

6. Agricultural Drainage Systems

Anonymous

The following was inspired by the article on North Kirktonmoor Farm in Vol 10 of the Journal. A local farmer who has had much practical experience of drainage systems thought it might be useful to those involved in field survey.

Old drainage systems always followed the rigs or ploughing, up and down the slope. Prior to 1830 stone drains were constructed using top-gathered stones laid in a trench 3ft deep. The layer of stones was 15 to 18ins thick and was covered with soil. The drains were 18ft apart - 18ft being the width of the Scots rig.

From about 1830 the drains were constructed using 'mug' or 'horse shoe' fire clay tiles, with a sole plate at every join. The bottom depth and the spacing remained the same. Stones were laid alongside the tiles, but never on top.

Between 1835 and 1860 drainage tiles with a continuous sole plate were in use. No stones were laid alongside and the bottom depth was 2ft 6ins. The spacing was at the Scots rig width.

From about 1850 double flat-sided drainage tiles became available and the use of 'mug' tiles gradually faded out.

Although the date at which common rig spacing (15ft) began to replace Scots rig spacing is not known, by the turn of the 19th/20th centuries common rig spacing was being used exclusively. It continued in use until the Second World War when new directions about crop density came into force.

The double flat-sided tile continued to be used until the end of the 19th century. About 1890 a round-topped, flat-bottomed fire clay tile came into use and remained the standard drainage method until 1960. In 1950 perforated plastic pipes became available and are now the standard drainage method. Double walled plastic pipes have been used in situations where cover was limited or where moss was being drained in the last ten years.