

FISHWATCH 2024 MONTHLY REPORT
JUNE 2024
by Edward Kikumoto

PART 1 OF 2

DISCLAIMER

The opinions in this report are strictly my own, and do not reflect the views and opinions of the U.S. Forest Service, the Oregon Department of Fish & Wildlife, or The North Umpqua Foundation.

Greetings from the Big Bend Pool, Steamboat Creek, in the **Frank and Jeanne Moore Wild Steelhead Special Management Area** (established March 12, 2019).

STEELHEAD EARLY! A FORECAST?

June 1 – Once again this year steelhead made their presence known in the Big Bend Pool with a big splash, followed by a leap out of the water at the head of the Pool. It could have been a very large cutthroat, but cutthroat generally do not leap out of the water. They usually make a slashing rise to the surface, causing a boiling disturbance on the surface. If they do leap out of the water, it is to "catch" a "bug" that has already come off of the water and is in flight.

I immediately started scanning the Pool with my binoculars and eventually saw 2 steelhead shapes in the main current just where the deepest part of the Pool begins to rise up into the shallow tailout. The steelhead were near the bottom and hard to see.

In these instances, what you are looking for is tails, which have a distinctive straight vertical back edge, a dark triangular shape, and movement side to side. A lighter, shadowy, torpedo shape can be seen in front of the tail. You have to know what to look for.

As I mentioned in my May report, there was a distinct possibility that I might see steelhead in the Pool early in June because of the low flow conditions at the end of May. But I wasn't expecting them on the first day of June!

The general trend after the first steelhead appear in the Pool, is for one or two to show up every 2 to 3 days for about a week, then that number increases to 5 to 10 every 2 to 3 days for another two weeks. After that the numbers may increase by 10 to 20 or more steelhead at a time.

My *hope*, given recent historical returns to the Big Bend Pool, is to see about 250 to 300 wild summer steelhead in the Pool by the end of September. Given the low return rates of wild summer steelhead to the North Umpqua River over the past 10 years, counting 250 to 300 steelhead in the Big Bend Pool, is considered a good number.

A Forecast

The hope for a good return this year didn't start out so positive. The return rate during the first two weeks of June were below the "critical abundance level" threshold, and the possibility of closing fishing on the North Umpqua River once again this year was in the air. However, towards the end of the month, ODFW reported that the June return rate was above the "critical abundance level" threshold, and that it was not likely that fishing would have to be closed on the North Umpqua River for the remainder of the summer. Any decision to close the North Umpqua River to summer fishing will have to wait until the July return count is completed. If the river is to be closed to summer fishing the announcement will be made towards the end of July and the closure will begin no later than August 1.

As I write this report in July, I was informed that 700 steelhead crossed Winchester Dam by June 21. If an additional 700 steelhead cross Winchester Dam in July, then the Critical Abundance Level threshold of 1,200, for the year, will already be surpassed, and any threat of a summer steelhead fishing closure on the North Umpqua River for this year is moot. This is assuming that at least 1,200 of the steelhead were "wild."

"Critical Abundance Level" and Forecasting

The Critical Abundance Level for the North Umpqua River wild summer steelhead is 1,200. This is the minimum number of wild summer steelhead

necessary to sustain the fishery. Eighty percent of the total of wild summer steelhead that return to the North Umpqua River will do so in June and July. The remaining 20% return in August through November. This means that 960 wild summer steelhead must return by the end of July in order for the Critical Abundance Level threshold to be met – at least as far as a forecast is concerned. Hypothetically, that means 480 wild summer steelhead have to return by the end of June, and another 480 wild summer steelhead by the end of July. On a day-to-day basis that's 16 steelhead a day crossing Winchester Dam.

A Very Speculative Hypothetical

If 700 steelhead have returned by June 21, then in theory, 1,000 should return by June 30.

If you double that number, then 2,000 steelhead will return by the end of July.

Add 20% more – 400 – and we may see 2,400 steelhead by the end of the year.

