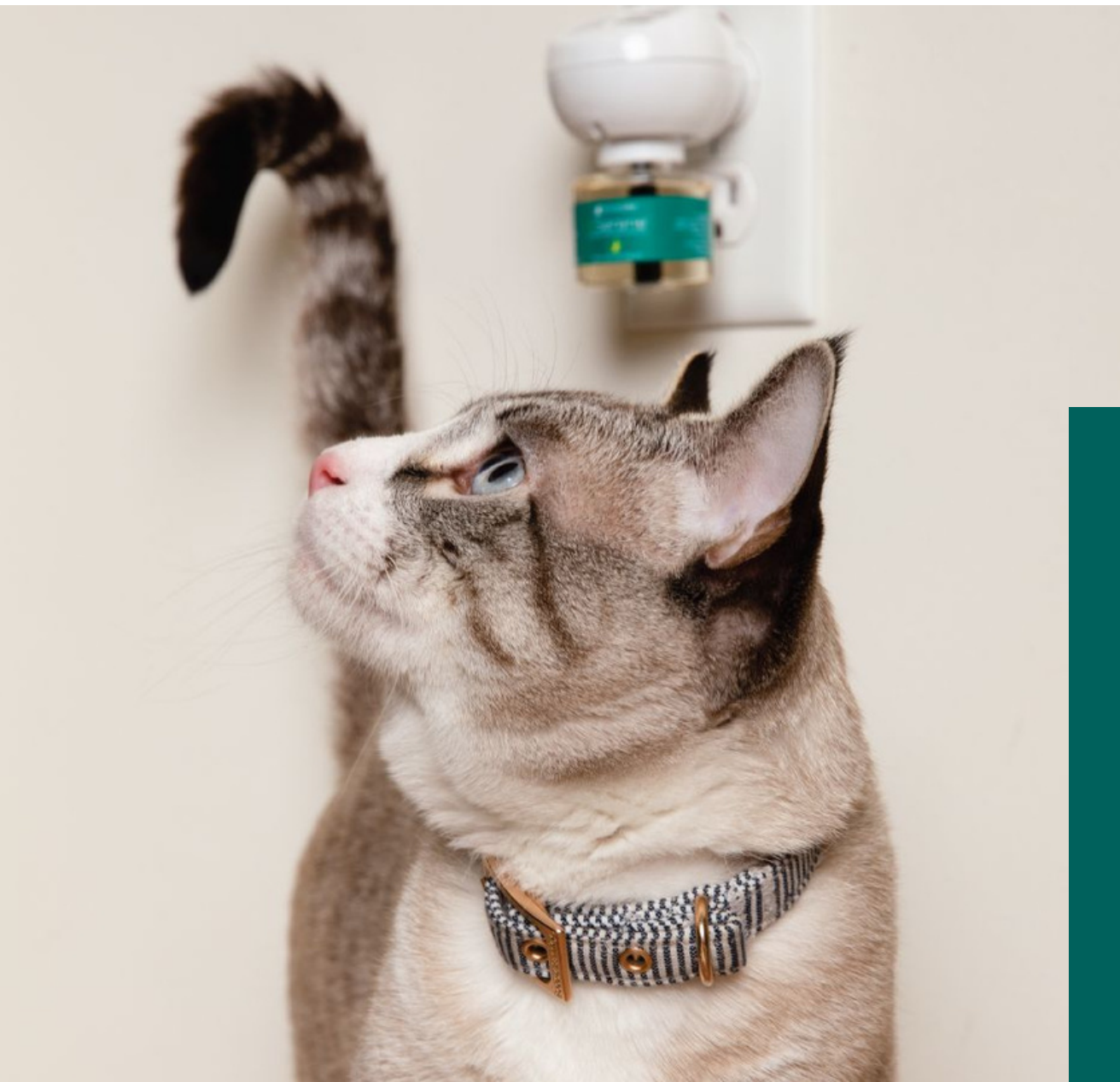


A Winning Alternative: The Positive Impact of bSerene™ Feline Calming Pheromones on the Family-Cat Bond and Practice Success

Cat ownership is on the rise, with documented growth rates of 2.05% annually for the past 6 years. This represents 66 million cats living in 31% of U.S. households¹. While 58% of these households have one cat, on average there are 1.7 cats/home. It is these multi-cat households that create challenges for felines who find themselves sharing their homes, which defies their natural preferences.



Pheromones Importance



At their core, domesticated cats are solitary animals that enjoy forming strong bonds with humans. Cats are not dependent on other cats for social interaction, preferring to travel and hunt alone. To create defined boundaries that minimize unwanted social contact, cats mark their territories with pheromones, which are species-specific organic compounds that cause consistent behavioral reactions when detected. The compounds are unique and send different messages. Examples include territorial markers, appeasement behavior, anti-anxiety messaging, and to signal availability for mating. In cats, these pheromones are mainly released by facial (cheek) glands, anal glands, urine, feces, and those deposited during vertical scratching activities.

