ELIMINATION BEHAVIOR PROBLEMS

The most common behavioral problem of cats is urinating, defecating or spraying outside the litter box. This handout explains the causes of these behaviors and how to change them. We assume that your cat has already been examined and that the many medical problems that contribute to litter box problems, such as urinary tract infections, colitis, diabetes, arthritis and kidney disease, have already been ruled out or treated. If, after reading this handout, you think your cat may have a medical problem after all, please let us know.

There are two basic divisions of elimination behavior problems. The first type involves cats who have developed aversions to the litter box or strong preferences for using locations other than the litter box. The second category of cats use the litter pan at times, but also spray or urinate or defecate in other locations because of stress, loneliness or feeling a need to defend their territory against other animals or people. We will first discuss a program to rehabituate the cat who does not use the pan. Then we will move on to discuss those who use a litter pan but who also exhibit marking behavior. Many problem cats exhibit both kinds of problems to some degree, however, and diagnosis and treatment programs overlap. It is probably best for you to read both sections of this handout no matter which kind of problem you think your cat has.

First, a bit about the possible causes of litter pan aversions. It is helpful whenever possible to determine the initiating factor that caused the behavior to begin, such as a change in the type of litter used, a bladder infection, or the addition of a new cat to the household. The sooner the initiating problem is resolved, if possible, the less likely it is that your cat will develop strong preferences for the surfaces or locations he is using for his litter pan that he shouldn't be. Knowing what started the problem is also the best way to avoid a recurrence. Some cats have never consistently used a litter box, but most develop a preference for eliminating outside the box later in life.

Some cats will stop using the box when they associate it with pain or fear. For instance, a cat with a bladder infection may associate the litter pan with pain when he urinates. A cat that has been frightened by a sudden loud noise or falling object while in the pan may subsequently refuse to use it. Shy cats may not use a pan in a noisy or busy location. Others are timid about going into a dark, damp basement or a cold back porch. Some cats will guard their litter pan and prevent other cats from using it. This is one of the main reasons for having multiple litter pans in different locations in the house.

A common problem in geriatric cats is pain from arthritis which prevents them from





going up or down stairs easily to get to a basement pan, or sometimes even getting in or out of the pan itself. Constipation and colitis are reasons an old cat may stop defecating in the pan.

Other common reasons for cats to avoid the pan are covered or hooded boxes, pans that are too small, litter the cat doesn't like, and, most importantly, a dirty litter pan. Many cats are very fastidious and will avoid a dirty box like the plague. Some also prefer separate pans for urine and stool, or their own pan in a multi-cat household. The litter box should be scooped out once or twice daily and emptied completely at least once a week. Wash the box with soap and water and rinse well after emptying.

If any of these things are the source of your cat's aversion to the litter pan, the solution may be as simple as moving the box to a different location, taking the hood off the box, or changing brands of litter. If the cat prefers privacy, try a hooded box, or move it to a quiet location such as a closet or storeroom. If you can cut a hole in the door for the cat to go in and out, the cat will also have privacy from the children or dogs in the family. Do not clean the pan with harsh smelling detergents and avoid scented litters, as many cats do not like their smell.

REWARD AND PUNISHMENT

Never punish your cat for eliminating outside the box and then take him to it. The cat will often associate the punishment with the pan itself, which makes the problem worse.

Elimination problems don't lend themselves to treatment with either positive reinforcement or punishment. For punishment to be effective it must be administered **immediately** upon onset of the behavior and **every time** the behavior occurs. For reward to be effective, it too must be administered within a few seconds of the desired behavior. Both of these constraints are hard for the average cat owner to meet. Many owners have tried punishment to no avail. In fact, it often makes the problem worse. It makes the cat fearful of its owner and increases stress, which is often a significant factor in the behavior problem in the first place.

So what do we do instead?

