

THE SURVEY OF WATER FEATURES ON SCALES MOOR

Stretching from Twisleton Scar End to Chapel-le-Dale lies a band of limestone terraces rising steeply from the valley floor to a height of over 380 metres. Given the permeable nature of the limestone bedrock you would expect the area to be devoid of any standing water; during the course of our survey, however, seventeen water related features were discovered on the terraces, with a further two found above the intake wall on the open moorland.

Of the two features lying on the moor top, one (WF10) lies in close proximity to Low Scales and Scales Cottage. It consists of an exit point for a leat which runs some considerable distance from Ellerbeck Gill higher up the fell down to SD73155 77527. From here the water is channelled beneath the intake wall and on towards Low Scales and Scales Cottage; this 1800m of channel is a major feat of engineering¹. The other feature, due west of the leat at SD72885 77525, is a spring issuing from beneath a limestone outcrop (WF11) and has been utilised as a water source with the aid of a pipeline carrying water in an easterly direction.

On the terraces themselves water emerges along several spring lines; these water sources have been enclosed in some form or another to provide drinking water for stock, both cattle and sheep being pastured along here. Many are now just a tumble of stones and identification is almost impossible; therefore only the most obvious have been recorded. All show some evidence of containment apart from one (WF05) which is a natural pool and at 373m is the highest in our survey. It was decided to include this feature because of its rarity; pools of water are not usually found high up in limestone areas unless there is a pocket of underlying clay, which one assumes is the case here.

In most instances water has been enclosed or channelled using the local limestone and in one case (WF02) the walling has been later re-enforced with an iron belt; in another, (WF11) by two breeze blocks, whilst another (WF13) has had a Belfast sink dug into the ground close-by. A good example of enhancement is a Helwith slate trough built into the original walling (WF15). Another adaptation is the use of modern piping to take the water from its source to another container (WF12 and W14) where in both cases the water is piped into an old bath. One of these (WF14) is adjacent to a boundary wall where on the other side water is channelled into a modern concrete tank. This particular feature is also adjacent to an old trackway.

Along the terraces of Twisleton Pasture at approximately 320m, a spring line erupts in at least four places and all have been enclosed at some point (WF01 and 15-17). All show evidence of walling, but there are others at the same elevation which may have been enclosed at some time although there is nothing left to substantiate this. Likewise a little higher at 345m on Twisleton Scars is another spring line with enhanced water features (WF07 and 08) with several other possible areas of containment, but again with insufficient evidence to be included in the survey.

¹ Dr. D. Johnson. 'Archaeological survey of fields and walls at Scales, Chapel le Dale, Ingleton parish: database and description' – unpublished report for the landowners and the Yorkshire Dales National Park Authority.

Perhaps the most impressive water feature found, apart from the leat (WF10) mentioned previously, is Ellerkills Well (WF19). This pit, measuring 1.1m side to side by 1.4 m from back to front, is lined with limestone blocks and is 1.6m deep. The top is partially covered by a large limestone slab, forming a lintel. The well no longer fills up, probably because the spring which feeds it is fed downhill to a modern tank on the other side of a wall.

The majority of these features are no longer in use; out of the sixteen which are actual drinking troughs only three appear to be currently working. The criteria employed to decide whether a feature is still being used was based on the premise that the water feature obviously needed to be watertight, while a trampled area adjacent to it would further confirm usage. The fact that most of the troughs are no longer usable could indicate that less cattle and more sheep are being pastured here than in the past, sheep being better able to manage without water if provided with enough grass.

Corresponding to these horizontal bands of springs higher up on the terraces is another line of springs in the valley bottom, shown on the Ordnance Survey map. These are between the boundary of the open access area and the minor road running through the valley and so are outside the scope of this survey.