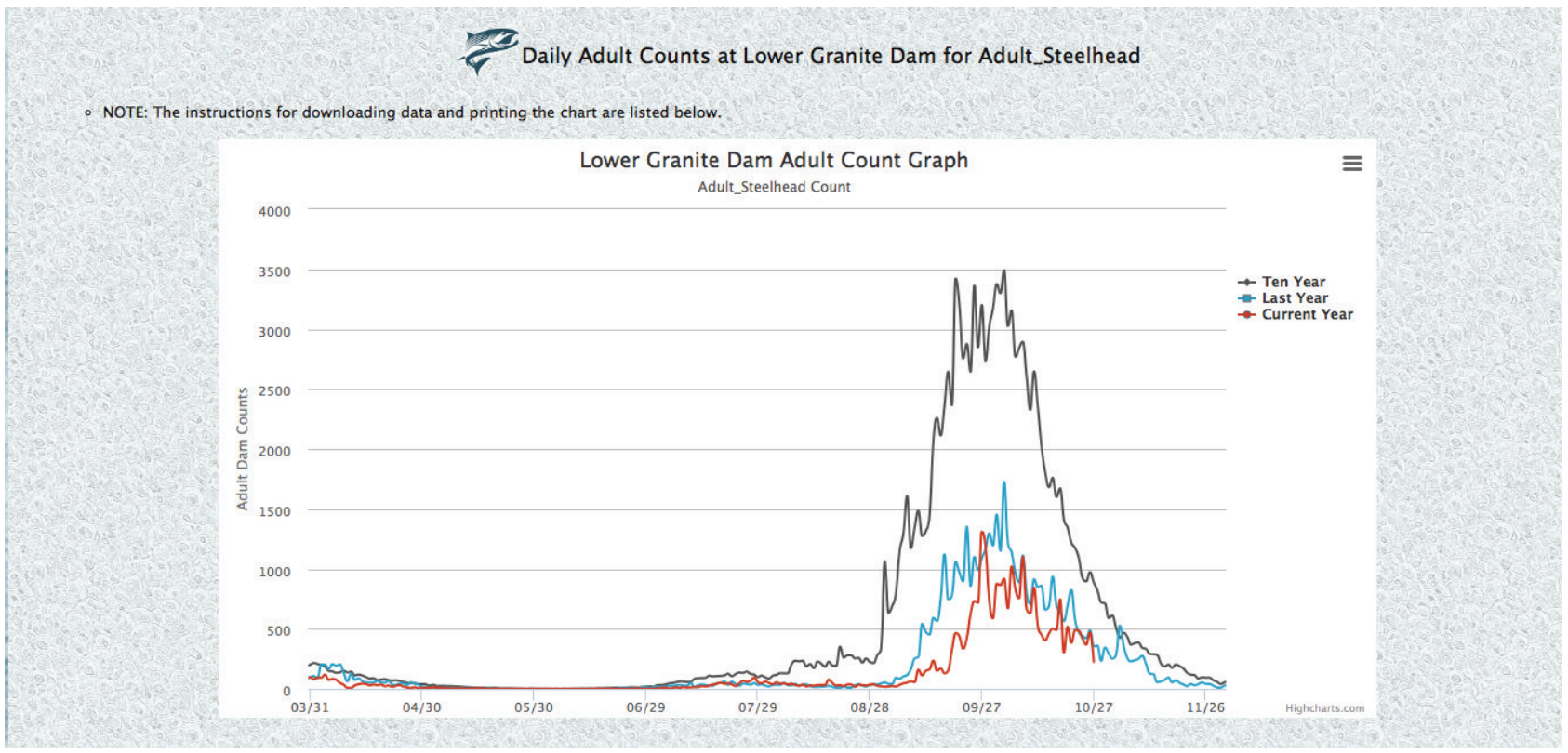
Steelhead season begins as fish reach Grande Ronde, Imnaha

Fish counts low, catch is limited.

By Alan Moore
For the Wallowa County Chieftain



NOAA/BPA

Steelhead returns across Lower Granite Dam on the Snake River

Prized by anglers for its beauty, challenge and raw bursts of power, the Pacific steelhead is referred to in fishing lore as the "fish of a thousand casts." For those fishing local steelhead streams like the Grande Ronde, Wallowa and Imnaha this year, it might be more like the fish of 27 hours.

That's currently about how much time an average angler will fish before bringing a steelhead to hand, based on local river surveys being done by the Oregon Department of Fish and Wildlife. Ten hours per fish is pretty decent steelheading around here, says ODFW Acting District Fish Biologist Kyle Bratcher in Enterprise, with exceptional years being closer to five hours per fish or even fewer.

"For the most part it's been pretty slow," Bratcher said, "We're not seeing great catch rates."

There's no magic formula to solving this year's steelhead fishing. It boils down to numbers: there just aren't very many fish around.

"We're definitely running behind what we were last year," said Bratcher, "and last year wasn't a good year either."

