



LIMESTONE TROUT CLUB, INC.

Location:
29 Allyndale Road
Canaan, Connecticut

Mailing Address:
c/o Petrovits, Patrick, Smith, & Co.
173 Prospect Street
Torrington, CT 06790

Reduce mortality of trout that are released under warm water conditions.

How many of the measures are you using?

- Handle fish as little as possible and release them quickly - do not fight fish to exhaustion
- Minimize or eliminate the time fish are out of the water - as little as 30 seconds of air exposure causes delayed mortality of released trout. Read **Airtime Is Bad** below.
- Use barbless hooks if you plan to release most of the fish you catch
- When a fish is deeply hooked, do not try to remove the hook - clip the leader instead
- Fishing when water temperatures are elevated:
 - The safest strategy: Do not fish for trout if you plan to release them - these fish are already stressed and additional handling may kill them.
 - If you do fish: Read the **Special Rules** below.

Air Time is Bad

One study by R.A. Ferguson and B.L. Tufts looked at the amount of time a fish is exposed to air after caught, and discovered that every second literally counts.

- Fish that were exercised but released **without being held out of the water** had a survival rate of 88 percent
- With 30 seconds air exposure, that dropped to 62 percent
- At one minute, it was a mere 28 percent

This makes sense. Imagine running a few laps around the track, and then dunking your head in a bucket of water. Think about those numbers when you go to take that photograph of the big trout you just landed. Try to keep those shots to 10 seconds or less, if at all possible.

Special Rules for Taking Trout in Deep Water

Use a Moderate Retrieve

A moderate steady retrieve will give the fish time to adjust to changes in water pressure. Trout and salmon caught in many cold water lakes are caught in very deep water. Bringing them to the surface is particularly stressful because the fish experiences a substantial reduction in water pressure. At 100 feet deep the pressure per inch is four times greater than at the surface. In this situation it is important not to "horse in" the fish but to bring it to the surface slowly but steadily.

Burp Your Fish

Fish brought up from deep water may need "burping." Burping is a method of expelling excess air from the fish's swim bladder. The drop in pressure causes the swim bladder to expand, increasing the fish's buoyancy and causing it to float belly up. Left in this condition many fish die as a result of the surface water's warm temperatures or attacks by predators. But in trout and salmon, the swim bladder is connected to the esophagus, making it possible to squeeze excess air out. To do so, *hold the fish gently on its side and gently, but firmly, squeeze the belly from the vent toward the head.* You will be able to hear the burp as air is expelled from the bladder. Do not squeeze the head and gill area, as that could damage vital organs.

Stimulate the Fish to Dive Deeply

Once burped, the fish should be able to dive down to the deep cold water. But it may require further assistance. Two methods have proved useful in stimulating fish to dive.

- One is to vigorously thrust the fish, head first, into the water. The slap of the water, and the plunge downward usually stimulates the fish to swim down.
- Another technique is the "release when recovered" method. Hold the fish gently at the middle of its body with its head pointed downward at a 45

degree angle. In that position a gentle side-to-side motion can be used to move water into the mouth and over the gills. As the fish recovers, it will begin to kick, and slide out of your hand. When its tail passes through your hand, give the tail a quick squeeze. This seems to stimulate the fish's swimming action, causing to dive with more vigor. Remember, the idea is not to catch the tail, but to compress it as it slides through your hand.

When is burping and additional handling needed?

Let the fish tell you that. Start by handling the fish as little as possible, i.e., flip it off the hook with needle-nosed pliers. If it is able to recover and returns to the depths, you have avoid a lot of handling. If it is unable to dive, the head first plunge may be enough or burping and the "release when recovered" technique may be required.