Strip Lynchets - An Addendum

This short paper is an addendum to my previous GNS article (Jeans, 2021) so that the subject of strip lynchets, or cultivation terraces, can be discussed and illustrated a little more fully. Two examples were given in the previous article (Lynes Barn and Northleach) and another two examples will be discussed and illustrated here. All of the locations mentioned are shown on the map below (Fig. 1)

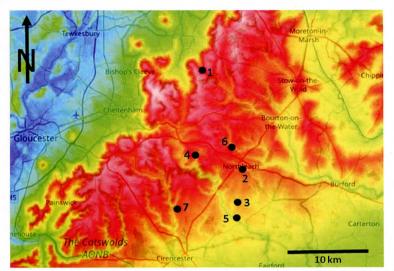


Fig. 1: Map showing all locations referred to in this text. I = Lynes Barn; 2 = Northleach; 3 = Bibury Old Racecourse; 4 = Compton Abdale; 5 = Sheep Bridge; 6 = Lower Dean; 7 = Conigree Wood.

Strip lynchets were formed by ploughing across a slope to produce a terrace or series of terraces, with a flat 'tread' bounded by steep 'risers' (Fig. 2). The earliest ploughs have been recorded in Britain from the Bronze Age, but the first wheeled ploughs with wooden mould-boards or plough shares are thought to be Iron Age or Roman in age. These plough shares could only throw a slice of soil to one side, but when creating a lynchet this enabled the riser to be

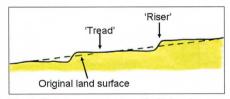


Fig. 2: Sketch cross-section of a flight of strip lynchets

progressively deepened by repeated ploughing on the uphill side of the terrace, and also resulted in a net migration of soil from the upslope part of the terrace to the downslope part of the terrace, thereby raising the riser on the downhill side of the terrace.

The resultant treads are most often in the range of 5–15m wide, and the risers most often range from 1-1.5m high: tiered arrangements are common, with 3-5 benches, sometimes many more.

The cutting of strip lynchets on hillsides permitted an increase in agricultural land area for arable crops, whilst reducing slope wash and run-off, i.e. the terraces retained both soil and water. They allowed for a wider range of crops to be grown, reducing the risk of crop failure and starvation, and also provided increased food to sustain higher populations. In Bronze Age – Iron Age times, it is believed that the Cotswolds were largely given over to pastoral land, but by late Iron Age

and Roman times, the Cotswolds became an major centre of cereal farming, especially on Roman villa estates. Arable farming continued to be important through Saxon – Norman times, but by the second half of the 14th century, the dramatic decline in population due to the Black Death, coupled with the rise to prominence of the wool industry, lead to a general shift back to grassland. Ironically, it is only where the land has remained as pasture that lynchets survive to the present day: modern deep ploughing would quickly erase them from the landscape.

Megalithic stone circles, long barrows, and hillforts are obvious early man-made features of the landscape, but strip lynchets are relatively small, more subtle features of the landscape, and less obviously man-made. Maybe as a result, they are much more common than suggested by The Cotswolds I:25,000 Ordnance Survey map. A download of data from the Gloucestershire Historic Environment Record Office (GHER) was most instructive. Hidden amongst the hut circles, enclosures, and sheepcotes are at least 40 reported instances of strip lynchets within a 20 km radius of Bourton on the Water, compared to three mentioned on the OS map.

Most of the GHER examples are quoted as Medieval in age, although a few are reportedly Romano-British (e.g. Bibury Old Racecourse, \sim 2.5 km ESE of Aldsworth [GR 180 092], and the linear features below the site of the Roman villa \sim 1.5 km SW of Compton Abdale [GR 049 163]) or Late Iron Age – Roman (e.g. where Akeman Street crosses the River Leach above Sheep Bridge, \sim 2 km NNW of Eastleach [GR 183 071]).

It appears that most of the GHER examples have been identified from aerial photographs, especially those taken in Spring, when patterns of ancient earthworks and field systems are revealed by the differential growth of crops or grass, reflecting the changes in soil structure, drainage, or density caused by these ancient structures. This does not mean that the features recorded from aerial photographs are easily visible when walking over the ground, for two reasons:-

- I. There is often no visible or coherent relief at the land surface, i.e. the evidence for these features lies within the soil, below the present land surface, and
- 2. The features are so located or oriented that they are not visible from available roads or footpaths.

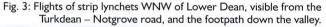






Fig. 4: Strip lynchets running down the hill, across the contours, \sim 0.5 km NNW of North Cerney. The lines of dry grass occupy the 'risers' separating the 'treads'.

Exceptionally, when clearly visible, strip lynchets can be really quite prominent features. An excellent example occurs just WNW of Lower Dean [GR 102 075], and comprises two flights, each of three terraces, on the SE side of the dry valley (Fig. 3). When the light is right, they are clearly visible from the Turkdean – Notgrove road.

As mentioned previously, strip lynchets are mostly oriented roughly parallel to contours on the slopes of (dry) valley sides. However, exceptions do occur, where the lynchets run downhill, across the contours. The most impressive example of this that I have found occurs SE of Conigree Wood, between Rendcomb and North Cerney on the East side of the Churn valley [GR 019 088], where a flight of ~8 terraces averaging ~7m wide run down the hillside, and can be clearly seen from the other side of the valley, from the Woodmancote – North Cerney road (Fig. 4). A public footpath runs across the lower part of this field, enabling these lynchets to be seen at close quarters (Fig. 5).

Pete Jeans (Ph.D. (Geol)) Email: pete.jeans2@gmail.com www.pj-exploration.co.uk

References: Jeans, P.J.F. (2021) Slides, Cambers, Slumps and 'Terraces': Part III, Small scale gravitational structures, and similar. Gloucs. Nat. Soc. NL, Dec. 2021.



Fig. 5: Downhill view along the lynchets shown in Fig. 4. The dry grass occupies the 'risers'.