

Oregon Department of Fish and Wildlife

Lookingglass Hatchery Monthly Progress Report

Reporting Month: December 2009
Author(s): Roger Elmore

Fish Culture:

December brought severe winter temperatures below zero causing an ice dam above the hatchery intake which broke loose like a fast moving glacier depositing an incredible amount of ice in the hatchery intake. Water flow into the hatchery was temporarily blocked ultimately causing the loss of approximately 91,000 BY 09 advanced sac fry that were in incubation. There was no appreciable loss to any BY 08 fish. The first BY 09 fry were ponded and have been started on feed. Fish feed for BY 09 fish was received from EWOS.

Dan LaPoint and crew PIT tagged 100 BY 08 Imnaha stock fish inadvertently missed during October PIT tagging.

Maintenance:

Ladco Electric repaired the louvers in the domestic generator building. The hatchery crew installed a top and windshield on the new Kawasaki Mule. Ron Kringlen Refrigeration removed the Freon from the freezer room compressor units. The compressors are going to be removed and replaced with compressors currently located in the spawning room. This should reduce the noise in the spawning room as well as create some useable space in the spawn room. The slip tank used to haul fish in the back of the pickup was modified to hold two oxygen bottles instead of just one.

NPDES Waste Discharge Permit Monitoring

DEQ water samples were submitted for testing and there were no non-compliance issues. Quarterly domestic water samples submitted last month were negative for coliform bacteria.

Miscellaneous:

December was the month for appliance failure as Roger's refrigerator and washing machine quit working. The refrigerator in the crew quarters quit working and the vent hose line on the clothes dryer in the crew quarters had become completely clogged with lint and burst. The vent hose was replaced. Also, during the early December cold snap, the water lines to a water heater above the visitor center restrooms froze and burst causing water damage to the sheetrock in the hallway. LaGrande Sheetrock is expected to repair in January. Old blasting caps were found in the hatchery office supply closet. A representative from the regional bomb squad was contacted and came the next day and disposed of the blasting caps. Apparently the

caps were of the high explosive variety and could have easily killed someone. I found this out after they were placed on my desk. An engineer from McMillen Co. and water well experts from Stoffel Well Drilling looked at and discussed the options concerning performing drawdown tests on the two domestic well sites. How best to modify and use the wells considering the upcoming residential housing construction was discussed. Rick Zollman from the NPT visited to discuss potential operational changes for 2010. The U. S. Geological Survey hydrology station located adjacent to the hatchery on Lookingglass Creek ceased operating in December due to lack of funding. The hatchery had used their website for creek flow and water temperature information.

Personnel:

Roger Elmore attended an HRT meeting in Pendleton and the draft AOP meeting in LaGrande. Diane Deal attended and gave a presentation at the Northwest Fish Culture Conference in California. Several staff members took leave time over the Holiday period.

Safety:

The monthly safety meeting was held December 16th. The safety topic was winter driving and winter safety. The PPE storage cabinet in the shop was moved to a better location within the shop.

Fish Production and Distribution:

Fish in Raceways

Pond #	Species	Stock	Number of Fish	lbs of fish	F/lb	grams/Fish
1	CHS	CQ 201-08	72,335	2,067	35.0	13.0
2A	CHS	CQ 201-08	38,961	1,218	32.0	14.2
2B	CHS	CQ 201-F-08	24,607	849	29.0	15.6
C-19	CHS	CQ 201-F-08	10,142	350	29.0	15.6
3	CHS	LG 81-08	73,714	2,949	25.0	18.1
4	CHS	LG 81-08	80,264	3,087	26.0	17.4
AHP-C&D	CHS	LG 81-08	111,026	6,168	18.0	25.2
5	CHS	GQ 80-08	42,335	1,512	28.0	16.2

