

## GLOSSARY<sup>1</sup>

### Abbreviations

<b>n.:</b> noun; simple term	<b>pl.:</b> plural
<b>adj.:</b> adjective	<b>pr.:</b> proper
<b>ph.:</b> phrase; complex term	

**Amphibolite:** n. [geology, petrography] General metamorphic rock consisting of amphibole and plagioclase, with some cleavage and a relatively massive texture, coloured dark green.

**Angular unconformity:** ph. [geology] Erosion surface that breaks rock layers on an angle.

**Anticyclonic:** adj. [climatology] Pertaining to an anticyclone, an atmospheric high pressure zone with closed circulation, that rotates clockwise in the Northern hemisphere.

**Archean:** pr. n. [geological period] First eon of the Precambrian, from the creation of the earth roughly 4.5 billion years ago to 2.5 billion years ago.

**Arkose:** n. [geology, petrography] Sedimentary rock derived from the erosion of emergent rock containing quartz grains (up to 60%), feldspath (25%) and frequently some mica. Especially formed of clay, which cements the grains together and comprises close to 15% of the rock.

**Artifact:** n. [archaeology] Object produced and used by humans that provides information about the culture of its creator.

**Aulacogen:** n. [tectonics] Tectonic trough that is longer than wide, situated perpendicular to the edge of a continent. The collapse is often progressive and occurs simultaneously with sedimentary filling. Current sedimentary mantle has levelled the trough. The structure is interpreted as a failed rift.

**Basaltic:** adj. [volcanism] Pertaining to basalt, a black-coloured extrusive igneous rock composing 95% of all continental and oceanic lava.

**Before present** (abbreviation, BP): ph. Indication of time calculated conventionally from 1950 A.D.

**Bioaccumulation:** n. [ecology] Accumulation of a substance in a living organism, at concentrations that sometimes exceed those normally found in the environment of the organism.

**Biocoenosis:** n. [ecology] Aggregate of living organisms, animals and plants, in a same biotope.

**Biotope:** n. [ecology] Well-defined geographic area, characterized by specific ecological conditions (soil, climate, etc.) that physically support the organisms composing the biocoenosis.

**Breccia:** n. [geology] In geology, any rock that is composed of angular fragments with diameters exceeding 2 mm (at least 50%) held together by a cement (sedimentary, tectonic or volcanic breccia).

**Bryophyte:** n. [botany] Land or semi-aquatic plant that possesses neither vessels nor roots. Bryophytes include liverworts, mosses and anthocerotae. The latter are not found in Nunavik. (adj.: bryophytic)

**Butte:** n. [geological structure] Part of a ledge separated by a valley. A transitional form between plateau and outlier.

**Caldera:** n. [volcanism] Crater with a diameter exceeding 1.5 km, created by the collapse of the edge of a volcanic vent or sometimes by its explosion.

**Calf:** n. [zoology] Small beluga or caribou, from birth until it is weaned.

**Chert:** n. [geology] Hard but brittle cryptocrystalline rock with a conchoidal fracture.

**Chionophilous:** adj. [botany] Pertaining to a plant that can grow in snow.

**Cirque:** n. [glaciation] In mountain areas or at high elevations, semi-closed bowl-shaped depression carved by a small glacier, often from a snow niche.

**Continental ice sheet:** n. [glaciation] Vast field of ice that may be a few kilometres thick at its centre and the edges of which form arms or ice barriers. For example, the ice sheets in Antarctica and Greenland.

**COSEWIC:** Committee on the Status of Endangered Wildlife in Canada.

**Craton:** n. [geological phenomenon] Bedrock formed largely of granite blocks or plutons. Large, stable portion of the continent as opposed to reworked, unstable portions such as orogens.

**Crustaceous lichen:** ph. [botany] Lichen that adheres to the substratum (bark, rock or soil).

**Cryptogam:** n. [botany] Plant without flowers, seeds or apparent reproductive organs. Includes fungus, ferns and mosses. (adj.: cryptogamian)

**Cuesta:** n. [landform, structural geomorphology] Non-symmetrical landform with a steep slope (face) and a gentler slope (back), produced by the differential erosion of inclined layers of sediment along fault lines.