When multiple felines occupy a confined space, such as a home, boundaries are often crossed, leading to conflicts between cats. Consequences of conflict include increased tension and aggressive behavior such as hissing, growling, chasing, staring, stalking, biting, and scratching of companion cats. Because domestic cats prefer solitude, social bonds are not desirable, nor do they seek reconciliation after episodes of conflict or aggression. The outcome of these interactions is continued conflict, aggression, and stress-associated diseases.

Undesirable outcomes of inter-cat conflict for pet owners include behavioral problems, such as territorial urine marking and continued physical altercations with injuries. Because of amplified aggression, the risk of misdirected aggression and injury to human family members exists. The submissive cat may avoid conflict by becoming reclusive. Due to self-isolation, they have less frequent litter box activity and decreased access to food. It is not uncommon for less dominant cats to develop idiopathic/associated stress[WH1] related cystitis and abnormal eating patterns that lead to weight loss or vomiting from binging/purging.

Pheromones telegraph unique messages; there are two feline pheromones that have been identified as helpful in managing inter-cat aggression and anxiety. The first, feline facial pheromones (FFP), help to signal to cats that new environments are safe, lowering anxiety and helping to prevent inappropriate territorial urine marking. The second, maternal appeasing pheromones (MAP), are naturally produced in the mammary region and aid in decreasing anxiety as well as stress and lessening aggressive reactions. First patented in 1995, commercial products have been developed that are comprised of FFP, or both FFP and MAP. Research has found that pheromones can positively impact the following medical and behavioral conditions:

Stress Associated with Travel

Synthetic FFP decreased stress associated with short-distance transportation of cats. One study found "curling, becoming motionless and meowing significantly reduced after treatment" when a synthetic FFP product was used compared to placebo.²

Clinical Signs of Feline Herpesvirus in Stressed Kittens

The introduction of synthetic FFP diffusers into communal housing situations where kittens were experimentally infected with feline-herpesvirus-1 (FHV-1) resulted in increased sleeping and less sneezing than observed in the placebo groups. The conclusions from this paper were that FFP "lessened stress and consequently clinical signs associated with FHV-1".³

Stress in Households Containing Dogs and Cats

A study examined the impact of simultaneous use of canine MAP and a combined feline FFP and MAP product in households where the cat-dog relationship was marked by interspecies stress. The finding was that the use of both products "improved cat-dog relationships in multi-species households."⁴

Inter-Cat Aggression Within Households

When diffusers containing combined feline FFP and MAP compounds were used in multi-cat households for four weeks in combination with behavioral counseling, there was a decrease in inter-cat aggression. Given that the inter-cat conflict was long-standing in nature, with a median of 594 days across all study households, "the ability of the treatment to have an impact in only four weeks is promising."⁵ The study concluded that "pheromones may be useful as a component of a complete behavior modification program."

Feline Urine Spraying

In a meta-analysis of 10 studies, FFP was found to reduce feline urine spraying by week four when compared to baseline. In contrast, pharmacologic therapy was found to take up to 16 weeks before feline urine spraying was decreased by at least 90%.⁶

Feline Idiopathic Cystitis

A study evaluating the impact of FFP on cats with idiopathic cystitis found that there was a "trend for the cats exposed to FFP to have less severe episodes and fewer recurrences of feline idiopathic cystitis."⁷

Stress in Hospitalized Cats

In a study that examined how cats responded to hospitalization in veterinary practices, it was found that "significant increases in grooming, interest in food, and food intake suggest that FFP induced an anxiolytic effect on some cats."⁸ Additionally, it was noted that cats exposed to FFP spent more time lying, sitting, and less time sleeping, all indicators of lessened stress.

The Impact of Pheromones on the Family-Cat Bond: What Your Colleagues Say

Both Fear Free® Guidelines⁹ and the Cat Friendly Environmental Guidelines¹⁰ advocate the use of FFP and MAP in veterinary practice settings, including both diffusers and pheromone-sprayed towels in examination rooms and hospital wards. In a recent survey¹¹, 100% of participating veterinary professionals said that they use feline pheromone diffusers in examination rooms. 57% of those surveyed stated that they use diffusers in waiting rooms, and 71% report using them in treatment areas. 71% of respondents use the pheromone spray on carrier bedding when the cats leave the practice.

