

Hampshire Avon Fish Counter

Knapp Mill, May - July 2026



Figure 1 – Heavy trout traffic on July 11th. 18 sea trout used the fish pass within an hour of the weir hatches being adjusted.

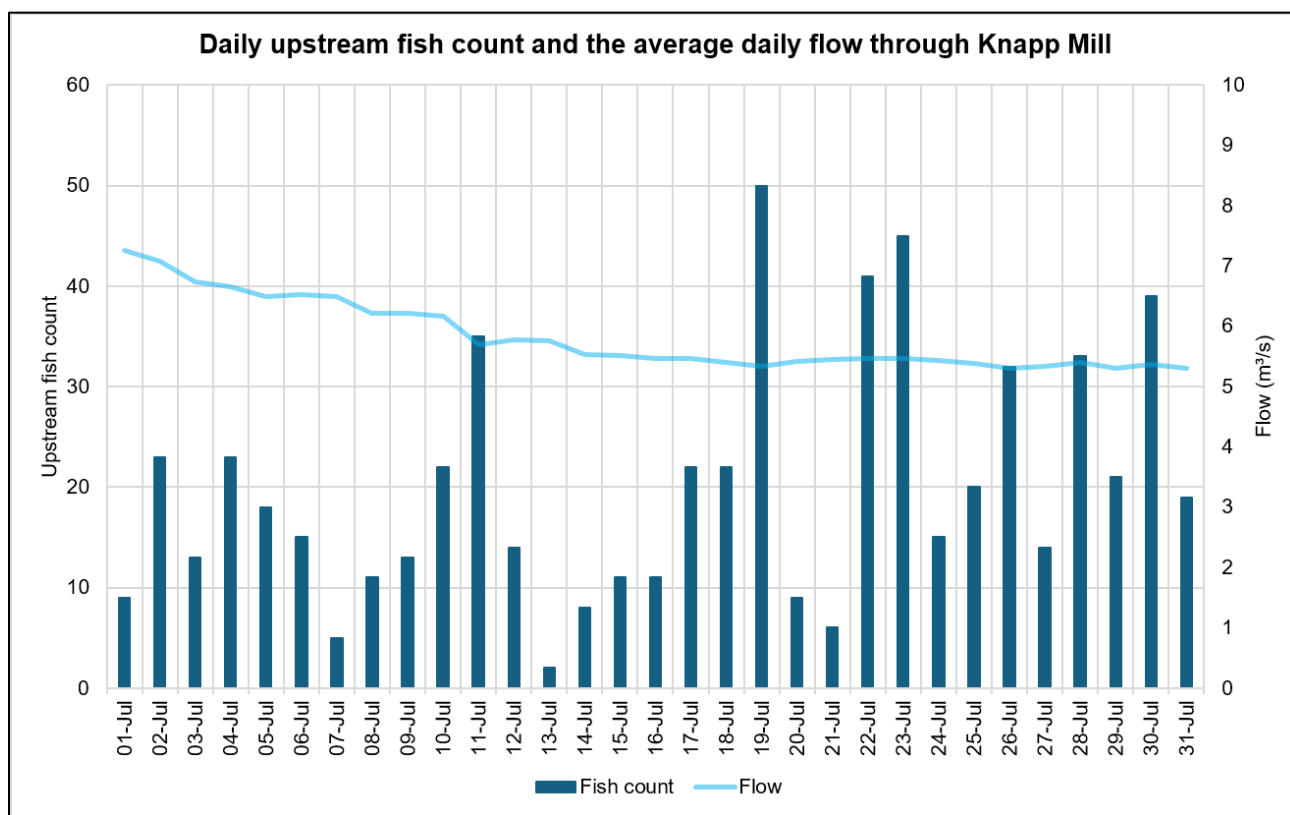
Summary

The counters at Knapp Mill operated without fault during July. With the dry conditions, there is a similar situation to last year at Knapp Mill with only one of the smaller hatches along the weir open since July 11th.

