

Winnebago System Lake Sturgeon Spawning Assessments 2012

Post-Season Synopsis

Ryan Koenigs, Winnebago Sturgeon Biologist, April 27, 2012

The 2012 sturgeon spawning run will go down in history as a record breaking event! Well above average water temperatures in March led to sturgeon spawning earlier than ever documented, with the first fish being tagged in New London on March 21, 2012. Previous to this year, there had never even been sturgeon spawning documented in the month of March. The record breaking did not end there though, as the last fish handled on March 10, 2012 was an 87.5" female lake sturgeon that was estimated to weigh 240 pounds (photo insert).



This fish has gained interest world-wide and is the largest lake sturgeon ever handled on the Lake Winnebago System. We estimate that she is roughly 125 years of age and has been evading spearkers for 80 years. There is no doubt that spearkers are drafting plans to hopefully harvest this monster that would have broken the current state record by almost 30 pounds if speared during the 2012 winter spear fishery. An interesting tidbit about this fish is that she had previously been PIT tagged in 2004. At that time she was 84" long and was one of the first fish that we surgically implanted a sonic tag into. Unfortunately the tags that we were using at that time had a much shorter battery life than

the 10 year tags we currently implant in sturgeon, and thus the tag was no longer active to record the migrational movements of this fish within the last year.

Another great accomplishment in 2012 was that through our cooperative efforts with the Menominee Indian Tribe, we were able to document sturgeon spawning at Keshena Falls for the first time in over 100 years. Through fish transfers conducted during three different time periods within the last year (September and October 2011 and April 2012), we were able to release 100 sturgeon into the upper Wolf River on the Menominee Indian Reservation. We are currently in an agreement to transfer 100 sturgeon per year for the next 10 years in attempt to restore sturgeon spawning to native spawning sites located within the reservation. The fish that were transferred within the last year were a mix of males and females and were mostly gravid fish that would spawn during the 2012 spawning run. All of these fish were tagged with PIT tags, the same microchip tags that are used to mark sturgeon on the Winnebago System, and 73 of the fish were surgically implanted with sonic tags that would allow us to monitor the migrational movements of these fish for 10 years. This is truly a monumental event that should not be overlooked.

In addition to the shattered records, the 2012 sturgeon spawning run was a huge success, mainly due to the hard work and dedication of our DNR crew and volunteers. In total were able to handle 1,762 lake sturgeon over a four week period that included a 10 day stretch where the fish had us guessing when they were going to start spawning again. However, like they always do, the fish came back into the rocked shorelines of the Wolf River and began spawning once again. Luckily for our crew we were able to enjoy Easter ham with our families before tagging operations began at Shawano Dam, the most important spawning site to our tagging program due the large concentration of female sturgeon that spawn here. Of the 1,762 fish handled: 885 were newly tagged males, 639 were recaptured males that had previously been tagged, 187 were newly tagged females (another record), 49 were recaptured females that had previously been tagged, and two were of unknown sex. Adult male sturgeon ranged in size from 36.8 to 72.3 inches with numerous fish being >70", while adult female sturgeon ranged in size from 52.2 to 87.5 inches with numerous fish being >77". We were also able to recapture a "white sturgeon" at Bamboo Bend in Shiocton. This was not a true white sturgeon, as this is a completely different sturgeon species, but rather a lake sturgeon that lacks pigment expression relative to other fish and thus is lighter in color. This particular fish already had been tagged at Bamboo Bend during spawning assessments conducted in previous years.

Table 1. Number of fish handled during 2012 spring spawning assessments.

Newly Tagged Females	187
Recaptured Females	49
Newly Tagged Males	885
Recaptured Males	639
Unknown	2
Total	1762

The data that are collected during spring spawning assessments are the core of our sturgeon management program. Fish harvested during the winter spear fishery are investigated for the presence of tags, and the data collected spring tagging assessments and the winter spear fishery are used to estimate how many male and female sturgeon are present in the population. Further, juvenile female, adult female, and male sturgeon harvest caps for the winter spear fishery are established to regulate the harvest and ensure that <5% of the population is harvested in each year (a harvest of <5% results in a sustainable population, while harvests >5% increase the risk of over-harvest). We currently have the largest naturally reproducing lake sturgeon population in the world and the management program that is currently in place works to ensure that our sturgeon population will remain healthy and robust for future generations to enjoy.

Even without the outstanding accomplishments, the 2012 sturgeon tagging season was of particular importance to me. This is because it was the first spring that I was working in my new position as the Winnebago sturgeon biologist. I am honored to be

working in this position and consider myself very lucky to be part of the biologist lineage that includes the likes of Dan Folz and Ron Bruch. I have been fortunate enough to work with and learn from these two outstanding biologists over the last 4+ years and have developed a bond that could not be broken (to the point that people jokingly say that Dan



is my Grandpa and Ron is my dad, see picture below). Anyway, I look forward to working with the people around the Lake Winnebago System to enhance our sturgeon population and fishery and I thank all of you for your interest and support in our outstanding resource!

Good luck fishing!

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