Opbrengsttabellen Vlaanderen 2020

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Voorwoord

Deze publicatie is in memoriam van Hans Jansen.

In Vlaanderen wordt geregeld beroep gedaan op de opbrengsttabellen van Nederland gezien er voor Vlaanderen zelf, met uitzondering van Corsicaanse den, geen opbrengsttabellen bestaan. Deze Nederlandse opbrengsttabellen zijn ontworpen op basis van permanente proef- en steekproefperken van homogene monoculturen (Jansen *et al.*, 2018[1]). Hiervoor werd gebruik gemaakt van waarnemingen tussen 1920 en 2010, waarvan het grootste deel is opgenomen tussen 1950 en 2000.

Het Vlaamse bosbeheer en boslandschap verschilt echter van het Nederlandse, wat deze opbrengsttabellen maar gedeeltelijk bruikbaar maakt in Vlaanderen. Zo werken we in Vlaanderen typisch met langere rotatietijden en staat er nog een groot aandeel van het bos op rijke leembodems waardoor de productiviteit van de Vlaamse bossen (8.72 $m^3.ha^{-1}.jr^{-1}$)[2] hoger ligt dan deze in de Nederlandse bossen (7.3 $m^3.ha^{-1}.yr^{-1}$)[3].

In kader van het BioWood project werden er nieuwe opbrengsttabellen ontwikkeld, die beter overeen moeten komen met het Vlaamse boslandschap, door extrapolatie van de groeigegevens onderliggend aan de Nederlandse opbrengsttabellen. Hiervoor werden de rotatietijden van enkele soorten verlengd, werden enkel de meest productieve site indices behouden en werd de berekening achter het grondvlak licht aangepast.

Ilié Storms
Leuven, 2020

[1] J.J. Jansen en A. Oosterbaan (redactie), 2018. Opbrengsttabellen Nederland 2018, 172 blz.
[2] Vlaamse bosinventaris (1997-1999, 2009-2019), Agentschap voor Natuur en Bos.
[3] FOREST EUROPE, 2020: State of Europe's Forests 2020.

Verantwoording

De opbrensttabellen Vlaanderen 2020 zijn gebaseerd op de Opbrengsttabellen Nederland 2020 (Jansen en Oosterbaan, 2020). De selectie omvat per soort de tabellen voor de matige laagdunning, behalve voor de ruwe berk, de gewone esdoorn en de trilpopulier waar bij voor de sterke laagdunning is gekozen.

Bij de populier is voor een plantverband van 4 x 4 m met systematische dunning gekozen. Voor de Corsicaanse en Oostenrijkse den zijn alleen de eerste vijf boniteiten gekozen, omdat de VIe en VIIe boniteit in Nederland alleen in de duinen voorkomen, wat in Vlaanderen niet het geval is.

Voor de Japanse lariks in de tabel voor Zuid-Nederland gekozen.

Daarnaast zijn de tabellen licht gemodificeerd bij de berekening van de grondvlakbijgroei.
Deze grondvlakbijgroei wordt berekend op iedere tijdstip waarop gedund wordt met:

$$i_G = f_1(S\%) \cdot f_2\left(h_{ref}\right) \cdot f_3(t_1, t_2, h_1, h_2) \cdot cf_{80} \text{ voor } h_1 > 7 \qquad (1)$$

met $f_3(t_1, t_2, h_1, h_2) = c_9 + \mathrm{c}_{10} \cdot \left\{\frac{c_{11} \cdot term_h + (1 - c_{11}) \cdot term_t}{t_2 - t_1}\right\}$

$term_h = \{(h_2 - 1.30)^b - (h_1 - 1.30)^b\}$

$term_t = \{(t_2 - t_{130})^b - (t_1 - t_{130})^b\}$

h_1 en h_2 zijn de opperhoogten op de tijdstippen t_1 en t_2, en $b = f_4\left(h_{top}\right)$

$$f_1 = \begin{cases} 1 & \text{voor } S\% \leq c_4 \\ 1 - c_5 \cdot \sqrt{S\% - c_4} & \text{voor } S\% > c_4 \end{cases}$$

$$f_2 = \sqrt{h_{ref}}$$

$$f_4 = \begin{cases} c_6 & \text{voor } h_1 > c_8 \\ c_6 - c_7 \cdot \sqrt{c_8 - h_1} & \text{voor } h_1 \leq c_8 \end{cases}$$

$cf_{80} =$ correctie (klimaat) factor voor groei voor en na 1980

$S\% =$ Hart-Becking Spacing Index

$h_{ref} =$ site index (verwachte tophoogte op referentieleeftijd)

c_4 tot c_{11} geschatte parameters

Afhankelijk van de boomsoort zijn niet alle functies f_1 tot f_4 actief en soms is $term_h$ of $term_t$ gelijk aan 0.

Bij het passeren van de grens voor de tophoogte van 7m moeten de $term_h$ en $term_t$ in formule (1) echter in een aangepaste vorm worden gebruikt, als volgt:

voor $h_2 > 7$ en $h_1 < 7$ geldt: (2)

$$term_h = \frac{(h_2 - 1.30)^b - (7 - 1.30)^b}{t_2 - t_7}$$

$$term_t = \frac{(t_2 - t_{130})^b - (t_7 - t_{130})^b}{t_2 - t_7}$$

Maar aangezien er dan geen dunning hoeft plaatst te vinden werd het *S*% voor deze situatie niet berekend en werd het laatst berekende *S*% gebruikt, of indien niet eerder berekend op 0 gesteld. Deze functionaliteit is in het programma voor Vlaanderen hersteld. De verschillen zijn over het algemeen verwaarloosbaar, zie Tabel 1 . Indien er eerst sprake is van een berekende zwakke laagdunning kunnen de verschillen voor de daarna berekende matige dunning iets groter zijn, zoal bij douglas, zomereik en beuk. Dat geldt ook indien c_4 veel lager dan het *S*% van de dunninggraad, zoals bij zwarte els.

Tabel 1. Verschil productieniveau op referentieleeftijd nieuwe t.o.v oude opbrengsttabel

boomsoort	referentieleeftijd	Boniteit I	II	III	IV	V	gem.
grove den	70	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Corsicaanse den	50	-0.08%	0.00%	0.00%	-0.02%	0.00%	-0.02%
Oostenrijkse den	50	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
douglas	70	-0.59%	-1.50%	-0.44%	-0.96%	-1.08%	-0.91%
Japanse lariks	50	-0.12%	-0.05%	-0.13%	-0.01%	-0.08%	-0.08%
fijnspar	50	-0.61%	-1.19%	-1.39%	-1.34%	-1.07%	-1.12%
zomereik	70	2.03%	0.49%	0.00%	0.27%	0.59%	0.68%
Amerikaanse eik	70	-0.53%	-0.37%	-1.30%	-0.55%	-1.02%	-0.75%
beuk	70	-1.06%	-0.56%	-0.96%	-0.89%	-0.46%	-0.79%
esp	25	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ruwe berk	50	-0.07%	-0.01%	0.00%	-0.06%	-0.01%	-0.03%
es	50	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
zwarte els	50	-2.23%	-0.69%	-1.41%	-1.84%	-1.08%	-1.45%
gewone esdoorn	50	-0.29%	-0.10%	-0.61%	-0.09%	-0.22%	-0.26%
gemiddeld		-0.25%	-0.28%	-0.45%	-0.39%	-0.32%	-0.34%

Tabel 2. Maximale leeftijd in opbrengsttabel.

		maximale leeftijd in Vlaanderen					
	maximale		Boniteit				
boomsoort	leeftijd oud	alles	I	II	III	IV	V
grove den	150	150					
Corsicaanse den	80	90					
Oostenrijkse den	90	90					
douglas	120	120					
Japanse lariks	70	100					
fijnspar	90	90					
zomereik	150	150					
Amerikaanse eik	100	120					
beuk	150	150					
populier_oud	per boniteit		40	45	50	50	50
populier_nieuw		100					
trilpopulier	per boniteit		30	30	30	45	55
ruwe berk	80	100					
es	90	100					
zwarte els	60	100					
gewone esdoorn	80	120					

Toelichting

Voor alle boomsoorten exclusief (tril)populier/ For all tree species excluding poplar and aspen.

symbool	eenheid/unit	betekenis	meaning
Boniteit		relatieve indeling in groeiklassen	site class
h_{ref}	m	site index (opperhoogte op t_{ref})	site index (top height op t_{ref})
t_{ref}	j	referentie leeftijd	reference age
t	j	leeftijd vanaf kieming	age since germination
h_{top}	m	opperhoogte	top height
h_{dom}	m	dominante hoogte	dominant height
d_{dom}	cm	gemiddelde diameter van dominante hoogte boom	mean diameter of dominant tree
$S\%$		S% (dunningsindex van Hart)	Hart-Becking spacing index
N	ha^{-1}	stamtal per ha	density (number of trees)
G	m^2ha^{-1}	grondvlak per ha	basal area
d_g	cm	diameter (1,30 m) van de grondvlakmiddenboom	diameter at breast height of mean basal area tree
h_g	m	hoogte van de grondvlakmiddenboom	height of mean basal area tree
V	m^3ha^{-1}	spilvolume met schors	stem volume over bark
Ic_G	$m^2ha^{-1}j^{-1}$	lopende grondvlakbijgroei op leeftijd t jaar	current basal area increment at age t
Ic_V	$m^3ha^{-1}j^{-1}$	lopende volumebijgroei op leeftijd t jaar	current volume increment at age t
Im_G	$m^2ha^{-1}j^{-1}$	gemiddelde grondvlakbijgroei tot op leeftijd t jaar	mean basal area increment until age t
Im_V	$m^3ha^{-1}j^{-1}$	gemiddelde volumebijgroei tot op leeftijd t jaar	mean volume increment until age t

Voor (tril)populier / For poplar and aspen

symbool	eenheid	betekenis	meaning
Boniteit		relatieve indeling in groeiklassen	site class
h_{25}	m	Site index gemiddelde hoogte op 25 jr)	site index mean height at 25 yr)
t	j	leeftijd vanaf kieming	age since germination
h_m	m	gemiddelde hoogte	mean height
$S\%$		S% (dunningindex van Hart)	Hart-Becking spacing index
N	km^{-1}	stamtal	density (number of trees)
G	m^2km^{-1}	grondvla	basal area
d_g	cm	diameter (1,30 m) van de grondvlakmiddenboom	diameter at breast height of mean basal area tree
d_{or}	cm	diameter loodrecht op rij	diameter on row
d_{ir}	cm	diameter in de rij	diameter in row
V	m^3km^{-1}	spilvolume met schors	stem volume over bark
Ic_G	$m^2km^{-1}j^{-1}$	lopende grondvlakbijgroei op leeftijd t jaar	current basal area increment at age t
Ic_V	$m^3km^{-1}j^{-1}$	lopende volumebijgroei op leeftijd t jaar	current volume increment at age t
Im_G	$m^2km^{-1}j^{-1}$	gemiddelde grondvlakbijgroei tot op leeftijd t jaar	mean basal area increment until age t
Im_V	$m^3km^{-1}j^{-1}$	gemiddelde volumebijgroei tot op leeftijd t jaar	mean volume increment until age t

Grove den
Pinus sylvestris **Scots pine**

Bron: Jansen, J.J., G.M.J. Mohren, A. Oosterbaan, L. Goudzwaard, en J. den Ouden, 2018. *Groei en productie van grove den in Nederland*. FEM Groei en Productie Rapport 2018 – 3, 87 blz.

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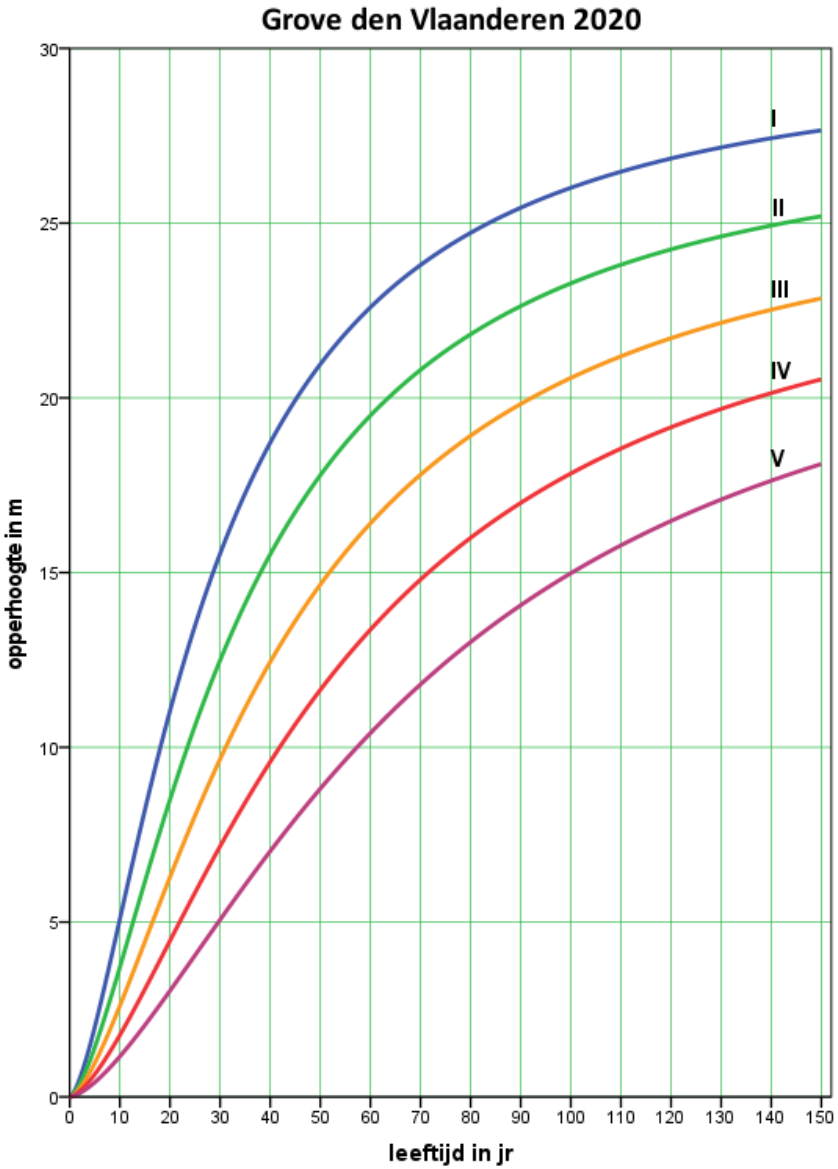

GROVE DEN, Vlaanderen 2020					**matige laagdunning**									**Boniteit I, h_{70} = 23.8**								
SCOTS PINE					moderate thinning from below									Site Class I, h_{70} = 23.8								
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	2.0	1.9	1.7		5000	0.6	1.3	1.6	1					5000	0.6	1.3	1.6	1	0.83	0.12	1.1	0.1	5
10	5.1	4.9	7.1		5000	10.5	5.2	4.3	26					5000	10.5	5.2	4.3	26	2.96	1.05	10.7	2.6	10
15	8.2	8.0	13.2	19.0	5000	25.5	8.1	7.2	106	252	0.8	6.3	3	4748	24.7	8.1	7.2	103	2.23	1.70	17.1	7.0	15
20	11.0	10.8	16.3	19.0	4748	34.4	9.6	9.9	184	2123	10.3	7.8	53	2626	24.2	10.8	10.0	131	1.69	1.76	15.5	9.4	20
25	13.5	13.2	18.9	19.0	2626	31.4	12.3	12.3	202	864	7.0	10.1	43	1761	24.5	13.3	12.4	159	1.26	1.70	13.2	10.3	25
30	15.5	15.2	21.3	19.0	1761	30.3	14.8	14.4	221	436	5.2	12.3	36	1325	25.2	15.6	14.5	185	1.09	1.61	12.1	10.7	30
35	17.3	16.9	23.4	19.0	1325	30.3	17.1	16.1	243	252	4.0	14.3	31	1073	26.3	17.7	16.2	212	0.97	1.53	11.1	10.8	35
40	18.7	18.4	25.3	19.0	1073	30.9	19.1	17.6	265	160	3.3	16.2	27	914	27.6	19.6	17.7	238	0.87	1.45	10.3	10.8	40
45	19.9	19.6	27.1	19.0	914	31.7	21.0	18.8	288	108	2.8	18.0	24	805	29.0	21.4	19.0	264	0.79	1.38	9.6	10.7	45
50	21.0	20.6	28.7	19.0	805	32.8	22.8	19.9	310	77	2.4	19.7	22	728	30.4	23.1	20.0	289	0.73	1.32	9.0	10.6	50
55	21.8	21.5	30.2	19.6	728	33.9	24.4	20.8	332	98	3.6	21.5	33	630	30.4	24.8	21.0	299	0.68	1.27	8.4	10.4	55
60	22.6	22.2	31.7	20.2	630	33.7	26.1	21.6	339	76	3.2	23.4	32	555	30.5	26.4	21.7	308	0.64	1.21	7.9	10.2	60
65	23.2	22.9	33.2	20.8	555	33.6	27.8	22.3	346	60	3.0	25.2	30	494	30.5	28.1	22.4	316	0.59	1.17	7.3	10.0	65
70	23.8	23.4	34.5	21.4	494	33.4	29.3	22.9	351	49	2.8	27.0	29	445	30.6	29.6	23.0	323	0.54	1.13	6.7	9.8	70
75	24.3	23.9	35.7	22.0	445	33.2	30.8	23.4	355	41	2.7	28.8	27	404	30.5	31.0	23.6	327	0.50	1.09	6.2	9.6	75
80	24.7	24.3	36.9	22.6	404	32.9	32.2	23.9	357	34	2.5	30.5	26	370	30.4	32.4	24.1	331	0.47	1.05	5.8	9.3	80
85	25.1	24.7	38.1	23.2	370	32.7	33.6	24.3	359	29	2.4	32.2	25	341	30.3	33.7	24.5	333	0.44	1.01	5.4	9.1	85
90	25.4	25.0	39.4	23.8	341	32.5	34.8	24.7	360	25	1.8	30.2	19	315	30.6	35.2	24.9	340	0.42	0.98	5.1	8.9	90
95	25.7	25.3	40.7	24.4	315	32.7	36.3	25.0	365	22	1.7	31.5	19	293	31.0	36.7	25.2	346	0.40	0.95	4.8	8.7	95
100	26.0	25.6	42.0	25.0	293	32.9	37.8	25.4	370	20	1.7	32.7	18	273	31.3	38.2	25.6	352	0.38	0.92	4.6	8.5	100
105	26.3	25.9	43.3	25.6	273	33.1	39.3	25.7	374	17	1.6	34.0	17	256	31.5	39.6	25.8	357	0.36	0.90	4.4	8.3	105
110	26.5	26.1	44.6	26.2	256	33.3	40.7	25.9	378	16	1.5	35.2	17	240	31.8	41.1	26.1	362	0.35	0.87	4.2	8.1	110
115	26.7	26.3	45.8	26.8	240	33.5	42.2	26.2	382	14	1.5	36.5	16	226	32.0	42.5	26.4	366	0.34	0.85	4.0	7.9	115
120	26.9	26.5	47.0	27.4	226	33.7	43.6	26.4	386	13	1.4	37.7	16	213	32.3	43.9	26.6	370	0.32	0.83	3.8	7.8	120
125	27.0	26.7	48.3	28.0	213	33.9	44.9	26.6	389	12	1.4	38.9	15	202	32.5	45.3	26.8	374	0.31	0.81	3.7	7.6	125
130	27.2	26.9	49.5	28.6	202	34.0	46.3	26.8	392	11	1.3	40.1	15	191	32.7	46.6	27.0	377	0.30	0.79	3.5	7.5	130
135	27.3	27.1	50.7	29.2	191	34.2	47.7	27.0	394	10	1.3	41.2	14	182	32.9	48.0	27.2	380	0.29	0.77	3.4	7.3	135
140	27.4	27.2	51.9	29.8	182	34.3	49.0	27.2	396	9	1.3	42.4	14	173	33.1	49.4	27.4	383	0.28	0.75	3.3	7.2	140
145	27.5	27.3	53.1	30.4	173	34.5	50.4	27.4	399	8	1.2	43.6	14	165	33.2	50.7	27.6	385	0.27	0.74	3.1	7.0	145
150	27.7	27.5	54.3	31.0	165	34.6	51.7	27.5	400	8	1.2	44.7	13	157	33.4	52.0	27.7	387	0.27	0.72	3.0	6.9	150

GROVE DEN, Vlaanderen 2020					**matige laagdunning**									**Boniteit II, h_{70} = 20.8**								
SCOTS PINE					moderate thinning from below									Site Class II, h_{70} = 20.8								
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**			
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment			
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	1.4	1.3	0.4		5000	0.0	0.3	1.1	0					5000	0.0	0.3	1.1	0	0.20	0.01	0.2	0.0	5
10	3.7	3.6	4.9		5000	4.9	3.5	3.0	9					5000	4.9	3.5	3.0	9	1.67	0.49	4.3	0.9	10
15	6.2	6.0	8.7		5000	16.0	6.4	5.3	49					5000	16.0	6.4	5.3	49	2.66	1.06	11.9	3.2	15
20	8.5	8.3	13.7	19.0	5000	27.2	8.3	7.5	116	571	1.9	6.5	8	4429	25.3	8.5	7.5	108	1.82	1.36	12.8	5.8	20
25	10.6	10.4	16.3	19.0	4429	33.5	9.8	9.5	173	1592	7.8	7.9	39	2837	25.7	10.7	9.6	134	1.47	1.42	12.5	7.2	25
30	12.5	12.2	18.5	19.0	2837	32.3	12.0	11.4	193	785	5.9	9.8	34	2052	26.4	12.8	11.5	159	1.15	1.40	11.0	8.0	30
35	14.1	13.8	20.4	19.0	2052	31.6	14.0	13.0	211	445	4.6	11.5	30	1606	27.0	14.6	13.1	181	0.99	1.35	10.1	8.3	35
40	15.5	15.2	22.2	19.0	1606	31.7	15.9	14.4	230	278	3.8	13.2	27	1328	27.9	16.4	14.5	204	0.90	1.30	9.5	8.5	40
45	16.7	16.4	23.9	19.0	1328	32.2	17.6	15.7	249	186	3.2	14.8	24	1142	29.0	18.0	15.8	226	0.82	1.25	8.9	8.6	45
50	17.8	17.5	25.3	19.0	1142	32.9	19.2	16.7	269	131	2.7	16.3	22	1011	30.2	19.5	16.8	247	0.76	1.20	8.4	8.6	50
55	18.7	18.4	26.8	19.6	1011	33.8	20.6	17.7	288	151	3.8	17.9	31	860	30.0	21.1	17.8	257	0.70	1.16	7.9	8.6	55
60	19.5	19.1	28.2	20.2	860	33.4	22.2	18.5	295	115	3.5	19.6	30	745	29.9	22.6	18.6	265	0.66	1.12	7.4	8.5	60
65	20.2	19.8	29.6	20.8	745	33.1	23.8	19.2	301	90	3.2	21.3	28	655	29.9	24.1	19.4	273	0.61	1.08	6.9	8.4	65
70	20.8	20.4	30.9	21.4	655	32.9	25.3	19.9	306	72	3.0	22.9	27	583	29.9	25.5	20.0	280	0.56	1.05	6.3	8.3	70
75	21.3	21.0	32.1	22.0	583	32.5	26.7	20.5	310	59	2.8	24.6	26	524	29.8	26.9	20.6	284	0.51	1.01	5.9	8.1	75
80	21.8	21.5	33.2	22.6	524	32.2	28.0	21.0	313	49	2.6	26.1	25	475	29.6	28.2	21.1	288	0.48	0.98	5.5	8.0	80
85	22.2	21.9	34.3	23.2	475	31.9	29.3	21.4	315	41	2.5	27.7	24	434	29.5	29.4	21.6	291	0.45	0.95	5.1	7.8	85
90	22.6	22.3	35.5	23.8	434	31.7	30.5	21.9	316	35	1.9	26.4	19	398	29.7	30.8	22.0	297	0.43	0.92	4.9	7.6	90
95	23.0	22.6	36.7	24.4	398	31.8	31.9	22.3	321	31	1.8	27.6	18	368	30.0	32.2	22.4	303	0.41	0.90	4.6	7.5	95
100	23.3	22.9	37.9	25.0	368	32.0	33.3	22.6	326	27	1.7	28.8	17	341	30.2	33.6	22.8	309	0.39	0.87	4.4	7.3	100
105	23.6	23.2	39.1	25.6	341	32.1	34.6	22.9	330	23	1.7	30.0	16	318	30.5	34.9	23.1	314	0.37	0.85	4.2	7.2	105
110	23.8	23.4	40.3	26.2	318	32.3	36.0	23.2	334	21	1.6	31.1	16	297	30.7	36.3	23.4	318	0.36	0.83	4.0	7.1	110
115	24.0	23.7	41.4	26.8	297	32.4	37.3	23.5	338	19	1.5	32.3	15	278	30.9	37.6	23.7	323	0.34	0.81	3.8	6.9	115
120	24.2	23.9	42.6	27.4	278	32.6	38.6	23.8	341	17	1.5	33.4	15	262	31.1	38.9	23.9	327	0.33	0.79	3.6	6.8	120
125	24.4	24.1	43.7	28.0	262	32.7	39.9	24.0	344	15	1.4	34.5	14	247	31.3	40.2	24.2	330	0.32	0.77	3.5	6.7	125
130	24.6	24.2	44.9	28.6	247	32.9	41.2	24.2	347	14	1.4	35.6	14	233	31.5	41.5	24.4	334	0.31	0.75	3.4	6.5	130
135	24.8	24.4	46.0	29.2	233	33.0	42.5	24.4	350	12	1.3	36.7	13	221	31.7	42.8	24.6	337	0.30	0.73	3.2	6.4	135
140	24.9	24.6	47.1	29.8	221	33.2	43.8	24.6	353	11	1.3	37.8	13	209	31.9	44.1	24.8	339	0.29	0.72	3.1	6.3	140
145	25.1	24.8	48.2	30.4	209	33.3	45.0	24.8	355	10	1.2	38.9	13	199	32.1	45.3	25.0	342	0.28	0.70	3.0	6.2	145
150	25.2	24.9	49.3	31.0	199	33.4	46.3	25.0	357	10	1.2	40.0	12	189	32.2	46.6	25.2	345	0.27	0.69	2.9	6.1	150

GROVE DEN, Vlaanderen 2020					**matige laagdunning**									**Boniteit III, h_{70} = 17.8**								
SCOTS PINE					moderate thinning from below									Site Class III, h_{70} = 20.8								
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**			
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment			
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	1.0	0.9			5000				0					5000				0			0.0	0.0	5
10	2.6	2.5	2.9		5000	1.8	2.1	2.1	2					5000	1.8	2.1	2.1	2	0.80	0.18	1.4	0.2	10
15	4.4	4.3	6.1		5000	7.7	4.4	3.7	17					5000	7.7	4.4	3.7	17	1.53	0.51	4.8	1.1	15
20	6.3	6.1	8.9		5000	16.7	6.5	5.4	52					5000	16.7	6.5	5.4	52	2.03	0.83	9.3	2.6	20
25	8.0	7.8	13.4	19.0	5000	25.9	8.1	7.1	105	54	0.2	6.3	1	4946	25.8	8.1	7.1	105	1.60	1.04	10.2	4.2	25
30	9.7	9.4	15.5	19.0	4946	33.1	9.2	8.6	157	1519	6.5	7.4	30	3427	26.6	9.9	8.7	127	1.35	1.11	10.2	5.2	30
35	11.1	10.9	17.4	19.0	3427	32.9	11.0	10.1	177	844	5.3	8.9	27	2584	27.6	11.7	10.2	149	1.15	1.13	9.6	5.9	35
40	12.4	12.2	19.1	19.0	2584	32.9	12.7	11.4	195	517	4.4	10.4	25	2067	28.5	13.2	11.5	170	0.95	1.12	8.7	6.3	40
45	13.6	13.3	20.6	19.0	2067	32.9	14.2	12.6	212	340	3.7	11.8	23	1726	29.2	14.7	12.7	189	0.85	1.09	8.1	6.5	45
50	14.7	14.4	22.0	19.0	1726	33.3	15.7	13.6	228	237	3.2	13.1	21	1489	30.1	16.0	13.7	207	0.78	1.07	7.7	6.7	50
55	15.6	15.3	23.4	19.6	1489	33.8	17.0	14.6	245	251	4.2	14.5	29	1238	29.7	17.5	14.7	216	0.73	1.04	7.3	6.8	55
60	16.4	16.1	24.7	20.2	1238	33.2	18.5	15.4	251	187	3.8	16.0	27	1051	29.4	18.9	15.5	224	0.68	1.01	6.9	6.8	60
65	17.1	16.8	26.0	20.8	1051	32.7	19.9	16.2	257	143	3.4	17.5	26	908	29.3	20.3	16.3	231	0.63	0.98	6.5	6.8	65
70	17.8	17.5	27.2	21.4	908	32.3	21.3	16.9	262	112	3.2	19.0	25	796	29.1	21.6	17.0	237	0.58	0.96	6.0	6.7	70
75	18.4	18.1	28.4	22.0	796	31.9	22.6	17.5	266	90	3.0	20.5	24	706	28.9	22.8	17.6	242	0.53	0.93	5.5	6.7	75
80	18.9	18.6	29.4	22.6	706	31.4	23.8	18.1	269	74	2.8	21.9	23	632	28.7	24.0	18.2	246	0.50	0.90	5.2	6.6	80
85	19.4	19.1	30.5	23.2	632	31.1	25.0	18.6	271	61	2.6	23.3	22	570	28.4	25.2	18.7	249	0.47	0.88	4.9	6.5	85
90	19.8	19.5	31.6	23.8	570	30.7	26.2	19.0	273	52	2.1	22.7	18	519	28.6	26.5	19.2	255	0.44	0.85	4.6	6.4	90
95	20.2	19.9	32.8	24.4	519	30.8	27.5	19.5	277	44	2.0	23.8	17	475	28.8	27.8	19.6	260	0.42	0.83	4.4	6.3	95
100	20.6	20.2	33.9	25.0	475	30.8	28.8	19.9	282	38	1.8	24.9	16	437	29.0	29.1	20.0	266	0.40	0.81	4.2	6.2	100
105	20.9	20.5	35.0	25.6	437	30.9	30.0	20.2	286	33	1.8	26.0	16	404	29.2	30.3	20.4	270	0.38	0.79	4.0	6.1	105
110	21.2	20.8	36.1	26.2	404	31.0	31.3	20.6	290	29	1.7	27.1	15	375	29.4	31.6	20.7	275	0.36	0.77	3.8	6.0	110
115	21.5	21.1	37.2	26.8	375	31.1	32.5	20.9	294	26	1.6	28.1	14	349	29.5	32.8	21.0	279	0.35	0.75	3.7	5.9	115
120	21.7	21.3	38.2	27.4	349	31.3	33.8	21.2	297	23	1.5	29.2	14	327	29.7	34.0	21.3	283	0.33	0.74	3.5	5.8	120
125	21.9	21.6	39.3	28.0	327	31.4	35.0	21.4	300	20	1.5	30.3	13	306	29.9	35.3	21.6	287	0.32	0.72	3.4	5.7	125
130	22.1	21.8	40.3	28.6	306	31.5	36.2	21.7	303	18	1.4	31.3	13	288	30.1	36.5	21.9	290	0.31	0.70	3.2	5.6	130
135	22.3	22.0	41.4	29.2	288	31.6	37.4	21.9	306	17	1.4	32.3	13	271	30.3	37.7	22.1	294	0.30	0.69	3.1	5.5	135
140	22.5	22.2	42.4	29.8	271	31.7	38.6	22.2	309	15	1.3	33.4	12	256	30.4	38.9	22.3	297	0.29	0.68	3.0	5.4	140
145	22.7	22.3	43.5	30.4	256	31.9	39.8	22.4	311	14	1.3	34.4	12	243	30.6	40.1	22.5	299	0.28	0.66	2.9	5.3	145
150	22.8	22.5	44.5	31.0	243	32.0	40.9	22.6	314	12	1.2	35.4	12	230	30.7	41.2	22.7	302	0.27	0.65	2.8	5.3	150

GROVE DEN, Vlaanderen 2020					**matige laagdunning**									**Boniteit IV, h_{70} = 14.8**						
SCOTS PINE					moderate thinning from below									Site Class IV, h_{70} = 14.8						
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	0.6	0.6			5000				0					5000				0			0.0	0.0	5
10	1.8	1.7	1.2		5000	0.3	0.9	1.4	0					5000	0.3	0.9	1.4	0	0.28	0.03	0.3	0.0	10
15	3.1	2.9	3.8		5000	3.0	2.8	2.5	5					5000	3.0	2.8	2.5	5	0.76	0.20	1.6	0.3	15
20	4.5	4.3	6.1		5000	7.8	4.5	3.7	17					5000	7.8	4.5	3.7	17	1.14	0.39	3.6	0.9	20
25	5.8	5.7	8.3		5000	14.3	6.0	5.0	41					5000	14.3	6.0	5.0	41	1.42	0.57	6.0	1.7	25
30	7.2	7.0	12.5	21.2	5000	21.8	7.5	6.3	78					5000	21.8	7.5	6.3	78	1.44	0.73	9.0	2.6	30
35	8.4	8.2	14.1	19.0	5000	28.2	8.5	7.5	119	487	1.7	6.6	7	4513	26.5	8.7	7.5	112	1.24	0.81	8.0	3.4	35
40	9.6	9.3	15.8	19.0	4513	32.6	9.6	8.6	153	1030	4.8	7.7	22	3483	27.8	10.1	8.7	131	1.13	0.86	8.1	4.0	40
45	10.7	10.4	17.3	19.0	3483	33.1	11.0	9.7	171	667	4.2	8.9	21	2816	28.9	11.4	9.7	150	1.01	0.88	7.7	4.4	45
50	11.6	11.4	18.7	19.0	2816	33.7	12.3	10.6	188	457	3.7	10.1	20	2360	30.0	12.7	10.7	168	0.89	0.89	7.3	4.7	50
55	12.5	12.3	20.1	19.6	2360	34.2	13.6	11.6	203	449	4.6	11.4	26	1910	29.6	14.0	11.6	177	0.76	0.88	6.7	4.9	55
60	13.4	13.1	21.3	20.2	1910	33.2	14.9	12.4	209	326	4.1	12.7	25	1584	29.1	15.3	12.5	184	0.71	0.87	6.3	5.1	60
65	14.1	13.8	22.5	20.8	1584	32.5	16.2	13.2	215	245	3.8	14.0	24	1340	28.8	16.5	13.3	191	0.65	0.85	5.9	5.2	65
70	14.8	14.5	23.6	21.4	1340	31.9	17.4	13.9	219	188	3.5	15.3	23	1151	28.4	17.7	14.0	196	0.60	0.84	5.5	5.2	70
75	15.4	15.1	24.7	22.0	1151	31.3	18.6	14.5	223	148	3.2	16.6	22	1003	28.1	18.9	14.6	201	0.55	0.82	5.2	5.2	75
80	16.0	15.7	25.7	22.6	1003	30.7	19.7	15.1	226	119	3.0	17.9	21	884	27.7	20.0	15.2	205	0.51	0.80	4.9	5.2	80
85	16.5	16.2	26.7	23.2	884	30.2	20.9	15.7	229	97	2.8	19.1	20	787	27.4	21.1	15.8	208	0.48	0.78	4.6	5.2	85
90	17.0	16.7	27.8	23.8	787	29.7	21.9	16.2	231	81	2.3	19.0	17	706	27.5	22.3	16.3	214	0.45	0.77	4.4	5.1	90
95	17.4	17.1	28.8	24.4	706	29.7	23.1	16.7	235	68	2.1	20.0	16	638	27.5	23.4	16.8	219	0.43	0.75	4.2	5.1	95
100	17.8	17.5	29.9	25.0	638	29.6	24.3	17.1	239	57	2.0	21.1	16	581	27.6	24.6	17.2	223	0.41	0.73	4.0	5.0	100
105	18.2	17.9	30.9	25.6	581	29.6	25.5	17.5	243	49	1.9	22.1	15	532	27.7	25.8	17.6	228	0.39	0.72	3.8	5.0	105
110	18.5	18.2	31.9	26.2	532	29.7	26.6	17.9	247	43	1.8	23.1	14	489	27.9	26.9	18.0	232	0.37	0.70	3.6	4.9	110
115	18.9	18.5	32.9	26.8	489	29.7	27.8	18.2	250	37	1.7	24.1	14	452	28.0	28.1	18.4	237	0.36	0.69	3.5	4.9	115
120	19.2	18.8	33.9	27.4	452	29.8	29.0	18.6	254	33	1.6	25.1	13	419	28.1	29.2	18.7	240	0.34	0.67	3.4	4.8	120
125	19.4	19.1	34.9	28.0	419	29.8	30.1	18.9	257	29	1.5	26.0	13	390	28.3	30.4	19.0	244	0.33	0.66	3.2	4.7	125
130	19.7	19.3	35.9	28.6	390	29.9	31.2	19.2	260	26	1.5	27.0	12	365	28.4	31.5	19.3	248	0.32	0.65	3.1	4.7	130
135	19.9	19.6	36.9	29.2	365	30.0	32.4	19.5	263	23	1.4	28.0	12	342	28.6	32.6	19.6	251	0.31	0.63	3.0	4.6	135
140	20.1	19.8	37.9	29.8	342	30.1	33.5	19.7	266	21	1.4	29.0	12	321	28.7	33.8	19.9	254	0.30	0.62	2.9	4.6	140
145	20.3	20.0	38.8	30.4	321	30.2	34.6	20.0	268	19	1.3	29.9	11	302	28.9	34.9	20.1	257	0.29	0.61	2.8	4.5	145
150	20.5	20.2	39.8	31.0	302	30.3	35.7	20.2	271	17	1.3	30.9	11	285	29.0	36.0	20.3	260	0.28	0.60	2.7	4.4	150

GROVE DEN, Vlaanderen 2020					**matige laagdunning**									**Boniteit V, h_{70} = 11.8**						
SCOTS PINE					moderate thinning from below									Site Class V, h_{70} = 11.8						
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	0.4	0.4			5000				0					5000				0			0.0	0.0	5
10	1.2	1.1			5000				0					5000				0			0.0	0.0	10
15	2.1	1.9	1.8		5000	0.7	1.3	1.6	1					5000	0.7	1.3	1.6	1	0.30	0.05	0.4	0.1	15
20	3.0	2.9	3.7		5000	2.8	2.7	2.5	4					5000	2.8	2.7	2.5	4	0.55	0.14	1.1	0.2	20
25	4.0	3.9	5.4		5000	6.2	4.0	3.4	14					5000	6.2	4.0	3.4	14	0.76	0.25	2.2	0.6	25
30	5.1	4.9	7.1		5000	10.4	5.2	4.3	26					5000	10.4	5.2	4.3	26	0.94	0.35	3.4	0.9	30
35	6.1	5.9	8.6		5000	15.4	6.3	5.3	47					5000	15.4	6.3	5.3	47	1.06	0.44	4.7	1.3	35
40	7.0	6.8	12.5	21.6	5000	21.0	7.3	6.2	74					5000	21.0	7.3	6.2	74	1.14	0.53	7.0	1.8	40
45	7.9	7.7	13.8	19.1	5000	26.4	8.2	7.1	106					5000	26.4	8.2	7.1	106	1.08	0.59	6.2	2.3	45
50	8.8	8.6	15.1	19.0	5000	31.8	9.0	7.9	138	885	3.7	7.3	15	4115	28.1	9.3	7.9	123	1.02	0.64	6.5	2.8	50
55	9.6	9.4	16.4	19.6	4115	33.0	10.1	8.7	155	878	4.8	8.3	22	3237	28.2	10.5	8.8	133	0.93	0.67	6.3	3.1	55
60	10.4	10.2	17.7	20.2	3237	32.7	11.3	9.5	164	624	4.4	9.5	21	2613	28.3	11.7	9.5	143	0.86	0.69	6.1	3.4	60
65	11.1	10.9	18.9	20.8	2613	32.4	12.6	10.2	173	457	4.1	10.7	21	2156	28.3	12.9	10.3	152	0.77	0.70	5.7	3.6	65
70	11.8	11.5	20.1	21.4	2156	31.9	13.7	10.9	179	345	3.8	11.9	21	1811	28.1	14.1	11.0	159	0.68	0.70	5.3	3.7	70
75	12.4	12.2	21.1	22.0	1811	31.3	14.8	11.5	184	266	3.5	13.0	20	1545	27.7	15.1	11.6	164	0.59	0.69	4.8	3.8	75
80	13.0	12.7	22.1	22.6	1545	30.5	15.9	12.1	187	210	3.3	14.1	19	1335	27.2	16.1	12.2	167	0.53	0.68	4.5	3.8	80
85	13.6	13.3	23.0	23.2	1335	29.8	16.9	12.7	189	168	3.1	15.2	19	1167	26.7	17.1	12.8	170	0.50	0.67	4.2	3.9	85
90	14.1	13.8	23.9	23.8	1167	29.2	17.8	13.2	191	137	2.6	15.5	16	1031	26.6	18.1	13.3	175	0.47	0.66	4.1	3.9	90
95	14.5	14.2	24.9	24.4	1031	28.9	18.9	13.7	195	113	2.4	16.4	15	918	26.5	19.2	13.8	179	0.45	0.65	3.9	3.9	95
100	15.0	14.7	25.9	25.0	918	28.7	19.9	14.2	198	94	2.2	17.3	15	823	26.5	20.2	14.3	184	0.42	0.64	3.7	3.9	100
105	15.4	15.1	26.8	25.6	823	28.5	21.0	14.6	202	80	2.1	18.2	14	744	26.5	21.3	14.8	188	0.40	0.63	3.6	3.9	105
110	15.8	15.5	27.8	26.2	744	28.4	22.1	15.1	205	68	1.9	19.1	14	676	26.5	22.3	15.2	192	0.39	0.62	3.4	3.9	110
115	16.1	15.8	28.7	26.8	676	28.4	23.1	15.5	209	58	1.8	20.0	13	617	26.5	23.4	15.6	196	0.37	0.61	3.3	3.8	115
120	16.5	16.2	29.6	27.4	617	28.4	24.2	15.8	212	51	1.7	20.9	13	567	26.6	24.5	15.9	199	0.36	0.60	3.2	3.8	120
125	16.8	16.5	30.6	28.0	567	28.4	25.2	16.2	215	44	1.7	21.8	12	522	26.7	25.5	16.3	203	0.34	0.59	3.1	3.8	125
130	17.1	16.8	31.5	28.6	522	28.4	26.3	16.5	218	39	1.6	22.8	12	483	26.8	26.6	16.6	206	0.33	0.58	3.0	3.8	130
135	17.4	17.0	32.4	29.2	483	28.4	27.3	16.8	221	34	1.5	23.7	11	449	26.9	27.6	17.0	210	0.32	0.57	2.9	3.7	135
140	17.6	17.3	33.3	29.8	449	28.4	28.4	17.1	224	31	1.5	24.6	11	418	27.0	28.7	17.3	213	0.31	0.56	2.8	3.7	140
145	17.9	17.5	34.2	30.4	418	28.5	29.4	17.4	227	27	1.4	25.5	11	391	27.1	29.7	17.5	216	0.30	0.55	2.7	3.7	145
150	18.1	17.8	35.1	31.0	391	28.6	30.5	17.7	229	25	1.3	26.4	10	367	27.2	30.7	17.8	219	0.29	0.54	2.6	3.6	150

Corsicaanse den
Pinus nigra subsp. *laricio* Corsican pine

Bron: Jansen, J.J., A. Oosterbaan, G.M.J. Mohren en J. den Ouden, 2018. *Groei en productie van Corsicaanse den in Nederland*. FEM Groei en Productie Rapport 2018 – 6, 109 blz.

