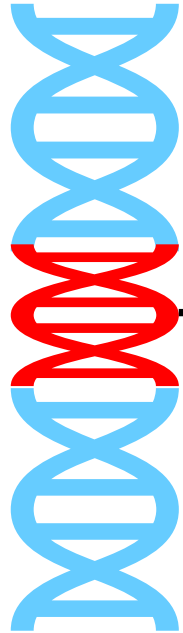
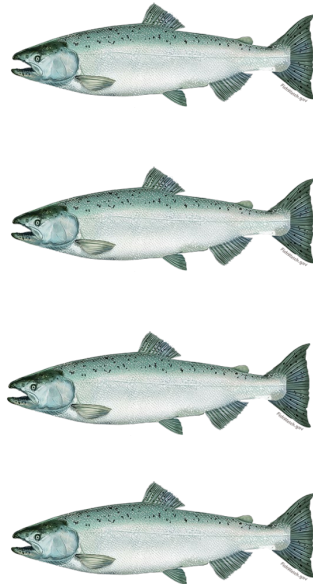


A COMPLEX PHENOTYPE IN SALMON CONTROLLED BY A SIMPLE CHANGE IN MIGRATORY TIMING. Thompson *et al. Science*. 2020.

FINDINGS FROM THOMPSON ET AL.



The study determined that a small genomic region, the Region of Strong Association (RoSA), is perfectly associated with different Chinook salmon "ecotypes" or run timing in the Klamath and Sacramento rivers.



Winter Run

Spring Run

Fall Run

Late-Fall Run

NOAA FISHERIES

SALMON ECOTYPES

These ecotypes look similar but, because they behave so differently, scientists have suggested that they be treated and managed as different species. **This study, however, suggested that they are genetically as similar as individuals with different eye color.**

MANAGEMENT IMPLICATIONS

Being able to distinguish salmon ecotypes at a genetic level is more accurate and will facilitate conservation and restoration of the ecologically, culturally, and economically important fish.