What can we learn from coded-wire tagging of Chinook salmon?

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Coded-wire Tag
Tagging the Salmon
Releases of Coded Wire Tagged King Salmon Juveniles by Year and State (1968 - 2011)
Ocean distribution of Yukon River Chinook salmon from NMFS high seas CWT recoveries, 1981-2012
Ocean distribution of Canada Chinook salmon from NMFS high seas recoveries of Agency-CDFO wire-tags (NOT CWTs), 2007-2012

Agency-CDFO Wire Tagged Chinook Salmon
- Previously-reported Agency-CDFO wire tags (n = 11)
- New Agency-CDFO wire tags (n = 2)
Ocean distribution of Cook Inlet Alaska Chinook salmon from NMFS high seas CWT recoveries, 1981-2012
Ocean distribution of Southeast Alaska Chinook salmon from NMFS high seas CWT recoveries, 1981-2012

Southeast Alaska Chinook Salmon

- Previously-reported CWT recoveries (n = 203)
- New CWT recoveries (n = 8)
Ocean distribution of Washington Chinook salmon from NMFS high seas CWT recoveries, 1981-2012

Washington Chinook Salmon

- Previously-reported CWT recoveries (n = 1693)
- New CWT recoveries (n = 75)
Ocean distribution of Oregon Chinook salmon from NMFS high seas CWT recoveries, 1981-2012

- Previously-reported CWT recoveries (n = 1555)
- New CWT recoveries (n = 36)
Ocean distribution of Idaho Chinook salmon from NMFS high seas CWT recoveries, 1981-2012
Average Survival of Southeast Wild and Hatchery Chinook Stocks by Location
Average Survival of Southeast Alaska Wild and Hatchery Chinook Stocks by Brood Year

- Hatchery
- Wild
Estimated harvest of Unuk River stock Chinook salmon released from LPW in two time periods

1982-1986 Brood years
- NE: 76.2%
- NW: 17.7%
- SE: 2.8%
- SW: 2.1%
- BC: 1.1%
- High Seas: 0.1%

1992-1999 Brood years
- NE: 70.0%
- NW: 23.2%
- SE: 4.5%
- SW: 0.5%
- BC: 0.8%
- High Seas: 1.0%
Estimated harvest of Unuk River Chinook released by Ketchikan hatcheries (SSRAA/DMT) in two time periods

1982-1986 Brood years:
- SE: 73.5%
- NW: 8.2%
- SW: 5.0%
- BC: 4.1%
- NE: 9.0%
- High Seas: 0.2%

1992-1999 Brood years:
- SE: 77.0%
- NW: 12.9%
- SW: 2.2%
- BC: 3.4%
- NE: 3.7%
- High Seas: 0.7%
Troll Recoveries only
Unuk Recoveries

SSRAA/DMH

1982-1986 Brood years
- NE: 17.2%
- NW: 16.2%
- SE: 54.4%
- SW: 9.1%
- BC: 3.1%

1992-1999 Brood years
- NE: 16.2%
- NW: 14.4%
- SE: 79.0%
- SW: 2.3%
- BC: 0.1%

Wild

1982-1986 Brood years
- NE: 21.4%
- NW: 25.4%
- SE: 39.7%
- SW: 11.3%
- BC: 2.2%

1992-1999 Brood years
- NE: 7.8%
- NW: 51.6%
- SE: 37.2%
- SW: 1.6%
- BC: 1.8%
Marine Survival of Unuk Stock Using Nominal Catch

LPW x Wild: $r = 0.36$
LPW x SSRAA: $r = 0.71^*$
SSRAA x Wild: $r = 0.18$
Exploitation of Unuk Stock Using Nominal Catch

LPW x Wild: $r = 0.27$
LPW x SSRAA: $r = 0.29$
SSRAA x Wild: $r = 0.37$
All Fishery Recoveries Unuk

Unuk Age Fishery Structure

- LPW Fishery BY 76-99
- Wild Fishery BY 92-99

Proportion

Age

2 3 4 5 6 7
Alaska Hatchery Adult Chinook Salmon Returns by Year in Southeast Alaska

- Cost Recovery, Egg Take, Other
- Commercial
- Sport
Hatchery Releases of Chum Salmon by Country in millions of fish.

- KOREA
- CANADA
- RUSSIA
- WOCI
- Alaska
- JAPAN
The End