

Supplementary material to:

Short blankets in snow leopard conservation: the case of Qilianshan National Park (China) and surrounding areas

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Table S1. Ranking of Core area patches calculated from resistance kernel at a dispersal threshold of 25 km equivalent. Intra, Flux and Connector represent the dPC (relative probability of connectivity) values for the three fractions composing the dPC index (See main text for details).

Rank	Area (Km²)	Kernel 25 km	Intra	Flux	Connector
1	11347.80	46145.10	21.234	48.305	48.305
2	7855	37607.80	6.758	36.591	36.591
3	6348.75	29570.20	2.729	25.577	25.577
4	4943.75	18496.60	0.648	14.578	14.578
5	2627.50	8788.90	0.041	3.864	3.864
6	2625	7966.88	0.034	3.542	3.542
7	2300.75	8092.99	0.027	2.689	2.689
8	980	3766.86	0.001	0.523	0.523
9	624	2481.35	0.000	0.229	0.229
10	706.25	2088.75	0.000	0.256	0.256
11	582	1760.40	0.000	0.139	0.139
12	585	1708.28	0.000	0.167	0.167
13	468.75	2054.22	0.000	0.131	0.131
14	489	1313.48	0.000	0.110	0.110
15	429.25	1298.06	0.000	0.089	0.089
16	343	1297.86	0.000	0.072	0.072
17	342.25	1175.73	0.000	0.053	0.053
18	286	780.73	0.000	0.038	0.038
19	233.25	618.95	0.000	0.023	0.023
20	216.75	599.48	0.000	0.021	0.021
21	201.50	631.19	0.000	0.019	0.019
22	170	533.86	0.000	0.014	0.014
23	142.25	420.88	0.000	0.010	0.010
24	129.75	352.67	0.000	0.008	0.008
25	120	330.74	0.000	0.007	0.007

Table S2. Ranking of Core area patches calculated from resistance kernel at a dispersal threshold of 50 km equivalent. Intra, Flux ad Connector represent the dPC (relative probability of connectivity) values for the three fractions composing the dPC index (See main text for details).

Rank	Area (Km ²)	Kernel 50 km	Intra	Flux	Connector
1	20644	282903.00	54.263	37.922	2.014
2	10347	141283.00	3.400	26.613	0.607
3	7174	109810.00	0.987	16.050	0.000
4	2308.25	26925.50	0.006	1.150	0.011
5	988.75	12744.80	0.000	0.189	0.000
6	962.25	11267.80	0.000	0.247	0.000
7	842.25	10025.80	0.000	0.187	0.000
8	654.75	7861.60	0.000	0.088	0.000
9	528	6627.21	0.000	0.068	0.001
10	527.75	4948.66	0.000	0.042	0.000
11	441.25	4448.58	0.000	0.046	0.000
12	347.5	3702.43	0.000	0.026	0.016
13	338.75	3087.24	0.000	0.020	0.013
14	337.25	2980.05	0.000	0.023	0.000
15	272	2891.86	0.000	0.015	0.000

Table S3. Ranking of Core area patches calculated from resistance kernel at dispersal thresholds of 100 and 200 km equivalent. Intra, Flux ad Connector represent the dPC (relative probability of connectivity) values for the three fractions composing the dPC index (See main text for details).

Rank	Area (Km ²)	Kernel 100 km	Intra	Flux	Connector
1	22990.30	1060050	57.202	35.742	1.761
2	11909.30	517009	3.651	26.421	0.289
3	7784.50	372514	0.810	13.666	0
4	2080.75	80456.70	0.003	0.633	0.015
5	911.75	34159	0	0.086	0
6	753.50	25406.60	0	0.099	0
7	479.50	15425.60	0	0.019	0
8	104	2968.69	0	0.001	0.001
9	77.25	2185.69	0	0.001	0
10	63.25	1812.96	0	0	0

Rank	Area (Km ²)	Kernel 200 km	Intra	Flux	Connector
1	24476.30	3650310	60	32.366	1
2	13716.80	1924380	5.271	26.440	0.064
3	7555.00	947464	0.388	8.892	0.000
4	1406.5	150362	0.000	0.193	0

