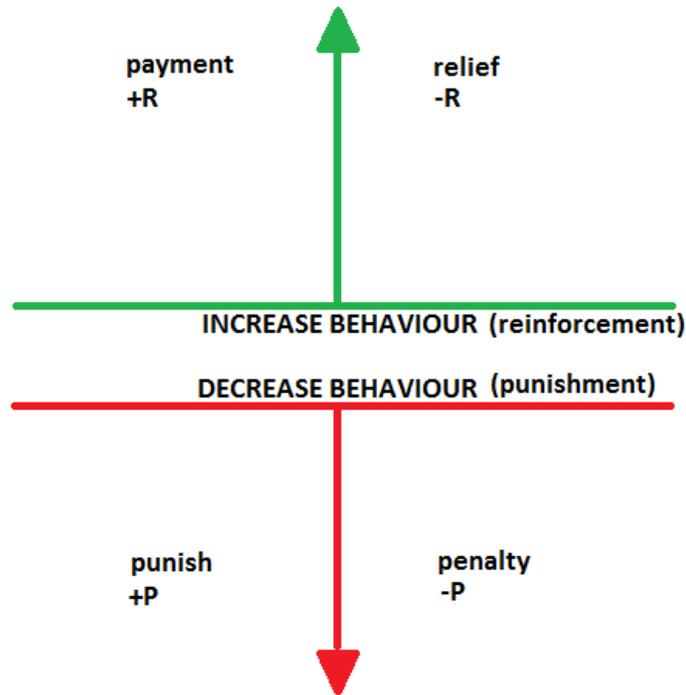# SAT
SNAKE AVOIDANCE TRAINING FOR DOGS

Can Snake Avoidance be achieved using "force-free" or "reward-based" methods?

To answer this question, the quadrants of reinforcement and punishment need to be understood.

Reinforcement and Punishment are the core tools through which behaviour is modified. These terms are defined by their effect on behaviour.

Using the above diagram which is universally acknowledged as true science, we can see that behaviour is decreased by using +P or –P, which is to punish or deliver a penalty.

In Snake Avoidance, are we attempting to increase, or decrease a particular behaviour? In fact, we are trying to persuade a dog to decrease its behaviour of engaging/investigating snakes.

From our core tools we need to select a tool that decreases behaviour. This leaves us with +P and – P.

Both of these tools have strengths and weaknesses.

The use of +P (Punishment)

Strength: Positive punishment is not dependent on a dog's desire to obtain a reward, or by the dog's state of drive (emotional arousal).

When the consequence is understood, there is no requirement for handler presence. The dog no longer exhibits the behaviour due to the consequence.

Weakness: Positive punishment can be emotionally taxing on a dog as there is a level of physical discomfort. Expertise in canine behaviour & temperament and in the delivery of Positive punishment is essential to deliver the correct timing and more importantly, the correct dosage of punishment. The dog's emotional state must be constantly assessed and tested after each correction.

Each dog has its own temperament and the temperament dictates the duration of training that can be delivered in a single session.

If applied incorrectly, the dog can draw inaccurate conclusions about the source or cause of the punishment

Positive punishment is politically controversial to some.

The use of – P (Penalty)

Strength: No physical discomfort.
Politically correct.

Weakness: The dog must currently desire the reward being offered.
The dog's unwanted behaviour must be occurring in an attempt to obtain the reward offered.

Since only +P (Punishment) and –P (Penalty) are suitable for reducing behaviour, the one which is applicable should be used.

-P Penalty cannot be used as the moment a live snake appears, the dog's desire immediately shifts away from the reward being offered and focuses only on the snake. Withholding what the dog no longer wants is ineffective. The dog has chosen to totally disregard the reward offered.

+P Punishment must be used since when it is applied, the dog's desire for the snake immediately ceases. Since the snake is no longer attractive to the dog, the dog can only now shift its focus back to the reward being offered.

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In an attempt to avoid using +P (Punishment) some have tried utilizing a technique called Differential Reinforcement. This technique has strengths and weaknesses also.

Differential Reinforcement

Differential reinforcement is a type of management technique that engages a dog in an activity to distract the dog from unwanted behaviour. The idea being that if the dog is engaged with some other activity it is not engaging with a snake.

Strengths: As the dog is not being punished in any way, this technique serves to preserve the currently unwanted behaviour. This is important in situations where a dog may later be required to engage in the currently unwanted behaviour, e.g. sheep-herding.

Weakness: The unwanted behaviour is preserved.
Constant handler presence is essential.
The dog must currently desire the reward being offered

Differential reinforcement cannot be used for Snake Avoidance due to the fact that the vast majority of dogs prefer the snake to any reward being offered. Furthermore this training simply serves to preserve the snake-engaging behaviour.

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Conclusion

The best method of snake avoidance training should not be reliant on a single core tool.
To be successful multiple tools should be employed together in harmonious cooperation to discourage snake engaging behaviour while rewarding the alternative desirable behaviour.

When the dog approaches the snake, it receives a correction. The dog quickly backs away from the snake (source of discomfort) and for this receives food/praise. After rewarding/praising the desired response, our trainer becomes neutral to allow the dogs' attention to refocus on the snake thus permitting the dog to make another decision. The dog quickly learns what behaviour causes an unpleasant consequence to occur and which behaviour maintains its own physical comfort and even brings additional rewards.

The discovery of a snake becomes a non-verbal cue to perform a behaviour:

•   Walk away
•   Stop and remain still
•   Return to handler

It is important to remember:
A dog can't be punished for a behaviour it did not do. A dog can't be rewarded for a behaviour it did not do.

While it may appear to some that the dog is being rewarded for NOT engaging the snake, this is not what's occurring. The dog is, in fact, being rewarded for displaying a desired behaviour, for example returning to and focusing on the handler.

Alternative correction equipment

"Many years ago, in an attempt to preserve my electric collar for reward based applications I employed a vast range of alternative correction equipment. The air horn was one such piece of equipment utilized.

Due to the fact that some dogs found the noise invigorating, exciting and enjoyable, I had to have an electric collar ready on standby to 'step in' and take over the role as the correction tool if the air horn failed.

The air horn is ineffective in the majority of cases however success was achieved in approximately 35% of dogs.

The air horn while startling to some dogs, is actually rewarding to others.
It is not the trainer or an ethics committee who decide if a stimulus is unpleasant or enjoyable...it is the dog itself." – Seth Pywell

Startle response
https://youtu.be/Vbg707Dq2U8

Invigorating response
https://youtu.be/30rwHAB84QI

Unusual response
https://youtu.be/seOuPQ2ekGc