		26-Jun-24	200	4	Fd	42.5	0.1419	C	98.00%	47.00%	-7.00%	29	30.45	14.79	48.57%		
1		26-Jun-24	200	5	Fd	42.5	0.1419	C	98.00%	66.00%	-10.00%	21.25	22.95	6.8	29.63%		
1		26-Jun-24	200	6	Dr	27.4	0.0590	C	96.00%	70.00%	-10.00%	20.75	21.995	5.395	24.53%		
1		26-Jun-24	200	7	Fd	11.1	0.0097	S	no data	no data	no data	no data	#VALUE!	#VALUE!	#VALUE!		
1		26-Jun-24	200	8	Fd	37.9	0.1128	C	86.00%	65.00%	4.00%	28.5	23.37	5.985	25.61%		
1		26-Jun-24	200	9	Fd	28.5	0.0638	C	90.00%	70.00%	1.00%	25.8	22.962	5.16	22.47%	1.3	28
1		26-Jun-24	200	10	Fd	18.1	0.0257	I	90.00%	75.00%	0.00%	25	22.5	3.75	16.67%		
1		26-Jun-24	200	11	Fd	15	0.0177	I	80.00%	80.00%	2.00%	23	17.94	0	0.00%		
1		26-Jun-24	200	12	Fd	23.2	0.0423	C	90.00%	70.00%	0.00%	28.6	25.74	5.72	22.22%		
1		26-Jun-24	200	13	Dr	19.2	0.0290	S	42.00%	42.00%	4.00%	20	7.6	0	0.00%		
1		26-Jun-24	200	14	Dr	34.2	0.0919	C	80.00%	75.00%	1.00%	41.5	32.785	2.075	6.33%		
1		26-Jun-24	200	15	Dr	15.1	0.0179	I	86.00%	68.00%	4.00%	28.4	23.288	5.112	21.95%		
1		26-Jun-24	200	16	Dr	37.8	0.1122	C	102.00%	62.00%	8.40%	28.5	26.676	11.4	42.74%		
1		26-Jun-24	200	17	Dr	34.1	0.0913	C	70.00%	51.00%	6.00%	34.3	21.952	6.517	29.69%	1.3	28
1		26-Jun-24	200	18	Dr	38.1	0.1140	C	72.00%	48.00%	-2.00%	34.3	25.382	8.232	32.43%	1.3	28
1		26-Jun-24	200	19	Dr	35.8	0.1007	C	105.00%	65.00%	2.00%	30.7	31.621	12.28	38.83%		
1		26-Jun-24	200	20	Dr	29.2	0.0670	C	92.00%	68.00%	-4.00%	27.7	26.592	6.648	25.00%	1.3	1.3
1		26-Jun-24	200	21	Dr	12.7	0.0127	S	74.00%	74.00%	-11.50%	20.6	17.613	0	0.00%		
1		26-Jun-24	200	22	Dr	33.3	0.0871	C	89.00%	47.00%	-11.00%	30.5	30.5	12.81	42.00%		

Plot 2

Plot Information				Tree Information					Tree Height							Stand Age	
Plot	Treatment	Date	Plot Size	Tree	Species	DBH	Basal Area	Crown Class	L -> Top	L -> LC	L -> Base	Distance	Height	Live Crown	LCR	Count Height	Count Age
#		sampled	m2	#		cm	m2		%	%	%	m	m	m	%	m	Years
2		28-Jun-24	200	1	Fd	31.8	0.0794	C	92.00%	41.00%	-7.00%	28.4	28.116	14.484	51.52%	1.3	31
2		28-Jun-24	200	2	Dr	10.9	0.0093	S	60.00%	60%	-10.00%	26.2	18.34	0	0.00%		
2		28-Jun-24	200	3	Fd	19.3	0.0293	I	82.00%	50.00%	-8.00%	26.4	23.76	8.448	35.56%		
2		28-Jun-24	200	4	Fd	25.6	0.0515	C	92.00%	66.00%	-1.00%	27.8	25.854	7.228	27.96%		
2		28-Jun-24	200	5	Fd	29.5	0.0683	I	92.00%	59.00%	-5.00%	23.83	23.1151	7.8639	34.02%	1.3	29
2		28-Jun-24	200	6	Fd	43.3	0.1473	C	86.00%	46.00%	-11.00%	31.3	30.361	12.52	41.24%		
2		28-Jun-24	200	7	Fd	34.2	0.0919	C	88.00%	53.00%	-16.00%	24.5	25.48	8.575	33.65%		
2		28-Jun-24	200	8	Dr	16.7	0.0219	C	91.00%	91%	-17.00%	20	21.6	0	0.00%		
2		28-Jun-24	200	9	Fd	25.6	0.0515	C	84.00%	51.00%	-9.00%	29.5	27.435	9.735	35.48%	1.3	32
2		28-Jun-24	200	10	Fd	33.1	0.0860	C	96.00%	44.00%	-18.00%	25.8	29.412	13.416	45.61%		
2		28-Jun-24	200	11	Fd	22	0.0380	C	70.00%	47.00%	-7.00%	29	22.33	6.67	29.87%		
2		28-Jun-24	200	12	Fd	33.7	0.0892	C	98.00%	56.00%	-13.00%	26.4	29.304	11.088	37.84%		
2		28-Jun-24	200	13	Fd	22.2	0.0387	C	92.00%	56.00%	-16.00%	24.7	26.676	8.892	33.33%		
2		28-Jun-24	200	14	Fd	33.7	0.0892	C	94.00%	50.00%	-1.00%	29.4	27.93	12.936	46.32%		
2		28-Jun-24	200	15	Fd	33.8	0.0897	C	94.00%	49.00%	-9.00%	31.7	32.651	14.265	43.69%		
2		28-Jun-24	200	16	Fd	24.6	0.0475	C	98.00%	64.00%	-16.00%	19.6	22.344	6.664	29.82%		

Plot 3

Plot Information				Tree Information					Tree Height							Stand Age	
Plot	Treatment	Date	Plot Size	Tree	Species	DBH	Basal Area	Crown Class	L -> Top	L -> LC	L -> Base	Distance	Height	Live Crown	LCR	Count Height	Count Age
#		sampled	m2	#		cm	m2		%	%	%	m	m	m	%	m	Years
3		27-Jun-24	200	1	Fd	10	0.0079	I	84.00%	62.00%	6.00%	19.6	15.288	4.312	28.21%	1.3	21
3		27-Jun-24	200	2	Fd	16.5	0.0214	I	88.00%	57.00%	8.00%	25.7	20.56	7.967	38.75%		
3		27-Jun-24	200	3	Fd	20.6	0.0333	I	82.00%	57.00%	11.00%	23	16.33	5.75	35.21%		
3		27-Jun-24	200	4	Fd	27.9	0.0611	C	92.00%	71.00%	13.00%	27.35	21.6065	5.7435	26.58%	1.3	27
3		27-Jun-24	200	5	Fd	33.7	0.0892	C	98.00%	67.00%	16.00%	37.2	30.504	11.532	37.80%		
3		27-Jun-24	200	6	Fd	32.8	0.0845	C	79.00%	62.00%	17.00%	37.1	23.002	6.307	27.42%	1.3	29
3		27-Jun-24	200	7	Fd	35.7	0.1001	C	86.00%	74.00%	16.00%	34.6	24.22	4.152	17.14%		
3		27-Jun-24	200	8	Fd	16.4	0.0211	I	76.00%	67.00%	15.00%	32.4	19.764	2.916	14.75%		
3		27-Jun-24	200	9	Fd	7.9	0.0049	S	88.00%	70.00%	9.00%	13.25	10.4675	2.385	22.78%		
3		27-Jun-24	200	10	Dr	22.7	0.0405	C	95.00%	52.00%	15.00%	31.43	25.144	13.5149	53.75%		
3		27-Jun-24	200	11	Dr	21.8	0.0373	C	98.00%	58.00%	12.00%	27.32	23.4952	10.928	46.51%		
3		27-Jun-24	200	12	Fd	10.7	0.0090	S	64.00%	36.00%	11.00%	20.19	10.7007	5.6532	52.83%		
3		27-Jun-24	200	13	Fd	10.8	0.0092	I	73.00%	35.00%	11.00%	21.45	13.299	8.151	61.29%		
3		27-Jun-24	200	14	Fd	7.8	0.0048	S	59.00%	31.00%	8.00%	17.12	8.7312	4.7936	54.90%		
3		27-Jun-24	200	15	Dr	21.9	0.0377	C	92.00%	60.00%	13.00%	29.9	23.621	9.568	40.51%		
3		27-Jun-24	200	16	Fd	9.8	0.0075		55.00%	55.00%	-4.00%	6.22	3.6698	0	0.00%		
3		27-Jun-24	200	17	Dr	20.9	0.0343		86.00%	86.00%	4.00%	10.96	8.9872	0	0.00%		
3		27-Jun-24	200	18	Fd	10.5	0.0087	S	75.00%	44.00%	6.00%	13.05	9.0045	4.0455	44.93%		
3		27-Jun-24	200	19	Fd	42.9	0.1445	D	84.00%	49.00%	14.00%	43.85	30.695	15.3475	50.00%		
3		27-Jun-24	200	20	Fd	16.5	0.0214	I	88.00%	42.00%	13.00%	22.05	16.5375	10.143	61.33%		
3		27-Jun-24	200	21	Fd	13.4	0.0141	S	56.00%	40.00%	11.00%	26.9	12.105	4.304	35.56%		
3		27-Jun-24	200	22	Dr	15.9	0.0199		86.00%	86.00%	14.00%	27.9	20.088	0	0.00%		
3		27-Jun-24	200	23	Fd	11.5	0.0104	I	65.00%	45.00%	13.00%	24.8	12.896	4.96	38.46%		

