RE-ASSESSING A RECENTLY PROPOSED TURBARY GROUND

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2011

Front cover Proposed Turbary Ground at Humphry Bottom

TURBARY SITE

A recently published article on the Ingleborough Archaeology Group Website entitled Turbary Ground (Web Ref 1) states that a new turbary area has been recognised at Humphrey Bottom (SD 743750). A photograph (Plate1) shows the feature being discussed, this is described as "a single abandoned bay possibly the last ever working". The photograph clearly shows that the peat has liquified and the sod has collapsed into the base of the eroded section. This sod block now overlies waterlogged peat, this has changed the flora of the sod to almost solid sphagnum moss, as shown in Plate 2. There are a few remnants of the original grass sticking through the moss

This area of the peat moss has become de-stabilised, caused by liquefaction of the peat due to water exuding from beneath the Arks scree slope (Plate 3). Adjacent to the above is another section, also about to collapse, that can be seen as a crescent-shaped crack that is full of water (Plate 4), This will probably result in a similar feature to the one already described so to suggest that the above feature "may well be medieval or early post-medieval" with this rate of erosion taking place is untenable.

It is also stated that "there is no evidence of a peat ground closer to Southerscales than this one" this is incorrect as will be shown when current research into turbary areas is completed. A track is also mentioned as possibly being related to the peat ground (Plates 5/6) show 2 areas where scree has been levelled, one shows the track terminating at a shepherds shelter and the other is lower down the slope. Apart from these two cleared sections there is no other evidence of a track - these are probably the result of the shepherd making access for his pony.

The palynological research carried out at the Arks by Sue Swales (Web Ref 2) has been quoted in the last paragraph of the article. The location where the peat cores were taken by Swales is north east of Mere Gill (747752). The drawing from Swales's thesis (Fig 1) shows the location of the site and the bog burst area drawn with a dotted line, this area is clearly shown in (Plate 7). The fact that the location where Swales has taken her cores has been incorrectly identified does not make **her** research invalid, but rather makes the last paragraph of the article "Turbary Ground" invalid.

Conclusions

The subject of peat bog types and their ecology is very complex and the one under discussion here is an ombrogenous form (i.e gets its water supply mostly from precipitation) this supports the paludification process, creating blanket bog. There has possibly been a change in the hydrology of the site since its formation with an increase in water flow from below the Arks scree, down slope this is causing liquefaction of the peat resulting in slumping. This increases the speed of erosion, as can be seen from surface cracks which are filled with water. Had there been any peat extraction here more than 100 years ago or perhaps even less it is highly unlikely there would be any remaining evidence.

The identification of old turbary sites is much more reliable on a reasonably level ground surface with no flowing water, and even then, if the peat is not very deep, coring can be required to detect the old cut edges. Peat bogs on level ground especially those overlying limestone bedrock can also cause problems with interpretation, as they are subject to swallow holes forming at any time, and if this occurs it can change the hydrology of the bog. These holes develop surface cracks around the edge, which lead to slumping of the peat into the swallow hole, this can be evident for some distance away depending on the underlying topography of the glacial deposits. At Humphrey Bottom the fact that the surface sod is at the base of an eroded formation plus the adjacent overall erosion; the topography and the hydrology make the interpretation as a peat bay or pot completely untenable.

References

Web Ref 1: www.ingleborougharchaeologygroup.org.uk
Luke, Y., *A survey of the north-west flanks of Ingleborough 2007-2011 - Turbary Ground*.

Web Ref 2: http://etheses.whiterose.ac.uk
Swales, S., 1987 *Vegetational and archaeological history of the Ingleborough Massif* PhD thesis, University of Leeds.

Plate 1 Showing proposed peat bay or pot.

Photograph A Batty

Plate 2 Collapsed sod.

Photograph A Batty

Plate 3 Area affected by water flow from beneath the Arks.

Photograph A batty

Plate 4 Crescent shaped crack in the sod which is full of water.

Photograph A Batty

Plate 5 Higher cleared area in scree with remains of Shepherd's shelter at the end

Photograph A Batty

Fig 6 Lower cleared section of track.