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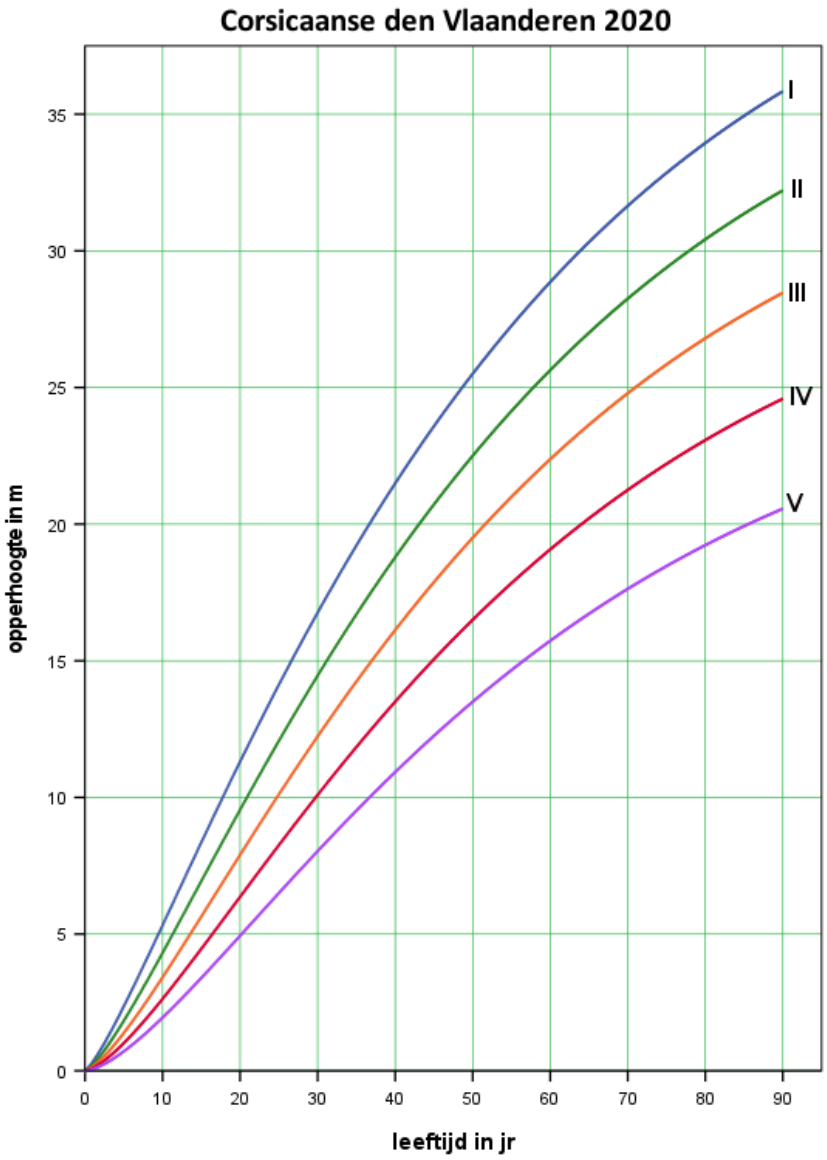

CORSICAANSE DEN, Vlaanderen 2020							**matige laagdunning**								**Boniteit I, h_{50} = 25.5**					
CORSICAN PINE							moderate thinning from below								Site Class I, h_{50} = 25.5					
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	2.4	2.1	3.0		5000	1.6	2.0	1.9	3					5000	1.6	2.0	1.9	3	0.84	0.32	2.0	0.5	5
10	5.3	5.0	8.3		5000	12.3	5.6	4.3	39					5000	12.3	5.6	4.3	39	3.82	1.24	15.2	3.9	10
15	8.4	8.1	13.9	19.0	5000	31.4	8.9	6.9	134	414	1.6	7.1	7	4586	29.7	9.1	7.0	127	2.46	2.09	19.1	8.9	15
20	11.3	11.0	18.5	19.0	4586	41.0	10.7	9.7	231	2084	12.4	8.7	69	2502	28.7	12.1	9.8	162	2.09	2.13	21.0	11.9	20
25	14.1	13.9	22.3	19.0	2502	38.5	14.0	12.4	267	898	9.1	11.4	62	1605	29.4	15.3	12.5	204	1.84	2.10	21.1	13.7	25
30	16.8	16.5	26.0	19.0	1605	38.1	17.4	15.0	310	466	7.3	14.1	58	1139	30.8	18.6	15.1	251	1.66	2.04	21.2	14.9	30
35	19.2	19.0	29.6	19.0	1139	38.7	20.8	17.3	358	273	6.1	16.9	56	866	32.6	21.9	17.5	302	1.52	1.97	21.4	15.8	35
40	21.5	21.2	33.4	19.7	866	39.9	24.2	19.5	409	224	6.9	19.8	70	642	33.0	25.6	19.7	339	1.41	1.91	21.3	16.5	40
45	23.6	23.3	37.1	20.5	642	39.8	28.1	21.5	444	146	6.2	23.2	68	496	33.6	29.4	21.7	377	1.31	1.85	21.0	17.0	45
50	25.5	25.2	40.7	21.2	496	40.0	32.0	23.3	481	101	5.6	26.6	66	396	34.4	33.3	23.5	414	1.24	1.79	20.6	17.4	50
55	27.3	27.0	44.3	21.9	396	40.4	36.1	25.0	517	72	5.1	30.1	65	324	35.3	37.3	25.2	452	1.17	1.74	20.3	17.7	55
60	28.9	28.6	47.9	22.6	324	41.0	40.2	26.5	552	53	4.8	33.8	63	270	36.2	41.3	26.7	489	1.11	1.69	19.9	17.9	60
65	30.3	30.1	51.4	23.4	270	41.6	44.3	27.8	587	40	4.5	37.5	62	230	37.2	45.4	28.1	525	1.05	1.64	19.4	18.0	65
70	31.6	31.4	54.9	24.1	230	42.3	48.4	29.1	621	31	4.2	41.2	61	198	38.1	49.4	29.3	560	1.00	1.60	18.8	18.1	70
75	32.9	32.6	58.4	24.8	198	42.9	52.5	30.2	652	25	4.0	45.0	60	173	39.0	53.5	30.5	593	0.95	1.56	18.2	18.1	75
80	33.9	33.7	61.7	25.6	173	43.6	56.6	31.2	682	20	3.8	48.8	58	153	39.8	57.5	31.5	624	0.90	1.52	17.6	18.1	80
85	34.9	34.7	64.7	26.3	153	44.2	60.6	32.2	711	17	3.6	52.6	57	137	40.6	61.5	32.5	654	0.86	1.48	17.0	18.1	85
90	35.8	35.6	67.9	27.0	137	44.8	64.6	33.0	738	14	3.4	56.4	56	123	41.4	65.4	33.4	682	0.82	1.44	16.5	18.0	90

CORSICAANSE DEN, Vlaanderen 2020					**matige laagdunning**									**Boniteit II, h_{50} = 22.5**								
CORSICAN PINE					moderate thinning from below									Site Class II, h_{50} = 22.5								
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	1.8	1.6	2.4		5000	1.0	1.6	1.5	1					5000	1.0	1.6	1.5	1	0.47	0.20	1.0	0.3	5
10	4.3	4.0	6.3		5000	7.1	4.3	3.4	19					5000	7.1	4.3	3.4	19	2.30	0.71	7.9	1.9	10
15	6.9	6.7	12.0		5000	25.5	8.1	5.7	99					5000	25.5	8.1	5.7	99	3.77	1.70	21.0	6.6	15
20	9.5	9.3	15.9	19.0	5000	37.3	9.8	8.1	180	1490	7.2	7.9	34	3510	30.1	10.5	8.2	146	2.12	1.87	18.2	9.0	20
25	12.1	11.8	19.6	19.0	3510	40.0	12.0	10.5	240	1313	9.9	9.8	58	2197	30.1	13.2	10.6	181	1.86	1.89	19.0	11.0	25
30	14.5	14.2	22.9	19.0	2197	38.9	15.0	12.8	276	667	7.8	12.2	54	1531	31.2	16.1	12.9	221	1.67	1.87	19.1	12.3	30
35	16.7	16.4	26.2	19.0	1531	39.1	18.0	15.0	317	384	6.5	14.6	52	1147	32.7	19.0	15.1	265	1.53	1.83	19.3	13.3	35
40	18.8	18.5	29.7	19.7	1147	40.0	21.1	17.0	362	307	7.2	17.3	64	841	32.8	22.3	17.2	298	1.42	1.78	19.2	14.0	40
45	20.7	20.5	33.2	20.5	841	39.7	24.5	18.9	393	198	6.4	20.2	62	643	33.3	25.7	19.1	331	1.32	1.74	19.0	14.6	45
50	22.5	22.2	36.6	21.2	643	39.7	28.1	20.6	425	135	5.7	23.3	60	508	34.0	29.2	20.8	364	1.24	1.69	18.7	15.0	50
55	24.1	23.9	39.9	21.9	508	40.0	31.7	22.2	457	95	5.3	26.5	59	413	34.8	32.8	22.4	398	1.18	1.65	18.4	15.3	55
60	25.6	25.4	43.3	22.6	413	40.5	35.4	23.6	489	70	4.9	29.7	58	343	35.6	36.4	23.9	431	1.12	1.61	18.1	15.6	60
65	27.0	26.8	46.5	23.4	343	41.1	39.1	25.0	520	53	4.5	33.1	57	290	36.5	40.1	25.2	464	1.06	1.57	17.6	15.7	65
70	28.3	28.0	49.8	24.1	290	41.7	42.8	26.2	551	41	4.3	36.5	56	249	37.4	43.7	26.4	495	1.00	1.53	17.1	15.9	70
75	29.4	29.1	53.0	24.8	249	42.3	46.5	27.3	579	32	4.0	39.9	54	217	38.3	47.4	27.5	525	0.95	1.49	16.6	15.9	75
80	30.4	30.2	56.1	25.6	217	42.9	50.2	28.3	607	26	3.8	43.3	53	191	39.1	51.1	28.6	554	0.90	1.46	16.1	15.9	80
85	31.4	31.1	59.2	26.3	191	43.5	53.9	29.2	633	21	3.6	46.8	52	170	39.9	54.7	29.5	581	0.86	1.42	15.6	15.9	85
90	32.2	32.0	62.1	27.0	170	44.1	57.5	30.1	657	17	3.5	50.2	51	152	40.6	58.3	30.4	607	0.82	1.39	15.1	15.9	90

CORSICAANSE DEN, Vlaanderen 2020					**matige laagdunning**									**Boniteit III, h_{50} = 19.5**								
CORSICAN PINE					moderate thinning from below									Site Class III, h_{50} = 19.5								
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	1.4	1.2	1.9		5000	0.6	1.3	1.1	1					5000	0.6	1.3	1.1	1	0.47	0.13	0.6	0.1	5
10	3.4	3.1	4.7		5000	4.0	3.2	2.7	9					5000	4.0	3.2	2.7	9	1.28	0.40	3.8	0.9	10
15	5.6	5.4	9.2		5000	15.1	6.2	4.5	49					5000	15.1	6.2	4.5	49	3.25	1.00	13.7	3.3	15
20	7.9	7.6	13.4	19.2	5000	31.1	8.9	6.6	126					5000	31.1	8.9	6.6	126	2.16	1.56	11.0	6.3	20
25	10.1	9.8	16.8	19.0	5000	41.2	10.2	8.6	209	1869	10.2	8.3	51	3131	31.0	11.2	8.7	158	1.89	1.65	16.8	8.4	25
30	12.2	12.0	19.8	19.0	3131	39.9	12.7	10.7	242	992	8.4	10.4	50	2138	31.6	13.7	10.8	192	1.69	1.67	17.0	9.8	30
35	14.2	14.0	22.8	19.0	2138	39.6	15.4	12.7	277	561	6.9	12.5	47	1578	32.8	16.3	12.8	230	1.54	1.66	17.1	10.8	35
40	16.1	15.9	25.9	19.7	1578	40.2	18.0	14.5	315	436	7.5	14.8	58	1141	32.7	19.1	14.7	257	1.43	1.64	17.1	11.6	40
45	17.9	17.6	29.1	20.5	1141	39.6	21.0	16.2	342	278	6.6	17.3	56	863	33.0	22.1	16.4	286	1.33	1.61	16.9	12.2	45
50	19.5	19.2	32.2	21.2	863	39.5	24.1	17.9	370	187	5.9	20.0	54	676	33.6	25.1	18.0	315	1.25	1.58	16.7	12.6	50
55	21.0	20.7	35.4	21.9	676	39.7	27.3	19.3	398	131	5.4	22.8	53	545	34.3	28.3	19.5	345	1.18	1.55	16.4	13.0	55
60	22.4	22.1	38.4	22.6	545	40.1	30.6	20.7	426	95	5.0	25.7	52	450	35.1	31.5	20.9	374	1.12	1.51	16.2	13.3	60
65	23.6	23.4	41.5	23.4	450	40.6	33.9	22.0	454	71	4.6	28.7	51	378	35.9	34.8	22.2	403	1.06	1.48	15.8	13.5	65
70	24.8	24.5	44.4	24.1	378	41.1	37.2	23.1	481	55	4.3	31.7	50	323	36.8	38.1	23.3	431	1.01	1.45	15.4	13.6	70
75	25.8	25.6	47.3	24.8	323	41.7	40.5	24.2	507	43	4.1	34.7	49	280	37.6	41.3	24.4	458	0.95	1.42	14.9	13.7	75
80	26.8	26.6	50.2	25.6	280	42.2	43.8	25.1	531	34	3.9	37.8	48	246	38.4	44.6	25.4	483	0.91	1.39	14.5	13.8	80
85	27.7	27.4	53.0	26.3	246	42.8	47.1	26.0	554	28	3.7	40.9	47	218	39.2	47.8	26.3	508	0.87	1.36	14.0	13.8	85
90	28.5	28.2	55.8	27.0	218	43.4	50.3	26.8	577	23	3.5	44.0	46	195	39.9	51.0	27.1	531	0.83	1.33	13.6	13.8	90

CORSICAANSE DEN, Vlaanderen 2020					**matige laagdunning**									**Boniteit IV, h_{50} = 16.5**							
CORSICAN PINE					moderate thinning from below									Site Class IV, h_{50} = 16.5							
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	1.0	0.9			5000				0					5000				0			0.3	0.0	5
10	2.6	2.3	3.5		5000	2.2	2.4	2.1	4					5000	2.2	2.4	2.1	4	0.66	0.22	1.7	0.4	10
15	4.5	4.2	6.8		5000	8.2	4.6	3.6	22					5000	8.2	4.6	3.6	22	1.86	0.55	6.5	1.5	15
20	6.4	6.1	10.9		5000	21.3	7.4	5.2	77					5000	21.3	7.4	5.2	77	3.37	1.07	16.1	3.8	20
25	8.3	8.0	14.1	19.0	5000	34.0	9.3	6.9	143	302	1.3	7.4	5	4698	32.7	9.4	7.0	138	1.92	1.36	13.9	5.7	25
30	10.1	9.8	16.9	19.0	4698	41.8	10.6	8.7	212	1555	9.1	8.7	46	3143	32.6	11.5	8.7	166	1.72	1.44	14.8	7.2	30
35	11.8	11.6	19.4	19.0	3143	40.8	12.9	10.4	240	862	7.4	10.5	43	2281	33.4	13.7	10.5	197	1.56	1.46	14.9	8.3	35
40	13.5	13.2	22.2	19.7	2281	40.9	15.1	12.0	272	653	7.9	12.4	52	1627	33.0	16.1	12.1	220	1.44	1.47	14.9	9.1	40
45	15.1	14.8	25.0	20.5	1627	40.0	17.7	13.6	294	410	6.9	14.6	50	1217	33.1	18.6	13.7	244	1.34	1.46	14.7	9.8	45
50	16.5	16.2	27.8	21.2	1217	39.6	20.4	15.0	317	273	6.1	16.9	48	945	33.5	21.2	15.2	269	1.26	1.44	14.6	10.3	50
55	17.8	17.6	30.6	21.9	945	39.6	23.1	16.4	341	189	5.6	19.3	47	755	34.1	24.0	16.5	294	1.19	1.42	14.4	10.6	55
60	19.1	18.8	33.4	22.6	755	39.9	25.9	17.6	366	137	5.1	21.8	46	619	34.8	26.7	17.8	320	1.13	1.40	14.2	11.0	60
65	20.2	20.0	36.2	23.4	619	40.3	28.8	18.8	390	101	4.7	24.4	45	517	35.5	29.6	18.9	344	1.07	1.38	13.9	11.2	65
70	21.3	21.0	38.9	24.1	517	40.7	31.7	19.8	413	77	4.4	27.0	44	440	36.3	32.4	20.0	369	1.01	1.36	13.5	11.4	70
75	22.2	22.0	41.5	24.8	440	41.2	34.5	20.8	435	60	4.2	29.6	43	380	37.1	35.3	21.0	392	0.96	1.33	13.1	11.5	75
80	23.1	22.8	44.1	25.6	380	41.8	37.4	21.7	457	48	3.9	32.3	42	332	37.8	38.1	21.9	414	0.91	1.31	12.8	11.6	80
85	23.9	23.6	46.6	26.3	332	42.3	40.3	22.6	477	39	3.7	35.0	41	293	38.6	40.9	22.8	436	0.87	1.28	12.4	11.6	85
90	24.6	24.3	49.1	27.0	293	42.8	43.1	23.3	497	32	3.5	37.7	40	261	39.3	43.7	23.6	456	0.83	1.26	12.0	11.7	90

CORSICAANSE DEN, Vlaanderen 2020					**matige laagdunning**									**Boniteit V, h_{50} = 13.5**					
CORSICAN PINE					moderate thinning from below									Site Class V, h_{50} = 13.5					
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	0.7	0.6			5000				0					5000				0			0.0	0.0	5
10	1.9	1.7	2.6		5000	1.2	1.7	1.6	2					5000	1.2	1.7	1.6	2	0.33	0.12	0.7	0.2	10
15	3.4	3.1	4.8		5000	4.1	3.3	2.7	9					5000	4.1	3.3	2.7	9	0.93	0.28	2.7	0.6	15
20	4.9	4.7	7.9		5000	11.1	5.3	4.0	33					5000	11.1	5.3	4.0	33	1.90	0.56	7.1	1.6	20
25	6.5	6.2	11.4		5000	23.3	7.7	5.3	86					5000	23.3	7.7	5.3	86	2.92	0.93	14.3	3.4	25
30	8.0	7.8	13.9	19.0	5000	34.4	9.4	6.7	141	44	0.2	7.5	1	4956	34.2	9.4	6.8	141	1.75	1.15	12.0	4.7	30
35	9.5	9.2	16.2	19.0	4956	42.5	10.5	8.2	204	1423	8.1	8.5	38	3533	34.5	11.1	8.2	166	1.59	1.22	12.8	5.9	35
40	10.9	10.7	18.8	19.7	3533	42.1	12.3	9.6	230	1048	8.4	10.1	45	2485	33.7	13.1	9.6	184	1.46	1.26	12.7	6.7	40
45	12.3	12.0	20.8	20.5	2485	40.7	14.4	10.9	247	649	7.2	11.9	43	1837	33.5	15.2	11.0	204	1.36	1.28	12.6	7.4	45
50	13.5	13.2	23.3	21.2	1837	40.1	16.7	12.1	266	426	6.4	13.8	42	1411	33.6	17.4	12.2	224	1.28	1.28	12.4	7.9	50
55	14.7	14.4	25.7	21.9	1411	39.8	19.0	13.3	286	293	5.8	15.9	41	1119	34.1	19.7	13.4	245	1.20	1.28	12.3	8.3	55
60	15.7	15.5	28.2	22.6	1119	39.9	21.3	14.4	306	209	5.3	17.9	40	910	34.6	22.0	14.5	266	1.14	1.27	12.1	8.6	60
65	16.7	16.5	30.6	23.4	910	40.2	23.7	15.4	326	154	4.9	20.1	39	756	35.3	24.4	15.6	287	1.08	1.26	11.9	8.9	65
70	17.6	17.4	33.0	24.1	756	40.5	26.1	16.4	345	117	4.5	22.3	38	639	36.0	26.8	16.5	307	1.02	1.24	11.6	9.1	70
75	18.5	18.2	35.3	24.8	639	41.0	28.6	17.3	364	90	4.3	24.5	37	549	36.7	29.2	17.4	327	0.97	1.22	11.3	9.2	75
80	19.2	19.0	37.6	25.6	549	41.4	31.0	18.1	382	71	4.0	26.8	36	478	37.4	31.6	18.3	346	0.92	1.21	10.9	9.3	80
85	19.9	19.7	39.9	26.3	478	41.9	33.4	18.8	400	57	3.8	29.0	36	420	38.1	34.0	19.0	364	0.88	1.19	10.6	9.4	85
90	20.6	20.3	42.1	27.0	420	42.4	35.8	19.5	417	47	3.6	31.3	35	374	38.8	36.4	19.7	382	0.84	1.17	10.3	9.5	90

Oostenrijkse den
Pinus nigra* subsp. *nigra **Austrian pine**

Bron: Jansen, J.J., A. Oosterbaan, G.M.J. Mohren en J. den Ouden, 2018. *Groei en productie van Oostenrijkse den in Nederland*. FEM Groei en Productie Rapport 2018 – 7, 96 blz.

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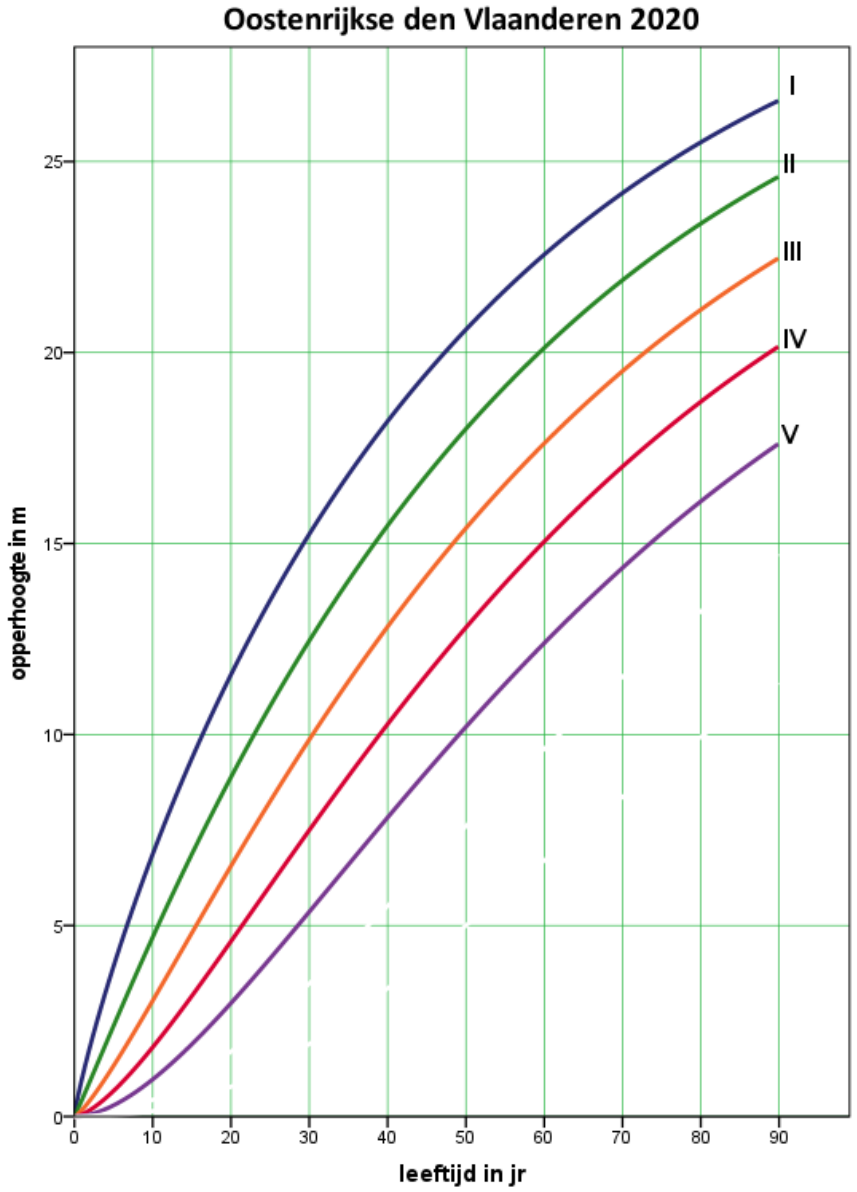


OOSTENRIJKSE DEN, Vlaanderen 2020					**matige laagdunning**									**Boniteit I, h_{50} = 20.6**								
AUSTRIAN PINE					moderate thinning from below									Site Class I, h_{50} = 20.6								
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	3.9	3.6	6.7		5000	7.9	4.5	3.1	17					5000	7.9	4.5	3.1	17	2.66	1.58	8.1	3.4	5
10	6.9	6.6	11.1		5000	22.2	7.5	5.5	77					5000	22.2	7.5	5.5	77	2.95	2.22	15.5	7.7	10
15	9.4	9.1	15.8	19.0	5000	35.7	9.5	7.9	173	1358	4.7	6.6	23	3642	31.0	10.4	7.9	150	2.41	2.38	19.0	11.5	15
20	11.6	11.3	19.8	19.0	3642	42.0	12.1	10.1	246	1251	7.4	8.7	44	2391	34.6	13.6	10.2	202	2.03	2.34	19.1	13.5	20
25	13.5	13.2	23.3	19.0	2391	44.1	15.3	12.0	295	639	6.2	11.1	43	1752	37.9	16.6	12.1	253	1.77	2.25	18.6	14.5	25
30	15.2	15.0	26.4	19.0	1752	46.2	18.3	13.7	344	376	5.4	13.5	41	1376	40.8	19.4	13.8	303	1.58	2.15	18.1	15.1	30
35	16.8	16.5	29.3	19.0	1376	48.4	21.2	15.2	392	243	4.8	15.9	40	1133	43.6	22.1	15.3	352	1.44	2.06	17.5	15.5	35
40	18.2	17.9	32.3	19.7	1133	50.5	23.8	16.5	438	238	6.3	18.4	56	895	44.1	25.1	16.6	382	1.32	1.97	16.9	15.7	40
45	19.5	19.2	35.1	20.5	895	50.5	26.8	17.6	465	167	5.9	21.2	56	728	44.6	27.9	17.8	409	1.23	1.89	16.1	15.8	45
50	20.6	20.3	37.8	21.2	728	50.5	29.7	18.6	488	122	5.6	24.1	55	606	45.0	30.7	18.8	433	1.15	1.82	15.4	15.8	50
55	21.6	21.4	40.4	21.9	606	50.5	32.6	19.5	508	92	5.3	27.0	54	513	45.2	33.5	19.7	453	1.08	1.76	14.7	15.7	55
60	22.6	22.3	42.9	22.7	513	50.5	35.4	20.3	526	72	5.0	29.9	54	442	45.5	36.2	20.5	472	1.02	1.70	14.1	15.6	60
65	23.4	23.2	45.3	23.4	442	50.5	38.1	21.0	541	57	4.8	32.9	53	385	45.6	38.9	21.2	488	0.97	1.65	13.6	15.5	65
70	24.2	23.9	47.6	24.1	385	50.4	40.8	21.6	555	46	4.6	35.9	52	339	45.8	41.4	21.8	502	0.93	1.60	13.0	15.3	70
75	24.9	24.6	49.8	24.9	339	50.3	43.4	22.2	566	37	4.4	38.9	51	302	45.9	44.0	22.4	515	0.89	1.55	12.5	15.2	75
80	25.5	25.3	51.9	25.6	302	50.2	46.0	22.7	576	31	4.3	41.9	50	271	45.9	46.4	22.9	526	0.85	1.51	12.0	15.0	80
85	26.1	25.8	54.0	26.3	271	50.1	48.5	23.1	585	26	4.1	45.0	50	245	45.9	48.9	23.3	536	0.82	1.47	11.6	14.8	85
90	26.6	26.4	56.1	27.1	245	50.0	51.0	23.5	593	22	4.0	48.1	49	223	46.0	51.2	23.7	544	0.79	1.43	11.2	14.6	90

OOSTENRIJKSE DEN, Vlaanderen 2020					**matige laagdunning**									**Boniteit II, h_{50} = 18.0**								
AUSTRIAN PINE					moderate thinning from below									Site Class II, h_{50} = 18.0								
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	2.4	2.1	3.6		5000	2.4	2.4	1.9	3					5000	2.4	2.4	1.9	3	1.43	0.47	2.6	0.7	5
10	4.7	4.4	8.0		5000	11.5	5.4	3.8	29					5000	11.5	5.4	3.8	29	2.10	1.15	7.6	2.9	10
15	6.9	6.6	11.3		5000	22.7	7.6	5.5	78					5000	22.7	7.6	5.5	78	2.39	1.52	12.5	5.2	15
20	8.9	8.6	14.8	19.0	5000	34.3	9.3	7.4	158	945	3.2	6.6	15	4055	31.1	9.9	7.5	143	2.13	1.72	15.8	7.9	20
25	10.7	10.5	18.4	19.0	4055	41.0	11.3	9.3	224	1283	6.9	8.3	39	2772	34.1	12.5	9.4	186	1.85	1.77	16.3	9.6	25
30	12.5	12.2	21.3	19.0	2772	42.8	14.0	11.0	267	710	6.0	10.4	38	2062	36.8	15.1	11.1	229	1.65	1.77	16.2	10.7	30
35	14.0	13.8	24.1	19.0	2062	44.7	16.6	12.6	309	436	5.3	12.5	38	1626	39.4	17.6	12.7	271	1.50	1.74	16.0	11.5	35
40	15.5	15.2	27.0	19.7	1626	46.5	19.1	14.0	350	386	6.6	14.8	51	1239	39.9	20.3	14.1	299	1.38	1.70	15.6	12.0	40
45	16.8	16.5	29.8	20.5	1239	46.6	21.9	15.2	376	261	6.2	17.3	51	978	40.4	22.9	15.4	325	1.28	1.66	15.0	12.4	45
50	18.0	17.7	32.5	21.2	978	46.6	24.6	16.4	399	185	5.8	20.0	51	793	40.8	25.6	16.5	348	1.19	1.62	14.5	12.6	50
55	19.1	18.9	35.1	21.9	793	46.6	27.3	17.4	419	136	5.5	22.6	50	658	41.1	28.2	17.5	369	1.12	1.57	14.0	12.8	55
60	20.1	19.9	37.5	22.7	658	46.5	30.0	18.3	437	102	5.2	25.4	50	555	41.4	30.8	18.5	388	1.06	1.53	13.5	12.8	60
65	21.0	20.8	39.9	23.4	555	46.5	32.7	19.1	454	79	4.9	28.2	49	476	41.6	33.3	19.3	404	1.00	1.49	13.0	12.9	65
70	21.9	21.6	42.2	24.1	476	46.5	35.2	19.8	468	62	4.7	31.0	49	414	41.8	35.8	20.0	420	0.96	1.46	12.6	12.9	70
75	22.7	22.4	44.5	24.9	414	46.4	37.8	20.5	481	50	4.5	33.9	48	364	41.9	38.3	20.7	433	0.91	1.42	12.1	12.8	75
80	23.4	23.1	46.6	25.6	364	46.4	40.3	21.1	493	41	4.3	36.8	47	323	42.0	40.7	21.3	446	0.88	1.39	11.7	12.8	80
85	24.0	23.8	48.7	26.3	323	46.3	42.8	21.6	503	34	4.2	39.7	47	289	42.1	43.1	21.8	456	0.84	1.36	11.3	12.7	85
90	24.6	24.4	50.8	27.1	289	46.3	45.2	22.1	512	28	4.0	42.6	46	260	42.2	45.4	22.3	466	0.81	1.33	10.9	12.6	90

OOSTENRIJKSE DEN, Vlaanderen 2020					**matige laagdunning**									**Boniteit III, h_{50} = 15.4**								
AUSTRIAN PINE					moderate thinning from below									Site Class III, h_{50} = 15.4								
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	1.3	1.1	0.3		5000	0.0	0.2	1.1	0					5000	0.0	0.2	1.1	0	0.27	0.00	0.3	0.0	5
10	3.0	2.7	5.1		5000	4.7	3.5	2.4	8					5000	4.7	3.5	2.4	8	1.31	0.47	3.1	0.8	10
15	4.8	4.5	8.3		5000	12.4	5.6	3.8	32					5000	12.4	5.6	3.8	32	1.73	0.83	6.4	2.1	15
20	6.6	6.3	11.0		5000	21.7	7.4	5.2	72					5000	21.7	7.4	5.2	72	1.96	1.08	9.6	3.6	20
25	8.3	8.0	13.7	19.0	5000	31.9	9.0	6.8	138	302	1.0	6.4	4	4698	30.9	9.2	6.9	133	1.96	1.28	13.4	5.5	25
30	9.9	9.6	16.7	19.0	4698	40.1	10.4	8.4	203	1412	6.6	7.7	34	3286	33.5	11.4	8.5	169	1.74	1.37	14.2	6.9	30
35	11.4	11.1	19.2	19.0	3286	41.7	12.7	10.0	240	821	5.9	9.6	35	2465	35.8	13.6	10.1	205	1.57	1.41	14.2	8.0	35
40	12.8	12.6	22.0	19.7	2465	43.3	15.0	11.4	276	661	7.0	11.6	46	1804	36.4	16.0	11.5	231	1.44	1.42	14.1	8.7	40
45	14.2	13.9	24.7	20.5	1804	43.3	17.5	12.7	300	428	6.5	13.9	46	1376	36.8	18.5	12.9	254	1.33	1.42	13.8	9.3	45
50	15.4	15.1	27.3	21.2	1376	43.2	20.0	14.0	323	292	6.0	16.2	46	1084	37.2	20.9	14.1	276	1.24	1.40	13.5	9.8	50
55	16.6	16.3	29.9	21.9	1084	43.2	22.5	15.1	343	207	5.7	18.7	46	876	37.5	23.3	15.2	297	1.17	1.39	13.1	10.1	55
60	17.6	17.4	32.3	22.7	876	43.2	25.0	16.1	361	152	5.4	21.2	46	724	37.8	25.8	16.2	315	1.10	1.36	12.7	10.3	60
65	18.6	18.3	34.7	23.4	724	43.2	27.5	17.0	378	115	5.1	23.8	46	609	38.1	28.2	17.2	332	1.04	1.34	12.4	10.5	65
70	19.5	19.3	37.0	24.1	609	43.1	30.0	17.8	393	89	4.9	26.4	45	521	38.3	30.6	18.0	347	0.99	1.32	12.0	10.6	70
75	20.4	20.1	39.2	24.9	521	43.1	32.5	18.6	406	70	4.6	29.1	45	451	38.5	33.0	18.8	362	0.94	1.30	11.6	10.7	75
80	21.1	20.9	41.4	25.6	451	43.1	34.9	19.3	419	56	4.4	31.8	44	395	38.6	35.3	19.5	374	0.90	1.27	11.3	10.7	80
85	21.8	21.6	43.5	26.3	395	43.1	37.3	19.9	430	46	4.3	34.6	44	350	38.8	37.6	20.1	386	0.87	1.25	10.9	10.7	85
90	22.5	22.2	45.5	27.1	350	43.0	39.6	20.5	440	38	4.1	37.3	43	312	38.9	39.9	20.7	397	0.83	1.23	10.6	10.7	90

OOSTENRIJKSE DEN, Vlaanderen 2020					**matige laagdunning**									**Boniteit IV, h_{50} = 12.8**							
AUSTRIAN PINE					moderate thinning from below									Site Class IV, h_{50} = 12.8							
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	0.7	0.6			5000				0					5000				0			0.0	0.0	5
10	1.8	1.5	2.3		5000	0.9	1.5	1.5	1					5000	0.9	1.5	1.5	1	0.62	0.09	0.9	0.1	10
15	3.2	2.9	5.5		5000	5.4	3.7	2.5	10					5000	5.4	3.7	2.5	10	1.11	0.36	2.7	0.7	15
20	4.6	4.3	8.1		5000	11.8	5.5	3.7	29					5000	11.8	5.5	3.7	29	1.43	0.59	5.1	1.5	20
25	6.0	5.8	10.5		5000	19.6	7.1	4.8	61					5000	19.6	7.1	4.8	61	1.65	0.78	7.5	2.4	25
30	7.5	7.2	12.6	20.3	5000	28.4	8.5	6.1	112					5000	28.4	8.5	6.1	112	1.85	0.95	13.9	3.7	30
35	8.9	8.6	15.1	19.0	5000	37.2	9.7	7.5	172	969	4.0	7.3	19	4031	33.1	10.2	7.5	153	1.66	1.06	12.3	4.9	35
40	10.3	10.0	17.7	19.7	4031	41.0	11.4	8.9	215	1219	7.5	8.8	40	2812	33.5	12.3	8.9	175	1.52	1.13	12.5	5.9	40
45	11.6	11.3	19.9	20.5	2812	40.8	13.6	10.2	237	752	6.9	10.8	41	2060	33.9	14.5	10.3	196	1.40	1.16	12.4	6.6	45
50	12.8	12.5	22.3	21.2	2060	40.7	15.9	11.4	258	492	6.4	12.9	42	1569	34.3	16.7	11.5	216	1.30	1.18	12.3	7.2	50
55	14.0	13.7	24.8	21.9	1569	40.6	18.1	12.6	277	337	6.0	15.1	42	1232	34.6	18.9	12.7	235	1.22	1.19	12.0	7.6	55
60	15.0	14.8	27.2	22.7	1232	40.5	20.5	13.7	295	239	5.6	17.3	42	993	34.8	21.1	13.8	253	1.15	1.19	11.8	8.0	60
65	16.1	15.8	29.5	23.4	993	40.4	22.8	14.7	311	175	5.3	19.7	42	817	35.1	23.4	14.8	269	1.09	1.18	11.5	8.3	65
70	17.0	16.8	31.7	24.1	817	40.4	25.1	15.6	326	132	5.1	22.1	42	685	35.3	25.6	15.7	284	1.03	1.17	11.3	8.5	70
75	17.9	17.6	33.9	24.9	685	40.3	27.4	16.4	340	102	4.8	24.5	42	583	35.5	27.8	16.6	298	0.98	1.16	11.0	8.7	75
80	18.7	18.5	36.1	25.6	583	40.3	29.7	17.2	352	80	4.6	27.1	41	504	35.7	30.0	17.4	311	0.94	1.15	10.7	8.8	80
85	19.5	19.2	38.2	26.3	504	40.3	31.9	17.9	364	64	4.4	29.6	41	440	35.9	32.2	18.1	323	0.90	1.14	10.4	8.9	85
90	20.2	19.9	40.2	27.1	440	40.3	34.2	18.6	374	52	4.2	32.2	40	388	36.1	34.4	18.7	334	0.86	1.12	10.1	9.0	90

OOSTENRIJKSE DEN, Vlaanderen 2020					**matige laagdunning**									**Boniteit V, h_{50} = 10.2**							
AUSTRIAN PINE					moderate thinning from below									Site Class V, h_{50} = 10.2							
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	0.3	0.3			5000				0					5000				0			0.0	0.0	5
10	1.0	0.8			5000				0					5000				0			0.0	0.0	10
15	1.9	1.6	2.6		5000	1.2	1.7	1.5	1					5000	1.2	1.7	1.5	1	0.55	0.08	0.8	0.1	15
20	3.0	2.7	5.2		5000	4.9	3.5	2.4	8					5000	4.9	3.5	2.4	8	0.91	0.24	2.1	0.4	20
25	4.1	3.9	7.5		5000	10.1	5.1	3.3	23					5000	10.1	5.1	3.3	23	1.18	0.40	3.8	0.9	25
30	5.4	5.1	9.6		5000	16.5	6.5	4.3	46					5000	16.5	6.5	4.3	46	1.38	0.55	5.6	1.5	30
35	6.6	6.3	11.6		5000	23.8	7.8	5.3	79					5000	23.8	7.8	5.3	79	1.53	0.68	7.6	2.3	35
40	7.8	7.6	13.4	19.7	5000	32.0	9.0	6.4	132	158	0.6	6.9	2	4842	31.4	9.1	6.5	129	1.62	0.80	10.3	3.3	40
45	9.0	8.8	15.6	20.5	4842	39.2	10.1	7.6	183	1462	7.5	8.1	36	3380	31.7	10.9	7.7	147	1.48	0.88	10.9	4.1	45
50	10.2	9.9	18.0	21.2	3380	38.8	12.1	8.8	202	910	6.9	9.8	37	2470	31.9	12.8	8.9	165	1.38	0.94	10.9	4.8	50
55	11.3	11.1	19.8	21.9	2470	38.5	14.1	10.0	219	597	6.4	11.7	37	1873	32.1	14.8	10.1	182	1.28	0.97	10.8	5.3	55
60	12.4	12.1	22.0	22.7	1873	38.3	16.1	11.1	235	409	6.0	13.7	38	1464	32.3	16.8	11.2	197	1.21	1.00	10.7	5.8	60
65	13.4	13.1	24.2	23.4	1464	38.1	18.2	12.1	251	290	5.7	15.8	38	1174	32.5	18.8	12.2	212	1.14	1.01	10.6	6.2	65
70	14.4	14.1	26.3	24.1	1174	38.0	20.3	13.1	265	212	5.3	17.9	38	962	32.7	20.8	13.2	227	1.08	1.02	10.4	6.5	70
75	15.3	15.0	28.5	24.9	962	37.9	22.4	14.0	278	159	5.1	20.1	38	802	32.9	22.8	14.1	240	1.03	1.02	10.2	6.7	75
80	16.1	15.8	30.5	25.6	802	37.9	24.5	14.8	290	122	4.8	22.4	38	680	33.1	24.9	14.9	253	0.98	1.02	10.0	6.9	80
85	16.9	16.6	32.6	26.3	680	37.8	26.6	15.6	302	96	4.6	24.7	38	584	33.3	26.9	15.7	264	0.93	1.01	9.8	7.1	85
90	17.6	17.4	34.5	27.1	584	37.8	28.7	16.3	313	76	4.4	27.1	37	508	33.4	29.0	16.4	275	0.90	1.01	9.5	7.3	90

Douglas

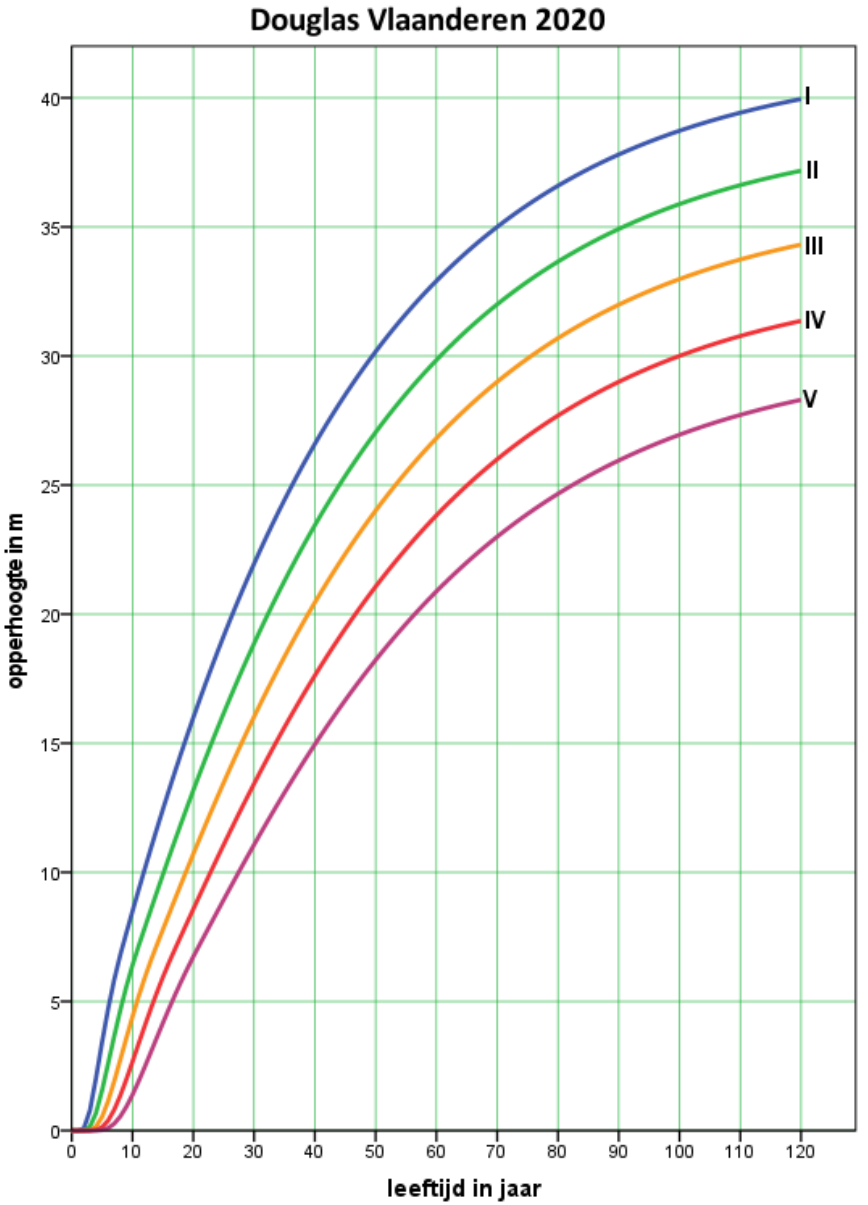
Pseudotsuga menziesii **Douglas fir**

Bron: Jansen, J.J., H. Schoonderwoerd, G.M.J. Mohren en J. den Ouden, 2016. Groei en productie van douglas in Nederland. Becking's dunningproeven ontsloten. Wageningen Academic Publishers, 180 blz.

Dit rapport is gratis te downloaden op: https://doi.org/10.3920/978-90-8686-827-8

In het rapport worden twee productieniveaus onderscheiden, een laag niveau tot en met 1980 en een hoog niveau vanaf 1981. In het rapport worden meerdere opbrengsttabellen gepresenteerd, die alle met het gemiddelde productieniveau zijn berekend.

In dit opbrengsttabellenboek is gekozen om alleen tabellen met het hoge productieniveau te presenteren.



