

IDAHO DEPARTMENT OF FISH AND GAME
McCALL SUMMER CHINOOK HATCHERY
August 2009 Monthly Narrative
Steve Kammeyer

South Fork Salmon River SU Production

Brood Year 2008

There are currently 1,220,471 SFSR SU parr being reared in the 2-outdoor ponds (208,249 AD/CWT and 1,012,222 AD-clip only). These fish average 45.4 fpp (4.14 inch TL) in size. During August the SFSR parr were fed 9,183 pounds of feed resulting in an average conversion of 0.82 for the month (0.73 to date). During the month periodic adjustments have been made to keep intake water temperatures near 50 degrees Fahrenheit. August hatchery intake water temperatures averaged 50.5 degrees Fahrenheit.

Fish marking personnel performed a CWT retention check (post 21-day mark period) on segregated sub-sample AD/CWT tag groups on August 12th that were being held in indoor rearing vats. For the 4-CWT tag groups there was an average tag loss rate of 1.92% (0.68%, 6.38%, 0.32% and 0.33% for the individual tag groups).

Hatchery personnel are anticipating out-planting approximately 180,000 SFSR summer Chinook parr (AD-clip only) from Pond 1 into the SFSR below the trap water intake structure near the end of September. Doug Munson, IDFG Fish Pathologist has been scheduled to take pre-liberation disease samples from this group of fish on September 11th. Following this fall parr release, hatchery inventory numbers will be reduced to approximately 1,040,000 for final rearing to smolt for release at the end of March/ Beginning April 2010.

| | Number | Fish/ Pound | Total Length (inch) | Total Mortality | | Feed Conversion | | Density Index | Flow Index | 30-d Length (inch) |
|-----------------------|-----------|----------------|---------------------------|-----------------|---------|-----------------|---------|------------------|---------------|--------------------------|
| | | | | Month | To Date | Month | To Date | | | |
| BY08 SFSR SU | | | | | | | | | | |
| Pond 1 | 701,186 | 43.6 | 4.20 | 368 | 1.70% | 0.85 | 0.75 | 0.17 | 1.03 | 0.65 |
| Pond 2 | 519,285 | 47.8 | 4.07 | 299 | 2.87% | 0.79 | 0.73 | 0.12 | 0.71 | 0.67 |
| | 1,220,471 | 45.4 | 4.14 | 667 | 2.21% | 0.82 | 0.73 | 0.15 | 0.89 | 0.66 |
| BY08 Johnson Creek SU | 100,799 | 60.1 | 3.77 | 107 | 1.93% | 0.81 | 0.82 | 0.35 | 0.71 | 0.48 |

Johnson Creek SU Production

Brood Year 2008

Johnson Creek origin summer Chinook parr currently number 100,799 and average 60.1 fpp (3.77 inch TL) in size. During August, 472.0 pounds of feed was fed to these fish resulting in a conversion of 0.81 for the month (0.82 to date). These parr are currently being reared in 4-indoor rearing vats. Ending density and flow indices averaged 0.35 and 0.71, respectively. Johnson Creek SU parr will be divided into additional indoor vats by mid-September to provide space for continue growth until they are marked into the outdoor collection basin near the end of October.

South Fork Salmon River Trap

Through September 3rd a total of 9,693 returning summer Chinook salmon have been trapped/ processed through the SFSR trap (does not include "re-trapped" recycled fish). Following a late pulse of both jacks and adults over the last 2-weeks of August, numbers have sharply declined going into September and are now primarily composed of jacks. Operation of the trap is expected to continue through September 11th, but will be dependent on when no more Chinook are being trapped.

| SFSR Returning SU | Reserve | Natural (unmarked) | No Mark/ w/ CWT | Total |
|-------------------|---------|--------------------|-----------------|-------|
| Adult | 4,100 | 459 | 7 | 4,566 |
| Jack | 5,038 | 85 | 4 | 5,127 |
| Total | 9,138 | 544 | 11 | 9,693 |

Data Current through September 3, 2009.

