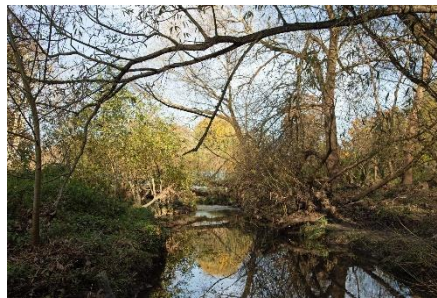


The Hogsmill in November 2021

With quiet mild conditions continuing, the change in the seasons has occurred slowly this month, providing a display of autumn colours along the Hogsmill that has lasted longer and been more impressive than usual.



Worcester Park

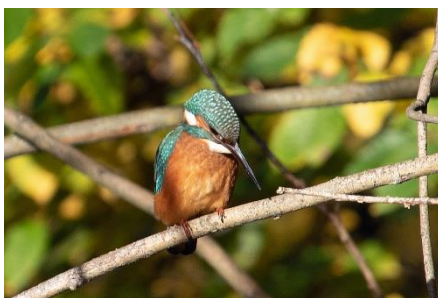


Green Lane Bridge



Charter Quay

But the leaves are now falling rapidly making it easier to spot wildlife. Our most iconic resident has started displaying again just in time to admire his picture on the wonderful new mosaic celebrating the Hogsmill.



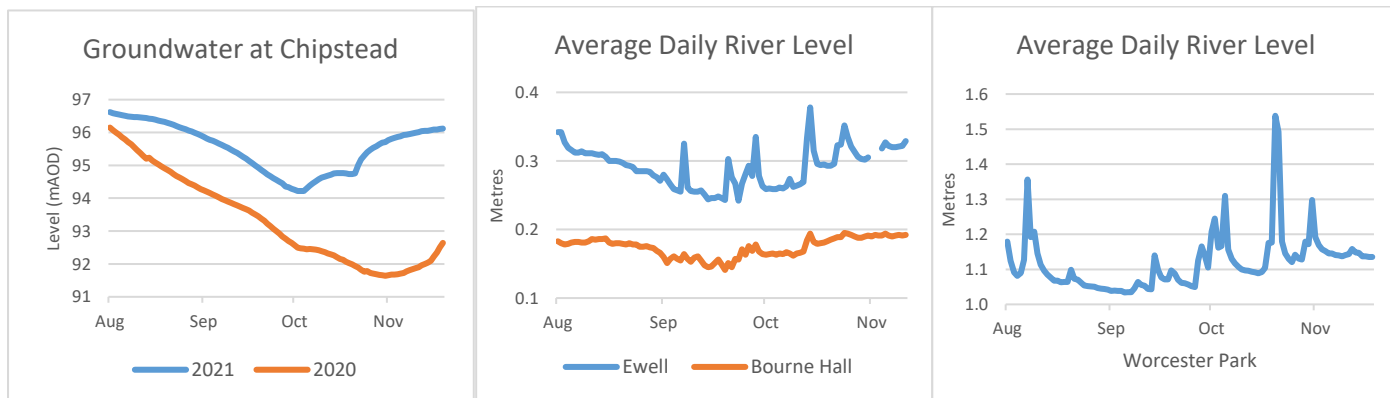
This newsletter looks at what is happening to the natural world along the Hogsmill, including the problems it faces and volunteer activities to monitor and restore its habitat, working with the South East Rivers Trust (SERT) and other local groups and alongside the Environment Agency (EA) and local water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

As well as covering the regular riverfly monitoring, this month it also looks at the results of this year's monitoring of eels and butterflies along the river.

The Hogsmill in November

After last month's downpours, it's been a dry November so there's been much less turbulence along the Hogsmill. Despite the lack of rain, the water level has risen at the upstream end as the boost to the aquifer from rain over the summer months has now fed through to the springs. The level has remained fairly flat in

the middle sections and there are some signs of the level and, in particular, flow weakening downstream. But all our survey sites had quite good water conditions when we took our riverfly samples this month.



