

Oregon Department of Fish and Wildlife

Lookingglass Hatchery Monthly Progress Report

Reporting Month: December 2008
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Fish Culture:

Lookingglass Hatchery staff received the last eyed eggs from the Captive Brood program this month. The eggs were enumerated at LG and at the end of December LG had received 79,075 Lostine stock eggs, 205,071 Grande Ronde stock eggs, and 36,811 Catherine Creek stock eggs for a total of 320,957 captive eggs in incubation.

Hatchery staff picked and counted all of the bad eggs and fry in incubation trays on a weekly basis. All lots of conventional eggs have hatched and captive eggs have begun to hatch.

Colder weather and water has slowed down feeding and growth of BY 2007 pre-smolts. A local trapper has set up furbearer traps to capture mink that have been dining on fish in the raceways.

Maintenance:

Plowing, blowing, and shoveling snow occupied a good portion of the staffs' time the latter half of December. Unofficially, Lookingglass received 78 inches of snow in December. Along with the snow, were several power outages, the longest lasting 13 hours. The power outages and electrical spikes have played havoc with the telephone system which has been out sporadically. Also, a solenoid on the domestic generator quit working, preventing the automatic start up of the generator whenever line power went down. A similar piece of electronic equipment in the PLC (Program Logic Controller) which operates the motor for tempering well # 2 quit working, preventing the automatic start up of the backup motor if line power goes down. A pressure relief valve associated with the domestic water well broke causing the hatchery to be without water for a short period of time. Fortunately, there is a shutoff valve prior to the pressure relief valve and by closing the shutoff, water delivery was restored. Bill Barnes traveled to Wallowa Fish Hatchery to service Wallowa's backup generators. Bill provided training to Wallowa staff to perform maintenance in the future. Miscellaneous tasks performed included: mounting and wiring tail lights on the garbage trailer, repaired raceway mortality nets, flushed incubator head tanks of silt build up, repair frozen water lines on pre-lube well tank, greased zirks inside the traveling water screens, routine service on the tractor and grader.

NPDES Waste Discharge Permit Monitoring

NPDES quarterly sampling and domestic water samples were taken in December.

Miscellaneous:

Roger attended the draft 2009 AOP meeting in LaGrande. A couple of dump truck loads of ¾ to 1 ½ inch sized gravel was distributed on top of what was becoming a muddy roadway leading to residential storage sheds. The metal components for raceway screen construction was received with two screens being damaged in shipment. The supplier has been contacted and will replace the two pieces. A pickup truck from the Regional office was brought to Lookingglass to have a snowplow and operating harness installed. Three test kits were purchased to test the Radon levels in the residences to make sure the radon abatement system is working properly. Test results have not been reported yet.

Personnel:

Michael Herr began work as a full time fisheries technician on Dec. 1.

Safety:

The monthly safety meeting was held December 10. The meeting was about bloodborne pathogens and their transmission. ODFW Policy 480_08 was reviewed and a powerpoint presentation on bloodborne pathogens was viewed.

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 | 46,892 | 1,660 | 28.2 | 16.1 |
| 2 | CHS | CQ 201-07 | 46,425 | 1,628 | 28.5 | 15.9 |
| 3 | CHS | CQ 201-07 | 45,767 | 1,548 | 29.6 | 15.3 |
| 4 | CHS | CQ 201-F-07 | 72,234 | 2,643 | 27.3 | 16.6 |
| 5 | CHS | CQ 201-F-07 | 28,366 | 1,056 | 26.9 | 16.9 |
| 6 | CHS | LG 81-07 | 50,158 | 1,890 | 26.5 | 17.1 |
| 7 | CHS | GQ 80-07 | 49,675 | 1,852 | 26.8 | 16.9 |
| 8 | CHS | GQ 80-F-07 | 52,521 | 2,084 | 25.2 | 18.0 |
| 9 | CHS | GQ 80-07 | 44,658 | 1,840 | 24.3 | 18.7 |
| 10 | CHS | LQ 200-07 | 62,185 | 2,121 | 29.3 | 15.5 |
| 11 | CHS | LQ 200-07 | | | 28.1 | 16.2 |

| | | | | | | |
|----------------|-----|-------------|---------|--------|------|------|
| | | | 62,273 | 2,218 | | |
| 12 | CHS | LQ 200-07 | 61,811 | 2,349 | 26.3 | 17.2 |
| 13 | CHS | LQ 200-F-07 | 62,068 | 2,020 | 30.7 | 14.8 |
| 14 | CHS | IM 29-07 | 58,925 | 2,282 | 25.8 | 17.6 |
| 15 | CHS | IM 29-07 | 58,966 | 2,398 | 24.6 | 18.4 |
| 16 | CHS | IM 29-07 | 58,956 | 2,297 | 25.7 | 17.7 |
| 17 | CHS | IM 29-07 | 55,087 | 2,196 | 25.1 | 18.1 |
| 18 | CHS | IM 29-07 | 62,437 | 2,312 | 27.0 | 16.8 |
| Totals/Average | | | 979,404 | 36,396 | 27.0 | 16.9 |

| Stock | # of Fish | Production Goal | % of Goal | Meeting Goal |
|--------------|-----------|-----------------|-----------|--------------|
| CQ 201-07 | 139,084 | 130,000 | 107.0 | YES |
| CQ 201-F-07* | 100,600 | | | |
| LG 81-07** | 50,158 | 250,000 | 60.3 | NO |
| GQ 80-07 | 94,336 | 250,000 | 37.7 | NO |
| GQ 80-F-07 | 52,521 | | | |
| LQ 200-07 | 186,269 | 187,500 | 99.3 | YES |
| LQ 200-F-07 | 62,068 | 62,500 | 99.3 | YES |
| IM 29-07 | 294,371 | 360,000 | 81.8 | NO |

