

# The Hogsmill in January 2021

So far there's been no great respite from the gloomy soggy conditions along the Hogsmill, but at least we've had glimpses of "real" winter and of bright winter colours when the sun has managed to break through.



Sheephouse Way



Six Acre Meadow

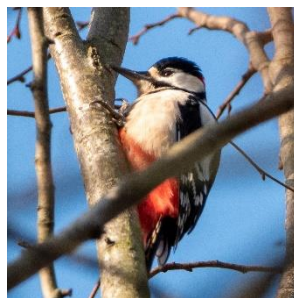


Green Lane Bridge

Already this month about 50 bird species have been recorded by the river in Ewell. Many are already looking forward to the spring with the volume of song rising and with the trees bare this is a great time to see them;



"Buzz"



"Woodie"  
(Photo thanks to Mark)



"Reddies"

and a benefit of all the rain is that fungi and plants that enjoy damp conditions are thriving along the banks.



"Scarlet elf cup" (Photo thanks to Julia)

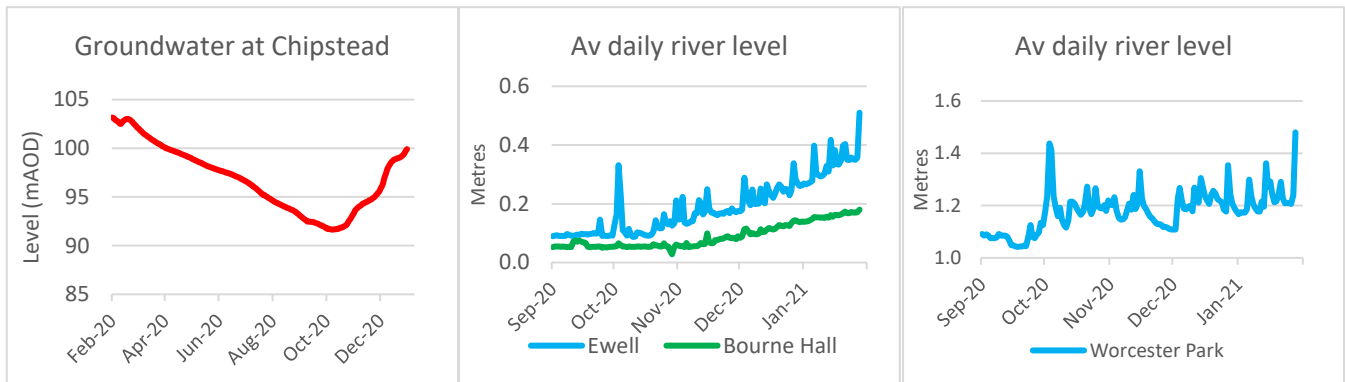


"Elmbridge mosses"

This newsletter looks at what is happening to the natural world along the Hogsmill corridor, including the problems it faces and volunteer activities to monitor the river and to restore its habitat. With riverfly sampling again on hold, it also looks back at the results of our surveys in 2020.

## The Hogsmill in January

With another month of above average rainfall, a continuing rise in groundwater in the aquifer and saturated land across the catchment, the water level and flow in the Hogsmill and its tributaries have continued to rise. Across much of its length the level has again reached the unusually high values seen early in 2020, though in the upper reaches it is still below the 2020 peak as rain takes some time to feed through to the springs.



Again the river has looked increasingly murky moving down the river. The benefits of “clear spring water” are evident in the upper reaches but with so much surface water around, large amounts of dirty silty water are flowing from the tributaries and outfalls further downstream. The Bonesgate continues to look relatively bad but, thanks to EA, measures are being taken to address the particular problems there.



Upstream Green Lanes Stream



Bonesgate confluence



Six Acre Meadow

There are now large areas of standing water alongside the river, with some places resembling temperate rainforests. Those taking daily exercise by the river are also facing challenging conditions more suitable for – and sadly being used for – cyclocross! But good news for one regular wetland is that thanks to a community grant from Kingston Council the crumbling boardwalk in the “marshy woodland” behind Six Acre Meadow is to be replaced, hopefully paving the way for habitat restoration of this neglected area.



Elmbridge marshes



“Welome to the Hogsmill Nature Trail!”



