Glossary of Speleological and Caving Terms

Max G. Meth

Copyright © Australian Speleological Federation Inc. 2002

Contents

- Introduction
- Glossary A Z
- Themes
- References
- Plea for updates / suggestions
- Acknowledgements
- Copyright
- Revision History

Introduction

The first Australian caving glossary was written in 1960 by Joseph N Jennings. Over the years this has appeared in a few publications and has been updated. It most recently appeared as:

JENNINGS Joe N, 1985, CAVE AND KARST TERMINOLOGY, in Matthews PG (ed), Australian Karst Index 1985, ASF Broadway, pp 14.1-13

This Glossary of Speleological and Caving Terms on Internet is a follow up to an article:

METH Max G, 1998, *CAVING DEFINITIONS*, in *AUSTRALIAN CAVER*, No. 143, February 1998, ASF Broadway, pp 7-8.

Following the definition of each term in the glossary is the **THEME** and the **REFERENCE**. The REFERENCE is the source of the term. This is for the first recorded listing of the term in an Australian caving glossary, or in some other publication. It does not reflect the authorship of the CURRENT definition of the term. Max G. Meth

Member of Cave Exploration Group of South Australia Inc.

A

AA

A type of lava surface in which the surface was too stiff to flow well, and so broke up into fragments. It is characterised by broken material which can vary from simple lumps to very sharp prickly fragments. It grades to pahoehoe.

Lava Cave term. Ref KG

ABNEY LEVEL A type of clinometer, having a bubble tube.

Survey & Mapping term. Ref JJ

ABSEIL Controlled descent on a rope using friction obtained by passing the rope through any of

various devices, eg rack, descender, karabiners. Safety considerations in caving would

preclude abseling without a mechanical device.

Climbing and SRT. Ref JJ

ACCIDENTAL An animal accidentally living in a cave, and not a normal resident. Usually fallen or

washed into cave. Could be drawn in by cave breathing. cf Cavernicole, Troglobite.

Cave - Biota. Ref JJ

ACETYLENE A flammable gas C2H2, produced by water reacting with Calcium Carbide and burnt

to yield light. See Carbide.

Miscellaneous terms. Ref JJ

ACTIVE CAVE A cave with a stream flowing in it. cf Live cave.

Cave - Kinds of. Ref JJ

ADAPTATION An inherited characteristic of an organism in structure, function or behaviour which

makes it better able to survive and reproduce. Visible examples of adaptations to cave

life are: lengthening of appendages, loss of pigments, modification of eyes.

Biology - Flora & Fauna. Ref JJ

ADVENTIVE Introduced accidentally, as most weeds are.

Flora. Ref MM

AEOLIAN A limestone formed on land by solution and redeposition of calcium carbonate in

CALCARENITE coastal dune sands that contain calcareous sand from mollusc shells and other organic

remains. Also as Eolian. Syn Dune limestone, Aeolianite.

Karst - Kinds of. Ref JJ

AEOLIAN Pertaining to the wind. Used for landforms generated by the wind, or sediments

transported by the wind. Also as Eolian.

Geology. Ref KG

AEOLIANITE Also as Eolianite. A rock formed on land by cementation of calcareous dune sands.

syn Dune calcarenite, Dune limestone, Aeolian calcarenite. See Calcarenite.

Karst - Kinds of. Ref KG

AFFINITY In biology, a similar but distinct species, closely related to the given species. Also

applies to interrelated minerals etc.

Biology - Flora & Fauna. Ref MM

AGGRESSIVE A measure of the relative capacity of water to dissolve rock material. In karst, this

usually involves the dissolution of limestone or dolomite by the action of dissolved

carbon dioxide. Although other acids may be present.

Hydrology terms. Ref JJ

AIR POCKET An enclosed air space above a lake water surface in a cave. Only accessible by diving.

Cave - Parts of. Ref WM

ALCOVE A side passage that is relatively short (or appears to be so) and does not have an

obvious continuation.

Cave - Parts of. Ref MM

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

or leaves.

Flora. Ref MM

ALLOGENIC Underground karst drainage that is derived entirely from surface run off from adjacent

DRAINAGE non karstic and generally impermeable rocks. Cf Autogenic drainage.

Karst - Miscellaneous features of. Ref DL

ALLUVIUM Sandy or silty matter deposited by rivers or floods.

Geology. Ref MM

AMPHIBIOUS Living on land and in water. cf Terrestrial, Aquatic, Arboreal.

Fauna. Ref MM

ANASTOMOSIS A mesh of small hollow tubes (the result of solution in the phreatic zone) in solid rock,

or half tubes when exposed in a fractured rock surface. Typically 1 to 4cm in diameter.

The holes are not the 'preserved' tunnels of worm-like animals.

Cave - Erosional & Solutional Features. Ref JJ

ANCHOR A fixed object used to secure a ladder, rope or safety line used for climbing.

Climbing and SRT. Ref JJ

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

currents. Seen in some Nullarbor caves. Cave - Depositional Features. Ref WM

ANTENNAE The feelers on the head of an insect, crustacean or other invertebrates that function as

sensory organs. *Fauna*. Ref AC

ANTHODITE Speleothem similar to Helictites, composed of quill-like or feathery crystal clusters of

long needlelike crystals of aragonite or gypsum. Each crystal has a central canal.

Cave - Depositional Features. Ref KG

AQUATIC Living in water. cf Terrestrial, Amphibious, Arboreal.

Fauna. Ref AC

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. *Hydrology terms*. Ref AC

ARAGONITE A less common crystalline form of calcium carbonate CaCO3 than calcite, being

denser and orthorhombic. Typically occurring as many small acicular needles. See

Anthodite.

Mineral, Rock and Chemical terms. Ref JJ

ARBOREAL Living in trees. cf Terrestrial, Aquatic, Amphibious.

Biology - Flora & Fauna. Ref MM

ARETE KARST Tropical landscape of near vertical sided spires. Also as Pinnacle Karst.

Karst - Kinds of. Ref WM

ARKOSE A sandstone which contains 25% or more feldspar grains, derived from granitic

sources. Arkosic is the adjective.

Geology. Ref KG

ARMCHAIR An experienced caver who now rarely if ever goes caving, but who may offer advice to

CAVER those that do.

Miscellaneous terms. Ref MM

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. [Advise cave manager if such items are found.]

Miscellaneous terms. Ref JJ

ARTESIAN Where water moves under pressure through completely flooded cavities. Much of

Australia is underlain by Artesian strata.

Geology. Ref TW

ARTHROPODS A Phylum of invertebrates, being very widespread. They are the most common group

of animals inhabiting caves, having jointed bodies, many limbs and exoskeletons eg

insects, crustaceans, spiders, millipedes.

Fauna. Ref JJ

ASCENDER A mechanical device for ascending a rope.

Climbing and SRT. Ref JJ

ASH Sand sized or finer-grained volcanic ejecta. Coarser material is called lapilli.

Lava Cave term. Ref KG

ASPHODILITES no definition (term mentioned in ASF codes)

Miscellaneous terms. Ref MM

ASSOCIATION A stable community of different species living in a specific habitat.

Cave - Biota. Ref JJ

AUTOGENIC Underground karst drainage that is derived entirely by absorption of meteoric

DRAINAGE (atmospheric) water into the karst rock surface.

Karst - Miscellaneous features of. Ref DL

AVEN A dome or vertical hole in a cave roof, particularly that is difficult or impossible to free-

climb. It does not reach the surface. It may have a passage leading from it. cf Blind

shaft.

Cave - Parts of. Ref MM

AZIMUTH In surveying, the true bearing of a survey line, obtained from an accurate survey or

Survey & Mapping term. Ref JJ

B

BACON A thin, translucent sheet of dripstone hanging from a cave wall or roof, and with

streaks of colour suggesting bacon.

Cave - Depositional Features. Ref UC

BACTERIA Unicellular microscopic plants. They are autotrophs, ie make their own food. They

sometimes form aggregations. Very important in caves as decomposers causing high

CO2 levels seen in some caves. Probably play a role in most speleogenesis.

Biology - Flora & Fauna. Ref AC

BARE KARST Karst with much exposed bedrock. Syn. Naked karst, Unmantled karst.

Karst - Kinds of. Ref JJ

BASALT An igneous rock that typically underlies oceanic basins. A dark coloured, generally

fine grained rock that occurs widely as lava flows of many different ages. Lava

caves occur most commonly in basaltic lava.

Geology. Ref DL

BASIN A segment of the earth's crust which has been downwarped. When filled with

sediments they increase in thickness toward the centre. cf Craton, Orogen.

Geology. Ref MM

BAT A mammal of the order Chiroptera, divided into several families. The only mammals

capable of true flight, having membranes between the toes of their forefeet.

Fauna. Ref JJ

BATHYPHREATIC Referring to water moving with some speed through downward looping passages in

the phreatic zone.

Hydrology terms. Ref JJ

BEARING In surveying, the angle measured clockwise that a line makes with north. See also

Grid, Magnetic & True north. Survey & Mapping term. Ref JJ

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

Geology. Ref JJ

BEDDING GRIKE A narrow rectilinear slot in a karst rock outcrop due to solution along a bedding

plane.

CAVE

Karst - Miscellaneous features of. Ref JJ

BEDDING PLANE A cavity developed along a bedding plane and elongate in cross section. May result

from a difference in solubility between the 2 beds.

Cave - Kinds of. Ref JJ

BEDDING PLANE A surface separating 2 beds of rock, usually planar.

Geology. Ref JJ

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.

Karst - Miscellaneous features of. Ref MM

BELAY POINT A fixed point used to support the belay, usually and ideally independent of the

support point of the ladder or rope used for climbing.

Climbing and SRT. Ref MM

BELAY ROPE The rope used for belaying, separate (usually) from the climbing rope.

Climbing and SRT. Ref MM

BELAY 1 The attachment (often by a separate rope) of a climber, or a ladder to a secure

point. 2 The secure point itself. 3 The use of a belay as a life line during ascent or

descent of a climber. see On belay.

Climbing and SRT. Ref JJ

BELOW Emergency call (often shouted) of danger. Signal given to those below that

something is falling. Only useful if there is voice contact between the top and bottom

of a pitch.

Climbing and SRT. Ref MM

BENCH A horizontal shelf along the wall of a lava tunnel, generally close to floor level. It is

formed at the edge of a lava flow level, by cooling and solidification of the edge

followed by a lowering of the level.

Lava Cave term. Ref KG

BENCH Some 'benches' form differently by the rolling down of a long flap of wall lining.

Gradations can occur, eg. where a thin bench breaks free and starts to roll

downwards.

Lava Cave term. Ref KG

BENTHIC Bottom dwelling. The ocean floor, from the low water mark to the greatest depths.

Some cave fauna would occur in this zone in submarine or submerged caves. cf

Littoral.

Geology. Ref MM

BIOCLASTIC Containing grains composed of fragmented and transported organic material, eg.

shell fragments.

Cave - Biota. Ref KG

BIOGENIC Of biological origin. eg most limestone is biogenic.

Biology - Flora & Fauna. Ref MM

BIOGEOGRAPHY The study of the geographical distribution of animals and plants over the globe. cf

Zoogeography, Phytogeography.

Cave - Biota. Ref AC

BIOMASS The total mass or weight of living matter, usually relates to a given area, habitat or

community.

Biology - Flora & Fauna. Ref MM

BIO-SPACE The separated or interconnected air or water-filled spaces that are inhabited by

living organisms. The spaces may be cracks, pipes, channels, interstitial medium,

saturated zone, tubes, voids, microcaverns, larger cavities including caves.

Cave - Biota. Ref AC

BIOSPELEOLOGY The study of plant, animal and other organisms living in caves.

Cave - Biota. Ref JJ

BIOTA The total assemblage of living organisms of a district. Biotic.

Fauna. Ref AC

BIVALVE A Mollusc. A soft bodied animal having a shell in 2 halves. eg scallop, oyster. Often

preserved (along with other mollusc types) as fossils in limestone.

Fauna Ref MM

BLANKET A dripstone curtain, thicker than Bacon, and not noticeably translucent.

Cave - Depositional Features. Ref MM

BLIND SHAFT A vertical extension upwards in a cave that does not reach the surface. cf Aven

Cave - Parts of. Ref JJ

BLIND VALLEY A valley which ends at its lower point in a ridge or wall of limestone. It has (or had)

either a perennial or intermittent stream flow, that escapes underground at the

lowest point.

Karst - Miscellaneous features of. Ref JJ

BLISTER CAVE Strictly, a cave formed by gas pressure pushing up a surface crust. True blisters are

rare, & generally too small to enter. Some large ones are known overseas. The term has been misused for single simple chambers formed by drainage of liquid lava.

Lava Cave term. Ref KG

BLOWHOLE A vertical hole often circular, on the surface in karst through which air blows in and

out, often audibly. Common feature of the Nullarbor Plain. Elsewhere in Australia

known as a Pipe or Solution pipe. In USA known as a Blowing cave.

Karst - Depression Features of. Ref JJ

BLOWHOLE A hole to the surface in the roof of a sea cave through which waves force air and

water.

Karst - Miscellaneous features of. Ref JJ

BOBBIN A descender that opens to enclose the rope around two fixed pulleys. May have a

handle ("STOP") which must be squeezed to allow descent.

Climbing and SRT. Ref RW

BOLLARD A projection of rock over which rope, tape or wire can be placed to create an

anchor.

Climbing and SRT. Ref RW

BOLT A high tensile steel bolt used as an anchor.

Climbing and SRT. Ref JJ

BOMB A large fragment of volcanic ejecta. Some bombs show twisted forms indicating that

they were still liquid when ejected, but solidified before landing. 'Breadcrust' and

'cowpat' bombs are named for their appearance.

Lava Cave term. Ref KG

BONE BRECCIA A breccia containing many bone fragments. see Breccia. [Advise cave manager if

such items are found.]

Cave - Erosional & Solutional Features. Ref JJ

BOOBTUBE A clear plastic tube about a metre long, used as a straw to drink water from

crevices and otherwise inaccessible pools.

Miscellaneous terms. Ref MM

BOTRYOID A speleothem shaped like a bunch of grapes. A variety of Coralloid, formed either

in air or water.

