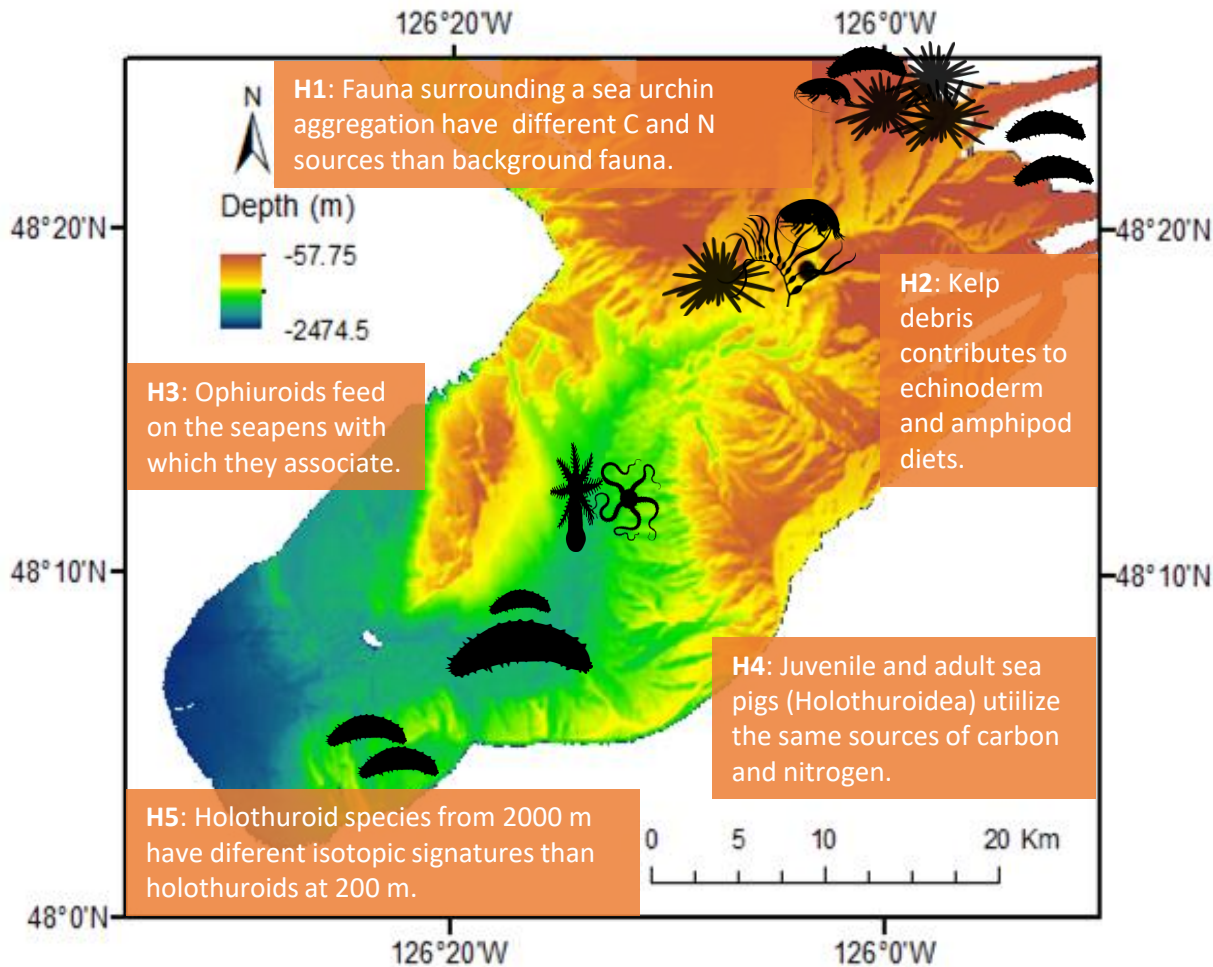


Aim: To use stable isotopes to enhance understanding of trophic ecology of the abundant echinoderms in Barkley Canyon (NE Pacific), where complex topography results in patchily distributed food (Campanyà-Llovet 2018).

Fig. 1: Bathymetry of Barkley Canyon and hypotheses.



ECHINODERMS IN THE BARKLEY CANYON (NE PACIFIC) FOOD WEB

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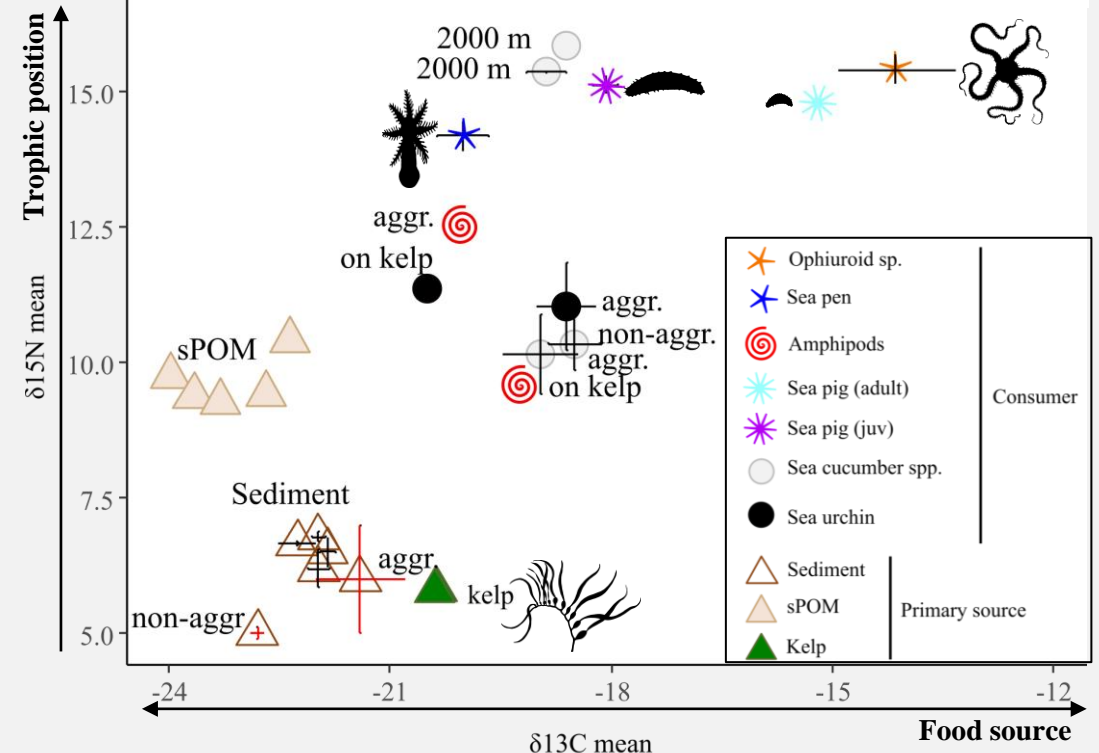


Fig. 2: C and N isotopic signatures of studied food web components.

Red lines = pseudoreplicates.

Results:

H1: Echinoderms have a similar isotopic signature at both places.

H2: Isotopic signatures suggest that kelp contribute to echinoderm and amphipod diets.

H3: Associated ophiuroids do not feed on sea pens or suspended particulate matter (sPOM).

H4: There is an ontogenic diet shift in sea pigs.

H5: Differences in signatures exist, likely reflecting lower organic matter quality (Campanyà-Llovet 2017).

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