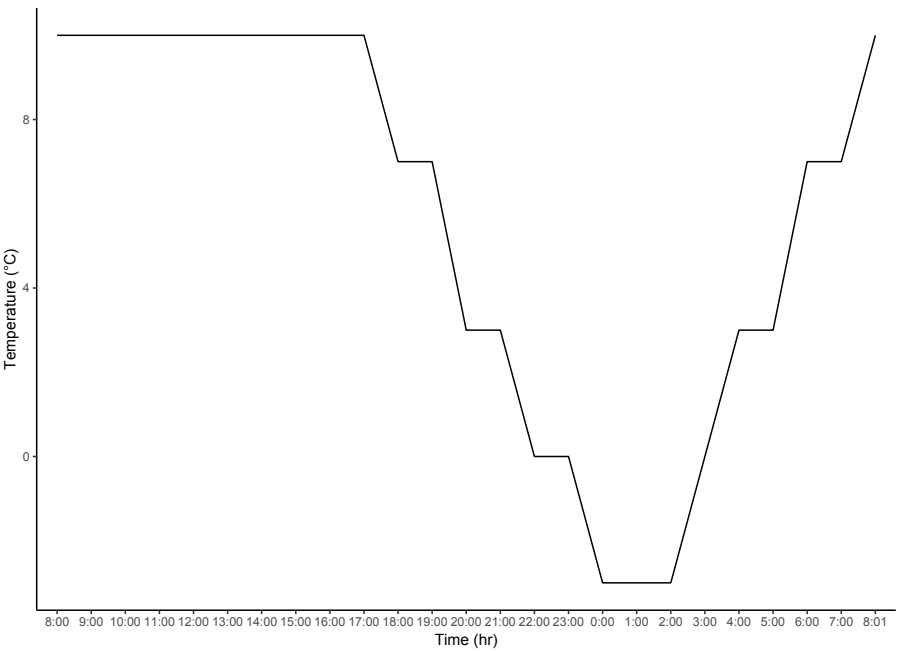


Supplemental materials: False spring damage on temperate tree seedlings is amplified with winter warming

Authors:  
C. J. Chamberlain <sup>1,2</sup>, K. Woodruff <sup>1</sup> & E. M. Wolkovich <sup>1,2,3</sup>

*Author affiliations:*  
<sup>1</sup>Arnold Arboretum of Harvard University, 1300 Centre Street, Boston, Massachusetts, USA;  
<sup>2</sup>Organismic & Evolutionary Biology, Harvard University, 26 Oxford Street, Cambridge, Massachusetts, USA;  
<sup>3</sup>Forest & Conservation Sciences, Faculty of Forestry, University of British Columbia, 2424 Main Mall, Vancouver, BC V6T 1Z4  
\*Corresponding author: 248.953.0189; cchamberlain@g.harvard.edu

Supplemental Tables and Figures



```
## Error in gsub("r_species[", "", modoutput$term):  invalid regular expression 'r_species[',  
reason 'Missing ']
```

Table S1: Summary of model with the effects of false spring treatment and chilling duration across species on duration of vegetative risk.

	mean	2%	10%	25%	75%	90%	98%
--	------	----	-----	-----	-----	-----	-----

Table S1: Summary of model with the effects of false spring treatment and chilling duration across species on duration of vegetative risk.

