

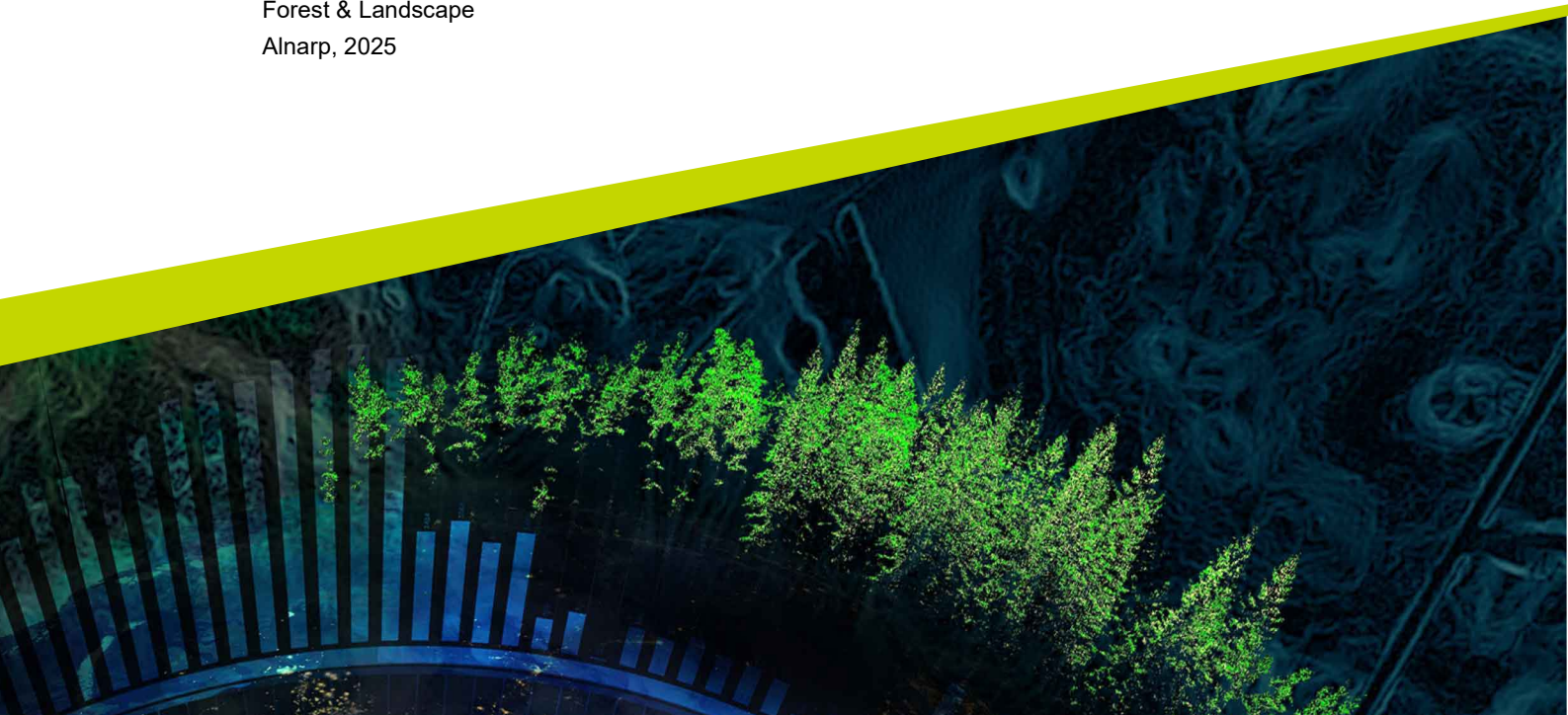


CCF in Lilla Trånghyltan

A study using Heureka comparing continuous cover forestry to rotation-forestry

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Swedish University of Agricultural Sciences, SLU
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CCF in Lilla Trånghylltan – A study using Heureka comparing continuous cover forestry to rotation-forestry

Hyggesfritt i Lilla Trånghylltan – En studie med hjälp av Heureka som jämför hyggesfritt med hyggesbruk.

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Swedish University of Agricultural Sciences

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Abstract

The interest in management of forests using Continuous Cover Forestry treatments has been increasing in Sweden during the latest decades among private landowners. Swedish research has however focused on rotation-forestry, clearcutting, meaning that what knowledge currently exists is based either on international studies or simulations.

Due to the lack of knowledge of, and increased interest in CCF, simulations were conducted to determine management's effect on biological growth and economical revenue. Three types of management regimes were simulated: (1) 100 % management using rotation forestry, (2) 100% management using Continuous Cover Forestry treatments, and (3) a combined treatment where part of the property was managed using Continuous Cover Forestry treatments and the rest using rotation forestry.

Results indicated that CCF performs worse than rotation forestry, both in terms of biological growth, and economical revenue. The combined treatment, when the correct stands are chosen for CCF, can yield growth and economical revenue similar to, or with some loss when compared to rotation forestry. The simulation did indicate issues with regeneration within spruce-dominated stands, resulting in stagnated growth. Further research on, and refinement of, Heureka's regeneration models are necessary to determine whether spruce stands are simulated correctly.

Keywords: Clearcutting, Heureka, Planwise, Simulation, CCF, Continuous Cover Forestry.

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Abbreviations

Abbreviation	Description
BAU	Business As Usual
CCF	Continuous Cover Forestry
SLU	Swedish University of Agricultural Sciences
NPV	Net Present Value
M3sk	Cubic metre standing volume
M3fub	Cubic metre solid volume excl. bark
PCT	Pre-commercial-thinning
FSC	Forest Stewardship Council
PEFC	Programme for the Endorsement of Forest Certification

1. Introduction

1.1 Swedish forestry – a historical context

Since the introduction of rational forest management, monocultures have been a common occurrence in management regimes across the world, and Sweden is no exception (Lowood, 2023). Similarly to the farmers field, forest management using monocultures have yielded benefits both in crop-yield and planning (Jönsson, 2024). Over time this has resulted in a standardisation of Swedish forestry, with clearcutting being the norm. The interventions in Swedish forestry have also been standardised to use mechanical site preparation and planting on the same regeneration sites (Figure 1). The area managed using mechanical site preparation and planting has also increased since the 1990s to an area of about 200.000 hectare/year (Figure 1). It has also resulted in a focus on mainly spruce and pine, with spruce being the most planted species until 2020, whereas Scots pine has been the most planted species after 2020 (Figure 2).