Habitat quality in the Qilianshan landscape

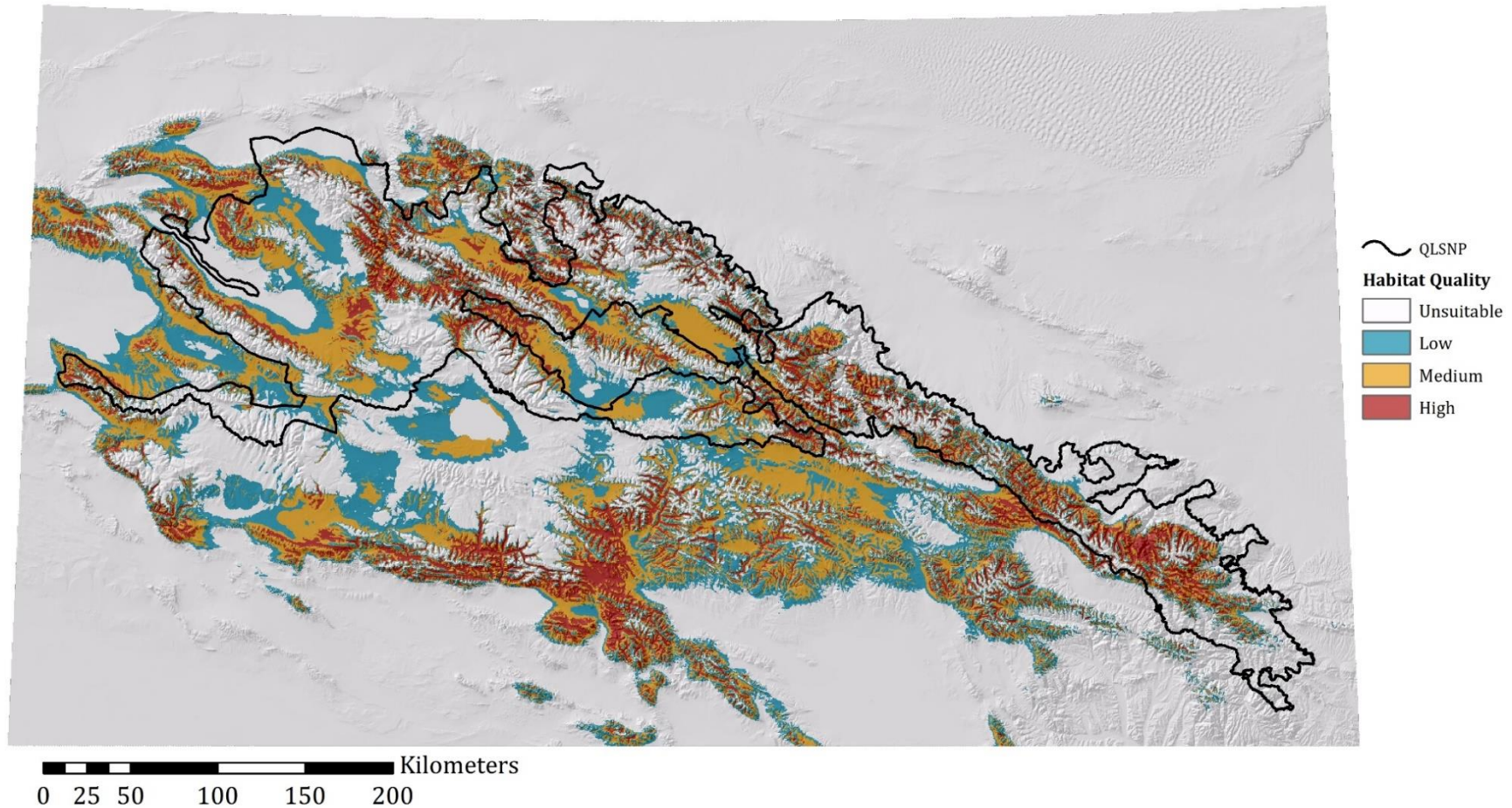


Fig. S1 Habitat categories based on a reclassification of the best suitability surface from Atzeni et al. (2020). Breaks were 95th percentile of values (high quality), 85th percentile of values (medium-to-high quality) and 75th percentile of values (low-to-high quality)

