Welcome to the ninth edition of Behavior News, the newsletter designed to keep veterinary staff and other animal handlers up to date on current behavior recommendations for companion animals. In this issue we continue our series on low-stress handling and have a few discussions regarding managing common behavior issues in dogs and cats.

For additional resources on animal behavior at The Ohio State University, please visit: vet.osu.edu/Behavior and vet.osu.edu/CommunityPractice.

Changes to the Ohio State behavior team

We are saddened to share with you that our beloved Ms. Traci Shreyer’s last day with the Ohio State Veterinary Medical Center (VMC) was March 31st. Traci served in a teaching role with The Ohio State University for over 17 years. She has served as a part-time lecturer for the Department of Psychology at the Ohio State Newark Campus, as well as a visiting scholar, guest lecturer, and an adjunct faculty member for the College of Veterinary Medicine. Traci spent five years in a combined appointment teaching veterinary students and working in the VMC. She created the low-stress animal handling curriculum and coordinated the hands-on labs for the first year behavior course. Along with her team she created a one-of-a-kind program in the area of applied animal behavior relevant to general practitioners and taught fourth-year veterinary students during their “Community Practice” rotation, while also supporting the service’s clients and patients.

Traci was instrumental in expanding the use of low-stress handling in the VMC. She has been an integral part of the Community Practice team and has served as a resource for many of our specialty services. Her departure is a loss, and she leaves a wonderful legacy through the education she provided to us about the benefits of low-stress handling. Traci is currently undertaking scientific writing opportunities, as well as providing continuing education for small animal practitioners and for individual hospitals through Ceva Animal Health.

The Community Practice and Behavioral Medicine teams have been diligently working on a plan to handle our current behavioral needs patients. Any new fearful, fractious patients should schedule an appointment with the Behavioral Medicine Service. We are doing everything possible to best serve the needs of this population and provide continuity of care for our patients and clients.
Be sure to check out the March 14 issue of the Journal of the American Veterinary Medical Association where you will find an article of interest, “The effects of environmental enrichment on the behavior of shelter dogs,” authored by Ohio State’s own faculty members and a senior student. The published study explores how the addition of enrichment - both animate (behavior modification training and social interactions) and inanimate (the provision of food-stuffed Kong toys) can improve the behavior of shelter dogs. This study, authored by Dr. Meghan Herron, Dr. Linda Lord, and new graduate Dr. Taylor Kirby-Madden, demonstrated that this type of enrichment improved behavior by increasing sitting and lying down behavior, decreasing barking behavior, and decreasing jumping up. This study also found that dogs who don’t receive such enrichment show worsening of behavior over just a few days’ time. See: Herron M, Lord L, Kirby-Madden T. The effects of environmental enrichment on the behavior of shelter dogs. JAVMA 2014; 244:687-692.

Also look for the January 2014 issue of the Journal of Veterinary Behavior where another article from our faculty and senior students was recently published. This study, “The effects of pre-adoption counseling on the development of separation anxiety in shelter dogs,” authored by Dr. Meghan Herron, Dr. Linda Lord, and recent graduate Dr. Sarah Husseini, looked at ways to prevent the development of separation anxiety post-adoption of shelter dogs. While the counseling provided to adopters in this study did not make a difference in preventing separation anxiety, the findings of the study gave researchers insight to many factors of the behavior problem. For example, this study found that having another dog in the home at the time of adoption did not have any effect on preventing or treating separation anxiety. Furthermore, dogs who were considered “needy” and/or showed signs of nervousness as the owners prepared to leave the house both had higher incidences of reported separation anxiety. See: Herron M, Lord L, Husseini S. The effects of pre-adoption counseling on the development of separation anxiety in shelter dogs. J Vet Behav 2014; 9:13-21.

Those of you who have purchased the most recent edition of Kirk’s Current Veterinary Therapy may notice some familiar names in the long list of authors. First, Ohio State’s veterinary behaviorist, Dr. Meghan Herron wrote a chapter on the psychopharmacology behind treating behavior-related dermatoses. In this chapter you will find an in-depth description of the various short and long-term medications utilized in the treatment of behavior related skin problems in dogs and cats, as well as other management insight. See: Herron, ME. “Drugs for Behavioral Dermatoses.” Kirk’s Current Veterinary Therapy XV. 15th ed. Edited by John Bonagura, DVM & David Twedt, DVM. Columbus: Elsevier, 2014.

