

References and Figures for:

Where Have All The Tucannon Steelhead Gone?

And What Is WDFW Doing To Fix It?

By Todd Miller, Joe Bumgarner, and Jeremy Trump
Washington Department of Fish and Wildlife

References

Araki H, Cooper B, Blouin M. 2007. *Genetic effects of captive breeding cause a rapid, cumulative fitness decline in the wild. Science 318, 100–103.*

Theriault V, Moyer G, Jackson L, Blouin M and M Banks. 2004. *Lower fitness of hatchery and hybrid rainbow trout compared to naturalized populations in Lake Superior Tributaries. Molecular Ecology (2004) 13, 3379–3388.*

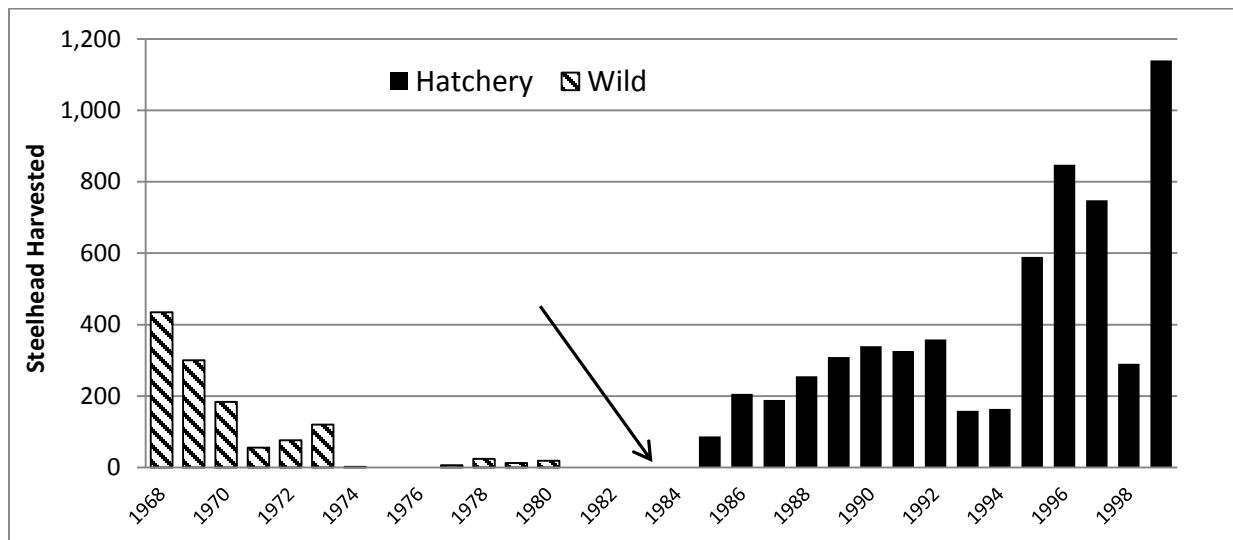


Figure 1. Estimated Harvest of wild and hatchery origin summer steelhead in the Tucannon River, 1967-1999.

