## The Hogsmill in July 2021

Yet another month of extreme conditions along the Hogsmill: it's becoming a stuck record! But there have been signs of resilience in nature. Many summer flowers are doing well, especially the "sweet and stinking".





Probably as a result it has been a better month for insects: butterflies have at last been out in abundance, especially marbled white and ringlets with very large numbers at some sites, such as Tolworth Court Farm; and many other weird but colourful summer bugs have been enjoying the flowers and leaves.



This newsletter looks at what is happening to the natural world along the Hogsmill, including the problems it faces and volunteer activities to monitor and restore its habitat, working with the South East Rivers Trust (SERT) and other local groups and alongside the Environment Agency (EA) and local water companies.

New volunteers are always welcome: we are particularly looking to recruit new members for our riverfly monitoring teams who collect and analyse samples at various points in the river every month. SERT is running online and practical training courses in August: more details at the end of the newsletter.

## The Hogsmill in July

A mirror-image of June this month: a wet half, a hot half and at least one big storm! The storm on July 12<sup>th</sup> dumped over 30mm of rain in an hour on parts of the catchment causing a large "grey" surge down the river.

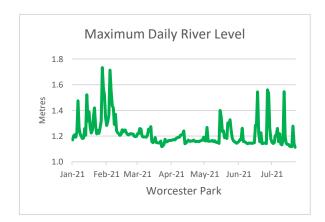


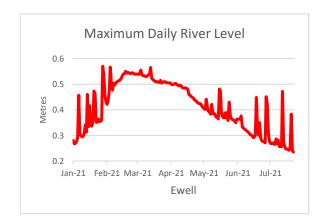




Green Lane Stream confluence

But its scale was not especially great by recent standards and it dispersed quickly, perhaps because the rain was localised. Despite a third month with well above average rainfall and strong flows from the mill ponds, the water level in the main Hogsmill fell slightly over the course of the month, especially upstream, though it remained comfortably above the summer lows seen 2-3 years ago. Flows down some tributaries became especially low. The "meter man" working for the Water Company Study of water flows has been seen out and about this month, so hopefully we'll soon learn more about the mysteries of Hogsmill hydrology!











Lower Mill "falls"

Bonesgate at Park Farm

Horse Pond depth gauge

The weather extremes have had a large impact on plantlife along the Hogsmill corridor. The rain has stimulated further rapid green growth along the banks making the game of "find the river" even more challenging this year. Everywhere the vegetation seems to be much taller; and the meadows have become a hotchpotch of ripened "old" grasses and new green growth with pockets of summer flowers.







Hogsmill in Ewell

Long Meadow

Tolworth Court Farm fields

But our Bonesgate "prairie" farmers don't seem to be faring all that well. Last July the crops in the fields alongside the Bonesgate looked thick and to be ripening nicely; this year they seem thin and dry. Last year flowers carpeted the surrounds of the fields; this year they are scarce and tired-looking.



 July 2020
 July 2021
 Park Farm
 July 2020
 July 2021

Our volunteers have again be active. The dry spell at last enabled many sections of the Outfall Safari to be completed; and there was a spurt of end-season balsam "bashing": even the Mayor of Kingston joined in! But the weather has been ideal for balsam: as well as some remaining pockets near the source of the Bonesgate, this year it has appeared on the banks in central Kingston right down to the Thames.







Six Acre Meadow

Rushett Lane

Clattern Bridge

Other "alien invaders" were seen in the Hogsmill this month. A mitten crab was found in the eel trap at Middle Mill; and 2 (probable) signal crayfish were spotted in a short stretch downstream of the Bonesgate confluence. Both species pose threats to native wildlife so hopefully these were just isolated occurrences.







Mitten crab at Middle Mill

"Big Cray" by Hogsmill Tavern (Photo thanks to Robb)

"Baby Cray" by Bonesgate confluence

As for pollution, the downpour on July 12<sup>th</sup> seems likely to have triggered overflows at the Epsom and Ewell storm tanks, especially as the rain was especially heavy nearby with Longmead Road flooded for a time. We don't yet have confirmation, but hopefully this will change soon as thanks to the work of in particular the London Waterkeeper, Thames Water has agreed to release data on sewer overflows in real-time, something that will be valuable for the safety and analysis of monitoring work.

