

Supporting information for: Elliott Smith, E.A., and Fox, M.D. Characterizing energy flow in kelp forests: a review of the geochemical evidence and a call for additional research.

Appendix 2 – Isotopic data of kelps and particulate organic matter (POM) from relevant studies and estimated contribution of kelps to local consumers.

File list (files found within DataA1.zip)

1. Kelp_POM.csv
2. Kelp_Consumer.csv

Description

Data A1. This file contains all of the data compiled by the authors for the current review and used to produce the analyses in the described manuscript. For a full reference list refer to the main text as well as Supplementary materials Appendix 1.

The file “Kelp_POM.csv” presents all isotope values, including the bulk tissue $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ values as they are originally presented in the cited manuscripts. Where spreadsheet cells are left blank indicates data that was not reported in the original citation.

The file “Kelp_Consumer.csv” presents the estimated mean or median contribution from kelp (or a combined kelp and macroalgae endmember) for consumers from all cited manuscripts. This includes associated metadata and methodological details for each species and study. Where spreadsheet cells are left blank indicates data/methods that was not reported in the original citation. As described in the main text, to avoid biasing analyses based on repeated measures from a small number of studies, where multiple values were recorded for the same species, we averaged the contribution estimates based on the ecological/geographic distinctions made in the original study. For example, Markel and Shurin (2015) and Ramshaw (2012) present estimates for various species in different ecological regions of British Columbia: Kyuquot Sound, an area with sea otters present, and Barkley Sound where sea otters are absent. For these studies we thus binned species data separately for Kyuquot and Barkley Sound. Details for all such bins can be found in the ‘Notes’ column.