Benefits reported by veterinary professionals surveyed include:

- Calmer cats and happier clients.
- Increased job satisfaction in veterinary teams who feel good about stress reduction for feline patients.
- Pet owners are more bonded to practices that provide a reduced-stress environment. Diffusers are an easily observable indicator of the practice's commitment to lowering feline stress.
- More thorough physical examinations.
- Feedback from clients after discharge that their cats seemed less stressed on the ride home, versus the trip to the practice, after the carrier bedding had pheromones applied.

Promoting the use of pheromones to clients was endorsed by 100% of respondents. Conditions that prompted the recommendation for feline pheromone use include:

- New cat in the household (100%)
- New Kitten (71%)
- Travel (100%)
- Situations that trigger stress or anxiety (100%)
- Aggression (86%)
- Inter-cat conflict (86%)
- Improper elimination (100%)

100%

of participating veterinary professionals said that they use feline pheromone diffusers in examination rooms.



57%

of those surveyed stated that they use diffusers in waiting rooms.

71%

of those surveyed report using feline pheromone diffusers report using them in treatment areas.



71%

of respondents use the pheromone spray on carrier bedding when the cats leave the practice.

Why bSerene™ Feline Pheromone Products?

bSerene™, marketed by H&C Animal Health, offers two different feline pheromone products:

- bSerene™ Feline Calming Spray is a unique formulation that includes FFP synthetic pheromones that release “feel-good signals” mimicking the F3 feline facial pheromone, a pheromone that cats use to mark places, objects, and persons as familiar. This provides more targeted exposure to the pheromones, resulting in more rapid stress relief.
- bSerene™ Advanced Calming Diffuser includes both FFP and MAP, a combination that has been found to have increased efficacy in multi-cat households with a higher incidence of inter-cat conflict. This product is appropriate for all life stages (8 weeks of age +) and provides coverage for up to 750 sq. ft of living space, which is 10% more than competitor products.

Early in the life of the product, the same diffuser was used by companies producing the product. Based on customer feedback, a unique diffuser design was implemented. Advantages include:

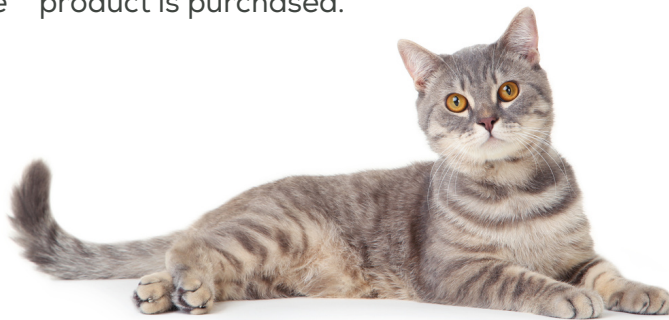
- Advanced diffusion technology that ensures efficient and consistent distribution of pheromones into the environment.
- Design efficiency that focuses on maximizing the effectiveness of pheromone release. The new design minimizes clogging, which ensures a steady distribution of pheromones into the atmosphere.
- bSerene™ diffusers incorporate safety features that prevent overheating or electrical issues.
- Designed to operate quietly, bSerene™ diffusers eliminate noise-related stress or discomfort to pets.



bSerene™

With the rise of big box stores and online pet retailers, many veterinarians have ceased to carry feline pheromone products in their practices. As one survey respondent observed, “We used to carry them, but people bought them online instead.” One unfortunate outcome of removing these products from veterinary retail centers is that it creates a barrier to purchase; to acquire the product, clients must go online as opposed to walking out of the veterinary practice with the product ready to use.

The distributor of bSerene™, H&C Animal Health, recognizes the disadvantages that veterinarians face when competing with mega-retailers. Because they are committed to the success of the veterinary profession, they have elected to use Minimum Advertised Pricing (MAP) strategy. This strategy means that the bSerene™ products can never be sold as loss leaders or for less than clients can purchase them at the veterinary practice. Advantages to this decision include consistent profit margins for veterinary practices, as MAP prevents underpricing by competitors, including online, big box stores, and local veterinary colleagues. This approach helps maintain customer trust and satisfaction; clients won't perceive that veterinarians are overcharging, as the price is the same regardless of where a bSerene™ product is purchased.



“As a gold-level designated Cat Friendly Practice since 2015 the use of pheromone diffusers in my clinic, West Towne Veterinary Center and Cat Boarding facility in Madison Wisconsin, has been a game-changer. Using them in our cat boarding, fostering & socialization facility, “Bugs Cat Gym” has made boarding cats less stressed and even allowed cats to mingle successfully during monthly “Cats Night Out” events with very few, if any, adverse inter-cat interactions.”

-Ken Lambrecht, DVM

Owner, West Towne Veterinary Center and Bug's Cat Gym
boarding/foster center, Madison, WI

CEO and Co-Founder, Healthy Pet Connect

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