

Supplementary file 1. Results from generalized linear mixed models (beta distribution) comparing, for annuals, perennials, *Bromus rubens* and *Lobularia maritima*, the percentage of individuals in each phenophase (i.e. mean Percphen_j, response variable) depending on the plot type (steppe and formerly-cultivated, fixed explanatory variable) with site (S1, S2, S3, F1, F2, and F3) as random effect. There were one model for each week. Phenophases are: Veg = vegetative, Gra = grazed, Buds = carrying flower buds, Flo = carrying flowers, Fru = carrying fruits, Di/sen = in dispersal/senescence. For each model, degrees of freedom (*df*) test statistics (*z*) and p-value (*p*) are indicated. No test was performed when only percentages of zero were recorded (-).

Species	Pheno phase	Week 1			Week 2			Week 3			Week 4			Week 5			Week 6			Week 7			Week 8		
		<i>df</i>	<i>z</i>	<i>p</i>	<i>df</i>	<i>z</i>	<i>p</i>	<i>df</i>	<i>z</i>	<i>p</i>	<i>df</i>	<i>z</i>	<i>p</i>	<i>df</i>	<i>z</i>	<i>p</i>	<i>df</i>	<i>z</i>	<i>p</i>	<i>df</i>	<i>z</i>	<i>p</i>	<i>df</i>	<i>z</i>	<i>p</i>
Annuals	Veg	14	-0.313	0.754	13	-0.610	0.542	14	-0.251	0.802	14	0.013	0.989	14	-1.070	0.285	14	-0.395	0.693	14	-1.078	0.281	14	-1.501	0.133
	Gra	-	-	-	-	-	-	14	-0.859	0.391	14	-0.705	0.481	14	0.539	0.590	14	0.095	0.924	14	-1.226	0.22	14	-2.281	0.023
	Buds	14	1.294	0.196	14	1.133	0.257	14	0.419	0.675	14	0.467	0.640	14	2.990	0.003	14	-1.277	0.201	14	-0.297	0.766	14	0.829	0.407
	Flo	14	-0.822	0.411	14	-1.050	0.294	14	-0.414	0.679	14	-0.116	0.907	14	-0.973	0.331	14	-0.551	0.582	14	-0.189	0.850	14	-0.861	0.389
	Fru	14	-1.663	0.097	14	-1.033	0.302	14	-1.559	0.119	14	-1.951	0.051	14	-2.312	0.021	14	0.996	0.319	14	1.142	0.253	14	0.092	0.926
	Di/sen	14	0.250	0.803	-	-	-	14	-1.134	0.257	14	-1.291	0.197	14	.259	0.796	14	-0.511	0.610	14	0.194	0.846	14	0.137	0.891
Perennials	Veg	14	0.256	0.798	14	0.425	0.671	13	-1.844	0.065	12	-1.095	0.274	14	0.737	0.461	14	0.041	0.967	14	-0.114	0.910	14	-0.695	0.487
	Gra	-	-	-	-	-	-	-	-	-	12	0.272	0.786	14	1.078	0.281	14	-0.041	0.967	14	-0.741	0.459	14	0.376	0.707
	Buds	14	0.072	0.942	14	0.442	0.658	13	1.214	0.225	12	0.508	0.611	14	0.965	0.334	14	-0.222	0.824	14	1.077	0.282	14	0.740	0.459
	Flo	14	0.471	0.638	14	0.775	0.438	13	-0.07	0.944	12	0.962	0.336	14	-0.226	0.822	14	-0.249	0.803	14	0.062	0.95	14	1.033	0.301
	Fru	14	0.648	0.517	14	-0.196	0.845	13	1.037	0.300	12	0.458	0.647	14	-0.683	0.495	14	0.841	0.400	14	-2.034	0.042	14	0.469	0.764
	Di/sen	14	-1.224	0.221	14	-1.120	0.263	13	-1.209	0.227	12	-0.858	0.391	14	-1.901	0.057	14	-0.276	0.782	14	1.147	0.251	14	-1.725	0.085
<i>Bromus rubens</i>	Veg	6	2.033	0.042	5	0.836	0.403	8	-0.548	0.584	5	0.605	0.545	-	-	-	-	-	-	-	-	-	-	-	-
	Gra	-	-	-	-	-	-	-	-	-	5	-1.097	0.273	-	-	-	-	-	-	-	-	-	-	-	-
	Buds	6	-1.986	0.047	5	-0.783	0.433	8	-0.237	0.812	5	-0.187	0.851	2	-0.803	0.422	6	0.926	0.355	-	-	-	-	-	-
	Flo	-	-	-	5	0.836	0.403	8	0.873	0.383	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Fru	-	-	-	-	-	-	-	-	-	-	-	-	2	0.813	0.416	6	-0.933	0.351	6	0.497	0.619	5	0.155	0.877
	Di/sen	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-0.475	0.635	5	-0.133	0.894
<i>Lobularia maritima</i>	Veg	10	-1.435	0.151	8	0.115	0.909	10	-0.499	0.618	8	-0.131	0.896	11	0.573	0.567	11	1.456	0.146	8	-0.655	0.512	5	0.851	0.395
	Gra	-	-	-	-	-	-	-	-	-	8	-1.736	0.083	-	-	-	-	-	-	-	-	-	5	-0.851	0.395
	Buds	10	0.738	0.46	8	0	1.00	10	0.428	0.669	8	0.929	0.353	11	-0.464	0.643	11	-1.460	0.144	-	-	-	-	-	-
	Flo	10	1.007	0.314	8	0.239	0.811	10	0.526	0.599	8	1.182	0.237	11	0.67	0.503	-	-	-	-	-	-	-	-	-
	Fru	10	0.882	0.378	-	-	-	10	0.373	0.709	8	-0.839	0.402	-	-	-	-	-	-	-	-	-	-	-	-
	Di/sen	-	-	-	-	-	-	-	-	-	-	-	-	11	-0.737	0.461	-	-	-	8	0.639	0.523	-	-	-