

## **Juvenile salmon bioenergetics | Testing temperature and feeding regime influences on precocious maturation of Spring-run Chinook Salmon**

The Blumenshine lab research examines how factors intrinsic and extrinsic to aquatic habitats interact and influence the structure and functioning of aquatic ecosystems. For example, climate change and human alteration of river hydrology has greatly changed the thermal landscape for juvenile salmonids, especially in western US rivers. Multiple water demands have reduced river habitat quantity and quality. Water management seeks to balance potentially conflicting demands yet provide cool water habitat to conserve threatened salmonids. Salmon hatchery facilities play a critical role in sustaining and restoring salmon populations, especially through propagation programs. However, a consequence of raising salmon in hatchery environments include precocious (early) maturation. Our group collaborates with CA Dept. of Fish & Wildlife and others to examine the factors that lead to precocious maturation in hatchery settings, including genetics (parental crosses), temperature, and food supply. These experiments are based on a foundation of 'nature vs. nurture' to better understand salmon life cycles and their applications to conservation.



**Steve Blumenshine and  
Stephen Winsor**

**Friday, October 11, 2019**

3:00 – 4:00 PM

Science 2, room 109

for further information:  
[www.csufresno.edu/biology](http://www.csufresno.edu/biology)

If you need a disability-related accommodation or wheelchair access, please contact Lindasue Garner at the Department of Biology at 278-2001 or e-mail [lgarner@csufresno.edu](mailto:lgarner@csufresno.edu) (at least one week prior to event).