

Oregon Department of Fish and Wildlife

Lookingglass Hatchery Monthly Progress Report

Reporting Month: **January 2010**
Author(s): **Roger Elmore**

Fish Culture:

January weather was relatively mild allowing for increased feeding to BY08 with month end sample counts reflecting a slight increase in fish size. The magnet broom was used to collect shed PIT tags in all of the raceways. About 35 tags were returned to fish research. The second week in February, pre-liberation fish sampling on all stocks is scheduled.

Approximately half of BY 09 fry were ponded and started on feed. EWOS brand feed instead of BioOregon is being used to feed the BY 09 cohort to see if there are any positive effects on fish health and growth. Two rows of Heath stacks were removed from the hatchery building and replaced with two new fiberglass rearing troughs for additional early rearing space. Approximately 1,000 Lostine stock surplus captive fry were transferred to the NPT for outplanting.

Maintenance:

Ladco Electric traced down an electrical malfunction in the communication between the TW-2 well electrical system and the backup diesel motor. A temporary fix has been applied. The malfunction was discovered as the result of a power outage. LaGrande Drywall replaced the damaged sheetrock in the visitor center hallway which had been damaged by water from a frozen water line in December. The hatchery crew built and placed new steps at strategic entry and exit points to the adult holding ponds and raceways. Also, a storage rack for wood and lumber was built and installed in the Endemic Building.

NPDES Waste Discharge Permit Monitoring

Hatchery and domestic DEQ water samples were not collected in January.

Miscellaneous:

The annual fuel tank inspection was completed with no deficiencies noted. Residence number 1 had new vinyl flooring installed. Also, an oven was installed as the motherboard in the old stove had been fried probably due to electrical surges during the power outage in early January. The refrigerator in the crew quarters was replaced as the old one wore out from old age. Federal fiscal year water usage reports were submitted to Fish Division. The design review plans for residential construction are at the 70% complete stage.

Personnel:

Roger Elmore attended the AOP meeting and Diane Deal completed domestic violence training online for the second time. Apparently Diane's training records from the first training had been lost. Diane and Bill both took off floating furlough days. Happy Birthday Bill! Josh Timmons and Derek Pruitt, two high school boys from Elgin, started working at the hatchery on Fridays through the Training and Employment Consortium.

Safety:

The monthly safety meeting was held January 20th. Discussion centered around how to complete vehicle accident reporting forms and the value of the reports to ODFW. Corky Gillies from the LaGrande Fire Department came to the hatchery and presented a five hour training module designed to train the staff to be proficient at the awareness level when dealing with hazardous materials.

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	71,991	2,666	27.0	16.8
2A	CHS	CQ 201-08	38,884	1,496	26.0	17.5
2B	CHS	CQ 201-F-08	24,495	845	29.0	15.7
C-19	CHS	CQ 201-F-08	10,004	294	34.0	13.4
3	CHS	LG 81-08	73,461	3,061	24.0	18.9
4	CHS	LG 81-08	79,927	3,197	25.0	18.2
AHP-C&D	CHS	LG 81-08	110,995	6,529	17.0	26.7
5	CHS	GQ 80-08	42,236	1,689	25.0	18.2
6	CHS	GQ 80-F-08	64,846	2,402	27.0	16.8
7	CHS	GQ 80-F-08	65,028	2,098	31.0	14.6
8	CHS	GQ 80-F-08	61,074	1,970	31.0	14.6
9	CHS	LQ 200-08	61,865	2,291	27.0	16.8
10	CHS	LQ 200-F-08	61,798	1,873	33.0	13.8

11	CHS	LQ 200-08	61,812	2,377	26.0	17.5
12	CHS	LQ 200-08	61,092	2,182	28.0	16.2
13	CHS	IM 29-08	66,631	2,897	23.0	19.7
14	CHS	IM 29-08	66,710	2,780	24.0	18.9
15	CHS	IM 29-08	66,642	2,666	25.0	18.2
16	CHS	IM 29-08	67,032	2,793	24.0	18.9
17	CHS	IM 29-08	66,767	2,568	26.0	17.5
18	CHS	IM 29-08	60,502	2,327	26.0	17.5
Totals/Average			1,283,792	51,000	26.0	18.0

Stock	# of Fish	Production Goal	% of Goal	Meeting Goal
CQ 201-08	110,875	130,000	111.8	YES
CQ 201-F-08	34,499			
LG 81-08	264,383	250,000	105.7	YES
GQ 80-08	42,236	250,000	93.3	NO
GQ 80-F-08	190,948			
LQ 200-08	184,769	187,500	98.5	NO
LQ 200-F-08	61,798	62,500	98.8	NO
IM 29-08	394,284	360,000	109.5	YES

