

Pacific Pink Salmon

07 August 2017

Background

Over recent weeks the Environment Agency has received an unusually high number of reports of Pacific pink salmon (*Oncorhynchus gorbuscha*) which have been captured in both rod and net fisheries in North East England, Scotland and Ireland. To date, it is believed that over 200 pink salmon have been captured in the North East coast salmon net fishery with an increasing number of reports from rod and line anglers within freshwater. There is a possibility that these fish might be present in other rivers throughout England and Wales following the recent capture of a pink salmon in County Cork, Ireland.

Pink salmon are the smallest and most abundant of the five Pacific salmon species and are a non-native salmon species within the North Atlantic Area. Non-native species have the potential to disturb the natural balance of our environment and introduce novel parasites and diseases to our native fish species.

To protect our rivers and native salmonid species, we are closely monitoring the situation and require the help of both salmon netmen and rod and line anglers to report any pink salmon that they capture.



Figure 1 Pink salmon in the ocean and freshwater phase.
Photo:- Eero Niemelä

Where have they come from?

Pacific pink salmon are also known as humpback salmon and originate from the northern areas of the Pacific Ocean.

Significant numbers of pink salmon have been stocked in the White Sea region of northern Russia and the Kola Peninsula from the 1950's until 2003 to develop a commercial net fishery. The species has now established self-sustaining populations in a number of rivers in Russia, Finland and northern Norway. We believe that this is the most likely origin of the pink salmon recently caught in the UK and Ireland.

Unlike Atlantic salmon, pink salmon have a two-year lifecycle and generally spawn during the late summer months in late August and early September. Spawning is reported to take place in the lower reaches of rivers systems with the eggs laid in river gravel. The eggs hatch in the late spring and the juveniles rapidly "smolt" and migrate to sea without feeding in freshwater. They are therefore unlikely to compete with wild Atlantic salmon and sea trout. All adult pink salmon die after spawning. Due to their 2 - year lifecycle, the progeny will be derived from distinct 'odd' or 'even' years, with the Russian/Norwegian fish being odd-year stocks. It is therefore possible, and likely, that these fish will appear again in 2019

Pink salmon identification

As with Atlantic salmon (*Salmo salar*) and sea trout (*Salmo trutta*), Pacific pink salmon change their colouration and body shape when they enter rivers and become sexually mature.

In the ocean feeding phase or following recent river entry, pink salmon are very silvery in colouration (*Figures 1 and 2*) and can resemble fresh sea trout which has led to recent mis-identification. The most reliable features to identify a pink salmon are the large black spots on the tail and adipose fins (*Figure 3*) with a black gum line and tongue. It also does not have teeth on the tongue.

customer service line
03708 506 506

incident hotline
0800 80 70 60

floodline
03459 88 11 88

Pink salmon do not grow to a large size and mature adults typically range in size from 1.5 to 2.5kg (2 to 6 lb) or 40 to 60 cm in length. Once in freshwater, pink salmon take on a dark green colouration and male fish developing a distinctive hump (*Figure 4*).



Figure 2 - Pink salmon in the ocean phase. Photo Jonathan Shelley, Environment Agency



Figure 3: Spots on tail of pink salmon

Photo: Kim Andre S. Herstad.



Figure 4: Mature male pink salmon

Drawing by Tim Knepp

What to do if you capture a pink salmon

If you are confident that you have caught a pink salmon it should be dispatched and retained. Please do **NOT** return it to the river.

If you are unsure about the identification, if possible please call the Environment Agency on our hotline number (**0800 80 70 60**). If possible retain the fish alive in a keep net. Otherwise, you should release it.

Please report your capture, including details of where you caught it and, if possible, a photograph of the fish, to Jonathan Shelley at the Environment Agency by email: Jonathan.shelley@environment-agency.gov.uk or by post: Brampton Fisheries Laboratory, Brampton, Peterborough, Bromholme Lane, PE28 4NE.

If possible, please make the whole fish available to us for inspection and further analysis. Otherwise, a sample of the scales would be very helpful.

Thank-you for your assistance.

customer service line
03708 506 506

incident hotline
0800 80 70 60

floodline
03459 88 11 88