

Hastings Cave and Thermal Springs



Glossary of Cave Terms

Aquifer

A layer of rock or sediment containing *groundwater* that can be drawn for use above ground.

Arthropods

The most common group of animals inhabiting caves, which includes insects, crustaceans, spiders, millipedes, etc. They have jointed limbs and external skeletons.

Biospeleology

The study of cave life.

Calcite

Crystallised form of calcium carbonate (CaCO_3). This is the major material in *stalactites* and other cave formations.

Carbonic Acid

A weak acid ($\text{CO}_2 + \text{H}_2\text{O} \rightleftharpoons \text{H}_2\text{CO}_3$) formed by rain or other water in contact with carbon dioxide in the atmosphere or in soils and vegetation.

Cave

A naturally occurring hole in the ground that has a dark zone. It may be horizontal or vertical and usually consists of *passages* and *chambers*.

Chamber

An enlargement in a *passage* or a room in a cave.

Column

A formation (*speleothem*) created when a *stalagmite* and a *stalactite* join together, or by the growth of either to meet bedrock.

Decoration

Another name for *speleothems*, created by redeposition of dissolved minerals from water, usually of *calcite* or *gypsum*. Also sometimes referred to as *formations*. These include *stalagmites*, *stalactites* etc.

Dolomite

The mineral calcium magnesium carbonate, $\text{CaMg}(\text{CO}_3)_2$ or the sedimentary rock mainly made up of that mineral.

Erosion

The wearing away of bedrock or sediment by mechanical and chemical actions of all moving agents such as rivers, wind and glaciers at the surface or in caves.

Flowstones

A formation created when water flows in a film over a sloping surface.



Formation

A cave decoration or *speleothem*.

Grotto

A room in a cave, of moderate dimensions but richly decorated.

Groundwater

The naturally occurring water found beneath the earth's surface in layers of rock or sediment.

Helictite

An irregular, gravity-defying *speleothem* with eccentric form (usually composed of *calcite* or *aragonite*), which at one or more stages of its growth changes its axis from the vertical to give a curving or angular form.

Karst

Terrain with special landforms and drainage characteristics due to greater solubility of certain rocks (notably carbonate rocks such as *limestone* or *dolomite*) in natural waters.

Limestone

A sedimentary rock consisting mainly of calcium carbonate, (CaCO_3), derived from the accumulated deposition (and fossilisation) of the calcareous remains of marine or freshwater organisms.

Passage

A cavity which is much longer than it is wide or high and may join larger cavities.

Rimstone

A deposit formed by precipitation from water flowing over the rim of a pool.

Room

A part of a cave, wider than a *passage* but not as large as a *chamber*.

Sedimentary rock

Rock that is formed by rock fragments created by weathering and erosion, parts of sea animals (shells and corals in particular), minerals in solution or organic material being deposited or being precipitated either on the surface of the earth or in water. Sedimentary rocks are deposited in layers called strata and may contain fossils. Sedimentary rocks are only a thin veneer over the Earth's crust, which consists mainly of igneous and metamorphic rocks.

Shaft

A vertical cavity roughly equal in horizontal dimensions but much deeper than it is broad.

Sinkhole

A rounded depression on the surface of the landscape formed by solution of bedrock or collapse of an underlying cavity.

Speleology

The study of caves.

Speleologist

A cave explorer or cave scientist.

Speleothems

The name used for all types of redeposited crystal formations in a cave, e.g. *stalagmites*.

Spring

A natural flow of water from rock or soil onto the land surface or into a body of surface water.

Stalactite

A *speleothem* hanging or 'growing' downwards from a roof or wall, usually of cylindrical or conical form, with a central hollow tube.

Stalagmite

A *speleothem* projecting vertically upwards from a cave floor and formed by precipitation from drips, often found directly under a *stalactite*.

Straw

A thin, hollow *stalactite*.

Stromatolites

A rock made by microbial action. Bacterium excrete mucus, which cements sedimentary particles together forming 'stepping-stones' in shallow water.

Tube

A cave *passage* of smooth surface, and elliptical or nearly circular in cross-section, usually formed below the water table.

Tunnel

A nearly horizontal cave, open at both ends, fairly straight and uniform in cross-section.

Further information

<http://home.mira.net/~gnb/caving/glossary/>

<http://www.tpwd.state.tx.us/learning/webcasts/caves/resources/glossary.phtml>