



# WINNEBAGO WALLEYE NEWS

INFO FROM THE WINNEBAGO SYSTEM

May 2005

## Spring Water Levels Appeared Adequate for 2005 Hatch

Water levels on walleye spawning marshes along the Wolf River this spring appeared to be adequate for walleye to pull off a hatch for 2005. A fast snowmelt, due to uncommonly warm temperatures in early April, caused the river to rise and quickly spill over its bank, flooding marshes (Fig. 1). On the upper Fox, levels were below their historic average (Fig. 2). They reached bankfull but not much more. However, thanks to some of the improvement work done by Walleyes for Tomorrow, some marshes did have reasonable flow over them, and likely there was some production of fry off of these and other marshes along the upper Fox. This work is important, as we seem to consistently be having springs with lower water levels than historically. Chalk it up to global warming, local climate changes or whatever.

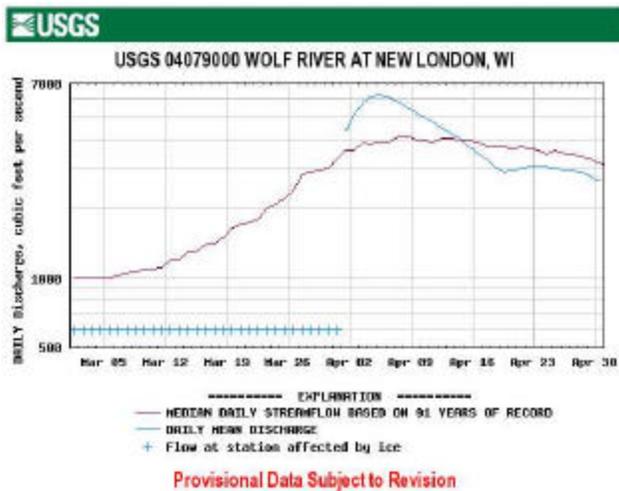


Figure 1 2005 vs. Historic spring water levels, Wolf R., New London.

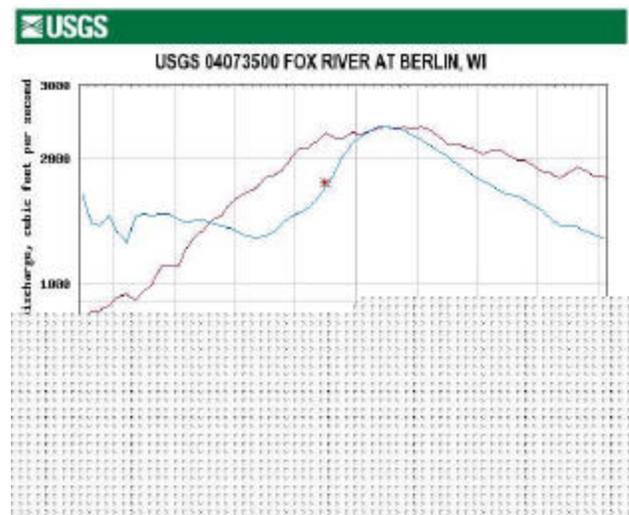


Figure 2 2005 vs. Historic spring water levels, Fox R., Berlin.

Water temps rose and spawning was early and fast. Walleye on the Wolf had started spawning by April 5<sup>th</sup> (or earlier). Spawning peaked on the 9<sup>th</sup> and was over by the 11<sup>th</sup>! This is almost a week earlier than in a typical year. It's fortunate that we had that unseasonably warm weather during spawning. With the sun heating up the shallow waters flowing over the marshes, it's likely the eggs developed and hatched in only 8 to 12 days. It is likely that at that time there was still enough water and flow to carry the newly hatched fry off the marshes and into the river.