	mean	2%	10%	25%	75%	90%	98%
Intercept	16.02	12.46	13.60	15.08	16.90	18.52	20.23
Tx	2.97	1.13	1.68	2.45	3.49	4.26	4.87
Chill 6 Wks	-0.53	-3.83	-2.73	-1.38	0.32	1.72	2.99
Chill 8 Wks	-2.67	-5.54	-4.56	-3.35	-1.94	-0.85	0.03
Tx:Chill 6 Wks	-0.91	-3.59	-2.78	-1.65	-0.17	0.92	1.85
Tx:Chill 8 Wks	0.62	-1.97	-1.14	-0.08	1.34	2.38	3.25
$r_{species}$ [ <i>Acer saccharinum</i> , Intercept	-3.06	-7.74	-5.82	-4.12	-1.93	-0.40	0.75
$r_{species}$ [ <i>Alnus incana rugosa</i> , Intercept	4.39	0.17	1.66	3.33	5.44	7.19	8.51
$r_{species}$ [ <i>Betula papyrifera</i> , Intercept	0.96	-3.52	-1.86	-0.06	2.02	3.69	4.85
$r_{species}$ [ <i>Betula populifolia</i> , Intercept	0.20	-4.12	-2.47	-0.86	1.27	2.93	4.19
$r_{species}$ [ <i>Cornus racemosa</i> , Intercept	0.48	-3.87	-2.35	-0.54	1.57	3.10	4.26
$r_{species}$ [ <i>Salix purpurea</i> , Intercept	-5.49	-10.38	-8.46	-6.57	-4.33	-2.69	-1.40
$r_{species}$ [ <i>Sorbus americana</i> , Intercept	-1.14	-5.56	-3.88	-2.20	-0.07	1.60	2.79
$r_{species}$ [ <i>Viburnum dendatum</i> , Intercept	3.57	-0.78	0.80	2.51	4.67	6.29	7.69
$r_{species}$ [ <i>Acer saccharinum</i> , Tx	-0.36	-2.80	-1.82	-0.72	0.05	0.63	1.27
$r_{species}$ [ <i>Alnus incana rugosa</i> , Tx	0.37	-1.36	-0.73	-0.06	0.76	1.91	2.86
$r_{species}$ [ <i>Betula papyrifera</i> , Tx	0.45	-1.17	-0.54	-0.03	0.84	2.03	3.08
$r_{species}$ [ <i>Betula populifolia</i> , Tx	-0.43	-3.09	-1.97	-0.80	0.04	0.55	1.12
$r_{species}$ [ <i>Cornus racemosa</i> , Tx	0.00	-1.93	-1.15	-0.29	0.32	1.13	1.91
$r_{species}$ [ <i>Salix purpurea</i> , Tx	-0.14	-2.48	-1.59	-0.55	0.25	1.21	2.14
$r_{species}$ [ <i>Sorbus americana</i> , Tx	-0.21	-2.43	-1.57	-0.54	0.15	0.84	1.57
$r_{species}$ [ <i>Viburnum dendatum</i> , Tx	0.35	-1.38	-0.75	-0.10	0.74	1.93	2.86
$r_{species}$ [ <i>Acer saccharinum</i> , Chill6Wks	-0.13	-4.23	-2.82	-1.21	0.92	2.61	4.04
$r_{species}$ [ <i>Alnus incana rugosa</i> , Chill6Wks	-0.66	-4.71	-3.50	-1.71	0.41	2.10	3.53
$r_{species}$ [ <i>Betula papyrifera</i> , Chill6Wks	1.50	-2.35	-1.14	0.40	2.54	4.30	5.65
$r_{species}$ [ <i>Betula populifolia</i> , Chill6Wks	-0.59	-4.77	-3.43	-1.62	0.50	2.10	3.22
$r_{species}$ [ <i>Cornus racemosa</i> , Chill6Wks	0.46	-3.46	-2.14	-0.56	1.48	3.11	4.43
$r_{species}$ [ <i>Salix purpurea</i> , Chill6Wks	4.60	0.55	1.62	3.26	5.84	7.88	9.27
$r_{species}$ [ <i>Sorbus americana</i> , Chill6Wks	-2.20	-6.59	-5.11	-3.27	-1.02	0.45	1.44
$r_{species}$ [ <i>Viburnum dendatum</i> , Chill6Wks	-3.19	-7.67	-6.24	-4.28	-2.01	-0.48	0.62
$r_{species}$ [ <i>Acer saccharinum</i> , Chill8Wks	0.94	-2.40	-1.30	-0.02	1.85	3.42	4.57
$r_{species}$ [ <i>Alnus incana rugosa</i> , Chill8Wks	-1.32	-5.07	-3.77	-2.23	-0.38	1.04	2.09
$r_{species}$ [ <i>Betula papyrifera</i> , Chill8Wks	0.21	-3.49	-2.22	-0.68	1.12	2.52	3.77
$r_{species}$ [ <i>Betula populifolia</i> , Chill8Wks	-1.36	-5.28	-3.90	-2.25	-0.39	0.82	1.82
$r_{species}$ [ <i>Cornus racemosa</i> , Chill8Wks	0.61	-2.76	-1.58	-0.30	1.48	2.94	4.23
$r_{species}$ [ <i>Salix purpurea</i> , Chill8Wks	3.91	0.30	1.23	2.72	5.00	6.79	8.30
$r_{species}$ [ <i>Sorbus americana</i> , Chill8Wks	-0.51	-4.16	-2.86	-1.41	0.41	1.76	2.89
$r_{species}$ [ <i>Viburnum dendatum</i> , Chill8Wks	-2.54	-6.43	-5.09	-3.50	-1.50	-0.18	0.69
$r_{species}$ [ <i>Acer saccharinum</i> , Tx : Chill6Wks	-0.46	-4.34	-2.80	-0.98	0.16	1.15	2.08
$r_{species}$ [ <i>Alnus incana rugosa</i> , Tx : Chill6Wks	0.35	-2.54	-1.42	-0.27	0.89	2.66	4.38
$r_{species}$ [ <i>Betula papyrifera</i> , Tx : Chill6Wks	0.33	-2.71	-1.36	-0.22	0.85	2.44	3.77
$r_{species}$ [ <i>Betula populifolia</i> , Tx : Chill6Wks	-0.54	-4.45	-2.83	-1.05	0.11	1.06	2.03
$r_{species}$ [ <i>Cornus racemosa</i> , Tx : Chill6Wks	0.23	-2.65	-1.45	-0.26	0.69	2.25	3.58
$r_{species}$ [ <i>Salix purpurea</i> , Tx : Chill6Wks	1.07	-1.87	-0.80	0.02	1.84	4.03	5.96
$r_{species}$ [ <i>Sorbus americana</i> , Tx : Chill6Wks	-0.44	-3.99	-2.60	-0.97	0.16	1.13	2.24
$r_{species}$ [ <i>Viburnum dendatum</i> , Tx : Chill6Wks	-0.58	-4.61	-2.97	-1.16	0.10	1.07	2.17
$r_{species}$ [ <i>Acer saccharinum</i> , Tx : Chill8Wks	-0.05	-2.85	-1.67	-0.45	0.33	1.47	2.79
$r_{species}$ [ <i>Alnus incana rugosa</i> , Tx : Chill8Wks	0.12	-2.75	-1.46	-0.30	0.54	1.87	3.40

Table S1: Summary of model with the effects of false spring treatment and chilling duration across species on duration of vegetative risk.

	mean	2%	10%	25%	75%	90%	98%
$r_{species}[Betula\ papyrifera, Tx : Chill8Wks]$	0.31	-1.95	-1.01	-0.16	0.72	2.14	3.56
$r_{species}[Betula\ populifolia, Tx : Chill8Wks]$	-0.06	-2.98	-1.62	-0.43	0.33	1.43	2.66
$r_{species}[Cornus\ racemosa, Tx : Chill8Wks]$	0.40	-1.62	-0.83	-0.10	0.75	2.28	3.86
$r_{species}[Salix\ purpurea, Tx : Chill8Wks]$	-0.09	-3.49	-2.09	-0.58	0.43	1.75	2.95
$r_{species}[Sorbus\ americana, Tx : Chill8Wks]$	-0.48	-4.01	-2.61	-0.90	0.08	0.80	1.61
$r_{species}[Viburnum\ dentatum, Tx : Chill8Wks]$	-0.25	-3.57	-2.24	-0.67	0.26	1.25	2.36

```
## Error in file(file, "rt"): cannot open the connection

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in gsub("r_species[", "", modoutput$term): invalid regular expression 'r_species['
reason 'Missing '■

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54
```

Table S2: Summary of model with the effects of false spring treatment and chilling duration across species on growing season length.

	mean	2%	10%	25%	75%	90%	98%
Intercept	16.02	12.46	13.60	15.08	16.90	18.52	20.23

Table S2: Summary of model with the effects of false spring treatment and chilling duration across species on growing season length.

