

# **Oregon Department of Fish and Wildlife**

## **Lookingglass Hatchery Monthly Progress Report**

**Reporting Month:** February 2009  
**Author(s) :** Roger Elmore, Albert Pollreis

### **Fish Culture:**

Lookingglass Hatchery staff continued to monitor the growth and development of BY 2008 sac fry. By the end of February 70% of fry had been ponded and started on feed. Fry rearing tanks are receiving a combination of UV treated water mixed with warmer well water to increase fish growth to meet minimum fish size requirements for fish marking which is scheduled to begin May 19. Two transfers of Grande Ronde conventional sac fry for the Safety Net Adult Program (SNAP) to Wallowa Hatchery were completed. A total of 162 fry have been transferred. Research personnel along with NPT and CTUIR personnel performed pre release weight, length, and mark sampling on BY07 stocks. Don Larsen, NOAA, lethally sampled 240 fish, 80 fish from each raceway 10, 11, and 12, for a study on hormonal signs of precocity.

### **Maintenance:**

Batteries used to power the TW-2 well backup motor were replaced. The old batteries were 8 years old and showing signs of not being able to maintain a charge. The fish pump was made ready for use. Dane Jensen from the Union County Sheriff's Department and court ordered community service workers, stripped and waxed floors in the visitor center and restroom area. Also, they moved lumber to the new location of the wood shop and helped sort out miscellaneous pieces of metal in a storage rack that had become unusable. In addition, Dane's crew installed insulation and sheetrock in the residential garages. Steve Laprell, a local general contractor, worked on the hatchery building roof to determine the cause and extent of the roof leaks. Steve applied some patchwork, but snow and ice on the roof impeded work efforts. However, it was discovered that damage has been done to the insulation and sheetrock in parts of the building. Water damage did cause a partial collapse of the ceiling in the visitor center women's restroom.

### **NPDES Waste Discharge Permit Monitoring**

NPDES water samples were taken for the quarter in February and domestic water samples were submitted. There were no non compliance issues and domestic water samples were negative for fecal coliform.

### **Miscellaneous:**

Roger attended the regional quarterly meeting and a meeting to discuss economic issues considering the Governor's recommended budget proposal. The 2007-2008 water usage report was submitted. Ladco Electric started work on upgrading lighting

fixtures with more energy efficient units. Construction of headscreens for the raceways is nearing completion. Three members of the LGH crew carpooling to work on February 25 slid off the road and their truck rolled over ending up in a creek. No one was hurt badly, except for frazzled nerves. The truck was a total loss.

**Personnel:**

One performance evaluation was completed in February.

**Safety:**

The monthly safety meeting was held February 24. Proper use of a backboard was demonstrated for possible neck and spinal injuries. Also, respirator mask fit test was repeated. Mask fit test failed in November and filter cartridges were replaced on all masks. All masks passed the test in February, however a half face mask is going to be replaced with a full face mask. In addition, some hands on experience in using a fire extinguisher was practiced. A fire was started in the burn barrel with members of the crew taking turns using the fire extinguisher.

**Fish Production and Distribution:**

Fish on Hand in Raceways: BY 2007

Pond #	Species	Stock	Number of Fish	lbs of fish	F/lb	grams/Fish
1	CHS	CQ 201-07	46,869	1,772	26.5	17.1
2	CHS	CQ 201-07	46,382	1,870	24.8	18.3
3	CHS	CQ 201-07	45,702	1,767	25.9	17.5
4	CHS	CQ 201-F-07	72,176	3,114	23.2	19.6
5	CHS	CQ 201-F-07	28,350	1,188	23.9	19.0
6	CHS	LG 81-07	50,077	2,134	23.5	19.3
7	CHS	GQ 80-07	49,607	2,184	22.7	20.0
8	CHS	GQ 80-F-07	52,435	2,542	20.6	22.0
9	CHS	GQ 80-07	44,597	1,980	22.5	20.1
10	CHS	LQ 200-07	62,037	2,382	26.0	17.4
11	CHS	LQ 200-07	62,088	2,479	25.1	18.1
12	CHS	LQ 200-07	61,654	2,451	25.2	18.0
13	CHS	LQ 200-F-07	61,977	2,358	26.3	17.3
14	CHS	IM 29-07	58,822	2,604	22.6	20.1