DOUGLAS, Vlaanderen 2020					**matige laagdunning**									**Boniteit I, h_{70} = 35.0**								
DOUGLAS FIR					moderate thinning									Site Class I, h_{70} = 35.0								
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	3.4	3.4	3.9		5000	0.7	1.3	2.7	2					5000	0.7	1.3	2.7	2	1.17	0.14	3.5	0.4	5
10	8.5	8.4	11.6	19.0	5000	18.8	6.9	6.0	95	559	1.2	5.2	6	4441	17.6	7.1	6.1	89	5.60	1.88	34.0	9.5	10
15	12.4	12.3	17.7	19.0	4441	37.4	10.4	10.3	242	2371	12.4	8.2	81	2069	25.0	12.4	10.4	162	2.91	2.57	26.8	16.5	15
20	16.0	15.9	22.9	19.0	2069	38.2	15.3	14.0	292	818	9.4	12.1	72	1252	28.8	17.1	14.2	220	2.43	2.59	25.6	18.9	20
25	19.1	19.0	27.8	19.0	1252	40.0	20.2	17.3	344	380	7.6	16.0	66	872	32.4	21.7	17.5	279	2.07	2.52	24.2	20.1	25
30	21.9	21.8	32.4	19.0	872	42.0	24.8	20.1	396	208	6.4	19.8	60	664	35.6	26.1	20.4	336	1.79	2.42	22.7	20.7	30
35	24.4	24.2	36.6	19.0	664	43.9	29.0	22.6	445	128	5.5	23.4	56	536	38.5	30.2	22.9	390	1.56	2.31	21.1	20.8	35
40	26.6	26.4	40.4	19.0	536	45.8	33.0	24.8	491	84	4.7	26.8	51	452	41.0	34.0	25.1	440	1.37	2.21	19.6	20.8	40
45	28.5	28.2	43.8	19.0	452	47.4	36.5	26.8	534	58	4.1	30.0	47	394	43.3	37.4	27.1	488	1.21	2.11	18.1	20.6	45
50	30.2	29.9	47.0	19.0	394	49.0	39.8	28.5	574	42	3.6	33.0	43	351	45.4	40.5	28.8	532	1.08	2.01	16.7	20.2	50
55	31.6	31.3	49.8	19.1	351	50.5	42.8	29.9	612	36	3.6	35.9	44	315	46.8	43.5	30.3	568	0.96	1.92	15.3	19.8	55
60	32.9	32.6	52.4	19.3	315	51.4	45.6	31.3	641	28	3.3	38.7	41	288	48.1	46.2	31.6	600	0.87	1.84	14.1	19.4	60
65	34.0	33.7	54.8	19.4	288	52.2	48.1	32.4	667	22	3.0	41.3	38	265	49.3	48.6	32.8	630	0.78	1.76	12.9	19.0	65
70	35.0	34.7	57.0	19.5	265	53.0	50.4	33.4	691	18	2.7	43.7	35	248	50.3	50.9	33.8	656	0.71	1.69	11.9	18.5	70
75	35.9	35.5	59.0	19.6	248	53.7	52.6	34.3	713	15	2.4	46.1	33	233	51.3	53.0	34.7	681	0.65	1.62	10.9	18.0	75
80	36.6	36.3	60.8	19.8	233	54.4	54.5	35.0	733	12	2.2	48.3	30	221	52.1	54.9	35.4	703	0.60	1.56	10.1	17.5	80
85	37.2	37.0	62.5	19.9	221	55.0	56.4	35.7	752	10	2.1	50.4	28	210	53.0	56.6	36.1	724	0.55	1.50	9.4	17.1	85
90	37.8	37.6	64.1	20.0	210	55.6	58.0	36.3	769	9	1.9	52.4	26	201	53.7	58.3	36.7	742	0.51	1.44	8.7	16.6	90
95	38.3	38.1	65.5	20.2	201	56.2	59.6	36.8	785	8	1.8	54.4	25	194	54.4	59.8	37.2	760	0.48	1.39	8.1	16.2	95
100	38.7	38.5	66.9	20.3	194	56.7	61.0	37.2	799	7	1.7	56.2	23	187	55.1	61.2	37.6	776	0.45	1.35	7.6	15.8	100
105	39.1	38.9	68.1	20.4	187	57.2	62.4	37.6	813	6	1.6	58.0	22	181	55.7	62.5	38.0	791	0.42	1.30	7.2	15.4	105
110	39.4	39.2	69.3	20.5	181	57.7	63.7	37.9	826	5	1.5	59.8	21	176	56.3	63.8	38.4	805	0.40	1.26	6.8	15.0	110
115	39.7	39.5	70.4	20.7	176	58.2	64.9	38.2	838	5	1.4	61.5	20	171	56.9	65.0	38.7	818	0.38	1.23	6.4	14.6	115
120	40.0	39.8	71.5	20.8	171	58.7	66.0	38.5	849	4	1.3	63.1	19	167	57.4	66.1	38.9	830	0.36	1.19	6.1	14.3	120

DOUGLAS, Vlaanderen 2020						**matige laagdunning**								**Boniteit II, h_{70} = 32.0**						
DOUGLAS FIR						moderate thinning								Site Class II, h_{70} = 32.0						
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	1.6	1.5	1.8		5000	0.0	0.3	1.2	0					5000	0.0	0.3	1.2	0	0.11	0.01	0.2	0.0	5
10	6.4	6.4	7.3		5000	6.5	4.1	5.1	27					5000	6.5	4.1	5.1	27	2.45	0.65	13.4	2.7	10
15	9.9	9.8	14.3	19.0	5000	26.6	8.2	7.6	147	1740	5.3	6.3	30	3260	21.3	9.1	7.7	118	3.53	1.78	25.4	9.8	15
20	13.2	13.1	19.2	19.0	3260	35.0	11.7	11.1	233	1415	9.1	9.1	61	1845	25.9	13.4	11.2	173	2.43	2.02	22.5	13.1	20
25	16.2	16.0	23.7	19.0	1845	37.2	16.0	14.2	283	620	7.6	12.5	58	1225	29.6	17.5	14.3	226	2.09	2.07	21.9	14.9	25
30	18.9	18.7	28.1	19.0	1225	39.4	20.2	17.0	333	326	6.4	15.9	54	899	33.0	21.6	17.2	278	1.82	2.05	20.9	16.0	30
35	21.3	21.1	32.1	19.0	899	41.5	24.2	19.5	380	193	5.6	19.2	51	706	36.0	25.5	19.7	329	1.60	2.00	19.8	16.6	35
40	23.4	23.2	35.8	19.0	706	43.5	28.0	21.7	425	124	4.9	22.3	47	582	38.6	29.1	21.9	377	1.41	1.94	18.5	16.9	40
45	25.4	25.1	39.2	19.0	582	45.3	31.5	23.6	467	85	4.3	25.4	44	498	41.0	32.4	23.9	423	1.26	1.87	17.3	17.1	45
50	27.0	26.8	42.3	19.0	498	47.0	34.7	25.3	506	60	3.8	28.2	41	437	43.2	35.5	25.6	465	1.12	1.80	16.0	17.0	50
55	28.5	28.3	45.2	19.1	437	48.5	37.6	26.8	542	50	3.7	31.0	42	388	44.8	38.3	27.1	501	1.01	1.73	14.8	16.9	55
60	29.8	29.6	47.8	19.3	388	49.5	40.3	28.2	572	38	3.4	33.6	39	350	46.2	41.0	28.5	533	0.90	1.67	13.6	16.6	60
65	31.0	30.7	50.1	19.4	350	50.4	42.9	29.3	598	30	3.0	36.1	36	320	47.4	43.4	29.7	562	0.82	1.61	12.5	16.4	65
70	32.0	31.7	52.3	19.5	320	51.3	45.2	30.4	622	24	2.8	38.5	34	296	48.5	45.7	30.7	589	0.74	1.55	11.5	16.1	70
75	32.9	32.6	54.3	19.6	296	52.1	47.3	31.3	644	19	2.5	40.7	31	277	49.5	47.7	31.6	613	0.68	1.49	10.6	15.7	75
80	33.7	33.4	56.1	19.8	277	52.8	49.3	32.1	664	16	2.3	42.9	29	261	50.5	49.6	32.4	635	0.62	1.44	9.8	15.4	80
85	34.3	34.0	57.8	19.9	261	53.4	51.1	32.8	682	13	2.1	44.9	27	247	51.3	51.4	33.1	655	0.57	1.39	9.1	15.0	85
90	34.9	34.6	59.4	20.0	247	54.1	52.7	33.4	699	11	2.0	46.9	25	236	52.1	53.0	33.8	674	0.53	1.34	8.4	14.7	90
95	35.4	35.1	60.8	20.2	236	54.7	54.3	33.9	714	10	1.8	48.7	24	226	52.9	54.5	34.3	691	0.49	1.30	7.9	14.3	95
100	35.9	35.6	62.1	20.3	226	55.2	55.7	34.4	729	8	1.7	50.5	22	218	53.6	55.9	34.8	706	0.46	1.26	7.3	14.0	100
105	36.3	36.0	63.4	20.4	218	55.8	57.1	34.8	742	7	1.6	52.3	21	211	54.2	57.3	35.2	721	0.44	1.22	6.9	13.7	105
110	36.6	36.4	64.5	20.5	211	56.3	58.4	35.1	754	6	1.5	54.0	20	204	54.8	58.5	35.5	734	0.41	1.18	6.5	13.4	110
115	36.9	36.7	65.6	20.7	204	56.9	59.6	35.4	766	6	1.4	55.6	19	198	55.5	59.7	35.9	747	0.39	1.15	6.1	13.1	115
120	37.2	37.0	66.7	20.8	198	57.4	60.7	35.7	777	5	1.3	57.2	18	193	56.0	60.8	36.1	759	0.37	1.12	5.8	12.8	120

DOUGLAS, Vlaanderen 2020					**matige laagdunning**															**Boniteit III, h_{70} = 29.0**
DOUGLAS FIR					moderate thinning															Site Class III, h_{70} = 29.0
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5					5000				0					5000				0			0.0	0.0	5
10	4.4	4.4	5.6		5000	1.9	2.2	3.5	6					5000	1.9	2.2	3.5	6	1.26	0.19	4.3	0.6	10
15	7.8	7.7	10.8	19.0	5000	13.9	5.9	5.2	65					5000	13.9	5.9	5.3	65	4.40	0.93	23.8	4.3	15
20	10.7	10.6	16.2	19.0	5000	32.1	9.0	8.4	185	2209	8.1	6.8	47	2791	24.0	10.5	8.5	138	2.51	1.60	20.1	9.2	20
25	13.5	13.4	20.4	19.0	2791	35.1	12.7	11.4	235	1028	7.5	9.7	50	1763	27.6	14.1	11.5	185	2.09	1.73	19.4	11.3	25
30	16.0	15.9	24.5	19.0	1763	37.4	16.4	14.1	281	517	6.5	12.6	49	1246	31.0	17.8	14.2	232	1.84	1.77	19.0	12.6	30
35	18.3	18.2	28.3	19.0	1246	39.6	20.1	16.5	325	296	5.6	15.6	46	950	34.0	21.3	16.6	279	1.63	1.76	18.2	13.5	35
40	20.4	20.3	31.8	19.0	950	41.6	23.6	18.6	367	185	5.0	18.5	44	765	36.7	24.7	18.8	324	1.44	1.74	17.3	14.0	40
45	22.3	22.1	35.1	19.0	765	43.5	26.9	20.5	407	123	4.4	21.3	41	641	39.1	27.9	20.8	366	1.29	1.69	16.2	14.3	45
50	24.0	23.8	38.1	19.0	641	45.2	30.0	22.2	445	86	3.9	23.9	38	555	41.3	30.8	22.5	407	1.15	1.65	15.2	14.4	50
55	25.5	25.3	40.9	19.1	555	46.8	32.8	23.8	480	70	3.8	26.5	39	485	43.0	33.6	24.0	441	1.04	1.60	14.1	14.4	55
60	26.8	26.6	43.4	19.3	485	47.9	35.4	25.1	508	52	3.5	29.0	37	433	44.4	36.1	25.4	472	0.93	1.55	13.0	14.4	60
65	28.0	27.7	45.7	19.4	433	48.9	37.9	26.3	534	40	3.1	31.3	34	393	45.7	38.5	26.6	500	0.84	1.49	12.0	14.2	65
70	29.0	28.7	47.9	19.5	393	49.8	40.2	27.4	558	32	2.8	33.6	32	361	46.9	40.7	27.7	526	0.77	1.45	11.1	14.0	70
75	29.9	29.6	49.8	19.6	361	50.6	42.3	28.3	579	26	2.6	35.7	30	335	48.0	42.7	28.6	549	0.70	1.40	10.2	13.8	75
80	30.7	30.4	51.6	19.8	335	51.3	44.2	29.1	598	21	2.4	37.8	28	314	49.0	44.6	29.4	571	0.64	1.35	9.4	13.6	80
85	31.4	31.1	53.3	19.9	314	52.0	46.0	29.8	616	18	2.2	39.7	26	296	49.9	46.3	30.2	590	0.59	1.31	8.7	13.3	85
90	32.0	31.7	54.8	20.0	296	52.7	47.6	30.4	632	15	2.0	41.6	24	281	50.7	47.9	30.8	608	0.55	1.27	8.1	13.0	90
95	32.5	32.2	56.2	20.2	281	53.3	49.1	31.0	647	13	1.9	43.4	23	269	51.5	49.4	31.3	625	0.51	1.23	7.5	12.7	95
100	33.0	32.7	57.5	20.3	269	53.9	50.5	31.5	661	11	1.7	45.1	21	258	52.2	50.8	31.8	640	0.47	1.19	7.0	12.5	100
105	33.4	33.1	58.8	20.4	258	54.5	51.9	31.9	674	9	1.6	46.7	20	249	52.9	52.0	32.3	654	0.45	1.16	6.5	12.2	105
110	33.7	33.4	59.9	20.5	249	55.1	53.1	32.3	685	8	1.5	48.3	19	240	53.5	53.3	32.6	667	0.42	1.12	6.1	11.9	110
115	34.0	33.8	61.0	20.7	240	55.6	54.3	32.6	696	7	1.4	49.9	18	233	54.2	54.4	33.0	679	0.40	1.09	5.8	11.7	115
120	34.3	34.0	62.0	20.8	233	56.1	55.4	32.9	707	6	1.3	51.4	17	227	54.8	55.5	33.2	690	0.38	1.06	5.5	11.4	120

DOUGLAS, Vlaanderen 2020					**matige laagdunning**									**Boniteit IV, h_{70} = 26.0**						
DOUGLAS FIR					moderate thinning									Site Class IV, h_{70} = 26.0						
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5					5000				0					5000				0			0.0	0.0	5
10	2.7	2.6	3.4		5000	0.3	0.8	2.1	1					5000	0.3	0.8	2.1	1	0.28	0.03	0.7	0.1	10
15	5.9	5.9	8.1		5000	5.2	3.6	4.7	20					5000	5.2	3.6	4.7	20	1.51	0.35	6.4	1.3	15
20	8.6	8.5	12.8	19.0	5000	19.2	7.0	6.1	94	644	1.3	5.0	6	4356	17.9	7.2	6.2	88	3.42	0.96	20.4	4.7	20
25	11.1	11.0	17.3	19.0	4356	31.9	9.7	8.8	185	1744	7.1	7.2	41	2612	24.8	11.0	9.0	144	2.06	1.33	16.7	7.7	25
30	13.4	13.3	21.1	19.0	2612	34.5	13.0	11.4	228	838	6.2	9.7	41	1774	28.2	14.2	11.5	186	1.83	1.43	16.7	9.2	30
35	15.6	15.5	24.6	19.0	1774	36.9	16.3	13.6	269	463	5.5	12.3	40	1312	31.3	17.4	13.8	228	1.63	1.47	16.3	10.2	35
40	17.6	17.5	28.0	19.0	1312	39.1	19.5	15.7	308	281	4.9	14.9	39	1030	34.1	20.5	15.9	270	1.46	1.48	15.7	10.9	40
45	19.4	19.3	31.1	19.0	1030	41.0	22.5	17.6	346	183	4.4	17.4	37	847	36.7	23.5	17.8	309	1.31	1.47	14.9	11.4	45
50	21.1	20.9	34.0	19.0	847	42.9	25.4	19.3	381	126	3.9	19.8	35	721	39.0	26.2	19.5	347	1.17	1.45	14.0	11.7	50
55	22.5	22.3	36.7	19.1	721	44.5	28.0	20.8	415	99	3.8	22.2	36	622	40.7	28.9	21.0	379	1.06	1.42	13.1	11.9	55
60	23.8	23.6	39.1	19.3	622	45.7	30.6	22.1	442	73	3.5	24.5	33	548	42.3	31.3	22.4	409	0.95	1.38	12.2	12.0	60
65	25.0	24.8	41.4	19.4	548	46.8	33.0	23.3	467	56	3.1	26.7	31	492	43.6	33.6	23.6	436	0.86	1.35	11.3	11.9	65
70	26.0	25.8	43.5	19.5	492	47.7	35.1	24.3	490	44	2.9	28.8	29	449	44.9	35.7	24.6	461	0.78	1.31	10.4	11.9	70
75	26.9	26.7	45.4	19.6	449	48.6	37.2	25.3	511	35	2.6	30.8	27	414	46.0	37.6	25.6	483	0.71	1.27	9.6	11.7	75
80	27.7	27.5	47.1	19.8	414	49.4	39.0	26.1	529	28	2.4	32.7	26	385	47.0	39.4	26.4	504	0.66	1.23	8.9	11.6	80
85	28.4	28.1	48.7	19.9	385	50.2	40.7	26.8	546	23	2.2	34.6	24	362	48.0	41.1	27.1	523	0.60	1.20	8.2	11.4	85
90	29.0	28.7	50.2	20.0	362	50.9	42.3	27.4	562	20	2.0	36.3	22	342	48.9	42.6	27.8	540	0.56	1.16	7.6	11.2	90
95	29.5	29.3	51.6	20.2	342	51.6	43.8	28.0	576	17	1.9	38.0	21	326	49.7	44.1	28.3	555	0.52	1.13	7.1	11.0	95
100	30.0	29.7	52.9	20.3	326	52.2	45.2	28.5	589	14	1.7	39.6	20	312	50.5	45.4	28.8	570	0.48	1.10	6.6	10.8	100
105	30.4	30.1	54.0	20.4	312	52.8	46.4	28.9	601	12	1.6	41.1	18	300	51.2	46.6	29.2	583	0.45	1.07	6.1	10.6	105
110	30.8	30.5	55.1	20.5	300	53.4	47.6	29.3	613	11	1.5	42.6	17	289	51.9	47.8	29.6	595	0.43	1.04	5.7	10.4	110
115	31.1	30.8	56.2	20.7	289	54.0	48.8	29.6	623	9	1.4	44.1	16	280	52.5	48.9	30.0	607	0.41	1.01	5.4	10.2	115
120	31.4	31.1	57.2	20.8	280	54.5	49.8	29.9	633	8	1.3	45.5	16	271	53.2	50.0	30.3	617	0.39	0.99	5.1	10.0	120

DOUGLAS, Vlaanderen 2020						**matige laagdunning**								**Boniteit V, h_{70} = 23.0**						
DOUGLAS FIR						moderate thinning								Site Class V, h_{70} = 23.0						
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5					5000				0					5000				0			0.0	0.0	5
10	1.4	1.4	2.1		5000	0.0	0.2	1.1	0					5000	0.0	0.2	1.1	0	0.03	0.00	0.1	0.0	10
15	4.2	4.1	5.9		5000	1.5	2.0	3.3	5					5000	1.5	2.0	3.3	5	0.78	0.10	2.5	0.3	15
20	6.7	6.7	8.8		5000	7.4	4.3	5.3	31					5000	7.4	4.3	5.4	31	1.73	0.37	9.7	1.5	20
25	8.9	8.9	14.2	19.0	5000	21.8	7.5	6.5	109	993	2.2	5.3	11	4007	19.6	7.9	6.6	98	2.82	0.87	17.4	4.4	25
30	11.1	11.0	18.0	19.0	4007	31.0	9.9	8.9	178	1395	5.8	7.3	34	2611	25.2	11.1	9.0	145	1.80	1.11	14.3	6.3	30
35	13.1	13.0	21.3	19.0	2611	33.7	12.8	11.0	216	742	5.3	9.5	34	1869	28.4	13.9	11.1	182	1.61	1.19	14.2	7.4	35
40	15.0	14.8	24.5	19.0	1869	36.1	15.7	13.0	252	438	4.7	11.7	33	1431	31.4	16.7	13.1	219	1.45	1.24	13.9	8.3	40
45	16.7	16.5	27.4	19.0	1431	38.2	18.4	14.7	287	279	4.3	14.0	32	1152	34.0	19.4	14.9	255	1.31	1.25	13.3	8.9	45
50	18.2	18.1	30.1	19.0	1152	40.2	21.1	16.3	320	188	3.8	16.1	31	963	36.3	21.9	16.5	289	1.18	1.25	12.7	9.3	50
55	19.6	19.5	32.7	19.1	963	41.9	23.5	17.8	351	144	3.8	18.3	32	819	38.2	24.4	18.0	319	1.07	1.24	11.9	9.5	55
60	20.9	20.7	35.0	19.3	819	43.2	25.9	19.1	377	105	3.4	20.3	30	714	39.8	26.6	19.3	347	0.96	1.22	11.1	9.7	60
65	22.0	21.8	37.2	19.4	714	44.4	28.1	20.3	401	79	3.1	22.4	28	635	41.3	28.8	20.5	373	0.87	1.20	10.3	9.8	65
70	23.0	22.8	39.2	19.5	635	45.4	30.2	21.3	422	61	2.8	24.3	26	573	42.6	30.8	21.6	396	0.79	1.17	9.6	9.8	70
75	23.9	23.7	41.0	19.6	573	46.4	32.1	22.2	442	49	2.6	26.1	25	525	43.8	32.6	22.5	417	0.73	1.14	8.9	9.8	75
80	24.7	24.5	42.7	19.8	525	47.3	33.9	23.0	460	39	2.4	27.9	23	486	44.9	34.3	23.3	437	0.66	1.12	8.2	9.7	80
85	25.3	25.1	44.2	19.9	486	48.1	35.5	23.7	476	32	2.2	29.6	22	454	45.9	35.9	24.0	454	0.61	1.09	7.6	9.6	85
90	26.0	25.7	45.7	20.0	454	48.8	37.0	24.4	491	26	2.0	31.2	20	427	46.8	37.3	24.7	471	0.57	1.06	7.0	9.5	90
95	26.5	26.3	47.0	20.2	427	49.5	38.4	24.9	504	22	1.9	32.7	19	405	47.7	38.7	25.2	485	0.53	1.03	6.5	9.3	95
100	27.0	26.7	48.2	20.3	405	50.2	39.7	25.4	517	19	1.7	34.2	18	386	48.5	40.0	25.7	499	0.49	1.01	6.0	9.2	100
105	27.4	27.1	49.3	20.4	386	50.9	40.9	25.8	528	16	1.6	35.7	17	370	49.2	41.2	26.1	511	0.46	0.98	5.6	9.0	105
110	27.7	27.5	50.4	20.5	370	51.5	42.1	26.2	538	14	1.5	37.0	16	356	50.0	42.3	26.5	523	0.43	0.96	5.2	8.8	110
115	28.0	27.8	51.4	20.7	356	52.1	43.1	26.6	548	12	1.4	38.4	15	344	50.7	43.3	26.9	533	0.41	0.93	4.9	8.7	115
120	28.3	28.1	52.3	20.8	344	52.7	44.2	26.8	557	11	1.3	39.7	14	333	51.3	44.3	27.2	543	0.39	0.91	4.6	8.5	120

Japanse lariks
Larix kaempferi **Japanese larch**

Bron: Jansen, J.J., A. Oosterbaan, G.M. J. Mohren en J. den Ouden, 2018. *Groei en productie van Japanse lariks in Nederland*. FEM Groei en Productie Rapport 2018 – 1. 120 blz.

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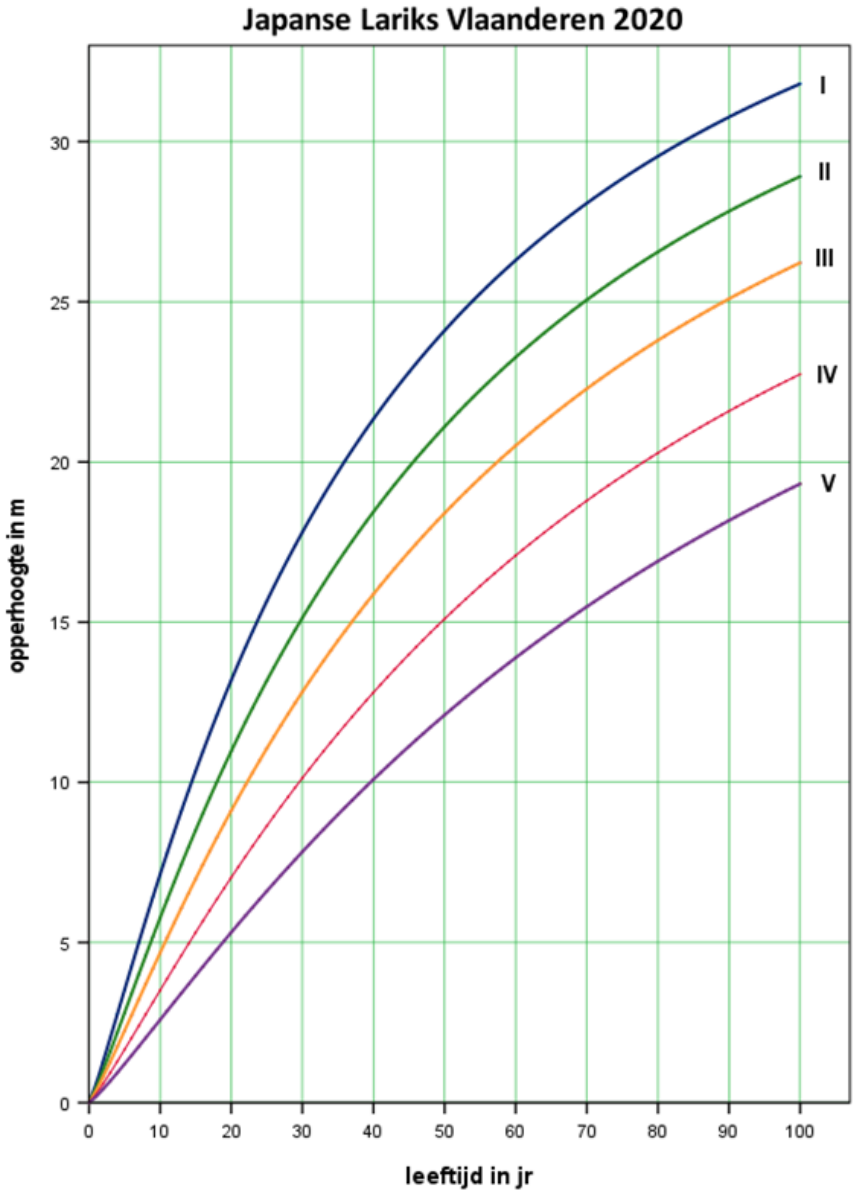

JAPANSE LARIKS Vlaanderen						**matige laagdunning**									**Boniteit I, h_{50} = 24.1**				
JAPANESE LARCH South Netherlands						moderate thinning from below									Site Class I, h_{50} = 24.1				
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	5.8	5.7	6.1		5000	7.5	4.4	4.9	22					5000	7.5	4.4	4.9	22	2.88	1.50	11.3	4.3	5
10	9.4	9.3	10.2	19.0	5000	18.5	6.9	8.4	89	1407	3.5	5.6	16	3593	15.1	7.3	8.4	73	1.58	1.85	12.7	8.9	10
15	12.3	12.1	13.1	19.0	3593	21.9	8.8	11.2	135	1490	6.3	7.3	38	2103	15.6	9.7	11.3	97	1.21	1.69	11.8	10.1	15
20	14.7	14.5	15.7	19.0	2103	21.1	11.3	13.6	153	632	4.4	9.4	31	1472	16.7	12.0	13.7	122	1.02	1.55	10.9	10.4	20
25	16.8	16.6	18.2	19.0	1472	21.6	13.7	15.7	175	339	3.5	11.5	28	1132	18.1	14.3	15.8	147	0.92	1.43	10.4	10.4	25
30	18.6	18.3	20.6	19.0	1132	22.5	15.9	17.5	198	209	3.0	13.4	26	923	19.5	16.4	17.6	172	0.85	1.34	10.1	10.4	30
35	20.2	19.9	22.9	19.0	923	23.7	18.1	19.2	222	140	2.6	15.4	24	783	21.1	18.5	19.3	198	0.81	1.27	9.8	10.3	35
40	21.6	21.3	25.1	19.0	783	25.0	20.2	20.6	246	100	2.4	17.3	23	683	22.7	20.5	20.8	224	0.77	1.21	9.6	10.2	40
45	22.9	22.6	27.2	19.0	683	26.5	22.2	22.0	271	75	2.2	19.3	22	608	24.3	22.5	22.1	249	0.75	1.16	9.4	10.2	45
50	24.1	23.8	29.2	19.0	608	28.0	24.2	23.2	296	58	2.0	21.2	21	551	25.9	24.5	23.4	275	0.73	1.12	9.2	10.1	50
55	25.2	24.8	31.2	19.2	551	29.5	26.1	24.3	320	58	2.4	23.1	26	493	27.1	26.5	24.5	294	0.71	1.08	9.0	10.0	55
60	26.2	25.8	33.2	19.5	493	30.6	28.1	25.4	339	47	2.3	25.1	25	446	28.3	28.4	25.5	313	0.70	1.05	8.8	9.9	60
65	27.1	26.7	35.2	19.7	446	31.7	30.1	26.3	357	39	2.3	27.2	25	406	29.5	30.4	26.5	331	0.69	1.02	8.6	9.8	65
70	27.9	27.6	37.2	19.9	406	32.9	32.1	27.2	374	33	2.2	29.3	25	373	30.7	32.3	27.4	349	0.68	1.00	8.4	9.7	70
75	28.7	28.3	39.1	20.2	373	34.0	34.1	28.1	391	28	2.2	31.4	25	345	31.9	34.3	28.2	366	0.67	0.98	8.2	9.6	75
80	29.4	29.1	41.0	20.4	345	35.2	36.0	28.9	407	24	2.2	33.5	24	321	33.0	36.2	29.0	382	0.66	0.96	8.0	9.5	80
85	30.1	29.7	42.9	20.6	321	36.3	38.0	29.6	422	21	2.1	35.7	24	299	34.2	38.1	29.8	398	0.66	0.94	7.9	9.4	85
90	30.8	30.4	44.8	20.8	299	37.5	39.9	30.3	437	19	2.1	37.9	24	281	35.4	40.1	30.5	413	0.65	0.92	7.7	9.3	90
95	31.4	31.0	46.6	21.1	281	38.6	41.9	30.9	450	17	2.1	40.1	24	264	36.5	42.0	31.1	426	0.65	0.91	7.5	9.2	95
100	32.0	31.6	48.4	21.3	264	39.8	43.8	31.6	463	15	2.1	42.3	24	249	37.7	43.9	31.7	440	0.64	0.90	7.3	9.2	100

JAPANSE LARIKS Vlaanderen					**matige laagdunning**									**Boniteit II, h_{50} = 21.1**								
JAPANESE LARCH South Netherlands					moderate thinning from below									Site Class II, h_{50} = 21.1								
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	4.8	4.7	4.7		5000	4.5	3.4	4.1	11					5000	4.5	3.4	4.1	11	2.05	0.89	6.6	2.2	5
10	8.0	7.8	8.7	19.1	5000	14.7	6.1	7.0	61					5000	14.7	6.1	7.0	61	1.52	1.47	11.2	6.1	10
15	10.5	10.3	11.4	19.0	5000	21.3	7.4	9.4	112	2093	6.2	6.1	32	2907	15.1	8.1	9.4	80	1.15	1.42	9.8	7.5	15
20	12.6	12.4	13.7	19.0	2907	20.4	9.4	11.5	127	897	4.4	7.9	27	2010	16.0	10.1	11.5	100	0.98	1.33	9.1	7.9	20
25	14.5	14.2	15.9	19.0	2010	20.6	11.4	13.3	145	479	3.5	9.6	24	1531	17.1	11.9	13.4	121	0.87	1.25	8.7	8.1	25
30	16.1	15.8	18.0	19.0	1531	21.3	13.3	14.9	164	293	2.9	11.3	22	1238	18.4	13.8	15.0	142	0.81	1.18	8.5	8.2	30
35	17.5	17.3	20.0	19.0	1238	22.3	15.2	16.4	183	196	2.6	12.9	21	1042	19.8	15.5	16.5	163	0.77	1.12	8.3	8.2	35
40	18.8	18.6	21.9	19.0	1042	23.5	17.0	17.7	204	139	2.3	14.6	20	902	21.2	17.3	17.9	184	0.73	1.08	8.1	8.2	40
45	20.0	19.7	23.7	19.0	902	24.8	18.7	19.0	224	104	2.1	16.2	19	798	22.6	19.0	19.1	205	0.71	1.04	8.0	8.2	45
50	21.1	20.8	25.5	19.0	798	26.1	20.4	20.1	244	80	2.0	17.9	18	718	24.1	20.7	20.2	226	0.69	1.00	7.8	8.2	50
55	22.1	21.8	27.3	19.2	718	27.5	22.1	21.1	265	79	2.4	19.5	22	639	25.2	22.4	21.2	242	0.67	0.97	7.7	8.1	55
60	23.0	22.7	29.1	19.5	639	28.5	23.8	22.1	280	64	2.3	21.3	22	575	26.2	24.1	22.2	258	0.66	0.95	7.5	8.1	60
65	23.9	23.6	30.9	19.7	575	29.5	25.5	23.0	296	53	2.2	23.1	22	522	27.3	25.8	23.1	274	0.65	0.92	7.4	8.0	65
70	24.7	24.3	32.6	19.9	522	30.5	27.3	23.8	310	44	2.2	24.9	22	478	28.3	27.5	24.0	289	0.64	0.90	7.2	8.0	70
75	25.4	25.1	34.3	20.2	478	31.5	29.0	24.6	325	38	2.1	26.7	21	440	29.4	29.2	24.7	303	0.63	0.89	7.1	7.9	75
80	26.1	25.8	36.0	20.4	440	32.5	30.7	25.3	338	33	2.1	28.6	21	407	30.4	30.9	25.5	317	0.63	0.87	7.0	7.9	80
85	26.8	26.4	37.7	20.6	407	33.6	32.4	26.0	351	28	2.1	30.4	21	379	31.5	32.5	26.2	330	0.62	0.86	6.8	7.8	85
90	27.4	27.0	39.4	20.8	379	34.6	34.1	26.7	364	25	2.0	32.3	21	354	32.6	34.2	26.8	343	0.62	0.84	6.7	7.8	90
95	28.0	27.6	41.0	21.1	354	35.6	35.8	27.3	376	22	2.0	34.3	21	332	33.6	35.9	27.5	355	0.61	0.83	6.5	7.7	95
100	28.5	28.2	42.6	21.3	332	36.6	37.5	27.9	387	20	2.0	36.2	21	312	34.6	37.5	28.1	366	0.60	0.82	6.4	7.6	100

JAPANSE LARIKS Zuid Nederland										**matige laagdunning**											**Boniteit III, h_{50} = 18.1**
JAPANESE LARCH South Netherlands										moderate thinning from below											Site Class III, h_{50} = 18.1
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	4.0	3.9	3.3		5000	2.3	2.4	3.3	5					5000	2.3	2.4	3.3	5	1.20	0.45	3.1	0.9	5
10	6.6	6.5	7.1		5000	10.3	5.1	5.7	34					5000	10.3	5.1	5.7	34	1.89	1.03	8.5	3.4	10
15	8.7	8.6	9.7	19.0	5000	17.2	6.6	7.7	76	795	1.8	5.4	8	4205	15.3	6.8	7.7	68	1.08	1.15	7.7	5.1	15
20	10.6	10.4	11.9	19.0	4205	20.3	7.8	9.4	107	1333	4.5	6.5	23	2872	15.8	8.4	9.5	84	0.92	1.11	7.5	5.7	20
25	12.2	12.0	13.8	19.0	2872	20.2	9.5	11.0	120	708	3.5	7.9	21	2164	16.7	9.9	11.1	100	0.82	1.06	7.2	6.1	25
30	13.6	13.4	15.6	19.0	2164	20.6	11.0	12.4	135	431	2.9	9.3	19	1733	17.7	11.4	12.5	116	0.76	1.02	7.0	6.2	30
35	14.9	14.6	17.3	19.0	1733	21.4	12.5	13.7	150	287	2.6	10.7	18	1446	18.8	12.9	13.8	133	0.72	0.98	6.8	6.3	35
40	16.0	15.8	18.9	19.0	1446	22.3	14.0	14.9	166	203	2.3	12.1	17	1243	20.0	14.3	15.0	150	0.69	0.94	6.7	6.4	40
45	17.1	16.9	20.5	19.0	1243	23.4	15.5	16.0	183	151	2.1	13.4	16	1092	21.2	15.7	16.1	166	0.66	0.91	6.6	6.4	45
50	18.1	17.8	22.1	19.0	1092	24.5	16.9	17.0	199	116	2.0	14.8	16	976	22.5	17.1	17.1	183	0.65	0.89	6.5	6.4	50
55	19.0	18.7	23.6	19.2	976	25.7	18.3	17.9	216	113	2.3	16.2	19	864	23.4	18.6	18.0	196	0.63	0.86	6.4	6.4	55
60	19.9	19.6	25.2	19.5	864	26.5	19.8	18.8	228	91	2.2	17.7	19	773	24.3	20.0	18.9	209	0.62	0.84	6.3	6.4	60
65	20.7	20.4	26.7	19.7	773	27.3	21.2	19.6	241	75	2.2	19.2	19	698	25.2	21.4	19.7	222	0.61	0.83	6.2	6.4	65
70	21.4	21.1	28.2	19.9	698	28.2	22.7	20.4	253	63	2.1	20.7	18	636	26.1	22.9	20.5	234	0.60	0.81	6.1	6.4	70
75	22.1	21.8	29.7	20.2	636	29.1	24.1	21.1	264	53	2.1	22.2	18	583	27.0	24.3	21.2	246	0.59	0.80	6.0	6.4	75
80	22.7	22.4	31.2	20.4	583	30.0	25.6	21.8	275	45	2.0	23.8	18	537	27.9	25.7	21.9	257	0.59	0.78	5.9	6.3	80
85	23.4	23.0	32.7	20.6	537	30.8	27.0	22.4	286	39	2.0	25.4	18	498	28.8	27.2	22.6	268	0.58	0.77	5.8	6.3	85
90	23.9	23.6	34.2	20.8	498	31.7	28.5	23.1	297	34	2.0	27.0	18	463	29.8	28.6	23.2	278	0.57	0.76	5.7	6.3	90
95	24.5	24.2	35.6	21.1	463	32.6	29.9	23.6	306	30	2.0	28.7	18	433	30.6	30.0	23.8	288	0.57	0.75	5.5	6.2	95
100	25.0	24.7	37.0	21.3	433	33.5	31.4	24.2	316	27	1.9	30.3	18	406	31.5	31.4	24.3	298	0.56	0.74	5.4	6.2	100

JAPANSE LARIKS Vlaanderen					**matige laagdunning**																**Boniteit IV, h_{50} = 15.1**
JAPANESE LARCH South Netherlands					moderate thinning from below																Site Class IV, h_{50} = 15.1
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	3.1	3.1	2.2		5000	1.0	1.6	2.5	2					5000	1.0	1.6	2.5	2	0.56	0.19	1.2	0.3	5
10	5.3	5.2	5.3		5000	5.8	3.8	4.5	15					5000	5.8	3.8	4.5	15	1.23	0.58	4.3	1.5	10
15	7.0	6.9	8.1	21.6	5000	12.4	5.6	6.1	43					5000	12.4	5.6	6.1	43	1.29	0.82	7.3	2.9	15
20	8.6	8.4	9.7	19.0	5000	17.0	6.6	7.5	73	641	1.5	5.4	6	4359	15.5	6.7	7.6	67	0.86	0.85	5.8	3.7	20
25	9.9	9.8	11.5	19.0	4359	19.6	7.6	8.8	96	1112	3.5	6.3	17	3247	16.0	7.9	8.9	79	0.77	0.84	5.7	4.1	25
30	11.1	11.0	13.2	19.0	3247	19.7	8.8	10.0	107	674	2.9	7.4	16	2573	16.8	9.1	10.1	91	0.71	0.82	5.5	4.3	30
35	12.3	12.1	14.7	19.0	2573	20.2	10.0	11.1	119	446	2.6	8.5	15	2127	17.7	10.3	11.2	104	0.67	0.80	5.4	4.5	35
40	13.3	13.1	16.0	19.0	2127	20.9	11.2	12.1	131	314	2.3	9.6	14	1813	18.7	11.4	12.2	117	0.64	0.79	5.4	4.6	40
45	14.2	14.0	17.4	19.0	1813	21.8	12.4	13.1	144	232	2.1	10.7	14	1581	19.7	12.6	13.2	130	0.62	0.77	5.3	4.7	45
50	15.1	14.9	18.7	19.0	1581	22.7	13.5	14.0	156	178	2.0	11.8	13	1403	20.8	13.7	14.0	143	0.60	0.75	5.2	4.8	50
55	15.9	15.7	20.0	19.2	1403	23.7	14.7	14.8	169	170	2.3	13.0	16	1233	21.5	14.9	14.9	153	0.58	0.74	5.2	4.8	55
60	16.7	16.4	21.3	19.5	1233	24.3	15.9	15.5	179	137	2.2	14.2	16	1096	22.2	16.1	15.6	163	0.57	0.72	5.1	4.8	60
65	17.4	17.1	22.7	19.7	1096	25.0	17.0	16.3	188	112	2.1	15.4	15	984	22.9	17.2	16.4	173	0.56	0.71	5.0	4.8	65
70	18.1	17.8	23.9	19.9	984	25.7	18.2	17.0	198	93	2.0	16.6	15	891	23.7	18.4	17.1	183	0.55	0.70	4.9	4.8	70
75	18.7	18.4	25.2	20.2	891	26.4	19.4	17.6	207	79	2.0	17.9	15	813	24.5	19.6	17.7	192	0.55	0.69	4.9	4.8	75
80	19.3	19.0	26.5	20.4	813	27.2	20.6	18.2	216	67	1.9	19.2	15	746	25.2	20.8	18.3	201	0.54	0.68	4.8	4.8	80
85	19.9	19.6	27.8	20.6	746	27.9	21.8	18.8	225	58	1.9	20.5	15	688	26.0	21.9	18.9	209	0.53	0.67	4.7	4.8	85
90	20.4	20.1	29.0	20.8	688	28.7	23.0	19.4	233	50	1.9	21.9	15	637	26.8	23.1	19.5	218	0.53	0.67	4.6	4.8	90
95	20.9	20.6	30.3	21.1	637	29.4	24.2	19.9	241	44	1.9	23.2	15	593	27.5	24.3	20.0	226	0.52	0.66	4.6	4.8	95
100	21.4	21.1	31.5	21.3	593	30.1	25.4	20.4	248	39	1.9	24.6	15	554	28.3	25.5	20.5	233	0.52	0.65	4.5	4.8	100

JAPANSE LARIKS Vlaanderen										**matige laagdunning**										**Boniteit V, h_{50} = 12.1**
JAPANESE LARCH South Netherlands										moderate thinning from below										Site Class V, h_{50} = 12.1
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	2.4	2.3	1.3		5000	0.3	0.9	1.9	0					5000	0.3	0.9	1.9	0	0.20	0.07	0.3	0.1	5
10	4.0	3.9	3.5		5000	2.4	2.5	3.3	5					5000	2.4	2.5	3.3	5	0.64	0.24	1.7	0.5	10
15	5.4	5.3	5.6		5000	6.3	4.0	4.6	17					5000	6.3	4.0	4.6	17	0.86	0.42	3.1	1.2	15
20	6.7	6.5	7.2		5000	10.6	5.2	5.8	35					5000	10.6	5.2	5.8	35	0.83	0.53	3.9	1.8	20
25	7.8	7.6	8.9	19.6	5000	14.6	6.1	6.8	57					5000	14.6	6.1	6.8	57	0.70	0.58	4.1	2.3	25
30	8.8	8.6	10.1	19.0	5000	18.0	6.8	7.7	78	844	2.2	5.7	9	4156	15.8	7.0	7.8	69	0.65	0.60	4.2	2.6	30
35	9.7	9.5	11.7	19.0	4156	19.0	7.6	8.6	89	755	2.5	6.5	12	3401	16.5	7.8	8.7	78	0.61	0.60	4.1	2.8	35
40	10.6	10.4	12.9	19.0	3401	19.4	8.5	9.4	98	530	2.2	7.3	11	2871	17.2	8.7	9.5	87	0.58	0.60	4.1	3.0	40
45	11.4	11.2	14.3	19.0	2871	20.0	9.4	10.2	107	390	2.0	8.2	11	2482	18.0	9.6	10.3	96	0.56	0.60	4.0	3.1	45
50	12.1	11.9	15.4	19.0	2482	20.8	10.3	11.0	116	297	1.9	9.0	10	2185	18.8	10.5	11.0	106	0.54	0.59	4.0	3.2	50
55	12.8	12.6	16.5	19.2	2185	21.5	11.2	11.7	126	279	2.2	9.9	12	1905	19.4	11.4	11.7	113	0.53	0.59	3.9	3.3	55
60	13.5	13.3	17.6	19.5	1905	22.0	12.1	12.3	133	223	2.1	10.8	12	1682	19.9	12.3	12.4	121	0.52	0.58	3.9	3.3	60
65	14.1	13.9	18.7	19.7	1682	22.5	13.1	12.9	140	182	2.0	11.8	12	1500	20.5	13.2	13.0	128	0.51	0.58	3.9	3.4	65
70	14.7	14.5	19.7	19.9	1500	23.0	14.0	13.5	147	150	1.9	12.8	12	1350	21.1	14.1	13.6	135	0.50	0.57	3.8	3.4	70
75	15.2	15.0	20.8	20.2	1350	23.6	14.9	14.1	154	126	1.9	13.8	12	1223	21.7	15.0	14.2	142	0.49	0.57	3.8	3.4	75
80	15.8	15.5	21.9	20.4	1223	24.2	15.9	14.6	161	107	1.8	14.8	12	1116	22.3	16.0	14.7	149	0.49	0.56	3.7	3.4	80
85	16.3	16.0	22.9	20.6	1116	24.8	16.8	15.2	167	92	1.8	15.8	12	1024	23.0	16.9	15.2	155	0.48	0.56	3.7	3.5	85
90	16.8	16.5	24.0	20.8	1024	25.4	17.8	15.6	174	80	1.8	16.9	12	944	23.6	17.8	15.7	162	0.48	0.55	3.6	3.5	90
95	17.2	17.0	25.0	21.1	944	26.0	18.7	16.1	180	70	1.8	17.9	12	874	24.2	18.8	16.2	168	0.47	0.55	3.6	3.5	95
100	17.7	17.4	26.1	21.3	874	26.6	19.7	16.6	186	62	1.7	19.0	12	812	24.8	19.7	16.7	174	0.47	0.55	3.5	3.5	100

Fijnspar
Picea abies **Norway spruce**

Bron: Jansen, J.J., G.M.J. Mohren, A. Oosterbaan en J. den Ouden, 2018. *Groei en productie van fijnspar in Nederland*. FEM Groei en Productie Rapport 2018 – 2, 88 blz.

