

Barbless Hooks

Our Nova Scotia Atlantic salmon fishing regulations now require use of barbless hooks. Most anglers I encounter seem to agree that barbless hooks aid conservation in two ways; they reduce injury to released fish and they increase the percentage of fish lost. As one of many anglers who have used barbless hooks for many years, I think that an examination of the prevailing wisdom is in order.

I've observed that barbless hooks make it much quicker and easier to release fish. There is no doubt in my mind, based upon my experience, that barbless hooks aid in maximizing survival of released angled fish. Some biologists will argue that a study conducted in New Brunswick some years ago showed that use of barbless hooks doesn't affect the survival rates of released angled salmon, but I have to assume that the study's conclusions were incorrect. I have to believe what I've experienced over many years and dismiss results of a study which may have been poorly designed. Far too often we hear "Studies show that". Sometimes I think that the main thing studies show is that there are too many studies.

The common belief that barbless hook use causes anglers to lose more fish is the one that I question. I've always found that fish are more readily hooked on barbless hooks, and well-hooked fish means more fish landed. A recent article "Going Barbless" by Kevin Compton in the fall 2008 issue of Hatches magazine provides some insight regarding this issue. Mr. Compton writes, "Fishing hooks were originally made of bone, shell, and thorn and were fashioned without barbs. The first metal hooks, made of Egyptian copper, were barbless. By Roman times, however, barbs appeared on bronze and iron hooks. Bending bronze or steel wire into a particular hook shape requires a barb, what Jeff Pierce of Mustad USA calls an 'anchoring point'. That is, a wedge-like, raised 'barb' cut into the metal wire that 'anchors' the wire between the pin and the hook template while it is being forged. Contrary to expectation, the production of a barbless hook requires an initial barb to 'anchor' the hook wire and to shape the hook bend. The barb is then removed. The added production time needed to remove a barb accounts, in part, for the higher cost of barbless hooks."

Mr. Compton goes on to say, "To understand the various characteristics of barbless hook design, it is helpful to understand some of the disadvantages of barbed hooks. Aside from its pivotal role as an 'anchor' in the forging process, barbs are designed to retain fish. On the other hand, aside from the inevitable and senseless harm done to a fish, a barbed hook has many disadvantages. Darrel Martin, in his excellent work 'Fly-tying Methods', explains: 'A wide or long barb may actually impede penetration. The increased surface of a large barb, sometimes described as the 'resistance wedge', requires greater penetrative force. The entry furrow caused by a large barb may actually allow the spear to escape. The primary penetration resistance occurs on the top of the spear where the barb is located. This, of course, allows the barb to hold under pressure; however, the resistance may also preclude deep entry by a large barb. When in doubt, cut the barb out. A sharp point and a flattened barb may actually increase retention because the spear sinks deeper into trout tissue. If a barb is present, it should be small and far enough from the hook heel to allow deep penetration. The only advantage of a small, delicate barb may be for airborne trout on a slack line.'"

Many years on the river have taught me to believe only what I see. I'd encourage readers to consider these thoughts in your own fishing and to experiment. David Clark of Melrose NS showed me a simple test anyone can conduct. Take two identical hooks

and flatten the barb on one. Then pull each point through a piece of stiff cardboard, observing the effort required to achieve penetration. You'll be surprised, I think, by how much easier the barbless hook penetrates.

Most important, though, is to be thoughtful and form your own opinions rather than believing everything you hear or read. All of the truly great anglers I've met were very observant deep-thinkers.

- Bill Carpan, Stillwater NS

