

# Garrison Dam National Fish Hatchery Complex



## *Restoring America's Fisheries*

*"We work with our partners and engage the public, using a science-based approach, to conserve, restore and enhance fish and other aquatic resources for the continuing benefit of the American people."*

*January 2020*

### *Spawning*

Burbot spawning began January 12<sup>th</sup> in ice cold water and finished up on the 31<sup>st</sup>. All six females ovulated producing 485,000 eggs. We were unable to capture any additional wild adults to add to the genetics of the captive broodstock held at the hatchery. The fish spawned were captive progeny that we have used for developing spawning and propagation techniques since 2006.

### *Fish Culture*

Trout and salmon culture activities are keeping staff busy. Eggs were received from Ennis NFH to meet our rainbow trout mitigation requests for the Corps of Engineers tailrace stockings as well as the urban fishing ponds across the State of North Dakota. The first lot of eggs were exposed to a shot of hot water from the hatchery's boiler resulting in a partial loss of eggs. Thankfully the staff at Ennis were kind enough to send replacements. The brown trout treatments to combat cold water disease and *Chilodonella* have staved off the mortality and hopefully put the lot back on the mend. This disease outbreak has been the most severe we have seen in years resulting in a 32% loss to date.



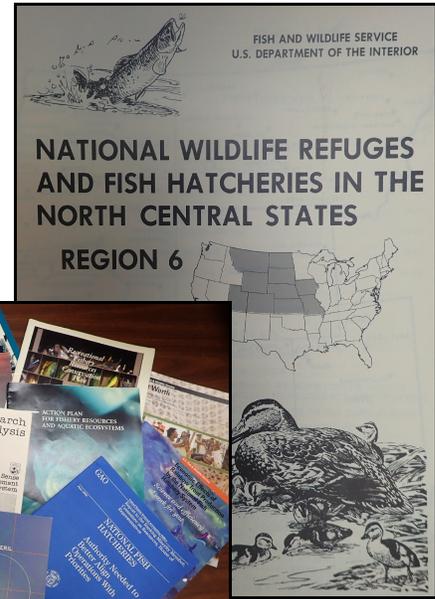
Shawn Cole spawning captive burbot

### *Upcoming Activities*

- Dakota Chapter of the American Fisheries Society meeting in Spearfish (February 24) with a continuing education workshop on the use of program R for fisheries data.
- Development of SOP's for fish culture and maintenance activities
- Pesticide use plan development
- Pond planning
- Writing fish culture reports

## Partnerships

Anyone with a functioning crystal ball? The project leader has been invited to give a presentation to the North Dakota Game and Fish Department at their annual divisional meeting in March. The topic of the presentation will be ‘The USFWS National Fish Hatchery System in the year 2040.’ Knowing where we have been helps in gauging where we might be headed. The development of the presentation has been interesting to say the least. We, the National Fish Hatchery System, have seen a lot of change in our history. Not only in the form of reorganization (does anyone recall when Iowa and Missouri were part of Region 6? - see photo), but also in our focus on fish or aquatic species production for recreational fishing or restoration and recovery. Since 1872 when Congress appropriated funds for the construction of a salmon spawning station on California’s McCloud River until present day, there have been 284 fish hatcheries constructed with the majority either transferred to the states and tribes or closed. Today we have 70 hatcheries in the National Fish Hatchery System. Here a few from our area that were transferred:



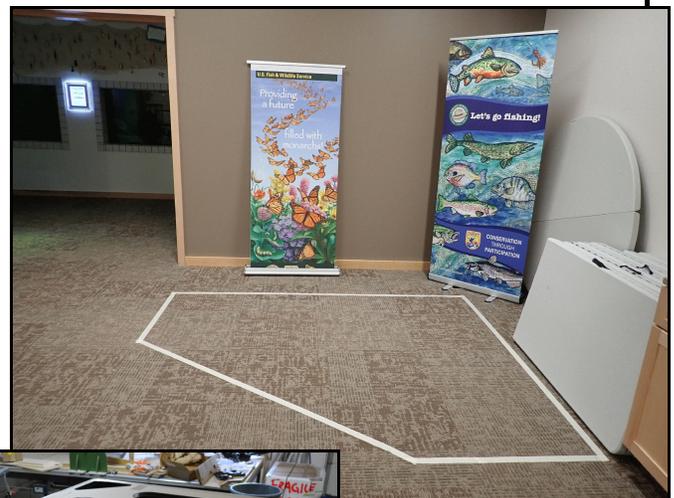
- New London, MN
- Lake Mills, WI
- Crawford, NE
- Miles City, MT
- Cedar Bluff, KS
- McNenny, SD



- Beulah Ranch A, SD
- Farlington, KS
- Springville, UT
- Fairport, IA
- Manchester, IA
- Hebron, OH

## Public Use

The new aquarium for the hatchery’s visitor center is nearing completion. The tank will allow for showing of the larger native Missouri River fishes including pallid sturgeon and paddlefish. Midwest Custom Aquariums out of Starbuck, MN is constructing the acrylic aquarium and stand with the hatchery staff fabricating the backdrop and tank surround as well as all the plumbing necessary to make the display as user friendly as practical. During construction of the visitor center, plumbing from our existing aquarium room filtration and water supplies were routed to this location. Hopefully all goes smoothly with the transport and installation in the coming weeks and the display is ready for the summer visitation.