If 37% of the entire annual return spawn in Steamboat Creek, as reported, then as many as 888 wild summer steelhead will do so.

How many of those will stop in the Big Bend Pool?

This hypothetical assumes that all the steelhead are "wild" summer steelhead, which may or may not be true. Generally speaking wild summer steelhead arrive earlier in the season than hatchery steelhead, so there is some likelihood that more than 480 of the 700 steelhead were "wild."

Extracted from ODFW's Summer Steelhead at Winchester Dam Historical Counts 1946 to 2022 –

2010	4,415
2011	4,405
2012	4,830
2013	2,285
2014	2,223
2015	1,633

2016	3,691
2017	2,505
2018	1,851
2019	1,947
2020	1,468
2021	450
2022	1,346
2023	960

OVERVIEW

Bad Behavior

I have not observed any illegal, unlawful or unacceptable behavior at the Pool during this period.

Visitors

There were 30 days in June.

I was away from the Pool on 15 days during daylight hours (9-5).

I was present at the Pool on 15 days during daylight hours.

I had 85 visitors on those 15 days that I was present at the Pool from 9 to 5, for an average of 5.7 visitors/day.

There were 5 weekends and 1 holiday (Juneteenth) – 11 days.

I had 82 visitors on the weekends and 1 holiday, for an average of 7.5 visitors/day.

On the remaining 4 weekdays I was there during the day, I had only 3 visitors, for an average of 0.75 visitors/day.

The June Count of Wild Summer Steelhead in the Big Bend Pool

June 1 – 2, possibly 4 steelhead, 2 observed.

June 3 – Steamboat Creek went into spate with the Canton Gage reaching 928 cfs (cubic feet per second) at 13:15.

June 12 – 6-8 steelhead. For the first time since June 3, the water level was low enough and clear enough to see and count the steelhead in the Pool. Canton Gage at 174 cfs @ 19:30.

June 15 – 10-12 steelhead.

June 16 – 13 steelhead.
June 19 – 9-10 steelhead.
June 22 – 21 steelhead.
June 23 – 50 steelhead.
June 29 – 67 steelhead.
June 30 – 61 steelhead.

Counting steelhead is difficult at best at this time of year. The water is still murky and flows higher than summer low flows (30-50 cfs). The steelhead are near the bottom where the deepest part of the pool begins to shallow out into the tailout, about 6 to 8 feet deep. The tailout will be about 3 to 4 feet deep. I'm seeing and counting shapes of fish and tail movements.

Temperatures and water levels are still good for steelhead movement. I am seeing steelhead in pools below the Big Bend Pool. There may be some movement back and forth. As the water levels lower and water temperatures rise the steelhead will congregate in the Big Bend Pool.

Weather

The daytime high temperatures at the Pool are generally 10 degrees hotter in the summer than the local area weather forecasts. The daytime highs in the Fall are generally 10 degrees colder. Being next to Steamboat Creek eases the extreme hot and cold conditions especially at night, and cools the daytime breeze.

Lowest LOW: 36.0
Highest HIGH: 98.4

Unseasonably warm/hot days: 15

- 85-89 – 9 days.
- 90+ – 6 days.

June started out seasonally normal but quickly became unseasonably warm and then hot. Early June daytime temperatures ranged between the low 60s to 80. On June 5, daytime temperatures started to become unseasonably warm with 7 days of hot daytime temperatures, followed by 5 days of cooler temperatures, then another 7 days of hot temperatures.

The lows were generally in the high 40s and low 50s, even when it got hot

during the day.

This is primarily due to close proximity to Steamboat Creek, especially when the winds are calm at night.

There were a few days when the low was in the mid to high 30s.

There was only one significant rainfall on June 2 with daytime showers turning into steady rain at night. The Canton Gage registered a LOW of 196 cfs @ 00:15 on June 2 to a HIGH of 928 @ 13:15 on June 3.

There was a light rainfall in the afternoon on June 15, and on June 16, in the late afternoon to early evening, which gave Steamboat Creek a slight bump in flow.