Cave - Depositional Features. Ref HF

BOULDER A collapse of rock from floor to roof which makes further progress difficult or

CHOKE dangerous.

Cave - Parts of. Ref MM

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.

Cave - Depositional Features. Ref UC

BRAKE BAR A round bar hinged to a karabiner or rappel rack used for abseiling.

Climbing and SRT. Ref JJ

BRANCHWORK A dendritic system of underground streams or passages that join successively to

form larger and larger streams and passages. cf Dendritic.

Cave - Parts of. Ref JJ

BREAKDOWN (1) Rock that has fallen from the wall or roof of a cave. (2) Enlargement of cave

chambers by this process. *Cave - Parts of.* Ref JJ

BRECCIA Rock that is composed of fragments of other rocks cemented together, often in a

matrix of finer sediment.

Cave - Erosional & Solutional Features. Ref JJ

BRUNTON A type of compass, with a hinged mirror and including a clinometer. Designed for

COMPASS measuring rock dip & strike.

Survey & Mapping term. Ref JJ

BRYOZOA A Phylum of tiny colonial animals 'Lace corals', that build calcareous structures of

many kinds. A fossil that was common in warm shallow Tertiary seas.

Karst - Kinds of. Ref KG

BURST See Flap.

Lava Cave term. Ref KG

C

CACO3 Calcium carbonate.

Mineral, Rock and Chemical terms. Ref MM

CAINOZOIC The last of the geological eras, includes the Tertiary and Quaternary Periods.

Extending from about 65 million years ago up to the present.

Geology. Ref KG

CALCARENITE An indurated sand composed mainly of detrital calcium carbonate fragments. A

limestone or dolomite composed of coral or shell sand, or of sand derived from

the erosion of older limestones, with sand sized particles. See Aeolianite.

Karst - Kinds of. Ref KG

CALCAREOUS Made of limestone or calcium carbonate.

Mineral. Rock and Chemical terms. Ref MM

CALCIFICATION Calcified. To become hard or stony by being impregnated with calcium salts. May

apply to tree roots etc in caves.

Processes. Ref MM

CALCILUTITE A fine grained clastic (silt and clay sized particles) limestone or dolomite.

Karst - Kinds of. Ref KG

CALCIRUDITE A coarse (gravel sized) limestone. The clasts (broken fragments) making up the

rock may be fossils or pieces of coral or shells or fragments of limestone, with the interstices filled with calcite, sand or mud with the whole bonded by a calcareous

cement.

Karst - Kinds of. Ref KG

CALCITE The common (trigonal) crystal form of Calcium carbonate mineral [CaCO3] and

the main constituent of limestone, with different crystal forms in the rhombohedral

subsystem. Occurs in caves as massive or finely crystalline speleothems or other

crystal forms.

Mineral, Rock and Chemical terms. Ref JJ

CALCIUM CaCO3. see Aragonite, Calcite

CARBONATE *Mineral, Rock and Chemical terms.* Ref MM

CALCRETE An indurated surface formed by weathering process involving cementation of the

surface soils and weathered rock by calcite, drawn to the surface by capillary

action. See Kankar, Oolite. Karst - Kinds of. Ref KG

CALCSILTITE A limestone composed of calcareous sediments of silt size

Karst - Kinds of. Ref EH

CAMBERING

FISSURE

A fissure that forms behind and parallel to a cliff line, as a result of the outward

rotation or sliding of large blocks.

Cave - Kinds of. Ref KG

CANOPY A compound speleothem consisting of a flowstone cover on a bedrock projection

and a fringe of stalactites or shawls on the outer edge.

Cave - Depositional Features. Ref JJ

CANYON A deep valley with steep to vertical walls. In karst, often formed by a river rising

on impervious rocks outside the karst area. *Karst - Depression Features of*. Ref JJ

CANYON A deep elongated cavity cut by running water in the roof or floor of a cave, or

forming a cave passage. *Cave - Parts of.* Ref JJ

CAPROCK A surface composed of Calcrete, especially where it is separated from the

underlying rock by a clay or similar layer...

Karst - Kinds of. Ref MM

CARABINER See Karabiner. Also Crab, Krab.

Climbing and SRT. Ref MM

CARBIDE LAMP Produces light by burning acetylene gas formed by reacting water and (calcium)

carbide.

Lighting term. Ref MM

CARBIDE Calcium Carbide Ca2C. Reacts with water to form Acetylene gas (and carbon

dioxide & calcium oxide) and because of impurities, also produces other noxious

gases.

Miscellaneous terms. Ref JJ

CARBON DIOXIDE CO2, a colourless odourless gas, which when dissolved in water, forms Carbonic

acid.

Mineral, Rock and Chemical terms. Ref UC

CARBONIC ACID H2CO3, an acid typical of ground water systems. The agent responsible for

dissolving most caves.

Mineral, Rock and Chemical terms. Ref UC

CARNIVOROUS Carnivore. An animal that feeds on any other animal. cf Herbivorous,

Insectivorous, Omnivorous.

Fauna. Ref MM

CATCHMENT The area drained by a watercourse, or by a system of watercourses. The

subterranean catchment may well be larger than the apparent surface one. eg as at Mole Creek & Jenolan. Dolines may form a catchment, which may be crucial in

their later development.

Geology. Ref AC

CAVE Alcove, Aven, Cavern, Chamber, Chimney, Crawlway, Decoration, Dome,

COMPONENT Fissure, Flattener, Gallery, Grotto, Hall, Passage, Pillar, Pitch, Pothole, Rift, Rock

pendant, Room, Shaft, Siphon, Speleogen, Speleothem, Squeeze, Sump, etc.

Cave - Parts of. Ref MM

CAVE AGE Most karst cave passages are less than 1 million years old, though Relict Caves

could be hundreds of millions of years old. The most recently formed passages

may be as little as 10,000 years old.

Speleology term. Ref DL

CAVE BLISTER A speleothem consisting of a hemisphere shape of thin calcite. See also Cave

postule.

Cave - Depositional Features. Ref JJ

CAVE BREATHING, (2) Barometric pressure changes (approx weekly). (3) Draught due to a cave with **(CONT)** entrances on different levels. (4) Cold air sinking into a cave displacing warmer

air. (5) Wind blowing over cave entrance. (6) Streams entering a cave may cause

air flow.

Processes. Ref MM

CAVE BREATHING The movement of air in and out of a cave entrance. May occur on a daily cycle.

The associated air currents within the cave. Breathing may be due to a number of causes: (1) Daily pressure changes due to the sun heating the air outside the cave.

Processes. Ref JJ

CAVE All the cavernicolous animals (and plants) that live in a cave, bound together by

COMMUNITY food chains and other processes.

Cave - Biota. Ref AC

CAVE CORAL Speleothems consisting of short stalks with bulbous ends or nodular, prickly,

globular, pop-corn or coral-like form. Often occurring in large numbers, covering

entire walls of chambers. See Coralloid.

Cave - Depositional Features. Ref JJ

CAVE CRICKET An insect of the order Orthoptera. Also known by the NZ name of Weta. Usually

scavengers feeding on plant detritus in caves, and fresh or dead plant matter

outside of a cave entrance.

Cave - Biota. Ref MM

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. See

Cave Fill.

Cave - Erosional & Solutional Features. Ref MM

CAVE Equates to cave genesis, the processes that work together to produce caves.

DEVELOPMENT Speleology term. Ref EH

CAVE EARTH See Cave fill.

Cave - Erosional & Solutional Features. Ref JJ

CAVE ECOLOGY The study of the interaction between cave organisms and their environment. eg

energy input from surface, climatic influences.

Cave - Biota. Ref JJ

CAVE ECOSYSTEM The interaction of the cave community organisms with their subterranean biospace

environment.

Cave - Biota. Ref AC

CAVE EXTENT The length, breadth and depth of the smallest cube that will contain the entire

cave. See Cave Length.

Survey & Mapping term. Ref MM

CAVE FILL Transported materials such as silt, clay, sand, gravel and humus, deposited in a

cave, and which may partly or wholly block parts of a cave. Syn Cave earth.

Cave - Erosional & Solutional Features. Ref JJ

CAVE FLOWER See Gypsum flower.

Cave - Depositional Features. Ref JJ

CAVE GROUP A number of caves, not interconnected, but geographically associated in some

relief feature or geological outcrop.

Speleology term. Ref WM

CAVE GUANO Accumulations of dung in caves, in some places may be partly mineralised. Main

source is bats and birds. Speleology term. Ref WM

CAVE LENGTH The total length of all the passages of a cave. This normally exceeds the Cave

extent. The exact method of determining Cave length varies from cave to cave and from State to State. A universal method should (ideally) be agreed on.

Survey & Mapping term. Ref MM

CAVE MINERAL A secondary mineral formed in caves from a primary mineral, by a physico-

chemical reaction. Examples are minerals formed by reactions with guano.

Mineral, Rock and Chemical terms. Ref UC

CAVE PEARL A smooth polished and rounded speleothem found in shallow hollows into which

water drips. Consists of concentric layers around a nucleus. Also as Pisolite,

Pisolith.

Cave - Depositional Features. Ref JJ

CAVE POSTULE A white, hemispherical wall and roof deposit of calcite. See also Cave blister.

Cave - Depositional Features. Ref JJ

CAVE RAFT See Raft.

Cave - Depositional Features. Ref HF

CAVE SHIELD See Shield.

Cave - Depositional Features. Ref WM

CAVE SPRING A natural flow of water from rock or sediment within a cave.

Hydrology terms. Ref JJ

CAVE SYSTEM A collection of caves linked by enterable passages, or linked hydrologically. Or a

large cave with extensive complex of chambers & passages.

Speleology term. Ref JJ

CAVE A natural cavity in rock, large enough to be entered by people. May be water

filled. May also be blocked partly or fully by sediment or ice. Commonly formed by solution in Limestone. Caves also form in many other rock types, and by many

other processes.

Cave - Kinds of. Ref JJ

CAVER A person who enters a cave for recreation and or scientific purposes. Syn,

potholer, spelunker.

Speleology term. Ref MM

CAVERN A large chamber within a cave. Also used poetically to denote a larger than

average size cave.

Cave - Parts of. Ref JJ

CAVERNICOLE An animal which normally lives in caves for the whole or part of its life cycle.

Most are invertebrates. cf Accidental, Trogloxene, Troglophile & Troglobite and

the aquatic equivalents Stygoxene, Stygophile & Stygobite.

Cave - Biota. Ref JJ

CAVES Unsatisfactory term. The plural CAVES should not to be used when the meaning

is the singular CAVE. eg "some caves are big" is ok, "we went to Big Cave" is ok, "we took shelter in the caves" is NOT OK. In the last case use CAVE, or use the

cave name.

Unsatisfactory term, not recommended. Ref MM

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

Speleology term. Ref JJ

CENOTE A partly water filled doline, often having vertical walls.

Karst - Depression Features of. Ref JJ

CHAMBER The name for the largest space in a cave. Compared to other parts of the cave

they generally have greater width, length & height.

Cave - Parts of. Ref JJ

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

Cave - Parts of. Ref WM

CHERT A hard flint like rock of fine crystalline silica, from white through light grey to

black or red or dark brown. Insoluble in water. Fractures irregularly forming very

sharp edges that resist weathering. Occurs in limestone in discrete strata as

nodules.

Speleology term. Ref JJ

CHERT Nodules commonly less than fist sized, but may range up to 1m diameter. Flakes

can be used as knife or scraper tools.

Speleology term. Ref JJ

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

Cave - Parts of. Ref JJ

CHIMNEYING Ascending or descending by means of opposed body and or limb pressures

against 2 facing walls.

Climbing and SRT. Ref JJ

CHOCK A device, being a block of metal, for use as a chockstone.

Climbing and SRT. Ref JJ

CHOCKSTONE A rock wedged between 2 fixed rock surfaces and used as an aid in climbing.

Climbing and SRT. Ref JJ

CHOKE A cave passage that is blocked by sediment or by local collapse of walls and or

roof.

Cave - Parts of. Ref JJ

CLASS 3th rank in Taxonomic system. Kingdom, Phylum, Class, Order, Family, Genus,

Species.

Biology - Flora & Fauna. Ref MM

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

See Taxon.

Biology - Flora & Fauna. Ref MM

CLAUSTROPHOBIA An irrational fear of being in a closed space.

Miscellaneous terms. Ref JJ

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

Survey & Mapping term. Ref JJ

CLOGGER A type of ascender without a handle, used with a karabiner to keep it securely on

the rope.

Climbing and SRT. Ref JJ

CLOSED In karst terrain, a depression having no outlet for surface water. see Doline,

DEPRESSION Uvala

Karst - Depression Features of. Ref WM

CLOSED In surveying, a traverse which forms a loop, thus enabling determination of a loop

TRAVERSE error.

Survey & Mapping term. Ref JJ

COCKPIT KARST Karst of tropical areas, with residual hills that are chiefly hemispheroidal and the

closed depressions often lobate. It grades up to Cone karst then Tower karst.

Some geographers describe a variety of other intermediate forms.

Karst - Hill Features of. Ref JJ

COFFEE AND A cave decoration caused by salt exudation finely shattering base rock to the

CREAM consistency of flour. Deposits have colours resembling coffee and cream.

Cave - Erosional & Solutional Features. Ref NP

COL A saddle or low point on a ridge or between adjacent peaks that gives (the

easiest) access from one side to the other.

Geology. Ref KG

COLLAPSE A doline which has formed chiefly by the collapse of rock strata. cf Solution

DOLINE doline, Doline.

Karst - Depression Features of. Ref WM

COLLAPSE DOME A chamber formed by progressive roof collapse until it reaches a stable dome-

shaped form. A rubble mound will generally be present on the floor. Collapse may

initiate by the removal of hydrostatic support when the water level falls.

Cave - Parts of. Ref KG

COLLUVIAL Transported sediment deposited on a slope.

Geology. Ref MM

COLUMN A speleothem joining floor to ceiling, formed when a stalactite and stalagmite

grow and join, or when either grow to meet bedrock.

