



Chignik Symposium

Using otoliths to
determine where juvenile
sockeye rear in the
Chignik watershed



Presenter: Jonathan Singleton




2024

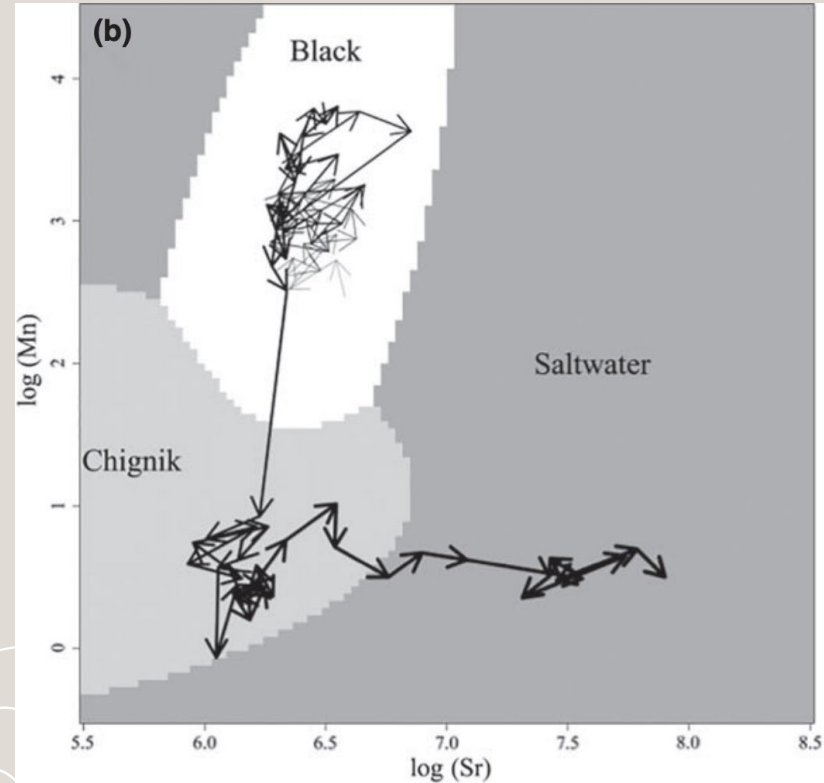
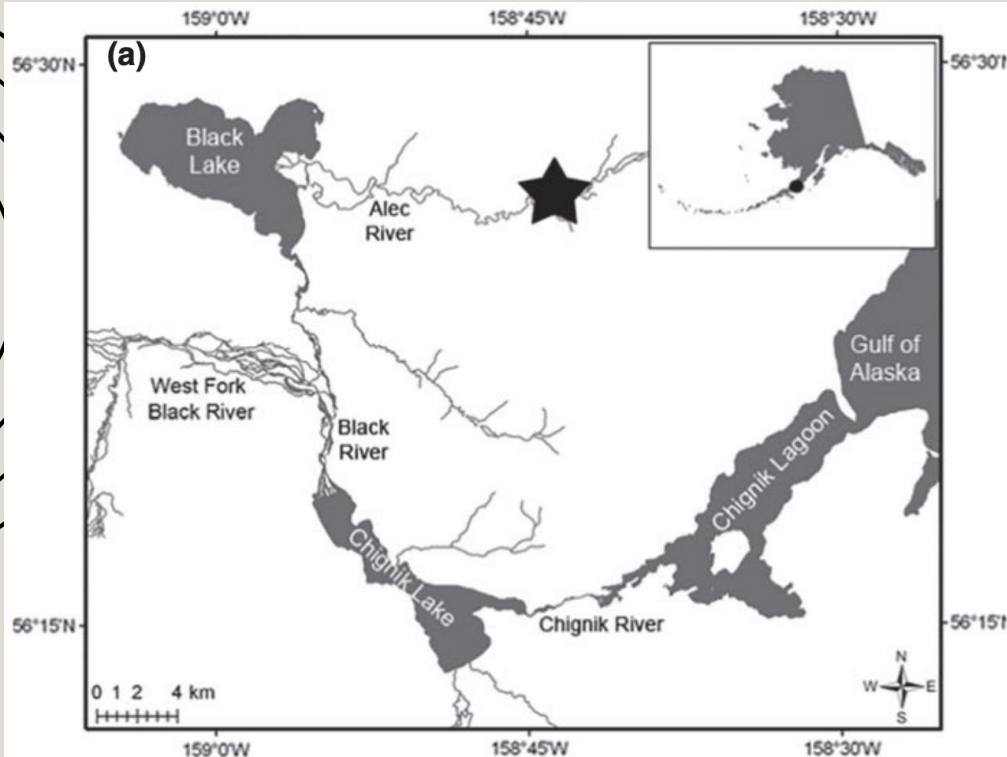


