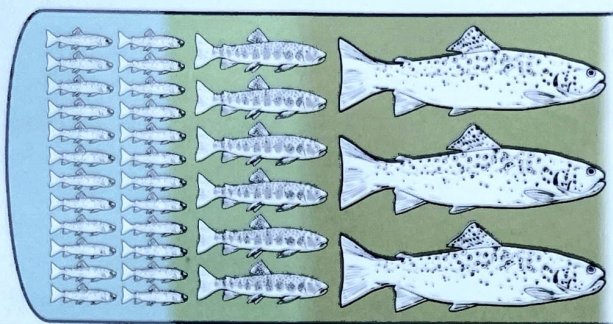
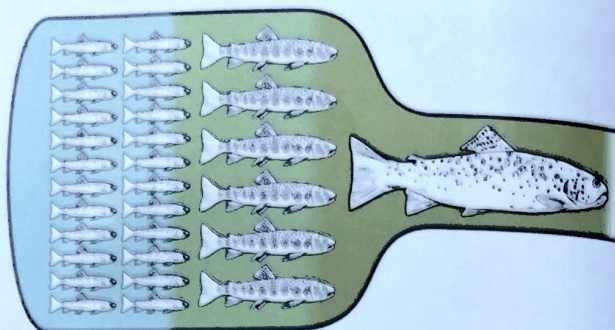


# 3 Home sweet home

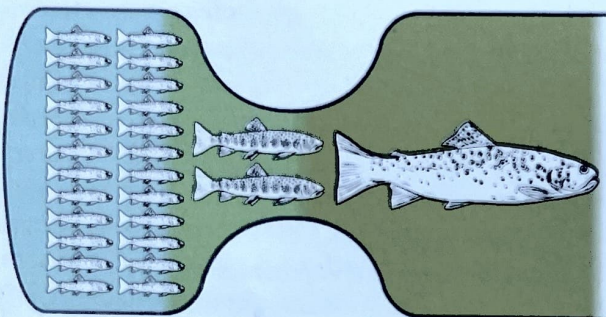
*Why habitat is important*



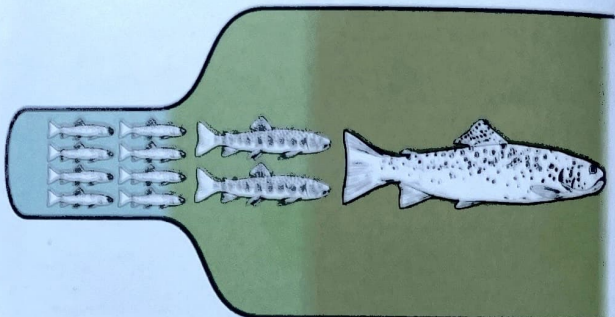
a). No limiting factor



b). Adult habitat acting as limiting factor



c). Juvenile habitat as limiting factor



d). Spawning habitat as limiting factor

## FISHERIES LIMITING FACTORS AS BOTTLENECKS

Most anglers instinctively know what makes good habitat for the trout they fish for: deep pools with undercut banks, glides between banks of water crowfoot and the crease between faster flowing water and slower sections of current. This is all true, but it ignores the fact that, although brown trout is a single species, it comprises at least three distinct life stages, each with its own, very demanding and different habitat requirements. Understanding this fact is probably the single most important factor in the successful management of habitat for trout.

The concept of the 'Habitat Bottleneck' helps explain why achieving the requirements of all key wild trout life stages is of such fundamental importance. Habitat bottlenecks can occur at any life stage of trout. For instance, a paucity of suitable sized gravel will limit spawning success, resulting in low numbers of trout hatching and surviving to adulthood. In such cases, the value of abundant juvenile and adult habitat in the fishery

would be negated by the bottleneck occurring at the spawning phase. Similarly, an absence of shallow riffle and glide areas suitable for juvenile trout will apply a bottleneck to this life stage, with the benefits of large numbers of swim-up fry from abundant spawning gravel largely negated. Although the 'Habitat Bottleneck' concept clearly explains why all life stages of trout need to be catered for in terms of both quality and quantity of habitat, it is at the spawning and juvenile life stages that most wild trout populations are limited.

## Trout spawning requirements

Brown trout are rheophilic (fast-flow loving) fish. They can breed at any time between October and March inclusive, with peak spawning taking place on most river systems during November, December and January. Male (cock) and female (hen) fish gather on gravel dominated shallows (riffles) with a suitable water velocity, between 25-75 cm/sec.