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

Egg Data 2008

| Stock | Females Spawmed | Fry / Eggs on hand |
|-------------|-----------------|--------------------|
| CQ 201-08 | 32 | 116,270 |
| CQ 201-F-08 | From Oxbow | 36,413 |
| LG 81-08 | 76 | 260,894 |
| GQ 80-08 | 12 | 42,116 |
| GQ 80-F-08 | From Oxbow | 202,590 |
| LQ 200-08 | 56 | 244,496 |
| LQ 200-F-08 | From Oxbow | 78,460 |
| IM 29-08 | 104 | 411,873 |
| | 280 | 1,393,112* |

*-After dead eggs and sac fry were removed by hand picking.

Fish Health

Fish pathology performed monthly sampling on December 17. Results are below. Water samples were collected to measure the effectiveness of the UV system.

II. LSRCP Fish Health Examinations

A. Lookingglass Hatchery

BY2007 ChS – See summary below for December. No virus or BKD has been detected in juveniles thus far this year. Some BKD ELISA results are pending for later in 2008. There was ~94% reduction in total bacterial counts in post UV treated Lookingglass Creek water in December with a flow setting of ~250 GPM (dose ~300,000 mw).

| BKD ELISA summary in mortality for August - October in BY2007 spring Chinook juveniles on hand at Lookingglass Hatchery and cumulative % mortality from final ponding to the end of December 2008 | | | | |
|---|---------|-----------------|------------------------|--------------------------------------|
| Stock | Raceway | BKD Segregation | Cumulative % Mortality | Proportion (%) ELISA OD \geq 1.000 |
| Catherine Creek Conventional (201W07) | R1 | Low | 0.26 | 0/7 (0) |
| Catherine Creek Conventional (201W07) | R2 | Low | 0.30 | 0/4 (0) |
| Catherine Creek Conventional (201W07) | R3 | Low | 0.58 | 0/11 (0) |
| Catherine Creek Captive F ₁ (201F07) | R4 | Low | 0.62 | 0/14 (0) |
| Catherine Creek Captive F ₁ (201F07) | R5 | Moderate | 0.79 | 0/8 (0) |
| Lookingglass Creek (81.07) | R6 | Low | 0.87 | 0/19 (0) |
| Grande Ronde Conventional (80W07) | R7 | Low | 0.50 | 0/14 (0) |
| Grande Ronde Captive F ₁ (80F07) | R8 | Low & Moderate | 0.75 | 0/15 (0) |
| Grande Ronde Conventional (80W07) | R9 | Low | 0.47 | 0/11 (0) |
| Lostine River Conventional (200W07) | R10 | Low | 0.54 | 0/8 (0) |
| Lostine River Conventional (200W07) | R11 | Low | 0.43 | 0/5 (0) |
| Lostine River Conventional (200W07) | R12 | Low | 0.98 | 0/8 (0) |
| Lostine River Captive F ₁ (200F07) | R13 | Low | 0.63 | 0/15 (0) |
| Imnaha River Conventional (2907) | R14 | Low | 0.28 | 0/6 (0) |
| Imnaha River Conventional (2907) | R15 | Low | 0.30 | 0/7 (0) |
| Imnaha River Conventional (2907) | R16 | Low | 0.36 | 0/3 (0) |
| Imnaha River Conventional (2907) | R17 | Low | 0.38 | 0/8 (0) |
| Imnaha River Conventional (2907) | R18 | Low | 0.47 | 0/3 (0) |

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

| Stock # | Stock Name | Culture Results | Comments |
|---------|--|---|--|
| 201W07 | Catherine Creek Conventional | 3/10 (30%) had aeromonad-pseudomonad (APS) bacteria, 1/10 (10%) internal fungus | 1/10 mortalities had a kidney adhesion, 3/10 had scoliosis |
| 201F07 | Catherine Creek Captive Brood progeny | 1/7 (14.3%) had a low level of APS bacteria | 1/7 mortalities had tail erosion and tail fungus |
| 80W07 | Grande Ronde River Conventional | 1/6 (16.7%) had a low level of APS bacteria | |
| 80F07 | Grande Ronde River Captive Brood progeny | 1/4 (25%) had a low level of APS bacteria | |
| 8107 | Lookingglass Creek | No significant levels of systemic bacteria detected | 1/3 mortalities had tail erosion and tail fungus |
| 200W07 | Lostine River Conventional | 1/10 (10%) internal fungus | 1/10 mortalities had a kidney adhesion |
| 200F07 | Lostine River Captive Brood progeny | No significant levels of systemic bacteria detected | 2/6 mortalities had scoliosis |
| 2907 | Imnaha River | No significant levels of systemic bacteria detected | 2/10 had tail fungus |

Examination of Imnaha BY2008 Egg/Sac Fry – Early in December increased loss was reported in two Imnaha trays. No pathogens were detected in 15 mortalities examined over the month. Losses tapered off and by the end of December were only slightly higher than the rest of the Imnaha trays.

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 |
| Fred Monzyk | 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
Mike Gribble
Marla Chaney
Greg Davis
Duane Banks
Guy Chilton
Muhammad Latif
Todd Hanna
Roger Elmore
Diane Deal

Nez Perce, Enterprise
Irrigon Hatchery
Bonneville Hatchery
Bonneville Hatchery
Oxbow Hatchery
ODFW, Salem HQ
ODFW, Salem HQ
Mt. Hood CC
Lookingglass Hatchery
Lookingglass Hatchery