

**Del Ray Animal Hospital**  
**524 E. Mount Ida Ave.**  
**Alexandria, VA 22301**  
**(703) 739-0000**  
**www.delrayanimalhospital.com**

## **Fighting Tooth and Nail:**

*A look at some common types of feline aggression*

Wayne Hunthausen, DVM

Most cats are good sorts, putting up with baby talk, dry food, and the occasional stimulating foray to the veterinarian. They even politely ignore us as we throw fits upon finding an errant hairball in a shoe or marking the pages of a favorite book.

On the other hand, some cats have attitudes that are downright nasty. An angry cat can bite and scratch with enough ferocity to back up even the most stalwart person.

Big Gulp was that kind of cat. She was a feline who gave real meaning to the words “The Cat from Hell.” Her aggressive fits resulted in trips to the emergency room for the owners. On one occasion, after being barricaded in the bathroom for several hours, they escaped to call animal control to send an officer over to save the day. But she’s much nicer now. Some behavior therapy and lots of patient work on the owners’ part have changed her into a friendly member of the family.

Why are cats aggressive? Well, there are many reasons, some of which include fear, territorial protection, play and redirected aggression. In fact, aggression is second only to housesoiling as one of the most common behavior problems for which cat owners seek help. Problems can vary from the pet that hisses and avoids social interaction to the cat that aggressively attacks other animals and people.

Because pain can cause aggression, it is very important for a cat with an aggression problem to be closely examined by the family veterinarian. This is especially important for adult cats that suddenly become aggressive. Ear infections, arthritis, bite wounds, and abscessed teeth can cause a cat to become aggressive.

## **Play Aggression**

The most common type of aggressive behavior that cats exhibit toward their owners is actually a form of play. Problems are likely to occur when a young cat or kitten is the only pet at home and the owner is away most of the day. Most kittens engage their peers in rough and tumble play. When furry playmates are not available, these rascals figure that a human will do almost as well. Anyone living with an active kitten can certainly sympathize with the cartoon character, Calvin, who is frequently the target of attacks by his feline friend, Hobbs.

Damage from vigorous play attacks is usually minimal but may be serious if the owner has fragile skin, an immune-suppressive disorder or if the play attack is directed toward the face. Less serious, but just as annoying, are those nighttime Kamikaze attacks.

Owners virtually offer themselves as sacrifices to these little beasts by playing with kittens in a way that encourages attacks toward hands or feet. Teasing the pet with fingers or dangling a foot for it to playfully attack are likely to lead the pet down the road of aggressive delinquency.

This is one of the few behavior problems for which a second pet might be recommended. A second cat of the same age and temperament will usually solve the problem by satisfying the pet’s need for active play. It’s very important that family members stop encouraging the behavior by engaging the cat in rough play. It’s also crucial that the cat have an acceptable outlet for this normal behavior. All chase and attack behaviors should be directed away from people. Play interaction with the cat should involve tossing or dangling toys for the cat to chase and catch. Physical punishment, such as swatting the pet on the nose, should be avoided since this may cause the pet to become fearful and avoid family members. It may even encourage some pets to become rougher with their play. A blast of air from a compressed air can (available at photography stores), a water gun or an audible or ultrasonic alarm may prove successful in discouraging the behavior.

## **Fear Aggression**

Fear is a very common motivation for feline aggression. This is a defensive type of aggression that occurs when the cat encounters someone or something it perceives as being a threat. Scared cats prefer to make an exit, but

when they can't, they may try to bluff their way out of the situation by growling and hissing. If that doesn't work, aggressive displays often escalate to biting and scratching.

The behavior is often self-reinforcing in that the growling, threats, or biting drive away the stimuli responsible for inducing the fear reaction. When the cat learns that exposing a few teeth or growling will stop the approach of something it fears, it will use the displays more quickly and frequently to keep potential problems at a distance.

Genetic and environmental influences can contribute to this type of problem. Some cats are born with extremely timid personalities. They show signs of timidity from a very early age and often remain fearful no matter what type of care they receive. Kittens that have not been adequately socialized are also very likely to be fearful of people and aggressive when approached or handled. Kittens go through a sensitive period of socialization early in their life during which they need to interact with other cats, other species of animals and people in order to develop confidence in interacting with other living beings when they are adults. Cats that miss this early period of interaction may never feel comfortable with social interaction. Problems also occur when cats learn to be fearful by as a result of frightening experiences associated with humans, dogs or other cats.