Photograph A Batty

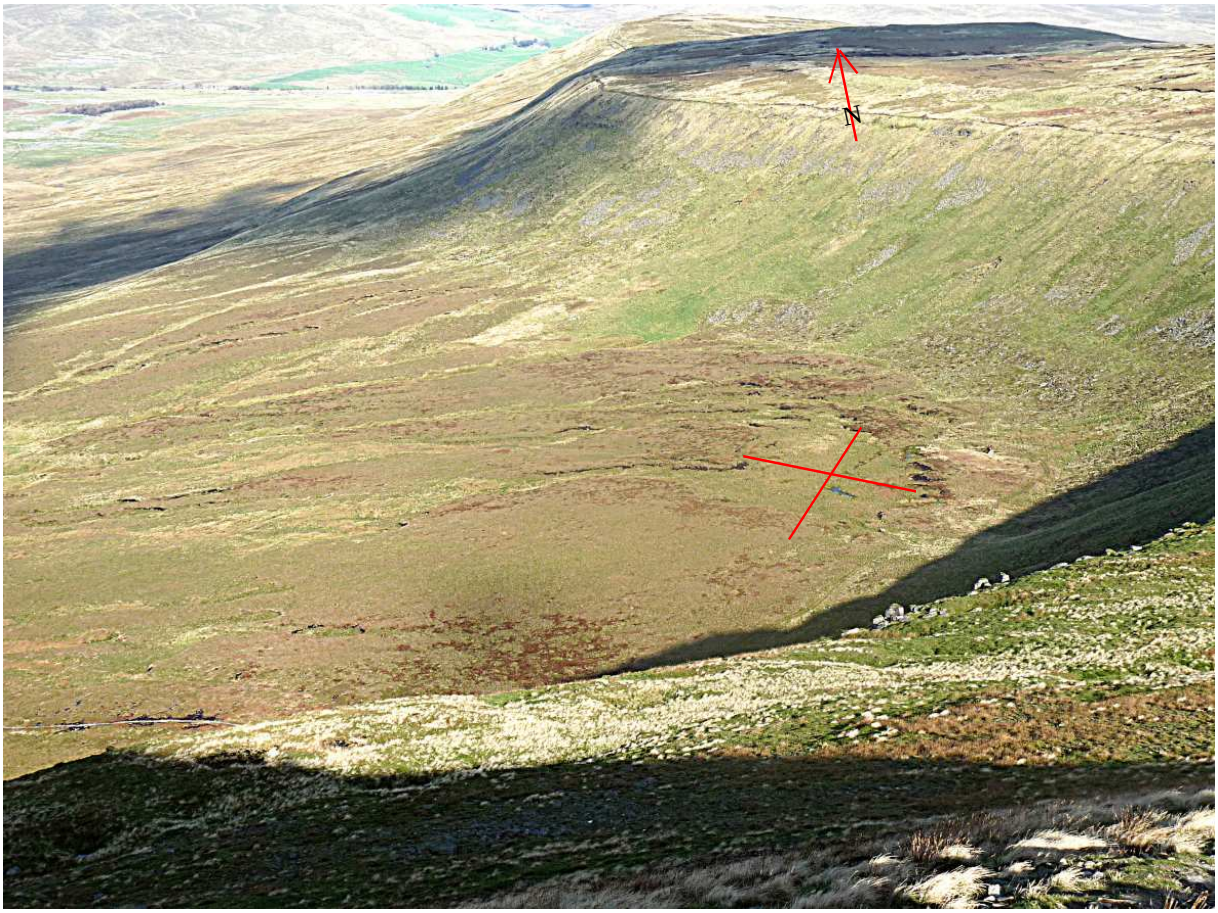

Plate 7 Location of Swales coring transect marked in red.

Photograph A Batty

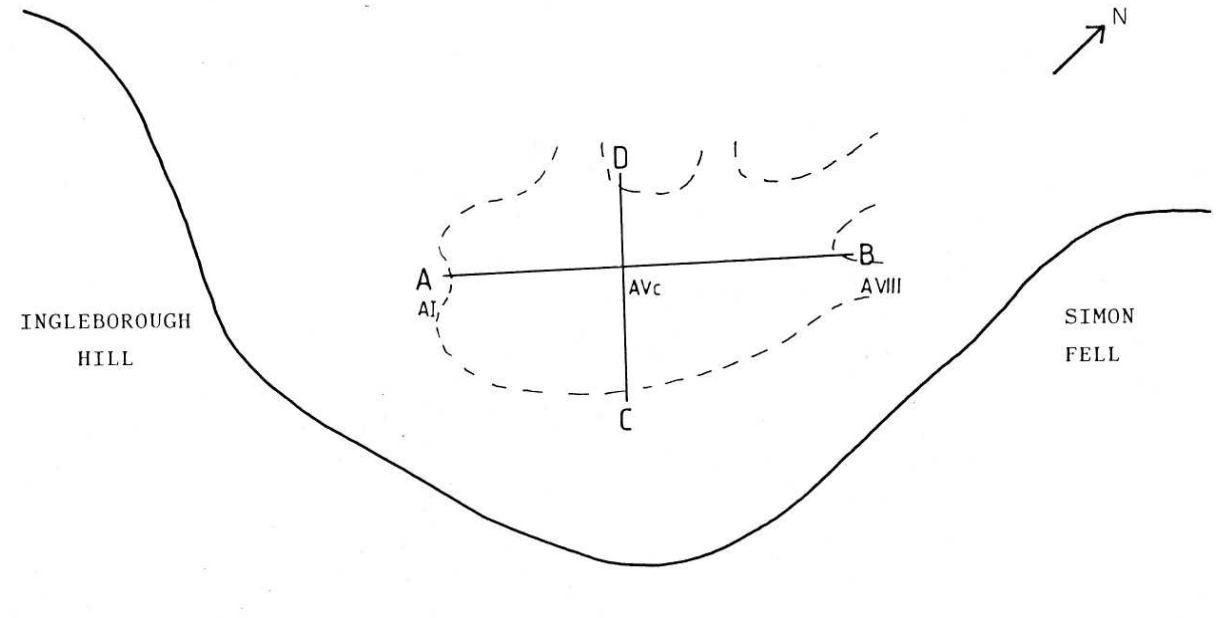

Fig 1 Drawing of location from Swales thesis.

Drawing S Swales 1987