

Saury Catch in Canada (updated with 2024 data)

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Commercial catches

There are $n = 260$ records of Pacific saury bycatch in commercial fishing gear (Figure 1). These records are from bottom trawl, midwater trawl, and the hook and line halibut fisheries. There are a number of records of catches of sauries which were assumed to be Pacific saury and included in this report. In 2024 there was 0 kg of discarded Pacific saury bycatch recorded in commercial fisheries.

Research catches

The catch per unit of effort (CPUE) of Pacific saury in survey catches (bottom trawl, midwater and surface trawls) is zero in most years (Figure 2). In 2002, 2006, 2009 and 2012 there were a total of 6 bottom trawl survey tows capturing Pacific saury (1, 1, 7, 1, 1 and 3 individuals respectively). There have been 34 catches of Pacific saury in pelagic tows, with a maximum catch of 2073 individuals. In 2024 there were two catches of Pacific saury in surveys totaling 87 individuals for a total weight of 7.6 kg.

The Pacific saury were mostly captured on the outer coast surveys and inside Queen Charlotte Sound (Figure 4). However, this mostly reflects the areas where the surveys are conducted (on the shelf and continental slope exclusively), rather than representing the distribution of Pacific saury in the area. There are also reports of juvenile and adult Pacific saury being captured on Oceanographic cruises to Ocean Station P using bongo nets. However, this data was not available.

It should be noted that historical survey catches focussed primarily on Salmonids and at times the bycatch species (including Pacific saury) were not entered in the databases. There is currently an effort underway to include bycatch species, so it is likely that the historical numbers presented in this report will be updated in future years.

A total of $n = 746$ Pacific saury lengths have been collected in surveys in Canada since 1991. The peak of observed lengths was ~28 cm. The length-weight data is limited to a few years of collection, but the relationship between length and weight is shown in Figure 5.