Plot 4

Plot Information				Tree Information					Tree Height							Stand Age	
Plot	Treatment	Date	Plot Size	Tree	Species	DBH	Basal Area	Crown Class	L -> Top	L -> LC	L -> Base	Distance	Height	Live Crown	LCR	Count Height	Count Age
#		sampled	m2	#		cm	m2		%	%	%	m	m	m	%	m	Years
4		27-Jun-24	200	1	Fd	29	0.0661	C	90.00%	46.00%	-35.00%	24	30	10.56	35.20%		
4		27-Jun-24	200	2	Fd	20.8	0.0340	I	82.00%	53.00%	-34.00%	21	24.36	6.09	25.00%		
4		27-Jun-24	200	3	Fd	36.7	0.1058	C	90.00%	48.00%	-20.00%	27	29.7	11.34	38.18%		
4		27-Jun-24	200	4	Fd	18.2	0.0260	I	89.00%	38.00%	-18.00%	21	22.47	10.71	47.66%		
4		27-Jun-24	200	5	Fd	33.3	0.0871	C	89.00%	42.00%	-22.00%	26	28.86	12.22	42.34%	1.3	30
4		27-Jun-24	200	6	Fd	33.6	0.0887	C	102.00%	62.00%	-12.00%	25.5	29.07	10.2	35.09%		
4		27-Jun-24	200	7	Fd	24	0.0452	C	98.00%	63.00%	-15.00%	23	25.99	8.05	30.97%		
4		27-Jun-24	200	8	Fd	26.3	0.0543	C	82%	54.00%	-22.00%	26	27.04	7.28	26.92%		
4		27-Jun-24	200	9	Fd	32.2	0.0814	C	98.00%	55.00%	-27.00%	20	25	8.6	34.40%		
4		27-Jun-24	200	10	Fd	28.6	0.0642	C	82.00%	45.00%	-16.00%	27	26.46	9.99	37.76%	1.3	30
4		27-Jun-24	200	11	Fd	24.3	0.0464	C	98.00%	52.00%	-20.00%	22	25.96	10.12	38.98%		
4		27-Jun-24	200	12	Fd	29.1	0.0665	C	80.00%	40.00%	-22.00%	24	24.48	9.6	39.22%		
4		27-Jun-24	200	13	Fd	27.1	0.0577	C	79.00%	45.00%	-19.00%	26.5	25.97	9.01	34.69%		
4		27-Jun-24	200	14	Fd	19.8	0.0308	C	69.00%	50.00%	-21.00%	26	23.4	4.94	21.11%		
4		27-Jun-24	200	15	Fd	28.5	0.0638	C	84.00%	46.00%	-20.00%	25.5	26.52	9.69	36.54%		
4		27-Jun-24	200	16	Fd	31.8	0.0794	C	92.00%	53.00%	-21.00%	24	27.12	9.36	34.51%		
4		27-Jun-24	200	17	Fd	22.3	0.0391	C	73.00%	46.00%	-24.00%	24	23.28	6.48	27.84%		
4		27-Jun-24	200	18	Ws	*104.5	#VALUE!	S	60.00%	26.00%	-24.00%	21.5	18.06	7.31	40.48%		
4		27-Jun-24	200	19	Vb	17	0.0227	I	58.00%	58.00%	-25.00%	22.3	18.509	0	0.00%		
4		27-Jun-24	200	20	Fd	29.1	0.0665	C	98.00%	48.00%	-23.00%	24.3	29.403	12.15	41.32%	1.3	34
4		27-Jun-24	200	21	Fd	26.8	0.0564	C	94.00%	43.00%	-23.00%	27.5	32.175	14.025	43.59%		

Plot 5

Plot Information				Tree Information					Tree Height							Stand Age	
Plot	Treatment	Date	Plot Size	Tree	Species	DBH	Basal Area	Crown Class	L -> Top	L -> LC	L -> Base	Distance	Height	Live Crown	LCR	Count Height	Count Age
#		sampled	m2	#		cm	m2		%	%	%	m	m	m	%	m	Years
5		28-Jun-24	200	1	Fd	32.4	0.0824	C	94.00%	35.00%	-6.00%	25.94	25.94	15.3046	59.00%	1.3	26
5		28-Jun-24	200	2	Fd	38.5	0.1164	C	94.00%	25.00%	-9.00%	27.2	28.016	18.768	66.99%		
5		28-Jun-24	200	3	Cw	12.3	0.0119	S	73.00%	73.00%	-13.00%	11.6	9.976	0	0.00%		
5		28-Jun-24	200	4	Bg	30.3	0.0721	C	88.00%	46.00%	14.00%	33.58	24.8492	14.1036	56.76%		31
5		28-Jun-24	200	5	Bg	21.2	0.0353	I	98.00%	98.00%	10.00%	21.65	19.052	0	0.00%	1.3	
5		28-Jun-24	200	6	Bg	22.6	0.0401	I	94.00%	94.00%	6.00%	22.45	19.756	0	0.00%		
5		28-Jun-24	200	7	Bg	15.2	0.0181	I	99.00%	63.00%	14.00%	25.3	21.505	9.108	42.35%		
5		28-Jun-24	200	8	Dr	15.1	0.0179	S	63.00%	63.00%	15.00%	13.75	6.6	0	0.00%		
5		28-Jun-24	200	9	Cw	16.3	0.0209	S	87.00%	87.00%	4.00%	14.8	12.284	0	0.00%		
5		28-Jun-24	200	10	Bg	37.7	0.1116	C	94.00%	94.00%	-14.00%	20.8	22.464	0	0.00%		
5		28-Jun-24	200	11	Bg	29	0.0661	C	92.00%	65.00%	-16.00%	19.1	20.628	5.157	25.00%		
5		28-Jun-24	200	12	Bg	24.4	0.0468	C	90.00%	62.00%	-4.00%	46.3	43.522	12.964	29.79%		
5		28-Jun-24	200	13	Bg	16.2	0.0206	I	70.00%	56.00%	9.00%	25.8	15.738	3.612	22.95%		
5		28-Jun-24	200	14	Bg	29.8	0.0697	C	98.00%	98.00%	-3.00%	23.4	23.634	0	0.00%		
5		28-Jun-24	200	15	Bg	24.3	0.0464	C	68.00%	47.00%	-12.00%	31.3	25.04	6.573	26.25%	1.3	26
5		28-Jun-24	200	16	Fd	35.7	0.1001	C	80.00%	52.00%	-12.00%	30.4	27.968	8.512	30.43%		
5		28-Jun-24	200	17	Fd	29.5	0.0683	C	74.00%	58.00%	-12.00%	24.9	21.414	3.984	18.60%		

