



The Life of a Salmon



A salmon fry, one summer old, and a salmon parr, one winter and two summers old

"Pinheads" is the name given to Salmon that have newly emerged from the riverbed.

They are only 2cms long and almost invisible against the stream bottom, they can be seen in shoals (groups) in the quiet water at the very edge of rivers and streams in May. As they get bigger and stronger, they move out into the faster water to become fully formed "Fry". In just two or three years, the tiny fish shown in this picture could be a metre long and living off the coast of Greenland.

The Salmon go through different stages, starting as fry, then becoming parr and when they are ready to leave the river and go to the sea they are called smolts. How long a Salmon stays in freshwater before smolting and going to sea depends on how fast it grows to the right size. For Tweed Salmon, the typical smolt size is 12cms and in the richer, warmer, parts of the system some can reach this size just one year after hatching. The great majority,



however, take two years to reach this size and a few three years. Fish that had taken four years to smolt are very rare for the Tweed.

When the smolts leave the river and enter the sea they use the current to help them travel northwards towards the coast of Norway. They spend their first summer at sea off Norway as they move out towards the Faeroe Islands. Some mature here and head back to their rivers as grilse after one winter in the sea. Others move towards Greenland and start to return to their home river after a second winter in the sea. These Salmon are "multi-sea-winter" fish.

At sea, their diet in the area around the Faeroe Islands is shrimps and Sand-eels, while in the Greenland area they eat fish and squid. When the Salmon return to the Tweed they do not eat at all.

Salmon come back to the river throughout the year and breed (spawn) from October to February. Some Atlantic Salmon can come back and spawn more than once, but this is mainly on smaller, shorter rivers. The Tweed is a large, long river and it takes a lot of energy for the Salmon to reach the spawning grounds. The Salmon can be seen jumping as they travel up waterfalls and in some places fish passes have been made by man to help the Salmon through obstacles. The difficult journey means that very few Tweed Salmon survive to spawn more than once.





Fish pass at Murray Cauld on the Ettrick Water

When Salmon reach the part of the Tweed where they were born they lay their eggs in "redds". Redds are areas of gravel that the female digs out with her tail that she then lays her eggs in. The male then covers the eggs with milt which fertilises them. The eggs are buried under the river bed where they will develop into tiny fish before emerging in the Spring.

The biggest recorded fish caught on the Tweed was caught by the Earl of Home in Yarrell in 1841, it weighed $69 \frac{3}{4}$ pounds. These days only a small number of fish over 30 pounds are caught each year.

Questions

What is the name given to a newly emerged Salmon and how big is it?

What is the name for a group of newly emerged Salmon?



How old is a Salmon fry?

How old is a Salmon parr?

At what age do Salmon "smolt"?

How big is a smolt when it goes to sea?

What is the name of a Salmon that returns to the river after one sea-winter?

Where do Salmon go to before they head back to the Tweed?

What do Salmon eat at sea and in the river?

What is the size of the biggest recorded Salmon caught on the Tweed?