

The Hogsmill in February 2022

It was “calm before the storm” this month with a tranquil period along the Hogsmill brought to an abrupt end by Eunice and friends. These toppled several riverside trees and made the bankside look even more of a brown wasteland, but the impact on the river seems to have been less than might have been feared.



There have also been signs that the winter gloom is ending with the first spring growth and colours;



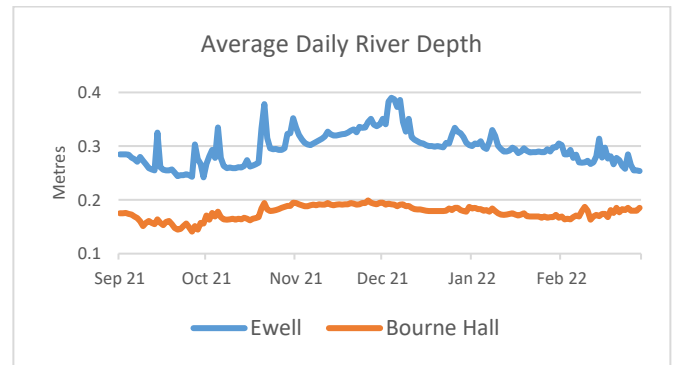
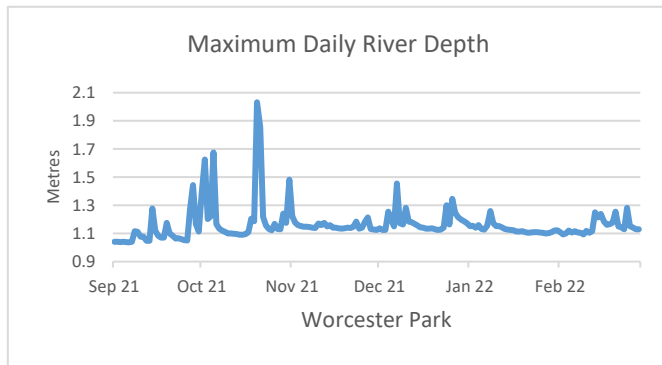
and the birds have been preparing for spring; some singing loudly from the treetops to attract a mate, while others have been perching on their “balconies” waiting for their Romeos to fly by!



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. This month it also compares the results of riverfly monitoring on the Hogsmill with those on other rivers.

The Hogsmill in February

The storms were more wild than wet: rainfall has been above average this month but not enough to offset the low amounts so far this winter and it has generally been steady. The water level has actually fallen slightly upstream as flow from the springs has dropped; and while there have been some rises downstream there's been no repeat of the downpours and large water surges that tend to trigger storm tank overflows.



But the rain has affected the appearance of the river: it has remained largely clear upstream but each spell of rain has brought a tide of land run-off down the Bonesgate so for much of the second half of the month the water down at least as far as New Malden has been murky and varying shades of brown.



Ewell Stepping Stones



Bonesgate confluence



Old Malden

There have been a number of pollution incidents in the river this month: a stream of pollution was flowing from one of the culverts in Alexandra Park; the water close to the stepping stones in Ewell turned grey for a time, though the source is unclear; and significant pollution returned to one of the A240 outfalls.



Alexandra Park



Ewell (photo thanks to Caroline)



A240 upstream

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) or on their website: www.thameswater.co.uk/help/emergencies/pollution.

There have been other “blots on the riverscape” along the Hogsmill. With the banks bare of vegetation the blight of rubbish and fly-tipping has become more obvious and this month has extended to the river itself, while the brown water has led to some unsightly build-ups of silty scum. Non-native species have also been spotted, including the first signs of what is likely to be another large invasion of Himalayan balsam.



Hogsmill RMI In February

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.

