

Table S4. Analysis of Variance table of type 3 with Satterthwaite approximation for degrees of freedom of the linear mixed effects models for the $\Delta^{13}\text{C}$ signature of the different **functional groups** as a function of exploratory, management intensity, treatment (precipitation reduction), group and the interaction of group and treatment.

$\Delta^{13}\text{C}$	late summer 2012				early summer 2013			late summer 2013		
Fixed factors	Num df	den DF ^b	F-value or z - score	p ^a	den DF ^b	F-value or z - score	p ^a	den DF ^b	F-value or z - score	p ^a
exploratory	2	3	1.173	0.420	2	2.313	0.297	3	3.533	0.161
management	2	3	0.812	0.522	2	0.974	0.506	3	1.118	0.430
treatment	1	157	1.241	0.267	121	1.073	0.302	139	5.532	0.020
group	4	159	3.372	0.011	123	12.68	<.001	141	13.13	<.001
group * treatment	4	157	0.861	0.490	122	1.507	0.204	139	3.063	0.019
fern_c-fern_rc ^{c,d}									0.601	1.000
grass_c-grass_r									3.400	0.030
herb_c-herb_r									2.299	0.967
shrub_c-shrub_r									1.249	1.000
tree_c-tree_r									-1.16	1.000

^a Significant probabilities (< 0.05) are shown in bold.

^b denDF is the number of degrees of freedom associated with the model errors.

^c Since tested parameters were affected by an interaction of group and treatment, post-hoc tests were applied for treatment within group and not for group and treatment alone.

^d cm = intensive conifer managed, bm = beech managed, bu = beech unmanaged, r = precipitation reduction subplot, c = control subplot