



Oregon Department of Fish and Wildlife

“DRAFT”

Oregon Hatchery Research Center (OHRC) Progress Report

Month: April to June 2012

Author: Ryan Couture

Date: 6/6/12

Facility Issues

- Western States Electric was onsite in April to troubleshoot a problem with our drum filter. The electrician found a faulty and undersized circuit breaker for the drum motor. While onsite, the electrician also connected our chiller to our Zetron (alarm) panel and moved the electrical outlets in the incubation room to E-power on our generation so we can run our UV unit during an outage.
- The (poor) condition of Fall Creek Road has been a topic of local discussion. Lincoln County has been maintaining the road, but suffering from a reduced maintenance budget. Plumb Creek, a private timber company now started maintaining the road. State Forestry is involved due to high turbidity and pollution points from muddy water running off the road. Approximately 30 dump truck and 30 log truck loads per day on the road. 14 loads of gravel were dumped on the road in the last two weeks. We're hoping the long term plan in the pave the road, but no breath holding yet.
- A pump contractor pulled our well pump after losing domestic water early in May. He found a dead pump in a 250' well. As best we can tell, this pump was installed in 1993, so shouldn't complain too much...
- The OSU Animal Care group (IACUC) performed a facility inspection in April. They found only one minor deficiency that was noted. An unsealed wooden support for a head tank needed to be sealed. Our host painted the wooden support the following week.
- A local contractor poured a concrete walkway from the parking lot to the rear building entrance. The walkway is ADA accessible and will eliminate the uneven gravel pathway

Fish Handling/Research Projects

- OHRC hosted a meeting to discuss a potential project "heritability of harvest vulnerability." Does using angler caught broodstock produce more fish to the creel? Or, does hatchery practices and broodstock selection breed non-bitters? A follow-up meeting with Kathleen O'Malley from the genetics lab will help determine if a genetic pedigree will answer these questions.
- Fry started emerging in our hatchbox / egg planting experiment. Fry are removed counted and weighed from 4 troughs each containing 4 sections. This project intended to determine if egg planting using an "egg planting gnome" produced similar results to whitlock-vibert boxes. Unfortunately, the increase rock depth in the troughs caused "leaking" of fry by the screens from one section to another.

-A final report was completed for the Bureau of Reclamation funded project testing the Swim-Thru Fishway. BOR was satisfied with the report. Ryan and Joseph met with Dennis Bromka (Swim-Thru Fishway) to discuss plans to do a follow up Swim-Thru Fishway experiment this fall in our fish ladder/trap.

-We started our early imprinting trials with winter steelhead fry. This is a follow-up to the trials we ran with Chinook in the fall. We're testing water preference of fish raised in 3 water sources. Testing wrapped up late May. Andy Dittman (NOAA) will analyze and summarize the results. Fry from this experiment will also be used for an Otolith Chemistry experiment where we'll analyze otoliths from fish reared in two water sources and on two different hatchery diets to determine if fish can my indirectly "marked" using rearing water or feed as a technique.

-Our moist air incubation fry were ponded. Approximately 50 were preserved and the otoliths will be removed and read to determine the effectiveness of otolith marking using MAI technology.

-We spawned 14 pairs of F1 winter steelhead from the Siletz River. The eggs and later fry will be used for an experiment trying to determine if density is the cause of domestication selection. Neil Thompson from OSU is the principle investigator.

-Adult trap numbers to date are:

	Chinook	Coho	Steelhead
2011-'12 (Season Total)	131	181	107 wild & 16 hatchery (13.0% stray rate)
2010-'11 (Season Total)	54	242	83 wild & 6 hatchery (6.7% stray rate)

Education and Outreach

-The first and second grade class from Alsea Elementary School visited OHRC one day in April. Mrs. Couture's class painted fish did the quest, a word clue/treasure hunt. They had a great time in spite of the rain.

-The 3rd/4th grade class from Alsea School visited OHRC in May. They did the "Quest" and dissected fish.

-An elementary class from Crestview Heights in Waldport was here in May. They dissected and painted fish.

-Joseph gave a tour to a group of Natural Resource students from University of Wisconsin. The group was on a three week trip exploring natural resources in Oregon.

-Three different classes of 3rd graders from Sam Case Elementary in Newport took field trips to OHRC late in May. Each class collected and identified macro-invertebrates in Fall Creek.

-This years Free Fishing Day (June 9th) was a hit. Lots of families and small children attended and participated in the event.

-OHRC staff assisted with "Forest Camp" at Camp Tadmor near Lebanon. Staff assisted with a challenge course developing team building skills as well as fishing/casting, knot tying and angler ethics classes.

-Ryan gave a presentation at the Oregon Coast Community College for the "Current Issues" Aquarium Science program class. He talked about hatchery and wild fish interactions and current OHRC research.

-Ryan and David Noakes met with Rich Berenson from Toledo H.S. to talk about a project having students utilize GIS mapping/tracking to analyze data from the Adult Winter Steelhead Radio Telemetry Project.

Miscellaneous

- Ryan participated in a conference call with the Oregon AFS external director and external committee chairs. Ryan is the chair of the Fish Culture Committee and is working on a work plan for the year. OR-AFS will also support this years Northwest Fish Culture Conference and have a presence there as well.

-Ryan participated on a conference call, as he is assisting with planning the NW Region Fish Bio meeting that will be held in Silverton in June. There will be an OHRC update as well as a presentation regarding the Chinook Surrogate Project.

-Ryan is participating in a Recruitment, Retention and Reengagement internal workgroup within ODFW. At this point there are three small workgroups and we plan to develop a report in August.