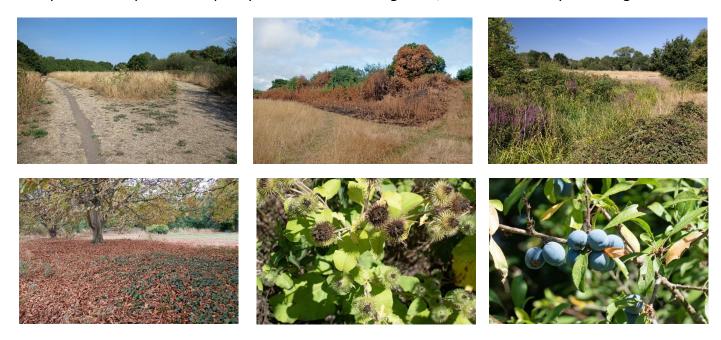
The Hogsmill in August 2022

The impact of continuing extreme conditions has become even more apparent along the Hogsmill this month: bare dry vegetation everywhere, and in Tolworth Court Farm hit by fire, with the riverbanks still providing almost the only green respite. There are also signs of an early autumn: trees shedding their leaves, "sticky" burrs everywhere and plenty of berries in the hedgerows, with some already withering.



It's been a tough time for most invertebrates, with massive falls in counts in our regular surveys of butterflies and river invertebrates along the Hogsmill. There've been just a few sightings of some late summer "specials", while competiton has been fierce for the few flowers in bloom. The only species that seem to have had a good month are damselflies and dragonflies as they have enjoyed the bankside "green".









(Photo thanks to Kim)

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

A slight respite from the dry spell, though until the late downpour the Hogsmill largely avoided the heaviest rain so it only had a small impact. Even so, unlike some other local rivers, water has continued to flow all along the river and the average depth and flow have not changed much over the course of the month.

But this mainly reflects strong augmentation, mostly "deliberate" from the Ewell pumps and STW effluent but also partly "accidental" with water main bursts, especially in Chessington Malden Manor, leading to large water surges from outfalls into the river. Along with the rain flushing weeks of road run-off and pollution from outfalls, the quality of the water must have been far from the chalk stream paradigm.









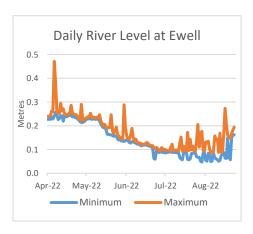
River Mole

Green Lanes Stream

Six Acre Meadow

Blue Bridge Kingston

Also with the repair work at the Ewell ponds continuing, the flow of water into the upper Hogsmill has again been highly variable: on some days the flow over the Mill "falls" has been at "winter levels" while on others there's been no flow at all. This has been reflected in large fluctuations in river depth downstream, with exceptionally low levels on some days, something that may well have affected river wildlife. But hopefully with the work now largely complete the flow will be more stable and there'll be fewer leaks from the Ponds.









August 10th

August 20th

"New" Upper Mill Pond

The main volunteer activity this month has been at Tolworth Court Farm: another field recorders' day, a highlight of which was some fierce-looking wasp spiders; a bat walk at which common and soprano pipistrelles were heard; and scything at the Moated Manor, a traditional meadow management technique.









The notable pollution "events" this month have been from burst mains and rain leading to a "cocktail" of pollution through some outfalls, such as Sheephouse Way: sewage; silt and sand; and road run-off. This must have been a horrid combination for wildlife; and to top it all an "alien invader" was spotted nearby!









August 1st

Sheephouse Way August 15th

August 25th

Signal crayfish (Photo thanks to Pauline)

If you see pollution in 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. You can also contact Thames Water on: 0800 316 9800 (option 2); on: www.thameswater.co.uk/help/emergencies/pollution; or on twitter: www.thameswater.co.uk/help/emergencies/pollution; or on twitter:

Hogsmill RMI In August

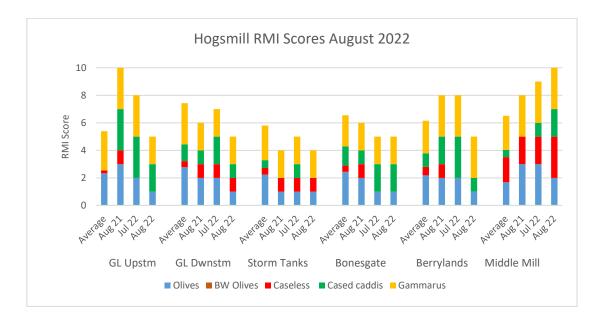
The River Monitoring Initiative (RMI) is a national scheme for monitoring river health that uses "scores" based on counts of certain "water quality sensitive" invertebrates in net samples to assess water quality.

The 6 main-river sites were surveyed between August 17th and 20th. With the exception of Middle Mill, the results were substantially worse than last month. All had scores of only 4-5 and the average for these 5 Sites was the lowest since August 2017, another time when the water level was particularly low. So it looks as if the drought is now having a significant impact on river life:

• The "5's" at the Green Lanes sites were 2-3 points below the July scores with big drops in most counts, but especially cased caddis. For the downstream site this was the lowest score ever recorded, though some counts were just below the "band boundary" so it could easily have been a little higher. Over

the previous month the water depth here had fluctuated considerably around a level not much changed from July. But at the particular time of the surveys it was at a very low point of the "cycle", which *might* have affected the *recorded* score as it was hard to collect net samples;

- The score also fell by 3 points at Berrylands, with large drops in all counts, but especially cased caddis. A substantial number of small dead fish were found in the trays, though this could have been partly the result of "the trauma of being caught". This was only the second time since early 2019 that a score as low as "5" had been recorded here. The water level was up slightly on July, mainly because of recent rain though even before this the depth and flow had remained at moderate levels;
- The counts at both the "shallow sites" were down on last month, leading to a "breach of the trigger" at Ewell Storm Tank and a "narrow miss" at Bonesgate. At both, the depth and flow were again very low making sampling difficult;
- The exception to the bad results was Middle Mill where the score rose to a "10", mainly reflecting a
 big jump in caseless caddis numbers. This is in line with the usual pattern of summer high scores.
 Presumably the effluent flows from the STW, which typically add 10cm or more to the water level at
 peak times, are shielding the site from the problems upstream;



• Amongst the species, there was a large drop in olive numbers from July though more dramatic was the fall of over 90 per cent in the total count for cased caddis. But this was mainly a reflection of the extraordinarily high July numbers; cased caddis counts normally fall around this time of year though this month's figure was still quite low by comparison with previous years.

"Disappearing invertebrates"

These low scores are a reflection of what has been a poor year so far for invertebrates, both below and above the water. At 5 RMI sites (excluding Middle Mil) the total recorded counts of our 4 RMI species since April are almost a third down on the same period in 2021, with that in August only half that of last year.

The picture with butterflies where we also have "formal" counts is broadly similar. At the 3 Hogsmill sites – Malden Manor Nature Trail, Tolworth Court Farm and the Ewell Nature Reserve – the total recorded counts in our weekly surveys since April are almost 20 per cent down on last year, with numbers so far in August only 15 per cent of those in 2021.