In that same book, Ohio State’s veterinary nutritionist Dr. Tony Buffington, and former Applied Animal Behaviorist Ms. Traci Shreyer, authored a chapter on environmental enrichment for cats. In this chapter the authors discuss how a well-managed, enriched environment has proven particularly useful in reducing illness signs in cats with idiopathic cystitis. Opportunities and techniques for effective implementation of changes to the environment are reviewed in the chapter, followed by descriptions of strategies to provide the client coaching and support that are critical for successful enrichment efforts. See: Shreyer, T., Buffington, CA. “Multimodal Environmental Enrichment for Domestic Cats.” In Kirk’s Current Veterinary Therapy XV. 15th ed. Edited by John Bonagura, DVM & David Twedt, DVM. Columbus: Elsevier, 2014.
Upcoming events

Interested in learning more about veterinary behavior? Are you already headed to Denver this summer to attend the AVMA Annual Convention? Why not add a day of behavior CE to your trip by attending the 2014 Veterinary Behavior Symposium?

Join us for the 2014 Veterinary Behavior Symposium on Friday, July 25, 2014 in Denver, Colorado.

Registration is now open. Please visit www.dacvb.org to register.

We look forward to seeing you all there!
News from the maternity barn –
hiding-behavior of dairy cows housed indoors

By Katy Proudfoot

Did you know that a dairy cow has to give birth once a year to produce milk? Like other animals, a cow begins to change her behavior when she is ready to give birth. In a natural setting like a pasture, cows will leave their herd in the few hours before going into labor, and will seek out a site with tree or bush cover to deliver the calf. A similar behavior has also been reported for other ungulates like elk and moose. In the wild, cows will hide themselves during labor, and will keep their calves hidden for the first few days of life. It is believed that this hiding behavior helps protect the cow and calf from predators, and allows for the pair to develop their bond without interference from other cows.

In modern dairy farms, we provide cows with an indoor living environment that protects them from poor weather and predators. When cows are ready to give birth, they are usually housed in a group pen with other ‘maternity’ cows, or are moved into their own private pens. Although some of these maternity areas may provide the cows with seclusion, until recently there had been no clear indication that indoor-housed cows are still motivated to hide when labor begins.

During my PhD program at the University of British Columbia’s Animal Welfare program, I was interested to see if indoor-housed cows will hide when giving birth if we provide them with the opportunity. To better understand this, we conducted two experiments that gave cows the choice between different environments to give birth, and recorded what areas they chose.

In the first experiment, we created a large maternity pen that had both an ‘open’ area and a 8-ft high plywood ‘sheltered’ area where they could spend their time. Cows entered the pen about 3 days before they were due to calve so they could get used to both areas before labor started. Using cameras mounted above each area, we recorded where the cows spent their time when labor began, and paid particular attention to where they chose to be when they delivered their calves.

In the end, we found that the answer depended on what time of day the cow had her baby. If she calved in the middle of the night, she was equally as likely to be in either the open or sheltered area. But, if she calved during the daytime, she was much more likely to use the shelter. Eighty-one percent of the cows that calved in the daytime were in the shelter when the calf was born, and they began to hide in the shelter about eight hours before delivery. The reasons for this behavior during the daytime are still unclear, but we predict that the high activity in the barn during the day may have provided the motivation for cows to hide compared to the relative quiet at night.

In the second experiment, we decided to create a more practical maternity pen design that producers could easily construct on their farms. We took a traditional single maternity pen, and added 4-ft high plywood around most of a pen to create a secluded ‘corner’ side and an open ‘window’ side where they could see other cows. We mounted cameras above this pen and again recorded which side of the pen cows used when they had their babies. In the end, 79 percent of cows used the secluded corner side of the pen to deliver their calves.

These studies provided new information about the maternal behavior of cows housed in modern dairy facilities. As we better understand these behaviors, we can design more appropriate environments for cows as they prepare to give birth. As I begin my research program here at Ohio State, I am very interested in following up on this research. For example, there may be other benefits to allowing cows to hide during labor, such as fewer labor complications and better health after the calf is born. Also, since many farms in the U.S. use group maternity pens, it would also be useful to design a group environment that includes some ‘hiding’ areas so cows can have more choices when the baby is on its way.
Low-Stress Handling Tips

Watch your language!
by Dr. Meghan Herron and Traci Shreyer

While our patients certainly do not communicate in English, our use of the language can have profound effects on our own behavior, the behavior of people around us, and ultimately the patients’ behavior. Inappropriate language in reference to our patients often promotes a false interpretation of their motivational state and can lead to poor patient handling (Hemsworth 2003). Rough patient handling may feel more justifiable when handlers perceive that their patients are being “bad” or intentionally “mean” and, therefore, deserve to be handled in a confrontational manner. Keep in mind that our patients are animals, not adversaries, and are incapable of moral thought or processing. Animals have no concept of their behavior being “wrong” and instead show behavior that in that moment they feel is necessary to escape or to halt the perceived threat at hand. This segment is intended to spread awareness of our own words and how they can affect our behavior and subsequent patient handling.

