

SURVEYING AND LITHICS ANALYSIS USING THE TRS-80

Nicholas Hawley,
19 b, Drury Lane, Lincoln.

A TRS-80 Model 1 Computer with two disc drives and an Anadex DP5000 dot matrix printer was used to demonstrate programs that had been developed while working for Peter Chowne of the North Lincolnshire Archaeological Unit on a neolithic site at Tattershall Thorpe.

The stratigraphy of the site was not complex, being mainly non-overlapping features cut into the subsoil. During excavation the computer was used to record the finds and the outline of features; the program reduced the field measurements to grid co-ordinates and stored them. The high density graphics capability of the Anadex printer was then used to produce accurate plots of feature outlines, finds distribution etc.

The post-excavation work consisted of developing a database for holding the detailed results of the lithics analysis. The standard discs for the TRS-80 have a maximum capacity of 83k bytes, and to enable all the information to be packed onto a single disc, machine language programs were used to compress the data so that each flint only used 80 bytes of disc space. The program was able to scan and decode 755 flints in under 2 minutes. Work is currently in progress on programs that produce lists, tables, distribution maps and scattergrams showing the various statistics relating to the flints. Some of these programs, (written in Pascal and machine code) were demonstrated. The printed output was designed to be suitable for incorporation in the site archive.