



# Wild Trout Trust

## View on Beaver – Trout Interactions

### Summary document

The Eurasian beaver (*Castor fiber*) co-evolved and still co-exists with fish throughout its geographical range. However, where it has been extirpated, the landscape, flora and fauna have all changed markedly since beavers last interacted freely in the environment. There are now many different pressures, mostly anthropogenic, and many river corridors simply do not contain suitable habitat for beaver anymore.

In areas such as Fenno-Scandia, France, and some Baltic states where beavers co-exist with high economic value species such as Atlantic salmon, there is surprisingly little published information relating to beaver–salmonid interactions. The majority of detailed scientific studies stem from the United States so they focus on a different beaver species in different local environments but an understanding of the underlying mechanisms can still be useful within the European context.

Will beavers impact upon trout populations? The complexity of potential ecological interactions between beavers and trout (see Table 1), especially against a backdrop of such a mosaic of patchy habitat (heavily influenced by man) across the UK means there can be no definitive answer. Even the beaver ‘trials’ work will be of limited scope for extrapolating countrywide. Read the full document for further details

**Table 1:** Summary of potential effects of beaver dams on trout. NB No weighting is assigned

Factor	+ve	-ve
Beavers only capable of constructing dams under specific circumstances	X	X
Dams are ephemeral and do not obstruct 100% of flow	X	
Evidence to demonstrate some dams are passable by all sizes of trout	X	
Low flow conditions increase likelihood of obstruction		X
Where man-made structures are present, passage issue exacerbated		X
Trout may use considerable energy attempting passage		X
Dam impoundments act as sediment (nutrient, pollutant) traps	X	
Impoundment may cover former quality spawning habitat		X
More scour & less sediment may improve spawning habitat below dam	X	
Conversion of riffle to pool may favour trout over salmon competitors	X	
Pools provide better refugia under spate conditions	X	
Woody material / food caches increase refugia from predation	X	
Pools may promote competition / predation from coarse fish		X
Pools may favour predators like otter / mink / goosander / cormorant		X
Pool habitat may boost invertebrate production locally	X	
Coppicing of trees increases light and boost primary production	X	
New pools tend to provide benefits but lost over time	X	X
Impact of beavers on riparian zone may cause vegetative regeneration but alter water temperature regime	X	X