**Abstract**—Predation during the early marine critical period is thought to determine year class strength for juvenile Pacific salmon, but predation impact is hard to document because it requires consistent sampling over extended periods to capture infrequent or episodic events. Juvenile salmon are among the most abundant daytime forage species available in summer to epipelagic predators in marine waters of Southeast Alaska (SEAK), and returning adult salmon are among the most abundant potential fish predators. Because of the spatial and temporal overlap of juveniles and adults of the five species, the potential for cannibalistic interactions to influence subsequent returns has long been of interest. To identify levels of predation on juvenile salmon, we examined the 15-year time series (1997-2011) of adult salmon and other potential predators captured in surface trawls by the Southeast Coastal Monitoring (SECM) project in SEAK, and two years of predation by adult pink and chum salmon captured in purse seines near shore in Prince William Sound. Here, we focus on the degree of piscivory and incidence of predation on juvenile salmon by adult/immature Chinook, coho, sockeye, chum, and pink salmon, address the potential for cannibalism by alternate year broodlines of pink salmon to depress returns the following year, and provide an example of the impact of an abundant episodic predator, immature sablefish, on salmon.

**Study area & predation overview**

Sampling in migration corridors of Prince William Sound (PWS) & Southeast Alaska (SEAK).

**Adult salmon predation in SEAK-epipelagic**

In SEAK, adult coho salmon consistently preyed on juvenile salmon. Pink salmon cannibalism was observed only in 2 of 15 years, & only one incident of predation was observed for Chinook salmon.

**Episodic sablefish predation**

More than half of ~2500 predators examined in SEAK in 15 years were sablefish. Immature sablefish had more than half of ~2500 predators examined in SEAK in 15 years were sablefish. Immature sablefish had a diet composition that included salmonids including coho, Chinook, & pink salmon. Immature sablefish had a diet composition that included salmonids including coho, Chinook, & pink salmon. Juvenile salmon are among the most abundant daytime forage species available in summer to epipelagic predators in marine waters of Southeast Alaska (SEAK), and returning adult salmon are among the most abundant potential fish predators. The recommendations and general content presented in this poster do not necessarily represent the views or official position of the Department of Commerce, NOAA, or NMFS.