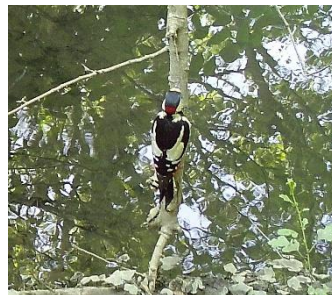


The Hogsmill in October 2023

A month of all-sorts along the Hogsmill: a tranquil sunny start, a touch of frost, then incessant rain sending water gushing down the river, but mostly mild keeping plenty of leaves on the magnificent trees.



Wildlife seems to have been hiding this month, but we have ways of keeping track! Citizen Zoo's "river-cams" have picked up plenty of birds during the day and the shadowy presence of mammals at night, unfortunately including a passing mink; while there are other signs of what has been in the meadows!



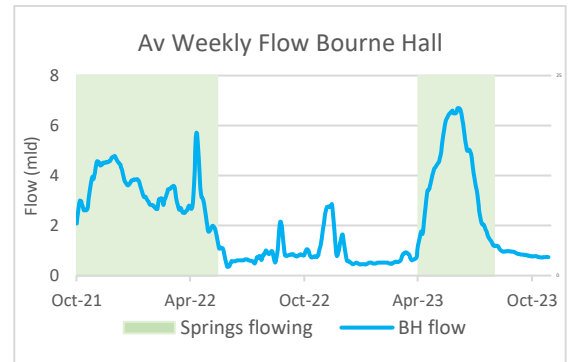
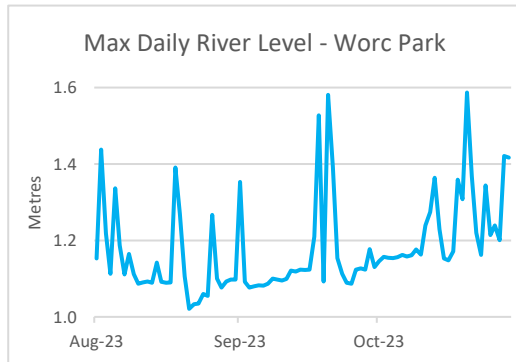
(Photos thanks to Citizen Zoo)

A visit from Brock?

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 reviews what has been a surprisingly good year for butterflies along the Hogsmill.

The Hogsmill in October

The Hogsmill may have escaped the worst of Storm Babet, but there's still been over 4 inches of rain this month, much of it in heavy downpours. One led to another "midnight surge" raising the river level almost half a metre, and there've been other smaller surges. The rain has also produced the first "brown flow" of run-off down the Bonesgate this season, albeit a fairly mild one. But while the water level has stayed high downstream, upstream it has rapidly reverted to the low flow from augmentation; and with groundwater having fallen by well over a metre this month it doesn't look as if the springs will be re-starting soon.



Berrylands confluence

Beside the river, the meadows are looking neat and tidy, many having had their annual "haircut" either naturally or artificially, and with the rain and sun they have had almost a spring-green appearance. But other colours have been scarce: the extensive areas of flowering balsam have now died back, leaving bare ground and millions of seeds; and there are only a few hips and haws left from a poor berry season. But it's been a good time to appreciate the weird growths on many of the trees along the banks of the Hogsmill.



Moated Manor



Long Meadow



Six Acre Meadow



Berrylands Nature Reserve



The storm on October 19th triggered sewage discharges at all 4 of the Combined Sewer Overflows on the Hogsmill; and that at the Hogsmill STW spilled on 4 further occasions after rain for a total of over 13 hours. The impact of such spills on the Hogsmill received national TV coverage this month with earlier discharges at the Ewell and Epsom Storm Tanks featuring in Channel 5's "Swimming in Sewage" programme.

The other striking feature this month is the extent to which the river has been turned black in places as large amounts of road run-off, probably containing significant pollutants, have been washed into the water through outfalls by main roads. Elsewhere it was mainly a month for spotting some intermittent spills that look to be from misconnected washing machines, one of which appears to have led to a dead fish.



