

IDAHO DEPARTMENT OF FISH AND GAME
McCALL SUMMER CHINOOK HATCHERY
July 2008 Monthly Narrative
Steve Kammeyer

South Fork Salmon River SU Production

Brood Year 2007

There are 1,103,192 SFSR SU Parr being reared in the 2-outdoor rearing ponds (260,565 Ad/ CWT and 842,627 Ad only). Currently these fish average 96.2 fpp (3.25 in TL) in size. During July, fish were fed 4,168 pounds of feed resulting in an average conversion of 0.90 for the month (0.79 to date). Water intakes were adjusted on July 10th to provide some warmer surface water to the hatchery. This raised incoming water temperatures from 46 degrees Fahrenheit to 51 degrees Fahrenheit where it has remained with little daily fluctuations. The increase in water temperatures further improved feeding behaviors from what was observed last month. Ending density and flow indices averaged 0.07 and 0.52, respectively.

Fish marking crews were originally scheduled to begin marking SFSR SU parr from indoor vats into Pond 2 on July 8th, however due to their concerns of fish being “too small” for the MATS trailers this process was delayed until July 21st. Fish markers were on station July 21-24, during which time they applied marks to 553,708 SFSR SU parr (260,639 Ad/ CWT and 293,069 Ad only); marking these fish into Pond 2. The electronic count obtained during marking resulted in an inventory gain of 43,568 fish (8.54% gain). Combining this with the June marking event resulted in an overall inventory increase of 84,459 parr or 8.27% gain.

Correcting for the inventory gains results in a revised spawning fecundity of 4,579.5 and revised percent eye-up of 84.89% for all of the BY07 SFSR SU spawned/ retained for initial incubation.

	Number	Total Length (inch)	Fish/ Pound	Total Mortality		Feed Conversion		Density Index	Flow Index	30-d Length (inch)
				Month	To Date	Month	To Date			
BY07 SFSR SU	1,103,192	3.25	96.3	3,410	1.71%	0.90	0.79	0.07	0.52	0.46
BY07 Johnson Creek SU	91,488	3.41	82.4	299	3.36%	1.08	0.89	0.40	0.39	0.43

Johnson Creek SU Production

Brood Year 2007

Johnson Creek origin summer chinook salmon parr currently number 91,488 and average 82.4 fpp (3.41 inch TL) in size. During July, 423.2 pounds of feed was fed to these fish resulting in a conversion of 1.08 for the month (0.89 to date). Johnson Creek parr were marked from 3-indoor vats into 5-indoor vats initially set at ½ length to improve feeding efficiency. These vats were extended to full length on August 1st reducing the average vat density to 0.20.

Fish marking crews applied a CWT tag to these fish July 22-23, 2008. During this process an inventory gain of 2,221 Johnson Creek SU parr (2.49%) was realized. Correcting for this inventory gain results in a revised spawning fecundity of 4,664.7 and a revised percent eye-up of 82.10%. The Johnson Creek SU parr will remain in these indoor vats until elastomer tagged in late October – early November when they will be marked into the outdoor collection basin.

South Fork Salmon River Adult Trap

Through July 31st a total of 4,748 returning SFSR Chinook have been trapped/ processed through the trap (not including 7 Johnson Creek strays and recaptured recycled SFSR chinook). During the Sport/ Tribal Fishery period (June 25-July 17) a total of 1,516 Ad-clip SFSR chinook were transported downstream and released at the traditional release site near Roaring Creek. Following the end of the Sport Fishery an additional 525 Ad-clip SFSR chinook were transported and released downstream, near Roaring Creek, in support of Tribal only fisheries (July 18-21).

Also through July 31st a total of 1,113 Reserve SFSR Chinook have been dispatched for subsistence purposes. These fish have been distributed as: 423-Nez Perce Tribe, 230-Shoshone Bannock Tribe, 460-Health and Welfare organizations (including 226 to the Shoshone Piute Tribe).

A thunderstorm rain event, affecting the SFSR, occurred on July 22. This led to several headwater creeks “blowing out” and also generated landslides that deposited significant amounts of ash and sediments into the South Fork Salmon River. Water quality was reduced to the point that fish could not be observed in the holding ponds unless they broke the

surface of the water. Poor water quality resulted in the suspension formalin treatments. Water clarity has been slow to clear and formalin treatments are expected to resume on August 6th. Although some pre-spawning mortality has occurred it hasn't been significant to this point (less than 80 adults).

Timing of "Primary Sort" will be delayed to August 12th to allow for better water quality and in hopes that the accumulated stress on this fish will have subsided prior to this additional handling. Spawning efforts will then continue on Tuesdays and Fridays through the first week of September.

SFSR Returning SU	Reserve	Natural (unmarked)	No Mark w/ CWT	Total
Adult	3,230	380	5	3,615
Jack	1,070	58	5	1,133
Total	4,300	438	10	4,748

Data current through July 31, 2008 and Does Not include re-trapped recycled salmon.
 *No Fin Clip with CWT (No elastomer mark); original source is in question.

Resident Program

Catchable size rainbow trout, numbering 32,900, were redistributed into area waters during July. In doing so, 1,087 miles were driven at an approximate transportation cost of \$ 1,300.15. Catchable trout redistribution totals for this summer are: 92,325 requiring 3,951 miles to be driven at a cost of \$4,550. Rainbow trout were fed 396 pounds of feed during July to maintain their condition and to provide some growth.

Rainbow trout fry, obtained from TroutLodge, were set out into an early rearing container on July 17th. Incubation mortality for the rainbow trout fry was 7.6%. Golden Trout eggs, numbering 31,000, were received from Mt Whitney FH, California Dept Fish and Game on July 8th and were set out into an early rearing container on July 30th. Incubation mortality for the golden trout fry was 8.1%. Westslope cutthroat trout eggs, numbering 220,000, were received from the "Westslope Cutthroat Trout Company" on July 21st. The following morning it was evident that significant mortality had occurred as the result of prematurely hatched eggs. Intensive egg picking was conducted daily through July 29th to remove all the dead fry/ eggs resulting in the removal of approximately 66,215 (30.1% incubation mortality to date). Since that time mortality has subsided to minimal levels. These fry will likely be set out into an early rearing container prior to August 12th. Cutthroat trout numbers will be less than needed to fill all 2008 requests and make-ups for 2007. Preliminary plans to adjust for this shortage is likely to be in the form of meeting all 2008 requests and meeting the majority of 2007 make-up with the exception of Region 1's "Odd Year" requests that will be eliminated and then stocked as a normal rotation in 2009.

	Number	Total Length (inch)	Fish/ Pound	Total Mortality		Feed Conversion		Density Index	Flow Index	30-d Length (inch)
				Month	To Date	Month	To Date			
Rainbow Trout (TT) Catchable Size (Nampa FH)	12,640	9.8	3.0	N/a		N/a				
Rainbow Trout (TT) Fry (TroutLodge)	37,522	1.0	1,907	578	1.54%	0.65	0.65	0.25	0.21	0.1
Golden Trout (GN) Swim-up Fry (Mt Whitney FH, CA)	28,620	0.9	4,350	50	0.17%	n/a	n/a	0.30	0.76	0.0
Westslope Cutthroat (C2) Sac-Fry (Westslope Cutthroat Trout Co)	153,785	(0.9)	(4,500)	Approx 66,215 picked 30.1% Incub Mortality		N/a				