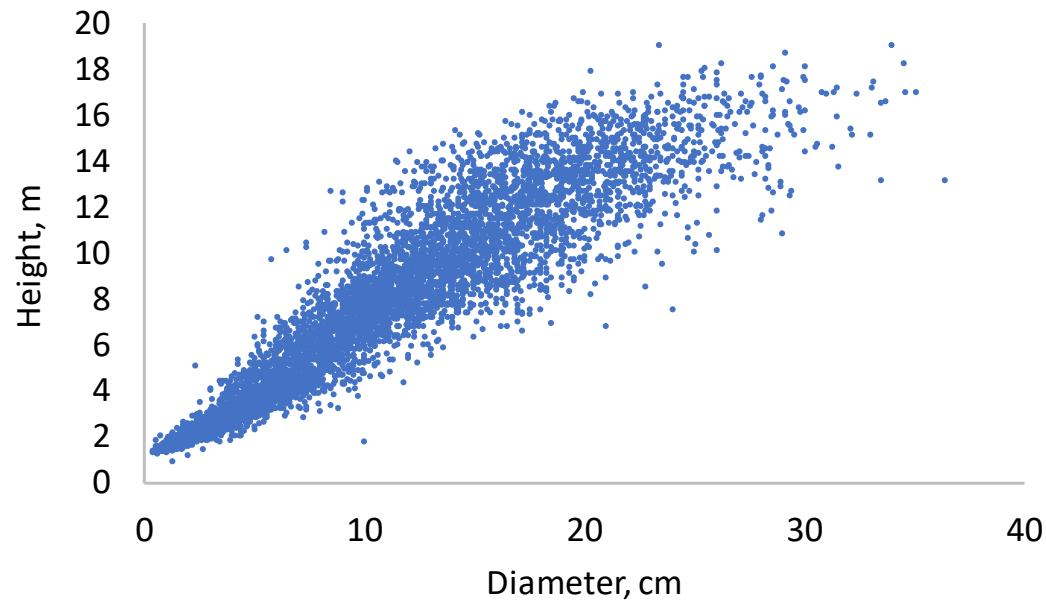


Vaxtarjöfnur fyrir sitkagreni

Lárus Heiðarsson,
Timo Pukkala og
Arnór Snorrason



Vaxtarjöfnur í skógrækt

- Jöfnur sem framreikna vöxt trjáa
- Með upplýsingum um vöxt trjáa má t.d. gera áætlanir um fjölda grisjana og lotulengd svo ræktunin skili sem mestum ávinningi
- Venjulegast notaðar í áætlanagerðarforritum (IceForest)

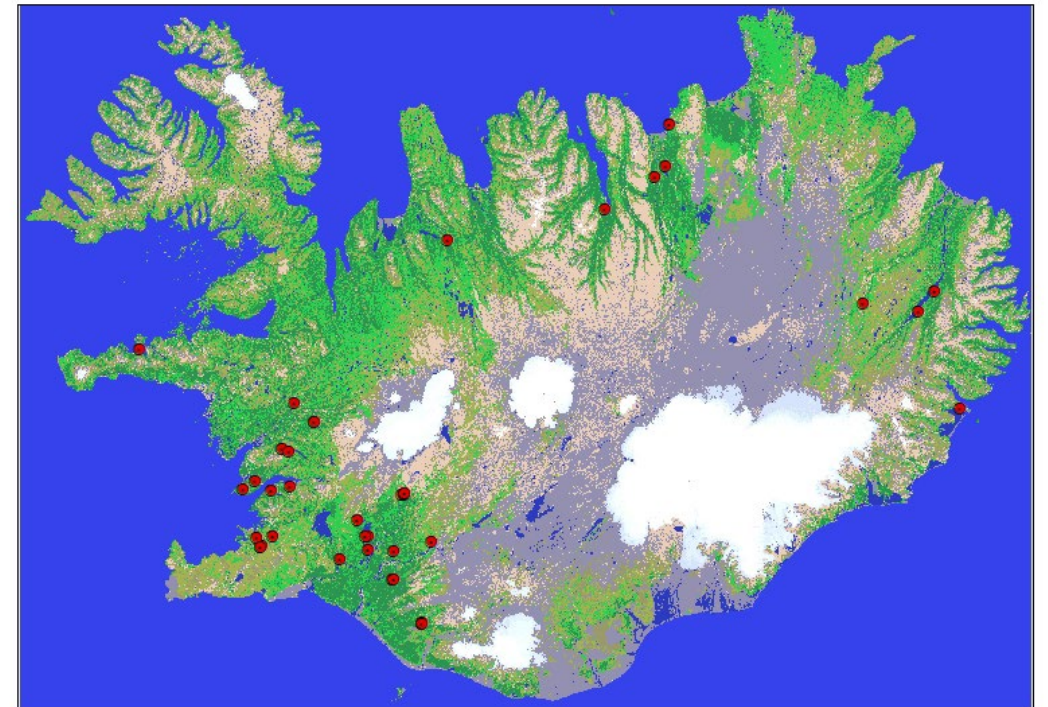
Tabell 15. Volym enligt grunddyta och övre höjd

Övre höjd, m	Grunddyta, m ² /ha (den övre siffran = tall, den undre = gran)																			Övre höjd, m	
	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42		44
10	25	35	45	55	60	70	80	90	100	105	115	125	135	140	150	160	170	180	185	195	10
11	30	40	50	60	70	80	90	95	105	115	125	135	145	155	165	175	185	195	205	215	11
12	30	40	55	65	75	85	95	105	115	125	140	150	160	170	180	190	200	210	220	235	12
13	35	45	55	70	80	90	105	115	125	135	145	155	165	175	190	200	210	220	230	240	13
14	35	45	55	70	80	90	100	115	125	135	150	160	170	180	195	205	215	225	240	250	14
15	40	50	60	75	85	100	110	125	135	150	160	170	185	195	210	220	235	245	260	270	15
16	40	55	70	85	100	110	125	140	155	170	180	195	210	225	235	250	260	275	290	300	16
17	45	60	75	90	105	120	135	150	165	180	190	205	220	235	250	265	280	295	310	325	17
18	45	65	80	95	110	125	140	155	170	190	205	220	235	250	265	280	295	315	330	345	18
19	50	65	80	100	115	130	150	165	180	200	215	230	245	265	280	295	315	330	345	365	19
20	50	70	85	100	120	135	155	170	185	205	220	240	255	270	280	305	325	340	355	375	20
21	55	75	90	110	125	145	165	180	200	220	235	255	275	290	310	325	345	365	380	400	21
22	55	75	95	115	130	150	170	190	210	225	245	265	285	300	320	340	360	380	395	415	22
23	60	80	100	120	140	160	180	200	220	240	260	280	295	315	335	355	375	395	415	435	23
24	60	85	105	125	145	165	185	205	230	250	270	290	310	330	350	375	395	415	435	455	24
25	65	85	110	130	150	175	195	215	240	260	280	305	325	345	370	390	410	435	455	480	25
26	65	90	110	135	155	180	200	225	245	270	290	315	335	360	385	410	430	455	475	500	26
27	70	95	120	140	165	190	210	235	260	285	305	330	355	375	400	425	450	470	495	520	27
28	75	100	125	145	170	195	220	245	270	295	320	345	370	390	415	440	465	490	515	540	28
29	75	100	125	155	180	205	230	255	280	305	330	355	380	405	430	455	480	505	530	560	29
30	80	105	130	160	185	210	240	265	290	315	345	370	395	420	450	475	500	525	550	580	30
31	80	110	135	165	190	220	245	275	300	330	355	385	410	435	465	490	520	545	575	600	31
32	85	115	140	170	200	225	255	285	310	340	370	395	425	455	480	510	535	565	595	620	32
	90	115	145	175	205	235	265	290	320	350	380	410	440	470	495	525	555	585	615	645	
	6	8	10	12	14	16	18	20	22	24	26	28	30	32	36	38	40	42	44		

