

Helping companion animals with noise phobia

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Sound-related fears and phobias are common in companion animals, with 49% of dog owners reporting their pet is frightened of loud noises (Blackwell et al, 2005).



A den is an ideal refuge from loud noises such as fireworks.

However, many owners consider the problem to be mainly associated with fireworks and, consequently, seasonal. Few realise this problem gets worse over time.

Also, owners do not fully appreciate the implications of failing to prevent, manage and treat sound sensitivities.

Although sound sensitivity is accepted as common in dogs, it is rarely reported in cats (Levine, 2009).

An acute sense of hearing is vital to the survival of mammals and birds – enabling detection, orientation and immediate escape from potential threats (Carlson, 2004). So it is reasonable to assume sensitivity to novel, loud or sudden sounds is common to all companion animals.

The under-reported nature of sound sensitivity in companion species other than the dog is probably linked to the way they try to cope with exposures.

Dogs will seek their owners' company, making their distress more obvious. Cats and other species are more likely to try to run from the sound and/or hide. As a result, their distress is often unobserved.

However, 60% of owners with sound-sensitive pets report no previous traumatic experience linked to sounds. This suggests natural sensitisation plays a considerable role in the problem (Levine, 2009).

Sensitivity and distress

Sudden, novel or loud noises initiate stress and an unconscious response to escape before there is time for a cognitive assessment of the threat (Carlson, 2004). This leads to anxiety in all companion animal species.

The cat is particularly likely to suffer anxiety on repeated exposure, as its first response is flight – leaving it little opportunity for gradual desensitisation. Other species that use flight as their primary response to threat are likely to encounter similar difficulties.

Animals that stay in range of the sound, through social affiliation with other animals or being unable to escape, can develop negative associations – fear. This, through conditioning to other predictive environmental clues, may generalise to a range of domestic situations that reduce its capacity to engage with its environment – phobia (Bowen, 2007).

This learning of predictive clues is particularly debilitating for animals (Overall, 2002). Everyday noises similar to the sound of thunder, gunshots or fireworks (such as gas boilers switching on, the crackling of wood in a log burner, the popping of bubble-wrap or items cooking in a microwave) soon become phobic stimuli.

It can further generalise until the sound sensitivity starts to invade the animal's capacity to cope (Bowen, 2007).

Such developments can occur at any age, but some animals are predisposed to sound sensitivity.

They include animals that have experienced fewer opportunities for socialisation and thorough habituation (Hunthausen, 2009; Seksel, 2009), those with medical problems enhancing sensitivity of the sensory systems (Mills et al, 2013), older animals (Blackwell, 2005; Landsberg and Danenberg, 2009) and pets with separation issues (Overall, 2002).

Conversely, puppies born in the UK shortly before the autumn firework season have been shown to be less susceptible to sound sensitivity (Blackwell et al, 2005).

Prevent sensitivities

Although it's impossible to prepare a companion animal for every sensitising sound it will meet, the more effort put in to early socialisation and habituation the better (Hunthausen, 2009; Seksel, 2009).

A considerable responsibility is placed on the veterinary team to ensure breeders are gently exposing puppies to domestic and more occasional sounds, using CDs. This learning should continue once the puppy joins its new home.

However, many owners don't realise a sudden and excessive exposure to a previously habituated noise can result in stress and dishabituation, followed by sensitisation (Mills et al, 2013). As a result, it's important learning is regularly revised throughout the animal's life.

Short-term management



Animals must always have access to safe places, such as dens.

Owners and veterinary staff must ensure sound management is appropriate during predictable events such as firework, shooting and thunder seasons.

The animal's main concern will be to reach a safe environment to minimise exposure (Bowen, 2007), so any attempts to seek a safe hideout should be enabled. Prevention may cause panic and, potentially, an owner injury (Overall, 2002).

To create a safe place:

- Identify the location at least two weeks before the event and make sure it is used. Provide pheromone support close to the den. For small animals kept outside, cages should be surrounded by noise-absorbing material such as bales of straw or hay. Cats will also need a litter tray close by.
- Secure doors and cat flaps. Keep water and food bowls in the room with the safe place.
- Ensure owners understand the welfare problems associated with punishment of their pet's coping strategies (for example, pacing, digging or whining) and ensure they appreciate the need to provide company, but not attention.

- Owners should remain upbeat about external noises, but otherwise ignore them.
- Close windows and darken rooms at dusk, closing curtains and blinds. Undertake toileting activity with dogs on a lead if necessary to prevent bolting.
- Don't close doors leading to the safe place – it must be accessible.
- Background noise such as the television or radio can disguise flashes and bangs – but don't have the volume much louder than usual as this may create stress.
- Favourite chews, puzzle toys and companions can create distractions for dogs. If the animal has been loath to adopt a safe place, provide blankets (to dig into) and boxes (to hide in).
- Gently and quietly reward any signs of coping (for example, leaving the den). Use a favourite treat or game.

Some owners say their pet fails to cope despite using the above regime. This does not mean the provisions are not working; it indicates the animal's distress has reached a more serious level.