**Cyclonic:** adj. [climatology] Pertaining to a cyclone, an atmospheric low pressure zone with closed circulation, that rotates counter-clockwise in the Northern hemisphere.

**Diagnostic artifact:** ph. [archaeology] Artifact identified with a specific cultural period that indicates relative chronology (in comparison with radiocarbon dating).

**Drumlin:** Irish n. [glaciation] Hill that stretches in the direction of glacial flow, formed by the remnants of a ground moraine of a former glacier.

**Dyke:** n. [geology] Tabular body of igneous rock (tens or hundreds of metres thick) that cuts through the structures of the surrounding rock. After erosion, a dyke may remain to form a wall.

**Ecosystem:** n. [ecology] The structured aggregate consisting of a biocoenosis and a biotope.

**Esker:** Swedish n. [glaciation] An elongated ridge that runs parallel to a valley or a retreating glacier, composed of fluvio-glacial sediments and representing the former bed of a watercourse that was forced through a sub-glacial tunnel.

**Eustasy:** n. [geology, oceanography] 1. Worldwide fluctuations of sea level.  
2. Phenomena responsible for such fluctuations. (adj.: eustatic)

**Facies:** n. (aspect) Classification of rock determined by one or more lithologic (lithofacies) or Paleontologic (biofacies) characteristics. Metamorphic facies include granulites and amphibolites.

**Felsic:** adj. [petrography] Pertaining to clear-coloured igneous rock, containing little iron or magnesium but large quantities of feldspath and quartz.

**Flora:** n. [botany] Aggregate of plant species present in a region.

**Fluvio-glacial:** adj. [glaciation] Pertaining to a phenomenon or the detritus produced by melt waters from a glacier (refer to outwash).

**Foliose:** adj. [botany] Which has the texture or appearance of a leaf.

**Foliation:** n. [petrography, mineralogy] Structure visible in certain metamorphic rocks where the schistosity contains differentiated band-like layers. Especially present in rocks that have been subjected to relatively intense metamorphism.

**Fructitose:** adj. [botany] Which has the appearance of a shrub.

**Frontal moraine:** ph. [glaciation] Formed at the front of a glacier, it marks precisely the glacier's former stationary phases. May be several tens of metres high and several hundreds of kilometres long.

**Frost mound:** ph. [periglacial phenomenon] Mound of mineral soil produced by the expansion of ice under the soil.

**Frost sensitive:** adj. [periglacial phenomenon] Pertaining to a phenomenon or a material that is likely to break or crumble as a result of freeze-and-thaw action. A rock fragment produced by freeze-and-thaw action is a conglifract.

**Giga annum** (abbreviation, Ga): ph. Latin term meaning one billion years.

**Glacial lake:** ph. [glaciation] Lake created next to or near a glacier and fed by glacier melt waters.

**Gneiss:** n. [petrography] Very common metamorphic rock produced deep under the earth's surface and characterized by alternating dark layers (ferromagnesian minerals) and clear layers (quartz and feldspath). Paragneiss derives from sedimentary rocks, while orthogneiss derives from igneous rock.

**Graben:** n. [structural geomorphology] Collapsed section of the earth's surface that forms a trough and is bordered by a network of parallel and often step-like faults. Produced by pressure in the earth's crust.

**Granite:** n. [petrography] Very common clear-coloured (white, grey, pink, red, blue) plutonic igneous rock consisting essentially (close to 80%) of quartz and feldspath. Secondary minerals vary, including mica, amphibole, pyroxene, apatite, zircon and tourmaline.

**Granulite:** n. [geology] Fine-grained, clear-coloured metamorphic rock comprising primarily quartz, feldspath and garnet, formed in high temperature and high pressure zones (catazone). This type of rock is found in Precambrian bedrock. (adj.: granulitic)

**Growing degree-day:** ph. [climatology] Indicator of the total temperature above 5°C for plants on a daily basis during the growing season.

