## Fryent County Park Management Plan: Section 10

## Streams and ditches: the Gaderbrook



The Gaderbrook stream arises in Fryent Country Park fed by the hedgerow ditch system and surface water from much of the east and west sides of the Country Park.

Many of the ditches are seasonal, flowing only during the winter and wet weather, while the Gaderbrook stream usually maintains at least some flow throughout year. Where Fryent Way is now, the Gaderbook flowed previously above ground but an underground culvert now takes the water from the east to the west side of the Park. From there it flows across the north of the Park, on the north side of Lower Hydes and south of Preston Eastfield, and then westwards towards Preston where it joins the Wealdstone Brook, and in turn the River Brent and The Thames.

While the surface water from the Gaderbrook catchment within Fryent Country is unpolluted, the Gaderbrook is also fed water, probably from road run-off from Fryent Way and from surface water from the Valley Farm suburban estate and towards Kingsbury Road. That includes some mis-connections where foul water is connected to the surface water system rather than to the foul sewerage system.

Several decades ago, possibly in the late 1970s or early 1980s, the stream was channelled with mechanical diggers into a vertically sided trench. It is not known what the stream looked like prior to that or when it was in a natural condition, but experience suggests that it would have had more gently sloping sides and a streamside vegetation.

The aim is to restore the stream, the stream-side vegetation and to reduce the pollution entering and flowing in the stream. The Gaderbrook would make a valuable wildlife and visual feature.

In 1998 the scrub was reduced on the south side and that bank was graded to that of a wider slope. In 2019-2020, Barn Hill Conservation Group reduced the scrub growth that was shading the northern bank and are making other improvements.

Further upstream, the ditch habitats show how the catchment has channelled the surface water for hundreds of years. One line of ditches is at the lower fold of the fields on the east side of the Park. The ditch between Goldringe Strip and Richards East fields has the potential to hold more water in winter and to restore floodplain meadows on either side. The ditches run through Meade Pond and Warrens Pond, and the catchment ditches can be traced upstream to Little Hillcroach Pond and in a few ditches further.

Wildlife: Streamside vegetation with nearby ponds, hedgerow edge, hedgerows, scrub and hay meadows. Habitat for amphibians, while dry banks could potentially benefit the Slow Worm and Common Lizard. Great Burnet and Narrow-leaved Bitter-cress occur in this area.

Task	Notes
Reduce shading from scrub on the banks of the stream to enable	
more light to reach the stream-sides.	
Manage re-growth of scrub, aiming instead for a range of	
herbaceous and streamside vegetation.	
Hedgerow: Restore or create a hedgerow on the Preston Eastfield	
side and set back several metres from the stream.	
Reduce the vertical height and gradient of the northern bank,	
aiming for a wider and damper streamside. That should also	
marginally increase the holding capacity of the stream at times of	
high rainfall, thus reducing the risk of flooding downstream.	
Lower and widen the north streambank opposite Lower Hydes	
Pond, to reduce the risk of erosion to the pond bank.	
Restore, as far as practicable, the off-stream, Preston Eastfield	
Pond.	
Stream-side vegetation establishment should then improve	
biodiversity, enhance the view of the stream, and help marginally	
to reduce pollution of the water as it flows through this section of	
the Gaderbrook.	
Pollution: continue to work with other organisations and	
authorities to reduce the number and severity of misconnections	
that are connected to the surface water drainage system.	
Ditch between Goldringe Strip and Richards East: enhance	
deflectors and large woody debris to enable the ditch to hold	
more water at times of flood. That will reduce the impact of	
water downstream. There is potential for the hay meadow flora	
to reflect that of the floodplain meadows that were probably	

present in the past.	
Restore the stream catchment back to Little Hillcroach Pond and	
throughout the Park.	
Masons Field to Honey Slough East ditch. The hedgerow ditch to	
the south of Valley Drive is assumed to also connect with the	
Gaderbrook (and would have done so before the construction of	
Fryent Way). The ability of the ditch to enable the flow of excess	
surface water should be maintained.	
Hedgerow ditches: Most of the old hedgerows have associated	
ditches.	



## More information

See also the Management Plan sections on 'Ponds' and 'Hedgerows'.

Barn Hill Conservation Group. <u>www.bhcg.btck.co.uk</u>

The Conservation Volunteers. Waterways and Wetlands.