	mean	2%	10%	25%	75%	90%	98%
Tx	2.97	1.13	1.68	2.45	3.49	4.26	4.87
Chill 6 Wks	-0.53	-3.83	-2.73	-1.38	0.32	1.72	2.99
Chill 8 Wks	-2.67	-5.54	-4.56	-3.35	-1.94	-0.85	0.03
Tx:Chill 6 Wks	-0.91	-3.59	-2.78	-1.65	-0.17	0.92	1.85
Tx:Chill 8 Wks	0.62	-1.97	-1.14	-0.08	1.34	2.38	3.25
r <sub>species</sub> [ <i>Sorbus americana</i> , <i>Chill6Wks</i>	-2.20	-6.59	-5.11	-3.27	-1.02	0.45	1.44
r <sub>species</sub> [ <i>Viburnum dendatum</i> , <i>Chill6Wks</i>	-3.19	-7.67	-6.24	-4.28	-2.01	-0.48	0.62
r <sub>species</sub> [ <i>Acer saccharinum</i> , <i>Chill8Wks</i>	0.94	-2.40	-1.30	-0.02	1.85	3.42	4.57
r <sub>species</sub> [ <i>Alnus incana rugosa</i> , <i>Chill8Wks</i>	-1.32	-5.07	-3.77	-2.23	-0.38	1.04	2.09
r <sub>species</sub> [ <i>Betula papyrifera</i> , <i>Chill8Wks</i>	0.21	-3.49	-2.22	-0.68	1.12	2.52	3.77
r <sub>species</sub> [ <i>Betula populifolia</i> , <i>Chill8Wks</i>	-1.36	-5.28	-3.90	-2.25	-0.39	0.82	1.82
r <sub>species</sub> [ <i>Cornus racemosa</i> , <i>Chill8Wks</i>	0.61	-2.76	-1.58	-0.30	1.48	2.94	4.23
r <sub>species</sub> [ <i>Salix purpurea</i> , <i>Chill8Wks</i>	3.91	0.30	1.23	2.72	5.00	6.79	8.30
r <sub>species</sub> [ <i>Sorbus americana</i> , <i>Chill8Wks</i>	-0.51	-4.16	-2.86	-1.41	0.41	1.76	2.89
r <sub>species</sub> [ <i>Viburnum dendatum</i> , <i>Chill8Wks</i>	-2.54	-6.43	-5.09	-3.50	-1.50	-0.18	0.69
r <sub>species</sub> [ <i>Acer saccharinum</i> , <i>Tx : Chill6Wks</i>	-0.46	-4.34	-2.80	-0.98	0.16	1.15	2.08
r <sub>species</sub> [ <i>Alnus incana rugosa</i> , <i>Tx : Chill6Wks</i>	0.35	-2.54	-1.42	-0.27	0.89	2.66	4.38
r <sub>species</sub> [ <i>Betula papyrifera</i> , <i>Tx : Chill6Wks</i>	0.33	-2.71	-1.36	-0.22	0.85	2.44	3.77
r <sub>species</sub> [ <i>Betula populifolia</i> , <i>Tx : Chill6Wks</i>	-0.54	-4.45	-2.83	-1.05	0.11	1.06	2.03
r <sub>species</sub> [ <i>Cornus racemosa</i> , <i>Tx : Chill6Wks</i>	0.23	-2.65	-1.45	-0.26	0.69	2.25	3.58
r <sub>species</sub> [ <i>Salix purpurea</i> , <i>Tx : Chill6Wks</i>	1.07	-1.87	-0.80	0.02	1.84	4.03	5.96
r <sub>species</sub> [ <i>Sorbus americana</i> , <i>Tx : Chill6Wks</i>	-0.44	-3.99	-2.60	-0.97	0.16	1.13	2.24
r <sub>species</sub> [ <i>Viburnum dendatum</i> , <i>Tx : Chill6Wks</i>	-0.58	-4.61	-2.97	-1.16	0.10	1.07	2.17
r <sub>species</sub> [ <i>Acer saccharinum</i> , <i>Tx : Chill8Wks</i>	-0.05	-2.85	-1.67	-0.45	0.33	1.47	2.79
r <sub>species</sub> [ <i>Alnus incana rugosa</i> , <i>Tx : Chill8Wks</i>	0.12	-2.75	-1.46	-0.30	0.54	1.87	3.40
r <sub>species</sub> [ <i>Betula papyrifera</i> , <i>Tx : Chill8Wks</i>	0.31	-1.95	-1.01	-0.16	0.72	2.14	3.56
r <sub>species</sub> [ <i>Betula populifolia</i> , <i>Tx : Chill8Wks</i>	-0.06	-2.98	-1.62	-0.43	0.33	1.43	2.66
r <sub>species</sub> [ <i>Cornus racemosa</i> , <i>Tx : Chill8Wks</i>	0.40	-1.62	-0.83	-0.10	0.75	2.28	3.86
r <sub>species</sub> [ <i>Salix purpurea</i> , <i>Tx : Chill8Wks</i>	-0.09	-3.49	-2.09	-0.58	0.43	1.75	2.95
r <sub>species</sub> [ <i>Sorbus americana</i> , <i>Tx : Chill8Wks</i>	-0.48	-4.01	-2.61	-0.90	0.08	0.80	1.61
r <sub>species</sub> [ <i>Viburnum dendatum</i> , <i>Tx : Chill8Wks</i>	-0.25	-3.57	-2.24	-0.67	0.26	1.25	2.36

[illegible]

```
## Error in file(file, "rt"): cannot open the connection

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in gsub("r_species[", "", modoutput$term): invalid regular expression 'r_species[',
reason 'Missing '■

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54
```

Table S3: Summary of model with the effects of false spring treatment and chilling duration across species on shoot apical meristem growth.

	mean	2%	10%	25%	75%	90%	98%
Intercept	16.02	12.46	13.60	15.08	16.90	18.52	20.23

Table S3: Summary of model with the effects of false spring treatment and chilling duration across species on shoot apical meristem growth.

	mean	2%	10%	25%	75%	90%	98%
Tx	2.97	1.13	1.68	2.45	3.49	4.26	4.87
Chill 6 Wks	-0.53	-3.83	-2.73	-1.38	0.32	1.72	2.99
Chill 8 Wks	-2.67	-5.54	-4.56	-3.35	-1.94	-0.85	0.03
Tx:Chill 6 Wks	-0.91	-3.59	-2.78	-1.65	-0.17	0.92	1.85
Tx:Chill 8 Wks	0.62	-1.97	-1.14	-0.08	1.34	2.38	3.25
$r_{species}[Cornus racemosa, Tx : Chill8Wks]$	0.40	-1.62	-0.83	-0.10	0.75	2.28	3.86
$r_{species}[Salix purpurea, Tx : Chill8Wks]$	-0.09	-3.49	-2.09	-0.58	0.43	1.75	2.95
$r_{species}[Sorbus americana, Tx : Chill8Wks]$	-0.48	-4.01	-2.61	-0.90	0.08	0.80	1.61
$r_{species}[Viburnum dentatum, Tx : Chill8Wks]$	-0.25	-3.57	-2.24	-0.67	0.26	1.25	2.36



[illegible]

```
## Error in gsub("r_species[", "", modoutput$term): invalid regular expression 'r_species[' ,
reason 'Missing ']
```

Table S4: Summary of model with the effects of false spring treatment and chilling duration across species on leaf chlorophyll content.

