

**Curing the Litter Box Blues:
Feline Elimination Disorders**
FELINE ELIMINATION DISORDERS



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Agenda

- General information
- Inappropriate elimination vs. urine marking
- Causes
- Resolving feline behavior problems
- Diagnosis and treatment
- Shelter program

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General Information

- Definition of "elimination disorder"
 - Do not use litter box for urination and/or defecation
- Prevalence ⇨ Widespread
 - THE most common behavioral problem of cats
 - 40 – 75 % of all cats presented with behavior problems
- Impact on human-animal bond
 - Can strain the relationship to the breaking point
- Can almost always be managed and resolved!

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<p>Inappropriate elimination</p> <ul style="list-style-type: none"> • Only horizontal surfaces • Deposit large amounts • Squatting posture • May eliminate both inside and outside litter box • May use box for urination or defecation only 	<p>Urine marking</p> <ul style="list-style-type: none"> • Mostly vertical surfaces • Deposit small amounts • Display a typical posture • Normal behavior
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Inappropriate Elimination vs. Urine Marking

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<p>Inappropriate elimination</p> 	<p>Urine marking</p> 
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Inappropriate Elimination vs. Urine Marking

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Causes

- Several factors may be involved
- What is initiated by one factor may continued by another
- Two general behavioral categories:
 1. Dislike of the litter box
 2. Stress-related misbehavior

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Causes — Examples

- Medical problem(s) (e.g., urinary tract infection)
- Infrequent cleaning
- Substrate aversion
- Litter box location
- Residual odor in inappropriate areas
- Negative association(s) with litter box
- Change of residents in the house (two and four-legged)
- Change in home and/or furnishings
- Change in daily routine
- Outdoor stressors

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Resolving Feline Behavior Problems

- Cause ⇒ Artificial social situations
- Involves the slow reshaping of the cat's natural behaviors
- To *solve* the problem, must *understand* the problem
- MUST rule out physical problems first

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Diagnosis and Treatment

- Behavioral history
- Medical/Physiological problems
- Environmental changes
 - Attraction therapy
 - Aversion therapy
- Behavioral modification
 - Shaping the cats behavior
- Behavioral products
- Behavioral pharmacology

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Medical/Physiological Problems

- Spay/Neuter unaltered pets!
 - 90% of male cats no longer mark after neutering
 - 95% of female cats no longer mark after spaying



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Medical/Physiological Problems

Even when a physical diagnosis is made, behavioral therapy may be needed in addition to medical treatment since behavioral problems can arise as a result of negative conditioning

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Environmental Changes

**Attraction Therapy:
 Making Litter Box More Attractive – Encourages Cat**

- Scoop out litter boxes daily
- Clean litter boxes on a regular schedule
- Try a variety of litter box styles and sizes – larger the better
- Provide at least one litter box per cat (may share)
- Provide at least one litter box for every level of the house
- Place litter boxes in private accessible locations
- Remove litter box covers and liners
- Use unscented litter; clumping preferred
- Purchase new litter box(s)
- Move food and water bowls away from the litter box sites
- Offer a variety of litter depths in different litter boxes

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Environmental Changes Attraction Therapy

- Scoop out litter boxes daily!



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Environmental Changes Attraction Therapy

- Clean litter boxes on a regular schedule



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Environmental Changes Attraction Therapy

- Try a variety of litter box styles and sizes
 - The larger the better



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Environmental Changes

Attraction Therapy

- Provide at least one litter box per cat (may share)
- Provide at least one litter box for every level of the house
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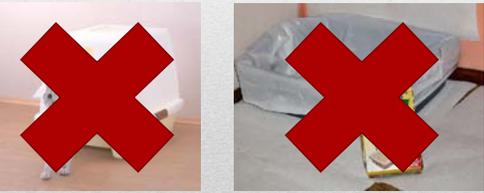


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Environmental Changes

Attraction Therapy

- Remove litter box covers and liners



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Environmental Changes

Attraction Therapy

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Environmental Changes Attraction Therapy

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Environmental Changes Attraction Therapy

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Environmental Changes Attraction Therapy

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Environmental Changes

Aversion Therapy:
Making Unsuitable Sites Undesirable – Discourages Cat

- Place deterrents at the soiled area site(s)
- Clean soiled areas with a cleaner that is specifically formulated to break down (neutralize) urine and/or stool
- If possible, make area being soiled inaccessible

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Environmental Changes

Aversion Therapy

- Place deterrents at the soiled area site(s)



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Environmental Changes

Aversion Therapy

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Environmental Changes

Aversion Therapy

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Behavioral Modification

Shaping the Cat's Behavior

- Take cat to the litter box frequently ⇒ praise use
- Do not use physical punishment
- Temporarily place a litter box over the soiled area(s)
- Avoid, eliminate, or at least reduce awareness of outdoor stressors
- If caught in the act ⇒ interrupt and redirect
- Multi-cat household ⇒ create an “atmosphere of plenty”
- Confine cat to a small area
- Keep a behavioral diary
- For inappropriate defecation, feed the cat twice a day