**Hogback:** n. [sedimentary rock, structure] Landform, ridge composed of very steep (predominantly vertical or subvertical) strata. Frequent in regions where tectonics are powerful.

**Horst:** n. [tectonics] Block raised between more or less parallel faults.

**Hummock:** n. [oceanography] Mass of ice raised by pressure.

**Ice-contact:** adj. [glaciation] Pertaining to a phenomenon or an action that occurs due to contact with a glacier, or on the edge of a glacier (deposit, terrace, esker).

**Impactite:** n. [geology] Rock produced at the time of impact of a large meteorite by fused metamorphism (formation of glass) and crystallization of specific minerals.

**Inukshuk** (pl., inukshuit): Inuktitut n. Markers built from rocks and serving various purposes such as to identify a location or a route.

**Invascular:** adj. [botany] Pertaining to cryptogams which do not possess vessels, including algae, fungus, liverworts, mosses and sphagnum.

**Isostasy:** n. [glaciation] General equilibrium that occurs at a certain depth under the earth's surface. The collapse of a portion of the earth's crust that causes the lifting of another portion is referred to as isostatic compensation. The rising of a continent as it regains its original position, with the melting of ice sheets, is referred to as isostatic rebound.

**Kayak:** Inuktitut n. Closed watercraft constructed of animal skins with one opening that permits entry of the lower body, and propelled with a paddle. Designed to transport a single person, it can nonetheless accommodate one other passenger.

**Kettle:** n. [glaciation] Kettle-shaped cavity found in fluvioglacial sediment, formed by the melting of an underlying ice block. Kettles are usually roughly ten metres in diameter, but can reach a few hundred metres in diameter.

**Kilo annum** (abbreviation, ka): ph. Latin term meaning one thousand years.

**Krummholz:** n. [botany] Stunted and twisted tree that is covered by snow in winter.

**Lava:** n. [geology] Rock that issues in a fused liquid or viscous state from a volcano, and that produces flows of variable distances.

**Ledge:** n. [oceanography] Area situated at or slightly above the waterline with conditions that encourage the gathering of colonies of amphibious marine mammals.

**Lichen:** n. [botany] Extremely resistant plant, formed through a symbiotic association of filamentous fungus and microscopic algae, that grows on the substratum and does not possess vessels.

**Liverwort:** n. [botany] Invascular bryophytic plant, of which the thallus or leaves are often divided in two and resemble a liver.

**Mafic:** adj. [petrography] Pertaining to dark-coloured igneous rock that is rich in iron and magnesium.

**Magma:** n. [geology] Liquid at a high temperature (at least 660°C) that produces rock following solidification, either at great depth under the earth through a slow cooling (plutonic rock) or on the surface through the rapid cooling of lava (volcanic rock). (adj.: magmatic)

**Meadowood:** pr. n. [archaeology] Culture that developed from 1000 to 500 B.C. and identified at sites in Québec and New York state. Meadowood culture was revealed with the discovery of cemeteries. It is characterized by a slow evolution of funeral rites in which cremation became the common practice. Its burial sites often contain rich artifacts, including many triangular chert blades, carefully cut uniquely for placement at burial sites.

**Meander:** n. [watercourse] Asymmetrical banks of a watercourse that generally flows in a single direction while winding back and forth.

**Mega annum** (abbreviation, Ma): ph. Latin term meaning one million years.

**Metamorphism:** n. [geology] Transformation of a rock from a solid state due to high temperature or under extreme pressure, with the crystallization of new minerals and the acquisition of new textures and structures. Metamorphic rock may be created through sedimentation or magmatism.

**Meta-population:** n. [ecology] In the context of caribou, a group of herds in a large region where gene flow between the herds is possible (Boulet et al., 2005).

**Minerotrophic:** adj. [botany] Pertaining to a peat bog that is fed by mineral-rich (generally surface runoff) water.

**Monoclinal:** adj. [structural geomorphology] Pertaining to structures where the layers are inclined in the same direction over vast stretches and, of course, have not been affected by folding.