Data just published by EA suggests that as well as the upstream tanks, more attention should be given to sewage overflows from the Berrylands STW. In 2020 there were 17 recorded overflows for about 40 hours in total at the Epsom and Ewell tanks together, but there were 30 overflows of over 250 hours at the STW.

The pollution "highlight" this month was 2 large but short-lived spills of what looked like silt from the Moor Lane and Sheephouse Way outfalls that turned the water brown for long stretches downstream, both occurring on the same day and probably caused by water main bursts. It's been quite a month for the Sheephouse Way outfall with "boiling" storm water, then silt and later the sight and smell of sewage fungus!







July 20th

July 12th

July 16th

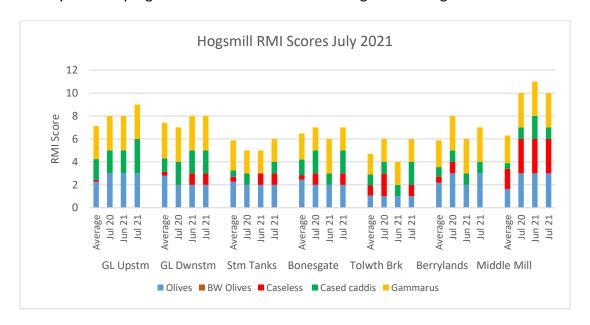
If you see pollution along the river or indications of possible pollution, such as dying fish, please call the EA Hotline: 0800 80 70 60, and ideally take a photo.

## Hogsmill RMI In July

The River Monitoring Initiative (RMI) is a national scheme for monitoring river health that uses "scores" based on counts of certain "water quality sensitive" invertebrates in net samples to assess water quality.

All 7 Hogsmill sites were sampled quite close together this time, between July 14<sup>th</sup> and 17<sup>th</sup>. All were taken a few days after the storm on the 12<sup>th</sup>, although apart from some "bank and bed re-engineering" there were few visible signs, and the water levels at most sites were the lowest they've been this year. But it is possible that the force of the storm surge shifted critters down the river in hard-to-predict ways.

Results were also closer together than June and generally good with some improvements in scores, though these were mainly driven by higher caddis counts often involving small changes in numbers:



- The highest scores were at the river extremes: a "10" at Middle Mill, though with counts in some cases well down on June's record, and a "9" upstream at Green Lanes, the highest here for over 3 years. As the one with what should be the purest water, good scores at the upstream site are to be be expected, but it has suffered from low flows and weed that can make sampling difficult. The increase this month was driven by a big rise in cased caddis numbers: a spring boom in these critters was the norm here but did not happen in 2020 and seems to have come late this year;
- Scores at the 3 sites downstream of the storm tanks Green Lanes downstream, Ewell Storm Tanks, and Bonesgate were in the "comfortable" "6-8" range. But at all of them olive counts were very low by historical standards as they had been last month after previous spills and scores were down on spring values, so *perhaps* there are *some* indications of a pollution impact;

- Further downstream there were improvements in scores, with a recovery from the low June score at Tolworth Brook and a boom in gammarus at Berrylands driving an increase in score;
- Amongst the species, notable this month was the wide spread of caddis: cased being recorded at all 7 sites and caseless at 5. Such diversity is a good sign, although with numbers mostly low and identification often hard it would be unwise to read too much into short-term changes in counts;
- We also found a good range of other weird critters, including a riffle bug "gang" and a cheeky mussel sticking its "tongue" out at the indignity of being in a tray!





## The Hogsmill Needs You!

Through retirements and moves, our RMI teams have become depleted so new members to help with the monthly surveys, which typically take 1-2 hours at a site, would be very welcome.

SERT is running a training course for new recruits for the Hogsmill and other local rivers early in August. This will be in 2 parts: the theory behind riverfly monitoring and the survey method will be covered in online sessions on Thursday 5<sup>th</sup> August from 4-7 p.m. or Thursday 12<sup>th</sup> August from 4-7 p.m.; then there'll be a practical session to try out collecting and counting a sample on Wednesday 18<sup>th</sup> August at Barnes Green.

Further details and how to book are on the SERT Events page: <a href="www.southeastriverstrust.org/events-2/">www.southeastriverstrust.org/events-2/</a>. If you'd like more information or would like to join but cannot make these times please contact Jess at SERT: <a href="jess@southeastriverstrust.org">jess@southeastriverstrust.org</a> Other volunteering opportunities are also available; see the SERT website.