Plot 6

Plot Information				Tree Information					Tree Height							Stand Age	
Plot	Treatment	Date	Plot Size	Tree	Species	DBH	Basal Area	Crown Class	L -> Top	L -> LC	L -> Base	Distance	Height	Live Crown	LCR	Count Height	Count Age
#		sampled	m2	#		cm	m2		%	%	%	m	m	m	%	m	Years
6		28-Jun-24	200	1	Bg	20	0.0314	C	91.00%	63.00%	6.00%	25	21.25	7	32.94%		
6		28-Jun-24	200	2	Bg	23.5	0.0434	C	92.00%	34.00%	-18.00%	24	26.4	13.92	52.73%		
6		28-Jun-24	200	3	Fd	30	0.0707	C	79.00%	46.00%	-28.00%	19.5	20.865	6.435	30.84%		
6		28-Jun-24	200	4	Fd	35.6	0.0995	D	89.00%	45.00%	-16.00%	27.1	28.455	11.924	41.90%		
6		28-Jun-24	200	5	Bg	21.8	0.0373	C	96.00%	52.00%	-14.00%	21.4	23.54	9.416	40.00%		
6		28-Jun-24	200	6	Dr	9.5	0.0071	S	77.00%	77.00%	-14.00%	12.5	11.375	0	0.00%		
6		28-Jun-24	200	7	Bg	13.6	0.0145	S	94.00%	94.00%	-16.00%	12.8	14.08	0	0.00%		
6		28-Jun-24	200	8	Bg	18	0.0254	C	79.00%	36.00%	-14.00%	23.5	21.855	10.105	46.24%		
6		28-Jun-24	200	9	Fd	16	0.0201	S	78.00%	78.00%	-17.00%	12	11.4	0	0.00%		
6		28-Jun-24	200	10	Bg	31	0.0755	D	96.00%	60.00%	-1.00%	27.8	26.966	10.008	37.11%	1.3	26
6		28-Jun-24	200	11	Fd	38.6	0.1170	D	96.00%	42.00%	-22.00%	24.7	29.146	13.338	45.76%		
6		28-Jun-24	200	12	Dr	21.1	0.0350	S	34.00%	34.00%	-19.00%	21.1	11.183	0	0.00%		
6		28-Jun-24	200	13	Bg	13	0.0133	I	61.00%	34.00%	-23.00%	23.7	19.908	6.399	32.14%		
6		28-Jun-24	200	14	Fd	24.4	0.0468	C	81.00%	44.00%	-16.00%	25	24.25	9.25	38.14%		
6		28-Jun-24	200	15	Dr	10.7	0.0090	S	4.00%	4.00%	-19.00%	21.9	5.037	0	0.00%		
6		28-Jun-24	200	16	Fd	25.6	0.0515	C	67.00%	45.00%	-16.00%	26.7	22.161	5.874	26.51%	1.3	31
6		28-Jun-24	200	17	Fd	12.9	0.0131	I	62.00%	42.00%	-26.00%	27	23.76	5.4	22.73%		
6		28-Jun-24	200	18	Fd	27.6	0.0598		91.00%	91.00%	4.00%	16.5	14.355	0	0.00%		
6		28-Jun-24	200	19	Fd	22.5	0.0398	I	68.00%	52.00%	-10.00%	27	21.06	4.32	20.51%	4.75%	29
6		28-Jun-24	200	20	Bg	17.6	0.0243	C	100.00%	71.00%	7.00%	22.3	20.739	6.467	31.18%		
6		28-Jun-24	200	21	Bg	21	0.0346	C	86.00%	86.00%	-15.00%	22	22.22	0	0.00%		
6		28-Jun-24	200	22	Bg	14.5	0.0165	I	79.00%	60.00%	-12.00%	21.30	19.383	4.047	20.88%		
6		28-Jun-24	200	23	Bg	23.5	0.0434	C	99.00%	76.00%	2.00%	25.2	24.444	5.796	23.71%		
6		28-Jun-24	200	24	Bg	23.8	0.0445	C	82.00%	45.00%	-10.00%	27.3	25.116	10.101	40.22%		

Plot 7

Plot Information				Tree Information						Tree Height							Stand Age	
Plot	Treatment	Date	Plot Size	Tree	Status	Species	DBH	Basal Area	Crown Class	L -> Top	L -> LC	L -> Base	Distance	Height	Live Crown	LCR	Count Height	Count Age
#		sampled	m2	#			cm	m2		%	%	%	m	m	m	%	m	Years
7		9-Jul-24	200	1	A	Fd	45.7	0.1640	C	106.00%	38.00%	4.00%	27.5	28.05	18.7	66.67%		
7		9-Jul-24	200	2	D	Cw	37.2	0.1087		15.00%	15.00%	-26.00%	5.1	2.091	0	0.00%		
7		9-Jul-24	200	3	A	Fd	31.2	0.0765	C	100.00%	45.00%	5.00%	28.7	27.265	15.785	57.89%		
7		9-Jul-24	200	4	A	Fd	18.8	0.0278	C	87.00%	57.00%	-2.00%	25	22.25	7.5	33.71%		
7		9-Jul-24	200	5	A	Fd	26.6	0.0556	C	74.00%	52.00%	-1.00%	31.6	23.7	6.952	29.33%	1.3	28
7		9-Jul-24	200	6	A	Fd	31.6	0.0784	C	86.00%	38.00%	-4.00%	28.4	25.56	13.632	53.33%	1.3	31
7		9-Jul-24	200	7	D	Fd	18.9	0.0281		46.00%	46.00%	-3.00%	24.3	11.907	0	0.00%		
7		9-Jul-24	200	8	A	Fd	10.2	0.0082	I	93.00%	74.00%	-4.00%	15.9	15.423	3.021	19.59%		
7		9-Jul-24	200	9	D	Fd	16.1	0.0204		65.00%	65.00%	-17.00%	3.4	2.788	0	0.00%		
7		9-Jul-24	200	10	A	Fd	30.5	0.0731	C	64.00%	42.00%	-5.00%	35.3	24.357	7.766	31.88%	1.3	34
7		9-Jul-24	200	11	A	Fd	33.5	0.0881	C	83.00%	53.00%	-13.00%	28.45	27.312	8.535	31.25%		
7		9-Jul-24	200	12	D	Fd	20.3	0.0324		39.00%	39.00%	-11.00%	23.1	11.55	0	0.00%		
7		9-Jul-24	200	13	A	Fd	26.2	0.0539	C	98.00%	60.00%	-14.00%	24.1	26.992	9.158	33.93%		
7		9-Jul-24	200	14	D	Fd	15.9	0.0199		27.00%	27.00%	-13.00%	23	9.2	0	0.00%		
7		9-Jul-24	200	15	A	Fd	12	0.0113	I	60.00%	47.00%	-12.00%	21.7	15.624	2.821	18.06%		
7		9-Jul-24	200	16	A	Fd	32.4	0.0824	C	90.00%	60.00%	7.00%	28.9	23.987	8.67	36.14%		
7		9-Jul-24	200	17	A	Fd	29.8	0.0697	C	98.00%	60.00%	5.00%	37.8	35.154	14.364	40.86%		
7		9-Jul-24	200	18	D	Fd	25.3	0.0503		49.00%	49.00%	5.00%	21.3	9.372	0	0.00%		
7		9-Jul-24	200	19	D	Fd	13.1	0.0135		14.00%	14.00%	-21.00%	4.45	1.5575	0	0.00%		
7		9-Jul-24	200	20	D	Dr	17.9	0.0252		50.00%	50.00%	6.00%	24.1	10.604	0	0.00%		
7		9-Jul-24	200	21	A	Fd	31.8	0.0794	C	94.00%	68.00%	8.00%	31.6	27.176	8.216	30.23%		
7		9-Jul-24	200	22	A	Fd	41.5	0.1353	C	92.00%	55.00%	2.00%	30.8	27.72	11.396	41.11%		
7		9-Jul-24	200	23	A	Fd	26.1	0.0535	C	81.60%	45.00%	0.00%	22.2	18.1152	8.1252	44.85%		
7		9-Jul-24	200	24	A	Fd	20	0.0314	C	101.00%	69.00%	2.00%	40.5	40.095	12.96	32.32%		

