

## 7 SUMMARY

### **Inappropriate elimination as a behavior problem of cats**

In order to obtain information about the elimination problems of cats, a questionnaire was developed, displayed in small animal veterinary practices, and evaluated. Of the 520 questionnaires distributed, 342 (65.8 %) were completed and used in the study. 30,1 % of cats studied showed house soiling, while 57 % showed only urination outside of the litter box. The findings indicate that differentiating between marking behavior and inappropriate elimination is very difficult for most cat owners.

Cats most often tend to soil the house if they are using lidded litter boxes or live together with other animals. By contrast, the following factors correlate with decreased soiling: the use of the box soon after cleaning, a complete cleaning of the litter box every other week and a daily interaction with the owner more than two hours.

Differences in litter box types and maintenance also play a strong role in elimination problems. Lidded litter boxes, frequent changes of litter type, and daily complete cleaning of the litter box, all correlate with increased house soiling. Daily removal of urine and feces from litter box; use of a cleaning agent (as opposed to fresh water only) and adequate amounts of litter correlate with decreased soiling.

Owner can also promote better house training of the cat. Increasing interaction with their cats and decreasing the time when the cat is left alone both correlates with decreased house soiling. Also separating the feeding and water bowls from the litter box and having a quiet place to feed the cat will decrease the inappropriate elimination.

Regarding different breeds, it is obvious that mixed breeds soil the house most often, followed by Persian and Siamese cats. Older or anxious animals tend to soil the house more often than others.

Among cats who soiled the house, two-thirds tended to use a "special place" for inappropriate elimination, and 68 % preferred soft surfaces. Signs of inappropriate elimination include standing with horizontal urine stream, scraping outside the litter box or leaving the litter box after using, panic-stricken.

While the above data are consistent with the literature, several findings diverge from it. No correlation was found between type of litter used, or number of persons in household, and improved elimination habits. Also new were the findings that the possibility to watch other animals through the window or to go outside (porch or garden) do not trigger stress for the

cat. Furthermore, allowing the cat more freedom of movement in the home (i.e. allowing access to bed and/or furniture) has no influence on the elimination behavior.

The inappropriate elimination is a long-term problem, which most cats in the study showed sporadically, not daily. A majority of cat owners are not overly concerned about soiling problems, and would own a cat again.

In veterinary practice, providing sound, thorough information to clients about cats' elimination habits and problems is essential to forestalling such problems, and is helpful in optimizing the animals' quality of life and preventing problems before they occur.