

## **Thinking Outside the Litterbox: Solving Feline Housesoiling**

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The most common behavior complaint owners have about their cats is housesoiling. Behavioral problems are also one of the leading reasons for euthanasia of cats in North America. The most typical scenario is a cat that both uses its litter box and also eliminates outside it. These cats typically housesoil with urine or stool, but not usually both.

It is very important to discriminate between medical and non-medical causes of this problem. Feline lower urinary tract disease (FLUTD – formerly called FUS) is very common and can be associated with housesoiling. Cats with FLUTD may housesoil with urine or stool or they may spray urine. Some other diseases may also be associated with housesoiling, such as kidney disease, hyperthyroidism, diabetes, constipation, and inflammatory bowel disease. It is important for the veterinarian to take a good history of the problem, and tests may be required to rule out medical problems.

We also have to remember that not all housesoiling behaviors are abnormal ones – most problem behaviors are actually normal behaviors that are exhibited in an inappropriate manner or location. For example, territorial spraying is a normal behavior for the cat, but an undesirable behavior in a pet.

When your veterinarian is taking a history of a housesoiling problem, be prepared to give information such as:

- A detailed description of the problem, its duration, progression and severity
- A description of any associated events
- A description of any corrections you have already tried
- A description of the cat's environment; e.g., number of animals, number and location of litter boxes, interactions between animals, etc.
- A medical history (especially any history of gastrointestinal or urinary problems)

There are three basic categories of housesoiling problems:

1. Normal elimination at an inappropriate location (the most common type)
2. Marking behavior such as spraying (which must be distinguished from urinating by the cat's body posture and where the urine is deposited)
3. Medical disease

... or a combination of any of the above.

After taking a complete history of the problem, your veterinarian will want to run some medical tests. A urinalysis is always indicated when housesoiling involves urine and is usually necessary if stool is involved as well. It is not unusual for a cat to have a medical

problem when the history is suggestive of only a behavioral problem. Testing may also involve blood tests for kidney disease and other diseases if appropriate.

A diagnosis is reached by determining which of the potential contributing factors (both medical and psychological) are involved. Reaching a working diagnosis enables the veterinarian to suggest which factors must be modified during treatment. A treatment plan is then formulated. The plan should be designed to do two important things:

- Entice the cat back to the litter box using any changes necessary
- Modify the inappropriate site to make it unattractive or unusable

It helps to understand that elimination in cats is actually a sequence of individual behaviors, and a problem can develop at any of the steps involved. In nature, cats have an infinite variety of sites and materials for elimination, but in a home setting they are expected to use a restricted number of sites (often only one) and a restricted type of material (usually only one choice).

The elimination sequence involves these steps:

1. Search and approach the location
2. Dig
3. Eliminate
4. Sweep/cover motions

Behavioral factors associated with housesoiling include litter aversion, surface preferences, location aversion and anxiety-related causes.

### **1) Litter Aversion:**

Litter aversion is a very common cause of housesoiling. A cat selects a site to eliminate based upon the tactile sensation created when it scratches at the material. A cat may dislike litter because:

- The litter is not clean enough (some cats are extremely fastidious and this can set off a litter aversion)
- The cat has learned to associate the litter with something unpleasant, such as pain due to a urinary or intestinal problem, or other situations, such as being caught and given medication there, being cornered by another cat there, or offensive odors (such as from deodorizers or cleansers)
- A spontaneous aversion to the feel of the litter material. (Cats can decide that a litter they have been using for years is no longer attractive to them.)
- A plastic litter box liner is being used and the cat catches its claws on it when trying to dig
- Too much or too little litter in the box
- A few cats dislike the litter box if it is too clean!