Cave - Parts of. Ref JJ

COMMON NAME In biology, the name used in publications aimed at a wide audience as opposed to

the specific name. see Species.

Biology - Flora & Fauna. Ref MM

COMPASS An instrument with a magnetic needle that is free to point to magnetic north.

Measures a bearing, the angle in degrees clockwise from north.

Survey & Mapping term. Ref JJ

CONDUIT 1 An underground stream course (often circular or elliptical in cross section)

completely water filled and under hydrostatic pressure. 2 A dry passage inferred

to have been such a stream course.

Cave - Parts of. Ref JJ

CONE KARST Karst of tropical areas, dominated by its projecting residual relief rather than by

its closed depressions. Intermediate between Cockpit karst and Tower karst.

Similar to Chinese term Fengcong. *Karst - Hill Features of*. Ref JJ

CONTIGUOUS

KARST

The interconnected air filled or water filled solutional or hydrological network of

spaces in any area of karstified carbonate rock.

Karst - Kinds of. Ref AC

CONULITE A speleothem which is hollow and conical and which forms in silt or other soft

material, as a drill hole under a ceiling drip. A "splash cup". The drill hole sides

may calcify, later erosion may leave the crystalline lining free standing. cf

Boxwork.

Cave - Erosional & Solutional Features. Ref UC

COPROLITE Fossilised large excrement of animals as found in caves, especially those used as

lairs.

Miscellaneous terms. Ref JJ

COPROPHAGE A scavenger which feeds on animal dung, including guano.

Miscellaneous terms. Ref JJ

CORALLINE Limestone having the structure of or composed of corals, as, coralline limestone.

Karst - Kinds of. Ref MM

CORALLOID A speleothem which is nodular, globular or coral-like in shape and which forms

from thin films of water. Cf Cave coral.

Speleology term. Ref MM

CORRASION The wearing away of bedrock or loose sediment by mechanical action of moving

agents, especially water, ie Corrosion & Abrasion.

Speleology term. Ref JJ

CORRIDOR An alternate name for a passage, especially when of walking height.

Cave - Parts of. Ref WM

CORROSION Syn. Solution.

Processes. Ref JJ

COVERED KARST Karst where the bedrock is mainly covered by soil or superficial deposits.

Karst - Kinds of. Ref JJ

COW'S TAIL A length of rope used as a safety when crossing a rebelay.

Climbing and SRT. Ref RW

CRAB See Carabiner. Also, Krab, Karabiner.

Climbing and SRT. Ref MM

CRATON A relatively large block of the earth. Being immobile the rocks are often of great

age.

Geology. Ref MM

CRAWL(WAY) A passage which, because of its low roof height, must be negotiated on hands and

knees. cf Flattener, Stooping, Walking.

Cave - Parts of. Ref JJ

CROSS BEDDING Sets of inclined layers or beds, typically seen in dunes.

Geology. Ref KG

CROSS SECTION The shape of a cave passage across its width.

Survey & Mapping term. Ref JJ

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

caves.

Cave - Depositional Features. Ref HF

CRYPTIC Animals that are inconspicuous either because they are small, secretive in their

habits, or well camouflaged. Applies to many cavernicoles, due to their habit of

living in darkness, as well as the other reasons.

Fauna. Ref AC

CRYPTOZOA The terrestrial animals that live in darkness beneath stones, logs, bark etc, or in

the soil. They are potential colonisers of caves.

Cave - Biota. Ref JJ

CRYSTAL POOL A cave pool, usually with little or no overflow, containing well formed crystals.

Cave - Parts of. Ref JJ

CURRENT Shallow asymmetrical hollows formed by solution by turbulent waterflow and

MARKING distributed regularly over karst rock surfaces. cf Scallop.

Speleology term. Ref JJ

CURTAIN A speleothem of dripstone, in the form of a wavy or folded sheet hanging from a

cave wall or roof, often translucent & resonant.

Cave - Depositional Features. Ref JJ

D

DARK Of eyes, a change in the retina sensitising it to dim light. (becoming accustomed to

ADAPTATION the dark). The reverse is 'Light adaption'.

Cave - Biota. Ref JJ

DARK ZONE The part of a cave in perpetual darkness, that lies beyond the Twilight zone. see

Transition zone.

Cave - Parts of. Ref JJ

DAYLIGHT HOLE An opening to the surface in the roof of a cave.

Cave - Parts of. Ref JJ

DEAD CAVE A cave without streams or drips of water.

Cave - Kinds of. Ref JJ

DECLINATION The angle from true (or grid) north to magnetic north, at a given time and place.

Survey & Mapping term. Ref JJ

DECOMPOSERS Living things, chiefly bacteria and fungi, that live by extracting energy from tissues of

dead animals and plants.

Miscellaneous terms. Ref JJ

DECORATION Coh

ON Column, Curtain, Dog tooth spar, Drape, Driphole, Dripstone, Eccentric, Floe

calcite, Flowstone, Gour, Helictite, Heligmite, Karren, Moonmilk,

Cave - Depositional Features. Ref MM

DECORATION

Pendulite, Rimstone, R dam, R pool, Roof crust, Shawl, Speleogen, Stalagmite,

TYPES

TYPES

Stalactite, Stegamite, Straw, Travertine. Cave - Depositional Features. Ref MM

DECORATION Cave features due to secondary mineral precipitation, usually of calcite, but also

Aragonite, Gypsum, Salt, Ice, Lava and other rarer minerals. Also called

Speleothem.

Cave - Depositional Features. Ref JJ

DEFLATION The removal of loose fine grained material from a surface by wind action. One way

of forming hollows that are not karst.

Geology. Ref KG

DENDRITIC In caves, a network formed by the merging of small channels which in turn merge to

form larger ones. cf Branchwork.

Fauna. Ref MM

DESCENDER A mechanical device for descending ropes.

Climbing and SRT. Ref JJ

DETRITIVORES Pertaining to detritus-feeding invertebrates.

Fauna. Ref MM

DETRITUS 1. Aggregate of fragments from organic structures as detached or broken down

tissues. Small pieces of dead and decomposing plants and animals. 2. Material

formed by mechanical breakage or abrasion of parent rocks.

Fauna. Ref KG

DEVELOPED SECTION

A long section through a cave, usually from the entrance to the end of the cave,

with the centreline being along the usual path.

Survey & Mapping term. Ref JJ

DIAGENESIS Post-depositional modification to a sediment that converts it into rock. Typically

involves compaction, cementation and induration.

Geology. Ref KG

DIG An excavation made (1) to discover a new cave (2) to extend an existing cave (3)

to uncover artifacts or animal bones.

Speleology term. Ref JJ

DIKE A body of igneous rock that cuts across the structure of adjacent rocks. Sometimes

intruding into or exposed in cave fissures and passages.

Geology. Ref MM

DIP The angle at which beds are inclined from the horizontal, being the maximum angle

of the bedding planes at right angles to the strike.

Geology. Ref JJ

DIP In surveying, the angle above or below horizontal of the current survey leg.

Speleology term. Ref JJ

DISCHARGE The outflow drainage of Aquifer waters.

Hydrology terms. Ref AC

DISJUNCT The separate occurrences of similar species in separate karst areas. These species

DISTRIBUTION are related to a (now extinct) common ancestor that was widespread, & a surface

dweller. cf. Distributional relict, Phylogenetic

Cave - Biota. Ref AC

DISTRIBUTIONAL Relates to a species surviving in an area isolated from the main or original

RELICT distribution area. Usually a result of broad scale environmental events such as

glaciation, continental drift. eg Gondwanan or Pangean relict species.

Cave - Biota. Ref AC

DOG TOOTH A speleothem, being calcite with acute pointed crystals.

SPAR *Cave - Depositional Features.* Ref JJ

DOLINE KARST Karst dominated by closed depressions, chiefly dolines, perforating a simple

surface.

Karst - Kinds of. Ref JJ

DOLINE A closed depression draining underground in karst, formed by Solution and or

Collapse of underlying rock strata. Shape is variable, but often conical or bowl

shaped.

Karst - Depression Features of. Ref JJ

DOLINE Sides may be gently sloping to vertical or overhanging. Size: a few metres to many

hundreds of metres across, . See also Cenote, Sinkhole, Polje, Uvala, Solution

doline, Subsidence doline & Collapse doline. *Karst - Depression Features of*. Ref JJ

DOLOMITE CAVE A cave in dolomite rock.

Cave - Kinds of. Ref MM

DOLOMITE A mineral, or a carbonate rock consisting of calcium magnesium carbonate

CaMg(CO3)2.

Karst - Kinds of. Ref JJ

DOMAIN A biological region of the earths crust.

Cave - Biota. Ref JJ

DOME SYNDROME The tendency for cavers to go to the known end of a cave, especially when without due regard for the cave itself nor for its contents. Term coined from a cave where

the final chamber is a dome and in which the practice was common.

Miscellaneous terms. Ref MM

DOME

A hemispheroidal hollow in the roof of a cave, formed by breakdown or salt

weathering. Some caves end at a dome.

Cave - Parts of. Ref JJ

DONGA

In the Nullarbor plain, a closed depression generally hundreds of metres across and often from 2 to 5 metres deep. Dongas have very gentle slopes and flat clay-loam floors. Often contain trees when the surrounding country is treeless.

Karst - Depression Features of. Ref JJ

DRIPHOLE

A hole formed by water dripping onto a cave floor. May be a metre deep or even

deeper. May form in sediments or rock.

Cave - Erosional & Solutional Features. Ref JJ

DRIPLINE

A line on the ground at a cave entrance formed by drips from the rock above. A dripline defines the beginning of a cave. Important to archaeologists in both Rock Shelters and Caves.

Speleology term. Ref JJ

DRIPSTONE

A speleothem formed where water drips fall from cave roofs and walls, usually of

calcite.

Cave - Depositional Features. Ref JJ

DRY CAVE

A cave without a running stream or a lake. cf Dead cave, Wet cave.

Cave - Kinds of. Ref JJ

DRY VALLEY

A valley in karst terrain without a surface flow of water. The talweg of such a valley may undulate with many closed depressions, and there may no longer be a distinct channel.

Karst - Depression Features of. Ref JJ

DUCK(UNDER)

A place where water is at or close to the cave roof for a short distance so that it

can be passed only by submersion.

Cave - Parts of. Ref JJ

DUNE LIMESTONE Syn. Aeolian calcarenite. *Karst - Kinds of*. Ref JJ

DURICRUST

An indurated surface formed by weathering processes involving cementation of the surface soils and weathered rock by calcite (calcrete), iron oxides (ferricrete, or

laterite), silica (silcrete) or other cements.

Karst - Kinds of. Ref KG

DYE GAUGING

Determining stream discharge by inserting a known quantity of dye and measuring

its concentration after mixing.

Survey & Mapping term. Ref JJ

DYNAMIC PHREAS A phreatic zone where water moves fast with turbulent flow under hydrostatic

pressure.

Speleology term. Ref JJ

EASTING (1) The distance of a point east of the point of origin of a map or a grid. (2)

The east-west component of a survey leg (or of a series of legs). East is

positive, west is negative. See also Northing, Vertical.

Survey & Mapping term. Ref JJ

ECCENTRIC A speleothem of abnormal shape or attitude. cf Helictite.

Cave - Depositional Features. Ref JJ

EDAPHOBITE An animal (invertebrate) dwelling in the soil.

Fauna. Ref MM

EFFLUX CAVE A cave entrance that has a stream flowing out of it. cf Influx cave, Inflow

cave, Outflow cave, Resurgence, Spring.

Cave - Kinds of. Ref MM

EFFLUX Place of outflow for karst waters from an aquifer. Applied to a place where

a cave stream emerges. See Efflux cave, Resurgence, Spring.

Hydrology terms. Ref AC

ENDEMIC Peculiar to a country or district, and not native elsewhere. May be very

limited in extent, eg to a single cave system.

Biology - Flora & Fauna. Ref AC

ENDOGEAN Pertaining to the biological domain immediately beneath the ground surface.

ie in the soil or plant litter. cf Epigean, Hypogean.

Cave - Biota. Ref JJ

ENDOKARSTIC Subterranean region in karst, below the Epikarstic zone. Includes the upper

area with free draining water plus the area below water table.

Speleology term. Ref AC

ENTRANCE ZONE The interface between surface and subterranean environments, leading into

the Twilight zone.

Cave - Parts of. Ref AC

EOLIAN See Aeolian. Also Aeolianite.

Karst - Kinds of. Ref JJ

EPIGEAN Pertaining to the biological domain at the ground surface or above it.

Includes streams. cf Endogean, Hypogean.

Cave - Biota. Ref JJ

EPIKARSTIC Of the upper layer of karstified carbonate rock in the unsaturated zone,

immediately below the soil layer

Speleology term. Ref AC

EPIPHREAS, The zone immediately above the permanently flooded Phreatic zone.

EPIPHREATIC ZONE Referring to water moving with some speed during floods that are too large

for the usual conduits.

Hydrology terms. Ref JJ

EROSION The wearing away of bedrock or sediment by mechanical and chemical

actions of all moving agents. eg rivers, wind, glaciers.

Geology. Ref JJ

ESCARPMENT A steep face terminating high lands abruptly, frequently of stratified rocks.

Uplift is not implied. *Geology*. Ref MM

EUSTATIC Pertaining to world-wide (simultaneous) changes of sea levels.

Geology. Ref KG

EVAPOTRANSPIRATION A process by which water is lost from a catchment or karst surface which

includes evaporation of water from wet surfaces and from plants.

Speleology term. Ref AC

EXHUMED KARST Karst features reexposed by erosion from beneath former covering strata.

Karst - Kinds of. Ref WM

EXSURGENCE A spring fed only by percolation water, and not by sinking streams.

Karst - Miscellaneous features of. Ref JJ

F

FACIES Part of a rock body as differentiated from other parts by appearance or

composition, often as a result of changing depositional environments.

Geology. Ref EH

FALLING Emergency signal, given by a climber to the belayer, that the climber is falling (and

to expect the safety line to become taut).

Climbing and SRT. Ref MM

FALSE FLOOR A remnant of a sheet of flowstone deposited on sediments that were later eroded

away. A false floor may span between passage walls or merely be projecting

ledges along the walls.

