

Table S1. Information on the place of study.

Site	Longitude	Latitude	altitude	aspect	slope	parent rock	Soil Type
IM-3-1	31° 27' 55"	115° 22' 48"	813	NE	24.5	granite	yellow-brown loam
IM 3-2	31° 27' 55"	115° 22' 54"	821	NE	25.2	granite	yellow-brown loam
IM 3-3	31° 27' 58"	115° 22' 46"	785	NE	26.4	granite	yellow-brown loam
IM 3-4	31° 27' 58"	115° 22' 41"	770	NE	21.2	granite	yellow-brown loam
IM 3-5	31° 28' 4"	115° 22' 51"	735	NE	21.4	granite	yellow-brown loam
IM 8-1	31° 28' 8"	115° 22' 48"	750	N	27.5	granite	yellow-brown loam
IM 8-2	31° 28' 6"	115° 22' 43"	779	NW	28.6	granite	yellow-brown loam
IM 8-3	31° 28' 2"	115° 22' 44"	786	NW	27.3	granite	yellow-brown loam
IM 8-4	31° 28' 4"	115° 22' 49."	787	NW	25.7	granite	yellow-brown loam
IM 8-5	31° 28' 3"	115° 22' 46"	796	NW	24.4	granite	yellow-brown loam
IM 15-1	31° 28' 17"	115° 22' 35."	729	NE	28.6	granite	yellow-brown loam
IM 15-2	31° 28' 19"	115° 22' 38"	741	NE	27.2	granite	yellow-brown loam
IM 15-3	31° 28' 33"	115° 22' 37"	738	NE	27.4	granite	yellow-brown loam
IM 15-4	31° 28' 16"	115° 22' 31."	762	NE	26.5	granite	yellow-brown loam
IM 15-5	31° 28' 18"	115° 22' 33"	726	NE	25.3	granite	yellow-brown loam
IM 20-1	31° 29' 41"	115° 22' 48"	584	N	29.3	granite	yellow-brown loam
IM 20-2	31° 29' 41"	115° 22' 53"	589	N	28.4	granite	yellow-brown loam
IM 20-3	31° 29' 37"	115° 22' 47"	604	N	29.5	granite	yellow-brown loam
IM 20-4	31° 29' 41"	115° 22' 44"	568	NW	28.8	granite	yellow-brown loam
IM 20-5	31° 29' 41"	115° 22' 49"	580	NW	28.5	granite	yellow-brown loam
EM-3-1	31° 15' 22"	115° 50' 32"	785	N	24.6	granite	yellow-brown loam
EM-3-2	31° 15' 21"	115° 50' 31"	821	N	25.2	granite	yellow-brown loam
EM-3-3	31° 15' 21"	115° 50' 27"	790	N	20.5	granite	yellow-brown loam

EM-3-4	31° 15' 22"	115° 50' 28"	827	N	22.5	granite	yellow-brown loam
EM-3-5	31° 15' 19"	115° 50' 28"	788	NW	25.2	granite	yellow-brown loam
EM-8-1	31° 15' 23"	115° 50' 28"	796	N	24.4	granite	yellow-brown loam
EM-8-2	31° 15' 23"	115° 50' 27"	804	N	26.5	granite	yellow-brown loam
EM-8-3	31° 15' 23"	115° 50' 26"	865	N	26.9	granite	yellow-brown loam
EM-8-4	31° 15' 24"	115° 50' 26"	847	NE	28.4	granite	yellow-brown loam
EM-8-5	31° 15' 25"	115° 50' 25"	841	NE	25.3	granite	yellow-brown loam
EM-15-1	31° 15' 14"	115° 50' 59"	716	N	21.5	granite	yellow-brown loam
EM-15-2	31° 15' 15"	115° 50' 60"	713	N	25.4	granite	yellow-brown loam
EM-15-3	31° 15' 13"	115° 50' 58"	723	N	26.3	granite	yellow-brown loam
EM-15-4	31° 15' 14"	115° 50' 57"	726	N	22.5	granite	yellow-brown loam
EM-15-5	31° 15' 12"	115° 50' 56"	746	N	24.3	granite	yellow-brown loam
EM-20-1	31° 15' 18"	115° 50' 53"	717	NE	24.8	granite	yellow-brown loam
EM-20-2	31° 15' 18"	115° 50' 52"	725	N	25.4	granite	yellow-brown loam
EM-20-3	31° 15' 19"	115° 50' 53"	723	NE	24.9	granite	yellow-brown loam
EM-20-4	31° 15' 16"	115° 50' 53"	726	NE	25.3	granite	yellow-brown loam
EM-20-5	31° 15' 15"	115° 50' 50"	746	NE	25.7	granite	yellow-brown loam
CK-1	31° 15' 14"	115° 51' 2"	714	NE	28.3	granite	yellow-brown loam
CK-2	31° 15' 14"	115° 51' 3"	719	NE	28.5	granite	yellow-brown loam
CK-3	31° 15' 12"	115° 51' 2"	747	NE	24.2	granite	yellow-brown loam
CK-4	31° 15' 13"	115° 51' 3"	767	N	21.8	granite	yellow-brown loam
CK-5	31° 15' 12."	115° 51' 4"	756	N	20.2	granite	yellow-brown loam

