**Wind River steelhead: an example of significant iteroparity in the Columbia River Hydrosystem**

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The proportion of repeat spawners in steelhead populations varies widely but is generally between 5 and 15% in the Pacific Northwest. However, in the Columbia River hydrosystem, published rates of iteroparity are far lower (0-2%), though it is unknown to what extent this difference results from natural or anthropogenic factors. We analyzed data from adult steelhead scales and Passive Integrated Transponder (PIT) tags from a long-term lifecycle monitoring project on a wild summer steelhead population in the Wind River, WA from 2001 to 2013. This tributary to the Columbia River enters immediately above Bonneville Dam and provided us an opportunity to study iteroparity in the absence of hatchery production and with minimal hydrosystem influence. Our analysis indicated the proportion of repeat spawners based on scales varied from 0 to 13.5% (mean = 5.4%) by spawn year and comprised individuals with thirteen distinct post-smolt life histories. Individuals that repeat spawned more than once were very uncommon (mean 0.11%) and individuals that skipped a year between spawning events were more common than individuals that spawned annually. Generalized linear models using PIT tag data revealed that females were more likely than males to repeat spawn, and the probability of repeat spawning was negatively correlated with initial length and maiden spawner age, and was positively correlated with the duration of time fish arrived in the Wind prior to spawning. The median length of repeat spawners was 48 mm greater than that of maiden spawners and growth of individuals between spawning events was positively correlated with the duration of time between maiden and repeat returns to the river (range = 20 mm to 180 mm). Repeat spawners increased Wind River median spawner abundance by 6% in all years, by 9% in years when abundance was below the median, and they reduced the coefficient of variation in adult abundance by 1.6%. Management actions that increase iteroparity would likely benefit other Columbia River populations.