Cave - Depositional Features. Ref LW

FAMILY 5th rank in Taxonomic system. Kingdom, Phylum, Class, Order, Family, Genus,

Species. Family names end in -aceae for plants, eg Liliaceae (lilies), and -idae for

animals, eg Macropodidae (kangaroos). *Biology - Flora & Fauna*. Ref MM

FAULT CAVE A cave developed along a fault or fault zone, either by movement of the fault or

by preferential solution along it.

Cave - Kinds of. Ref JJ

FAULT PLANE A plane along which movement of a fault has taken place.

Geology. Ref JJ

FAULT A fracture separating 2 parts of a once continuous rock body with relative

movement along the fault plane.

Geology. Ref JJ

FENGCONG Chinese term equating to Cone karst.

Karst - Hill Features of. Ref EH

FENGLIN Chinese term for the isolated limestone hills known as Tower karst.

Karst - Hill Features of. Ref EH

FISSURE CAVE A narrow vertical cave passage, often developed along a joint but not necessarily

so. Usually due to solution but sometimes to tension.

Cave - Kinds of. Ref JJ

FISSURE An open crack in rock or soil.

Speleology term. Ref JJ

FLAP A section of wall lining in a lava tube that has broken free and sagged or rolled

down away from the wall. Where only a small patch has been pushed off by gas

pressure from behind it may be referred to as a 'burst'.

Lava Cave term. Ref KG

FLATTENER A passage, often of considerable length which though wide, is so low that one has

insufficient room to stand or crawl. Movement along a flattener is only possible in

a prone position. cf. Crawlway, Stooping, Walking

Cave - Parts of. Ref JJ

FLINT See Chert.

Geology. Ref MM

FLOCCULANT Suspended sediment.

Hydrology terms. Ref AC

FLOE CALCITE Very thin flakes of calcite floating on the surface of a cave pool, or previously

formed in this way.

Cave - Depositional Features. Ref JJ

FLOWSTONE A speleothem. A deposit formed by precipitation from thin films or trickles of

mineralised water over floors or walls, usually of calcite. cf Travertine.

Cave - Depositional Features. Ref JJ

FLUORESCEIN A reddish-yellow organic dye C20H12O5 which gives a green fluorescence to

water, used in water tracing. Detectable in minute concentrations.

Survey & Mapping term. Ref JJ

FLUOROMETER An instrument for measuring the fluorescence of water. Used in water tracing and

dye gauging.

Survey & Mapping term. Ref JJ

FLUVIAL Pertaining to flowing water. Produced by the action of a stream or river. cf Lotic.

Hydrology terms. Ref KG

FOIBE A blind or dead-end shaft.

Cave - Parts of. Ref KG

FOOD CHAIN A series of plants or animals linked together by their food relationships or a

specific nutrient and energy pathway, see Food web.

Fauna. Ref AC

FOOD WEB An interlocking system of separate food chains in any (cave) community.

Fauna. Ref AC

FORAMINIFERA A subclass of Sarcodina, unicellular (mostly microscopic & marine) animals that

secrete tests of CaCO3. Their remains accumulate to form foraminiferous

limestone.

Karst - Kinds of. Ref MM

FORAMINIFEROUS Composed chiefly of the remains of Foraminifera.

LIMESTONE *Karst - Kinds of.* Ref MM

FOREDUNE A dune ridge built up behind a coastline. Generally higher and more extensive than

a beachridge.

Geology. Ref KG

FORESTRY COMPASS A lightweight tripod mounted compass which also functions as a clinometer, and

has a telescopic sight. Similar to a theodolite.

Survey & Mapping term. Ref JJ

FORMATION An unsatisfactory term in speleology. Use KARST GEOMORPHOLOGY,

referring to the creation of a cave. The term FORMATION is generally confused with FORMATIONS, which also should not be used. Formation is a geologic

term

Unsatisfactory term, not recommended. Ref MM

FORMATION In geology, the fundamental unit in rock stratigraphic classification, consisting of a

distinctive mappable body of rock.

Geology. Ref WM

FORMATIONS An unsatisfactory term in speleology. Use DECORATION or SPELEOTHEM.

The term FORMATIONS is generally confused with FORMATION, which also

should not be used. Note the plural. The term invariably implies 'pretty'

decorations especially Stalactites.

Unsatisfactory term, not recommended. Ref MM

FOSSIL CHAMBER Ossuary, a place in a cave where there is a large number of fossil bones.

Cave - Parts of. Ref MM

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

Speleology term. Ref JJ

FOUL AIR In a cave or mine, air with greater than 1% carbon dioxide (CO2) which

adversely affects respiration and metabolism.

Speleology term. Ref MM

FREE PITCH Where a rope or ladder hangs vertically and free of the walls.

Climbing and SRT. Ref JJ

FREE SURFACE

A cave stream which does not normally fill its passage to the roof.

STREAM

Speleology term. Ref JJ

FRIEND A mechanical caming device that is wedged into a rock crack and used as an

anchor point.

Climbing and SRT. Ref RW

FROSTWORK A speleothem consisting of radiating, acicular (needle like) crystal sprays

resembling a catus or thistle plant.

Cave - Depositional Features. Ref MM

FUNGLIN Isolated limestone hill in an alluvial plain. (Chinese term).

Karst - Kinds of. Ref WM

FUNGUS Plu Fungi, organisms that subsist upon dead or living organic matter, of glycogen,

fat, mannitol, but not starch. eg mushrooms, moulds, mildews, rusts, smuts.

Flora. Ref MM

GALLERY A cave chamber that is rather large and nearly horizontal. May be adorned with

natural decorations.

Cave - Parts of. Ref WM

GARDENING Clearing stones or other material from a route either to (1) moderate potential

danger of falling stones (2) increase accessibility.

Speleology term. Ref JJ

GASTROPOD 'stomach footed', a class of molluses eg snail, having a shell of a single valve,

usually spirally coiled.

Fauna. Ref MM

GENUS 6th rank in Taxonomic system. Kingdom, Phylum, Class, Order, Family,

Genus, Species. Genus + Species constitute a unique name for all known

species of living or extinct organisms. Biology - Flora & Fauna. Ref MM

GENUS A group of species thought to have a fairly recent ancestor, but which do not

interbreed, or if they do, they form sterile hybrids.

Biology - Flora & Fauna. Ref MM

GEOCONSERVATION The conservation of geodiversity protecting natural values that encompass its

ecological and geoheritage values.

Conservation. Ref MM

GEODIVERSITY The range or diversity of geologic (bedrock), geomorphic (landform) and soil

features, assemblages, systems and processes.

Geology. Ref MM

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. Geology. Ref MM

GIBBS An ascender with its cam operated by the weight of the climber.

Climbing and SRT. Ref JJ

GLACIER CAVE A cave formed within or beneath a glacier. Having walls, floor & roof mainly of

ice. May have have a floor at least partly of bedrock.

Cave - Kinds of. Ref JJ

GLACIOKARST Karst landscape which has been glaciated during or since the Ice Ages.

Karst - Kinds of. Ref TW

GPS. Hand held device that computes position in latitude/longitude or in map **GLOBAL**

POSITIONING grid reference. Uses Satellite technology. **SYSTEM** Survey & Mapping term. Ref MM

GLOSSARY This Glossary (compiled by M Meth Feb 98) is the copyright property of the

Australian Speleological Federation inc (ASF).

Miscellaneous terms. Ref MM

Syn. Rimstone dam. **GOUR**

Cave - Depositional Features. Ref JJ

GPS See Global Positioning System.

Survey & Mapping term. Ref MM

GRADE The class of a cave survey on the basis of the precision of the instruments and

the accuracy of the methods. *Survey & Mapping term*. Ref JJ

GRID NORTH The direction of a north-south grid line on a map. Only at the point of origin is

this equal to True north.

Survey & Mapping term. Ref JJ

GRID A system of squares on a map formed by straight lines that denote distance east

and north of a fixed point of origin. *Survey & Mapping term*. Ref JJ

GRIKE A solutional trench that may be deep, narrow, vertical (or nearly so) rectilinear

slot in a rock outcrop due to solution along a joint. Syn Kluftkarren.

Speleology term. Ref JJ

GROT HOLE A small and insignificant cave with no leads, often tight and difficult to maneuver

in.

Speleology term. Ref MM

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

Cave - Parts of. Ref JJ

GROUND TROG A search on the surface for cave entrances. Or merely the walk from car or

camp to a (known) cave, particularly if the terrain is difficult.

Speleology term. Ref MM

GROUNDWATER Water below the level at which all voids in the rock are completely filled

saturated. Syn. phreatic water in saturated zone below water table.

Speleology term. Ref JJ

GUANO The accumulation of dung from bats or birds. Often partly mineralised, and

includes rock fragments, animal remains eg bones. Guano also may contain

products of reactions between the excretions and the rock.

Speleology term. Ref JJ

GUANOBIA An animal association feeding on guano. Not considered true cavernicoles? as

guano is not confined to caves.

Cave - Biota. Ref JJ

GYPSUM FLOWER An elongated and curving deposit of gypsum on a cave surface.

Cave - Depositional Features. Ref JJ

GYPSUM The mineral hydrated calcium sulphate CaSO4.2(H2O)

Speleology term. Ref JJ

H

HABITAT The immediate surroundings of a plant or animal, with everything necessary to

sustain life.

Biology - Flora & Fauna. Ref AC

HALF BLIND

VALLEY

A blind valley that overflows its threshold when the flow exceeds a certain limit,

beyond which the stream sink cannot accept all the water

Karst - Depression Features of. Ref JJ

HALF TUBE

Exposed on a fractured rock surface. Often meandering or 'anastomosing'. see

Anastomosis.

Speleology term. Ref JJ

HALITE

The common salt sodium chloride NaCl as a mineral in the cubic crystalline system.

May form as decorations on dry caves as, dripstone, crust, flowstone, stalactite,

stalagmite and other forms.

Mineral, Rock and Chemical terms. Ref JJ

HALL

A lofty chamber that is longer than it is wide.

Cave - Parts of. Ref JJ

HARNESS

In climbing, an arrangement of tape, either the seat harness or chest harness for the

attachment of ascenders or descenders.

Climbing and SRT. Ref JJ

HELICTITE

A speleothem, appearing to defy gravity, being a curved or angular twiglike lareral

projection of calcim carbonate. Has a tiny central canal. See Anthodite.

Cave - Depositional Features. Ref JJ

HELIGMITE

A helictite that grows on a cave floor or a shelf. Usually thin, curved and angular.

Cave - Depositional Features. Ref WM

HELMET

A miners, climbers or other kind of non metallic protective helmet used in caving.

Australia does not have a standard for caving helmets. A chin strap is recommended for vertical work. A sun visor is generally an inconvenience.

Speleology term. Ref JJ

HERBIVORE

An animal that eats plants.

Fauna. Ref MM

HISTOPLASMOSIS A lung disease usually mild in effect but known to be fatal. May be caught from

guano in caves, caused by fungus, Histoplasmosis capsulatum.

Miscellaneous terms. Ref JJ

HOLOKARST

Having bare surfaces on thick deposits of limestone that extend below sea level

and little or no surface drainage. They have karren, dolines, uvalas and cave

systems. cf merokarst.

Karst - Kinds of. Ref WM

HORIZONTAL

The difference in direction of two survey lines measured clockwise in a horizontal

ANGLE plane.

Survey & Mapping term. Ref JJ

HORNITO

A small spatter cone up to 5 m high which spits out red hot drops of lava.

Lava Cave term. Ref KG

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.

Speleology term. Ref MM

HYDROSTATIC The

The pressure due to a column of water.

PRESSURE

Speleology term. Ref JJ

HYPOGEAN

Pertaining to the domain below the endogean, including the dark zone of caves. cf

Epigean, Endogean. *Speleology term*. Ref JJ

HYPORHEOS

Pertaining to water flowing over streambeds. cf Lotic.

Speleology term. Ref AC

I

ICE CAVE (1) An otherwise normal cave with permanent (ie perennial) ice in it. (2) A cave that

only has ice in it on a seasonal basis. Note: A cave entirely in ice, or under an ice

sheet, is called a Glacier cave.

Cave - Kinds of. Ref JJ

ICE A mineral, H2O, which may form speleothems in ice caves as, stalactite, stalagmite,

drapery, crust, flower, flowstone, helictites and euhedral (having well formed crystal

faces) crystals.

Mineral, Rock and Chemical terms. Ref HF

INDURATED Soils and sedimentary rocks which have become hardened or cemented.

Geology. Ref KG

INFLOW CAVE A cave into which a stream enters or is known to have entered formerly. The stream

cannot be followed downstream to the surface.

Cave - Kinds of. Ref JJ

INFLUX CAVE A cave entrance that has a stream flowing into it. cf Efflux cave. See also Inflow &

Outflow caves.

Cave - Kinds of. Ref MM

INORGANIC Of non-biological origin.

Biology - Flora & Fauna. Ref MM

INTERSTITIAL

The spaces between grains of sand, fine gravel or detritus filled with air or water

MEDIUM which contains phreatobia.

Speleology term. Ref JJ

INVERTEBRATE An animal without a backbone. eg Annelid (worm), Mollusc (snail) & Arthropods.

The main life forms found in caves.

Fauna. Ref AC

INVERTED

A siphon of U-profile.

SIPHON Cave - Parts of. Ref JJ

ISOPOD An animal of the order of Crustaceans having 7 pairs of legs. Includes slaters.

Commonly found in caves.

Fauna. Ref MM

JOINT PLANE A cavity developed along a joint, which is often steeply dipping, and thus high in relation

CAVE to width.

Cave - Kinds of. Ref JJ

JOINT PLANE The plane in which a joint has formed.

Speleology term. Ref MM

A planar or gently curving crack separating two parts of once continuous rock, without **JOINT**

relative movement along its plane.

Speleology term. Ref JJ

JUG HANDLE A small loop of rock shaped like a handle, used as an anchor point or hand hold to aid

in climbing.

Climbing and SRT. Ref MM

An ascender with a simple finger operated safety catch, a handle and several attachment **JUMAR**

points.