Note: EM-3, EM-8, EM-15, EM-20, IM-3, IM-8, IM-15, IM-20, and CK, respectively, represent three years of extensive management, eight years of extensive management, 15 years of extensive management, 20 years of intensive management, three years of intensive management, eight years of intensive management, 15 years of intensive management, 20 years of intensive management, and no management. N, NE, and NW represent north, northeast, and northwest, respectively

Table S2. Comparison of species composition of various forest layers under different management intensities and durations.

Pairs	Tree		Shrub		Herb	
	R2	p-Value	R2	p-Value	R2	p-Value
CK vs EM-3	0.290	0.022*	0.335	0.015*	0.361	0.007**
CK vs EM-8	0.474	0.003**	0.381	0.013*	0.421	0.012*
CK vs EM-15	0.493	0.008**	0.291	0.009**	0.375	0.007**
CK vs EM-20	0.349	0.008**	0.411	0.006**	0.462	0.010*
CK vs IM-3	0.423	0.007**	0.310	0.011*	0.394	0.007**
CK vs IM-8	0.486	0.010*	0.386	0.008**	0.614	0.010*
CK vs IM-15	0.451	0.011*	0.49	0.011*	0.584	0.009**
CK vs IM-20	0.499	0.010*	0.598	0.009**	0.439	0.008**
EM-3 vs EM-8	0.107	0.360	0.211	0.008**	0.322	0.006**
EM-3 vs EM-15	0.376	0.018*	0.249	0.020*	0.374	0.006**
EM-3 vs EM-20	0.061	0.843	0.342	0.008**	0.350	0.007**
EM-3 vs IM-3	0.147	0.228	0.241	0.010*	0.335	0.008**
EM-3 vs IM-8	0.243	0.067	0.284	0.007**	0.525	0.015*
EM-3 vs IM-15	0.147	0.266	0.402	0.007**	0.489	0.010*
EM-3 vs IM-20	0.321	0.036*	0.500	0.008**	0.496	0.006**
EM-8 vs EM-15	0.413	0.017*	0.297	0.014*	0.315	0.009**
EM-8 vs EM-20	0.065	0.589	0.349	0.015*	0.160	0.155
EM-8 vs IM-3	0.070	0.518	0.26	0.011*	0.414	0.007**
EM-8 vs IM-8	0.588	0.021*	0.235	0.017*	0.508	0.005**
EM-8 vs IM-15	0.282	0.129	0.349	0.01*	0.496	0.007**
EM-8 vs IM-20	0.507	0.024*	0.493	0.010*	0.485	0.007**
EM-15 vs EM-20	0.310	0.078	0.249	0.013*	0.313	0.019*
EM-15 vs IM-3	0.138	0.274	0.245	0.017*	0.416	0.007**
EM-15 vs IM-8	0.717	0.007**	0.364	0.011*	0.527	0.008**
EM-15 vs IM-15	0.604	0.011*	0.406	0.007**	0.470	0.004**
EM-15 vs IM-20	0.682	0.010*	0.429	0.010*	0.398	0.005**
EM-20 vs IM-3	0.081	0.425	0.218	0.034*	0.454	0.012*
EM-20 vs IM-8	0.294	0.039*	0.377	0.007**	0.594	0.008**
EM-20 vs IM-15	0.161	0.235	0.401	0.008**	0.566	0.006**
EM-20 vs IM-20	0.357	0.035*	0.304	0.008**	0.533	0.006**
IM-3 vs IM-8	0.370	0.055	0.226	0.025*	0.389	0.010*
IM-3 vs IM-15	0.239	0.130	0.308	0.007**	0.424	0.016*
IM-3 vs IM-20	0.392	0.057	0.333	0.008**	0.283	0.019*
IM-8 vs IM-15	0.099	0.374	0.207	0.031*	0.247	0.043*
IM-8 vs IM-20	0.090	0.370	0.528	0.009**	0.491	0.014*
IM-15 vs IM-20	0.183	0.243	0.457	0.017*	0.495	0.006**

Note: *, correlation is significant at the 0.05 level; **, correlation is significant at the 0.01 level.