

Building Fish Ponds

Two general types of fish pond construction are used in Michigan:

Excavated or dug ponds. These are the most common type in Michigan. They are usually rather small ponds in fairly level terrain, made by digging a pit deeper than the groundwater table. The hole then fills with groundwater by seepage, or water flows in from nearby springs. Less commonly, pits are placed to catch runoff water from surrounding land or receive water diverted from a stream. These sources are less desirable than are groundwater springs and seepages.

Impoundments. Usually formed by earthen dams, these need greater land slope and tight soils. Here also, it's better for pond quality to impound water from springs rather than from runoff or streams. Daming streams of any size is strictly controlled in Michigan and requires a state permit.

Ponds can also be built by a combination of excavation and damming.

Proper site selection and careful planning of construction play large parts in successful fish pond management. Contact your county's office of the U.S. Soil Conservation Service (SCS) for help in choosing a site and designing the pond. Many mistakes have been made by failure to seek this advice.

When choosing a contractor to build the pond, compare the costs and services of several. Find out the contractor's previous performance by talking with others for whom the firm has built ponds.

A state permit is needed for construction of the pond if any of the following is true:

- It is to be formed by damming any running water.

- It is to be connected to any other running or standing water body.

- It is to be within 500 feet of any other water body.

Contact the nearest DNR office early in the planning stage to find out what restrictions may apply to your situation.

Key considerations in designing a successful fish pond are **water depth, water supply, and forming the basin and its surroundings to avoid overabundance of nutrients and aquatic plants.** Usually of somewhat lesser importance are the size of the pond's surface and landscaping details. All of these design considerations are interrelated, with one often greatly influencing one or more of the others.

Pond Depth

Pond depth is one of the most important factors for achieving satisfactory fishing. Whether the pond is formed by digging or impounding, and no matter how large its surface area, **a better fish population is likely to result from having water depth of 15 feet (5 meters) or more**, where soil conditions permit, throughout as much of the pond as possible. This helps avoid winter and summer oxygen depletion and resultant stress on fish which can end in poor growth or mass die-off. Michigan ponds with less than 15 feet of water not only are more subject to complete winterkill in especially cold winters, but may, in most years, have disappointing fish populations—fewer fish, smaller fish, and

