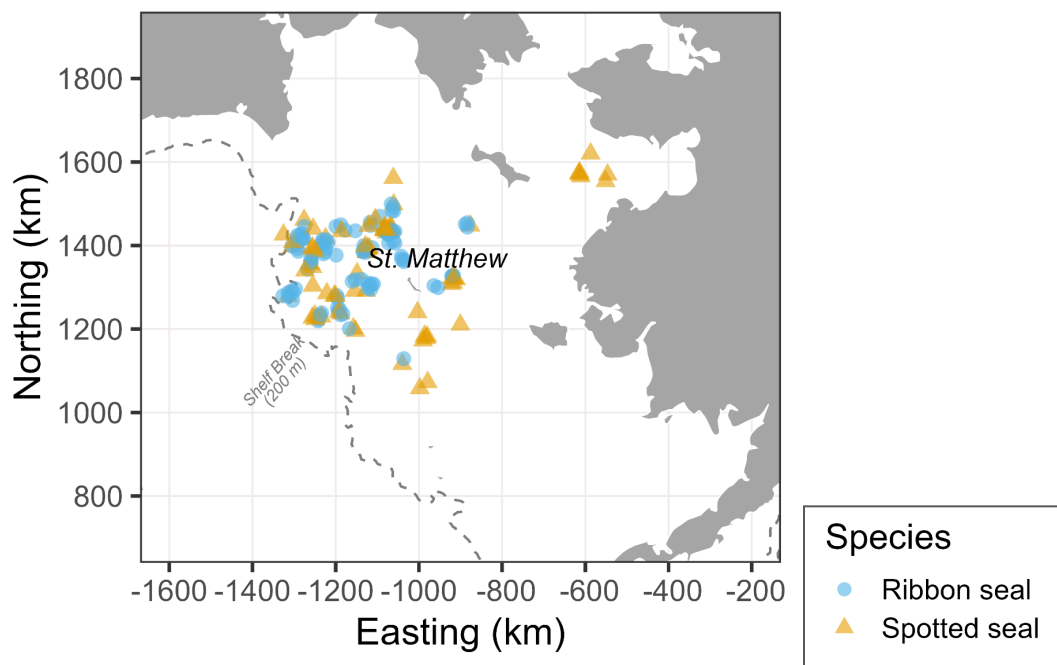


Food habits of ribbon and spotted seals in the central Bering Sea (2006-2024)

The Polar Ecosystems Program has collected scats from ribbon and spotted seals during research cruises in the central Bering Sea in spring (Apr-June, 2006-2024). We captured animals on ice floes at the edge of the pack ice, attached satellite tags, collected biological samples, including scats.

The map shows the locations of scats collected during all years – ribbon are blue, spotted are yellow.

- Most of our samples collected in the central Bering near St. Matthew and the shelf edge, except for a few spotted seal samples that were collected farther north and closer to the coast in 2018, during the extremely low ice year.
- The samples collected in 2018 are not included in the data in the following table and plot.



Primary prey of ribbon and spotted seals in the central Bering Sea

The following table and plot show the proportions of the main prey groups we found in diets.

- In our samples, walleye pollock and Pacific herring were the primary prey for both ribbon and spotted seals.
- Most of the known diet information for ribbon and spotted seals comes from harvested animals – so our samples complement harvest-based diet data because they represent feeding in the central Bering during spring only vs harvest data that represent feeding at coastal locations during both spring and fall.
 - We did find different primary prey in our samples compared to the harvest-based data:
 - In our samples, pollock and herring were the prey found most often, and Arctic and saffron cod were found much less frequently than in harvested samples.
- We have a few samples from spotted seals near the mouth of Norton Sound, collected in 2018, the year of low ice, which is why we were able to sample seals so close to the coast.
 - It's only a very small number of scats, but the prey in those samples were more similar to primary prey from harvest-based samples.
 - In harvest data for spotted seals, saffron cod and rainbow smelt are some of the fish species that were found most frequently, and in our samples, both of these species were only found in the 2018 spotted seal scats.

