



**STATUS OF THE WISCONSIN RIVER
SMALLMOUTH BASS FISHERY - 2003
DELLS DAM TO LAKE WISCONSIN
(MWBC 1179900)**

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Summary

Information gathered in 2003 from volunteer angler caught and tagged smallmouth bass has shown a quality fishery exists in the 36 miles of the Wisconsin River from the Dells Dam downstream to Lake Wisconsin. It was found that of 585 angler caught fish over 10", 29% were 10-13", 36% 14-15", 26% 16-17" and 9% 18"+. A slightly greater proportion of 14-15" fish and lesser proportion of 16-17" fish (~10%) exist in the lower 1/3 of the river, from Portage to the lake, which is more accessible. Lengths of smallmouth from four bass tournaments during 2003 with a 14" minimum size limit noted 42% 14-15", 48% 16-17" and 10% 18"+. Most of the tournament smallmouths are known to be "river" fish. A comparison is made to similar size groups of DNR electro-shocked fish both on the lake and the river just below the Dells Dam.

To date, movement data is limited on the 317 angler tagged bass and 196 tournament released fish, however some of the tournament released fish were noted to have moved as far as 9-13 miles up-river, just downstream from Portage, in less than 16 days. More tagged fish and more time are needed to better assess both natural and tournament released movement.

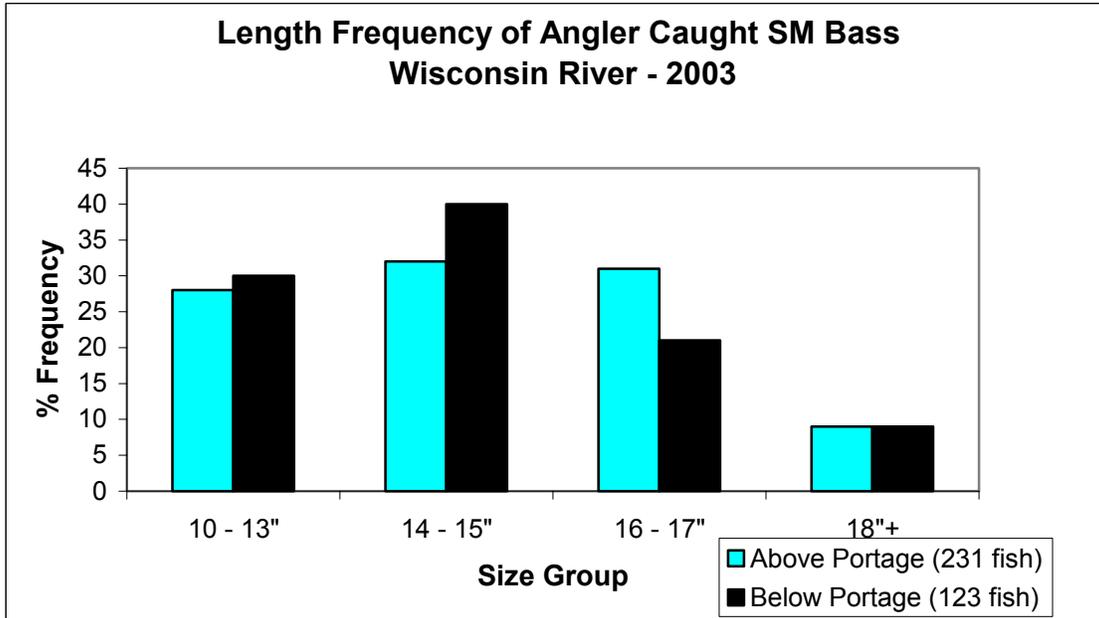
This data is invaluable to determine trends and provide for future management decisions for this smallmouth fishery. Will its fairly inaccessible environment continue to preserve its quality or will such factors as increased fishing pressure, ie. jet boats, shoreline development and increased downriver tournament transport of fish to lake weigh-in sites change its future status?