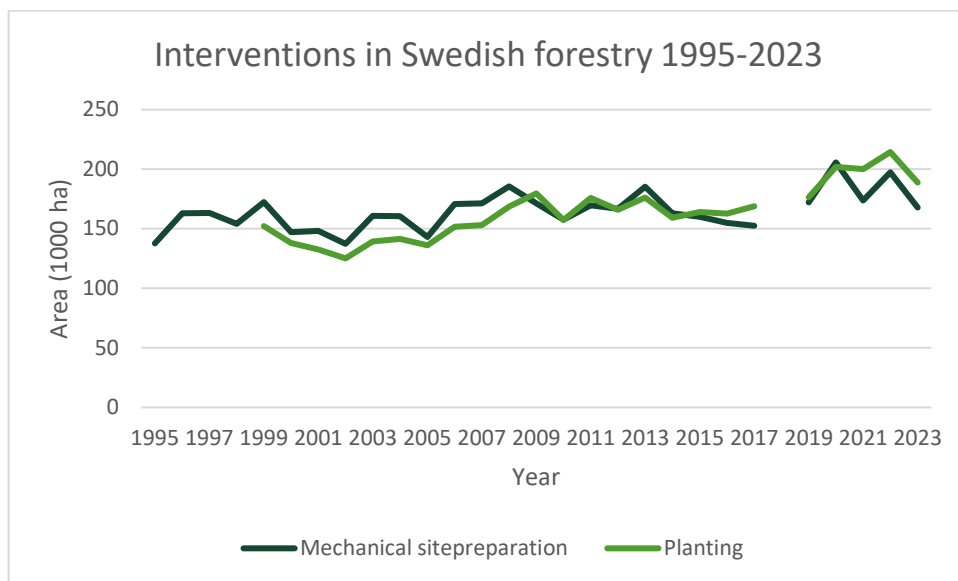


Figure 1: Interventions with mechanical site preparation and planting across Sweden (1995-2023). Note: Data regarding planted area is not available pre-1999, and no data was recorded 2018 (Swedish Forest Agency, 2023).

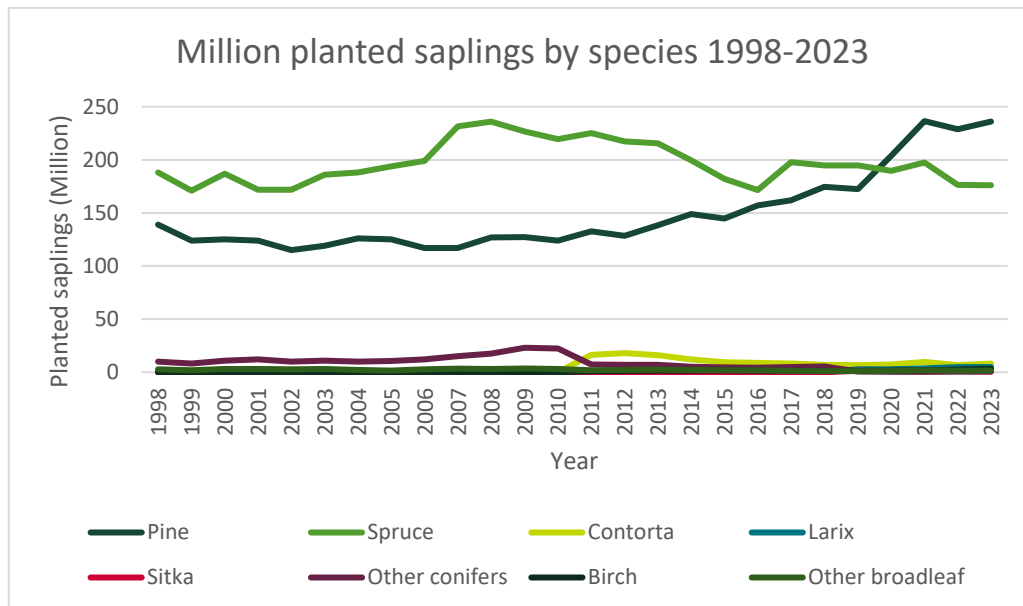


Figure 2: Planted saplings in Sweden 1998-2023 according to the Swedish Forest Agency's statistical database (Swedish Forest Agency, 2023).

This intensive forestry, in many ways similar to modern agriculture, has received increasing criticism over the years (Ahlström, Canadell, & Metcalfe, 2022) (Swedish Society for Nature Conservation, 2011). This criticism includes the usage of Hormoslyr in the northern parts of Sweden during the 1960s and 1970s with the intent of eradicating birch in productive forest land, a practise that was banned in the 1970s (Östlund, Laestander, Aurell, & Hörnberg, 2022). Modern forestry has also received criticism in broader terms for lack of biodiversity and lack of care for socioeconomic and aesthetic needs (Zhang, Mårald, & Bjärstig, 2022).

In response to the criticism, governmental regulations have been introduced, but also softer approaches such as forest certification (PEFC&FSC) which provides criteria to ascertain that the practiced forestry is managed sustainably in terms of economy, society and ecology (Forest Stewardship Council, 2013) (Nordén, Coria, & Villalobos, 2016). There has also been an increasing interest among private landowners to practice a sustainable forestry (Nordén, Coria, & Villalobos, 2016).

In the last 10-20 years, the main upcoming interest among private landowners in terms of new forest management treatments has been regarding the usage of some form of continuous cover forestry (CCF) (Figure 3). In Sweden, this refers to many ways of using the forest, some examples include blädning (selective thinning), the Lübeck-model etc, but all are based on the principle of minimising clearcuts and often using natural regeneration.

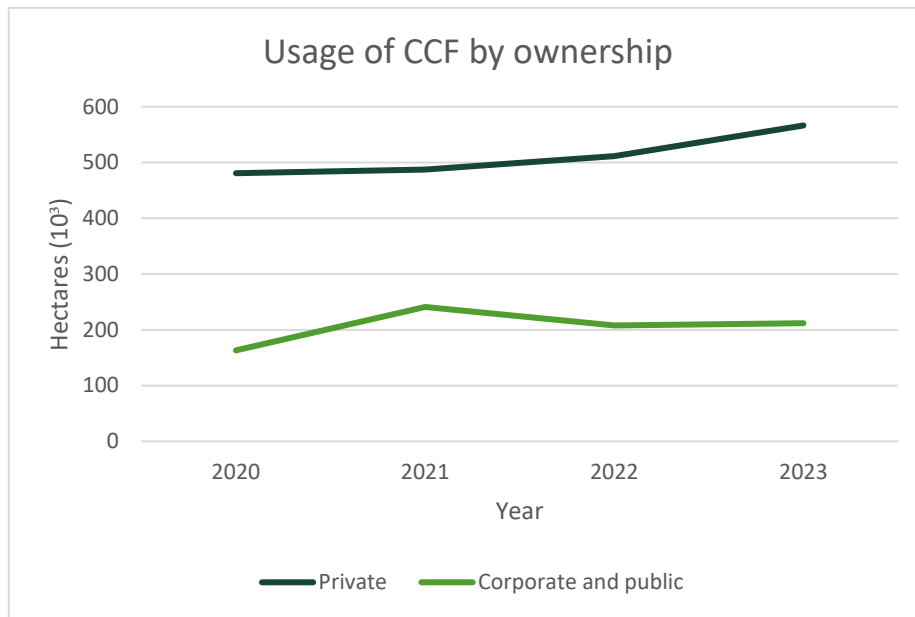


Figure 3: Thousand hectares managed using CCF in Sweden (According to definition by the Swedish Forest Agency), by ownership. 2020-2023 (Swedish Forest Agency, 2023)

With this increasing interest in CCF-treatments, a problem with Swedish forestry science occurs; there is simply too little research into the subject in a Swedish context. Swedish forestry research has focused on Rotation Forestry Management (clearcuts) since at least the 1950's, leading to a systemic neglect in terms of long-term research on alternative treatments (Hertog, Brogaard, & Krause, 2022). There are as of today very few trial areas for CCF-management in all of Sweden, which means that in terms of knowledge, we must rely on either international studies or simulations to understand the effects of CCF-management (Ekholm, o.a., 2023).

