The Mysterious Case of the Missing Daglingworth Stream

Anecdotal evidence from longstanding residents of Cirencester (including me) tells of the portion of the Gumstool Brook complex known these days as 'The Riverside Walk'; as not being choked with excessive weed growth, supporting trout and water voles and never drying-up in summer or winter. This would be from about 20 years ago and earlier.

Memories are notoriously unreliable but the main feed for the now defunct and largely vanished Cirencester section of the Thames and Severn Canal, also fed the Riverside Walk. The canal closed in 1933 but required considerable amounts of water from what we know as the Daglingworth Stream.

In more recent years the flow from the Daglingworth Stream nearly always vanishes completely in the summer and only flows properly at times of flood. Thus, we have the 'Mysterious Case of the Missing Daglingworth Stream.' Missing, that is from somewhere north of Stratton, and no longer flowing via the Swan Sanctuary Lake into the Riverside Walk. This is despite a good and regular flow in the upper reaches along the Duntisbournes. The only water flowing into the Riverside Walk at present comes from a small overflow from the Barton Millpound and ultimately therefore from the River Churn sluices at the end of Gloucester Street.

This is an alarming and damaging (for the environment) development and has exercised our skills in suggesting a possible cause or combination of causes for the loss of flow.

A recent independent survey produced these observations:

There has been no water flowing at School Hill in Stratton since July 2020 except for when we had the floods in Cirencester at Christmas 2020.This was because there was no water flowing through Cirencester Park from the pink star on the map (see Figure 1 below) just downstream of the pathway to Daglingworth Place. The maintenance of the stream in Cirencester Park is poor.

Is the loss of water likely to be a result of the stream dropping into the aquifer below? The following is the response from a hydrogeologist/geochemist with over 30 years of experience of groundwater resources within water utilities.

Having looked back at previous slides, which included the information on the stream drying up between Daglingworth and Stratton School Hill, it is not possible to immediately reconcile the continuing dry stream with groundwater level data that is usually examined. So, there may be other factors at play, causing this part of the stream to remain dry, as groundwater levels have not been any lower than most previous years in the period of the stream flow observations.

Because of the geology the stream would be more likely to drop down into the aquifer below as it got closer to Grange Farm and beyond, but it had not completely disappeared during the time that we have been monitoring it.

So perhaps we should consider asking that the stream through Cirencester Park should be cleared.

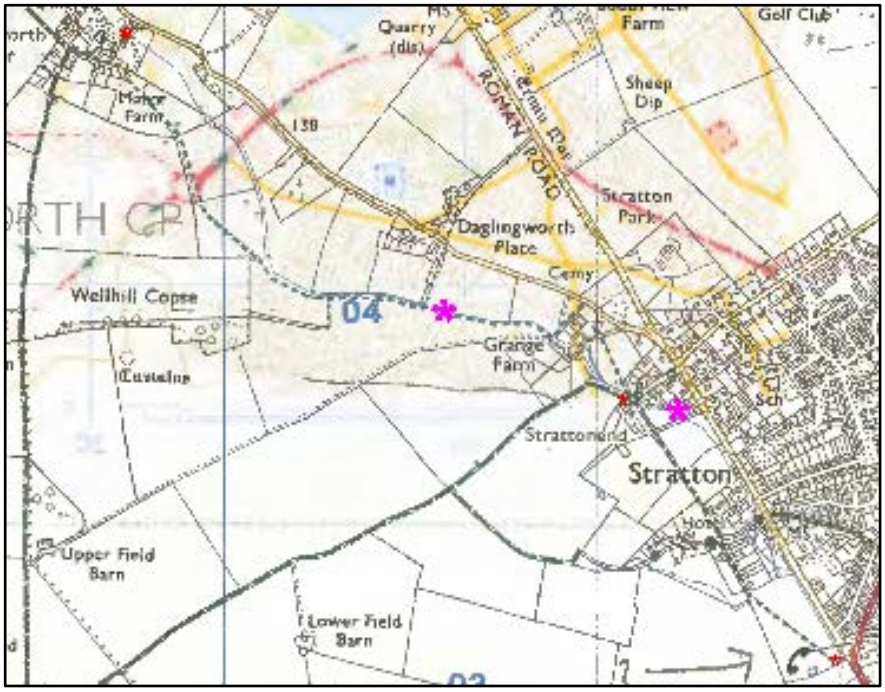
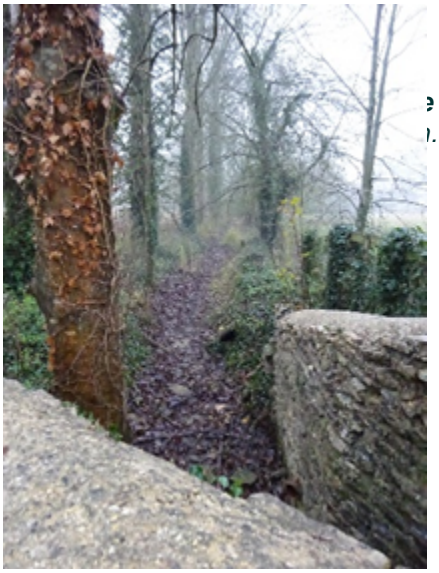