Visitor center aquarium



The hatchery's cross country ski trail was highlighted in the Minot Air Force Base publication *Northern Sentry*. The article focused on the opportunity for night skiing and the wildlife you might hear and see on your trek. The groomed cross country trail meanders through the Corps Downstream Campground where street lights illuminate the runs on nights where the moon is blocked by overcast skies. Some runs parallel the Missouri River where geese are roosting. The chorus of the geese on the river in the evening twilight adds to the enjoyment of the outing.

### Maintenance

The crews at both Valley City and Garrison Dam are busy with winter maintenance activities and gearing up for the spring spawning season. Work on the Isolation Facility at Valley City NFH is ongoing. The stand for the new filter and UV sterilizer unit is built and put into place. Plumbing work is being done to tie the filtration system into the new booster pump, and then back out to the tanks. Additionally supplies are now on hand to begin installing a new backup oxygen system that will act as a life support system when pumps and filters need to be shut down to swap filter screens as well as providing for an emergency back up when river levels drop during scheduled maintenance and inspections on the Corps of Engineers' Baldhill Dam. Having these systems in place in both the Isolation Facility and Baldhill Culture Building will eliminate the need to bypass water past the filters and eradicate the risk of zebra mussels getting into culture tanks.



Automatic backflush filter

### Hatchery Quarters



Paul Drabus showing off his drywall skills

In response to water damage some years ago, the basement of one of the residences underwent a partial demolition to make repairs, however repairs were stopped half way through and sat idle until this winter. Staff finished demolishing the basement and replaced all the sheet rock throughout the basement including the rebuilt stairway. New lights were also installed where previous lights were removed and nothing put back into place. New windows for the house are on order to upgrade and improve efficiency. In addition, the bathroom is



Basement stairwell

also being remodeled. Decking has been ordered to have hand to replace the rotting deck on another residence on station when weather and time allows.

## Hatchery Production Summary (Intensive Culture)

Station:	Period Covered:					October 1, 2019	Through:			December 31, 2019			
Species/Strain and Lot Number	Fish on Hand the Last Day of the Period					To Date This Fiscal Year						Survival from 1 <sup>st</sup> Inventory	
						Weight	Feed Expended		Fish Shipped				
	Number	Weight	Length	D.I.	F.I.	Gain	Pounds	Cost	Number	Weight	Conversion		
RBT-SSD-19-ENN	56257	25341	10.88	0.43	0.97	11729	16215	\$9,891.15			1.38	99.8	
RBT-SSD-20-ENN													
BNT-PRD-18-SAR*	12864	4695	9.75	0.34	1.09	604	4150	\$4,853.70			6.87	67.9	
BNT-PRD-19-SAR													
RBT-HCD-18-WY	14540	6891	11.05	0.44	0.98	2934	4200	\$2,562.00			1.43	93	
<b>Totals/Averages</b>	<b>83,661</b>	<b>36,927</b>				<b>15,267</b>	<b>24,565</b>	<b>\$17,307</b>	<b>0</b>	<b>0</b>	<b>1.61</b>		

### Hatchery Complex Personnel

Employee	Functional Title	Grade
<i>Robert Holm</i>	<i>Project Leader</i>	<i>GS-13</i>
<i>Jerry Tishmack</i>	<i>Fishery Biologist</i>	<i>GS-11</i>
<i>Sean Henderson</i>	<i>Fishery Biologist</i>	<i>GS-11</i>
<i>Shawn Cole</i>	<i>Fishery Biologist</i>	<i>GS-7</i>
<i>Toni Ganje</i>	<i>Administrative Support</i>	<i>GS-7</i>
<i>Ben Oldenburg</i>	<i>Fisheries Technician</i>	<i>NDGF</i>
<i>Aaron Von Eschen</i>	<i>Assistant Project Leader</i>	<i>GS-12</i>
<i>Vacant</i>	<i>Biological Technician</i>	<i>GS-5</i>
<i>Paul Drabus</i>	<i>Maintenance Worker</i>	<i>GS-7</i>

No personnel changes this month. Waiting to fill the vacant biological technician position at Valley City NFH.