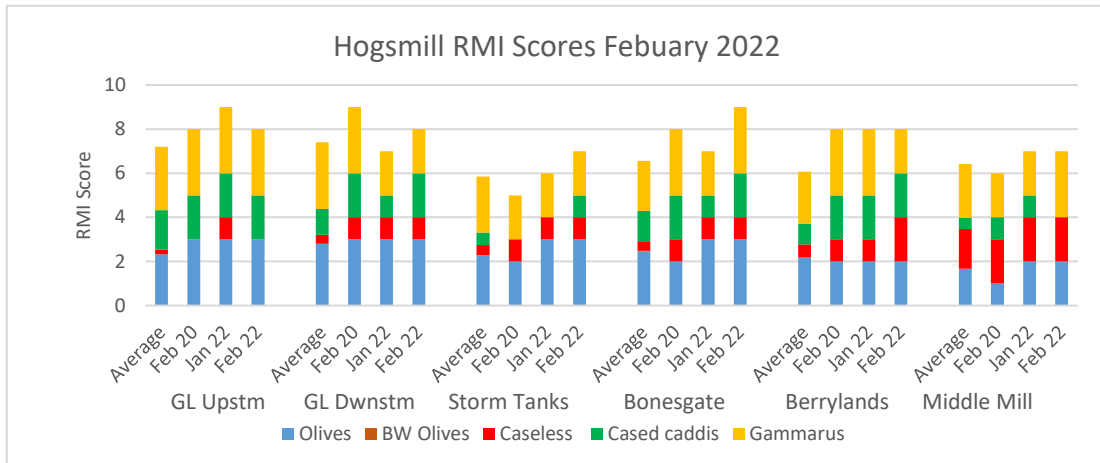
The 6 main Hogsmill sites were sampled between January 17th and 25th, spread out so we could avoid the storms and enjoy some calm sunny interludes that highlighted the flowers at some sites.



The scores were again good with some higher than January, though partly from small changes in counts:

- the best result this time was the “9” at Bonesgate, based partly on the highest gammarus count for over a year. This is the site most impacted by the brown water flowing down the Bonesgate, which was still evident when we did the survey, so it doesn’t appear to be affecting numbers, at least not yet. Our sampling also disturbed bullhead eggs deposited at several locations on the riverbed, so hopefully there’ll soon be new mouths to take advantage of the good invertebrate numbers!;

- also notable was the increase to an “8” downstream at Green Lanes, the result of a large jump in the cased caddis count to about 70 from around 10 found normally. There was a also a large – but short-lived – spike here at a similar time in 2020 so perhaps this is seasonal;
- the one score below January’s was upstream at Green Lanes, but this was solely because last month’s rare catch of a caseless caddis was not repeated;



- amongst the species, both gammarus and cased caddis numbers were up at 5 of the 6 sites, but again the star finds were of cased caddis: as well as large numbers of tiny “sticks”, some “whoppers” with a variety of shapes and sizes were caught in the nets.



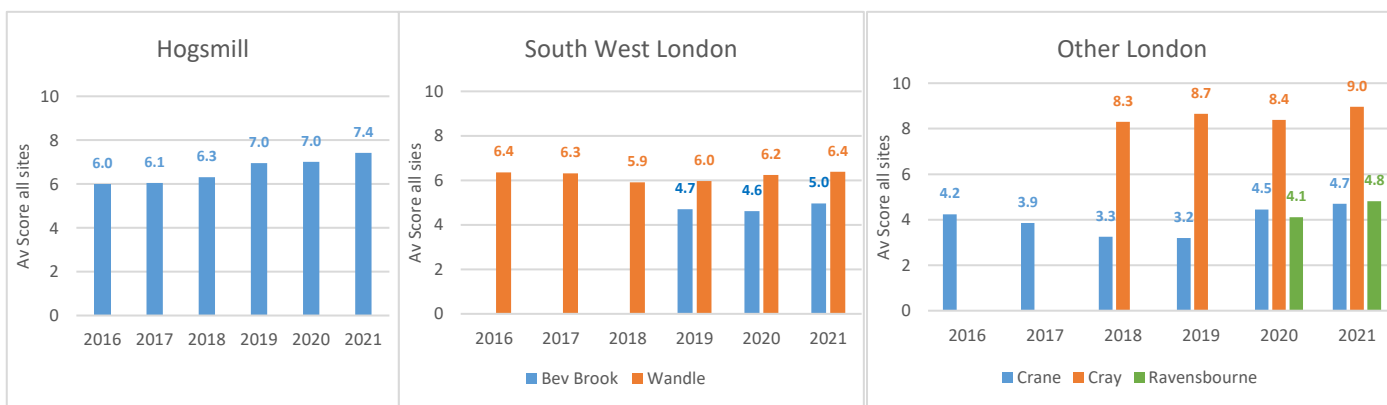
How does the Hogsmill compare to other rivers?

The method used for RMI sampling on the Hogsmill is the same as that used at 100s of other locations across the country. Sampling on many other rivers is more sporadic and there are many site-specific factors that affect the results but broad comparisons, particularly of trends where such factors should be less important, and with locations with similar characteristics can help understand what is happening on the Hogsmill.