Plot 8

Plot Information				Tree Information						Tree Height							Stand Age	
Plot	Treatment	Date	Plot Size	Tree	Status	Species	DBH	Basal Area	Crown Class	L -> Top	L -> LC	L -> Base	Distance	Height	Live Crown	LCR	Count Height	Count Age
#		sampled	m2	#			cm	m2		%	%	%	m	m	m	%	m	Years
8		9-Jul-24	200	1	A	Fd	24	0.0452	C	81.00%	49.00%	-9.00%	26.7	24.03	8.544	35.56%		
8		9-Jul-24	200	2	D	Fd	13.6	0.0145		66.00%	66.00%	-8.00%	27.2	20.128	0	0.00%		
8		9-Jul-24	200	3	A	Fd	19.7	0.0305	C	61.00%	45.00%	-9.00%	27.25	19.075	4.36	22.86%		
8		9-Jul-24	200	4	A	Fd	28.8	0.0651	C	68.00%	61.00%	-11.00%	26	20.54	1.82	8.86%		
8		9-Jul-24	200	5	D	Fd	11.8	0.0109		62.00%	62.00%	-15.00%	18.9	14.553	0	0.00%		
8		9-Jul-24	200	6	A	Fd	22.6	0.0401	C	92.00%	71.00%	-6.00%	21.35	20.923	4.4835	21.43%		
8		9-Jul-24	200	7	A	Fd	18.5	0.0269	C	96.00%	75.00%	-1.00%	21.1	20.467	4.431	21.65%		
8		9-Jul-24	200	8		Fd	95	0.7088	S	77.00%		-1.00%	18.6	14.508	14.322	98.72%		
8		9-Jul-24	200	9	D	Fd	11.8	0.0109		89.00%	89.00%	-2.00%	18.2	16.562	0	0.00%		
8		9-Jul-24	200	10	A	Fd	14.4	0.0163	I	100.00%	65.00%	-2.00%	20.76	21.1752	7.266	34.31%		
8		9-Jul-24	200	11	A	Fd	21.4	0.0360	C	91.00%	55.00%	-5.00%	24.15	23.184	8.694	37.50%		
8		9-Jul-24	200	12	A	Fd	14.2	0.0158	I	72.00%	55.00%	-9.00%	23.4	18.954	3.978	20.99%		
8		9-Jul-24	200	13	A	Fd	29.2	0.0670	C	96.00%	54.00%	-8.00%	28.35	29.484	11.907	40.38%		
8		9-Jul-24	200	14	A	Fd	33.6	0.0887	C	94.00%	56.00%	-4.00%	24.86	24.3628	9.4468	38.78%		
8		9-Jul-24	200	15	A	Fd	25.8	0.0523	C	91.00%	61.00%	-9.00%	24.03	24.03	7.209	30.00%		
8		9-Jul-24	200	16	A	Fd	13	0.0133	S	94.00%	68.00%	-8.00%	19.7	20.094	5.122	25.49%		
8		9-Jul-24	200	17	A	Fd	24.2	0.0460	C	68.00%	57.00%	-8.00%	21.25	16.15	2.3375	14.47%		
8		9-Jul-24	200	18	A	Fd	29.8	0.0697	C	98.00%	71.00%	-3.00%	21.15	21.3615	5.7105	26.73%		
8		9-Jul-24	200	19	A	Fd	25.8	0.0523	C	98.00%	92.00%	-7.00%	20.8	21.84	1.248	5.71%		
8		9-Jul-24	200	20	D	Fd	22	0.0380		58.00%	58.00%	-4.00%	20.05	12.431	0	0.00%		
8		9-Jul-24	200	21	A	Fd	27.6	0.0598	C	91.00%	56.00%	-6.00%	20.5	19.885	7.175	36.08%	1.3	29
8		9-Jul-24	200	22	A	Fd	13.4	0.0141	S	61%	30.00%	-9.00%	20.1	14.07	6.231	44.29%		
8		9-Jul-24	200	23	D	Dr	16.2	0.0206		19.00%		-7.00%	20.64	5.3664	3.9216	73.08%		
8		9-Jul-24	200	24	A	Fd	26.5	0.0552	C	99.00%	62.00%	-19.00%	17.47	20.6146	6.4639	31.36%	1.3	28
8		9-Jul-24	200	25	A	Fd	24.9	0.0487	C	61.00%	46.00%	-21.00%	16.77	13.7514	2.5155	18.29%		
8		9-Jul-24	200	26	A	Cw	9	0.0064	S	48.00%	41.00%	-11.00%	13.98	8.2482	0.9786	11.86%		
8		9-Jul-24	200	27	A	Fd	33.5	0.0881	C	89.00%	54.00%	-9.00%	26.43	25.9014	9.2505	35.71%		
8		9-Jul-24	200	28	A	Fd	23.7	0.0441	C	91.00%	46.00%	-11.00%	24.1	24.582	10.845	44.12%	1.3	31
8		9-Jul-24	200	29	A	Fd	35	0.0962	C	83.00%	41.00%	-7.00%	29.2	26.28	12.264	46.67%		
8		9-Jul-24	200	30	A	Fd	12.9	0.0131	S	75.00%	51.00%	-12.00%	18.4	16.008	4.416	27.59%		
8		9-Jul-24	200	31	A	Fd	9.2	0.0066	S	71.00%	49.00%	-13.00%	19.2	16.128	4.224	26.19%		
8		9-Jul-24	200	32	A	Cw	8.4	0.0055	S	41.00%	14.00%	-51.00%	18.25	16.79	4.9275	29.35%		
8		9-Jul-24	200	33	A	Fd	23.6	0.0437	C	66.00%	44.00%	-7.00%	26.35	19.2355	5.797	30.14%		
8		9-Jul-24	200	34	A	Fd	31.4	0.0774	C	94.00%	51.00%	-14.00%	24.85	26.838	10.6855	39.81%		