The basic goals of retraining your cat are:

- 1) Make the litter pan more attractive to the cat
- 2) Make the areas he's using now less attractive to the cat
- 3) Decrease or eliminate causative factors such as stress

See separate handout on Stress in Cats

4) Administer antianxiety medications to decrease stress and territorial behavior

Let's talk about 4) first. We cannot stress enough that most cats who urinate outside the litter box have a stress component to it, especially if you have already worked on numbers 1) and 2) from above and you still have a problem. Stress and territorial behavior both respond well to fluoxetine (Prozac) and clomipramine, with about a 75% response rate to either medication. Right now, fluoxetine is less expensive and easier to obtain, so we usually start with that. We can get it in a flavored chew, a flavored liquid suspension or a capsule. Antianxiety medication needs to be started early on because it takes weeks to start working. Depending on the cat and the situation we can continue medications long term if needed or wean the cat off once the urinary behavior has improved.

Now let's move on to a plan for what to do when all the basic territory has been covered.

Let's say you have been doing everything right as far as 1-3 and your cat is now on medication. While you are waiting for medication to work what should be done to minimize the urinary behavior and get back on track?

THE PROGRAM

Most cats when confined to a small area will use the litter pan rather than the floor. The first step, therefore, is to confine the cat to a small area, such as a laundry room, bathroom or large dog kennel, until he or she is consistently using the litter pan again. This reestablishes the habit of regular litter pan use. The rule of thumb is to keep the cat confined for one week for every month that it has been soiling outside the box. This period should never be less than 5 days. At the end of this time the cat should be consistently using the litter box for both urine and stool.

Some cats like having their own little territory but others are stressed by confinement. If your cat howls or meows or drives you crazy, then call us for additional antianxiety medication. Since fluoxetine works slowly we may need additional medication to make being confined less stressful. Drugs in the valium class, such as alprazolam (Xanax) can be given along with fluoxetine for more immediate results. We want to decrease stress, not make it worse! Our goals are to keep the cat from urinating outside the box while giving the fluoxetine time to work, and to encourage litter box use.

Cats being temporarily confined need a window to look out of and regular playtime with you. You will need a litter box in the old, familiar location, as well as one in the cage or small room, for when he is out of the cage during supervised play periods. If your cat is out loose THE CAT MUST BE IN YOUR SIGHT AT ALL TIMES. Follow if he or she leaves the room. If the cat begins to sniff, scratch or squat take him to the litter box or distract with toys or treats to divert the behavior.

If your cat will not use the litter pan even when confined to a small area, try alternate forms of litter. Sand, potting soil, clumping litter, recycled paper litter, plain clay litter and cedar shavings are all things you can try. Put several trays in and see which he likes best.

If that doesn't work you may need to cover the whole floor of the confinement area with litter. A large cage with a perch or shelf works well for this -- cover the entire floor of the cage with litter. The cat will almost always use the cage floor rather than soil his perch. Once the cat is using the litter in the cage or on the floor consistently, put a litter pan with the same litter in it in the area and gradually remove the surrounding litter over a period of several weeks. Don't rush. Patience now will yield better rewards.

If your cat has been urinating or defecating on fabric or carpet, use these materials to make the litter pan more attractive to him. You can try using rags, throw rugs or small bits of carpet for litter. Or you can build a carpet or fabric covered ledge around the box, or put carpet under the pan, up on the wall next to it, in the pan under a small amount of litter or draped over the sides of the pan. Many cats will use regular clay litter in the box if they can scratch on the carpet afterwards.

Some cats who prefer a tile floor or other hard smooth surface may use a large, empty pan instead. Prop the pan up slightly at one end so urine won't soak your cat's feet. You may need to cover the rest of the floor with carpet or throw rugs. If your cat is confined to the bathroom, put some water in the tub and sink to prevent him from using those spots instead. Once the cat is using the empty pan consistently, you can add a small amount of litter gradually -- no more than 2 tablespoons a day. Again patience is the key here.

Once you have solved the puzzle of what your cat wishes his litter box to be like, you

can either continue to use the material he prefers, such as sand, or you can try mixing it gradually with regular litter. If your cat prefers carpet, put a little litter on top of a piece of carpet, gradually increasing the amount, as you would for a cat who prefers an empty pan.

It is a rare cat who cannot be re-accustomed to using a litter pan using this confinement and litter preference technique.

MEANWHILE...

While your cat is relearning how to use a litter pan, you need to thoroughly clean all the areas he or she has already soiled. This requires a cleaner made specifically to remove those odors. We have several of these available, depending on what surfaces the cat is urinating on and whether a fabric or carpet is stained as well as wet. Do not clean the areas with other cleaners first, as this makes odor eliminator sprays less effective.

