

Protocol for teaching your dog to take a deep breath and use other biofeedback methods as part of relaxation

Dogs, like humans, cannot learn new behaviors if they are distressed. In fact, we all best produce the needed brain chemicals to make lasting memory if we are attentive enough to watch carefully but not so attentive that we are overly concerned. Most dogs about whom clients are concerned and/or who have truly pathological behavior are not calm enough to learn and use new information, especially if part of that information is learning to be calm.

The purpose of this short handout is to teach you how to teach your dog to take a deep breath and how to use other biofeedback tools to prepare your dog to relax so that the dog can learn how to change his behavior in a way that makes everyone happier.

The 3 important signaling tools used here that involve biofeedback are:

- “look”,
- “breathe”,
- petting a dog in a manner that avoids unhelpful arousal and encourages useful focus.

These 3 signaling tools are demonstrated in the video, *Humane Behavioral Care for Dogs: Problem Prevention and Treatment*.

“Look”

You will make the most progress with your dog if you work with this protocol together with the other 2 foundation behavior modification programs, the **Protocol for relaxation: behavior modification tier 1**, and the **Protocol for deference**. Both of these protocols require that your dog “look” – meaning look at and – preferably - make eye contact with you and work best if your dog can hold his breath for a second or two .

Teaching “look”:

1. First, you want to couple your dog’s attention to the word when giving the dog a food reward. Start by holding the treat in your hand with fingers closed, palm up, and then opening the hand to deliver the treat. The open hand prevents shying in some fiercely treated dogs and also promotes treat delivery that is gentle for the human. Your first step in teaching deep breathing may be to teach the dog to take a treat calmly. Feel free to get professional help with teaching this. You will need to ensure that you are not triggering any signs of anxiety, as this will not help the dog to be calm (See **Box1**).

Box 1: Non-specific signs of anxiety

- Urination
- Defecation
- Anal sac expression
- Panting

- Increased respirator and heart rates
- Trembling/shaking*
- Muscle rigidity (usually with tremors)
- Lip licking
- Nose licking
- Grimace (retraction of lips)
- Head shaking
- Smacking or popping lips/jaws together
- Salivation/hypersalivation
- Vocalization (excessive and/or out of context)
 - Frequently repetitive sounds, including high pitched whines*, like those associated with associated with isolation (see Yin and McCowan, 2004).
- Yawning
- Immobility/freezing or profoundly decreased activity
- Pacing and profoundly increased activity
- Hiding or hiding attempts
- Escaping or escape attempts
- Body language of social disengagement (turning head or body away from signaler)
- Lowering of head and neck
- Inability to meet a direct gaze
- Staring at some middle distance
- Body posture lower (in fear, the body is extremely lowered and tail tucked)
- Ears lowered and possibly droopy because of changes in facial muscle tone
- Mydriasis
- Scanning
- Hyper-vigilance/hyper-alertness (may only be noticed when touch or interrupt dog or cat – may hyper-react to stimuli that otherwise would not elicit this reaction)

- Shifting legs
- Lifting paw in an intention movement
- Increased closeness to preferred associates
- Decrease closeness to preferred associates
- Profound alterations in eating and drinking (acute stress is usually associated with decreases in appetite and thirst, chronic stress is often associated with increases)
- Increased grooming, possibly with self-mutilation
- Decreased grooming
- Possible appearance of ritualized or repetitive activities
- Changes in other behaviors including increased reactivity and increased aggressiveness (may be non-specific)

**The most commonly recognized signs of anxiety identified via questionnaire by clients.*

2. So, start by giving the dog a treat so that he knows what the reward is and so that you can be sure the dog loves the treat. Remember, dogs work best for information about expectations. A really good treat tells them that their work with you will be appropriately rewarded.
3. Once you are sure that your dog likes the treat, take the treat in your hand, close your fingers over the treat so that only your fingers – not the treat - show and move it to your eye. See photos 1 and 2.



Photo 1: Fingers closed over treat in hand



Photo 2: Distance to stand from the dog (*Picasso*) with the dog looking at a closed hand that is held near your eye.

4. When you get the treat to your eye, say “look”.
5. As soon as the dog looks at your eyes, however briefly, tell him he is great and quickly move your hand with the treat down and open it flat under their chin so that he can have the treat.
6. Then, continue to practice the sequence above where you reward eye contact with the treat to further promote the coupling of the word “look” to actually looking up to your eye.
7. Next, reward better eye contact with a signal that draws the dog’s attention to the human’s eye (e.g., moving a finger to the eye while saying ‘look’). You can do this by hiding the food behind your curled index finger and thumb so that your dog is watching your finger and not the food. This action helps dogs to follow a target – your finger – not a lure – the treat. See photo 3.



