

## **Effects of domestication on predation mortality and competitive dominance**

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Propagation of fish in hatcheries has the potential to unintentionally change the genetic composition of donor populations and to subsequently contribute to reduced survival in natural environments. This is a particular concern for supplementation or conservation hatcheries because the objective of these hatcheries is to increase natural production. The mechanism of genetic change most likely to occur in conservation hatcheries is domestication, or natural selection in an artificial environment. We present the results of the sixth year of monitoring to detect changes to predation mortality and competitive dominance of the supplemented population of spring Chinook salmon in the upper Yakima River relative to two control populations; one with no prior hatchery influence and a segregated hatchery population in its third generation of hatchery culture.