



## INAPPROPRIATE URINATION IN CATS:

Inappropriate urination is the most common behavioral problem reported by cat owners. Both male and female cats seem to exhibit this problem leading us away from the myth that only male intact cats will inappropriately urinate. The majority of cats that are euthanized for behavioral problems, are due to inappropriate urination.

The best way to solve the problem is to understand the underlying cause for this behavior. This article will explain the different types of urination problems, the trigger for inappropriate urination and how to stop the problem.

The first step in any elimination problem is to rule out an underlying medical condition. Some examples would be bladder or kidney problems, diabetes, arthritis and more. Consult with your veterinarian immediately before assuming it is a true behavioral problem. At minimum a physical exam and urinalysis should be performed.

It is important to differentiate between the different types of elimination problems, spraying and inappropriate elimination. Spraying is generally performed by the cat standing and spraying a stream of urine on a vertical surface such as a wall, windows, furniture, drapes, etc. This is a normal behavior performed by cats which serves to mark their territory. This is the reason the incidence of spraying in single cat households is only about 25% whereas in households with 10 or more cats the incidence increases to 100%.

Inappropriate urination generally is when the cat urinates in the normal squatting position, but not in the litterbox. The cat may urinate just outside the box, on the carpet in the living room, on your clothes, in the bathtub, on a specific rug, the list can be endless. My cat personally chose freshly cleaned laundry which I would leave lying around for days until she broke me of that bad habit. She also would immediately run over to a jacket I had worn for the day and thrown on the bed, squat and urinate on it in front of me. She obviously construed nothing wrong with this situation.

Cats may exhibit inappropriate urination for several reasons which for now we will loosely categorize in two divisions. 1- *Location aversion or preference.* 2- *Substrate preference or aversion.* 3- *marking territory.*

### Location Aversion:

These may develop rapidly, or over an extended period of time. If the cat is startled while using the litterbox, an aversion to the location may ensue. Examples are placing the box next to noisy machinery such as the washer/dryer. Next to items with alarms or timers that may go off when kitty is in the box or next to the television or stereo speakers. Cats also do not like to go to the bathroom next to where they eat or drink. Natural instincts dictate this is not healthy.

Cats generally prefer privacy. Placing the litterbox in a busy location may cause kitty to avoid using it there.

If the cat has been startled or abused while using the box in a certain location, she may wish not to return. For example: a dog or child harassing kitty while she is in the box. (Children are notorious for stalking cats and often can only catch them while in the act of going to the bathroom.) Or possibly another more dominant cat that ambushes the meeker cat while in the vulnerable position of trying to use the box. Another bad experience for kitty may have been the owner capturing her in the box in order to administer some unpleasant medication. It is also important not to catch your cat in the act of urinating outside the box, punish her and then shove her into the box. This will most likely reinforce the aversion to the box.

Cats readily associate bad experiences with the environment and will avoid that environment in the future.

Covered boxes are preferred by some cats because they allow for extra privacy. Other cats may not like them because it may prevent them from getting into a comfortable position to eliminate. Sometimes it prevents them from being able to scratch around in the litter. Also, these boxes are great for humans because fewer odors escape into the environment, but that means that it is more concentrated in the box which may repulse kitty. Frequent cleaning is necessary if this type of box is used.

### **Substrate Aversions & Preferences:**

Most important - cats do not want to use a dirty box. It is repulsive to them to have to enter a non-clean space. If they step in a box and get urine or feces on their paws, they may not want to go back. Remember cats are fanatic about being clean. They especially don't want to have to encounter another cat's excrement. Just pretend you are Felix Unger and you have to enter an old, dirty, extensively used outhouse. You would probably think twice about going there and search out another spot. This is a mild form of what your cat feels.

Cats are also very sensitive to the smell of other cats and will especially avoid the excrement of an ill feline. If one cat is sick or on medications that may change the odor of their excrement, the other cats may avoid the box.