"It stinks, how disgusting is this?..."
(Photo thanks to SERT)



A3 North Side



Raeburn Avenue, Tolworth Brook
(Photo thanks to Patrick)

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/report-a-problem or on twitter: [@thameswater](https://twitter.com/thameswater).

Hogsmill RMI in October

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

The 6 main-river sites were surveyed between October 12th and 26th, all of them in the wet spell so our hardy volunteers had to cope with higher than usual river levels and often challenging conditions. We were also able to welcome Georgina, SERT's new Catchment Officer for the Hogsmill, to the wonderful world of RMI.



Ewell Storm Tanks
(Photo thanks to Robb)



Green Lanes Ewell
(Photo thanks to Pamela)

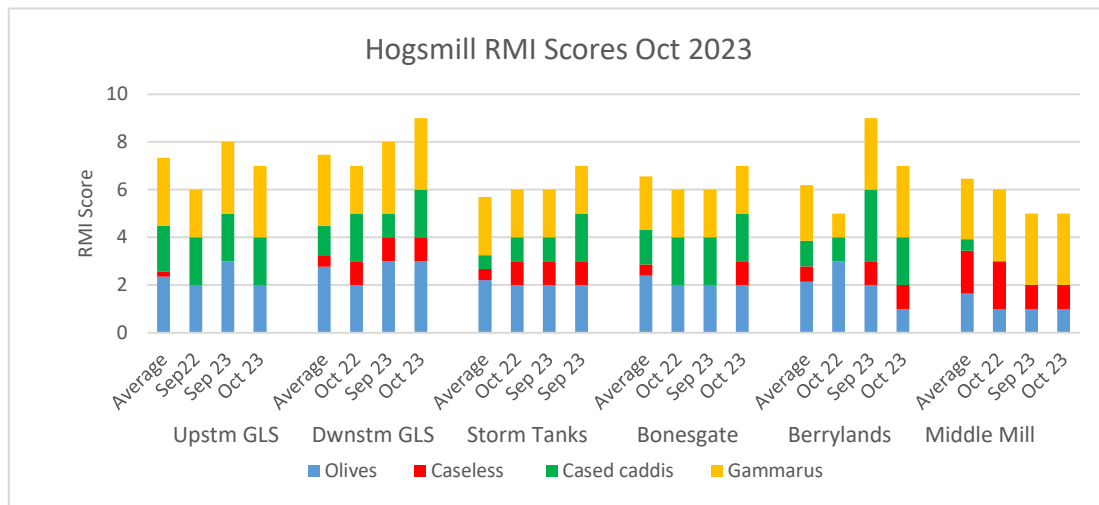


Berrylands
(Photo thanks to Phil)



Bonesgate

It seemed possible that the major river turbulence might have a short-term impact on numbers at the sites, for example by washing invertebrates downstream. But there's little sign in the results that this happened. Counts were mostly close to September's and the average score - a moderately good "7" - was the same as last month, with a few changes at individual sites generally reflecting small differences in counts:



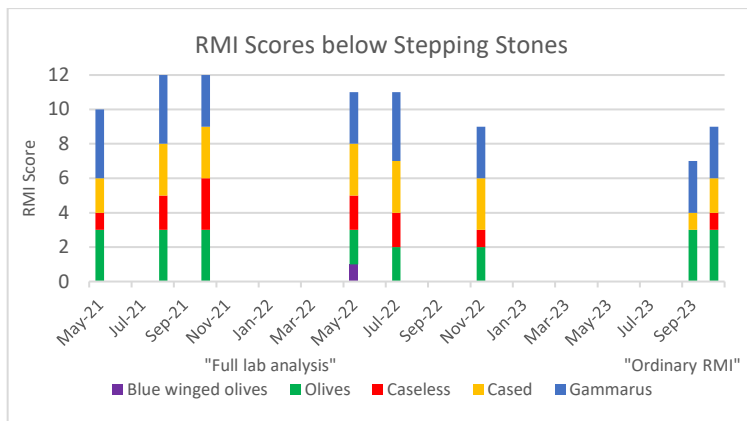
- The biggest change was the drop in score to a "7" at Berrylands, the last site to be surveyed after days of heavy rain. But this came from a reversal of the massive spike in cased caddis last month; and a fall in olive numbers, which is common in the autumn, so it can be explained by other factors;
- Middle Mill was sampled at the start of the wet spell before the latest STW spills, though the river was reported to be smelling badly a few days before. The score of "5" was again poor: for the third month in a row, counts of caseless caddis and olives were very low. This is probably partly seasonal as these have often been low in the autumn, though the drop this year is greater than recently;
- The sites on either side of the (existing) Green Lanes Stream confluence were both surveyed in the pouring rain (!), while that at Bonesgate was sampled at the end of a week with 2½ inches of rain. But at all 3 the counts for all species were fairly close to September's, with changes in scores being triggered by small changes in numbers;
- As last month, the total individual count across all sites was much lower than earlier in the year. This is probably partly seasonal, but there appears to be a trend to find fewer of the "big number" species, olives and gammarus, and more caddis: caseless were found at 5 sites for the first time this year.

2 "test" surveys were also conducted this month near the Ewell Stepping stones just downstream of where the Green Lanes Stream will re-join the main river following its diversion through Chamber Mead.

Previous studies have suggested that this stretch of the river could be rich in invertebrates. For example, as part of the Low Flow Study for the Hogsmill, samples were collected using the same method as RMI, but subjected to detailed lab analysis. These found very high numbers of "RMI species", especially caddis here;

and the implied RMI scores were higher than sites upstream and downstream; surprising but possibly because the habitat appears good, with relatively little bank/river modification, a stony bed and good flow.

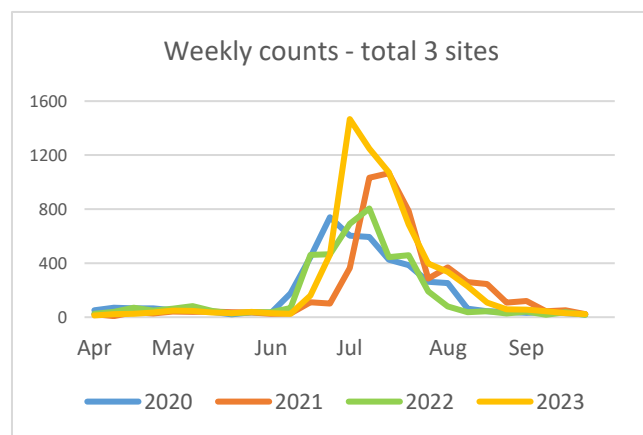
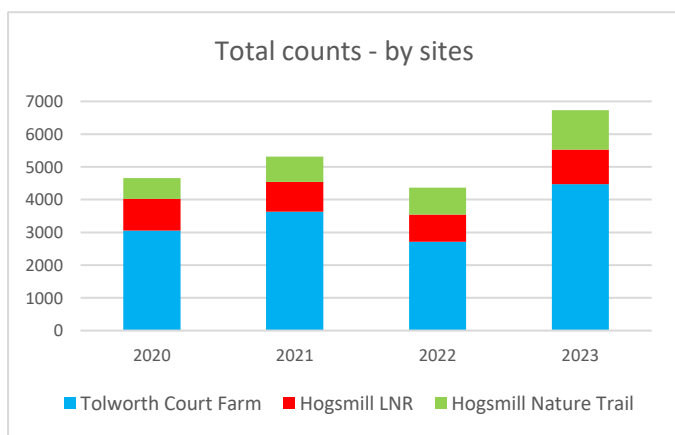
Our surveys this month were designed to add to this information to help create a base to judge the impact of the new wetlands. They also produced quite good scores but caddis numbers were low, creating a challenge in making assessments going forward, as we don't know whether this was just a temporary dip.