	mean	2%	10%	25%	75%	90%	98%
Intercept	30.16	23.88	26.03	28.65	31.70	34.08	36.04
Tx	-0.32	-2.16	-1.59	-0.84	0.18	0.94	1.53
Chill 6 Wks	0.11	-1.86	-1.20	-0.45	0.66	1.49	2.22
Chill 8 Wks	0.61	-1.49	-0.81	0.03	1.15	2.12	3.00
Tx:Chill 6 Wks	-0.82	-3.42	-2.69	-1.61	-0.07	1.14	2.12
Tx:Chill 8 Wks	-1.97	-4.48	-3.67	-2.66	-1.27	-0.26	0.52
Intercept	29.77	23.73	25.79	28.36	31.27	33.56	35.47
<i>r_species</i> [ <i>Acer saccharinum</i> , <i>Intercept</i> ]	-5.14	-11.39	-9.18	-6.71	-3.62	-0.95	1.16
<i>r_species</i> [ <i>Alnus incana rugosa</i> , <i>Intercept</i> ]	6.38	0.27	2.31	4.74	7.95	10.74	12.82
<i>r_species</i> [ <i>Betula papyrifera</i> , <i>Intercept</i> ]	-1.61	-7.66	-5.57	-3.24	-0.08	2.62	4.70
<i>r_species</i> [ <i>Betula populifolia</i> , <i>Intercept</i> ]	1.40	-4.47	-2.63	-0.23	2.88	5.66	7.77
<i>r_species</i> [ <i>Cornus racemosa</i> , <i>Intercept</i> ]	1.69	-4.55	-2.33	0.09	3.28	5.88	8.11
<i>r_species</i> [ <i>NYSSYL</i> , <i>Intercept</i> ]	-2.28	-11.59	-8.71	-4.83	0.34	3.97	6.94
<i>r_species</i> [ <i>Salix purpurea</i> , <i>Intercept</i> ]	12.96	6.80	8.90	11.28	14.54	17.38	19.44
<i>r_species</i> [ <i>Sorbus americana</i> , <i>Intercept</i> ]	-6.48	-12.54	-10.51	-8.10	-4.90	-2.28	-0.09
<i>r_species</i> [ <i>Viburnum dendatum</i> , <i>Intercept</i> ]	-4.13	-10.23	-8.19	-5.71	-2.58	0.12	2.31
<i>r_species</i> [ <i>Acer saccharinum</i> , <i>Tx</i> ]	0.02	-1.90	-1.00	-0.24	0.30	1.03	1.74
<i>r_species</i> [ <i>Alnus incana rugosa</i> , <i>Tx</i> ]	-0.06	-1.95	-1.21	-0.34	0.22	0.99	1.83
<i>r_species</i> [ <i>Betula papyrifera</i> , <i>Tx</i> ]	-0.23	-2.52	-1.50	-0.48	0.09	0.64	1.23
<i>r_species</i> [ <i>Betula populifolia</i> , <i>Tx</i> ]	-0.15	-2.26	-1.30	-0.41	0.14	0.76	1.34
<i>r_species</i> [ <i>Cornus racemosa</i> , <i>Tx</i> ]	0.03	-1.76	-1.00	-0.24	0.30	1.11	1.96
<i>r_species</i> [ <i>NYSSYL</i> , <i>Tx</i> ]	0.04	-2.58	-1.31	-0.26	0.36	1.38	2.56
<i>r_species</i> [ <i>Salix purpurea</i> , <i>Tx</i> ]	-0.47	-3.24	-2.13	-0.88	0.04	0.61	1.26
<i>r_species</i> [ <i>Sorbus americana</i> , <i>Tx</i> ]	0.29	-1.29	-0.65	-0.08	0.60	1.61	2.54
<i>r_species</i> [ <i>Viburnum dendatum</i> , <i>Tx</i> ]	0.28	-1.16	-0.59	-0.06	0.58	1.56	2.37
<i>r_species</i> [ <i>Acer saccharinum</i> , <i>Chill6Wks</i> ]	0.29	-1.96	-1.05	-0.16	0.74	1.85	2.94
<i>r_species</i> [ <i>Alnus incana rugosa</i> , <i>Chill6Wks</i> ]	-0.70	-4.26	-2.80	-1.23	-0.00	0.62	1.35
<i>r_species</i> [ <i>Betula papyrifera</i> , <i>Chill6Wks</i> ]	0.56	-1.37	-0.62	-0.03	1.02	2.45	3.73
<i>r_species</i> [ <i>Betula populifolia</i> , <i>Chill6Wks</i> ]	0.23	-1.99	-1.14	-0.24	0.63	1.97	3.16
<i>r_species</i> [ <i>Cornus racemosa</i> , <i>Chill6Wks</i> ]	-0.48	-3.51	-2.30	-0.93	0.08	0.78	1.59
<i>r_species</i> [ <i>NYSSYL</i> , <i>Chill6Wks</i> ]	0.09	-3.70	-1.86	-0.40	0.58	2.20	3.95
<i>r_species</i> [ <i>Salix purpurea</i> , <i>Chill6Wks</i> ]	-0.85	-4.26	-3.04	-1.46	-0.03	0.56	1.36
<i>r_species</i> [ <i>Sorbus americana</i> , <i>Chill6Wks</i> ]	0.02	-2.97	-1.64	-0.39	0.49	1.54	2.45
<i>r_species</i> [ <i>Viburnum dendatum</i> , <i>Chill6Wks</i> ]	0.26	-2.02	-1.09	-0.18	0.71	1.83	2.87
<i>r_species</i> [ <i>Acer saccharinum</i> , <i>Chill8Wks</i> ]	-0.05	-2.81	-1.71	-0.50	0.42	1.54	2.39
<i>r_species</i> [ <i>Alnus incana rugosa</i> , <i>Chill8Wks</i> ]	0.25	-2.45	-1.31	-0.26	0.77	2.01	3.18
<i>r_species</i> [ <i>Betula papyrifera</i> , <i>Chill8Wks</i> ]	0.10	-2.66	-1.47	-0.36	0.56	1.76	2.77
<i>r_species</i> [ <i>Betula populifolia</i> , <i>Chill8Wks</i> ]	-0.01	-2.78	-1.64	-0.46	0.49	1.58	2.50
<i>r_species</i> [ <i>Cornus racemosa</i> , <i>Chill8Wks</i> ]	1.03	-0.94	-0.31	0.11	1.71	3.26	4.41
<i>r_species</i> [ <i>NYSSYL</i> , <i>Chill8Wks</i> ]	-0.04	-4.58	-2.54	-0.63	0.58	2.39	4.46
<i>r_species</i> [ <i>Salix purpurea</i> , <i>Chill8Wks</i> ]	-0.43	-3.85	-2.59	-1.00	0.25	1.22	2.06
<i>r_species</i> [ <i>Sorbus americana</i> , <i>Chill8Wks</i> ]	-0.80	-4.37	-3.01	-1.40	-0.01	0.64	1.32
<i>r_species</i> [ <i>Viburnum dendatum</i> , <i>Chill8Wks</i> ]	-0.80	-4.46	-2.97	-1.36	-0.02	0.56	1.24
<i>r_species</i> [ <i>Acer saccharinum</i> , <i>Tx : Chill6Wks</i> ]	0.03	-3.29	-1.89	-0.48	0.59	1.84	2.91

Table S4: Summary of model with the effects of false spring treatment and chilling duration across species on leaf chlorophyll content.

