

Table. Range of variation in landscape structure for oak-dominated shrub stands 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							CV ²	HRV Departure Index ³	
		Metric Value	Percentile of HRV	0	5	25	50	75	95	100			
<i>Seral Stage Composition</i> ⁴													
PLAND	Early seral	12.330	100	2.389	3.688	5.199	6.199	7.205	8.781	10.183	82	100	
	Late seral	0.631	0	3.011	4.482	6.264	7.092	8.013	9.266	10.384	67		
<i>Class Configuration</i> ⁵													
PD	Early seral	0.265	2	0.251	0.272	0.303	0.329	0.354	0.404	0.496	40	96	
	Late seral	0.020	0	0.122	0.153	0.181	0.202	0.224	0.242	0.269	44		
ED	Early seral	12.501	100	4.555	6.042	7.804	8.705	9.549	10.926	12.327	56	100	
	Late seral	0.730	0	4.194	6.031	7.789	8.826	9.742	11.057	11.688	57		
AREA_MN	Early seral	46.551	100	8.640	11.255	14.938	18.740	22.464	27.178	33.626	85	63	
	Late seral	31.435	19	20.714	27.731	32.794	35.573	38.373	41.718	46.648	39		
AREA_AM	Early seral	554.128	71	90.966	165.890	314.845	443.938	663.482	865.764	1607.120	158	40	
	Late seral	232.689	5	154.068	227.272	303.651	340.343	370.988	410.134	482.305	54		
GYRATE_AM	Early seral	1093.184	82	411.613	531.462	708.512	864.920	1035.172	1182.460	1674.341	75	61	
	Late seral	677.457	2	586.160	709.822	820.848	877.030	916.163	971.469	1072.540	30		
SHAPE_MN	Early seral	1.886	98	1.687	1.731	1.771	1.802	1.825	1.859	1.902	7	97	
	Late seral	1.743	0	1.838	1.905	1.948	1.967	1.987	2.011	2.038	5		
SHAPE_AM	Early seral	3.987	58	2.599	2.837	3.411	3.845	4.376	4.836	5.876	52	47	
	Late seral	3.172	1	2.968	3.385	3.649	3.826	3.937	4.100	4.428	19		
CPLAND	Early seral	9.461	100	1.629	2.669	3.788	4.620	5.459	6.978	8.323	93	100	
	Late seral	0.466	0	2.202	3.439	4.938	5.550	6.237	7.189	8.277	68		
CORE_MN	Early seral	35.719	100	5.890	8.069	11.027	13.957	17.069	21.301	26.959	95	77	
	Late seral	23.220	11	15.297	21.317	25.265	27.866	30.089	32.757	38.213	41		
CORE_AM	Early seral	462.310	71	67.044	137.625	260.011	366.016	542.754	709.674	1290.825	156	45	

	Late seral	173.104	2	128.687	194.593	257.893	290.599	318.286	351.473	424.344	54	
CAI_MN	Early seral	41.236	50	32.292	35.033	38.669	41.289	44.004	47.439	50.043	30	48
	Late seral	58.020	99	47.515	49.055	50.917	52.602	54.090	56.585	59.109	14	
CAI_AM	Early seral	76.731	78	65.466	70.562	72.870	74.833	76.501	79.328	83.462	12	55
	Late seral	73.867	1	73.130	75.916	77.002	77.889	78.850	80.310	82.476	6	
PROX_MN	Early seral	188.251	77	12.581	35.795	68.831	129.828	184.850	264.697	348.411	176	53
	Late seral	2.067	0	52.687	87.912	123.365	142.386	163.479	198.350	243.807	78	
PROX_AM	Early seral	557.129	62	22.278	81.861	209.433	437.227	896.259	1671.612	3518.172	364	50
	Late seral	0.229	0	80.956	153.310	263.189	329.136	403.244	498.246	593.371	105	
CWED	Early seral	4.954	100	1.328	2.000	2.676	3.047	3.393	3.846	4.348	61	100
	Late seral	0.280	0	1.380	1.906	2.426	2.775	3.166	3.725	4.077	66	
TECI	Early seral	38.845	100	28.995	31.093	33.033	34.342	35.560	37.049	38.531	17	100
	Late seral	37.837	100	27.644	29.024	30.324	31.116	31.934	33.457	34.690	14	
CLUMPY	Early seral	0.928	100	0.874	0.886	0.900	0.908	0.914	0.919	0.923	4	100
	Late seral	0.932	100	0.905	0.912	0.915	0.917	0.919	0.922	0.925	1	
IJI	Early seral	77.339	56	69.114	71.485	74.638	76.683	79.175	81.672	85.404	13	32
	Late seral	76.223	91	63.812	66.783	70.155	72.455	74.386	76.938	79.445	14	

Summary Indices⁶:

<i>Seral-Stage Departure Index</i>	100
<i>Class Configuration Departure Index</i>	70
<i>Cover Type Departure Index</i>	85

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 = interspersed 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.