



### Our Mission:

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

### Program Staff:

- Dr. Elizabeth Berliner, Janet L. Swanson  
Director of Shelter Medicine
- Dr. Holly Putnam,  
Instructor of Shelter Medicine
- Dr. Jan Scarlett,  
Professor of Epidemiology
- Ms. Anne Marie McPartlin, LVT,  
Teaching Support Specialist
- Mrs. Amanda Grace,  
MS, Program Coordinator
- Ms. Sue Honig, MS,  
Computer Technician

### Contact Information:

Shelter Medicine Program  
Cornell University  
College of Veterinary Medicine  
SI-066 Schurman Hall  
Ithaca NY 14853

(607) 253-3349

sheltermedicine@cornell.edu

# Shelter Watch



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## From the Desk

This happened last year as well. The summer seemed to evaporate. It went especially quickly for me this year because I have been on sabbatical for the past 6 months. I greet my return with mixed feelings. I miss the freedom of the sabbatical, but I am happy to be back among my colleagues looking forward to a new academic year! For those of you unfamiliar with an academic sabbatical, faculty members must explain what they plan to accomplish during the time they are excused from their usual duties in an application to the Chairman of their department. If granted, the time frame can be 6 or 12 months in duration, depending on the nature of the proposed project and a faculty member's ability to insure that basic responsibilities are covered in her absence.

I chose a 6 month time frame to collaborate with Dr. Michael Greenberg, one of our former interns, on a guide to the use of shelter metrics to enhance the welfare of shelter animals. Some of you may have participated recently in the selection of the new book's title. While we had hoped to have a complete draft by the end of my sabbatical, we didn't quite make our goal. That said, we did finish drafts of the 4 core chapters and we're working on the others. It has been exciting work, but also more challenging than either of us envisioned.

So, you're asking . . . what is the book about? Very briefly, it's about using the data that many of you already collect to set and evaluate progress towards achieving your shelter's goals. The goals we're targeting are those that improve the welfare of animals in your community and in your shelter's care. We have four core chapters relating to 1) using intake data to monitor progress towards reducing shelter intake; 2) outcome data to evaluate progress towards releasing as many animals alive as possible; 3) data regarding the movement and housing of animals within the shelter to assess shelter efficiency in management of its animals (so more animals can be accepted and successfully rehomed); and 4) disease surveillance data to monitor the success of your population

health program with the goal of minimizing disease and suffering of shelter animals. We've used data from real shelters and presented them primarily in graphic form to make their interpretation clear. We may be asking some of our closest shelter collaborators to provide us with feedback on the content and usefulness before it ultimately goes to print! If all goes well, we are hoping to have it available by late Spring 2014.

I hope that you all had a productive and enjoyable summer as well. If the Program can be of any help to you, please let us know at [sheltermedicine@cornell.edu](mailto:sheltermedicine@cornell.edu).

*Dr. Jan Scarlett*  
*Professor of Epidemiology*



This month we address practical and animal welfare issues around large scale cases, including hoarding and mill operations. Regionally we are hearing more often from our shelters that they are becoming involved in seizures of large numbers of animals, and these events can quickly overwhelm their operations. Furthermore, legal aspects can be delayed, leading to ongoing struggles in organizations when animals can't be released for adoption. We are trying to assist our local shelters in some of these cases, and educating ourselves more about the challenges and legal pitfalls. We hope this issues helps your organization to troubleshoot some of the elements of preparation and management.

*Dr. Elizabeth Berliner, Janet L. Swanson*  
*Director of Shelter Medicine*

## Dental Disease in Breeding Mills and Hoarding Cases

### Tiva Hoshizaki, BVSc



**“Small breed dogs are commonly a victim of the puppy mill industry, and are unfortunately already prone to developing a number of dental problems.”**

**Dental disease** is one of the most common ailments of companion animals, and even more common in animals from poor breeding operations or hoarding situations. This is due to a number of factors including genetics, lack of veterinary care and poor husbandry.