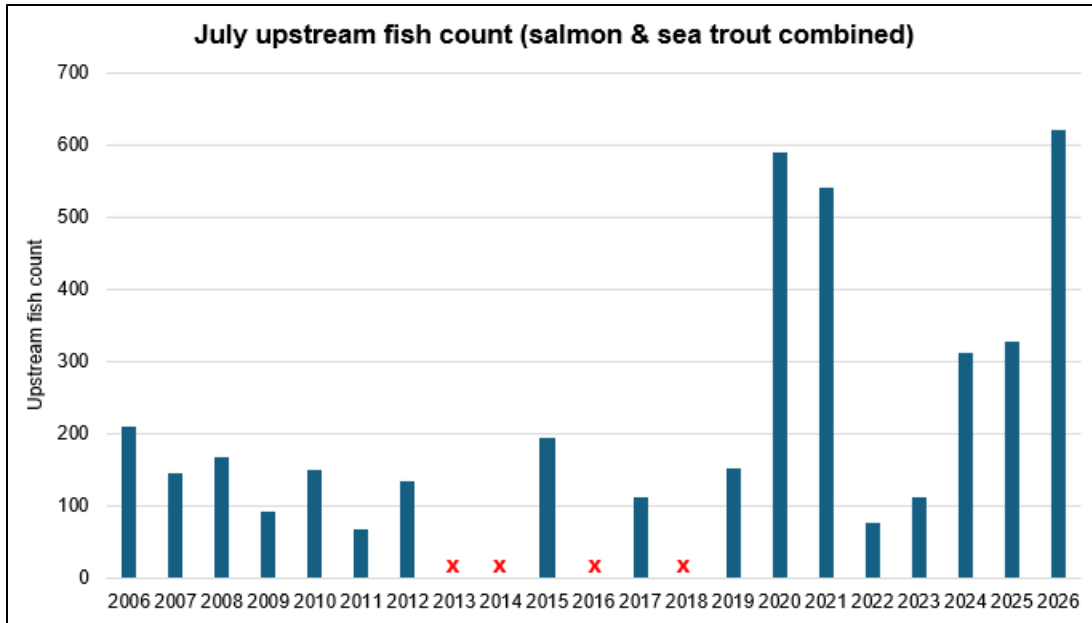
Given the large aggregations of sea trout that can be seen hanging around in the river, it's no surprise that Knapp Mill has recorded high numbers of fish during July. With 621 recorded, it is the highest figure on record for any month, beating the 590 seen in July 2020. This is 293% of the long-term average for July. In addition, 21 fish were recorded moving downstream.

The new camera set ups have been successful, and combined with the clear water have allowed over 93% of recorded fish to be identified to species level. Of these, 42 were salmon and 539 sea trout. Identifying a higher percentage of fish enables more of a detailed look at each species, which is included further below in the report.