Gögnin

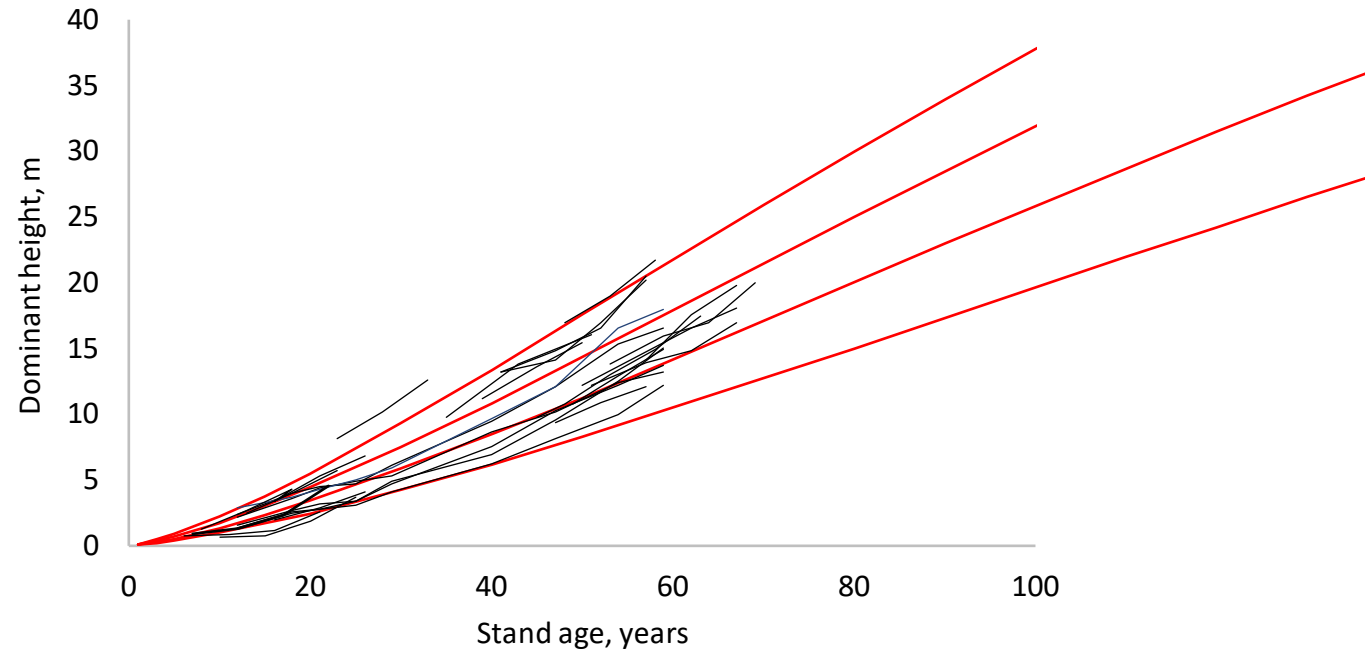
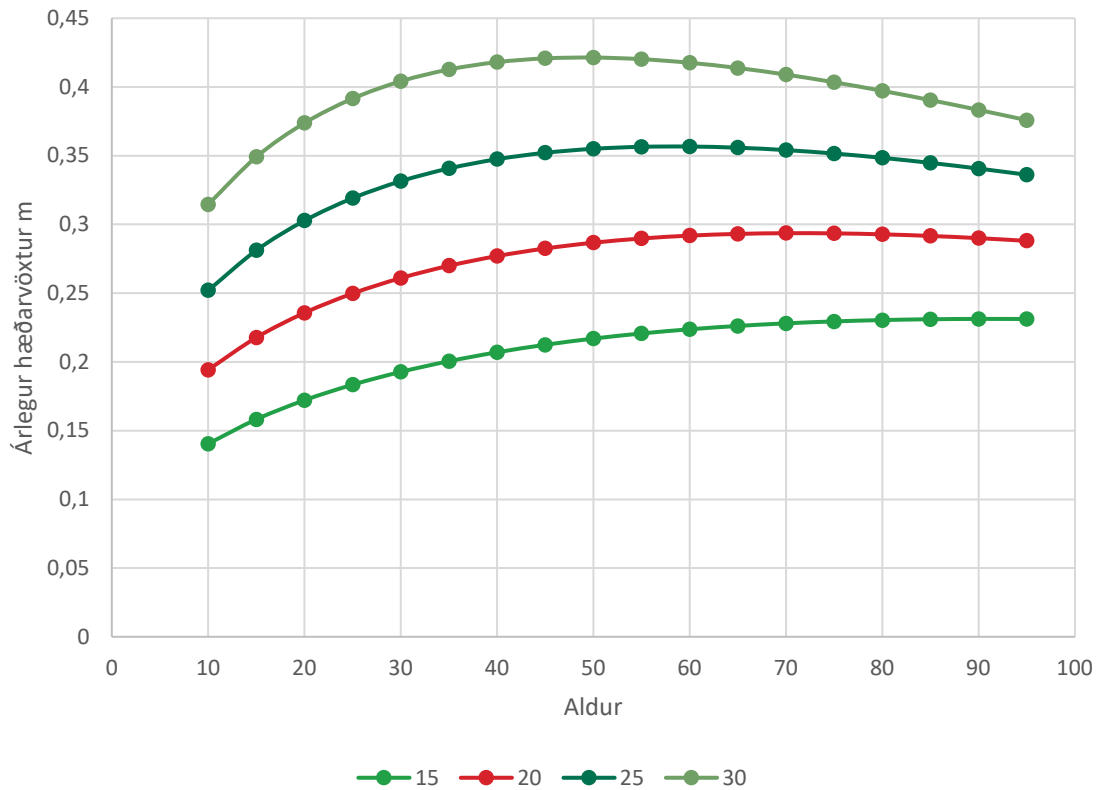
- Koma frá föstum mæliflötum og ÍSÚ
- Misjöfn tíðni mælinga