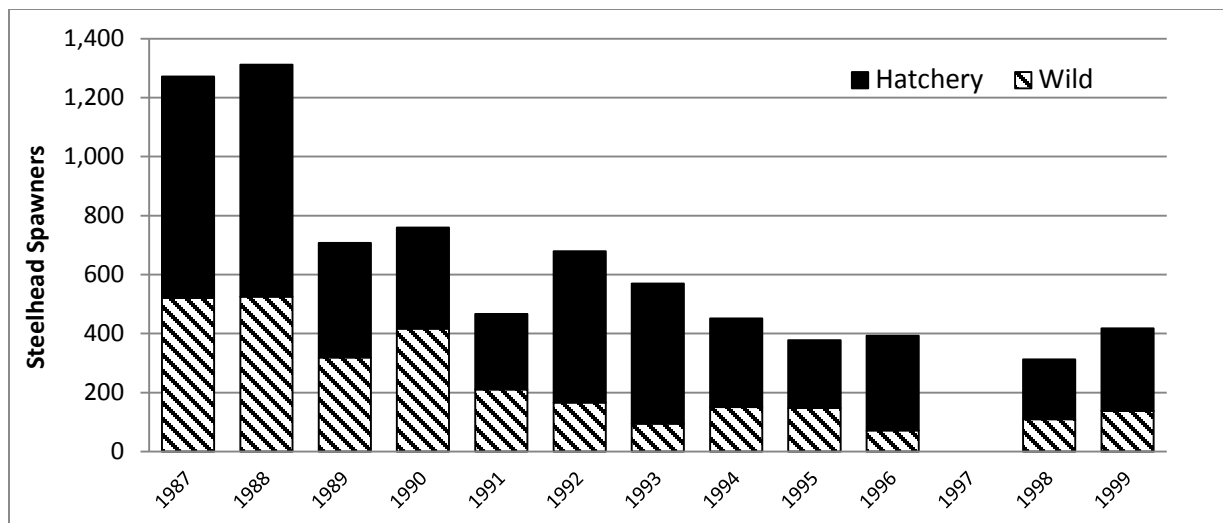


Figure 2. Estimated number of wild and hatchery origin steelhead spawners in the Tucannon River, 1987-1999. Estimates derived from spawning ground surveys and creel information.

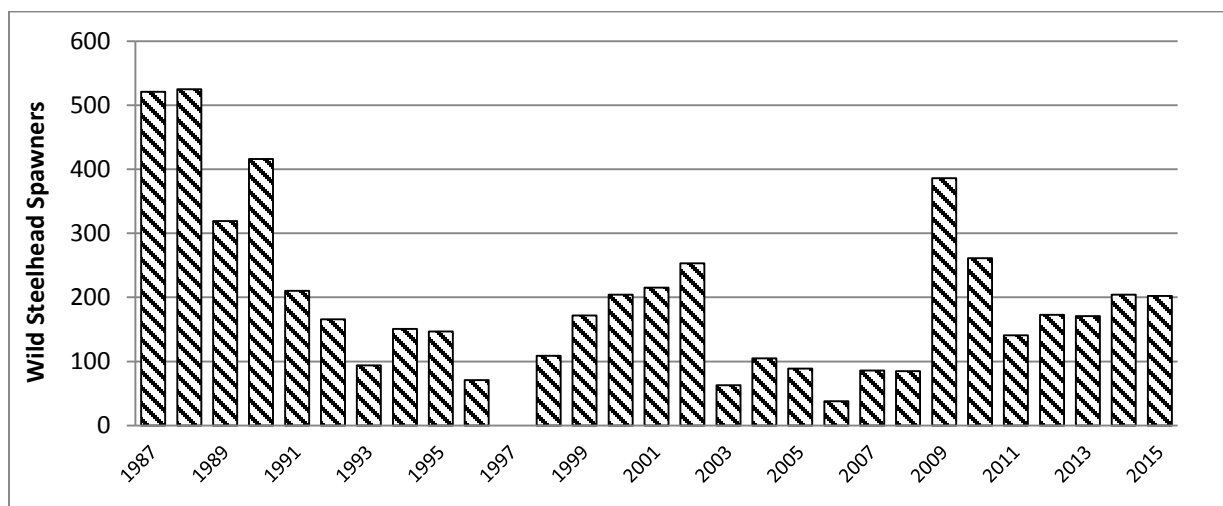


Figure 3. Estimated number of wild origin steelhead spawners in the Tucannon River, 1987-2015. Estimates derived from spawning ground surveys and creel information (1987-1999), or from PIT Tags (2000-2015).