**Inaccurate terms to describe animal behavior that may result in poor handling:**
- Bad
- Stupid
- Stubborn
- Spiteful
- Evil
- Mean
- Dominant
- Vicious

**Accurate terms to describe animal behavior that may result in safer, more effective handling:**
- Fearful
- Afraid
- Feeling threatened
- Painful
- Confused
- Anxious
- Fractious
- Aggressive

All veterinary clinicians and staff should be mindful of their actions. At the VMC we strive to handle our patients in a gentle and humane manner that is most conducive to handler safety. With the understanding that aggressive and/or aberrant behavior in a veterinary clinic setting is primarily motivated by pain and/or fear, we — animal care professionals — should take strict care to avoid handling actions that increase fear and arousal. The use of punishment in response to fear-driven behaviors increases arousal, may escalate aggression, and is counter-productive to our goals of low stress handling. We understand that animal handling can get frustrating. Please remember that it is always acceptable to take a “time out” and step away from handling an animal when you feel your frustration or aggravation over an animal escalating.

At the VMC we encourage everyone to ask for help when faced with any potentially challenging or dangerous patient-handling situation. While it may seem obvious to most of us that abusive handling of animals is entirely unacceptable, we still strive to recognize types of handling that are unacceptable and should be avoided, such as hitting or kicking an animal, scruffing a dog, shoving, slamming or throwing an animal forcibly against a wall or table, verbally or physically threatening/intimidating an animal (i.e. yelling “no!”, scolding), or forcing an animal to accept painful procedures without chemical restraint or analgesia.
A Few Words on Reptile Behavior

By Susan Green, Behavior Club President, Veterinary Medicine Class of 2017

When it comes to reptiles, things get weird. They can regrow organs, effectively switch genders, and even clone themselves! They are so unlike us, yet they still have interesting personalities!

One study demonstrated social personality in lizards by observing the behavior of *Lacerta vivipara* in response to adult male odors. The male odor was chosen because adult females release an egg dispersing pheromone that repulses all individuals. Lizards were tested throughout their lifetime and repeatedly showed either aversion or tolerance to the odor of their adult conspecific. The consistency in each lizard’s reaction, regardless of age and context, illustrates that some lizards are just inherently asocial while others are a bit more extroverted at heart.

Reptiles can even respond selectively to individuals of a different species. A laboratory pet named Fido the iguana used both visual and auditory cues to determine which individual was and was not his handler. The handler was recognized with a series of head bobs, while the stranger received little to no head bobs. My own iguana, Luigi, also reacts differently to people of varying familiarity. When I approach her cage, she will lean in towards the door and tilt her head forward. In contrast, when the cable company representative was at my house, and gazed in awe at my massive “dinosaur,” Luigi had her body flat against the back of the cage with her dewlap fully displayed.

Regardless of the biological differences, reptiles are a lot like mammals. Each individual has a unique disposition that responds differently to certain stimuli. So the next time you see one of these scaly creatures, remember they have a personality too!

References


Taking Your Kitty for a Walk: The “Come With Me Kitty” Harness
By Kyrie Turpen, Behavior Club Secretary, Veterinary Class of 2016

Allowing indoor kitties to go outside presents a big dilemma for many cat owners. Since going outdoors can provide a form of enrichment and stimulation, many owners desire to allow their pet to have that experience, but also fear the dangers that are associated with such activity. Cat harnesses have been a solution to this problem, allowing owners to take their kitties on walks without the fear that they will run away and be hit by a car or attacked by a dog. One such harness is the Come with Me Kitty, which I have been using on my 11-month-old kitten. I began using it when he was a little under four months old and he took to it wonderfully, acting as though it was not even there. Sadly, as is common while in veterinary school, I became busy with my studies. Between that and the onset of winter, his time wearing the harness dwindled down to never. When nicer weather returned, I anticipated he would not be happy with the harness, and it was like starting from scratch. He rolled, flopped, and tried to escape it. Eventually he would just lie there, occasionally creeping his way across the floor. Luckily, I had an idea of how to address this issue.