1.2 Aim of study

With the increasing interest in CCF-treatments by both public perception and landowners, research is necessary. Through this project the aim is to increase the knowledge regarding what effects an increased usage of CCF-treatments have, when compared to traditional clearcutting treatments. Through simulations using Heureka, an attempt to establish the effects on economical and biological growth during a period of 100 years was made.

The hypothesis was that (1) the introduction of largescale CCF-treatments will result in lowered economical and biological growth across the property in comparison to clearcutting, and (2) that there will be differences between stands, depending on its structure and initial conditions.

2. Methodology

2.1 Choice of property

For this project, a landowner with interest in increased CCF-treatments, or complete conversion to CCF-treatments was sought, preferably with a property around 100 hectares. Through local recommendations, and discussion with landowners, a property of 144 hectares, whereof 77 hectares are productive, was chosen. It is situated in Lilla Trånghyttan Osby municipality and is in many ways quite typical for the area in the sense that it is dominated by either spruce or pine, growing on mainly mesic to moist sites, with occasional mires in the landscape. For this project only productive forest land was considered, since non-productive land is not suited for forestry.

What makes this property especially interesting is the CCF-management regimes on parts of the property. The current landowner, as well as the two former landowners have all managed some part of the property with different CCF-treatments. Currently about 34% of the productive forestland is managed mainly using selective thinning, one of the Swedish treatments of CCF (Figure 4).

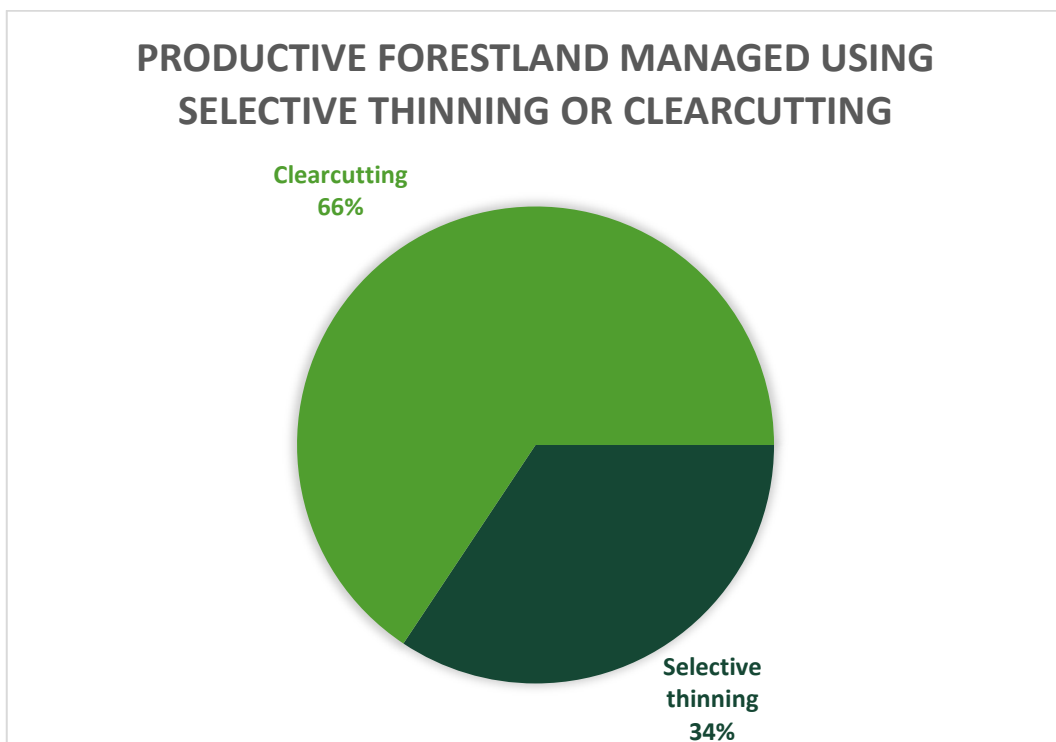


Figure 4: Proportion of management regimes in Lilla Trånghyttan, 2017

2.2 Forest management plan

To describe the property, a forest management plan was provided by Södra Skogsägarna with the property owners blessing. The plan, covering the years 2017-2027, provided a description of the property, as well as each stand with its structure and management suggestions (Appendix 1). The management plan served as a basis for further simulations and analysis. Starting conditions are a spruce dominated property (69-72%) with pine (14-16%) and some minor stands of beech, birch and oak (Figure 5).

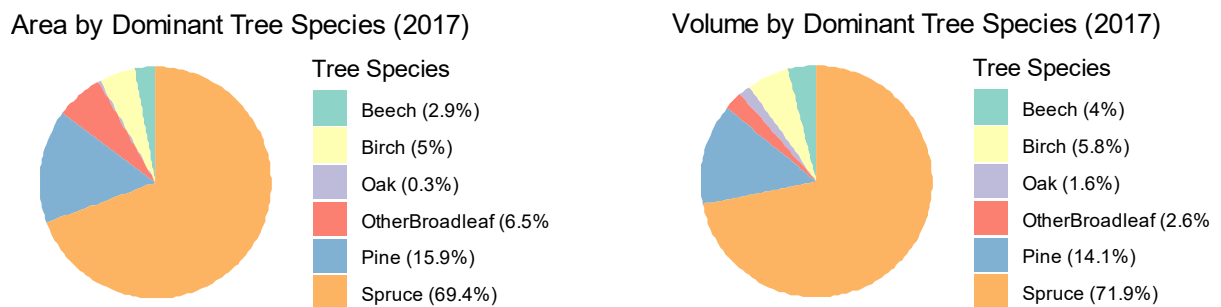


Figure 5: Tree species visualised by area and volume respectively for the first period 2017, indicating starting conditions of the simulation. See appendix 1 for full data.

2.3 Heureka – Planwise

For this project, the tool Heureka PlanWise was used. It is part of Heureka Forestry Decision Support System, publicly available and hosted by the Swedish University of Agriculture (SLU, 2025). All simulations were conducted using PlanWise version 2.23.0.2, using the standard settings for management. For management using clearcuts this relies on thinning guidelines from the Swedish Forestry Agency (Swedish Forest Agency, 1984). Final felling was determined using the default optimization function that is based on net-present value (NPV).

For the stands managed using continuous cover forestry treatments, the default function Uneven-aged was used, which means that selective-thinning was simulated.

No settings were changed, except for the pricelists. Based on Södra Skogsägarnas pricelists per 2025-04-15, the value for slash, pulpwood and timber were changed for spruce, pine, birch, beech and oak (Appendix 3).

For the project three types of management were defined:

- Clearcutting: 100% of the property was managed using classic clearcutting treatments in accordance with thinning guidelines and optimal NPV.
- CCF: 100% of the property was managed using Continuous Cover Forestry treatments, based on optimal NPV.
- Combined: Most of the property was managed using clearcutting, but the 34% currently being managed using CCF remained with this management practice. This was also based on optimal NPV.