Green Lanes confluence



Bonesgate
(photos thanks to Pamela, Phil and Dagmara)



Berrylands



Middle Mill

On volunteering, the “Moles” spent 2 weeks clearing large amounts of scrub by the river in Old Malden which has opened up access to the boardwalk in Six Acre Meadow and to the riverside path. Volunteers also helped look after “Eric and his friends” on their riverside spell in Tolworth Court Moated Manor that has had a big impact on the grass in the meadow. A team organised by Citizen Zoo removed a large amount of rubbish from the banks in the Hogsmill STW as well as cutting back trees to allow more light to reach the river.



Six Acre Meadow



Nature Trail path



Moated Manor meadow



Hogsmill STW

As for pollution, there were signs that the Ewell Storm Tanks may have overflowed again after the heavy rain at the end of October. We do not know for sure, but that should be about to change. Thanks in part to an amazing public campaign, the new Environment Act contains a range of obligations on water companies:

- to provide real-time information when a storm overflow discharges. Thames Water has promised to provide this for all its monitored outfalls by the end of 2022; it would be good if for the Hogsmill where monitors have been in place for some time if the release of data could be speeded up;
- to monitor and report on the impact of sewage discharges; and
- to “progressively reduce” the adverse impact of discharges from storm overflows.

In addition, under the Act the Government must publish a plan to tackle sewage pollution and present to Parliament by the end of 2022. Separately OfWAT and the EA have launched an investigation into whether water companies have been discharging sewage into rivers from their treatment works outside their permits. Last year the storm overflow at the Hogsmill STW spilled 30 times for 257 hours.

With the dry weather, pollution has again become more visible at several of the “usual suspect” outfalls, with the channel at California Road, the highest scoring outfall in the recent Safari, looking especially bad.



California Road



Malden Way South



Barker Close

There have also been several “small irritants”: oil in Bourne Hall Lake; paint dumped by the A3; a spill from an outfall in Tolworth Brook; and unsightly, probably natural, foam in several places at the start of the month.



Bourne Hall Lake



A3



Tolworth Brook



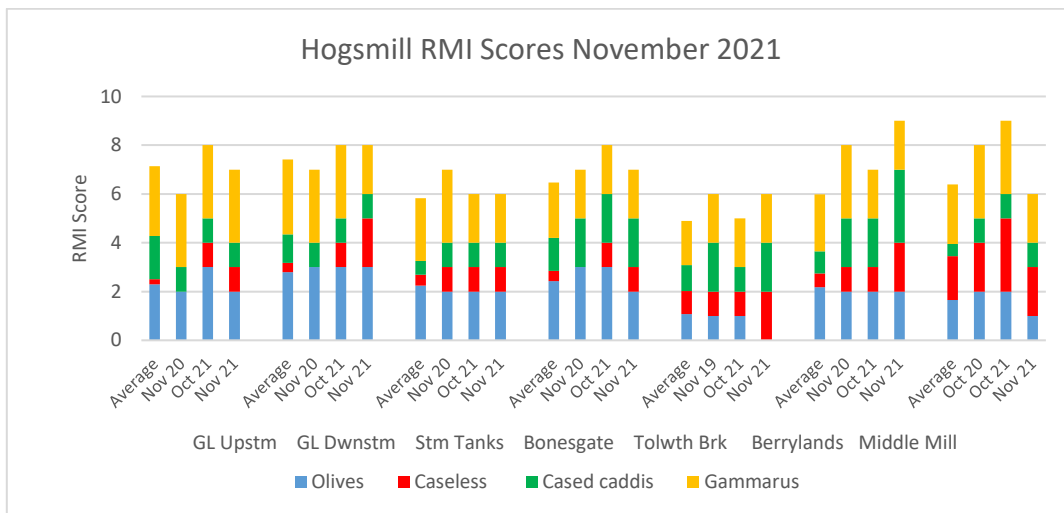
Bonesgate
(Photo thanks to Robb)

If you see pollution along 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.