INTRODUCTION

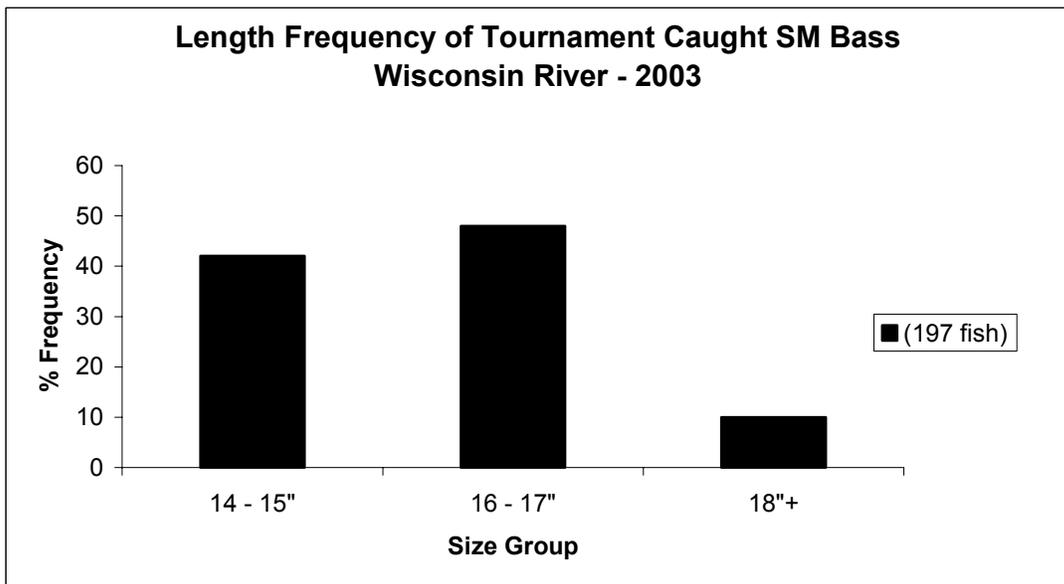
The 36 mile stretch of the Wisconsin River from the Dells Dam downstream to Lake Wisconsin (Dekorrra Park, 3 miles below I-90) is known to support a quality smallmouth bass fishery. A 14" minimum size limit and 5 daily aggregate bag with largemouth bass has existed since 1989. The majority of this area is fairly inaccessible to standard fishing boats. Only paddle craft and jet prop boats can navigate the shallow, shifting sand riverbed during typical summer - fall water levels. Therefore less fishing pressure occurs than on the more accessible waters of Lake Wisconsin. However, during the past few years increased angler use of this area may be occurring and Lake Wisconsin based bass tournaments are noting more anglers fishing stretches of the up river and bringing the river smallmouth downstream to the lake for weigh-in and release. This study was undertaken to document the current status of the river smallmouth and through tagged fish observe both natural movement and movement of tournament released fish.

DATA

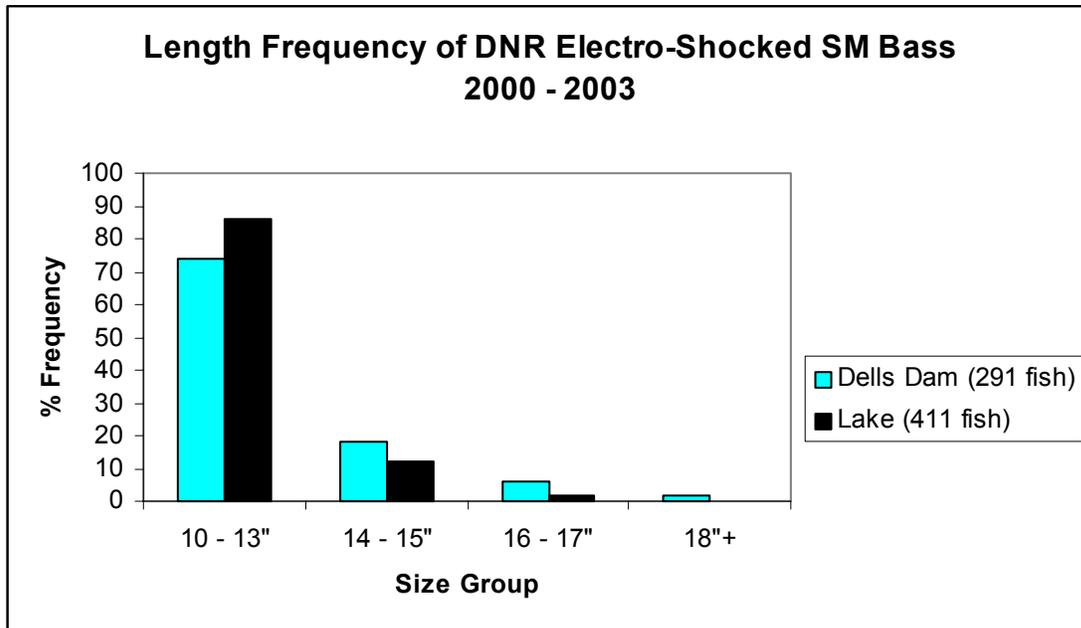
LENGTH FREQUENCY



Length information was collected on the river smallmouth by volunteer anglers who recorded lengths of all fish caught over 10" above Portage (22 miles) and below (14 miles), during the summer and fall of 2003. Similar percentages for the two areas were noted for fish under 14" (~30%) and of the larger fish, 9% 18" +. The area downstream from Portage, which is more accessible, showed 8% more 14-15" fish and 10% less of the 16-17" size group.