Correcting fear aggression requires an immense amount of patience. The biggest mistake well-meaning people make is to try to reduce the anxiety of the fearful pet too quickly. When a fearful cat is brought into the home, it should initially be ignored. Anything that makes the cat anxious should carefully be avoided. This may include loud noise, fast movement, approaching the cat and direct eye contact. Attempts to catch and hold it or force food into its face always increase the level of anxiety.

Whenever someone is at home, a tasty piece of chicken or fish can be placed in a saucer at the far end of the room. This will lure the pet into the room with the person and teach it to look forward to having people at home. Once the cat is moving about and entering rooms with the family, very tasty tidbits of food can be flipped toward the cat at distances that gradually become closer. Eventually, all but the most fearful cats will approach close enough to take food from the hand and be petted. Patience is the key to success. It may take months before some cats will approach to within petting distance.

## **Redirected Aggression**

This type of aggression is probably the most dangerous type of aggression directed toward humans. It has been the cause of some of the most frightening, vicious and damaging attacks that owners have described to me. It occurs when the cat is stimulated to an aggressive state of arousal and directs its aggression to a person or animal that was not the cause of the arousal. Some of the things that can cause an aggressive state of arousal include the sight or sound of another cat, unusual noises, odors of other animals, unfamiliar people and unfamiliar environments. The aroused cat may exhibit growling, yowling, nervous pacing, hair standing on end, tail lashing, dilated pupils, and a fixed gaze directed toward the stimulus for arousal. The attack occurs when a person or animal approaches or touches the aroused cat. Male cats are more likely to show this type of aggression. This may reflect the higher tendency of male cats to become aroused over territorial concerns.

A common situation is one in which the pet becomes aroused upon seeing or hearing another cat while sitting in a window. When the owner attempts to pet it, pick it up or nudge it away from the window, it attacks. In another situation, the indoor cat that escapes to the yard may become frightened by another animal, an unusual noise or by being in an unfamiliar environment. If the level of fear is high enough, it may bite when the owner attempts to pick it up to return it indoors. The owner does not necessarily need to interact with the cat. In some cases, the aroused cat may attack a person who is moving around the room and paying no attention to it. The attacks are often very intense, sudden, and may seem unprovoked. Multiple bites and severe injuries are common.

The attacks that seem unprovoked usually occur when the arousing stimulus was present earlier, when the owner was not present, and the pet remained in a high state of arousal. Because of the apparent unpredictability and the intense nature of the aggressive displays, it sometimes seems as though the cat has literally "gone mad."<sup>4</sup> Big Gulp's problem was redirected aggression. She was extremely sensitive to vocalizations by roaming cats as well as to unusual, loud noises in the apartment complex. Either type of stimulus would cause her to become extremely aroused. There was one particular stray male who used to hang out around the apartment complex and howl. When Big Gulp heard this guy, she would become extremely agitated. Her pupils dilated and she would pace nervously. When she was in this state, any move by the owners would cause her to suddenly and viciously attack them.

To treat this type of aggression, it is very important to identify all the stimuli for arousal. Since a cat may stay in a high state of arousal for hours after stimulus exposure, it may be very difficult to uncover what stimuli resulted in the aggressive attacks. A review of previous aggressive incidents may lead to a list of likely stimuli.

Deciding whether or not to keep the pet in the household should be based on the frequency and severity of the attacks, the ability of family members to recognize and avoid the aroused cat, and their ability to control

arousing stimuli. If there are family members in the household who are unable to recognize and avoid the aroused cat, serious consideration should be given to removing the pet from the home.

Treatment involves removing the pet's access to the stimuli and/or modifying the response to the stimuli. If the pet becomes highly aroused when it goes outdoors, it should be confined indoors. If it becomes aroused watching outdoor cats through the windows, that opportunity should be removed. Males may pay less attention to cats visiting their territory if they are castrated. Medication that reduces anxiety may help to reduce the pet's response to the arousing stimuli.