Climbing and SRT. Ref JJ

K

ZONES

Serbian word for a type of Karren. Literally means Pool in the stone. Syn KAMENITZA

Solution pan.

Karst - Minor Forms of. Ref EH

(pronounced kunkar) A deposit, often nodular, of calcium carbonate formed in **KANKAR**

soils of semi arid regions by evaporation of mineralised water at the surface.. Can

form cave roof. see Oolite, Calcrete, Caprock.

Karst - Kinds of. Ref JJ

KARABINER A steel or other alloy, oval or D-shaped link with a spring loaded gate on one

side to admit a rope, or to clip to a ladder etc. Also known as See Karabina.

Also Carabiner, Crab, Krab. Climbing and SRT. Ref JJ

German word for the surface occurring minor forms of karst. Solution grooves **KARREN**

> cut into bare or covered limestone surfaces by running water. Also occur underground. Several types exist eg: Rillenkarren, Rundkarren, Kamenitza.

Karst - Minor Forms of. Ref TW

KARST The scientific study of karst landforms (both on the surface and underground) and

GEOMORPHOLOGY the processes which contribute to their development.

Speleology term. Ref EH

KARST The 3 vertically aligned subterranean divisions of karst: upper unsaturated zone,

intermittently saturated epiphreatic (or floodwater) zone and lower saturated HYDROGRAPHIC

(phreatic) zone.

Speleology term. Ref MM

KARST The scientific study of the movement of water through a karst system, and the

HYDROLOGY storage of water in it.

Hydrology terms. Ref EH

KARST TYPES Buried karst, Covered karst, Exhumed karst, Halbkugelkarst,

Holokarst, Kegelkarst, Merokarst, Microkarst, Naked karst, Paleokarst, Pseodokarst, Spitzkegelkarst, Subjacent karst, Syngenetic karst, Thermokarst,

Tower karst.

Karst - Kinds of. Ref WM

KARST WINDOW A closed depression, not a polie, which has a stream flowing across its bottom.

Karst - Depression Features of. Ref JJ

KARST, FEATURES

OF

The special landforms of a karst area include: Caves, Dolines, Karren, Rill,

Rillenkarren, Rundkarren, Solution pan and underground drainage.

Cave - Kinds of. Ref JJ

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 - Kinds of. Ref JJ

KARSTIC Pertaining to karst.

Speleology term. Ref MM

KARSTIFICATION A periodic or cyclic process where phases of active solutional development of

karst are followed by infilling of karst conduits and voids.

Processes. Ref AC

KERNMANTEL A rope with a plaited sheath around a core of parallel or twisted strands.

Climbing and SRT. Ref JJ

KEYHOLE A small passage or opening in a cave having a keyhole shaped cross section,

round above and narrow below.

Cave - Parts of. Ref JJ

KINGDOM 1st and highest rank in Taxonomic system. Kingdom, Phylum, Class, Order,

Family, Genus, Species.

Biology - Flora & Fauna. Ref MM

KNOBBY A form of pahoehoe lava in which the smooth surface is broken by numerous

PAHOEHOE small knobs and lumps.

Lava Cave term. Ref KG

KRAB Short for Karabiner. A steel or aluminium alloy snap link used in rope work. Also

known as Karabina, Carabiner, Crab.

Climbing and SRT. Ref JJ

L

LABYRINTH Syn, Maze cave, Network.

Cave - Kinds of. Ref WM

LADDER In caving, a flexible lightweight ladder of galvanised or stainless steel wires and

aluminium alloy rungs.

Climbing and SRT. Ref JJ

LAKE In caving, a body of standing water (no matter how small) in a cave.

Cave - Parts of. Ref JJ

LAPIES A synonym for Karren, used mainly in the special case of Marine Lapies which form

on limestone surfaces exposed to the sea, or to sea spray. See also Phytokarst.

Karst - Minor Forms of. Ref KG

LAPILLI A general term for pebble to granule sized volcanic ejecta. Angular frothy fragments

are called scoria. Finer material is ash and coarser fragments are called bombs or

blocks.

Lava Cave term. Ref KG

LARVA (Plu larvae). The young of insects, eg grub, caterpillar, maggot that metamorphose into

adult forms eg beetle, moth, fly. Larvae are active, self sustaining and independent life

forms, and many inhabit caves.

Fauna. Ref AC

LATERITE An iron rich deep weathering profile. Lateritised means containing laterite.

Geology. Ref KG

LAVA CAVE A cave in a lava flow, usually a tube formed by flow of liquid lava through a solidified

mass, or by roofing over of an open channel. Small lava caves may form as gas

blisters.

Cave - Kinds of. Ref JJ

LAVA Drips and associated runs of smooth surfaced lava on a vertical or sloping wall in a

DRIBBLES lava tube. Formed from a molten lining.

Lava Cave term. Ref KG

LAVA DRIPS Short smooth-surfaced drips of lava on a ceiling or upper wall, formed from a molten

lining. Grades to flatter 'lava dribbles' on the walls.

Lava Cave term. Ref KG

LAVA HANDS Groups of elongated finger or grape-like extrusions formed on a wall or roof where

pasty lava has been forced out through a crack or hole in the lining. Matching 'lava

stalagmites' may occur on the floor below. See also 'lava turds'.

Lava Cave term. Ref KG

LAVA Longer and thicker than 'lava drips'. Rare straw-like lava stalactites have been

STALACTITES recorded overseas.

Lava Cave term. Ref KG

LAVA Mounds or columns of lava built up on a floor. Some may resemble 'lava turds', others

STALAGMITES are built up of numerous small semi-solid droplets to form agglutinated stalagmites.

Lava Cave term. Ref KG

LAVA TUBE A cave in lava formed by removal of liquid material from beneath a solid roof.

Lava Cave term. Ref KG

LAVA TURDS A descriptive term for small lava extrusions. A thick pasty lava has been forced out of

a small orifice in the wall lining or floor. Analogies to dog, sheep, cow, etc. have been

seen. aka 'Lava hands'. aka (less politely) 'Stoolite' and 'faecicles'

Lava Cave term. Ref KG

LAVA Molten rock that is capable of flowing on the surface or in lava tubes. Also volcanic

rock solidified from magma. See 'pahoehoe' and 'aa' for specific types.

Lava Cave term. Ref KG

LAVACICLE Small round-tipped lava stalactites, formed where molten lava has dripped from the

roof, or dribbled down the walls of the cave.

Lava Cave term. Ref KG

LAY The way in which strands of a rope or cable are twisted.

Climbing and SRT. Ref JJ

LEAD ACID

A rechargeable acid battery used as a light source in caving, usually worn on a waist

BATTERY strap and with a lamp fitted to the helmet.

Lighting term. Ref JJ

LEAD A cave passage noticed but as yet unexplored.

Speleology term. Ref JJ

LEADER In caving, the person directing the activities of a caving party, and with responsibility

> for the safety of the group. Speleology term. Ref JJ

LEG A survey leg, the measurement between 2 adjacent survey stations in a cave survey.

Survey & Mapping term. Ref JJ

LEUCOPHOR A colourless water tracer, which fluoresces blue.

Survey & Mapping term. Ref JJ

LEVEE An outward sloping raised area on each side of a lava channel. Analogous to a river

levee, it is built up by successive lava layers whenever the channel overflows.

Lava Cave term. Ref KG

LEVEL A group of cave passages developed in the same horizontal plane, especially in caves

that are developed on 2 or more planes.

Cave - Parts of. Ref WM

LEVEL In caves, the height relation of a point in a cave to the entrance or a datum eg sea

level.

Survey & Mapping term. Ref WM

LIFE LINE A safety device additional to the main support in climbing. May be an additional rope,

or merely an additional attachment to the main system

Climbing and SRT. Ref MM

LIMESTONE

Limestone is relatively soluble and is the most common rock type in which caves

CAVE develop.

Cave - Kinds of. Ref MM

LIMESTONE (1) A bare plane surface of bedded limestone, commonly divided into blocks (clints)

by solutionally widened joints (grikes). (2) On the Nullarbor, an area of calcrete built **PAVEMENT**

up in an otherwise soil covered area.

Karst - Minor Forms of. Ref WM

LIMESTONE A sedimentary rock consisting mainly of calcium carbonate (CaCO3) derived from the

> deposition of the calcareous remains of animals. Usually of marine origin but can be of freshwater origin. eg Oolitic, Coralline, Foraminiferous. See Dolomite, Magnesite.

Karst - Kinds of. Ref JJ

LINTEL LINE A line on the ground at a cave entrance directly below the outer edge of the rock above. May or may not coincide with the dripline.

Speleology term. Ref JJ

LIQUID Contains the Stygofauna or aquatic Cavernicoles.

MEDIUM Speleology term. Ref JJ

LITHIFICATION Hardening of sediment to form a rock.

Geology. Ref KG

LITTORAL Shoreline. Between high and low tide marks, Intertidal. cf Benthic. Most sea caves

occur in this zone.

Geology. Ref MM

LIVE CAVE A cave containing flowing water or active speleothems. Cf Active cave.

Cave - Kinds of. Ref JJ

LONG SECTION A cave map showing a cross section along the length of a cave or of a single passage

or chamber.

Survey & Mapping term. Ref JJ

LOOP ERROR The error in easting, northing & vertical that results when a survey, in forming a loop,

closes on itself.

Survey & Mapping term. Ref MM

LOOP See Closed traverse.

Survey & Mapping term. Ref MM

LOTIC Pertaining to the aquatic environment of running water.

Geology. Ref AC

M

MACROCAVERN Includes all cavities in rocks greater than 20 cm in diameter. This includes

all the cave passages that are accessible to people. Cf Mesocavern,

Microcavern.

Cave - Kinds of. Ref EH

MACROINVERTRBRATE An invertebrate large enough to be easily visible to the naked eye.

Fauna. Ref AC

MAGNESITE Magnesium carbonate rock. Usually considered as a mineral, and may

have various impurities such as Calcium or Iron and may be susceptible to karst solution processes. (cf dolomite). Example is the magnesite karst at

Savage River in NW Tasmania.

Karst - Kinds of. Ref AC

MAGNETIC NORTH The direction to the north magnetic pole. The position of the north (and

south) magnetic poles undergoes continuous change year by year.

Survey & Mapping term. Ref JJ

MARBLE Limestone recrystallised and hardened by pressure and heat.

Karst - Kinds of. Ref JJ

MARL A calcareous clay, or impure fine grained limestone.

Karst - Kinds of. Ref KG

MASS MOVEMENT Dislodgment and downslope transport of soil and bedrock under the

influence of gravity. *Geology*. Ref MM

MASSIVE A rock mass that is not obviously fractured, or with individual strata more

than 100mm in thickness.

Geology. Ref MM

MAZE CAVE A complex pattern of connecting passages often on two or more levels in a

cave. Syn Labyrinth, Network.

Speleology term. Ref JJ

MEANDER NICHE A hemispherically roofed part of a cave formed by a stream meandering

and cutting down at the same time.

Speleology term. Ref JJ

MEANDER An arcuate curve in a river course due to the stream eroding sideways.

Geology. Ref JJ

MEROKARST Having bare surfaces on thick deposits of limestone that extend below sea

level and little or no surface drainage. They have karren, dolines, uvalas

and cave systems. cf holokarst. *Karst - Kinds of*. Ref WM

MESOCAVERN Includes all cavities in rock that are smaller than 20 cm in diameter and

larger than 0.1 cm in diameter. Not large enough to be considered as a

cave in the usual sense. Cf Microcavern, Macrocavern.

Cave - Kinds of. Ref EH

METABOLIC RATE The rate at which an organism transforms food into energy and body

tissue; most cave animals, particularly the obligates in the dark zone have a

reduced metabolic rate.

Fauna. Ref MM

MICROCAVERN All cavities in rock that are smaller than 0.1 cm in diameter down to and

including microscopic size. Whislt not considered a cave, such caverties may be important biological niche sites. Cf Mesocavern, Macrocavern.

Cave - Kinds of. Ref EH

MICROCLIMATE The climate (temperature, humidity, air movement etc) of a restricted

space, eg of a cave, or of a portion of a cave. see Microhabitat.

Speleology term. Ref JJ

MICROGOUR Miniature rimstone dam with associated tiny pool of the order 10mm wide

and deep. Most commonly occurs on flowstone, but may occur in other

situations.

Cave - Depositional Features. Ref JJ

MICROHABITAT The individual faunal habitat or niche within a larger (cave) environment.

Fauna. Ref AC

MICROKARST Karst topography in which all surface features are small. An area

dominated by minor karst features.

Karst - Kinds of. Ref WM

MOONMILK Often a cauliflower shaped mass of soft, white, moist, plastic speleothem

consisting of calcite, and hydrated minerals such as hydrocalcite,

hydromagnesite or huntite. May become hard or powdery if they dry out.

Syn Rockmilk.

Cave - Depositional Features. Ref JJ

MORPHOLOGY The study of the physical form of lands or regions. Also the form and

structure of any natural phenomena, eg of plant or animal design.

Geology. Ref MM

MOTTLING Blotchy or patchy colour patterning.

Speleology term. Ref KG

MUD PENDULITE A pendulite with the knob coated in mud.

Cave - Erosional & Solutional Features. Ref JJ

N

NAKED KARST Syn. Bare karst.

Karst - Kinds of. Ref WM

NATURAL ARCH An arch of rock formed by weathering.

Speleology term. Ref JJ

NATURAL A bridge of rock spanning a ravine or valley and formed by erosive agents.

BRIDGE Speleology term. Ref JJ

NECROPHAGE A scavenger feeding on animal carcasses rather than live prey.

Cave - Biota. Ref JJ

NETWORK A complex pattern of repeatedly connecting passages in a cave. Syn Maze, cave,

Labvrinth.

Speleology term. Ref JJ

NICHE An organism's place in the cave ecosystem. Where it lives and eats, and what eats

it. How it interacts with all biotic and abiotic factors.

Fauna Ref AC

NIFE CELL A rechargeable alkaline battery for use with an electric cap lamp.

