History of the Upriver Lakes Fishery and 2018 Season Wrap Up

Ryan Koenigs, Winnebago System Sturgeon Biologist, 16 February 2018

The current lottery system format for the Upriver Lakes sturgeon spear fishery was instituted in 2007. Each year 500 applicants are drawn from the lottery and authorized approval to purchase an Upriver Lakes spearing license. Winning applicants are selected based on a preference point system where applicants with the most preference points are given priority when awarded tags. Interested spearers have two options, they can purchase a preference point directly or they can apply for an Upriver Lakes permit. Applicants that were in the drawing but were not drawn receive a preference point. 2018 marked the 12th season under the lottery format and during that time the fishery has been very successful and grown in interest.

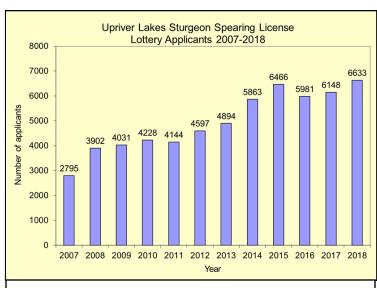


Figure 1. The number of applicants for the lottery sturgeon spear fishery offered on the Upriver Lakes (2007-2018).

In 2007 there were 2,795 applicants for Upriver Lakes fishery meaning that an applicant could expect to get a tag every 5-6 years. Interest has grown over the past 12 years, to the point that there were 6,633 applicants for the 2018 The increased interest is mainly attributable to the high success rate relative to Lake Winnebago. This season marked the 12th lottery fishery on the Upriver Lakes (2007-2018), and the average success rate those seasons has been of license holders 61.2% harvesting a fish, compared

to 9.4% on Lake Winnebago during that same time frame. One reason for the higher success rate is the shallower water on the Upriver Lakes. Lakes Butte des Morts, Poygan, and Winneconne are composed mostly of shallow water habitat that is 4-7 feet deep with some areas being slightly deeper. Therefore, water clarity does not play as much of a factor in these shallower lakes relative to Lake Winnebago which is deeper. The Upriver Lakes also serve as overwintering grounds for gravid fish that would spawn that spring, while also being a nursery area for immature fish. Thus, the Upriver Lakes harvest contains a higher percentage of smaller fish and adult fish with black eggs (females) or fully developed testes (males).

Regardless of the reason, the Upriver Lakes spearing season has been very successful and 2018 was no different. The season lasted just 4 days until the adult female harvest cap was triggered. The fishery was very close to going an extra day, but the 95th adult female (which hit 100% of the cap resulting in immediate closure) was registered at 1:56 on Tuesday afternoon. The 4-day season was slightly shorter than the average 5.2

2007	6	313	64.5%
2008	4	300	62.0%
2009	5	275	56.1%
2010	6	312	63.2%
2011	10	335	68.4%
2012	2	242	48.6%
2013	4	261	53.2%
2014	3	341	72.7%
2015	5	288	59.5%
2016	7	307	63.4%
2017	16	295	61.1%
2018	4	297	61.4%
Average	6.0	297.2	61.2%

Table 1. Season, season length, number of applicants, number of sturgeon registered, and success rate during Upriver Lakes spearing seasons (2007-2018).

75.6" and speared by Benjamin Berger.

I will be sure to include more information about the Upriver Lakes fishery in the

final report once the data have been entered and tabulated. For now though, I would summarize the Upriver Lakes season as similar to most other past seasons. The season was short, but offered spearers a great opportunity to see fish and experience success. I know of multiple youth spearers that were transferred Upriver Lakes tags this season and used those tags to harvest their first career fish. I love seeing youth get engaged in the sport and there is no better way to get hooked then to feel the rush harvesting that fish for the first time.

days (range 2-16) since the lottery fishery was implemented. The 297 fish harvested was right on par with the average of 297.2 fish/season and the 61.4% success rate was very comparable to the average success rate as well.

The length-weight data from the Upriver Lakes season has not been entered and tabulated yet, but we do know some general information. For starters, the registration Critter's station at Winneconne lead the way with 128 sturgeon registered, while the stations at Indian Point and Boom Bay registered 85 and 84 fish respectively. There were 10 fish registered that were 100 pounds or larger, which equated to 3.4% of the harvest. In fact, the largest fish harvested this season (as of February 16) was registered on the Upriver Lakes on opening day. That fish was 155.6 pounds,

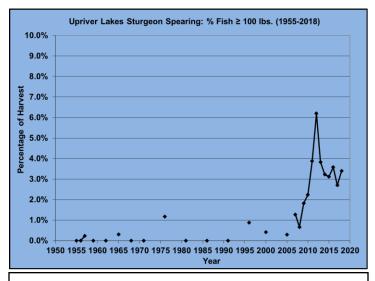


Figure 2. Percentage of the Upriver Lakes sturgeon harvest that were 100 pounds or larger (1955-2018).

History of Upriver Lakes Sturgeon Fishery:

Most Winnebago System sturgeon spearers may be aware of the current lottery fishery held annually on the Upriver Lakes (Lakes Butte des Morts, Winneconne, and Poygan), but may not know the history behind the fishery and events that transpired to create the fishery that we enjoy today. There has been an annual sturgeon spearing season on Lake Winnebago since the winter of 1931-1932, but it wasn't until 1952 that the first spearing season occurred on the Upriver Lakes (harvest of 200 fish). There was a setline fishery that preceded the spear fishery from 1932-1951; however, that season was abandoned due to concerns of illegal harvest contributing to overharvest of the stock, particularly younger, immature fish.

Annual spear fisheries on the Upriver Lakes took place from 1952-1957 with harvests ranging from 200-879 fish per year (average of 578 fish). Spearing seasons were then periodically held every 2-5 years between 1958-2005. The current harvest cap system was implemented in 1999 establishing system-wide harvest caps for the first time. The 2000 spearing season was the first trial run at an Upriver Lakes season under the harvest cap system, with the season only lasting two days and a total harvest of 2,516 sturgeon (347 from Lake Winnebago and 2,169 from the Upriver Lakes). Due to the high harvest in 2000, a 1 day season was set for the Upriver Lakes in 2005, a season in which spearers harvested 345 fish. 2005 was the last spearing season on the Upriver Lakes before the lottery fishery was implemented in 2007.

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