
9 GLOSSARIES

Glossary I

Current rock names applied to glassy, and related rocks (modified from North American Geologic-map Data Model Steering Committee (2004), Le Maitre (2002), and Gillespie and Styles (1999)).

Felsite – informal field term for fine-grained, pale-coloured igneous rocks, usually occurring as minor intrusions. May form by the devitrification of glassy rocks.

Obsidian – vitric igneous rock that is non-hydrated, is generally dark-coloured, and has few or no phenocrysts, and a bright, glassy lustre.

*Perlite** – vitric igneous rock characterised by hydrated glass with a distinctive spherical fracture texture.

Pitchstone – vitric igneous rock characterised by hydrated glass with a dull lustre.

Porphyry – (geological usage) informal field term for conspicuously porphyritic rocks, especially where the groundmass is fine-grained and hard to characterise. Common in Arran, Bute and Cumbrae, and probably sometimes originally glassy.

*Vitrophyre** – vitric igneous rock that has conspicuous phenocrysts in a matrix of glass.

*Terms approved in the USA, but not given as valid by Le Maitre, or Gillespie and Styles.

Glossary II

Obsolete rock terms used in the older literature on Arran pitchstone.

The 19th-century geological literature on Arran uses many terms which are poorly defined, and hence it can be difficult to establish what is meant when they are used. Some of the more frequently used terms relating to fine-grained rocks are discussed below.

Claystone – obsolete term for fine-grained materials made largely of clay minerals. Usually synonymous with mudrock (ie, a sedimentary rock). However, sometimes used for igneous rocks which have been thoroughly altered to soft clay-rich material, or finegrained clay-rich material in fault-zones. Curiously Bryce (1859) includes under claystone the riebeckite felsite of Holy Isle – an extremely hard, tough and un-clay-like material!

Clinkstone – hard, fine-grained rock (usually igneous) which makes a metallic or musical clinking sound when struck.

Greenstone – poorly-defined, vague and obsolete term usually used to refer to basaltic igneous rocks, usually somewhat altered. Also used to refer to serpentine-rich marbles and metabasic rocks.

Hornstone – obsolete term for tough, flinty-looking fine-grained rocks which break with conchoidal fracture. Partly corresponds to the modern term hornfels, but also used for cherts, or igneous rocks with similar physical properties.

Trap – obsolete term for fine-grained igneous rocks, usually basaltic in composition, and dark coloured. Used for both lavas and minor intrusions.