With these settings, 20 periods (100 years) were simulated for all three management systems.

2.3.1 Data-extraction

Heureka provides a large number of variables to describe its simulation result. For this project 21 variables (Appendix 2) were chosen.

With the data provided through the Heureka-simulation calculations for stemdensity, current annual increment (CAI), total growth, total income and NPV were conducted. The discount rate was set to 2.5%. This data was later visualized through various graphs.

3. Results

Through the visualization provided by R, a couple of trends were clear. Accumulated Net-Present-Value (NPV), the summarized NPV from all income for all stands over the whole simulation, is greater in the clearcut treatment than the CCF-treatment (Figure 6). This accumulated difference seems to be slightly increasing the further into the simulation we get, mainly due to the CCF-curves lower gradient. For the combined treatment, an expected loss of NPV occurs, but not so great as when the whole property is converted to CCF. The initial NPV for the clearcutting treatment is twice that of CCF & combined treatment.

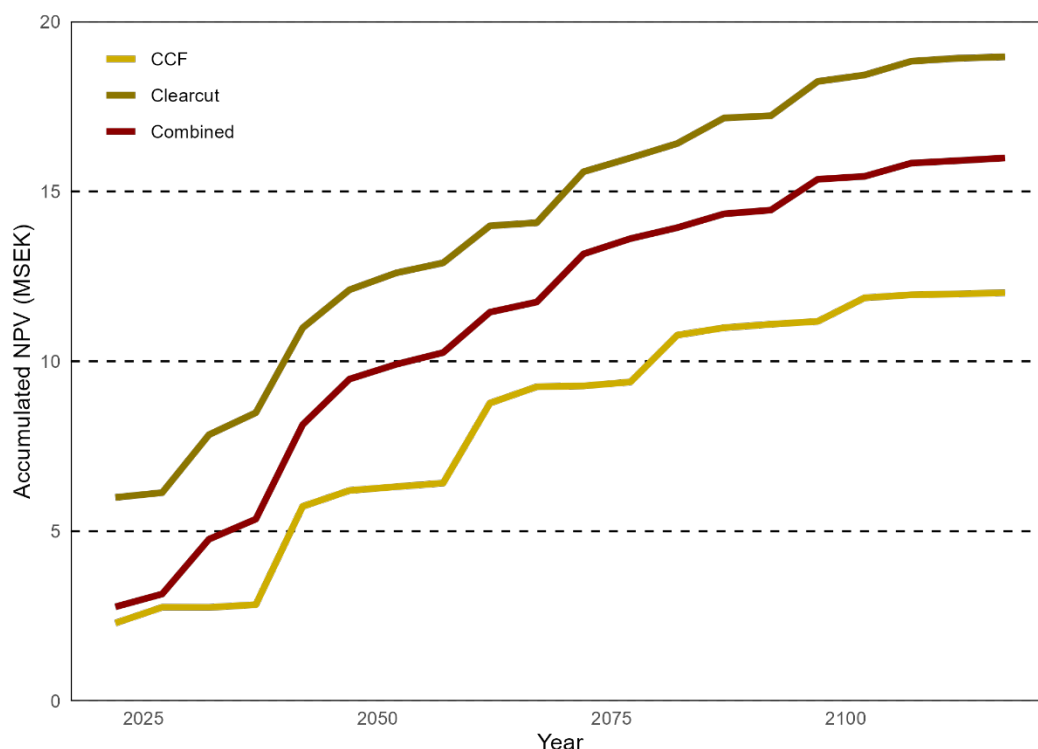


Figure 6: Accumulated NPV for each treatment and year, 2017-2117

Total growth for the whole property and for each treatment and year was a quite consistent growth between 500-750 m³sk/year (6.5-9.7 m³sk/ha/year) for both the clearcut treatment and the combined treatment (Figure 7). However, for the CCF-treatment the growth increases drastically during the first 20 years overcoming the growth of the clearcut-treatment. After this the growth of CCF decreases at a similar pace and ends at about 250 m³sk/year. As a result, the volume growth of CCF per year is halved in comparison to both the clearcut- and the combined treatment after a period of 100 years. The difference in growth between the clearcut- and combined treatment is no more than 20% during the simulation, mostly around 5-10% in favour of the clearcut treatment.