Primary sort occurred on Tuesday August 11th. At that time 4-females were found that were soft enough to warrant re-checking to spawn, but it was decided to forego such a minimal spawn take. The first spawn take Lot was collected on August 14th and concluded with a total of 6 Lots ending on September 1st (see Table below). In doing so eggs were collected, and retained, from 473-SFSR females and 27-Johnson Creek females. Included in the SFSR total were eggs from 72-SFSR females which were transferred to Clearwater FH personnel following water hardening for incubation/ rearing at Clearwater FH. Also, through the spawning season, eggs were initially taken but then immediately discarded from 5-SFSR females and 1-Johnson Creek female following visual carcass inspection indicating gross clinical signs consistent for BKD or extreme Liver Phoma. Additionally, eggs were fertilized/ retained from 1-SFSR female which had gross clinical signs of BKD following visual inspection but are not included in production retained totals. These eggs will be incubated, in segregation, at MCFH at the request of Doug Munson for use by EFHL following eye-up when a portion will be transferred to him for use in his wet-lab; all others will be destroyed at that time. A spawning protocol of 1M:1F was used this year to help limit the already exceeded holding capacities taking place at the SFSR trap in response to further enhanced program goals. Genetic samples were collected from all spawning pairs with minimal difficulties due to the efforts of Laurie Janssen and her crew. Kidney samples were collected, through the help of Doug Munson, from all spawned females for ELISA analysis to determine levels of BKD antibodies present. Kidney samples generating ELISA optical densities greater than 0.250 will be considered “high positives” and be culled prior to hatching. No ELISA results were available by the last spawn day.

| Lot # | Spawn Date | South Fork Salmon River – SU | | | | Johnson Creek – SU | |
|---|------------|------------------------------|---------------------------------------|--|---------------------------------------|---------------------------|---------------------------------------|
| | | Females Spawned/ Retained | Approximate Green Eggs (4,500 Fecund) | Females Spawned/ Transferred Clearwater FH | Approximate Green Eggs (4,500 Fecund) | Females Spawned/ Retained | Approximate Green Eggs (4,500 Fecund) |
| 1 | Aug – 14 | 43 | 193,500 | - | - | 5 | 22,500 |
| 2 | Aug – 18 | 57 | 256,500 | - | - | 4 | 18,000 |
| 3 | Aug – 21 | 120 | 540,000 | 24 | 108,000 | 6 | 27,000 |
| 4 | Aug – 25 | 98 | 441,000 | 24 | 108,000 | 6 | 27,000 |
| 5 | Aug – 28 | 48 | 216,000 | 24 | 108,000 | 3 | 13,500 |
| 6 | Sept – 1 | 35 | 157,500 | - | - | 3 | 13,500 |
| Totals | | 401 | 1,804,500 | 72 | 324,000 | 27 | 121,500 |
| Visual Culls are not included. | | | | | | | |
| 1-SFSR SU Female, Lot 2, (Visual BKD Positive) Spawned and Retained for EFHL is not included in totals above. | | | | | | | |

Resident Species

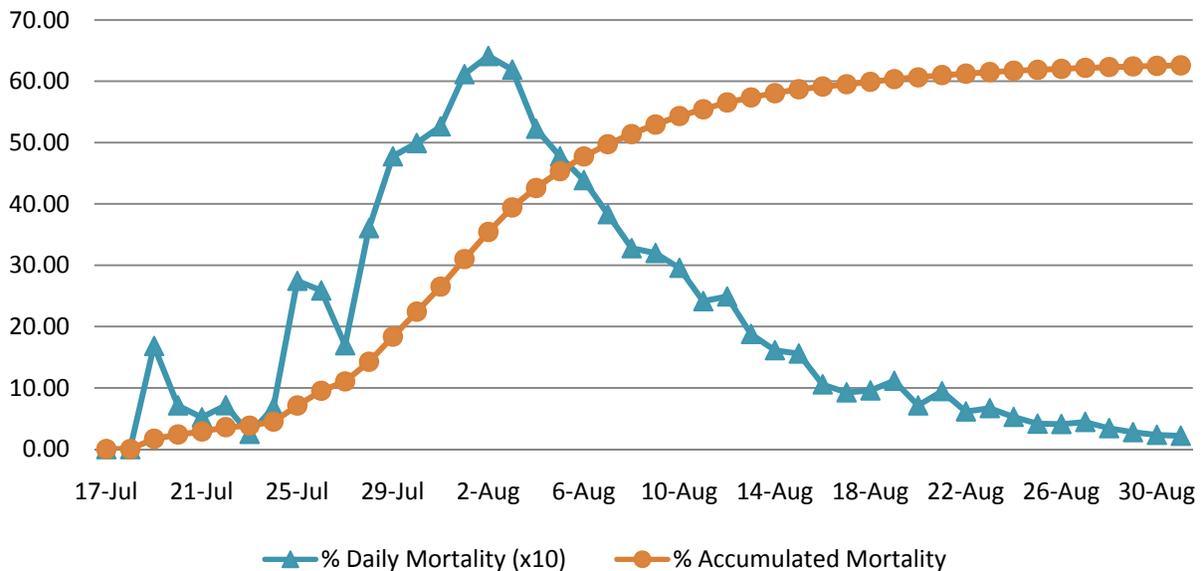
Catchable size rainbow trout, numbering 16,270, were redistributed into area waters during August through September 2nd. Catchable rainbow trout stocking activities out of MCFH are now completed for this year. This past month, 672 miles were driven at an approximate transportation cost of \$722. Final catchable redistribution totals for this summer were: 109,370 rainbow trout stocked requiring 4,209 miles to be driven at a cost of \$4,850.

