CGI Simple Lithology vocabulary 200811

Tag 11/17/2008
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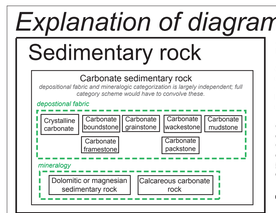
This document is a 'road map' for the lithology vocabulary used by the NGMDB geologic map portal. The words in boxes with black outlines are terms in the vocabulary. These are meant to be used for specifying the rock types that compose a geologic unit. The concepts represented are hand-sample scale rock types to be treated as material constituents of a geologic unit.
In each diagram, flow is generally from more general to more specific categories from top to bottom.

This vocabulary includes slightly larger collection of terms than GeoSciML draft lithology vocabulary. Intention is to keep this vocabulary synchronized with GeoSciML vocabulary, such that more specific terms that are included in NGMDB portal vocabulary, will always map to concepts in GeoSciML vocabulary unambiguously.

Explanation of diagrams



Definitions or scope notes for categories are in accompanying text document.

All terms in solid-black-line boxes are lithology categories; Terms not in boxes are used for identifying sub vocabularies.

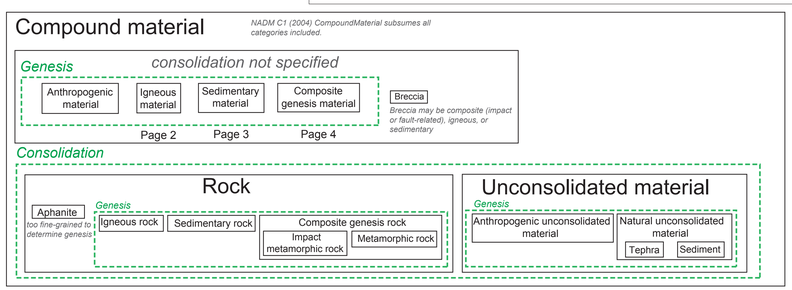
A green-dashed-line box indicates that categories within that box are mutually exclusive, e.g. Carbonate sedimentary rock has two groups of subcategories--one group defined based on depositional fabric, and a second group defined based on mineralogy. The green-text label specifies the property used to distinguish subcategories within the associated green-dashed-line box.

Containment of a boxed group within another boxed group indicates subcategories, e.g. Carbonate sedimentary rock is a kind of Sedimentary rock, and Carbonate packstone is a kind of Carbonate sedimentary rock. In some cases for which only one subcategory is included, or there is no unifying property used to define subcategories, stacking of black-outline boxes in direct contact is used to represent 'Kind-of' or subcategory relationship.

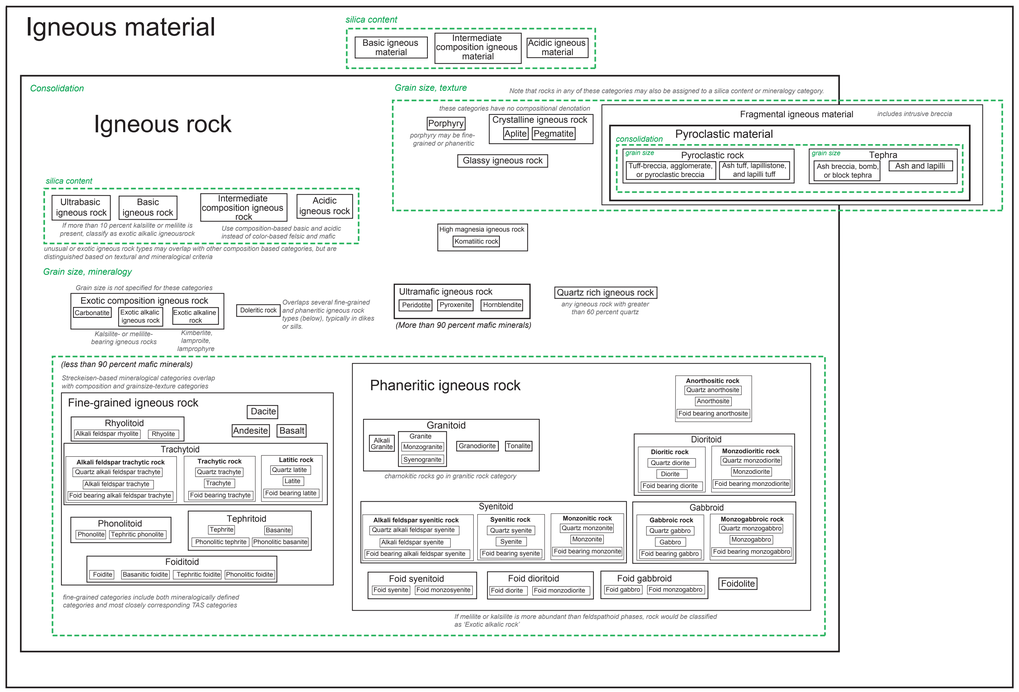
Other usage rules are specified in notes on the diagrams.