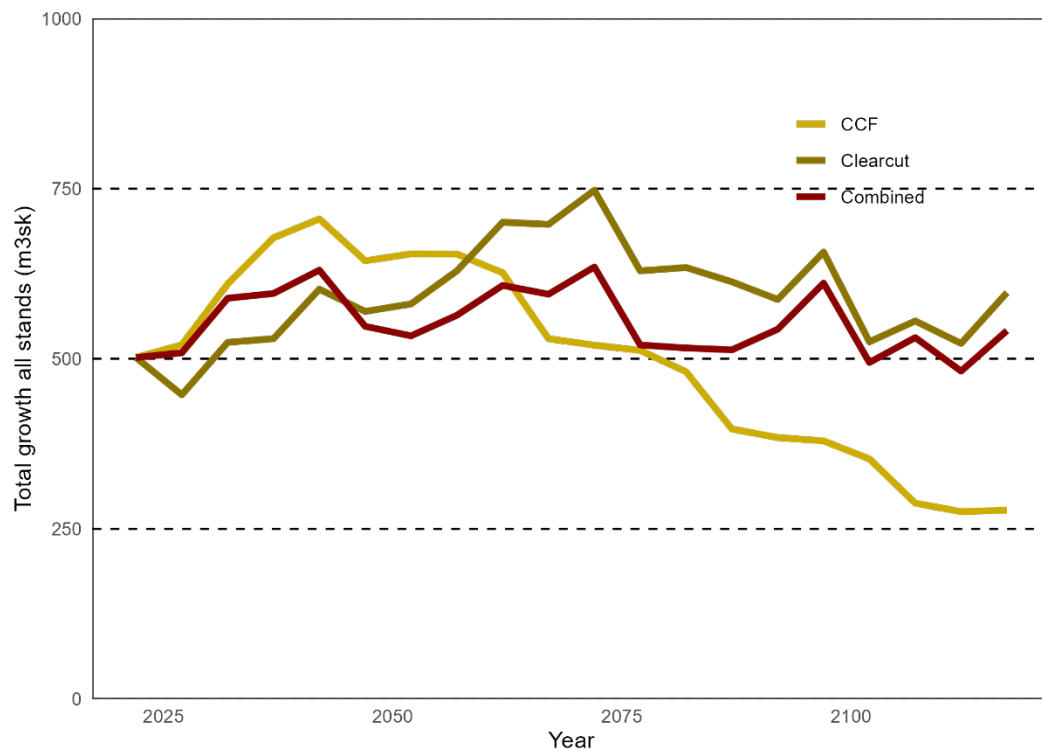


Figure 7: Total growth for all stands per year, 2017-2117

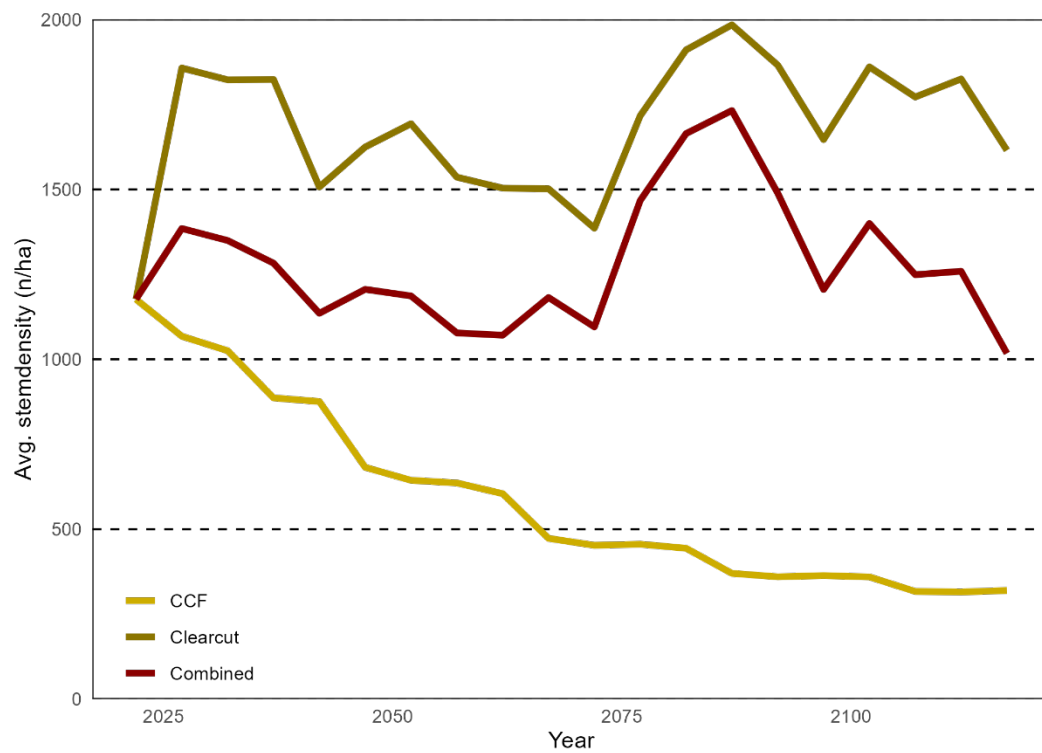


Figure 8: Average stem density per treatment and year, 2017-2117

Average stem density for each treatment and year indicated a difference between all treatment, especially when CCF is compared to the others (Figure 8).

Clearcutting is quite stable between 1450-2000 stems/hectare, whereas the combined treatment is stable at 1200-1650. For the CCF treatments, the average stem density begins at around 1200 and declines sharply before bottoming out around 400 stems/hectare.

To better understand the differences between complete CCF-treatment and the combined treatment, an understanding of the differences between these were necessary. When visualising the main species of the CCF-treatment, compared to the CCF-treated part (the landowners chosen stands) of the combined treatment some differences appear (Figure 9). This indicates that for the CCF-treatment 67% of the stand was dominated with spruce, 12% pine, 8% birch, 4% beech, 2% oak and the rest other broadleaves. When looking only at the CCF-portion of the combined stands, 20% was spruce, 40% pine, 13% birch, 13% beech, 7% oak and the rest other broadleaves. This would mean that the CCF of the combined stands are more used in stands dominated by pine and broadleaves than the complete CCF-treatment. The proportion of spruce is more than halved in comparison.

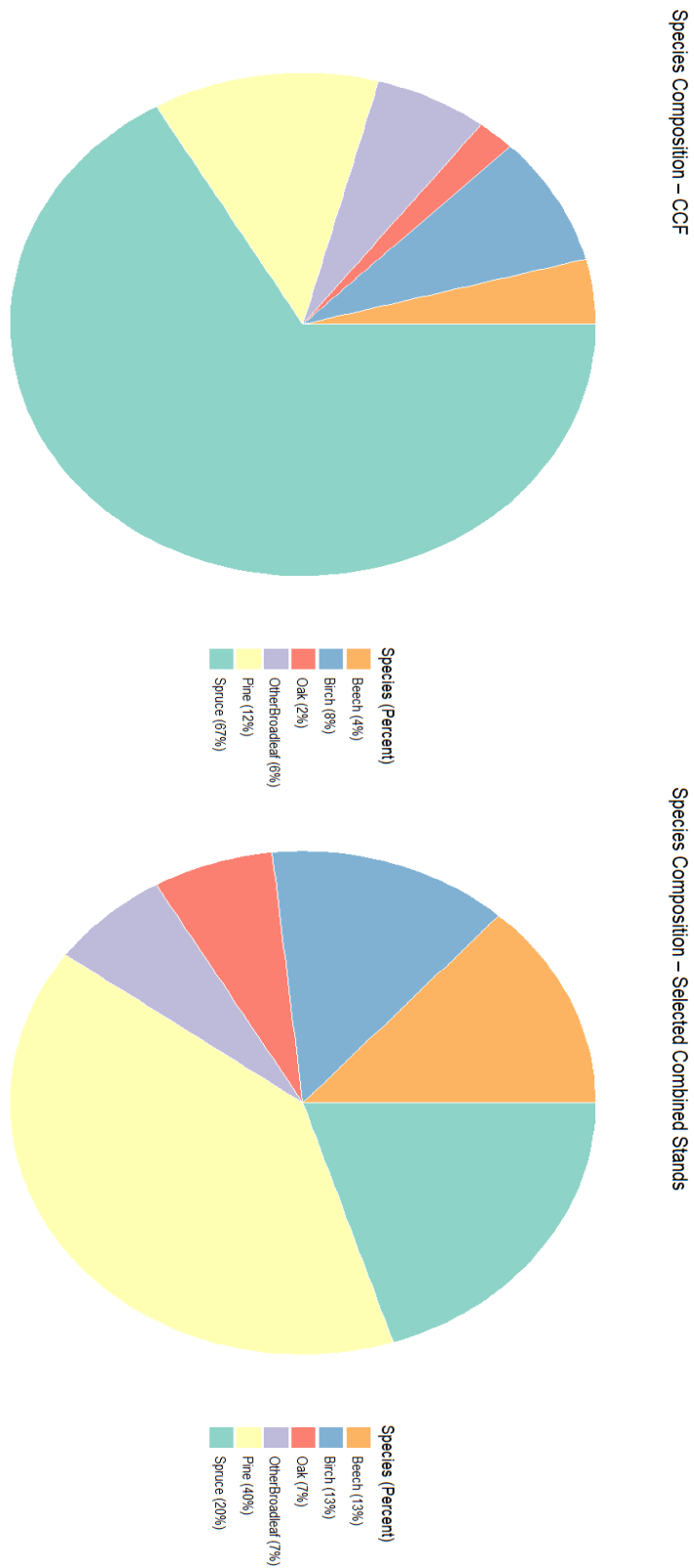


Figure 9: Species composition for CCF-treatment and CCF-portion of combined treatment

