MINING TERMS used in the LCMLA Scheme

Black - terms used across several regions

Other terms predominantly used in Derbyshire, North Wales,

in the South West, the Forest of Dean, the North of England and in Southern England

Adit A horizontal tunnel into a mine from a hillside for access to the vein or to

drain water from the mine, sometimes called a level. Not horizontal, usually

about 1:150 upwards

Adventurer Share holder in proposed mining operation

Afterdamp Noxious gases left after underground explosion

Air Door Door fixed across a level to direct flow of air for ventilation

Arching Roof supports in a level built of stone, wood, concrete or iron.

Attle Cornish term for waste rock of no value

Back filling Waste rock, which is dumped in a disused area of the mine to save the time

and expense of bringing it out to a surface tip (also sometimes to support the mine so that a greater amount of rock can be extracted adjacent to

backfilled areas)

Bagging Roof stone separating from the rock overlay and sagging downwards - an

indication of potential hazard.

Banjo Shovel Short handled shovel (Cornwall)

Bal-maiden Cornish term for woman employed in surface ore preparation

Balance Bob Counterbalance on beam engine

Banksman Foreman in charge of works in and around the surface winding gear

Barracks Building where miners lodged at the mine during the week.

Barytes (US- Barite) The mineral barium sulphate. Also called heavy spar.

Bell Pit Primitive form of mining – involving sinking of a shaft to a shallow seam,

and mining outwards to the point of collapse

Billy Box attached to a child's back to carry iron ore out of the mine

Bind Synonymous with mudstone

Blackdamp Asphyxiant mixture of mine gases predominantly carbon dioxide and

nitrogen - synonymous with "chokedamp". It is heavier than air, best test is

a naked flame test with an upright candle.

Black powder Gun powder, used for extracting rock.

Blende Sulphide of zinc, properly known as sphalerite. The chief ore of zinc.

Sometimes known as Black Jack.

Block Roughly trimmed lump of slate.

Blondin Wire rope spanning a quarry on which a traveling pulley could lift and move

loads.

Brassey Term used in association with the occurrence of iron pyrites

Brush Ore Low grade iron ore, crystal structure looks like a brush.

Buddle Trough or circular pit where ore was separated from waste.

Caban Recess cut into the rock underground for shelter

Calamine Zinc Carbonate.

Calcite The mineral calcium carbonate (note Aragonite is another crystal form of

CaCo3).

Chert A hard siliceous rock, like flint, found as nodules and layers in the limestone.

Often black but may weather white.

Caisson Method of shaft sinking involving a structure sunk from ground surface by

continually excavating beneath the bottom of the structure

A Chase "Cut a Chase" a groove cut into the rock with a pick to allow a block of rock

to be removed

Coe Derbyshire: a small shed, usually of stone, above or near a mine, in

which the miners kept their tools and sometimes a change of clothing. The

climbing shaft was often under a trap door in the floor of the coe.

Concentrates Processed ore, usually non-ferrous, suitable for smelting.

Coffin level A narrow tunnel, coffin shaped in section, usually dating to the early mining

period and driven without the use of explosives.

Country rock Naturally occurring rock, igneous, metamorphic or sedimentary, in which

the mineral vein is situated.

Cross-cut A passageway cut through solid rock from one vein to another (technically

cutting across the rocks/beds rather than along them, also known as a

cross measures drift in coal mines)

Crusher Machine with two revolving drums to crush ore

Dram Truck on rails to carry ore out and materials in to mine.

Deads (See also 'backfilling' above) Useless stone or wastes from a vein or

working, usually stacked in abandoned workings, often on timber platforms

which are now dangerously unstable.

Dressing The reduction and sorting, by hand or machine, of ore into grades suitable

for further processing. Also the process of trimming roofing slates to their

finished size.

Drumhouse Structure supporting the drum of a balanced incline.

Engine shaft A larger shaft equipped with winding machinery (or a pump engine shaft

with or without a man lift on the pump rods) rather than a stow or windlass.

False floor The floor of a tunnel made of timber and clay, constructed after the original

floor has been mined away.

Fathom Nautical measurement of 6 feet, widely used in the mining industry.

Firedamp Explosive methane gas associated with coal mining.

Firesetting Primitive method of breaking rock for tunneling, by heating then quenching.

Flat A body of ore generally lying more or less horizontal, usually parallel with

the bedding planes of the enclosing country rock.

Flat Rods Iron or wooden rods transmitting motion from an engine to pumps.

Floor Working level of a slate quarry underground.

Fluorspar The mineral fluorite, calcium fluorite, widely used as a flux in blast furnaces

and as a source of fluorine in chemical industry. Also used for special

glasses and ceramics.

Forefield The working face of a mine, usually the furthest point from the shaft.

Free Miner Person with free mineral rights issued by the Gaveller on behalf of the

Crown.

Gale Surface area allocated to a free miner into which he is allowed to work

Gaveller Bailiff of mines in Forest of Dean with legal powers

Galena The mineral lead sulphide, the chief ore of lead.

Gangue Secondary minerals in a vein in which the more valuable minerals occur.

Ginging The dressed stonework around the top parts of a shaft holding up the loose

ground.

Hade The slope of a vein from the vertical usually measured in degrees.

Hangingwall The wall or cheek of the vein which is uppermost (geologically sequenced)

as the vein hades. The opposite (normally lower) side is the footwall. Normally the upper and lower sides, but in a vertical vein the geological

sequence is important

Haulage road Tunnel in which tubs of ore are hauled.