15	CHS	IM 29-07	58,877	2,646	22.3	20.4
16	CHS	IM 29-07	58,884	2,528	23.3	19.5
17	CHS	IM 29-07	55,049	2,319	23.7	19.1
18	CHS	IM 29-07	62,393	2,562	24.4	18.6
Totals/Average			977,976	40,881	24.0	19.0

Canadian Troughs BY 2008

CT #	Species	Stock	Number of Fish	lbs of fish	F/lb	grams/Fish
1	CHS	IM 29-08	52,436	65.3	803	0.6
2	CHS	IM 29-08	51,012	50.1	1019	0.4
3	CHS	IM 29-08	51,353	49.7	1033	0.4
4	CHS	IM 29-08	52,408	52.0	1008	0.4
5	CHS	IM 29-08	49,846	46.5	1073	0.4
6	CHS	IM 29-08	-	0.0	0	0
7	CHS	IM 29-08	-	0.0	0	0
8	CHS	IM 29-08	-	0.0	0	0
9	CHS	LG 81-08	35,114	28.3	1242	0.4
10	CHS	LG 81-08	49,445	44.1	1120	0.4
11	CHS	LG 81-08	51,696	44.2	1169	0.4
12	CHS	LG 81-08	44,150	40.4	1093	0.4
13	CHS	LG 81-08	-	0.0	0	0
14	CHS	GQ 80-08	22,365	23.9	935	0.5
15	CHS	LQ 200-08	-	0.0	0	0
16	CHS	LQ 200-08	-	0.0	0	0
17	CHS	LQ 200-08	9,534	8.3	1143	0.4
18	CHS	LQ 200-08	54,661	51.2	1067	0.4
19	CHS	LQ 200-08	50,791	48.8	1040	0.4
20	CHS	CQ 201-08	54,136	49.2	1100	0.4

21	CHS	CQ 201-08	0	0	0	0
22	CHS	CQ 201-F-08	0	0	0	0
23	CHS	LQ 200-F-08	0	0	0	0
24	CHS	LQ 200-F-08	0	0	0	0
25	CHS	GQ 80-F-08	0	0	0	0
26	CHS	GQ 80-F-08	0	0	0	0
27	CHS	GQ 80-F-08	0	0	0	0
28	CHS	GQ 80-F-08	0	0	0	0

Stock	# of Fish	Production Goal	% of Goal	Meeting Goal
CQ 201-07	138,953	130,000	106.9	<b>YES</b>
CQ 201-F-07*	100,526			
LG 81-07**	50,158	250,000	60.3	<b>NO</b>
GQ 80-07	94,204	250,000	37.7	<b>NO</b>
GQ 80-F-07	52,435			
LQ 200-07	185,779	187,500	99.1	<b>YES</b>
LQ 200-F-07	61,977	62,500	99.2	<b>YES</b>
IM 29-07	294,025	360,000	81.7	<b>NO</b>

\* Surplus to Lookingglass \*\* includes surplus from Catherine Creek Captives

### Egg Data 2008

Stock	Females Spawned	Fry / Eggs on hand	Fry Poned
CQ 201-08	32	116,232	54,207
CQ 201-F-08	From Oxbow	36,272	0
LG 81-08	76	260,750	189,769
GQ 80-08	12	38,937	22,407
GQ 80-F-08	From Oxbow	201,319	0
LQ 200-08	56	244,343	114,993
LQ 200-F-08	From Oxbow	77,982	0
IM 29-08	104	411,671	233,343
	280	1,387,506	614719

## Fish Health

Fish pathology performed monthly and pre-release sampling in February. Results are not available at this time. January's results are below. Water samples were collected to measure the effectiveness of the UV system.

