

Acetylene

A flammable gas C_2H_2 , created by water reacting with Calcium Carbide and burnt to produce light.

Alcove

A side passage that is relatively short (or appears to be) and does not have an obvious continuation.

Algae

Photosynthetic plants with a range of pigments in addition to chlorophyll. No root, stem or leaves.

Anastomoses

Anastomoses are one of the two most common characteristics of cave walls. The other is scallops. Anastomoses are small, winding tubes that interconnect in a serpent-like pattern, often found along bedding plane partings. They can sometimes be spotted on flat ceilings. These are often mistaken for solution pockets, which are short holes located along joints in the walls or ceilings.

Anemolite

A speleothem (eg Helictite, stalagmite) with a preferred orientation caused by air currents.

Aquifer

A body of rock saturated with water, that is capable of allowing the subterranean water to be stored, transmitted and is capable of absorbing recharge water. It can yield water through a well or a spring.

Aragonite

A less common crystalline form of calcium carbonate $CaCO_3$ than calcite, being denser and orthorhombic. Typically occurring as many small acicular needles.

Artefact

An item of human manufacture, normally applied only to the products of previous culture. Artefacts may or may not be buried by sediment. Examples bone or stone tools, engraving, painting.

Azimuth

In surveying, the true bearing of a survey line, obtained from an accurate survey or Survey & Mapping term.

Bacon

A thin, translucent sheet of dripstone hanging from a cave wall or roof, and with streaks of colour suggesting bacon.

Bearing

In surveying, the angle measured clockwise that a line makes with north. See also Grid, Magnetic & True north.

Bed

A stratum or layer in a sedimentary rock sequence, or unconsolidated sediment.

Bedrock

- (1) In a cave, a portion of the native rock strata that has not undergone collapse. The walls and roof of caves are often in bedrock.
- (2) In karst, the rock that underlies the limestone strata.

Blindfish

Amblyopsis Spelaea is Mammoth Cave's famous blindfish that could not survive outside the cave. The blindfish is translucent and has no eyes.

Blind Crayfish

These are crayfish without eyes that have adapted to the total darkness of the cave. They are eyeless and translucent because they never leave the dark of the Echo River.

Boxwork

A speleothem composed of intersecting mineral blades. In Nullarbor caves they are formed by the filling of cracks that form in dried out sediments with calcite material then the sediment has been eroded away.

Calcification

To become hard or stony by being impregnated with calcium salts. May apply to tree roots etc in caves.

Calcite

A mineral composed of calcium carbonate.

Carbonic Acid

A weak acid that forms from the interaction of carbon dioxide and water. It is responsible for the dissolution of limestone. The cave forming process begins with rainwater. Rainwater picks up carbon dioxide from the atmosphere and from decaying plants and animals in the soil. Carbon dioxide and water combine to form a weak acid, called carbonic acid.

Cave

A natural, underground cavity, usually formed by the dissolving action of acidic groundwater.

Cave Coral

Also known as "cave popcorn", are small knobby clusters formed by seeping water.

Cave Cricket

Spiderlike cricket that lives in the cave and on the surface. This cricket is at home in the darkness and its beige coloration helps camouflage it on the brown covered limestone walls. The slender antennae helps the cave cricket find its way to the surface where its eyes take over in hunting for food.

Cave Deposit

An accumulation of material other than speleothems, such as charcoal, fossils, skeletal remains and flood borne debris as well as clay, silt, sand and gravel.

Cave Pearl

A smooth polished and rounded speleothem found in shallow hollows into which water drips.

Cave Popcorn

Cave popcorn is formed when calcium carbonate creates cauliflower-shaped clusters, deposited on cave walls through limestone pores, or by splashes from a waterfall.

Cave Shrimp

The freshwater Kentucky cave shrimp is eyeless and also an endangered species. The cave shrimp is translucent and only found in Mammoth Cave.

Cave wrn

A large chamber within a cave.

Caving

The entering and exploration of caves. Also referred to as indoor mountaineering.

Chamber

The name for the largest space in a cave. Compared to other parts of the cave they generally have greater width, length & height.

Chasm

In caves, a deep, wide and elongated gap in a cave floor.

Chimney

A vertical opening in a cave that is narrow enough to be climbed by chimneying.

Classification

In biology, the scientific naming of all life forms like plants, animals, fungi, algae.

Clinometer

An instrument for measuring vertical angles, or angles of dip.

Columns

Columns are formed when stalactites join with stalagmites as a single structure.

