



Our Mission:

We are committed to saving lives and reducing suffering of homeless dogs and cats through education, advancement of knowledge and shelter outreach.

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Shelter Watch



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From the Director's Desk

I hope that everyone had a wonderful Thanksgiving! We are experimenting with devoting each newsletter issue to one primary topic, hoping that the information may be more useful to you.

This month's issue is devoted to equipment and facilities. Where our animals reside and how we manage their environment is important, both to their physical and mental health! Similarly, shelter staff, volunteers and potential adopters must also be comfortable. Levels of noise, odor, dust, and moisture in animal housing areas usually exceed those found in environments where only humans reside. Most of us working in shelters have little expertise regarding building materials, heating, air conditioning, ventilation, and plumbing design and equipment to manage these challenges. We must partner with people who have that expertise, make them aware of the

special needs of an animal housing facility, and make clear that building costs must be affordable. The shelter manager (from one of the shelters with which we work closely) volunteered to share his experience with improving his shelter's air quality in this issue in hopes of helping other shelters. Please let us know what you think of our new approach.

Jan Scarlett, DVM, Ph.D.



Improving Air Quality on a Tight Budget: Mr. Tom Geroy*

The HVAC system serving our shelter was outdated, extremely inefficient, and constantly malfunctioning, so it was time for new equipment. I researched information pertaining specifically to animal shelters, and everything I found spoke solely to the importance of air exchange. A variety of sources recommend exchange rates anywhere from 10 to 25 complete room changes per hour, depending on the room's intended use. As I began consulting with various HVAC

contractors, the universal message I received was that they could achieve those exchange rates, but the upfront cost of the air exchangers and the ongoing utility costs to operate them would be very high. Air exchange is expensive! Being a modest non-profit organization, the shelter faced the challenge of how to attain a meaningful level of air quality on a tight budget. As a result of this obstacle, I learned two

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“The use of cost-effective alternatives to high rates of air exchange can significantly improve indoor air quality on a limited budget.”



An example of colony housing with great use of vertical space and hiding areas.

Air Quality: Continued from Page 1

valuable lessons: establishing good indoor air quality is actually a three-stage process including air exchange, filtration, and purification, and that you can significantly improve your indoor air quality by utilizing affordable alternatives to high rates of air exchange. For details on what this shelter manager learned, please see <http://www.sheltermedicine.vet.cornell.edu/facilities/documents/IMPROVINGINDOORAIRQUALITY.pdf>.

Working within the shelter budget, the shelter installed a system that provides an air exchange rate of two complete room changes per hour, incorporates two independent filtering systems utilizing high efficiency 13 MERV filtering media, and two RFG REME+ air purification modules. The improvement is outstanding. Most notably, many staff members, volunteers and customers have commented on how “neutral” the cat and

dog adoption rooms now smell. Due to the purification units’ efficacy at reducing odors, the shelter is able to stop using a deodorizing agent that cost approximately \$500 per year. Furthermore, we have observed a modest decrease in the rate of feline URI – the current average is about twelve percent, while prior to the installation of the new system, the rate averaged between seventeen and twenty percent. And due to the efficiency of the new equipment, we have seen a decrease in our electricity costs and expect a similar decrease in natural gas expense during the winter. Therefore, through the use of technologies that provide cost-effective alternatives to high rates of air exchange, it is not that difficult to significantly improve indoor air quality on a limited budget.

**Tom Geroy is the manager of a small, open admission, upstate New York shelter handling approximately 1700 animals annually. He can be contacted at shelter@cheumungspca.org*

Feline Focused Construction: 5 Consideration for High Quality Housing for Cats: Dr. Nicole Putney

1. Vertical space

Cats love to be up high. It gives them a sense of security to be able to perch and look out over their environment. In colony housing, an old bookcase does wonders for feline wellbeing. Shelving can also be secured to the walls. Shelves can be carpeted, but this is generally not recommended as it makes their surfaces more difficult to sanitize. Washable beds – tacked down if need be – are a much better option. If housing in single units, a shelf or raised surface can provide extra room for the cat to

have a resting space away from food and litter.

2. Hiding spaces

Providing a box or carrier for cats to retreat to can greatly decrease their stress levels. How would you feel if you were exposed to the world 24 hours a day? Cardboard boxes cannot be cleaned, but are great disposable hideaways.

3. Scratching

Cats need to scratch. It is natural behavior and expressing it is key to their wel-

fare. Carpet scraps are a great (and disposable) alternative to scratching posts – although the latter can be easily built from a piece of plywood, a 2' x 4' and a lot of rope. Be sure to place scratching surfaces high enough so that they can scratch at a full stretch.

4. Access to “nature”

Of course, your shelter cats should be indoor-only. However, allowing them some sort of access to the great outdoors in highly enriching. While not every shelter is outfitted to have a safely enclosed outdoor area for cats, simply housing them near a window helps. Placing a birdfeeder outside can provide them with hours of entertainment! Televisions are another creative way to entertain cats. DVDs with soothing music and scenes of small rodents, birds, and fish are available for your cats' viewing pleasure.

5. Space

In addition to providing vertical space, allow enough overall space for separation of food/water, litter, and resting and play areas. Cats are a neat and clean species and humane housing should ensure that they do not have to dine in their bathrooms.



Image courtesy of the Ladew Cat Sanctuary, Oyster Bay, New York.



Vertical perches, like that pictured above, help give cats a sense of security.