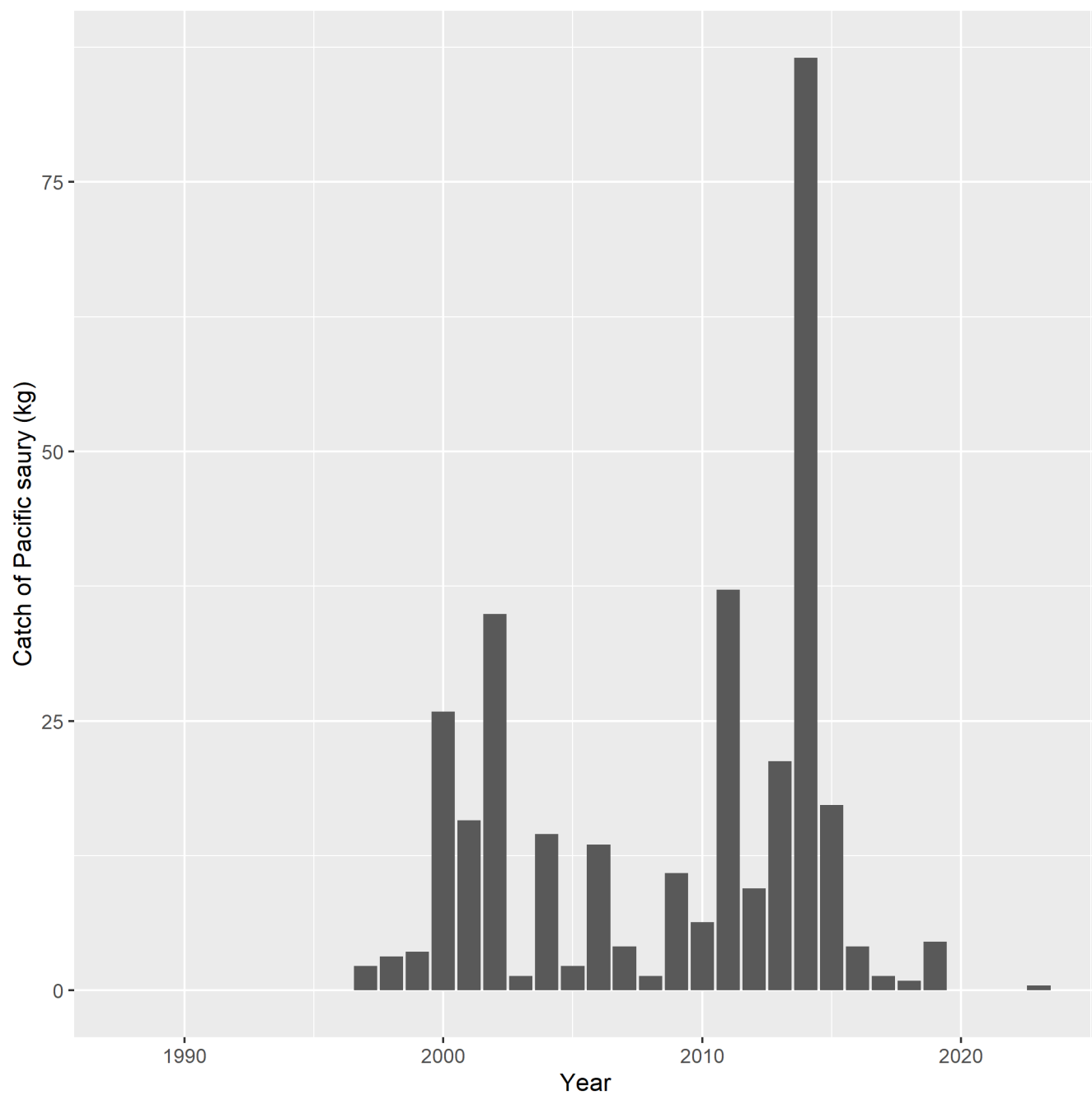


Figure 1: Catch of Pacific Saury in commercial fisheries in British Columbia, Canada combined by year across all fishing gears.

