How to Choose Leaders and Tippets when Fly Fishing

By John Merwin

When fish don't strike, chances are it's not your fly or your casting, it's your leader.

Take me to your leader, and chances are we'll be able to fix some of your flyfishing problems. Leaders are among the basic elements of fly tackle, but the essentials of leader design and performance get the least attention from most anglers. When your fly is landing off target, or you can't get a drag-free drift, don't automatically blame your casting. Check your leader.

Leaders in Theory…
Knotless leaders of nylon monofilament are common these days, but the basic taper designs are old. The flyfishing pioneer and French hotelier Charles Ritz worked out the basic 60-20-20 leader formula in the early days of mono after World War II. By his design, 60 percent of a leader's length is a level, large-diameter butt; the last 20 percent is a fine-diameter tippet to which the fly is tied. The leader-butt diameter should be two-thirds of the diameter of the end of your fly line for best performance. The 5-weight fly line you may use for fishing small dry flies has a tip diameter of about .030 inch. The 9-foot, 6X leader you attach to it should then have a butt diameter of about .020 inch. Most light trout leaders conform to that standard.

Problems may occur when you start switching line, leader, or fly sizes. The leader taper that works for small dry flies on a 5-weight won't work for big steelhead dries on an 8-weight, and vice versa. The tip diameter of an 8-weight floating line is about .040 inch, requiring a larger .026-inch-diameter leader butt to get the leader to turn a large fly over properly in casting.

You don't need a micrometer in your vest to keep track of all the numbers, because many manufacturers label their packaging with both the butt and tippet diameters. Some companies even distinguish their leaders by species, such as trout or bass. In this case, trout should mean a small-butt, small-fly leader; and bass, the opposite.

…And in Practice
Modern knotless leaders are designed for the law of averages: average casters casting average-size flies to an average distance. Trouble is, most fly anglers constantly change fly sizes and casting distances, so no leader is perfect all the time. Here are some tricks that will solve many of your problems:

If your dry fly is falling back on the leader dramatically when you make a presentation, shorten the tippet by a foot, use a tippet one size larger, or both. This is often a problem when you're switching from a small dry fly to one that is larger and less aerodynamic. The same remedy will
also help you punch a dry fly into the wind. If you can’t get a drag-free drift, on the other hand, lengthen your tippet by 1 or 2 feet, which will create a bit of slack leader near the fly when it lands.

In both bass and saltwater fishing, where larger lines and flies are used, I solve most leader problems by using a heavier butt section with 9-weight lines and above. That might mean about 3 feet of 50-pound mono (.030 inch diameter) at the end of the fly line to which I attach a knotless, tapered leader after cutting a couple of feet off its smaller-diameter butt. The increased leader-butt mass then helps to extend heavier flies at the end of the cast.

Changing a tippet section takes just a few minutes on the water. Granted, it’s another thing to keep track of while you’re fishing, but paying attention to those sorts of details will definitely catch you more fish.