

Appendix IV - Soil Survey Methods

SCALE

The area has been mapped in the field at a scale of 1:31,680 (1 cm to 0.32 km, 1 in to 0.50 mile). Soil boundaries were transferred to an aerial photography of the same scale.

The soil association map in this report is at the reduced scale of 1:100,000 (1 cm to 1 km, 1 in to 1.58 mile) and the soil type map is at the reduced scale of 1:45,000 (1 cm to 0.45 km, 1 in to 0.72 mile).

PROCEDURE

Profile descriptions were obtained from about 700 sites located at intervals varying from 100 to 1,000 metres apart depending on the complexity of the soil pattern. Surface features such as topography, vegetation and land use were noted at each site. A 10 cm (4 in) diameter Jarrett soil auger was used. The soil profile was exposed usually to a depth of 120 cm, but sometimes to 210 cm, and the soil classified into its soil type. During classification, each horizon in the soil profile was examined and its thickness, colour, texture, structure, fabric, consistency and the presence of lime, gypsum and any other inclusion were noted. Each site which was examined, and its thickness, colour texture, structure, fabric, consistence and the presence of lime, gypsum and any other inclusions were noted. Each site which was examined, and its relevant classification, were marked on the aerial photography. A boundary was drawn to show the transition of soil mapping units.

The smallest area that can be shown on the soil type map at the scale used is about 4 hectares. This means that any area shown as a single soil type may have small areas of one or more soil types within it, but not to a greater extent than about 5% of the occurrence.

A soil association may be regarded as a complex of soil types on a broad scale of mapping. The soil association map shows the soils of the area grouped on this basis, but, in this case, the map was compiled from the detailed soil map after it was completed, and not by mapping the soils as associations in the field.