The Hogsmill in August 2021

It's been the calm *after* the storms this month: monsoon-like downpours at the start battering the Hogsmill corridor then a spell of dry cool gloom more reminiscent of autumn. So yet more confusion for the critters, though some look to be enjoying the tranquillity that has returned to the Hogsmill "lakes and mouth".







Bourne Hall Lake

Hogsmill STW Nature Reserve

Charter Quay

But the conditions seem to have taken a toll on some of our wildlife: insect numbers, especially butterflies, have fallen sharply and judging by their "hungry" look, our predators may be having a difficult time!







"Not much to eat around here now!"

"I can't wait for water voles to be released!"

But being the Hogsmill there is always something colourful or special to see in the greenspace.







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.

The Hogsmill in August

In the 2 weeks around the start of August well over 100 mm of rain fell in parts of the Hogsmill catchment, much in storms that raised the river level close to its highest recorded value in recent years. But as usual the level dropped back quickly and with little further rain it again fell slightly over the month.



The storms left a legacy of scoured banks, helpfully removing some riverside balsam, and detritus, some of which has accumulated in "stagnant pools" that surprisingly developed after only a few dry days. The bankside and meadow vegetation has also become "raggedy" with few signs of life or of the abundance of berries usually seen at this time of year. The one plant that is thriving in the meadows is unfortunately balsam, though at least it is providing some colour in an otherwise drab landscape.







Hogsmill in Old Malden

Long Meadow

Six Acre Meadow

It's been another busy time for volunteers. Good progress has been made revamping the Moated Manor site by the Hogsmill: the "Moles" have installed a fence so cows can be used to tackle the unruly meadow grass allowing other plants to thrive; and Citizen Zoo's impressive bird hide is now in place above the pond.







Tolworth Court Farm Moated Manor Site

The dry spell also enabled most remaining sections of the river to be surveyed for outfall pollution, including "hidden" areas such as the Tolworth Brook winding through the back streets of Tolworth that was also found to be blighted by invasive species, including Japanese knotweed.







Bonesgate confluence

Tolworth Book

As for pollution, the August 7th storm led to a spectacular overflow of the Ewell Storm Tanks that even overwhelmed the new screens leading to rag escaping into the river. With the amount of water, it seems likely that the earlier storms in late July also caused overflows here and at the Epsom Tanks. The July storms also led to overflows from the main sewer pipe that runs alongside the Bonesgate, with rag seen around manholes from Moor Lane to Tolworth Court Farm, though it didn't appear to reach the stream itself.











Ewell Storm Tanks

Tolworth Court Farm

Moor Lane

Some of the largest outfalls were submerged by the stormwater surges, leaving behind massive amounts of rubbish in some cases, while others were swamped by flows of "black" road run-off.



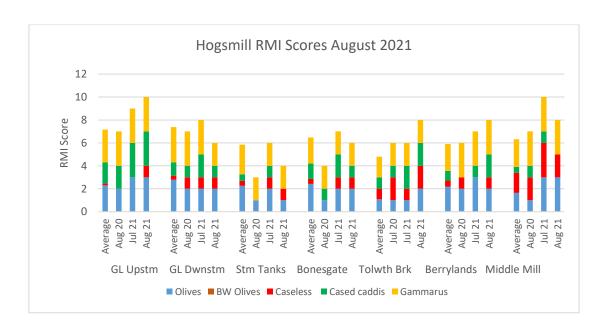
If you see pollution along the river or indications of possible pollution, such as dying fish, please call the EA Hotline: 0800 80 70 60, and ideally take a photo.

Hogsmill RMI In August

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.

7 Hogsmill sites were sampled between August 12th and 18th. Like last month the surveys were a few days after the big storms, but while the water level had returned to about normal, this time the strong surges of water had more of an impact in reprofiling the river bed at some sites, perhaps impacting on the counts.

Results were mixed with a marked contrast between the mid-river sites and those at either end of the river:



Scores were poor at the 3 mid-river sites closest to the Storm Tanks and down on July: "6" downstream at Green Lanes, only the third time since 2016 that such a low score has been recorded here; "4" at Ewell Storm Tanks; and "6" at Bonesgate. Counts of olives and gammarus were very low, under a third of the long-term average. This *could* be a sign of a pollution effect from the Tank overflows, though there are other factors that could have played a part. The Green Lanes and Bonesgate sites were the ones with particularly large post-storm shifts in gravel/stones on the riverbed affecting both depth and flow; and August is traditionally a bad month at the Tanks, though this is usually related to low summer flows, not an issue this year.

The results at the other sites were all good and well above the long-term average. Upstream at Green Lanes the score of "10" was the highest ever recorded here, albeit one resulting from the "catch" of a single caseless caddis. The downstream sites all scored "8", with improvements at Tolworth Brook and Berrylands but some fall back from the exceptionally high recent scores at Middle Mill.

Amongst the species, cased caddis were recorded at all sites, the first time this has happened on the Hogsmill, though with numbers typically small it's not clear whether this is a significant change. Counts of other species were generally down from last month.

Strengthening the Hogsmill RMI

Thanks to the training course run by ZSL and SERT this month, some more volunteers have gained their RMI "badge" some of whom will hopefully join us on the Hogsmill.



An exciting new development is SERT's plan to increase the sophistication of Hogsmill monitoring by joining Salmon and Trout Conservation's "SmartRivers" scheme. This will involve taking extra samples twice a year at our sites that will be preserved and analysed in much greater detail with expert help. This should enable better identification of the drivers behind our scores, including sediment, chemicals and flow variations as well as pollution, hopefully throwing light on the many puzzles that arise with our current results. If you are interested in becoming involved, please contact Jess at SERT: jess@southeastriverstrust.org