“It is not uncommon for noise levels in dog kennels to register 115 decibels. This is not just a bit higher than the standard; it is exponentially higher and very damaging to human hearing”

Noise Abatement in Animal Shelters: Mr. Bill Brothers*

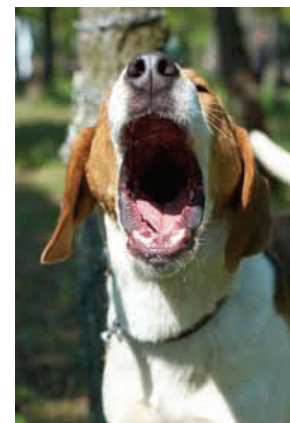
One of the biggest problems common to many animal shelters is the ear-splitting, high noise level in the dog kennels. Typically, these rooms house many dogs and are not designed with noise control in mind. In fact, the surfaces - walls, floor, and ceiling - are almost always “hard” so they can be easily cleaned and disinfected. Unfortunately, this makes them highly reflective of sound which makes the room reverberate with annoying - even dangerous - levels of noise when the dogs bark. This makes it unpleasant for visitors as well as unpleasant and dangerous to staff and to the dogs.

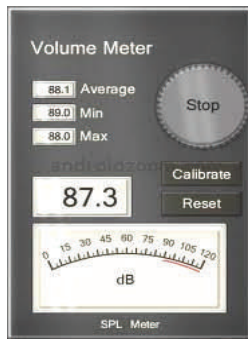
OSHA - Occupational & Safety Health Administration - has a workplace noise level standard of 85 decibels for worker noise exposure. A

decibel is a measure of loudness. It is not uncommon in noisy dog kennels to record a noise level of 115 decibels. This is not just a bit higher than the standard; it is exponentially higher and very damaging to human hearing. It is also in violation of OSHA regulations which can expose the employer to high fines and require remedial action.

Fortunately, there are steps that can be taken to reduce ambient noise in shelters. If you're designing a new shelter, be sure the architect employs noise-reduction strategies. For existing shelters, your first step is to test your noise level. You can have a professional test for you, or, for \$25, you can buy a simple test device (from EAR, Inc.) that shows when you're above 85 db.

If your kennel gets over 85 db (almost all





A simple test device or app can be used to measure decibel levels.

“Determining where to conduct canine behavioral evaluations and how to set up the testing room efficiently is an important part of the process.”



Be sure there is a secure tether (like the one pictured here) in the room for safety reasons.

Noise Abatement: Continued from Page 3

will), the simplest strategy is to introduce some soft, sound-absorbing surfaces to the room to absorb reverberating noise. These come in a variety of forms including hanging baffles, panels applied to the walls, or sound-absorbing ceiling tiles. It is important that the materials used be disinfectable and sturdy. They should also be placed where they are unlikely to get damaged - usually well up the walls or in the ceiling area. In general, the more soft surface area you have, the quieter the kennel will be.

Remember that these physical changes to the environment should be accompanied with behavioral interventions with the dogs to reduce barking (see

K. Bollen’s article in the March 2011 issue of Shelter Watch). Failure to incorporate noise reduction strategies not only exposes the shelter to costly sanctions by OSHA but, even more importantly, it exposes the animals and staff to hearing damage. Furthermore, it tends to drive the public out of your facility with resultant lowering of adoption rates.

Resources:

EAR, Inc.: <http://www.earinc.com/>
 ACES: <http://www.animal-care.com/>
 Local noise-control specialists

**Mr. Bill Brothers is the President of Humane Services International and works closely with the Maddie’s Shelter Medicine Program.*

Where to Perform Canine Behavior Evaluations: Ms. Kelley Bollen, MA, CABC

Properly conducted canine behavior evaluations give shelter staff lots of great information about the dogs in their care. The information gleaned from the evaluation can be used to set up in-house training and behavior modification programs as well as improve adoption matching and counseling. The procedure that I have used, taught and researched over the past 12 years can be found on our website under Shelter Resources and then under Behavior and Training. But for the purposes of this month’s newsletter on shelter design I want to discuss where the evaluations should be conducted and how to set up the room to do them efficiently.

The evaluations should be conducted

in a quiet room preferably away from the kennels where the barking of the other dogs can be distracting. The room should be big enough so that the dog doesn’t feel cornered and the evaluator can get away from the dog should he become aggressive. The furniture in the room should include a chair for the observer and a chair for the evaluator plus a table to hold the items used during the procedure. There should be a secure tether hook in the room so that the dog can be tethered during the resource guarding portions of the evaluation. The best tether consists of an eyebolt secured into a stud or the concrete wall and a heavy-duty carabiner hooked to the eyebolt to which the end of the leash can be attached. A British slip lead is best to use for the tether leash as it

has a sliding locking loop to secure the noose snugly around the neck so that it doesn't slip off of the dog's head while he is eating his food. The other items needed to perform the evaluation include a leather slip lead used for handling, a towel to mock dry off the dog, a variety of toys (ball, squeaky toy, rope tug toy) for the play test and a bowl, dry and wet food and a variety of valuable possessions (rawhide, pig ears, bully sticks, for example) to assess the dog's propensity for food bowl and possession guarding. An Assess-a-hand® (pictured left) is a necessary tool to safely test for resource guarding. A small rug or blanket is nice to have for the dog during the possession session, as most dogs will settle with a possession if given a soft

spot to do so.

This simple set up will allow you to perform the behavior evaluation safely and effectively. If you have any questions about the procedure itself, do not hesitate to contact me at ksb68@cornell.edu.



Equipment such as a British slip lead (left) for tethering and Assess-a-Hands® (above) are invaluable tools for use in conducting canine behavior evaluations.

Events Calendar

December 2011						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
				RAVS/HSVMA meeting →		
4	5	6	7	8	9	10
		Maryland Area Shelter Visits →				
11	12	13	14	15	16	17
	Humane Alliance →					
18	19	20	21	22	23	24
25	26	27	28	29	30	31
University Closed →						



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