## Smaller Males, Larger Females Dominate Spring Sampling

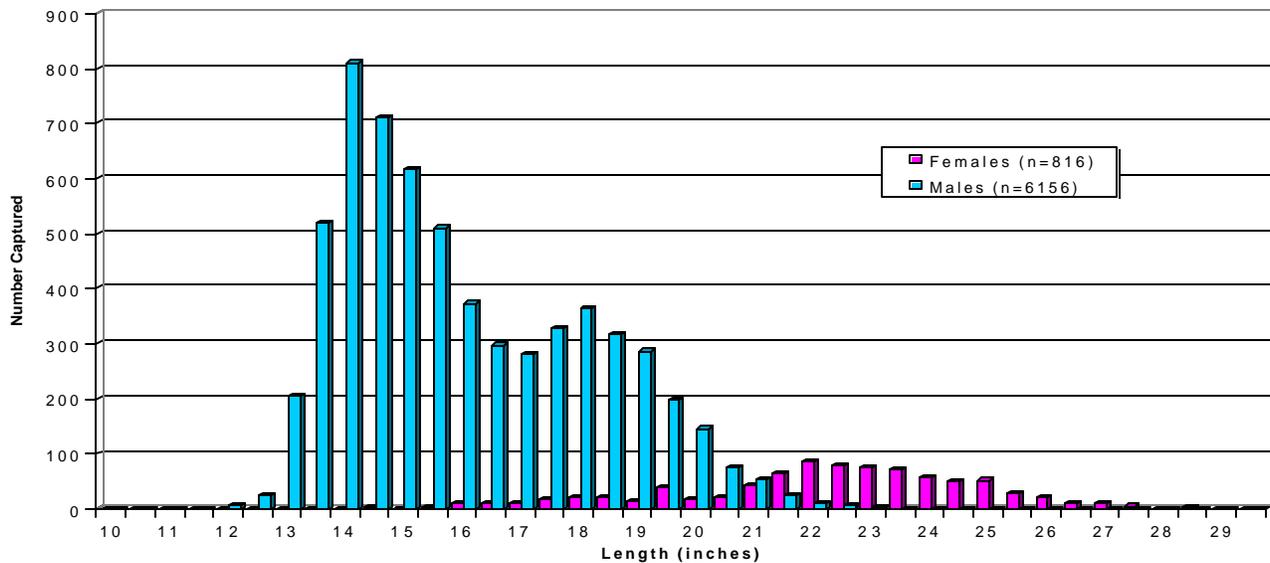
Good spring waters levels enabled DNR tagging crews to again capture large numbers of walleye. A total of 7229 walleye were handled this past spring from around the Winnebago system. These were measured, tagged and released. Weights and spines for aging were taken from a representative sample. The breakdown of waters and by sex is shown in Table 1.

**Table 1. 2005 Walleye Tagging Summary Numbers**

	Male	Female	Unknown	Total
<b>Upper Fox River</b>	13	5	1	<b>19</b>
<b>Wolf River</b>	6157	816	97	<b>7070</b>
<b>Lake Winnebago</b>	124	16	0	<b>140</b>
<b>Totals</b>	6294	837	98	<b>7229</b>

As the table shows, the fish from the Wolf again dominated the sample, and males from the 2001 yearclass ruled the marshes. More than half of the males sampled were less than 15.5 inches in length! Males ranged in size from 12.0 to 23.2 inches, with an average length of 16.1” and weight of 1.6 lbs. This is almost identical to last year. The mode or most frequently occurring length was 14.2”, perfect size for anglers braving the not –so-cold looking for a fresh meal of walleye. However, not all the males were small. One quarter (25%) of the males were 17.5 inches or larger. Their frequency distribution is shown in Figure 3.

## Walleye Length Frequency Winnebago System - Spring 2005



**Figure 3. 2005 Spring Walleye Length Frequency, by sex, Winnebago system.**

A total of 837 females were tagged in '05, ranging from 14.9 to 28.6 inches in length (Fig. 3). Their mean length was 22.4” and the average weight was 4.64 lbs. This is down slightly from last year when the averages were 22.7” and 5.17 lbs., but nothing significant. The mode for females this past spring was 22.2 inches, a good size walleye by any angler’s yardstick. Similar to last year, 50% of the female walleye were larger than 22.5” and 21% of the females were 24” or greater. While males from the 2001 yearclass were present in great numbers, females from that yearclass were still mostly absent from the marshes this spring, evidenced by the fact females smaller than 18.5” made up less than 10% of the total number of females sampled. These 2001 females need one more summer of growth to mature. In addition to continued good numbers of larger fish, those 22 inches and larger, we should see a significant influx of smaller females up on the marshes in 2006 as females from the large 2001 yearclass make their way upstream as 1<sup>st</sup> year spawners.