6	CHS	GQ 80-F-08	64,868	1,908	34.0	13.3
7	CHS	GQ 80-F-08	65,039	1,807	36.0	12.6
8	CHS	GQ 80-F-08	61,099	1,651	37.0	12.3
9	CHS	LQ 200-08	61,949	2,294	27.0	16.8
10	CHS	LQ 200-F-08	61,945	1,721	36.0	12.6
11	CHS	LQ 200-08	61,956	2,383	26.0	17.4
12	CHS	LQ 200-08	61,218	2,186	28.0	16.2
13	CHS	IM 29-08	66,742	2,670	25.0	18.1
14	CHS	IM 29-08	66,791	2,672	25.0	18.1
15	CHS	IM 29-08	66,975	2,576	26.0	17.4
16	CHS	IM 29-08	67,125	2,685	25.0	18.1
17	CHS	IM 29-08	66,898	2,389	28.0	16.2
18	CHS	IM 29-08	60,540	2,162	28.0	16.2
Totals/Average			1,286,529	47,302	28.7	16.2

Stock	# of Fish	Production Goal	% of Goal	Meeting Goal
CQ 201-08	111,296	130,000	112.3	YES
CQ 201-F-08	34,749			
LG 81-08	265,004	250,000	106.0	YES
GQ 80-08	42,335	250,000	93.3	NO
GQ 80-F-08	191,006			
LQ 200-08	185,123	187,500	98.7	NO
LQ 200-F-08	61,945	62,500	99.1	NO
IM 29-08	395,071	360,000	109.7	YES

Stock	Spawned Females	EGG TAKE	EGGS RECEIVED	EGGS TRANS.	EGGS SHIPPED	EGG and Fry LOSS	EGGS RELS	FRY ON HAND
CQ 201-09	43	165,263	0	0	0	11,267	0	153,996
CQ 201-F-09	0	0	104,319	0	0	4,223	1,915	98,181
LG 81-09	26	101,637	0	0	0	3,427	0	98,210
GQ 80-09	61	261,136	0	330	0	59,930	0	200,876
GQ 80-F-09	0	0	202,129	0	143,349	661	0	58,119
LQ 200-09	57	262,883	0	0	0	80,090	0	182,793
LQ 200-F-09	0	0	113,681	0	0	3,590	0	110,091
IM 29-09	109	513,432	0	0	0	75,095	0	438,337

Fish Health

Fish pathology performed monthly sampling on December 21st. In addition, fish from two raceways exhibiting the white mucus film were sent to the laboratory at Corvallis for examination. No causative agent for the condition could be positively identified. The November Fish Health report is below.

II. LSRCP Fish Health Examinations

III. Lookingglass Hatchery

BY2008 ChS – Monthly monitoring was conducted on 11/23/09 – see summary table below. No virus was detected in November; BKD testing results are pending. There continued to be some level of white film (mucus) anterior to the dorsal fin. The UV disinfection water system was tested for the second time this fall. We found there was a 99.5% reduction in total bacterial counts in post UV treated Lookingglass Creek water with a theoretical UV dose of ~250,000 mw and a flow of ~300 GPM.

BKD ELISA summary in mortality for August – October in BY2008 spring Chinook juveniles on hand at Lookingglass Hatchery and cumulative % mortality from final ponding to the end of November 2009				
Stock	Raceway	BKD Segregation	Cumulative % Mortality	Proportion (%) ELISA OD \geq 1.000
Catherine Creek Conventional (201W08)	R1	Low	2.20	0/15 (0)
Catherine Creek Conventional (201W08)	R2A	Low	2.60	0/15 (0)
Catherine Creek Captive F ₁ (201F08)	R2B	Low	1.37	0/23 (0)
Catherine Creek Captive F ₁ (201F08)	Circular 19	Low	0.47	Not tested yet
Lookingglass Creek (81.08)	R3	Low	1.47	0/9 (0)
Lookingglass Creek (81.08)	R4	Low	1.31	0/14 (0)