July Data

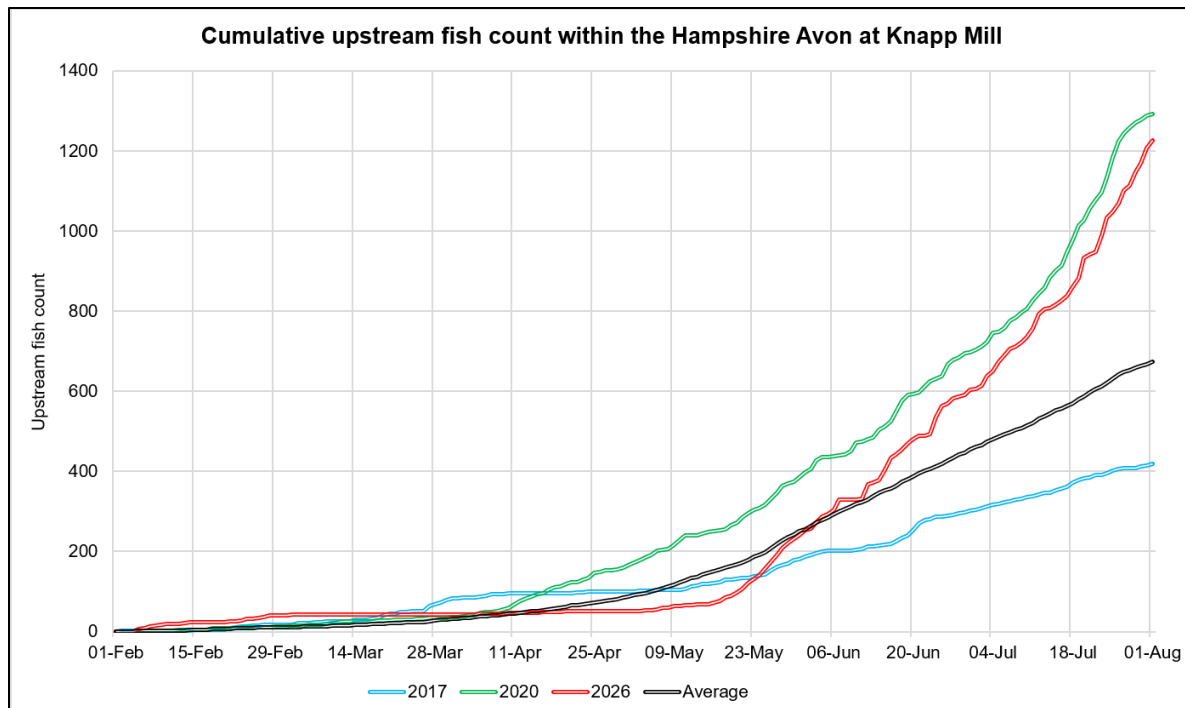


Graph 1 - 2026 upstream fish count (salmon & sea trout combined) each day in July alongside the flow through Knapp Mill for the same period.

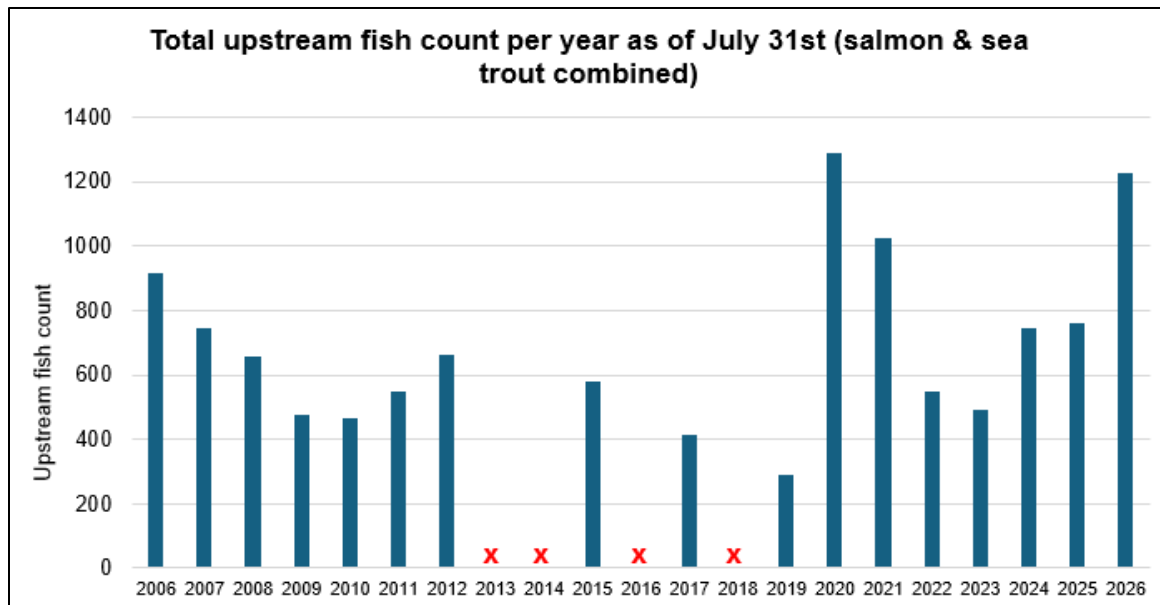


Graph 2 – A comparison of the total upstream fish count for July across each year (no valid data was available for 2013, 2014, 2016 and 2018).

Q2 Data



Graph 3 - A comparison of the long-term average since 2006 (excluding 2013, 2014, 2016 and 2018) with the current year's cumulative fish count (2026), as well as the highest previously recorded annual count (2020) and lowest (2017).



Graph 4 - Total upstream fish count through Knapp Mill for each year, beginning February 1st, as of July 31st (no valid data was available for 2013, 2014, 2016 and 2018).