Local businesses focused on fishing find themselves running behind too. Brad Snook, owner of the Sports Corral in Joseph, says receipts on fishing licensing are running about 40 percent of normal for this time of year.

With an estimated 85 percent of this year's hatchery steelhead run past Lower Granite Dam on the Lower Snake, ODFW estimates that fewer than 3,000 are heading back to a Grande Ronde or Imnaha basin hatchery facility. In the 2014-15 season, the total of hatchery arrivals was closer to 12,000. {span}ODFW does not normally project wild steelhead returns to the Grande Ronde and Imnaha basins, but said a rough estimate would be about 25 percent of the wild steelhead total crossing Lower Granite headed for the Grande Ronde Basin, and about 8 percent headed to the Imnaha. With 10,866 "unclipped," meaning presumably wild, steelhead past Lower Granite so far this year, that estimate would have about 2,717 headed for the Grande Ronde and 869 Imnaha-bound. Notably, total counts at Lower Granite show hatchery steelhead outnumbering wild fish by nearly 2:1.{/span} With numbers that low, all wild steelhead caught must be released.

Fish populations overall in the Grande Ronde, Wallowa and Imnaha rivers are co-managed by the Nez Perce Tribe, the Confederated Tribes of the Umatilla Indian Reservation, and the fish and wildlife departments of Oregon, Washington and Idaho. For his district the decision of whether or not to have a sport steelhead season falls to Bratcher. As of now, the answer is yes, there will be a season.

"Numbers are looking like we can still support a fishery," Bratcher said.

His decision must ensure that enough adult hatchery steelhead return to hatchery facilities to produce the next generation. That means that about 600 fish, total, must return to the Wallowa and Imnaha hatcheries. It's also important to reduce impacts to wild steelhead from fishing. The daily bag limit of three hatchery fish per person has been reduced to one. As in past years, anglers must stop fishing once they reach their bag limit

"A one-fish limit is one of the most conservative strategies besides just closing the season," Bratcher said. "By having a one-fish limit it actually gets people off the river quicker."

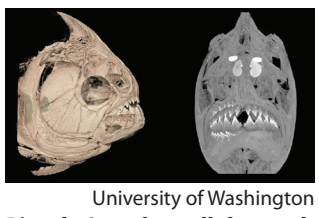
Reducing angler time on the river will limit the number of wild steelhead caught, handled and released, Bratcher said, reducing mortality among those fish. Bratcher said an estimated five percent of steelhead caught and released will die. How the fish is handled can swing that number significantly either way. Landing fish quickly, leaving them in the water, handling using wet hands or a rubber net (not nylon) are all good practices. If you want a quick photo, Bratcher said, support your fish with two wet hands and return it to the water as quickly as possible. Ten seconds of air exposure can cause serious problems for fish.

Some wild steelhead advocates would likely argue for a more conservative range of changes in order to reduce or eliminate impacts on wild steelhead from fishing, and from hatcheries, in area rivers. Some might argue for shutting the season down. Other steelheaders might object to the changes already made.

"If we have to go more conservative it'll be to close the season," Bratcher said. "But I don't anticipate that being the case right now. People are catching fish and it's a great time of year to be down on the river," Bratcher said, "a great time of year to be fishing."

How piranha fish regrow their teeth, swap old teeth for new simultaneously

Michelle Ma
University of Washington



University of Washington

Piranha's replace all the teeth on one side of their head at the same time.

Piranha fish have a powerful bite. Their teeth help them shred through the flesh of their prey or even scrape plants off rocks to supplement their diet.

Years ago, scientists discovered that piranhas lose all of the teeth on one side of their mouth at once and regrow them, presumably to replace dulled teeth with brand new sharp spears for gnawing on prey. But no museum specimens have ever shown this theory to be true, and there's no documentation of piranhas missing an entire block of teeth.

With the help of new technologies, a team led by the University of Washington has confirmed that piranhas — and their plant-eating cousins, pacus — do in fact lose and regrow all the teeth on one side of their face multiple times throughout their lives. How they do it may help explain why the fish go to such efforts to replace their teeth.

"I think in a sense we found a solution to a problem that's obvious, but no one had articulated before," said senior author Adam Summers, a professor of biology and of aquatic and fishery sciences at UW Friday Harbor Laboratories on San Juan Island.

"The teeth form a solid battery that is locked together, and they are all lost at once on one side of the face. The new teeth wear the old ones as 'hats' until they are ready to erupt. So, piranhas are never toothless even though they are constantly replacing dull teeth with brand new sharp ones." With new teeth waiting in the wings, the fish are never missing a full set of pearly whites.

Once the researchers discovered how the teeth were being replaced, they began to understand why the fish likely employ this tactic. They found that the teeth on each side were interlocked together, forming two strong blocks within each mouth.

"When one tooth wears down, it becomes hard to replace just one," lead author Matthew Kolmann, a postdoctoral researcher at George Washington University.