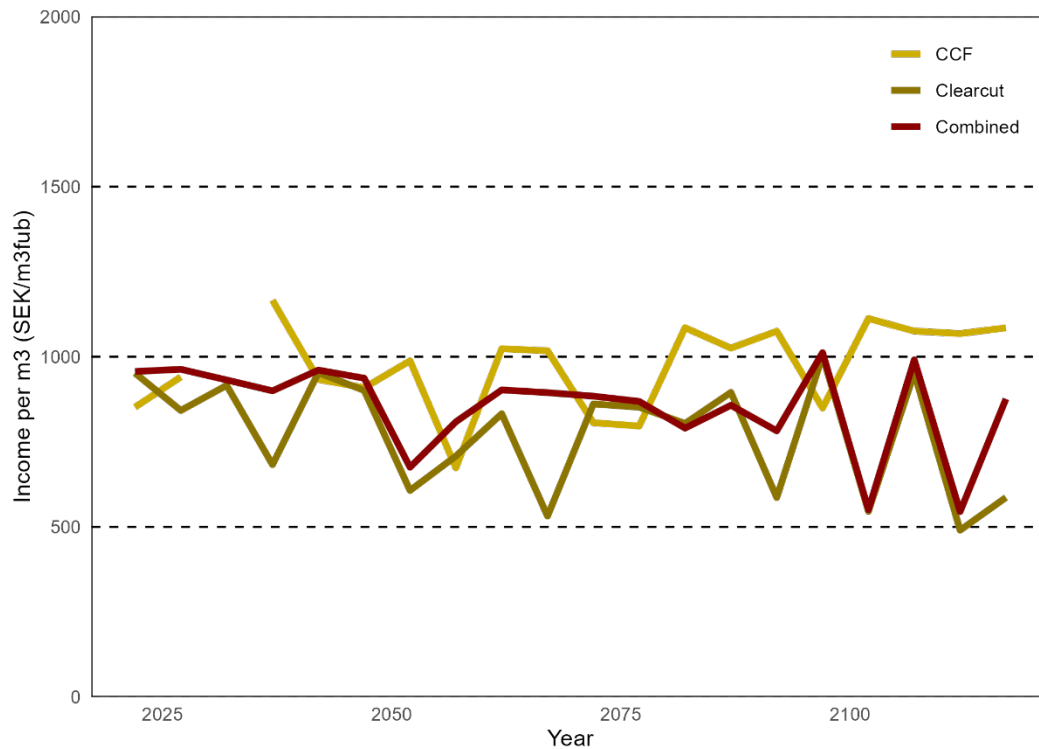


Figure 10: Average income per m3fub and year, 2017-2117

The average income per m3fub and year is quite similar for all treatments (Figure 10), with CCF being slightly higher on average with a margin of at most ~200 SEK/m3fub. On average over the whole period, the difference is small but still noticeable. When comparing clearcutting to the combined treatment, the figure indicates a slight average increase of price for combined treatment.

To better differentiate the treatments, an average income per m3fub and treatment was calculated for the whole simulated period. (Table 1).

Table 1: Average income per m3fub and treatment during simulation

Treatment	Avg. income/m3fub during period	
CCF	1003 SEK	
Clearcut	852 SEK	
Combined	895 SEK	

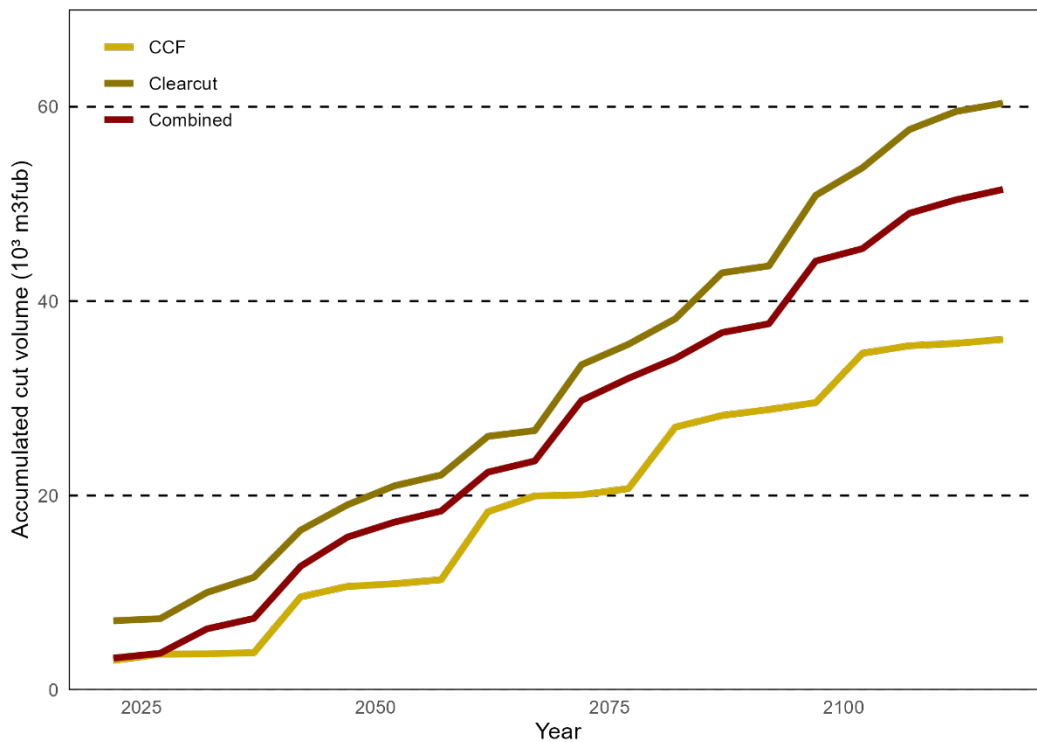


Figure 11: Accumulated cut volume for each treatment during 2017-2117

For the accumulated cut volume during the whole period, the clearcut- and the combined treatment follow each other closely with the clearcut treatment having a slight advantage (Figure 11). The CCF treatment however fall of during the later parts of the simulation and ends at about 58% of the clearcutting treatment.

It was theorized that there could be a difference between different stands, which were more suitable for CCF than others, so NPV for all stands were visualized comparing CCF to clearcut for each stand.

This made it clear that no stands were favoured, in terms of NPV, by using CCF instead of clearcutting (Figure 12). There were however some that were heavily disfavoured by CCF-treatments, and as such should be managed using clearcut-treatments in this comparison. The five worst performing CCF-stands are indicated by red circles, and correspond to stands 34, 35, 36, 55 and 56. These stands are 4/5 spruce, and 1/5 pine.

Similarly deviating stands are 1, 6, 8, 28 and 38, all corresponding to spruce.