The missing data for 2013, 2014, 2016, and 2018 is due to issues with the fish counters during these years that resulted in erroneously low counts being recorded. Therefore, data from these years is not included in any of the long-term averages for fish counts.

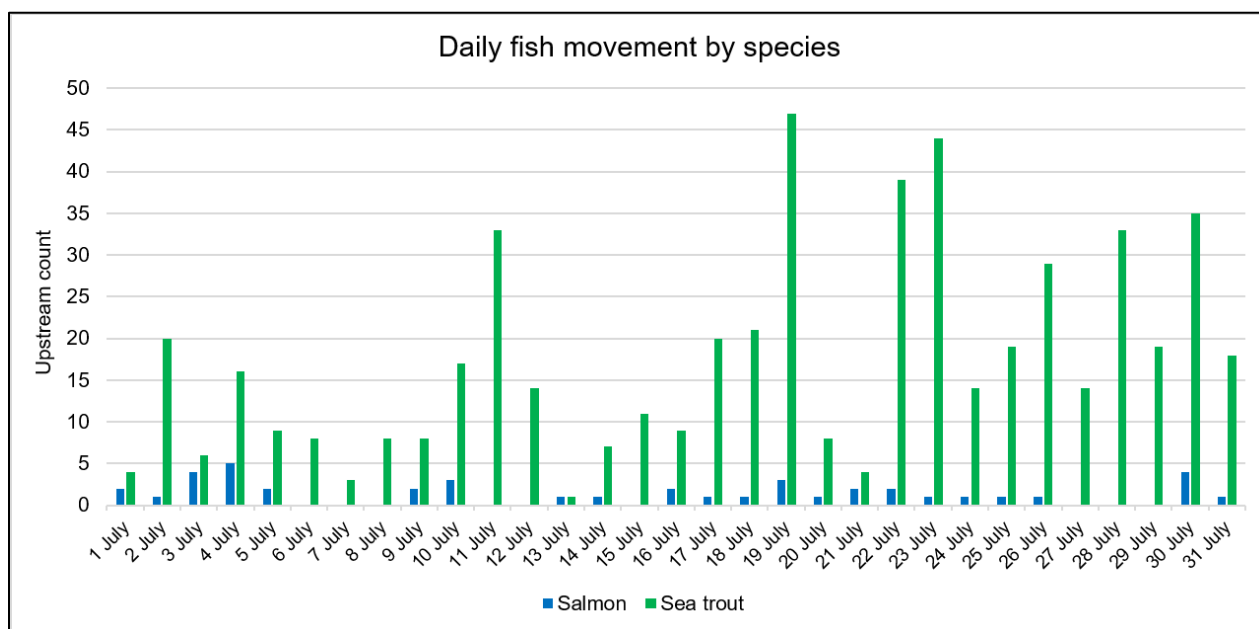
Species Split

A high proportion of such a large number of fish identified to species level for July offers a chance to look further into a comparison of their movements.

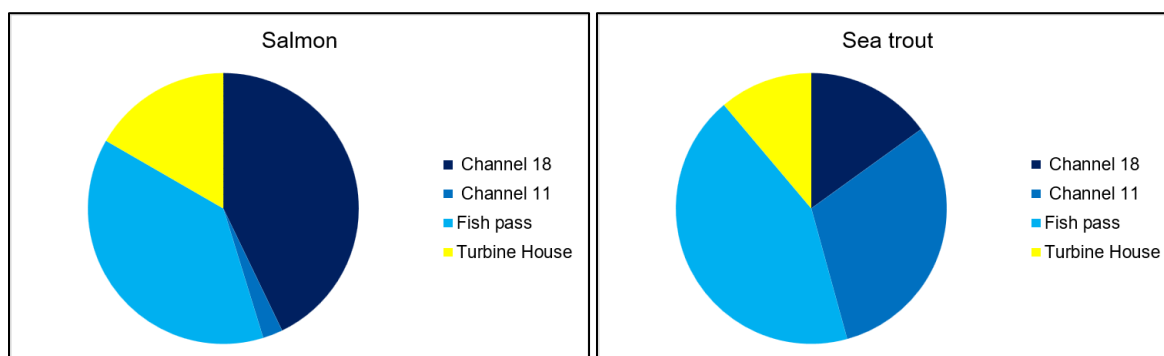
	2023	2024	2025	2026
February	4	4	14	26
March	7	36	10	1
April	43	74	22	7
May	82	47	47	179
June	136	42	93	213
July	44	46	9	45
Total	316	250	195	471

Table 1 – A comparison of salmon counts (both identified on camera **and** estimated for unidentified fish) since 2023.

