

Supplementary material

Drying rates of saturated masticated fuelbeds from Rocky Mountain mixed-conifer stands

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Table S.1 - A summary of values for the regression analyses across drying environments and replicates at each site. Column headings are Site (see Table 1 for site descriptions), Drying Environment is the method used to dry fuelbeds (Chamber, Outside); Mast Code definitions can be found in Table 1. Rep is replicate number and Age Code defines the two age categories (1=young=0-6 years; 2=old=7-10 years), 24HR and 96HR are relative weights (normalized) between saturation and equilibrium moisture content at 24 and 96 hours after saturation. The Intercept and slope are the α and β coefficients (β is also the BCOEFF response variable in mixed models) in Equation 1 and R^2 is the coefficient of determination.

Site	Drying Environment	Mast Code	Rep	Age Code	24HR	96HR	Intercept- α	Slope- β	R^2
Amber	Chamber	VS1	1	1	0.212	0.001	-0.497	-0.054	0.918
Amber	Chamber	VS1	2	1	0.108	0.001	-1.028	-0.061	0.946
Amber	Chamber	VS1	3	1	0.217	0.001	-0.563	-0.061	0.931
Amber	Outdoors	VS1	1	1	0.277	0.004	0.037	-0.058	0.921
Amber	Outdoors	VS1	2	1	0.697	0.009	0.488	-0.046	0.826
Amber	Outdoors	VS1	3	1	0.120	0.026	-0.656	-0.048	0.914
Amber New	Chamber	VS1	1	2	0.350	0.006	0.185	-0.055	0.998
Amber New	Chamber	VS1	1	2	0.453	0.039	0.630	-0.046	0.879
Amber New	Chamber	VS1	2	2	0.352	0.006	0.369	-0.059	0.979
Amber New	Outdoors	VS1	2	2	0.424	0.030	0.747	-0.054	0.841
Amber New	Outdoors	VS1	3	2	0.741	0.022	0.736	-0.045	0.812

Amber New	Outdoors	VS1	3	2	0.282	0.032	0.088	-0.048	0.940
BH Mix	Chamber	VS2	1	2	0.066	0.001	-1.887	-0.054	0.848
BH Mix	Chamber	VS2	2	2	0.119	0.000	-1.648	-0.051	0.826
BH Mix	Chamber	VS2	2	2	0.088	0.001	-1.599	-0.050	0.880
BH Mix	Outdoors	VS2	1	2	0.204	0.026	-1.059	-0.043	0.719
BH Mix	Outdoors	VS2	3	2	0.492	0.003	0.135	-0.046	0.804
BH Mix	Outdoors	VS2	3	2	0.274	0.004	-0.073	-0.057	0.920
BH Mow	Chamber	VS2	1	2	0.159	0.000	-1.605	-0.051	0.806
BH Mow	Chamber	VS2	2	2	0.125	0.001	-1.466	-0.051	0.891
BH Mow	Chamber	VS2	3	2	0.181	0.001	-1.225	-0.051	0.891
BH Mow	Outdoors	VS2	1	2	0.131	0.003	-0.607	-0.055	0.882
BH Mow	Outdoors	VS2	2	2	0.329	0.002	-0.913	-0.041	0.653
BH Mow	Outdoors	VS2	3	2	0.027	0.036	-2.165	-0.033	0.506
LG	Chamber	HS	1	1	0.486	0.029	0.806	-0.053	0.955
LG	Chamber	HS	2	1	0.531	0.035	0.917	-0.054	0.950
LG	Chamber	HS	3	1	0.482	0.026	0.885	-0.057	0.954
LG	Outdoors	HS	1	1	0.762	0.023	0.807	-0.047	0.846
LG	Outdoors	HS	2	1	0.383	0.034	0.555	-0.056	0.959
LG	Outdoors	HS	3	1	0.498	0.017	0.894	-0.059	0.907
MEF Chip	Chamber	Chip	1	1	0.255	0.001	-0.638	-0.060	0.925
MEF Chip	Chamber	Chip	1	1	0.233	0.001	-0.988	-0.051	0.862
MEF Chip	Chamber	Chip	2	1	0.301	0.001	-0.624	-0.055	0.922
MEF Chip	Outdoors	Chip	2	1	0.685	0.003	0.153	-0.045	0.747
MEF Chip	Outdoors	Chip	3	1	0.352	0.003	0.033	-0.059	0.901
MEF Chip	Outdoors	Chip	3	1	0.167	0.035	-1.289	-0.042	0.653
MEF-WS	Chamber	VS1	1	1	0.223	0.002	-0.672	-0.060	0.931
MEF-WS	Chamber	VS1	1	1	0.151	0.001	-0.739	-0.055	0.949
MEF-WS	Chamber	VS1	2	1	0.249	0.001	-0.413	-0.058	0.970
MEF-WS	Outdoors	VS1	2	1	0.235	0.000	-1.047	-0.042	0.646

