The Hogsmill in June 2022

A time for national celebrations at the beginning of the month. The wildlife along the Hogsmill played its part with "red, white and blue" species displaying prominently, while some rare or elusive critters came out into the open, perhaps hoping to join the very rare Atlas and Globemaster "birds" in the "Hogsmall" fly past!















Yellowhammer

Linnet

Painted lady

Atlas and Globemaster

But for many creatures it was business as usual: feeding, mating and looking after the youngsters.



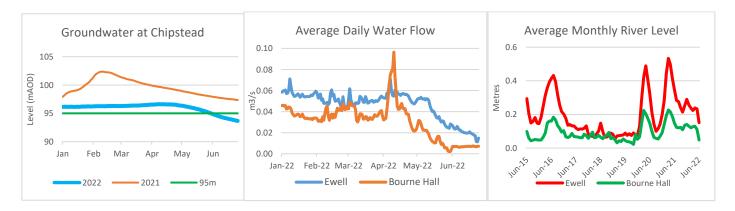




This newsletter looks at what is happening to the natural world along the Hogsmill, including the problems it faces and volunteer activities to monitor and restore its habitat, working with the South East Rivers Trust (SERT) and other local groups and alongside the Environment Agency (EA) and local water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

The Hogsmill in June

Despite a welcome spell of rain around the end of May, it's been another relatively dry month. The impact on the Hogsmill has become much more noticeable. The springs have dried up as the water level in the aquifer has fallen steeply and this has been reflected in a large fall in the flow of water at the upstream end of the river. The resumption of augmentation in May stemmed the decline for a time, but even so the average water level this month in Ewell has dropped back to the values seen in the dry summers of the later 2010s.



The augmentation helped clear blue algae from Bourne Hall Lake but this has been replaced by patches of green algae. Also after the very hot days there were sudden sharp drops in the water levels in the Horse Pond and Upper Mill Pond highlighting the fragility of the "water system" feeding the Hogsmill. These have been reversed by closing a valve at the Mill, but not before parts of the Pond dried up completely for a few days with several dead fish reported, though some youngsters seemed to appreciate the easy source of food!







Bourne Hall Lake

Upper Mill Pond

Perhaps surprisingly, recorded levels at the gauging stations further downstream did not change much for most of the month. They fell after the Ewell "incident", though it is not clear if this is just a "short blip". But even before this there were clear signs of marked falls at some of the fixed gauges and "on the ground". Levels were noticeably down from May at our RMI sites, by up to about 5cm where we are able to measure reasonably accurately and in some cases leaving the water so shallow as to make net sampling difficult.









Green Lanes Stream

Ewell Storm Tanks (Photo thanks to Robb)

Bonesgate confluence

Berrylands

Mid-June in the meadows has looked rather different from recent years. The abundance of flowers in 2019 is far from being repeated, perhaps explaining a generally poor time for insects so far this year. But even with the dry weather the meadows do not yet look as bare and parched as two years ago, though this may be changing; and the absence so far of the storms that hit the area last June means that the resulting "green boost" is absent. What is notable this year is the vigorous growth of grasses, almost up to an "elephant's thigh", so there should be a good incentive for mowing for hay to help refresh the meadows.









June 2019

June 2020

Long Meadow

June 2021

June 2022

The focus for volunteering this month has been on removing Himalayan balsam to limit the extent to which this invasive species, already swamping large areas of the banks of the Hogsmill, can release its copious seeds. This year special efforts are being made to tackle upstream sources on the Bonesgate from which seed can easily spread down the river. But "bashes" have also been held at the usual "hotspots" with many enthusiastic "pullers" motivated by competition to find the "tallest specimen"!







But large clumps remain that can't easily be tackled by pulling. So with support from the experts at CABI, a new approach is being trialled involving infecting balsam with a rust fungus that damages balsam without harming other plants. This is being tested on a small patch and it'll be next year before the effect can be assessed. So it is not a quick fix, but it has the potential to be a valuable additional tool in the longer-term.