Six Acre Meadow “ex-boardwalk”

As for pollution, several large patches of unsightly “foamy scum” have appeared where the river flow is restricted. It’s is not clear how harmful they are, but certainly of concern are signs of pollution at outfalls not amongst the usual suspects: rag on the Green Lanes outfall and sewage fungus at Middle Mill.



By Green Lane Rec  
(Photo thanks to Alison)



Bonesgate  
(Photo thanks to Nick)



Green Lanes Ewell



Middle Mill

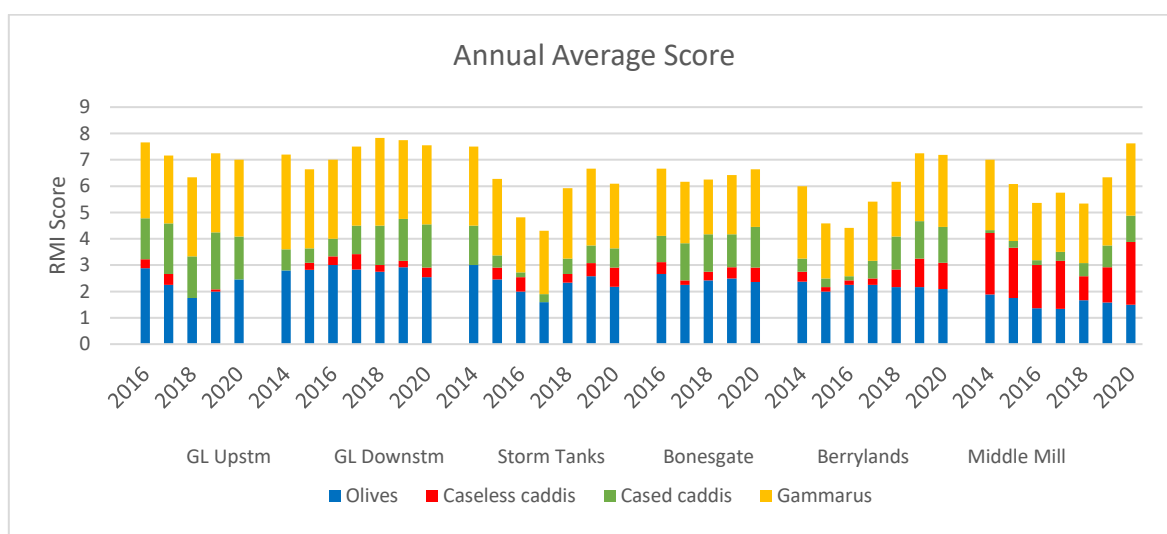
If you see pollution along the river or indications of possible pollution, such as dying fish, please call the Environment Agency Hotline: 0800 80 70 60, and ideally take a photo.

Something that could lead to major reductions in sewage pollution in the Hogsmill and other rivers is the Private Member’s Sewage (inland Waters) Bill that is currently before Parliament. If enacted, water companies would be required progressively to reduce discharges from combined sewer outfalls, improve their monitoring and also report regularly on sewage discharges. The Bill was due to have its Second Reading in January but this has been postponed. A template letter to write to MP’s to encourage them to support the Bill is at: <https://www.sas.org.uk/EndSewagePollution-SewageBill>

## Hogsmill RMI in 2020

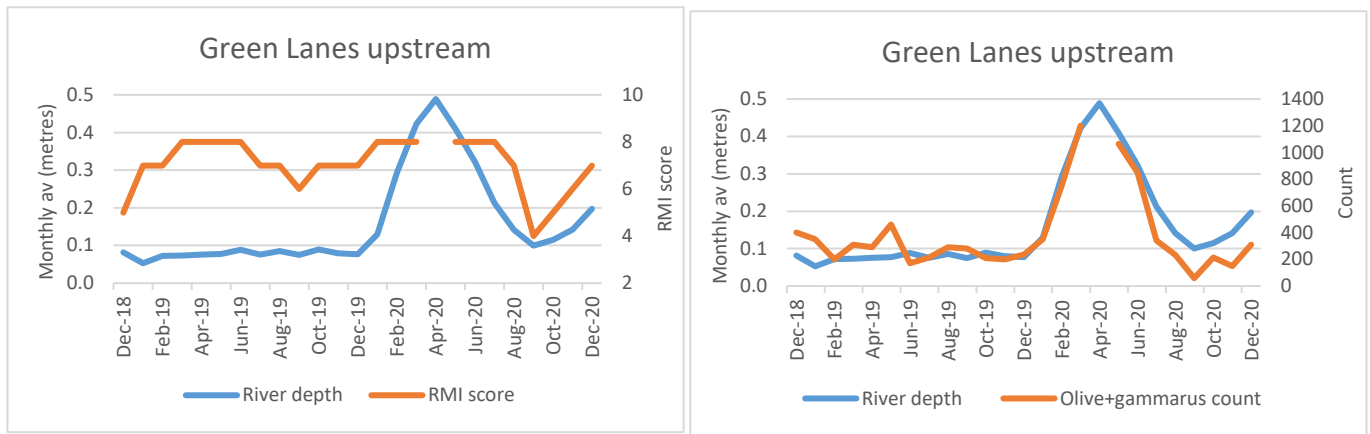
The River Monitoring Initiative (RMI) uses counts of “water quality sensitive” invertebrates to assess river health. Although the pandemic disrupted monitoring, over 60 surveys were undertaken along the Hogsmill in 2020, bringing the total to 450 since 2014; and at 5 sites we were able to collect 11 monthly samples.