	mean	2%	10%	25%	75%	90%	98%
$r_{species}[Alnus\ incana\ rugosa, Tx : Chill6Wks]$	0.07	-3.15	-1.94	-0.54	0.59	2.27	3.94
$r_{species}[Betula\ papyrifera, Tx : Chill6Wks]$	-0.09	-3.57	-2.04	-0.57	0.48	1.63	2.82
$r_{species}[Betula\ populifolia, Tx : Chill6Wks]$	-0.95	-5.67	-3.62	-1.58	-0.02	0.62	1.42
$r_{species}[Cornus\ racemosa, Tx : Chill6Wks]$	0.14	-2.87	-1.64	-0.43	0.69	2.14	3.42
$r_{species}[NYSSYL, Tx : Chill6Wks]$	0.10	-4.63	-2.38	-0.55	0.74	2.73	5.13
$r_{species}[Salix\ purpurea, Tx : Chill6Wks]$	-1.34	-6.10	-4.38	-2.27	-0.12	0.61	1.50
$r_{species}[Sorbus\ americana, Tx : Chill6Wks]$	0.85	-1.78	-0.84	0.00	1.50	3.37	4.90
$r_{species}[Viburnum\ dendum, Tx : Chill6Wks]$	0.20	-3.03	-1.62	-0.35	0.75	2.15	3.38
$r_{species}[Acer\ saccharinum, Tx : Chill8Wks]$	0.01	-2.43	-1.28	-0.29	0.32	1.26	2.33
$r_{species}[Alnus\ incana\ rugosa, Tx : Chill8Wks]$	0.03	-2.19	-1.30	-0.28	0.36	1.30	2.38

```
## Error in file(file, "rt"): cannot open the connection

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in gsub("r_species[", "", modoutput$term): invalid regular expression 'r_species['
reason 'Missing '■

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54
```

Table S5: Summary of model with the effects of false spring treatment and chilling duration across species on leaf toughness.

	mean	2%	10%	25%	75%	90%	98%
Intercept	30.16	23.88	26.03	28.65	31.70	34.08	36.04

Table S5: Summary of model with the effects of false spring treatment and chilling duration across species on leaf toughness.

	mean	2%	10%	25%	75%	90%	98%
Tx	-0.32	-2.16	-1.59	-0.84	0.18	0.94	1.53
Chill 6 Wks	0.11	-1.86	-1.20	-0.45	0.66	1.49	2.22
Chill 8 Wks	0.61	-1.49	-0.81	0.03	1.15	2.12	3.00
Tx:Chill 6 Wks	-0.82	-3.42	-2.69	-1.61	-0.07	1.14	2.12
Tx:Chill 8 Wks	-1.97	-4.48	-3.67	-2.66	-1.27	-0.26	0.52
r <sub>species</sub> [ <i>Betula populifolia</i> , <i>Chill6Wks</i>	0.23	-1.99	-1.14	-0.24	0.63	1.97	3.16
r <sub>species</sub> [ <i>Cornus racemosa</i> , <i>Chill6Wks</i>	-0.48	-3.51	-2.30	-0.93	0.08	0.78	1.59
r <sub>species</sub> [ <i>NYSSYL</i> , <i>Chill6Wks</i>	0.09	-3.70	-1.86	-0.40	0.58	2.20	3.95
r <sub>species</sub> [ <i>Salix purpurea</i> , <i>Chill6Wks</i>	-0.85	-4.26	-3.04	-1.46	-0.03	0.56	1.36
r <sub>species</sub> [ <i>Sorbus americana</i> , <i>Chill6Wks</i>	0.02	-2.97	-1.64	-0.39	0.49	1.54	2.45
r <sub>species</sub> [ <i>Viburnum dentatum</i> , <i>Chill6Wks</i>	0.26	-2.02	-1.09	-0.18	0.71	1.83	2.87
r <sub>species</sub> [ <i>Acer saccharinum</i> , <i>Chill8Wks</i>	-0.05	-2.81	-1.71	-0.50	0.42	1.54	2.39
r <sub>species</sub> [ <i>Alnus incana rugosa</i> , <i>Chill8Wks</i>	0.25	-2.45	-1.31	-0.26	0.77	2.01	3.18
r <sub>species</sub> [ <i>Betula papyrifera</i> , <i>Chill8Wks</i>	0.10	-2.66	-1.47	-0.36	0.56	1.76	2.77
r <sub>species</sub> [ <i>Betula populifolia</i> , <i>Chill8Wks</i>	-0.01	-2.78	-1.64	-0.46	0.49	1.58	2.50
r <sub>species</sub> [ <i>Cornus racemosa</i> , <i>Chill8Wks</i>	1.03	-0.94	-0.31	0.11	1.71	3.26	4.41
r <sub>species</sub> [ <i>NYSSYL</i> , <i>Chill8Wks</i>	-0.04	-4.58	-2.54	-0.63	0.58	2.39	4.46
r <sub>species</sub> [ <i>Salix purpurea</i> , <i>Chill8Wks</i>	-0.43	-3.85	-2.59	-1.00	0.25	1.22	2.06
r <sub>species</sub> [ <i>Sorbus americana</i> , <i>Chill8Wks</i>	-0.80	-4.37	-3.01	-1.40	-0.01	0.64	1.32
r <sub>species</sub> [ <i>Viburnum dentatum</i> , <i>Chill8Wks</i>	-0.80	-4.46	-2.97	-1.36	-0.02	0.56	1.24
r <sub>species</sub> [ <i>Acer saccharinum</i> , <i>Tx : Chill6Wks</i>	0.03	-3.29	-1.89	-0.48	0.59	1.84	2.91
r <sub>species</sub> [ <i>Alnus incana rugosa</i> , <i>Tx : Chill6Wks</i>	0.07	-3.15	-1.94	-0.54	0.59	2.27	3.94
r <sub>species</sub> [ <i>Betula papyrifera</i> , <i>Tx : Chill6Wks</i>	-0.09	-3.57	-2.04	-0.57	0.48	1.63	2.82
r <sub>species</sub> [ <i>Betula populifolia</i> , <i>Tx : Chill6Wks</i>	-0.95	-5.67	-3.62	-1.58	-0.02	0.62	1.42
r <sub>species</sub> [ <i>Cornus racemosa</i> , <i>Tx : Chill6Wks</i>	0.14	-2.87	-1.64	-0.43	0.69	2.14	3.42
r <sub>species</sub> [ <i>NYSSYL</i> , <i>Tx : Chill6Wks</i>	0.10	-4.63	-2.38	-0.55	0.74	2.73	5.13
r <sub>species</sub> [ <i>Salix purpurea</i> , <i>Tx : Chill6Wks</i>	-1.34	-6.10	-4.38	-2.27	-0.12	0.61	1.50
r <sub>species</sub> [ <i>Sorbus americana</i> , <i>Tx : Chill6Wks</i>	0.85	-1.78	-0.84	0.00	1.50	3.37	4.90
r <sub>species</sub> [ <i>Viburnum dentatum</i> , <i>Tx : Chill6Wks</i>	0.20	-3.03	-1.62	-0.35	0.75	2.15	3.38
r <sub>species</sub> [ <i>Acer saccharinum</i> , <i>Tx : Chill8Wks</i>	0.01	-2.43	-1.28	-0.29	0.32	1.26	2.33
r <sub>species</sub> [ <i>Alnus incana rugosa</i> , <i>Tx : Chill8Wks</i>	0.03	-2.19	-1.30	-0.28	0.36	1.30	2.38

	mean	2%	10%	25%	75%	90%	98%

```
## Error in file(file, "rt"): cannot open the connection

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in gsub("r_species[", "", modoutput$term): invalid regular expression 'r_species['
reason 'Missing '■

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54
```