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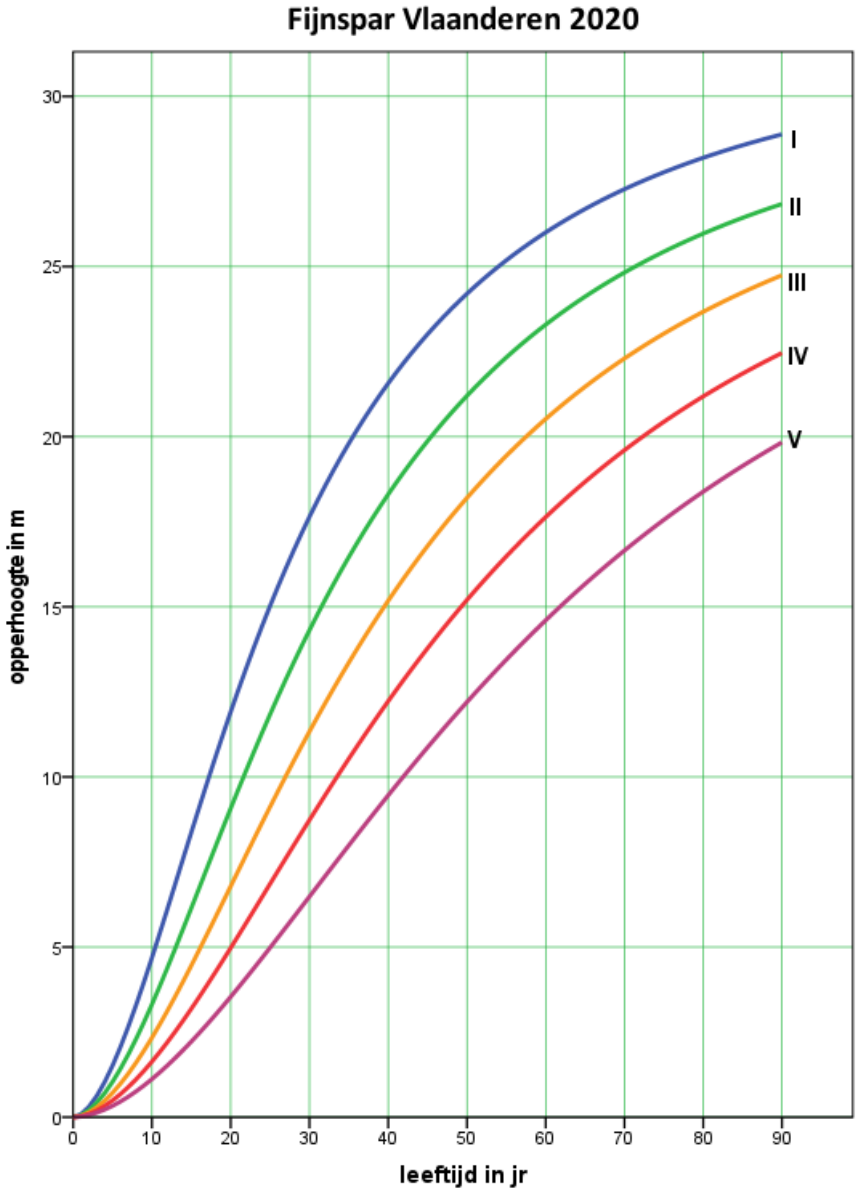

FIJNSPAR, Vlaanderen 2020					**matige laagdunning**																**Boniteit I, h_{50} = 24.2**
NORWAY SPRUCE					moderate thinning from below																Site Class I, h_{50} = 24.2
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	1.5	1.5	1.5		5000	0.5	1.1	1.2	0					5000	0.5	1.1	1.2	0	0.44	0.10	0.5	0.1	5
10	4.7	4.6	6.1		5000	8.1	4.5	3.9	18					5000	8.1	4.5	3.9	18	4.08	0.81	11.6	1.8	10
15	8.4	8.3	14.2	19.0	5000	39.7	10.1	7.2	178	427	2.3	8.2	10	4573	37.5	10.2	7.3	168	4.24	2.65	45.5	11.9	15
20	11.9	11.8	19.7	19.0	4573	53.8	12.2	10.6	324	2316	19.0	10.2	115	2256	34.8	14.0	10.7	210	2.19	2.80	25.9	16.7	20
25	15.0	14.9	23.7	19.0	2256	44.6	15.9	13.6	327	839	11.3	13.1	83	1418	33.3	17.3	13.7	243	1.75	2.63	22.0	18.1	25
30	17.6	17.5	27.4	19.0	1418	41.2	19.2	16.1	346	390	7.7	15.8	64	1028	33.6	20.4	16.2	281	1.45	2.46	19.3	18.5	30
35	19.8	19.7	30.6	19.0	1028	40.3	22.3	18.1	372	212	5.6	18.3	52	816	34.7	23.3	18.3	320	1.24	2.30	17.2	18.4	35
40	21.6	21.4	33.6	19.0	816	40.5	25.1	19.8	402	128	4.2	20.5	42	688	36.2	25.9	20.0	360	1.08	2.16	15.5	18.1	40
45	23.0	22.9	36.1	19.0	688	41.3	27.7	21.2	433	84	3.3	22.5	35	604	38.0	28.3	21.4	398	0.96	2.03	14.1	17.8	45
50	24.2	24.0	38.5	19.0	604	42.5	29.9	22.4	465	58	2.7	24.4	30	546	39.8	30.5	22.6	436	0.87	1.92	12.9	17.3	50
55	25.2	25.0	40.7	19.4	546	44.0	32.0	23.4	497	61	3.3	26.2	37	485	40.7	32.7	23.5	460	0.79	1.82	11.8	16.9	55
60	26.0	25.8	42.8	19.7	485	44.4	34.2	24.2	516	47	2.9	28.1	34	438	41.5	34.7	24.4	482	0.72	1.73	10.8	16.4	60
65	26.7	26.5	44.8	20.1	438	45.0	36.2	24.9	534	38	2.6	29.9	31	401	42.3	36.7	25.1	503	0.66	1.65	10.0	15.9	65
70	27.3	27.1	46.6	20.5	401	45.5	38.0	25.5	551	31	2.4	31.5	29	370	43.1	38.5	25.7	522	0.61	1.58	9.2	15.5	70
75	27.8	27.6	48.3	20.9	370	46.1	39.8	26.1	566	26	2.2	33.2	27	344	43.9	40.3	26.2	539	0.57	1.51	8.6	15.1	75
80	28.2	28.0	50.0	21.2	344	46.7	41.5	26.5	581	22	2.1	34.7	26	322	44.6	42.0	26.7	555	0.54	1.45	8.1	14.6	80
85	28.6	28.4	51.5	21.6	322	47.2	43.2	27.0	594	19	2.0	36.3	25	303	45.2	43.6	27.1	569	0.51	1.40	7.6	14.2	85
90	28.9	28.7	53.0	22.0	303	47.7	44.8	27.3	606	17	1.9	37.7	24	287	45.9	45.1	27.5	582	0.48	1.35	7.2	13.9	90

FIJNSPAR, Vlaanderen 2020					**matige laagdunning**									**Boniteit II, h_{50} = 21.2**								
NORWAY SPRUCE					moderate thinning from below									Site Class II, h_{50} = 21.2								
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	1.0	1.0			5000				0					5000				0			0.2	0.0	5
10	3.3	3.3	3.6		5000	2.8	2.7	2.6	5					5000	2.8	2.7	2.6	5	1.30	0.28	2.9	0.5	10
15	6.1	6.1	9.7		5000	20.1	7.2	5.2	56					5000	20.1	7.2	5.2	56	6.61	1.34	22.8	3.7	15
20	9.1	9.0	15.5	19.0	5000	44.2	10.6	7.9	212	1112	6.6	8.7	32	3888	37.6	11.1	8.0	180	3.20	2.21	25.8	10.6	20
25	11.8	11.8	19.7	19.0	3888	50.4	12.8	10.6	302	1604	14.3	10.6	86	2284	36.1	14.2	10.6	216	1.84	2.28	20.8	13.4	25
30	14.3	14.2	22.9	19.0	2284	44.5	15.7	12.9	313	722	9.5	13.0	67	1562	35.0	16.9	13.0	246	1.53	2.18	18.4	14.3	30
35	16.5	16.3	25.9	19.0	1562	42.0	18.5	15.0	333	382	6.9	15.2	55	1181	35.1	19.5	15.1	278	1.31	2.07	16.6	14.8	35
40	18.3	18.2	28.7	19.0	1181	41.3	21.1	16.8	357	226	5.3	17.3	46	955	36.0	21.9	16.9	311	1.15	1.96	15.2	14.9	40
45	19.9	19.7	31.3	19.0	955	41.4	23.5	18.3	383	145	4.2	19.2	39	810	37.2	24.2	18.5	345	1.02	1.87	13.9	14.9	45
50	21.2	21.1	33.6	19.0	810	42.0	25.7	19.6	411	98	3.4	21.0	33	712	38.6	26.3	19.8	378	0.92	1.78	12.8	14.7	50
55	22.3	22.2	35.9	19.4	712	43.0	27.7	20.8	440	95	3.8	22.7	39	617	39.2	28.4	20.9	400	0.83	1.69	11.8	14.5	55
60	23.3	23.1	38.0	19.7	617	43.1	29.8	21.7	457	71	3.4	24.5	36	546	39.8	30.4	21.9	421	0.76	1.62	10.9	14.2	60
65	24.1	24.0	40.0	20.1	546	43.4	31.8	22.6	473	55	3.0	26.3	33	491	40.4	32.4	22.7	440	0.69	1.55	10.0	13.9	65
70	24.8	24.7	41.9	20.5	491	43.7	33.7	23.3	489	44	2.7	27.9	30	446	41.0	34.2	23.5	458	0.64	1.49	9.3	13.6	70
75	25.4	25.3	43.6	20.9	446	44.1	35.5	23.9	503	36	2.5	29.5	28	410	41.6	35.9	24.1	475	0.60	1.43	8.7	13.3	75
80	26.0	25.8	45.3	21.2	410	44.5	37.2	24.5	517	30	2.3	31.1	27	380	42.2	37.6	24.7	490	0.56	1.38	8.1	13.0	80
85	26.4	26.3	46.9	21.6	380	44.9	38.8	25.0	529	26	2.1	32.6	25	354	42.8	39.2	25.2	504	0.53	1.33	7.7	12.7	85
90	26.8	26.7	48.4	22.0	354	45.4	40.4	25.5	541	22	2.0	34.0	24	332	43.3	40.8	25.6	517	0.50	1.28	7.2	12.4	90

FIJNSPAR, Vlaanderen 2020					**matige laagdunning**									**Boniteit III, h_{50} = 18.2**								
NORWAY SPRUCE					moderate thinning from below									Site Class III, h_{50} = 18.2								
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	0.7	0.7			5000				0					5000				0			0.0	0.0	5
10	2.3	2.3	2.3		5000	1.2	1.7	1.9	1					5000	1.2	1.7	1.9	1	0.45	0.12	0.8	0.1	10
15	4.5	4.4	5.7		5000	6.9	4.2	3.7	15					5000	6.9	4.2	3.7	15	2.26	0.46	6.2	1.0	15
20	6.8	6.7	11.4		5000	28.3	8.5	5.8	85					5000	28.3	8.5	5.8	85	5.65	1.41	22.1	4.3	20
25	9.1	9.1	15.6	19.0	5000	45.4	10.8	8.0	219	1152	7.0	8.8	34	3848	38.4	11.3	8.1	185	2.71	1.82	21.6	8.7	25
30	11.3	11.3	19.0	19.0	3848	49.8	12.8	10.1	288	1357	12.0	10.6	69	2492	37.8	13.9	10.2	218	1.69	1.89	17.8	10.7	30
35	13.4	13.3	21.7	19.0	2492	45.3	15.2	12.1	301	699	8.6	12.5	57	1793	36.7	16.1	12.2	243	1.39	1.84	15.8	11.5	35
40	15.2	15.1	24.3	19.0	1793	43.2	17.5	13.9	319	404	6.5	14.3	48	1389	36.6	18.3	14.0	271	1.21	1.77	14.6	12.0	40
45	16.8	16.7	26.7	19.0	1389	42.3	19.7	15.4	341	254	5.2	16.1	42	1135	37.2	20.4	15.5	299	1.08	1.70	13.5	12.2	45
50	18.2	18.1	28.9	19.0	1135	42.3	21.8	16.8	364	170	4.2	17.8	36	966	38.1	22.4	16.9	328	0.97	1.63	12.6	12.3	50
55	19.4	19.3	31.2	19.4	966	42.7	23.7	18.1	389	151	4.5	19.5	41	814	38.2	24.4	18.2	347	0.88	1.57	11.7	12.3	55
60	20.5	20.4	33.3	19.7	814	42.4	25.7	19.1	404	111	3.9	21.2	37	704	38.5	26.4	19.3	366	0.80	1.51	10.8	12.2	60
65	21.5	21.3	35.3	20.1	704	42.3	27.7	20.1	418	84	3.5	22.9	34	619	38.8	28.3	20.2	384	0.73	1.45	10.1	12.1	65
70	22.3	22.1	37.2	20.5	619	42.4	29.5	20.9	432	66	3.1	24.5	32	553	39.2	30.1	21.1	401	0.68	1.40	9.4	11.9	70
75	23.0	22.9	39.0	20.9	553	42.5	31.3	21.7	446	53	2.8	26.1	30	501	39.7	31.8	21.8	416	0.63	1.35	8.8	11.7	75
80	23.7	23.5	40.7	21.2	501	42.7	33.0	22.4	459	43	2.6	27.6	28	457	40.1	33.4	22.5	431	0.59	1.30	8.2	11.5	80
85	24.2	24.1	42.3	21.6	457	43.0	34.6	23.0	471	36	2.4	29.1	26	421	40.6	35.0	23.1	444	0.55	1.26	7.7	11.3	85
90	24.7	24.6	43.8	22.0	421	43.3	36.2	23.5	482	31	2.2	30.5	25	391	41.0	36.6	23.7	457	0.52	1.22	7.3	11.1	90

FIJNSPAR, Vlaanderen 2020					**matige laagdunning**									**Boniteit IV, h_{50} = 15.2**							
NORWAY SPRUCE					moderate thinning from below									Site Class IV, h_{50} = 15.2							
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	0.5	0.5			5000				0					5000				0			0.0	0.0	5
10	1.6	1.6	1.6		5000	0.6	1.2	1.3	1					5000	0.6	1.2	1.3	1	0.17	0.06	0.2	0.1	10
15	3.2	3.2	3.4		5000	2.5	2.5	2.5	4					5000	2.5	2.5	2.5	4	0.75	0.17	1.6	0.3	15
20	5.0	4.9	6.8		5000	9.9	5.0	4.2	28					5000	9.9	5.0	4.2	28	2.44	0.49	7.2	1.4	20
25	6.9	6.8	11.7		5000	29.3	8.6	5.9	90					5000	29.3	8.6	5.9	90	4.62	1.17	18.3	3.6	25
30	8.7	8.7	14.8	19.0	5000	44.0	10.6	7.7	204	804	4.7	8.6	22	4196	39.3	10.9	7.7	182	2.48	1.47	18.4	6.8	30
35	10.5	10.5	17.9	19.0	4196	50.3	12.4	9.4	274	1314	10.7	10.2	58	2883	39.6	13.2	9.5	215	1.83	1.57	16.8	8.5	35
40	12.2	12.1	20.2	19.0	2883	46.9	14.4	11.1	289	742	8.1	11.8	50	2141	38.8	15.2	11.1	239	1.28	1.56	13.8	9.2	40
45	13.8	13.7	22.4	19.0	2141	44.8	16.3	12.6	305	456	6.4	13.4	44	1684	38.4	17.0	12.7	262	1.14	1.52	12.9	9.7	45
50	15.2	15.1	24.4	19.0	1684	43.8	18.2	14.0	324	300	5.2	14.9	39	1384	38.6	18.8	14.1	285	1.03	1.48	12.2	10.0	50
55	16.5	16.4	26.6	19.4	1384	43.5	20.0	15.3	344	252	5.3	16.4	42	1133	38.1	20.7	15.4	302	0.93	1.43	11.4	10.1	55
60	17.6	17.5	28.6	19.7	1133	42.6	21.9	16.4	357	180	4.6	18.0	39	952	38.0	22.5	16.5	318	0.85	1.38	10.6	10.2	60
65	18.7	18.5	30.6	20.1	952	42.0	23.7	17.5	369	134	4.0	19.6	36	818	38.0	24.3	17.6	334	0.77	1.34	9.9	10.2	65
70	19.6	19.5	32.4	20.5	818	41.7	25.5	18.4	382	102	3.6	21.2	33	716	38.1	26.0	18.5	349	0.71	1.30	9.3	10.2	70
75	20.4	20.3	34.2	20.9	716	41.5	27.2	19.3	394	80	3.2	22.7	31	636	38.3	27.7	19.4	363	0.66	1.26	8.8	10.1	75
80	21.2	21.0	35.9	21.2	636	41.5	28.8	20.0	406	65	3.0	24.1	29	571	38.5	29.3	20.2	377	0.62	1.22	8.3	10.0	80
85	21.9	21.7	37.5	21.6	571	41.5	30.4	20.7	417	53	2.7	25.6	27	518	38.8	30.9	20.9	389	0.58	1.18	7.8	9.9	85
90	22.5	22.3	39.1	22.0	518	41.6	32.0	21.4	427	44	2.5	27.0	26	474	39.1	32.4	21.5	401	0.54	1.15	7.4	9.7	90

FIJNSPAR, Vlaanderen 2020					**matige laagdunning**										**Boniteit V, h_{50} = 12.2**						
NORWAY SPRUCE					moderate thinning from below										Site Class V, h_{50} = 12.2						
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	0.3	0.3			5000				0					5000				0			0.0	0.0	5
10	1.1	1.1			5000				0					5000				0			0.2	0.0	10
15	2.2	2.2	2.2		5000	1.0	1.6	1.8	1					5000	1.0	1.6	1.8	1	0.26	0.07	0.4	0.1	15
20	3.5	3.5	4.0		5000	3.4	3.0	2.9	7					5000	3.4	3.0	2.9	7	0.79	0.17	1.8	0.4	20
25	5.0	4.9	6.8		5000	9.9	5.0	4.2	24					5000	9.9	5.0	4.2	24	1.95	0.40	5.8	0.9	25
30	6.5	6.4	10.6		5000	24.2	7.8	5.6	71					5000	24.2	7.8	5.6	71	3.87	0.81	14.0	2.4	30
35	8.0	7.9	13.6	19.0	5000	39.5	10.0	7.0	170					5000	39.5	10.0	7.0	170	2.37	1.13	15.6	4.9	35
40	9.5	9.4	16.1	19.0	5000	50.6	11.3	8.4	251	1424	9.7	9.3	49	3576	40.8	12.1	8.5	203	1.94	1.26	15.5	6.3	40
45	10.9	10.8	18.5	19.0	3576	49.3	13.2	9.8	275	867	8.0	10.9	45	2708	41.2	13.9	9.9	230	1.39	1.31	13.2	7.2	45
50	12.2	12.1	20.1	19.0	2708	47.0	14.9	11.1	289	559	6.5	12.2	40	2149	40.5	15.5	11.2	249	1.08	1.30	11.5	7.7	50
55	13.4	13.4	22.0	19.4	2149	45.7	16.5	12.3	305	447	6.4	13.5	43	1702	39.3	17.1	12.4	262	0.98	1.27	10.8	8.0	55
60	14.6	14.5	23.9	19.7	1702	43.9	18.1	13.5	314	313	5.5	15.0	40	1389	38.4	18.8	13.6	275	0.89	1.24	10.2	8.2	60
65	15.7	15.6	25.7	20.1	1389	42.7	19.8	14.6	324	227	4.8	16.4	37	1162	37.9	20.4	14.7	288	0.82	1.21	9.6	8.3	65
70	16.7	16.5	27.5	20.5	1162	41.9	21.4	15.6	334	170	4.2	17.8	34	992	37.6	22.0	15.7	300	0.76	1.18	9.1	8.4	70
75	17.6	17.4	29.2	20.9	992	41.3	23.0	16.5	345	131	3.8	19.2	32	861	37.5	23.5	16.6	313	0.70	1.15	8.6	8.4	75
80	18.4	18.3	30.9	21.2	861	40.9	24.6	17.4	355	103	3.4	20.6	30	758	37.4	25.1	17.5	325	0.65	1.12	8.1	8.4	80
85	19.1	19.0	32.5	21.6	758	40.6	26.1	18.1	364	83	3.1	22.0	28	676	37.4	26.6	18.3	336	0.61	1.09	7.7	8.4	85
90	19.8	19.7	34.0	22.0	676	40.4	27.6	18.9	374	67	2.9	23.3	27	608	37.5	28.0	19.0	347	0.57	1.07	7.4	8.3	90

Zomereik
Quercus robur **Common oak**

Bron: Jansen, J.J., A. Oosterbaan, G.M.J. Mohren en J. den Ouden, 2018. *Groei en productie van zomereik in Nederland*. FEM Groei en Productie Rapport 2018 – 4, 87 blz.

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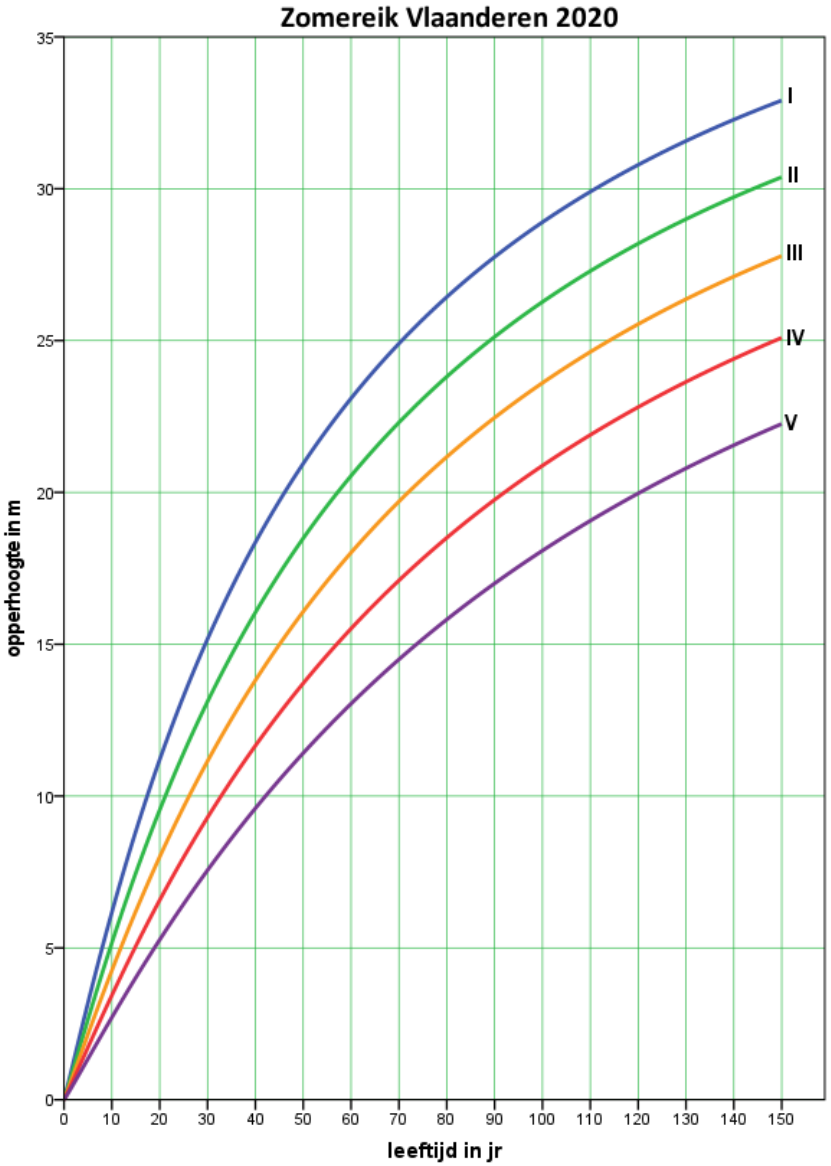

ZOMEREIK, Vlaanderen 2020					**matige laagdunning**									**Boniteit I, h_{70} = 25.2**								
COMMON OAK					moderate thinning from below									Site Class I, h_{70} = 25.2								
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	3.2	3.2	4.3		5000	3.3	2.9	2.6	6					5000	3.3	2.9	2.6	6	1.72	0.65	4.5	1.2	5
10	6.3	6.2	9.4		5000	15.9	6.4	5.1	51					5000	15.9	6.4	5.1	51	2.76	1.59	12.5	5.1	10
15	9.0	8.8	12.7	19.0	5000	27.0	8.3	7.7	116	1023	3.2	6.3	13	3977	23.7	8.7	7.8	103	1.69	1.80	12.6	7.7	15
20	11.4	11.2	15.5	19.0	3977	31.4	10.0	10.1	166	1502	7.1	7.8	36	2474	24.3	11.2	10.2	130	1.37	1.73	12.3	9.0	20
25	13.5	13.3	18.3	20.1	2474	30.5	12.5	12.3	189	903	6.8	9.8	40	1571	23.7	13.9	12.4	149	1.15	1.64	11.4	9.5	25
30	15.4	15.2	21.1	21.1	1571	29.1	15.4	14.3	204	479	5.5	12.1	37	1092	23.6	16.6	14.3	167	1.01	1.54	10.7	9.8	30
35	17.1	16.9	23.8	22.1	1092	28.4	18.2	16.0	219	284	4.6	14.4	34	808	23.8	19.4	16.1	185	0.88	1.46	9.9	9.9	35
40	18.6	18.4	26.4	23.1	808	27.9	21.0	17.6	233	182	4.0	16.6	32	626	23.9	22.0	17.7	201	0.76	1.38	9.1	9.8	40
45	20.0	19.7	28.9	24.0	626	27.4	23.6	19.0	245	124	3.5	18.9	29	503	24.0	24.6	19.1	215	0.67	1.30	8.4	9.7	45
50	21.2	21.0	31.3	24.8	503	27.2	26.2	20.3	256	88	3.1	21.1	27	415	24.1	27.2	20.4	228	0.61	1.24	7.9	9.5	50
55	22.4	22.1	33.6	25.7	415	27.0	28.8	21.4	267	65	2.7	23.2	26	350	24.3	29.7	21.5	241	0.56	1.18	7.5	9.4	55
60	23.4	23.1	35.9	26.5	350	26.9	31.3	22.5	277	49	2.5	25.4	24	301	24.5	32.2	22.6	253	0.52	1.12	7.1	9.2	60
65	24.3	24.0	38.2	27.2	301	27.0	33.8	23.4	288	38	2.3	27.5	23	263	24.7	34.6	23.5	265	0.49	1.08	6.8	9.0	65
70	25.2	24.9	40.4	27.9	263	27.1	36.2	24.3	298	30	2.1	29.6	22	233	25.0	37.0	24.4	276	0.46	1.03	6.5	8.9	70
75	26.0	25.7	42.5	28.6	233	27.2	38.6	25.1	308	24	1.9	31.7	21	209	25.3	39.3	25.2	288	0.44	0.99	6.3	8.7	75
80	26.7	26.5	44.6	29.2	209	27.5	40.9	25.9	319	20	1.8	33.7	19	189	25.7	41.6	26.0	300	0.42	0.96	6.1	8.5	80
85	27.4	27.2	46.7	29.8	189	27.8	43.2	26.6	330	16	1.6	35.7	18	173	26.1	43.9	26.7	311	0.40	0.93	5.9	8.4	85
90	28.1	27.9	48.8	30.3	173	28.1	45.5	27.2	340	14	1.5	37.7	17	159	26.6	46.1	27.3	323	0.39	0.90	5.8	8.2	90
95	28.6	28.5	50.8	30.8	159	28.5	47.7	27.8	351	11	1.4	39.6	17	148	27.1	48.3	28.0	335	0.37	0.87	5.6	8.1	95
100	29.2	29.1	52.8	31.3	148	28.9	49.9	28.4	362	10	1.3	41.5	16	138	27.6	50.4	28.5	347	0.36	0.84	5.5	8.0	100
105	29.7	29.6	54.8	31.7	138	29.4	52.0	28.9	374	8	1.2	43.4	15	130	28.1	52.5	29.1	359	0.35	0.82	5.4	7.9	105
110	30.2	30.1	56.7	32.1	130	29.9	54.1	29.4	386	7	1.1	45.2	14	123	28.7	54.6	29.6	372	0.34	0.80	5.3	7.7	110
115	30.7	30.6	58.6	32.4	123	30.4	56.1	29.9	398	6	1.1	47.0	13	117	29.4	56.6	30.0	385	0.33	0.78	5.2	7.6	115
120	31.1	31.0	58.5	32.7	117	31.0	58.1	30.4	410	5	1.0	48.8	12	112	30.0	58.5	30.5	398	0.33	0.76	5.1	7.5	120
125	31.5	31.4	60.5	33.0	112	31.7	60.1	30.8	423	5	0.9	50.5	11	107	30.8	60.5	30.9	412	0.32	0.74	5.0	7.4	125
130	31.9	31.8	62.4	33.2	107	32.4	62.0	31.2	437	4	0.8	52.1	11	103	31.5	62.4	31.3	426	0.32	0.73	5.0	7.3	130
135	32.2	32.2	64.2	33.4	103	33.1	63.9	31.6	451	3	0.8	53.7	10	100	32.3	64.2	31.7	441	0.31	0.71	4.9	7.2	135
140	32.6	32.6	66.0	33.5	100	33.9	65.7	31.9	466	3	0.7	55.3	9	97	33.2	66.0	32.1	457	0.31	0.70	4.9	7.2	140
145	32.9	32.9	67.7	33.6	97	34.7	67.5	32.3	481	2	0.6	56.8	8	95	34.1	67.7	32.4	473	0.30	0.68	4.8	7.1	145
150	33.2	33.2	69.4	33.6	95	35.6	69.2	32.6	497	2	0.5	58.3	7	93	35.1	69.4	32.8	490	0.30	0.67	4.8	7.0	150

ZOMEREIK, Vlaanderen 2020					**matige laagdunning**									**Boniteit II, h_{70} = 22.0**								
COMMON OAK					moderate thinning from below									Site Class II, h_{70} = 22.0								
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	2.6	2.5	3.0		5000	1.6	2.0	2.0	3					5000	1.6	2.0	2.0	3	1.02	0.32	2.2	0.5	5
10	5.0	5.0	7.4		5000	9.9	5.0	4.0	26					5000	9.9	5.0	4.0	26	2.07	0.99	7.6	2.6	10
15	7.3	7.2	11.3	20.9	5000	21.3	7.4	6.1	77					5000	21.3	7.4	6.1	77	2.00	1.42	10.8	5.1	15
20	9.3	9.2	13.3	19.0	5000	29.2	8.6	8.1	130	1325	4.9	6.9	21	3675	24.3	9.2	8.1	109	1.41	1.46	10.5	6.5	20
25	11.2	11.0	15.7	20.1	3675	30.7	10.3	10.0	160	1384	7.6	8.4	38	2291	23.1	11.3	10.0	122	1.18	1.42	9.9	7.3	25
30	12.9	12.7	18.0	21.1	2291	28.6	12.6	11.7	170	725	6.0	10.3	34	1566	22.5	13.5	11.7	136	1.03	1.37	9.3	7.6	30
35	14.4	14.2	20.3	22.1	1566	27.4	14.9	13.3	181	425	5.0	12.2	31	1142	22.4	15.8	13.3	150	0.90	1.31	8.7	7.8	35
40	15.8	15.6	22.5	23.1	1142	26.6	17.2	14.7	191	269	4.3	14.2	29	873	22.3	18.0	14.8	162	0.77	1.25	8.0	7.9	40
45	17.0	16.8	24.6	24.0	873	25.9	19.4	16.0	200	181	3.7	16.1	27	692	22.2	20.2	16.1	173	0.68	1.19	7.4	7.9	45
50	18.2	18.0	26.7	24.8	692	25.4	21.6	17.2	209	127	3.2	18.0	25	564	22.2	22.4	17.3	184	0.61	1.14	7.0	7.8	50
55	19.3	19.0	28.7	25.7	564	25.1	23.8	18.3	218	93	2.9	19.9	24	472	22.3	24.5	18.4	194	0.56	1.09	6.6	7.7	55
60	20.3	20.0	30.7	26.5	472	25.0	26.0	19.4	226	70	2.6	21.8	22	402	22.4	26.6	19.5	204	0.52	1.04	6.3	7.6	60
65	21.2	20.9	32.7	27.2	402	24.9	28.1	20.3	235	54	2.4	23.7	21	348	22.5	28.7	20.4	214	0.49	1.00	6.1	7.5	65
70	22.0	21.7	34.6	27.9	348	24.9	30.2	21.2	243	42	2.2	25.5	20	306	22.8	30.8	21.3	223	0.46	0.96	5.9	7.4	70
75	22.8	22.5	36.5	28.6	306	25.0	32.3	22.0	252	34	2.0	27.4	19	272	23.0	32.8	22.1	233	0.44	0.93	5.7	7.3	75
80	23.5	23.2	38.4	29.2	272	25.2	34.3	22.8	261	27	1.8	29.2	18	245	23.3	34.8	22.9	243	0.42	0.90	5.5	7.2	80
85	24.2	23.9	40.2	29.8	245	25.4	36.3	23.5	270	22	1.7	31.1	17	222	23.7	36.8	23.6	253	0.40	0.87	5.4	7.1	85
90	24.8	24.6	42.1	30.3	222	25.7	38.3	24.1	279	19	1.6	32.9	16	204	24.1	38.8	24.2	263	0.39	0.84	5.2	7.0	90
95	25.4	25.2	43.9	30.8	204	26.0	40.3	24.8	289	16	1.5	34.6	16	188	24.5	40.8	24.9	273	0.38	0.82	5.1	6.9	95
100	26.0	25.8	45.6	31.3	188	26.4	42.3	25.3	299	13	1.4	36.4	15	175	25.0	42.7	25.5	284	0.36	0.80	5.0	6.8	100
105	26.5	26.3	47.4	31.7	175	26.8	44.2	25.9	309	11	1.3	38.1	14	164	25.5	44.6	26.0	295	0.35	0.78	4.9	6.7	105
110	27.0	26.8	49.1	32.1	164	27.2	46.1	26.4	319	10	1.2	39.8	13	154	26.1	46.4	26.5	306	0.34	0.76	4.8	6.6	110
115	27.5	27.3	50.8	32.4	154	27.8	47.9	26.9	330	8	1.1	41.5	13	146	26.6	48.3	27.0	317	0.34	0.74	4.8	6.5	115
120	27.9	27.8	52.5	32.7	146	28.3	49.7	27.4	341	7	1.0	43.1	12	139	27.3	50.1	27.5	329	0.33	0.72	4.7	6.5	120
125	28.3	28.2	54.1	33.0	139	28.9	51.5	27.8	352	6	1.0	44.7	11	132	27.9	51.8	28.0	341	0.32	0.71	4.6	6.4	125
130	28.7	28.6	55.8	33.2	132	29.5	53.3	28.3	364	5	0.9	46.3	10	127	28.7	53.5	28.4	354	0.32	0.69	4.6	6.3	130
135	29.1	29.0	57.3	33.4	127	30.2	55.0	28.7	377	5	0.8	47.8	10	123	29.4	55.2	28.8	367	0.31	0.68	4.5	6.3	135
140	29.4	29.4	58.9	33.5	123	31.0	56.7	29.1	390	4	0.7	49.3	9	119	30.2	56.9	29.2	381	0.31	0.66	4.5	6.2	140
145	29.8	29.7	60.4	33.6	119	31.8	58.3	29.4	403	3	0.7	50.7	8	116	31.1	58.5	29.6	395	0.30	0.65	4.5	6.1	145
150	30.1	30.0	60.1	33.6	116	32.6	59.9	29.8	418	3	0.6	52.1	7	113	32.0	60.1	29.9	411	0.30	0.64	4.4	6.1	150

ZOMEREIK, Vlaanderen 2020					**matige laagdunning**									**Boniteit III, h_{70} = 18.8**								
COMMON OAK					moderate thinning from below									Site Class III, h_{70} = 18.8								
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	2.0	1.9	1.8		5000	0.6	1.2	1.6	1					5000	0.6	1.2	1.6	1	0.52	0.11	0.9	0.2	5
10	3.9	3.9	5.5		5000	5.5	3.8	3.1	12					5000	5.5	3.8	3.1	12	1.32	0.55	3.8	1.2	10
15	5.8	5.7	8.6		5000	13.4	5.8	4.6	40					5000	13.4	5.8	4.6	40	1.76	0.89	7.4	2.7	15
20	7.5	7.4	11.4	20.4	5000	21.5	7.4	6.3	79					5000	21.5	7.4	6.3	79	1.39	1.08	7.8	4.0	20
25	9.0	8.9	13.2	20.1	5000	28.1	8.5	7.8	122	1488	5.8	7.1	24	3512	22.3	9.0	7.9	97	1.21	1.12	8.3	4.9	25
30	10.5	10.3	15.1	21.1	3512	27.9	10.1	9.3	138	1152	6.5	8.5	31	2360	21.4	10.7	9.3	107	1.05	1.12	7.9	5.4	30
35	11.8	11.6	17.0	22.1	2360	26.4	11.9	10.7	146	666	5.3	10.1	28	1694	21.0	12.6	10.7	118	0.92	1.11	7.4	5.7	35
40	13.0	12.9	18.9	23.1	1694	25.2	13.8	11.9	153	418	4.5	11.7	26	1276	20.7	14.4	12.0	127	0.79	1.07	6.9	5.9	40
45	14.2	14.0	20.6	24.0	1276	24.4	15.6	13.1	160	278	3.9	13.4	24	998	20.5	16.2	13.2	136	0.69	1.04	6.4	6.0	45
50	15.2	15.0	22.4	24.8	998	23.8	17.4	14.2	167	194	3.4	15.0	23	805	20.4	17.9	14.3	144	0.62	1.00	6.1	6.0	50
55	16.2	16.0	24.1	25.7	805	23.3	19.2	15.3	173	140	3.0	16.6	21	665	20.3	19.7	15.3	152	0.57	0.96	5.8	6.0	55
60	17.1	16.9	25.8	26.5	665	23.1	21.0	16.2	180	104	2.7	18.2	20	561	20.3	21.5	16.3	160	0.53	0.93	5.6	6.0	60
65	18.0	17.8	27.5	27.2	561	22.9	22.8	17.1	187	80	2.5	19.9	19	481	20.4	23.3	17.2	168	0.50	0.89	5.4	5.9	65
70	18.8	18.6	29.2	27.9	481	22.9	24.6	18.0	194	62	2.3	21.5	18	419	20.6	25.0	18.1	176	0.47	0.87	5.2	5.9	70
75	19.5	19.3	30.9	28.6	419	22.9	26.4	18.8	202	49	2.1	23.1	17	370	20.8	26.8	18.9	184	0.45	0.84	5.0	5.8	75
80	20.3	20.0	32.5	29.2	370	23.0	28.1	19.5	209	40	1.9	24.7	17	330	21.1	28.5	19.6	193	0.43	0.81	4.9	5.8	80
85	20.9	20.6	34.1	29.8	330	23.2	29.9	20.2	217	33	1.8	26.4	16	297	21.4	30.3	20.3	201	0.41	0.79	4.8	5.7	85
90	21.5	21.3	35.7	30.3	297	23.4	31.6	20.9	225	27	1.7	28.0	15	270	21.7	32.0	21.0	210	0.39	0.77	4.7	5.7	90
95	22.1	21.8	37.3	30.8	270	23.7	33.4	21.5	233	22	1.5	29.6	14	248	22.1	33.7	21.6	219	0.38	0.75	4.6	5.6	95
100	22.7	22.4	38.9	31.3	248	24.0	35.1	22.1	241	19	1.4	31.2	14	229	22.5	35.4	22.2	228	0.37	0.73	4.5	5.6	100
105	23.2	22.9	40.4	31.7	229	24.4	36.8	22.7	250	16	1.3	32.7	13	213	23.0	37.1	22.8	237	0.36	0.71	4.5	5.5	105
110	23.7	23.5	42.0	32.1	213	24.8	38.5	23.2	259	14	1.3	34.3	12	200	23.5	38.7	23.3	247	0.35	0.70	4.4	5.5	110
115	24.2	24.0	43.5	32.4	200	25.2	40.1	23.7	268	12	1.2	35.8	12	188	24.1	40.4	23.8	256	0.34	0.68	4.3	5.4	115
120	24.6	24.4	45.0	32.7	188	25.7	41.7	24.2	278	10	1.1	37.3	11	178	24.6	42.0	24.3	267	0.33	0.67	4.3	5.4	120
125	25.0	24.9	46.5	33.0	178	26.3	43.4	24.7	288	9	1.0	38.8	11	169	25.3	43.6	24.8	277	0.32	0.65	4.2	5.3	125
130	25.4	25.3	47.9	33.2	169	26.9	44.9	25.1	298	7	0.9	40.2	10	162	25.9	45.1	25.2	288	0.32	0.64	4.2	5.3	130
135	25.8	25.7	49.4	33.4	162	27.5	46.5	25.6	309	6	0.9	41.7	9	156	26.6	46.7	25.7	300	0.31	0.63	4.2	5.2	135
140	26.2	26.1	50.8	33.5	156	28.2	48.0	26.0	321	5	0.8	43.1	9	150	27.4	48.2	26.1	312	0.31	0.62	4.1	5.2	140
145	26.5	26.4	52.2	33.6	150	28.9	49.5	26.3	333	5	0.7	44.4	8	145	28.2	49.7	26.5	325	0.31	0.61	4.1	5.2	145
150	26.9	26.8	53.6	33.6	145	29.7	51.0	26.7	345	4	0.7	45.8	7	141	29.1	51.2	26.8	338	0.30	0.60	4.1	5.1	150

ZOMEREIK, Vlaanderen 2020					**matige laagdunning**									**Boniteit IV, h_{70} = 15.6**								
COMMON OAK					moderate thinning from below									Site Class IV, h_{70} = 15.6								
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	1.5	1.5	0.6		5000	0.1	0.4	1.2	0					5000	0.1	0.4	1.2	0	0.20	0.01	0.3	0.0	5
10	3.0	2.9	3.8		5000	2.6	2.6	2.4	5					5000	2.6	2.6	2.4	5	0.76	0.26	1.7	0.5	10
15	4.4	4.4	6.4		5000	7.3	4.3	3.5	18					5000	7.3	4.3	3.5	18	1.09	0.49	3.5	1.2	15
20	5.8	5.7	8.6		5000	13.4	5.8	4.6	40					5000	13.4	5.8	4.7	40	1.32	0.67	5.6	2.0	20
25	7.1	7.0	11.3	21.5	5000	20.6	7.2	5.9	72					5000	20.6	7.2	5.9	72	1.36	0.82	6.7	2.9	25
30	8.3	8.1	12.7	21.1	5000	26.4	8.2	7.1	106	1204	4.8	7.1	18	3796	21.6	8.5	7.1	87	1.09	0.88	6.6	3.5	30
35	9.4	9.3	14.2	22.1	3796	26.8	9.5	8.2	120	1115	6.0	8.3	26	2681	20.7	9.9	8.2	94	0.94	0.90	6.3	4.0	35
40	10.4	10.3	15.7	23.1	2681	25.1	10.9	9.3	124	691	5.0	9.6	24	1990	20.1	11.3	9.3	101	0.81	0.90	5.8	4.2	40
45	11.4	11.3	17.2	24.0	1990	23.8	12.3	10.3	129	455	4.2	10.9	22	1535	19.6	12.7	10.4	107	0.71	0.88	5.4	4.4	45
50	12.4	12.2	18.6	24.8	1535	22.9	13.8	11.3	133	314	3.7	12.2	20	1222	19.2	14.2	11.3	113	0.64	0.86	5.2	4.5	50
55	13.3	13.1	20.1	25.7	1222	22.3	15.2	12.2	138	225	3.2	13.6	19	997	19.0	15.6	12.3	119	0.58	0.84	4.9	4.5	55
60	14.1	13.9	21.5	26.5	997	21.8	16.7	13.1	143	166	2.9	14.9	18	831	18.9	17.0	13.1	125	0.54	0.81	4.8	4.5	60
65	14.9	14.7	22.9	27.2	831	21.5	18.2	13.9	148	126	2.6	16.3	17	706	18.9	18.5	14.0	131	0.51	0.79	4.6	4.5	65
70	15.6	15.4	24.3	27.9	706	21.4	19.6	14.7	154	97	2.4	17.7	16	608	19.0	19.9	14.8	138	0.48	0.77	4.5	4.5	70
75	16.3	16.1	25.7	28.6	608	21.3	21.1	15.5	160	77	2.2	19.1	16	532	19.1	21.4	15.5	144	0.45	0.75	4.4	4.5	75
80	17.0	16.7	27.1	29.2	532	21.3	22.6	16.2	166	61	2.0	20.5	15	470	19.3	22.9	16.2	151	0.43	0.73	4.3	4.5	80
85	17.6	17.4	28.5	29.8	470	21.4	24.1	16.8	172	50	1.9	21.9	14	420	19.5	24.3	16.9	158	0.41	0.71	4.2	4.5	85
90	18.2	17.9	29.9	30.3	420	21.6	25.6	17.5	178	41	1.7	23.3	14	379	19.8	25.8	17.6	165	0.40	0.69	4.1	4.5	90
95	18.7	18.5	31.3	30.8	379	21.8	27.0	18.1	185	34	1.6	24.7	13	345	20.1	27.2	18.2	172	0.38	0.68	4.1	4.5	95
100	19.3	19.0	32.7	31.3	345	22.0	28.5	18.7	192	29	1.5	26.0	13	317	20.5	28.7	18.8	179	0.37	0.66	4.0	4.4	100
105	19.8	19.5	34.0	31.7	317	22.3	30.0	19.3	199	24	1.4	27.4	12	293	20.9	30.2	19.3	187	0.36	0.65	3.9	4.4	105
110	20.3	20.0	35.3	32.1	293	22.7	31.4	19.8	207	20	1.3	28.8	12	272	21.3	31.6	19.9	195	0.35	0.64	3.9	4.4	110
115	20.8	20.5	36.7	32.4	272	23.1	32.8	20.3	215	17	1.2	30.2	11	255	21.8	33.0	20.4	204	0.34	0.62	3.9	4.4	115
120	21.2	20.9	38.0	32.7	255	23.5	34.3	20.8	223	15	1.2	31.5	11	240	22.3	34.4	20.9	212	0.33	0.61	3.8	4.4	120
125	21.6	21.4	39.3	33.0	240	24.0	35.7	21.3	231	13	1.1	32.9	10	227	22.9	35.8	21.4	221	0.33	0.60	3.8	4.3	125
130	22.0	21.8	40.6	33.2	227	24.5	37.1	21.7	240	11	1.0	34.2	9	216	23.5	37.2	21.8	231	0.32	0.59	3.8	4.3	130
135	22.4	22.2	41.9	33.4	216	25.1	38.5	22.2	249	10	0.9	35.5	9	206	24.2	38.6	22.3	241	0.32	0.58	3.7	4.3	135
140	22.8	22.6	43.2	33.5	206	25.7	39.8	22.6	259	8	0.9	36.8	8	198	24.9	40.0	22.7	251	0.31	0.57	3.7	4.3	140
145	23.2	23.0	44.4	33.6	198	26.4	41.2	23.0	269	7	0.8	38.0	8	191	25.6	41.3	23.1	262	0.31	0.56	3.7	4.3	145
150	23.5	23.3	45.6	33.6	191	27.1	42.5	23.4	280	6	0.7	39.2	7	185	26.4	42.6	23.5	273	0.30	0.55	3.7	4.2	150

ZOMEREIK, Vlaanderen 2020					**matige laagdunning**									**Boniteit V, h_{70} = 12.4**								
COMMON OAK					moderate thinning from below									Site Class V, h_{70} = 12.4								
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	1.1	1.1			5000				0					5000				0			0.0	0.0	5
10	2.2	2.1	2.2		5000	0.9	1.5	1.7	1					5000	0.9	1.5	1.7	1	0.36	0.09	0.6	0.1	10
15	3.2	3.2	4.3		5000	3.3	2.9	2.6	6					5000	3.3	2.9	2.6	6	0.60	0.22	1.4	0.4	15
20	4.3	4.2	6.2		5000	6.8	4.2	3.4	16					5000	6.8	4.2	3.4	16	0.77	0.34	2.4	0.8	20
25	5.3	5.2	7.8		5000	11.0	5.3	4.2	31					5000	11.0	5.3	4.2	31	0.90	0.44	3.4	1.2	25
30	6.2	6.1	9.4		5000	15.7	6.3	5.1	50					5000	15.7	6.3	5.1	50	0.99	0.52	4.6	1.7	30
35	7.1	7.0	11.4	22.1	5000	20.9	7.3	6.0	74	353	1.2	6.5	4	4647	19.7	7.3	6.0	70	0.99	0.60	4.7	2.1	35
40	8.0	7.9	12.6	23.1	4647	24.2	8.1	6.8	94	1249	5.3	7.4	20	3397	18.9	8.4	6.9	75	0.83	0.63	4.7	2.5	40
45	8.8	8.7	13.8	24.0	3397	22.7	9.2	7.7	97	814	4.5	8.4	18	2584	18.2	9.5	7.7	79	0.73	0.65	4.4	2.7	45
50	9.6	9.5	14.9	24.8	2584	21.7	10.3	8.5	100	555	3.9	9.4	17	2028	17.8	10.6	8.5	83	0.65	0.65	4.2	2.8	50
55	10.4	10.2	16.1	25.7	2028	20.9	11.5	9.2	104	394	3.4	10.5	16	1634	17.5	11.7	9.3	88	0.60	0.65	4.1	3.0	55
60	11.1	10.9	17.3	26.5	1634	20.4	12.6	10.0	108	288	3.0	11.6	15	1346	17.3	12.8	10.0	92	0.55	0.64	3.9	3.1	60
65	11.7	11.6	18.4	27.2	1346	20.0	13.8	10.7	112	217	2.7	12.7	15	1129	17.3	13.9	10.8	97	0.52	0.64	3.8	3.1	65
70	12.4	12.2	19.6	27.9	1129	19.8	14.9	11.4	116	166	2.5	13.8	14	963	17.3	15.1	11.5	102	0.49	0.63	3.7	3.2	70
75	13.0	12.8	20.8	28.6	963	19.6	16.1	12.1	120	130	2.3	15.0	13	833	17.3	16.3	12.1	107	0.46	0.62	3.7	3.2	75
80	13.6	13.4	21.9	29.2	833	19.6	17.3	12.7	125	104	2.1	16.1	13	729	17.5	17.5	12.8	112	0.44	0.61	3.6	3.2	80
85	14.2	14.0	23.1	29.8	729	19.6	18.5	13.3	130	84	2.0	17.3	12	646	17.7	18.7	13.4	118	0.42	0.59	3.5	3.2	85
90	14.7	14.5	24.3	30.3	646	19.7	19.7	13.9	135	68	1.8	18.4	12	578	17.9	19.9	14.0	123	0.40	0.58	3.5	3.3	90
95	15.3	15.1	25.4	30.8	578	19.9	20.9	14.5	141	56	1.7	19.6	11	521	18.2	21.1	14.6	129	0.39	0.57	3.4	3.3	95
100	15.8	15.6	26.6	31.3	521	20.1	22.1	15.1	146	47	1.6	20.8	11	474	18.5	22.3	15.1	135	0.38	0.56	3.4	3.3	100
105	16.2	16.0	27.7	31.7	474	20.3	23.4	15.6	152	39	1.5	22.0	11	435	18.8	23.5	15.7	142	0.36	0.56	3.4	3.3	105
110	16.7	16.5	28.9	32.1	435	20.6	24.6	16.1	158	33	1.4	23.2	10	401	19.2	24.7	16.2	148	0.35	0.55	3.3	3.3	110
115	17.2	16.9	30.0	32.4	401	21.0	25.8	16.6	165	28	1.3	24.3	10	373	19.6	25.9	16.7	155	0.35	0.54	3.3	3.3	115
120	17.6	17.4	31.2	32.7	373	21.3	27.0	17.1	171	24	1.2	25.5	9	349	20.1	27.1	17.2	162	0.34	0.53	3.3	3.3	120
125	18.0	17.8	32.3	33.0	349	21.8	28.2	17.5	178	21	1.2	26.7	9	328	20.6	28.3	17.6	169	0.33	0.52	3.3	3.3	125
130	18.4	18.2	33.4	33.2	328	22.2	29.4	18.0	186	18	1.1	27.8	9	310	21.2	29.5	18.1	177	0.32	0.51	3.3	3.3	130
135	18.8	18.5	34.5	33.4	310	22.8	30.6	18.4	193	16	1.0	29.0	8	294	21.7	30.7	18.5	185	0.32	0.51	3.3	3.3	135
140	19.1	18.9	35.6	33.5	294	23.3	31.8	18.8	202	13	1.0	30.1	8	281	22.4	31.8	18.9	194	0.31	0.50	3.3	3.3	140
145	19.5	19.2	36.7	33.6	281	23.9	32.9	19.2	210	12	0.9	31.2	7	269	23.0	33.0	19.3	203	0.31	0.49	3.3	3.3	145
150	19.8	19.6	37.8	33.6	269	24.6	34.1	19.6	219	10	0.8	32.3	7	259	23.8	34.2	19.7	212	0.31	0.49	3.3	3.3	150

Amerikaanse eik
Quercus rubra **Red oak**

Bron: Jansen, J.J., A. Oosterbaan, G.M.J. Mohren en J. den Ouden, 2018. *Groei en productie van Amerikaanse eik in Nederland*. FEM Groei en Productie Rapport 2018 – 9, 41 blz.