Crawl Way

A passage which, because of its low roof height, must be negotiated on hands and knees. cf Flatteners, Stooping, Walking.

Crust

A speleothem composed of thin mineral layers on bedrock or soil surfaces in caves.

Curtain

A speleothem of dripstone, in the form of a wavy or folded sheet hanging from a cave wall or roof, often translucent & resonant.

Dolomite

A mineral, or a carbonate rock consisting of calcium magnesium carbonate $\text{CaMg}(\text{CO}_3)_2$.

Domes

Waterfalls in the cave make domes, which are holes you can look up into the cave ceiling.

Drapery

A speleothem formed when water deposits calcite in thin sheets that hang in delicate folds.

Driphole

A hole formed by water dripping onto a cave floor.

Dripstone

Forms where water drips fall from cave roofs and walls, usually of calcite.

Dry Cave

A cave without a running stream or a lake.

Epsomite

Epsomite and mirabilite are small amounts of crystallized salts that form hairlike tendrils from ceilings, walls, and floors. They can also have the look of wisps of cotton. These salts form more during the winter months when humidity is low and disappear as the humidity rises.

Erosion

The wearing away of bedrock or sediment by mechanical and chemical actions of all moving agents.

Fissure

An open crack in rock or soil.

Flocculant

Suspended sediment.

Flowstone

A secondary deposit in caves of calcium carbonate, usually in the form of calcite, precipitated by groundwater. It occurs in the form of sheets, drapery, and dams. Flowstone often resembles frozen waterfalls building up sheets of calcite like icing on a cake. Also referred to as Travertine.

Formation

In geology, the fundamental unit in rock stratigraphic classification, consisting of a distinctive mappable body of rock.

Fossil

The remains or traces of animals or plants preserved in rocks or sediments.

Foul

AIR In a cave or mine, air with greater than 1% carbon dioxide (CO₂) which adversely affects respiration and metabolism.

Geology

The study of the earth, its rocks, and how it changes, or has changed. Includes earth sciences, such as geology, geophysics, earth history, stratigraphy, paleontology, mineralogy.

Grotto

A well decorated cave room.

Groundwater

Water which flows beneath the surface of the earth. This is used as drinking water on the surface so think about what you do or leave there.

Guano

Accumulations of dung in caves, in some places may be partly mineralised. Main source is bats.

Gypsum

Gypsum is made of calcium sulfate $\text{CaSO}_4 \cdot 2(\text{H}_2\text{O})$ and is one of the more beautiful mineral decorations. The snowy white gypsum can grow in swordlike needles (up to 30 inches), flower shapes, tendrils, or sheets covering ceilings, walls, or floors.

Gypsum Flowers

Gypsum flowers are created by elongated and curving deposit of gypsum that "grow" out of the dry cave walls and ceiling.

Gypsum Snowballs

Mineral formations on the ceiling in the Snowball Dining Room of Mammoth Cave that look like snowballs.

Habitat

The immediate surroundings of a plant or animal, with everything necessary to sustain life.

Helictites

Helictites have a twisted, knotted shape due to water seeping very slowly such that a thin film of calcium carbonate sticks in a haphazard fashion to the side of a speleothem without dripping off.

Humidity, Relative

The ratio of the amount of water present in air to the amount present at saturation. Most caves have high humidity because climatic conditions tend to be constant with very little evaporative moisture loss. But caves can have low humidity.

Karst

Terrain with special landforms & drainage characteristics due to greater solubility of certain rocks in natural waters than is common. Name derived from a province in Slovenia, where this type of landform was first described. Several types described.

Karst Topography

A characteristic landscape, found in the cave regions, produced by solution and underground drainage in areas of soluble bedrock such as limestone and dolomite. This topography is evidenced on the surface by sink holes, sinking streams, and irregular ridges.

Lake

In caving, a body of standing water in a cave.

Limestone

Limestone is made up of shells gathered on the floor of the sea and hardened into layers of rock. This sedimentary rock is composed mainly of calcium carbonate.

Live Cave

A cave containing flowing water or active speleothems.

Loop

A route or passage that meets or intersects at another point.

Mirabilite

Mirabilite and epsomite are small amounts of crystallized salts that form hairlike tendrils from ceilings, walls, and floors. They can also have the look of wisps of cotton. These salts form more during the winter months when humidity is low and disappear as the humidity rises.

Moonmilk

Often a cauliflower shaped mass of soft, white, moist, speleothem consisting of calcite, and hydrated minerals such as hydrocalcite, hydromagnesite or huntite. May become hard or powdery if they dry out.