**Moraine:** n. [glaciation] 1. A landform comprising glacial sediment, especially till, that has been deposited by a glacier into any number of shapes, including many closed depressions. 2. a) Refers to the heterometric detritus of pebbles, gravel, sand and clay that covers large sub-rounded unpolished blocks. b) Refers to the landforms created by the heterometric detritus and large blocks. (adj.: morainic)

**Moss:** n. [botany] A chlorophyllous cellular cryptogam plant, with leafy stems but without roots or vessels, capable of sexual and sometimes vegetative reproduction, which attaches itself to the substratum using root hairs.

**Oligotrophic:** adj. [botany, limnology] In botany, pertaining to a plant species that adapts well in poor-nutrient environments. In limnology (lake hydrology), pertaining to a lake with low levels of nutrients.

**Ombrotrophic:** adj. [botany] Pertaining to a peat bog fed exclusively by precipitation.

**Ordovician:** pr. n. [geological period] Second period of the Paleozoic (Primary age) that occurred between 500 and 435 million years before present and began with a glut of trilobites. The seas of the Ordovician covered the Canadian Shield.

**Orogen:** n. [tectonics] A mountain range created along an unstable portion of the earth's crust that has been compressed and folded.

**Orogeny:** n. [tectonics] Any process that produces landforms and in particular orogens. (adj.: orogenic)

**Ortho-:** [petrography] Prefix that signifies genuine. With metamorphic rocks, the prefix indicates that it is derived from magma (for example, orthogneiss).

**Outwash:** n. [water] Flat surface covered with fine sediment spread by a watercourse.

**Paleo-current:** n. [paleogeography] Ancient marine, lake or fluvial current.

**Paleo-shoreline:** n. [paleogeography] Ancient shoreline of a lake or sea that no longer exists.

**Palsa:** Russian n. [periglacial phenomenon] Peat hummock with an ice core. Palsen are generally found in bogs in discontinuous permafrost zones.

**Peat bog:** ph. [biogeography] An area that is somewhat acidic, consisting of peat and characteristic of wetlands. Peat bogs are colonized by typical low-growing plants, including moss, sedge, heath, etc.

**Peneplain:** n. [flattening, landform evolution] Vast flat surface created by erosion that wears away interfluves (peneplanation), regardless of rock type or structure.

- Periglacial:** [cold climates] 1. n. In geomorphology, periglacial action is the spatial movement of soil as it freezes and thaws, as well as related mechanisms and phenomena. 2. adj. Pertaining to the morphogenic activity of alternate freezing and thawing.
- Polynya:** n. [oceanography] 1. Opening of water surrounded by or next to pack ice. 2. Permanently open body of water.
- Precambrian:** [geological period] 1. pr. n. Period of time formerly known as an eon, the Precambrian comprises two eons: the Archean from 4.5 to 2.5 Ga and the Proterozoic from 2.5 Ga to 570 Ma. 2. adj. Pertaining to a phenomenon of the Precambrian.
- Prismatic (or columnar) lava:** ph. [geology] Lava in which the prisms are oriented vertically.
- Proterozoic:** pr. n. [geological period] Second eon of the Precambrian, the Proterozoic lasted from 2500 to 570 Ma. It is subdivided into three eras: the Paleoproterozoic (2500–1600 Ma), the Mesoproterozoic (1600–1000 Ma) and the Neoproterozoic (1000–570 Ma).
- Qammaq** (pl., qammait): Inuktitut n. Semi-subterranean house, set in the ground and generally consisting of a sleeping bench and an entrance tunnel. The walls were often constructed of blocks of peat plus wood and bones, and the roofs were covered with animal skins or peat.
- Quaternary:** pr. n. [geological period, glaciation] Fourth and last era of the Phanerozoic; the current era which began in 1.6 Ma and is marked by the appearance of humans as well as by the expansion and then partial retreat of continental ice sheets.
- Ribbed moraine:** ph. [glaciation] Formed under the front of a glacier during deglaciation. Reaching above 10 m in height and aligned parallel to the glacier's front.
- Rift:** n. [geology] 1. Continental rift: collapsed trough (graben) circumscribed by raised edges, and more or less powerful volcanic activity. 2. Oceanic rift: collapsed central area in an undersea ridge.
- Sphagnum:** n. [botany] Type of moss that grows in bogs which, when it decomposes, produces peat.
- Squamous:** adj. [botany] Having the appearance of scales.
- Stratigraphic:** adj. [geology] Pertaining to stratigraphy, the study of sedimentary deposit sequences, generally arranged in layers (or strata). According to the principle of superposition, the lower layer is older.
- Stromatolite:** n. [paleontology] Disk- or mammillary-shaped unit of algae produced by cyanophyte (blue-green algae). One of the first forms of organized life on earth (after bacteria). (adj.: stromatolitic)
- Sub-aerial:** adj. [basic concept] Pertaining to a phenomenon or action that occurs between the surface of the earth and the atmosphere (process, formation, erosion).
- Subsistence:** n. [geology, lithosphere] Progressive, regular or saccadic sinking, over a long period, of the floor of a sedimentary, marine or other type of basin.
- Talweg:** n. Line connecting the lowest points along a valley.
- Taxon:** n. [biology] Unit (family, genus, species, form) of the zoological or botanical classification system. For example, *Cetraria islandica* subsp. *crispiformis* and *Cetraria islandica* subsp. *islandica* are two distinct taxa of the same species.