*Note: Some cats may urinate in the box where other cats have gone in order to cover the previous feline's odor.*

As stated before, cats exhibit strong association patterns (i.e. a displeasing situation will often be associated with something in the environment). An aversion to hard clay litter may develop after a declawing surgery. The cat finds it painful to scratch in the litter and associates this type of litter with pain. A soft finely textured litter would be the appropriate option. Some cats will develop an aversion to litter after suffering from a painful bout of cystitis (bladder inflammation/infection) or lower urinary tract disease such as a blocked urethra. Even gastrointestinal diseases can lead to an aversion sequela. So can constipation or pain or anal sac impaction. Also if kitty has diarrhea and soils her paws in the process of covering, she may associate it with the litter. Basically if kitty is uncomfortable in the box, or has an unpleasant experience, an aversion can develop.

Cats often dislike strong odors, especially citrus. Do not use strong smelling disinfectants which leave residual odors. Also many cats dislike the deodorant litters or strong smelling cedar chips.

Some owners notice an aversion after baking soda has been added to the litter to reduce the odor. When the cat urinates on the baking soda, it fizzes and may be displeasing.

Generally large gravel size is less appealing to cats. The newer fine grained clumping litters and fine grained sands are usually the most appealing. Some lumbar yards carry play box sand at a very inexpensive rate.

Some cats develop preferences for rugs after the owner has placed a rug in front of the cat box to catch the litter. The cat scratches the rug like the litter in the act of covering and soon develops a preference for the softer feel of the rug. Next kitty seeks out other rugs on which to eliminate. Some cats do not like the plastic tray liners. They get their nails caught or dislike the texture.

How do you know if kitty is starting to develop an aversion? Possible cues are eliminating just outside the box and not wanting to be in the box; scratching outside the box but not inside. If your cat is perched precariously on the edge of the box, not wanting to touch a thing and leaps out as soon as finished, you can probably interpret those cues as not wanting to touch what is in there.

*Note: Many cats do not cover their feces or urine. This is not an abnormal behavior. In the wild many cats leave their excrement out in the open in order to mark their territory.*

### **How to Deal with Aversions:**

As before stated, be sure to first rule out any underlying medical condition. Even a subtle medical disorder could be affecting your cat's urination habits.

Most important – provide a clean box! Even though your cat may not be acting like the neat, cleanly kitty you generally perceive because she is urinating outside of her box, she most definitely still is. If the litterbox is dirty, she probably will not want to use it. Different cats tolerate varying levels of cleanliness. For some even the minutest amount of urine or feces will send her delicate little paws elsewhere to relieve herself. Ick! You want me to go in there? For these fastidious types you will need to scoop daily, if not more.

**Number of Boxes:** The general rule of thumb for the number of litter boxes is one box per cat, plus an extra box. Translated, this means one cat should have two boxes; two cats should have three boxes, and so forth. Two boxes per cat are even better.

Many aversions/preferences develop when the litter box is extremely dirty and kitty seeks elsewhere to eliminate such as bedding, rugs, carpet, newspapers, etc. In the process kitty may learn to prefer the softer material and chose it over even a clean box.

If this has occurred, you may have to place some old rags, torn up paper towels or newspapers in the box. These will have to be changed several times a day since they provide minimal absorbency and odor control. Gradually start adding soft litter to the box until all the other materials are replaced by litter.

While treating any inappropriate elimination problem, it may be necessary to isolate the cat in a small room where no previous house-soiling has occurred. Provide kitty with plenty of toys, love and attention in this room. Let her out only when 100% supervision is provided. You may place a bell on her collar to monitor where she is at all times. Gradually you will start her on new habits and hopefully preferences. The amount of time she is isolated is proportional to the length of the inappropriate behavior, anywhere from 1-4 weeks is usually sufficient.

If you are using a clumping litter, use anywhere from an inch to three inches of litter, depending on your cat's preference for depth. Use a scoop with slots to retrieve the clump. Scoop frequently

because the clumps will break down with agitation and will be harder to remove. If the waste products are removed regularly, the box will probably only need to be washed every week.

### **Cleaning the Box:**

Do not use ammonia based cleansers as these have the same type of odor to a cat as old urine. It is also best to avoid heavily scented cleaners, as these may be aversive to kitty. I use Ivory™ soap to clean, followed by a dilute solution of bleach (1 part bleach to 9 parts water) and then thoroughly rinse and dry. Bleach is one of the best disinfectants around and is cheap. Bleach kills bacteria, viruses and fungus. Just be sure to rinse well because remember that whatever kitty gets on her paws is going to go in her mouth because of her grooming habits.

