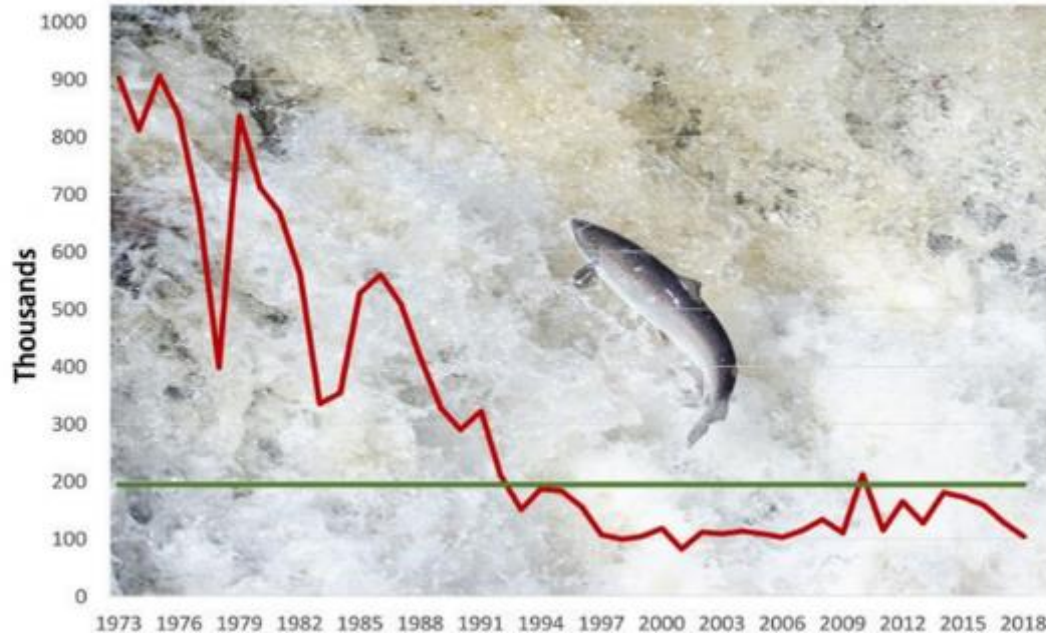


Game & Wildlife Conservation Trust

Salmon & Trout Research Centre



Salmonid conservation – the need for marine and freshwater approaches

The importance of wild Atlantic salmon

- Indicator of a healthy well managed ecosystem
- Supported commercial and recreational fishing and a thriving angling tourism in rural areas – *Now almost totally lost*
- Supported heritage fisheries – again almost totally lost



Wild Atlantic salmon are in serious decline

STOCK STATUS FOR 2,359 RIVERS IN:

Canada, Denmark, England, Finland, France, Greenland, Germany, Ireland, Northern Ireland, Norway, Portugal, Russian Federation, Scotland, Spain, Sweden, USA, Wales.