Lighting term. Ref JJ

NORTHING 1. The distance of a point north of the point of origin of the grid of a map. 2. The

south-north component of a survey leg, or of a series of 2 or more legs. North is

positive, south is negative. cf Easting. *Survey & Mapping term*. Ref JJ

NOTHEPHREATIC Referring to water moving slowly in cavities in the phreatic zone.

Speleology term. Ref JJ

NUMBERING Assigning an alphanumeric identity number to a cave entrance, such that no 2

entrances have the same number. *Survey & Mapping term*. Ref JJ

NYMPH Some insect young or juveniles are called nymphs. Esp. those with no or incomplete

wings.

0

OBLIGATE Invariably. A species which is unable to live outside of a given environment. Applied to

animals living in the dark zone of caves that may display Troglomorphic adaptions.

Biology - Flora & Fauna. Ref AC

ON BELAY Signal given to a climber by the belayer, that the manually operated belay system is

ready for use.

Climbing and SRT. Ref MM

OOLITE Oolitic limestone. A type of rock, often calcareous which grows by radial or concentric

means around a nucleus. The term Oolite formerly referred to cave pearls.

Karst - Kinds of. Ref JJ

OPEN A survey traverse which does not form a loop.

TRAVERSE Survey & Mapping term. Ref JJ

ORDER 4th rank in Taxonomic system. Kingdom, Phylum, Class, Order, Family, Genus,

Species.

Biology - Flora & Fauna. Ref MM

ORGANIC Of biological origin. (Strictly includes all carbon compounds, some of which are NOT

biological).

Biology - Flora & Fauna. Ref AC

ORIENTATION The relationship of a survey line to true, grid or magnetic north.

Survey & Mapping term. Ref JJ

OROGEN Oro = mountain. A belt of deformed rocks, making up a portion of the continental

crust.

Geology. Ref MM

OUTFLOW A cave from which a stream flows or formerly did, and which can not be followed

CAVE upstream to the surface.

Cave - Kinds of. Ref JJ

OVERHANG A ladder or rope that hangs over a ledge or shelf of rock that projects past the rest of

the rock face below, & thereby hangs free.

Climbing and SRT. Ref MM

OVERHANG A simple cave or rock shelter in which no part is in the dark zone.

Cave - Kinds of. Ref MM

P

PAHOEHOE A type of lava in which the surface was relatively fluid and so formed smooth or

porridge-like surfaces. Variants include wrinkled or 'ropy' surfaces, like flowing pitch,

and surfaces with small rounded knobs.

Lava Cave term. Ref KG

PALAEOKARST A 'fossil' karst, being a remnant of a previous period of Karstification. Characterised

by old deposits, as lithified cave fills or breccias

Karst - Kinds of. Ref RW

PALAEOSOL Ancient soils.

Geology. Ref KG

PALEO SOILS See Palaeosol.

Geology. Ref MM

PARASITE Deriving food from a host, to which it is attached, and harming the host. In caves the

Acarina (ticks & mites) are parasites on other invertebrates or vertebrates. (Note that some mites are free living in caves. cf Endophyte Epiphyte Holozoic Saprophytic

Fauna. Ref AC

PARIETAL Animals found on walls around cave entrances.

ASSOCIATION Speleology term. Ref JJ

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.

Cave - Parts of. Ref JJ

PENDANT See Rock pendant.

Cave - Erosional & Solutional Features. Ref JJ

PENDULITE A kind of stalactite which has been partly submerged with that part covered with Dog

tooth spar, giving the appearance of a drumstick.

Cave - Depositional Features. Ref JJ

PERCOLATION

WATER

Water moving mainly downwards through pores, cracks & fissures in the unsaturated

Epikarstic zone and Vadose zone. Also relates to water draining underground from a

Swallet or Streamsink. *Hydrology terms*. Ref JJ

PERMEABILITY The property of rock or soil permitting water to pass through it. Primary permeability

depends on pores between the grains of material. Secondary Permeability depends on solutional widening of joints & bedding planes & on other solution cavities.

Hydrology terms. Ref JJ

PHREAS Syn. Phreatic Zone.

Speleology term. Ref JJ

PHREATIC Water below the level at which all voids in the rock are completely filled with water.

WATER Speleology term. Ref JJ

PHREATIC The zone that is below the Water table (except at times of drought) where voids or

ZONE tubes in the rock are completely saturated with water.

Speleology term. Ref JJ

PHREATOBIA An animal association found in water separating grains of sand or fine gravel.

Speleology term. Ref JJ

PHYLOGENETIC Pertaining to an evolutionary development of a species. Usually this would involve a

long history of development, but it could conceivably be relatively short.

Fauna. Ref AC

PHYLUM Second rank in Taxonomic system. Kingdom, Phylum, Class, Order, Family, Genus,

Species. In Plant Classification Phylum can be known as a Division.

Biology - Flora & Fauna. Ref MM

PHYTOKARST A type of small scale solutional sculpturing or Karren which forms with the assistance

of certain algae and other micro-organisms that secrete acid solutions. Commonly occurs as a part of Marine lapies, and also as light oriented features in Cenotes.

Speleology term. Ref KG

PILLAR A bedrock column from roof to floor left by removal of surrounding rock.

Cave - Parts of. Ref JJ

PINNACLE Tropical landscape of near vertical sided spires. Also as Arete Karst.

KARST Karst - Kinds of. Ref WM

PIPE A tubular cavity projecting down from the surface into karst rocks. Often filled with

earth etc.

Karst - Depression Features of. Ref JJ

PIT (Looking for a definition)

Cave - Parts of. Ref MM

PITCH A vertical or nearly vertical part of a cave for which a ladder or rope is normally used

for ascent or descent. Cave - Parts of. Ref JJ

PITON A solid or folded metal spike driven into a crack in a rock to form an anchor.

Climbing and SRT. Ref JJ

PLAN A cave map at a reduced scale showing the details projected vertically onto a

horizontal plane..

Survey & Mapping term. Ref JJ

PLUNGE POOL A swirlhole, generally of large size. occurring at the foot of a waterfall or rapid, on the

surface or underground. *Speleology term*. Ref JJ

POLJE A large closed depression draining underground, with a flat floor across which there

may be an intermittent or perennial stream. The polie may be liable to flood and become a lake, and its floor makes a sharp break with parts of surrounding slopes.

Karst - Depression Features of. Ref JJ

POLYGONAL Kar

KARST

Karst completely pitted by closed depressions so that divides between them form a

crudely polygonal network.

Karst - Kinds of. Ref JJ

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.

Cave - Depositional Features. Ref JJ

POPULATION Individuals of a species that form an interbreeding group, separated by physical

barriers from other such populations. Biology - Flora & Fauna. Ref JJ

POROSITY The property of rock or soil of having small voids between the constituent particles.

The voids may or may not interconnect. If they conect, the Permeability of the rock

will be higher. 3 classes of prosity are recognised:

Hydrology terms. Ref JJ

POROSITY Primary: intergrannular porosity. Secondary: porosity arising from fractures and joints

etc in the rock mass. Tertiary: posoity arising from the development of karstic

conduits.

Hydrology terms. Ref JJ

POT See Pothole.

Karst - Depression Features of. Ref JJ

POTHOLE A vertical or nearly vertical shaft or chimney open to the surface.

Karst - Depression Features of. Ref JJ

PREDATOR An animal which captures other animals for its food.

Fauna. Ref JJ

PRISMATIC

COMPASS

A compass with a prism that enables the viewing angle to be read whilst sighting a

distant object.

Survey & Mapping term. Ref JJ

PROJECTED

SECTION

In mapping, a vertical section along the main trend of a cave. Horizontal distances

may be distorted, so that slope angles are reduced.

Survey & Mapping term. Ref JJ

PRUSIK KNOT A friction knot which can slide along a rope when no weight is applied, but grips

when a pull is applied. Used in climbing.

Climbing and SRT. Ref JJ

PRUSIK SLING A sling fastened by a prusik knot to a rope

Climbing and SRT. Ref JJ

PRUSIKING Ascent on a rope using prusik knots as ascenders.

Climbing and SRT. Ref JJ

PSEUDOKARST Terrain with landforms (and caves) which resemble those of karst but are not the

product of karst solution processes.

Karst - Kinds of. Ref JJ

PUDDINGS A local term for small tumuli within lava tubes, but also applied to porridge like

mounds of pahoehoe that have been squeezed up through an opening in a crusted

floor.

Lava Cave term. Ref KG

PUPA (Plu Pupae) The inactive stage of certain insects when the larva undergoes

metamorphis and becomes an adult.

Fauna. Ref AC

Q

QUATERNARY The youngest geological period, extending from the end of the Tertiary 1.6 million years

ago to the present. Divided into Pleistocene, and Holocene which is the last 10,000

years. A time of great ice ages with widely fluctuating climates and sea levels.

Geology. Ref KG

RADON A radioactive inert gas (Rn86 half life 3.8 days) formed continuously in the earth's

interior by radioactive decay. Densest of all known gases, tends to collect in caves as

well as man made cellars etc. Concentration varies greatly between localities.

Geology. Ref MM

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.

Cave - Depositional Features. Ref HF

RAPPEL RACK A descender consisting of a frame mounting 5 or 6 brake bars.

Climbing and SRT. Ref JJ

RAPPEL Syn. Abseil.

Climbing and SRT. Ref JJ

REBELAY The placing of an additional belay on a rope so as to avoid a rub point on a pitch. Or

merely to split long pitches. Syn. Deviation, Redirection.

Climbing and SRT. Ref JJ

RECHARGE The process involving the input or intake of water into the saturated zone in karst

aquifers. Relates to the quantity of water added.

Hydrology terms. Ref AC

REGRESSION A withdrawal of the sea from the land, due to uplift or a eustatic drop in sea level.

See transgression. *Geology*. Ref KG

REGRESSIVE Concept used to describe the adaptive traits or troglomorphies of obligate

EVOLUTION cavernicoles, particularly those species that only live in the dark zone. eg Reduced

eye size; Loss of visual ability or loss of eyes;

Fauna. Ref MM

REGRESSIVE Reduced body pigmentation (or no pigment); Loss of wings (in insects, such as

EVOLUTION carabid beetles); Elongated appendages including antennae; Longer and greater

density spines or setae (hairs); Reduced metabolic rate.

Fauna. Ref MM

RELATIVE See Humidity.

HUMIDITY Speleology term. Ref MM

RELICT KARST Old cave forms produced by earlier geomorphic processes within the present phase

or period of karstification and open to modification by present day processes. Such

as deposition of speleothems, sediments or skeletal deposits.

Karst - Kinds of. Ref RW

RELICT See Distributional Relict.

Fauna. Ref MM

RESURGENCE A Spring where a stream, which has a course higher up on the surface, reappears

lower down at the surface. *Speleology term*. Ref JJ

RHIZOMORPH A calcareous structure formed around roots, and preserving the form of the root.

Speleology term. Ref KG

RHODAMINE A red organic dye detectable in very dilute solutions. Used in water tracing and dye

gauging.

Survey & Mapping term. Ref JJ

RIFT A long narrow high and straight cave passage controlled by planes of weakness in

the rock. cfFissure.

Speleology term. RefJJ

RIGGING In climbing, the process of establishing the belays for ropes and or ladders.

Climbing and SRT. Ref RW

RILL Small solution groove on surface exposures of limestone. Most common in arid or

semiarid areas.

Karst - Minor Forms of. Ref WM

RILLENKARREN A type of Karren, runnels about 20mm wide with sharp ridges between them.

Usually solutional, formed by air currents with airborne moisture forming closely situated often parallel to sub-parallel vertical grooves on a sloping limestone surface.

Karst - Minor Forms of. Ref KG

RIMSTONE A ridge or rib of rimstone, often curved convexly downstream.

DAM Cave - Depositional Features. Ref JJ

RIMSTONE A pool held up by a rimstone dam. **POOL** Cave - Depositional Features. Ref JJ

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

Cave - Depositional Features. Ref JJ

RIPARIAN Pertaining to the banks of a river or stream. And expanded to include the perimeter

area around dolines, particularly those which act as swallets.

Geology. Ref MM

RISING Another term for a spring. A feature where water returns to the surface from an

underground body of water. Speleology term. Ref JJ

ROCK PENDANT A smooth surfaced projection from the roof of a cave due to solution. Usually occur

in groups.

Cave - Erosional & Solutional Features. Ref JJ

ROCK SHELTER A cave, often at a cliff base, with more or less level floor extending only a short

distance so that no part is beyond daylight.

Cave - Kinds of. Ref JJ

ROCK Any naturally formed coherent and relatively hard mass of mineral matter.

Geology. Ref MM

ROCK A warning given (shouted) when a rock is seen to be falling, or is about to fall, and

which could endanger those below. See also "Below".

Climbing and SRT. Ref MM

ROCKHOLE A shallow small hole in rock outcrops, often rounded in form and holding water after

rain. A feature of the Nullarbor Plain.

Karst - Minor Forms of. Ref JJ

ROCKMILK See Moonmilk.

Speleology term. Ref MM

ROCKPILE A heap of rocks in a cave, usually formed by local collapse, roughly conical in overall

shape.

Cave - Parts of. Ref JJ

ROOF CRUST A thin speleothem on a cave precipitated from water films exuding from pores or

cracks.

Cave - Depositional Features. Ref JJ

ROOF SNIFFING Describes progress in a water filled passage with only sufficient air space for the nose

to be above the water. *Speleology term*. Ref MM

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

Cave - Parts of. Ref JJ

ROPE A length of fabric or plastic hose etc placed around a rope where it may rub against

PROTECTOR rock.

Climbing and SRT. Ref JJ

ROPY LAVA Another term for pahoehoe, especially the type with curved and twisted ridges.

Lava Cave term. Ref KG

RUNDKARREN A type of karren. Generally about 200mm wide with rounded profile. Surface karst

solution feature consisting of rounded grooves in eg, limestone, normally formed

under soil or under heavy litter or moss layers. cf Rillenkarren.

Karst - Minor Forms of. Ref MM

S

SAFETY LINE A safety rope attached to a climber in addition to the main rope or ladder.

Climbing and SRT. Ref JJ

SALT Detachment of particles from a rock surface by the growth of crystals from salt

WEATHERING solutions. A feature of the Nullarbor and other desert caves.