Plot 9

Plot Information				Tree Information						Tree Height							Stand Age	
Plot	Treatment	Date	Plot Size	Tree	Status	Species	DBH	Basal Area	Crown Class	L -> Top	L -> LC	L -> Base	Distance	Height	Live Crown	LCR	Count Height	Count Age
#		sampled	m2	#			cm	m2		%	%	%	m	m	m	%	m	Years
9		10-Jul-24	200	1	A	Fd	28.1	0.0620	C	76.00%	98.00%	-4.00%	24.3	19.44	-5.346	-27.50%		
9		10-Jul-24	200	2	A	Fd	23.1	0.0419	C	52.00%	35.00%	-9.00%	22.7	13.847	3.859	27.87%	1.3	21
9		10-Jul-24	200	3	D	Fd	9.2	0.0066		63.00%	63.00%	-5.00%	25.07	17.0476	0	0.00%		
9		10-Jul-24	200	4	A	Fd	25	0.0491	C	73.00%	49.00%	-6.00%	28.17	22.2543	6.7608	30.38%		
9		10-Jul-24	200	5	A	Fd	20.1	0.0317	C	79.00%	52.00%	-9.00%	23.35	20.548	6.3045	30.68%	1.3	27
9		10-Jul-24	200	6	A	Fd	26.6	0.0556	C	98.00%	57.00%	-6.00%	22.03	22.9112	9.0323	39.42%		
9		10-Jul-24	200	7	D	Fd	20.9	0.0343		55.00%	55.00%	-9.00%	18.35	11.744	0	0.00%		
9		10-Jul-24	200	8	A	Fd	16.2	0.0206	C	90.00%	58.00%	-9.00%	20.69	20.4831	6.6208	32.32%		
9		10-Jul-24	200	9	A	Fd	11.6	0.0106	C	82.00%	63.00%	-5.00%	20.13	17.5131	3.8247	21.84%		
9		10-Jul-24	200	10	A	Fd	29.2	0.0670	C	73.00%	59.00%	-5.00%	27.04	21.0912	3.7856	17.95%		
9		10-Jul-24	200	11	A	Fd	16.7	0.0219	C	72.00%	59.00%	-7.00%	25.86	20.4294	3.3618	16.46%		
9		10-Jul-24	200	12	D	Dr	17	0.0227		77.00%	77.00%	-6.00%	20.8	17.264	0	0.00%		
9		10-Jul-24	200	13	A	Fd	28.3	0.0629	C	73.00%	59.00%	-5.00%	27.17	21.1926	3.8038	17.95%		
9		10-Jul-24	200	14	D	Fd	23	0.0415		25.00%	25.00%	-11.00%	4.49	1.6164	0	0.00%		
9		10-Jul-24	200	15	A	Fd	22.6	0.0401	C	89.00%	56.00%	-6.00%	26.37	25.0515	8.7021	34.74%		
9		10-Jul-24	200	16	A	Fd	13	0.0133	I	98.00%	79.00%	-10.00%	11	11.88	2.09	17.59%		
9		10-Jul-24	200	17	A	Fd	28.3	0.0629	C	92.00%	63.00%	-8.00%	24.04	24.04	6.9716	29.00%		
9		10-Jul-24	200	18	A	Fd	34.3	0.0924	C	98.00%	61.00%	-9.00%	21.45	22.9515	7.9365	34.58%		
9		10-Jul-24	200	19	A	Fd	19.5	0.0299	C	69.00%	97.00%	-7.00%	25.3	19.228	-7.084	-36.84%		
9		10-Jul-24	200	20	A	Fd	13	0.0133	I	90.00%	64.00%	-5.00%	18.26	17.347	4.7476	27.37%		
9		10-Jul-24	200	21	D	Fd	10.9	0.0093		37.00%	37.00%	-6.00%	15	6.45	0	0.00%		
9		10-Jul-24	200	22	A	Fd	27.1	0.0577	C	72.00%	95.00%	-9.00%	25.6	20.736	-5.888	-28.40%		
9		10-Jul-24	200	23	A	Fd	26.8	0.0564	C	81.00%	56.00%	-11.00%	24.3	22.356	6.075	27.17%		
9		10-Jul-24	200	24	A	Fd	15.6	0.0191	C	91.00%	66.00%	-6.00%	21.6	20.952	5.4	25.77%		
9		10-Jul-24	200	25	A	Fd	17.1	0.0230	C	92.00%	76.00%	-9.00%	21.24	21.4524	3.3984	15.84%		
9		10-Jul-24	200	26	A	Fd	17.6	0.0243	C	98.00%	79.00%	-2.00%	22.78	22.78	4.3282	19.00%		
9		10-Jul-24	200	27	A	Fd	31.3	0.0769	C	96.00%	59.00%	-9.00%	23.6	24.78	8.732	35.24%	1.3	31
9		10-Jul-24	200	28	D	Fd	10.6	0.0088		84.00%	84.00%	-3.00%	21.3	18.531	0	0.00%		
9		10-Jul-24	200	29	A	Fd	21.9	0.0377	C	91.00%	58.00%	-2.00%	24.73	22.9989	8.1609	35.48%		
9		10-Jul-24	200	30	D	Fd	13.1	0.0135		70.00%	70.00%	-3.00%	21.62	15.7826	0	0.00%		
9		10-Jul-24	200	31	A	Fd	17.6	0.0243	C	79.00%	51.00%	-1.00%	25.7	20.56	7.196	35.00%		

Plot 10

Plot Information				Tree Information						Tree Height							Stand Age	
Plot	Treatment	Date	Plot Size	Tree	Status	Species	DBH	Basal Area	Crown Class	L -> Top	L -> LC	L -> Base	Distance	Height	Live Crown	LCR	Count Height	Count Age
#		sampled	m2	#			cm	m2		%	%	%	m	m	m	%	m	Years
10		10-Jul-24	200	1	A	Fd	25.9	0.0527	C	91.00%	70.00%	-4.00%	26.4	25.08	5.544	22.11%	1.3	29
10		10-Jul-24	200	2	D	Vb	10	0.0079		78.00%	78.00%	-6.00%	22.78	19.1352	0	0.00%		
10		10-Jul-24	200	3	A	Fd	22	0.0380	C	98.00%	83.00%	-3.00%	23.1	23.331	3.465	14.85%		
10		10-Jul-24	200	4	A	Fd	25.5	0.0511	C	99.00%	85.00%	-19.00%	20.3	23.954	2.842	11.86%		
10		10-Jul-24	200	5	A	Fd	16.3	0.0209	I	97.00%	72.00%	-7.00%	24	24.96	6	24.04%		
10		10-Jul-24	200	6	A	Fd	23.5	0.0434	C	97.00%	61.00%	-12.00%	21.8	23.762	7.848	33.03%		
10		10-Jul-24	200	7	A	Fd	15.9	0.0199	I	92.00%	85.00%	-1.00%	23.5	21.855	1.645	7.53%		
10		10-Jul-24	200	8	A	Fd	31.2	0.0765	C	98.00%	75.00%	1.00%	26.3	25.511	6.049	23.71%		
10		10-Jul-24	200	9	A	Fd	24.3	0.0464	C	82.00%	63.00%	-2.00%	30.35	25.494	5.7665	22.62%	1.3	30
10		10-Jul-24	200	10	A	Fd	28.5	0.0638	C	92.00%	66.00%	-1.00%	28.9	26.877	7.514	27.96%		
10		10-Jul-24	200	11	A	Fd	21	0.0346	C	94.00%	84.00%	1.00%	24.1	22.413	2.41	10.75%		
10		10-Jul-24	200	12	A	Fd	23.7	0.0441	C	76.00%	60.00%	-1.00%	31	23.87	4.96	20.78%		
10		10-Jul-24	200	13	A	Fd	18.7	0.0275	I	89.00%	65.00%	1.00%	28.3	24.904	6.792	27.27%		
10		10-Jul-24	200	14	D	Fd	10.8	0.0092		67.00%	67.00%	1.00%	26	17.16	0	0.00%		
10		10-Jul-24	200	15	A	Fd	29.7	0.0693	C	94.00%	68.00%	3.00%	25.4	23.114	6.604	28.57%		
10		10-Jul-24	200	16	A	Fd	20.4	0.0327	C	93.00%	64.00%	1.00%	24.2	22.264	7.018	31.52%		
10		10-Jul-24	200	17	A	Fd	11.1	0.0097	I	68.00%	52.00%	1.00%	31	20.77	4.96	23.88%		
10		10-Jul-24	200	18	A	Fd	12	0.0113	I	65.00%	53.00%	1.00%	27.6	17.664	3.312	18.75%		
10		10-Jul-24	200	19	D	Fd	12.1	0.0115		38.00%	38.00%	1.00%	27.3	10.101	0	0.00%		
10		10-Jul-24	200	20	A	Fd	34.7	0.0946	C	95.00%	62.00%	-3.00%	27.8	27.244	9.174	33.67%		
10		10-Jul-24	200	21	A	Fd	18.6	0.0272	C	94.00%	54.00%	-4.00%	29.1	28.518	11.64	40.82%		
10		10-Jul-24	200	22	A	Fd	12.2	0.0117	I	80.00%	61.00%	-4.00%	28.41	23.8644	5.3979	22.62%		
10		10-Jul-24	200	23	A	Fd	29.8	0.0697	C	99.00%	61.00%	-2.00%	27.3	27.573	10.374	37.62%		
10		10-Jul-24	200	24	A	Fd	30.5	0.0731	C	90.00%	64.00%	-2.00%	27.61	25.4012	7.1786	28.26%		
10		10-Jul-24	200	25	D	Fd	11.8	0.0109		80.00%	80.00%	-5.00%	21.8	18.53	0	0.00%		
10		10-Jul-24	200	26	A	Fd	30.3	0.0721	C	98.00%	55.00%	-3.00%	26.5	26.765	11.395	42.57%		
10		10-Jul-24	200	27	A	Fd	13.3	0.0139	S	47.00%	45.00%	-4.00%	25.9	13.209	0.518	3.92%		
10		10-Jul-24	200	28	A	Fd	28	0.0616	C	99.00%	60.00%	-5.00%	25.2	26.208	9.828	37.50%	1.3	28