#### Genetics

Puppy mills produce breed dogs irrespective of health, leading to proliferation of conformation faults and predispositions. Small breed dogs are commonly a victim of the puppy mill industry, and are unfortunately already prone to developing a number of dental problems. Small dogs have altered skull dimensions, leading to smaller mouths but relatively normal sized teeth. Shortening of the maxilla causes crowding, rotation and misalignment of teeth. Known issues include malocclusion, persistent deciduous teeth, and impacted, missing, deformed, under-erupted, or crowded permanent teeth.

#### Lack of veterinary care

Animals in hoarding or breeding facilities often do not have access to routine veterinary care, including an oral exam or dentistry. These animals miss out on annual checkups which would easily uncover the severity of their dental problems. Ideally the teeth would be scaled and polished before severe periodontal disease develops. Unfortunately, for most dogs and cats, veterinary intervention occurs only after irreversible damage has occurred.

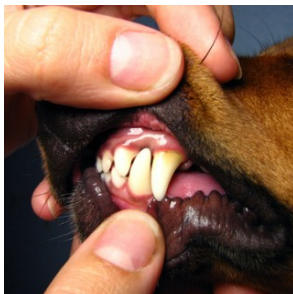
#### Husbandry

Animals kept in large-scale facilities are often kept in cages containing wire or hard materials. Animals which are bored or frustrated may chew on their enclosures, leading to cut gums, and

broken or damaged teeth. These animals are often fed low quality food, with inadequate access to chew toys or abrasive treats, and are unable to cleanse their teeth of plaque and calculi.

#### In conclusion

Due to the severity and commonality of dental disease in these animals, almost all rescued pets will require some degree of dental intervention and maintenance. In many cases the animal will require a full dental cleaning, dental radiographs, and/or extraction of severely affected teeth. Shelters are finding themselves in a position of needing to provide dental care, which requires specialized equipment and training for veterinary staff or a relationship with a private practice for intervention. These procedures can be time and labor intensive, and standards of dental care continue to rise in the veterinary profession. Furthermore, new adopters need to be made aware of the ongoing commitment they will need to make to their pet's teeth. Luckily, at-home dental care, appropriate food, and chew toys will go a long way.



## Legal Considerations and Documentation

### Holly Putnam, DVM

#### **Take Heed**

Hoarding cases can be emotional and mentally exhausting for both the shelter staff and the person being accused of hoarding. There may be cases where the accused hoarder willingly signs over the animals to the shelter, and other times when the animals have been confiscated by law enforcement officers. In either scenario, these animals are considered legal evidence if charges are going to be pressed against the accused hoarder. How the shelter documents the examination of these animals and handles them while at the shelter, will differ from the usual relinquishment case. Following legal protocols will make for an easier transition for all involved.

#### **They're Coming!**

Prior to their arrival to the shelter, it's a good idea to be sure that the team has all the essential staff, equipment and paperwork available and ready to document each animal's intake exam.

Because hoarding cases often present animals in need of medical care, a veterinarian will be required to perform examinations and initiate treatment. Their witness testimony and the documentation of their exam findings will likely be crucial evidence if the case proceeds to trial. If your shelter does not currently employ a veterinarian, local private practice veterinarians may be willing to work with you on such cases.

In addition to veterinary care, you will need a camera, a photographer's scale, and examination forms. Examples of these are available at the SPCAPro.org website.

#### **Forms, Forms and More Forms**

Although hoarding cases often create a sense of urgency, taking the proper time

to thoroughly document the arrival and physical state of each animal may make the difference in both the case outcome and the welfare of the animals.

The animals should arrive with a Chain of Custody form and a transport manifest listing each animal's ID number, physical description, date and time of departure, and date and time of arrival at the shelter. The shelter team will be responsible for matching each animal's intake description to the transport manifest, in order to document the arrival of every animal removed from the hoarding site.

