The daily summer consumption of snow crab by Pacific cod in the EBS survey area, 1985-2019, was estimated from AFSC-collected cod stomachs (proportion by weight), cod CPUE (numbers/km^2), and temperature adjusted length-specific maximum consumption rates from lab bioenergetics experiments (grams/day) – for the temperature adjustment, haul-specific gear temperature was used.

Consumption (mt/day in EBS survey area) =

Diet Propotion (C. opilio in cod stomachs, fraction by weight) \*

Cmax (Allometric maximum consumption rate, dependent on predator length) \*

f\_c(t) (temperature-adjustment to maximum consumption rate) \*

N\_CPUE (N for each specific length class of predator)

Cmax, f\_c(t), and N\_CPUE were calculated at the haul level for 1cm increments of predator size. Diet proportion was calculated at the stratum level for five length classes of cod (0-10cm, 10-30cm, 30-60cm, 60-85cm, 85+ cm) with bins chosen based on observed ontogenetic shifts in diets. The resulting consumption rates in g/km^2 was summed across cod length classes at the haul level, then the stratum mean across hauls was multiplied by the total area of the stratum in km^2.