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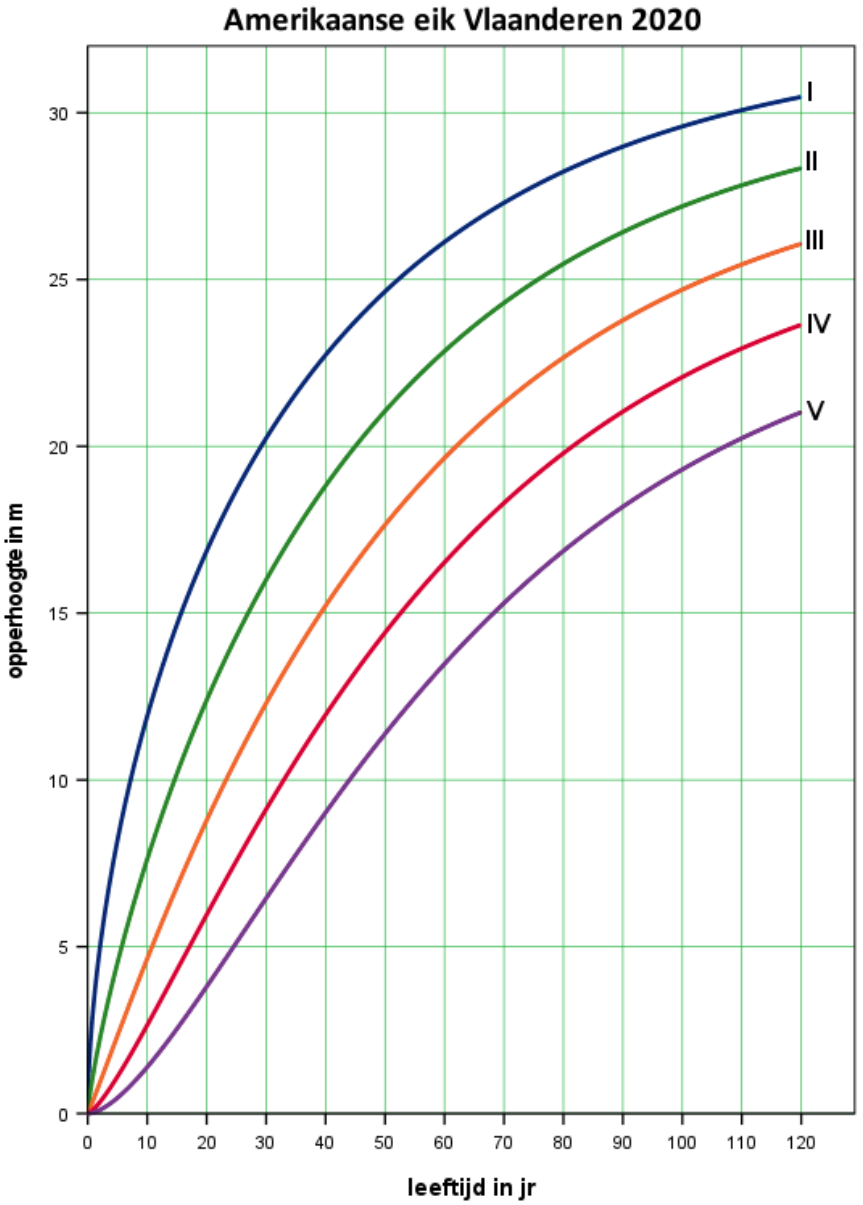

AMERIKAANSE EIK, Vlaanderen 2020			**matige laagdunning**										**Boniteit I, h_{70} = 27.3**								
RED OAK			moderate thinning from below										Site Class I, h_{70} = 27.3								
	Opstandkenmerken		**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics		Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	8.2	19.0	5000	6.7	4.1	7.0	31	217	0.2	3.0	1	4783	6.5	4.2	7.1	31	1.63	1.34	10.8	6.2	5
10	11.9	19.0	4783	14.4	6.2	10.7	87	2525	4.5	4.7	26	2259	9.9	7.5	10.8	62	1.39	1.45	11.3	8.8	10
15	14.7	19.0	2259	16.3	9.6	13.4	117	769	3.3	7.4	22	1489	13.1	10.6	13.6	95	1.20	1.40	11.0	9.6	15
20	16.9	19.0	1489	18.7	12.7	15.7	149	364	2.7	9.8	20	1125	16.0	13.4	15.8	129	1.08	1.33	10.7	9.9	20
25	18.7	19.0	1125	21.1	15.5	17.6	182	210	2.4	12.1	19	916	18.7	16.1	17.7	163	0.99	1.27	10.5	10.0	25
30	20.2	19.0	916	23.5	18.1	19.2	214	135	2.2	14.4	19	781	21.3	18.7	19.3	196	0.93	1.22	10.2	10.1	30
35	21.6	19.0	781	25.9	20.5	20.5	246	94	2.0	16.5	18	687	23.8	21.0	20.7	228	0.88	1.17	9.9	10.1	35
40	22.7	20.2	687	28.1	22.8	21.7	277	137	3.9	18.9	35	550	24.3	23.7	21.9	241	0.80	1.13	9.2	10.0	40
45	23.8	21.3	550	28.0	25.5	22.8	285	99	3.6	21.6	34	451	24.4	26.3	23.0	250	0.72	1.09	8.4	9.9	45
50	24.6	22.5	451	27.9	28.1	23.7	291	74	3.4	24.3	33	377	24.5	28.7	23.9	258	0.67	1.05	7.8	9.7	50
55	25.4	23.6	377	27.7	30.6	24.6	295	57	3.2	27.0	32	320	24.4	31.2	24.8	263	0.63	1.01	7.3	9.5	55
60	26.1	24.8	320	27.5	33.1	25.3	299	44	3.1	29.7	31	276	24.4	33.6	25.5	267	0.59	0.98	6.9	9.3	60
65	26.7	25.9	276	27.3	35.5	25.9	301	36	2.9	32.5	30	240	24.3	35.9	26.2	271	0.56	0.95	6.6	9.1	65
70	27.3	27.1	240	27.1	37.9	26.5	303	29	2.8	35.2	29	211	24.3	38.2	26.7	273	0.53	0.92	6.2	8.9	70
75	27.8	28.2	211	26.9	40.2	27.1	304	24	2.7	38.0	28	188	24.2	40.5	27.3	275	0.51	0.89	5.9	8.7	75
80	28.2	29.4	188	26.6	42.5	27.5	304	20	2.6	40.8	28	168	24.1	42.7	27.8	276	0.49	0.87	5.6	8.5	80
85	28.6	30.5	168	26.4	44.8	28.0	304	17	2.5	43.7	27	151	23.9	44.9	28.2	277	0.47	0.85	5.4	8.4	85
90	29.0	31.7	151	26.2	47.0	28.3	303	14	1.7	39.1	18	137	24.5	47.8	28.6	285	0.45	0.82	5.1	8.2	90
95	29.3	32.8	137	26.7	49.9	28.7	310	12	1.6	41.4	18	125	25.1	50.6	28.9	292	0.43	0.80	4.9	8.0	95
100	29.6	34.0	125	27.2	52.7	29.0	316	11	1.6	43.8	17	114	25.6	53.5	29.2	299	0.42	0.79	4.7	7.9	100
105	29.8	35.2	114	27.7	55.6	29.3	322	9	1.5	46.2	17	105	26.2	56.4	29.5	306	0.40	0.77	4.5	7.7	105
110	30.1	36.3	105	28.2	58.5	29.6	328	8	1.5	48.5	16	97	26.7	59.2	29.8	311	0.39	0.75	4.3	7.6	110
115	30.3	37.5	97	28.6	61.3	29.8	333	7	1.4	50.9	16	90	27.1	62.1	30.0	317	0.38	0.74	4.1	7.4	115
120	30.5	38.6	90	29.0	64.2	30.0	337	6	1.4	53.3	15	83	27.6	64.9	30.3	322	0.37	0.72	4.0	7.3	120

AMERIKAANSE EIK, Vlaanderen 2020			**matige laagdunning**														**Boniteit II, h_{70} = 24.3**				
RED OAK			moderate thinning from below														Site Class II, h_{70} = 24.3				
	Opstandkenmerken		**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics		Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	4.5		5000	1.5	2.0	3.6	4					5000	1.5	2.0	3.6	4	0.66	0.30	2.2	0.8	5
10	7.6	20.0	5000	6.1	3.9	6.5	27					5000	6.1	3.9	6.5	27	1.25	0.61	7.5	2.7	10
15	10.2	19.0	5000	12.2	5.6	9.0	66	1916	2.6	4.2	13	3084	9.6	6.3	9.0	52	1.18	0.81	8.3	4.4	15
20	12.4	19.0	3084	15.4	8.0	11.2	96	1000	2.9	6.0	17	2084	12.6	8.8	11.3	79	1.11	0.90	8.9	5.5	20
25	14.3	19.0	2084	17.9	10.4	13.1	124	522	2.6	8.0	17	1562	15.2	11.1	13.2	107	1.02	0.93	9.0	6.2	25
30	16.0	19.0	1562	20.2	12.8	14.8	152	312	2.4	10.0	17	1250	17.8	13.4	15.0	135	0.96	0.94	9.0	6.6	30
35	17.5	19.0	1250	22.4	15.1	16.4	180	204	2.3	11.9	17	1046	20.1	15.7	16.5	163	0.90	0.94	9.0	7.0	35
40	18.8	20.2	1046	24.5	17.3	17.7	208	243	3.7	14.0	30	803	20.8	18.2	17.9	178	0.82	0.93	8.5	7.2	40
45	20.0	21.3	803	24.6	19.8	19.0	219	167	3.5	16.4	29	636	21.1	20.6	19.1	189	0.74	0.92	7.9	7.3	45
50	21.1	22.5	636	24.7	22.2	20.1	227	120	3.3	18.8	29	516	21.3	22.9	20.2	199	0.68	0.89	7.4	7.3	50
55	22.0	23.6	516	24.6	24.7	21.1	235	89	3.2	21.3	28	428	21.5	25.3	21.2	207	0.64	0.87	7.0	7.3	55
60	22.9	24.8	428	24.6	27.1	21.9	241	67	3.0	23.8	27	360	21.6	27.6	22.1	213	0.60	0.85	6.7	7.3	60
65	23.6	25.9	360	24.5	29.4	22.7	246	52	2.9	26.4	27	308	21.7	29.9	22.9	219	0.57	0.83	6.3	7.2	65
70	24.3	27.1	308	24.4	31.8	23.5	250	41	2.7	29.0	26	267	21.7	32.2	23.7	224	0.54	0.81	6.0	7.2	70
75	24.9	28.2	267	24.3	34.1	24.1	253	33	2.6	31.7	25	233	21.7	34.4	24.3	228	0.52	0.79	5.8	7.1	75
80	25.5	29.4	233	24.3	36.4	24.7	256	27	2.5	34.3	25	206	21.7	36.6	24.9	231	0.50	0.78	5.5	7.0	80
85	26.0	30.5	206	24.2	38.6	25.2	258	23	2.4	37.0	24	184	21.7	38.8	25.5	234	0.48	0.76	5.3	6.9	85
90	26.4	31.7	184	24.1	40.9	25.7	259	19	1.7	33.9	17	165	22.3	41.6	25.9	242	0.46	0.74	5.0	6.8	90
95	26.8	32.8	165	24.6	43.6	26.2	267	16	1.6	36.2	17	149	22.9	44.3	26.4	250	0.44	0.73	4.8	6.7	95
100	27.2	34.0	149	25.1	46.4	26.6	274	14	1.6	38.5	16	135	23.5	47.1	26.8	258	0.42	0.71	4.6	6.6	100
105	27.5	35.2	135	25.6	49.1	26.9	280	12	1.5	40.8	16	123	24.1	49.8	27.2	265	0.41	0.70	4.4	6.5	105
110	27.8	36.3	123	26.1	51.9	27.3	286	10	1.5	43.1	15	113	24.6	52.6	27.5	271	0.40	0.68	4.3	6.4	110
115	28.1	37.5	113	26.5	54.6	27.6	292	9	1.4	45.4	15	104	25.1	55.4	27.8	277	0.38	0.67	4.1	6.3	115
120	28.3	38.6	104	27.0	57.4	27.8	297	8	1.4	47.7	14	96	25.6	58.1	28.1	283	0.37	0.66	3.9	6.2	120

AMERIKAANSE EIK, Vlaanderen 2020			**matige laagdunning**										**Boniteit III, h_{70} = 21.3**								
RED OAK			moderate thinning from below										Site Class III, h_{70} = 21.3								
	Opstandkenmerken		**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics		Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	2.3		5000	0.2	0.6	1.9	0					5000	0.2	0.6	1.9	0	0.14	0.03	0.3	0.1	5
10	4.6		5000	1.6	2.0	3.7	4					5000	1.6	2.0	3.7	4	0.44	0.16	1.5	0.4	10
15	6.8		5000	4.5	3.4	5.7	17					5000	4.5	3.4	5.7	17	0.76	0.30	3.8	1.1	15
20	8.8	19.0	5000	9.4	4.9	7.6	45	857	0.9	3.6	4	4143	8.5	5.1	7.7	41	1.06	0.47	6.3	2.3	20
25	10.6	19.0	4143	14.0	6.6	9.4	77	1306	2.5	4.9	13	2837	11.5	7.2	9.5	64	1.05	0.59	7.3	3.2	25
30	12.3	19.0	2837	16.6	8.6	11.1	102	721	2.4	6.5	14	2116	14.2	9.2	11.2	88	0.98	0.66	7.6	3.9	30
35	13.8	19.0	2116	19.0	10.7	12.6	126	443	2.3	8.2	15	1674	16.6	11.2	12.8	112	0.93	0.71	7.8	4.5	35
40	15.2	20.2	1674	21.1	12.7	14.1	151	446	3.5	10.0	24	1227	17.6	13.5	14.2	128	0.85	0.73	7.6	4.9	40
45	16.5	21.3	1227	21.6	15.0	15.4	164	292	3.4	12.1	24	935	18.2	15.7	15.5	140	0.76	0.74	7.2	5.2	45
50	17.6	22.5	935	21.8	17.2	16.6	175	200	3.2	14.3	24	735	18.6	18.0	16.7	151	0.70	0.74	6.8	5.4	50
55	18.7	23.6	735	22.0	19.5	17.7	184	143	3.1	16.5	24	592	18.9	20.2	17.8	160	0.65	0.73	6.5	5.5	55
60	19.6	24.8	592	22.1	21.8	18.7	192	105	2.9	18.8	24	487	19.2	22.4	18.8	169	0.62	0.72	6.3	5.6	60
65	20.5	25.9	487	22.2	24.1	19.6	199	79	2.8	21.2	23	408	19.4	24.6	19.7	176	0.58	0.71	6.0	5.6	65
70	21.3	27.1	408	22.2	26.3	20.4	205	61	2.7	23.6	23	347	19.6	26.8	20.6	182	0.55	0.70	5.7	5.6	70
75	22.0	28.2	347	22.3	28.6	21.1	210	48	2.6	26.1	23	299	19.7	29.0	21.3	188	0.53	0.69	5.5	5.6	75
80	22.7	29.4	299	22.3	30.8	21.8	215	39	2.5	28.6	22	260	19.8	31.1	22.0	192	0.50	0.68	5.3	5.6	80
85	23.2	30.5	260	22.3	33.0	22.5	218	31	2.4	31.1	22	229	19.9	33.3	22.6	197	0.48	0.67	5.1	5.6	85
90	23.8	31.7	229	22.3	35.2	23.0	221	26	1.7	29.2	16	203	20.5	35.9	23.2	205	0.46	0.66	4.9	5.5	90
95	24.3	32.8	203	22.8	37.8	23.5	229	21	1.7	31.4	16	182	21.1	38.5	23.7	214	0.45	0.65	4.7	5.5	95
100	24.7	34.0	182	23.3	40.4	24.0	236	18	1.6	33.6	15	164	21.7	41.1	24.2	221	0.43	0.64	4.5	5.5	100
105	25.1	35.2	164	23.8	43.1	24.4	243	15	1.5	35.8	15	148	22.3	43.7	24.6	229	0.41	0.63	4.3	5.4	105
110	25.5	36.3	148	24.3	45.7	24.8	250	13	1.5	37.9	14	135	22.8	46.4	25.0	236	0.40	0.62	4.1	5.4	110
115	25.8	37.5	135	24.8	48.3	25.2	256	11	1.4	40.1	14	124	23.4	49.0	25.4	242	0.39	0.61	4.0	5.3	115
120	26.1	38.6	124	25.3	51.0	25.5	262	10	1.4	42.3	13	114	23.9	51.7	25.7	248	0.38	0.60	3.8	5.2	120

AMERIKAANSE EIK, Vlaanderen 2020			**matige laagdunning**													**Boniteit IV, h_{70} = 18.3**				
RED OAK			moderate thinning from below													Site Class IV, h_{70} = 18.3				
	Opstandkenmerken		**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics		Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	1.1		5000				0					5000				0			0.0	0.0	5
10	2.6		5000	0.3	0.8	2.1	0					5000	0.3	0.8	2.1	0	0.13	0.03	0.3	0.0	10
15	4.3		5000	1.3	1.8	3.4	3					5000	1.3	1.8	3.4	3	0.30	0.09	0.9	0.2	15
20	6.0		5000	3.2	2.9	4.9	11					5000	3.2	2.9	4.9	11	0.45	0.16	2.1	0.5	20
25	7.6	20.1	5000	6.5	4.1	6.5	28					5000	6.5	4.1	6.5	28	0.97	0.26	5.6	1.1	25
30	9.1	19.0	5000	11.3	5.4	7.9	55	1152	1.4	3.9	6	3848	9.9	5.7	8.0	49	0.97	0.38	5.9	1.8	30
35	10.6	19.0	3848	14.8	7.0	9.4	80	990	2.1	5.3	11	2858	12.7	7.5	9.5	69	0.96	0.46	6.5	2.5	35
40	11.9	20.2	2858	17.3	8.8	10.8	103	867	3.2	6.8	17	1991	14.2	9.5	10.9	85	0.87	0.52	6.5	3.0	40
45	13.2	21.3	1991	18.3	10.8	12.1	117	537	3.1	8.6	19	1453	15.2	11.5	12.2	98	0.78	0.55	6.3	3.4	45
50	14.4	22.5	1453	18.9	12.9	13.3	129	352	3.0	10.4	19	1102	15.9	13.5	13.4	110	0.72	0.57	6.1	3.7	50
55	15.5	23.6	1102	19.3	15.0	14.4	140	241	2.9	12.4	20	861	16.4	15.6	14.5	121	0.67	0.58	5.9	3.9	55
60	16.5	24.8	861	19.7	17.1	15.5	150	171	2.8	14.4	20	690	16.9	17.7	15.6	130	0.63	0.59	5.8	4.0	60
65	17.4	25.9	690	20.0	19.2	16.4	158	125	2.7	16.6	20	564	17.3	19.7	16.6	138	0.60	0.59	5.6	4.2	65
70	18.3	27.1	564	20.2	21.3	17.3	165	94	2.6	18.7	20	470	17.6	21.8	17.5	146	0.57	0.59	5.4	4.2	70
75	19.1	28.2	470	20.3	23.5	18.1	172	72	2.5	21.0	20	398	17.8	23.9	18.3	152	0.54	0.59	5.2	4.3	75
80	19.8	29.4	398	20.5	25.6	18.9	178	57	2.4	23.3	20	341	18.0	25.9	19.0	158	0.51	0.58	5.0	4.4	80
85	20.4	30.5	341	20.6	27.7	19.6	183	45	2.3	25.6	19	296	18.2	28.0	19.7	163	0.49	0.58	4.8	4.4	85
90	21.0	31.7	296	20.6	29.8	20.2	187	37	1.8	24.8	15	260	18.9	30.4	20.4	172	0.47	0.57	4.6	4.4	90
95	21.6	32.8	260	21.2	32.2	20.8	195	30	1.7	26.8	14	230	19.5	32.9	21.0	180	0.45	0.57	4.5	4.4	95
100	22.1	34.0	230	21.7	34.7	21.3	202	25	1.6	28.8	14	205	20.1	35.3	21.5	188	0.44	0.56	4.3	4.4	100
105	22.5	35.2	205	22.3	37.2	21.8	209	21	1.6	30.9	14	184	20.7	37.8	22.0	196	0.42	0.56	4.1	4.4	105
110	22.9	36.3	184	22.8	39.7	22.2	216	18	1.5	33.0	13	167	21.3	40.3	22.4	203	0.41	0.55	4.0	4.4	110
115	23.3	37.5	167	23.3	42.2	22.6	222	15	1.5	35.0	13	151	21.8	42.8	22.8	209	0.39	0.54	3.8	4.4	115
120	23.6	38.6	151	23.7	44.7	23.0	228	13	1.4	37.1	13	139	22.3	45.3	23.2	216	0.38	0.54	3.7	4.3	120

AMERIKAANSE EIK, Vlaanderen 2020			**matige laagdunning**																	**Boniteit V, h_{70} = 15.3**
RED OAK			moderate thinning from below																	Site Class V, h_{70} = 15.3
	Opstandkenmerken		**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics		Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	0.5		5000				0					5000				0			0.0	0.0	5
10	1.4		5000	0.0	0.1	1.1	0					5000	0.0	0.1	1.1	0	0.01	0.00	0.0	0.0	10
15	2.5		5000	0.2	0.8	2.0	0					5000	0.2	0.8	2.0	0	0.09	0.02	0.2	0.0	15
20	3.8		5000	0.9	1.5	3.0	2					5000	0.9	1.5	3.0	2	0.19	0.05	0.6	0.1	20
25	5.1		5000	2.2	2.3	4.2	6					5000	2.2	2.3	4.2	6	0.30	0.09	1.2	0.3	25
30	6.4		5000	3.9	3.2	5.4	14					5000	3.9	3.2	5.4	14	0.40	0.13	2.0	0.5	30
35	7.8	19.6	5000	7.3	4.3	6.7	32					5000	7.3	4.3	6.7	32	0.89	0.21	4.5	0.9	35
40	9.0	20.2	5000	11.9	5.5	7.9	57	1506	2.0	4.1	9	3494	9.8	6.0	7.9	48	0.87	0.30	5.1	1.4	40
45	10.2	21.3	3494	14.0	7.2	9.1	74	1065	2.6	5.5	13	2430	11.5	7.8	9.1	61	0.80	0.36	5.2	1.8	45
50	11.4	22.5	2430	15.3	9.0	10.2	87	663	2.6	7.1	14	1767	12.7	9.6	10.3	73	0.74	0.40	5.2	2.2	50
55	12.5	23.6	1767	16.3	10.8	11.3	99	434	2.6	8.8	15	1333	13.6	11.4	11.4	84	0.69	0.43	5.2	2.5	55
60	13.5	24.8	1333	17.0	12.7	12.4	110	297	2.6	10.5	16	1036	14.4	13.3	12.5	94	0.65	0.45	5.1	2.7	60
65	14.4	25.9	1036	17.5	14.7	13.3	120	210	2.5	12.4	16	826	15.0	15.2	13.4	104	0.61	0.46	5.0	2.9	65
70	15.3	27.1	826	18.0	16.6	14.2	128	153	2.5	14.3	16	673	15.5	17.1	14.4	112	0.58	0.47	4.9	3.0	70
75	16.1	28.2	673	18.3	18.6	15.1	136	115	2.4	16.3	17	558	15.9	19.1	15.2	119	0.55	0.48	4.8	3.1	75
80	16.9	29.4	558	18.6	20.6	15.9	143	88	2.3	18.4	17	470	16.3	21.0	16.0	126	0.53	0.48	4.6	3.2	80
85	17.6	30.5	470	18.8	22.6	16.6	149	68	2.3	20.5	17	402	16.6	22.9	16.7	132	0.50	0.48	4.5	3.3	85
90	18.2	31.7	402	19.0	24.6	17.3	154	54	1.8	20.4	13	347	17.3	25.1	17.4	140	0.48	0.48	4.3	3.4	90
95	18.8	32.8	347	19.6	26.8	17.9	162	44	1.7	22.3	13	304	17.9	27.4	18.0	149	0.46	0.48	4.2	3.4	95
100	19.3	34.0	304	20.2	29.1	18.4	169	36	1.6	24.2	13	268	18.5	29.7	18.6	156	0.44	0.48	4.1	3.4	100
105	19.8	35.2	268	20.7	31.4	19.0	176	30	1.6	26.1	13	238	19.1	32.0	19.1	164	0.43	0.48	3.9	3.5	105
110	20.2	36.3	238	21.2	33.7	19.4	183	25	1.5	28.0	12	214	19.7	34.3	19.6	171	0.41	0.48	3.8	3.5	110
115	20.7	37.5	214	21.7	36.0	19.9	190	21	1.5	29.9	12	193	20.3	36.6	20.1	178	0.40	0.47	3.7	3.5	115
120	21.0	38.6	193	22.2	38.3	20.3	196	18	1.4	31.8	12	175	20.8	38.9	20.5	184	0.39	0.47	3.5	3.5	120

Beuk

Fagus sylvatica **Common beech**

Bron: Jansen, J.J., G.M.J. Mohren, A. Oosterbaan, L. Goudzwaard en J. den Ouden, 2018. *Groei en productie van beuk in Nederland*. FEM Groei en Productie Rapport 2018 – 5, 96 blz.

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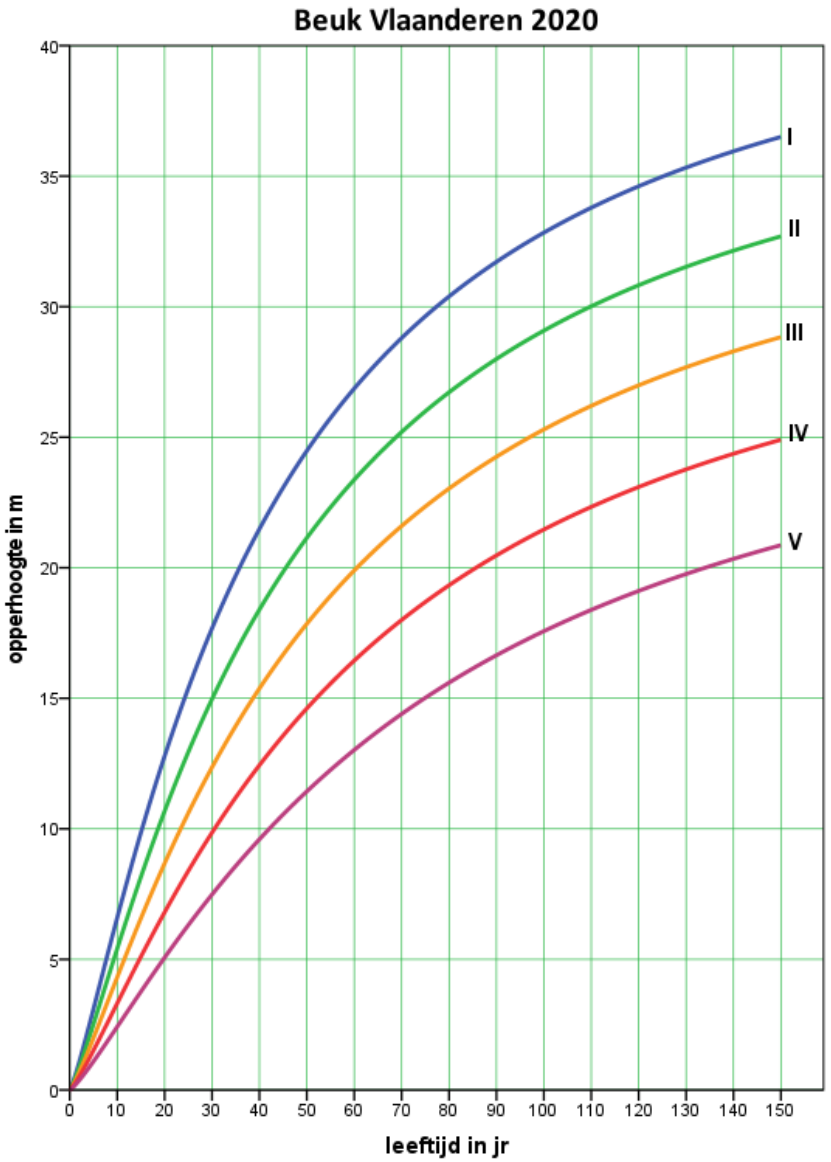

BEUK, Vlaanderen 2020					**matige laagdunning**									**Boniteit I, h_{70} = 28.8**								
COMMON BEECH					moderate thinning from below									Site Class I, h_{70} = 28.8								
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	3.1	3.1	3.3		5000	1.8	2.2	2.5	3					5000	1.8	2.2	2.5	3	1.20	0.37	2.2	0.5	5
10	6.6	6.5	8.3		5000	11.4	5.4	5.4	31					5000	11.4	5.4	5.4	31	2.49	1.14	10.3	3.1	10
15	9.8	9.8	13.8	19.0	5000	23.1	7.7	8.5	105	1699	5.3	6.3	23	3301	17.8	8.3	8.5	82	2.13	1.54	14.3	7.0	15
20	12.8	12.7	18.0	19.0	3301	27.7	10.3	11.4	156	1342	7.7	8.5	41	1959	20.1	11.4	11.4	114	1.77	1.65	14.5	8.9	20
25	15.4	15.2	21.4	19.0	1959	28.1	13.5	14.0	185	607	5.8	11.1	37	1353	22.3	14.5	14.1	148	1.47	1.64	13.8	10.0	25
30	17.7	17.5	24.5	19.0	1353	29.1	16.6	16.4	215	328	4.7	13.5	33	1024	24.4	17.4	16.4	182	1.27	1.60	13.2	10.6	30
35	19.7	19.5	27.4	19.0	1024	30.4	19.4	18.4	246	200	3.9	15.8	30	825	26.4	20.2	18.5	216	1.12	1.54	12.6	10.9	35
40	21.5	21.3	30.1	19.0	825	31.7	22.1	20.3	277	132	3.3	18.0	28	693	28.4	22.8	20.3	249	1.01	1.48	12.0	11.1	40
45	23.1	22.9	32.5	19.0	693	33.2	24.7	21.9	308	92	2.9	20.0	26	601	30.3	25.3	22.0	282	0.92	1.42	11.5	11.1	45
50	24.5	24.2	34.9	19.0	601	34.7	27.1	23.4	338	67	2.6	22.0	24	534	32.1	27.7	23.4	315	0.84	1.37	11.0	11.1	50
55	25.7	25.5	37.3	19.5	534	36.2	29.4	24.7	368	75	3.4	24.0	33	459	32.8	30.2	24.7	335	0.77	1.32	10.5	11.1	55
60	26.9	26.6	39.6	20.0	459	36.5	31.8	25.8	386	58	3.1	26.1	32	400	33.4	32.6	25.9	355	0.71	1.27	9.9	11.0	60
65	27.9	27.6	41.9	20.5	400	36.8	34.2	26.9	402	46	2.9	28.1	30	354	33.9	34.9	27.0	372	0.66	1.22	9.3	10.9	65
70	28.8	28.5	44.1	21.0	354	37.0	36.5	27.9	418	38	2.7	30.2	29	316	34.4	37.2	27.9	389	0.61	1.18	8.9	10.8	70
75	29.6	29.3	46.2	21.5	316	37.3	38.8	28.7	432	31	2.5	32.2	28	285	34.8	39.4	28.8	404	0.57	1.14	8.4	10.6	75
80	30.4	30.1	48.3	22.0	285	37.5	41.0	29.5	445	26	2.4	34.1	27	259	35.2	41.6	29.6	418	0.54	1.11	8.1	10.5	80
85	31.1	30.8	50.3	22.5	259	37.8	43.1	30.3	457	22	2.3	36.0	26	237	35.5	43.7	30.4	431	0.51	1.07	7.7	10.3	85
90	31.7	31.4	52.2	23.0	237	38.0	45.2	31.0	469	19	2.2	37.9	25	218	35.8	45.8	31.0	443	0.48	1.04	7.4	10.2	90
95	32.3	32.1	54.1	23.5	218	38.2	47.2	31.6	479	17	2.1	39.8	25	201	36.1	47.8	31.7	455	0.46	1.01	7.1	10.0	95
100	32.8	32.6	56.0	24.0	201	38.3	49.3	32.2	489	14	2.0	41.7	24	187	36.3	49.8	32.3	465	0.43	0.98	6.8	9.9	100
105	33.3	33.1	57.8	24.4	187	38.5	51.2	32.7	499	13	1.9	43.5	24	174	36.6	51.8	32.8	475	0.41	0.95	6.6	9.7	105
110	33.8	33.6	59.6	24.9	174	38.6	53.2	33.2	507	11	1.8	45.3	23	163	36.8	53.7	33.3	484	0.40	0.93	6.3	9.6	110
115	34.2	34.1	61.1	25.4	163	38.7	55.1	33.7	516	10	1.8	47.1	22	152	36.9	55.6	33.8	493	0.38	0.91	6.1	9.4	115
120	34.6	34.5	62.5	25.9	152	38.8	56.9	34.1	523	9	1.7	48.9	22	143	37.1	57.4	34.2	501	0.36	0.88	5.9	9.3	120
125	35.0	34.9	63.9	26.4	143	38.9	58.8	34.5	530	8	1.7	50.6	22	135	37.2	59.2	34.6	509	0.35	0.86	5.7	9.2	125
130	35.3	35.2	65.2	26.9	135	39.0	60.6	34.9	537	7	1.6	52.3	21	128	37.4	61.1	35.0	516	0.34	0.84	5.6	9.0	130
135	35.7	35.6	66.6	27.4	128	39.0	62.4	35.3	543	7	1.6	54.1	21	121	37.5	62.8	35.4	523	0.33	0.82	5.4	8.9	135
140	36.0	35.9	68.0	27.9	121	39.1	64.2	35.7	549	6	1.5	55.8	20	115	37.5	64.6	35.8	529	0.31	0.81	5.2	8.8	140
145	36.2	36.2	69.4	28.4	115	39.1	65.9	36.0	555	6	1.5	57.5	20	109	37.6	66.3	36.1	535	0.30	0.79	5.1	8.6	145
150	36.5	36.5	70.7	28.9	109	39.1	67.6	36.3	560	5	1.4	59.1	20	104	37.7	68.0	36.4	540	0.29	0.77	5.0	8.5	150

BEUK, Vlaanderen 2020					**matige laagdunning**									**Boniteit II, h_{70} = 25.2**								
COMMON BEECH					moderate thinning from below									Site Class II, h_{70} = 25.2								
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	2.5	2.5	2.4		5000	0.9	1.6	2.0	1					5000	0.9	1.6	2.0	1	0.75	0.19	1.1	0.2	5
10	5.4	5.4	6.7		5000	7.4	4.3	4.3	17					5000	7.4	4.3	4.3	17	1.74	0.74	5.6	1.7	10
15	8.2	8.1	11.1	19.0	5000	17.6	6.7	6.8	69	185	0.4	5.4	2	4815	17.2	6.7	6.9	67	2.16	1.17	11.8	4.6	15
20	10.7	10.6	15.4	19.0	4815	27.2	8.5	9.3	131	2005	7.7	7.0	36	2810	19.5	9.4	9.3	96	1.79	1.38	12.6	6.7	20
25	12.9	12.8	18.8	19.0	2810	27.7	11.2	11.6	157	899	5.9	9.2	32	1911	21.7	12.0	11.6	125	1.49	1.43	12.1	7.8	25
30	15.0	14.8	21.6	19.0	1911	28.6	13.8	13.6	184	483	4.8	11.3	30	1428	23.8	14.6	13.7	154	1.28	1.42	11.6	8.5	30
35	16.8	16.6	24.2	19.0	1428	29.8	16.3	15.5	211	292	4.0	13.3	27	1137	25.7	17.0	15.5	184	1.13	1.39	11.2	8.9	35
40	18.4	18.2	26.6	19.0	1137	31.1	18.7	17.1	238	191	3.5	15.2	25	945	27.6	19.3	17.2	213	1.02	1.35	10.7	9.1	40
45	19.8	19.7	28.9	19.0	945	32.5	20.9	18.6	265	133	3.0	17.0	24	812	29.5	21.5	18.7	242	0.92	1.31	10.3	9.3	45
50	21.1	20.9	31.0	19.0	812	33.9	23.0	20.0	292	97	2.7	18.7	22	716	31.2	23.6	20.1	270	0.85	1.27	9.9	9.4	50
55	22.3	22.1	33.2	19.5	716	35.3	25.1	21.2	319	105	3.5	20.5	30	610	31.9	25.8	21.3	289	0.78	1.23	9.4	9.4	55
60	23.4	23.2	35.3	20.0	610	35.6	27.2	22.3	335	81	3.2	22.3	29	529	32.4	27.9	22.4	306	0.72	1.19	8.9	9.4	60
65	24.3	24.1	37.3	20.5	529	35.8	29.4	23.3	350	64	2.9	24.2	28	465	32.9	30.0	23.4	322	0.66	1.15	8.5	9.3	65
70	25.2	25.0	39.3	21.0	465	36.1	31.4	24.3	364	52	2.7	26.0	26	413	33.3	32.1	24.3	337	0.62	1.11	8.1	9.3	70
75	26.0	25.7	41.3	21.5	413	36.3	33.5	25.1	376	43	2.6	27.8	26	370	33.7	34.1	25.2	351	0.58	1.08	7.7	9.2	75
80	26.7	26.5	43.1	22.0	370	36.5	35.4	25.9	388	35	2.4	29.5	25	335	34.1	36.0	25.9	364	0.54	1.04	7.3	9.1	80
85	27.4	27.1	44.9	22.5	335	36.7	37.4	26.6	400	30	2.3	31.3	24	305	34.4	37.9	26.7	376	0.51	1.01	7.0	8.9	85
90	28.0	27.7	46.7	23.0	305	36.9	39.3	27.3	410	26	2.2	33.0	23	279	34.7	39.8	27.3	387	0.48	0.99	6.8	8.8	90
95	28.6	28.3	48.5	23.5	279	37.1	41.1	27.9	420	22	2.1	34.7	23	257	35.0	41.6	27.9	397	0.46	0.96	6.5	8.7	95
100	29.1	28.8	50.2	24.0	257	37.2	42.9	28.4	429	19	2.0	36.3	22	238	35.2	43.4	28.5	407	0.44	0.93	6.2	8.6	100
105	29.6	29.3	51.8	24.4	238	37.4	44.7	29.0	438	17	1.9	38.0	22	221	35.5	45.2	29.0	416	0.42	0.91	6.0	8.5	105
110	30.0	29.8	53.5	24.9	221	37.5	46.5	29.5	446	15	1.8	39.6	21	206	35.7	46.9	29.5	425	0.40	0.89	5.8	8.4	110
115	30.4	30.2	55.1	25.4	206	37.6	48.2	29.9	453	13	1.8	41.2	21	193	35.8	48.7	30.0	433	0.38	0.86	5.6	8.2	115
120	30.8	30.6	56.7	25.9	193	37.7	49.9	30.4	461	12	1.7	42.8	20	181	36.0	50.4	30.5	441	0.37	0.84	5.4	8.1	120
125	31.2	31.0	58.2	26.4	181	37.8	51.6	30.8	467	11	1.7	44.4	20	170	36.1	52.0	30.9	448	0.35	0.82	5.3	8.0	125
130	31.5	31.4	59.7	26.9	170	37.8	53.3	31.2	474	10	1.6	46.0	19	160	36.2	53.7	31.3	454	0.34	0.81	5.1	7.9	130
135	31.8	31.7	60.9	27.4	160	37.9	54.9	31.6	480	9	1.6	47.6	19	151	36.3	55.3	31.6	461	0.33	0.79	5.0	7.8	135
140	32.1	32.0	62.1	27.9	151	37.9	56.5	31.9	485	8	1.5	49.1	19	143	36.4	56.9	32.0	466	0.32	0.77	4.8	7.7	140
145	32.4	32.3	63.3	28.4	143	38.0	58.1	32.2	490	7	1.5	50.6	18	136	36.5	58.5	32.3	472	0.31	0.76	4.7	7.6	145
150	32.7	32.6	64.4	28.9	136	38.0	59.6	32.6	495	7	1.4	52.2	18	129	36.6	60.0	32.6	477	0.30	0.74	4.6	7.5	150