Multiple lectures and seminars had presented the concept of training a cat using a clicker. So I had been eager to try this with my new kitten. He proved to be very treat motivated and his clicker training was easy to continue, even during my busy school year. I decided to adapt this training method to teach him to view walking on his harness as a game, happily rather than hating it. I used a Clik-Stik target clicker to train my ‘little man,’ but one can also use their hand and any clicker of preference. The treats need to be something the cat really likes and does not receive regularly so they have enough value that he will be willing to work to receive them. Ultimately, my kitten was chasing his target all around my apartment in less than a week. The steps I followed are detailed below:

1. The first step is to teach the cat that the sound of the click means they will receive a treat. This is called “loading the clicker.” The clicker is loaded by making a click then giving the cat a treat. This is repeated until, when the cat is not already paying attention, the click gains his attention and he consistently looks to the trainer for a treat. Often this step is accomplished very quickly, but some cats may require a little more time than others.

2. The next step is to teach the cat that in order to receive the click and corresponding treat, he must perform a specific task; in this case, touch the target. It is important that as soon as the proper task occurs a click is made so the cat realizes exactly what action caused the click. This may take a few repeats for the cat to make the connection. Since cats are such inquisitive creatures, if you place your hand or the target item in front of them, often they will instinctively want to sniff it. As soon as the cat does this, make a click and then reward him. Repetition is the key and most cats will pick this up relatively quickly, but keeping the target close in the beginning helps them to understand what is wanted.
Taking your Kitty for a Walk - continued

3. Once the cat understands that sniffing the target is the goal, the target can be moved progressively farther away so he has to walk, climb, or jump to reach it. This turns the process into a game where the cat has to think and focus on the target.

4. Next, the harness is placed on the cat and he is given a really delicious high value treat, like chicken baby food, to help him get used to the harness and be willing to eat while wearing it. If he is so upset about the harness that he does not want his treat for reaching the target, the next steps will not work. Thus, it is very important to help him feel comfortable enough with the harness on that he still wants to eat.

5. Once the above steps have been completed, it is time to help the cat learn to walk normally on the harness and to consider it part of the game. This part can feel like a step back as he may not be interested in performing some of the more involved activities, like climbing and jumping, to receive the reward. Start slowly; eventually, he will get back to that point. The goal here is to just getting him back to sniffing the target placed in front of him, since the harness is a new element and his focus is more on that at the moment. Once he is willing to sniff the target, and shows interest in it again, it is possible to progressively increase the distance and difficulty to reach it. If the cat still shows interest in the target but refuses to perform the action required to reach it, such as jumping up onto the couch, then he may not be comfortable enough, yet, for that action. If that is the case, back up a step to the actions he was comfortable with, reinforcing what he will do rather than frustrating him with what he will not yet do. Once he is comfortable again, slowly progress to the more difficult actions, repeating this process as needed.

6. The previous tasks were all completed indoors, because being outdoors is a new factor in the game, just like the harness in Step 5. Once the cat will chase the target the same way with the harness as without the harness, he can be taken outside on the harness. If the desire is simply to have the cat comfortable enough on the harness for normal movement, the trainer can stop here. If the trainer wishes, step 5 can be repeated outside to continue the game and to give the trainer the ability to direct where the cat goes. This is up to the trainer.

This method worked well with my kitten, increasing his comfort level with the harness so I can let him enjoy nature without fearing that he might get away from me. I feel that the Come with Me Kitty harness is better for this purpose than other harnesses I have used in the past. When fitted properly, it seems much more difficult for him to escape from, less restrictive of his movements, and possibly more comfortable. In the past I have had cats easily escape dog harnesses and simple cat harnesses, but not the Come with Me Kitty. The downside is that while it is difficult to escape from it is also somewhat challenging to fit and put on the cat, but I feel ultimately the benefits are worth the initial challenges. I also like that the harness comes with a bungee leash which allows the cat to jump and romp while decreasing the chance that the handler could end up dropping the leash. I also prefer using the Clik-Stik target clicker because it allows me to hold both the clicker and target in one hand, and have the other available to give treats, pet my cat, or hold the leash when outside.

Remember, it is important not to push the cat to do something he is not ready to do on his own. Repetition allows the cat to figure out what you want from him and what your signals to him mean. This process can be very helpful in training your cat to a harness at the cat’s pace. If he loses interest in the training, stop for the day. Cats only do what they want, when they want. Pushing him may set things back for the next session. Lastly, be careful not to add more than one new component to the training at a time as this will overwhelm the cat. Hope you have loads of fun with your kitty and its harness!