Lookingglass Creek (81.08)	AHP	Low	0.46	0/5 (0)
Grande Ronde Conventional (80W08)	R5	Low	0.47	0/12 (0)
Grande Ronde Captive F ₁ (80F08)	R6	Low	1.20	0/8 (0)
Grande Ronde Captive F ₁ (80F08)	R7	Low	2.06	0/9 (0)
Grande Ronde Captive F ₁ (80F08)	R8	Low	1.61	0/12 (0)
Lostine River Conventional (200W08)	R9	Low	0.45	0/7 (0)
Lostine River Captive F ₁ (200F08)	R10	Low	1.39	0/22 (0)
Lostine River Conventional (200W08)	R11	Low	0.67	0/8 (0)
Lostine River Conventional (200W08)	R12	Low	0.68	0/11 (0)
Imnaha River Conventional (2908)	R13	Low	1.12	0/6 (0)
Imnaha River Conventional (2908)	R14	Low	0.60	1/5 (20%)
Imnaha River Conventional (2908)	R15	Low	0.55	0/5 (0)
Imnaha River Conventional (2908)	R16	Low	0.39	0/4 (0)
Imnaha River Conventional (2908)	R17	Low	0.55	0/4 (0)
Imnaha River Conventional (2908)	R18	Low	0.30	0/5 (0)

November Fish Health summary for BY2008 spring Chinook juveniles on hand at Lookingglass Hatchery

Stock #	Stock Name	Culture Results	Comments
201W08	Catherine Creek Conventional	2/10 aeromonad pseudomonad (APS) bacteria	1/10 mort/moribund fish had scoliosis 2/10 had only a very small amount of body fat
201F08	Catherine Creek Captive Brood progeny	4/10 APS	
80W08	Grande Ronde River Conventional	No significant levels of systemic bacteria	
80F08	Grande Ronde River Captive Brood progeny	3/10 APS, 3/10 internal fungus	1/10 mort/moribund fish had a kidney adhesion and 1/10 had tail fungus
8108	Lookingglass Creek	2/10 APS	2/10 mortalities had some external fungus (from AHP)
200W08	Lostine River Conventional	3/10 APS	3/10 mortalities had tail fungus
200F08	Lostine River Captive Brood progeny	6/10 APS, 1/10 internal fungus	1/10 mortalities had a kidney adhesion and 2/10 had tail fungus
2908	Imnaha River	6/10 APS	1/10 mort/moribund fish had tail fungus

Distribution:

Joe Krakker	Lower Snake, Boise
Chris Starr	Lower Snake, Boise
Scott Marshall	Lower Snake, Boise
Tammy Froscher	Lower Snake, Boise
Sam Onjukka	Pathology, LaGrande
Mary Hoverson	N. E. Region, LaGrande
Scott Patterson	N. E. Region, LaGrande
Kim Sines	N. E. Region, LaGrande
Tracy Wyllie	N. E. Region LaGrande
Bill Knox	N. E. Region, Enterprise
Joe Feldhaus	Research, La Grande
Rich Carmichael	Research, LaGrande
Pat Keniry	Research, LaGrande
Tim Hoffnagle	Research, LaGrande

Deb Eddy	Research, LaGrande
Steve Boe	C.T.U.I.R., LaGrande
Mike McLean	C.T.U.I.R., LaGrande
Carrie Crump	C.T.U.I.R., LaGrande
Laurie Hewitt	C.T.U.I.R., LaGrande
Gary James	C.T.U.I.R., Pendleton
Brian Zimmerman	C.T.U.I.R., Pendleton
Becky Johnson	Nez Perce, Enterprise
Jim Harbeck	Nez Perce, Enterprise
Rick Zollman	Nez Perce, Enterprise
Peter Cleary	Nez Perce, Enterprise
Rusty Eschler	Nez Perce, Enterprise
Mary Edwards	Nez Perce, Enterprise
Cameron Albee	Nez Perce, Enterprise
Mike Gribble	Irrigon Hatchery
Marla Chaney	Bonneville Hatchery
Guy Chilton	ODFW, Salem HQ
Muhammad Latif	ODFW, Salem HQ
Roger Elmore	Lookingglass Hatchery
Diane Deal	Lookingglass Hatchery