If you are using clay or other types of litter, use a specifically designated spoon or scoop to remove the soiled litter. The important item to remove is the urine because this is what causes most of the odor. Ideally use only a small amount of this type of litter so you can get to the bottom of the box and remove all of it. If it is allowed to remain in the bottom it will cause an odor. Cats olfactory senses (sense of smell) are much keener than ours. If you can smell it, it is likely blowing her away. Replace small amounts of litter as needed. If you are able to remove all soiled areas, then the box will probably only require washing every 3-4 days. If kitty prefers a deeper amount of litter to dig in, try using the clump-able types of litters. If kitty prefers deeper non clumping litters the box should be washed at minimum every other day as you probably will have urine accumulation in the bottom of the box.

It is important to deal with inappropriate urination problems immediately. The longer the behavior persists, the more difficult it is to change. Even better is if you can spot a potential elimination problem before it becomes a real problem (as discussed above).

It is often difficult to distinguish between location and substrate aversions. If Kitty's environment does not include any of the items mentioned under location aversions, try offering a variety of different types of litters at different depths. If kitty resumes using the box in the same location with a different material then you will know she exhibits specific preferences. Again, most cats prefer the softer, finer grained materials such as sand and the newer clumping litters. Remember though, if kitty had a bad experience with one of these types of litters, i.e. soiled her paws with diarrhea, she may associate the experience with the litter and avoid it in the future. Change to a different textured litter in this case. For example: clay litter. There are also litters made out of different substances – examples Yesterday's News is made from recycled newspapers.

Cats with long fine hair (i.e. Persians) seem to be more particular to substrate preferences.

If kitty is still not using the box, provide a variety of different litters at a variety of locations. Use different types of boxes with different depths and types of litters. Provide different types of boxes – shallow, deep, wide open, covered or partially covered. Also provide different depths of litter.

If you have several cats with one being the definite dominant cat and one the meeker weaker cat, the latter may develop a location preference for the back of your closet. This kitty will probably require some privacy; maybe a screen or a covered box. Provide this cat with a safe place to eliminate. You may need to place a box in the closet. The problem is the aggressor may stalk kitty and corner her in the closet. Sometimes placing a bell on the aggressor's collar will alert kitty the bully is near. Always remember to use breakaway collars on cats. There are also electronic eye devices which can be used allowing only the cat wearing the proper collar to be recognized and allowed into an area.

The softer finer grained litters are usually much preferred by cats, as often evidenced by their increased desire to scratch around in the box, but may be a nuisance to the owner because of the tracking problems around the house. Many owners place a rug around the box, but I recommend a rougher surface. Kitty may learn to prefer the softer surrounding rug even to the fine grained litter. The plastic doormats or ones that are crisscrossed provide excellent cleaning with little desire for scratching. If kitty does not like to cross these to get to the box, try a straw mat. There are some sisal rope mats available to place around the box. These may actually help attract kitty to the box since they love to scratch sisal materials.

**Location Preference:** [Note - Cats will usually only have 1 or a few location preferences.](#)

If Kitty is exhibiting a definite location preference and continually urinates in a particular location, there are several ways to solve this problem. First you must thoroughly clean the soiled area. (See following article on this subject.) You may then need to place something over the preferred area, such as furniture or maybe her food and water bowls since many cats do not want to eliminate where they eat. If kitty comes back and urinates next to the obstacles, try placing a litter box in the area where she is eliminating. If she uses the box, don't make the mistake of moving it immediately. Leave the box in the exact position for 1-2 weeks (depending on the length of time the inappropriate behavior has been occurring). Then begin to gradually move the box 1 inch per day or every other day to a more appropriate spot. You may even need to move it slower than this. It may seem like a small distance to you but kitty perceives it as much more.

If kitty urinates next to the box, try a different type of litter. If the box is now used, follow the above protocol.

If you need to not have the box in the middle of the room for an occasion, then lock kitty in a room in which no inappropriate elimination has previously occurred. Supply her with her favorite box and litter, plenty of toys, food, water and love. When possible to return to the previous decor, kitty may be released.