Variable	N	Meðal	SD	Max	Min
pvermál (cm)	7276	9.46	7.17	36.4	0.0
Hæð (m)	8432	5.92	4.62	19.0	0.28
Grunnflötur (m ² ha ⁻¹)	203	18.25	15.89	79.38	0.0
Aldur (ár)	203	36.6	15.7	63.0	6.0
Yfirhæð (m)	203	8,65	5.1	18.0	0.38
Vaxtatímabil	203	5.48	1.62	16.0	3.0
Trjá fjöldi/ha	203	2222	1414	5026	458

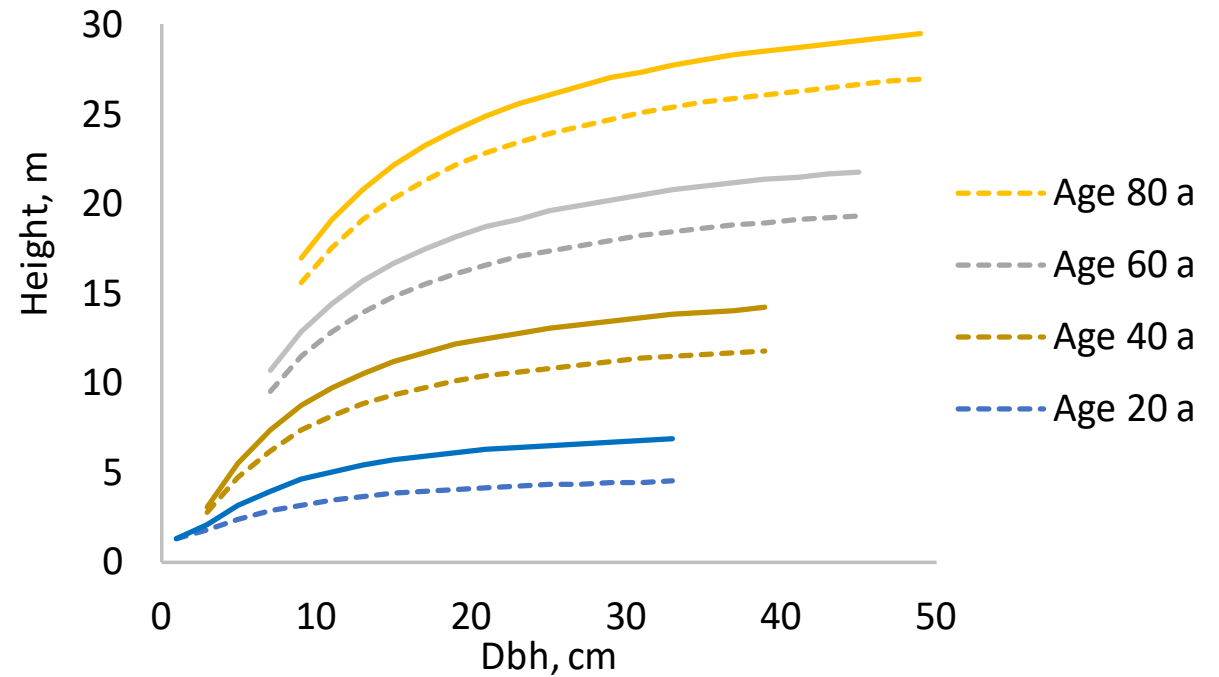
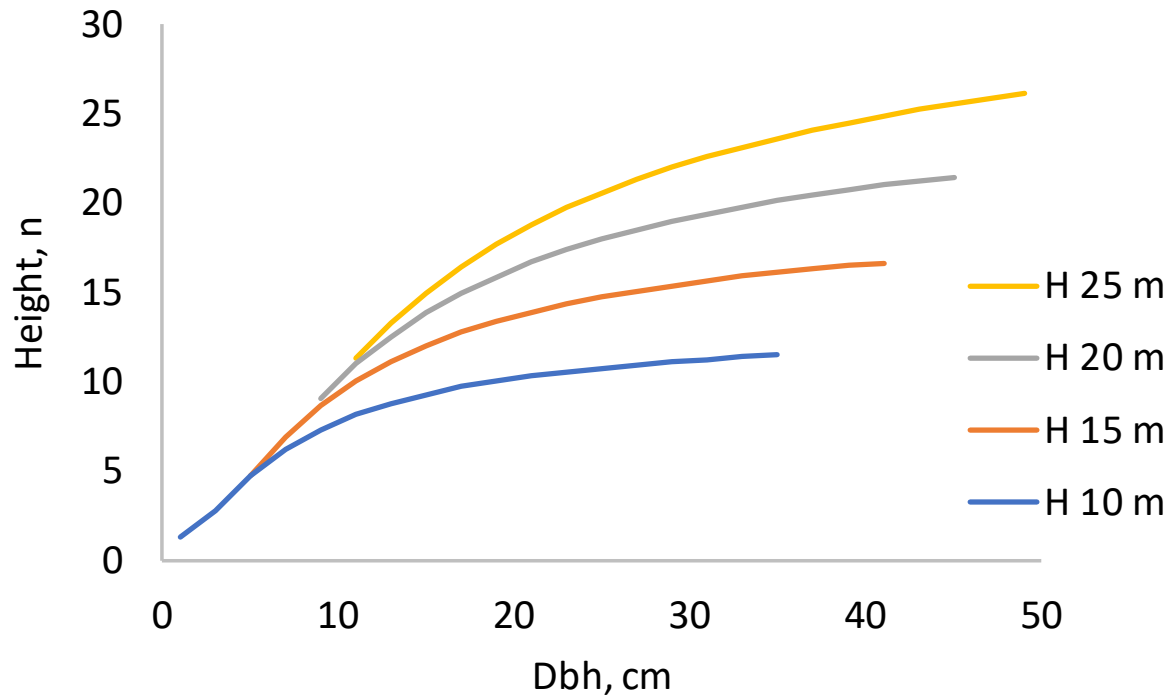