Unlike June, where salmon movement is proportionally higher during the first half of the month, it has been reasonably constant throughout July (graph 5). Graph 6 shows the routes taken by each species during July, and a reluctance for salmon to use the smaller channel 11 relative to the larger channel 18. Even with falling flows, trout movement through channel 11 remains high until the end of the month. Possibly this is related to the shallow water spreading across the downstream weir apron here, which may favour smaller fish. At channel 18 the flow down the weir remains quite deep until it meets the pool below.

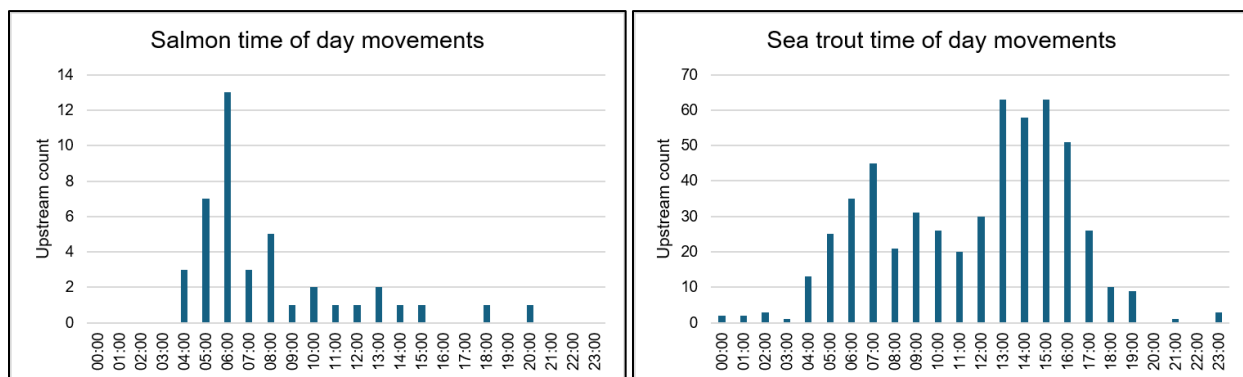


Graph 5 – Fish counts each day for salmon and sea trout.



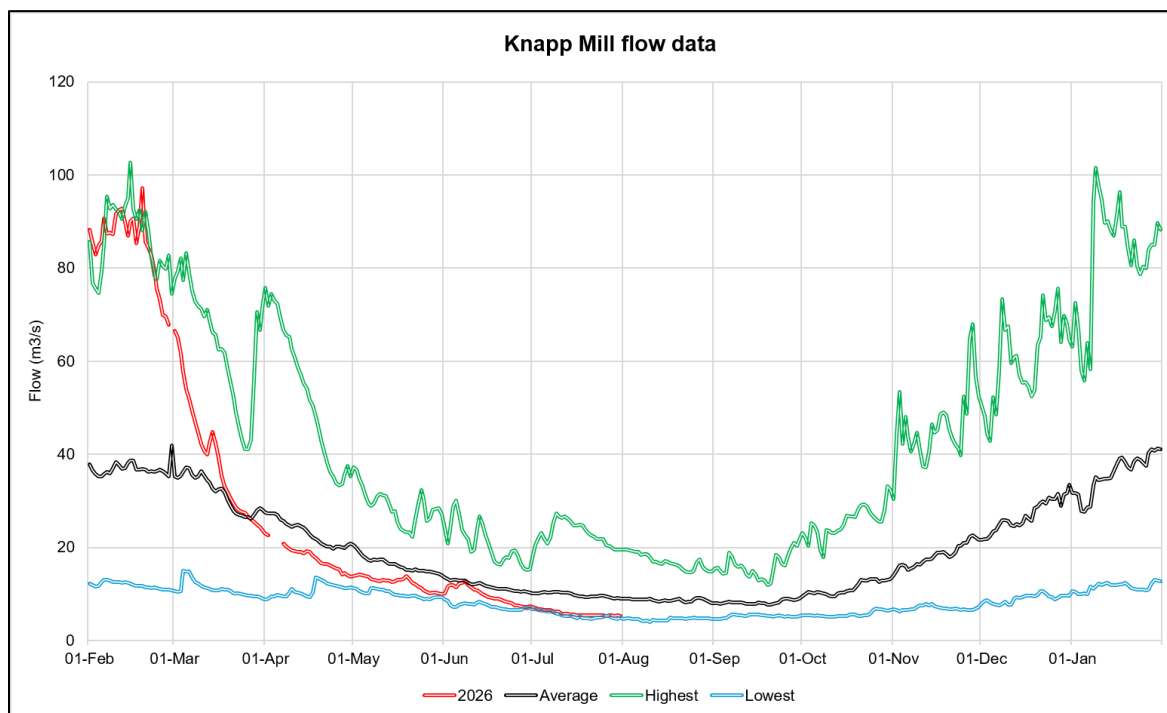
Graph 6 – Channels used by fish moving through the counters during July. Channel 18 is the largest channel by flow, and closed on July 11th. Channel 11 opened on July 11th.