It is essential to examine every animal as close as possible to the time of arrival at the shelter. This includes photographing each animal, along with photographing specific lesions noted at presentation. The animal's ID number and the date should be included in each photograph. When photographing specific lesions, it is important to include a photographer's scale in order to give the viewer a sense of the size of the area of concern. Specific instructions can be found at ASPCAPro.org. Body condition scores, behavioral health, obvious injuries/lesions (including scars), dental disease, skin, coat, and nail health are examples of findings that could indicate neglect or abuse and should be thoroughly documented in writing. Lab work such as heartworm testing, Felv/FIV testing, complete blood cell counts, chemistry panel and urinalysis may be indicated depending on the case. All results should be documented in writing and kept in the appropriate animal's record.

How each animal progresses, whether positive or negative, should be documented as well.



***“The shelter team will be responsible for matching each animal’s intake description to the transport manifest, in order to document the arrival of every animal removed from the hoarding site.”***



## Parasites: Hitch-Hikers in Large Scale Cases

### Elizabeth Berliner, DVM



**“The really basic and quick answer to preventing an outbreak in your shelter of these common and hearty parasites is prevention...”**

**References:**  
 ASPCApro Sanitation chart @ <http://www.sheltermedicine.vet.cornell.edu/documents/ShelterDisinfectantQuickReference.pdf>

Barr SC, Bowman DD. *Canine and feline infectious disease and parasitology*. Ames, Iowa: Wiley Blackwell 2006

Animals seized from large-scale hoarding or poor breeding situations are often riddled with intestinal parasites, and these can quickly impact your entire shelter population. To make matters worse, these large intakes overcrowd the shelter environment, contributing to contamination of housing areas and play yards. Historically speaking, transmission has been more of an issue in shelter dogs, because of communal access to the outdoors. However, with communal cat housing, transmission can occur if precautions are not taken in co-housing. The really basic and quick answer to preventing an outbreak in your shelter of these common and hearty parasites is prevention: frequent removal and disposal of feces, standard cleaning protocols, prophylactic dewormers, and prevention of reinfection. Here's a quick review of the most common and most transmissible friends our large-scale rescue scenarios can bring along.

#### General recommendations:

- Bathe +/- clip animals upon or soon after entry. Parasitic cysts can often cling to coats, contaminating the environment and allowing pets to re-infect themselves with grooming.
- Deworm at intake with a broad spectrum de-wormer. Even if this is not your standard protocol, in large-scale cases it is warranted.
- Increase surveillance for diarrhea and other signs of parasitism
- Control access to spaces used by other animals or the public
- Promote strict adherence to cleaning and handling protocols
- Immediate/more frequent scooping of fecal matter
- Appropriate disinfectants with adequate contact time
- Gloves, washable boots, and other personal protective equipment

Parasite	Species	Important to know	Cleaning and Disinfection
Roundworms (Ascariasis)	Dogs and cats	Most de-wormers need to be repeated every 2-4 weeks to kill both adult and larval stages Eggs can live in soil for years	Mechanical scrubbing and rinsing Diluted bleach will decrease egg adherence in the environment Prevent by picking up feces ASAP
Whipworms (Trichuriasis)	Dogs	Long pre-patent period so requires 90 days to complete treatment in a dog Eggs can live in soil for years	Prevent by picking up feces ASAP Almost impossible to remove from outdoor spaces In infected environments, monthly heartworm prevention is advised
Hookworms	Dogs and cats	Voracious blood feeders; can cause life-threatening anemia Zoonotic via migration through human skin	Killed by freezing or by application of sodium borate to outdoor yards Paved areas can be treated with 1% bleach solution
Giardia	Dogs and cats	Aclinical carriers common Most giardia species in companion animals are not zoonotic, but a couple are	Cysts can survive for months in the environment and on coats Prevent by picking up feces ASAP Cysts inactivated by quaternary ammonium cleaners

## Addressing the Behavioral Needs of Animals From Large Scale Cruelty Cases: So, We Rescued Them, Now What?

Danielle Boes, DVM

When an organization is involved with a large-scale cruelty situation, there are a variety of animal needs to be addressed, both physical and physiological. The physical effects include medical issues such as dental and skin disease, poor body condition, etc. However, the psychological effects of mental well-being and behavior are crucial to evaluate, and often more subtle.