BEUK, Vlaanderen 2020					**matige laagdunning**									**Boniteit III, h_{70} = 21.6**								
COMMON BEECH					moderate thinning from below									Site Class III, h_{70} = 21.6								
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	2.0	2.0	1.5		5000	0.4	1.0	1.6	1					5000	0.4	1.0	1.6	1	0.40	0.07	0.5	0.1	5
10	4.3	4.3	5.1		5000	4.4	3.3	3.4	8					5000	4.4	3.3	3.4	8	1.14	0.44	2.9	0.8	10
15	6.6	6.5	8.2		5000	11.3	5.4	5.4	31					5000	11.3	5.4	5.4	31	1.60	0.76	6.6	2.1	15
20	8.7	8.6	12.1	19.0	5000	20.1	7.2	7.4	83	746	2.0	5.8	8	4254	18.1	7.4	7.4	75	1.72	1.01	9.9	4.1	20
25	10.6	10.5	15.7	19.0	4254	26.4	8.9	9.3	127	1407	5.9	7.3	27	2847	20.5	9.6	9.3	100	1.51	1.14	10.3	5.4	25
30	12.4	12.2	18.7	19.0	2847	27.5	11.1	11.0	151	750	4.8	9.1	25	2096	22.7	11.7	11.0	125	1.30	1.18	10.0	6.2	30
35	13.9	13.8	21.0	19.0	2096	28.8	13.2	12.6	174	450	4.1	10.8	24	1646	24.7	13.8	12.6	151	1.14	1.18	9.7	6.7	35
40	15.4	15.2	23.1	19.0	1646	30.1	15.3	14.1	198	293	3.5	12.4	22	1353	26.5	15.8	14.1	176	1.03	1.17	9.4	7.1	40
45	16.7	16.5	25.2	19.0	1353	31.4	17.2	15.4	222	203	3.1	14.0	21	1151	28.3	17.7	15.5	201	0.93	1.15	9.1	7.3	45
50	17.9	17.7	27.0	19.0	1151	32.8	19.0	16.7	245	147	2.8	15.5	20	1004	30.0	19.5	16.7	226	0.86	1.13	8.7	7.5	50
55	18.9	18.7	29.0	19.5	1004	34.2	20.8	17.8	269	155	3.5	17.0	27	849	30.6	21.4	17.8	242	0.79	1.10	8.4	7.6	55
60	19.9	19.7	30.9	20.0	849	34.4	22.7	18.8	283	119	3.2	18.6	25	730	31.2	23.3	18.8	257	0.72	1.07	8.0	7.6	60
65	20.8	20.6	32.8	20.5	730	34.7	24.6	19.7	296	93	3.0	20.2	25	637	31.7	25.2	19.8	272	0.67	1.04	7.6	7.6	65
70	21.6	21.4	34.6	21.0	637	34.9	26.4	20.6	309	75	2.8	21.8	24	562	32.1	27.0	20.7	285	0.62	1.01	7.2	7.6	70
75	22.3	22.1	36.3	21.5	562	35.1	28.2	21.4	320	61	2.6	23.4	23	501	32.5	28.7	21.5	297	0.58	0.99	6.9	7.6	75
80	23.0	22.8	38.0	22.0	501	35.3	29.9	22.1	331	50	2.5	25.0	22	451	32.8	30.5	22.2	309	0.55	0.96	6.6	7.5	80
85	23.7	23.4	39.6	22.5	451	35.5	31.7	22.8	341	42	2.3	26.5	22	408	33.2	32.2	22.9	320	0.52	0.93	6.3	7.5	85
90	24.3	24.0	41.2	23.0	408	35.7	33.3	23.5	351	36	2.2	28.0	21	372	33.4	33.8	23.5	330	0.49	0.91	6.1	7.4	90
95	24.8	24.6	42.8	23.5	372	35.8	35.0	24.0	360	31	2.1	29.5	20	341	33.7	35.5	24.1	339	0.46	0.89	5.9	7.3	95
100	25.3	25.1	44.3	24.0	341	36.0	36.6	24.6	368	27	2.0	31.0	20	314	33.9	37.1	24.7	348	0.44	0.87	5.7	7.2	100
105	25.8	25.5	45.8	24.4	314	36.1	38.2	25.1	376	23	1.9	32.5	19	291	34.2	38.7	25.2	357	0.42	0.84	5.5	7.2	105
110	26.2	26.0	47.3	24.9	291	36.2	39.8	25.6	384	21	1.9	33.9	19	270	34.3	40.2	25.7	365	0.40	0.82	5.3	7.1	110
115	26.6	26.4	48.8	25.4	270	36.3	41.4	26.1	391	18	1.8	35.4	19	252	34.5	41.8	26.1	372	0.39	0.81	5.1	7.0	115
120	27.0	26.7	50.2	25.9	252	36.4	42.9	26.5	397	16	1.7	36.8	18	236	34.7	43.3	26.6	379	0.37	0.79	4.9	6.9	120
125	27.3	27.1	51.6	26.4	236	36.5	44.4	26.9	404	15	1.7	38.2	18	221	34.8	44.8	27.0	386	0.36	0.77	4.8	6.8	125
130	27.7	27.5	53.0	26.9	221	36.5	45.9	27.3	409	13	1.6	39.6	17	208	34.9	46.2	27.4	392	0.34	0.75	4.7	6.7	130
135	28.0	27.8	54.4	27.4	208	36.6	47.3	27.7	415	12	1.6	41.0	17	196	35.0	47.7	27.7	398	0.33	0.74	4.5	6.7	135
140	28.3	28.1	55.7	27.9	196	36.6	48.8	28.0	420	11	1.5	42.4	17	185	35.1	49.1	28.1	403	0.32	0.72	4.4	6.6	140
145	28.6	28.4	57.0	28.4	185	36.7	50.2	28.3	425	10	1.5	43.8	16	175	35.2	50.6	28.4	409	0.31	0.71	4.3	6.5	145
150	28.8	28.7	58.3	28.9	175	36.7	51.6	28.7	430	9	1.4	45.2	16	166	35.3	52.0	28.7	414	0.30	0.70	4.2	6.4	150

BEUK, Vlaanderen 2020					**matige laagdunning**									**Boniteit IV, h_{70} = 18.0**								
COMMON BEECH					moderate thinning from below									Site Class IV, h_{70} = 18.0								
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	1.5	1.5	0.5		5000	0.0	0.4	1.2	0					5000	0.0	0.4	1.2	0	0.13	0.01	0.1	0.0	5
10	3.3	3.3	3.6		5000	2.2	2.4	2.6	3					5000	2.2	2.4	2.6	3	0.68	0.22	1.3	0.3	10
15	5.1	5.1	6.2		5000	6.5	4.1	4.1	14					5000	6.5	4.1	4.1	14	1.02	0.44	3.0	0.9	15
20	6.8	6.7	8.5		5000	12.2	5.6	5.6	35					5000	12.2	5.6	5.6	35	1.31	0.61	5.5	1.7	20
25	8.4	8.3	11.9	19.0	5000	19.7	7.1	7.1	79	451	1.2	5.7	4	4549	18.5	7.2	7.1	74	1.47	0.79	8.0	3.1	25
30	9.9	9.8	15.1	19.0	4549	25.6	8.5	8.5	116	1253	4.7	6.9	21	3296	20.9	9.0	8.6	96	1.32	0.89	8.3	4.0	30
35	11.2	11.1	17.8	19.0	3296	27.1	10.2	9.9	137	746	4.1	8.3	20	2551	23.0	10.7	9.9	117	1.16	0.94	8.2	4.6	35
40	12.4	12.3	19.7	19.0	2551	28.5	11.9	11.1	157	482	3.6	9.7	19	2068	25.0	12.4	11.2	139	1.04	0.96	8.0	5.1	40
45	13.6	13.5	21.5	19.0	2068	29.9	13.6	12.3	178	331	3.2	11.0	18	1737	26.8	14.0	12.3	160	0.95	0.97	7.7	5.4	45
50	14.6	14.5	23.1	19.0	1737	31.3	15.1	13.4	198	239	2.8	12.3	17	1499	28.5	15.6	13.4	181	0.87	0.96	7.5	5.6	50
55	15.6	15.4	24.9	19.5	1499	32.7	16.7	14.4	218	245	3.6	13.6	23	1254	29.1	17.2	14.4	195	0.80	0.95	7.2	5.8	55
60	16.4	16.3	26.5	20.0	1254	32.9	18.3	15.3	230	185	3.3	15.0	22	1069	29.6	18.8	15.3	209	0.73	0.93	6.9	5.9	60
65	17.3	17.1	28.2	20.5	1069	33.2	19.9	16.1	242	144	3.0	16.4	21	924	30.1	20.4	16.2	221	0.68	0.92	6.6	5.9	65
70	18.0	17.8	29.8	21.0	924	33.4	21.5	16.9	253	115	2.8	17.7	21	810	30.6	21.9	17.0	233	0.63	0.90	6.3	6.0	70
75	18.7	18.5	31.3	21.5	810	33.6	23.0	17.7	264	93	2.7	19.1	20	717	31.0	23.5	17.7	244	0.59	0.88	6.1	6.0	75
80	19.3	19.2	32.8	22.0	717	33.8	24.5	18.3	273	76	2.5	20.4	19	640	31.3	25.0	18.4	254	0.55	0.86	5.8	6.0	80
85	19.9	19.7	34.3	22.5	640	34.0	26.0	19.0	283	64	2.4	21.8	19	576	31.6	26.4	19.0	264	0.52	0.84	5.6	6.0	85
90	20.5	20.3	35.7	23.0	576	34.2	27.5	19.6	291	54	2.3	23.1	18	522	31.9	27.9	19.6	273	0.49	0.82	5.4	5.9	90
95	21.0	20.8	37.1	23.5	522	34.3	28.9	20.1	299	46	2.1	24.4	18	476	32.2	29.3	20.2	281	0.47	0.80	5.2	5.9	95
100	21.5	21.3	38.5	24.0	476	34.5	30.3	20.7	307	40	2.1	25.7	18	437	32.4	30.7	20.7	290	0.45	0.79	5.0	5.9	100
105	21.9	21.7	39.8	24.4	437	34.6	31.8	21.2	314	34	2.0	27.0	17	402	32.6	32.1	21.2	297	0.43	0.77	4.9	5.8	105
110	22.3	22.1	41.2	24.9	402	34.7	33.1	21.6	321	30	1.9	28.2	17	372	32.8	33.5	21.7	304	0.41	0.75	4.7	5.8	110
115	22.7	22.5	42.5	25.4	372	34.8	34.5	22.1	327	27	1.8	29.5	16	345	33.0	34.9	22.1	311	0.39	0.74	4.6	5.7	115
120	23.1	22.9	43.8	25.9	345	34.9	35.9	22.5	334	24	1.8	30.8	16	322	33.1	36.2	22.6	317	0.37	0.72	4.4	5.7	120
125	23.4	23.2	45.0	26.4	322	35.0	37.2	22.9	339	21	1.7	32.0	16	301	33.3	37.5	23.0	324	0.36	0.71	4.3	5.6	125
130	23.8	23.5	46.3	26.9	301	35.0	38.5	23.3	345	19	1.6	33.3	15	282	33.4	38.8	23.3	329	0.35	0.70	4.2	5.6	130
135	24.1	23.9	47.5	27.4	282	35.1	39.8	23.6	350	17	1.6	34.5	15	265	33.5	40.1	23.7	335	0.33	0.68	4.1	5.5	135
140	24.4	24.1	48.7	27.9	265	35.1	41.1	24.0	355	15	1.5	35.7	15	249	33.6	41.4	24.0	340	0.32	0.67	4.0	5.5	140
145	24.6	24.4	49.9	28.4	249	35.2	42.4	24.3	359	14	1.5	36.9	15	236	33.7	42.7	24.4	345	0.31	0.66	3.8	5.4	145
150	24.9	24.7	51.0	28.9	236	35.2	43.6	24.6	364	13	1.5	38.2	14	223	33.7	43.9	24.7	349	0.30	0.65	3.8	5.4	150

BEUK, Vlaanderen 2020										**matige laagdunning**										**Boniteit V, h_{70} = 14.4**
COMMON BEECH										moderate thinning from below										Site Class V, h_{70} = 14.4
	Opstandkenmerken				**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics				Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	h_{dom}	d_{dom}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	1.1	1.1			5000				0					5000				0			0.0	0.0	5
10	2.4	2.4	2.2		5000	0.8	1.4	1.9	1					5000	0.8	1.4	1.9	1	0.34	0.08	0.5	0.1	10
15	3.8	3.7	4.3		5000	3.1	2.8	3.0	5					5000	3.1	2.8	3.0	5	0.57	0.21	1.3	0.3	15
20	5.1	5.0	6.2		5000	6.4	4.0	4.1	14					5000	6.4	4.0	4.1	14	0.74	0.32	2.2	0.7	20
25	6.3	6.3	7.9		5000	10.4	5.2	5.1	34					5000	10.4	5.2	5.1	34	0.85	0.42	3.4	1.3	25
30	7.5	7.4	10.7	20.3	5000	15.7	6.3	6.3	58					5000	15.7	6.3	6.3	58	1.27	0.52	6.0	1.9	30
35	8.6	8.5	12.6	19.0	5000	21.8	7.4	7.3	89	652	1.9	6.0	7	4348	19.9	7.6	7.3	81	1.17	0.62	6.4	2.5	35
40	9.6	9.5	15.3	19.0	4348	25.5	8.6	8.3	114	876	3.4	7.0	15	3472	22.1	9.0	8.3	99	1.07	0.69	6.4	3.0	40
45	10.5	10.5	17.0	19.0	3472	27.2	10.0	9.3	131	598	3.1	8.1	14	2874	24.1	10.3	9.3	117	0.97	0.72	6.3	3.4	45
50	11.4	11.3	19.1	19.0	2874	28.8	11.3	10.2	148	427	2.8	9.2	14	2447	25.9	11.6	10.2	134	0.89	0.74	6.2	3.7	50
55	12.3	12.2	20.6	19.5	2447	30.2	12.5	11.0	165	424	3.5	10.2	18	2022	26.7	13.0	11.0	147	0.82	0.75	6.0	3.9	55
60	13.0	12.9	22.1	20.0	2022	30.6	13.9	11.8	176	318	3.2	11.4	18	1704	27.4	14.3	11.8	158	0.75	0.76	5.8	4.1	60
65	13.7	13.6	23.5	20.5	1704	31.0	15.2	12.5	187	245	3.0	12.5	17	1458	27.9	15.6	12.6	169	0.69	0.75	5.6	4.2	65
70	14.4	14.3	24.9	21.0	1458	31.3	16.5	13.2	197	193	2.8	13.7	17	1265	28.4	16.9	13.3	179	0.64	0.75	5.4	4.3	70
75	15.0	14.9	26.2	21.5	1265	31.5	17.8	13.9	206	155	2.7	14.8	17	1110	28.9	18.2	13.9	189	0.60	0.74	5.2	4.4	75
80	15.6	15.5	27.6	22.0	1110	31.8	19.1	14.5	214	127	2.5	15.9	16	983	29.2	19.5	14.5	198	0.56	0.73	5.0	4.4	80
85	16.1	16.0	28.9	22.5	983	32.0	20.4	15.1	223	105	2.4	17.0	16	878	29.6	20.7	15.1	207	0.53	0.72	4.8	4.4	85
90	16.6	16.5	30.1	23.0	878	32.2	21.6	15.6	230	88	2.3	18.1	16	790	29.9	21.9	15.7	215	0.50	0.71	4.6	4.4	90
95	17.1	17.0	31.3	23.5	790	32.3	22.8	16.2	238	75	2.2	19.3	15	715	30.2	23.2	16.2	222	0.48	0.70	4.5	4.5	95
100	17.6	17.4	32.6	24.0	715	32.5	24.0	16.6	244	64	2.1	20.4	15	652	30.4	24.4	16.7	230	0.45	0.68	4.4	4.5	100
105	18.0	17.8	33.8	24.4	652	32.6	25.2	17.1	251	55	2.0	21.4	15	597	30.6	25.6	17.2	236	0.43	0.67	4.2	4.4	105
110	18.4	18.2	34.9	24.9	597	32.8	26.4	17.5	257	48	1.9	22.5	14	549	30.8	26.8	17.6	243	0.41	0.66	4.1	4.4	110
115	18.8	18.6	36.1	25.4	549	32.9	27.6	18.0	263	42	1.8	23.6	14	507	31.0	27.9	18.0	249	0.40	0.65	4.0	4.4	115
120	19.1	18.9	37.2	25.9	507	33.0	28.8	18.4	268	37	1.8	24.7	14	470	31.2	29.1	18.4	255	0.38	0.64	3.9	4.4	120
125	19.4	19.3	38.3	26.4	470	33.0	29.9	18.7	274	33	1.7	25.8	14	437	31.3	30.2	18.8	260	0.36	0.63	3.8	4.4	125
130	19.8	19.6	39.4	26.9	437	33.1	31.1	19.1	279	29	1.7	26.8	13	408	31.5	31.3	19.1	265	0.35	0.62	3.7	4.3	130
135	20.1	19.9	40.5	27.4	408	33.2	32.2	19.4	283	26	1.6	27.9	13	382	31.6	32.5	19.5	270	0.34	0.61	3.6	4.3	135
140	20.3	20.2	41.6	27.9	382	33.2	33.3	19.8	288	24	1.6	29.0	13	358	31.7	33.6	19.8	275	0.33	0.60	3.5	4.3	140
145	20.6	20.4	42.6	28.4	358	33.3	34.4	20.1	292	21	1.5	30.0	13	337	31.8	34.7	20.1	280	0.31	0.59	3.4	4.3	145
150	20.9	20.7	43.6	28.9	337	33.3	35.5	20.4	296	19	1.5	31.1	12	317	31.9	35.8	20.4	284	0.30	0.58	3.3	4.2	150

Populier

Populus cultivars **Poplar**

Bron: Jansen, J.J., G.M.J. Mohren, P. Schmidt, L. Goudzwaard, A. Oosterbaan en J. den Ouden, 2018. *Groei en productie van populier in Nederland.* FEM Groei en Productie Rapport 2018 - 8, 127 blz.

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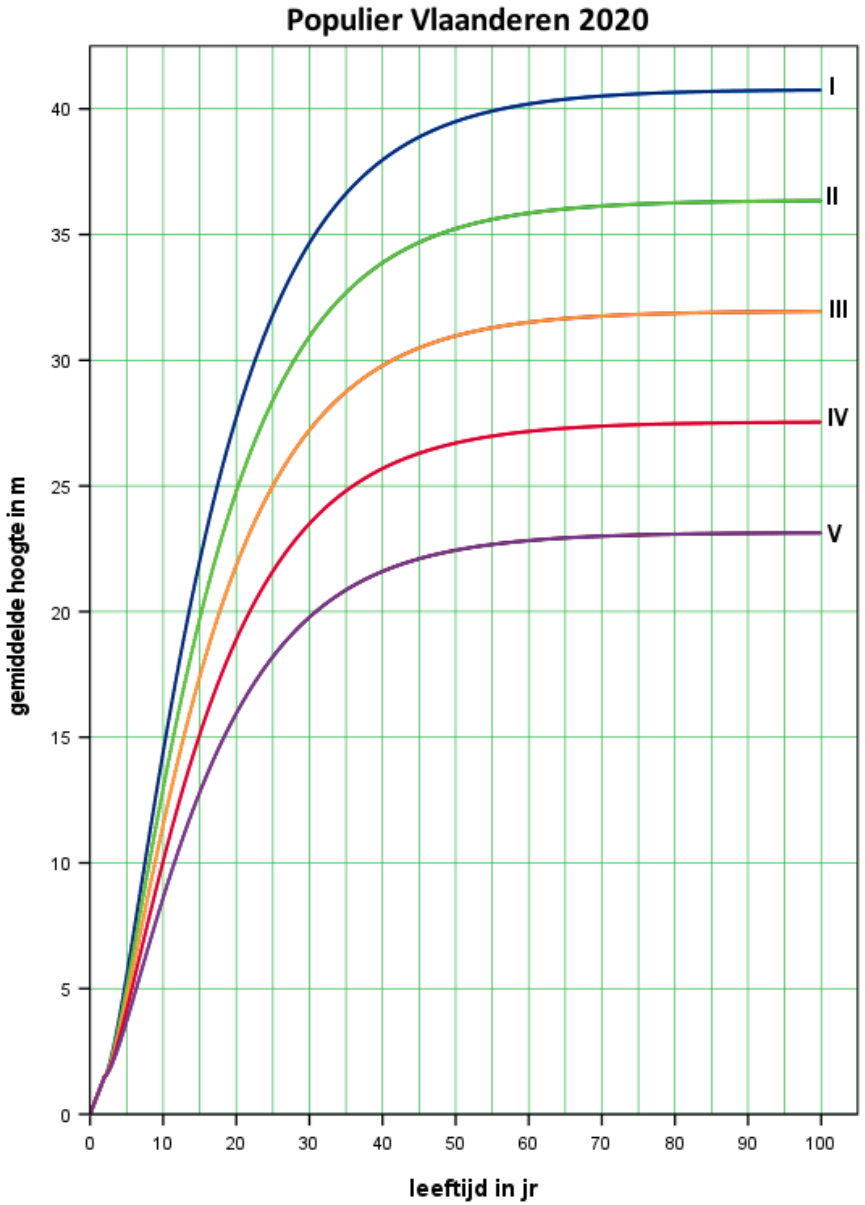

Populier Vlaanderen 2020, plantverband 4 x 4 m							**systematische dunning**								**Boniteit I, h_{25} = 31.8**
Poplar, spacing 4 x 4 m							systematically thinning								Site Class I, h_{25} = 31.8
	Kenmerken blijvende opstand						**dunning**				**Bijgroei**				
	Characteristics remaining stand						thinning				Increment				
t	***h_m***	***S%***	***N***	***G***	***d_g***	***V***	***N***	***G***	***d_g***	***V***	***Ic_G***	***Im_G***	***Ic_V***	***Im_V***	***t***
5	5.5	73.0	625	3.2	8.1	8					2.18	0.65	10.6	1.6	5
10	14.4	27.8	625	18.7	19.5	120					2.93	1.87	28.9	12.0	10
15	22.0	25.7	313	15.6	25.2	136	313	15.6	25.2	139	2.03	2.07	27.3	18.3	15
20	27.7	28.9	156	12.0	31.3	125	156	12.0	31.3	127	1.45	1.98	20.2	19.5	20
25	31.8	25.2	156	18.3	38.6	211					1.10	1.84	16.1	19.1	25
30	34.7	23.1	156	23.2	43.5	286					0.87	1.69	13.7	18.4	30
35	36.6	21.8	156	27.1	47.0	349					0.72	1.56	11.6	17.6	35
40	38.0	21.1	156	30.4	49.8	402					0.61	1.45	9.9	16.7	40
45	38.9	20.6	156	33.2	52.0	448					0.53	1.35	8.5	15.9	45
50	39.5	28.6	78	17.8	53.9	242	78	17.8	53.9	246	0.47	1.27	7.2	15.1	50
55	39.9	28.3	78	20.1	57.2	275					0.43	1.19	6.3	14.3	55
60	40.2	28.1	78	22.1	60.1	305					0.39	1.13	5.8	13.6	60
65	40.4	28.0	78	24.0	62.6	332					0.37	1.07	5.3	13.0	65
70	40.5	27.9	78	25.8	64.9	358					0.35	1.02	5.0	12.4	70
75	40.6	27.9	78	27.5	67.0	383					0.33	0.97	4.7	11.9	75
80	40.7	27.8	78	29.1	68.9	406					0.31	0.93	4.5	11.5	80
85	40.7	27.8	78	30.7	70.7	428					0.30	0.90	4.3	11.0	85
90	40.7	27.8	78	32.1	72.4	449					0.29	0.86	4.1	10.7	90
95	40.7	27.8	78	33.6	74.0	469					0.28	0.83	4.0	10.3	95
100	40.8	27.8	78	34.9	75.5	488					0.27	0.80	3.8	10.0	100

Populier Vlaanderen 2020, plantverband 4 x 4 m							**systematische dunning**								**Boniteit II, h_{25} = 28.4**
Poplar, spacing 4 x 4 m							systematically thinning								Site Class II, h_{25} = 28.4
	Kenmerken blijvende opstand						**dunning**				**Bijgroei**				
	Characteristics remaining stand						thinning				Increment				
t	***h_m***	***S%***	***N***	***G***	***d_g***	***V***	***N***	***G***	***d_g***	***V***	***Ic_G***	***Im_G***	***Ic_V***	***Im_V***	***t***
5	5.0	79.5	625	2.5	7.2	6					1.83	0.51	8.3	1.2	5
10	12.9	30.9	625	15.9	18.0	94					2.58	1.59	23.2	9.4	10
15	19.7	28.7	313	13.6	23.5	109	313	13.6	23.5	111	1.87	1.81	22.6	14.7	15
20	24.8	22.8	313	21.4	29.5	206					1.34	1.75	18.2	15.9	20
25	28.4	28.2	156	13.6	33.3	144	156	13.6	33.3	146	1.02	1.63	14.4	16.1	25
30	30.9	25.9	156	18.1	38.4	205					0.81	1.51	11.3	15.4	30
35	32.7	24.5	156	21.7	42.1	257					0.67	1.40	9.6	14.7	35
40	33.9	23.6	156	24.8	45.0	301					0.57	1.30	8.2	14.0	40
45	34.7	23.1	156	27.4	47.3	339					0.49	1.21	7.2	13.3	45
50	35.2	22.7	156	29.8	49.3	373					0.44	1.14	6.3	12.6	50
55	35.6	22.5	156	31.9	51.0	403					0.40	1.07	5.6	12.0	55
60	35.9	22.3	156	33.8	52.5	430					0.37	1.02	5.1	11.5	60
65	36.0	22.2	156	35.6	53.9	454					0.35	0.97	4.7	11.0	65
70	36.1	22.1	156	37.3	55.1	477					0.33	0.92	4.4	10.5	70
75	36.2	22.1	156	38.9	56.3	498					0.31	0.88	4.2	10.1	75
80	36.3	22.1	156	40.4	57.4	519					0.30	0.84	3.9	9.7	80
85	36.3	22.0	156	41.8	58.4	538					0.28	0.81	3.8	9.4	85
90	36.3	22.0	156	43.2	59.3	556					0.27	0.78	3.6	9.0	90
95	36.3	22.0	156	44.5	60.3	574					0.26	0.75	3.5	8.8	95
100	36.3	22.0	156	45.8	61.1	591					0.25	0.73	3.3	8.5	100

Populier Vlaanderen 2020, plantverband 4 x 4 m							**systematische dunning**								**Boniteit III, h_{25} = 25.0**
Poplar, spacing 4 x 4 m							systematically thinning								Site Class III, h_{25} = 25.0
	Kenmerken blijvende opstand						**dunning**				**Bijgroei**				
	Characteristics remaining stand						thinning				Increment				
t	***h_m***	***S%***	***N***	***G***	***d_g***	***V***	***N***	***G***	***d_g***	***V***	***Ic_G***	***Im_G***	***Ic_V***	***Im_V***	***t***
5	4.6	87.2	625	1.9	6.2	4					1.51	0.38	6.3	0.8	5
10	11.5	34.8	625	13.2	16.4	71					2.19	1.32	17.8	7.1	10
15	17.4	23.0	625	23.1	21.7	171					1.69	1.54	20.0	11.4	15
20	21.8	25.9	313	15.1	24.8	132	313	15.1	24.8	134	1.22	1.51	15.9	13.3	20
25	25.0	22.6	313	20.4	28.8	198					0.93	1.42	12.2	13.3	25
30	27.2	20.8	313	24.6	31.6	253					0.74	1.32	10.3	12.9	30
35	28.7	27.8	156	14.0	33.7	149	156	14.0	33.7	151	0.61	1.23	8.2	12.4	35
40	29.8	26.9	156	16.8	37.0	184					0.52	1.15	6.6	11.7	40
45	30.5	26.2	156	19.2	39.6	215					0.46	1.07	5.8	11.1	45
50	31.0	25.8	156	21.4	41.7	243					0.41	1.01	5.2	10.6	50
55	31.3	25.6	156	23.3	43.6	267					0.37	0.95	4.7	10.0	55
60	31.5	25.4	156	25.1	45.3	289					0.35	0.90	4.3	9.6	60
65	31.7	25.3	156	26.8	46.7	310					0.32	0.86	4.0	9.2	65
70	31.8	25.2	156	28.4	48.1	329					0.30	0.82	3.7	8.8	70
75	31.8	25.1	156	29.9	49.3	347					0.29	0.79	3.5	8.4	75
80	31.9	25.1	156	31.3	50.5	364					0.28	0.75	3.3	8.1	80
85	31.9	25.1	156	32.6	51.6	380					0.27	0.73	3.2	7.8	85
90	31.9	25.1	156	33.9	52.6	396					0.26	0.70	3.0	7.6	90
95	31.9	25.1	156	35.2	53.5	411					0.25	0.68	2.9	7.3	95
100	31.9	25.0	156	36.4	54.5	425					0.24	0.65	2.8	7.1	100

Populier Vlaanderen 2020, plantverband 4 x 4 m							**systematische dunning**								**Boniteit IV, h_{25} = 21.6**
Poplar, spacing 4 x 4 m							systematically thinning								Site Class IV, h_{25} = 21.6
	Kenmerken blijvende opstand						**dunning**				**Bijgroei**				
	Characteristics remaining stand						thinning				Increment				
t	h_m	***S%***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	4.1	96.6	625	1.4	5.3	3					1.19	0.27	4.1	0.5	5
10	10.1	39.8	625	10.6	14.7	52					1.81	1.06	13.3	5.2	10
15	15.1	26.5	625	19.1	19.7	127					1.50	1.27	15.4	8.5	15
20	18.9	21.2	625	25.5	22.8	201					1.10	1.27	13.7	10.0	20
25	21.6	26.2	313	15.1	24.8	131	313	15.1	24.8	133	0.84	1.21	10.5	10.6	25
30	23.5	24.1	313	18.9	27.7	174					0.67	1.13	8.0	10.2	30
35	24.8	22.8	313	21.9	29.9	211					0.56	1.06	6.8	9.8	35
40	25.7	22.0	313	24.5	31.6	242					0.48	0.99	5.8	9.4	40
45	26.3	21.5	313	26.7	33.0	269					0.42	0.93	5.0	8.9	45
50	26.7	21.2	313	28.7	34.2	293					0.38	0.88	4.4	8.5	50
55	27.0	21.0	313	30.5	35.3	314					0.35	0.83	4.0	8.1	55
60	27.2	20.8	313	32.2	36.2	333					0.32	0.79	3.6	7.8	60
65	27.3	20.7	313	33.7	37.1	350					0.30	0.75	3.3	7.4	65
70	27.4	20.7	313	35.2	37.9	366					0.28	0.72	3.1	7.1	70
75	27.4	20.6	313	36.5	38.6	381					0.27	0.69	2.9	6.9	75
80	27.5	20.6	313	37.9	39.3	396					0.26	0.66	2.8	6.6	80
85	27.5	20.6	313	39.1	39.9	409					0.25	0.64	2.6	6.4	85
90	27.5	20.6	313	40.3	40.5	422					0.24	0.62	2.5	6.2	90
95	27.5	20.5	313	41.5	41.1	435					0.23	0.60	2.4	6.0	95
100	27.5	20.5	313	42.6	41.7	447					0.22	0.58	2.4	5.8	100

Populier Vlaanderen 2020, plantverband 4 x 4 m							**systematische dunning**								**Boniteit V, h_{25} = 18.2**
Poplar, spacing 4 x 4 m							systematically thinning								Site Class V, h_{25} = 18.2
	Kenmerken blijvende opstand						**dunning**				**Bijgroei**				
	Characteristics remaining stand						thinning				Increment				
t	***h_m***	***S%***	***N***	***G***	***d_g***	***V***	***N***	***G***	***d_g***	***V***	***Ic_G***	***Im_G***	***Ic_V***	***Im_V***	***t***
5	3.7	108.3	625	0.9	4.4	2					0.87	0.19	2.4	0.3	5
10	8.6	46.5	625	8.2	12.9	36					1.46	0.82	9.8	3.6	10
15	12.8	31.3	625	15.0	17.5	88					1.25	1.00	11.0	5.9	15
20	15.9	25.1	625	20.6	20.5	143					0.97	1.03	10.3	7.1	20
25	18.2	22.0	625	24.8	22.5	190					0.75	0.99	8.7	7.6	25
30	19.8	28.6	313	14.1	23.9	114	313	14.1	23.9	116	0.60	0.94	6.7	7.7	30
35	20.9	27.1	313	16.8	26.2	142					0.50	0.88	5.2	7.4	35
40	21.6	26.2	313	19.1	27.9	166					0.43	0.83	4.5	7.0	40
45	22.1	25.6	313	21.1	29.4	187					0.38	0.78	3.9	6.7	45
50	22.4	25.2	313	23.0	30.6	205					0.34	0.74	3.5	6.4	50
55	22.7	24.9	313	24.6	31.7	222					0.31	0.70	3.1	6.1	55
60	22.8	24.8	313	26.1	32.6	237					0.29	0.67	2.9	5.9	60
65	22.9	24.7	313	27.5	33.5	250					0.27	0.64	2.6	5.6	65
70	23.0	24.6	313	28.8	34.3	263					0.26	0.61	2.5	5.4	70
75	23.1	24.5	313	30.1	35.0	275					0.24	0.59	2.3	5.2	75
80	23.1	24.5	313	31.3	35.7	287					0.23	0.57	2.2	5.0	80
85	23.1	24.5	313	32.4	36.3	297					0.22	0.55	2.1	4.9	85
90	23.1	24.5	313	33.5	37.0	308					0.22	0.53	2.0	4.7	90
95	23.1	24.5	313	34.6	37.5	318					0.21	0.51	2.0	4.6	95
100	23.1	24.5	313	35.6	38.1	327					0.20	0.50	1.9	4.4	100

Populier, plantverband 4 x 4 m							**met en zonder systematische**								**Boniteit V, h_{25} = 18.2**
Poplar, spacing 4 x 4 m							with and without systematically thinning								Site Class V, h_{25} = 18.2
	Kenmerken blijvende opstand						**met dunning**				**Bijgroei**				
	Characteristics remaining stand						with thinning				Increment				
t	***h_m***	***S%***	***N***	***G***	***d_g***	***V***	***N***	***G***	***d_g***	***V***	***Ic_G***	***Im_G***	***Ic_V***	***Im_V***	***t***
5	3.7	108.3	625	0.9	4.4	2					0.87	0.19	2.4	0.3	5
10	8.6	46.5	625	8.2	12.9	36					1.46	0.82	9.8	3.6	10
15	12.8	31.3	625	15.0	17.5	88					1.25	1.00	11.0	5.9	15
20	15.9	25.1	625	20.6	20.5	143					0.97	1.03	10.3	7.1	20
25	18.2	22.0	625	24.8	22.5	190					0.75	0.99	8.7	7.6	25
30	19.8	28.6	313	14.1	23.9	114	313	14.1	23.9	116	0.60	0.94	6.7	7.7	30
35	20.9	27.1	313	16.8	26.2	142					0.50	0.88	5.2	7.4	35
40	21.6	26.2	313	19.1	27.9	166					0.43	0.83	4.5	7.0	40
45	22.1	25.6	313	21.1	29.4	187					0.38	0.78	3.9	6.7	45
50	22.4	25.2	313	23.0	30.6	205					0.34	0.74	3.5	6.4	50
5	3.7	108.3	625	0.9	4.4	2	**zonder dunning**				0.87	0.19	2.4	0.3	5
10	8.6	46.5	625	8.2	12.9	36	without thinning				1.46	0.82	9.8	3.6	10
15	12.8	31.3	625	15.0	17.5	88					1.25	1.00	11.0	5.9	15
20	15.9	25.1	625	20.6	20.5	143					0.97	1.03	10.3	7.1	20
25	18.2	22.0	625	24.8	22.5	190					0.75	0.99	8.7	7.6	25
30	19.8	20.2	625	28.1	23.9	230					0.60	0.94	7.2	7.7	30
35	20.9	19.2	625	30.9	25.1	263					0.50	0.88	6.0	7.5	35
40	21.6	18.5	625	33.2	26.0	290					0.43	0.83	5.0	7.2	40
45	22.1	18.1	625	35.2	26.8	313					0.38	0.78	4.3	7.0	45
50	22.4	17.8	625	37.0	27.5	333					0.34	0.74	3.7	6.7	50

Trilpopulier
Populus tremula **Aspen**

Bron: Jansen, J.J., G.M.J. Mohren, P. Schmidt, L. Goudzwaard, A. Oosterbaan en J. den Ouden, 2018. *Groei en productie van populier in Nederland.* FEM Groei en Productie Rapport 2018 - 8, 127 blz.

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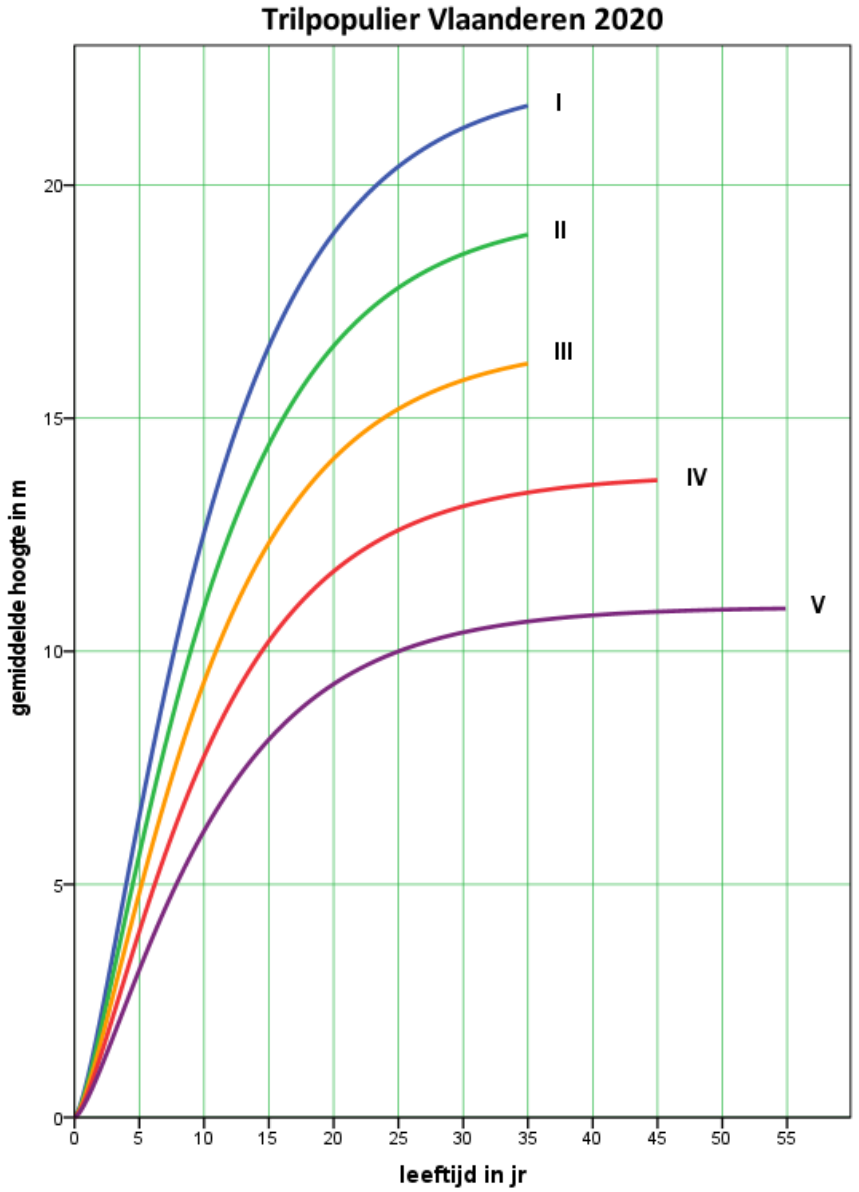

TRILPOPULIER, Vlaanderen						**sterke laagdunning**								**Boniteit I, h_{25} = 20.4**					
ASPEN						heavy thinning from below								Site Class I, I_{25} = 20.4					
	Opstandkenmerk			**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics			Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_m	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	6.4	8.0	31.0	2500	13.5	8.3	6.4	40	*0*	*0*	*0*	*0*	2500	13.5	8.3	6.4	40	4.30	2.71	21.5	8.0	5
10	12.5	14.5	22.0	2500	27.8	11.9	12.4	162	1185	9.3	10.0	55	1315	18.5	13.4	12.6	107	1.92	2.78	19.1	16.2	10
15	16.5	18.5	22.0	1315	26.0	15.9	16.3	186	559	7.8	13.3	56	756	18.2	17.5	16.7	130	1.21	2.35	13.1	16.0	15
20	19.0	20.9	22.0	756	23.3	19.8	18.7	184	181	3.8	16.4	31	574	19.4	20.8	19.1	153	0.86	2.02	9.3	14.7	20
25	20.4	22.3	22.0	574	23.1	22.6	20.1	193	78	2.1	18.7	18	496	21.0	23.2	20.6	175	0.66	1.76	7.0	13.4	25
30	21.2	23.1	22.0	496	23.9	24.8	21.0	206	38	1.2	20.4	11	458	22.7	25.1	21.4	195	0.53	1.57	5.5	12.2	30
35	21.7	23.6	22.0	458	25.2	26.4	21.4	220	20	0.7	21.7	7	438	24.4	26.6	21.9	213	0.45	1.41	4.6	11.1	35

TRILPOPULIER						**sterke laagdunning**								**Boniteit II, h_{25} = 17.8**					
ASPEN						heavy thinning from below								Site Class II, h_{25} = 17.8					
	Opstandkenmerk			**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics			Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_m	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	5.6	7.1	35.5	2500	9.6	7.0	5.6	25	*0*	*0*	*0*	*0*	2500	9.6	7.0	5.6	25	3.85	1.93	17.1	5.1	5
10	10.9	12.8	22.0	2500	24.6	11.2	10.8	129	773	5.3	9.3	28	1727	19.3	11.9	11.0	101	1.76	2.46	16.0	12.9	10
15	14.4	16.4	22.0	1727	26.2	13.9	14.3	169	734	7.8	11.6	51	992	18.4	15.4	14.6	118	1.11	2.10	11.3	13.1	15
20	16.6	18.5	22.0	992	23.0	17.2	16.3	164	238	3.8	14.2	27	754	19.2	18.0	16.7	137	0.79	1.80	7.9	12.2	20
25	17.8	19.8	22.0	754	22.6	19.5	17.6	170	102	2.1	16.1	16	652	20.5	20.0	18.0	155	0.61	1.58	5.9	11.1	25
30	18.5	20.5	22.0	652	23.3	21.3	18.3	181	50	1.2	17.5	9	602	22.1	21.6	18.7	171	0.49	1.41	4.6	10.1	30
35	18.9	20.9	22.0	602	24.3	22.7	18.7	192	26	0.7	18.6	6	576	23.6	22.9	19.1	186	0.42	1.27	3.8	9.2	35

TRILPOPULIER				**sterke laagdunning**																	**Boniteit III, h_{25} = 15.2**
ASPEN				heavy thinning from below																	Site Class III, h_{25} = 15.2
	Opstandkenmerk			**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics			Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_m	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	4.8	6.2	41.6	2500	6.1	5.6	4.8	14	0	0	0	0	2500	6.1	5.6	4.8	14	3.29	1.22	11.8	2.8	5
10	9.3	11.1	22.0	2500	21.3	10.4	9.2	100	132	0.8	8.6	4	2368	20.6	10.5	9.4	96	1.63	2.13	13.9	10.0	10
15	12.3	14.2	22.0	2368	26.8	12.0	12.2	154	1007	8.0	10.0	46	1361	18.8	13.3	12.4	107	1.01	1.83	9.5	10.5	15
20	14.1	16.1	22.0	1361	23.0	14.7	14.0	146	327	3.8	12.1	24	1034	19.2	15.4	14.3	122	0.72	1.59	6.5	9.8	20
25	15.2	17.2	22.0	1034	22.3	16.6	15.0	149	140	2.1	13.7	14	894	20.3	17.0	15.3	136	0.55	1.39	4.9	8.9	25
30	15.8	17.8	22.0	894	22.7	18.0	15.6	157	69	1.2	14.8	8	826	21.6	18.2	16.0	149	0.45	1.24	3.8	8.2	30
35	16.2	18.1	22.0	826	23.6	19.1	16.0	166	36	0.7	15.7	5	790	23.0	19.2	16.3	161	0.39	1.13	3.2	7.5	35

TRILPOPULIER				**sterke laagdunning**																	**Boniteit IV, h_{25} = 12.6**
ASPEN				heavy thinning from below																	Site Class IV, h_{25} = 12.6
	Opstandkenmerk			**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics			Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_m	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	4.0	5.2	50.2	2500	3.3	4.1	4.0	7	*0*	*0*	*0*	*0*	2500	3.3	4.1	4.0	7	2.27	0.67	6.4	1.3	5
10	7.7	9.4	25.8	2500	17.9	9.5	7.7	72	0	0.0	0.0	0	2500	17.9	9.5	7.7	72	1.87	1.79	12.8	7.2	10
15	10.2	12.1	22.0	2500	23.4	10.9	10.1	117	519	3.3	9.0	17	1981	20.1	11.4	10.3	100	0.90	1.56	7.5	7.8	15
20	11.7	13.6	22.0	1981	23.8	12.4	11.6	132	475	3.9	10.3	22	1505	19.9	13.0	11.8	110	0.64	1.36	5.4	7.4	20
25	12.6	14.5	22.0	1505	22.7	13.9	12.4	132	204	2.1	11.4	12	1301	20.6	14.2	12.7	120	0.50	1.20	3.9	6.8	25
30	13.1	15.1	22.0	1301	22.9	15.0	13.0	137	100	1.2	12.3	7	1202	21.7	15.2	13.2	130	0.41	1.07	3.1	6.3	30
35	13.4	15.4	22.0	1202	23.6	15.8	13.2	144	52	0.7	13.0	4	1149	22.9	15.9	13.5	140	0.35	0.97	2.5	5.8	35
40	13.6	15.5	22.0	1149	24.5	16.5	13.4	151	28	0.4	13.5	3	1121	24.1	16.5	13.7	149	0.31	0.89	2.2	5.3	40
45	13.7	15.6	22.0	1121	25.6	17.0	13.5	159	16	0.2	14.0	2	1105	25.3	17.1	13.8	157	0.28	0.83	1.9	5.0	45

TRILPOPULIER							**sterke laagdunning**													**Boniteit V, h_{25} = 10.0**
ASPEN							heavy thinning from below													Site Class V, h_{25} = 10.0
	Opstandkenmerk			**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics			Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_m	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	3.2	4.3	63.3	2500	1.5	2.7	3.2	3	0	0	0	0	2500	1.5	2.7	3.2	3	1.19	0.30	2.8	0.5	5
10	6.1	7.7	32.5	2500	12.1	7.8	6.1	34	0	0.0	0.0	0	2500	12.1	7.8	6.1	34	2.16	1.21	10.2	3.4	10
15	8.1	9.8	24.7	2500	18.9	9.8	8.1	79	0	0.0	0.0	0	2500	18.9	9.8	8.1	79	0.78	1.26	5.5	5.3	15
20	9.3	11.1	22.0	2500	22.2	10.6	9.2	103	110	0.7	8.7	3	2390	21.5	10.7	9.4	100	0.56	1.11	4.1	5.2	20
25	10.0	11.8	22.0	2390	24.0	11.3	9.9	118	324	2.2	9.3	11	2066	21.8	11.6	10.1	107	0.44	0.99	3.1	4.8	25
30	10.4	12.3	22.0	2066	23.8	12.1	10.3	120	158	1.2	9.9	6	1908	22.5	12.3	10.5	114	0.36	0.89	2.4	4.5	30
35	10.6	12.5	22.0	1908	24.2	12.7	10.5	125	83	0.7	10.4	4	1825	23.5	12.8	10.7	121	0.31	0.81	1.9	4.1	35
40	10.8	12.6	22.0	1825	25.0	13.2	10.6	130	45	0.4	10.8	2	1780	24.5	13.2	10.9	128	0.28	0.74	1.6	3.8	40
45	10.9	12.7	22.0	1780	25.9	13.6	10.7	135	25	0.2	11.1	1	1755	25.6	13.6	10.9	134	0.25	0.69	1.4	3.6	45
50	10.9	12.8	22.0	1755	26.8	13.9	10.8	141	14	0.1	11.4	1	1741	26.7	14.0	11.0	140	0.23	0.65	1.3	3.4	50
55	10.9	12.8	22.0	1741	27.8	14.3	10.8	146	8	0.1	11.7	0	1733	27.7	14.3	11.0	146	0.22	0.61	1.2	3.2	55

Ruwe berk
Betula pendula **Silver birch**

Bron: Jansen, J.J., A. Oosterbaan, G.M. Mohren en J. den Ouden, 2018. Groei en productie van ruwe berk in Nederland, FEM Groei en Productie Rapport 2018 – 13, 41 blz.

