



Bering Strait and Chukchi Sea: Origin of Juvenile Chum Salmon

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Northern collections of juvenile chum--where are these fish from?

Changes in the Arctic have stimulated new research on the distribution and origin of fish.

A U.S. BASIS survey in fall 2007 caught juvenile chum salmon in the Bering and Chukchi Seas.

Origin was determined by genetic analysis.



NOAA research vessel *Oscar Dyson*

Genetic Analysis

The origin of juvenile chum salmon from two locations were determined with genetic stock identification methods.

- 10 SNP and 9 microsatellite loci
- 89 population genetic baseline (●)
- SPAM 3.7 program



Juvenile chum salmon

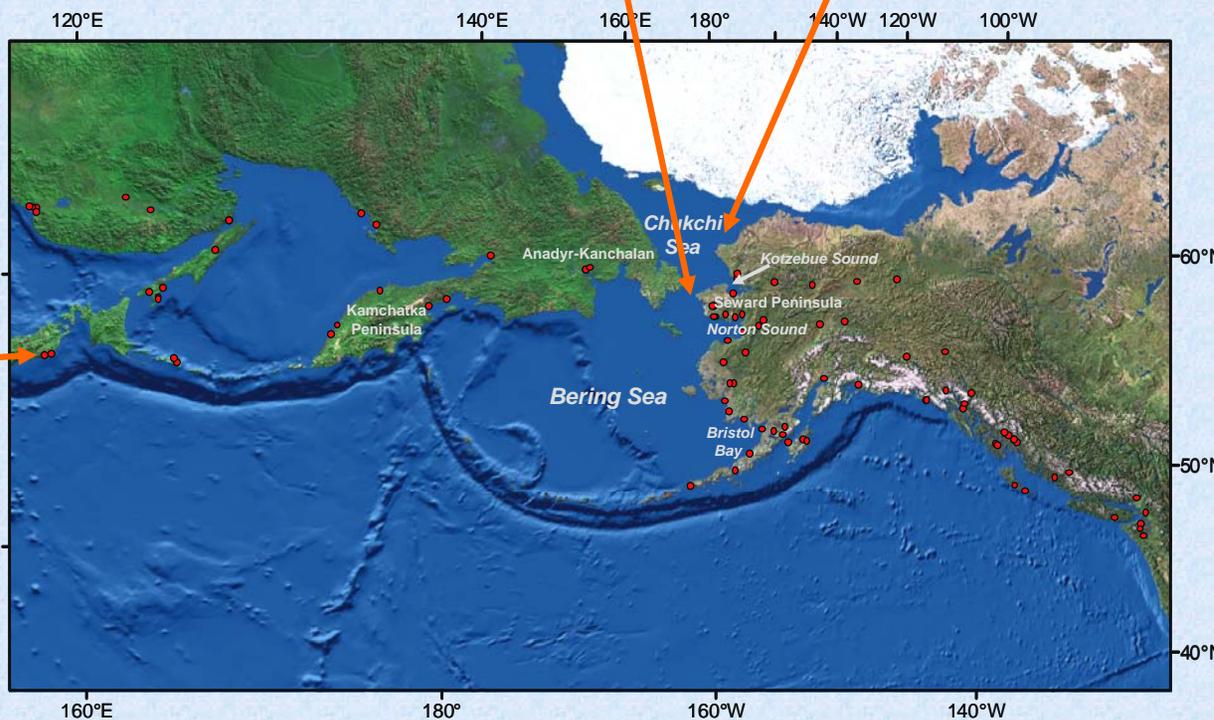
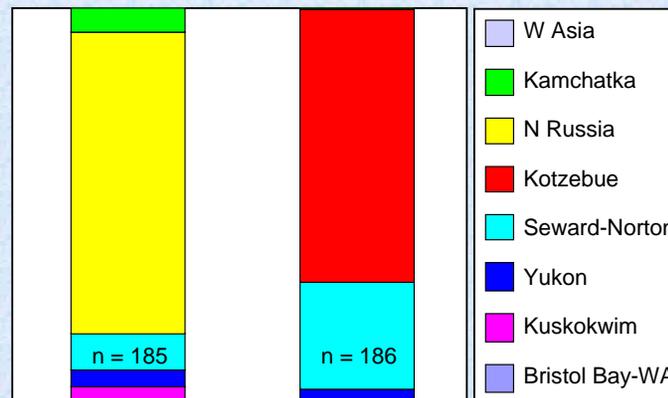
Origin of Fish

Bering Strait: fish were primarily from northern Russian—the Anadyr and Kanchalan Rivers.

Chukchi Sea: majority of fish were from the Kotzebue and Norton Sound area.

Less than 5% of the fish were from the Yukon River.

The SNP and microsatellite markers provide concordant results.



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