## Turn in Your Tags!



Anglers are reminded to notify their local DNR office if they catch a tagged fish. Walleye on the Winnebago system are tagged with a small plastic “spaghetti” tags that are inserted into the fishes back near the 2<sup>nd</sup> dorsal fin. After a year or 2 these may be covered with algae making them more difficult to see. Be sure to watch for them. There are two pieces of writing on the tag. One side is an address to send the tag to. The other is a number unique to that fish. It has 5 digits and is preceded by a “W”, and is like a serial number for that fish **The W##### is the number that we need when you report a tagged fish.** For fish caught on the Winnebago system, you can call the DNR office in Oshkosh at 920-424-3050, e-mail the info to Doug Rinzel or Kendall Kamke (email addresses are located on the DNR website) or send the tag to us through the mail. Be sure to include when and where you caught the fish, if you kept it or released it (with the tag still attached!) and its size. You will get info back on when and where the fish was tagged, it’s size at tagging, the length of time since it was tagged and the distance it traveled.

**THANK YOU**

Growth rates in the Winnebago system remain good. Walleye reach 15 inches at about age 4. After that, male’s growth slows but females continue and reach 20” by age 7 and 25” at about 10 or 11 years of age. Growth for walleye from 2004 is shown in Figure 4.

## Mean Walleye Length at Age Winnebago System - 2004

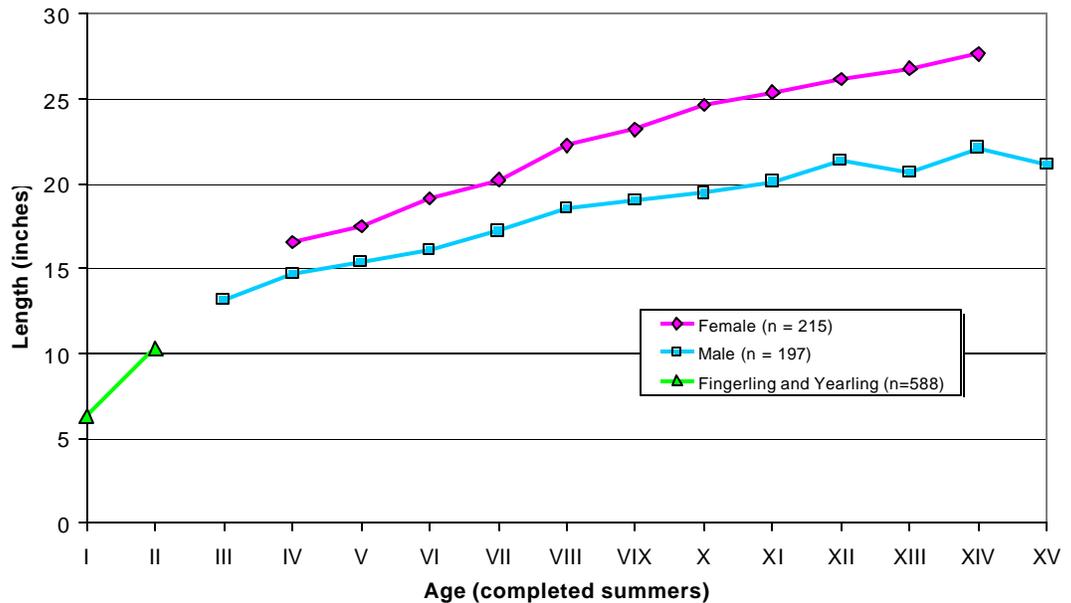


Figure 4 Walleye growth chart for Winnebago system, 2004

## Temperature Swings Stymie Sauger Efforts

Fluctuating water temperatures on the north end of Lake Winnebago hindered our netting assessment and egg taking effort this past spring. A total of 4 double-ended Fyke nets were set on and among the sauger spawning reefs in the northeast corner of the lake near High Cliff. From the 1<sup>st</sup> lift, there were hard, ripe and spent female sauger. This was unusual. Typically, at first all the females are hard, there is a peak period of ripe fish trailing off to mostly spent fish. In addition, catches were very low. A total of only 97 fish were netted, consisting of 80 males and 17 females. Because of these small catches the nets were pulled after only 6 days.

A total of 20 oz. of eggs were collected, or about 150,000 eggs. These were taken to the Walleyes for Tomorrow (WFT) portable hatchery in Oshkosh, where about 50% hatched. Of these, 50,000 4-day old fry were marked with OTC and stocked into Lake Winnebago on April 28 and 30<sup>th</sup>. (Kudos to WFT and Otter St. for the *vastly* improved fry collection system at the hatchery. A re-design and new tanks worked GREAT!) An additional 30,000 4-day old fry were transferred to the DNR hatchery at Kettle Moraine Springs where they will be reared to fingerling size, fin-clipped and stocked back to the lake this fall.