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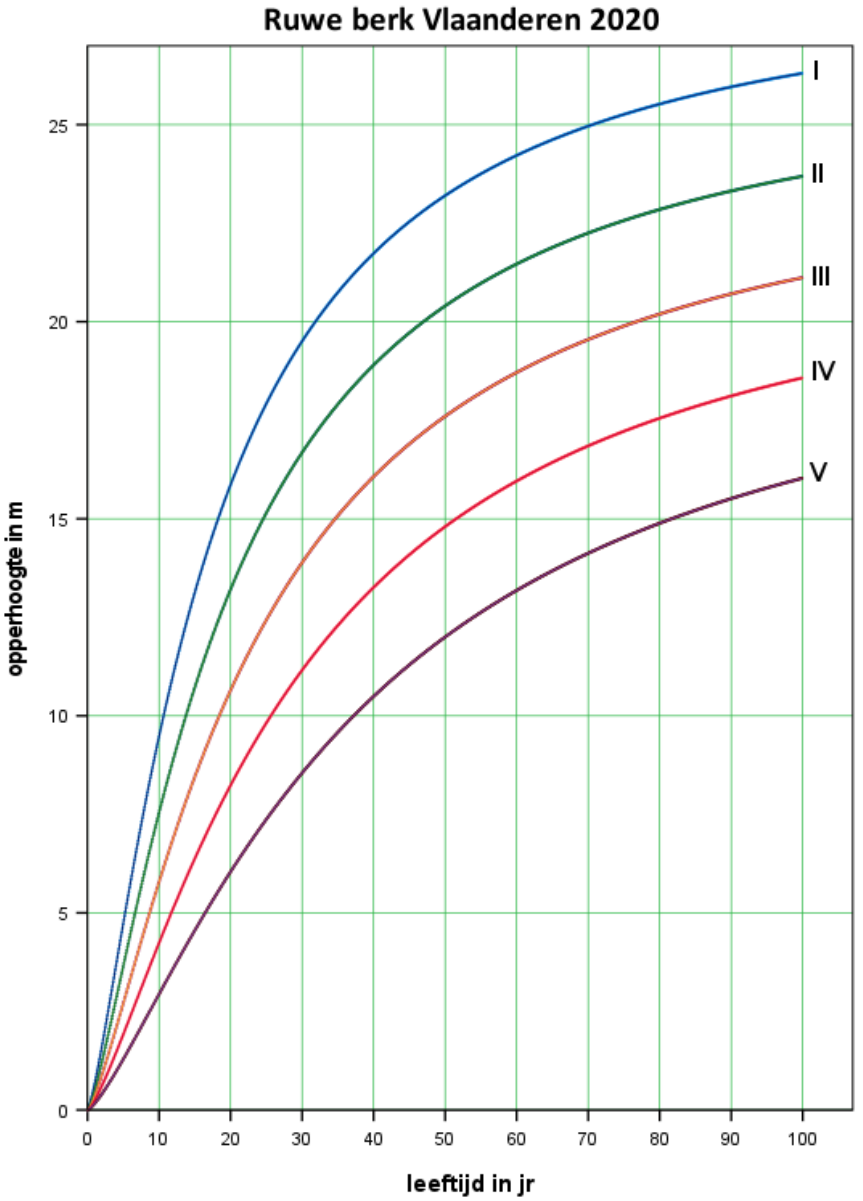

RUWE BERK, Vlaanderen 2020			**sterke laagdunning**									**Boniteit I, h_{50} = 23.2**								
SILVER BIRCH			heavy thinning from below									Site Class I, h_{50} = 23.2								
	Opstandkenmerken		**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**			
	Stand characteristics		Characteristics before thinning					Thinning				Characteristics after thinning					Increment			
t	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	4.7		5000	5.8	3.8	4.3	17					5000	5.8	3.8	4.3	17	2.78	1.16	10.4	3.4	5
10	9.5	22.0	5000	16.9	6.6	8.1	75	2337	6.2	5.8	26	2663	10.7	7.1	8.1	48	1.27	1.69	9.8	7.5	10
15	13.1	22.0	2663	16.2	8.8	11.2	93	1277	6.1	7.8	34	1386	10.1	9.6	11.3	59	0.95	1.49	8.2	7.9	15
20	15.9	22.0	1386	14.3	11.5	13.7	96	437	3.5	10.1	22	949	10.8	12.0	13.8	73	0.77	1.33	6.9	7.8	20
25	17.9	22.0	949	14.3	13.9	15.8	106	206	2.4	12.2	17	743	11.9	14.3	15.9	89	0.65	1.21	6.1	7.5	25
30	19.5	22.0	743	15.0	16.0	17.4	118	116	1.8	14.0	13	627	13.2	16.3	17.5	104	0.57	1.11	5.5	7.2	30
35	20.7	22.0	627	15.9	17.9	18.8	131	73	1.4	15.7	11	554	14.4	18.2	18.9	120	0.51	1.02	5.1	7.0	35
40	21.7	22.0	554	16.9	19.7	19.9	144	49	1.1	17.2	9	505	15.7	19.9	20.0	135	0.47	0.96	4.7	6.7	40
45	22.5	22.0	505	18.0	21.3	20.8	157	35	1.0	18.6	8	470	17.0	21.5	21.0	149	0.43	0.90	4.4	6.5	45
50	23.2	22.0	470	19.1	22.7	21.6	171	26	0.8	19.8	7	443	18.3	22.9	21.8	164	0.40	0.85	4.1	6.2	50
55	23.8	22.5	443	20.2	24.1	22.3	184	38	1.3	21.0	12	405	18.9	24.4	22.4	172	0.38	0.81	3.9	6.0	55
60	24.2	23.0	405	20.7	25.5	22.9	191	32	1.2	22.3	11	374	19.5	25.8	23.0	180	0.36	0.77	3.7	5.9	60
65	24.6	23.4	374	21.2	26.9	23.4	198	27	1.2	23.5	10	347	20.1	27.1	23.6	188	0.34	0.74	3.5	5.7	65
70	25.0	23.9	347	21.7	28.2	23.8	205	23	1.1	24.6	10	324	20.6	28.5	24.0	195	0.32	0.71	3.3	5.5	70
75	25.3	24.4	324	22.2	29.5	24.2	211	20	1.0	25.8	9	304	21.2	29.8	24.4	202	0.31	0.68	3.1	5.4	75
80	25.5	24.9	304	22.7	30.8	24.6	217	18	1.0	26.9	9	287	21.7	31.0	24.8	208	0.29	0.66	3.0	5.2	80
85	25.8	25.3	287	23.1	32.0	24.9	223	16	1.0	27.9	9	271	22.2	32.3	25.1	214	0.28	0.64	2.9	5.1	85
90	26.0	25.8	271	23.5	33.3	25.2	228	14	0.9	29.0	9	257	22.6	33.5	25.4	219	0.27	0.62	2.8	5.0	90
95	26.1	26.3	257	23.9	34.4	25.5	233	13	0.9	30.0	8	244	23.0	34.7	25.7	225	0.26	0.60	2.7	4.8	95
100	26.3	26.8	244	24.3	35.6	25.8	238	12	0.9	31.1	8	233	23.5	35.8	25.9	230	0.25	0.58	2.6	4.7	100

RUWE BERK, Vlaanderen 2020			**sterke laagdunning**									**Boniteit II, h_{50} = 20.4**								
SILVER BIRCH			heavy thinning from below									Site Class II, h_{50} = 20.4								
	Opstandkenmerken		**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics		Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	3.6		5000	3.2	2.8	3.4	8					5000	3.2	2.8	3.4	8	1.77	0.64	5.4	1.6	5
10	7.5	20.2	5000	14.0	6.0	6.5	56					5000	14.0	6.0	6.5	56	1.37	1.40	7.2	5.6	10
15	10.7	22.0	5000	19.1	7.0	9.1	93	2921	8.9	6.2	42	2079	10.2	7.9	9.2	51	0.89	1.27	7.2	6.2	15
20	13.2	22.0	2079	14.2	9.3	11.3	82	710	3.8	8.2	21	1369	10.4	9.9	11.4	61	0.73	1.15	5.9	6.2	20
25	15.1	22.0	1369	13.8	11.3	13.1	89	329	2.5	9.9	16	1040	11.2	11.7	13.2	73	0.62	1.06	5.3	6.1	25
30	16.7	22.0	1040	14.1	13.1	14.6	98	182	1.9	11.5	13	858	12.2	13.5	14.7	86	0.54	0.98	4.8	5.9	30
35	17.9	22.0	858	14.8	14.8	15.8	109	113	1.5	12.9	11	744	13.3	15.1	15.9	98	0.49	0.91	4.4	5.7	35
40	18.9	22.0	744	15.6	16.3	16.8	120	76	1.2	14.3	9	668	14.4	16.6	17.0	111	0.44	0.85	4.1	5.5	40
45	19.7	22.0	668	16.5	17.7	17.7	131	54	1.0	15.5	8	614	15.5	17.9	17.8	123	0.41	0.81	3.9	5.4	45
50	20.4	22.0	614	17.5	19.0	18.5	142	40	0.9	16.6	7	573	16.6	19.2	18.6	135	0.38	0.77	3.6	5.2	50
55	21.0	22.5	573	18.4	20.2	19.1	153	54	1.3	17.7	10	519	17.1	20.5	19.3	142	0.36	0.73	3.4	5.1	55
60	21.5	23.0	519	18.9	21.5	19.7	159	44	1.2	18.8	10	476	17.7	21.7	19.8	149	0.34	0.70	3.2	4.9	60
65	21.9	23.4	476	19.3	22.7	20.2	165	37	1.1	19.8	9	439	18.2	23.0	20.3	155	0.32	0.67	3.1	4.8	65
70	22.3	23.9	439	19.7	23.9	20.6	170	31	1.1	20.9	9	408	18.7	24.1	20.8	162	0.30	0.64	2.9	4.6	70
75	22.6	24.4	408	20.1	25.1	21.0	176	27	1.0	21.9	8	381	19.1	25.3	21.2	167	0.29	0.62	2.8	4.5	75
80	22.8	24.9	381	20.6	26.2	21.4	181	23	1.0	22.9	8	358	19.6	26.4	21.5	173	0.28	0.60	2.7	4.4	80
85	23.1	25.3	358	21.0	27.3	21.7	186	21	0.9	23.8	8	337	20.0	27.5	21.9	178	0.27	0.58	2.6	4.3	85
90	23.3	25.8	337	21.3	28.4	22.0	191	18	0.9	24.8	8	318	20.5	28.6	22.2	183	0.26	0.56	2.5	4.2	90
95	23.5	26.3	318	21.7	29.5	22.3	195	17	0.9	25.7	7	302	20.9	29.7	22.4	188	0.25	0.55	2.4	4.1	95
100	23.7	26.8	302	22.1	30.5	22.5	199	15	0.8	26.6	7	287	21.2	30.7	22.7	192	0.24	0.53	2.3	4.0	100

RUWE BERK, Vlaanderen 2020			sterke laagdunning									Boniteit III, h_{50} = 17.6								
SILVER BIRCH			heavy thinning from below									Site Class III, h_{50} = 17.6								
	Opstandkenmerken		Kenmerken voor dunning					Dunning				Kenmerken na dunning					Bijgroei				
	Stand characteristics		Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	*S%*	*N*	*G*	d_g	h_g	*V*	*N*	*G*	d_g	*V*	*N*	*G*	d_g	h_g	*V*	Ic_G	Im_G	Ic_V	Im_V	*t*
5	2.7		5000	1.4	1.9	2.6	3					5000	1.4	1.9	2.6	3	1.00	0.28	2.5	0.6	5
10	5.8		5000	8.9	4.8	5.1	29					5000	8.9	4.8	5.1	29	1.83	0.89	8.0	2.9	10
15	8.4	22.0	5000	15.6	6.3	7.3	63	1655	4.0	5.6	16	3345	11.6	6.6	7.3	48	0.84	1.04	5.8	4.2	15
20	10.6	22.0	3345	15.3	7.6	9.1	75	1239	4.4	6.7	21	2106	10.9	8.1	9.2	54	0.68	0.97	5.1	4.5	20
25	12.4	22.0	2106	14.1	9.2	10.6	78	562	2.9	8.1	15	1544	11.2	9.6	10.7	62	0.58	0.90	4.5	4.6	25
30	13.9	22.0	1544	13.9	10.7	12.0	84	307	2.1	9.4	12	1238	11.8	11.0	12.0	72	0.51	0.84	4.1	4.5	30
35	15.1	22.0	1238	14.2	12.1	13.1	91	188	1.7	10.6	10	1049	12.5	12.3	13.2	81	0.46	0.79	3.8	4.4	35
40	16.1	22.0	1049	14.7	13.4	14.0	100	125	1.3	11.7	9	924	13.4	13.6	14.1	91	0.42	0.75	3.6	4.3	40
45	16.9	22.0	924	15.4	14.6	14.9	108	88	1.1	12.7	8	835	14.3	14.8	15.0	101	0.39	0.71	3.4	4.2	45
50	17.6	22.0	835	16.2	15.7	15.6	117	65	1.0	13.7	7	770	15.2	15.8	15.7	110	0.36	0.67	3.2	4.1	50
55	18.2	22.5	770	17.0	16.7	16.2	126	80	1.3	14.6	10	690	15.6	17.0	16.3	116	0.34	0.65	3.0	4.1	55
60	18.7	23.0	690	17.3	17.8	16.8	131	64	1.2	15.6	9	626	16.0	18.1	16.9	122	0.32	0.62	2.8	4.0	60
65	19.2	23.4	626	17.6	18.9	17.2	136	53	1.1	16.5	8	573	16.4	19.1	17.4	127	0.30	0.60	2.7	3.9	65
70	19.5	23.9	573	17.9	20.0	17.7	140	44	1.1	17.4	8	528	16.9	20.2	17.8	132	0.29	0.57	2.6	3.8	70
75	19.9	24.4	528	18.3	21.0	18.1	145	38	1.0	18.3	8	491	17.3	21.2	18.2	137	0.27	0.55	2.4	3.7	75
80	20.2	24.9	491	18.6	22.0	18.4	149	33	0.9	19.2	7	458	17.7	22.2	18.6	142	0.26	0.54	2.3	3.6	80
85	20.5	25.3	458	18.9	22.9	18.7	153	29	0.9	20.0	7	429	18.0	23.1	18.9	146	0.25	0.52	2.2	3.5	85
90	20.7	25.8	429	19.3	23.9	19.0	157	25	0.9	20.9	7	404	18.4	24.1	19.2	151	0.24	0.50	2.2	3.5	90
95	20.9	26.3	404	19.6	24.9	19.3	161	23	0.8	21.7	7	381	18.8	25.0	19.4	155	0.23	0.49	2.1	3.4	95
100	21.1	26.8	381	19.9	25.8	19.5	165	20	0.8	22.5	6	361	19.1	26.0	19.7	159	0.23	0.48	2.0	3.3	100

RUWE BERK, Vlaanderen 2020			**sterke laagdunning**									**Boniteit IV, h_{50} = 14.8**								
SILVER BIRCH			heavy thinning from below									Site Class IV, h_{50} = 14.8								
	Opstandkenmerken		**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics		Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	***h_{top}***	***S%***	***N***	***G***	***d_g***	***h_g***	***V***	***N***	***G***	***d_g***	***V***	***N***	***G***	***d_g***	***h_g***	***V***	***Ic_G***	***Im_G***	***Ic_V***	***Im_V***	***t***
5	1.9		5000	0.4	1.0	2.0	1					5000	0.4	1.0	2.0	1	0.44	0.08	0.9	0.2	5
10	4.2		5000	4.6	3.4	3.9	12					5000	4.6	3.4	3.9	12	1.11	0.46	3.8	1.2	10
15	6.4		5000	10.9	5.3	5.6	38					5000	10.9	5.3	5.6	38	1.36	0.72	6.5	2.6	15
20	8.2	22.0	5000	15.3	6.2	7.1	61	1480	3.5	5.5	13	3520	11.8	6.5	7.1	48	0.63	0.77	4.2	3.0	20
25	9.8	22.0	3520	14.7	7.3	8.4	67	1044	3.4	6.4	15	2476	11.4	7.6	8.5	53	0.54	0.73	3.8	3.2	25
30	11.2	22.0	2476	13.9	8.5	9.6	71	559	2.4	7.4	12	1917	11.5	8.7	9.6	59	0.48	0.69	3.5	3.3	30
35	12.3	22.0	1917	13.8	9.6	10.6	75	338	1.9	8.4	10	1579	11.9	9.8	10.6	66	0.43	0.66	3.2	3.3	35
40	13.3	22.0	1579	14.0	10.6	11.4	81	222	1.5	9.3	8	1357	12.5	10.8	11.5	73	0.39	0.63	3.0	3.3	40
45	14.1	22.0	1357	14.4	11.6	12.2	88	155	1.3	10.1	7	1202	13.1	11.8	12.3	80	0.36	0.60	2.9	3.2	45
50	14.8	22.0	1202	14.9	12.5	12.9	94	113	1.1	11.0	6	1089	13.8	12.7	13.0	88	0.34	0.58	2.7	3.2	50
55	15.4	22.5	1089	15.4	13.4	13.5	101	128	1.4	11.7	9	961	14.1	13.6	13.6	92	0.32	0.55	2.6	3.1	55
60	16.0	23.0	961	15.6	14.4	14.0	105	101	1.3	12.6	8	860	14.4	14.6	14.1	97	0.30	0.53	2.4	3.1	60
65	16.4	23.4	860	15.8	15.3	14.5	108	82	1.1	13.4	8	779	14.7	15.5	14.6	101	0.28	0.51	2.3	3.0	65
70	16.9	23.9	779	16.0	16.2	14.9	112	67	1.1	14.1	7	711	15.0	16.4	15.0	105	0.27	0.50	2.2	3.0	70
75	17.2	24.4	711	16.3	17.1	15.3	116	57	1.0	14.9	7	655	15.3	17.3	15.4	109	0.26	0.48	2.1	2.9	75
80	17.6	24.9	655	16.6	17.9	15.7	119	48	0.9	15.7	6	606	15.6	18.1	15.8	113	0.24	0.47	2.0	2.9	80
85	17.8	25.3	606	16.8	18.8	16.0	123	42	0.9	16.4	6	564	15.9	19.0	16.1	117	0.23	0.45	1.9	2.8	85
90	18.1	25.8	564	17.1	19.6	16.3	126	37	0.8	17.1	6	528	16.2	19.8	16.4	120	0.23	0.44	1.9	2.8	90
95	18.4	26.3	528	17.3	20.5	16.6	129	32	0.8	17.8	6	495	16.5	20.6	16.7	124	0.22	0.43	1.8	2.7	95
100	18.6	26.8	495	17.6	21.3	16.8	132	29	0.8	18.6	6	467	16.8	21.4	16.9	127	0.21	0.42	1.7	2.7	100

RUWE BERK, Vlaanderen 2020			**sterke laagdunning**									**Boniteit V, h_{50} = 12.0**								
SILVER BIRCH			heavy thinning from below									Site Class V, h_{50} = 12.0								
	Opstandkenmerken		**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**			
	Stand characteristics		Characteristics before thinning					Thinning				Characteristics after thinning					Increment			
t	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	1.3		5000				0					5000				0			0.1	0.0	5
10	2.9		5000	1.8	2.1	2.8	4					5000	1.8	2.1	2.8	4	0.58	0.18	1.5	0.4	10
15	4.6		5000	5.4	3.7	4.2	15					5000	5.4	3.7	4.2	15	0.82	0.36	3.0	1.0	15
20	6.0		5000	9.8	5.0	5.4	33					5000	9.8	5.0	5.4	33	0.92	0.49	4.2	1.7	20
25	7.4	22.0	5000	13.8	5.9	6.4	50	609	1.3	5.2	4	4391	12.5	6.0	6.4	46	0.50	0.55	1.1	2.0	25
30	8.5	22.0	4391	14.9	6.6	7.4	61	1125	2.9	5.8	12	3265	11.9	6.8	7.4	49	0.44	0.54	2.9	2.2	30
35	9.6	22.0	3265	14.0	7.4	8.2	63	667	2.2	6.5	9	2598	11.8	7.6	8.3	54	0.40	0.52	2.7	2.3	35
40	10.5	22.0	2598	13.7	8.2	9.0	66	431	1.7	7.2	8	2167	12.0	8.4	9.1	58	0.36	0.50	2.5	2.3	40
45	11.3	22.0	2167	13.7	9.0	9.7	70	296	1.4	7.9	7	1871	12.3	9.1	9.8	63	0.34	0.49	2.4	2.3	45
50	12.0	22.0	1871	13.9	9.7	10.3	75	214	1.2	8.5	6	1657	12.7	9.9	10.4	69	0.32	0.47	2.3	2.3	50
55	12.6	22.5	1657	14.2	10.5	10.9	80	223	1.5	9.1	8	1434	12.8	10.6	11.0	72	0.30	0.46	2.1	2.3	55
60	13.2	23.0	1434	14.2	11.2	11.4	82	173	1.3	9.8	7	1261	12.9	11.4	11.5	75	0.28	0.44	2.0	2.3	60
65	13.7	23.4	1261	14.2	12.0	11.9	85	137	1.2	10.5	7	1124	13.1	12.2	12.0	78	0.26	0.43	1.9	2.3	65
70	14.1	23.9	1124	14.3	12.7	12.3	88	111	1.1	11.1	6	1012	13.2	12.9	12.4	81	0.25	0.42	1.8	2.2	70
75	14.5	24.4	1012	14.4	13.5	12.7	90	92	1.0	11.8	6	920	13.4	13.6	12.8	84	0.24	0.40	1.8	2.2	75
80	14.9	24.9	920	14.6	14.2	13.1	93	77	0.9	12.4	6	842	13.7	14.4	13.2	87	0.23	0.39	1.7	2.2	80
85	15.2	25.3	842	14.8	14.9	13.4	96	66	0.9	13.0	5	776	13.9	15.1	13.5	90	0.22	0.38	1.6	2.1	85
90	15.5	25.8	776	14.9	15.7	13.7	98	57	0.8	13.7	5	720	14.1	15.8	13.8	93	0.21	0.37	1.6	2.1	90
95	15.8	26.3	720	15.1	16.4	14.0	101	50	0.8	14.3	5	670	14.3	16.5	14.1	96	0.20	0.36	1.5	2.1	95
100	16.0	26.8	670	15.3	17.1	14.3	103	44	0.8	14.9	5	626	14.6	17.2	14.4	98	0.19	0.36	1.5	2.1	100

Es

Fraxinus excelsior **Ash**

Bron: Jansen, J.J. L. Goudzwaard, A. Oosterbaan, G.M.J. Mohren en J. den Ouden, 2018. *Groei en productie van es in Nederland*. FEM Groei en Productie Rapport 2018 – 11, 44 blz.

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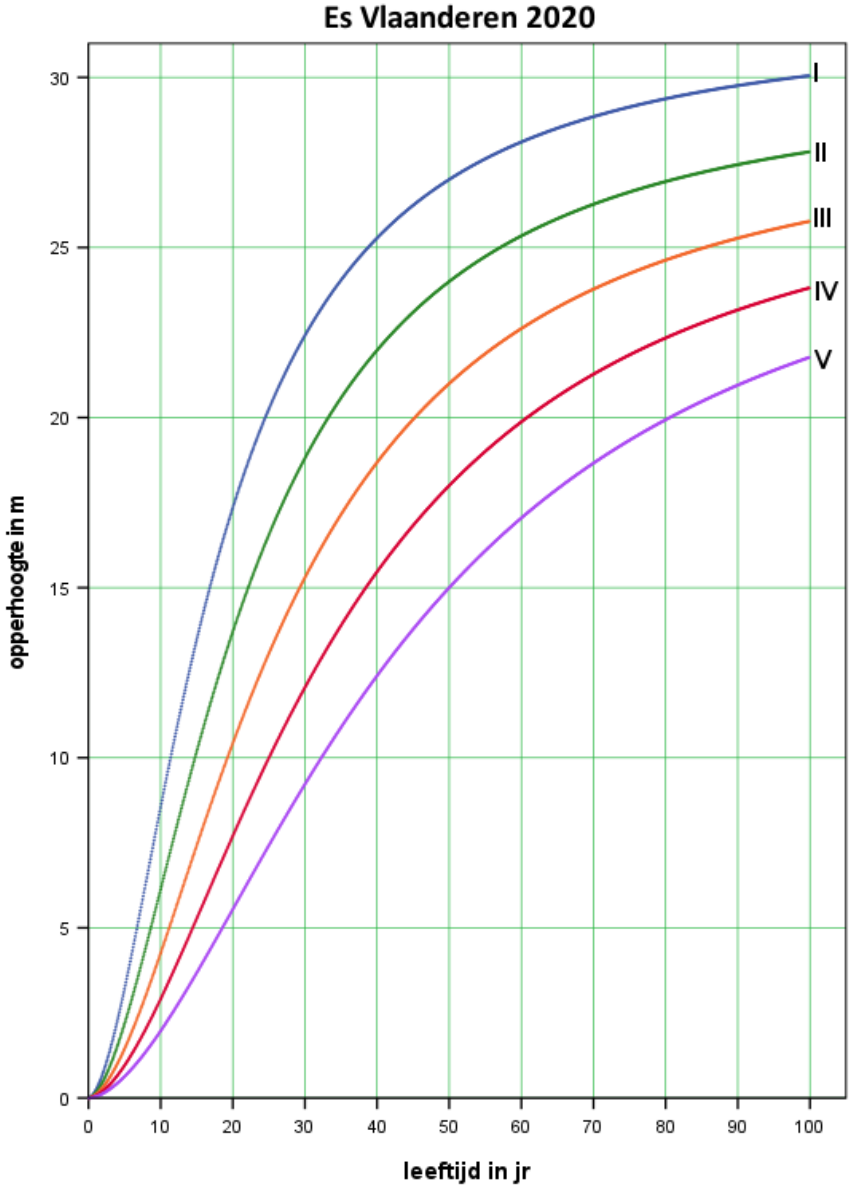

ES, Vlaanderen 2020			**matige laagdunning**										**Boniteit I, h_{50} = 27.0**								
ASH			moderate thinning from below										Site Class I, h_{50} = 27.0								
	Opstandkenmerken		**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics		Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	3.2		5000	1.5	2.0	2.6	2					5000	1.5	2.0	2.6	2	1.58	0.30	3.1	0.4	5
10	8.5	19.0	5000	17.4	6.7	6.8	78	613	1.9	6.2	8	4387	15.5	6.7	6.9	70	2.58	1.74	25.6	7.8	10
15	13.5	19.0	4387	26.4	8.8	11.4	163	2622	14.1	8.3	84	1765	12.3	9.4	11.6	79	1.87	1.88	17.2	11.4	15
20	17.3	19.0	1765	20.7	12.2	15.1	157	701	7.2	11.5	53	1064	13.4	12.7	15.3	104	1.51	1.83	14.9	12.4	20
25	20.2	19.0	1064	20.4	15.6	17.9	175	284	4.8	14.6	39	780	15.6	16.0	18.1	136	1.29	1.74	13.6	12.8	25
30	22.4	19.0	780	21.7	18.8	19.9	201	143	3.5	17.6	31	637	18.2	19.1	20.2	170	1.14	1.66	12.6	12.8	30
35	24.0	19.0	637	23.6	21.7	21.5	231	83	2.7	20.3	25	554	21.0	22.0	21.8	206	1.03	1.57	11.7	12.7	35
40	25.3	19.0	554	25.9	24.4	22.7	262	53	2.2	22.8	21	501	23.7	24.6	23.0	242	0.95	1.50	11.0	12.5	40
45	26.2	19.0	501	28.3	26.8	23.6	295	36	1.8	25.0	18	465	26.5	27.0	23.9	277	0.88	1.43	10.3	12.3	45
50	27.0	19.0	465	30.7	29.0	24.4	328	26	1.5	27.1	15	439	29.3	29.1	24.7	313	0.82	1.38	9.8	12.1	50
55	27.6	19.2	439	33.2	31.0	25.0	360	29	1.9	29.0	20	410	31.3	31.2	25.3	341	0.77	1.32	9.3	11.9	55
60	28.1	19.5	410	35.0	33.0	25.5	386	24	1.8	30.8	18	386	33.2	33.1	25.8	367	0.72	1.27	8.8	11.6	60
65	28.5	19.7	386	36.7	34.8	25.9	410	20	1.6	32.5	17	366	35.1	34.9	26.2	393	0.68	1.23	8.4	11.4	65
70	28.8	19.9	366	38.4	36.5	26.2	434	17	1.5	34.2	17	349	36.8	36.6	26.6	417	0.64	1.19	8.0	11.2	70
75	29.1	20.2	349	39.9	38.2	26.5	456	15	1.5	35.7	16	335	38.5	38.3	26.9	440	0.61	1.15	7.6	10.9	75
80	29.4	20.4	335	41.4	39.7	26.8	478	13	1.4	37.2	15	322	40.0	39.8	27.1	462	0.58	1.12	7.3	10.7	80
85	29.6	20.6	322	42.9	41.2	27.0	498	12	1.4	38.6	15	310	41.5	41.3	27.4	483	0.55	1.08	7.1	10.5	85
90	29.8	20.9	310	44.2	42.6	27.2	518	11	1.3	40.0	15	299	42.9	42.7	27.6	503	0.53	1.05	6.8	10.3	90
95	29.9	21.1	299	45.5	44.0	27.4	537	10	1.3	41.3	14	290	44.2	44.1	27.8	522	0.51	1.03	6.6	10.1	95
100	30.1	21.3	290	46.7	45.3	27.6	555	9	1.3	42.5	14	281	45.4	45.4	27.9	541	0.49	1.00	6.4	10.0	100

ES, Vlaanderen 2020			**matige laagdunning**									**Boniteit II, h_{50} = 24.0**								
ASH			moderate thinning from below									Site Class II, h_{50} = 24.0								
	Opstandkenmerken		**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics		Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	2.2		5000	0.3	0.9	1.7	0					5000	0.3	0.9	1.7	0	0.52	0.06	0.7	0.1	5
10	6.1		5000	9.7	5.0	4.9	24					5000	9.7	5.0	4.9	24	3.34	0.97	11.4	2.4	10
15	10.2	19.0	5000	22.2	7.5	8.4	112	1913	6.6	6.7	32	3087	15.5	8.0	8.5	80	1.94	1.48	14.9	7.5	15
20	13.7	19.0	3087	24.2	10.0	11.6	152	1382	8.5	8.9	51	1705	15.6	10.8	11.8	101	1.56	1.54	13.9	9.2	20
25	16.5	19.0	1705	22.8	13.0	14.3	167	537	5.6	11.5	39	1168	17.2	13.7	14.5	128	1.32	1.52	12.7	10.0	25
30	18.8	19.0	1168	23.4	16.0	16.5	189	263	4.1	14.0	31	905	19.3	16.5	16.7	157	1.16	1.47	11.9	10.4	30
35	20.6	19.0	905	24.8	18.7	18.2	215	149	3.2	16.4	26	755	21.7	19.1	18.4	189	1.05	1.42	11.1	10.5	35
40	22.0	19.0	755	26.7	21.2	19.6	243	93	2.5	18.6	22	662	24.1	21.5	19.8	221	0.96	1.37	10.5	10.6	40
45	23.1	19.0	662	28.8	23.5	20.7	272	63	2.1	20.6	19	600	26.7	23.8	20.9	253	0.89	1.32	9.9	10.5	45
50	24.0	19.0	600	30.9	25.6	21.5	301	44	1.7	22.4	16	555	29.2	25.9	21.8	285	0.83	1.27	9.4	10.4	50
55	24.7	19.2	555	33.2	27.6	22.3	331	45	2.1	24.2	20	510	31.1	27.9	22.5	311	0.77	1.23	8.9	10.3	55
60	25.3	19.5	510	34.9	29.5	22.9	355	36	1.9	25.9	18	474	33.0	29.8	23.2	337	0.72	1.19	8.5	10.2	60
65	25.8	19.7	474	36.5	31.3	23.4	378	29	1.7	27.4	17	445	34.8	31.5	23.7	361	0.68	1.15	8.1	10.0	65
70	26.3	19.9	445	38.1	33.0	23.8	401	24	1.6	29.0	16	421	36.5	33.2	24.1	385	0.64	1.12	7.7	9.9	70
75	26.6	20.2	421	39.6	34.6	24.2	422	21	1.5	30.4	15	400	38.1	34.8	24.5	407	0.61	1.08	7.4	9.7	75
80	26.9	20.4	400	41.1	36.2	24.5	443	18	1.4	31.8	15	382	39.7	36.4	24.8	429	0.58	1.05	7.1	9.6	80
85	27.2	20.6	382	42.5	37.6	24.8	463	16	1.4	33.1	14	366	41.2	37.8	25.1	449	0.56	1.02	6.8	9.4	85
90	27.4	20.9	366	43.9	39.0	25.0	483	14	1.3	34.4	14	352	42.6	39.2	25.4	469	0.53	1.00	6.6	9.3	90
95	27.6	21.1	352	45.2	40.4	25.3	502	13	1.3	35.6	13	340	43.9	40.6	25.6	488	0.51	0.97	6.4	9.1	95
100	27.8	21.3	340	46.4	41.7	25.5	520	12	1.2	36.8	13	328	45.2	41.9	25.8	507	0.49	0.95	6.2	9.0	100

ES, Vlaanderen 2020			**matige laagdunning**									**Boniteit III, h_{50} = 21.0**								
ASH			moderate thinning from below									Site Class III, h_{50} = 21.0								
	Opstandkenmerken		**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics		Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	1.4		5000	0.0	0.1	1.2	0					5000	0.0	0.1	1.2	0	0.08	0.00	0.1	0.0	5
10	4.2		5000	3.6	3.0	3.4	7					5000	3.6	3.0	3.4	7	1.52	0.36	3.7	0.7	10
15	7.4	20.5	5000	14.9	6.2	5.9	45					5000	14.9	6.2	5.9	45	2.14	0.99	18.7	3.0	15
20	10.4	19.0	5000	23.5	7.7	8.6	120	2053	6.6	6.4	32	2947	16.9	8.5	8.7	88	1.58	1.17	12.1	6.0	20
25	13.1	19.0	2947	24.3	10.2	11.1	148	1071	6.0	8.5	35	1875	18.3	11.1	11.2	113	1.36	1.24	11.7	7.2	25
30	15.3	19.0	1875	24.6	12.9	13.2	169	508	4.5	10.6	29	1368	20.1	13.7	13.3	140	1.19	1.24	11.1	7.9	30
35	17.1	19.0	1368	25.8	15.5	15.0	194	280	3.5	12.7	25	1088	22.2	16.1	15.1	168	1.07	1.23	10.5	8.3	35
40	18.7	19.0	1088	27.3	17.9	16.4	219	171	2.9	14.6	22	917	24.5	18.4	16.6	198	0.98	1.20	10.0	8.5	40
45	19.9	19.0	917	29.2	20.1	17.7	246	113	2.4	16.4	19	804	26.8	20.6	17.9	227	0.90	1.17	9.5	8.7	45
50	21.0	19.0	804	31.1	22.2	18.7	273	79	2.0	18.1	17	725	29.1	22.6	18.9	257	0.84	1.14	9.1	8.7	50
55	21.9	19.2	725	33.2	24.1	19.6	301	73	2.2	19.7	19	652	30.9	24.6	19.8	282	0.78	1.11	8.6	8.7	55
60	22.6	19.5	652	34.7	26.0	20.3	324	56	2.0	21.2	18	596	32.7	26.4	20.5	306	0.73	1.08	8.2	8.7	60
65	23.2	19.7	596	36.3	27.8	20.9	346	45	1.8	22.7	16	551	34.4	28.2	21.2	330	0.69	1.05	7.8	8.7	65
70	23.8	19.9	551	37.8	29.6	21.4	368	37	1.7	24.1	16	514	36.1	29.9	21.7	353	0.65	1.03	7.5	8.6	70
75	24.2	20.2	514	39.3	31.2	21.9	389	31	1.6	25.5	15	483	37.7	31.5	22.2	375	0.62	1.00	7.2	8.5	75
80	24.6	20.4	483	40.7	32.8	22.3	410	26	1.5	26.8	14	457	39.3	33.1	22.6	396	0.59	0.97	6.9	8.4	80
85	25.0	20.6	457	42.1	34.2	22.7	430	23	1.4	28.0	13	435	40.7	34.5	23.0	416	0.56	0.95	6.7	8.3	85
90	25.3	20.9	435	43.5	35.7	23.0	449	20	1.3	29.2	13	415	42.2	36.0	23.3	436	0.54	0.93	6.4	8.2	90
95	25.5	21.1	415	44.8	37.1	23.3	468	17	1.3	30.4	13	398	43.5	37.3	23.6	455	0.51	0.91	6.2	8.1	95
100	25.8	21.3	398	46.0	38.4	23.5	486	16	1.2	31.5	12	382	44.8	38.7	23.8	474	0.49	0.89	6.0	8.0	100

ES, Vlaanderen 2020			**matige laagdunning**													**Boniteit IV, h_{50} = 18.0**				
ASH			moderate thinning from below													Site Class IV, h_{50} = 18.0				
	Opstandkenmerken		**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics		Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	1.0		5000				0					5000				0			0.0	0.0	5
10	2.9		5000	1.1	1.6	2.3	1					5000	1.1	1.6	2.3	1	0.60	0.11	1.0	0.1	10
15	5.3		5000	6.5	4.1	4.2	15					5000	6.5	4.1	4.2	15	1.61	0.44	4.7	1.0	15
20	7.7	19.7	5000	16.1	6.4	6.2	67					5000	16.1	6.4	6.2	67	1.69	0.80	17.5	3.3	20
25	10.0	19.0	5000	23.6	7.8	8.2	118	1795	4.9	5.9	23	3205	18.7	8.6	8.3	94	1.40	0.94	10.2	4.7	25
30	12.1	19.0	3205	25.3	10.0	10.1	145	1007	4.6	7.6	25	2198	20.8	11.0	10.3	120	1.23	1.01	10.1	5.6	30
35	13.9	19.0	2198	26.6	12.4	11.9	170	539	3.7	9.4	23	1659	22.9	13.2	12.0	147	1.10	1.03	9.7	6.2	35
40	15.5	19.0	1659	28.1	14.7	13.4	195	322	3.1	11.0	20	1337	25.0	15.4	13.6	175	1.00	1.03	9.4	6.6	40
45	16.8	19.0	1337	29.8	16.8	14.7	221	208	2.6	12.6	18	1129	27.2	17.5	14.9	202	0.92	1.02	9.0	6.9	45
50	18.0	19.0	1129	31.6	18.9	15.8	247	142	2.2	14.1	17	987	29.4	19.5	16.0	230	0.85	1.01	8.7	7.1	50
55	19.0	19.2	987	33.5	20.8	16.8	273	123	2.3	15.6	18	864	31.2	21.4	17.0	255	0.80	0.99	8.4	7.3	55
60	19.9	19.5	864	35.0	22.7	17.7	296	93	2.1	17.0	17	771	32.9	23.3	17.9	279	0.74	0.97	8.0	7.3	60
65	20.6	19.7	771	36.5	24.5	18.4	318	72	1.9	18.4	16	699	34.6	25.1	18.6	302	0.70	0.95	7.6	7.4	65
70	21.3	19.9	699	38.0	26.3	19.1	339	57	1.8	19.7	15	642	36.2	26.8	19.3	324	0.66	0.94	7.3	7.4	70
75	21.8	20.2	642	39.4	28.0	19.6	360	47	1.6	21.0	14	595	37.8	28.4	19.9	346	0.62	0.92	7.1	7.4	75
80	22.3	20.4	595	40.9	29.6	20.1	381	39	1.5	22.2	13	556	39.3	30.0	20.4	367	0.59	0.90	6.8	7.3	80
85	22.8	20.6	556	42.2	31.1	20.6	401	33	1.4	23.4	13	523	40.8	31.5	20.8	388	0.57	0.88	6.6	7.3	85
90	23.2	20.9	523	43.6	32.6	21.0	420	29	1.3	24.5	12	494	42.2	33.0	21.2	408	0.54	0.86	6.3	7.2	90
95	23.5	21.1	494	44.9	34.0	21.3	439	25	1.3	25.6	12	469	43.6	34.4	21.6	427	0.52	0.84	6.1	7.2	95
100	23.8	21.3	469	46.2	35.4	21.7	457	22	1.2	26.7	12	447	44.9	35.8	21.9	446	0.50	0.83	6.0	7.1	100

ES, Vlaanderen 2020			**matige laagdunning**									**Boniteit V, h_{50} = 15.0**								
ASH			moderate thinning from below									Site Class V, h_{50} = 15.0								
	Opstandkenmerken		**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics		Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	0.6		5000				0					5000				0			0.0	0.0	5
10	2.0		5000	0.2	0.7	1.6	0					5000	0.2	0.7	1.6	0	0.18	0.02	0.2	0.0	10
15	3.7		5000	2.3	2.4	2.9	4					5000	2.3	2.4	2.9	4	0.72	0.16	1.5	0.3	15
20	5.5		5000	7.5	4.4	4.4	17					5000	7.5	4.4	4.4	17	1.33	0.37	4.1	0.9	20
25	7.4	20.5	5000	15.2	6.2	5.9	62					5000	15.2	6.2	5.9	62	1.47	0.61	15.4	2.5	25
30	9.2	19.0	5000	21.8	7.5	7.5	103	1236	2.5	5.1	11	3764	19.3	8.1	7.6	92	1.26	0.73	8.5	3.4	30
35	10.9	19.0	3764	25.4	9.3	9.1	135	1066	3.4	6.3	17	2698	22.0	10.2	9.2	118	1.14	0.80	8.7	4.2	35
40	12.4	19.0	2698	27.4	11.4	10.5	161	621	2.9	7.7	16	2077	24.5	12.3	10.6	145	1.03	0.83	8.6	4.7	40
45	13.8	19.0	2077	29.5	13.4	11.8	187	392	2.6	9.1	15	1685	26.9	14.3	11.9	172	0.94	0.85	8.4	5.2	45
50	15.0	19.0	1685	31.4	15.4	13.0	213	263	2.2	10.4	14	1422	29.2	16.2	13.1	199	0.87	0.86	8.2	5.5	50
55	16.1	19.2	1422	33.4	17.3	14.0	239	215	2.3	11.7	16	1206	31.1	18.1	14.2	224	0.81	0.85	8.0	5.7	55
60	17.0	19.5	1206	35.0	19.2	15.0	263	158	2.1	13.0	15	1048	32.9	20.0	15.2	248	0.76	0.85	7.7	5.9	60
65	17.9	19.7	1048	36.6	21.1	15.8	285	120	1.9	14.3	14	928	34.7	21.8	16.0	271	0.71	0.84	7.4	6.0	65
70	18.7	19.9	928	38.1	22.9	16.5	308	94	1.8	15.5	14	834	36.4	23.6	16.8	294	0.67	0.83	7.1	6.1	70
75	19.3	20.2	834	39.6	24.6	17.2	329	75	1.6	16.7	13	759	38.0	25.2	17.4	316	0.63	0.82	6.9	6.2	75
80	19.9	20.4	759	41.1	26.2	17.8	350	61	1.5	17.8	12	698	39.5	26.9	18.1	338	0.60	0.80	6.7	6.2	80
85	20.5	20.6	698	42.5	27.8	18.4	371	51	1.4	18.9	12	647	41.1	28.4	18.6	359	0.57	0.79	6.5	6.2	85
90	21.0	20.9	647	43.9	29.4	18.8	391	43	1.3	20.0	11	604	42.5	29.9	19.1	379	0.55	0.78	6.3	6.2	90
95	21.4	21.1	604	45.2	30.9	19.3	410	37	1.3	21.0	11	567	43.9	31.4	19.5	399	0.53	0.77	6.1	6.2	95
100	21.8	21.3	567	46.5	32.3	19.7	429	32	1.2	22.0	11	535	45.3	32.8	19.9	418	0.50	0.75	5.9	6.2	100

Zwarte els
Alnus glutionosa **Black alder**

Bron: Jansen, J.J., A. Oosterbaan, G.M.J. Mohren, P. Copini en J. den Ouden, 2018. Groei en productie van zwarte els in Nederland. FEM Groei en Productie Rapport 2018 – 10, 47 blz.