Signs of litter aversion include:

- Cat avoids the litter box completely
- Cat uses the litter, but scratches at the sides of the box, on the floor, or other objects nearby instead of in the litter

- Cat uses litter, but shakes paws a lot during and after use
- Cat does not dig in the litter before eliminating
- Cat straddles the litter box, putting feet up on the edge of the box to avoid touching the litter
- Cat uses the litter, but then bolts out of the box quickly
- Cat meows at the litter box
- Cat starts to urinate in the box in the normal squatting position, but ends up standing and depositing the urine outside the box

There are several steps that can be taken to solve the problem of litter aversion:

- First ensure the litter is being kept clean and that the litter is not a deodorized one. Some cats find these scents very distasteful.
- Review your cleaning procedure. A product with an odor used in the cleaning process may leave a lingering smell. Try using only very hot water to clean the box.
- Stop using plastic litter box liners.
- Try different types of litter – many types are now available on the market. You may have to try quite a few systematically, for 7 to 10 days each to find the right one. You could also set up a “litter buffet”, with several boxes, each containing a different litter material, to see which the cat prefers.
- If you want to make changes to the litter box or its location, always make these changes very gradually. To change the type of litter, first use an additional box with the new litter and gradually take away the old litter once the cat is happy with the new one. To change the location of a litter box, the same idea applies. Add a new litter box in the new location and gradually move the old box day by day to the new location.
- Many cats prefer to have two litter boxes for elimination; one for urine and one for stool.

## **2) Surface Preferences:**

A cat may find another surface in the house it prefers to the litter provided in the litter box. This is very common. Even in cases where some other factor was the initial cause behind the housesoiling, a cat can develop new surface preferences. The most commonly preferred surface is some type of fabric, with carpeting being the most preferred. Sometimes these preferences can develop accidentally, such as when a cat scratches at a bathmat hanging next to the litter box and then develops an association between elimination and the bathmat. Cats can also have a primary preference for one type of surface over another; some cats just like carpeting better. Studies have shown conclusively that cats prefer soft, fine-grained litters. Therefore, the best litters are the sandy, scoopable litters. Play box sand could also be used. Next most preferred are the traditional clay litters. Last are the litters made from nontraditional materials, such as newspaper, wood shavings, and pellets.

Some cats prefer a smooth surface, such as a bare floor, in the sink or in the bathtub. These cats may respond best to an empty litter box or one with minimal litter in it. Once they return to using the litter box, more litter can be added gradually.

Carpeting presents a special problem since it is almost impossible to clean. Urine odor is very pervasive and usually soaks into not only the carpet, but also the underlay, and even the flooring underneath. For lightly soiled areas, cleaning with an odor eliminator designed for urine may help, or get a professional carpet cleaner. Most home steam cleaners won't be effective. In some cases, the carpet must be removed and replaced or the area re-floored in another type of material. It may be necessary to place a small scrap of carpet in the litter box itself to get the cat back to using the box or to build a small carpeted platform surrounding the litter box, so the cat can perch on the platform.

It may also be necessary to block access to areas previously soiled (e.g., keep the bedroom door closed, cover the soil in plant pots with fitted wire mesh or add lots of pebbles, move a large object or piece of furniture over a soiled area). Areas can be made undesirable by many tactics, such as covering the area with tinfoil (don't use plastic) or placing a citrus-scented room freshener nearby. For cats that get up on countertops and urinate on objects there, place a strip of double-sided sticky tape on the edge of the counter so the cat's feet will touch it when it lands there (most dislike the sticky feeling). In some cases, you may need to resort to a motion detector that emits a noise when the cat disturbs the area. This works very well and most cats learn to avoid the area after only one or two attempts. However, be sure it is an area you want the cat to learn to avoid totally (i.e., it's not a place you want to sit and cuddle) and that you warn the neighbors about the noise (since it may scare more than the cat). For bathtubs and sinks, leave one inch of water in them. For only one or two soiled areas, try feeding the cat at those spots. Other ideas include getting an invisible fencing system designed for indoor use, or purchasing harmless static electricity mats.

