

# May stocking programs affect the predator stocks and decrease the survival of the wild Atlantic salmon juveniles?

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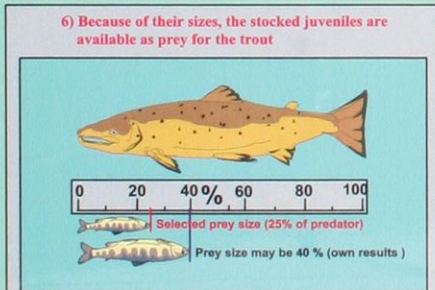
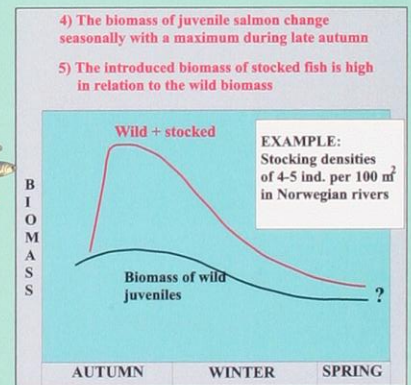
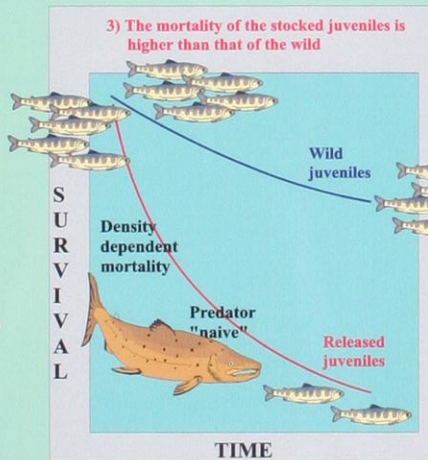
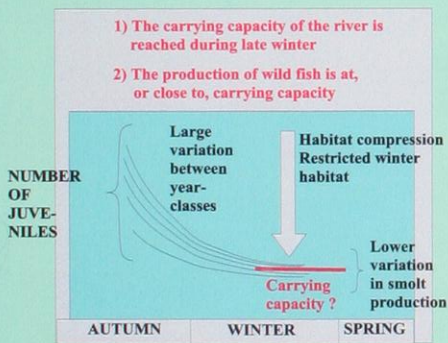
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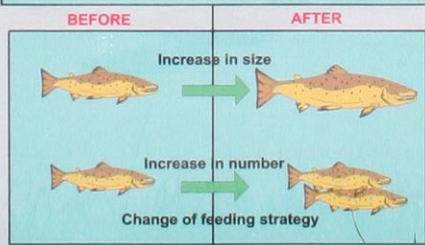
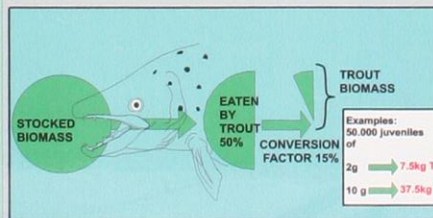
## Abstract

Stocking of Atlantic salmon juveniles is carried out in many rivers to increase the production of smolts. In many cases, the number of stocked juveniles exceeds the assumed carrying capacity of the river, and represents a considerable and rapid increase of the fish biomass. Normally, the stocked juveniles suffer from high predation mortality, presumably higher than for native fish. Therefore, the introduction of naive prey may influence the number and size of predators. When the stocked juveniles has been depleted, the predation upon their wild conspecifics might increase. In this paper we will discuss possible relationship between the survival of the wild juveniles and the introduced biomass, the time of stocking and its influence on the stock of predators.

## Speculations based on 8 assumptions. Exemplified by rivers in Western Norway



7) The biomass of the stocked juveniles is sufficient to increase the number and/or size of predatory trout



8) While the majority of the stocked juveniles are depleted, the enlarged stock of piscivore trout may represent a long term increase in the predation pressure upon survivors and the wild juveniles