Processes Ref.IJ

SANDSTONE CAVE A cave formed in sandstone.

Cave - Kinds of. Ref MM

SAPROPHAGE A scavenger feeding on decaying organic material.

Cave - Biota. Ref JJ

SATURATED ZONE The zone below the water table, composed of shallow, deep (bathyphreatic) and

stagnant phreatic zones. Syn. Phreatic zone.

Hydrology terms. Ref AC

SATURATED Water which has dissolved as much limestone or other material as it can under the

prevailing conditions.

Speleology term. Ref JJ

SCALE The ratio of the length between any 2 points on a map to the actual distance

between the same points on the ground or in a cave.

Survey & Mapping term. Ref JJ

SCALING CHIP A small, thin, flat piece of limestone that has fallen from the ceiling or wall of a

cave. May be the result of Salt weathering, a cave breakdown process.

Cave - Erosional & Solutional Features. Ref WM

SCALING POLE A light weight pole, often in short sections and assembled where used, to raise a

ladder to points inaccessible by climbing.

Climbing and SRT. Ref JJ

SCALLOP Current markings that intersect to form points which are directed downstream.

Cave - Erosional & Solutional Features. Ref JJ

SCAT Faecal pellets or animal droppings, which may provide an important source of

food in caves. Fauna. Ref MM

SCAVENGER An animal that eats dead remains and wastes of other animals and plants. cf

coprophage, necrophage, saprophage.

Speleology term. Ref JJ

SCORIA Refers to the angular pebble-sized frothy fragments that have solidified while flying

through the air. Lapilli is a more general term for pebble to granule sized ejecta. Finer material is referred to as ash, and coarser fragments as bombs or blocks.

Lava Cave term. Ref KG

SCROGGIN Food, being high energy food eaten by cavers etc consisting of nuts, dried fruit,

lollies, chocolate pieces etc.

Miscellaneous terms. Ref MM

SEA CAVE A cave in present day or emerged sea cliffs, formed most commonly by wave

attack but may have been formed by the usual karst solution processes. In karst

areas, a 'normal' cave may be exposed then modified by marine action.

Cave - Kinds of. Ref JJ

SECTION A map of a cave in a vertical plane, that shows the floor and roof lines.

Survey & Mapping term. Ref JJ

SEDIMENT Material deposited by water ice or wind or precipitated from water.

Cave - Erosional & Solutional Features. Ref JJ

SEEPAGE WATER Syn. Percolation water.

Speleology term. Ref JJ

SELENITE A crystalline form of gypsum.

Mineral, Rock and Chemical terms. Ref JJ

SHAFT A vertical cavity that is deeper than it is wide, and roughly circular in cross

section. Wider than a chimney.

Speleology term. Ref JJ

SHAWL A simple triangular shaped curtain.

Cave - Depositional Features. Ref JJ

SHIELD A speleothem consisting of 2 parallel plates separated by a medial planal crack.

Forms by water seeping through the medial crack. Cf Stegamite.

Cave - Depositional Features. Ref HF

SHOW CAVE A cave that has been made accessible to the public for guided visits.

Cave - Kinds of. Ref JJ

SINGLE ROPE

The practice of climbing up and down ropes with the help of ascenders and

TECHNIQUE descenders. Abbr. SRT.

Climbing and SRT. Ref JJ

SINK A place where a surface water course disappears underground. Also known as

'streamsink'.

Karst - Depression Features of. Ref KG

SINKHOLE In Australia, used for sites of sinking water in a karst area. Sinkholes also include

Swallets. Note that in USA the term is, by long established usage, synonymous

with the term DOLINE, in the broader sense. *Karst - Depression Features of*. Ref AC

SINTER A mineral precipitate deposited by a mineral spring, either hot or cold. Calcareous

sinter is also called tufa, travertine or onyx marble.

Cave - Depositional Features. Ref WM

SIPHON A waterfilled passage of inverted U profile which delivers a flow of water

whenever the upstream head rises above the top of the U.

Cave - Parts of. Ref JJ

SLING A joined loop of rope or tape.

Climbing and SRT. Ref JJ

SOIL CONE A conical pile of soil (and material filtering down from the surface) accumulates on

the floor of a cave beneath fissures and pipes in the ceiling.

Cave - Erosional & Solutional Features. Ref MM

SOLIFLUCTION Usually relates to the slow movement or flow of saturated soil or rock fragment

masses down slopes and may be applied to subaqueous flowage.

Hydrology terms. Ref MM

SOLUTION

A doline formed by solution processes and not modified by collapse.

DOLINE

Karst - Depression Features of. Ref MM

SOLUTION FLUTE An English term for some forms of Karren, generally equivalent to Rillenkarren. A

solution hollow running down the maximum slope of the rock, of uniform width & depth, with sharp ribs between it and its neighbours. Often 1-2cm wide & deep.

Karst - Minor Forms of. Ref JJ

SOLUTION PAN A dish shaped depression on a flat, horizontal rock surface. Sides may overhang.

sYN. Kamenitza.

Karst - Minor Forms of. Ref JJ

SOLUTION PIPE A vertical cylindrical shaft, often about 0.5 m across and up to 20 m deep, which

is a characteristic of syngenetic karst areas. See Blowhole.

Karst - Depression Features of. Ref KG

SOLUTION A larger solution flute that may increase in size down its length.

RUNNEL Karst - Minor Forms of. Ref JJ

SOLUTION TUBE May equate to blowhole, but solution tubes are often filled with sediment, which

falls to a cave floor and forms a mound. *Karst - Depression Features of*. Ref JJ

SOLUTION In karst rocks particularly, the change of bedrock from solid to liquid state by

combination with water. In physical solution, ions of rock go directly into solution

without transformation.

Processes. Ref JJ

SOLUTION In chemical solution, weak acids take part especially carbonic acid H2CO3,

formed by dissolved carbon dioxide.

Processes. Ref JJ

SPATTER Molten material that was ejected from a vent or turbulent flow and which stuck

together on landing to form a knobby rock in which the individual lumps are still

just recognisable.

Lava Cave term. Ref KG

SPECIES 7th and lowest rank in Taxonomic system. Kingdom, Phylum, Class, Order,

Family, Genus, Species. Genus & Species together constitute the 'specific name', a unique name for all known organisms that are alive or have become extinct.

Biology - Flora & Fauna. Ref JJ

SPECIES Individuals of a given species have a large number of characteristics in common,

and are thought to be able to breed together & have come from a common

ancestor.

Biology - Flora & Fauna. Ref JJ

SPELEOGEN A cave feature formed erosionally or by weathering within a cave. Usually formed

in the parent rock, eg Current markings, Rock pendant, Canyon, Spongework,

Dome, Scallop.

Cave - Erosional & Solutional Features. Ref JJ

SPELEOLOGIST A person who studies caves and their contents, especially by actually entering

caves.

Speleology term. Ref MM

SPELEOLOGY The study of caves and their contents. The exploration, description and study of

caves and related phenomena.

Speleology term. Ref JJ

SPELEOTHEM Any of the secondary mineral cave deposits formed by chemical deposition, most

commonly of calcite. See decoration. Note that use of 'formation' is detrimental.

Cave - Depositional Features. Ref JJ

SPLASH CUP (1) A shallow cavity in the top of a stalagmite. (2) Any depression caused by

dripping water. Syn Conulite.

Cave - Depositional Features. Ref JJ

SPONGEWORK A complex of irregular, inter-connecting cavities intricately perforating the rock.

The cavities may range from a few centimetres to more than a metre across.

Speleology term. Ref JJ

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

surface water. Syn Rising. Speleology term. Ref JJ **SQUEEZE** An opening in a cave only passable with effort because of its small dimensions. cf

Flattener, Crawl.

Cave - Parts of. Ref JJ

SRT See Single rope technique.

Climbing and SRT. Ref MM

STALACTITE A speleothern hanging or growing downwards from a roof or wall, usually of

cylindrical or conical form, originally with a central hollow tube, and formed by

dripping water. see Straw.

Cave - Depositional Features. Ref JJ

STALAGMITE A speleothem projecting vertically upwards from a cave floor and formed by

precipitation from drips, often found directly under a stalactite.

Cave - Depositional Features. Ref JJ

STANCE (is this a caving term)

Speleology term. Ref JJ

STATION A survey point in a chain of such points in a survey.

Survey & Mapping term. Ref JJ

STEEPHEAD A steep-sided valley in karst, generally short, ending abruptly upstream where a

stream emerges or formerly did so.

Speleology term. Ref JJ

STEGAMITE A speleothem projecting upwards from a cave floor in the form of a calcite ridge.

A medial crack appears along the top of the ridge where water is thought to be forced from the speleothem under capillary action. First described by R Webb.

Cave - Depositional Features. Ref RW

STOOPING In caving, describes a passage in which there is not quite enough head room walk,

but more than a crawl way. cf Flattener, Crawlway, Walking

Cave - Parts of. Ref MM

STRANDLINE A coast line, present or ancient.

Geology. Ref KG

STRAW A long, thin-walled tubular stalactite that elongates as minerals are deposited at

the lower tip by seepage water flows dripping through its hollow interior. see

Stalactite.

Cave - Depositional Features. Ref JJ

STREAMSINK A point where a surface stream disappears underground. May empty into an

obvious karst feature, or percolate down through streambed gravels.

Karst - Depression Features of. Ref JJ

STRIKE The orientation of beds of rocks, given as the direction of a horizontal line in a

bedding plane. On level ground it is the direction of outcrop of inclined beds.

Geology. Ref JJ

STROMATOLITE A calcareous deposit, secreted by calcareous algae in the form of laminated

domes and columns. Occurs in many cenotes. *Karst - Miscellaneous features of*. Ref KG

STYGOBIONT Aquatic cavernicoles. Animals that live in karstic groundwater, or in alluvial

groundwater. Includes stygobites, stygophiles & stygoxenes.

Speleology term. Ref AC

STYGOBITE An aquatic troglobite. An obligate aquatic species of hypogean waters having

troglomorphic adaptions. Also includes the fauna found in deep groundwater

substrata of alluvial aquifers. *Speleology term*. Ref AC

STYGOFAUNA Ecologically descriptive term covering aquatic groundwater fauna. Syn

Stygobiont.

Speleology term. Ref AC

STYGOPHILE A facultative stygobiont, usually lacking troglomorphies, and considered as the

aquatic equivalent of a (terrestrial) troglophile.

Speleology term. Ref AC

STYGOXENE An habitual stygobiont which spends only part of its life cycle in cave waters and

returns periodically to the epigean domain, eg for food.

Speleology term. Ref AC

STYLOLITE Suture in rock formed where pressure solution has taken place, often leaving a

thin lamina of insoluble material along it. Also applied to columnlike structures in

some limestones which are at right angles to the bedding plane.

Karst - Miscellaneous features of. Ref JJ

SUBJACENT Karst developed in limestone or other soluble rock underlying other rock

formations that are far less soluble. The ground surface may be perforated by

collapse dolines etc or it may show no hint of the underlying karst. Example: Big

Hole in NSW.

Karst - Kinds of. Ref JJ

SUBSIDENCE Formed by the downward movement of limestone by solution and of loose

DOLINE surface material such as soils into an underground cavity.

Karst - Depression Features of. Ref KG

SUBTERRANEAN Pertaining to underground environments. Often in reference to caves. And often in

reference to caves in karst. Speleology term. Ref AC

SUMP A point in a cave passage where the water meets the roof, then continues under

water.

Speleology term. Ref JJ

SUPERSATURATED Referring to water that has more calcium carbonate or other karst rock mineral in

solution than the maximum corresponding to normal conditions.

Speleology term. Ref JJ

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.

Survey & Mapping term. Ref JJ

SUSPENDED Small particles of insoluble organic or inorganic matter suspended in water, Syn

SEDIMENT flocculant.

KARST

Hydrology terms. Ref AC

SUUNTO A small, handheld pendulum clinometer commonly used in cave survey.

CLINOMETER Survey & Mapping term. Ref JJ

SUUNTO COMPASS A small, handheld sighting compass commonly used in cave survey.

Survey & Mapping term. Ref JJ

SWALE A linear hollow or depression found between dunes or beachridges. Generally

marshy or swampy, or may contain small lakes.

Geology. Ref KG

SWALLET Usually in karst, a form of sinkhole (which may also be a cave entrance) but could

refer to a streamsink. Swallets are major entry points for recharge waters in some

karst areas.

Karst - Depression Features of. Ref AC

SWALLET They may empty into open or choked cave features (eg shafts, avens). Swallets

may simply be a portion of streambed from which there is a gradual downward

percolation of surface water.

Karst - Depression Features of. Ref AC

SWIRLHOLE A more or less circular hole in rock in a streambed eroded by eddying water.

Sometimes aided by rocks, sand or pebbles tumbling round and round.

Karst - Depression Features of. Ref JJ

SYNGENETIC

KARST

Karst developed in Aeolianite. Where the evolution of the karst has occurred at the same time as the lithification of the host sediment. A characteristic feature of

Australian Quaternary dune calcarenites. First described by J N Jennings.

Karst - Kinds of. Ref JJ

T

TAFONI Roughly hemispherical hollows weathered in rock at the surface. Not common in

caves, but some hollows in Nullarbor caves may well be tafoni.

Karst - Depression Features of. Ref JJ

TAGGING Affixing a tag bearing a cave number near its entrance, either by glue or by

means of rock drill and a small nail or screw.

Survey & Mapping term. Ref JJ

TALWEG Also Thalweg. The line of lowest points along a valley floor, normally the stream

channel.

Geology. Ref KG

TAPE In survey, a graduated tape of steel, plastic, wire-reinforced cloth, or fiberglass,

used for measuring distance.

Survey & Mapping term. Ref JJ

TAPE Strips of woven synthetic fibre used for slings to support ladders or as a

handline. Short lengths can be worn as a waist band.

Climbing and SRT. Ref JJ

TAXON (Plu Taxa) In biology, the name of a rank in a system of Taxonomy. From

highest to lowest: Kingdom, Phylum, Class, Order, Family, Genus, Species. See

Species.

Biology - Flora & Fauna. Ref MM

TECTONIC Pertaining to large scale movements of the earth's crusts, such as Folding and

faulting.

