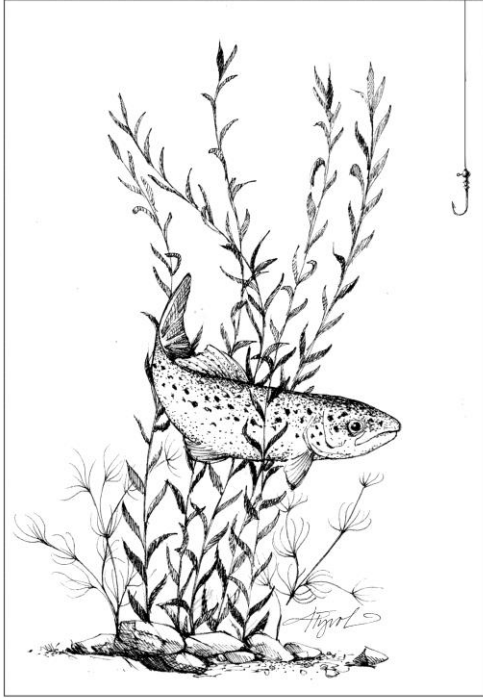


# The Outside Story



## Catch and Release

By: Tim Traver

To be good at catching fish these days you have to be good at letting fish go. Releasing fish unharmed turns out to be a good way to share a limited resource, and depending on what you hook, it also may be required by fishing regulations. Yet releasing fish successfully can be tricky. There's nothing more demoralizing than watching a released fish turn sideways and drift downstream.

Scientists have been studying release techniques since the 1950s, when the catch and release ethic first took hold in this country. Over the years, every imaginable variable affecting fish survival

has been studied, including stress from air exposure, exhaustion, bait type and size, hook type, water temperature and water depth (shallow dwelling fish do better than deep caught fish, which are stressed by changes in water pressure), net design, net versus no net, differences between species, size of fish (large survive better than small). Researchers have looked at sub-lethal injuries, too, and their impact on growth and reproduction...the list goes on.

What's come from all these studies is both a good understanding of fish capture and release techniques that work best for fish survival and, the quantification of just how easy it is to harm a fish. It appears that the average mortality rate for all released fish hovers at around 16%. That's too high.

Both Vermont Fish and Wildlife (*Releasing Your Catch*) and New Hampshire Fish and Game (*Tips for Releasing Fish*) provide excellent guidelines for handling and releasing fish. You can find these resources online. In the meantime, here are a few points to remember.

Avoid deep hooking fish if you can by setting the hook quickly rather than passively allowing a fish to swallow the bait. Circle hooks, rather than J-shaped hooks, can reduce deep hooking when using live bait. And you can actively set a circle hook, even though this goes against product recommendations.

Smaller, single hook lures beat those with treble hooks. The more hooks, the more likely there will be eye and fin injuries or damage to the fish's lips that may not be lethal but nonetheless may affect growth and reproduction. On the topic of barbed

hooks versus barbless, controversy has raged for years, but common sense says go with barbless. (There's no need to buy new tackle – you can easily flatten barbs with a small pair of pliers.) If you deep hook a fish you intend to release, consider cutting the line and leaving the hook in place. The hook will rust away within a month or two.

Stress can kill fish quickly, and air exposure is a deadly stress factor. Keep air exposure to a minimum. The highest standard is no exposure at all, but staying under one minute is a good rule of thumb for bass and other warm water fish; even less time (as fast as you can) is recommended for cold water fish like trout that live in highly oxygenated environments.

Fish exhaustion is another contributor to stress and mortality, so don't "play" a fish any longer than necessary. Fish stand a better chance of survival if you bring them in and release them quickly. Try to avoid fishing in places where either low water or warm summer water temperatures are already stressing the population. Let those cold water fish be and hope they survive the summer drought and heat. If you do find yourself with an exhausted fish, instead of releasing it right away, hold it gently with both hands in the water, keeping it horizontal to the water's surface, until it can swim away on its own.

Get good at releasing fish. Fishing with someone who's expert at releasing fish can be as inspiring as watching the best fish stalker at her work. With a quick flick of the wrist, the caught fish is free. An expert angler fishing with a fly rod and dry fly can push that 16% average mortality rate down into the less-than-5% zone. I've

watched expert trout anglers fishing with worms achieve the same level of success.

As for the fish you take home to release into the frying pan, developing skills in the kitchen has its benefits, too.

*Tim Traver is an author and freelance writer. Previously, he served as executive director of the Upper Valley Land Trust and co-directed the social service organization COVER Home Repair. The illustration for this column was drawn by Adelaide Tyrol. The Outside Story is assigned and edited by Northern Woodlands magazine: [northernwoodlands.org](http://northernwoodlands.org), and sponsored by the Wellborn Ecology Fund of New Hampshire Charitable Foundation: [wellborn@nhcf.org](mailto:wellborn@nhcf.org)*

**Northern  
Woodlands**

PO Box 471, Corinth, Vermont 05039  
Tel. 802.439.6292 Fax 802.439.6296  
[www.northernwoodlands.org](http://www.northernwoodlands.org)

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