

Oregon Department of Fish and Wildlife

Lookingglass Hatchery Monthly Progress Report

Reporting Month: March 2009
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Fish Culture:

Lookingglass Hatchery began the process of loading BY 07 smolts onto fish liberation trucks for transport to the various acclimation sites. By the end of March, fish remaining on station consisted of the Lostine late acclimation group and Catherine Creek captive brood and Lookingglass smolts. The Lostine late group was transported on April 1 and the Catherine Creek and Lookingglass stock smolts began a volitional release the same day.

BY 08 fry have all been ponded into Canadian troughs except for one tray of Lostine captive brood fry which will be ponded in early April. Fry are feeding well with overall low mortality. BioOregons' BioDiet starter #1 and #2 are being fed to the fry.

Lookingglass fish trap was operational on March 4 with the first steelhead of the year being trapped on March 16. For the month, a total of 45 steelhead were trapped.

Chinook smolts were transported to Imnaha on March 10 and 11 for acclimation. The first week of acclimation proved difficult as cold weather, ice, and slush ice inhibited water flow through the intake and into the acclimation pond. Diligent monitoring of the situation by Tim Helwick kept water flowing without any problems. Imnaha stock smolts occupying raceway 16 tested positive for low levels of IHN during monthly fish health sampling in February. The decision was made not to commingle them with the rest of the fish at acclimation. Raceway 16 smolts were direct stream released into the Imnaha River at Summit Creek Bridge about 9 miles below the Imnaha Facility.

Maintenance:

McMillen Engineering and Steve LaPrelle Construction submitted bids to remove damaged sheetrock and insulation caused by a leaky roof on the hatchery building. Most of the damage is located in the area of the visitor center and visitor center restrooms. Steve LaPrelle was the low bidder and cleaned up the mess on March 23. Ledbetter Refrigeration assessed what it would take to repair one of the water chiller units. A bid for repair work will be received in April. Ladco Electric continued work on replacing old lighting fixtures with new energy efficient lights and ballasts. The annual State Fire Marshall survey of hazardous substances stored at Lookingglass and Imnaha was completed and submitted. Hatchery staff along with Dane Jensen and court appointed community service workers, began to pressure wash and disinfect raceways. The raceways are being prepared for use by the BY 08 fish sometime in early May. Also, egg incubation trays are being washed and disinfected.

NPDES Waste Discharge Permit Monitoring

There were no NPDES activities in March.

Miscellaneous:

Roger attended the annual Lower Snake meeting in Boise. Hatchery staff researched a new technology of egg incubation using a moist air incubator. The incubation unit will be tested at Wallowa Hatchery using steelhead eggs. More to come on this as we learn more.

Personnel:

There were no personnel actions in March.

Safety:

The monthly safety meeting was held March 24. The topic was safe driving in winter conditions.

Fish Production and Distribution:

The numbers below for BY 07 reflect number and size of fish in each raceway at the time of transport or volitional release.

BY 07

Pond #	Species	Stock	Number of Fish	lbs of fish	F/lb	grams/Fish
1	CHS	CQ 201-07	46,865	1,772	26.5	17.1
2	CHS	CQ 201-07	46,375	1,870	24.8	18.3
3	CHS	CQ 201-07	45,690	2,053	22.3	20.4
4	CHS	CQ 201-F-07	72,137	2,740	26.3	17.2
5	CHS	CQ 201-F-07	28,313	1,095	25.9	17.5
6	CHS	LG 81-07	50,027	1,959	25.5	17.8
7	CHS	GQ 80-07	49,608	2,398	20.7	21.9
8	CHS	GQ 80-F-07	52,420	2,647	19.8	22.9
9	CHS	GQ 80-07	44,595	2,155	20.7	21.9
10	CHS	LQ 200-07	62,035	2,382	26.0	17.4
11	CHS	LQ 200-07	62,079	2,478	25.1	18.1
12	CHS	LQ 200-07	61,636	2,811	21.9	20.7
13	CHS	LQ 200-F-07	61,962	2,710	22.9	19.8
14	CHS	IM 29-07	58,808	2,662	22.1	20.5
15	CHS	IM 29-07	58,845	2,663	22.1	20.5
16	CHS	IM 29-07	58,839	2,660	22.1	20.5

17	CHS	IM 29-07	55,030	2,283	24.1	18.8
18	CHS	IM 29-07	62,366	2,588	24.1	18.8
Totals/Average			977,630	41,927	23.5	19.5

Canadian Troughs BY 2008

CT #	Species	Stock	Number of Fish	lbs of fish	F/lb	grams/Fish
1	CHS	IM 29-08	52,280	90	584	0.8
2	CHS	IM 29-08	50,846	97	522	0.9
3	CHS	IM 29-08	51,194	89	575	0.8
4	CHS	IM 29-08	52,038	87	600	0.8
5	CHS	IM 29-08	49,458	82	600	0.8
6	CHS	IM 29-08	52,328	80	653	0.7
7	CHS	IM 29-08	51,860	58	888	0.5
8	CHS	IM 29-08	48,803	58	839	0.5
9	CHS	LG 81-08	58,898	67	736	0.6
10	CHS	LG 81-08	49,344	74	669	0.7
11	CHS	LG 81-08	51,580	77	673	0.7
12	CHS	LG 81-08	48,961	78	624	0.7
13	CHS	LG 81-08	51,167	70	735	0.6
14	CHS	GQ 80-08	41,738	63	659	0.7
15	CHS	LQ 200-08	43,613	58	754	0.6
16	CHS	LQ 200-08	48,139	58	831	0.5
17	CHS	LQ 200-08	45,596	69	664	0.7
18	CHS	LQ 200-08	54,360	92	589	0.8
19	CHS	LQ 200-08	50,578	89	566	0.8
20	CHS	CQ 201-08	53,899	79	682	0.7
21	CHS	CQ 201-08	58,484	75	781	0.6
22	CHS	CQ 201-F-08	35,671	26	1370	0.3
23	CHS	LQ 200-F-08	38,431	32	1183	0.4
24	CHS	LQ 200-F-08	38,507	24	1574	0.3
25	CHS	GQ 80-F-08	49,186	34	1436	0.3
26	CHS	GQ 80-F-08	48,704	33	1467	0.3
27	CHS	GQ 80-F-08	47,221	33	1450	0.3
28	CHS	GQ 80-F-08	51,764	36	1450	0.3
Totals/Average			1,374,648	1,027	972	0.5

