

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE SPECIFICATION**

FISHPOND MANAGEMENT

(Acre)

CODE 399

GENERAL SPECIFICATION

with a written plan.

Procedures, technical details and other information listed below, provide additional guidance for carrying out selected components of the named practice. This material is referenced from the conservation practice standard for Stream habitat Improvement and Management and supplements the requirements and considerations listed therein.

Habitat

Habitat in a pond consists of man-made or natural features used for hiding cover, egg laying, feeding, shade or resting. Open water should be maintained on about 70% of the pond.

Warm water species such as catfish require some sort of protected place to lay, guard and fan eggs. Usually a 8-10 inch diameter pipe layed on the bottom will be used. Plants provide most cover and resting places.

Cold water species such as trout will not reproduce in ponds very well, if at all. Gravel beds could be placed in the pond just below the inflow of a creek.

PURPOSE

1. To provide favorable habitat for fish and other aquatic organisms.
2. To develop and maintain a desired species composition and ratio.
3. To develop and maintain a desired level of production.

Stocking

INVENTORY

Water Quality is the most important factor in considering successful fish growth and management. Dissolved oxygen, temperature, pH, hardness, carbon dioxide are some factors which change daily. These must be checked to establish a baseline for planning.

All ponds must be free of undesirable wild fish at time of stocking.

1. Warm water ponds – Stock warm water ponds with one of the following combinations of species, at the following rates per surface acre, to meet planned management objectives:

- 400 to 600 channel catfish fingerlings, without supplemental feeding.
- 1500 to 2000 channel catfish fingerlings, with supplemental feeding.
- 50 largemouth bass fingerlings

MANAGEMENT

This practice is satisfactorily applied when adequate fish habitat is developed, a fishpond is stocked with fish and /or when prescribed fish population and composition is maintained in accordance

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and 500 fathead minnows in unfertilized waters.

- 100 largemouth bass fingerlings and 1000 fathead minnows in fertilized waters.
- 50 largemouth bass fingerlings and 50 channel catfish fingerlings.
- 50 largemouth bass fingerlings and 500 minnows.

Other combinations and rates should be verified by a biologist prior to stocking. Warm water ponds are stocked once initially after the construction is complete.

Supplemental stockings should occur when the population is depleted through fishing, predators or other factors.

2. Cold water ponds

- 200 to 300 fingerlings annually in unfed, unfertilized ponds at elevations from above 8500 feet supplied by surface runoff.
- 300 to 400 fingerlings annually in unfed, unfertilized ponds at elevations from 7000 to 8500 feet supplied by surface runoff.
- 400 to 500 fingerlings annually in unfed, unfertilized ponds supplied with spring or pumped well water at near constant temperatures of 55 – 65 degrees F.

These rates may be doubled if a supplemental feeding program is planned.

Feeding

Natural feeding is feasible in older ponds where vegetation, invertebrates and insects occur. Light stocking rates are necessary.

Supplemental feeding with a prepared ration at a rate not to exceed three percent of total weight of fish in the pond is feasible in ponds stocked only with channel catfish or trout.

Aquatic vegetation control

Control undesirable growths of filamentous algae, submerged or emergent aquatic vegetation which interferes with fish management by; hand removal by pulling, raking or seining; establishing a single-celled algae bloom through pond fertilization; applying approved herbicides or algacides; or stocking certified triploid grass carp.

Fish Populations

Population management of fish is necessary to adjust numbers to habitat conditions by any needed combination of: harvest restrictions; removal of unbalanced segments of the populations; total eradication of the fish; installing fish spawning devices; control disease or parasites.

Aeration

Aeration of the pond is usually necessary at some time during the annual cycle. Increasing dissolved oxygen in water is related to temperature and is a physical condition rather than chemical. Many devices are commercially available to accomplish this. Some methods involve tumbling, mixing, or spraying, or by releasing water from the bottom of the pond.

Disease Control

Disease control in a pond is difficult and is best done by eradication of the fish, treatment of the disease and restocking.

Barriers

Barriers in ponds involve either keeping fish in the pond or keeping fish out of the pond. The most common problem is to keep fish from leaving the pond during runoff conditions. Proper construction of the pond is the best prevention.

Fish Species

Common fish for most cold water ponds includes Rainbow Trout, Brook Trout and Brown Trout. Warm Water species include Largemouth bass, channel catfish and fathead minnows as a food source. Blue gill tend to over populate the pond and may not be desirable.

REFERENCES

USDA. Trout Ponds for Recreation,
Farmers Bulletin No. 2249

USDA. Warm Water Ponds for Fishing,
Farmers Bulletin No. 2210.

USDA, NRCS. Aquatic Weed Control,
Biology Technical Note 29.

UDSA, NRCS. Water Temperatures,
Biology Technical Note 13.