GLOSSARY OF TERMS

Air Scent	Air scent is the scent that your dog can smell floating in the air. A dog seen working air scent will typically have his head up.
Alert	An alert is how the dog notifies the handler that he/she has found. When air scenting a dog may be a long distance from the handler and will need to alert and then show the handler where the misper is. With mantrailing, the handler will be behind the dog at the end of the line and therefore may not need to run back to the handler but the alert at the Misper should be calm in order not to alarm the misper. Individual dogs alert differently (a sit is a nice calm alert).
Ask the Dog	A technique used by an experienced handler and dog to determine how confident their dog is on a scent trail. Where the handler has reason to suspect the dog is working a false positive trail, they apply increased back pressure on the trailing line. If the dog stops and or turns back soon after the pressure is applied this may be a negative indication and suggests that the dog was not working target scent i.e. chasing wildlife instead. However, if the dog insists on working on despite the handler trying to 'put the brakes on' then this may be an indication the dog is firmly on target scent and won't be pulled away.
Back Trails	A deliberate 'cul-de- sac' where a trail is laid by the misper and at some point, during the trail they have turned back and retraced their steps before continuing away from the back trail in a fresh continuous direction. Replicates a missing person who is lost and wandering aimlessly or is unsure where they are headed.
Blind Trails *-Single* *-Double*	**Single Blind** trail is a trail laid by a misper and the direction of travel taken by the misper is not known to the handler but is known by someone accompanying the handler team such as an instructor or other support person. These are generally the preferred trails in training so that the handler does not influence the direction their dog takes whilst having someone with them who does know where the trails goes, which means corrections can be given to avoid lengthy erroneous directions being taken. **Double Blind** trails are where the trail is laid by a misper but no one with the working dog team i.e. handler, instructor or another knows the route taken by the misper. This is commonly used for qualification assessments as

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	this replicates 'real life' most closely where a deploying search dog team are most unlikely to know the direction of travel taken by a missing person. (See also Clever Hans Effect).
Body Language	A dog has a variety of observable non-verbal behaviours which indicates its level of arousal and activity. (E.g. wagging tail.) In mantrailing over time and with experience a handler will come to recognise the trailing specific non-verbal body language their dog displays when working scent or not working scent. Common examples are when on scent for a dog's body to be 'stiff' with tail carried higher and the dog is pulling consistently in a single direction. If lost scent, the dog may start looking for the scent by weaving (sinuous body motion like a snake) or undertaking a half moon manoeuvre (see later) or lifting head up and seeming to be 'staring' around it. (See also Six Points of Trailing Dog Body Posture). (N.B. Human body language can also be read and interpreted by canines - see Guiding and Cueing)
Casting	Casting is when a handler gives the dog a length of line to find and work out the trail's direction of travel. This will happen at the beginning of a trail after the dog has taken scent and at other times during the trail particularly junctions and open spaces.
Clever Hans Effect	It is a recognised trait in animal science that animals such as dogs through repetitive conditioning/training (also known as Long Term Potentiation) can come to learn non-verbal and audible signals from humans (i.e. their handler or instructor) which give them cues as to which way is 'right' and which way is 'wrong'. This behaviour was originally scientifically recognised as the 'Clever Hans' effect in Germany in 1904 where a horse could apparently 'do sums' until it was finally established the horse was 'reading' unconscious, unintentional non-verbal communication from humans to get the right answer to a maths question. 'Clever Hans' lead to the beginning of the use of double-blind testing of animals. (see also Cueing)
Cueing and Guiding (or accidental human to canine communication)	**Cueing** can for example occur where a dog interprets their handler's posture as a clue as to the correct and/or desired direction of travel. For example, you stand in front of a path at a crossroad and the dog thinks that path you are blocking cannot the correct one. Most dogs recognise the meaning of an arm pointing in a direction and are smart enough to understand the importance of the spoken word such as 'good' or 'no' and some can understand 'left', 'right' and 'straight on'. **Guiding** occurs for example where a handler consciously or unconsciously applies tension to a line to direct their dog into a chosen direction of travel