Stock	Spawned Females	EGG TAKE	EGGS RECEIVED	EGGS/FRY TRANS.	EGGS SHIPPED	EGG and Fry LOSS	EGGS RELS	FRY ON HAND
CQ 201-09	43	165,263	0	0	0	11,781	0	153,482
CQ 201-F-09	0	0	104,319	0	0	6,513	1,915	98,891
LG 81-09	26	101,637	0	0	0	3,281	0	98,356
GQ 80-09	61	261,136	0	330	0	60,250	0	200,556
GQ 80-F-09	0	0	202,129	0	143,349	1,913	0	56,867
LQ 200-09	57	262,883	0	0	0	81,627	0	181,256
LQ 200-F-09	0	0	113,681	1,015	0	4,315	0	108351
IM 29-09	109	513,432	0	0	0	57,328	0	456,104

Fish Health

Fish pathology performed monthly sampling on January 12 and 25th. BY 09 fish were sampled the 12th and BY 08 fish on the 25th. Sam Onjukka brought along newly hired Microbiologist Julie Keniry to the hatchery for health inspections. The December results are below.

II. LSRCP Fish Health Examinations

III. Lookingglass Hatchery

BY2008 ChS – see summary table below. No virus was detected in December; BKD testing results are pending for November & December. Low levels of *Epistylis* and *Apiosoma* were detected in skin scrapings. Additionally, 1/3 (33.3%) moribund fish from raceway 3 also had low-moderate levels of *Ichthyobodo (Costia)*. Some fish continued to display excessive mucus anterior to the dorsal fin. We found there was a 98.2% reduction in total bacterial counts in post UV treated Lookingglass Creek water with a theoretical UV dose of ~240,000 mw and a flow of ~310 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 December 2009 (note: some corrections to mortality numbers from previous month due to excel formula errors)				
Stock	Raceway	BKD Segregation	Cumulative % Mortality	Proportion (%) ELISA OD \geq 1.000
Catherine Creek Conventional (201W08)	R1	Low	2.85	0/15 (0)
Catherine Creek Conventional (201W08)	R2A	Low	2.83	0/15 (0)
Catherine Creek Captive F ₁ (201F08)	R2B	Low	1.82	0/23 (0)
Catherine Creek Captive F ₁ (201F08)	Circular 19	Low	1.74	Not tested yet
Lookingglass Creek (81.08)	R3	Low	1.81	0/9 (0)
Lookingglass Creek (81.08)	R4	Low	1.75	0/14 (0)
Lookingglass Creek (81.08)	AHP	Low	0.53	0/5 (0)
Grande Ronde Conventional (80W08)	R5	Low	0.65	0/12 (0)

Grande Ronde Captive F ₁ (80F08)	R6	Low	0.43	0/8 (0)
Grande Ronde Captive F ₁ (80F08)	R7	Low	0.71	0/9 (0)
Grande Ronde Captive F ₁ (80F08)	R8	Low	0.53	0/12 (0)
Lostine River Conventional (200W08)	R9	Low	0.57	0/7 (0)
Lostine River Captive F ₁ (200F08)	R10	Low	1.56	0/22 (0)
Lostine River Conventional (200W08)	R11	Low	0.84	0/8 (0)
Lostine River Conventional (200W08)	R12	Low	0.84	0/11 (0)
Imnaha River Conventional (2908)	R13	Low	1.35	0/6 (0)
Imnaha River Conventional (2908)	R14	Low	0.77	1/5 (20%)
Imnaha River Conventional (2908)	R15	Low	0.85	0/5 (0)
Imnaha River Conventional (2908)	R16	Low	0.59	0/4 (0)
Imnaha River Conventional (2908)	R17	Low	0.75	0/4 (0)
Imnaha River Conventional (2908)	R18	Low	0.35	0/5 (0)

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

Stock #	Stock Name	Culture Results	Comments
201W08	Catherine Creek Conventional	1/10 aeromonad pseudomonad (APS) bacteria	5/10 mort/moribund fish had fungus on the operculum
201F08	Catherine Creek Captive Brood progeny	3/10 APS	2/10 mortalities had gill fungus
80W08	Grande Ronde River Conventional	2/10 APS	1/10 mortalities had fungus on operculum and 1/10 gill fungus
80F08	Grande Ronde River Captive Brood progeny	No significant levels of systemic bacteria	2/10 mortalities had tail fungus
8108	Lookingglass Creek	2/10 APS & 1/10 low level <i>Yersinia ruckeri</i> (enteric redmouth)	4/10 mort/moribund fish had tail fungus. 1/10 had operculum fungus and 1/10 had gill fungus
200W08	Lostine River Conventional	1/10 APS	1/10 mort/moribund fish had gill fungus
200F08	Lostine River Captive Brood progeny	3/10 APS	
2908	Imnaha River	1/10 had a low level of <i>Pseudomonas fluorescens</i>	2/12 mort/moribund fish had scoliosis

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