Once you have removed the urine odor, and the carpet or floor is clean and dry, it may also be very helpful to spray these areas with a product called Feliway. Feliway is an artificial version of the scent that cats produce in the glands on their face. When cats rub their face on you or on other objects they are actually scent marking you as their own. If this scent is present in an area or on an object, and the cat believes it has already marked it with this smell, the cat will be much less likely to spray or urinate there. Feliway is also helpful to make a new or unfamiliar place smell familiar. It comes in a plug-in diffuser as well as a spray. Unfortunately, some cats may interpret the scent as that of a rival cat, so it doesn't always help. It is also fairly expensive, though we have rebate coupons and a bottle does last a long time.

If territorial stress between multiple cats is a factor, we also have a newer version of Feliway called Feliway Multicat. This product contains a different pheromone that copies the scent mother cats emit after their kittens are born. Conflict behaviors will usually decrease within a week of plugging in Feliway Multicat diffusers.

The next step is to make the areas the cat has soiled less attractive as toilet areas. There are several ways to do this. The first is to put food bowls at those spots. Most cats will not urinate or defecate where they eat. You may have to put bowls in 13 different spots, but this will often work.

You can also make these areas less attractive or even frightening to the cat by using materials he doesn't like at these locations. Aluminum foil, plastic, pans of mothballs or water, plastic citrus deodorizers, an upside down carpet runner (plastic points up), motion alarms or mousetraps set upside down are all good possibilities. If the cat only uses one particular room in the house for his problem behaviors, prevent access to that room if possible.

Some cats have a very strong location preference and will continue to soil in the same location despite the aversive materials you've put there. In these cases it is most effective to put a litter box where the cat is eliminating. After several weeks of consistent litter box usage at that location the box may be gradually moved away, no more than 2 inches per day. At the same time, aversive materials are again used in the old location. If the box is moved gradually and made as attractive to the cat as possible, the cat will usually follow the box.

So let's assume your cat has been successfully using the litter pan in his confined area for several weeks and you are ready to let him back out into the house. Again, patience and more patience are required.

In multi-cat households it is helpful to allow the offending cat supervised time out while the other cats are confined. The cat should have its own litter pan and food dish at these times. After 4 to 6 hours, switch and allow the other cats out while the problem cat is again confined. This helps ease the territorial stress that often causes cats to spray or squat outside the box. If there are many cats in the household and the problem began after the introduction of a new cat, you may have reached the threshold for the number of cats in the household. It may be necessary to decide whether to keep that many cats if the problem recurs (more on this later). Alone time for the problem cat helps and if continued after the problems are resolved, may help prevent recurrence.

You may now start to move the litter pan gradually from the cage or room the cat has been in to your preferred litter pan location. Try to move the pan no more than 1 or 2 feet per day. The food bowls or other materials you have placed around the house should remain in place until the cat has been using the litter pan in its proper location for several weeks.

If the cat was eliminating around the perimeter of a room, the first portion of the floor or carpet to be uncovered should be the center. Once the cat has demonstrated that it can spend time in the room without urinating or defecating, the central area can gradually be expanded several inches per day.

At this point, your cat can be considered cured if he or she is consistently using the litter pan at your preferred location. If the cat resumes the problem behavior at a later date, it will again be necessary to rule out a physical problem causing the behavior, especially if the cat has a history of urinary tract problems.

TERRITORIAL MARKING

Let's start this part of this handout with a definition of marking. Cats may spray or squat to mark something with their urine, or they may defecate on an object such as a bed. Spraying deposits urine on a vertical surface such as a wall or chair, several inches to a foot off the floor. Spraying is most often a problem of unneutered male cats. Neutering eliminates or reduces territorial spraying 90% of the time. Neutered males and spayed or unspayed females occasionally spray as well. Both sexes will deposit urine markers by squatting as well. Often this behavior is performed in front of the owner, leading to much shouting and ineffective punishment.

Although many owners think that cats urinate on walls and furniture out of spite, for a cat urination is not a bad or naughty behavior. It is a natural instinct to mark their territory when they are frightened or anxious. Decreasing anxiety levels is the way to treat the problem most effectively.

