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Objectives:

- 1. Determine stock and age-specific ocean distribution and migration patterns of Chinook salmon in Icy Strait
- 2. Examine the relationships among agespecific fish abundance and stockspecific ocean survivals
- 3. Explore the feasibility of developing a first year production indicator of SEAK Chinook salmon based on ocean monitoring







Size of trawl-caught Chinook sampled (99% pre-recruit)

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Chinook salmon first year production indicators from ocean monitoring in Southeast Alaska Joe Orsi, Emily Fergusson, Alex Wertheimer, and Ed Farley

Methods:

- Chinook salmon were sampled with surface trawls in annual ocean surveys in Icy Strait from May, June, July, August, and September, 1997-2014
- Coded-wire tags (CWTs) were decoded to obtain stock, age, and migration information
- Trawl catches (CPUE) of juvenile and ocean-age 1 Chinook salmon were correlated with brood year survivals: corresponding years of ocean entry were matched to selected wild and hatchery stocks

Conclusions:

Southeast Alaska Chinook salmon stocks have an initial localized marine distribution as juveniles, are present the ensuing spring and summer as immature fish, emigrate in the fall, and CPUE of ocean-age 1 fish has promise as a first year production indicator of later recruitment

	Chinook salmon brood year survivals				
	Wild	Wild	Hatchery	Hatchery	Wild
Stock	Chilkat	Taku	DIPAC	H-Falls	Stikin
Chilkat	- 1.4				We Transfer
Taku	*0.74				
DIPAC	*0.67	*0.81		a she was	
H-Falls	*0.57	*0.52	*0.55		
Stikine	*0.53	*0.72	*0.58	0.42	
LPW	0.36	0.18	0.18	0.03	0.09
CPUE					
Juv-June	0.13	0.41	*0.49	0.01	0.38
Juv-July	0.17	0.27	0.35	0.09	0.13
Juv-Aug	0.15	0.26	0.17	*0.49	0.26
Imm-June	0.19	0.46	0.37	*0.62	0.22
Imm-July	-0.20	0.22	0.30	*0.56	-0.39
Imm-Aug	0.11	0.31	0.27	*0.50	-0.16

Correlation matrix of Chinook salmon brood year survivals and catch rates of juvenile and immature Chinook salmon



- wild stocks)
- respectively
- immature ocean-age 1 fish
- for managers