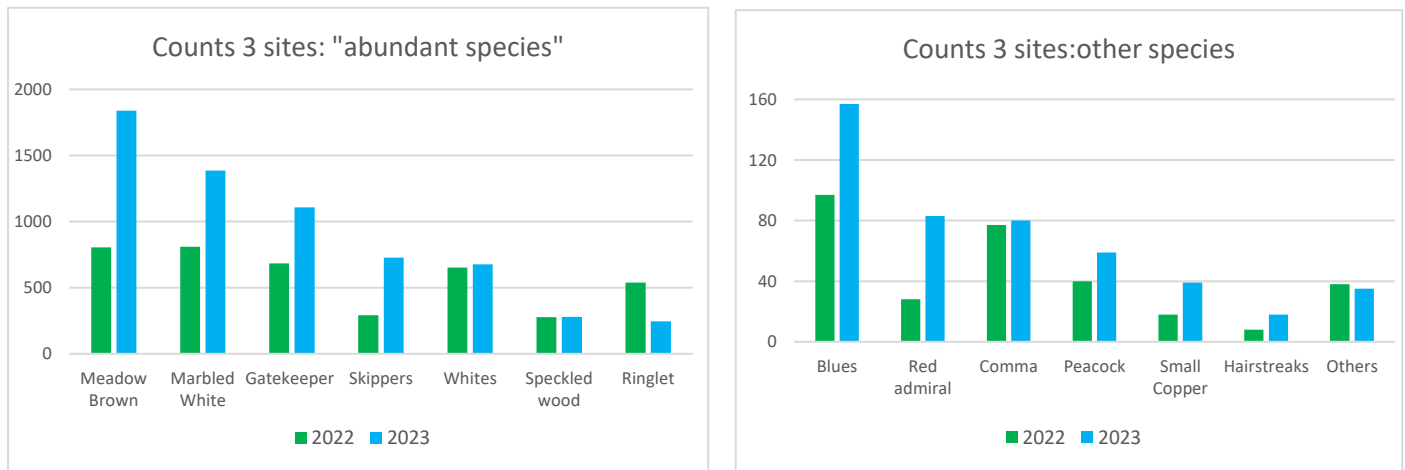
Butterflies along the Hogsmill

Butterflies are a good indicator of the health of nature as they respond quickly to changes in habitat and climate. The Hogsmill corridor has a range of habitats – meadows, woodlands, hedgerows, brambles and nettles – that support a variety of species. These are monitored under the national Butterfly Monitoring Scheme that involves 26 weekly counts on fixed walks (“transects”). 3 transects are surveyed: Tolworth Court Farm; the Hogsmill Local Nature Reserve (LNR) in Ewell; and the Hogsmill Nature Trail in Old Malden.

Survey results for 2023 were good, with the total number of butterflies recorded across the 3 sites up by over 50 per cent from 2022, albeit compared to quite a low year. The season started slowly with relatively low numbers up to June, but there was a massive spike in July when around two-thirds of the annual totals were recorded, after which numbers fell back though they remained moderately high into September.



Counts were well up on 2022 for many species: amongst the “big number” ones, there were large increases for meadow browns, gatekeepers, skippers and, something of a Hogsmill speciality, marbled whites; and amongst the less common ones, big rises in red admirals and holly blues and moderate increases in small copper and brown hairstreaks. There was little change in counts of whites and speckled wood, but there was a big fall in ringlets, though this was from unusually high levels recorded last year. Sadly there were only 2 sightings of small tortoiseshells, a species in danger of disappearing from this part of the country.