Overall the results were broadly similar to those for 2019, with small falls in average annual scores at the upstream sites and mostly small increases downstream. They were generally quite good by Hogsmill standards with annual scores at or above the historical average at all sites and above the previous 2014 peak at many, though there were some big variations within the year and 3 samples below the “trigger” score.

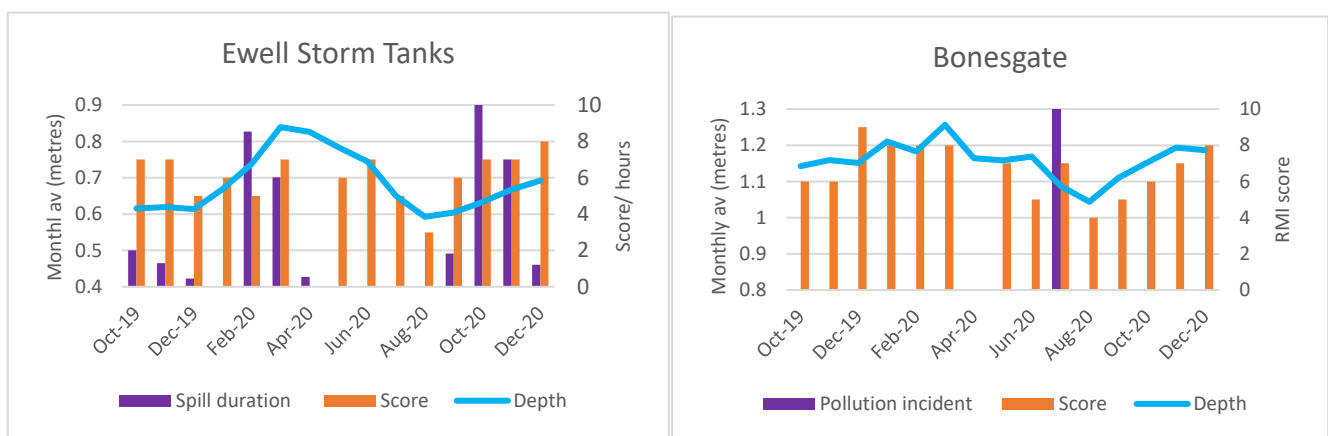


As before, the main driver seems to have been the impact of the weather on the level and flow of water, an effect that is becoming more complex with more extreme weather. There was slightly more total rainfall in 2020 than 2019, though not as much as 2014; and average water levels at the gauging stations were higher than 2019. But within this there were more “heavy rain events” leading to high water “surges” and storm tank overflows but also long dry spells when levels dropped sharply, though not as low as 2-3 years ago.

The largest boost to the water level was upstream at Ewell from strong spring flows and this was most noticeable at the [upstream Green Lanes](#) site. There was some, though not a great, impact on scores. But there also seem to have been more subtle effects: *counts* of olives and gammarus rose dramatically in early 2020 before falling back sharply, closely mirroring water levels. But these did not feed into large jumps in score because of the “logarithmic band” method of calculation. At the same time, the spring “feast” of cased caddis that usually boosts the score was not found in 2020: perhaps they were “swept away” by the strong water flows, as numbers were higher than normal at the downstream site.



