

## SUMMER 2017

### PATTON VETERINARY HOSPITAL

425 East Broadway  
Red Lion, PA 17356  
717-246-3611  
www.pattonvethospital.com

#### Office hours:

Monday–Friday 8am – 8pm  
Saturday 8am – 2pm



The Standard of  
Veterinary Excellence



Jess with Dexter and Bogey

## EMPLOYEE SPOTLIGHT Jessica Bradley

Jess attended the Veterinary Technician program at Wilson College and worked at Shippensburg Animal Hospital as a technician for several years before becoming their practice manager. After moving to the York area, Jess joined the Patton Veterinary Hospital nursing team in December 2015, and was promoted to Nursing Coordinator during the summer of 2016.

Like many of our employees, Jess had animals as a child and was drawn to the animal field from an

*continued on pg. 4*



## Tick-Borne Diseases

Concerned about Lyme disease this summer? The Centers for Disease Control and Prevention (CDC) estimate nearly 300,000 people contract Lyme disease each year. Due to an unseasonably warm winter, ticks are predicted to be out in larger numbers this year. We live in a very Lyme endemic area – 95% of Lyme disease occurs in only 14 states, two of which are Pennsylvania and Maryland.

Traditionally, Lyme disease was caused by the bacteria *Boerrelia burgdorferi*; however, there is a new strain of bacteria, found in 2016, called *Borrelia mayonii*. *Borrelia mayonii* causes similar symptoms to the older strain (i.e., fever, headache, joint pain) but also causes vomiting and a wide-spread rash rather than the typical "bull's-eye" rash. In addition, there is a growing concern for a rarer, but deadly tick disease called Powassan Virus, which has no cure.

What does this mean for our four-legged friends? It is safe to assume that tick-borne diseases will likely increase in dogs and possibly cats this summer as well. What can we do to protect them? Using a high-quality flea/tick preventive, such as Vectra 3-D, Bravecto, or Simparica is highly recommended for dogs. Bravecto or Frontline Gold for Cats can be used on cats. (Be sure to always read the product labels, and never use products labeled for dogs on your cats, as some are highly toxic to cats.) Using preventives protects both your pets and your family by killing ticks before they drop off in your home and bite humans.

If appropriate, the K9 Lyme vaccine is also highly recommended in this area. Please consult one of the veterinarians at Patton Veterinary Hospital if you have questions on how to better protect your pet and family this summer from ticks and their associated illnesses.

## Pyrethrin Toxicity

The incidence of tick-borne disease is increasing. Fortunately, there's a growing awareness of this threat, and many people are taking measures to keep their pets and their yards tick-free. It's important to realize that some chemicals, especially pyrethrins and permethrins, can be toxic, especially to cats and fish, and to dogs to a lesser degree.

Pyrethrins are a class of chemicals derived from chrysanthemums that are potent insecticides that target the nervous systems of insects. They are naturally-occurring, but also industrial-made as well. Permethrins are a related, synthetically created insecticide. These chemicals are used in a wide variety of products, including spot-on flea and tick preventives, collars, flea shampoos, and aerosols and powders that are used by homeowners and commercial pest management companies.



By Dr. Kathleen  
Spencer-Schmidt

*continued on pg. 4*



## Powassan Virus

There's a new tick-borne disease making the national news these days: Powassan virus. This virus was first identified in the 1950s, but until recently it has been quite rare. At the time of this writing, the Centers for Disease Control and Prevention (CDC) has received 75 reports of Powassan virus.

This virus is transmitted by deer ticks, and can cause severe symptoms in 50%-60% of people who are infected, including fever, headache, weakness, confusion, seizures and death. Most of the cases reported so far have been in the Midwest and the Northeast, with 20 cases appearing in Minnesota through 2015. As with Lyme disease, however, experts are concerned that the incidence of this disease will spread throughout the country.