Yfirhæð - gróskuflokkar

Hæðarvöxtur - Aldur

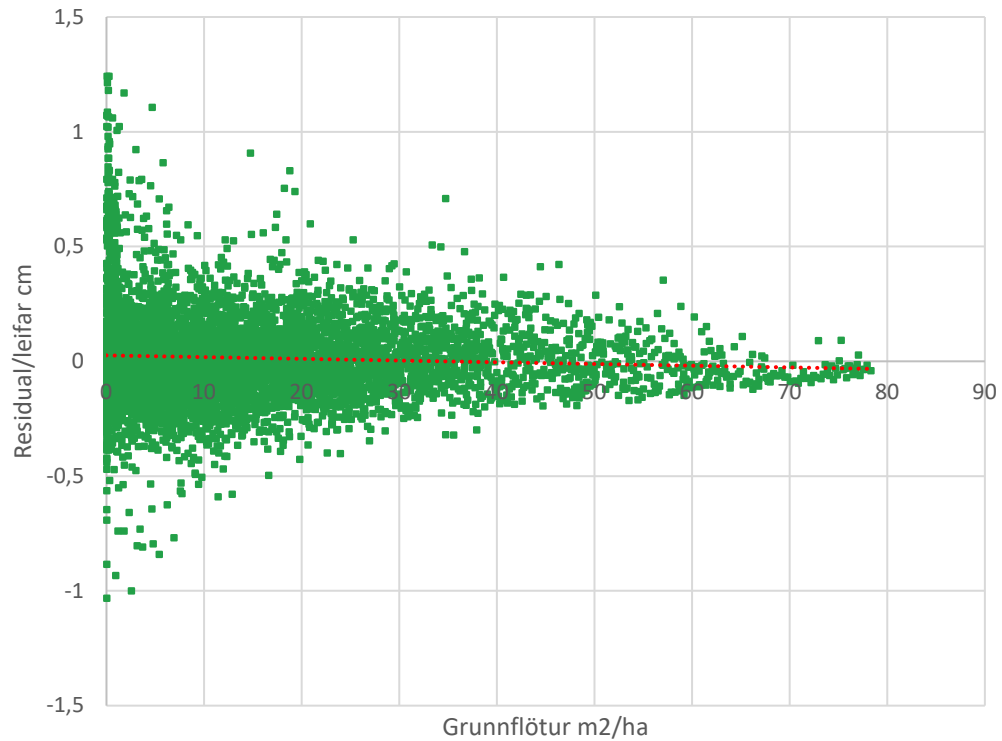


Hæðarjöfnur fyrir stök tré

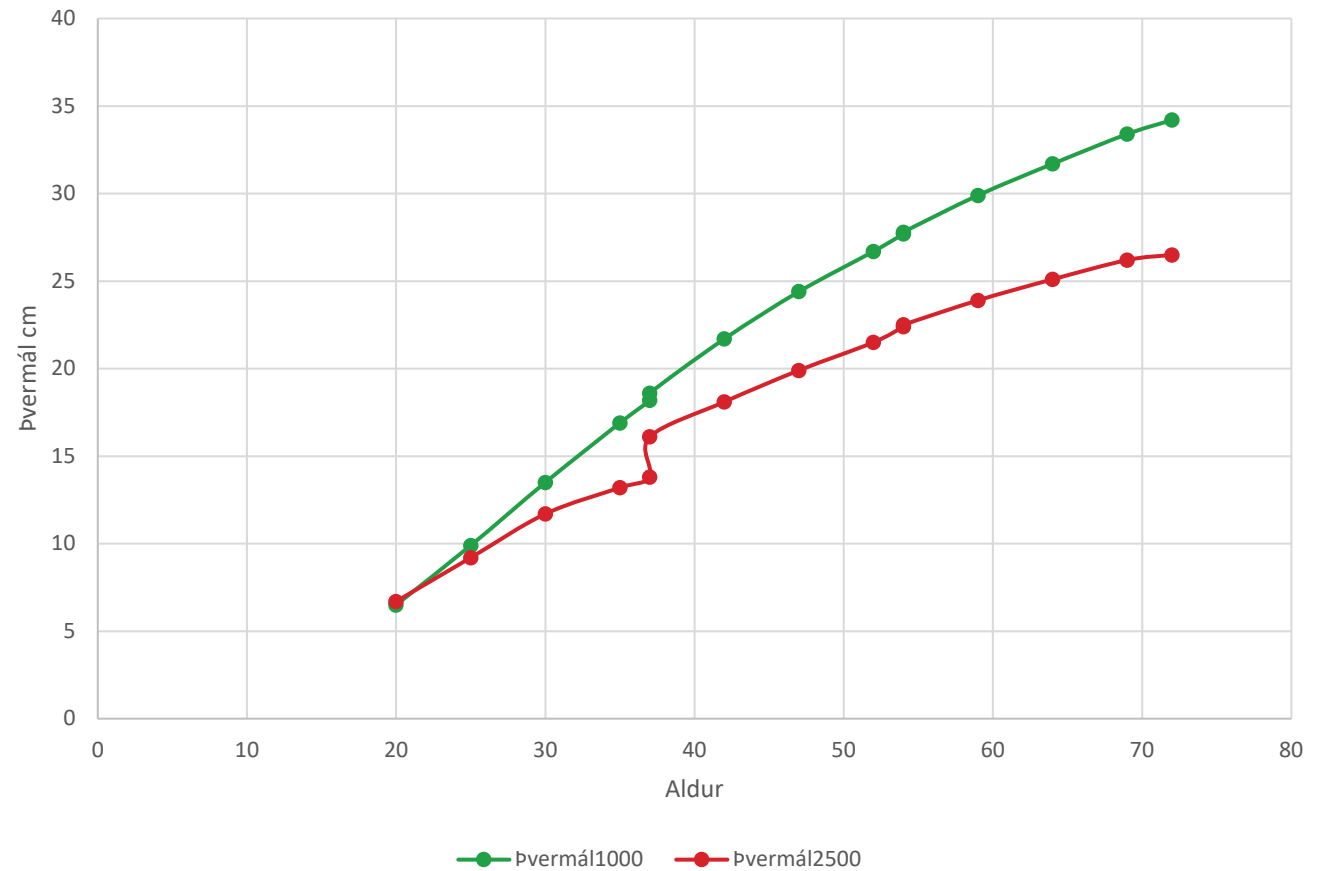


Þvermálsvöxtur

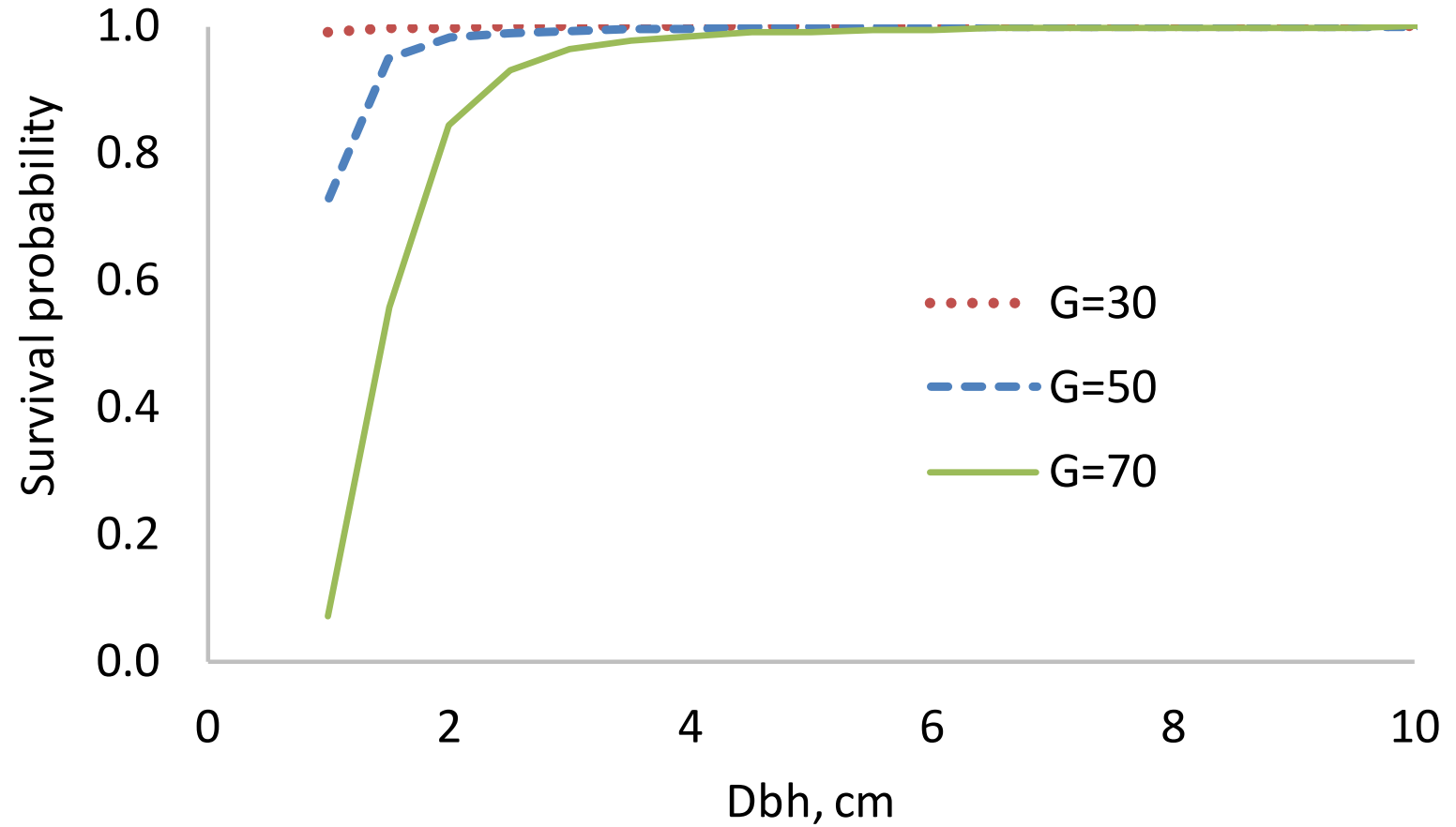