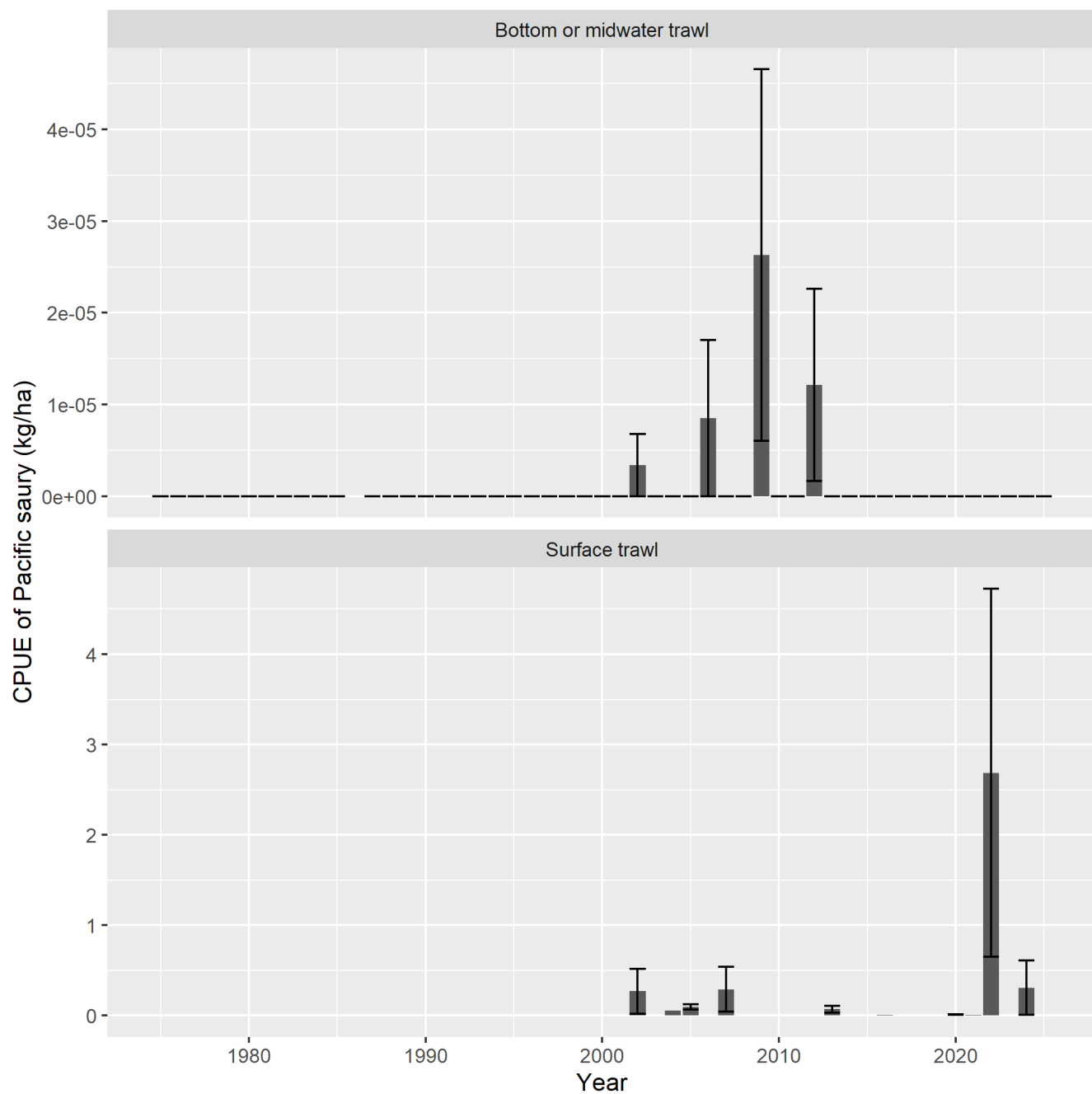


Figure 2: Catch per unit effort of Pacific Saury in research survey trawl in British Columbia, Canada. Data were combined across gear types (pelagic, midwater and bottom trawls).