Concerned pet owners have been asking about the danger to their pets. So far, Powassan virus does not appear to pose a threat to dogs and cats. It has been found in some animals, such as woodchucks and squirrels. Dogs and cats have been experimentally infected, but so far no naturally-occurring cases in dogs or cats have been reported.

Tick prevention is important for pets and pet owners. Remove brush and leaf litter from around your home, and be sure to keep your pets current on tick preventives.

**“Animals are such agreeable friends— they ask no questions, they pass no criticisms.”**

— George Elliot

## A Purr-fect Companion

“Dogs have owners, cats have staff.” There's no shortage of literary quotes depicting cats as aloof, solitary, and even antisocial. Yet somehow cats have worked their way into the hearts and homes of many Americans: it's estimated that there are 85.8 million owned cats compared to 78 million dogs (according to a 2015-2016 survey by the American Pet Products Association). And, of course, cats are superstars on the Internet. Clearly, many cat-lovers think felines are anything but antisocial.

Kristyn Vitale Shreve, a Ph.D. student at Oregon State University, appears to be one of them. She teaches kitten training and socialization classes, and her research interests include cat behavior and cognition, and human-cat interactions. She recently completed a study, published in *Behavioural Processes*, to assess cats' preferences for various types of stimuli.

Using adult cats from two populations, owned cats and shelter cats, the study aimed to determine whether the cats preferred social interaction with a human (petting, talking to or playing with the cat), food (tuna or chicken), toys or scent (a cloth that smelled like catnip or gerbil). In the initial session, researchers observed how much time the cats spent with items in each of the categories. In the final session, the preferred stimulus from each of the categories was pitted head-to-head and presented to the cats. The winner? Most cats chose to interact with people.

The study states, “Although there was clear individual variability in cat preference, social interaction with humans was the most-preferred stimulus category for the majority of cats, followed by food. This was true for cats in both the pet and shelter population.”

Understanding what type of stimulus your cat prefers may help you to enrich your cat's environment and increase the bond you share. It may also help you train your cat, if you so choose.

It turns out the most accurate of literary quotes about cats may be one from Charles Dickens: “What greater gift than the love of a cat?”



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**“The woman I live with had business cards printed for me. She says it's a nicer way to say hello to another dog.”**



# Lawn Chemicals and Pets

What could be better than playing fetch with your dog on a lush, beautiful green lawn? Many homeowners are motivated to enhance the beauty and value of their home by maintaining verdant lawns and landscaping. Use caution, though, because products designed to improve the appearance of lawns can be dangerous to your pets and your family.

Lawn chemicals and pesticides are used by many people to keep weeds and bugs at bay. Most people know to keep their children off newly treated lawns, but may not be aware of the danger these chemicals pose to pets.

One study performed by the Purdue University College of Veterinary Medicine found that dogs exposed to lawn chemicals are seven times more likely to develop a certain form of bladder cancer, known as transitional cell carcinoma, or TCC. Another study, done by Cummings School of Veterinary Medicine at Tufts University found that the use of certain specific lawn care products is associated with a significantly higher risk of canine malignant lymphoma.

Given these known risks, a recent study published in *Science of the Total Environment* aimed to characterize the exposure of lawn chemicals to dogs by investigating how long the chemicals continue to come off the grass after application, and whether there is an uptake of the chemicals into dogs' urine.

The scientists realized that different environmental conditions might lead to different results, so they tested the chemicals on green and brown grass in both dry and wet conditions. They covered a wooden block with a cloth and dragged it through the grass. They found that chemicals were still coming off the grass after 48 hours, and in some conditions even longer.



In the separate part of the study that used dogs, they stated that "the detection of lawn chemicals in the urine of dogs was widespread;" in fact, some of the dogs had chemicals in their urine prior to the lawn treatment, indicating that they had already been exposed in other places. Eight dogs in the study were from homes that did not treat their lawns, and four of those dogs had chemicals in their urine.