Project questions/goals

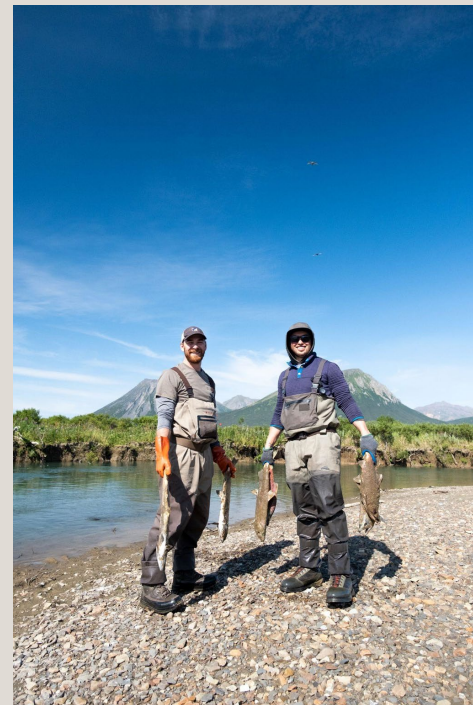


- Where in the watershed are juvenile sockeye rearing?
 - Black Lake, Chignik Lake, Chignik Lagoon
 - How does rearing habitat usage change with different thermal regimes and food availability?
 - Anomalies in the years leading up to the 2018?
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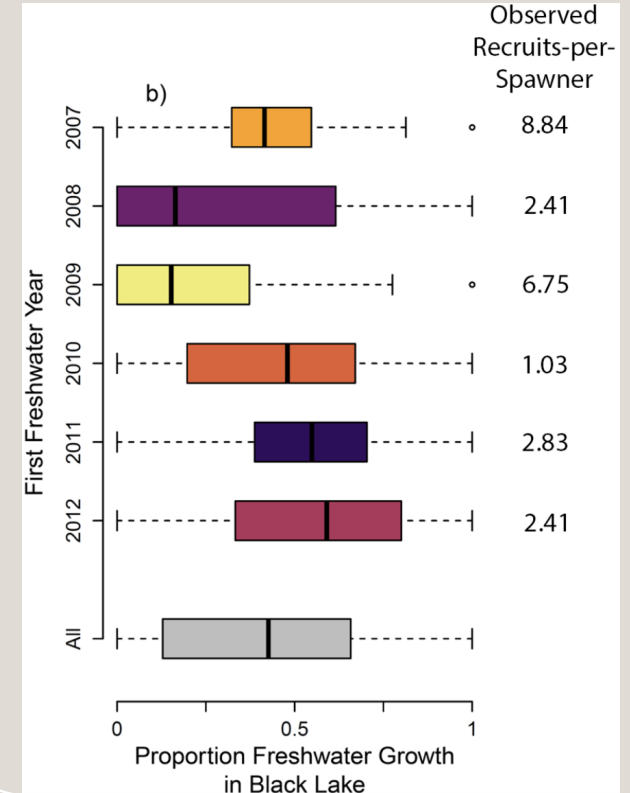
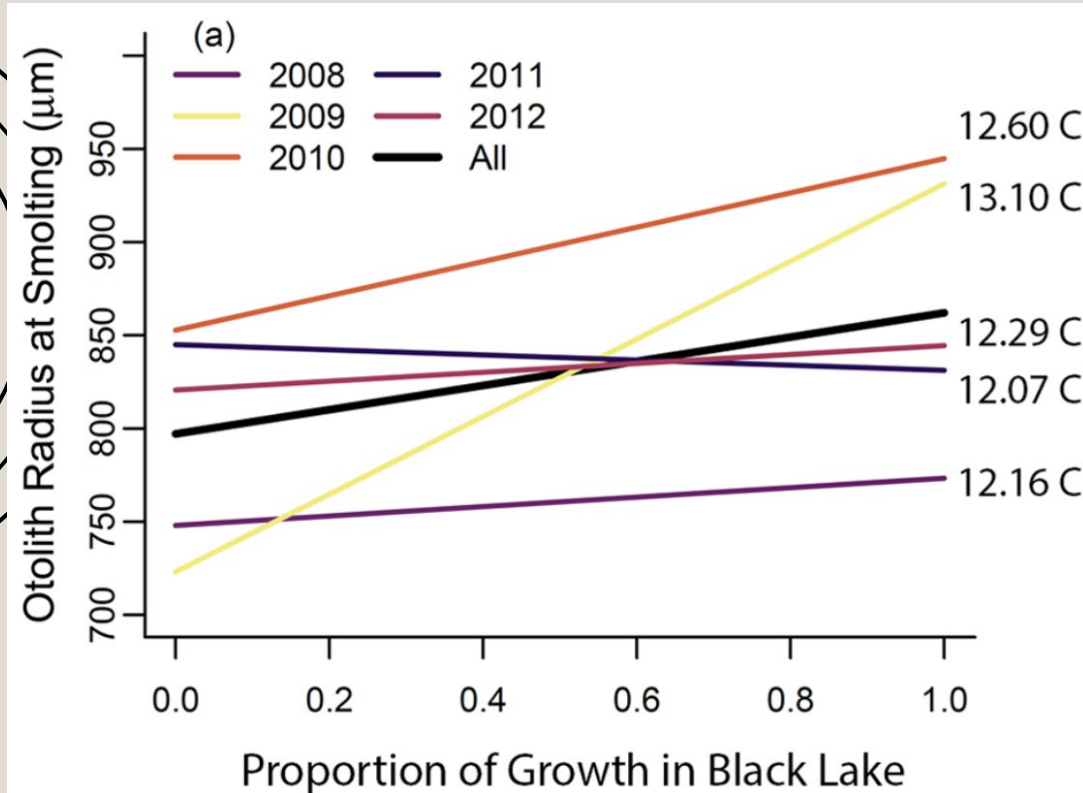
Walsworth et al. 2015