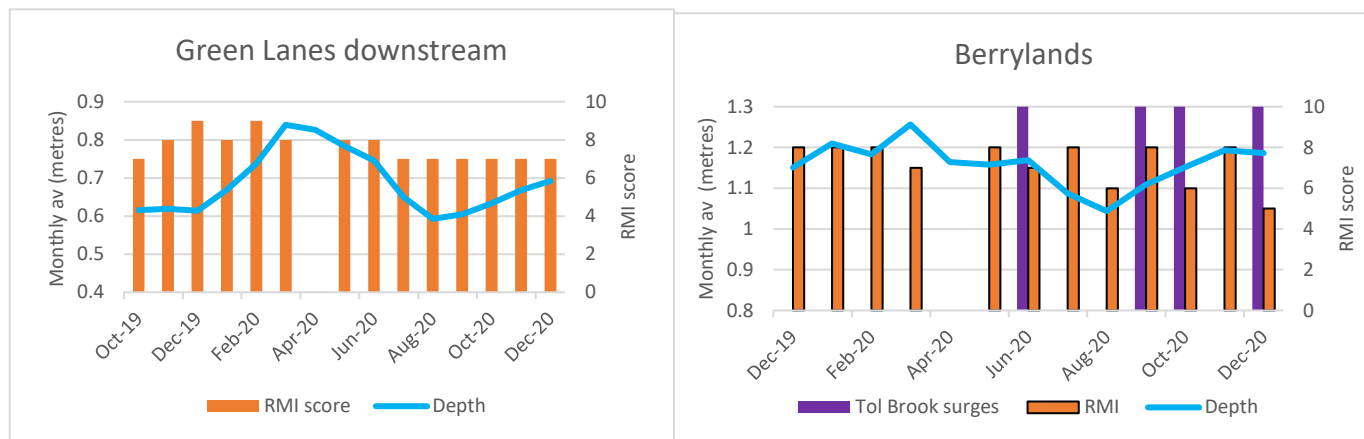
Fluctuations in river levels, especially the 2020 summer “dip”, also seem to have been broadly matched by changes in scores at the “mid-river” sites – **Ewell Storm Tanks and Bonesgate** - though at neither were there the big swings in olive and gammarus numbers. There were also *potential* pollution effects at both. There doesn’t look to be a strong link between storm tank overflows and scores at Ewell, though as the surveys were mostly 2 or more weeks after the spills any effect could have dissipated by then. Scores at the Bonesgate site fell sharply around the time of the major pollution incident on the stream identified at the end of June, but this coincided with a fall in river levels so it is not clear which was behind the fall.



The link between river levels and scores was weaker at the 2 other sites with a near complete set of surveys in 2020, particularly **downstream at Green Lanes**. The consistent run of moderate/good scores here – only twice in the last 3 years has it fallen below “7” – is surprising with its proximity to the “upper Hogsmill” with its large swings in water levels and the Green Lanes Stream with its pollution problems. There was though a marked fall in olive numbers in 2020, which led to a small fall in the average score.

The average score at **Berrylands** was slightly below 2019, but still well above that 3-4 years ago. Much of the improvement was from greater diversity; caddis being found more often, though usually in small

numbers, so it *could* be just better recording. There were some big swings in scores during 2020. This site may have been particularly prone to large water surges from the “heavy rain” events last year. It is close to the Tolworth Brook that drains road run-off from a large area: data from the gauge there available from mid-2020 shows surges of around a metre in depth. Some, though not all, of the largest surges preceded low scores and it seems possible that these could have harmed or shifted invertebrate populations.



The one site with a noticeable change in average score – a marked rise from 2019 – was **Middle Mill**. Only 8 surveys were possible in 2020, but this probably didn’t bias the comparison as the “missing months” didn’t have low scores previously. The rise in scores dates from the spring of 2019 and doesn’t match any change in river level. A possible explanation is a change in the “quality” of effluent from the Sewage Treatment Works that accounts for a large part of the water volume passing through the site. Hopefully this is good news, but there’s a slight proviso in that the rise in score has largely arisen from higher counts of caseless and gammarus. Lab analysis of samples from another site close to effluent outflows found high numbers of “pollution-tolerant” caseless and shrimps that are hard to distinguish by eye from the “pollution-intolerant” ones we aim to record. The same was not true of a lab analysis taken at Middle Mill in early 2019, but it would be useful to look again to see if this continues to be true today.