14% currently sustainable

43% currently at risk

7% no longer have salmon

36% no data available

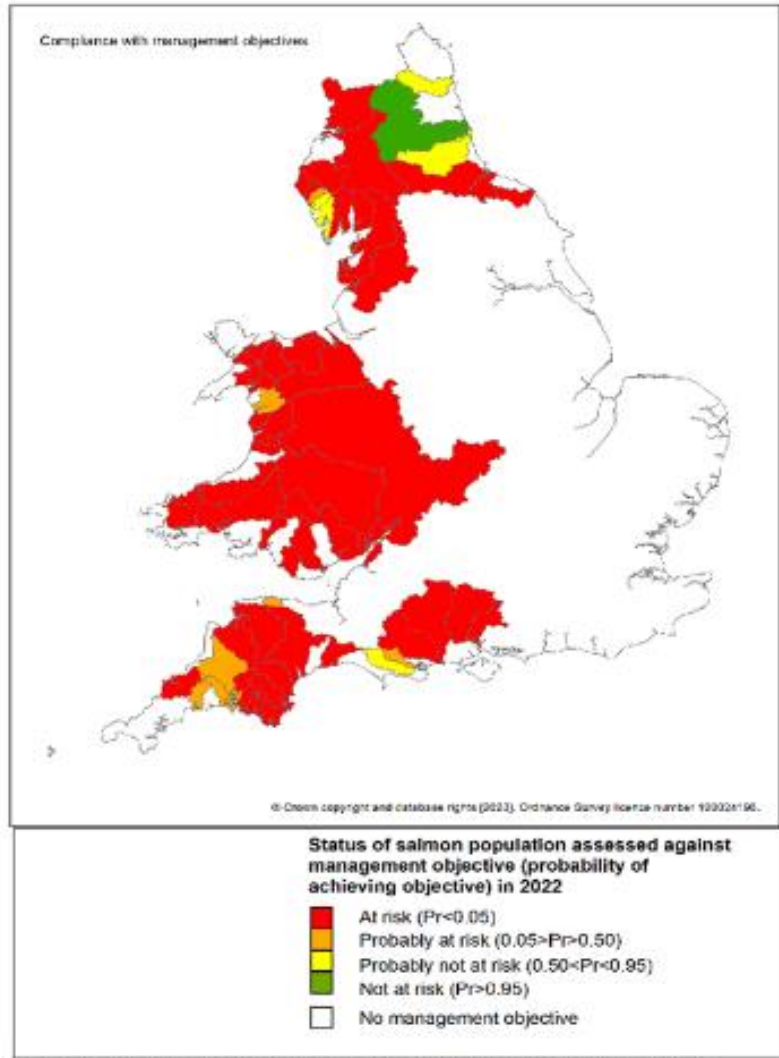


Figure 32. Status of river catchments in 2022 assessed against the management objective (i.e. that the CL is met or exceeded in at least 4 years out of 5, on average).

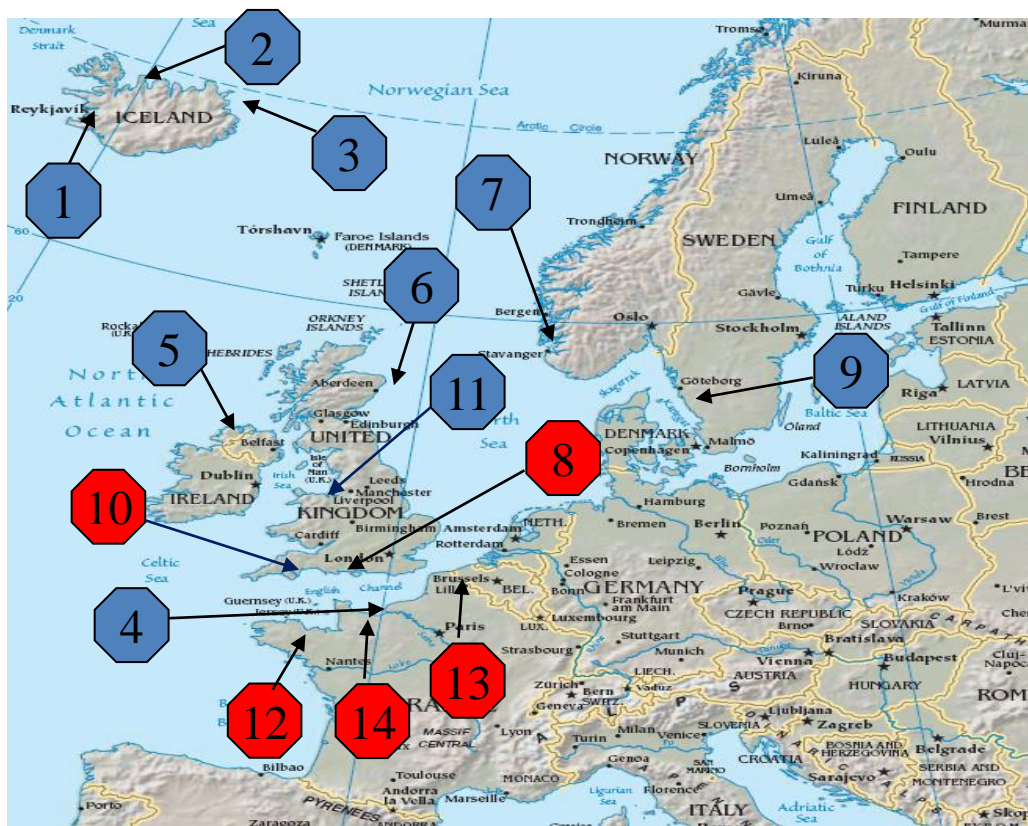
GWCT salmon index river - River Frome Dorset

- 50 years of data on wild Atlantic salmon
- 20 years of detailed data on juvenile salmon and marine survival
- Work to understand the causes of the decline and what can be done to reverse it