"The continuing balsam challenge."

"Spreading the rust spores"

There have been signs of pollution at some of the "well-known" outfalls this month, but perhaps fewer than might have been expected in dry weather. The usual flow of water through several outfalls has completely dried up so it may be that pollution from misconnections has become "stuck" inside the system.







Cox Lane

Sheephouse Way

Malden Way South

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: <a href="https://www.thameswater.co.uk/help/emerg

Hogsmill RMI In June

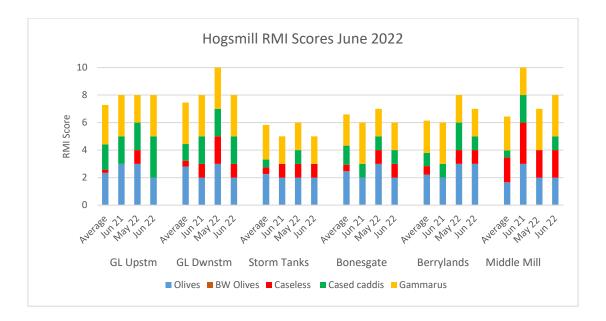
The River Monitoring Initiative (RMI) is a national scheme for monitoring river health that uses "scores" based on counts of certain "water quality sensitive" invertebrates in net samples to assess water quality.

The 6 main Hogsmill sites were surveyed between June 15th and 18th, at the peak of the heatwave so some of us looked like the red chironomids that were unusually common in our samples this month, though we found some shade to welcome Emma who has taken over organising RMIs in SERT!





The results were mostly around the long-term average, but down on May and overall equal to the lowest average over the past year. This *could* be an early sign of an effect of the low water levels and flows, though it is early to judge, especially as any impact seems likely to build up over time if dry weather continues:



- The highest scores were the "8s" at the river extremes, sites that all benefit from augmentation of the natural flow. At the Green Lanes Stream sites, water levels were down but there was still a steady flow of clear water. Both had good counts of cased caddis, with well over 100 at the upstream site, something that is regularly observed here in the early summer;
- The water level at Middle Mill was also down but sustained by the top-up of treated water from the STW. There were increased counts of all 4 of our main species this month. But scores are usually very high here in the early summer so the "8" is perhaps disappointing;
- The lowest score, a "5", was at Ewell Storm Tanks, though this is fairly typical here. As it has the shallowest water of all our sites, it is particularly vulnerable to low water levels/flows; scores were badly affected in the dry summers of 2016-17. So it will be a good indicator if the dry spell continues;

- Scores and most counts were down at both Bonesgate and Berrylands, though not massively so. At both the water level was noticeably lower, by almost 5cm at Berrylands to the lowest value since we began water depth at the site in 2016;
- Amongst the species, there was a big decline in olive numbers, almost a halving overall from May.
 Cased caddis numbers held up overall, but like last month they were concentrated in the Green Lanes sites; there was no repeat of the boom in small "stick-cased" across several sites seen in the spring.
 But we did find a hydroptila "micro-caddis", a rare spot on the Hogsmill as they are so tiny; and plenty of demoiselles, both above and below water.







"What sort of caddis are you? ..."

"I'm a hydroptila!"

Thames 21's London Rivers Week to celebrate London's rivers and the work being done to renaturalize them is being held from July 11th to 17th. A wide range of events are planned across London, details and booking information are on their website: https://www.thames21.org.uk/events/">Putting Healthy Rivers at the Heart of the Community > London Rivers Week 2022 – Thames21

For the Hogsmill these include: on July 11th a volunteer day to improve the river through bank reprofiling and the installation of deflectors; on July 12th a guided walk around the Hogsmill Nature Reserve and a balsam bash on the Bonesgate; and on July 14th a nature-friendly dog walk in Elmbridge Meadows and a tour of the Hogsmill STW. There are also nearby events on the Beverley Brook and Wandle; and walks along other London rivers that should provide opportunities to see how the Hogsmill compares with similar urban rivers.