Last year in these reports we looked at how the timings of salmonid movement up the counters changed throughout the calendar. Graph 7 shows how this can be dependent on which species is most prevalent at the time, as salmon show a stronger preference for mornings. However, in June, both species predominantly moved during the morning, so it appears to be the trout that have altered their behaviour into July.



Graph 7 – The time of the day that salmonids were recorded moving upstream through the counters. Times are in UTC and rounded to the previous hour.

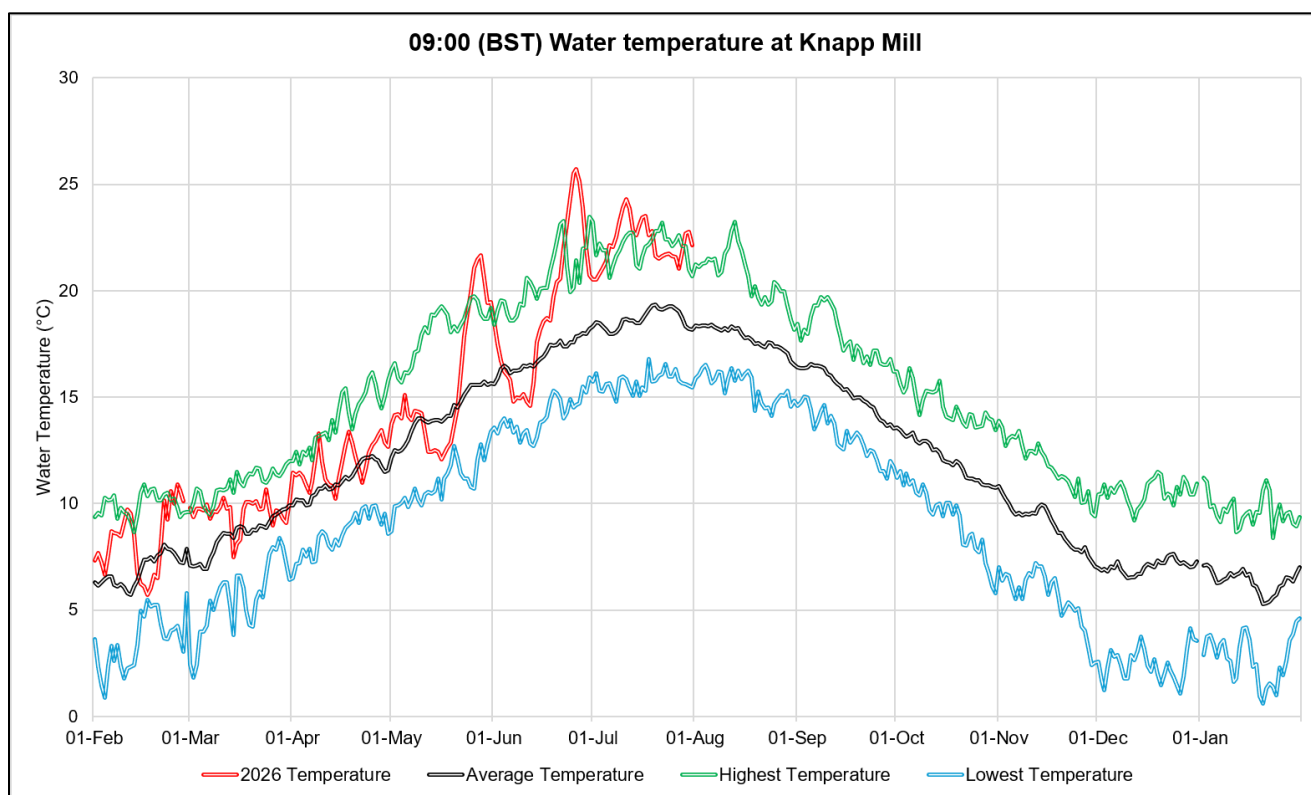
Flow and Temperature



Graph 8 - A comparison of the long-term average flow data, as well as highest and lowest mean daily flow, for the period of 01/02/2006 – 31/01/2026, with the current year's flow data.

As with last summer, it's another one this year for Met Office records. Southern England recorded it's warmest July on record, as well as the sunniest and driest calendar months ever observed.

Conditions at Knapp Mill are raising concerns again for fish welfare, with river flows close to the lows of last year and temperatures even higher. The temperature of the Hampshire Avon at Knapp Mill has now not dropped below 20°C since June 19th, and the 09:00 temperature on site has set a daily high on 32 occasions since May 25th.



Graph 9 - A comparison of the long-term average 09:00 water temperature data, as well as highest and lowest daily 09:00 water temperature (all from 01/02/2006 to 31/01/2026), with the current year's water temperature data.

Gallery

Below is a collection of images taken from the counter cameras. Figure 2 offers a sense of scale for any images taken within the fish counters.



Figure 2 – Overhead view of the Turbine House (left) and Fish Pass (right). The distance between neighbouring electrodes, as indicated by each yellow line, is 45 cm.



Figure 3 – The new camera on channel 11 has a clear view of trout heading upstream from left to right.



Figure 4 – The only salmon seen to use channel 11 during July. 21/07/26.



Figure 5 – A sea trout at the Fish Pass. In July 2025, the majority of fish moved upstream through the Turbine House, while this year the weir route has recorded ~88% of salmonid counts.