Hogsmill RMI In November

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.

7 Hogsmill sites were sampled between November 17th and 22nd. Most scores were around the long-term average and some were above. There was a contrast between fairly stable results at the upstream sites and some big changes downstream; and further signs of a change in the species composition:



- The best result of the month was the “9” at Berrylands, an improvement based on increased numbers of caddis. Counts of cased caddis rose here in some previous autumns but usually to about 20, whereas this month over 160 were recorded. These were all tiny, but very active and hence easy to spot, though it seems unlikely that better identification could explain the high number;

- By contrast the score at Middle Mill fell to “6” from “9” in October and there were very large drops in most counts. This *could* indicate a pollution “incident”, but there were no other signs of pollution. A more likely explanation is that the weed that usually blankets this site and provides a haven for invertebrates had largely dispersed. This month’s score is also broadly in line with that in other autumns, so the high scores in recent months are perhaps more of a puzzle;
- Although there were some mostly small changes, the scores and counts at the 4 upstream sites and Tolworth Brook were broadly similar to October; and at some, especially Bonesgate and downstream at Green Lanes, there’s now been a run of months with not much changing;
- Just as in October, both cased and uncased caddis were found at all 7 sites, something that had not been seen before, and counts of both were generally up. But olive and gammarus numbers were generally down, to about half the long-term average overall.



Cased caddis at Berrylands



Caseless caddis at Middle Mill

Eels in the Hogsmill

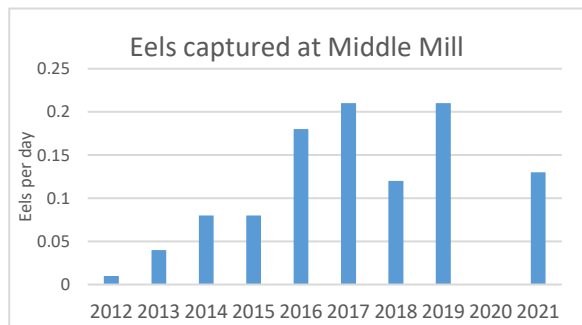
The European eel has an amazing life-cycle: starting in the Sargasso Sea, crossing the Atlantic to live in European rivers, like the Hogsmill, before returning to spawn. But numbers have fallen dramatically since the 1980s and it is now classed as “critically endangered”.

To help conserve this fascinating creature, SERT has managed a major programme to remove weirs and other obstacles along the Hogsmill that were barriers to eels – and other fish – moving upstream. The Hogsmill is also part of a ZSL project to monitor the arrival of eels in Thames tributaries: a “trap” on one channel of the river at Middle Mill in Kingston is activated for 6 months a year and the eels “caught” are counted.

Numbers at Middle Mill are quite low – at a trap on the Ember, the daily catch this year was 100 times higher – though this may be partly because it is relatively easy for eels to bypass our trap. But counts have risen since monitoring began in 2012, especially since 2015 after the installation of eel passes downstream. This year the count was well down on 2019. The total number of eels arriving in the North Sea seems to have

fallen this year so it could be part of a wider effect. But as counts at some other sites were up in 2021 and generally counts often fluctuate from year-to-year, the significance of the low count is not yet clear.

There is not any systematic monitoring to help assess the impact of removing upstream barriers. But a positive sign is that an “electronic fishing” survey earlier in the year found several eels near Ewell.