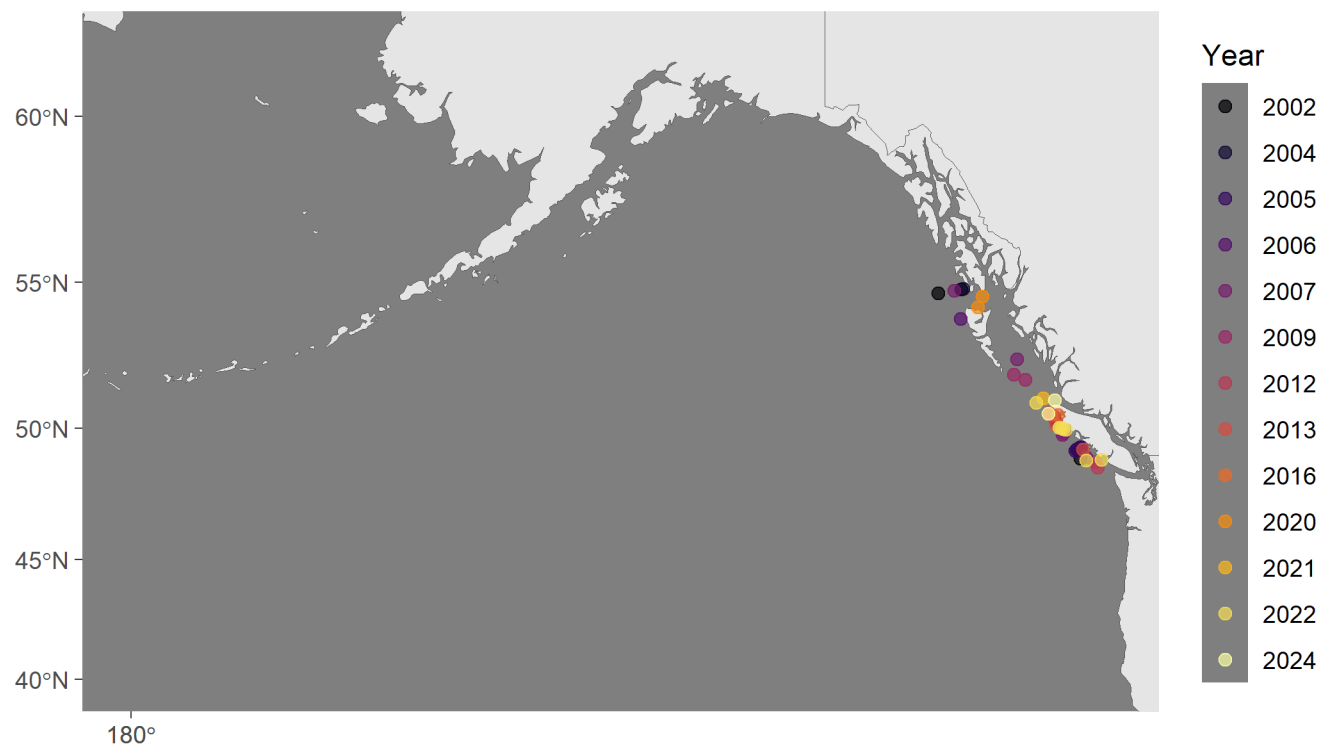


Figure 3: Locations of Pacific saury catches in historical research surveys in British Columbia.