Network of salmon index rivers

Monitors their populations in detail



1. Ellidar (Iceland)
2. Midfjarda (Iceland)
3. Vesturdalsa (Iceland)
4. Nivelles (France)
5. Bush (Ireland)
6. North Esk (Scotland)
7. Imsa (Norway)
8. Frome (UK)
9. Lagan (Sweden)
10. Tamar (UK)
11. Welsh Dee
12. Scorff (France)
13. Bresle (France)
14. Oir (France)

Freshwater – several causes of decline

- Climate change –
 - warming rivers affects spawning success, juvenile growth & survival and adults are stressed or die
 - Floods destroy redds
- Barriers to migration
- Predation

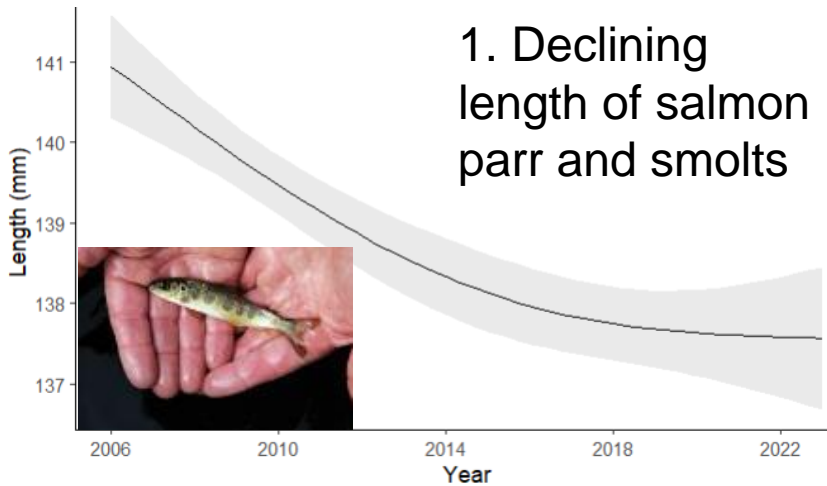


And water pollution (nutrients & sediment)

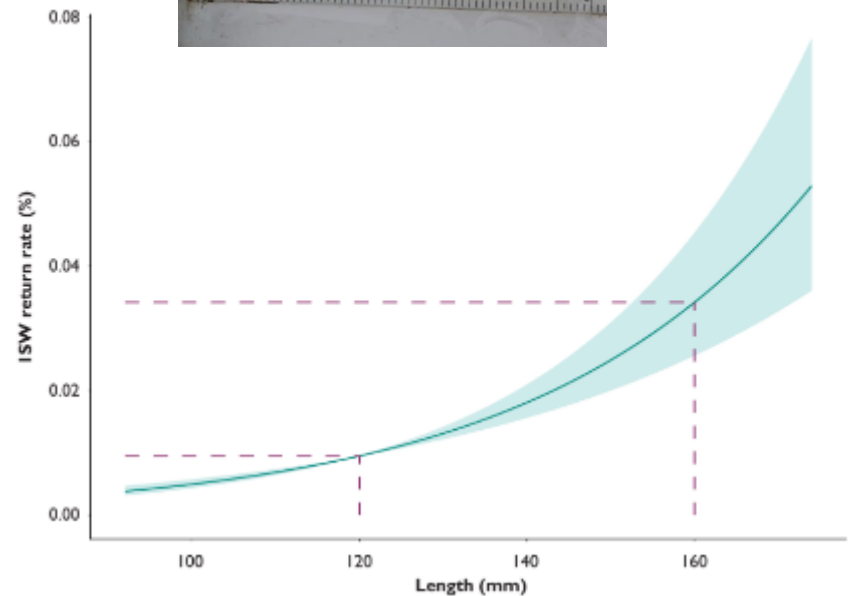


Returning salmon are getting smaller – and size matters

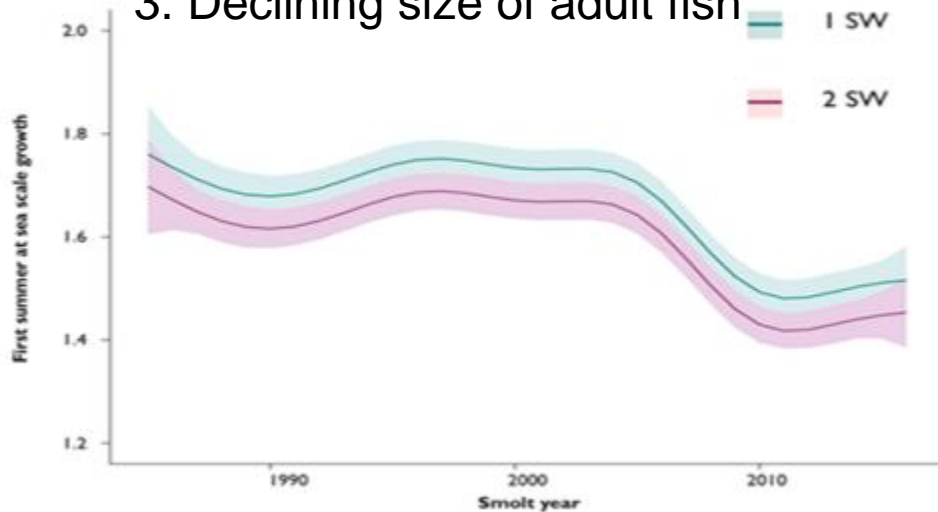
1. Declining length of salmon parr and smolts