Table S6: Summary of model with the effects of false spring treatment and chilling duration across species on leaf thickness.

	mean	2%	10%	25%	75%	90%	98%
Intercept	30.16	23.88	26.03	28.65	31.70	34.08	36.04

Table S6: Summary of model with the effects of false spring treatment and chilling duration across species on leaf thickness.

	mean	2%	10%	25%	75%	90%	98%
Tx	-0.32	-2.16	-1.59	-0.84	0.18	0.94	1.53
Chill 6 Wks	0.11	-1.86	-1.20	-0.45	0.66	1.49	2.22
Chill 8 Wks	0.61	-1.49	-0.81	0.03	1.15	2.12	3.00
Tx:Chill 6 Wks	-0.82	-3.42	-2.69	-1.61	-0.07	1.14	2.12
Tx:Chill 8 Wks	-1.97	-4.48	-3.67	-2.66	-1.27	-0.26	0.52
$r_{species}[Sorbus americana, Tx : Chill6Wks]$	0.85	-1.78	-0.84	0.00	1.50	3.37	4.90
$r_{species}[Viburnum dendatum, Tx : Chill6Wks]$	0.20	-3.03	-1.62	-0.35	0.75	2.15	3.38
$r_{species}[Acer saccharinum, Tx : Chill8Wks]$	0.01	-2.43	-1.28	-0.29	0.32	1.26	2.33
$r_{species}[Alnus incana rugosa, Tx : Chill8Wks]$	0.03	-2.19	-1.30	-0.28	0.36	1.30	2.38



Table S6: Summary of model with the effects of false spring treatment and chilling duration across species on leaf thickness.

	mean	2%	10%	25%	75%	90%	98%

```
## Error in file(file, "rt"): cannot open the connection

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in gsub("r_species[", "", modoutput$term): invalid regular expression 'r_species[',
reason 'Missing '■

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54

## Error in '$<-.data.frame'('*tmp*', term, value = character(0)): replacement has 0 rows,
data has 54
```

Table S7: Summary of model with the effects of false spring treatment and chilling duration across species on total season growth.

	mean	2%	10%	25%	75%	90%	98%
Intercept	30.16	23.88	26.03	28.65	31.70	34.08	36.04

Table S7: Summary of model with the effects of false spring treatment and chilling duration across species on total season growth.

	mean	2%	10%	25%	75%	90%	98%
Tx	-0.32	-2.16	-1.59	-0.84	0.18	0.94	1.53
Chill 6 Wks	0.11	-1.86	-1.20	-0.45	0.66	1.49	2.22
Chill 8 Wks	0.61	-1.49	-0.81	0.03	1.15	2.12	3.00
Tx:Chill 6 Wks	-0.82	-3.42	-2.69	-1.61	-0.07	1.14	2.12
Tx:Chill 8 Wks	-1.97	-4.48	-3.67	-2.66	-1.27	-0.26	0.52

Table S7: Summary of model with the effects of false spring treatment and chilling duration across species on total season growth.

[illegible]

```
## Error in gsub("r_species[", "", modoutput$term): invalid regular expression 'r_species['  
reason 'Missing ']
```

Table S8: Summary of model with the effects of false spring treatment and chilling duration across species on total biomass.