Photo 3: Fingers hiding treat brought to eye

8. Ideally and ultimately, your dog should be able to respond to the non-verbal signal AND to sit and relax when he or she sees the client's finger go to their eye. It takes practice to get this amount of progress but it's achievable within a few practice sessions. See photo 4.



Photo 4: *Picasso* sitting and looking with relaxed face

9. Finally, as soon as you say the dog's name and begin to move your finger to your eye, your dog should sit and look at you.

Really smart dogs figure out that since we are working with deferential behaviors, every time you say their name they will look at you and if you are close to them they will sit. This is a desirable outcome because it means you are meeting their needs for information

and you are communicating well.

Please note: If you are using these instructions for teaching ‘look’ and ‘breathe’ so that you can begin the **Protocol for relaxation: behavior modification tier 1**, please go slowly until you are sure that the dog responds as described above. *It is very easy to teach dogs to be obedient but more anxious if you rush any of these programs.*

The single biggest mistake that clients make in working with true behavior modification is that they move through the process too rapidly without paying attention to the dog’s signals about whether he is calm, scared, or simply overwhelmed. It’s best to pretend that all dogs have special needs and go slowly.....there is no cost to going slowly enough so that the dog is always rewarded for clearly showing you they are calm and attentive.

On the other hand, *there is a huge cost in confusion and anxiety on the dog’s part* - and frustration on the human’s part – when the human goes too fast for that dog’s particular comfort level. Frequent, short sessions are preferable to long, drawn-out sessions for both the client and dog. Working for a few minutes 4-5 times a day actually may help the dog to learn and use the behaviors better than would 1-2 long sessions. This work schedule also allows everyone to incorporate the behavior mod into everyday life.

“Breathe”

Heart rate, attentiveness and respiratory rate are all linked. If we can teach a human or a dog to take slower, deeper breaths, they relax, their heart rate decreases, and they can be more attentive to focusing on the task at hand. These responses are all coupled to changes in hormonal and other chemical signals that shift the brain’s and body’s reactivity from a system ready to act on a threat to one ready to focus on learning, not reacting.

The first step for dogs is to teach them to hold their breath as a way to learn deep breathing and focus.

The trick to getting this to work is to teach the dog to breathe deeply and to incorporate this breathing into all encouraged deferential behaviors. Understanding how dogs breathe will help in understanding how we can teach them to hold their breath.

Dogs cannot simultaneously pant and smell or breathe through their nose, and they have alar folds/flaps on the sides of their nose that move up and out when they take a deep breath. This means that you can use the movement of these folds – the dilation of the nostrils – to indicate and confirm when the dog is holding his or her breath. With small or thin and short-coated dogs you can also watch the ribcage to see if the rate at which it moves, slows. The steps are as follows.

1. You can start to teach the dog to take a deep breath by asking the dog to sit and “look” at you for a food treat, as explained above. See photo 5.



Photo 5: *Picasso* sitting and looking as he is beginning to relax and take a deep breathe

2. Next, as you quickly move the treat from your eye region (where it is hidden in your curled finger) and while the dog makes eye contact with you, stop moving your a few cm in front of the dog's nose without giving the treat. Say the word 'breathe'. See photo 6. *If your dog is reactive or aggressive when food is available, you will want to watch carefully here to ensure that the dog remains calm. If the dog becomes more agitated, you will benefit from working with a professional (a trained, certified dog trainer or trained veterinary professional who uses only force-free techniques – see the Pet Professional Guild site for information: <http://www.petprofessionalguild.com/>) who can help you to desensitize the dog to food moving towards his nose.* If your dog doesn't know how to take food without grabbing it and is overly enthusiastic, but not aggressive, if you don't give the dog the treat until they stop grabbing for it, the dog will learn not to grab.

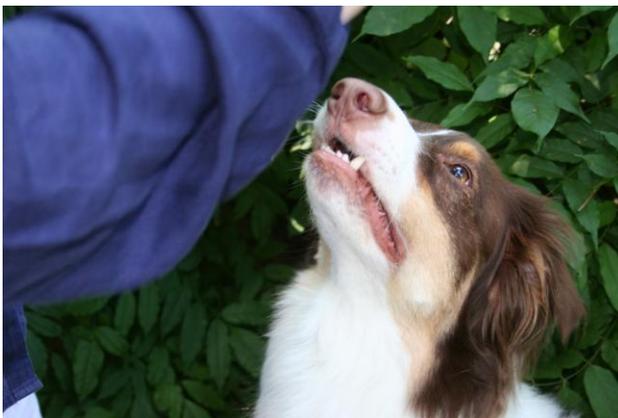


Photo 6: Changes in *Picasso's* mouth and nose as the treat is lowered to his face and he inhales

3. The dog's nostrils will usually flare as he smells the treat, and because he cannot sniff something and pant at the same time, the dog will hold his or her breath. See photo 7.



