

Table. Heights and cover over time of natural vs novel scenarios.

	Response variable	Scenario	Site	Estimate	Error	Lower 95% CI	Upper 95% CI	Rhat	Bulk effective sample size	Tail effective sample size	Effect	Sample size
Intercept	Cover	Novel	CG	-3.4	0.3	-4.1	-2.8	1.00	11300.9	8594.7	fixed	147
Sample age	Cover	Novel	CG	0.2	0.1	0.1	0.4	1.00	7852.9	8411.4	fixed	147
Random intercept	Cover	Novel	CG	0.4	0.3	0.0	1.2	1.00	4249.9	4692.6	random	147
sd(Sample age)	Cover	Novel	CG	0.2	0.1	0.1	0.3	1.00	666.9	1407.4	random	147
cor(Intercept, Sample age)	Cover	Novel	CG	-0.3	0.5	-1.0	0.9	1.00	319.2	900.4	random	147
phi	Cover	Novel	CG	14.4	2.4	10.2	19.6	1.00	3506.6	7114.2	residual	147
Intercept	Canopy height	Novel	CG	3.0	0.1	2.7	3.2	1.00	2717.2	4104.6	fixed	341
Sample age	Canopy height	Novel	CG	0.0	0.0	0.0	0.0	1.00	4168.6	6754.5	fixed	341
Random intercept	Canopy height	Novel	CG	0.8	0.1	0.7	1.0	1.00	4199.6	7088.8	random	341
sd(Sample age)	Canopy height	Novel	CG	0.1	0.0	0.1	0.1	1.00	3410.4	5983.0	random	341
cor(Intercept, Sample age)	Canopy height	Novel	CG	-0.6	0.1	-0.8	-0.4	1.00	5060.7	7900.7	random	341
phi	Canopy height	Novel	CG	0.3	0.0	0.3	0.3	1.00	7087.2	8742.7	residual	341
Intercept	Mean height	Natural	QHI	4.5	1.2	2.2	6.7	1.00	5169.3	4668.9	fixed	57
Year (indexed)	Mean height	Natural	QHI	0.3	0.1	0.2	0.5	1.00	4975.0	4691.1	fixed	57
Random intercept	Mean height	Natural	QHI	1.0	0.5	0.1	2.3	1.00	2679.8	3742.8	random	57
sigma	Mean height	Natural	QHI	2.1	0.2	1.7	2.6	1.00	7090.3	7280.6	residual	57
Intercept	Max height	Natural	QHI	7.3	3.2	0.9	13.7	1.00	4291.2	5399.1	fixed	57
Year (indexed)	Max height	Natural	QHI	0.7	0.2	0.3	1.1	1.00	4390.3	5490.3	fixed	57
Random intercept	Max height	Natural	QHI	3.7	1.2	2.0	6.6	1.00	3054.5	5098.2	random	57
sigma	Max height	Natural	QHI	3.2	0.3	2.6	4.0	1.00	6601.0	7586.7	residual	57
Intercept	Max cover	Natural	QHI	-1.2	0.4	-2.0	-0.4	1.00	8213.3	6540.1	fixed	11
Year (indexed)	Max cover	Natural	QHI	0.0	0.0	0.0	0.0	1.00	8306.8	6648.8	fixed	11
Random intercept	Max cover	Natural	QHI	0.1	0.1	0.0	0.4	1.00	3898.2	5410.3	random	11
phi	Max cover	Natural	QHI	110.9	70.1	28.4	296.2	1.00	5243.9	5617.1	residual	11
Intercept	Mean cover	Natural	QHI	-2.0	0.3	-2.7	-1.3	1.00	9042.1	6913.9	fixed	11
Year (indexed)	Mean cover	Natural	QHI	0.0	0.0	0.0	0.0	1.00	9151.7	6995.3	fixed	11
Random intercept	Mean cover	Natural	QHI	0.1	0.1	0.0	0.3	1.00	5306.3	6267.4	random	11
phi	Mean cover	Natural	QHI	174.5	93.0	47.6	404.0	1.00	8410.5	7361.9	residual	11
Intercept	Max cover	Natural	Toolik	-0.7	0.7	-2.1	0.8	1.00	11105.7	8009.3	fixed	14
Year (indexed)	Max cover	Natural	Toolik	0.0	0.1	-0.1	0.1	1.00	11045.5	7938.0	fixed	14
Random intercept	Max cover	Natural	Toolik	0.4	0.4	0.0	1.3	1.00	4667.7	5517.4	random	14
phi	Max cover	Natural	Toolik	3.2	1.2	1.4	5.9	1.00	11868.5	9049.7	residual	14
Intercept	Mean cover	Natural	Toolik	-2.2	0.2	-2.6	-1.8	1.00	8918.1	7005.7	fixed	14
Year (indexed)	Mean cover	Natural	Toolik	0.0	0.0	0.0	0.0	1.00	8277.1	6757.8	fixed	14
Random intercept	Mean cover	Natural	Toolik	0.2	0.1	0.0	0.5	1.00	2765.8	5350.1	random	14
phi	Mean cover	Natural	Toolik	165.6	90.0	50.2	402.2	1.00	4001.9	5848.8	residual	14