	mean	2%	10%	25%	75%	90%	98%
Intercept	49.26	27.73	34.80	43.68	55.16	63.02	69.20
Tx	-3.41	-9.89	-8.08	-5.27	-1.55	1.15	3.47
Chill 6 Wks	0.39	-6.74	-4.36	-1.55	2.29	5.20	7.81
Chill 8 Wks	2.58	-4.64	-2.31	0.55	4.56	7.58	9.92
Tx:Chill 6 Wks	-0.59	-9.92	-7.10	-3.37	2.06	6.10	9.03
Tx:Chill 8 Wks	3.77	-5.75	-2.83	1.13	6.42	10.47	13.14
Intercept	49.06	28.12	34.71	43.77	54.77	62.43	68.15
r <sub>s</sub> species[Acer saccharinum, Intercept	3.91	-16.51	-10.19	-2.04	9.57	18.72	26.20
r <sub>s</sub> species[Alnus incana rugosa, Intercept	43.69	23.67	29.56	37.62	49.34	58.87	66.02
r <sub>s</sub> species[Betula papyrifera, Intercept	-13.61	-33.58	-27.43	-19.46	-7.89	1.31	8.48
r <sub>s</sub> species[Betula populifolia, Intercept	6.46	-13.58	-7.58	0.46	12.18	21.50	28.50
r <sub>s</sub> species[Cornus racemosa, Intercept	-3.40	-23.25	-17.50	-9.36	2.25	11.53	18.08
r <sub>s</sub> species[Salix purpurea, Intercept	36.46	16.89	22.39	30.53	42.05	51.62	59.11
r <sub>s</sub> species[Sorbus americana, Intercept	-30.68	-50.72	-44.79	-36.60	-24.97	-15.66	-8.88
r <sub>s</sub> species[Viburnum dendatum, Intercept	-14.67	-34.35	-28.81	-20.56	-8.91	0.09	6.99
r <sub>s</sub> species[Acer saccharinum, Tx	-0.29	-6.96	-3.85	-1.04	0.56	2.71	5.05
r <sub>s</sub> species[Alnus incana rugosa, Tx	0.42	-5.60	-3.06	-0.63	1.31	4.62	7.89
r <sub>s</sub> species[Betula papyrifera, Tx	0.08	-5.79	-3.25	-0.71	0.88	3.53	6.24
r <sub>s</sub> species[Betula populifolia, Tx	0.53	-4.48	-2.32	-0.39	1.28	4.26	7.61
r <sub>s</sub> species[Cornus racemosa, Tx	-0.56	-7.56	-4.32	-1.35	0.38	2.32	4.50
r <sub>s</sub> species[Salix purpurea, Tx	-0.44	-7.54	-4.49	-1.31	0.56	2.88	5.10
r <sub>s</sub> species[Sorbus americana, Tx	-0.14	-6.77	-3.80	-0.96	0.73	3.20	5.86
r <sub>s</sub> species[Viburnum dendatum, Tx	0.43	-4.76	-2.59	-0.50	1.17	4.45	7.28
r <sub>s</sub> species[Acer saccharinum, Chill6Wks	1.49	-4.32	-2.04	-0.18	2.63	7.53	12.00
r <sub>s</sub> species[Alnus incana rugosa, Chill6Wks	-1.69	-12.66	-8.10	-3.19	0.21	2.61	5.31
r <sub>s</sub> species[Betula papyrifera, Chill6Wks	-0.92	-10.34	-6.41	-2.09	0.51	3.07	5.56
r <sub>s</sub> species[Betula populifolia, Chill6Wks	-0.28	-8.41	-4.88	-1.39	0.88	3.90	7.16
r <sub>s</sub> species[Cornus racemosa, Chill6Wks	-0.49	-9.07	-5.41	-1.55	0.75	3.71	6.46
r <sub>s</sub> species[Salix purpurea, Chill6Wks	-0.30	-8.90	-5.43	-1.53	0.94	4.43	8.05
r <sub>s</sub> species[Sorbus americana, Chill6Wks	1.26	-5.46	-2.72	-0.29	2.50	7.02	11.38
r <sub>s</sub> species[Viburnum dendatum, Chill6Wks	0.53	-6.88	-3.62	-0.69	1.65	5.56	8.91
r <sub>s</sub> species[Acer saccharinum, Chill8Wks	0.20	-8.38	-4.85	-1.16	1.54	5.38	8.77
r <sub>s</sub> species[Alnus incana rugosa, Chill8Wks	-0.77	-10.60	-6.71	-2.42	0.93	4.44	7.95
r <sub>s</sub> species[Betula papyrifera, Chill8Wks	1.38	-5.93	-2.93	-0.30	2.96	7.05	10.73
r <sub>s</sub> species[Betula populifolia, Chill8Wks	-1.31	-10.81	-7.20	-2.78	0.35	2.79	5.61
r <sub>s</sub> species[Cornus racemosa, Chill8Wks	1.61	-5.17	-2.47	-0.15	2.95	7.54	11.45
r <sub>s</sub> species[Salix purpurea, Chill8Wks	-2.99	-14.97	-10.63	-4.98	-0.19	1.50	3.55
r <sub>s</sub> species[Sorbus americana, Chill8Wks	0.01	-8.73	-5.36	-1.41	1.56	4.97	7.88
r <sub>s</sub> species[Viburnum dendatum, Chill8Wks	1.28	-5.84	-2.93	-0.33	2.72	6.88	10.76
r <sub>s</sub> species[Acer saccharinum, Tx : Chill6Wks	-0.87	-12.34	-7.31	-2.28	0.77	4.21	7.46
r <sub>s</sub> species[Alnus incana rugosa, Tx : Chill6Wks	-1.82	-14.80	-9.63	-3.66	0.42	3.50	6.71
r <sub>s</sub> species[Betula papyrifera, Tx : Chill6Wks	-1.98	-14.88	-9.48	-3.64	0.23	2.68	5.21
r <sub>s</sub> species[Betula populifolia, Tx : Chill6Wks	0.98	-7.16	-4.01	-0.64	2.40	7.27	11.84
r <sub>s</sub> species[Cornus racemosa, Tx : Chill6Wks	0.56	-8.13	-4.51	-0.98	2.00	6.60	11.47

Table S8: Summary of model with the effects of false spring treatment and chilling duration across species on total biomass.

	mean	2%	10%	25%	75%	90%	98%
$r_{species}[Salix\ purpurea, Tx : Chill6Wks]$	0.63	-8.71	-4.93	-1.04	2.18	7.06	11.90
$r_{species}[Sorbus\ americana, Tx : Chill6Wks]$	0.64	-8.68	-4.76	-0.95	2.14	6.73	11.31
$r_{species}[Viburnum\ dendatum, Tx : Chill6Wks]$	1.51	-6.58	-3.41	-0.42	3.08	8.77	13.43
$r_{species}[Acer\ saccharinum, Tx : Chill8Wks]$	1.71	-4.94	-2.42	-0.21	3.14	8.66	13.63
$r_{species}[Alnus\ incana\ rugosa, Tx : Chill8Wks]$	0.49	-8.70	-5.08	-1.10	2.01	6.60	11.66
$r_{species}[Betula\ papyrifera, Tx : Chill8Wks]$	0.70	-7.60	-3.95	-0.74	1.99	6.43	10.94
$r_{species}[Betula\ populifolia, Tx : Chill8Wks]$	-0.68	-11.41	-6.55	-1.86	0.74	4.00	6.87
$r_{species}[Cornus\ racemosa, Tx : Chill8Wks]$	-0.68	-10.98	-6.69	-1.75	0.74	3.81	7.04
$r_{species}[Salix\ purpurea, Tx : Chill8Wks]$	-0.53	-11.31	-6.52	-1.95	0.99	4.76	8.65
$r_{species}[Sorbus\ americana, Tx : Chill8Wks]$	-0.61	-10.77	-6.46	-1.95	0.85	4.34	7.95

```
## Error in gsub("r\\_species[", "", modoutput$term): invalid regular expression 'r\\_species[',
reason 'Missing ']
```

Table S9: Summary of model with the effects of false spring treatment and chilling duration across species on belowground to aboveground biomass ratio.