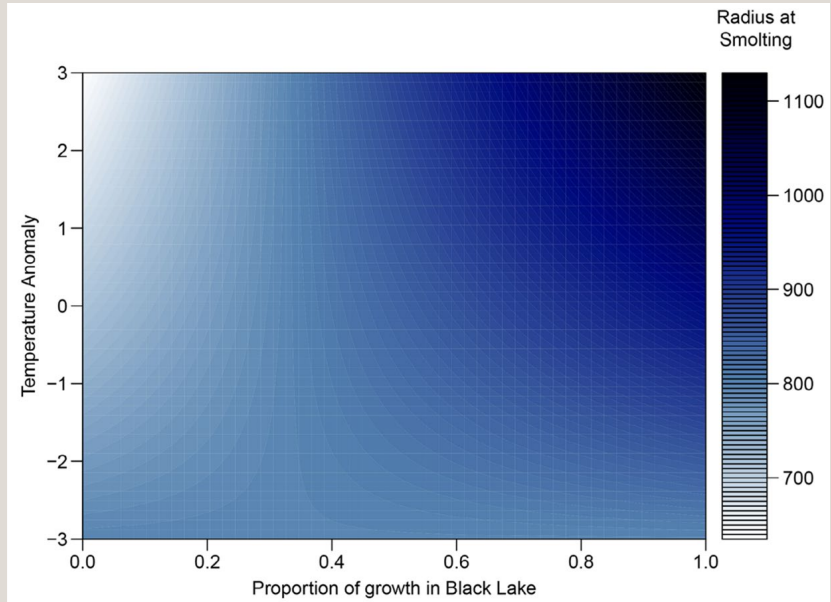
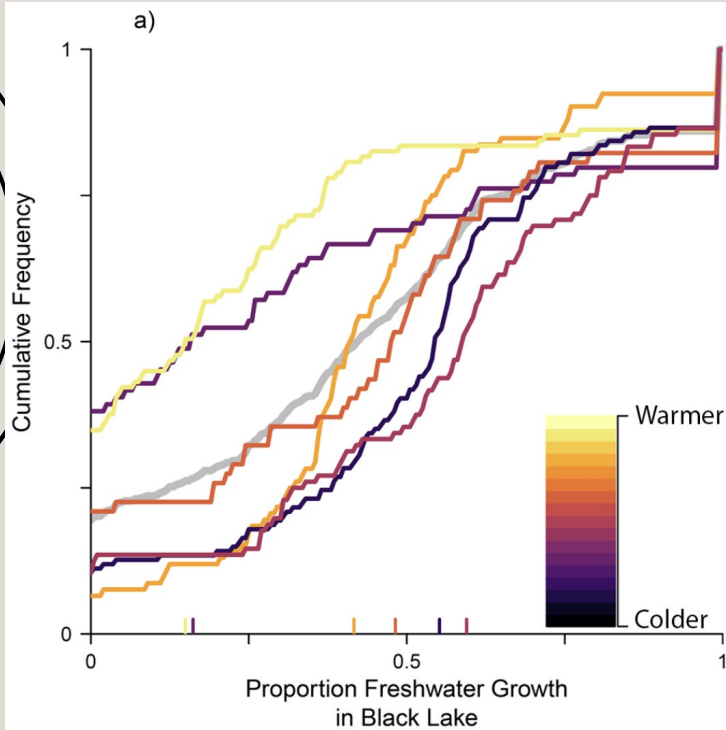
Otolith collection



Walsworth et al. 2020



Walsworth et al. 2020







Chinook otolith side project



Literature cited



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- A series of concentric circles on the left side of the page, partially cut off by the edge.
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- Walsworth, T.E., D.E. Schindler, J.R. Griffiths & C.E. Zimmerman 2015. Diverse juvenile life-history behaviours contribute to the spawning stock of an anadromous fish population. *Ecology of Freshwater Fish* 4: 204–213.
- Walsworth, T.E., J.R. Baldock, C.E. Zimmerman & D.E. Schindler 2020. Interaction between watershed features and climate forcing affects habitat profitability for juvenile salmon. *Ecosphere* 11(10).
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- Zimmerman, C.E. 2005. Relationship of otolith strontium-to-calcium ratios and salinity: experimental validation for juvenile salmonids. *Canadian Journal of Fisheries and Aquatic Sciences* 62: 88–97.
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