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	e.g. by walking to the left or right of their dog rather than 'tucking in' directly behind the dog. Alternatively, it could be where the handler allows a line to go slack when the dog is not following the trail.
Delay	Before a trail is worked can vary from immediately after the misper leaves (as in a runaway) to an aged trail where the scent was laid at least 20 minutes before the dog begins work. A trail start can be delayed indefinitely subject to the ability of the dog and environmental effects.
Direction of Travel	This is the direction that the missing person has walked and the dog follows once they have taken scent from the article.
Displaced Start	The dog will be given a scent article in an area that there is no scent of that person. This is useful in training as the dog will give a clear 'No Scent' indication or negative very quickly.
Distance	The length of the trail usually in metres (this is important if you want to keep records and for assessment purposes and progression information).
Distraction	Anything along the trail that a dog encounters that could be more interesting than working the trail such as dropped food, wildlife, cats, other dogs, and the pee mail.
Disturbance	Something negative that disrupts a dog's concentration on working a trail; injury, lack of motivation, thirst, need a pee, sudden noises, sound phobia (gunshot fireworks, thunder) and fear responses e.g. dog is fearful of men etc.
Duration	The duration of a trail is how long the trail is measured in time elapsed whilst working it. A fresh straight trail of 200 metres would be worked in a shorter duration than an aged trail of 200 metres with several turns in it.
Encouragement	Individual dogs will sometime require encouragement to continue to work when they are struggling to locate the scent trail or when they are getting distracted or loosing focus, a simple good girl/boy should be sufficient when the handler knows they are back on the trail.
False Negative	The dog gives a negative indication despite the scent of the person whose scent was presented at the start being present.
False Positive	Where the dog follows a scent trail which is not that of the person whose scent object was presented to the dog at the start

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Find Command	A command that is given to the dog to direct him to start the search once he has taken scent from the scent item provided. The command word must be used consistently and only used in the context of mantrailing.
Firetrails	These are trails similar to Runaways which are used to motivate beginner and experienced dog alike. They are short in distance and unaged. With experienced dogs they may be used to boost the dog's motivation after a difficult or challenging trail so the dog finishes on a clear positive with a big reward and fuss.
Ground Scent	This is the scent that your dog can smell on the ground therefore will be close to the actual footsteps taken by the misper. Ground scenting is when a dog is following a trail on the ground (also known as trailing - mantrailing if it is human scent)
Guiding and Cueing (or accidental human to canine communication)	**Guiding** occurs for example where a handler consciously or unconsciously applies tension to a line to direct their dog into a chosen direction of travel e.g. by walking to the left or right of their dog rather than 'tucking in' directly behind the dog. Alternatively, it could where the handler allows a line to go slack when the dog is not following the trail. **Cueing** can for example occur where a dog interprets their handler's posture as a clue as to the correct and/or desired direction of travel. For example, you stand in front of a path at a crossroad and the dog thinks that path you are blocking cannot be the correct one. Most dogs recognise the meaning of an arm pointing in a direction and are smart enough to understand the importance of the spoken word such as 'good' or 'no' and some can understand 'left', 'right' and 'straight on'.
Half-moon Manoeuvre	This behaviour happens when a dog has over run and lost the scent trail and is seeking to reacquire the scent. Frequently observed at junctions or turns. Typically, they will walk in half a circle back on themselves which may also be a full circular sweep around the handler.
Harness	A harness suitable for an individual dog that is comfortable with a line attachment available on mid to lower back. Fluorescent strips and lights can be attached to harness for safety when working in the dark and near roads.
Head Snap	This is an abrupt movement of the dog's head and may occur during a scent inventory, when working a trail or when the dog is near to the missing person. It indicates that the dog has registered a scent of possible interest and the handler should remember it for later use for example where a negative or loss of scent indication is given shortly afterwards.

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Hunting	A term used in mantrailing to describe the body language of a dog that has 'lost' the scent trail and may be attempting to reacquire it. Distinct from 'trailing behaviour', 'hunting behaviour' will have no consistent direction of travel, no consistent speed or tension on the line and the head may be held up higher than when trailing as though the dog is trying to 'see' the trail. Note: Proximity Alert behaviour may appear similar.
Jumped Trail	On this occasion a dog displays great trailing behaviour/body language from a start point - it just *happens* to be the wrong trail. Mis-trailing can affect dogs of wide experience or none, although experienced dogs and handlers should be less prone to it. It is sometimes called a 'Jump Trail' and is distinct from a Lost Track or wrong turning during a trail. Explanations for a jumped trail focus around scent pools, weak scent taking by the dog team and/or the coincidental presence of either a fresher human scent trail or a higher value animal trail leading away from the PLS that grabs the dog's focus instead of the target.
Junctions	Any change in direction for the misper will be a junction (see also Turns) and in many cases the scent will be dragged down wind and not necessarily in the new direction for an indeterminate distance. If this happens the dog should eventually then give a clear negative indication before doubling back to where trailing behaviour was last seen and working out the correct direction at the junction.
Line Handling	Line handling is an important part of Mantrailing and needs to be continually practiced to ensure a safe and effective working relationship between handler and dog. Safety is the key not only for the dog and handler but also for the support team and members of the public.
Line Work Exercises	Exercises for the handler to work with the long lead to enable a better connection when working with the dog and to help with safety issues for themselves and others !!
Locard's Exchange Principle	Edmond Locard was a French forensic scientist who in 1934 established that when there is contact between two objects (for example a misper's foot and the ground or a misper's hand and a door handle) there will be an exchange of particles, which for mantrailing means that wherever the misper moves they will leave a trace of themselves which could (subject to environmental factors) be used by the dog to locate them.
Lost Scent	This is when the dog has lost the scent trail and will show a variety of behaviours whilst looking for the trail.