Middle Mill

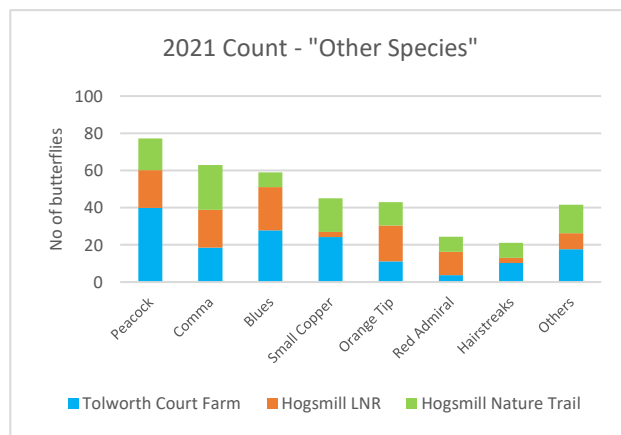
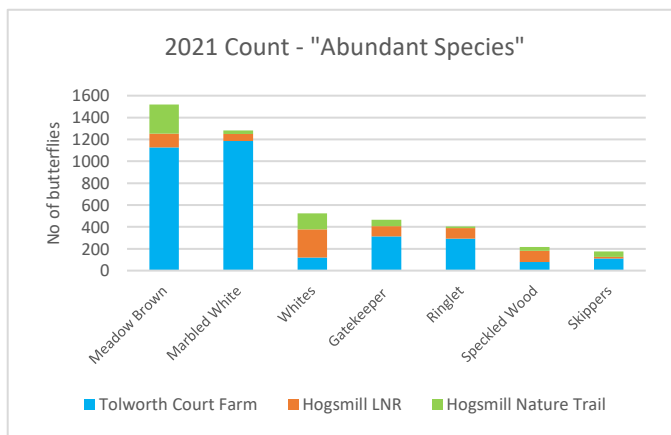


Eel and “friends” at Ewell

Butterflies along the Hogsmill

Butterflies are a good indicator of the health of the environment as they respond rapidly to habitat and climate changes. The Hogsmill corridor contains a wide range of habitats – grass and wildflower meadows; woodland; hedgerows; bramble and nettle banks – that can support a variety of species. These are monitored as part of the Butterfly Monitoring Scheme (BMS), a national scheme involving 26 weekly counts on set walks (“transects”). Currently 3 transects each 1-2km long are surveyed: Tolworth Court Farm; the Hogsmill Local Nature Reserve (LNR) in Ewell; and the Hogsmill Nature Trail in Old Malden.

In 2021, 24 species were found in the 3 transects and about 5000 individuals were counted, two-thirds of them at Tolworth Court Farm. The most numerous included those that are widespread in the country as a whole, especially meadow browns but also whites and gatekeepers. But they also included marbled whites and ringlets, species that are much less common nationally.





Meadow brown



Marbled white



Ringlet

Several other species were also frequently found though in much smaller numbers. Particularly notable are the small copper and brown hairstreak. The latter mostly lives in the tree canopy so is not easily captured in surveys, but many more than usual were recorded this year. Another good indicator for this species is the eggs laid on young blackthorn, and large numbers of these have been found in the meadows this month.



Small copper

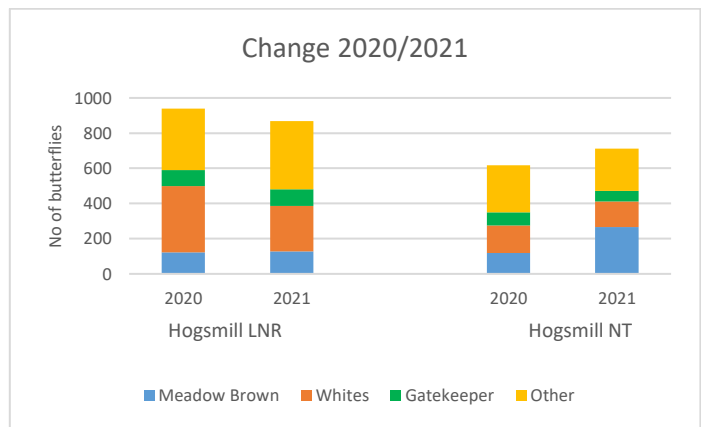
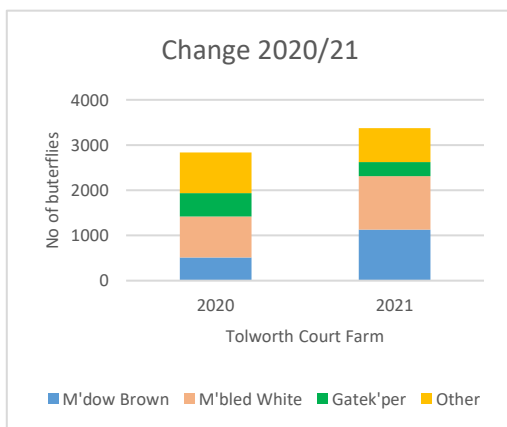


