

Table. Range of variation in landscape structure for Mesic Sagebrush under the simulated HRV disturbance scenario on the Columbine District, San Juan National Forest, Colorado, and the degree of departure of the current landscape from the simulated range of variation (see text for details).

Landscape Metric	Condition Class (seral stage)	Current Landscape ¹		Percentiles of Simulated Distribution							HRV Departure	
		Metric Value	Percentile of HRV	0	5	25	50	75	95	100	CV ²	Index ³
<i>Seral Stage Composition</i> ⁴												
PLAND	Herbs - Shrubs	0.645	82	0.178	0.238	0.367	0.533	0.624	0.697	0.744	86	26
	Shrubs - Herbs	0.137	18	0.037	0.084	0.157	0.248	0.414	0.543	0.603	185	
<i>Class Configuration</i> ⁵												
PD	Herbs - Shrubs	0.021	0	0.022	0.025	0.029	0.033	0.041	0.050	0.054	75	100
	Shrubs - Herbs	0.011	0	0.016	0.026	0.037	0.046	0.053	0.064	0.103	82	
ED	Herbs - Shrubs	0.954	69	0.364	0.556	0.707	0.871	0.969	1.075	1.131	60	26
	Shrubs - Herbs	0.240	12	0.101	0.200	0.332	0.498	0.752	0.919	1.069	144	
AREA_MN	Herbs - Shrubs	30.159	100	3.752	5.448	8.904	16.219	21.203	26.801	29.482	132	95
	Shrubs - Herbs	12.775	98	1.145	2.256	3.930	5.576	8.133	11.654	16.209	169	
AREA_AM	Herbs - Shrubs	164.465	43	15.990	30.040	90.229	179.664	227.398	254.252	290.330	125	20
	Shrubs - Herbs	35.031	15	11.388	22.353	50.603	85.001	137.982	200.341	265.396	209	
GYRATE_AI	Herbs - Shrubs	631.304	48	185.338	275.166	441.741	642.539	732.192	788.524	895.695	80	30
	Shrubs - Herbs	277.826	10	150.900	241.941	333.698	430.264	554.949	696.670	840.008	106	
SHAPE_MN	Herbs - Shrubs	2.098	100	1.345	1.460	1.551	1.709	1.818	1.965	2.029	30	98
	Shrubs - Herbs	1.611	99	1.134	1.189	1.286	1.355	1.442	1.531	1.663	25	
SHAPE_AM	Herbs - Shrubs	3.295	40	1.846	2.240	2.873	3.630	3.943	4.266	4.936	56	24
	Shrubs - Herbs	2.206	13	1.665	2.021	2.421	2.754	3.300	3.988	4.607	71	
CPLAND	Herbs - Shrubs	0.437	88	0.091	0.143	0.223	0.345	0.404	0.457	0.496	91	28
	Shrubs - Herbs	0.095	24	0.019	0.045	0.099	0.158	0.281	0.363	0.413	202	
CORE_MN	Herbs - Shrubs	20.438	100	2.103	3.162	5.574	10.448	13.843	17.777	19.787	140	97
	Shrubs - Herbs	8.919	98	0.619	1.269	2.419	3.568	5.547	7.925	11.919	187	
CORE_AM	Herbs - Shrubs	130.468	49	8.617	18.536	67.799	131.995	166.433	188.390	216.898	129	15