The first fish stocking flight in 2009 was completed on August 3rd. Through the end of August 8-flights have been completed that resulted in the out-planting of 110,750 fry into 112 lakes. These fish stocking flights have covered 2,810 miles and have cost \$8,830.50. Volunteers have stocked 8 additional lakes with 6,100 fry. Also stocked have been excess Troutlodge Kamloop (3N), numbering 3,950, into 3 local waterbodies as well as 400-eyed Westslope Cutthroat Trout eggs that were taken to the MK Nature Center in July. Total numbers of fry stocked out have included: 3,300-Arctic Grayling, 43,450-Troutlodge Kamloop (3N), 39,470-Westslope Cutthroat Trout (WSTC), 34,580-Westslope Cutthroat Trout (Washoe Park FH – group B) and 400-Westslope Cutthroat Trout (Washoe Park FH – group A). One additional flight in the McCall sub-Region remains to be completed to finish off this year’s requests, but has been delayed until fish health issues with the Washoe Park FH Westslope Cutthroat Trout (group A) are resolved.

A 10-day prophylactic medicated feed treatment (low dose/ non-INAD) with TM-200 was completed on August 3rd; demonstrating no impact on mortality. A second fish health diagnostic was requested and completed on August 7th by Doug Burton, IDFG Fish Pathologist. Subsequent analysis of samples collected were positive (10/10) for *Flavobacterium psychrophilum* (aka: cold water disease). Following pathogen antibiotic sensitivity analysis Aquaflor (2%) medicated feed was ordered and arrived on August 31st. A 10-day feed treatment using Aquaflor was initiated on September 1st. Once this treatment is completed the final fish stocking flight can take place.