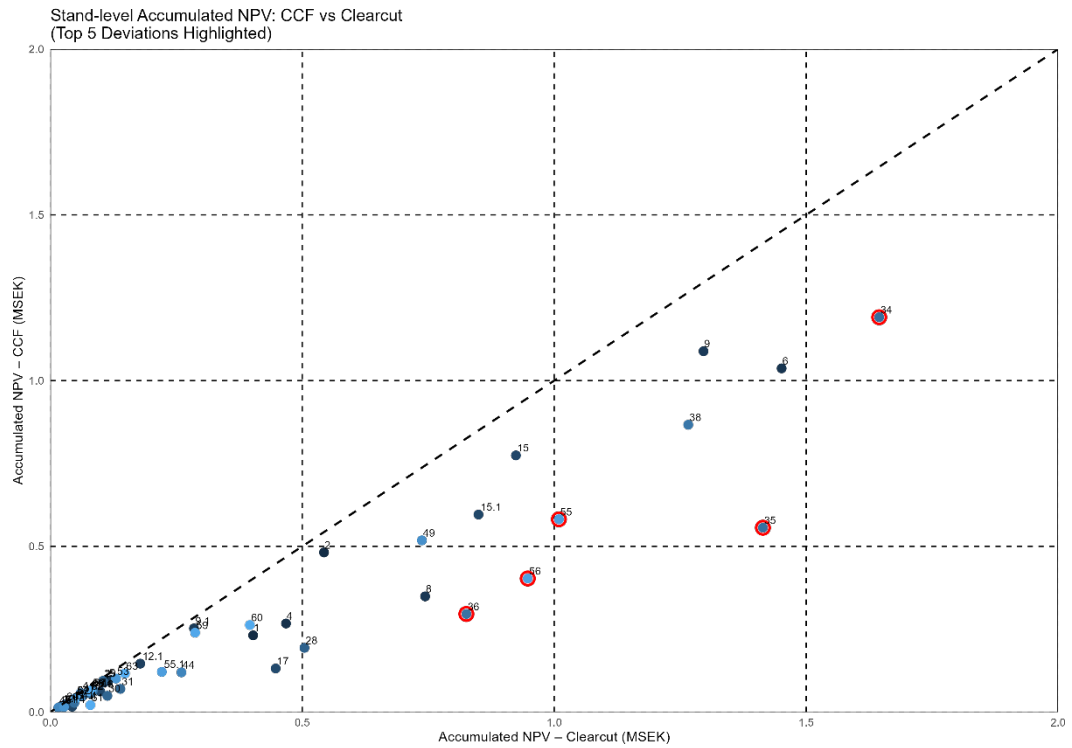


Figure 12: Accumulated NPV compared between CCF and Clearcutting. The dotted line shows where CCF and Clearcutting is equal, and red circles indicated the top five deviations from this line.

4. Discussion

4.1 Results

4.1.1 Net Present Value

In 2017 (period 1) we see much higher NPV for treatment clearcut than the CCF-treatment, with the combined treatment in between. This indicates high early incomes, due to harvesting. Since the combined treatments accumulated NPV in 2017 is almost the same as the CCF-treatment, it is likely that the difference clearcut-CCF is due to the harvesting of all stands managed using CCF by the current landowner. This provides large early incomes for clearcutting-treatment, but results in a property with large proportion of clearcuts and likely loss of growth in the short term. In terms of overall results for the whole 100-year period, there is a clear difference in end-results between the different treatments. This means that the data suggests that clearcutting yields higher NPV than CCF treatments. However, this says nothing about the reasons as to why that is.

Comparing accumulated NPV between clearcut and CCF (Figure 12) and analysing the largest deviations indicate that especially stands 34, 35, 36, 55 and 56 lose NPV when managed using CCF compared to clearcutting. Four of these stands are dominated by spruce, and one by pine. The next five most deviating stands (1,6,8,28 and 38) are all spruce. This is interpreted as spruce stands performing worse in CCF than for instance pine, birch, oak, beech on this property. Studies in Siljansfors however show that it is possible to sustainably manage homogenous stands of spruce in Sweden using selection cutting systems. For this an inverse j-curve in regard to diameter distribution is necessary in order to sustain long term regeneration and growth (Olofsson, Langwall, & Pommerening, 2023).

4.1.2 Total growth

The data for total growth per year (Figure 7) provide some interesting phenomena as well; that both combined and CCF initially produce higher growth than clearcutting, with CCF intersecting with clearcutting at year 2060 whereafter CCF's growth keep declining until bottom out at around 260m³sk/year and end at half of clearcutting. Thus, the data suggest that long term CCF across all the property results in a loss of growth when compared to clearcutting, while the chose 34% currently manages using CCF provide only a minor loss of growth.

Regarding the phenomena of early higher growth for CCF & Combined, this is likely a result from the aforementioned harvesting of the stands currently

managed using CCF-treatments, resulting in loss of growing biomass and thus less growth than CCF/combined. With CCF performing so much worse than the combined treatment, and with such a clear decline in growth for CCF, it's clear that some stands perform better with clearcutting than CCF, and thus the choice of stands matter. Comparing the species composition of the whole property to those 34% chosen by the landowner (Figure 8) it's clear that the chosen stands have a higher proportion of especially pine and birch than the rest of the property. That the combined treatment follows both the growth and NPV of clearcutting so much better than 100% CCF, would indicate that the chosen stands are well suited to manage using CCF while still retaining a large portion of the NPV and growth. It is however surprising that spruce is so heavily disfavoured by CCF in this simulation, since research indicated that it's a good candidate for CCF-management (Olofsson, Langwall, & Pommerening, 2023).

4.1.3 Stand structure

To explain the early high growth of CCF, and consequent decline, could stem from regeneration problems with the pure CCF-management. Looking at stem density (Figure 8) we see that clearcut and combined follow each other, although vertically different. CCF-treatment however declines from the first year and bottoms out at 400 stems/ha compared to clearcuts 1600 stems/ha. With such a sharp decline, the data suggests that the CCF treatment creates sparser forests with consequently less growing biomass. The effects of this can be seen in the accumulated cut volume (Figure 11), where the difference between clearcut and CCF grows the further into the simulation we get. In simple terms, the CCF managed simulation create sparser forests with less volume cut for each year.

With combined treatment still performing similar to clearcut, the question arises whether this phenomenon could be stand-specific. Could it be that CCF lose growing biomass especially in spruce stands, and that could explain why these stands deviate so much when comparing management regimes?

4.1.4 Income

A common argument for CCF is the higher proportion of timber over time, due to thinnings mostly cutting larger stems instead of the smaller dimensions corresponding to pulpwood. This should in theory result in a higher average price per m³fub in CCF than clearcut. The data suggests that CCF yields higher average price than the combined treatment, which yields higher average price than clearcutting. This would solidify the hypothesis that CCF provides higher value timber, but the loss of growth over time likely results in worse economy when compared to clearcut.

4.2 Limitations

One of the most prevalent problems with this study is the limitations of Heureka. Heureka's models are based on empirical Swedish data, consequently it suffers from Sweden's lack of reference stands of CCF. As a result of this, Heureka's interpretations especially on CCF should be interpreted with caution (Trubins, 2025). For CCF Swedish models consistently underestimate volume increments, especially in spruce stands. These discrepancies are according to the authors expected to be more prevalent in sites with higher productivity (Grzeszkiewicz, o.a., 2025).

In most continuous cover forestry treatments, natural regeneration is the preferred treatment and thus heavily rely on continuous regeneration and ingrowth which is affected by shelter density, site conditions etc. (Lämås, o.a., 2023). The Heureka System was developed with focus on even-aged forestry and thus is less accurate for CCF (Grzeszkiewicz, o.a., 2025). While Heureka can simulate CCF, its distance-independent models may underperform when local density or spatial competition is of importance, indicating the necessity of individual-tree models (Fagerberg, Olsson, Lohmander, Andersson, & Bergh, 2022). The current regeneration models for ingrowth need further refinement, especially the handling of competition under partial canopy cover (Grzeszkiewicz, o.a., 2025). This could explain why stands dominated by spruce perform so much worse than i.e. stands with pine and birch, and thus further research on Heurekas growth models are necessary.

