

Introduction

This bulletin is primarily for the present or prospective owner of a Michigan pond where the main goal is sport fishing—for the owner, his or her family, and a few friends. It should also be useful where the pond is for public fishing, or where the pond has some other primary use such as for waterfowl, swimming or irrigation, and angling is a side benefit.

The emphasis is on pond management under Michigan conditions, but much of the information should apply to other northern U.S. areas. Many other writings on pond fisheries pertain to conditions in states with milder climate and are unsuitable for Michigan.

Our objective is to help owners of existing ponds achieve more satisfactory fishing, as well as to aid aspiring owners in foreseeing pond potentials and problems before building or buying one. How a pond is situated and constructed strongly affects the success of management.

The Resource

Many Michigan land owners want ponds of their own for fishing, although they have free access to fishing in a greater offering of fresh waters than may exist in any other U.S. state: four Great Lakes fronting on some 3,200 miles of shoreline, 9,000 inland lakes, 36,000 miles (58,000 km) of streams, and numerous natural ponds. No person in Michigan is far from a selection of public fishing sites. But one's very own fishing water, close at hand on the farm or vacation property—or even in a suburban setting—may be more convenient, as well as privately controllable, although

not without costs and special responsibilities.

Between 25,000 and 40,000 artificial ponds have been built in Michigan. About 1,000 new ones are created each year. Most of these are primarily for fishing. Other purposes often include swimming, wildlife habitat, livestock watering, irrigation, and scenic enhancement. If a pond is especially designed and managed for one of these other purposes, it shouldn't be expected to provide the same quality of fishing as one designed especially as a fishery. For example, a pond that provides proper duck habitat may be too shallow and plant-choked to maintain enough oxygen for fish during hard winters.

What qualifies as a pond, and how does it differ from a lake? There are no sharp differences. Everyone thinks of a pond as being smaller than a lake, but opinions vary as to how much smaller. This bulletin is intended to deal primarily with water bodies ranging in size from $\frac{1}{4}$ acre to 10 acres (0.2 to 4 hectares).

Regardless of size, ponds typically provide a few years of good fishing when new, or when "renovated" in various ways, then fishing deteriorates as fish populations change. On occasion, ponds may be dismal failures right from the start, usually because of faulty design, improper location, or poor water quality.

What is Successful Management?

When is a pond a "success" or "failure?" **Satisfaction** is the key. The owner's or user's idea of what