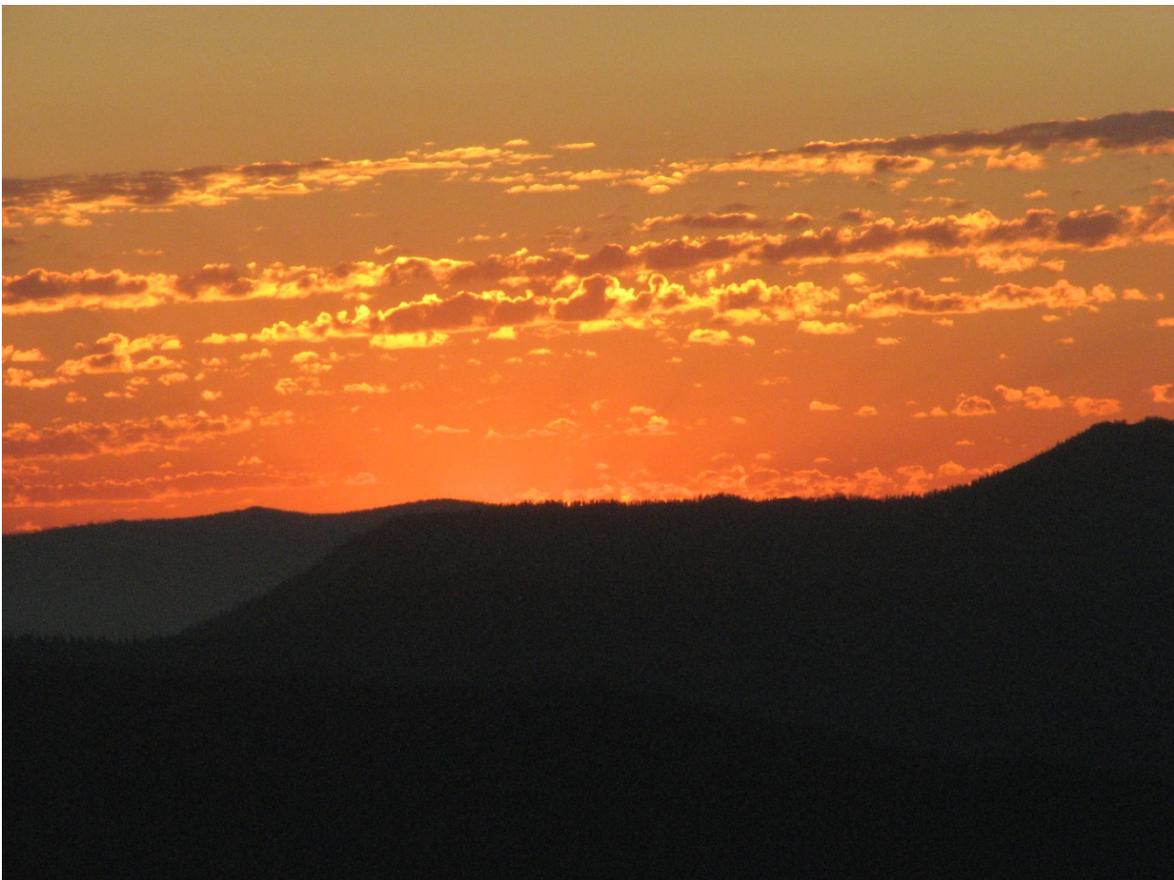
| | Number | Ending Fish/ Pound | Total Length (inch) | Rearing Total Mortality | | Feed Conversion | | Density Index | Flow Index | 30-d Length (inch) |
|---|--------|-----------------------|------------------------|-------------------------|---------|-----------------|---------|---------------|------------|--------------------|
| | | | | Month | To Date | Month | To Date | | | |
| Rainbow Trout (TT) Catchable as of 9/2/09 (Nampa FH) | - 0 - | 2.60 | 10.0 | 18 | 0.4% | N/a | | | | |
| Last catchables for the 2009 season were stocked out on 9/2/09. Total Rainbow Trout out-planted in 2009 was 109,370. Final inventory numbers were 210 fish Long (+ 0.2 %) of what was reported as received. | | | | | | | | | | |
| Rainbow Trout (TT) Fry (TroutLodge) | - 0 - | 569 | 1.71 | 248 | 6.6% | 0.40 | 0.50 | N/a | | 0.54 |
| Final inventory numbers were 2,260 fish Long (+ 5.0%) of what was purchased/ received. | | | | | | | | | | |
| Westslope Cutthroat (C2-B) Fry (Washoe FH, MT F&G) | - 0 - | 2,611 | 1.03 | 757 | 2.6% | 0.85 | 1.00 | N/a | | 0.19 |
| Final inventory numbers were 11,580 fish Short (- 17.7%) of what was reported as received. | | | | | | | | | | |
| Westslope Cutthroat (C2) Fry (Westslope Trout Co, MT) | - 0 - | 2,911 | 1.00 | 1,350 | 3.3% | 1.28 | 1.28 | N/a | | 0.12 |
| Final inventory numbers were 4,900 fish Long (+ 12.3%) of what was purchased/ received. | | | | | | | | | | |
| Westslope Cutthroat (C2-A) Fry (Washoe FH, MT F&G) | 25,095 | 940 | 1.45 | 24,222 | 62.6% | 0.46 | 0.70 | 0.31 | 0.17 | 0.53 |
| Visual observation appears that the actual number of fry remaining is significantly less than the inventory number shown above. | | | | | | | | | | |
| Arctic Grayling Fry (Ashton FH; Meadow Lk, WY) | 1,861 | 3,352 | 1.00 | 1,219 | 19.1% | 19.54 | 19.54 | 0.02 | 0.06 | 0.25 |
| Picked up grayling from Ashton Fish on August 13 th . | | | | | | | | | | |

Washoe Park FH C2's (Group A) % Mortality Since Setout





Flight #1 (8/3/09): Sunrise Heading Northeast out of McCall.



Flight #7 (8/22/09): Sunrise Heading Southeast out of McCall.