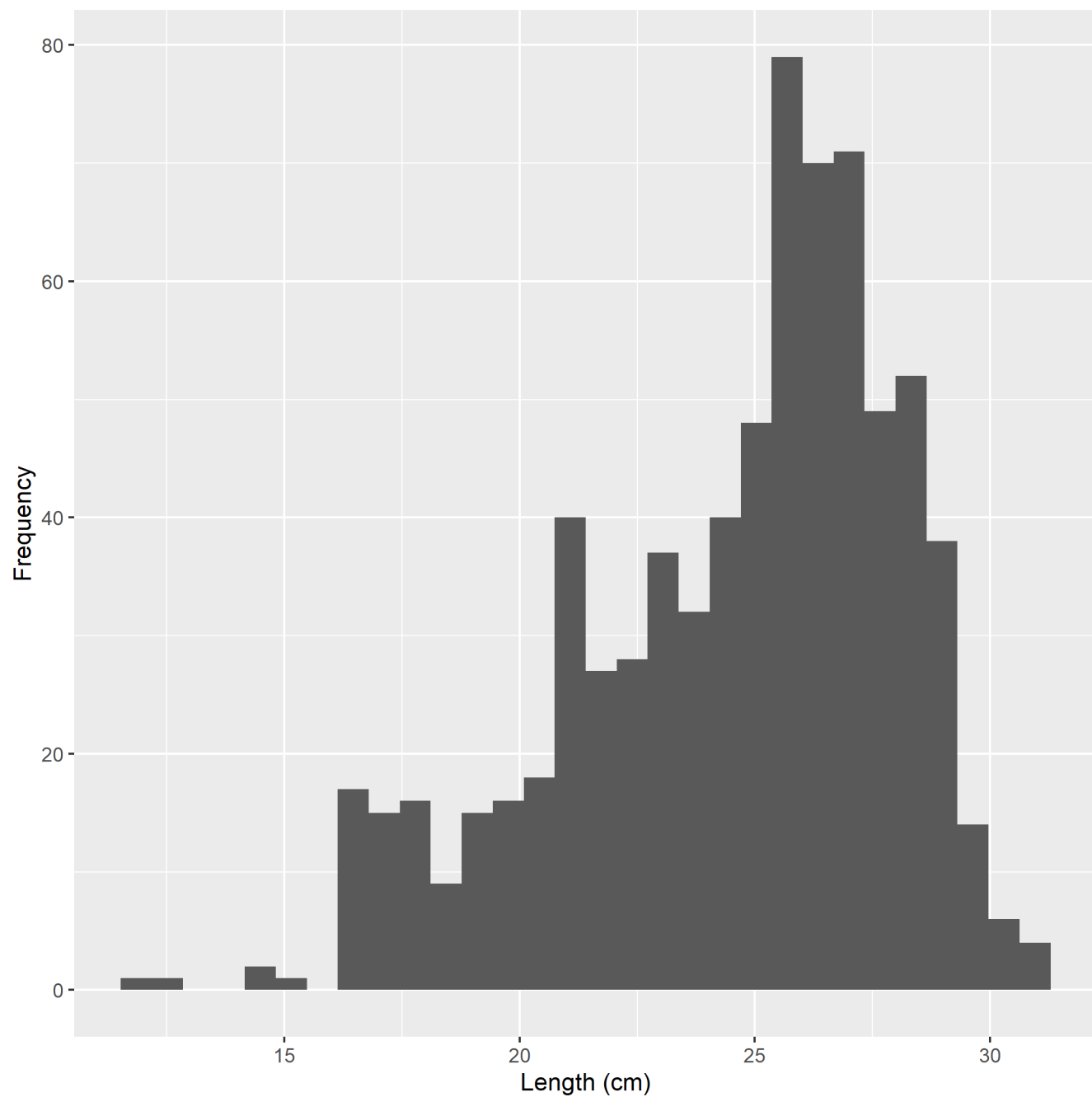


Figure 4: Length frequency of research survey catch of Pacific saury in British Columbia, Canada.

