

Proposal Aims at Establishing Self-sustaining

Trophy Musky Populations in Green Bay

GREEN BAY – Wisconsin’s effort to reintroduce Great Lakes muskellunge to Green Bay and the Winnebago system already has anglers catching trophy-sized muskies from those waters, and now state fish managers are proposing changes to keep the fishery thriving into the future .

Department of Natural Resources fisheries biologists would like to see the minimum size of musky that can be kept on the lower Fox River, upstream from the De Pere Dam and throughout the Lake Winnebago system rise from 34 to 50 inches.

Fish managers are also proposing to change the musky season opening date to later in May to afford more protection to spawning muskies and to be consistent with the northern musky season opener, which already applies to Fox River waters north of Highway 10.

Kevin Kapuscinski, fisheries biologist coordinating the reintroduction program, says that the proposed higher minimum size limits will make regulations consistent across the area where DNR’s trying to reintroduce the fish: Green Bay already has a 50-inch minimum size limit. Most importantly, increasing the minimum size will help protect these fish long enough to spawn and help increase the chances of establishing a self-sustaining population and thus, a diversity of predators.

The questions are featured in the April 10 Spring Fisheries and Wildlife Rules Hearings held in every county. All state anglers and hunters can attend the hearings and weigh in on proposed regulations.

“Our primary goal with the reintroduction program is to restore a self-sustaining musky population in the Green Bay, the Fox River and, and the Winnebago system; secondary goals are to increase the diversity of predators and provide a trophy fishery,” Kapuscinski says. “We’ve achieved the third goal -- producing a trophy fishery -- but populations are not self-sustaining. Increasing the size limit will improve our chances of achieving that goal.”

“We’ve learned that these fish are growing very fast and the 34 inch minimum is inadequate to protect them past one spawning event,” Kapuscinski said. “In some cases, they could actually be vulnerable to harvest before they spawn.”

Affording the fish protection so they can spawn multiple times is critical to establishing a self-sustaining population. It’s especially important because of the growing popularity of the fishery, he said.

DNR, with support from local fishing clubs, launched efforts to reintroduce Great Lakes muskellunge into Green Bay in 1989 and later expanded that effort into the Winnebago system, which is in the same basin.

“We have a lot of water for these fish and there’s also a lot of forage: both systems have gizzard shad which are really good forage fish so they grow fast,” Kapuscinski says. “The fish are at extremely low density because we don’t stock very many of them and they are also subjected to

less fish pressure because of the size of the bay and Lake Winnebago. They get the opportunity to get big, very big.”

Great Lakes muskellunge are native to Green Bay, but the fish were extirpated in the bay during the mid-1900s by over-fishing, pollution, habitat degradation, and interactions with exotic species. Passage and enforcement of the Clean Water Act starting in the early 1970s, followed by targeted clean up efforts in Green Bay, greatly improved water quality and allowed DNR to start the reintroduction effort, Kapuscinski says.

From 1989-93, fertilized muskellunge eggs from Michigan were hatched and raised at the Wild Rose State Fish Hatchery and stocked out at sites including the Fox and Menominee rivers and southern Green Bay. DNR gathered eggs from established broodstock waters of Long Lake in Waushara County during 1995-2004 and from the Fox River during 2004-2005. Musky were stocked at sites in the Fox, Peshtigo, and Menominee rivers, Sturgeon, Little Sturgeon, and Green bays, and the Winnebago system during 1995-2004

From 1989 through 2005, 121,330 fingerling and 2,921 yearling muskellunge have been stocked out. Anglers are now reporting catching large fish in the 45- to 50-inch range, and one angler reported to wardens he caught a fish he measured at 55 7/8 inches with a girth of 33 inches.

DNR electrofishing and fyke nets surveys have revealed other important information about the reintroduced fish. Green Bay muskellunge mature up to two years later than muskellunge in some inland Wisconsin lakes but grow faster than muskellunge sampled in eight lakes in Michigan, Minnesota, and Wisconsin. The muskellunge also achieve a more plump body size at a given length compared to most muskellunge sampled elsewhere throughout their range, Kapuscinski says.

“Our stocking efforts have been successful in providing a sport fishery with true trophy potential,” he says. “But we have no evidence that muskellunge are successfully reproducing. We hope the proposed changes that increase the minimum size limit and protect the fish during the spawning season will help increase the chances of achieving self-sustaining populations.”

Toward that end, DNR is also trying to broaden the genetic diversity of the fish stocked, developing plans with counterpart agencies in other states to import eggs from other Great Lakes populations.