Some ponds on the borderline between coldwater and warmwater conditions can support trout only for a few years. As vegetation develops, dead organic matter accumulates and consumes more oxygen. Temperatures may also increase. A decreasing water supply, as during drouth, can aggravate this situation. Such a marginal pond can be managed for trout until the unfavorable conditions develop. Then bass or other warmwater fishes can be stocked.

## **Stocking**

## Preparing the Pond for Stocking

A new pond, properly built (Chapter 3) for coldwater fish, usually needs no further preparation. In converting an old pond to support trout or readying a renovated trout pond, certain actions may be needed before stocking.

If other kinds of fish are in the pond, they must be completely removed (Chapter 9).

Screen inlets and outlets to prevent entry of the smallest fish. Maintaining screens can be quite a problem, so it is far better to build the pond without connections to other waters which would harbor fish. Caution children and friends not to bring in minnows, panfish, goldfish or any other fish!

You may at this time want to combine a re-digging operation with a fish-removal drawdown. Dragline digging with the pond bed exposed and somewhat dry may be much cheaper than suction dredging or drag-lining when the pond is full.

Even if you don't dig the pond deeper during a drawdown, take advantage of the situation to rake out aquatic plants and debris. Reducing organic matter will usually improve a pond for trout. See Chapter 10 for plant control methods.

## When to Stock

April, May, and possibly June are good trout stocking months because water temperatures have warmed considerably but are still moderate, and natural food organisms are increasing in abundance. Fish planted at this time tend to survive better and start growing sooner.

Table 8-1. A guide for stocking trout to achieve maximum growth without additional feeding and aeration.

Type of trout	Size in inches	Number* to stock per acre	Time to stock	Comments
Spring fingerlings	2-3	200-300	April-May	Cost least. May be hard to get. Use ONLY FOR INITIAL STOCKING of new pond or one which has had all fish removed.
Fall				
fingerlings	5-6	50-150	Sept-Oct	For initial stocking or restocking.
Spring yearlings	6-7	50-150	April-June	For initial stocking or restocking. More expensive than fingerlings.
"Adults"	over 7	25-50	spring or fall	For initial stocking or restocking. Can be very expensive.

<sup>\*</sup>The lower number is for ponds with alkalinity less than 50 ppm or which will be lightly fished. The higher number is for ponds with alkalinity over 150 ppm and/or which will be heavily fished, hence be more rapidly "thinned out."

Trout can also be stocked in September and October when the pond is becoming cooler. However, there is less chance for growth because the pond soon becomes too cold. Fall stocking is usually done only in new or redredged ponds—or where the fish have been eradicated during summer. Except in unusually good ponds, many fall-stocked trout may die during harsh winter conditions. The losses may be outweighed by much lower cost of fall fingerlings. Also, the longer time that fall-stocked fish are on natural feed before the fishing season often results in better appearance and flavor than newly-stocked fish.

Stocking trout in summer is inadvisable due to risk of thermal shock which can kill many or all of the fish planted.

## Number and Size of Trout to Stock

Table 8-1 is a guide to achieving trout populations which grow well on natural food supplies. ONLY ONE of the types listed should be stocked in one year, although "adult" trout can be restocked as often as they are fished out.

A common mistake is to stock too many trout—which results in poor growth. The stocking rates recommended are conservative and are lower than often suggested in the past. We believe it far better to risk starting with too few trout than to risk ruining the food supply. If the trout are fast-growing (see diagram,

page 37) and stay plump all year, then stocking can be done at a somewhat higher rate the next time.

The number and size of trout to stock depend on conditions of the **individual** pond: amount and size of trout already present, how fast they are to be harvested, the food supply, and whether there is natural reproduction. Adjust stocking from year to year according to past experience and current conditions.

Infertile ponds may support only about 20-25 pounds of trout per acre. Very fertile ponds may sustain upwards of 150 pounds per acre on the natural food supply.

Pond capacity for trout production can be increased several fold by artificial feeding, and then the stocking rate can be raised. However, feeding can cause various problems (page 38).

As a rule, the larger the body size of the trout stocked, the greater the percentage that survive to be caught—and, of course, the sooner there will be fishing for big trout. Whenever you stock, consider using the largest fish that the pocketbook allows. Price per stocked fish rises sharply with increasing size, but the number needed to adequately stock the pond decreases.

Experimenting in the pond over the years should reveal the best sizes and numbers to stock. Keep careful records of fish stocked and of fish caught. Calculate the **cost per pound caught**—or per fish of desirable size caught. You may find that