

## Supplementary material

**Table S1. Edge contrast values between Land Use\Cover classes.**

<b>LULC class</b>	Coniferous	Scattered veg.	Water	Non-coniferous	Bare soil	Agriculture	Urban
Coniferous	0	-	-	-	-	-	-
Scattered veg.	0.4	0	-	-	-	-	-
Water	0.75	0.75	0	-	-	-	-
Non-coniferous	0.1	0.4	0.75	0	-	-	-
Bare soil	1	0.9	0.8	1	0	-	-
Agriculture	0.75	0.6	0.8	0.75	0.5	0	-
Urban	1	1	0.8	1	0.25	0.5	0

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**Table S2. Plots and their variables used for the analyses. Plots 3,4,9,10 were not included as those were the outlier values for shape index. Geographic location is not included.**

Plot	Forest type	PCA axis 1	PCA axis 2	PCA axis 3	PCA axis 4	SLOPE (Degrees)	Elevation (masl.)
0	Coniferous	1.23	0.41	-2.30	1.39	7.86	2515
1	Coniferous	1.08	1.22	0.08	0.37	11.18	2510
2	Coniferous	1.14	0.28	0.89	-0.06	5.13	2527
5	Coniferous	1.41	-0.49	0.10	0.55	8.11	2595
6	Coniferous	1.17	-1.00	0.55	0.06	3.32	2612
7	Coniferous	0.88	0.04	1.75	0.35	3.84	2617
8	Coniferous	1.26	-0.03	1.61	0.39	7.12	2630
11	Coniferous	0.17	-1.05	1.19	0.01	11.18	2546
12	Coniferous	0.20	-1.59	0.23	-0.33	12.93	2553
13	Coniferous	0.52	-1.61	1.13	0.34	10.36	2525
14	Coniferous	0.21	-1.52	0.62	-0.09	4.53	2544

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15	Coniferous	0.10	-0.73	0.72	0.07	1.35	2509
16	Coniferous	0.07	-1.35	1.08	-0.51	9.26	2545
17	Coniferous	0.55	-0.22	1.06	0.02	0.00	2508
18	Coniferous	0.21	-2.11	0.66	-0.41	7.59	2598
19	Coniferous	0.37	-0.31	1.75	0.23	6.80	2583
20	Coniferous	0.59	-1.06	0.65	0.17	2.13	2591
21	Coniferous	0.56	1.01	1.90	-0.04	0.00	2634
22	Coniferous	-1.09	-0.30	0.73	-1.89	12.37	2460
23	Coniferous	-0.69	0.01	0.61	-0.72	14.10	2598
24	Coniferous	-1.70	0.57	0.69	1.84	11.10	2588
25	Coniferous	-1.64	-0.89	2.17	0.12	16.92	2673
26	Coniferous	-1.17	0.20	-1.08	-1.11	22.53	2535
27	Coniferous	-1.46	-0.02	1.61	-0.21	14.04	2528
28	Coniferous	-1.28	-0.23	2.38	0.44	5.48	2546
29	Coniferous	-2.44	0.34	0.85	7.00	13.13	2517
30	Coniferous	-1.64	-0.89	2.18	0.11	3.20	2612
31	Coniferous	-0.98	-0.33	1.23	-1.61	0.00	2610
32	Coniferous	-0.04	-1.79	0.58	-0.49	26.72	2542

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33	Non coniferous	0.79	1.40	-0.81	0.51	17.39	2516
34	Non coniferous	0.80	-1.04	-0.87	0.03	28.84	2367
35	Non coniferous	1.39	2.61	0.02	0.39	17.18	2425
36	Non coniferous	0.90	0.40	-0.27	0.09	9.02	2525
37	Non coniferous	1.39	0.81	0.35	0.26	13.33	2467
38	Non coniferous	0.98	0.68	0.21	0.18	30.51	2515
39	Non coniferous	1.64	0.05	-0.24	0.22	25.52	2510
40	Non coniferous	0.74	0.18	-0.48	0.00	9.21	2682
41	Non coniferous	0.78	1.07	-0.03	0.00	4.68	2617
42	Non coniferous	1.32	0.01	-0.79	0.60	7.23	2624
43	Non coniferous	1.25	-0.15	-0.86	0.20	7.57	2468
44	Non coniferous	-1.80	-0.24	-0.19	0.94	23.83	2532
45	Non coniferous	-1.63	0.45	-0.38	1.55	24.78	2568
46	Non coniferous	-0.40	0.23	-0.50	-1.30	0.00	2594
47	Non coniferous	-0.82	0.31	-0.33	-0.77	4.17	2620
48	Non coniferous	-0.59	0.00	0.29	-0.86	0.00	2628
49	Non coniferous	-1.23	0.49	-2.15	-0.80	5.01	2642
50	Non coniferous	-1.92	0.05	-1.35	1.71	2.88	2633

51	Non coniferous	-1.45	1.15	-2.12	-0.14	1.22	2585
52	Non coniferous	-0.70	2.79	1.31	-0.37	9.70	2600
53	Non coniferous	-0.83	0.67	-1.15	-0.89	17.87	2653
54	Non coniferous	-0.76	0.70	-1.77	0.28	30.90	2622
55	Non coniferous	0.52	1.78	-0.04	0.01	2.88	2577
56	Non coniferous	0.19	-1.37	-0.26	-0.48	9.19	2617
57	Non coniferous	0.20	-0.65	0.26	-0.24	29.19	2496
58	Non coniferous	0.11	-0.64	-0.86	-0.15	14.07	2453
59	Non coniferous	0.67	0.53	0.20	-0.16	10.10	2577
60	Non coniferous	-0.06	0.07	-0.90	-0.51	19.18	2553
61	Non coniferous	0.72	-0.41	-0.72	-0.05	19.32	2668
62	Non coniferous	0.50	-0.51	-1.39	0.33	1.72	2553
63	Non coniferous	0.51	-0.79	-0.68	0.04	0.34	2615
64	Non coniferous	-0.13	0.83	-0.89	-0.23	14.41	2660
65	Non coniferous	0.36	0.82	-0.61	-0.10	0.00	2558
66	Scattered veg.	0.71	0.12	0.03	0.02	1.07	2557
67	Scattered veg.	0.99	1.18	0.87	0.00	6.53	2462
68	Scattered veg.	1.18	0.03	0.45	0.05	7.06	2511