In theory, the cat can be conditioned to be passive instead of aggressive when it is exposed to the aversive stimulus by using behavior modification techniques such as systematic desensitization and counterconditioning. Using this approach, the pet is exposed to a small amount of the stimulus (a low volume howl or the appearance of another cat at a distance) and given a very desirable reward, such as food, if it shows no sign of anxiety or aggression. Gradually, the stimulus is increased or brought closer until the pet actually looks forward to exposure to the stimuli in anticipation of a food reward.

Since people often respond to the aggression with behaviors that make things worse, such as screaming, hitting the cat, throwing it, etc., the consequences of these behaviors may have to be treated. The most common result of a forceful, physical response by the person is that defensive or fearful aggression develops in the pet. Behaviors such as avoidance or hissing whenever the person approaches the pet may appear. If this happens, the pet should be completely ignored. Don't even make eye contact. Once it seems more relaxed, play and treat sessions will help restore the owner-pet bond.

When the pet is in a high state of arousal, the ideal way to handle it is to leave it in a darkened room and close the door without touching it. If it must be handled, thick leather gloves, a fish net or a large towel can be used for protection.

## **Petting-Induced Aggression**

Some cats bite while being petted. This is a very disconcerting problem, especially since these cats often seek attention, get into the person's lap and seem to initially enjoy the physical attention. But, after a short amount of time elapses or after a certain amount of petting occurs, the cat suddenly bites and runs off. Although this may appear to be a cheap shot by an ungrateful little truant, it seems that these cats have a certain threshold for the amount of physical interaction they can tolerate. When stimulated beyond that level, they become anxious and bite. The observant person can tell when the bite is about to occur since the pet usually will show typical behaviors that may include fidgeting, tail twitching, tenseness, leaning away, ears flattened against the head, bared teeth or hissing.

The first step in correcting this problem is to be sure that all family members stop absentmindedly petting the cat. All petting should be reserved for training sessions. Training exercises should only be held when the cat voluntarily approaches the owner. The threshold for anxiety must be determined. The cat should be gently petted, but the petting must stop well before the threshold is reached. If it shows no signs of anxiety or aggression, the cat should be offered a tasty food treat. If the session takes place on the owner's lap, care should be taken not to restrain the cat and it should be allowed or encouraged to jump down as soon as each session is complete. The length of the petting sessions should gradually be increased. The owner should have frequent petting sessions with the pet in the lap or next to the owner on the sofa. With time, the pet will learn to tolerate longer and longer petting sessions in anticipation of a food reward. Learning can be facilitated by holding the sessions just prior to feeding times and withholding food treats except during training.

## **Summary**

The aggressive cat presents a difficult problem for the owner. You can't live with it, yet you can't live without it. Well, you're more likely to have a cat you can live with if you take some time to figure out what type of aggression the pet is showing and have the patience to work with it. Serious cases may require the help of an expert. If in doubt, ask your veterinarian for help or for a referral to a behavior specialist

## **Using Fluorescein to Tell Which Cat is Urine Soiling**

Give fluorescein orally (0.5 ml of a 10% solution) or by injection (0.3 ml of a 10% solution SQ) in order to trace urine stains to the individual with the problem.[1,2,3] Urine soiled spots retain fluorescence for at least 24 hours.[1]

1. Hart B, Hart L. Canine and Feline Behavioral Therapy. Lee & Febiger, 1985.

2. Hart BL. Urine spraying and marking in cats. In Slatter, SH, Ed.: Textbook of Small Animal Surgery. Philadelphia: W. B. Saunders Co., 1985

## CALMING THE FEARFUL CAT

W Hunthausen, DVM

As I grabbed my notes and car keys, I thought about the conversation I'd had with the family on the previous day. Their cat, Sanibel, was 6 weeks old and very frightened when she they rescued her on the Florida island of the same name. Eleven months later she was still avoiding them, even though they'd tried their best to give her plenty of tender loving care in hopes that she'd warm up to them.

Sanibel was hiding when I arrived for my consultation, and she remained in hiding throughout the visit. I knew we had our work cut out for us in easing this pet's fears and making her comfortable with her new family. We used a very conservative treatment approach that allowed Sanibel to come along at her own speed. After a substantial amount of time, Sanibel became less fearful and the story had a happy ending. With lots of patience, Sanibel eventually left her hiding places to become part of a very loving family.

