

What to Do When Your Cat Thinks Outside of the Box

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The most common behavioral concerns reported by clients about their cats involve litter box use. Complaints about litter box use can often be prevented and usually be successfully treated if the client becomes good at observing their cat's behavior. The key to resolving **all** elimination concerns is to recognize and be able to identify the pattern in the choices the cat makes about elimination. If clients can do this the problem will resolve. Otherwise, you need to know that *the single biggest reason why cats are relinquished or euthanized involves elimination behaviors that the clients views as problematic*, whether these are true behavioral problem for the cat.

For cats, the world of odor is a rich one. All of their affiliative social behaviors involve odor and rubbing on or wrapping around each other, and many of the behaviors of concern are also affected by odor.....whether they are scenting another cat or that cat's urine.



Smelling where another cat has been – notice the piloerection and elevated stance of the cat.



Cats that have a close affiliative relationship rubbing scent on each other using their tails, heads, and cheeks.

Cats enhance their ability to perceive and identify odor through a Flehmen response where they inhale and aerosolize the odor in a way that allows them to taste and smell it at the same time and further identify it by processing through the vomeronasal organ and the olfactory bulb.



A young, captive cheetah in a cheetah sanctuary exhibiting a Flehmen response to urine an adult sprayed on the other side of the fence.

Responses to unfamiliar odors – or odors associated with illness or individuals that the cat does not like – can include aggression, spraying urine on a vertical or horizontal surface, and/or not using the litter box.



A cat spraying while moving his tail in a quivering manner and treading his feet.

Feline house-soiling problems can generally be divided into two broad categories: inappropriate elimination and marking. Inappropriate elimination describes cats who are eliminating (emptying their bowels and/or bladders) in locations their owners consider inappropriate (in other words, not in their litter boxes). This is a situation where the pet is performing a bodily maintenance behavior in a way that doesn't fit with our idea of how a pet should behave.

Marking, on the other hand, is a social behavior and a form of communication. Cats most typically mark with urine rather than feces. The majority of cats who urine mark, both male and female, spray urine on vertical surfaces (see illustration above). Some cats will also urine mark on horizontal surfaces. Rarely, cats will only mark on horizontal surfaces. These are usually areas of social significance like prominent objects, near doors and windows, places with new odors or areas where the cat encounters other pets.

You can usually distinguish inappropriate elimination from marking by the following:

Inappropriate Elimination

Usually Horizontal Surfaces

Squatting position

Large amounts of urine and/or feces

Eliminates near the box but not in it

Digs/scratches to prepare spot and cover

Equally likely in male and female

Underlying medical conditions are common

Marking

Vertical Surfaces-walls and drapes

Most cats will stand but some will squat

Small amounts of urination

Areas of social significance

Males > females; Intact > neutered

Underlying medical conditions are uncommon

Concerns about inappropriate elimination use generally involve one or more of the following complaints and involve squatting behaviors:

- the cat doesn't use the box at all;
- the cat uses the box for either urine or feces, but not both;
- the cat eliminates right next to or on the box, but not in it;
- the cat uses the box but doesn't cover urine or feces. Not covering urine or feces – if this is not a change in behavior – may be normal.
- If the cat used to cover and now doesn't, the cat's perception of the experience changed.

Cleanliness of the box is often the number one reason that cats will choose other locations to eliminate. Location, litter type, litter box size, and type of box are important factors to evaluate when determining a cause. The litterbox should be scooped at least daily and the litter changed once a week. Cleaning the box with soap and water is preferred over other types of cleaners.

Current research shows that the most important factor when choosing a box is size and not necessarily whether it is covered or not. Most commercial litter boxes are too small for the average cat and creating a box out of Rubbermaid containers or a sweater box may be a better choice. Most cats do not like automatic litter boxes or litter box liners.

Cats with a litter box aversion will often avoid the box completely, fail to dig in the box or cover their elimination. Many will straddle the box, shake their feet excessively after leaving the box or eliminate near but not in the box. If it is a substrate aversion, they will show a preference for a particular substrate such as carpet, tile, or piece of furniture. These cats will often choose a closet or secluded area of the house and often have a medical reason that initially causes elimination out of the box, but the behavior continues after the primary condition resolves.

Overall, the treatment for inappropriate elimination and marking in cats is similar. Regular scooping of the box along with non-scented, clay, clumping litter will make the box more appealing. Location matters with most cats preferring a quiet, secluded area for elimination away from loud appliances, furnaces, and air conditioners. Multiple litterboxes give choice for elimination with some cats choosing to urinate in one box and defecate in another. With cats that have a litter box aversion or develop a substrate preference, medication is often not necessary. Once the aversion or preference is identified and managed, the cat often returns to using the box.

Treatment for marking cats involves identifying the underlying cause. When there are multiple cats in the household, make sure there are plenty of resources in the form of litter boxes, feeding stations, vertical spaces, sleeping stations, hiding areas, and water bowls. Punishment is often ineffective and confusing for these cats. Reward-based training helps to improve communication while providing mental stimulation and positive human interaction. Food dispensing and puzzle toys mimic hunting and encourage exploration of their environment reducing overall stress levels and meet basic needs. Medication is often beneficial when treating marking cats.

General guidelines that will help you meet the basic litter box needs include the following suggestions.

1. Have one more litter box than you have cats so that fussier cats can find a clean box.
2. Scoop the box multiple times a day.
3. Even with clumpable litters, dump the box at least once or twice a week.
4. Wash the box weekly, rinse well, and air dry to remove any odor of cleaning agent. Hot water and soap is best for cleaning.
5. Don't use scented litter, liners or additives like baking soda.
6. Get a litter box that is 1.5 times the cat's body length where the cat can move and turn around – underbed sweater boxes make great litter boxes.

7. If the cat likes to dig, make the litter deep. If the cat flicks the litter from his or her feet, make the litter shallow or switch to a different type (pelleted sawdust, buckwheat, et cetera).
8. Wash, rinse and dry any area the cat has soiled outside the box and then use a good odor elimination. The best ones help to enzymatically break down urine compound and make some odorants too heavy to be sniffed.
9. Regardless, follow the cat around and see what that cat chooses – mimic that choice.

Cats tell us every day what they like and what they do not like. We need to understand and listen to them.