

## Presidents Blog

October 2021

Greetings NCD!

The first presidents blog of my tenure. I was a little conflicted on how to approach the presidents blog and the direction I should take. Formal or informal, business or business casual, or just some airing of grievances (*"because I have a lot of problems with you people"* – Frank Costanza). After some consideration, I think my blog will showcase the different activities fisheries biologist are fortunate enough to take part in during the year. Well, in some cases, less fortunate. I know the duties I perform as a biologist and those I was expecting when I finished school did not coalesce! Think of this as a year in the life of a South Dakota Biologist 😊. Hopefully, some will find it interesting and maybe a little educational. But at the very least, entertaining (lots of pictures). I hope students find this particularly interesting as an in-depth look into the workings of a fisheries biologist! Beware of what you are signing up for! Throughout the year, I will be asking for some responses to blog posts (which may just end up in the spring Mainstream issue).



In Central South Dakota, fall means firing up the salmon spawning station! I know what you are thinking, salmon in South Dakota? But that's right, North and South Dakota (and Montana) have had salmon in their Missouri River reservoirs since the 1980's! Most of these fish are Chinook Salmon but recently South Dakota has begun dabbling with Atlantic Salmon as well. And spoiler alert; there is talk of Kokanee! The tailraces of these reservoirs have also seen many different trout species – Rainbows, Browns, and Cutthroats have all found a home in the cold tailraces of the Dakotas! All this in a state that has NO native salmonids! Every fall we dust off the salmon ladder (by dust I mean remove old seals with wire brushes and re-calk the ladder joints – quite the pain), wire up and push the irrigation pumps into the lake (with giant pay loaders and tractors), and work as plumbers (and rodent exterminators) for a few days getting the inside of the spawning station watertight. It is a sight to see on the prairie!

It is amazing the different "hats" that fish biologist wear! Spawning, rearing, monitoring, research, education, outreach, renovation, construction, plumbing, electrical, public speaking, angling (that's right, we still get to use the ol' hook and line to sample some fishes!), lots and lots of computer time, and many more activities I couldn't think of on the spot. I am asked quite often by students how most of my time is spent as a biologist. The quick answer is behind a computer. BUT, my time allocation shifts appreciably from season to season and year to year so that becomes a very difficult question to answer. We are continually asked to accomplish different tasks to provide new and better experiences for our anglers and better resources for populations. For biologists out there, as I write these blogs and showcase different South Dakota activities each month, I want you to think about your duties in your current position and how these differ from the expectations you had when you were a student! I say this as I am about to head out in a couple weeks to help band hawks during their fall migration. This isn't a part of my normal work duties but something that sounds fun and terrifying – something I NEVER expected I would be doing when I was in school!

Remember that NCD award nominations will be due soon. Please take the time to nominate deserving individuals and groups. We all know folks that have made substantial contributions to the fisheries field, please consider showcasing those contributions! The award winners will be honored at the Midwest Fish and Wildlife Conference to be held February 13<sup>th</sup>-16<sup>th</sup> in Des Moines, IA. I hope to see many of you there! Until next month, enjoy the cooling weather, autumn colors, and time in the field!



Mark Fincel

President NCD-AFS



Placing the different sections of irrigation pipes and bolting the section together and pushing the whole works into the lake. The pumps sit on the bottom of the reservoir and push thousands of gallons of water per minute through the spawning station. That's me on the left checking 400ft of cable for abrasions or cuts that could short out the pumps.



Here, we finished prepping the ladder and are adding the weir plates for ascending salmon.



Here is the ladder after we started up the pumps and are pushing a little water. When both pumps are running full speed, about twice as much water will be running down the ladder than what is currently seen.





The results of spending a few days getting the station running – Salmon start ascending the ladder and we start spawning fish at the beginning of October.

Once the Salmon have moved up the ladder, we sort the fish, place them in their respective holding raceways, and move them into the spawning building when we are ready.



We move about 25 fish at a time (3-400 lbs) with the help of an electric winch. The fish are dispatched in bubbled CO<sub>2</sub> prior to spawning.

Individual male milt is held in containers on ice until used to fertilize eggs. We try to use a 1:1 male to female ratio for fertilization.



We use compressed air to push the ripe eggs from the females. The eggs and milt are mixed, and boom, little baby salmon ready to stock the following year.