# Atlantic salmon (Salmo salar)

MarLIN – Marine Life Information Network
Marine Evidence-based Sensitivity Assessment (MarESA) Review

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#### A report from:

The Marine Life Information Network, Marine Biological Association of the United Kingdom.

**Please note**. This MarESA report is a dated version of the online review. Please refer to the website for the most up-to-date version [https://www.marlin.ac.uk/species/detail/2096]. All terms and the MarESA methodology are outlined on the website (https://www.marlin.ac.uk)

#### This review can be cited as:

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See online review for distribution map

Distribution data supplied by the Ocean Biogeographic Information System (OBIS). To interrogate UK data visit the NBN Atlas.

**Researched by** Jessica Heard **Refereed by** Admin

**Authority** Linnaeus, 1758

Other common - Synonyms -

# **Summary**

# Description

Salmo salar can grow up to 150 cm in length and weights of 39 kg or more. The colour is dependant on habitat and age. When at sea, the dorsal area is silvery and blue-green, the sides silvery, the belly white and there are dark spots along the lateral line. In freshwater, the silvery colour is lost and the fish becomes a more mottled brown, the spots darken, become larger and are ringed by a paler colour. The number and size of spots and the depth of colour also varies with age and sexual maturity. Atlantic salmon have two dorsal fins, the second is situated near the tail and is small and fleshy with no fin rays. The tail fin is slightly forked.

#### **Recorded distribution in Britain and Ireland**

Found all around the coast of Britain and Ireland.

#### **Q** Global distribution

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### Habitat

The adult Atlantic salmon spends its a life at sea, returning to freshwater to spawn. The juveniles inhabitat freshwater areas, before migrating to the sea. Juveniles undergo smolting; morphological and physiological changes which allow them to adapt to life in sea-water.

# Depth range

**Q** Identifying features

- Salmo salar have numerous small black spots mainly on the head and sides.
- The jaw line of Atlantic salmon extends back to the level of the eye. During breeding season the jaw of the adult male becomes markedly hooked.
- The tail fan rises at a steep angle from a narrow tail stalk.

#### Additional information

Due to a highly acute sense of smell, Salmo salar is able to remember the smell of the river in which it was born and on maturity return to these home grounds to spawn (Dipper, 2001). As a result of the numerous hazards, both natural and anthropogenic, most females do not make it back to the sea from their spawning grounds (Dipper, 2001). Salmo salar is a non-shoaling species (Whitehead et al. 1986) and may be confused with the similar looking brown trout (Salmo trutta), which is smaller and has much larger, more widely distributed spots.

Aquaculture of Salmo salar is big business and highly contentious. Production has increased dramatically since the 1960s and now dwarfs the wild salmon fisheries (WWF, 2001). Farming salmon to relieve pressure from wild stocks may seem like a good idea but it can have severe environmental consequences. In Britain, salmon farms are established in Scottish sea lochs and in estuaries. Salmon are cultivated in high concentrations, making them susceptible to parasites and disease. The proximity of these farms to wild populations, and the frequency with which cultivated salmon escape, puts the local wild populations at risk, both from the spread of disease and increased competition (Hendry & Cragg-Hine, 2003).

#### ✓ Listed by









### Further information sources

Search on:



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