Hopper A wooden chute fixed into the wall and roof of a level, through which ore is

discharged into tubs from the workings above.

Horse level A major level where horses are used for hauling tubs of ore.

Incline Inclined underground level or surface track for access or haulage.

a) Balanced Incline - two parallel tracks with pulley wheel at top, where weight of full wagon descending pulled up empty wagon.

- b) Chain Incline device running on chain or wire rope instead of rails.
- c) Mass Balanced Incline single track with iron weight running between the rails to balance weight of down-going load.
- d) Powered Incline- device where engine was used to haul loads upwards.
- e) Table Incline where wagons were carried on a moving table rather than on the rails themselves.

Iron Stone Iron ore

Jackroll A manpowered windlass for raising kibbles from a shaft.

Jumper Long iron rod, pointed at each end, which was used to drill shot holes by

repeatedly hitting it against the rock face.

Kibble A large bucket used to lift the ore up a shaft.

Level A horizontal tunnel, adit, sough or drift. A level may also be a surveying

instrument.

Lode Mineral vein. A fissure containing a deposit of ore.

Launder Wooden trough for conveying water.

Leat Surface channel for conveying water.

Manway A walkway or ladder-way between levels.

Mill Surface building where slate or ore was processed.

Mine (Open to debate – as opposed to Quarry)

Mochyn The iron weighted balancing trolley of a mass balanced incline.

Nelly Small forked stick held in mouth like a smoking pipe to hold a candle.

Ocre Iron oxide, forms in red, yellow and purple.

Old man (T'owd man) Places worked by former miners or the former miners

themselves.

Ore Material from which metal could be extracted by smelting.

Ore chute Near vertical chute for moving ore downwards by gravity.

Pack wall Deads built up along side a level, e.g. in flats or pipe workings.

Pelton Wheel Small waterwheel with cups into which a jet of water was directed.

Pillar In a Slate or Stone working (or any mine), the area of rock left undisturbed

between chambers for the purpose of supporting the ground above.

Plate Rail Old style of railway where the trucks had flat wheels and the rails had a

flange.

Plug and feather An old method of splitting rock by inserting wedges in opposition into a

drilled hole

Pillar and stall The mining method of leaving pillars to support the roof. N.B back-filling

was also a very important method of supporting the roof often used in

conjunction with pillar and stall mining.

Pillar robbing The bad practice of thinning pillars underground to cheaply obtain slate (or

stone or mineral). (Often carried out on the retreat from an area, so not

necessarily 'bad practice' to the original miners)

Pipe A body of ore lying more or less horizontally, but long and narrow.

Grades into a flat by broadening. Many pipe veins are in fact ancient

caverns filled with ore. Pipes may branch out of a rake.

Portal The entrance to a level, usually constructed from local stone.

Powder House Explosive store.

Quarry Place where stone or slate was excavated, either on surface or

underground.

Rake The local name for the main type of mineral vein found in the Peak District.

A body of ore disposed vertically between two walls of rock and thus having

a straight course across country.

Rise / Raise An underground shaft driven upwards above a working.

Roofing shaft In slate, the first cut made in developing a chamber, made along the top of

the vein, above the intended extraction area.

Scrin Derbyshire, a short often thin, vertical vein of ore. Often branching out of a

rake.

Sett Area of a mining lease.

Shaft Vertical or slightly inclined entrance for access, haulage or pumping.

Sheave Grooved pulley wheel.

Shot hole Hole bored in rock to take explosives.

Shrinkage stope A system of overhand stoping where the miners use the broken ore to

stand on.

Slab Piece of finished (or partly finished) slate, thicker and larger than a roofing

slate.

Waste material usually in heaps Slag

Slideway Unrailed incline.

Slimes The finest mud from the crushing machines.

Sough Derbyshire, a drainage adit.

Spoil Waste rock tipped on the surface.

Stemple A piece of wood wedged across a working or vein, for use as a rung of a

> climbing way or as part of a platform or lodgement for stacking deads, or part of a roof support. Stemples of dressed stone occur in a few mines.

Stink damp (Hydrogen sulphide) smells of rotten eggs, caused when timber or

> vegetation rots. The ability to smell this gas is lost very guickly (it knocks out the olfactory nerves within seconds) and this can give a false sense of

security. NB very dangerous.

A worked out vein after removal of the ore, left as a cavity. When working Stope

upwards it is overhand stoping. Downwards is underhand stoping.

Stow / Stowe Derbyshire, the wooden windlass over a shaft for raising ore.

Stulls Heavy horizontal timbers fixed from wall to wall in open stopes to hold back

the hanging wall. (Also to support false floors where a stope below has

taken the crown pillar [i.e. the floor of the upper level] out).

Sump An internal shaft, not connected to the surface, sometimes called a winze,

Alternatively a sump is a hollow in the bottom of a mine for collecting the

drainage for pumping.

Tell tails Stones deliberately inserted into cracks to fall out if movement takes place,

to indicate possible hazards.

Trunc Table of a table incline.

TwI Open slate pit.

Untopping Removing the overburden of an underground working to enable the slate

pillars to be extracted. Modern machinery makes this economic.

Vein The body of minerals enclosed by rock usually vertical or near vertical,

possibly striking through the rock for great distances and for great depth.

Whim Winding engine powered by horse, steam or water.

White Damp Dangerous gas – Carbon monoxide

Winch Portable device for raising loads, either hand, steam or air powered.

Winze A small underground shaft sunk from one part of a mine to another.-

opposite of a raise or rise