Such dogs will benefit from pharmaceutical support from anxiolytics, such as benzodiazepines (Overall, 2013). However, medication should be trialled several weeks before a predicted event as this may not be ideal for all dogs.

Owners must also be warned the medication will not prevent their dog from engaging its natural coping strategies; if it usually paces or whines, it may continue to do so (Bowen and Heath, 2005).

Recognise potential for suffering

If animals receive the right preparation and protection from predictable loud noises they are unlikely to experience levels of exposure they fail to cope with.

However, if an animal's predictive and avoidance strategies fail – for example, an inability to engage in avoidance strategies – then coping will fail (Mills et al, 2013). The likely result is fear.

The innate need for generalisation will then affect everyday routines and potentially develop into a phobia (Bowen, 2007). Such animals will learn to predict cues a fear-inducing event may occur.

For animals sensitised to fireworks, many will start showing signs of distress at twilight or near olfactory cues such as bonfires.

Such animals may refuse to go out after dark or refuse to go to certain places (Overall, 2002). They may become increasingly resistant and aggressive if owners approach them with leads at such times.

Animals that experience initial, highly sensitising events while alone in the home may become highly distressed and potentially destructive when left in the environment by owners.

However, the factors affecting such problems may go unnoticed or be considered insignificant by owners until a phobia has developed.

Owners need help from the veterinary team to recognise simple issues, such as accidentally closing a door that enables access to a safe place, may have serious welfare implications.

Companion animals have no control over their exposure to sensitising stimuli unless owners enable that control.

Owners must recognise the danger posed by a stressor is wholly dependent on their pet's interpretation of the situation – it has nothing to do with how the owner perceives it.

Owners can identify dogs requiring specific support by using the online sound sensitivity questionnaire, designed by Jon Bowen and Jaume Fatjo, launched by CEVA Animal Health in 2012 (Bowen, 2014).

Treatment



Plug-in diffusers can help animals stay calm.

Owner commitment to supporting the pet is long-term.

Treatment involves behaviour modification, in the form of desensitisation, and counter-conditioning. It is likely many will also require pharmacological support.

Behaviour modification will aim to desensitise the pet by identifying the negative stimuli. Through repeated, neutral presentations at gradually increasing levels, it will aim to reduce the emotional effect to one of minimal reaction (Bowen and Heath, 2005).

Dogs adapt quite well to this technique when used on static and unchanging stimuli. But fireworks are neither of these, so recordings must be used to break down the component sounds of whistles, whooshes, pops and bangs as well as full displays.

Exposure needs to be in a non-stressful environment where the animal can remain calm (Overall, 2013). The initial exposure level should be barely salient – just the slight movement of the pinna of the ear should indicate awareness. If the animal lifts its head or looks towards the source of the sound, the volume is too great.

However, desensitisation will only result in emotional neutrality and does not prevent distress on exposure (Bowen, 2007).

Counter-conditioning is the essential second part of the treatment, replacing the previous negative response as the animal learns the sound is a positive emotional state (Overall, 2002).

During this part of the treatment the stimulus is repeatedly linked to a positive outcome, such as food or play.

Once again, the nature of the sound and the way the stimulus is built up is important to the success of the treatment and few of the CDs marketed meet these criteria.

The process takes a long time and owners need support from their veterinary team or a clinical animal behaviourist to ensure progress.

Pharmaceutical support

Many animals will be too fearful of fireworks for owners to initiate behavioural modification, due to an inability to find a starting volume sufficiently low.

Others will require medication as events occur, during or before behavioural change, or because the animal is cognitively impaired/unwell and may not be able to reach a safe place during exposures (Overall, 2013).

Short-term medical support (such as benzodiazepines) will reduce the emotional response to predicted events and, if used shortly after unexpected noises, will limit their effect and prevent a potential relapse (Overall, 2013).

It should be noted some medications previously considered appropriate for short-term use (for example, acetylpromazine) will exacerbate fears so should not be used (Bowen and Heath, 2005).

Long-term treatments will reduce emotional sensitivity, increase confidence and prevent the condition getting worse, improving the animal's quality of life.

Most commonly used are selective serotonin reuptake inhibitors (Overall, 2013), with advice about a delay in onset of activity and the need for regular health and bio-chemical assessments.

Pheromone therapy

Access to synthetic analogues of pheromones, normally associated by the animal with security and familiarity, will significantly enhance its capacity to cope.

Provision close to the safe place may prevent problems developing (Mills et al, 2013), but it is unlikely to treat existing problems.

Despite this, provision of suitable pheromone products will enhance an animal's capacity to adopt an emotional state to begin desensitisation and counter-conditioning.

Conclusion

Sound sensitivity is highly adaptive across companion animal species, and veterinary staff and owners should assume pets are sensitive to novel, loud or sudden noises.

Consequently, educating owners about the welfare implications of failing to guard against exposure should become a veterinary priority that is not confined to annual attention each November.

Useful contacts

- [Animal Behaviour and Training Council](#)
- [Association for the Study of Animal Behaviour: certified clinical animal behaviourists](#)
- [Association of Pet Behaviour Counsellors](#)
- CEVA Animal Health sound sensitivity questionnaire
- [Sound Therapy for Pets](#), available through Dogs Trust

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