## **BAIT BAN AS A MANAGEMENT TOOL**

Restrictions on the use of bait in freshwa-ter sport fisheries throughout the province are generally founded on the principle of reducing the risk of injury and death to fish that are required to sustain the population at a preferred level of abundance. There is a large body of scientific literature that demonstrates fish caught with bait experience significantly higher mortality rates when released than those caught with artificial lures or flies. Mortality can also be influenced by factors such as high water temperatures, handling techniques, and size of fish. Generally speaking, larger fish such as salmon and steelhead are less vulnerable to hooking injuries and mortality than smaller stream-dwelling trout and char.

The degree to which fishing with bait is a conservation problem depends on factors other than just the mortality rate. For example, if a significant proportion of a fish population is expected to die from natural causes over the course of a year, then mortality associated with angling may not be as significant a concern. Also, if the population is relatively large and only a small fraction of the available fish are caught by anglers, the actual number of fish that die as a result of fishing may be of less consequence. In addition, if only a small fraction of the anglers participating in the fishery use bait, the mortality issue also tends to

be minimized. However, if the population is small and not subject to significant natural mortality, if the fish are highly accessible and vulnerable to capture and if bait fishing is prevalent among anglers, then there may be a strong case to be made for restrictive regulations. Under these circumstances, every spawner counts and angling regulations must be tailored to protect the remaining fish while still accommodating some angling opportunities if possible. Unfortunately, many fish populations in the southern half of the province fit this scenario, including steelhead.

Fishing with bait may have other consequences. Juvenile fish and nontarget fish are frequently caught and can suffer high loss rates when released. In coastal river fisheries, both cutthroat trout and Dolly Varden may be at risk.

Apart from conservation issues there may also be other valid reasons for restricting the use of bait. This might occur where bait is just too effective at catching fish. It is reasonable to manage fisheries to spread the catchable supply of fish over more anglers or a longer season, or to reduce the incidence of multiple captures that may influence fish behavior in nonlethal ways.

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It is also recognized that, for many young anglers, fishing with bait

forms the basis of their introduction to the sport. Optimizing benefits

from recreational fisheries is as much a challenge as conserving the fish that sustain them. In many circum-

stances, bait restriction can be an important management tool to maintain angling opportunities while ensuring the sustainability of the resource.