Low and High Temperatures, Canton Gage Streamflow, Steelhead Counts

You will notice that the nighttime humidity is very high, which is because of the Airstream's proximity to Steamboat Creek. It is of no great significance when it comes to the overall humidity in the basin, especially in regards to the drying out of the forest as the summer progresses. Its significance is in how it affects the mean nighttime temperature even when daytime temperatures reach the 90s and 100s. The moisture off of the stream is cold, and it makes sleeping in the Airstream at night comfortable in light of the fact that the inside temperature during hot days can be in the 90s, and even the 100s.

The daytime humidity number is important because it signals how quickly the forest is drying out, which is a contributing factor to the possibility of wildfires. The early (June) high temperatures and low humidity may signal an early start to wildfire season.

The temperatures are followed by the humidity, e.g., 46.8/87%.
 Minimum humidity below 30% is considered a wildfire risk factor.

DATE	LOW TEMP	HIGH TEMP	CANTON GAGE	COUNT
1	46.8/87%	80.8/26%	204 @ 13:45	2-4
2	56.1/78%	61.3/97%	196 @ 00:15	
3	53.4/98%	64.6/52%	928 @ 13:15 (spate)	
4	52.0/98%	68.5/64%	465	
5	53.2/99%	88.5/22%	336	
6	50.4/98%	88.0/24%	293	
7	48.0/94%	95.2/24%	262	
8	51.8/94%	88.3/31%	240	
9	55.0/82%	85.8/27%	219	
10	48.7/92%	89.6/24%	201	
11	51.4/95%	89.8/29%	182	
12	52.7/90%	82.4/34%	174	6-8
13	45.5/90%	83.5/29%	169	
14	45.5/85%	76.8/25%	158	
15	47.8/82%	64.9/35%	153	10-12
16	39.0/90%	61.9/40%	151	13
17	43.7/47%(?)	62.6/42%	153 (rain)	
18	36.0/95%	81.5/16%	144	
19	42.8/95%	90.0/18%	139	9-10
20	48.4/86%	91.9/18%	132	
21	52.9/86%	94.1/22%	125	21
22	52.0/90%	92.1/22%	123	
23	48.9/82%	85.6/34%	119	50
24	47.3/92%	88.5/22%	116	
25	50.7/92%	98.4/24%	114	
26	55.4/88%	79.2/37%	110	
27	54.0/86%	81.3/31%	106	
28	47.8/90%	86.9/28%	106	
29	50.9/84%	82.8/31%	102	67
30	52.0/94%	89.2/29%	99.9	61

Streamflow

On June 2 the Canton Gage reached a low of 196 cfs (cubic feet per second) at 00:15 in the morning.

The Gage reached a high of 928 cfs at 13:15 on June 3, following a night of rain.

The flow steadily dropped after that except for a slight bump on June 17, after showers the previous two days.

On June 30 the Gage measured 99.9 cfs.

Normal mid to late summer flows are between 30 and 50 cfs.

Water Temperatures

Generally speaking (for the Pacific Northwest) steelhead begin stressing when water temperatures are over 64°. Between 64° and 68° any additional stress (e.g., being caught and released) may cause fatalities. Temperatures above 74° are lethal – not enough oxygen.

The reason the wild summer steelhead hold in the Big Bend Pool all through the summer is because of the cold water in the pool – the result of cold spring water that enters the pool from Big Bend Creek, just up stream. I've been told that the spring that flows into Big Bend Creek comes out of the ground at 43°F (5°C). In the summer (once the spring runoff has ended), a fair amount of the water flowing out of Big Bend Creek into the Big Bend Pool is spring water.

The water flowing through the Pool is striated both vertically and horizontally (the water from Steamboat Creek and Big Bend Creek don't completely mix until they get to the back of the Pool), so that the steelhead find the coldest water flows to hold in – normally at the top of the pool where Big Bend Creek water hasn't mixed yet with Steamboat Creek water – and is the coldest spot in the pool. For the most part, as Big Bend Creek and Steamboat Creek water passes downstream, the colder Big Bend Creek water will be beneath the warmer Steamboat Creek water until it mixes toward the back of the pool – where the pool shallows.