	mean	2%	10%	25%	75%	90%	98%
Intercept	49.26	27.73	34.80	43.68	55.16	63.02	69.20
Tx	-3.41	-9.89	-8.08	-5.27	-1.55	1.15	3.47
Chill 6 Wks	0.39	-6.74	-4.36	-1.55	2.29	5.20	7.81
Chill 8 Wks	2.58	-4.64	-2.31	0.55	4.56	7.58	9.92
Tx:Chill 6 Wks	-0.59	-9.92	-7.10	-3.37	2.06	6.10	9.03
Tx:Chill 8 Wks	3.77	-5.75	-2.83	1.13	6.42	10.47	13.14
Intercept	49.06	28.12	34.71	43.77	54.77	62.43	68.15
r <sub>s</sub> species[Acer saccharinum, Intercept]	3.91	-16.51	-10.19	-2.04	9.57	18.72	26.20
r <sub>s</sub> species[Alnus incana rugosa, Intercept]	43.69	23.67	29.56	37.62	49.34	58.87	66.02
r <sub>s</sub> species[Betula papyrifera, Intercept]	-13.61	-33.58	-27.43	-19.46	-7.89	1.31	8.48
r <sub>s</sub> species[Betula populifolia, Intercept]	6.46	-13.58	-7.58	0.46	12.18	21.50	28.50
r <sub>s</sub> species[Cornus racemosa, Intercept]	-3.40	-23.25	-17.50	-9.36	2.25	11.53	18.08
r <sub>s</sub> species[Salix purpurea, Intercept]	36.46	16.89	22.39	30.53	42.05	51.62	59.11
r <sub>s</sub> species[Sorbus americana, Intercept]	-30.68	-50.72	-44.79	-36.60	-24.97	-15.66	-8.88
r <sub>s</sub> species[Viburnum dendatum, Intercept]	-14.67	-34.35	-28.81	-20.56	-8.91	0.09	6.99
r <sub>s</sub> species[Acer saccharinum, Tx]	-0.29	-6.96	-3.85	-1.04	0.56	2.71	5.05
r <sub>s</sub> species[Alnus incana rugosa, Tx]	0.42	-5.60	-3.06	-0.63	1.31	4.62	7.89
r <sub>s</sub> species[Betula papyrifera, Tx]	0.08	-5.79	-3.25	-0.71	0.88	3.53	6.24
r <sub>s</sub> species[Betula populifolia, Tx]	0.53	-4.48	-2.32	-0.39	1.28	4.26	7.61
r <sub>s</sub> species[Cornus racemosa, Tx]	-0.56	-7.56	-4.32	-1.35	0.38	2.32	4.50
r <sub>s</sub> species[Salix purpurea, Tx]	-0.44	-7.54	-4.49	-1.31	0.56	2.88	5.10
r <sub>s</sub> species[Sorbus americana, Tx]	-0.14	-6.77	-3.80	-0.96	0.73	3.20	5.86
r <sub>s</sub> species[Viburnum dendatum, Tx]	0.43	-4.76	-2.59	-0.50	1.17	4.45	7.28
r <sub>s</sub> species[Acer saccharinum, Chill6Wks]	1.49	-4.32	-2.04	-0.18	2.63	7.53	12.00
r <sub>s</sub> species[Alnus incana rugosa, Chill6Wks]	-1.69	-12.66	-8.10	-3.19	0.21	2.61	5.31
r <sub>s</sub> species[Betula papyrifera, Chill6Wks]	-0.92	-10.34	-6.41	-2.09	0.51	3.07	5.56
r <sub>s</sub> species[Betula populifolia, Chill6Wks]	-0.28	-8.41	-4.88	-1.39	0.88	3.90	7.16
r <sub>s</sub> species[Cornus racemosa, Chill6Wks]	-0.49	-9.07	-5.41	-1.55	0.75	3.71	6.46
r <sub>s</sub> species[Salix purpurea, Chill6Wks]	-0.30	-8.90	-5.43	-1.53	0.94	4.43	8.05
r <sub>s</sub> species[Sorbus americana, Chill6Wks]	1.26	-5.46	-2.72	-0.29	2.50	7.02	11.38
r <sub>s</sub> species[Viburnum dendatum, Chill6Wks]	0.53	-6.88	-3.62	-0.69	1.65	5.56	8.91
r <sub>s</sub> species[Acer saccharinum, Chill8Wks]	0.20	-8.38	-4.85	-1.16	1.54	5.38	8.77
r <sub>s</sub> species[Alnus incana rugosa, Chill8Wks]	-0.77	-10.60	-6.71	-2.42	0.93	4.44	7.95
r <sub>s</sub> species[Betula papyrifera, Chill8Wks]	1.38	-5.93	-2.93	-0.30	2.96	7.05	10.73
r <sub>s</sub> species[Betula populifolia, Chill8Wks]	-1.31	-10.81	-7.20	-2.78	0.35	2.79	5.61
r <sub>s</sub> species[Cornus racemosa, Chill8Wks]	1.61	-5.17	-2.47	-0.15	2.95	7.54	11.45
r <sub>s</sub> species[Salix purpurea, Chill8Wks]	-2.99	-14.97	-10.63	-4.98	-0.19	1.50	3.55
r <sub>s</sub> species[Sorbus americana, Chill8Wks]	0.01	-8.73	-5.36	-1.41	1.56	4.97	7.88
r <sub>s</sub> species[Viburnum dendatum, Chill8Wks]	1.28	-5.84	-2.93	-0.33	2.72	6.88	10.76
r <sub>s</sub> species[Acer saccharinum, Tx : Chill6Wks]	-0.87	-12.34	-7.31	-2.28	0.77	4.21	7.46
r <sub>s</sub> species[Alnus incana rugosa, Tx : Chill6Wks]	-1.82	-14.80	-9.63	-3.66	0.42	3.50	6.71
r <sub>s</sub> species[Betula papyrifera, Tx : Chill6Wks]	-1.98	-14.88	-9.48	-3.64	0.23	2.68	5.21
r <sub>s</sub> species[Betula populifolia, Tx : Chill6Wks]	0.98	-7.16	-4.01	-0.64	2.40	7.27	11.84
r <sub>s</sub> species[Cornus racemosa, Tx : Chill6Wks]	0.56	-8.13	-4.51	-0.98	2.00	6.60	11.47

Table S9: Summary of model with the effects of false spring treatment and chilling duration across species on belowground to aboveground biomass ratio.

	mean	2%	10%	25%	75%	90%	98%
$r_{species}[Salix\ purpurea, Tx : Chill6Wks]$	0.63	-8.71	-4.93	-1.04	2.18	7.06	11.90
$r_{species}[Sorbus\ americana, Tx : Chill6Wks]$	0.64	-8.68	-4.76	-0.95	2.14	6.73	11.31
$r_{species}[Viburnum\ dendatum, Tx : Chill6Wks]$	1.51	-6.58	-3.41	-0.42	3.08	8.77	13.43
$r_{species}[Acer\ saccharinum, Tx : Chill8Wks]$	1.71	-4.94	-2.42	-0.21	3.14	8.66	13.63
$r_{species}[Alnus\ incana\ rugosa, Tx : Chill8Wks]$	0.49	-8.70	-5.08	-1.10	2.01	6.60	11.66
$r_{species}[Betula\ papyrifera, Tx : Chill8Wks]$	0.70	-7.60	-3.95	-0.74	1.99	6.43	10.94
$r_{species}[Betula\ populifolia, Tx : Chill8Wks]$	-0.68	-11.41	-6.55	-1.86	0.74	4.00	6.87
$r_{species}[Cornus\ racemosa, Tx : Chill8Wks]$	-0.68	-10.98	-6.69	-1.75	0.74	3.81	7.04
$r_{species}[Salix\ purpurea, Tx : Chill8Wks]$	-0.53	-11.31	-6.52	-1.95	0.99	4.76	8.65
$r_{species}[Sorbus\ americana, Tx : Chill8Wks]$	-0.61	-10.77	-6.46	-1.95	0.85	4.34	7.95