There are many other creative ways to make a spot aversive to your cat, but they must all be used in conjunction with tactics to get the cat back to using the litter box. If you train the cat not to use one area, it may go to another instead. In some cases, it helps to isolate the cat in a small area (such as a bathroom) with the litter box, a sleeping spot, toys, food and water in order to enforce re-training. Make sure food and water dishes are never placed too close to the litter box. This process may have to be carried out for a minimum of two weeks. The cat can be allowed out of isolation only when the owner is around to carry it at first, then gradually for little play sessions, or cuddle sessions, gradually increasing in time providing no relapses have occurred. If a relapse occurs, the process may have been too rapid and should be started over again.

### **3) Location aversion:**

The location or the litter box itself can become associated with aversive events for the same reasons that the litter can (e.g., pain, fear, bad odor). Most cats prefer an easily accessible spot, but one with privacy. So strike a balance between getting the litter box out of the way for your own sake, and making it private but not too distant for the cat's sake. Don't place the litter near a noisy appliance, such as the washer and dryer, or near the

furnace. Some cats prefer open boxes, but some prefer the privacy of closed boxes; most like large boxes, but some like small ones.

Cats will learn a preference in which elimination becomes associated with a specific location. This type of preference can develop very quickly if a cat first chooses to go out of the litter box for any other reason. It is to be strongly suspected if a cat repeatedly goes back to one area, or to one room. Some of these location preferences can become quite unusual. To help treat this type of problem, you may actually have to provide a litter box in the cat's preferred spot to get the cat using the litter again. Then slowly move the box back to another location. Cats will usually dislike having to eliminate near where they must eat, so don't put the food and water bowls near the litter box.

#### **4) Anxiety-related Causes:**

We must always consider the possibility that stress or anxiety is contributing to the housesoiling. But this is not as frequent a cause of housesoiling as people think. Be sure you have enough litter boxes in the home. It has been said that there should be one more litter box than the number of cats; e.g., a home with 3 cats should have 4 litter boxes. You can't be too rich or too thin or have too many litter boxes!

Some types of stress:

1. Separation anxiety: previously recognized only in dogs, but now believed to occur in cats as well. It usually occurs when there has been a prolonged absence of the owner, typically 8 hours or more. The housesoiling will occur 8 to 12 hours after the owner's departure. The behavior may involve diarrhea and destructive events in addition to housesoiling. It can be treated similar to the way dogs are treated for separation anxiety (e.g., training through graduated departures with a lot of skill, time and patience) and with some medications.
2. Fear: cats that are naturally shy or fearful may not want to come out into the open to go to the litter box. In some cases, there is an identifiable fear stimulus, such as a certain person, cat, dog, object or sound that can be removed or modified. Desensitization and counterconditioning methods can also be used. You may have to provide a litter box in a "safe" location for these cats.
3. Overcrowding: there is a large variation in individual tolerances for overcrowding. Where some cats may be happy with 20 other cats in the house, others will dislike even one other cat, or even one other animal of any kind. Cats do not naturally live in social groups all the time; they spend much of their lives in solitary circumstances and get together for breeding or sometimes for raising kittens communally, or if they are forced to by a limited food supply. Many cats view all living beings (including people) in the home as part of the social group, and adding to the group in any way can upset them. You can decrease the number of cats/animals, or you can increase the amount of vertical space by adding cat trees or shelving. You can separate the cats into smaller groups within the home, either on a permanent basis or for a few weeks to try to resolve the problem and then try re-introducing them.

The prognosis for housesoiling cats is variable. It depends on getting an accurate diagnosis; on how long the problem has been going on; on how severe the problem is; and on how many animals are in the home. For new kitten owners, there are steps that can be taken right from the start to avoid housesoiling problems:

1. Make the litter box location easily accessible, but in a private, low traffic area
2. Try to provide at least one litter box per cat
3. Use finely-grained, non-scented litters
4. Do not put food and water beside the litter box
5. Scoop the litter box at least daily; change clay litters at least once weekly; change scoopable litters every 6 to 8 weeks
6. Avoid frightening the cat in the litter box, or trapping and catching it there
7. Never, ever punish a cat for housesoiling
8. Make any changes to the litter box filler or location very gradually
9. Call your veterinarian immediately if any housesoiling occurs; do not wait until it has become an ingrained problem