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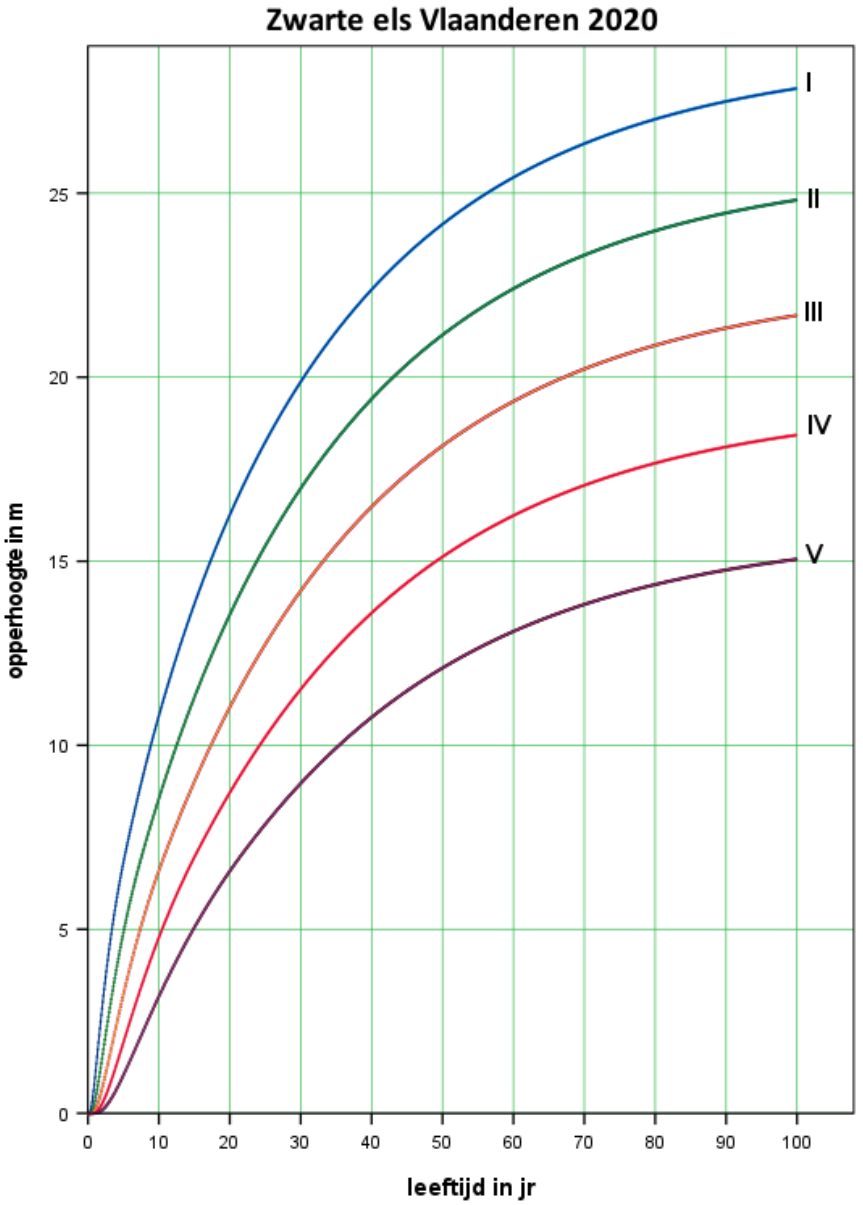

ZWARTE ELS, Vlaanderen 2020			**matige dunning**									**Boniteit I, h_{50} = 24.0**								
BLACK ALDER			moderate thinning									Site Class I, h_{50} = 24.0								
	Opstandkenmerken		**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics		Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	6.4		5000	14.0	6.0	5.3	47					5000	14.0	6.0	5.3	47	3.91	2.79	19.1	9.5	5
10	10.4	19.0	5000	22.6	7.6	9.0	118	2047	6.9	6.5	36	2953	15.7	8.2	9.0	82	1.36	2.26	12.1	11.8	10
15	13.5	19.0	2953	22.6	9.9	11.9	143	1187	6.8	8.5	43	1766	15.9	10.7	12.0	100	1.27	1.97	11.7	11.9	15
20	15.9	19.0	1766	21.8	12.5	14.4	156	503	4.6	10.8	33	1263	17.3	13.2	14.5	123	1.12	1.77	10.9	11.8	20
25	17.9	19.0	1263	22.6	15.1	16.4	177	268	3.5	12.9	27	995	19.1	15.6	16.5	149	1.02	1.63	10.5	11.5	25
30	19.6	19.0	995	24.0	17.5	18.1	200	163	2.9	14.9	24	833	21.2	18.0	18.3	176	0.95	1.52	10.1	11.3	30
35	21.0	19.0	833	25.7	19.8	19.6	226	107	2.4	16.9	21	725	23.3	20.2	19.7	205	0.89	1.44	9.8	11.1	35
40	22.2	19.0	725	27.6	22.0	20.8	253	75	2.1	18.7	19	651	25.6	22.4	21.0	234	0.84	1.37	9.5	10.9	40
45	23.2	19.0	651	29.7	24.1	21.9	280	54	1.8	20.5	17	596	27.9	24.4	22.0	263	0.80	1.31	9.2	10.8	45
50	24.0	19.0	596	31.8	26.1	22.7	309	41	1.6	22.1	15	555	30.2	26.3	22.9	293	0.77	1.25	8.9	10.6	50
55	24.7	19.3	555	34.0	27.9	23.5	337	49	2.2	23.7	22	506	31.8	28.3	23.7	315	0.73	1.21	8.5	10.4	55
60	25.3	19.7	506	35.3	29.8	24.1	357	40	2.0	25.3	20	466	33.3	30.2	24.3	337	0.69	1.17	8.1	10.2	60
65	25.8	20.0	466	36.7	31.7	24.7	376	33	1.9	26.9	19	433	34.8	32.0	24.9	357	0.66	1.13	7.7	10.1	65
70	26.3	20.3	433	38.0	33.4	25.1	395	28	1.8	28.4	18	405	36.3	33.7	25.3	376	0.63	1.09	7.4	9.9	70
75	26.6	20.7	405	39.3	35.1	25.5	412	24	1.7	29.8	18	382	37.7	35.4	25.7	395	0.60	1.06	7.1	9.7	75
80	26.9	21.0	382	40.6	36.8	25.9	429	21	1.6	31.2	17	361	39.0	37.1	26.1	413	0.57	1.03	6.8	9.5	80
85	27.2	21.3	361	41.8	38.4	26.2	446	18	1.5	32.6	16	343	40.3	38.7	26.4	430	0.55	1.00	6.5	9.4	85
90	27.4	21.6	343	43.0	39.9	26.4	461	16	1.4	33.9	16	327	41.5	40.2	26.6	446	0.53	0.98	6.2	9.2	90
95	27.6	22.0	327	44.1	41.4	26.6	476	14	1.4	35.2	15	313	42.7	41.7	26.8	461	0.51	0.95	5.9	9.0	95
100	27.8	22.3	313	45.2	42.9	26.8	490	13	1.3	36.4	15	300	43.9	43.2	27.0	476	0.49	0.93	5.7	8.9	100

ZWARTE ELS, Vlaanderen 2020			**matige dunning**										**Boniteit II, h_{50} = 21.0**								
BLACK ALDER			moderate thinning										Site Class II, h_{50} = 21.0								
	Opstandkenmerken		**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics		Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	4.6		5000	6.5	4.1	3.7	17					5000	6.5	4.1	3.7	17	3.10	1.30	10.6	3.4	5
10	8.2	19.0	5000	19.4	7.0	6.9	85	259	0.7	6.0	3	4741	18.6	7.1	6.9	82	1.46	1.94	12.9	8.5	10
15	11.0	19.0	4741	25.7	8.3	9.5	140	2080	8.4	7.2	46	2661	17.3	9.1	9.6	94	1.30	1.76	11.0	9.5	15
20	13.2	19.0	2661	23.4	10.6	11.7	146	835	5.4	9.1	34	1826	18.0	11.2	11.8	112	1.14	1.63	10.1	9.8	20
25	15.1	19.0	1826	23.4	12.8	13.6	161	429	4.0	10.9	28	1397	19.4	13.3	13.7	133	1.03	1.52	9.7	9.8	25
30	16.7	19.0	1397	24.3	14.9	15.2	181	254	3.2	12.7	24	1143	21.1	15.3	15.3	157	0.96	1.43	9.3	9.7	30
35	18.1	19.0	1143	25.7	16.9	16.6	202	164	2.7	14.4	21	979	23.1	17.3	16.7	181	0.89	1.36	9.0	9.6	35
40	19.2	19.0	979	27.4	18.9	17.7	225	113	2.3	16.1	19	867	25.1	19.2	17.9	207	0.85	1.30	8.7	9.5	40
45	20.2	19.0	867	29.2	20.7	18.7	250	81	2.0	17.6	17	786	27.3	21.0	18.9	233	0.81	1.24	8.5	9.4	45
50	21.0	19.0	786	31.2	22.5	19.6	274	60	1.7	19.1	15	725	29.5	22.7	19.7	259	0.77	1.20	8.2	9.3	50
55	21.7	19.3	725	33.2	24.2	20.3	300	69	2.3	20.5	21	656	31.0	24.5	20.5	279	0.73	1.16	7.9	9.2	55
60	22.3	19.7	656	34.5	25.9	20.9	317	55	2.1	22.0	19	601	32.4	26.2	21.1	298	0.69	1.12	7.5	9.1	60
65	22.8	20.0	601	35.8	27.5	21.5	335	45	1.9	23.4	18	556	33.8	27.8	21.6	316	0.66	1.09	7.2	9.0	65
70	23.2	20.3	556	37.1	29.1	21.9	351	38	1.8	24.8	17	518	35.2	29.4	22.1	334	0.63	1.06	6.9	8.8	70
75	23.6	20.7	518	38.3	30.7	22.3	368	32	1.7	26.1	16	486	36.6	31.0	22.5	351	0.60	1.03	6.5	8.7	75
80	23.9	21.0	486	39.5	32.2	22.7	383	28	1.6	27.3	16	458	37.9	32.5	22.8	367	0.57	1.00	6.3	8.5	80
85	24.2	21.3	458	40.7	33.6	22.9	398	24	1.5	28.6	15	434	39.2	33.9	23.1	383	0.55	0.97	6.0	8.4	85
90	24.4	21.6	434	41.9	35.0	23.2	412	21	1.5	29.7	14	413	40.4	35.3	23.4	398	0.53	0.95	5.7	8.3	90
95	24.6	22.0	413	43.0	36.4	23.4	426	19	1.4	30.9	14	395	41.6	36.6	23.6	412	0.51	0.93	5.5	8.1	95
100	24.8	22.3	395	44.1	37.7	23.6	439	17	1.4	32.0	14	378	42.7	38.0	23.7	425	0.49	0.90	5.3	8.0	100

ZWARTE ELS, Vlaanderen 2020			**matige dunning**									**Boniteit III, h_{50} = 18.0**								
BLACK ALDER			moderate thinning									Site Class III, h_{50} = 18.0								
	Opstandkenmerken Stand characteristics		**Kenmerken voor dunning** Characteristics before thinning					**Dunning** Thinning				**Kenmerken na dunning** Characteristics after thinning					**Bijgroei** Increment				
t	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	3.0		5000	2.1	2.3	2.4	4					5000	2.1	2.3	2.4	4	1.64	0.42	3.9	0.8	5
10	6.3		5000	13.4	5.8	5.2	45					5000	13.4	5.8	5.2	45	2.47	1.34	11.5	4.5	10
15	8.7	19.0	5000	21.1	7.3	7.4	97	797	2.4	6.2	11	4203	18.6	7.5	7.4	85	1.23	1.40	9.1	6.4	15
20	10.8	19.0	4203	24.8	8.7	9.3	133	1441	6.3	7.5	34	2763	18.5	9.2	9.4	99	1.17	1.36	9.3	7.2	20
25	12.5	19.0	2763	24.1	10.5	11.0	144	713	4.6	9.0	27	2050	19.5	11.0	11.1	117	1.05	1.31	8.8	7.6	25
30	14.0	19.0	2050	24.6	12.4	12.4	160	410	3.6	10.5	23	1639	21.0	12.8	12.5	136	0.97	1.26	8.5	7.7	30
35	15.2	19.0	1639	25.7	14.1	13.7	178	260	3.0	12.0	21	1380	22.7	14.5	13.8	157	0.91	1.22	8.2	7.8	35
40	16.3	19.0	1380	27.1	15.8	14.8	197	176	2.5	13.5	18	1204	24.6	16.1	14.9	179	0.85	1.17	7.9	7.8	40
45	17.2	19.0	1204	28.8	17.4	15.7	218	125	2.2	14.8	16	1079	26.6	17.7	15.8	202	0.81	1.14	7.7	7.8	45
50	18.0	19.0	1079	30.6	19.0	16.5	240	92	1.9	16.1	15	987	28.7	19.2	16.6	225	0.78	1.10	7.5	7.8	50
55	18.7	19.3	987	32.5	20.5	17.2	262	101	2.4	17.4	19	887	30.1	20.8	17.3	242	0.74	1.07	7.2	7.8	55
60	19.2	19.7	887	33.7	22.0	17.8	278	80	2.2	18.7	18	807	31.5	22.3	17.9	260	0.70	1.04	6.9	7.7	60
65	19.7	20.0	807	34.9	23.5	18.3	293	65	2.0	19.9	17	742	32.9	23.7	18.4	276	0.66	1.01	6.6	7.6	65
70	20.1	20.3	742	36.1	24.9	18.7	308	53	1.9	21.1	16	689	34.2	25.2	18.8	292	0.63	0.99	6.3	7.6	70
75	20.5	20.7	689	37.3	26.3	19.1	323	45	1.8	22.3	15	644	35.6	26.5	19.2	307	0.60	0.96	6.0	7.5	75
80	20.8	21.0	644	38.5	27.6	19.4	337	38	1.7	23.4	15	605	36.8	27.8	19.5	322	0.58	0.94	5.7	7.4	80
85	21.1	21.3	605	39.7	28.9	19.7	350	33	1.6	24.5	14	572	38.1	29.1	19.8	336	0.55	0.92	5.5	7.3	85
90	21.3	21.6	572	40.8	30.1	19.9	363	29	1.5	25.6	13	543	39.3	30.4	20.0	350	0.53	0.90	5.2	7.1	90
95	21.5	22.0	543	41.9	31.3	20.1	375	26	1.4	26.6	13	518	40.5	31.6	20.2	363	0.51	0.88	5.0	7.0	95
100	21.7	22.3	518	43.0	32.5	20.3	387	23	1.4	27.6	12	495	41.6	32.7	20.4	375	0.49	0.86	4.8	6.9	100

ZWARTE ELS, Vlaanderen 2020			**matige dunning**									**Boniteit IV, h_{50} = 15.0**								
BLACK ALDER			moderate thinning									Site Class IV, h_{50} = 15.0								
	Opstandkenmerken Stand characteristics		**Kenmerken voor dunning** Characteristics before thinning					**Dunning** Thinning				**Kenmerken na dunning** Characteristics after thinning					**Bijgroei** Increment				
t	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	1.8		5000	0.2	0.8	1.4	0					5000	0.2	0.8	1.4	0	0.48	0.05	0.8	0.1	5
10	4.5		5000	6.4	4.0	3.6	16					5000	6.4	4.0	3.6	16	1.65	0.64	5.6	1.6	10
15	6.7		5000	15.3	6.2	5.5	54					5000	15.3	6.2	5.5	54	1.73	1.02	8.7	3.6	15
20	8.5	19.0	5000	21.1	7.3	7.1	95	556	1.7	6.2	8	4444	19.4	7.5	7.2	87	1.10	1.06	7.6	4.7	20
25	10.0	19.0	4444	25.1	8.5	8.6	127	1251	5.2	7.3	26	3193	19.9	8.9	8.6	101	1.08	1.07	7.9	5.4	25
30	11.3	19.0	3193	25.0	10.0	9.8	139	700	4.0	8.5	22	2493	21.0	10.4	9.9	117	0.99	1.06	7.6	5.8	30
35	12.5	19.0	2493	25.8	11.5	10.9	154	434	3.3	9.8	20	2060	22.5	11.8	11.0	135	0.92	1.05	7.3	6.0	35
40	13.4	19.0	2060	27.0	12.9	11.9	171	289	2.7	11.0	17	1771	24.2	13.2	12.0	153	0.87	1.03	7.1	6.2	40
45	14.3	19.0	1771	28.5	14.3	12.7	188	202	2.4	12.2	16	1569	26.1	14.6	12.8	172	0.82	1.01	6.9	6.3	45
50	15.0	19.0	1569	30.1	15.6	13.5	207	147	2.0	13.3	14	1422	28.1	15.9	13.6	192	0.79	0.99	6.7	6.3	50
55	15.6	19.3	1422	31.9	16.9	14.1	226	155	2.5	14.4	18	1267	29.4	17.2	14.2	208	0.75	0.97	6.5	6.3	55
60	16.1	19.7	1267	33.0	18.2	14.6	239	121	2.3	15.5	17	1145	30.7	18.5	14.7	223	0.70	0.95	6.2	6.3	60
65	16.6	20.0	1145	34.2	19.5	15.1	253	97	2.1	16.6	16	1048	32.1	19.7	15.2	237	0.67	0.93	5.9	6.3	65
70	17.0	20.3	1048	35.3	20.7	15.5	266	80	1.9	17.6	15	968	33.4	21.0	15.6	251	0.64	0.91	5.6	6.3	70
75	17.3	20.7	968	36.5	21.9	15.8	279	67	1.8	18.6	14	901	34.7	22.1	15.9	265	0.61	0.89	5.4	6.2	75
80	17.6	21.0	901	37.6	23.1	16.1	291	56	1.7	19.6	13	845	35.9	23.3	16.2	278	0.58	0.87	5.1	6.2	80
85	17.9	21.3	845	38.8	24.2	16.4	303	48	1.6	20.5	13	797	37.2	24.4	16.5	290	0.56	0.85	4.9	6.1	85
90	18.1	21.6	797	39.9	25.3	16.6	314	42	1.5	21.4	12	755	38.4	25.4	16.7	302	0.53	0.84	4.7	6.0	90
95	18.2	22.0	755	41.0	26.3	16.8	325	37	1.4	22.3	12	718	39.6	26.5	16.9	314	0.51	0.82	4.5	6.0	95
100	18.4	22.3	718	42.1	27.3	16.9	336	33	1.4	23.2	11	685	40.7	27.5	17.0	325	0.49	0.80	4.3	5.9	100

ZWARTE ELS, Vlaanderen 2020			**matige dunning**									**Boniteit V, h_{50} = 12.0**								
BLACK ALDER			moderate thinning									Site Class V, h_{50} = 12.0								
	Opstandkenmerken		**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**			
	Stand characteristics		Characteristics before thinning					Thinning				Characteristics after thinning					Increment			
t	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	1.0		5000				0					5000				0			0.0	0.0	5
10	3.0		5000	2.2	2.4	2.4	4					5000	2.2	2.4	2.4	4	0.86	0.22	2.0	0.4	10
15	4.9		5000	7.5	4.4	3.9	20					5000	7.5	4.4	3.9	20	1.20	0.50	4.3	1.4	15
20	6.4		5000	13.8	5.9	5.2	47					5000	13.8	5.9	5.2	47	1.27	0.69	6.0	2.3	20
25	7.7	19.8	5000	19.3	7.0	6.4	81					5000	19.3	7.0	6.4	81	1.01	0.77	6.1	3.2	25
30	8.8	19.0	5000	24.4	7.9	7.4	113	875	3.1	6.7	14	4125	21.3	8.1	7.5	98	0.99	0.81	6.5	3.8	30
35	9.8	19.0	4125	26.2	9.0	8.4	131	783	3.6	7.7	18	3342	22.6	9.3	8.4	113	0.94	0.84	6.4	4.1	35
40	10.6	19.0	3342	27.1	10.2	9.2	144	512	3.0	8.7	16	2830	24.1	10.4	9.2	128	0.88	0.85	6.2	4.4	40
45	11.4	19.0	2830	28.4	11.3	9.9	158	354	2.6	9.6	14	2476	25.8	11.5	9.9	144	0.84	0.85	6.0	4.6	45
50	12.0	19.0	2476	29.9	12.4	10.5	174	255	2.2	10.5	13	2221	27.7	12.6	10.6	161	0.80	0.84	5.9	4.7	50
55	12.5	19.3	2221	31.6	13.4	11.0	190	258	2.7	11.4	16	1963	28.9	13.7	11.1	174	0.76	0.84	5.6	4.8	55
60	13.0	19.7	1963	32.6	14.5	11.5	201	200	2.4	12.4	15	1763	30.2	14.8	11.6	186	0.71	0.83	5.4	4.9	60
65	13.4	20.0	1763	33.6	15.6	11.9	213	159	2.2	13.3	14	1604	31.4	15.8	12.0	199	0.68	0.82	5.1	4.9	65
70	13.8	20.3	1604	34.7	16.6	12.2	224	129	2.0	14.1	13	1474	32.7	16.8	12.3	211	0.64	0.81	4.9	4.9	70
75	14.1	20.7	1474	35.8	17.6	12.5	235	107	1.9	15.0	12	1368	34.0	17.8	12.6	222	0.61	0.80	4.7	4.9	75
80	14.3	21.0	1368	37.0	18.6	12.8	245	90	1.8	15.8	12	1278	35.2	18.7	12.9	234	0.59	0.78	4.5	4.9	80
85	14.5	21.3	1278	38.1	19.5	13.0	255	76	1.6	16.5	11	1201	36.4	19.6	13.1	244	0.56	0.77	4.3	4.9	85
90	14.7	21.6	1201	39.2	20.4	13.2	265	66	1.6	17.3	11	1135	37.6	20.5	13.3	255	0.54	0.76	4.1	4.8	90
95	14.9	22.0	1135	40.3	21.2	13.4	275	58	1.5	18.0	10	1078	38.8	21.4	13.5	265	0.52	0.75	3.9	4.8	95
100	15.0	22.3	1078	41.3	22.1	13.5	284	51	1.4	18.8	10	1027	39.9	22.2	13.6	274	0.50	0.73	3.8	4.7	100

Gewone Esdoorn
Acer pseudoplatanus **Sycamore**

Bron: Jansen, J.J. A. Oosterbaan, G.M.J. Mohren en J. den Ouden, 2018. *Groei en productie van gewone esdoorn in Nederland*. FEM Groei en Productie Rapport 2018 – 12, 38 blz.

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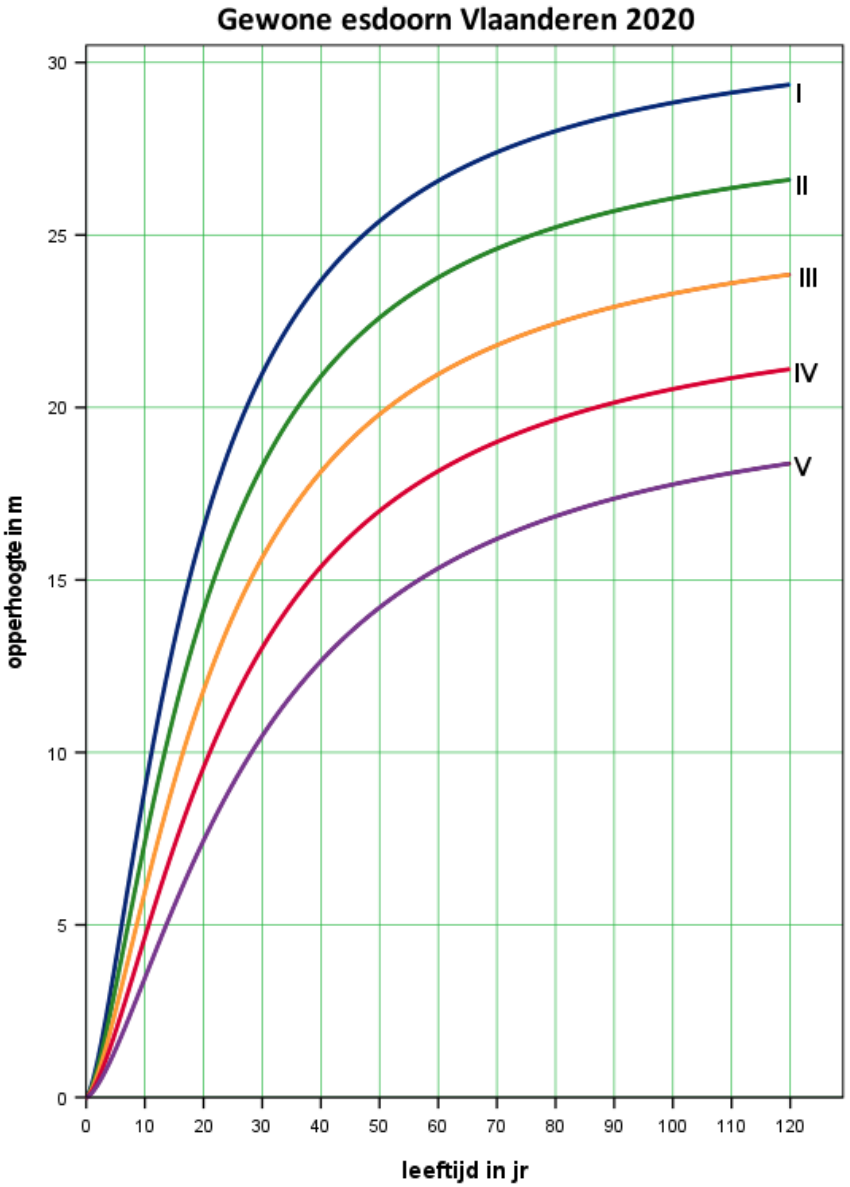

GEWONE ESDOORN, Vlaanderen 2020			**sterke laagdunning**										**Boniteit I, h_{50} = 25.4**								
SYCAMORE			heavy thinning from below										Site Class I, h_{50} = 25.4								
	Opstandkenmerken		**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics		Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	3.9		5000	3.0	2.7	3.5	6					5000	3.0	2.7	3.5	6	2.21	0.59	5.9	1.2	5
10	8.9	22.0	5000	19.9	7.1	8.3	88	2004	6.7	6.5	28	2996	13.2	7.5	8.3	59	3.06	1.99	21.6	8.8	10
15	13.2	22.0	2996	26.1	10.5	12.5	160	1624	12.0	9.7	72	1372	14.1	11.4	12.6	89	2.19	2.18	19.3	12.6	15
20	16.5	22.0	1372	23.8	14.9	15.8	178	496	7.2	13.6	52	876	16.6	15.6	15.9	126	1.73	2.12	17.0	13.9	20
25	19.0	22.0	876	24.5	18.9	18.4	206	217	5.0	17.2	41	658	19.5	19.4	18.4	165	1.44	2.01	15.2	14.3	25
30	21.0	22.0	658	26.1	22.5	20.3	236	116	3.8	20.4	33	542	22.3	22.9	20.3	203	1.24	1.90	13.6	14.3	30
35	22.5	22.0	542	28.2	25.7	21.7	268	70	3.0	23.3	28	472	25.2	26.1	21.8	240	1.10	1.80	12.3	14.1	35
40	23.7	22.0	472	30.4	28.6	22.8	299	46	2.4	25.9	23	426	28.0	28.9	22.9	275	0.99	1.70	11.1	13.8	40
45	24.6	22.0	426	32.7	31.3	23.7	328	32	2.0	28.3	20	393	30.7	31.5	23.8	309	0.91	1.62	10.1	13.5	45
50	25.4	22.0	393	35.1	33.7	24.3	357	24	1.7	30.5	17	370	33.3	33.9	24.4	340	0.84	1.54	9.3	13.1	50
55	26.0	22.2	370	37.4	35.9	24.9	385	25	2.1	32.5	21	345	35.3	36.1	25.0	364	0.79	1.48	8.5	12.7	55
60	26.6	22.5	345	39.1	38.0	25.3	405	20	1.9	34.4	19	324	37.2	38.3	25.4	386	0.74	1.42	7.8	12.3	60
65	27.0	22.7	324	40.8	40.1	25.6	423	17	1.8	36.3	18	307	39.1	40.3	25.7	406	0.70	1.36	7.2	12.0	65
70	27.4	22.9	307	42.5	42.0	25.9	441	15	1.6	38.0	16	292	40.8	42.2	26.0	424	0.66	1.32	6.7	11.6	70
75	27.7	23.2	292	44.1	43.8	26.0	456	13	1.6	39.6	16	280	42.5	44.0	26.1	441	0.63	1.27	6.2	11.3	75
80	28.0	23.4	280	45.6	45.6	26.2	471	11	1.5	41.2	15	269	44.1	45.7	26.3	456	0.61	1.23	5.8	10.9	80
85	28.3	23.6	269	47.1	47.2	26.3	484	10	1.4	42.7	14	259	45.7	47.4	26.4	470	0.58	1.19	5.4	10.6	85
90	28.5	23.9	259	48.5	48.8	26.4	497	9	1.4	44.2	13	250	47.2	49.0	26.5	483	0.56	1.16	5.1	10.3	90
95	28.7	24.1	250	49.9	50.4	26.4	508	8	1.3	45.6	13	242	48.6	50.6	26.5	495	0.54	1.13	4.8	10.0	95
100	28.8	24.3	242	51.2	51.9	26.5	518	7	1.3	47.0	13	235	49.9	52.1	26.6	505	0.52	1.10	4.5	9.8	100
105	29.0	24.6	235	52.5	53.4	26.5	527	7	1.3	48.3	12	228	51.2	53.5	26.6	515	0.50	1.07	4.2	9.5	105
110	29.1	24.8	228	53.7	54.8	26.5	535	6	1.2	49.6	12	221	52.5	55.0	26.6	523	0.49	1.04	4.0	9.3	110
115	29.2	25.0	221	54.9	56.2	26.4	543	6	1.2	50.8	11	215	53.7	56.3	26.5	531	0.47	1.02	3.7	9.0	115
120	29.4	25.3	215	56.0	57.6	26.4	549	6	1.2	52.1	11	210	54.9	57.7	26.5	538	0.46	1.00	3.5	8.8	120

GEWONE ESDOORN, Vlaanderen 2020			**sterke laagdunning**									**Boniteit II, h_{50} = 22.6**								
SYCAMORE			heavy thinning from below									Site Class II, h_{50} = 22.6								
	Opstandkenmerken		**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics		Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	3.2		5000	1.6	2.0	2.8	3					5000	1.6	2.0	2.8	3	1.35	0.31	2.9	0.5	5
10	7.4	20.6	5000	14.8	6.1	6.8	52					5000	14.8	6.1	6.8	52	3.17	1.48	18.4	5.2	10
15	11.1	22.0	5000	27.8	8.4	10.5	146	3069	14.5	7.8	75	1931	13.3	9.3	10.5	72	2.22	1.85	17.2	9.7	15
20	14.1	22.0	1931	23.1	12.3	13.4	150	733	7.3	11.3	46	1198	15.7	12.9	13.5	104	1.75	1.88	15.1	11.2	20
25	16.5	22.0	1198	23.7	15.9	15.7	175	317	5.2	14.4	37	881	18.5	16.4	15.8	138	1.46	1.82	13.7	11.8	25
30	18.3	22.0	881	25.3	19.1	17.5	203	168	4.0	17.4	31	713	21.3	19.5	17.6	172	1.26	1.74	12.4	12.0	30
35	19.7	22.0	713	27.2	22.0	18.9	231	101	3.2	20.0	26	612	24.0	22.4	19.0	205	1.11	1.66	11.2	12.0	35
40	20.9	22.0	612	29.3	24.7	20.0	258	66	2.6	22.4	22	546	26.7	25.0	20.1	236	1.01	1.59	10.3	11.8	40
45	21.8	22.0	546	31.5	27.1	20.8	285	46	2.2	24.6	19	500	29.4	27.3	20.9	266	0.92	1.52	9.4	11.6	45
50	22.6	22.0	500	33.8	29.3	21.5	311	33	1.8	26.5	16	467	31.9	29.5	21.6	295	0.85	1.45	8.6	11.3	50
55	23.2	22.2	467	36.1	31.4	22.0	336	34	2.2	28.4	20	433	33.9	31.6	22.1	317	0.80	1.40	7.9	11.1	55
60	23.8	22.5	433	37.7	33.3	22.4	355	28	2.0	30.2	18	405	35.8	33.5	22.5	337	0.75	1.34	7.3	10.8	60
65	24.2	22.7	405	39.4	35.2	22.8	372	23	1.8	31.9	17	382	37.6	35.4	22.9	356	0.70	1.30	6.8	10.5	65
70	24.6	22.9	382	41.0	37.0	23.1	388	19	1.7	33.4	16	363	39.3	37.1	23.1	373	0.67	1.25	6.3	10.2	70
75	24.9	23.2	363	42.6	38.6	23.3	403	17	1.6	35.0	15	346	41.0	38.8	23.4	388	0.64	1.21	5.9	9.9	75
80	25.2	23.4	346	44.1	40.3	23.4	417	15	1.5	36.4	14	331	42.5	40.4	23.5	403	0.61	1.18	5.5	9.7	80
85	25.5	23.6	331	45.5	41.8	23.6	429	13	1.5	37.8	13	319	44.1	42.0	23.6	416	0.58	1.14	5.1	9.4	85
90	25.7	23.9	319	46.9	43.3	23.6	441	12	1.4	39.2	13	307	45.5	43.5	23.7	428	0.56	1.11	4.8	9.2	90
95	25.9	24.1	307	48.3	44.8	23.7	452	10	1.3	40.5	12	297	46.9	44.9	23.8	440	0.54	1.08	4.5	8.9	95
100	26.1	24.3	297	49.6	46.1	23.8	461	10	1.3	41.7	12	287	48.3	46.3	23.9	450	0.52	1.05	4.2	8.7	100
105	26.2	24.6	287	50.9	47.5	23.8	470	9	1.3	43.0	11	278	49.6	47.6	23.9	459	0.51	1.03	4.0	8.5	105
110	26.4	24.8	278	52.1	48.8	23.8	478	8	1.2	44.2	11	270	50.8	49.0	23.9	467	0.49	1.00	3.8	8.3	110
115	26.5	25.0	270	53.3	50.1	23.8	486	8	1.2	45.3	11	263	52.0	50.2	23.9	475	0.48	0.98	3.6	8.1	115
120	26.6	25.3	263	54.4	51.4	23.8	492	7	1.2	46.4	10	256	53.2	51.5	23.9	482	0.46	0.96	3.4	7.9	120

GEWONE ESDOORN, Vlaanderen 2020			**sterke laagdunning**									**Boniteit III, h_{50} = 19.8**								
SYCAMORE			heavy thinning from below									Site Class III, h_{50} = 19.8								
	Opstandkenmerken		**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics		Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	2.5		5000	0.7	1.3	2.2	1					5000	0.7	1.3	2.2	1	0.72	0.13	1.2	0.2	5
10	6.0		5000	9.0	4.8	5.4	26					5000	9.0	4.8	5.4	26	2.53	0.90	10.0	2.6	10
15	9.1	22.0	5000	21.9	7.5	8.5	97	2142	7.9	6.8	34	2858	14.0	7.9	8.5	63	2.24	1.46	14.2	6.5	15
20	11.8	22.0	2858	23.9	10.3	11.1	133	1142	8.0	9.4	43	1716	16.0	10.9	11.1	90	1.77	1.59	13.4	8.3	20
25	13.9	22.0	1716	24.0	13.3	13.2	153	487	5.6	12.2	35	1229	18.4	13.8	13.2	118	1.48	1.59	12.2	9.2	25
30	15.6	22.0	1229	25.2	16.2	14.8	176	254	4.3	14.7	29	975	20.9	16.5	14.9	147	1.28	1.56	11.2	9.6	30
35	17.0	22.0	975	26.9	18.7	16.1	201	151	3.4	17.0	25	824	23.5	19.0	16.2	176	1.13	1.51	10.2	9.8	35
40	18.1	22.0	824	28.8	21.1	17.2	225	98	2.8	19.1	21	726	26.0	21.4	17.2	203	1.02	1.45	9.4	9.8	40
45	19.0	22.0	726	30.9	23.3	18.0	248	68	2.4	21.1	18	658	28.5	23.5	18.1	230	0.93	1.40	8.6	9.7	45
50	19.8	22.0	658	33.0	25.3	18.7	271	49	2.0	22.9	16	609	31.0	25.5	18.7	255	0.86	1.35	8.0	9.5	50
55	20.4	22.2	609	35.1	27.1	19.2	294	49	2.3	24.6	19	560	32.8	27.3	19.3	275	0.80	1.30	7.4	9.4	55
60	21.0	22.5	560	36.7	28.9	19.6	310	39	2.1	26.2	17	521	34.6	29.1	19.7	293	0.75	1.26	6.8	9.2	60
65	21.4	22.7	521	38.3	30.6	20.0	326	32	1.9	27.7	16	489	36.3	30.8	20.1	310	0.71	1.22	6.3	9.0	65
70	21.8	22.9	489	39.8	32.2	20.3	340	27	1.8	29.1	15	462	38.0	32.4	20.4	326	0.67	1.18	5.9	8.8	70
75	22.1	23.2	462	41.3	33.7	20.5	354	23	1.7	30.5	14	439	39.6	33.9	20.6	340	0.64	1.15	5.5	8.6	75
80	22.4	23.4	439	42.8	35.2	20.7	367	20	1.6	31.9	13	419	41.2	35.4	20.8	354	0.61	1.11	5.1	8.4	80
85	22.7	23.6	419	44.2	36.6	20.8	378	17	1.5	33.2	12	402	42.7	36.8	20.9	366	0.59	1.08	4.8	8.2	85
90	22.9	23.9	402	45.5	38.0	20.9	389	16	1.4	34.4	12	386	44.1	38.1	21.0	377	0.57	1.05	4.5	8.0	90
95	23.1	24.1	386	46.9	39.3	21.0	399	14	1.4	35.6	11	372	45.5	39.5	21.1	388	0.54	1.03	4.2	7.8	95
100	23.3	24.3	372	48.2	40.6	21.1	408	13	1.3	36.7	11	359	46.8	40.7	21.2	397	0.53	1.00	4.0	7.6	100
105	23.5	24.6	359	49.4	41.8	21.1	417	12	1.3	37.8	11	348	48.1	42.0	21.2	406	0.51	0.98	3.8	7.4	105
110	23.6	24.8	348	50.6	43.0	21.1	424	11	1.3	38.9	10	337	49.3	43.2	21.2	414	0.49	0.96	3.6	7.2	110
115	23.7	25.0	337	51.7	44.2	21.2	432	10	1.2	40.0	10	327	50.5	44.3	21.2	422	0.48	0.94	3.4	7.1	115
120	23.9	25.3	327	52.9	45.4	21.2	438	9	1.2	41.0	10	318	51.6	45.5	21.2	428	0.46	0.92	3.2	6.9	120

GEWONE ESDOORN			**sterke laagdunning**									**Boniteit IV, h_{50} = 17.0**								
SYCAMORE			heavy thinning from below									Site Class IV, h_{50} = 17.0								
	Opstandkenmerken		**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**			
	Stand characteristics		Characteristics before thinning					Thinning				Characteristics after thinning					Increment			
t	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	1.9		5000	0.2	0.7	1.6	0					5000	0.2	0.7	1.6	0	0.30	0.04	0.4	0.0	5
10	4.6		5000	4.8	3.5	4.2	11					5000	4.8	3.5	4.2	11	1.51	0.48	4.6	1.1	10
15	7.3	20.9	5000	14.6	6.1	6.7	50					5000	14.6	6.1	6.7	50	2.25	0.97	12.8	3.3	15
20	9.6	22.0	5000	24.7	7.9	8.9	113	2389	9.9	7.3	44	2611	14.8	8.5	8.9	69	1.80	1.24	11.5	5.7	20
25	11.5	22.0	2611	23.0	10.6	10.7	124	796	5.8	9.6	30	1816	17.2	11.0	10.7	93	1.50	1.32	10.6	6.7	25
30	13.0	22.0	1816	24.1	13.0	12.2	144	410	4.5	11.8	26	1405	19.6	13.3	12.2	118	1.30	1.33	9.8	7.3	30
35	14.3	22.0	1405	25.7	15.3	13.4	165	241	3.6	13.9	23	1164	22.1	15.5	13.5	142	1.15	1.31	9.1	7.6	35
40	15.4	22.0	1164	27.5	17.4	14.4	186	155	3.0	15.7	20	1009	24.5	17.6	14.5	166	1.04	1.29	8.4	7.7	40
45	16.3	22.0	1009	29.5	19.3	15.2	207	106	2.6	17.5	17	902	26.9	19.5	15.3	190	0.95	1.25	7.8	7.8	45
50	17.0	22.0	902	31.5	21.1	15.9	227	77	2.2	19.1	15	826	29.3	21.2	15.9	212	0.88	1.22	7.2	7.8	50
55	17.6	22.2	826	33.5	22.7	16.4	247	73	2.4	20.6	17	752	31.1	22.9	16.5	229	0.82	1.18	6.7	7.7	55
60	18.2	22.5	752	35.0	24.3	16.9	262	58	2.2	22.0	16	694	32.8	24.5	16.9	246	0.76	1.15	6.3	7.6	60
65	18.6	22.7	694	36.5	25.9	17.2	276	47	2.0	23.4	15	647	34.5	26.0	17.3	261	0.72	1.12	5.8	7.5	65
70	19.0	22.9	647	38.0	27.3	17.5	289	39	1.9	24.7	14	608	36.1	27.5	17.6	276	0.68	1.09	5.4	7.3	70
75	19.3	23.2	608	39.4	28.7	17.8	302	33	1.8	26.0	13	575	37.7	28.9	17.8	289	0.65	1.06	5.1	7.2	75
80	19.6	23.4	575	40.8	30.1	18.0	313	28	1.7	27.2	12	546	39.2	30.2	18.0	301	0.62	1.04	4.8	7.1	80
85	19.9	23.6	546	42.2	31.4	18.1	324	25	1.6	28.4	12	522	40.6	31.5	18.2	313	0.59	1.01	4.5	6.9	85
90	20.1	23.9	522	43.5	32.6	18.2	334	22	1.5	29.5	11	500	42.0	32.7	18.3	323	0.57	0.99	4.2	6.8	90
95	20.3	24.1	500	44.8	33.8	18.3	344	20	1.4	30.6	11	480	43.4	33.9	18.4	333	0.55	0.96	4.0	6.6	95
100	20.5	24.3	480	46.1	35.0	18.4	352	18	1.4	31.6	10	462	44.7	35.1	18.5	342	0.53	0.94	3.8	6.5	100
105	20.7	24.6	462	47.3	36.1	18.5	360	16	1.3	32.7	10	446	46.0	36.2	18.6	351	0.51	0.92	3.5	6.4	105
110	20.9	24.8	446	48.5	37.2	18.5	368	15	1.3	33.6	10	432	47.2	37.3	18.6	358	0.50	0.90	3.4	6.2	110
115	21.0	25.0	432	49.6	38.3	18.6	375	13	1.3	34.6	9	418	48.4	38.4	18.6	365	0.48	0.89	3.2	6.1	115
120	21.1	25.3	418	50.7	39.3	18.6	381	12	1.2	35.5	9	406	49.5	39.4	18.7	372	0.47	0.87	3.0	6.0	120

GEWONE ESDOORN, Vlaanderen 2020			**sterke laagdunning**									**Boniteit V, h_{50} = 14.2**								
SYCAMORE			heavy thinning from below									Site Class V, h_{50} = 14.2								
	Opstandkenmerken		**Kenmerken voor dunning**					**Dunning**				**Kenmerken na dunning**					**Bijgroei**				
	Stand characteristics		Characteristics before thinning					Thinning				Characteristics after thinning					Increment				
t	h_{top}	***S%***	***N***	***G***	d_g	h_g	***V***	***N***	***G***	d_g	***V***	***N***	***G***	d_g	h_g	***V***	Ic_G	Im_G	Ic_V	Im_V	***t***
5	1.4		5000	0.0	0.1	1.1	0					5000	0.0	0.1	1.1	0	0.06	0.00	0.1	0.0	5
10	3.5		5000	2.1	2.3	3.0	4					5000	2.1	2.3	3.0	4	0.79	0.21	1.8	0.4	10
15	5.5		5000	7.6	4.4	5.0	20					5000	7.6	4.4	5.0	20	1.37	0.51	5.0	1.3	15
20	7.4	22.0	5000	15.6	6.3	6.8	58	690	1.8	5.7	6	4310	13.9	6.4	6.8	52	1.85	0.78	10.7	2.9	20
25	9.1	22.0	4310	22.3	8.1	8.3	98	1417	6.1	7.4	26	2893	16.2	8.4	8.4	72	1.54	0.96	8.9	4.2	25
30	10.5	22.0	2893	23.3	10.1	9.7	115	719	4.8	9.2	23	2174	18.5	10.4	9.7	92	1.33	1.04	8.4	4.9	30
35	11.7	22.0	2174	24.8	12.0	10.8	133	417	3.9	10.9	20	1757	20.9	12.3	10.8	113	1.18	1.07	7.9	5.4	35
40	12.6	22.0	1757	26.4	13.8	11.7	151	265	3.3	12.6	18	1492	23.1	14.1	11.7	133	1.06	1.08	7.4	5.7	40
45	13.5	22.0	1492	28.2	15.5	12.5	169	180	2.8	14.1	16	1312	25.4	15.7	12.5	152	0.97	1.07	6.9	5.8	45
50	14.2	22.0	1312	30.0	17.1	13.1	186	129	2.4	15.5	14	1183	27.6	17.2	13.2	171	0.89	1.05	6.5	5.9	50
55	14.8	22.2	1183	31.9	18.5	13.6	203	118	2.6	16.8	16	1065	29.3	18.7	13.7	187	0.83	1.04	6.1	5.9	55
60	15.3	22.5	1065	33.3	20.0	14.1	216	92	2.4	18.1	15	972	31.0	20.1	14.1	201	0.78	1.02	5.7	5.9	60
65	15.8	22.7	972	34.7	21.3	14.5	229	74	2.2	19.3	14	898	32.6	21.5	14.5	215	0.73	1.00	5.3	5.9	65
70	16.2	22.9	898	36.1	22.6	14.8	241	61	2.0	20.5	13	838	34.1	22.8	14.8	228	0.69	0.98	5.0	5.9	70
75	16.5	23.2	838	37.5	23.9	15.0	252	51	1.9	21.6	12	787	35.6	24.0	15.1	240	0.66	0.96	4.7	5.8	75
80	16.8	23.4	787	38.8	25.1	15.2	262	43	1.8	22.7	11	743	37.1	25.2	15.3	251	0.63	0.94	4.4	5.7	80
85	17.1	23.6	743	40.1	26.2	15.4	272	38	1.7	23.7	11	706	38.5	26.4	15.5	261	0.60	0.92	4.1	5.6	85
90	17.4	23.9	706	41.4	27.3	15.6	281	33	1.6	24.7	10	673	39.9	27.5	15.6	271	0.58	0.90	3.9	5.5	90
95	17.6	24.1	673	42.7	28.4	15.7	290	29	1.5	25.7	10	644	41.2	28.5	15.8	280	0.56	0.88	3.7	5.4	95
100	17.8	24.3	644	43.9	29.5	15.8	298	26	1.5	26.7	10	618	42.4	29.6	15.9	289	0.54	0.87	3.5	5.3	100
105	17.9	24.6	618	45.1	30.5	15.9	306	23	1.4	27.6	9	594	43.7	30.6	15.9	296	0.52	0.85	3.3	5.3	105
110	18.1	24.8	594	46.2	31.5	15.9	313	21	1.4	28.5	9	573	44.9	31.6	16.0	304	0.50	0.83	3.1	5.2	110
115	18.2	25.0	573	47.3	32.4	16.0	319	19	1.3	29.3	9	553	46.0	32.5	16.1	310	0.49	0.82	3.0	5.1	115
120	18.4	25.3	553	48.4	33.4	16.0	325	18	1.3	30.2	8	536	47.1	33.5	16.1	317	0.47	0.80	2.8	5.0	120