The conditions from which these animals are removed can vary greatly. However, some commonalities include large numbers of animals, minimal to no allowance for exercise, minimal enrichment, and nominal to no positive human interaction. Similar to post-traumatic stress disorder (PTSD) in people, animals from these environments can experience residual signs of trauma that manifest as increased frequency and severity of fearful behavior. Dr. Frank McMillan of Best Friends Sanctuary has surveyed households which have fostered or adopted animals from puppy mills. Illustrated in the table are several startling behavioral differences when compared to a control dog group.

Additionally, owners commonly commented that these dogs bonded closely to one or two people in the household

and housetraining could be a challenge (1/3 are fully housetrained while approximately 3/4 of these dogs still have accidents).

Further research into behavior of animals from hoarding situations reveals similar insights. However, hoarding circumstances can vary greatly resulting in a wider array of behaviors. Dog fighting is another category of large-scale cruelty case but behavioral research specific to these cases is not yet widely available.

The capacity for behavior modification once one of these animals enters a shelter will largely depend on the shelter's resources and it is essential to seek the advice of an experienced behaviorist. A couple options could include playgroups, positive human interaction, routine and environmental enrichment. An extremely valuable alternative to consider would be foster care, especially in foster homes with other dogs. Whatever route is chosen, it is important to treat each case individually and to recognize that behavior modification will likely be a life-long process for animals rescued from large-scale cruelty cases.

**Figure 1: What should potential adopters of puppy mill dogs expect?**

### For Adopters

Adopting a Rescued Puppy Mill Dog: What to Expect

- ◆ Slow, often very slow, improvement
- ◆ Backsliding during improvement
- ◆ Limits to improvement
- ◆ Fear-Specific and Generalized
- ◆ Housetraining limitations
- ◆ Bonding to one person-very common
- ◆ Touch sensitivity-touching, holding, hugging, picking-up
- ◆ Eye contact avoidance – very common

#### **Additional Resources:**

1. McMillan, F.D., et al., Mental health of dogs formerly used as 'breeding stock' in commercial breeding establishments. *Appl. Anim. Behav. Sci.* (2011).  
Online PDF access: [http://www.speakingforspot.com/PDF/Mental\\_Health\\_of\\_Dogs\\_from\\_Breeders-2\\_McMillan.pdf](http://www.speakingforspot.com/PDF/Mental_Health_of_Dogs_from_Breeders-2_McMillan.pdf)

2. Physical and physiological health issues in puppy mill and hoarding rescues webinar: <http://www.youtube.com/watch?v=eCz3JMq6b4A>

3. Therapeutic insights for treating animals rescued from puppy mills and hoarding situations webinar: <http://www.youtube.com/watch?v=bX9gYIZodTs>

4. Instructions and Prognostic Information for adopters of puppy mill and hoarding animals webinar: <http://www.youtube.com/watch?v=pe0UicOVcVs>

**Addressing the Behavioral Needs of Animals From Large Scale Cruelty Cases: So, We Rescued Them, Now What? {Continued}**  
**Danielle Boes, DVM**

**Figure 2:** Common behaviors and the frequency in which they are displayed in puppy mills dogs.

*“Illustrated in the table are several startling behavioral differences when compared to a control dog group.”*

Increased Behaviors	Amount
Fearful of Strangers	+215%
Fearful of Other Dogs	+34%
Fearful of Non-Social Contact (ie bikes, noises, etc)	+128%
Sensitivity to Touch	+96%
Challenges w/ Cognitive Abilities/ mental focus	+53%
Stereotypic Behaviors	+77%
Reluctance to use Stairs	+395%
Decreased Behaviors	
Trainability	-26%
Aggression Towards Other Dogs	-57%
Aggression Towards Strangers	-46%
Aggression Towards Owners	-50%
Pulling on a leash	-28%

**Figure 3:** How much improvement is seen “problem” behaviors post-adoption