DATE	AIR	BBC	SC	BBP	W1105
06.02	61.3	50.4	56.6	53.4	
06.09	85.8	54.5	60.3	57.8	50.0 @ 12:10
06.16	61.9	49.2	54.5	50.3	44.1 @ 17:00
06.23	85.6	55.8	63.5	59.8	51.5 @ 17:55
06.30	89.2	56.1	64.3	60.6	50.5 @ 18:35

- *Highest air (AIR) temperature is around mid-day.*
- *The Big Bend Creek (BBC) water temperature is taken just above its confluence with Steamboat Creek.*
- *The Steamboat Creek (SC) temperature is taken above Big Bend Creek.*
- *The Big Bend Pool (BBP) water temperature is taken at the bottom of the Pool where it flows out mixed (Steamboat Creek and Big Bend Creek).*
- ***Bulldog Creek (W1105) originates on Reynolds Ridge and is the source of the spring water that cools the Big Bend Pool. Bulldog Creek enters Big Bend Creek about 1/2-mile above the Big Bend Creek confluence with Steamboat Creek. W1105 (at 3,846 feet) is a marked firefighting water source that crosses NF 3850-300, which is the road to Bullpup Lake.***

Water temperature readings are being taken on a ThermoWorks ThermaCheck Plus digital thermometer.

INFRASTRUCTURE

Airstream

All the Airstream's necessary bells and whistles are working for FishWatch purposes.

I have not seen or heard any mice in the Airstream so I'm assuming that all the holes in the exterior continue to be sealed.

Propane – Suburban Propane

On June 6, Suburban Propane filled the 288-gallon tank to 80% (230.4 gallons). This should be sufficient for the entire FishWatch season. The only use for propane, at this time, is the refrigerator. The other uses are the catalytic heaters, and the Honda EU2200i generator, which will go back on line in the Fall.

Portable Toilets – Southern Septic

The toilets were cleaned on schedule on the second Friday of the month. The toilets were used pretty frequently during the last two weeks of May due to spring bear hunting season, and less frequently during the first two weeks of June. I maintain the cleanliness of the toilets as necessary.

WILDLIFE – SIGHTINGS & BEHAVIOR

This is turning out to be a very different spring and early summer than in the past – flowers going crazy [and allergies], but not much usual wildlife.

You might recall my sighting of a very colorful small bird on May 26, on my walk up the road from the Big Bend Pool. It was at the 11 Mile Post Bridge, a place I often seeing coveys of quail and the occasional ruffed grouse, and deer. There is a grassland there and mix of trees and shrubbery bordered by a burn alongside Steamboat Creek. There were birds calling, and one perched high on a dead conifer alongside the bridge. It didn't stay there long enough for a photo, but what I saw was blue, orange and a splash of yellow above its eye. I now think it was an adult male **Varied Thrush** in full color. It was the brightest colored bird I've seen in this forest.

You'll need to go look at a picture of it on the internet. I like the All About Birds (allaboutbirds.org) picture of an adult male the best.

The does with fawns are now about. I'm seeing lots of deer on my commute on Steamboat Creek Road, as many as five or six a trip – a mix of does, new born (this May and June) fawns, and yearlings. I didn't see any does with newborns in May.

06.01.24 – *Viburnum ellipticum* (Oregon Viburnum, Western Wayfaring Tree) growing on the bank of the Big Bend Pool right in front of the viewing area, flowering. Identified by the Umpqua National Forest Fire Chief.

06.02 – I saw a red crayfish below the Big Bend Pool while I was taking water temperature.

This is important because this is the first one I've seen this season and I'm not seeing any in other parts of Steamboat Creek. I have only seen only a few crayfish during the rest of the month. I also haven't seen any otters and kits yet. I'm wondering if this is related to the scarcity of crayfish, which they feed on.