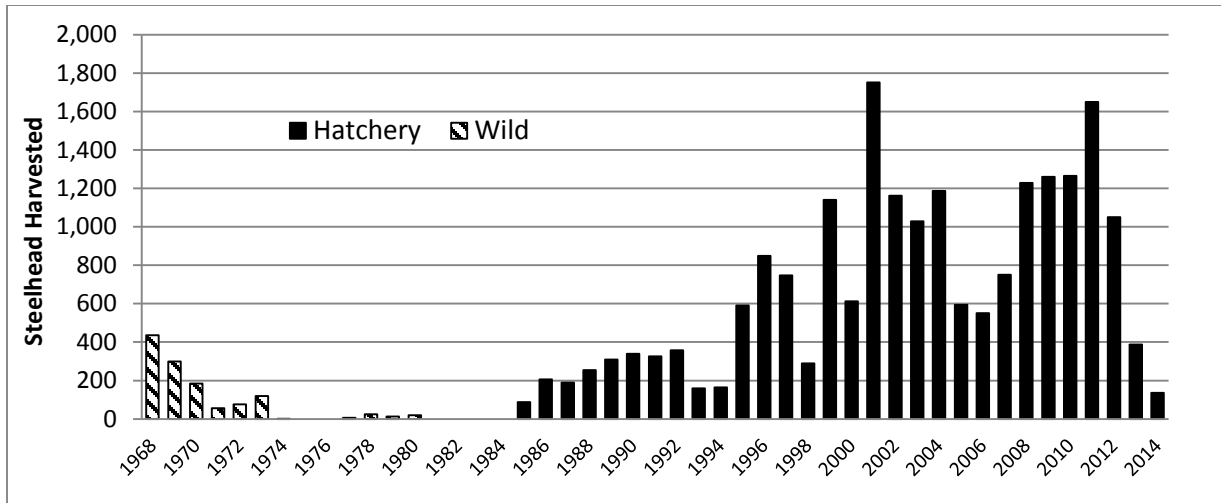


Figure 4. Estimated harvest of wild and hatchery origin summer steelhead in the Tucannon River, 1967-2014.

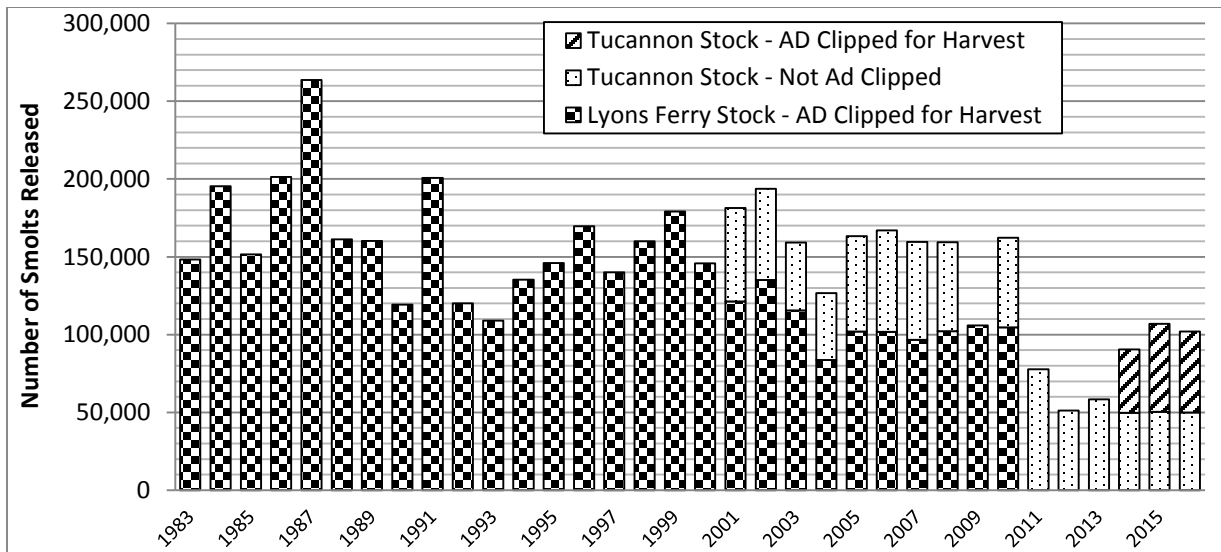


Figure 5. Number of hatchery origin steelhead from either Lyons Ferry or Tucannon stocks released into the Tucannon River, 1983-2016.