### Fearful Behavior

What causes a cat to be fearful? Why aren't all cats outgoing and social like my friend Suzanne's cat, Rocky? He's always the first one to the door to greet visitors and has learned to quickly win affection and attention from them. He pulls this off by running up to the plants in the entryway of Suzanne's house, standing on his hindlegs and beating the plants like a drum. Heck of a life for the plants, but it sure makes Rocky entertaining!

Actually, fearful behavior is normal for cats and most other domestic species. It serves to protect them from jeopardy until they grow older and learn to distinguish between real dangers and the normal hustle and bustle of life. If cats came into this world with no inhibitions and approached everything and everyone with wild abandon, they would soon be in grave danger.

Even though cats have been domesticated and have lived with humans for thousands of years, each individual must still go through an introductory period of socialization with people before gaining the confidence necessary to live with us.

The most sensitive period for socialization occurs during the kitten's first four to seven weeks of age. This is the period when kittens can most easily develop attachments with us as well as with members of their own species and other species. After this period, the ability to develop a trusting relationship with members of any species rapidly declines. If there has been no human contact before the kitten reaches twelve weeks of age, it's not likely that it will ever comfortably cohabit with humans.

Besides socialization, cats also need to learn about the nonliving things they will encounter in their life. If they have a secluded, protected kittenhood, chances are they may freak out when exposed to unusual stimuli, such as vacuum sweepers, doorbells or grandfather clocks. Again, it is the cat's protective, instinctive behavior to avoid anything unknown that results in fearful behaviors.

### Phobias

When the pet repeatedly exhibits exaggerated fear responses beyond what would be expected for the type or intensity of the stimulus, the condition is called a phobia. The phobic cat typically responds to fearful stimuli with frantic behaviors, such as vigorous attempts to escape, yowling, and aggression to anyone who attempts to restrain it. Escape attempts may be so desperate that the pet injures itself or is destructive to its surroundings when trying to escape. These physical behaviors are usually accompanied by physiological changes, such as dilated pupils, rapid heart rate and uncontrollable urination or defecation.

A fearful cat may hesitate, act a little nervous or cautiously avoid a certain noise. But the phobic cat will bolt away, knocking over things in its way and, on occasion, attack anyone or anything that interferes with it. Flight or fight are not the only behaviors exhibited. At the other end of the response spectrum, some individuals will freeze when confronted with an extremely fearful experience. Fearful behavior can be helpful or lifesaving for the individual, but excessively fearful behavior is often counterproductive. Frantic escape attempts may cause injury and put the pet's life in danger.

The way in which an animal responds to its environment is partially controlled by genetics. Thus, exceptionally fearful temperaments can be inherited. While this characteristic usually shows up during the first few months, it may not be evident until later in life. This is not to say that a pet's personality is fixed at birth. The experiences a young pet has as it matures can play a major role in governing how it behaves. Indeed, in some cases,

learning will even override instinctual behaviors. This is why environmental influences can result in an adult that is either more or less fearful than when it was a kitten.

Fears and phobias can be acquired through learning. When a cat is mistreated by a person, it will develop a fear of that person. Sometimes, fear responses become generalized to similar stimuli. For example, a cat that was mistreated by one man may become fearful of all men. If the pet generalizes easily or if the experience was exceptionally frightful, it may become fearful of all humans. When people use a painful swat to discipline their pet, it may become fearful of all hand movements and may bite when anyone tries to pet it. A cat can also be conditioned to be fearful of a location where it was exposed to a traumatic event. For example, I once had a patient that became fearful and refused to use the litter box in one room of the house. This occurred because some books had fallen off a bookshelf in the room while the pet was using the box.

People often contribute to the development of fearful behaviors by trying to calm the pet when it acts anxious. In most cases, the attempts at assurance only result in reinforcing the anxious behaviors. Another way in which people contribute to fearful behavior is by attempting to introduce an anxious pet to a visitor or other fearful stimulus by holding the pet and carrying it toward the stimulus. This makes the pet feel trapped as the fear eliciting stimulus is brought closer. When owners do this, they often end up wearing the pet on their head as it frantically tries to scramble away.