**Tectonics:** n. [geology, lithosphere] Aggregate of deformations occurring in rock after its formation (folds, breaks, faults, etc.).

**Terricolous:** adj. [botany, zoology] In botany, pertaining to lichens that grow directly in mineral or organic soil. In zoology, pertaining to animal organisms that live in the earth.

**Thermokarst:** n. [periglacial phenomenon] Shallow depression a few tens of metres in diameter, without a typical shape, produced by permafrost thawing. Such a depression filled with water is called a thermokarst pond.

**Till** (synonym: glacial till): n. [geology, sedimentology] Unconsolidated sediment deposited directly by a glacier and consisting of a loose mix of blocks, gravel, sand, silt and clay; very heterometric without stratification. Till is different from a moraine, which signifies the form taken by the till.

**Topographical energy:** ph. [measure, physical geography] Figure expressing the force of the topography and corresponding to the average elevation of summits above a surface defined by the floor of the main valley. Similar to the notion of vertical drop.

**Stripes:** n. [periglacial phenomenon] Periglacial landform produced by alternate freezing and thawing that slowly wears down saturated soil.

**Ulu:** Inuktitut n. Knife used by Inuit women that varies according to the Arctic region; the blade is generally semi-circular.

**Umiaq:** Inuktitut n. Open watercraft constructed of animal skins and propelled by paddles. The size of an umiaq varies according to the Arctic region and needs. A large umiaq can carry more than 30 individuals, while remaining lightweight.

**Unconformity:** n. [geology] Surface that corresponds to a gap (absence of one or two periods) in the chronological sequence of layers. Stratigraphic placement of a sedimentary formation on a folded or reworked substratum that is partially eroded.

**Unit:** n. [geology, stratigraphy] Aggregate of rocks that are considered distinct for tectonic (structural) or stratigraphic reasons. The first case involves areas circumscribed by abnormal contacts; the second case involves formations.

**Upwelling:** n. [oceanography] An area where sub-surface water rises; sub-surface water. Such water is especially conducive for the development of plankton.

**Vascular:** adj. [botany] Pertaining to plants that possess vessels (xylem and phloem) through which circulates sap, from roots to leaves.

<sup>1</sup> Mainly based on: Derruau (1988); Foucault and Raoult (1995); Genest (2000); Girault and Ledoux (1991); Hébert and Hébert (1994); Parent (1990); Robitaille and Allard (1997); Parent (1990); Ayotte (1994), various Internet sites.

