



A history of Soil Survey in England and Wales

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Early soil mapping in Britain was dominated, as in the USA, by soil texture with maps dating back to the early 1900's identifying surface texture and parent rock materials. Only in the 1920's did Dokuchaev's work in Russia involving soil morphology and the development of the soil profile start to gain popularity, drawing in the influence of climate and topography on pedogenesis. Intentions to create a formal body at this time responsible for soil survey were not implemented and progress remained slow. However, in 1939 definite steps were taken to address this and the soil survey was created. In 1947, its activities were transferred from Bangor to the research branch of the Rothamsted experimental station in Hertfordshire under Professor G.W. Robinson. Soon after, a number of regional offices were also established to act as a link with the National Agricultural Advisory Service. At this time a Pedology Department was established at Rothamsted, focussing on petrological, X-ray, spectrographic and chemical analyses. Although not a Rothamsted Department itself, the Survey did fall under the 'Lawes Agricultural Trust'. A Soil Survey Research Advisory Board was also formed to act as a liaison with the Agricultural Field Council. In Scotland by contrast, soil survey activities became centred on the Macaulay Institute in Aberdeen.

Developments in the survey of British soils were accompanied in parallel by the development of soil classification systems. In 1930 a Soils Correlation Committee had been formed to ensure consistency in methods and naming of soil series and to ensure the classification was applied uniformly. In England and Wales the zonal system adopted was similar to that used in the USA, where soil series were named after the location where they were first described. American soil scientists such as Veitch and Lee provided stimulus to the development of mapping methods. In Scotland a differing classification was adopted, being similar to that used in Canada, recognising the importance of the soil drainage characteristics within areas of similar parent material. This led to the adoption of the soil catena approach and the usage of soil 'associations'.

With Britain entering the Second World War in 1939, there followed the almost complete cessation of survey activities and it was only in the aftermath of that war that recruitment of surveyors could re-commence. The first Soil Survey Field Handbook was published in 1940. Systematic and formal national soil survey activities across both England and Wales can be dated back to 1947 when work commenced to provide a complete picture of the soil resources of the two countries. Mapping at 1:25,000 scale, almost half the land was covered when, in 1979, the survey received instructions, together with the Scottish survey, to complete respective national maps at 1:250,000, which were published in the early 1980s. Attention then turned again to mapping lowland areas in more detail as well as specialised and thematic maps. However, in 1987 systematic survey was terminated and staff of the Soil Survey of England and Wales disbanded to form the Soil Survey and Land Research Centre (SSLRC) at what became Cranfield University - where its successor, the National Soil Resources Institute (NSRI) operates currently.