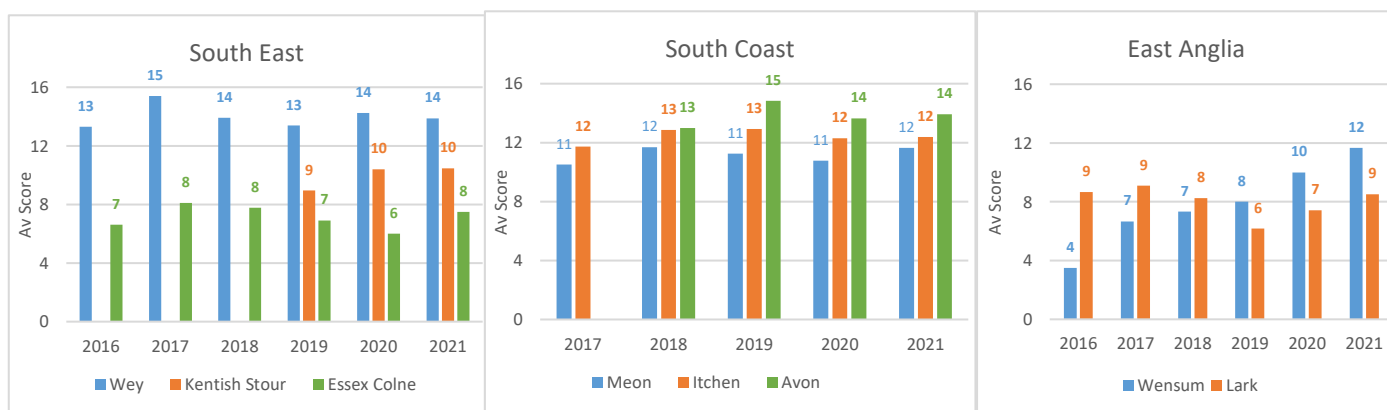
The rise in the annual average score, both overall and at most sites, seen on the Hogsmill, particularly over the last 3 years, has been matched at both “sister rivers”: the Beverley Brook, where 4 sites have been

surveyed since 2019, and the Wandle, where 6 sites have been surveyed fairly regularly since 2016. Recent increases in scores are also a feature of 3 other London rivers with a run of results: the Crane in the North West and the Cray and Ravensbourne in South-East London, though all have quite big gaps in coverage.

Several of these rivers have had restoration/pollution alleviation work that *could* have contributed, but the similarity of the trends suggests a common factor has been the key driver, of which the most likely is varying rainfall and its impact on the water level and flow. Both the Wandle and Crane have “U” shaped score profiles similar to that on the Hogsmill that broadly match the pattern of relatively high rainfall in the mid-2010s followed by some dry years, especially summers, and now 3 relatively wet years.



One London river where the increase has been less marked is the Cray. This is also the river with the highest overall score so perhaps rivers with generally better water quality are more resilient to dry periods. This is supported by the experience at a selection of other rivers fed at least partly by chalk-based water: in the South East, the iconic chalk rivers of the South Coast and in East Anglia. These are very different from rivers like the Hogsmill and no doubt have other factors affecting the trends, but again the highest scoring ones seem to have been least affected by weather variations over the last few years.



Looking at score *levels*, where site-specific factors are clearly important, the *overall* average score for the Hogsmill compares quite favourably with other London rivers over the past 3 years. The only one with a higher average is the Cray; this seems similar to the Hogsmill having a chalk-fed lake as its source and flowing through an urban/greenspace mix so it might have lessons for how we might improve the Hogsmill.

There are also marked differences from other London rivers. Scores are less variable between sites and surveys on the Hogsmill, probably partly reflecting its long green corridor. Both the Wandle and Crane have higher-scoring sites in green areas that have been extensively restored, but they also have long urban/industrial stretches with low-scoring sites. The Hogsmill also has a narrower range of species than some others with finds outside the “Fab 4” being extremely rare, but it also seems to be a particularly good river for caddis, which contribute much more to the total score than elsewhere in London and are also found much more often: 95% of Hogsmill surveys in the last 3 years have found at least one type of caddis.



Unsurprisingly, other mostly rural chalk-based rivers outside London generally have scores well above the Hogsmill, mainly because of a wider spread of species, though not all rivers or sites fare much better. Particularly interesting is that some of the highest-scoring sites are quite local, upstream on the Wey. So perhaps a visit to the Surrey Hills to scout out what it does well would be worthwhile!

