

What Fish are Suited to My Pond?

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Pond Considerations

- Size
- Maximum depth
- Amount of shallows
- Climate (eastern or western Oregon)
- Water Quality
- Temperature
- Clarity
- Thermal Stratification
- Amount of nutrient enrichment
- Aquatic vegetation
- Other in-water fish cover
- Plankton blooms (green water)

Characteristics of a Typical Trout Pond (Table 1)

- Depth of at least 10 feet in western Oregon and 15 feet in eastern Oregon
- Cool summer water source desirable but not essential
- Limited shallows (areas less than 6 feet deep)
- Sparse or moderate aquatic vegetation
- Low to moderate nutrient level (nitrogen, phosphorus)
- Light to moderate plankton blooms (“pea soup” look)
- In-water fish cover desirable but not essential

Characteristics of a Typical Warmwater Fish Pond (Table 1)

- Depth of at least 5 feet in western Oregon and 10 feet in eastern Oregon
- Surface temperatures in the high 60's F. for at least three months
- Extensive shallows
- Moderate to abundant aquatic vegetation
- Moderate to high nutrient level
- Light to heavy plankton blooms
- In-water fish cover from vegetation as well as brush, sunken logs, rocks, etc.

Fish Considerations

Trout:

- Require cooler water than warmwater fish (Table 2).
- Require higher levels of dissolved oxygen than warmwater fish (Table 2).
- Summer and/or winter survival can be an issue.
- Will not reproduce in a pond; periodic stocking required.
- Lack of reproduction allows control of numbers.
- Fishable populations can be established instantly by stocking catchable size trout or within one year by stocking fingerling size trout.
- Grow well if not overstocked.
- Do best when stocked by themselves.

Fish Considerations

Warmwater Game Fish

- Require warm water to grow well (Table 2).
- Can survive lower dissolved oxygen levels than trout (Table 2).
- Survival is not usually an issue.
- Can reproduce in ponds (except channel catfish); populations can be self-sustaining once established.
- Lack of control over reproduction can cause overpopulation and stunting.
- Maintaining population balance between predator and prey species is often difficult and requires attention of pond owner.
- Fishable populations take longer to develop than trout - at least two years.
- Growth is highly variable, depending on pond fertility and population balance.
- Do best when stocked with a combination of a predator species (largemouth bass) and one or more prey species (bluegill, crappie, mosquito fish).

Trout Species Selection

■ Rainbow trout

- Most adapted to pond environments.
- Readily available from private growers.
- Grow well.
- Easy to catch.

■ Brook trout

- Require clear, cold water.
- Grow more slowly than rainbow.
- Good foragers in infertile waters.
- Can be difficult to catch.
- Very colorful.
- Limited availability in Oregon.

Trout Species Selection (cont.)

■ Cutthroat trout

- Species includes a number of subspecies with varied life history patterns.
- Not well adapted to most farm ponds but can do well in small lakes having good water quality.
- Not currently available from Oregon producers.
- Relatively easy to catch.

■ Brown trout

- Not well adapted to farm ponds but can do well in small lakes having good water quality.
- Not currently available from Oregon producers.
- More difficult to catch than rainbow and cutthroat.
- Highly regarded by fly fishers.

Warmwater Species Selection

- Largemouth bass and bluegill
 - Generally the best warm-water fish combination.
 - Natural predator and prey relationship.
 - Largemouth bass can reach quality size but are difficult to catch.
 - Bluegill are readily caught by beginner anglers.
 - Escape cover must be controlled to allow effective predation by bass and prevent overpopulation of bluegill.

Warmwater Species Selection (cont.)

■ Largemouth bass alone

- Good for ease of management when large size is not a priority.
- Most bass will not grow larger than about 12 inches due to lack of a forage fish.
- Overpopulation can usually be prevented by removal of bass by angling.
- The small bass are more easily caught than larger bass but are not as well suited for beginning anglers as bluegill.

Warmwater Species Selection (cont.)

■ Channel catfish alone

- Do well by themselves in fertile ponds.
- Can grow to about 10 pounds in ponds but a number of years required to reach that size.
- Do not reproduce in Oregon ponds; must be restocked periodically – fingerling size fish okay
- Are relatively easy to catch with simple techniques.
- Good eating

Warmwater Species Selection (cont.)

- Largemouth bass, bluegill and channel catfish
 - Channel catfish do well in ponds in combination with bass and bluegill.
 - Channel catfish do not reproduce in Oregon ponds; must be restocked periodically at a size large enough (at least 6 inches) to survive bass predation.
 - Channel catfish provide an additional species with different angling and eating qualities.

Warmwater Species Selection (cont.)

- Largemouth bass and white or black crappie
 - Crappie are not recommended in waters under 5 acres due to tendency to overpopulate.
 - Crappie populations are cyclic in nature and difficult to manage.
 - Crappie are preyed upon by bass but are poorer forage than bluegill and are less likely to be controlled by predation.
 - White crappie do better in turbid waters with limited vegetation; black crappie do better in clear, weedy waters.
 - In the right situation, crappie provide a sporty and larger panfish which are good eating.

Warmwater Species Selection (cont.)

- Largemouth bass, bluegill, crappie and channel catfish
 - Can be a good combination for larger waters; risks of overpopulation of crappie and bluegill remain.
 - Both bass and larger crappie prey on bluegill fry, improving growth and maximum size of all species.
 - Inclusion of channel catfish is optional, depending on preferences of pond owner.
 - Provides a nice variety of species for angling and eating.

Warmwater Species Selection (cont.)

■ Brown, black or yellow bullheads ("catfish")

- Not generally recommended because of tendency to overpopulate and stunt; should not be considered unless pond can be drained.
- Hardy enough to withstand almost any adverse environmental conditions.
- Strong competitor with other species; should not be stocked in combination with channel catfish.
- Generally don't exceed 12 inches in length.
- Popular with some folks as an easily-caught and good eating fish.

Grass Carp (sterile triploid)

- An alternative to other vegetation control methods in the right situation.
- Introductions must comply with strict state rules.
- Not produced in Oregon but available from approved out-of-state sources.
- Can be stocked with trout or warmwater species.
- Grass carp numbers are not easily managed for partial control of aquatic vegetation.
- Excessive removal of aquatic vegetation by grass carp can reduce populations of cover-dependent warmwater species.
- Nutrients released when aquatic plants are consumed and digested can stimulate bluegreen algae blooms, degrading water quality.

Mosquito Fish (*Gambusia*)

- Can help control mosquitoes.
- Widely available from Oregon producers.
- Prolific livebearers.
- Subject to winter die-offs in eastern Oregon.
- Not of much value as a forage fish for bass; easily depleted by predation unless there is abundant vegetative cover.
- Concerns over potential impacts on native species may prevent stocking in some areas.