69	Scattered veg.	0.82	0.83	0.63	-0.19	25.01	2481
70	Scattered veg.	0.87	-1.23	-0.17	-0.14	17.28	2526
71	Scattered veg.	0.98	0.37	0.15	0.03	0.00	2524
72	Scattered veg.	1.31	0.33	-0.10	0.30	0.00	2580
73	Scattered veg.	0.83	1.91	1.17	-0.02	3.81	2659
74	Scattered veg.	1.08	0.25	-0.81	0.67	0.34	2541
75	Scattered veg.	0.73	0.78	-0.92	0.55	0.00	2563
76	Scattered veg.	1.45	2.26	1.01	0.33	23.39	2617
77	Scattered veg.	0.18	-1.52	0.40	-0.27	18.23	2447
78	Scattered veg.	0.27	-0.01	0.79	-0.42	13.27	2470
79	Scattered veg.	0.22	-1.64	-0.76	0.13	10.25	2566
80	Scattered veg.	0.07	-1.33	-0.45	-0.20	4.26	2547
81	Scattered veg.	-0.12	-1.09	-1.38	0.14	1.35	2543
82	Scattered veg.	-0.12	-0.66	-0.13	-0.36	10.85	2556
83	Scattered veg.	0.70	-0.63	-0.68	0.22	0.00	2501
84	Scattered veg.	-0.28	1.39	-0.10	-0.48	3.52	2621
85	Scattered veg.	0.11	-1.60	-0.90	0.35	11.10	2575
86	Scattered veg.	-0.22	-0.61	-0.90	0.33	3.77	2613

87	Scattered veg.	0.22	-1.38	-1.30	0.43	5.55	2611
88	Scattered veg.	-1.25	0.02	-0.55	-1.08	11.31	2552
89	Scattered veg.	-2.12	2.15	1.02	-2.49	9.65	2579
90	Scattered veg.	-0.86	-0.54	-0.69	-0.47	9.28	2627
91	Scattered veg.	-0.62	0.79	-0.57	0.07	0.34	2589
92	Scattered veg.	-1.79	-0.30	0.03	0.86	5.05	2565
93	Scattered veg.	-1.33	0.31	-1.60	-0.74	5.43	2529
94	Scattered veg.	-1.24	0.74	0.40	0.35	0.00	2529
95	Scattered veg.	-0.29	-0.52	-0.78	-0.11	2.90	2523
96	Scattered veg.	-0.65	-0.73	-0.68	-0.91	19.18	2545
97	Scattered veg.	-0.48	0.28	-0.89	0.12	3.37	2586
98	Scattered veg.	-1.14	1.17	0.41	-2.21	13.64	2520
99	Scattered veg.	-1.25	0.03	-0.59	-1.13	6.85	2582

## Supplementary material

**Table S3. Plant species collected, their main seed dispersal mechanism and the number of individuals per species per forest type.**

Species name	Family	Seed dispersal mechanism	Number of individuals		
			Coniferous	Non coniferous	Scattered veg.
<i>Alnus acuminata</i> Kunth	Betulaceae	Anemochorous	0	7	0
<i>Arbutus xalapensis</i> Kunth	Ericaceae	Zoochorous	27	24	10
<i>Arctostaphylos pungens</i> Kunth	Ericaceae	Zoochorous	227	125	162
<i>Celtis pallida</i> Torr.	Ulmaceae	Zoochorous	48	62	29
<i>Garrya laurifolia</i> Hartw. ex Benth.	Garryaceae	Anemochorous	3	0	0
<i>Juniperus deppeana</i> stendel var. robusta Martínez	Cupressaceae	Zoochorous	34	46	52
<i>Pinus arizonica</i> Engelmann	Pinaceae	Anemochorous	90	36	97
<i>Pinus arizonica</i> var. <i>cooperi</i> (C. E. Blanco) Farjon	Pinaceae	Anemochorous	163	66	51
<i>Pinus cembroides</i> Zuccarini	Pinaceae	Zoochorous	1	4	11
<i>Pinus engelmannii</i> Carrière	Pinaceae	Anemochorous	20	7	3
<i>Pinus leiophylla</i> var. <i>chihuahuana</i> (Engelmann) G. R. Shaw	Pinaceae	Anemochorous	16	12	3
<i>Pinus strobiformis</i> Engelmann	Pinaceae	Zoochorous	23	30	3
<i>Quercus depressipes</i> Trel.	Fagaceae	Zoochorous	88	114	127
<i>Quercus macvaughii</i> Spellennb.	Fagaceae	Zoochorous	27	36	7
<i>Quercus rugosa</i> Née	Fagaceae	Zoochorous	11	12	0
<i>Quercus sideroxylla</i> Humb. & Bonpl.	Fagaceae	Zoochorous	108	109	67
<i>Quercus</i> no ID	Fagaceae	Zoochorous	38	67	49