MEF-WS	Outdoors	VS1	3	1	0.183	0.004	-0.162	-0.056	0.927
MEF-WS	Outdoors	VS1	3	1	0.050	0.033	-1.876	-0.038	0.592
PAL	Chamber	HS	1	2	0.499	0.064	0.816	-0.047	0.867
PAL	Chamber	HS	1	2	0.507	0.076	0.849	-0.046	0.836
PAL	Chamber	HS	2	2	0.513	0.050	0.874	-0.050	0.914
PAL	Outdoors	HS	2	2	0.561	0.052	1.040	-0.054	0.809
PAL	Outdoors	HS	3	2	0.824	0.116	1.167	-0.043	0.720
PAL	Outdoors	HS	3	2	0.418	0.054	1.073	-0.062	0.849
PR3	Chamber	HS	1	2	0.585	0.048	0.922	-0.052	0.926
PR3	Chamber	HS	1	2	0.583	0.026	0.954	-0.057	0.961
PR3	Chamber	HS	2	2	0.582	0.050	0.897	-0.050	0.907
PR3	Outdoors	HS	2	2	0.810	0.031	0.999	-0.048	0.851
PR3	Outdoors	HS	3	2	0.594	0.020	1.001	-0.059	0.902
PR3	Outdoors	HS	3	2	0.457	0.042	0.723	-0.054	0.954
PRCC1	Chamber	VS1	1	2	0.132	0.002	-1.127	-0.046	0.867
PRCC1	Chamber	VS1	1	2	0.158	0.001	-1.120	-0.051	0.929
PRCC1	Chamber	VS1	3	2	0.041	0.002	-1.605	-0.053	0.910
PRCC1	Outdoors	VS1	2	2	0.316	0.001	-0.800	-0.041	0.635
PRCC1	Outdoors	VS1	2	2	0.294	0.005	0.063	-0.057	0.924
PRCC1	Outdoors	VS1	3	2	0.106	0.044	-0.491	-0.060	0.851
Skelton	Chamber	VS1	1	2	0.313	0.002	0.102	-0.065	0.950
Skelton	Chamber	VS1	2	2	0.343	0.005	0.139	-0.054	0.992
Skelton	Chamber	VS1	3	2	0.299	0.002	-0.247	-0.055	0.946
Skelton	Outdoors	VS1	1	2	0.635	0.004	0.147	-0.045	0.781
Skelton	Outdoors	VS1	2	2	0.154	0.035	-1.185	-0.041	0.685
Skelton	Outdoors	VS1	3	2	0.257	0.006	0.192	-0.057	0.940
VC1	Chamber	HS	1	2	0.592	0.122	0.973	-0.043	0.749
VC1	Chamber	HS	2	2	0.550	0.130	0.938	-0.042	0.725
VC1	Chamber	HS	3	2	0.568	0.120	0.942	-0.043	0.745

VC1	Outdoors	HS	1	2	0.601	0.083	1.114	-0.052	0.743
VC1	Outdoors	HS	2	2	0.876	0.168	1.241	-0.041	0.655
VC1	Outdoors	HS	3	2	0.539	0.139	0.899	-0.042	0.737
VC2	Chamber	HS	1	2	0.316	0.006	0.448	-0.062	0.967
VC2	Chamber	HS	2	2	0.302	0.004	0.106	-0.056	0.996
VC2	Chamber	HS	3	2	0.373	0.006	0.453	-0.058	0.965
VC2	Outdoors	HS	1	2	0.582	0.013	0.602	-0.046	0.831
VC2	Outdoors	HS	2	2	0.366	0.034	0.618	-0.058	0.946
VC2	Outdoors	HS	3	2	0.327	0.006	0.351	-0.058	0.936

Figure S1. Measures of association of masticated fuelbed age (AGE), mastication method (MM), drying environment (DE), and site, based on the Goodman and Kruskal's τ measure (Goodman and Kruskal 1954), which evaluates the percentage improvement in predictability of the a variable (column or row) given the value of other variables (row or column). The diagonal shows the numbers of unique levels for each variable while the off-diagonal elements give the numeric and graphical representations of the Goodman-Kruskal τ values, including potential assymetrical associations. For example the numerical values in row 'MM' indicates that AGE can be a relatively strong predictor of MM; conversely, the column values of 'MM' indicates that MM provides little information about AGE. A value of 1 indicates complete association. Analysis was conducted using GoodmanKruskal package in R.