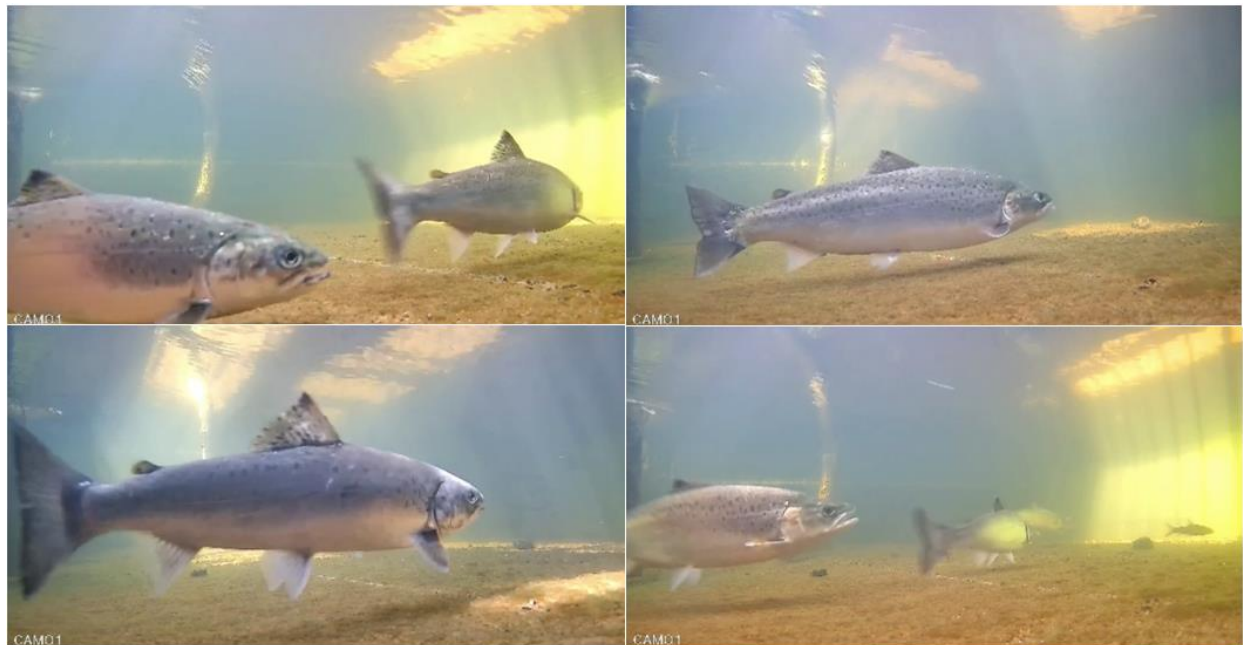


Figure 6 – Unlike the salmon, the sea trout tend to rest for a short time after ascending the fish pass, providing some clear images from the camera here.



Figure 7 – A ~80 cm salmon on the busiest day of movement, when 50 fish were recorded moving upstream. 19/07/26.



Figure 8 – An orderly ascent of sea trout at the fish pass, heading upstream into the afternoon sun. 19/07/26.



Figure 9 – The cameras haven't picked up too many images of injuries to fish, but this poor sea trout was displaying one of the more gruesome. 05/07/26.



Figure 10 – The downstream sections of the fish pass are the best spot to capture images of salmon, as they tend to spend a few minutes circling before climbing the next step. 18/07/26.



Figure 11 – The peace for the shoal of dace usually occupying the fish pass has been disrupted in July by the fairly constant stream of salmonids passing through. 23/07/26.



Figure 12 – Early mornings see a warm glow backlighting the sea trout through the fish pass steps.



Figure 13 – Gridlock in the fish pass. As alluded to in figure 1, it has been observed previously that changes to the flow through the weir resulting from hatch changes can inadvertently prompt a movement of fish through the counters. This activity was shortly after hatch 18 closed and 11 opened. 11/07/25.