Reiknaður árlegur vöxtur



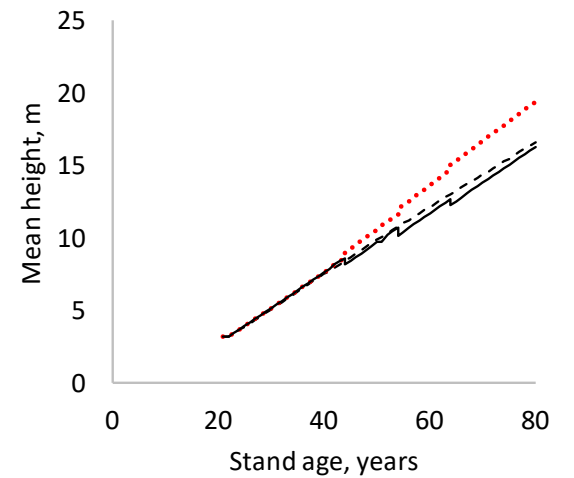
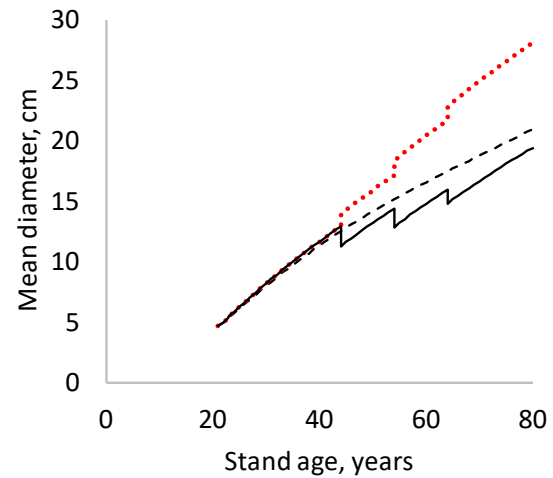
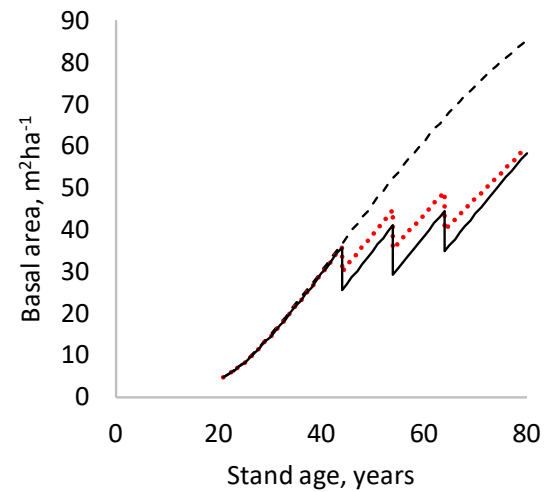
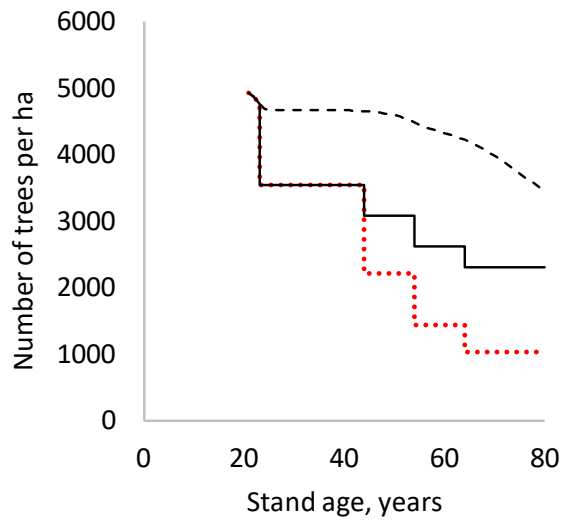
Þvermálsvöxtur, 1000, 2500 tré/ha



