General thesis ideas that need to be rearranged:

From spatial chapter, some needs moving to intro chapter

Pacific salmon species have complex life history strategies that can impact survival from smolts to adults, and species interactions during the early marine phase are still not well understood (\*). Pink salmon are the smallest smolts to begin the marine migration (as small as 0.2 g \*), due to their short, obligate life cycle of two years. Chum salmon are the second smallest species when leaving freshwater habitats, with various amounts of time spent rearing in estuaries (\*). Smaller salmon smolts are often the most vulnerable to predators and require sufficient food resources to grow to a critical size during this period to survive their first winter in the ocean (\*). Salmon growth during the early marine period has been shown to affect adult survival in all five species of Pacific salmon (\*), therefore, prey quality and quantity are crucial. The variability in early marine growth of different species and stocks of salmon make predicting adult returns challenging, resulting in many returns being much lower or higher than expected (\*). Salmon have to cope with multiple stressors in freshwater and oceanic environments, such as warming, disease, predation, fishing, habitat loss, pollution, and more, and achieving sufficient food for growth and resilience in order to overcome these challenges is paramount. As scientists and managers who hope to understand salmon dynamics, these relationships between species, their prey and environmental interactions must be viewed very holistically. Therefore, studies investigating multiple species potentially competing for prey resources in various environments are required to learn more about the challenges that young salmon face.

The data was transformed using an arc sine square root transformation, common for proportional data metrics to correct skewed data. Bray-Curtis dissimilarity metrics were then calculated for clustering and ordination analyses, to determine and visualize the differences in diets between the salmon species, sites and regions.