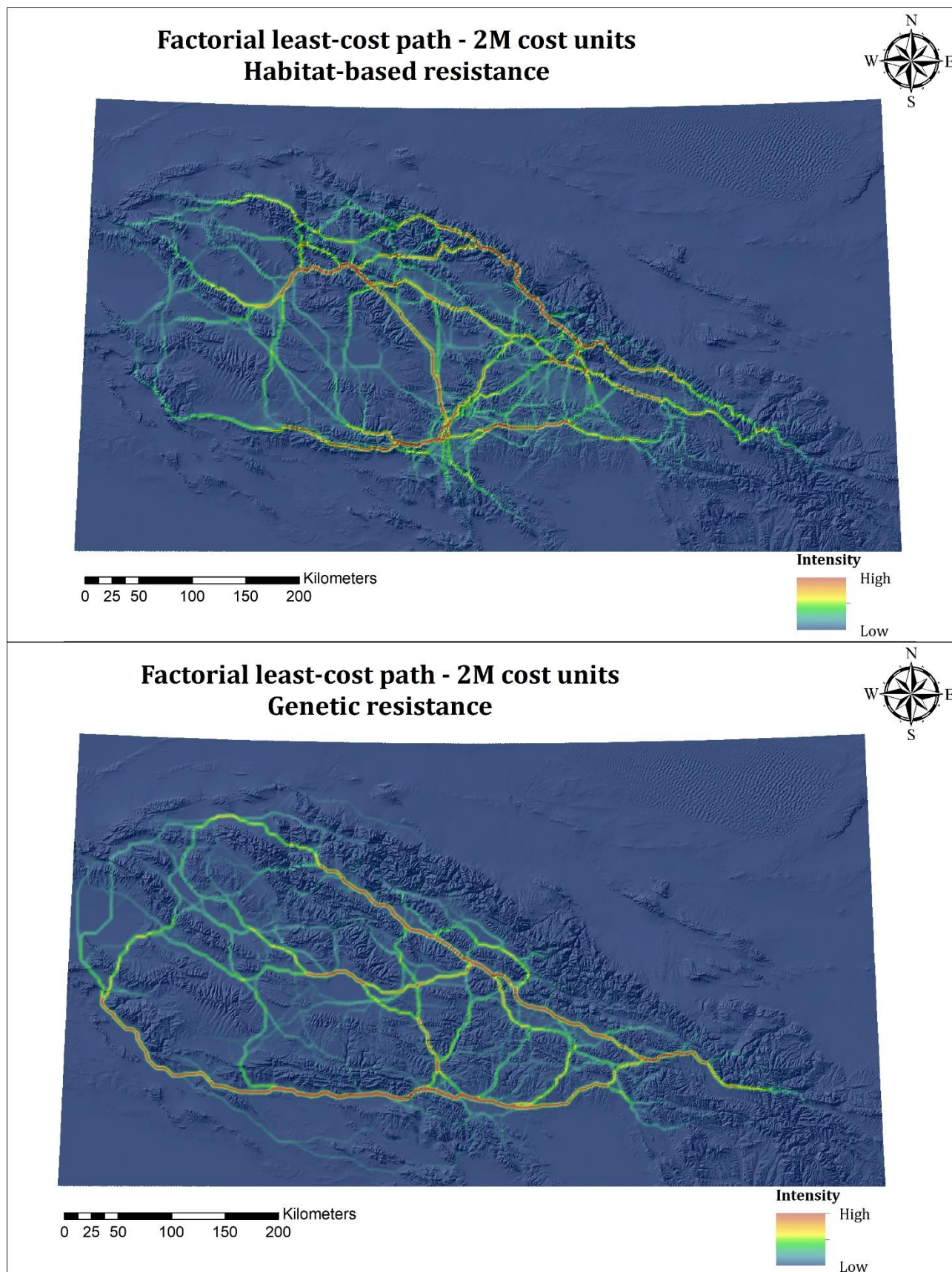
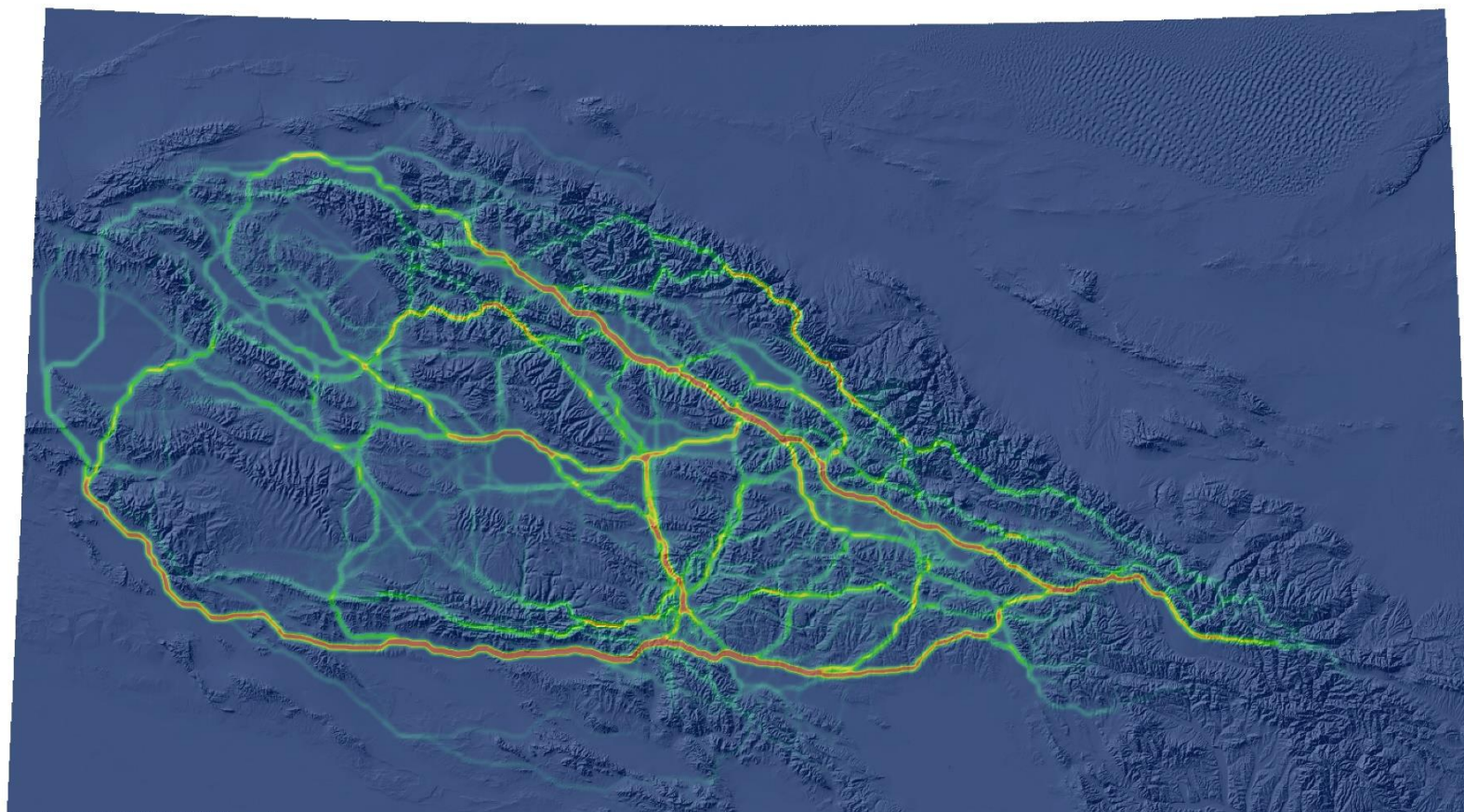


Fig. S2 Factorial least-cost paths at a threshold of 2 million cost units for the habitat-based and genetic resistance scenarios

Cumulative factorial least-cost paths - 2M cost units



0 25 50 100 150 200 Kilometers

Intensity
High
Low

Fig. S3 Factorial least-cost paths at a threshold of 2 million cost units for the cumulative output created by summing the habitat-based and genetic least-cost path outputs