Sjálfgrisjun

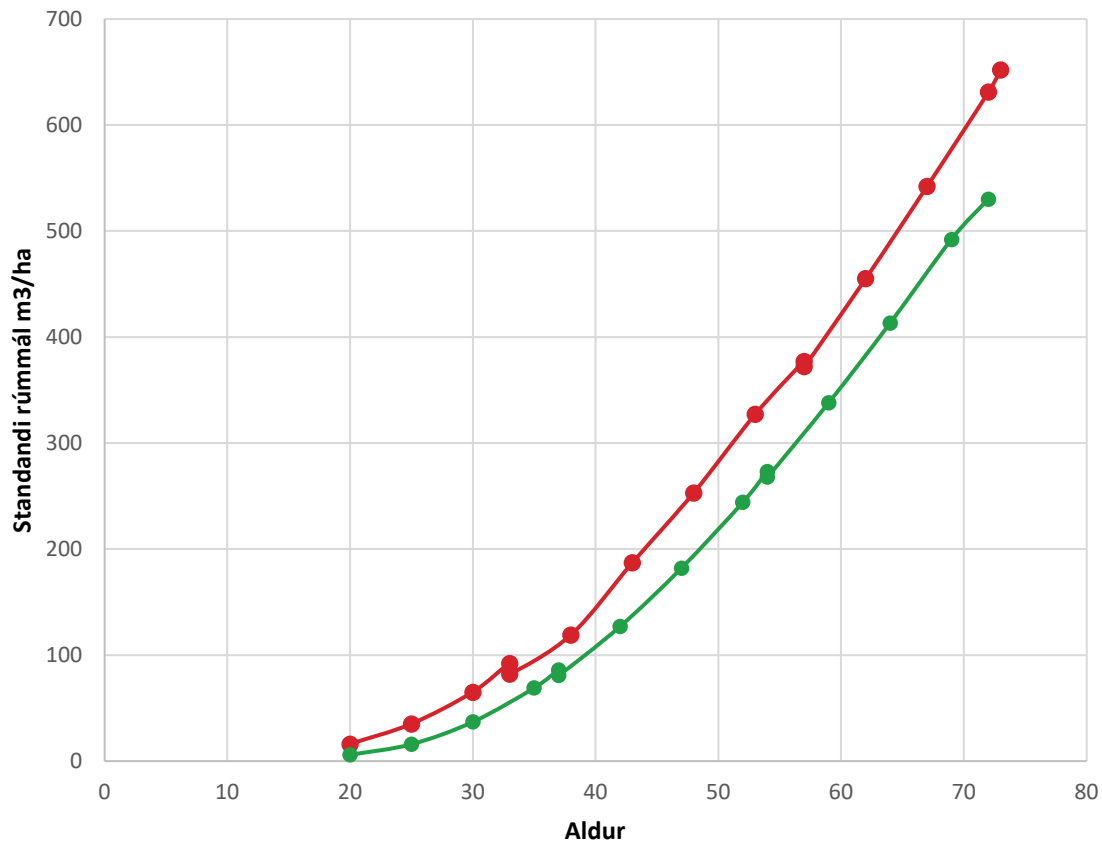


Útreikningar með jöfnunum

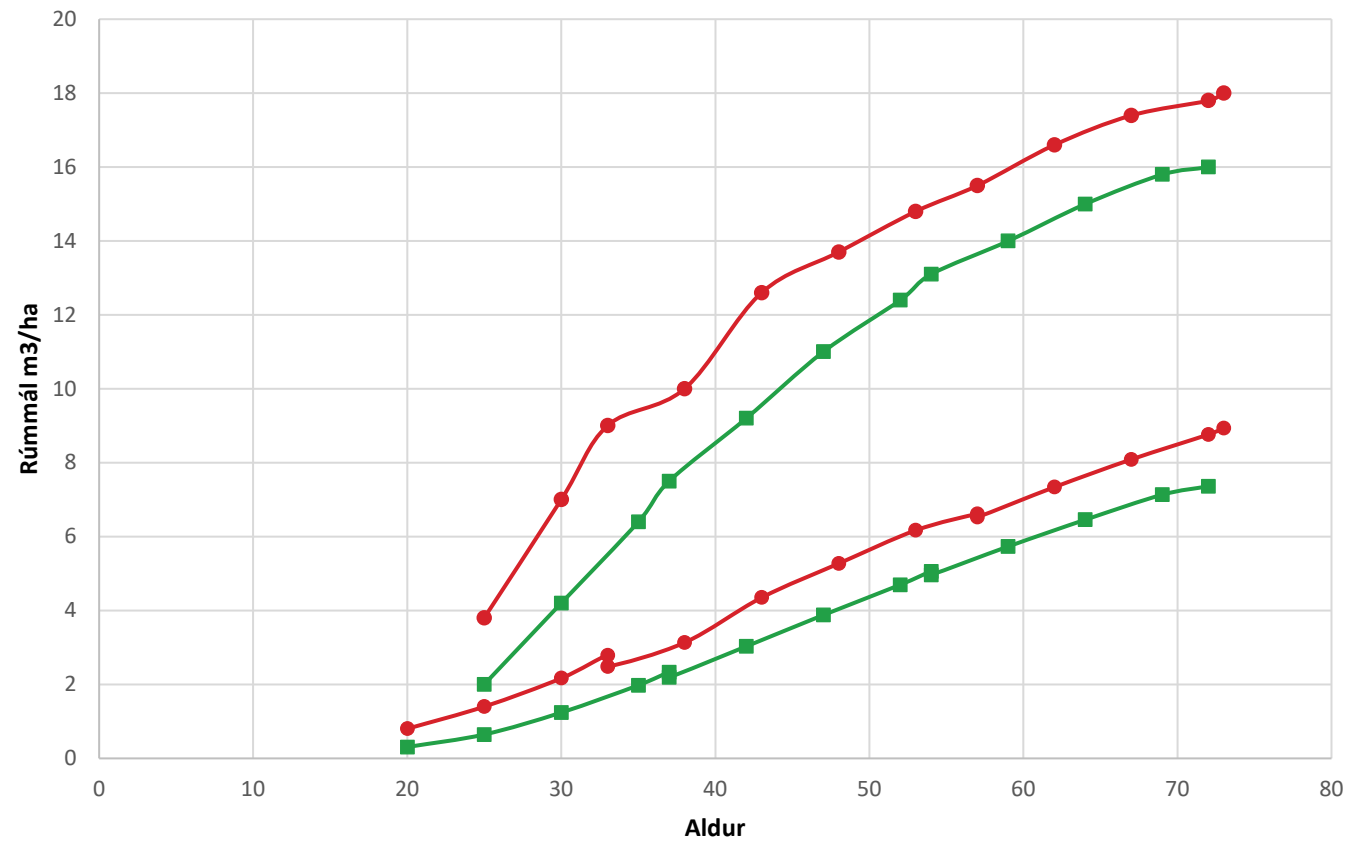


Útreikningar með jöfnunum

Standandi rúmmál 1000 og 2500 tré/ha

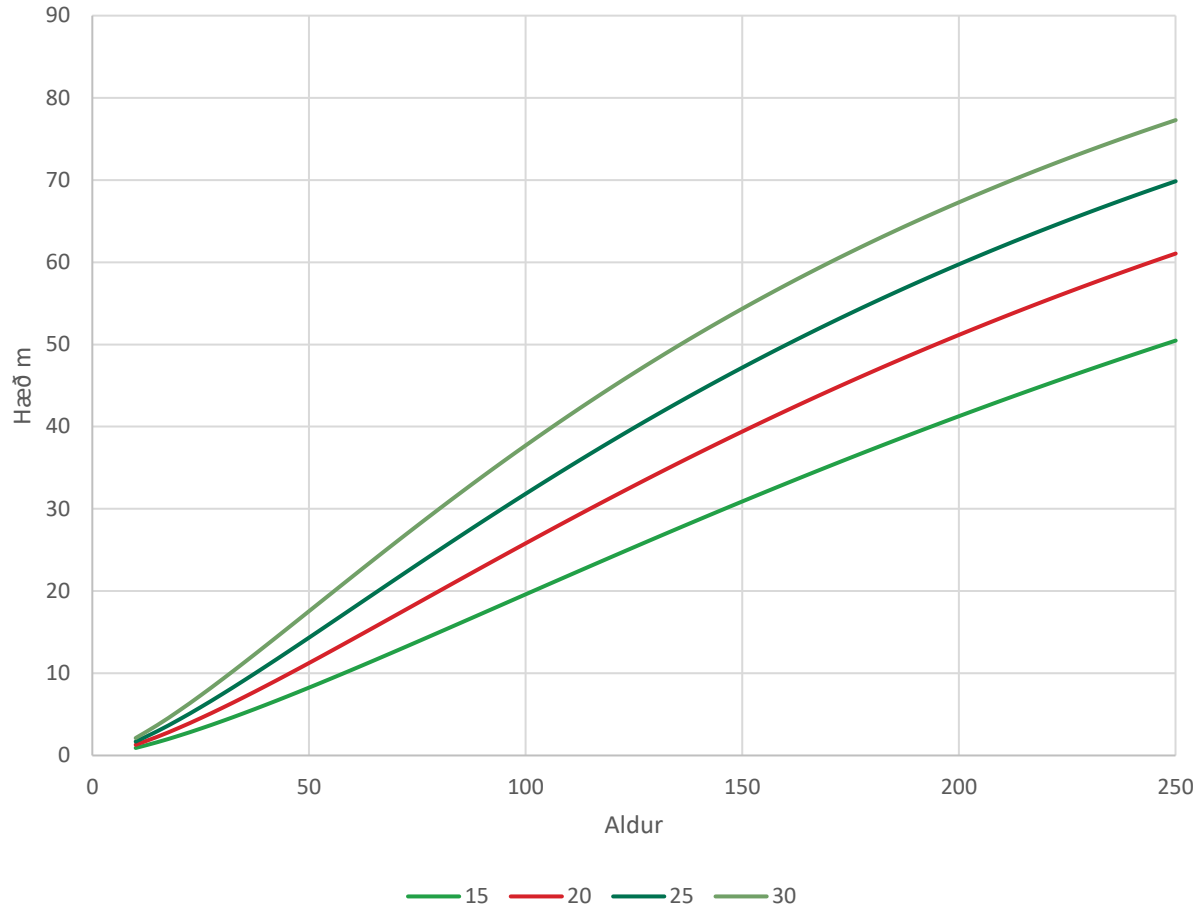


Meðal árlegur- og Hlaupandi vöxtur, 1000 og 2500 tré/ha

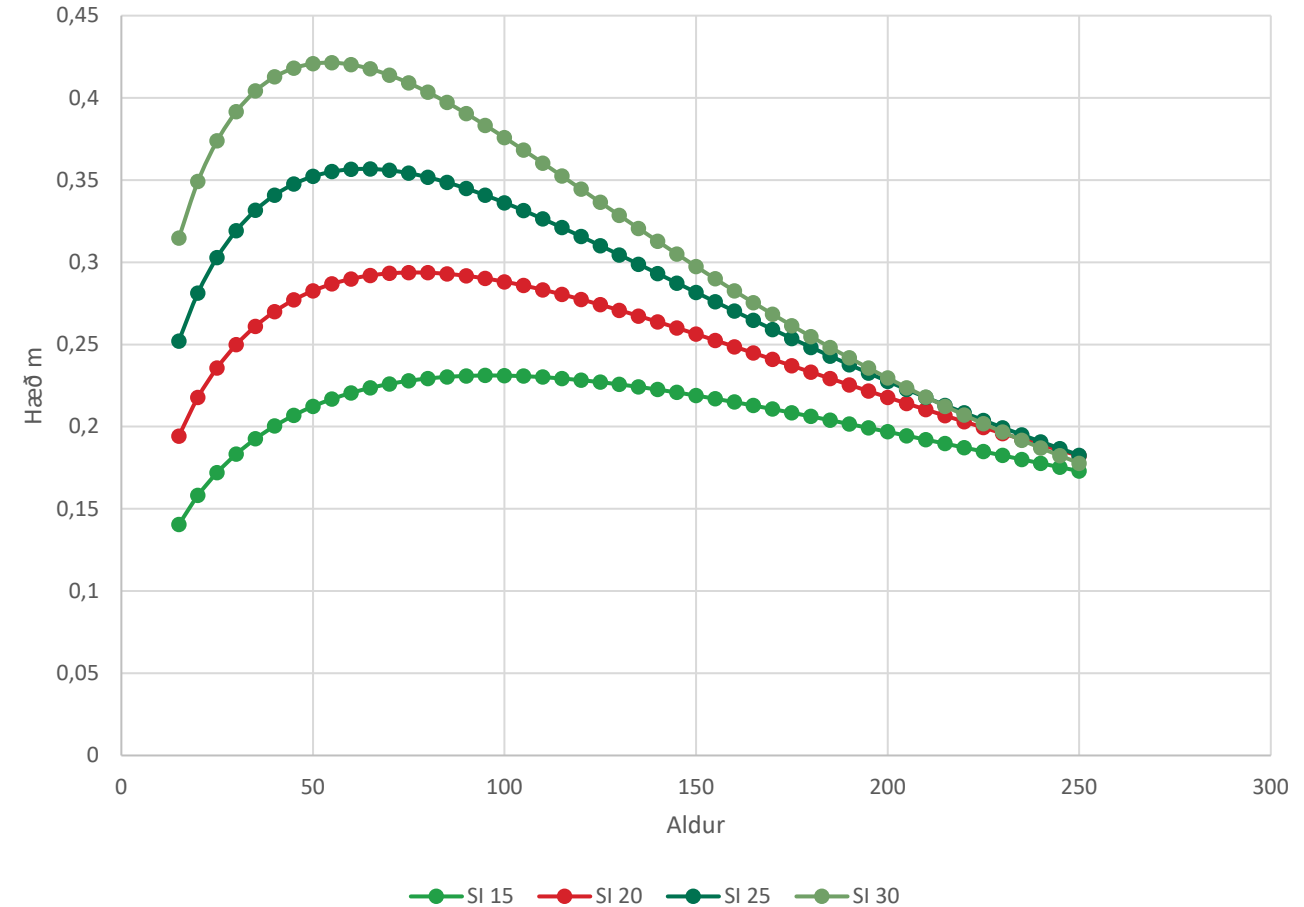


Langtímaspá

Yfirhæð