4.3 Improvements

Another issue stems from the selected setting when the data was simulated. Only price lists regarding timber, pulpwood and slash were updated, not costs for e.g. machinery operations or planting. This means that the simulated costs are consistent with the original settings of Heureka, i.e. old price levels, and consequently the costs are underestimated in modern monetary measurements. This should however not affect the trends between growth or NPV etc., but it would have been interesting to see whether the higher costs would have affected management.

Since there currently is effectively no market in Sweden for birch timber, all birch was cut into pulpwood or slash. In a future where more birch is sawed into timber or exported to other countries, perhaps these stands would have performed even better.

5. Conclusions

For this study three types of management regimes were simulated and compared over a hundred-year period, to determine the effects of management on Net Present Value and biological growth.

- Continuous Cover Forestry across all stands was in the simulation consequently outperformed by clearcutting, both in economical and biological terms.
- The simulation indicated that Continuous Cover Forestry led to sparser forest, with less growing biomass and consequently less harvested volume over time.
- The combined treatment, where chosen stands were managed using CCF-treatments, performed like the clearcutting treatment although with some minor loss in both economy and biological terms. With this treatment, stand density remained like that of the clearcutting treatment.

That not all stands are in terms of economy and growth best managed using Continuous Cover Forestry treatments; a combined treatment with correctly chosen stands perform similar to that of clearcutting.

With the results and research indicating underperformance of especially Spruce-stands when simulated using Heureka, further research and refinement of Heurekas growth models is necessary.

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Appendix 1

Stand description of Lilla Trångshytan according to the provided forest-management-plan. CCF indicating a stand currently managed using CCF-treatments, and set-aside indicating that the stand has been voluntarily set-aside according to FSC&PEFC regulations

StandID	Area	Main Species	Comment
1	1.13	Spruce	
2	2.74	Spruce	
4	0.88	Spruce	
5	0.70	Spruce	
6	4.86	Spruce	
7	0.71	Spruce	
8	1.93	Spruce	
9	8.05	Spruce	
9:1	1.15	Spruce	
11	1.80	OtherBroadleaf	Clearcut. Spruce planted
12:1	1.46	Spruce	
14	0.51	Birch	CCF
15	2.80	Spruce	
15:1	1.62	Spruce	
16	1.22	Beech	CCF
17	1.81	Pine	CCF
17:1	1.18	Birch	
19	0.08	Spruce	
20	0.92	OtherBroadleaf	Clearcut. Spruce planted
28	1.57	Spruce	CCF
29	0.60	Spruce	
30	0.97	Beech	CCF. Set-aside
31	1.22	OtherBroadleaf	CCF. Set-aside; beech. alder. oak and beech
32	0.22	Spruce	
34	3.24	Spruce	
34:1	0.49	Birch	CCF
35	4.18	Spruce	CCF
36	1.73	Spruce	
37	0.50	Spruce	
38	3.39	Spruce	
41	44	Nonproductive	Mire

41:1	20	Nonproductive	Mire
41:2	0.92	Pine	CCF
44	1.06	Pine	CCF
45	0.17	Oak	CCF
47	0.23	Spruce	
49	1.81	Spruce	
51	1.16	OtherBroadleaf	Birch. sparse
53	0.40	Spruce	
55	6.05	Pine	CCF
55:1	1.83	Pine	CCF
56	2.74	Spruce	CCF
57	0.34	Spruce	
58	0.53	Spruce	
59	1.17	Spruce	
60	1.50	Spruce	
61	1.74	Birch	CCF. Set-aside.
62	0.27	Spruce	
63	1.07	Spruce	
63:1	0.46	Spruce	

Appendix 2

Data variables extracted from Heureka for the simulation

Number	Name	Description
1	Management system	Used treatment-treatment
2	Volume incl. overstorey per species	
3	Total cost	
4	Net Revenue	
5	Pulpwood revenue	
6	Timber Revenue	
7	Basal area (excl. overstorey)	
8	Dominant Species	
9	Mean Age	
10	Stems	
11	Volume incl. overstorey	
12	CAI Net (all species)	
13	Bonitet	
14	SIS	Site index determined by site factors
15	Date	Inventory date
16	MeanAge	
17	MeanDiameterTotal	
18	MeanHeightTotal	
19	StandID	
20	TotalArea	
21	Volume Cut Per Species	

Appendix 3

Pricelists from Södra Skogsägarna 2025-04-15

Species	Diameter class	Quality 1 (SEK/m3fub)	Quality 2 (SEK/m3fub)	Quality 3 (SEK/m3fub)	Quality 4 (SEK/m3fub)
Pine	13	745	745		
Pine	14	1040	1040		
Pine	16	1150	1150		
Pine	18	1260	1210		
Pine	20	1355	1215		
Pine	22	1435	1225		
Pine	24	1485	1235		
Pine	26	1535	1245		
Pine	28	1535	1245		
Pine	30	1585	1255		
Pine	32	1585	1265		
Pine	34	1585	1270		
Pine	36	1585	1270		
Pine	38	1435	1210		
Spruce	13	1360	1360	1360	1360
Spruce	14	1360	1360	1360	1360
Spruce	16	1360	1360	1360	1360
Spruce	18	1375	1375	1375	1375
Spruce	20	1375	1375	1375	1375
Spruce	22	1475	1475	1475	1475
Spruce	24	1475	1475	1475	1475
Spruce	26	1475	1475	1475	1475
Spruce	28	1475	1475	1475	1475
Spruce	30	1475	1475	1475	1475
Spruce	32	1475	1475	1475	1475
Spruce	34	1475	1475	1475	1475
Spruce	38	1350	1350	1250	1250
Oak	20	0	0	550	
Oak	22	0	0	600	
Oak	24	0	0	650	
Oak	26	0	0	700	
Oak	28	0	0	750	
Oak	30	0	1400	900	
Oak	32	0	1500	1000	

Oak	34	0	1550	1050	
Oak	36	0	1800	1200	
Oak	38	0	1900	1300	
Oak	40	3300	2050	1400	
Oak	42	3400	2150	1400	
Oak	44	3800	2300	1450	
Oak	46	4200	2300	1550	
Oak	48	4500	2450	1550	
Oak	50	4900	2700	1550	
Oak	52	5300	2800	1550	
Oak	54	5700	2900	1550	
Oak	56	5900	3000	1550	
Oak	58	6300	3100	1550	
Oak	60	6500	3200	1600	
Oak	70	7500	3500	1100	
Oak	80	8100	3950	900	
Beech	35	0	1200	0	1010
Beech	40	1500	1400	1300	1010
Beech	50	2100	2100	1400	1010

Priselists pulpwood courtesy Södra Skogsägarna 2025-04-15

Species	Price/m3fub
Pine	675
Spruce	675
NotUsed	250
Birch	665
NotUsed	250
Beech	735

Pricelist other assortments. Södra Skogsägarna 2025-04-15

Assortment	Price per m3
Harvest residue	833
Fuelwood	550

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