Figure 14 – A ~90 cm salmon emerging from the Turbine House. 03/07/26.



Figure 15 – Given the high activity of fish movement, sea trout ascending in pairs has been spotted on quite a few occasions. 09/07/26.



Figure 16 – A shoal of gudgeon has taken up residence at the top of the fish pass, frequently appearing in shot with the salmonids. They tend to be drawn towards the cameras, helping with maintenance by cleaning the lens.



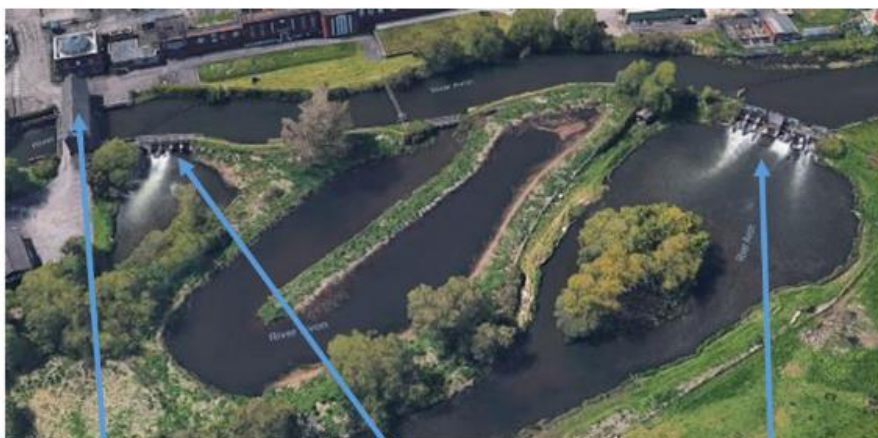
Figure 17 – Other notable sea trout include...



Figure 18 – One of the large shoals of sea trout congregating in the river just downstream of the weir, here surrounding a pike. 28/07/26.

For further information

Contact: KnappMill@environment-agency.gov.uk



Route 1 – Turbine House

Open to fish movement throughout the year in all flow conditions.

Route 3 – Side Weir

This weir unfortunately has no fish counters and so an unrecorded number of fish may use it when the hatches open in high flows.

Route 2 – Great Weir

Majority of fish pass through this structure as it sits within the main channel. The fish pass is located here.



Great Weir showing the location of each channel.