	Shrubs - Herbs	26.838	18	7.444	11.199	37.987	70.136	108.429	154.972	197.974	205	
CAI_MN	Herbs - Shrubs	46.995	95	27.091	33.052	37.648	40.758	43.162	47.111	55.407	34	69
	Shrubs - Herbs	39.056	10	29.097	35.293	43.494	49.021	53.075	60.268	74.633	51	
CAI_AM	Herbs - Shrubs	67.766	92	50.973	55.957	60.743	63.860	65.954	68.335	71.990	19	48
	Shrubs - Herbs	69.815	82	35.663	49.224	61.207	65.289	68.791	72.742	77.326	36	
PROX_MN	Herbs - Shrubs	53.546	44	3.506	10.079	35.000	56.628	70.726	105.522	189.060	169	28
	Shrubs - Herbs	6.555	11	0.911	3.340	12.856	27.101	62.926	118.652	170.094	425	
PROX_AM	Herbs - Shrubs	63.064	44	1.708	5.592	24.371	114.526	275.426	330.508	371.296	284	0
	Shrubs - Herbs	16.201	49	0.538	1.911	4.862	16.865	58.039	179.456	333.517	1053	
CWED	Herbs - Shrubs	0.369	74	0.112	0.170	0.238	0.322	0.370	0.419	0.443	77	28
	Shrubs - Herbs	0.075	11	0.028	0.056	0.111	0.158	0.245	0.313	0.378	163	
TECI	Herbs - Shrubs	38.398	77	24.493	29.609	33.632	36.628	38.213	39.950	40.892	28	3
	Shrubs - Herbs	31.027	35	19.626	26.693	30.145	32.021	34.061	37.658	41.037	34	
CLUMPY	Herbs - Shrubs	0.912	88	0.833	0.859	0.886	0.901	0.907	0.914	0.918	6	52
	Shrubs - Herbs	0.901	88	0.809	0.841	0.871	0.886	0.896	0.907	0.930	7	
IJI	Herbs - Shrubs	69.465	58	57.314	63.008	66.572	68.907	70.969	75.279	79.116	18	46
	Shrubs - Herbs	64.673	2	55.389	66.850	70.517	73.608	76.682	79.326	82.771	17	

Summary Indices⁶:

<i>Seral-Stage Departure Index</i>	26
<i>Class Configuration Departure Index</i>	45
<i>Cover Type Departure Index</i>	36

¹Some stand conditions are not represented in the current landscape. Certain metrics are logically zero if the class is absent, while others are undefined (indicated by missing data). HRV departure index is undefined if the current landscape condition is undefined.

²CV = coefficient of variation in the simulated distribution, computed as the difference between the 5 and 95th percentiles divided by the median and multiplied by 100 to convert to a percentage. n/d = not defined (division by zero).

³HRV departure index represents the degree of departure of the current landscape condition from the historic range of variability and is given here specifically as the degree of departure from the 25-75th percentile range of variation, where a 0 represents no departure (i.e., within the 25-75th percentiles of variation) and 100 represents complete departure (i.e., outside the 0-100th percentiles of variation).

⁴Landscape composition here represents the distribution of area among seral stages for the corresponding cover type. PLAND = the percent of the landscape encompassed by the corresponding seral stage. Note, PLAND = the percentage of the entire landscape, not as a percent of the corresponding cover type.

⁵Landscape configuration here represents the spatial character, distribution, and arrangement of the corresponding cover type. The landscape metrics listed here are described in detail in the FRAGSTATS methods section. PD = patch density; ED = edge density; AREA_MN = mean patch size; AREA_AM = area-weighted mean patch size; GYRATE_AM = area-weighted mean patch radius of gyration (correlation length); SHAPE_MN = mean patch shape index; SHAPE_AM = area-weighted mean patch shape index; CPLAND = core area percent of landscape; CORE_MN = mean patch core area; CORE_AM = area-weighted mean patch core area; CAI_MN = mean patch core area index; CAI_AM = area-weighted mean patch core area index; PROX_MN = mean proximity index; PROX_AM = area-weighted mean proximity index; CWED = contrast-weighted edge density; TECI = total edge contrast index; CLUMPY = clumpiness index; IJI = interspersion and juxtaposition index.

⁶Seral-stage departure index is based on the distribution of area (percentage of landscape) among seral stages and is computed as the mean departure across seral stages. Class configuration departure index is based on several landscape metrics that quantify different aspects of the spatial distribution of the cover type and is computed as the mean departure across metrics. Cover type departure index is computed as the mean of the seral-stage and class configuration departure indices.