The offending cat is often reacting to the presence of other persons or animals, or to prolonged absence of the owner. Spraying is most often seen in households with more than one cat. In multi-cat families it is sometimes very difficult to determine which cat is the culprit, especially when the behavior is intermittent. It is often necessary to confine the cats separately to determine which one is the problem. If you are introducing a new pet into the household ask us for a protocol to decrease stress and minimize problems with the new introduction.

Marking behavior may be triggered by stresses such as a new baby or pet in the

house, a visitor staying in a room the cat likes to use or the presence of stray cats outside the house. A timid cat may become stressed even by simple things like a change in the owners work schedule. Anxious cats will often eliminate on personal items of the owner such as a bed, pillows or clothing.

If an outdoor cat is the problem, urine is often found around windows or doors, or in areas used by other cats in the household. Visitors to a household whose persons or belongings smell like other cats, or objects brought into the house with scent on them (such as fireplace logs which were sprayed by an outdoor cat or suitcases after traveling) may bring on this sort of behavior as well.

As with the litter-aversive cat, the treatment of this behavior involves making the target areas less attractive to the cat for this purpose. Environmental management reduces urine marking by an average of 50%. First, treat the areas that were marked to remove the scent. As discussed earlier you may then use food bowls at these locations, lock the cat out of target rooms, or put aluminum foil over the spots. Spray marked areas with odoreliminating spray.

It may also be necessary to confine your cat to reestablish the use of the litter pan, as you would with a litter pan aversion problem. This depends upon how often the cat has been marking, and for how long. Cats that have been marking for a long time should be confined to a large cage or small room to break their pattern of not using the litter box. Cats who have only marked a few times may not need to be confined at all.

If outdoor cats are part of the problem, block your cat's exposure to them. Keep windows closed, keep curtains or shades drawn so your cat can't see the intruder, and don't let him sit on the couch right by the window -- put some foil along the back of the couch if necessary.

Sometimes it becomes necessary to reduce the number of cats in a household to reduce the territorial behavior. Some individuals will spray less if allowed more access to the outdoors. Others do better if kept inside more.

If you know stress is a factor, try to minimize it as best you can -- obviously you can't change your work schedule or evict your mother in law on account of your cat, but you can give your cat extra attention or quality time if he or she is not coping well with a change in the house. Antianxiety medications usually help a lot.

Allowing your problem cat access to the house while your other cats are confined in another area for a few hours each day (while you are at work, perhaps) may help decrease territorial stress. You will also need to provide regular playtime and attention, which eases stress. Food rewards are helpful for rewarding good, relaxed, playful behavior. They also give the cat something to think about and look forward to.

As already discussed, Feliway can be useful for territorial marking, as well as for other behavior problems. For a cat, Feliway is a soothing, comforting smell that decreases stress. Feliway can be sprayed daily onto an object or in an area where the cat has sprayed, or it can be purchased in a diffuser that periodically emits a puff of pheromones into the air.

Luckily, many marking behaviors will improve with medications. Anxiety-reducing drugs such as clomipramine or fluoxetine (Prozac) reduce fear, aggression and territorial behavior. Drugs in the valium class, such as alprazolam (Xanax) can be given along with fluoxetine. Alprazolam is especially useful for short term problems such as the stray cat or visitor hanging around the house. Medications are generally used for a few weeks or months and discontinued as the problems resolve or the household situation changes. If the medication is continued long term (months to years) annual blood testing is needed to

ensure no side effects are developing. The longer a cat has been getting the medication the more slowly they must be weaned off again.

Medication doesn't help all cats but it does benefit most cats with urinary behavior problems. When fluoxetine is used daily for 8 weeks, spraying is usually reduced by 90% of more. Sometimes more than one medication must be tried before we find one that is effective. Hormonal therapies such as progesterones and estrogens can also be very effective, but their potential for serious side effects such as diabetes and anemia makes their use a last resort.

To summarize what we've just discussed:

- 1) Remove or minimize the cause of the problem
- 2) Reestablish the habit of litter pan use by confinement
- 3) Prevent the reuse of previously soiled areas
- 4) Work with us to find antianxiety medications that work best for your cat

If you have any questions or problems while you carry out the programs in this handout please feel free to call us so that we can help you out. Our goal is to make your cat a contented member of your family for as many years as possible!