Most of the tournament smallmouth are known to have been caught in the river, above the lake. Length measurements taken at four tournaments (June 7 - August 8) were obtained on 197 fish, 42% 14-15", 48% 16-17" and 10% 18"+.



Anglers target larger fish, as compared to DNR electro-shocker surveys which sample shoreline waters less than 5' deep. Shocking most of the shallow river is not possible. Annual DNR night shocking surveys have been conducted on six lake transects totaling 14.6 miles of shoreline and two river transects of 2.9 miles immediately downstream of the Dells Dam since 1993. Slightly higher percentages of larger fish are noted from the river below the Dells versus the lake.

MOVEMENT

Although a few fish were tagged in the fall of 2002, beginning in May 2003 three anglers tagged 317 smallmouth, 229 in the Dells to Portage stretch and 88 from Portage down to the lake. In addition 196 smallmouth bass were tagged from four tournaments with 136 released near the weigh-in site (Whalens Grade-Tipperary Point) and 66 transported about six miles upstream to Hookers (1.7 miles above I-90). Tag location and recapture locations were divided into three sub areas above Portage and four sub areas below.

Of the recaptured angler tagged fish, 8 above and 14 below Portage, all but two remained within the immediate sub area in which they had been tagged. Many recaps occurred within 15 days and most within 30 days. Of the two which moved outside their tagged sub-area, both were tagged in the Pine Island to Hwy O sub-area and recaptured upstream in the Hwy O to Dells Dam zone. One was recaptured on October 25 and had been at large for 59 days. The other had been tagged in the fall of 2002 and recaptured 193 days later on April 13. Might these fish have moved to the deeper water at the Dells to overwinter?

Tournament released fish demonstrated varied movement. Of 12 fish that were recaptured, four turned up in the release area, four moved down into the lake (3 to Okee, 2 miles and 1 to Wiegands Bay, 8 miles) and four moved upriver as far as the Baraboo River-Portage sub area (9-13 miles). These fish also were at large less than 20 days.

DISCUSSION

QUALITY OF THE FISHERY

The 'smallie' fishery of the river between the Dells Dam downstream to Lake Wisconsin contains a good portion of quality size fish. The 16"+ fish from random angler caught fish (>10") above Portage tallied 40% and below Portage 30%. Both areas contained 9% greater than 18". Of the tournament measured fish, less than half were of 14-15" (42%) and 10% were over 18". Would a higher minimum size limit provide an even greater proportion of larger fish? It would, if the growth rate would not decline with the increase in numbers of smallmouth. Reduced growth allows for additional natural mortality over time. The current growth rate on the smallmouth has not been checked. Also, a higher size limit will target harvest at the size limit (ie. 18"). Therefore it is possible to reduce the number of fish at the size limit from that which presently exists. Another issue is whether anglers are satisfied with the current fishery versus a trade-off for more large fish associated with a catch and release fishery? Tournament anglers would disfavor a higher size limit unless a size limit exemption can be allowed for tournaments. Monitoring of smallmouth length frequency should continue for the purpose of noting change in the status of the fishery.

MOVEMENT

With only 513 smallmouth tagged in 2003 and less than 30 days between most tag and recapture events, the data currently provides limited information. More tagging and recapture events are needed to learn about both natural and tournament released movement. A recent synopsis on movement of bass tournament released fish found limited evidence that released fish return to their sites of capture (Gene Wilde. 2003. Dispersal of Tournament Caught Black Bass. Fisheries. vol 28. no 7. p 10-15. www.fisheries.org). It is noteworthy from this study that some of the tournament released SM Bass moved 9-13 miles upriver in less than 30 days. However location of the tourney caught fish is not known.

ACKNOWLEDGEMENT

This information would not have been possible without assistance from the following individuals and organizations. Three anglers, Ron Barefield, Tim Willinganz and Ryan Larson were responsible for measuring, tagging and releasing angler caught fish throughout the study area. Ryan also managed the database. In addition Mark Ripp and other members of the Madison BASS Club, coordinated by Steve Simer, kept length information on fish caught. Appreciation is also extended to the four bass tournaments that allowed DNR to obtain length data and tag registered fish.