### LSRCP Fish Health Examinations

#### Lookingglass Hatchery

**BY2007 ChS** – See summary below for January. No virus or BKD has been detected in juveniles thus far with this brood year. BKD ELISA results are pending for January. There was ~93% reduction in total bacterial counts in post UV treated Lookingglass Creek water in December with a flow setting of ~270 GPM (dose ~280,000 mw).

BKD ELISA summary in mortality for August - December in BY2007 spring Chinook juveniles on hand at Lookingglass Hatchery and cumulative % mortality from final ponding to the end of January 2009				
Stock	Raceway	BKD Segregation	Cumulative % Mortality	Proportion (%) ELISA OD $\geq$ 1.000
Catherine Creek Conventional (201W07)	R1	Low	0.30	0/13 (0)
Catherine Creek Conventional (201W07)	R2	Low	0.38	0/10 (0)
Catherine Creek Conventional (201W07)	R3	Low	0.68	0/19 (0)
Catherine Creek Captive F <sub>1</sub> (201F07)	R4	Low	0.69	0/24 (0)
Catherine Creek Captive F <sub>1</sub> (201F07)	R5	Moderate	0.84	0/11 (0)
Lookingglass Creek (81.07)	R6	Low	0.98	0/25 (0)
Grande Ronde Conventional (80W07)	R7	Low	0.56	0/24 (0)
Grande Ronde Captive F <sub>1</sub> (80F07)	R8	Low & Moderate	0.84	0/24 (0)
Grande Ronde Conventional (80W07)	R9	Low	0.53	0/17 (0)
Lostine River Conventional (200W07)	R10	Low	0.60	0/12 (0)
Lostine River Conventional (200W07)	R11	Low	0.53	0/12 (0)
Lostine River Conventional (200W07)	R12	Low	1.05	0/17 (0)
Lostine River Captive F <sub>1</sub> (200F07)	R13	Low	0.71	0/23 (0)
Imnaha River Conventional (2907)	R14	Low	0.45	0/11 (0)
Imnaha River Conventional (2907)	R15	Low	0.43	0/13 (0)
Imnaha River Conventional (2907)	R16	Low	0.45	0/7 (0)
Imnaha River Conventional (2907)	R17	Low	0.42	0/13 (0)
Imnaha River Conventional (2907)	R18	Low	0.53	0/3 (0)

#### January Fish Health summary for BY2007 spring Chinook juveniles on hand at Lookingglass Hatchery.

Stock #	Stock Name	Culture Results	Comments
201W07	Catherine Creek Conventional	1/10 (10%) yeast	The fish with yeast had a distended abdomen and fluid in the stomach
201F07	Catherine Creek Captive Brood progeny	2/10 (20%) had a low level of aeromonad-pseudomonad (APS) bacteria and 1/10 had moderate levels of <i>P. fluorescens</i>	
80W07	Grande Ronde River Conventional	6/10 (60%) had a low – moderate levels of APS bacteria	1/10 mortalities had tail erosion
80F07	Grande Ronde River Captive Brood progeny	1/7 (14.3%) had a low level of APS bacteria and 1/7 (14.3%) had internal fungus	1/7 mortalities had a kidney adhesion and five had exophthalmia
8107	Lookingglass Creek	1/10 (10%) internal fungus	1/10 mortalities had a kidney adhesion
200W07	Lostine River Conventional	1/10 (10%) had a moderate level of APS bacteria	
200F07	Lostine River Captive Brood progeny	1/10 (10%) had a low level of APS bacteria	

2907	Imnaha River	No significant levels of systemic bacteria detected	1/10 had fungus on the gills
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**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
Brad Smith	N. E. Region, Enterprise
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
Shawn Sealey	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