

Pacific Pink Salmon (*Oncorhynchus gorbuscha*) advisory note - 2021 update

Introduction

The purpose of this advice note is to ensure:

1. That all fishery stakeholders, including fishery managers, anglers and netsmen, are alert to the possibility of the return of pink salmon to English rivers during 2021.
2. To ensure that fishery managers, anglers and netsmen know what to do should pink salmon be observed or captured in England.



Pacific Pink Salmon in spawning condition

Illustration by Timothy Knepp - U.S Fish and Wildlife Service

Background

Pacific pink salmon were originally introduced into a number of Russian rivers in the 1960s and have slowly spread westwards subsequently colonising a number of rivers in northern Norway.

In 2017, unprecedented numbers of pink salmon were recorded in UK and other European rivers. These fish are believed to have “strayed” from rivers in northern Norway and Russia. The unusually high numbers of pink salmon observed in 2017 are thought to have originated from a particularly strong year class with good marine survival. Lower numbers of pink salmon were observed in 2019 although they were recorded further west.

Pink salmon have a distinct two year life cycle and stocks can be distinguished by their year of return. Some stocks return in “even” years and others return in “odd” years. Russian and Norwegian pink salmon are derived from “odd-year” stocks and it is therefore possible that they will occur again in English rivers in 2021.

Pink salmon spawn at a different time of year to Atlantic salmon (July through to mid-October), usually on the main river channel in the lower reaches of rivers although they have been observed in upstream tributaries. Juveniles hatch within 3 to 4 months and then quickly migrate to sea limiting their potential interaction with native salmonid species.

customer service line **03708 506 506**

incident hotline **0800 80 70 60**

floodline **03459 88 11 88**

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What have we learnt about pink salmon to date.

It was previously thought that the environmental conditions present in UK rivers would not be favourable for colonisation by pacific pink salmon. However, in 2017, important information was gathered about the viability of these fish to reproduce in a number of Scottish rivers.

Monitoring found that the eggs removed from pink salmon spawning areas were viable and subsequently hatched into juvenile pink salmon. We therefore need to remain alert to the possibility that a viable populations of pink salmon could become established in English rivers.

In 2017, many pink salmon were reported from the licensed salmon drift nets fishery operating off the Northumbrian coast in north east England. Furthermore, 7 pink salmon were subsequently recorded by anglers in or close to English rivers (River Wear (2) Tyne (1), Coquet (1), River Hull system (1), Hampshire Avon (1), Frome (1) and from the mouth of the Solway estuary (1). In 2019, there were 7 recorded incidences of pink salmon across the UK and the Republic of Ireland (1 in Ireland, 1 in Wales, 3 in Scotland and 2 in a T-net set off the Northumbrian coast).

In June 2021, the Environment Agency has received a notification from Norwegian environmental authorities that pink salmon have been found in larger numbers and further south and west than in previous years. Whilst it is difficult to predict what will happen, the available information suggests that more pink salmon may be observed over the coming months in English rivers. Fishery managers, anglers and netsmen are requested to remain vigilant particularly if fishing in the lower reaches of our river systems. Many of the migratory salmonid net fisheries in the North East are now closed and therefore we will be more reliant upon reports from anglers.

From the specimens that were captured and recovered by the Environment Agency, no notable disease or novel parasites were detected. However, we need to remain vigilant and continue to investigate the possible risk of undesirable consequences arising from the presence of this species.

Fisheries management organisations across the UK are sharing advice to ensure that any appearance of pink salmon in England can be monitored and managed appropriately. This will include ongoing advice to stakeholders, awareness raising and liaison with other UK and international fishery managers to exchange information on any new situation.

What should you do if you see or capture a Pacific pink salmon?

Pacific pink salmon are usually clearly identifiable from Atlantic salmon particularly when mature and in spawning condition – Please see **Annex 1**.

- If you are confident that you have caught a pacific pink salmon, the fish should be humanely despatched. Please report the capture as soon as possible to the Environment Agency on **0800 80 70 60** as this will enable the fish to be formally logged. This guidance applies to rivers with mandatory catch and release for Atlantic salmon in England.
- If you are not confident that you have caught a pink salmon the fish should be released back to the river alive where it was captured. This is to ensure that no Atlantic salmon are retained in error.

- If you have found a fresh, dead pink salmon, please contact the Environment Agency on **0800 80 70 60**

In recording the capture of a pink salmon, please collect and report the following details:

- **date of capture or sighting,**
- **location of capture (grid reference if possible) and details of the site,**
- **method of capture,**
- **sex of fish.**

If possible, please also:

- **take a photograph of the fish,**
- **obtain a scale sample from the captured fish and store these in a paper envelope,**
- **freeze and store the fish whole as soon as possible after capture,**
- **Obtain a fin clip (an adipose fin clip or a clip from any other fins) as well as a sample of dorsal muscle tissue (at least 2cm x 2cm),**
- **the weight and fork length measurement of the fish.**

Recovered or retained pink salmon can also be stored in a suitable, sealed plastic bag in a standard domestic freezer before collection. Please also store the capture details together with the fish in a separate sealed plastic bag if at all possible.

Please also be vigilant for any early or unusual spawning activity particularly during late July, August and September when pink salmon are most likely to be active in spawning areas – particularly in shallow, gravelly glides and runs. Any suspected activity should also be reported to us as soon as possible.

For further information please contact:

National Enquiries relating to pink salmon management

Simon Toms, National Fisheries Management Team Leader, Environment Agency

Mobile: **07778 991603** Email: simon.toms@environment-agency.gov.uk

Reporting of captured pink salmon by anglers and netmen

Please contact Jonathan Shelley who is co-ordinating reports from anglers

Contact details for Jonathan Shelley are:

Mobile: **07979 704 281** Email jonathan.shelley@environment-agency.gov.uk.

National Customer Contact Centre

If you have a general fisheries enquiry please telephone our National customer contact number on **03708 506 506**.

Annex 1: Identification of Pink Salmon

customer service line 03708 506 506

incident hotline 0800 80 70 60

floodline 03459 88 11 88

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Pacific pink salmon, when fresh from the sea, are steel blue to blue-green on their backs, silver on the flanks and white on their bellies. There are large black spots on the backs, upper flanks, adipose fins and tail – some of the spots on the tail can be as large as the fish's eyes. They are very uniform in size, reaching only 40 to 60cms in length. It is possible that at first sight, a fresh pink salmon may be confused with a small Atlantic salmon.

Pink salmon: Ocean phase



Image – Environment Agency

Pink salmon: Freshwater phase



Images courtesy of Helmsdale DSFB & River Dee Trust and Nigel Fell

Note the shape of the tail, spots on tail and dark mouth. Breeding males are immediately identifiable because of their humps and they will almost certainly be running milt at this time of year. Their black tongues and heavily spotted tails are also very obvious. Females will show heavily spotted tails and be pinkish-brown on the flanks.