Figure 1. *In late November 2020, the Daglingworth Stream had stopped flowing at the magenta star, in Cirencester Park, just downstream of the path to Daglingworth Place.*



e 2 *As a result, no water was flowing at School Hill,*
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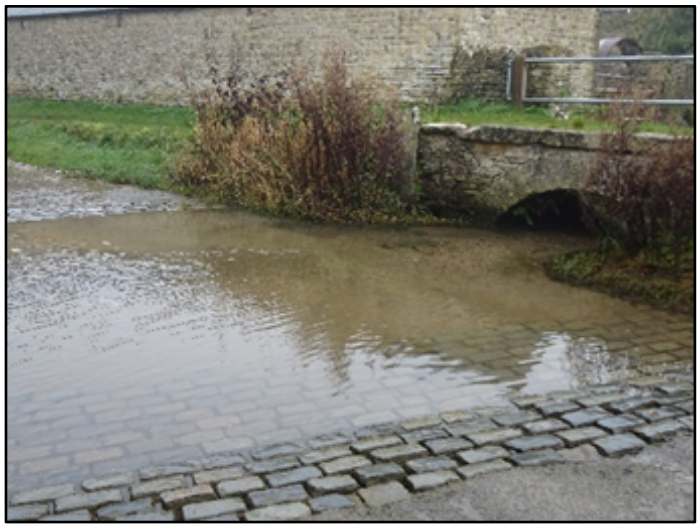

Figure 3 *However, at the same time, time, upstream of Cirencester Park, the the Daglingworth Stream was flowing flowing as usual e.g. as here at Middle Duntisbourne.*

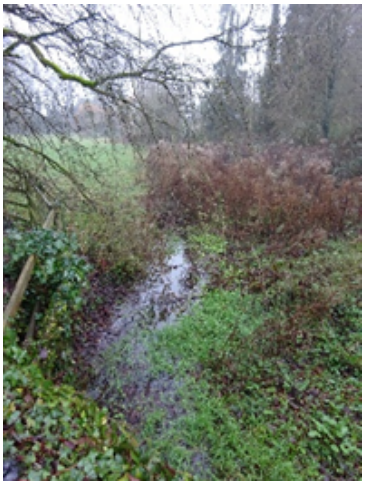

Figure 4

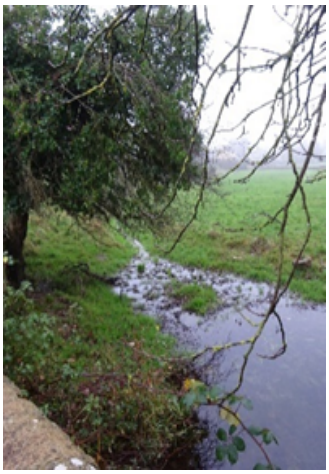

Figure 5

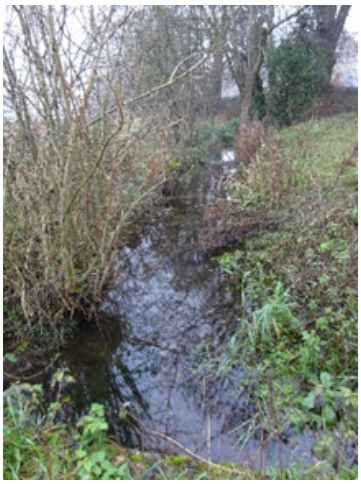

Figure 6

*It was baffling that although the stream was not flowing at School Hill Stratton (see **Figure 2** above) it was flowing at South Stratton (**Figure 6**) although there was no flow of the stream between the pathway to Daglingworth Place in Cirencester Park and School Hill Stratton. It did start flowing again about 50m upstream of the lane to Stratton End (**Figure 4.**) It flowed under Stratton End Lane (**Figure 5**) and continued on to South Stratton and into Cirencester.*

On 25 September 2021, when the flow of the Daglingworth Stream had moved downstream in Cirencester Park and reached to about 20m before it should exit the Park and enter Grange Farm, no water was flowing all the way into Cirencester. It was the same on 29 October 2021 and also into November.

Reasons for the water apparently flowing and vanishing into the sub-surface aquifer might be summarised as:

- Changing agricultural practices, with cattle no longer 'puddling' the base of the Stream when they walk in it. This has allowed water to seep away into the aquifer below.
- Flood defence measures undertaken to the north of Stratton after new building.
- A well with unsealed walls in the Stratton area.
- Insufficient maintenance of the area surrounding the route of the Stream through Cirencester Park.
- Changing weather patterns.