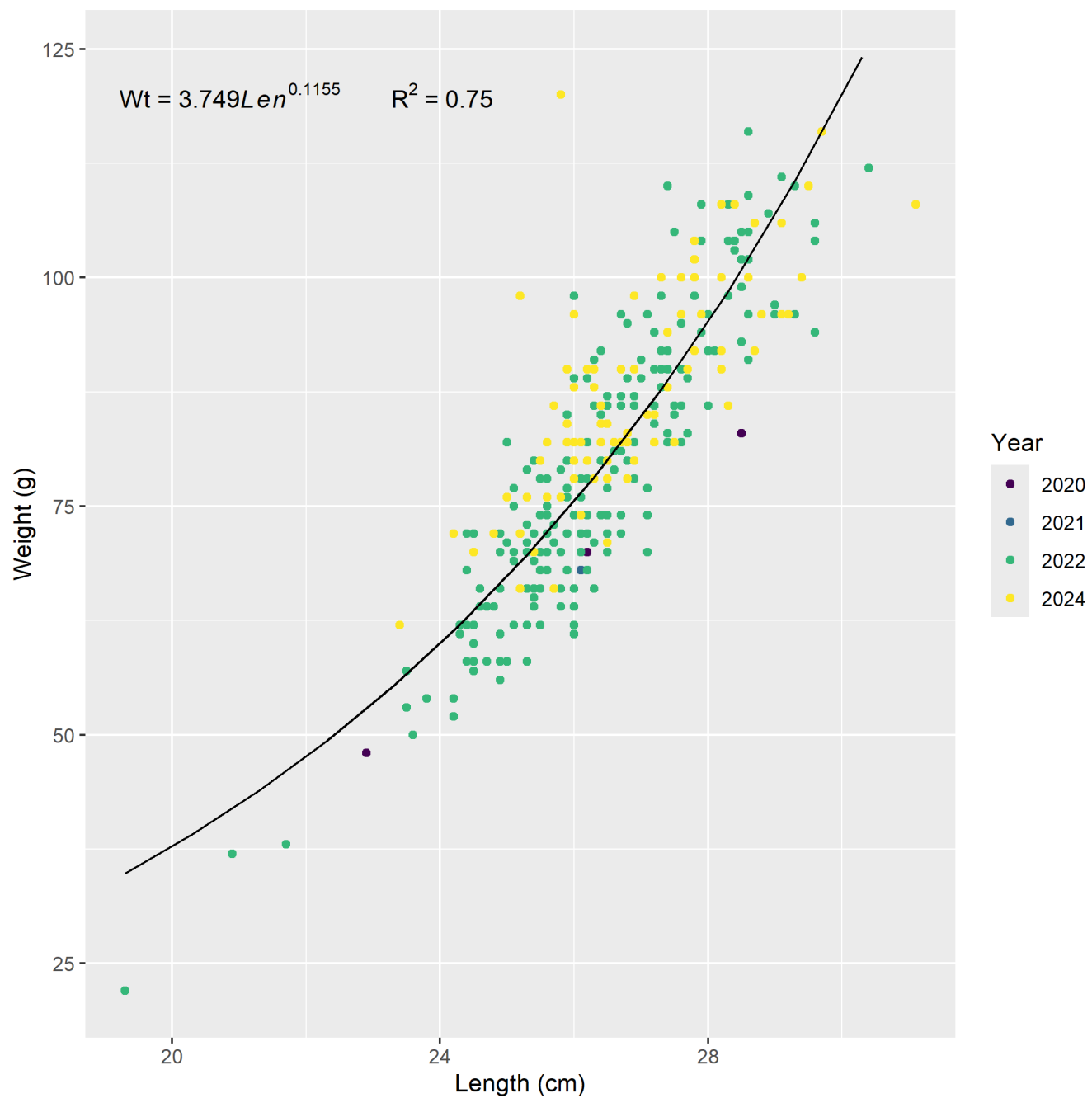


Figure 5: Length-weight relationship for of research survey catch of Pacific saury in British Columbia, Canada.

Other observations

Pacific saury are a regular component, sometimes comprising a large portion of the diet of seabirds in BC. For example, Pacific saury are regularly fed to nestlings in the Rhinoceros Auklet colony on Triangle Island (Figure 6, reprinted from DFO 2020 and Hedd et al. 2006). Pacific saury are also observed in some years as a component of salmon diet. In 2022, Pacific saury were observed in the diet of multiple coho salmon captured in July off the west coast of Vancouver Island (Figure 7, J. Boldt, pers. comm.).

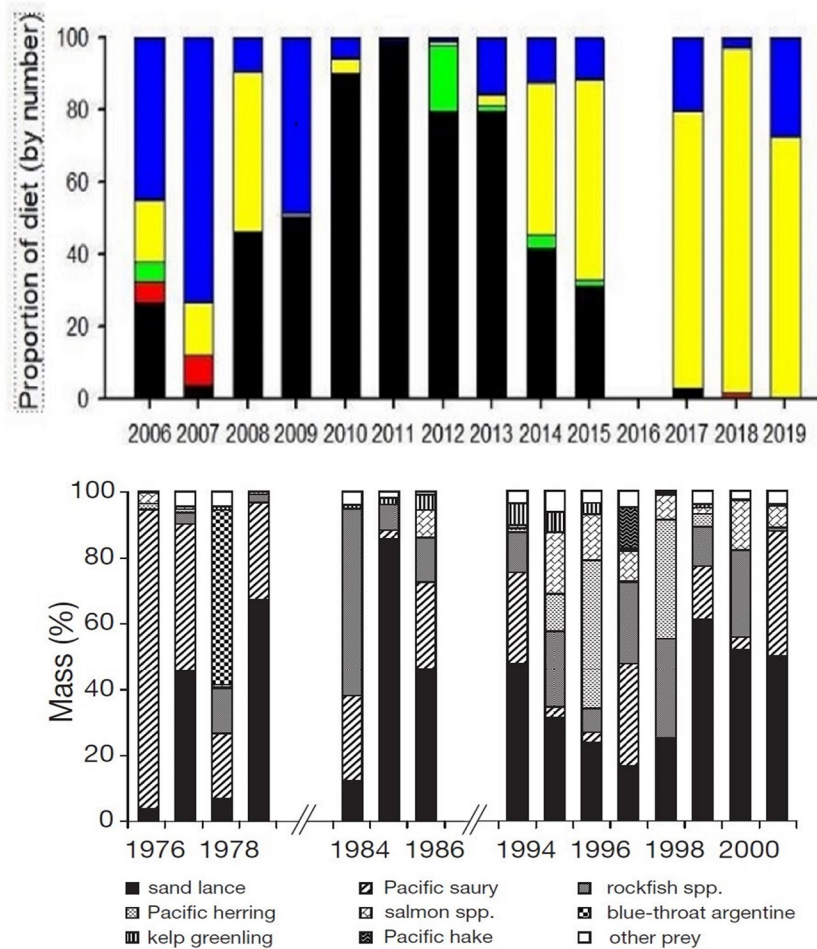


Figure 6: Diet composition of rhinoceros auklet nesting diet at Triangle Island British Columbia (Hedd et al. 2006, DFO 2020). Pacific saury is shown in blue in the top panel



Figure 7: Pacific saury observed in coho salmon stomach in 2022 Integrated Pelagic Ecosystem Survey (IPES) on the west coast of Vancouver Island (photo by J. L. Boldt).