Punishment is not an effective solution. If kitty is caught on the act and physically punished and then placed in the litter box a more powerful aversion is likely to ensue. The only acceptable type of correction would be to startle kitty when she is about to perform the act. Either a whistle or water spray bottle set on stream may be employed at the beginning of the behavior, i.e. when she is sniffing or scratching, but not during the behavior (squatting and urinating) it is then too late to have the desired effect.

Whereas punishment is not effective in cats, rewards are sometimes helpful. When kitty exhibits the appropriate behaviors, reward her with treats and praise.

If the location is in a specific room, restrict access to that room unless supervised. Placing a bell on the cat's collar is an excellent way to know where she is at all times. Be sure to use the breakaway collars. Remember one basic rule of feline behavior. Cats can't be trained to use the litter box. They can only choose to prefer a litterbox.

If kitty is choosing a potted plant for urination there are several steps to stop this behavior. First, make the plant unappealing. Place wire mesh or aluminum foil over the soil. Sometimes large stones are effective as well. In addition you may need to use potting soil in the litterbox to get kitty to use the box. Gradually start replacing the soil with the preferred litter. If kitty urinates next to the plant or still attempts to use the plant, then place the box next to the plant with potting soil. Gradually replace the soil with litter and then follow the above protocol of slowly moving the box to a more appropriate location.

## **Marking Behaviors:**

Spraying is the most common form of this type of problem, but many cats will also urinate or defecate on a surface to mark their territory. Suspect a marking behavior if there has been any change in kitty's social environment. For example: a new pet in the household or a new baby or another person who detracts from kitty's attention. Cats often urine mark when they are insecure about their environment.

Cats use olfactory cues (sense of smell) as a major form of communication. Their sense of smell is far more developed than humans (about a thousand times more sensitive).

Intact males and females in heat will often urine mark as part of their natural reproductive behavior. This is why it is extremely important to neuter all cats not specifically meant for breeding purposes.

Mostly spraying and urine marking is a social issue. It is the cat's way of communicating its presence. A dominant bold cat may spray to mark his territory or threaten another cat, whereas a timid defensive feline may spray or urine mark in response to an aggressive cat or to try and mark a small territory for himself. The important point to remember is that it is not just the big confident Tom who is spraying to mark his territory. The passive threatened neutered cat also has a high propensity to spray or urine mark if he/she feels threatened.

Often cats may spray or urine mark in front of a window where they can see other cats in the neighborhood. They feel threatened because they can see another cat neighboring their turf. They may spray on the window or by a door. To deal with this problem try to block the cat's view to the intruder(s). A border along the bottom of the window is often effective. Thoroughly clean all soiled areas. Also remove any bird feeders or other attractants which may bring outdoor cats to your home.

Remember, the more cats present in a household, the more likely there will be social problems and concomitant urine marking. If possible reduce the number of cats in the household. Obviously the more dominant cat will probably be the one who causes the most problems (i.e. The dominant cat sprays to announce his/her presence and to establish dominance and the more timid cat may mark in response to the dominant cat's aggression).

Separating indoor cats is extremely helpful in controlling marking. Provide each cat a separate room with plenty of toys, food and of course an appropriate litter box. The cats may be allowed out together only when supervised 100%. Again using different toned bells on the cats will help you to know where they are at all times. Sometimes cats will get used to each other if they are not allowed to exhibit their aggressive behaviors and perpetuate social dominance behaviors. You may wish to provide treats to them when they coexist peacefully. An excellent bonding behavior between cats is grooming each other. Occasionally if cats are grooming themselves in close proximity, they will begin to groom each other. To facilitate the desire to groom, you can try wiping them down with a damp cloth. This will cause them to groom themselves excessively and they may even begin to groom each other.

Feliway is a product which you spray in the environment. It is a feline facial pheromone analogue and helps to impart a good feeling to the cat. It needs to be sprayed twice daily around prominent areas of the house and nose level to your cat. It can be very effective at reducing spraying.

Often times though these social hierarchies are difficult to overcome and the longer the inappropriate behaviors continue, the more difficult they are to break and keep under control.

But don't despair. Your veterinarian is equipped with several pharmacological therapies which may greatly help the situation with very few side effects. There have been many advances in behavioral pharmacology which make it a safe and easy addition to treatment.

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