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Mantrailing	Mantrailing is when a dog is following a specific human scent trail from scent that is mainly on the ground but also following the rafts. The dog will be on a harness and long leash and will work closely with the handler to find a missing person (Misper)
Misper	Misper is an abbreviation used for missing person, (used in the police force and many search and rescue teams). In training, we use this term for the person who is hiding for the dogs.
Motivational Exercises	Short games with motivational rewards to help to motivate the dog if it appears to be losing interest in trailing. Fire trails are often used as motivational exercises.
Motivational Food	A treat or small meal that can be used in training as a reward that really excites the dog to want to work for it.
Motivational toy	A toy that can be used in training as a reward that really excites the dog to want to work for it.
Negative Indication	This is body language that the dog displays when the scent weakens and/or stops, for example where the dog has overshot a turn taken by the misper. An experienced dog will self-task to relocate the scent trail but a less experienced dog may be frustrated and look to the handler for help or alert to try and "finish the game". (See also no scent indication).
No Scent Indication	This is a trained behaviour where a dog will by its body language indicate to the handler that the scent of the misper is not present at a location or is no longer present. For example, the PLS may be incorrect in that the misper hasn't been there or the scent article presented to the dog does not belong to the misper. Also, it can mean that the misper's trail ends at the point, for example they boarded a bus or train or where picked up in a car. Frequently the dog will attempt to find or require the scent before stopping, appearing confused, sitting or lying down or even staring/barking at the handler.
Odour	See Scent (Human)
Passive Identification	This is the preferred style of alert for a dog to give at the correct misper. It is generally advised when training search dogs that when they alert on the misper this alert is in a calm/non-intrusive manner. This is to ensure that the misper does not get frightened by the dog and that the handler does not alarm the misper either.

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Place Last Seen	A term used in search and rescue to denote where a misper was last seen to be by a witness e.g. at home, at a bus stop, sitting on a park bench etc... Often abbreviated as 'PLS'. This is usually the start point for an operational search. Also sometimes called Point Last Seen.
Proximity Alert	When close to a misper at the end of a trail the dog may change search behaviour often bringing its head up from the ground to take air scent. The dog may alert the owner/cycle/bark and behave excitedly. They may not be able to pinpoint where the misper is as they are detecting the edge of the scent pool. This is when the handler and dog need to work together to work to enable the dog to find and finish his game.
Questing	Visible behaviour by a dog that is actively seeking or looking for a scent. Most commonly observed in Spaniels, the dog will be seen to be aroused and moving rapidly from side to side across the ground with its head down, often accompanied by audible sniffing.
Rafts	In context with scent, a raft is the characteristic of the individual. This raft will carry minute particles of skin that has been shed along with bacteria and body secretions, enshrouded by vapour in a little cloud specific to one individual.
Reward	It's the dog's motivational prize for finding the misper. The reward can be a toy or food whatever motivates the individual dog the most.
Runaways *-Seen* *-Semi-seen* *-Unseen*	These are the foundation trails that dogs first do when starting mantrailing. They are all fresh (unaged), typically less than 50 metres and are used to encourage the dog to learn the game of mantrailing by achieving quick positive results and rewards. These three grades of runaway are: ***seen*** where the dog sees the misper leave the start point and where they hide, ***semi-seen*** where the dog sees the misper leave but is unable to see where or how far away they hide and finally, ***unseen*** where the dog does not witness the misper's departure (direction of travel) nor where they hide.
Scent (Human) NB There is no clear definition between Scent, Smell, and Odour, much depends on which dictionary is used.	Human scent is a bacterial, cellular, and vaporous debris, enshrouding an individual. Each individual is encased in his/her own personal "cloud" sections of which are constantly drifting and blowing off. Some of these settle on the ground or surrounding surfaces – trees, plants, buildings etc. **Aged scent:** a scent trail that someone has walked more than 20 minutes previously or hours/days previously **Fresh scent:** a scent trail that has just been walked and dog is set to follow immediately