Appendix 2: *Forest CWD (Coarse Woody Debris) Raw Data*

Plot 1

Transect Information						CWD Information							
Plot	Treatment	Transect	Azimuth	Date	Length	CWD	Species	Diameter	Class	Tilt Angle	Length	Height of End	Angle grnd.
#		A or B	°	sampled	m	#		cm		°	m	cm	°
1		A	160	26-Jun-24	24	1	Dr	10.5	3	2	14	0	2
1		A	160	26-Jun-24	24	2	Cw	20	4	0	9	0	0
1		A	160	26-Jun-24	24	3	Cw	8	2	0	6.75	0	0
1		A	160	26-Jun-24	24	4	Cw	12	2	5	3.25	0	5
1		A	160	26-Jun-24	24	5	Cw	8	3	10	2.4	9	5
1		A	160	26-Jun-24	24	6	Cw	9.5	2	0	2.7	15	0
1		A	160	26-Jun-24	24	7	Cw	38	3	55	93	0	0
1		B	250	26-Jun-24	24	1	Cw	11	5	0	54	0	0
1		B	250	26-Jun-24	24	2	Fd	7.75	1	10	165	18	0

Plot 2

Transect Information						CWD Information							
Plot	Treatment	Transect	Azimuth	Date	Length	CWD	Species	Diameter	Class	Tilt Angle	Length	Height of End	Angle grnd.
#		A or B	°	sampled	m	#		cm		°	m	cm	°
2		A	230	27-Jun-24	24	1	Dr	14	2	1	7.6	0	1
2		A	230	27-Jun-24	24	2	Dr	10	3	19	0.8	0	1
2		A	230	27-Jun-24	24	3	Cw	9.5	4	5	3.9	0	1
2		A	230	27-Jun-24	24	4	Dr	10.5	2	5	7.7	0	7
2		A	230	27-Jun-24	24	5	Cw	9.5	5	1	4.1	0	1
2		A	230	27-Jun-24	24	6	Cw	42	5	5	2.8	0	5
2		A	230	27-Jun-24	24	7	Dr	13.5	1	0	11.4	0	0
2		A	230	27-Jun-24	24	8	Cw	13	4	0	5	0	0
2		A	230	27-Jun-24	24	9	Dr	14.5	1	5	3.3	0	3
2		A	230	27-Jun-24	24	10	Cw	30	5	4	9	0	4
2		A	230	27-Jun-24	24	11	Cw	16	5	9	1.9	0	4
2		A	230	27-Jun-24	24	12	Cw	8.5	4	6	7	0	5
2		A	230	27-Jun-24	24	13	Cw	16	5	4	4.9	0	4
2		A	230	27-Jun-24	24	14	Cw	27	5	5	1.4	0	5
2		B	140	27-Jun-24	24	1	Dr	10	4	4	6.2	0	4
2		B	140	27-Jun-24	24	2	Cw	30	5	4	2.1	0	4
2		B	140	27-Jun-24	24	3	?	18	5	3	2.57	0	3
2		B	140	27-Jun-24	24	4	Dr	17	2	1	9.93	0	1
2		B	140	27-Jun-24	24	5	Dr	7.5	2	10	3.68	0	10
2		B	140	27-Jun-24	24	6	Fd	12	3	9	2.17	13	0

Plot 3

Transect Information						CWD Information							
Plot	Treatment	Transect	Azimuth	Date	Length	CWD	Species	Diameter	Class	Tilt Angle	Length	Height of End	Angle grnd.
#		A or B	°	sampled	m	#		cm		°	m	cm	°
3		A	136	27-Jun-24	24	1	Dr	10	2	10	2.1	6.5	10
3		A	136	27-Jun-24	24	2	Dr	13	2	4	4.61	7	5
3		A	136	27-Jun-24	24	3	Dr	8.5	2	6	1.36	4.5	8
3		A	136	27-Jun-24	24	4	Dr	11.25	2	3	5.15	7.5	7
3		A	136	27-Jun-24	24	5	Dr	8	2	3	1.48	4.5	3
3		A	136	27-Jun-24	24	6	Fd	21	1	5	13.97	4	7
3		A	136	27-Jun-24	24	7	Fd	16	1	9	0.53	0	0
3		B	226	27-Jun-24	24	1	Dr	12.5	2	2	3.81	7.5	7
3		B	226	27-Jun-24	24	2	Dr	13.5	2	2	1.71	6.5	5
3		B	226	27-Jun-24	24	3	Dr	11.5	3	3	9.5	7.5	7
3		B	226	27-Jun-24	24	4	Fd	9	4	4	0.56	4	7
3		B	226	27-Jun-24	24	5	Dr	11.5	3	3	11.1	7.5	15
3		B	226	27-Jun-24	24	6	Dr	9.5	2	2	6.24	7	15
3		B	226	27-Jun-24	24	7	Fd	25	1	1	16.95	20	3
3		B	226	27-Jun-24	24	8	Fd	18.5	1	1	16.4	0	20

Plot 4

Transect Information						CWD Information							
Plot #	Treatment	Transect A or B	Azimuth °	Date sampled	Length m	CWD #	Species	Diameter cm	Class	Tilt Angle °	Length m	Height of End cm	Angle grnd. °
4		A	236	27-Jun-24	24	1	Cw	23	4	8	3.1	0	8
4		A	236	27-Jun-24	24	2	Fd	19.5	1	6	12.5	0	6
4		A	236	27-Jun-24	24	3	Cw	17.3	3	5	4	0	7
4		A	236	27-Jun-24	24	4	Fd	30.3	1	10	24.3	14	7
4		A	236	27-Jun-24	24	5	Cw	14	3	5	5.2	0	7
4		A	236	27-Jun-24	24	6	Cw	15.2	3	9	6	0	15
4		A	236	27-Jun-24	24	7	Fd	11.8	2	5	10.8	0	5
4		B	326	27-Jun-24	24	1	Cw	20	3	3	4.2	0	23
4		B	326	27-Jun-24	24	2	Fd	13.2	2	4	11	0	28
4		B	326	27-Jun-24	24	3	Cw	36.5	4	15	3.8	0	3
4		B	326	27-Jun-24	24	4	Fd	8.7	2	5	6	0	9
4		B	326	27-Jun-24	24	5	Fd	9.4	2	5	4.7	0	5
4		B	326	27-Jun-24	24	6	Cw	30	4	3	2.3	0	5
4		B	326	27-Jun-24	24	7	Dr	7.5	2	11	1.5	0	10
4		B	326	27-Jun-24	24	8	Cw	11.4	3	10	4.9	0	5
4		B	326	27-Jun-24	24	9	Cw	48	4	12	2.2	0	12
4		B	326	27-Jun-24	24	10	Fd	10.1	2	5	3.7	0	12