Photo 7: Nostrils begin to flare as *Picasso* closes mouth and inhales in response to the request 'breathe'

4. As soon as you see that the dog has held his breath and/or flared his nostrils, immediately deliver the treat with the phrase 'good breathe, *Picasso**'. See photos 8 and 9. If your dog does not flare his nostrils you will have to shape the flare. Simply reward any movement of the nostrils at first. Then reward them only when the nostril is larger. Then, move towards only rewarding larger, flared nostrils once they are held still, round and open. Most dogs can figure this out in a few minutes, but the changes can be hard to see. By only using positive rewards in this activity, mistakes are recoverable and it's okay that both the human and the dog are learning.



Photo 8: Deeper breath with flare of sides of nostrils

* Picasso is the name of the dog in the photos; you should use your dog's name.



Photo 9: Deep breath and fully flared nostrils

5. Practice this for a few minutes until you are certain that you know what you are looking for and that your dog is giving it to you. It can be difficult to see nostril flares in dark faced dogs, but once you learn what a nostril flare looks like on your dog, you will know it.
6. As your dog gets better at responding to the 'breathe' request, start to delay the provisioning of the treat a few seconds at a time.
7. Within a short while you will have a dog who holds his breath and slows his heart and respiratory rate, and so becomes more focused and relaxed. If you only reward the most focused and relaxed states, your dog will come along quite nicely.

It does not usually take more than 5 minutes to teach a dog to hold his or her breath, even if the dog is very hairy, making the nose tough to see (Photo 10) or the nose is dark (Photo 11), but it may take longer for you to recognize and encourage the behavior. You will need to be observant and quick, and not linger with presenting the food as an olfactory stimulus.



Photos 10 and 11: Naïve dogs being taught to 'breathe' and flare their nostrils. Very hairy faces (Photo 10) and dark noses (Photo 11) often make it a bit harder for people to see the nostrils move, but veterinarians in this laboratory class had no difficulty.

If you videotape yourself you will learn to teach the dog to take a deep breath upon request because you will see when the dog takes a breath and learn to look for the associated behaviors in your dog.

Here is a Youtube link that will help you to see how breathing and relaxation can help: <http://www.youtube.com/watch?v=DIxELL4FkWI> . This video was made by a client who taught the technique to her dog, and here he is using it to calm himself when she is not available to give him cues.

How to pet a thoughtful dog

Finally, people pet their dogs, but few calm them by petting them. In fact, people usually arouse their dogs when petting them by petting in quick, short strokes all over the dog's head, face and shoulders.

Instead, if we want a thoughtful, calm dog who looks to us for information that is helpful to him, we need to replace conventional petting with long, slow strokes, deep muscle pressure, and massage.

“Smart-pet” instructions:

1. To start, the next time you touch your dog, don't move your hand. Instead, touch him and press firmly but gently. Most dogs will move into your hand.
2. Then, gradually, using constant, gentle pressure, move your hand from his head, down his neck and slowly down your dog's spine. If you move too quickly to be able to identify and count the vertebrae (back bones) you are going too fast (or the dog is too plump).
3. Then press and massage the front of your dog's chest in a circular motion. Concentrate on the area just above where the front legs attach. Use one hand at first until you get used to slow, firm pressure. Slowly extend your circular massage movements to the dog's shoulders and neck and work your way back down the dog.
4. The dog will relax if he is not worried about you (see Photo 12), there have been no traumatic handling experiences, and the dog has no painful conditions.



Photo 12: Puppy after being petted and massaged slowly.

These “smart-pet” instructions are demonstrated in the video, *Humane Behavioral Care for Dogs: Problem Prevention and Treatment*. For most dogs this type of petting really helps them to focus when needed because they learn what it is like to be calm and to be able to take in information when calm. This type of handling and physical interaction also changes the dog-human relationship. The dogs get to have some seriously enjoyable downtime with their people and then seem more attentive to them in other circumstances.

What's after “look”, “breathe” and “pet”?

Enjoy the calm and use it to help promote the dog's ability to learn the other 2 parts of the foundation behavior modification protocols: the **Protocol for relaxation: behavior modification tier 1**, and the **Protocol for deference**. These act as foundations for kind and humane rules by which you can guide your dog through more appropriate and desired behavioral responses.

If your dog has no behavior problems, these exercises will minimize the chance that any problems will develop.

But most important – these exercises will ensure that you and your dog understand each others' signals and needs. That's priceless!