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	NB A dog will instinctively follow fresher scent first if they have a choice of aged and fresh.
Scent Article	An article used to enable the dog to take the scent of the person who is to be the missing person (misper). This may be a large article such as a coat for a novice dog to a small gauze scented by the misper or item of personal property taken from the misper such as keys or drinks bottle for an experienced dog.
Scent Cone	A scent cone (also known as a Scent Plume) is the movement of scent away from misper in the shape of a 'cone' down wind. The size of such a cone is increased when the misper is high up as on a building or in a tree. The rafts travel long distances with a solid breeze. In still conditions the cone is replaced by a pool of scent spread evenly around the stationary misper.
Scent Discrimination	Particular scent exercises that help the dog to learn to discriminate one human scent from another. One example would be for a dog to follow a trail that ends at a bus stop where other people are also standing. The dog must only alert the handler on the person whose scent he has been following and ignore the other people.
Scent Exercises	Tasks and exercises that focus on following or discriminating scent. Usually brief and with a short length of any trail associated with the exercise.
Scent Inventory	This is used at the PLS as a means for the dog to familiarise itself with a location and the scent present prior to starting trailing. Usually done 'informally' on leash before harness or line are attached to the dog or a scent article is presented, dog and handler deliberately walk a roughly circular route around the place last seen paying attention to obvious exit paths and routes through which the misper probably passed. The dog also deliberately takes the scent of all people at the PLS such as relatives of the misper, police and other helpers. Once completed the dog is harnessed and given the scent item and commanded to find. The handler initially remains still and using the line waits before moving for the dog to establish a direction of travel away from PLS.

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Scent Plume	A scent plume (also known as a Scent Cone) is the movement of scent away from misper in the shape of a 'plume' or 'cone' downwind. The size of such a plume is increased when the misper is high up as on a building or in a tree. The rafts travel long distances with a solid breeze. In still conditions the plume is replaced by a pool of scent spread evenly around the stationary misper.
Scent Pool	Scent rafts collect in an area like a pool of water. This usually occurs in a low area. It occurs where there is little dispersal of scent by the wind. It can be challenging for dog to follow a misper's trail out of a scent pool such as where the misper has remained stationary for a sometime as on a bench before moving away again.
Six Points of Trailing Dog Body Posture	This is a structured method for analysing and interpreting the body language that a dog displays when mantrailing. The six points are Head/Ears, Body, Tail, Direction, Line Tension and Focus.
Snagging Line	Sharp jerks on the line or wrapping the line around hazards such as vegetation and trees will cause this and may stop a dog from working or distract them from the trail.
Snaking	Sinuous body movement by a dog 'like a snake slithering in motion' often occurs when a dog is unsure of trail direction.
Surface Transitions	This is the different ground surfaces the trail has covered, i.e. sand, soil, grassy areas, tarmac, rocks, sand, pebbles, main roads, paving etc. In training trails will be laid to deliberately change the surface the dog is working on as different surfaces retain and propagate scent in different ways.
Take Scent Command	A command given to a dog when he is taking scent from an article to work with to follow a trail. This command should be given only at the time the article is given and should be only used as a command in the context of mantrailing.
Three Second Rule	A dog actively working a scent trail will occasionally stop briefly to locate target scent from an object or location such as tuffs of grass or shady areas on hot days. However, dogs are also often distracted by non-target scents such as discarded human food, urine marking by other dogs or wildlife cross trails. This non-target scent focus can be easily identified with experience by the handler and a rule of thumb is that a dog should be allowed to 'pause' on a trail for no more than 3 seconds before being deliberately told to work

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	on so as to maintain the momentum of the search and discourage a dog deciding to self-reward with a tasty scent now rather than working on to collect its reward later at the end of the trail.
Tracking	A tracking dog should indicate almost each and every step of the misper and should not vary more than 1 or 2 feet from these footsteps despite the wind conditions. The dog will characteristically be in a head down posture, sniffing the ground for the evidence. Bloodhounds are the traditional image of tracking.
Trailing	A Trailing dog is orientated to the rafts that have fallen to the ground along a person's route. These dogs may well be working some distance from the actual footsteps and may stop and sniff leaves and other vegetation. They may well be working some distance from the actual footsteps on the opposite side of the road or outer boundary and then go back covering a much wider area than tracking.
Training Line	A long leash or lead approximately 8-10 metres attached to the harness and held by the handler.
Turns	Turns in a trail are where the misper laying the trail changes direction (e.g. turning from heading south to heading east instead) and are important when training and an opportunity to monitor the dogs body language especially at junctions. Turns should also be practised across country where there is no obvious junction. The absence of a visual cue will test the accuracy of dog and handler at following the scent rather than the paths in the area.
Working Scent	When your dog is on the scent trail i.e. working the scent trail left by the misper.
Yerkes Dodson Law	This law describes how a human's performance increases with physiological or mental arousal but only up to a point - beyond which the relationship is reversed and performance declines with greater arousal. A mantrailing dog is believed to respond in a similar way to arousal so that a dog that is highly aroused (perhaps by the close proximity of wildlife) is unlikely to be an effective search dog. This law can be illustrated by a bell-shaped curve.

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