**An empirical demonstration of the effect of study design on density estimation.**

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**Supporting Information:**

Appendix S1**:** Comparison of landscape characteristics in areas covered by each of the two camera trapping designs. Values are the average with the range in parenthesis and are computed in ArcGIS.

|  |  |  |
| --- | --- | --- |
|  | Compact Design | Diffuse Design |
| Elevation (m) | 4661.59 (2073 to 7792) | 4461.51 (1949 to 7792) |
| Slope (degrees) | 29.25 (0 to 75.98) | 30.56 (0 to 79.43) |
| Terrain Ruggedness Index | 21.99 (0 to 293.07) | 22.90 (0 to 330.24) |
| Settlements density (per 100 km2) | 0.0137 (0 to 0.07) | 0.0129 (0 to 0.07) |
| Road-density (per 100 km2) | 0.0061 (0 to 0.083) | 0.0265 (0 to 0.198) |

Appendix S2: Images of Bharpu (A, B) and Baltoro 1 (C, D) snow leopards captured in Session 1 and 2, respectively during camera trapping in Hunza-Nagar districts, Gilgit-Baltistan, Pakistan

|  |  |
| --- | --- |
| A cat that is standing in the snow  Description automatically generated | A cat that is standing in the snow  Description automatically generated |
| (A) | (B) |
| A close up of a rock  Description automatically generated | A picture containing photo, standing, front, field  Description automatically generated |
| (C) | (D) |