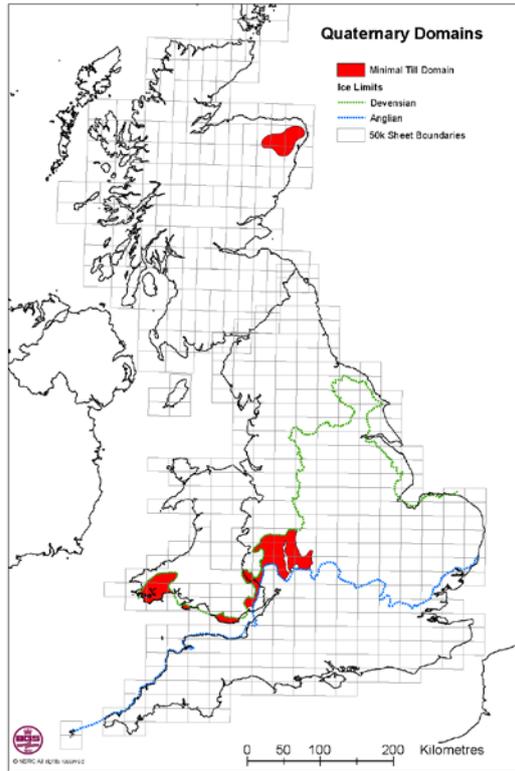
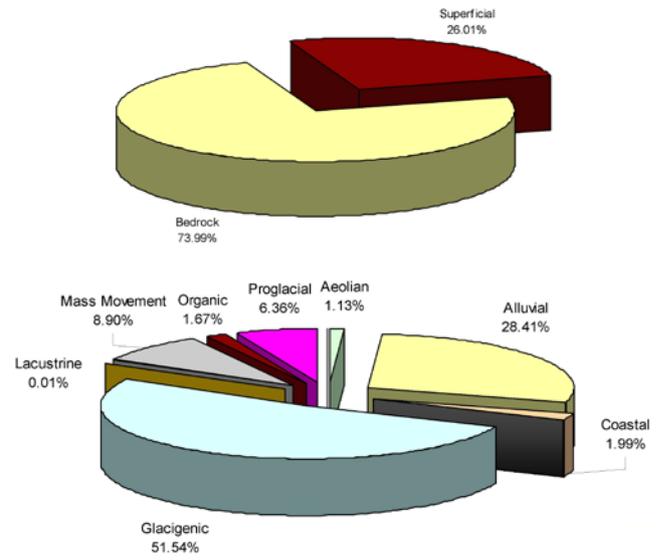


DOMAIN: MT MINIMAL TILL (with three sub-domains)



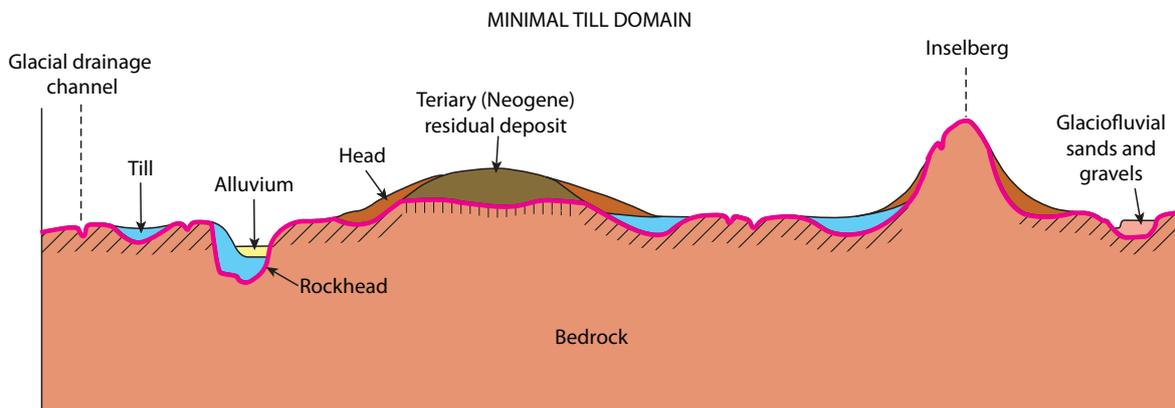
Bedrock/Superficial ratios



Superficial components

Pie chart proportions are based on an analysis of DigMapGB50 Version 2.

A schematic diagram showing elements of the minimal till domain



- Weathered metasediments and igneous rocks (granular disintegration)
- Decomposed metasediments and igneous rocks (chemical decomposition)

Background information for project planning:

Landforms, deposits and processes

This domain comprises two discrete areas.

1. Within the limits of the Devensian glaciation, in north-east Scotland, where little till or glaciofluvial material was laid down. Many older maps of the area show till as being widespread; in reality, it is commonly less than 1 m thick. There are occurrences of deep (<30 m), chemically weathered bedrock, mostly of granular type, and locally, complete decomposition to kaolinitic sandy clay. Associated with these regoliths are remnant deposits of Neogene flint and quartzite gravel. The predominant processes that have shaped this landscape are prolonged subaerial denudation during the Palaeogene and Neogene, and severe periglacial processes during the Pleistocene.

2. Beyond the limits of the Devensian glaciation, in the southern Welsh Borderland and Vale of the Severn, where there are no glaciogenic landforms and glaciogenic cover is generally patchy, consisting of weathered glacial deposits on valley sides and glaciofluvial deposits in the valley bottoms. Glacigenic deposits comprise glaciofluvial gravels, tills and glaciolacustrine silts, and are confined to 'buried' valleys, as in the Mathon Valley. Periglacial slope deposits are extensively distributed over valley sides. Fluvial deposits include possible pre-Anglian sands and gravels and post-Anglian glaciofluvial outwash terraces, river terraces and alluvium.

For mapping guidance:

Primary approach

Office-based information search and landform analysis followed by a preliminary field visit to confirm model and appropriate methodologies. Soil Survey data, borehole and trench information are invaluable aids. Ground truthing is essential, taking particular note of soils, soil brash and exposures, especially river and coastal cliff sections and drainage ditches.

Farm buildings and churches commonly provide important information on lithology.

Extensive augering may be unproductive. The daily average ground coverage is between 1 and 2 km².

Supplementary approach

- Drilling and trenching essential, supported by a wide-ranging sample analysis.

Specific problems

- Whether or not to map weathered/decomposed bedrock where present. In those instances where granite or micaceous psammite has decomposed to sand, it should be regarded as a superficial deposit and mapped. To complete this task adequately, much augering and trenching is required.