

Single Hook Versus Treble Hook

By R. E. ANDREWS

Canadian fishery biologists have recently completed controlled studies into the relative hooking mortality of rainbow trout using a fly, treble hook, and a single hook plus worm. The purpose of the studies was to quantitatively assess the mortality caused by hooking and releasing trout.

It is common for some anglers to hook and release trout after catching their daily bag limit, or to be selective from the start, releasing fish under or over a preferred size, or in many cases to fish strictly for fun, releasing every fish caught.

As pointed out by the Canadians, "There is nothing wrong in this practice as long as mortality to fish caused by hooking is negligible.

On the other hand, if mortality is high on released fish, then good management would dictate the need for fishing regulations to reduce this loss."

Some anglers and conservation groups become so concerned about the injury to hooked and released fish that they assert pressures for enactment of regulations restricting sport fishing gear—usually to fly fishing only.

The reasoning restricting certain areas to fly fishing only is that it is assumed that fly fishing is less injurious to released fish relative to other types of fishing gear.

With little factual evidence available to formulate realistic fishing regulations applicable to hooking mortality to a particular fishery, controlled experiments were carried out in British Columbia with wild rainbow trout.

Rainbow trout were caught from Pennask Lake, B.C., using flies, treble hooks attached to spoons and single hook with bait. After landing, the trout were transferred to holding pens, tagged for later identification and observed for mortality. Mortalities were recorded in twelve hour periods.

The fish were held a total of 48 hours in the pens as most mortalities occurred within the first 12 hours following hooking.

The results at the conclusion of the study showed that mortality to released trout caught with a fly was the least, followed by fish hooked with a treble hook.

Greatest mortality resulted from a single hook with worm because of deep ingestion and the fact that most anglers try to recover their hook and cause lethal injury through handling.

It was further concluded that releasing mortality might be substantially reduced if proper techniques were used in handling and removing the hook or hooks. Never insert fingers inside the gill covers, or grasp trout by the gills to remove hooks.

This is nearly always fatal to the fish. The proper way is to use a pair of longnose pliers to remove artificial lures, or flies. The fish does not have to be handled when pliers are used. It is preferable to leave the fish in the water and never handle it at all.

If fishing with bait, and the hook is ingested too deep for easy removal, cut the leader as close to the hook as possible to release.