Table 8.4 General features of glacial facies

Deposition: takes place in a variety of environments: beneath glaciers of various types, in glacial lakes, on glacial outwash plains and glaciomarine shelves and basins, and by a variety of processes including moving and melting glaciers, melt-water streams, melt-water density currents and icebergs.

Lithologies: polymictic conglomerates termed tillite, sandstones, muddy sediments with dispersed clasts (dropstones).

Texture: poorly-sorted, matrix-supported conglomerates (tillites), angular clasts possibly with striations and facets, and elongate clasts possibly showing preferred orientation.

Structures: tillites generally massive but some layering may occur; rhythmically laminated ('varved') muddy sediments common; fluvioglacial sandstones show cross-bedding and lamination, flat bedding, scours and channels.

Fossils: generally absent (or derived), except in glaciomarine sediments.

Geometry: tillites laterally extensive.

Facies sequences: no typical sequence.