Brown hairstreak



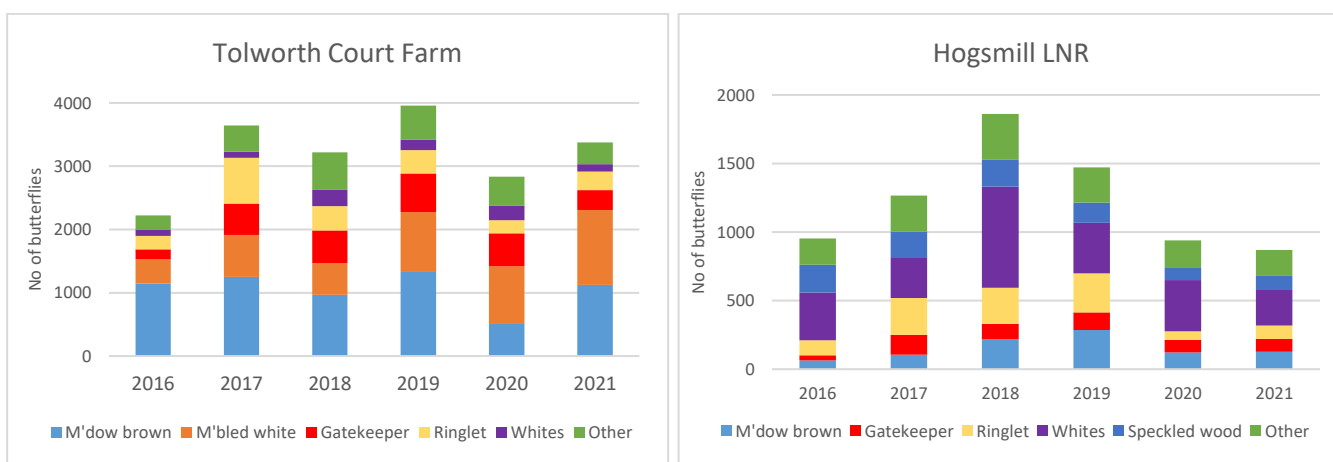
Brown hairstreak eggs

A wet start to the 2021 season after variable weather in 2020 created difficult conditions for butterflies and nationally surveys show numbers well down on 2020. Along the Hogsmill many species suffered badly: counts of whites, gatekeepers, blues, red admirals and small tortoiseshell fell by about a third from 2020. But overall numbers were up as counts of in particular, meadow brown but also marbled white and ringlet rose strongly, albeit from low levels last year. So habitat in the meadows seems to have held up so far; perhaps the lush grass after the rain made up for the dearth of flowers.



For Tolworth Court Farm and the LNR, for which there are records for a longer period, there have been large year-to-year swings in numbers overall and for some species. The totals this year – and last - were well down on most for the late 2010s, especially for the LNR, probably reflecting the drier and warmer summers then.

The differences in life/breeding cycles and lifestyles mean that the drivers of numbers for individual species are complex and need detailed analysis. But for some species an important factor is likely to be the way the meadows, and also the bushes and scrub, are managed, especially in Tolworth Court Farm and around the Hogsmill NT. Recently mowing has been done later in the year and in some cases not at all. It is early to assess the impact, but this *could* have contributed to rises in meadow-living species, particularly marbled whites, the one species where there has been a clear upward trend in numbers.



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