Supplementary material for: Himmelberger A., Frey K.E. & Sangermano F. 2022. Applying landscape fragmentation analysis to icescape environments: potential impacts for the Pacific walrus (*Odobenus rosmarus divergens*). *Polar Research 41*. Correspondence: Karen E. Frey, Graduate School of Geography, Clark University, 950 Main Street, Worcester, MA 01610, USA. E-mail kfrey@clarku.edu

Supplementary Table S1. FRAGSTATS metrics included in the analysis and explanation for the ones chosen.

Metric	Included in manuscript?	Explanation
Total Class Area	N	Total Area and % of Landscape are similar, but % of Landscape also divides by the total area of the image, while Total Class Area does not. This is more accurate and useful when talking about SIC.
% of Landscape	Y	See above.
Number of Patches	Y	A useful metric for showing fragmentation in the form of how many ice floes there are.
Largest Patch Index	N	Knowing the area that the largest floe takes up was not useful in our overall analysis.
Total Edge	N	Similar to edge density, but less useful.
Edge Density	Y	More useful than total edge because it reports edge length on a per unit area basis.
Mean Patch Area	Y	Useful in knowing the average size of each floe.
Shape Index distribution	Y	Corrects for the size problem of the perimeter-area ratio index by adjusting for a square standard. It is the best measure for shape complexity.
Perimeter Area Ratio distribution	N	Similar to shape index but has the problem of not being standardized.
Euclidean Nearest Neighbour distance	Y	Useful in showing the distances between floes.