

RC 022

In regards to ACR#6

10/19/15

To members of the Board of Fish –

Below are some comments made by researchers studying jacks that I would like to bring to the Board's attention:

Matt Dean, Phd - Molecular and Computational Biology, USC:

*"Jacking is heritable, meaning jacks tend to give rise to jacks..."*

Daniel Heath, Professor and Executive Director, Great Lakes Institute for Environmental Research

University of Windsor, Ontario, Canada

*"My work was on Chinook salmon jacks, but based on that, jack fathers produce much higher rates of jacking in their offspring."*

Jukka Kekalainen, Phd – Department of Biology, Univ. of Eastern Finland

*"Several studies have demonstrated that improved fertilization success of subordinate individuals is often associated with higher sperm motility. Supporting this view sperm motility has been shown to be one of the most important factors predicting the paternity of the males, especially in externally fertilizing fish, such as salmonids."*

There are several recent studies suggesting that jacks are better at fertilizing eggs than mature males and that they tend to produce jacks. This is a problem for Frazer Lake and is doing the run harm. Until further clarification, please consider reducing the acceptable level of jack escapement into Frazer Lake from 10% to 4%. We also need an actionable plan that can guarantee the culling of any jacks in excess of the desired percentage.

Thank you for your time and taking this problem into consideration.

Miles Underwood