

The Intake

WDFW Hatcheries Division

December 2019
Volume 6, Issue 1

King of the Reach - Alf Haukenes H/W Interactions, Paul Hoffarth FWBio3 Reg3, Steve Richards H/W Interactions, Brian Lyon Reg3 Ops Mgr.

During October 25-27, 2019, the annual Angler Broodstock Collection (ABC) fishery to collect fall Chinook salmon broodstock for the **Priest Rapids Hatchery** (PRH) program took place. A key element of hatchery reform are practices that reduce the impact of domestication selection on fish released to supplement natural production. To address this concern the PRH partners, Grant County Public Utility District (GCPUD) and Washington Department of Fish and Wildlife (WDFW), have modified broodstock collection and spawning practices to include the annual ABC fishery in the Hanford Reach portion of the Columbia River. The ABC fishery is a fishing tournament that was initiated in 2012 as a means to increase the number of natural origin hatchery broodstock for the PRH program.



The ABC fishery has become known as the 'King of the Reach' tournament and attracts a large number of anglers. Fish captured during this event are transported live to PRH to be used as broodstock. The local chapter of a large nationwide sport fishing group, the Coastal Conservation Association (CCA), has also assumed the responsibility for promoting the event nationally, leading to participation by anglers from around the country. The angler broodstock collections routinely contain >90% natural origin fish that make an important contribution for reaching the hatchery reform targets of the PRH program.

The numbers of anglers participating and broodstock collected this year were the highest ever recorded (see Appendix). Currently, this tournament is supported by a collaboration of GCPUD providing funds and equipment, the CCA and WDFW promoting and advertising of the event, and all three organizations working together during the three day derby in late October.

Inside this issue:

ABC Fishery	1
Hanford Reach Upriver Brights	2
Innovations	2
CWT Head Lab Remodel	3
Construction Zone	3
Staff Recipe	3
Announcements	4
Appendix	4



All photos provided by Alf Haukenes, Hatchery/Wild Interactions

Things are Bright in the Hanford Reach- Mike Erickson FHS4, RSRF

Ryan Ashcraft, Fish Hatchery Specialist 2 at **Ringold Springs Rearing Facility** (RSRF), on a cold October morning holds a beautiful example of a Hanford Reach Up-River Bright (URB) fall Chinook salmon! Despite a one fish limit, Hanford Reach fall Chinook fishing was really exceptional this year. Catch rates exceeded last year and lots of jacks returning to the Priest Rapids and Ringold hatcheries are a good indicator of a solid return of three-year old Chinook next fall. These fish contribute in a really big way to our WA state economy, OR, AK and Canada, both in recreational, commercial and Tribal fisheries.



Photo provided by Mike Erickson

Innovations

Low Head Oxygenator at Eells Springs- Mike Lucero FHS4, Eells Springs

Eells Springs Hatchery will be starting to use a Low Head Oxygenator to supplement dissolved oxygen levels when their flow decreases. It works by using an oxygen generating machine to pump oxygen into the chambers of the box and supersaturate the water by pressure, displacing the nitrogen in the water. **Mossyrock Hatchery** also using one, which is working really well to increase dissolved oxygen levels.



Photo by Mike Lucero

"Hatchery in a Box"

Folks who attended this year's *NW Fish Culture Concepts Annual Meeting* in Victoria BC, were fascinated with Redd Zone's vendor display "instant hatchery" system. A complete system can be custom-designed and shipped in a few weeks.



Mobile Hatchery! Redd Zone LLC owners and creators Roger Warren and Tod Jones stand inside a hatchery built in a shipping container. The instant hatchery can house up to 5-million chum eggs for incubation and release with minimal handling. The new owners of this particular mobile unit are Hood Canal's own Skokomish Tribe. Photo by Emily Lindblom, for *The Astorian*.

(See: [The Astorian: "Instant hatchery the first of its kind"](#) for full article.)

