

Good Habitat, Good Water Quality Key to Good Fishing



Mike Staggs, DNR Fisheries Director

Fishing is one of Wisconsin's most popular recreations: **1.4 million licensed anglers** fish 22 million days each year on our lakes and streams¹. It's important for our economy. In 2001, fishing was a **\$2.3 billion industry supporting 26,200 jobs and generating \$95 million in GPR taxes** for the state. Wisconsin is the second most popular destination for nonresident anglers, trailing only Florida.

Anglers come to Wisconsin because fishing is good here. Anglers **catch 49 million fish annually and keep 20 million**. **The vast majority of these fish come from natural reproduction resulting from good aquatic habitat.** Over 90 percent of Wisconsin waters are supported entirely by natural reproduction and do not need stocking.³

Studies show that fish populations sustain themselves best when the water quality and habitat are good. Some examples of recent studies:

- * Good naturally reproducing muskellunge populations have on average only 20% of their shoreline developed while poor muskellunge populations have on average 40% of their shoreline developed.⁴
- * Bluegill production is 2.5 times higher in lakes with no development versus developed lakes.⁵
- * Trout populations eliminated in watersheds with more than 11% imperviousness (a measure of building and paving in a watershed).⁶
- * Walleye populations exploded in Lake Delevan when whole lake ecosystem restoration completed.⁷
- * The amount of woody cover and aquatic plant growth for fish cover declines exponentially with the amount of shoreline development^{8,9}.
- * The amount of woody cover, aquatic plants, and bank cover is 30-600% higher along natural shorelines versus ripped shorelines, and 100-600% higher along natural shorelines versus seawalled shorelines¹⁰.

The bottom line is that good fishing in Wisconsin absolutely depends on having good aquatic habitat and water quality in every lake and stream. Construction of docks, riprap, seawalls and boathouses, dredging, filling, removal of aquatic plants and woody cover, and installation of more impervious surfaces are all things that can degrade aquatic habitat if not done properly.

If we destroy the natural shoreline habitat then fishing will get worse – and we cannot fix that situation simply by stocking or changing fishing regulations. If you want great fishing – then you have to protect fish habitat.

References:

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- ⁸ Impacts of lakeshore residential development on coarse woody debris in north temperate lakes. 1996. D.L. Christensen, B.R. Herwig, D.E. Schindler and S. R. Carpenter. *Ecological Applications* 6:1143-1149.
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