

### **3\_3\_1\_Soil\_coring**

Two transect coring lines - one North - South and the other West - East - were produced to investigate differences in the loess - chernozem profiles across the mega-site. The mechanical corer utilised was the Atlas Copco Cobra TT petrol breaker with a 50 cm Eijkelkamp percussion drill bit. Using this equipment, a three-person team could rapidly retrieve soil samples from depths up to 1.50m. A total of 34 soil cores was drilled in the 2013 season ([ADS LINK TO 3\\_3\\_2\\_IMAGES/3\\_3\\_3\\_SPREADSHEET/3\\_3\\_3\\_Coring\\_Data](#)), using two transects across the site ([ADS LINK TO 3\\_3\\_2\\_IMAGES/3\\_3\\_2\\_coring\\_transect1](#) & [ADS LINK TO 3\\_3\\_2\\_IMAGES/3\\_3\\_2\\_coring\\_transect2](#)).

Three sediment / soil horizons were identified in almost every core: a 'pure' loess horizon, a B horizon mixed with the uppermost loess sediments and the uppermost chernozem A horizon. The top of the loess horizon was most frequently found at depths of 1.00 - 1.10m (15 out of 34 cores) but depths of as little as 0.50m and as great as 1.30m were also encountered. The top of the chernozem B horizon was most frequently found at depths of 0.60 - 0.75m (13 out of 34 cases), with secondary clusters at 0.25 - 0.30m (7 cases) and 0.50m (5 cases). The shallowest top of the B horizon was found at 0.20m, the deepest at 1.00m. The depth of the B horizon compares well to the results of the test pitting, where most of the houses had been built on a living surface in the middle of the chernozem B horizon.