New and Improved CWT Head Lab

The Coded-Wire Tag Head Lab remodel is almost completed! The large freezer room was completely redone, replacing the large built-in freezer with a series of smaller chest and upright freezers. These freezers can be easily moved, as necessary, and are easier to clean and replace than the build-in. After a deep clean and a fresh coat of paint the room looks great!

The coring room was also thoroughly cleaned and repainted. The cabinets are scheduled to receive a coat of sealant in January.

The reading room was dismantled, cleaned, and painted, with fresh ceiling tiles and new desks installed to round out the renovation. IT is working on hiding pesky computer cords in special monitor arms.



Current CWT Lab crew L to R: Norm Switzler, Stacey Linville, Shelley Peterson, Merrie Schultz, Ray Bissonnette, Nick Hickman. Not pictured: John Thompson and Lynn Anderson

Construction Zone

Ringold Spring Rearing Facility

received a long-needed fish feed and equipment storage building constructed by Gillispe Homes Kennewick WA (builder), with the help of **Lane Sater** (CAMP project coordinator) and other outside vendors.



Photos by Mike Erickson

Staff Recipe: Lobster Mac and Cheese- Anja Huff

Ingredients:

- 1lb pasta
- 1qrt milk
- 8 TBSP unsalted butter
- ½ C Flour
- 4 C grated Gruyere
- 2 C grated Cheddar
- ½ tsp ground pepper
- ½ tsp nutmeg
- 1 1/2lbs cooked lobster meat
- 1 ½ C bread crumbs

Directions:

In a large pot melt 6 TBSP of butter; add the flour to create a roux. Cook on low-medium heat for two minutes, stirring gently. Add warm milk to the roux and whisk gently. The sauce will thicken, remove from heat when thick and smooth and add cheese, salt to taste, pepper, and nutmeg. Add in cooked pasta of choice and lobster. Place in a 9x13 pan or smaller gratin dishes, as preferred.

If you want a bread crumb topping: melt remaining 2 TBSP of butter and combine with bread crumbs. Sprinkle on top.

Bake at 375°F for 30 to 35 minutes, or until the sauce is bubbly and the top has browned.

Please send us your recipes!

Announcements

With best regards, we wish the following employees success in their new positions:

Kelly Cunningham: Fish Program Director
Laurie Peterson: Science Division Manager
Craig Burley: Fish Program Deputy Director
James Losee: Region 6 Program Manager
Jennifer Whitney: Region 6 FW Bio4

Monica Rees: FW Bio2 Mass Marking Unit
Angela Stefani: FHS4 Minter Creek
Kevin Kitchell: FHS3 George Adams
Wyatt Mathes: FHS2 Eells Springs

Interesting Reads

Benjamin Nelson, et al., 2019. *Wild Chinook salmon productivity related to seal density and not related to hatchery releases in the Pacific Northwest.*

Hankin et al., 2009. *Unnatural random mating policies select for younger age at maturity in hatchery Chinook salmon (*Oncorhynchus tshawytscha*) populations.*

J.C. Jolley et al., 2017. *Pacific lamprey recolonization of a Pacific Northwest river following dam removal.*

Photo Contest!!

Announcing this quarter's photo contest!

We will kick off *The Intake's* revival of with a two category photo contest.

- 1) Funniest Wildlife Photo
- 2) Best Fishing Photo-Any Species

Comments are always welcome and much appreciated. This newsletter is for you; to keep us connected, share information, and motivate us to new levels of scientific exchange and hatchery management. Suggestions are being taken for future articles. Tell us what you want to read about!

-Contact Anja Huff (Anja.Huff@dfw.wa.gov).



Appendix- ABC Fishery

Angler participation in the annual 'King of the Reach' tournament and the numbers of broodstock contributed to the PRH program during return years 2012–2019.



Year	Number of Anglers	Number of Boats	Broodstock Collected	
			Males	Females
2012	57	21	42	26
2013	101	41	291	121
2014	65	25	164	132
2015	77	25	216	304
2016	115	38	132	202
2017	177	57	180	296
2018	277	85	614	607
2019	521	98	775	771

Photo provided by Alf Haukenes