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Behavioral Products

- Feliway® Pheromone Spray and Diffuser



- Cat Attract™ Litter or Cat Attract™ Litter Additive



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Behavioral Pharmacology

- Only an adjunct to treatment plan
- Usually more successful for motivated behavior (e.g., urine spraying) and stressed animals
- No drugs approved by the FDA for the treatment of inappropriate elimination
- Many psychotropic drugs have human abuse potential

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Behavioral Pharmacology

Source: Landsberg G, Hunthausen W, Ackerman L. *Handbook of Behavioral Problems of the Dog and Cat* (Philadelphia, PA: Elsevier Science, 2003), pp. 532-535.

Drug Class	Drug Name	Dose for Cats (PO)	Freq.	Potential Side Effects
Azaperone	Buspirone (Buspar)	0.5 – 1.0 mg/kg	SID/TID	Irritability, aggression, alterations in social behaviors
Benzodiazepine	Alprazolam (Xanax)	0.125 – 0.25 mg/cat	SID/TID	Sedation, idiosyncratic hepatic necrosis (?)
Benzodiazepine	Diazepam (Valium)	0.2 – 0.5 mg/kg	BID/TID	Sedation, idiosyncratic hepatic necrosis
Selective Serotonin Reuptake Inhibitor	Fluoxetine (Prozac)	0.5 – 1.0 mg/kg	SID	Sleep disturbances, irritability, anorexia, changes in elimination patterns
Selective Serotonin Reuptake Inhibitor	Paroxetine (Paxil)	0.5 – 1.0 mg/kg	SID	Sleep disturbances, irritability, anorexia, changes in elimination patterns
Tricyclic Antidepressant	Amitriptyline (Elavil)	0.5 – 1.0 mg/kg	SID	Sedation, anticholinergic effects, cardiac conduction disturbances
Tricyclic Antidepressant	Clomipramine (Anafranil)	0.3 – 0.5 mg/kg	SID	Sedation, anticholinergic effects, cardiac conduction disturbances

Key: SID = Once per day, BID = Twice per day, TID = Three times per day

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Shelter Program

- Identifying litter box problems in the shelter
- Medical/Physiological problems
- Treatment — how?
 - Environmental changes
 - Attraction therapy
 - Aversion therapy
 - Behavioral modification
 - Shaping the cats behavior
 - Behavioral products
 - Behavioral pharmacology
- Placement

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Identifying Litter Box Problems in the Shelter

- Intake questionnaire
 - Include questions about history of litter box use
 - Can be used as a screening tool
 - Example:
 - Cat Intake Profile from Animal Rescue League of Boston
<http://www.arlboston.org>
- Intake interview
 - Opportunity to develop rapport
 - Questions are not “blaming” ⇒ Help manage the cat

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Identifying Litter Box Problems in the Shelter

- Observation of enclosure behavior
 - Litter box “misuse” often not demonstrated



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Medical/Physiological Problems Shelter Environment

- Minimal database for inappropriate urination/urine marking
 - Physical exam
 - Determination of neuter status
 - Urinalysis via cystocentesis
 - +/- urine culture, abdominal radiographs
- Minimal database for inappropriate defecation
 - Physical exam (including a rectal exam)
 - Determination of neuter status
 - Fecal exam (floatation and smear)
 - +/- Expressing of anal sacs and cytological evaluation of contents
- Other tests may be warranted (e.g., Blood Glucose, BUN, Creatinine, thyroid level)

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Treatment – Foster Care

- Strongly recommended
- Keep cat in one room
- Monitor and record elimination (in and out of box)
- Follow cleaning and environmental recommendations
- If no problems after two weeks, *gradually* allow access to rest of home
 - Continue to monitor
- If no problems after additional two weeks, put up for adoption

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Treatment – In Shelter

- Keep in “real life” room or large cat condo
- Monitor and record elimination (in and out of box)
- Follow cleaning and environmental recommendations



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Treatment

Remember, lack of a problem in a shelter (or foster care) does not guarantee that the problem would not happen in a adoptive home

The Good News!
 Following standard recommendations usually prevents reoccurrence

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Placement

- Ideal home:
 - Single cat household
 - Minimal outdoor activity/stressors
 - Quiet household
 - **Adopter willing and able to follow standard litter box environmental recommendations**
⇒ MOST IMPORTANT



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Placement

Adoption Counseling

- Full disclosure regarding cat's history
- Offer "foster to adopt" as an option
- Education! Education! Education!
- Follow-up



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Questions?



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