



## Appendix C: 2020 SKR Habitat Suitability Model Predictors

Variables in the final habitat model for each of five modeling subregions showing two measures of variable contribution to model predictive power: permutation importance and percent contribution.

Predictor	Scale	Permutation Importance	Percent Contribution
Perris Valley			
Topsoil Grain Size Index, September	60m	19.8	27.1
Proportion in Developed and Agricultural Land Use	40m	16.8	22.7
Slope	60m	14.6	9.4
Normalized Difference Red Edge Index Variation #3, April	60m	14.0	6.4
Tasselled Cap Wetness, September	60m	10.8	21.5
Distance to Primary/Secondary Roads	0m	6.1	2.6
Distance to Non-Perennial Streams	0m	5.7	4.5
Tasselled Cap Brightness, April-September Difference	60m	5.3	2.6
Nightlight	0m	4.4	1.0
Normalized Difference Texture Index, April-September Difference	60m	2.6	2.3
Badlands – Banning			
Slope	60m	53.8	21.1
Nightlight	0m	20.0	3.9
Proportion in Developed and Agricultural Land Use	40m	9.2	7.5

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Average Precipitation, 1981-2010, March-May	0m	8.0	22.0
Distance to Primary/Secondary Roads	0m	6.1	22.4
Tasselled Cap Wetness, September	60m	2.8	23.1
Anza – Aguanga			
Elevation	0m	25.1	12.9
Slope	60m	15.8	9.7
Distance to Non-Perennial Streams	0m	14.7	3.3
Anthocyanin Reflectance Index, April-September Difference	60m	12.6	11.0
Topsoil Grain Size Index, September	60m	9.9	26.4
Clay Percentage, 0-5cm	20m	6.5	18.7
Normalized Difference Sand Dune Index, April-September Difference	60m	6.3	5.7
Nightlight	0m	3.7	3.3
Average Precipitation, 1981-2010, March-May	0m	3.2	6.3
Normalized Difference Texture Index, April-September Difference	60m	2.2	2.8
Inland San Diego			
Slope	60m	48.1	25.2
Tasselled Cap Wetness, September	60m	18.4	48.5
Modified Chlorophyll Absorption in Reflectance Index, April-September Difference	60m	13.6	6.0
Normalized Difference Sand Dune Index, April-September Difference	60m	5.3	4.1
Proportion in Developed and Agricultural Land Use	40m	5.3	3.4
Distance to Primary/Secondary Roads	0m	4.6	8.6
Normalized Difference Texture Index, April-September Difference	60m	4.6	4.2
Coastal San Diego			
Slope	60m	39.8	24.4
Tasselled Cap Wetness, September	60m	13.4	41.3

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Distance to Primary/Secondary Roads	0m	13.1	8.9
Elevation	0m	9.7	10.1
Modified Chlorophyll Absorption in Reflectance Index, April-September Difference	60m	9.0	4.0
Proportion in Developed and Agricultural Land Use	40m	6.6	3.1
Normalized Difference Sand Dune Index, April-September Difference	60m	3.5	4.1
Anthocyanin Reflectance Index, April-Sept Difference	60m	3.5	2.5
Alpha (measure related to mean soil pore diameter), 30-60cm	20m	1.5	1.6