Plot 5

Transect Information						CWD Information							
Plot #	Treatment	Transect A or B	Azimuth °	Date sampled	Length m	CWD #	Species	Diameter cm	Class	Tilt Angle °	Length m	Height of End cm	Angle grnd. °
5		A	212	28-Jun-24	24	1	Cw	12.5	2	10	4.3	5	3
5		A	212	28-Jun-24	24	2	Bg	16.5	1	2	12.6	7	7
5		A	212	28-Jun-24	24	3	Bg	7.5	1	12	5.25		7
5		A	212	28-Jun-24	24	4	Cw	15.5	2	15	4.6	7	14
5		A	212	28-Jun-24	24	5	Cw	9	2	6	5	5	4
5		A	212	28-Jun-24	24	6	Bg	11.5	2	13	14.9	5.5	20
5		A	212	28-Jun-24	24	7	Bg	16	1	10	4.4	8.5	10
5		A	212	28-Jun-24	24	8	Cw	8.5	4	10	3.5	8	10
5		A	212	28-Jun-24	24	9	Cw	8	4	5	1.1	4	5
5		A	302	28-Jun-24	24	10	Cw	7.5	3	5	11.3	2	5
5		B	302	28-Jun-24	24	1	Cw	25	3	5	7.3	15	0
5		B	302	28-Jun-24	24	2	Fd	8	2	2	0.85	5	2
5		B	302	28-Jun-24	24	3	Bg	8.5	1	7	15.8	8.5	8
5		B	302	28-Jun-24	24	4	Cw	47	2	8	6.25	20	8
5		B	302	28-Jun-24	24	5	Bg	12	1	0	8.78	7.5	2
5		B	302	28-Jun-24	24	6	Cw	25	4	7	4.2	5	7
5		B	302	28-Jun-24	24	7	Cw	20	3	10	5.7	10	10
5		B	302	28-Jun-24	24	8	Bg	8	4	5	0.8	4	5
5		B	302	28-Jun-24	24	9	Cw	35	3	0	0.95	10	5
5		B	302	28-Jun-24	24	10	Cw	44	5	10	2.4	12	10

Plot 6

Transect Information						CWD Information							
Plot	Treatment	Transect	Azimuth	Date	Length	CWD	Species	Diameter	Class	Tilt Angle	Length	Height of End	Angle grnd.
#		A or B	°	sampled	m	#		cm		°	m	cm	°
6		A	248	27-Jun-24	24	1	Cw	17	5	28	6.35	0	28
6		A	248	27-Jun-24	24	2	Dr	8	3	20	6	0	20
6		A	248	27-Jun-24	24	3	Dr	12.8	2	7	7.08	0	7
6		A	248	27-Jun-24	24	4	Cw	18.5	5	17	1.3	0	17
6		A	248	27-Jun-24	24	5	Dr	11	2	9	2.72	0	9
6		A	248	27-Jun-24	24	6	Bg	7.8	2	19	3.71	0	2
6		A	248	27-Jun-24	24	7	Cw	12.5	4	3	1.93	0	3
6		A	248	27-Jun-24	24	8	Cw	16.5	4	20	5.24	0	3
6		A	248	27-Jun-24	24	9		17.5	5	3	9.62	0	3
6		B	338	27-Jun-24	24	1	Cw	13.1	3	8	3.59	0	8
6		B	338	27-Jun-24	24	2	Cw	16.8	3	0	3	0	0
6		B	338	27-Jun-24	24	3	Bg	14	2	4	3.5	0	4
6		B	338	27-Jun-24	24	4	Bg	14.6	1	2	11	9	2
6		B	338	27-Jun-24	24	5	Fd	8.8	1	35	3.6	0	2

Plot 7

Transect Information						CWD Information							
Plot	Treatment	Transect	Azimuth	Date	Length	CWD	Species	Diameter	Class	Tilt Angle	Length	Height of End	Angle grnd.
#		A or B	°	sampled	m	#		cm		°	m	cm	°
7		A	330	9-Jul-24	24	1	Dr	12.5	2		4.2		
7		A	330	9-Jul-24	24	2	Dr	18.5	2		8.4		
7		A	330	9-Jul-24	24	3	Cw	60	3		2.5		
7		A	330	9-Jul-24	24	4	Fd	16.6	2		8		
7		A	330	9-Jul-24	24	5	Fd	10	2		5		
7		A	330	9-Jul-24	24	6	Fd	11	2		12.1		
7		A	330	9-Jul-24	24	7	Fd	8	1		8.5		
7		B	60	9-Jul-24	24	1	Cw	28	3		4.3		
7		B	60	9-Jul-24	24	2	Cw	13.8	3		3.1		
7		B	60	9-Jul-24	24	3	Cw	24	3		3.5		
7		B	60	9-Jul-24	24	4	Cw	17	5		2.5		
7		B	60	9-Jul-24	24	5	Fd	8.7	2		10.8		
7		B	60	9-Jul-24	24	6	Cw	30	3		8.5		
7		B	60	9-Jul-24	24	7	Cw	14.8	3		3.6		
7		B	60	9-Jul-24	24	8	Fd	8.5	1		5.6		
7		B	60	9-Jul-24	24	9	Fd	12	4		1.6		
7		B	60	9-Jul-24	24	10	Fd	13	1		13.4		
7		B	60	9-Jul-24	24	11	Fd	8.4	2		3.5		
7		B	60	9-Jul-24	24	12	Fd	11.4	1		3		
7		B	60	9-Jul-24	24	13	Cw	40	4		4.46		
7		B	60	9-Jul-24	24	14	Fd	8	2		3.6		

Plot 8

Transect Information						CWD Information							
Plot #	Treatment	Transect A or B	Azimuth °	Date sampled	Length m	CWD #	Species	Diameter cm	Class	Tilt Angle °	Length m	Height of End cm	Angle grnd. °
8		A	360	9-Jul-24	24	1	Cw	8	3		4.3		
8		A	360	9-Jul-24	24	2	Cw	17	3		11.7		
8		A	360	9-Jul-24	24	3	Fd	9	2		2.32		
8		A	360	9-Jul-24	24	4	Fd	18.6	2		15.23		
8		A	360	9-Jul-24	24	5	Fd	12	2		14.7		
8		A	360	9-Jul-24	24	6	Mb	7.5	2		3.5		
8		A	360	9-Jul-24	24	7	Cw	11.5	3		1.9		
8		A	360	9-Jul-24	24	8	Cw	12	3		5.4		
8		A	360	9-Jul-24	24	9	Cw	9.8	3		4.55		
8		A	360	9-Jul-24	24	10	Fd	9	2		2.2		
8		B	90	9-Jul-24	24	1	Cw	8.5	3		4.5		
8		B	90	9-Jul-24	24	2	Cw	17	3		11.7		
8		B	90	9-Jul-24	24	3	Fd	19	2		15.3		
8		B	90	9-Jul-24	24	4	Cw	8	3		4.5		
8		B	90	9-Jul-24	24	5	Fd	16	2		20.2		
8		B	90	9-Jul-24	24	6	Fd	12	2		17.3		
8		B	90	9-Jul-24	24	7	Dr	12	5		4.2		
8		B	90	9-Jul-24	24	8	Dr	11.5	5		7.04		
8		B	90	9-Jul-24	24	9	Dr	8	4		1.78		
8		B	90	9-Jul-24	24	10	Cw	18.5	3		6.35		
8		B	90	9-Jul-24	24	11	Fd	23	3		8.65		
8		B	90	9-Jul-24	24	12	Cw	16	3		2.4		
8		B	90	9-Jul-24	24	13	Cw	9.5	4		2		
8		B	90	9-Jul-24	24	14	Cw	28	4		3.6		
8		B	90	9-Jul-24	24	15	Dr	8.5	5		9.7		
8		B	90	9-Jul-24	24	16	Dr	12	3		1.75		
8		B	90	9-Jul-24	24	17	Dr	17	3		1		
8		B	90	9-Jul-24	24	18	Fd	14.5	3		5.2		

