these costs decrease if you raise the size of fish stocked somewhat beyond the smallest, cheapest fish available.

For the first stocking of a new or renovated trout pond, it may be most economical to use spring fingerlings. Plan not to fish them until the next spring when they should be 7-8 inches (17-20 cm) long. However, you may want to do some test fishing in the interim.

If you want an initial springtime stocking to provide more immediate fishing, use yearlings of 6-7 inches. In excellent ponds, they will grow an inch a month during spring, summer and fall.

For restocking in ponds with established trout populations, don't use fish smaller than fall fingerlings (5-6 inches or 12-15 cm). If larger fish are used, there will be fewer losses to cannibalism by trout which have survived from previous stocking. Annual restocking may provide far more consistent fishing than restocking at greater intervals.

Transporting and Planting the Trout

Contact the state fishery office nearest to your pond (see Appendix) to see whether a permit for stocking is required. One will be needed if the pond has any connection with other waters or if certain other conditions apply. Allow at least a month for the inspection and permit issuance.

Be sure the trout are healthy when stocked. Don't accept fish that are obviously diseased or that appear weak or abnormal in behavior. Fish stressed by improper handling and transport will die soon after stocking. Even under the best conditions, 10-20 percent of them may die in the first 2-4 weeks.

If you transport your own fish, keep the water at a rather constant low temperature (50-60°F or 10-15°C). Handling stress is greatly reduced in cool weather.

Besides being cold, the water must be well-oxygenated and unchlorinated. There are small aeration devices that operate on batteries or automobile current—or you can attach a tube with clamp-valve and airstone to a spare tire.

Cool the container of water (plastic trash cans work well) with ice. It's usually most convenient and reliable to let the dealer deliver the fish.

As mentioned, stocking trout in summer is inadvisable. Since trout must be transported in water that is much colder than the summer surface water of most ponds, they may undergo lethal stress in passing through the warm upper layers of the pond toward the cool water below. Resulting deaths may not be evident immediately, but may take several hours or days to occur.

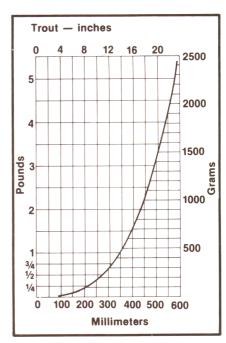
If more than a 10°F (5°C) difference exists between transport water and the pond, "temper" the trout to the new water gradually. To do this, add small amounts of pond water to the transport tank until its water is of pond temperature. If the fish are transported in plastic bags, trash cans or other small containers, these can be set in the pond until the water inside is the same temperature as the pond.

CAUTION: If the transport bags have been filled with oxygen and tied off, do not open the bag (unless fish are in distress) until tempering has been accomplished and you are ready to release the fish into the pond.

Flushing the trout through a large tube from the transport truck directly into the cold pond depths is another way to reduce thermal shock losses, but few dealers have such equipment. All in all, it is best not to stock in summer.

When to Start Fishing and How Much to Harvest

Do some catch-and-release fishing periodically to see how the trout are growing. Start keeping them as soon as you start catching some of desirable size. Reasonable size at which to start harvest is 7-10 inches. If you delay harvest until they are much larger, the total return may be severely reduced. This is because loss of fish by non-fishing or "natural" causes is usually rapid, especially in the case of rainbow or brook trout. Few live to be over 3 years old, and at some point before



Determining whether a trout is of proper weight for its length. Weigh the fish to the nearest half ounce or 10 grams, if less than 1/4 pound. If heavier, it may be weighed a bit less precisely. Measure length to the nearest eighth inch or millimeter. Plot length on the horizontal scale and lightly pencil a vertical line there. Plot weight on the vertical scale and draw a light horizontal line there. If the point where the two lines intersect lies on the heavy curved line, the fish is of standard weight for its length. If the point lies above the curve, it is heavier than average. If it lies below the curve, the fish is underweight.