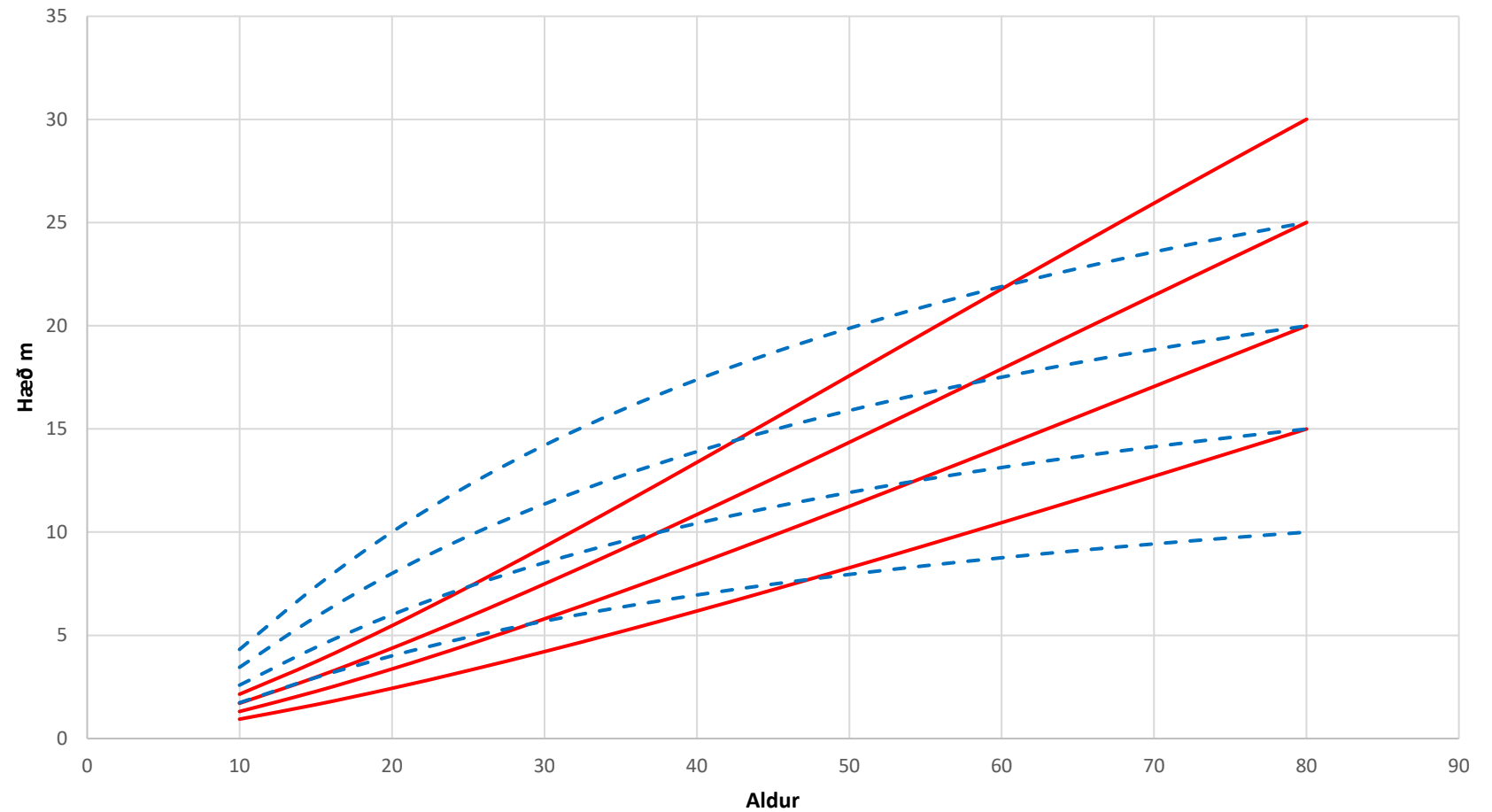


Árlegur hæðarvöxtur



Samanburður

Gróskuflokkar sitkagreni - lerki



Samantekt

- Við val á jöfnum var horft á hvort þær hegðuðu sér rökrétt í framtíðarspám. Af þeim sökum þá erum við sannfærðir um að mögulegt sé að nota þær í sitkagreniskógum yngri en 90 ára.
- Veikasti hlutinn er líklega sjálfgrisjunarjafnan, en mjög lítill sjálfgrisjun átti sér stað á mæliflötunum, jafnvel við mjög háan grunnflöt.
- Nýju jöfnurnar verða mikilvægur þáttur í því áætlanagerðarkerfi sem notað er hér á landi því þær gera okkur mögulegt að áætla umhirðu, lotulengd, viðarframleiðslu og kolefnisbindingu til að hámarka arðsemi ræktunarinnar.
- Sitkagreniskógar á Íslandi eru á unga aldri og uppfæra þarf jöfnurnar eftir því sem þeir eldast.