Stock	# of Fish	Production Goal	% of Goal	Meeting Goal
CQ 201-08	112,383	111,800	103.1	YES
CQ 201-F-08*	35,671	35100	101.1	YES
LG 81-08**	259,950	251,800	117.3	YES
GQ 80-08	41,738	40,000	104.3	YES
GQ 80-F-08	196,875	196,000	100.1	YES
LQ 200-08	242,286	248,500	97.5	NO
LQ 200-F-08	76,938	62,500	123.0	YES
IM 29-08	408,807	399,000	101.2	YES
	1,374,648			

Fish Health

Fish pathology performed monthly and pre-release sampling in March. Sample results discovered a low level of IHN infection in Raceway 16 Imnaha stock smolts. Water samples were collected to measure the effectiveness of the UV system.

II. LSRCP Fish Health Examinations

A. Lookingglass Hatchery

BY2007 ChS – Infectious hematopoietic necrosis virus (IHNV) was detected in the Imnaha stock in fish from raceway 16 at the pre-transfer examination. Losses remained low in raceway 16 through the end of February but were slightly elevated above normal by early March. No other samples from other stocks or raceways have turned up positive for virus. No BKD has been detected in juveniles thus far with this brood year. BKD ELISA results are pending for January mortality and most pre-transfer examinations. On 2/25/09 another test was conducted on the UV system and the effectiveness was greatly reduced as compared to previous months. There was ~52% reduction in total bacterial counts in post UV treated Lookingglass Creek water in February with a flow setting of ~475 GPM (theoretical dose ~150,000 mw). Various levels of *Epistylis* sp. and some *Ambiphrya* sp. were detected in skin scrapings throughout all stocks.

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 February 2009				
Stock	Raceway	BKD Segregation	Cumulative % Mortality	Proportion (%) ELISA OD \geq 1.000
Catherine Creek Conventional (201W07)	R1	Low	0.31	0/13 (0)
Catherine Creek Conventional (201W07)	R2	Low	0.40	0/10 (0)
Catherine Creek Conventional (201W07)	R3	Low	0.72	0/19 (0)
Catherine Creek Captive F ₁ (201F07)	R4	Low	0.70	0/24 (0)
Catherine Creek Captive F ₁ (201F07)	R5	Moderate	0.85	0/11 (0)
Lookingglass Creek (81.07)	R6	Low	1.03	0/25 (0)
Grande Ronde Conventional (80W07)	R7	Low	0.63	0/24 (0)
Grande Ronde Captive F ₁ (80F07)	R8	Low &	0.91	0/24 (0)

		Moderate		
Grande Ronde Conventional (80W07)	R9	Low	0.60	0/17 (0)
Lostine River Conventional (200W07)	R10	Low	0.78	0/12 (0)
Lostine River Conventional (200W07)	R11	Low	0.73	0/12 (0)
Lostine River Conventional (200W07)	R12	Low	1.23	0/17 (0)
Lostine River Captive F ₁ (200F07)	R13	Low	0.77	0/23 (0)
Imnaha River Conventional (2907)	R14	Low	0.48	0/11 (0)
Imnaha River Conventional (2907)	R15	Low	0.47	0/13 (0)
Imnaha River Conventional (2907)	R16	Low	0.50	0/7 (0)
Imnaha River Conventional (2907)	R17	Low	0.47	0/13 (0)
Imnaha River Conventional (2907)	R18	Low	0.56	0/3 (0)

February/Early March Fish Health summary for BY2007 spring Chinook juveniles on hand at Lookingglass Hatchery

Stock #	Stock Name	Culture Results	Comments
201W07	Catherine Creek Conventional	6/10 (60%) aeromonad-pseudomonad (APS) bacteria and 1/10 had mixed bacterial growth	Pre-transfer examination conducted on 3/2/09
201F07	Catherine Creek Captive Brood progeny	2/3 (66.7%) had a low level of APS bacteria	
80W07	Grande Ronde River Conventional	1/7 (14.3%) internal fungus	1/7 mortalities had a kidney adhesion
80F07	Grande Ronde River Captive Brood progeny	No significant levels of systemic bacteria	
8107	Lookingglass Creek	1/8 (12.5%) had a low level of <i>Flavobacterium psychrophilum</i> (CWD bacteria)	
200W07	Lostine River Conventional	1/10 (10%) internal fungus	1/10 mortalities had a kidney adhesion
200F07	Lostine River Captive Brood progeny	1/6 (16.7%) had a low level of APS bacteria	
2907	Imnaha River	3/10 had APS bacteria and 1/10 had internal fungus	Mortalities from R16 had <u>gross signs of IHN</u>

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