

Additional file 4: Tables with details on selected null, univariate and multivariate models

For: Does delaying the first mowing date benefit biodiversity in meadowland?
Humbert et al. 2012. *Environmental Evidence*

Model	AIC	Test for Heterogeneity			I ² in %	Tau ²	R ² in %*	Parameter	Estimate**	SE	Z-value	P-value	95% CI	
		Q	df	P-value									Lower b.	Upper b.
For plant species richness														
Null	63.66	56.88	25	<0.001	54.01	0.2055		Intercept	0.017	0.130	0.134	0.894	-0.237	0.271
Years	71.09	55.22	24	<0.001	54.01	0.2042	0.63	Intercept	-0.094	0.181	-0.518	0.604	-0.448	0.261
								Years	0.016	0.018	0.878	0.380	-0.019	0.051
Cut_1	66.51	43.12	24	0.010	54.01	0.1324	35.57	Intercept	2.582	0.904	2.856	0.004	0.811	4.354
								Cut_1	-0.015	0.005	-2.878	0.004	-0.025	-0.005
Cut_2	71.90	49.77	24	0.002	54.01	0.1806	12.12	Intercept	1.507	0.837	1.800	0.072	-0.134	3.147
								Cut_2	-0.007	0.004	-1.805	0.071	-0.013	0.001
Time_lapse	74.75	56.78	24	<0.001	54.01	0.2280	0.00	Intercept	0.036	0.297	0.122	0.903	-0.546	0.618
								Time_lapse	0.000	0.004	-0.057	0.955	-0.009	0.008
Habitat	64.38	52.34	23	<0.001	54.01	0.2016	1.90	Intercept	0.526	0.502	1.048	0.295	-0.458	1.510
								meso	-0.667	0.526	-1.269	0.205	-1.698	0.363
								wet	-0.221	0.563	-0.393	0.695	-1.325	0.883
Veget_size	71.54	56.86	24	<0.001	54.01	0.2222	0.00	Intercept	0.022	0.142	0.152	0.880	-0.256	0.299
								Veget_size	-0.001	0.021	-0.028	0.978	-0.042	0.041
Cut_1 + Cut_2	77.51	41.71	23	0.010	54.01	0.1407	31.53	Intercept	2.805	0.993	2.823	0.005	0.858	4.752
								Cut_1	-0.013	0.006	-2.213	0.027	-0.025	-0.002
								Cut_2	-0.002	0.004	-0.546	0.585	-0.010	0.005
Cut_1 x Cut_2	95.11	41.57	22	0.007	54.01	0.1586	22.82	Intercept	-0.311	6.138	-0.051	0.960	-12.341	11.719
								Cut_1	0.005	0.036	0.134	0.894	-0.066	0.075
								Cut_2	0.011	0.025	0.430	0.667	-0.039	0.061
								Cut_1:Cut_2	0.000	0.000	-0.518	0.605	0.000	0.000

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Model	AIC	Test for Heterogeneity			I ² in %	Tau ²	R ² in %*	Parameter	Estimate**	SE	Z-value	P-value	95% CI	
		Q	df	P-value									Lower b.	Upper b.
For invertebrate species richness														
Null	24.63	14.97	8	0.060	34.67	0.1126		Intercept	0.511	0.195	2.622	0.009	0.129	0.893
Cut_1	33.90	14.35	7	0.045	34.67	0.2178	0.00	Intercept	-0.420	1.434	-0.293	0.770	-3.231	2.391
								Cut_1	0.006	0.009	0.644	0.519	-0.012	0.024
Cut_2	31.62	13.76	7	0.056	34.67	0.1906	0.00	Intercept	-3.761	4.189	-0.898	0.369	-11.971	4.450
								Cut_2	0.021	0.021	1.018	0.309	-0.019	0.061
Cut_1 + Cut_2	38.65	12.90	6	0.045	34.67	0.2198	0.00	Intercept	-9.053	8.062	-1.123	0.261	-24.853	6.747
								Cut_1	-0.018	0.024	-0.761	0.447	-0.066	0.029
								Cut_2	0.061	0.056	1.088	0.277	-0.049	0.170
Years***	25.04	11.59	5	0.041	58.59	0.3320	14.52	intrcpt	-0.241	0.568	-0.424	0.672	-1.354	0.873
								year	0.154	0.117	1.322	0.186	-0.074	0.382
For invertebrate abundance														
Null	35.96	31.04	8	<0.001	87.12	1.3291		Intercept	-0.053	0.427	-0.125	0.901	-0.889	0.783
Cut_1	43.01	24.85	7	0.001	87.12	1.4365	0.00	Intercept	-2.969	2.864	-1.037	0.300	-8.583	2.644
								Cut_1	0.019	0.019	1.025	0.305	-0.018	0.056
Cut_2	40.92	24.55	7	0.001	87.12	1.3819	0.00	Intercept	-10.980	9.774	-1.123	0.261	-30.137	8.178
								Cut_2	0.054	0.049	1.118	0.264	-0.041	0.149
Cut_1 + Cut_2	22.76	2.47	6	0.871	87.12	0.0000	100	Intercept	-811.179	171.128	-4.740	<0.001	-1146.582	-475.775
								Cut_1	-2.129	0.453	-4.699	<0.001	-3.017	-1.241
								Cut_2	5.607	1.185	4.730	<0.001	3.284	7.930

Model abbreviations:

Years = study duration in years
Cut_1 = ordinal day of the date of the early cut
Cut_2 = ordinal day of the date of the delayed cut
Time_lapse = number of days between the early and the delayed cuts
Habitat = meadow type (dry, meso or wet)
Veget_size = size of the vegetation relevé (in m²)

* R² in %, is the proportion of variance explained by the covariates (Borenstein et al. 2009)

** Weighted meta-regression, based on the Hedges'd' effect size

*** This model is without the study of Valtonen et al. (2006), thus AIC value cannot be compared with the other models