2. This also affects marine survival



3. Declining size of adult fish

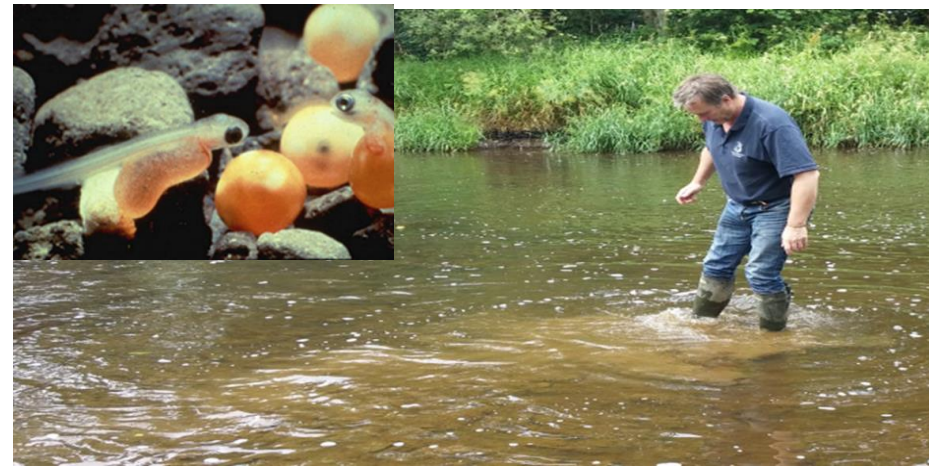
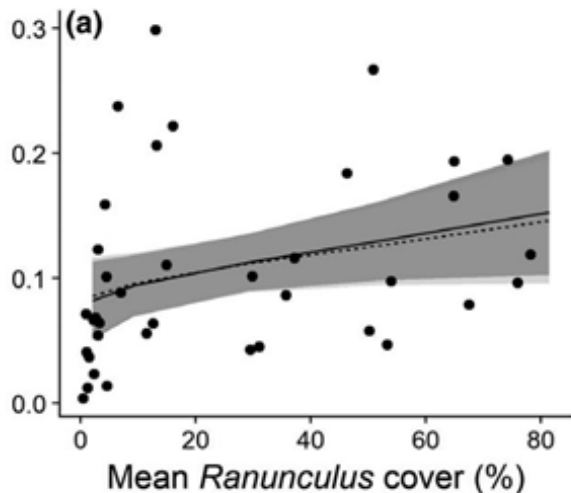


The need for improved water quality and reduced sediment in our rivers

- Boosting freshwater productivity requires:
 - Aquatic vegetation
 - Cold, clean water



Clean gravel & instream vegetation is crucial for salmon in lowland rivers



What we need to do

- A regulatory framework that is enforced!
 - And with the necessary resources to ensure enforcement and monitoring (farm and water discharge checks)
- Agriculture
 - Fully funded schemes – poor take up in the past
 - Informed advisory services to help farmers
 - Risk assessments by field/crop to identify sediment pathways and need for sediment traps

What we need to do

- Agriculture cont'd
 - Centralised slurry storage and treatment
 - Infrastructure grants for slurry storage and handling (not available in Wales!)
- Water companies & local government
 - All drains (including road) – sediment traps
 - Phosphate treatments improved
 - Sewage and road run-off – plan needed
 - Fines for repeat offences and monies to restoration

What we need to do

- Salmonid conservation
 - review the framework and rules for removal of barriers to migration
 - More balanced approach to managing predation
 - Conservation across both freshwater and marine.

Thank you!

droberts@gwct.org.uk



<https://www.samarch.org,uk>

<https://www.gwct.org.uk/fishing/>

<https://missingsalmonalliance.org/>