



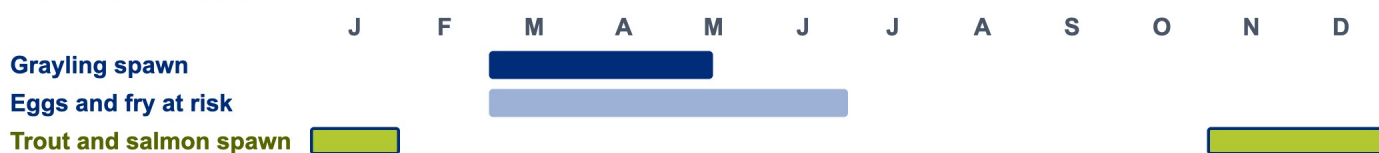
Grayling are not trout

River work designed around trout and salmon is often assumed to suit grayling too. Here is where that assumption fails.

**Grayling****Brown trout**

Spawning	March to mid-May. Eggs lie on or just under the gravel surface. Fish run upstream on falling flows and warming water, like spring-spawning coarse fish.	Late autumn and winter. Eggs are buried in a redd cut deep enough to resist scour.
Weirs	Good burst speed, poor stamina, and reluctant in turbulent water. Only 36% got over a 0.4 m Flat-V gauging weir.	The stronger swimmer over distance: 84% of similar-sized trout passed the same weir.
Cover	An open-water fish. Avoids weed beds, tree roots and woody debris; depth is its refuge.	Seeks out weed, roots and woody debris as refuge.
Fry	Emerge from the gravel by day and need slack, shallow margins straight away.	Emerge at night, like other salmonids.
Range	Middle reaches on gentler gradients; adults are rare in channels under 5 m wide.	Reaches steep upland headwaters, and is more widespread within and between catchments.
Tolerance	Narrower. Succumbs sooner to warm water and, on limited evidence, to organic pollution.	Broader environmental tolerance.
Cormorants	Ranges widely instead of hiding. In one small Danish river, 72% of tagged wild grayling were eaten.	In the same river, 30% of tagged wild trout were eaten.

A different calendar



Flow regimes are usually set around autumn-spawning salmon and trout, even where grayling are the dominant fish. Check flow releases and in-river work windows against the spring calendar too. Bars are approximate; southern rivers spawn earliest.

Nine things to build into multispecies and whole-river projects

- 1 Name grayling in the brief.** No UK habitat scheme is known to have targeted grayling; most are built for trout and salmon.
- 2 Fix causes first.** Trace silt, phosphate and sewage to source with buffer strips, fencing and catchment partners. Gravel cleaning rarely lasts.
- 3 Keep the shallows.** Do not narrow every "over-wide" reach. Slack margins are grayling nurseries; even a cattle drink below spawning gravel shelters fry in a spate.
- 4 Wood and weed serve the river, not grayling cover.** Woody debris sorts gravel and weed feeds invertebrates, but keep open feeding lanes and deep refuges.
- 5 Build passage for the weaker swimmer.** Remove barriers where you can. Otherwise use rock ramps or bypass channels, then Larinier or vertical-slot passes. Avoid Denil and Alaskan A.
- 6 Shade in a mosaic.** Bankside trees keep summer water 2–3 °C cooler on average, yet spawning riffles need light. Plant for dappled shade, not a tunnel.
- 7 Protect winter water.** Adults drop into deeper, slower pools in winter, when cormorants hunt rivers. Keep or create deep-water refuges.
- 8 Stock only as a last resort.** Stocking has failed to halt decline in most rivers. If it is ever needed, use broodstock from the same catchment and never extend the current range.
- 9 Monitor on purpose.** Routine electric fishing undercounts grayling: young fish shoal away in mid-water and adults sit deep. Add angler logbooks and sample deep water.