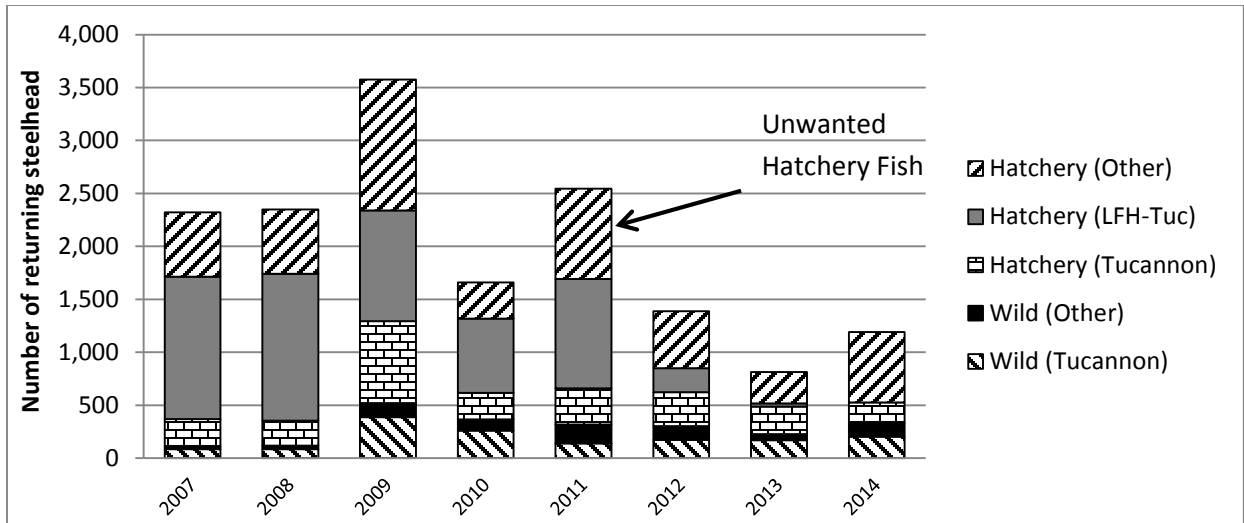


Figure 6. Estimated number of wild and hatchery origin (multiple stocks) steelhead that escape to the Tucannon River, 2007-2014 Run Years.

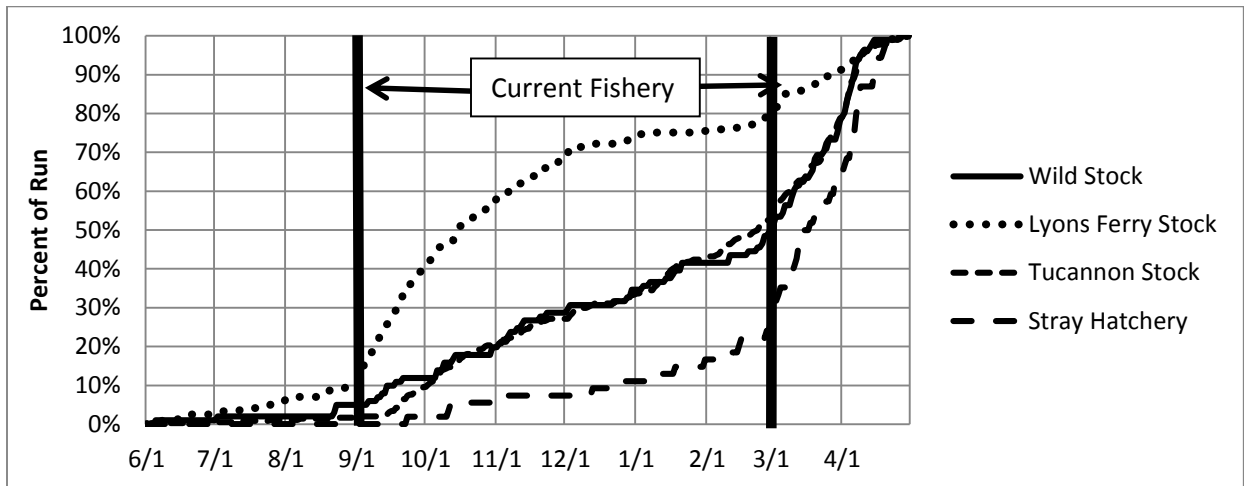


Figure 7. Run timing (based on PIT Tags) of wild and hatchery origin (multiple stocks) steelhead into the Tucannon River, and current fishery timeframe.