# THE WILD SALMON MEET NUMEROUS CHALLENGES

The decline in wild salmon stocks in Norway and countries surrounding the North Atlantic Ocean is very alarming. Stocks have reduced by more than 80% during the last 30 years. Salmon is now extinct in 11 countries. Historically, it is different forms of river developments (hydro power stations, barriers, gravel excavation etc) in addition to environmental pollution and acid rain that have wiped out salmon stocks around the North Atlantic Ocean. The major threats for the wild salmon in Norway today are:

- **Sea lice:** a seriously increasing threat to migrating smolt due to intensive fish farming
- **Escaped farmed salmon:** significant problem due to genetic interference with wild spawning stocks
- **Gyrodactylus salaris:** deadly parasite killing fry, parr and smolt destroying a number of Norwegian salmon rivers
- **Acid rain:** affected water quality and destroyed stocks but improvements due to lime treatment
- **River water regulation:** numerous salmon stocks affected and threatened by large and small hydro power stations
- **Overfishing:** river angling not adjusting to the stock situation, coastal and fjord sea-netting of mixed stocks
- **Pelagic fisheries:** 'hidden' catches of juvenile salmon when trawlers fish for other fish in the Norwegian Sea
- **Global climate:** dramatic changes in the food supply in the Norwegian Sea due to temperature increase

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# The incredible WILD SALMON

Norway's silvery inheritance!

## THE SILVER-COVERED NOMAD

For thousands of years the salmon has fascinated people with its dual life in rivers and the sea, and with its fantastic ability to force a way up rivers, wild rapids and waterfalls.

The salmon has a nomadic life cycle, migrating to the sea as a smolt after 2 – 5 years in its native river and then returning to start the next cycle of new generations of salmon. The migration to the sea starts during spring time when the sea temperature is around 8°C. It remains a mystery how the smolts, far up the rivers, know when to begin their journey. Smolts are very vulnerable during this period and numerous are eaten by predators including birds and other fish. Additionally, when they reach the sea, smolts face serious infectious threats from the sea lice population. At present, only 2 – 5% of migrating smolts return back to their rivers as adult salmon.

The salmon stay in the sea for 1 – 3 years, feeding mainly off the coasts of Greenland and the Faroe Islands in the Atlantic Ocean before they return to their native rivers. Incredibly, they even find their exact pool or stretch of river where they hatched and grew up. This is after a sea journey of more than 5,000 kilometres and then often a battle with strong rapids in rivers and the necessity to leap waterfalls of 4 metres.

Nobody appears to know exactly how the salmon find their way back to the rivers. A combination of magnetic iron in their body sideline and brain, in addition to a strong sense of smell could play an important part. The first salmon show up in the rivers in early springtime and spawning takes place during October to January.

The size of the salmon is quite impressive – they can reach up to 1.5 metres and weigh more than 30 kilograms. The cock salmon (male) is normally bigger than the hen fish (female) which is seldom over 20 kilos. The longer the salmon has been in the sea the larger it becomes. The largest rod-caught salmon was caught on the Tana River, Norway and topped the scales at 35.89 kilos.

Smaller salmon stay in the sea for one year (one winter salmon or grilse) and gain around 1 – 3 kilos in weight. Salmon over 7 kilos are regarded as large salmon (three winter salmon).

Fishing for salmon is a popular sport and leisure pursuit and between 80,000 – 100,000 anglers fish for salmon in Norwegian rivers every year.

This activity brings in more than NOK 1.4 billion to the rural economy representing the equivalent of 2,900 jobs annually.

*Salmo Salar is the Latin name for the Atlantic salmon. Salmo means salmon and Salar means the springer.*