Meadow brown



Marbled white



Gatekeeper



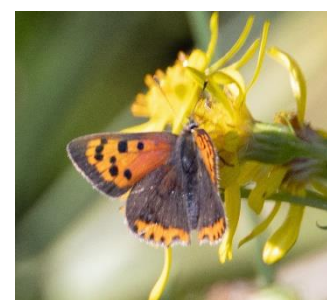
Skipper



Red admiral



Holly blue

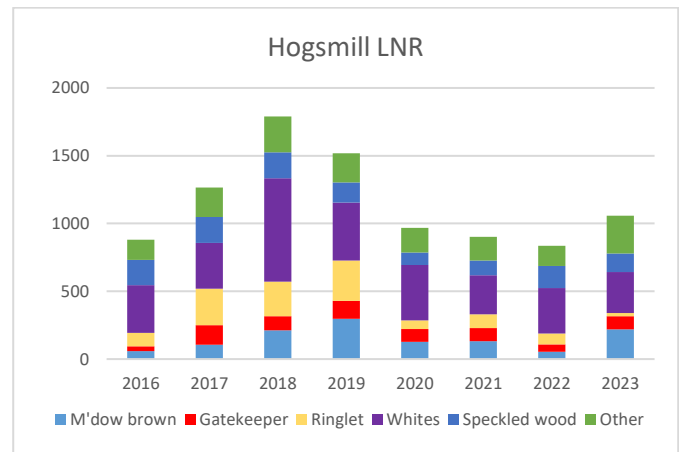
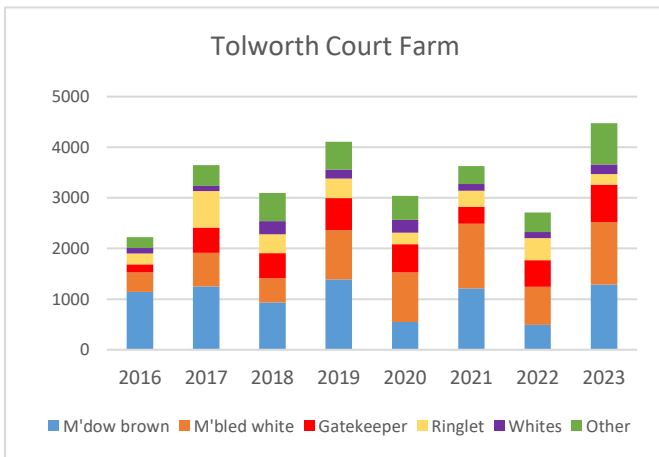


Small copper



Brown hairstreak

Fortunes at the 3 transects varied in 2023, probably mainly reflecting differences in habitat. The total count at Tolworth Court Farm was the highest in 8 years of monitoring and that along the Nature Trail was also a record, both transects with large meadows. Numbers were better than recent years at the Hogsmill LNR, but still well down on those found in the warm and sunny summers of the late 2010s.



The higher counts in 2023, which broadly mirror the experience in other transects in the region, are a welcome surprise as there were fears that last summer’s drought and heatwave would have a large adverse effect on numbers this year, though these might help explain the slow start in 2023.

Individual species have different life cycles/styles so the drivers of such changes are complex. But an old-fashioned summer with a good mix and timing of rain and sun is likely to have helped. Particularly noticeable was exceptional growth of vegetation. The “wild meadows” of Tolworth Court Farm and the Nature Trail were especially lush and were the main source of the massive jump in numbers in mid-summer, though disturbance from wading through extra tall grass while surveying *might* have artificially boosted counts. Management of these meadows has been erratic in recent years, so going forward this – and landscape scale conservation more generally - will be key to sustaining populations: perhaps as a start we need to extend scything and the use of cattle from the Moated Manor!

A long period of unusually mild weather stretching back to last winter and continuing to this autumn has probably also been important for some species, such as red admirals some of which are now overwintering here and were also seen well into October. The warm and wet autumn this year that led to “second-flowerings” of some plants, such as ragwort, probably also helped species like small coppers.

If you would like to be involved in transect monitoring, please contact Bill Downey, the Transect Co-ordinator for SW London and Surrey: billdowney@sky.com