

Improving Fishery Habitats: Better Fishing for Roaming Shores Residents!

Many recreational fishers spend time preparing their skills and tackle box for a great day on the lake, but what about creating the right long-term conditions for a successful fishery? Managing a lake habitat is just as important as managing the fish population itself, particularly on a highly populated lake where common problems can occur.

- **Finding the right balance of aquatic plants** in a lake habitat is crucial to managing fisheries. Aquatic plant beds provide shelter and spawning areas for desirable fish species, with an estimated optimal plant cover for northern pike to be greater than 80%; 25 to 50% for perch; 15 to 30% for bluegills; and 40 to 60% for largemouth bass. In excess, normally-beneficial pond weeds shade out large areas of the lake, preventing algae and low-growing plants from photosynthesizing and releasing healthy levels of oxygen. Creating a vegetation management plan is a good first step in
- **Shoreline erosion contributes to increased sediment levels** in the water column, which blocks sunlight necessary for aquatic plant health. This is often remedied by Lakescaping, a term used for planting native grasses and trees around shore to anchor the soil and stabilize banks. Another option for strengthening eroding shoreline is to implement jetty rocks or riprap which absorb repetitive wave action and protect against sediment disturbances from fluctuating water levels. With this problem in check, lake vegetation is able to flourish as a valuable resource for fish populations.
- **A green tint in the water may indicate excess nutrients** in the lake, which is another contributing factor to poor fish habitat. Microscopic plants called phytoplankton thrive in water rich in nitrogen and phosphorus. As blooms of these organisms die off seasonally, oxygen levels in the water drop to dangerous levels resulting in poor fish health and lake-wide fish kills in extreme situations. Reducing and redirecting sources of excess nutrients is the most important preventative measure to this problem, and can be solved by servicing your septic system regularly and cutting down on lawn fertilizer use. A community commitment to using phosphate-free detergents and cleansers is another proactive step in caring for your fish habitat.

A happy community of lake residents also includes fishery habitats, but maintaining a natural balance of these factors is no easy task. By conducting regular vegetation surveys and water quality studies residents can detect early disturbances in their community.