Plot 9

Transect Information						CWD Information							
Plot	Treatment	Transect	Azimuth	Date	Length	CWD	Species	Diameter	Class	Tilt Angle	Length	Height of End	Angle grnd.
#		A or B	°	sampled	m	#		cm		°	m	cm	°
9		A	335	10-Jul-24	24	1	Fd	12	2		5		
9		A	335	10-Jul-24	24	2	Fd	14	2		8		
9		A	335	10-Jul-24	24	3	Fd	22	2		9		
9		A	335	10-Jul-24	24	4	Fd	10.1	2		10.4		
9		A	335	10-Jul-24	24	5	Fd	13.8	2		9		
9		A	335	10-Jul-24	24	6	Fd	19.1	2		11.4		
9		A	335	10-Jul-24	24	7	Dr	11.3	2		6.6		
9		A	335	10-Jul-24	24	8	Fd	15.8	3		2.7		
9		A	335	10-Jul-24	24	9	Cw	12	3		7.2		
9		A	335	10-Jul-24	24	10	Fd	86	1		4.4		
9		A	335	10-Jul-24	24	11	Cw	19	3		3.4		
9		A	335	10-Jul-24	24	12	Cw	11.7	3		4.8		
9		A	335	10-Jul-24	24	13	Cw	22	3		4.2		
9		A	335	10-Jul-24	24	14	Fd	9.7	2		6.4		
9		A	335	10-Jul-24	24	15	Fd	47	4		1.4		
9		A	335	10-Jul-24	24	16	Cw	11	4		3.8		
9		A	335	10-Jul-24	24	17	Fd	9	5		2.1		
9		A	335	10-Jul-24	24	18	Fd	16	3		8.5		
9		A	335	10-Jul-24	24	19	Cw	8	5		2.4		
9		B	245	10-Jul-24	24	1	Fd	26	4		3.7		
9		B	245	10-Jul-24	24	2	Fd	12	1		10		
9		B	245	10-Jul-24	24	3	Fd	7.5	1		8.4		
9		B	245	10-Jul-24	24	4	Fd	20	5		3.5		
9		B	245	10-Jul-24	24	5	Cw	14.2	3		5.3		
9		B	245	10-Jul-24	24	6	Cw	17	4		1.8		
9		B	245	10-Jul-24	24	7	Cw	10.5	3		5		
9		B	245	10-Jul-24	24	8	Cw	13	3		4.6		
9		B	245	10-Jul-24	24	9	Cw	9.9	3		7		
9		B	245	10-Jul-24	24	10	Cw	12	3		10.4		
9		B	245	10-Jul-24	24	11	Cw	7.6	3		9.8		
9		B	245	10-Jul-24	24	12	Fd	10.2	2		5.8		
9		B	245	10-Jul-24	24	13	Fd	25	4		2.5		
9		B	245	10-Jul-24	24	14	Cw	9.5	3		2.4		
9		B	245	10-Jul-24	24	15	Cw	12.4	3		2.3		
9		B	245	10-Jul-24	24	16	Fd	15	4		1.1		
9		B	245	10-Jul-24	24	17	Fd	8.6	2		5.6		
9		B	245	10-Jul-24	24	18	Dr	12	4		3.5		

Plot 10

Transect Information						CWD Information							
Plot	Treatment	Transect	Azimuth	Date	Length	CWD	Species	Diameter	Class	Tilt Angle	Length	Height of End	Angle grnd.
#		A or B	°	sampled	m	#		cm		°	m	cm	°
10		A	160	10-Jul-24	24	1	Fd	9	2		2.82		
10		A	160	10-Jul-24	24	2	Cw	13	3		3.3		
10		A	160	10-Jul-24	24	3	Fd	8.5	1		8.4		
10		A	160	10-Jul-24	24	4	Fd	11	2		1.2		
10		A	160	10-Jul-24	24	5	Fd	16	1		15.1		
10		A	160	10-Jul-24	24	6	Dr	12	3		5.96		
10		A	160	10-Jul-24	24	7	Dr	10	3		1		
10		A	160	10-Jul-24	24	8	Dr	8	3		7.6		
10		A	160	10-Jul-24	24	9	Cw	16	3		4.3		
10		B	250	10-Jul-24	24	1	Fd	10	2		2.82		
10		B	250	10-Jul-24	24	2	Cw	9	3		6.75		
10		B	250	10-Jul-24	24	3	Cw	29	5		3.9		
10		B	250	10-Jul-24	24	4	Cw	20	4		2.6		
10		B	250	10-Jul-24	24	5	Dr	8	3		4.54		
10		B	250	10-Jul-24	24	6	Dr	11	3		3.37		
10		B	250	10-Jul-24	24	7	Cw	65	4		1.8		
10		B	250	10-Jul-24	24	8	Fd	9	2		7.4		
10		B	250	10-Jul-24	24	9	Fd	10	2		9.6		
10		B	250	10-Jul-24	24	10	Fd	9	2		10.04		
10		B	250	10-Jul-24	24	11	Fd	10	2		1.8		
10		B	250	10-Jul-24	24	12	Fd	14	2		3.42		

Appendix 3: *Plot Photosheres*

Plot 1

Plot 2

Plot 3

Plot 4

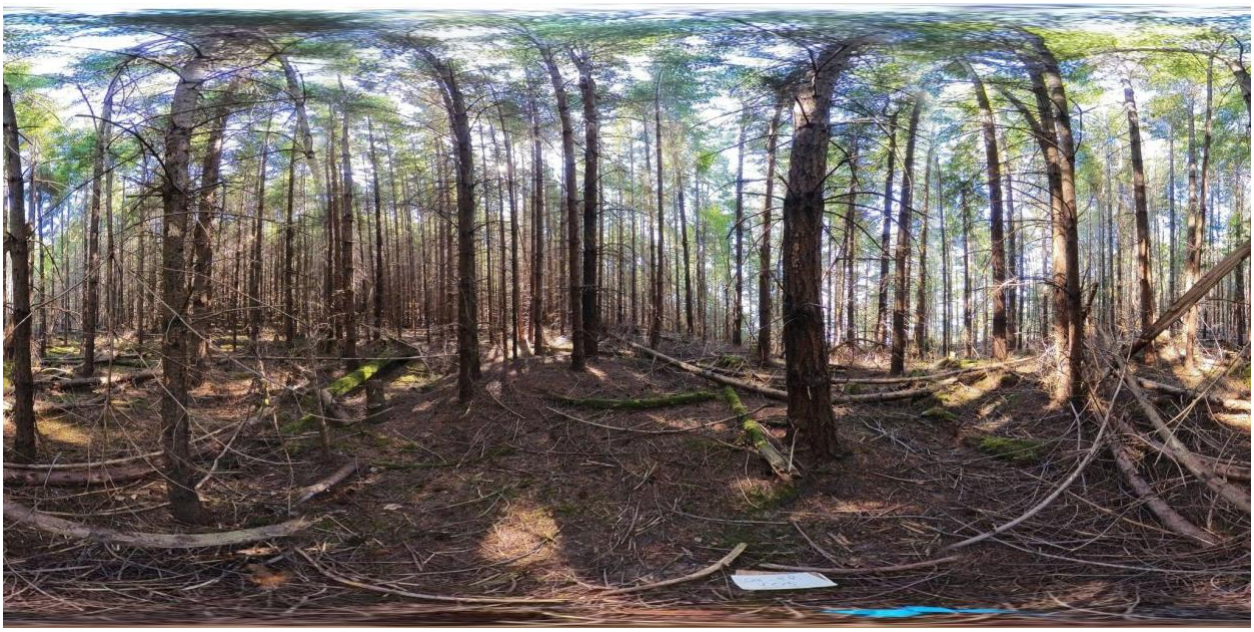
Plot 5

Plot 6

Plot 7

Plot 8

Plot 9



Plot 10