Passage

A cavity in a cave that is longer than it is wide or high. A passage normally leads to other places in a cave, and is not a dead end.

Pitch

A vertical or nearly vertical part of a cave for which a ladder or rope is normally used for ascent or descent.

Pits

Pits are vertical openings in the floor of a cave passage created by a collapse of rock, slumping of breakdown, or the solutional activity of descending water.

Pool Deposit

Any sediment which accumulates in a pool in a cave. Crystalline deposits precipitated in a cave pool, usually of crystalline shape as well as structure.

Raft

A speleothem consisting of a thin layer of crystalline material which forms and floats on the surface of a cave pool. Sinks if water surface is disturbed. May form many layers in a dried out pool.

Rimstone

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

Rimstone Dams

Rimstone forms around the edges of temporary pools of calcium carbonate-laden water. This creates steplike terraces along streams and on cave floors that enclose pools of water.

Rimstone Pool

A pool held up by a rimstone dam.

Room

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

Saltpeter

A mineral mined from caves, which was used for the production of gunpowder.

Sandstone

The protective sandstone caprock serves as a protective "roof" that sheds rainwater to vertical cracks. This "roof" protects the existing wet and dry passageways from further erosion.

Sandstone Cave

A cave formed in sandstone.

Saturated

Water which has dissolved as much limestone or other material as it can under the prevailing conditions.

Scallops

Scallops are one of the two most common characteristics of cave walls. The other is anastomoses. Scallops are spoon-shaped hollows dissolved in limestone floors, walls, and ceilings. These scallops are created by the flow of underground streams. The size and shape of the scallops indicates the last sustained direction and rate of flow of the underground streams or rivers. Faster current was indicated by the smaller the scallop.

Shield

A speleothem consisting of 2 parallel plates separated by a medial planal crack. Forms by water seeping through the medial crack.

Show Caves

Caves that are open to the public for guided tours.

Sinkhole

Sinkholes are "bowl-shaped" depressions in the fields created by cave collapse below ground. The sinkholes help guide rainwater and melting snow into underlying caves like a funnel. This is important environmentally because this can allow surface sewage, animal waste, pesticides, and other pollutants into the underground water supply that travels through an underground labyrinth of cave systems.

Sinking Stream

A stream that flows in a valley that terminates in a headwall beneath which the stream plunges underground into an underground water system.

Soda Straw

A hollow stalactite that resembles the shape and dimensions of a soda straw. They can sometimes reach lengths as long as eighteen inches.

Solutional Caves

Caves that are formed in rock that can be dissolved by acidic groundwater. Most solutional caves form in limestone, dolomite, gypsum, and marble.

Solution Pockets

Solution pockets are short holes located along joints in the walls or ceilings.

Speleothems (cave formations)

Speleothems are mineral deposits formed by the deposition of dissolved minerals in a cave.

Spelunker

A person who likes to explore caves or a "caver."

Speleologist

People who study the formations, geology, and hydrology of caves and their environment.

Squeeze

An opening in a cave only passable with effort because of its small dimensions.

Stalactite

Stalactites are formations formed from the cave ceiling downward. They are comprised of mineral deposits formed by water interacting with bedrock. Stalactites are usually of calcite, and hang from the ceiling of cave passages.

Stalagmites

Stalagmites are formations formed from the cave floor upward in a mound-shaped mineral deposit. They are comprised of mineral deposits formed by water interacting with bedrock. Stalagmites are usually of calcite mineral-bearing solutions dripping from the ceiling, and often form under stalactites. If the two grow together, they form a column.

Survey

In caving, the measurement of directions and distances between survey points and of cave details from them, and the plotting of cave plans and sections from these measurements.

Travertine

Travelling rock formation created by the redeposition of calcium carbonate.

Trogllobites

Animals that live their entire life cycle in a cave.

Troglodyte

A human being that lives in or frequently visits caves.

Troglophiles

Animals that like living in caves, but who are not dependent on the cave environment for their survival.

Trogloxenes

Animals who live above ground, but occasionally visit caves.

Tube

A cave passage of smooth surface, and elliptical or nearly circular in cross-section.

Twilight Zone

The part of a cave in which some daylight penetrates (but not direct sun light) and gradually diminishes to zero light.

Watertable

The surface between phreatic water which completely fills voids in the rock, and ground air, which partially fills higher voids.

Well

A deep rounded hole in a cave floor or on the surface in karst.

Wet Cave

A cave containing a lake, often a non flowing (or extremely slow flowing) lake at water table.

Wild Cave

A cave that has not been developed with lighting and trails.