06.04 – There are lots of mosquitoes on Reynolds Ridge at 5,500 feet elevation. I've heard that folks that are camping up there are being driven crazy and having to leave.

06.06 – I checked the osprey nest down the road from the Big Bend Pool. It's empty, but I've heard osprey calling both downstream and upstream of the Pool. The nest has been empty this entire month. I frequently hear a lone osprey near the Big Bend Pool but it doesn't seem to live close by.

06.11 – Four [big] guys in 2 utility pickup trucks stopped at the Pool. They said that they were headed upstream to check out a worksite for the presence of Franklin's Bumblebees (*Bombus franklini*), endangered and ESA listed since August 2021. I originally thought they were loggers or a work crew.

Deer sightings:

06.13 – a doe with 2 fawns, and 2 single yearlings.

06.15 – a visitor to the Pool saw a newborn fawn lying on the road when he was driving up to the Pool.

06.17 – doe and fawn, and an elk cow.

06.20 – doe, doe and fawn, doe and 2 fawns.

06.24 – 3 young does in 4 miles on Steamboat Creek Road.

06.25 – doe and 2 fawns, and a gray squirrel (the 4th sighting this early in the year).

06.28 – doe and 2 fawns.

That I am seeing so many deer, and possibly turkey, may be related to the Rough Patch Complex wildfires in 2021 that burned 30,000 acres within Steamboat Creek Basin. 85% of the burn was reported to have been primarily understory burn, and small areas of trees. The new ground cover growth and opening of what was primarily dense forest is ideal for the proliferation of ungulates (deer and elk).

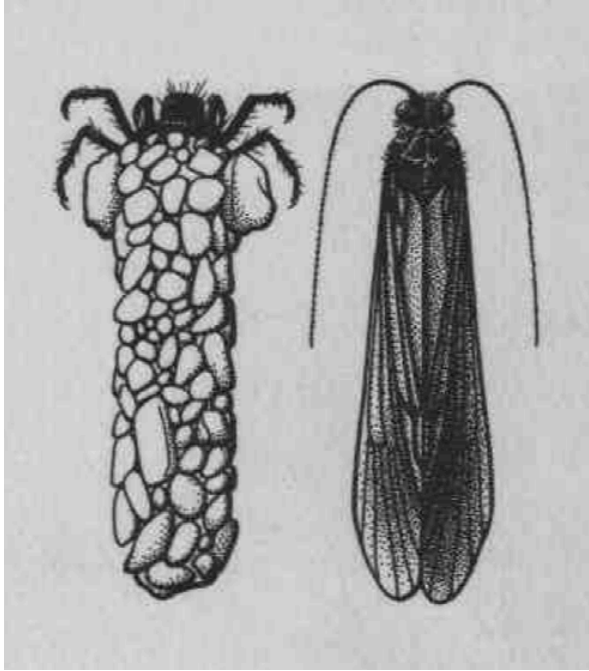
Back to other wildlife...

06.22 – warm weather is bringing out the horseflies (BIG, 5/8 to 3/4 inch) and a few yellowjackets.

You don't want to get bit by either one.

06.26 – A TURKEY (hen or jack). The first turkey I've seen in Steamboat Creek Basin in years. The last time I saw turkeys was in 2018.

06.30 – Seeing lots of caddis larvae cases in Steamboat Creek. It's as if they suddenly appear. And in the early and late evening the adults are out and about. The slashing rise of cutthroat trout in the Big Bend Pool at dusk is to caddis pupae turning into adults or adults falling onto the surface of the Pool.



Tricoptera



Caddis Larvae, Steamboat Creek, 07.14.24.

06.19 – The steelhead in the Big Bend Pool daisy-chained when a hydrologist (male) waded into Big Bend Creek to install a temperature data logger. He waded in "wet," without hip-boots or waders.

I wonder if wading into Big Bend Creek with waders on, and not touching the water with bare skin (hands), will still cause the steelhead to daisy-chain?

END OF REPORT

Respectfully submitted,

Ed Kikumoto
FishWatch 2024 Caretaker