Geology. Ref KG

TERRA ROSSA Reddish residual clay soil developed on limestone.

Speleology term. Ref JJ

TERRESTRIAL Living or active on the land surfaces, either Epigean, Endogean or Hypogean.. cf

Amphibious, Aquatic, Arboreal.

Fauna. Ref AC

TERRIGENOUS Shallow marine sediments consisting of material derived from the land surface.

Geology. Ref KG

TERTIARY The geological time between Cretaceous and Quaternary, from about 65 to 1.6

million years ago. It occupies the bulk of the Cainozoic era. From oldest to youngest, the subdivisions are Palaeocene, Eocene, Oligocene, Miocene, and

Pliocene.

Geology. Ref KG

TERTIARY Tertiary climates in Australia were mainly warm and humid, with aridity first

appearing towards the end of the Miocene and becoming widespread in the

Pliocene.

Geology. Ref KG

THEODOLITE Survey instrument that measures both horizontal and vertical angles, as well as

horizontal distances using a telescope and a stadia.

Survey & Mapping term. Ref MM

THREAD A natural hole in a rock mass through which a rope, tape or wire can be passed

to create an anchor.

Climbing and SRT. Ref RW

THRESHOLD That part of a cave near the entrance where surface climatic conditions rapidly

grade into cave climatic conditions. Not necessarily identical with twilight zone.

Cave - Parts of. Ref JJ

THRESHOLD Slope or cliff facing up a blind or half-blind valley below a present or former

streamsink.

Geology. Ref JJ

THROUGH CAVE A cave which may be followed from entrance to exit along a stream course or

along a passage which formerly carried a stream.

Cave - Kinds of. Ref JJ

TIDEMARK A horizontal bench or a marking on a wall of a lava tube which indicates a prior

lava level.

Lava Cave term. Ref KG

TOPOFIL A mechanical cave survey device that uses a roll of thread and a distance

counter, a protractor to measure inclination and a compass to measure the

bearing.

Survey & Mapping term. Ref RW

TOWER KARST The ultimate development of Cockpit karst through Cone karst to Tower karst,

in which the residual hills have very steep to overhanging lower slopes. There may be alluvial plains between the towers and flat-floored depressions within

them. Syn Fenglin.

Karst - Hill Features of. Ref JJ

TRACE A length of wire rope with clips at each end to fasten a wire ladder to a belay

point.

Climbing and SRT. Ref JJ

TRACER (1) A material introduced into surface or underground water where it disappears

or into soil to determine drainage interconnections and travel time. (2) A material

introduced into cave air to determine cave interconnections.

Survey & Mapping term. Ref JJ

TRANSGRESSION An advance of the sea across the land, due to subsidence of the land, or a

eustatic rise in sea level. Opposite of Regression (qv).

Geology. Ref KG

TRANSITION ZONE Initial region of the Dark zone beyond the Twilight zone where there is no visible

light. But some external factors from the entrance environment may still be

apparent, eg seasonally fluctuating air temperatures.

Cave - Parts of. Ref AC

TRANSPIRATION Loss of water by plants, usually by evaporation from leaves. Cf.

evaportranspiration. *Fauna*. Ref MM

TRAVERSE The commonest form of cave survey in which direction, distance and vertical

angle between successive points are measured.

Survey & Mapping term. Ref JJ

TRAVERSE (1) A route along ledges above the floor of a cave, (2) to travel in a cave along

such a route.

Speleology term. Ref JJ

TRAVERTINE Compact calcium carbonate deposit, often banded, precipitated from spring,

river or lake water. It is often at least partly of biogenic origin with algae or

invertebrate animals involved. Cf. tufa.

Karst - Kinds of. Ref JJ

TREE ROOT Tree roots often penetrate down into caves and can form dense mats of fine

rootlets, or thick tap roots which can completely block a passage. The

breakdown of the tree roots forms food for cavernicoles.

Speleology term. Ref MM

TRI-CAM A metallic device placed in holes or cracks for use as an anchor Cf. Chock.

Climbing and SRT. Ref RW

TROG UP To dress in suitable clothing and to gather lighting and other gear before going

caving.

Speleology term. Ref MM

TROG A caver. The act of caving. Short for troglodyte.

Speleology term. Ref MM

TROGLOBITE An animal (an obligate cavernicole) that lives in a cave and is unable to live

outside of it. Troglobites usually have troglomorphic adaptions. Aquatics now

referred to as Stygobites but may be referred to as aquatic troglobites.

Speleology term. Ref JJ

TROGLODYTE A human cave dweller.

Speleology term. Ref JJ

TROGLOMORPHIC

ADAPTION

Adaptions to the cave environment, eg loss of pigment, for species living in the

dark zone. eg long antennae and legs, partial or complete loss of eyes, reduced

metabolic rate.

Speleology term. Ref AC

TROGLOMORPHIES Syn. troglomorphic adaptations. (N.B. Troglomorphies do not necessarily

equate to level of adaptation to dark zone environment.)

Speleology term. Ref MM

TROGLOPHILE A terrestrial cavernicole which frequently completes its life cycle in caves but is

not confined to this habitat. *Speleology term*. Ref JJ

TROGLOXENE A terrestrial Cavernicole which spends only part of its life cycle in caves and

returns periodically to the epigean domain for food.

Speleology term. Ref JJ

TRUE NORTH The direction of the geographical north pole at a place.

Survey & Mapping term. Ref JJ

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

section. Cf. phreatic tube *Cave - Parts of*. Ref JJ

TUFA Spongy or vesicular calcium carbonate deposited from spring, river or lake

waters. Cf. travertine. Speleology term. Ref JJ

TUFF A consolidated form of volcanic ash or lapilli.

Lava Cave term. Ref KG

TUMULUS A rounded, sharply convex, mound of lava, frequently with radial or polygonal

cracks, where a semi-solid crust has been pushed up by pressure from below.

Applied to small mounds on a lava tube floor. See 'Puddings'.

Lava Cave term. Ref KG

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

section.

Cave - Parts of. Ref JJ

TURBIDITY The muddiness, cloudiness or milkiness of water. Related to the amount of

suspended sediment in the water.

Hydrology terms. Ref AC

TWILIGHT ZONE The part of a cave in which some daylight penetrates (but not direct sun light)

and gradually diminishes to zero light. See Transition zone.

Cave - Parts of. Ref JJ

U

UNCONFORMITY A time break in a depositional sequence.

Geology. Ref KG

UNSATURATED

ZONE

In karst, the zone where voids in rock are partly filled with air and through which

water descends under gravity. syn Vadose zone.

Speleology term. Ref AC

UVALA A complex closed depression with several lesser depressions or dolines within its

rim.

Karst - Depression Features of. Ref JJ

 \mathbf{V}

VADOSE FLOW Water flowing in free-surface streams in caves.

Speleology term. Ref JJ

VADOSE Refers to water moving downward through the vadose zone, either in narrow

SEEPAGE fissures, or on the walls of air-filled caves. Syn. percolation water.

Speleology term. Ref JJ

VADOSE WATER Water in the vadose zone.

Speleology term. Ref JJ

VADOSE ZONE That part of the cave environment that lies or once lay above the water table. Also

refers to the erosional processes that act in that zone. See Unsaturated zone.

Speleology term. Ref JJ

VAUCLUSIAN

SPRING

A spring rising up a deep, steeply-inclined, water-filled passage from a deep aquifer, and under considerable pressure. The term derives from such a spring in France that rises about 250m and flows at about 25 cubic metres per second.

Speleology term. Ref JJ

VENOM From a variety of animals, and introduced to a victim by a variety of methods.

Toxin types include, anticoagulant, haemolytic, haemorrhagic, myotoxin, neurotoxin, procoagulant. Bite sites may be infected by agents such as bacteria, carried by the

animal.

Miscellaneous terms. Ref MM

VERMICULATION Pattern of thin, worm-shaped coatings of clay or silt on cave surfaces.

Speleology term. Ref JJ

VERTICAL The angle in a vertical plane between a line of sight and the horizontal, positive

above the horizontal and negative below.

Survey & Mapping term. Ref JJ

VUG A small cavity in rock, often lined with crystals.

Cave - Erosional & Solutional Features. Ref WM

ANGLE

WALKING In caving, a passage in which there is enough head room to walk upright. cf Flattener,

Crawlway, Stooping.

Cave - Parts of. Ref MM

WATER SINK (Looking for a definition)

Speleology term. Ref MM

WATER Determination of water connection between points of stream disappearance or of soil

TRACING water seepage and points of reappearance on the surface or underground.

Survey & Mapping term. Ref JJ

WATER TRAP A place where a cave roof dips under water but lifts above it farther on. Cf. duck (-

under).

Speleology term. Ref JJ

WATERTABLE The surface between phreatic water which completely fills voids in the rock, and ground

air, which partially fills higher voids.

Speleology term. Ref JJ

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

Cave - Parts of. Ref JJ

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

table. cf Dead cave, Dry cave. Cave - Kinds of. Ref MM

WET SUIT A garment of foam neoprene that insulates a diver from the cold by allowing a thin film

of water to penetrate between the suit and the body.

Diving terms. Ref JJ

WHALETAIL A descender consisting of an aluminium block with slots, knobs and a safety gate.

Speleology term. Ref JJ

WHISTLE In climbing, 1= Stop, 2= Up, 3= Down. The SUD acronym is used widely. 4 =

SIGNALS OK/Safe, and 1 long blast = Help is also used.

Climbing and SRT. Ref GB

WINDOW An irregular opening through a thin rock wall in a cave. A similar hole that forms a cave

entrance.

Speleology term. Ref JJ

WIRE A flexible lightweight ladder of steel wires and aluminium alloy rungs.

LADDER *Climbing and SRT.* Ref MM

X

Y

ZONATION The division of a cave into a series of zones relating to the extent of light penetration, influence of external environmental factors and degree of internal stability. Examples of cave zones are the twilight zone, transition zone and dark zone.

Speleology term. Ref MM

Themes

- 1. Biology Flora & Fauna
- 2. Cave Biota
- 3. Cave Depositional Features
- 4. Cave Erosional & Solutional Features
- 5. Cave Kinds of
- 6. Cave Parts of
- 7. Climbing and SRT
- 8. Conservation
- 9. Diving terms
- 10. Documentation
- 11. Fauna
- 12. Flora
- 13. Geomorphology
- 14. Geology
- 15. Hydrology terms
- 16. Karst Depression Features of
- 17. Karst Hill Features of
- 18. Karst Kinds of
- 19. Karst Minor Forms of
- 20. Karst Miscellaneous features of
- 21. Lava Cave term
- 22. Lighting term
- 23. Mineral, Rock and Chemical terms
- 24. Miscellaneous terms
- 25. Processes
- 26. Speleology term
- 27. Survey & Mapping term
- 28. Unsatisfactory term, not recommended

References

- GB BADDELEY Glenn, 1998, Pers comm to Max G METH
- AC CLARKE Arthur, 1997, Karst Bio-Space a Glossary of Terms, in Walsh J (comp), Proceedings of the 21st Biennial Conference, SA Speleo Council, Rundle Mall, pp 87-92
- KG GRIMES Ken, 1995, *Glossary: Some Volcanic, Cave and Karst Terms*, in Baddeley, G. (ed), 1995, *Vulcon Guidebook*, Victorian Speleological Association Inc, Melbourne, pp 107-

- EH HAMILTON-SMITH Elery, 1998, Pers comm to Max G METH
- HF HILL C & FORTI P, 1997, *Cave Minerals of the World*, National Geographic Society, Alabama, 2nd ed, pp 355-365
- JJ JENNINGS Joe N, 1985, *Cave and Karst Terminology*, in Matthews PG (ed), *Australian Karst Index 1985*, ASF Broadway, pp 14.1-13
- LW LOWE David & WALTHAM Tony, 1995, *A Dictionary of Karst and Caves*, British Cave Research Assoc, pp 1-41
- MM METH Max G, 1998, Glossary of Speleological and Caving Terms
- WM MONROE Watson H, 1970, A Glossary of Karst Terminology , US Govt Print Washington , pp K1-K26
- NP POULTER Norman, 1995, Regarding proposed roadside development adjacent to cave 6N75, SRGWA, Nedlands., p4
- RW WEBB Rauleigh, 1995, Caving and Karst Terminology

Plea for updates / suggestions

Please peruse the list, and advise the author if:

- You have a better definition for a term.
- You have a term that is not included on the list.
- You have any comment on the list.

Acknowledgements

The current listing represents the work of many people, including (AND APOLOGIES TO THOSE I MISSED):

- Peter J ACKROYD,
- Edward (Ted) G ANDERSON,
- Glenn BADDELEY,
- Arthur CLARKE,
- W J COUNSEL,
- John R DUNKLEY,
- David GILLIESON,
- Ken GRIMES,
- Elery HAMILTON-SMITH,
- G S HUNT,
- Julia M JAMES.
- J N Jennings,
- David C LOWRY,

- Peter G MATTHEWS,
- Max G METH,
- Neil MONTGOMERY,
- G J MIDDLETON,
- A PAVEY,
- Norman POULTER,
- Aola M RICHARDS,
- Andy SPATE,
- Rauleigh WEBB,
- Tom M WIGLEY.

Copyright

Copyright © Australian Speleological Federation Inc. 20/12/2018 9:14:30 PM

The *Glossary of Speleological and Caving Terms* is the copyright property of the <u>AUSTRALIAN</u> <u>SPELEOLOGICAL FEDERATION INC.</u> (ASF) and any reproduction of it either in part or in full, should have the approval of the ASF, and such reproduction should be accompanied by a copyright notice similar to this one.

Revision History

3 Mar 1998

First Draft for Comment. The first public release on Internet.

15 Apr 1998

Add a downloadable ZIP file containing HTML for complete glossary A - Z. Add an access counter.

Mar 1998 - Oct 2018

Located at http://home.pacifc.net.au/~gnb/caving/glossary/.

20 Dec 2018

This PDF available at

https://sites.google.com/site/glennbaddeley/GlossaryOfSpeleologicalAndCavingTerms-MaxMeth-1.pdf