

S2 Appendix: Sensitivity analysis of resolution

Sensitivity analysis using square raster cells indicates that for the footprint analysis, 5 km diameter hexagons (21.6 km² cell area) is an appropriate compromise between commission errors (overestimating footprint) and computing efficiency. For temporal trend estimates, 10 km diameter hexagonal cells (86.6 km² cell area) seems a good compromise between providing spatial resolution at a scale relevant for management and having sufficient data in each cell to analyse trends.

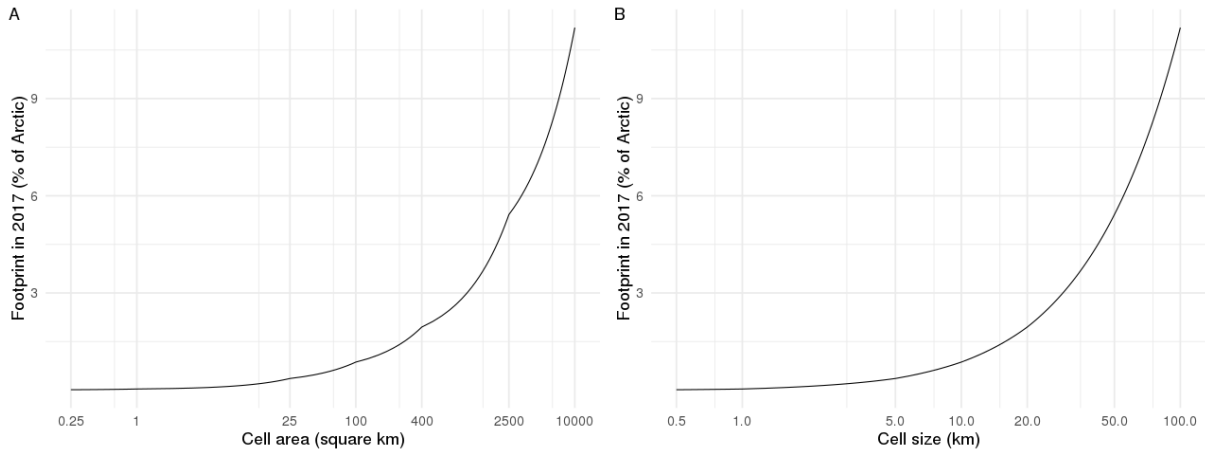


Figure S2.1 Tourism footprint estimated from Flickr data relative to the resolution of the raster at which point data was aggregated A. Cell area (km) B. Cell diameter (km).

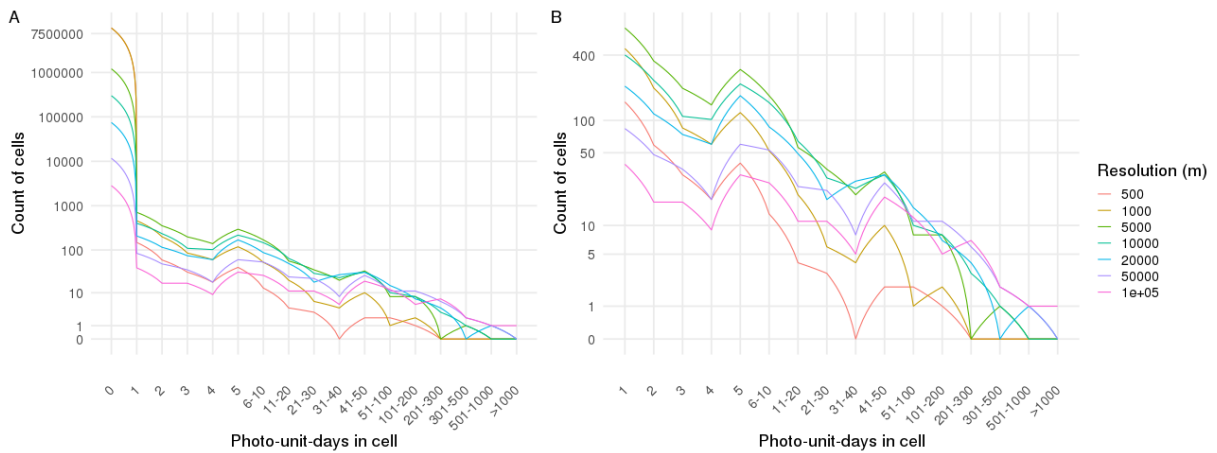


Figure S2.2 A. Histogram of Flickr photo density in the Arctic measured in photo-unit-days, relative to the resolution (cell diameter, m) of the raster at which point data was aggregated B. is a zoomed in view of A.