Compound material

NADM C1 (2004) CompoundMaterial subsumes all categories included:

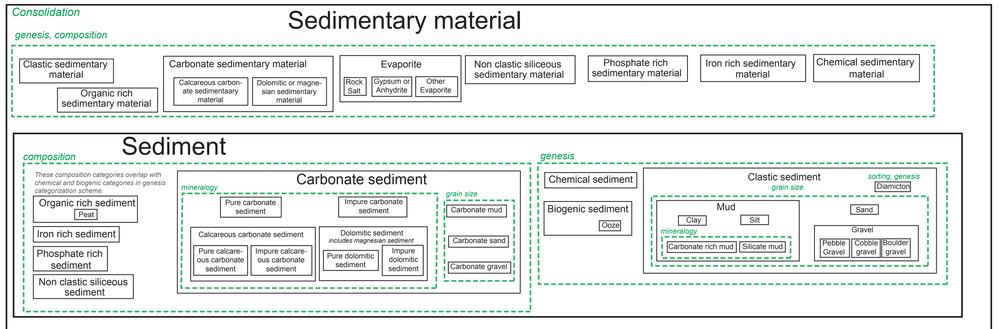


Igneous material

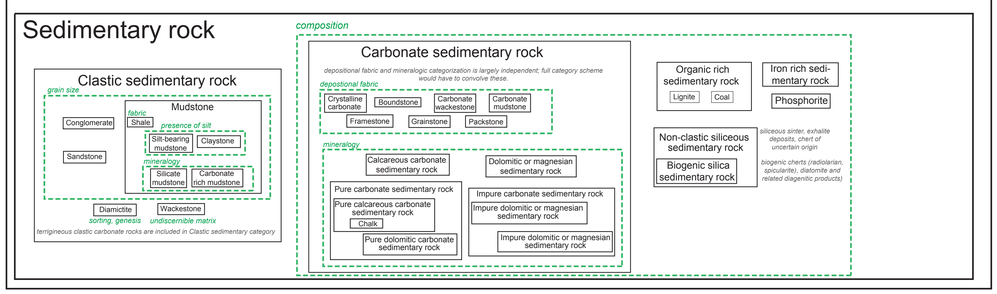
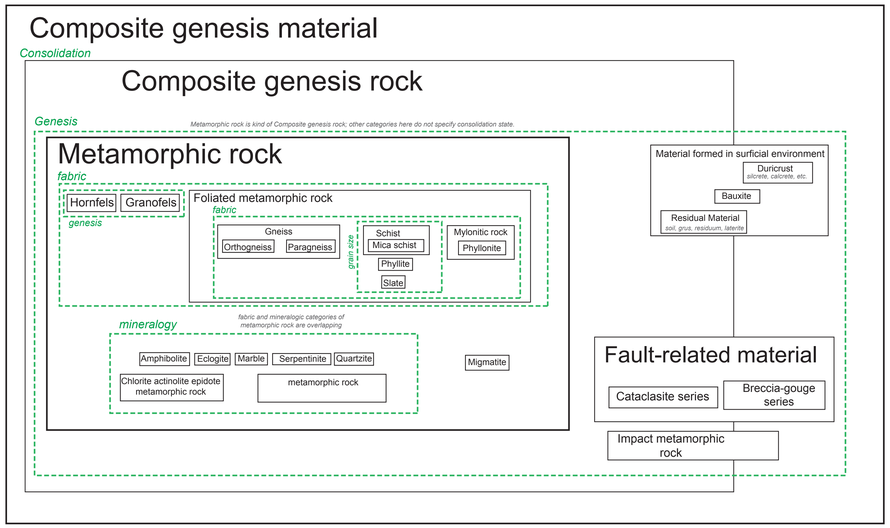


Based on Gillespie and Styles (1999), Figure 8, which cites 'modified from Fisher and Schmincke, 1984.'

Sedimentary material



Sedimentary rock



Composite genesis material