## **Treating the Fearful Cat**

The most common type of fearful problem I see in cats is fear of people. This is frequently seen with poorly socialized strays who are brought into the home. The same principles that we will use in this example of treating fear of people can be applied to most other types of fearful behavior. The most important thing we have to guard against is going too fast in attempting to socialize the cat to people. Unfortunately, people with good intentions often make things worse by forcing the cat to interact with them or others.

The first thing we need to do in order to reduce the cat's fear is to identify all things that make the cat anxious and then prevent it from being exposed to those stimuli. Fearful behaviors tend to worsen and become more resistant to change as the number of fearful experiences increases. Most of the stimuli that need to be controlled are obvious. Fast movements, loud noises and touching the cat are common stimuli that need to be reduced or avoided.

Reaching toward the fearful pet is a threatening gesture. It can be so threatening that the gesture will keep a very fearful animal away from an exceptionally tasty tidbit of food in the outstretched hand. Steady, prolonged eye contact is another fear-evoking stimulus that should be avoided when the cat is fearful of people. The cat needs to feel safe and nonthreatened. Therefore, it should have an avenue of escape indoors so it doesn't feel trapped and a dark, quiet refuge should be available. In most cases, it's best to initially ignore the cat as much as possible. With time and a minimum amount of stress, the cat will gradually become used to its new environment and the people in it. This process is called habituation.

Actively reducing a cat's level of fear involves several considerations. First, you must identify the fearful stimuli. Next, you must identify the amount or intensity of the stimuli required to cause a fearful response. Basically, you want to know what makes it fearful and the minimum amount of the stimulus required to make the cat begin to act fearful. Once you have determined these parameters, desensitization and counterconditioning exercises can begin.

Desensitization involves exposing the subject to a small amount of the stimulus, an amount that is below the threshold or intensity that causes fear. Then, the intensity of the stimulus is gradually increased. Counterconditioning entails having the subject learn a response to a stimulus that is incompatible with the present, undesirable response. In this case, we want to replace a fearful response to the human stimulus with a calm, relaxed response. If we can teach the pet to expect to get a very tasty food treat or engage in play instead of being afraid when people are near, we have counterconditioned it. As I mentioned before, you can't just stick food in the cat's face. You'll just make matters worse. You must place tasty tidbits of food at a safe distance away. If the cat is comfortable until someone approaches to within ten feet of it, food must be casually fed to it from a distance of eleven feet or more. If the cat remains in its hiding room, food may be placed on the floor outside the door to the room. The person can then move to eleven feet away and sit quietly, avoiding eye contact. Gradually, the food is offered at closer distances. Patience is the most important part of treating these cats.

For cats that are afraid of specific things in their environment, the treatment approach is similar. Take, for example, the pet that is afraid of the vacuum sweeper no matter where in the house it is being operated. Since the cat is always afraid whenever the sweeper is running, we are unable to get it far enough away to give food for relaxed behavior. That means we will have to improvise in controlling the stimulus. The first stage involves leaving the sweeper in the center of the room at all times for the initial first few days or weeks. Whenever the cat is near it, a food treat is given. Next, the sweeper would slowly be moved about the room and food would be given for

nonanxious behavior. The final step would involve dampening the sound by wrapping a heavy towel around the sweeper chassis and turning it on for a split second when the cat is as far away as possible in the house. Gradually, the sweeper would be left on for longer and longer durations. Food or play is provided whenever the pet exhibits nonanxious behavior. Food treats should be withheld at all other times. What we want the pet to learn is that the sweeper is no threat and that it should look forward to having it around, because good things happen for the pet when it is around.

When a cat's fear is exceptionally strong and exposure to the fear-provoking stimuli can't be controlled, your veterinarian may need to prescribe medication. Anxiety-reducing drugs will help reduce the pet's fear to a point where behavior modification can begin. As therapy progresses, the medication should be gradually withdrawn.

We can successfully treat most cats for fearful behavior if the stimuli can be discovered, reduced and gradually presented to the pet during desensitization and counterconditioning exercises. The key ingredient for a successful outcome is patience. It is extremely important that we take the time necessary to get the job done without pushing the cat into anxious situations. And lastly, we must begin providing adequate socialization and stimulation for kittens at a very young age to prevent problems from occurring.