After an analysis of this past season by resident expert “Sauger Bob”, two things became clear. First, analysis of past years water temperature and sauger netting

data showed that sauger consistently spawned at temps between 50° F and 55° F, regardless of the date. Recently these temps have occurred as early as April 16<sup>th</sup> or as late as April 25<sup>th</sup>. Temperature data from this year showed that temps rose quickly to 57° F, than dropped off and rose again. These seesawing temps confused the biological clock of the sauger and caused odd maturity patterns. This temperature pattern has occurred before. In hindsight, if we had left the nets in longer it's possible that we would have been able to collect more eggs, as ripe females likely would have trickled in over a long period. However, this requires a much lengthier time commitment from the numerous volunteers working on the project for speculative gains at best.

## Habitat Work Around the Winnebago System Continues

This past winter Walleyes for Tomorrow and Shadows on the Wolf, in cooperation with DNR, completed a number of habitat projects to benefit fish (and in turn anglers) around the system. On the Wolf, WFT completed a small dredging project that will increase the volume of spring water flowing down through the Colic Slough and Jenny Bayou spawning marshes. Over the years a sand bar had formed across the inlet, restricting the flow. Working with the landowner, a permit was received and the sand was dredged out. In addition to this work, WFT also mowed grass and shrubs on the marsh below Larson's Ditch to keep the vegetation in appropriate grasses and sedges.



**Figure 5 Water Inlet to Colic Slough prior to dredging.**

Shadows on the Wolf, based in Shiocton, has been busy as well. Last year they completed work on clearing the outlet on a small 15 – 20 acre marsh  $\frac{3}{4}$  miles downstream from Spoehr's marsh north of Shiocton. Shadows also completed a large project many years in the making. Just south of Leeman, an inlet to Allen's Bayou was re-opened after being closed for decades. This inlet was a major water source for Winterfeldt's Bayou, located about 1 mile downstream. I was there this spring and there was a significant volume of water that was again flowing down to the marsh, and at the marsh, there was more water than I've seen in years. The project appears to have worked precisely as planned. Another excellent club project!



**Figure 6 Underwater view of newly placed Sauger Reef**

Finally, the East Shore chapter of WFT put in 7 more sauger spawning reefs on the north shore of Lake Winnebago early in 2005. These reefs total 14 to date and go west from the Lower Cliff landing. They are located in 6 – 10 feet of water. WFT also put in a number of habitat reefs again this year. There were 4 put in on the east shore from Quinney south about 1.4 miles, and 21 off the southeast shore NE of the Fond du Lac harbor. They show up on your fish locators, so give them a try. All of the reefs should have at least 6' of water over them at summer level.