The authors noted that further

research is indicated to assess the risk of exposure to humans and dogs.

Some recommendations: Read the labels of all the products you use in your yard, and if it says to stay off the grass after applying the product, that caution applies to your pets as well as people. Pay attention to public and private places where you walk your dog, as this study made it clear that many dogs are exposed to chemicals in places other than their own yards. Ask your neighbors to let you know if they use herbicides, as it's possible for airborne particles can make their way to your lawn (known as "chemical drift") even if you're not the one doing the application. Wash your dog's paws after walking on lawns that may have been treated with chemicals.



Never leave your dog unattended in a parked car in the summer! Even in the shade and with the windows down, the inside of a car can reach deadly temperatures within minutes.

# Backyard Hazards

Herbicides aren't the only things in your backyard that pose a potential threat to your pet's health.

Other products used to create a beautiful lawn and landscape can be toxic as well. It's wise to assess the environment in your yard, and determine if there are hazards that could unintentionally harm your pets. Some of the dangers include:

- Fertilizers (including bone meal and blood meal, which may smell really good to your dog) and other plant foods can be toxic to pets
- Pesticides
- Fungicides
- Herbicides
- Cocoa mulch, and some dyes used in bark mulch
- Many plants, including lilies, hosta and gladiola, are toxic to pets (for a complete list, visit [www.asPCA.org/pet-care/poison-control/plants/](http://www.asPCA.org/pet-care/poison-control/plants/))
- Barbecues and fire pits (and the food you're cooking)
- Pools can be treacherous for pets

Be familiar with the potential dangers of ingesting certain plants or other items. Symptoms of poisoning could include drooling, vomiting, diarrhea, depression, anorexia, tremors, seizures and lethargy.

In addition to ensuring that your yard is free of hazards, it's wise to monitor your pet while outdoors. If you do leave your pet in a fenced yard, be sure to provide shade and fresh water.



## EMPLOYEE SPOTLIGHT

continued from pg. 1

early age. Jess loves many aspects of the job but her favorites are educating clients as well as leading the nursing team.

When Jess isn't at work, she enjoys crafting, cooking, camping, kayaking, and spending time with her family—husband Len and her stepchildren, Ben and Allie. The family has two fur children—Dexter, an Old English Sheepdog, and Bogey, a rough Collie.



By Kelli Swanson



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### Upcoming Events

#### YAPD National Night Out

August 1, 5:00pm - 8:30pm  
Dallastown Park

#### Red Lion Street Fair

August 12, 9:00am - 4:00pm  
Red Lion Square

#### Dog's Day in the Park

August 26, 9:00am - 4:00pm  
Marge Goodfellow Park, New Freedom, PA



## Water Safety

Many dogs love water. Swimming is a great way to cool off, and can provide good exercise as well. Water can also be treacherous, so keep the following safety tips in mind:

## PYRETHRIN TOXICITY *continued from pg. 1*

Cats are most often exposed by inadvertent use of a product labeled for dogs, or by licking or grooming a dog that has had a product applied. Exposure to these chemicals can be toxic, and even deadly, to cats. Signs may include ear flicking, tremors, salivation, vomiting, lack of coordination and seizures. If you suspect exposure, you should immediately seek veterinary treatment. There is no antidote for this toxicity, but your veterinarian can provide advanced supportive care and decontamination, and if treatment begins quickly enough the prognosis is often good.

Small dogs and dogs with compromised livers are more susceptible to toxicity than large, healthy dogs. Fish are highly susceptible, and a small amount of these chemicals can kill fish. If you have an aquarium, be sure to cover it if you use these products, and don't let your dog go swimming in a pond where fish may live for at least 24 hours after application.



- Not all dogs are natural swimmers. As with any form of exercise, be extra vigilant with dogs that have health problems, and overweight or older dogs. Consider a canine PFD (personal floatation device), especially if you take your pet on a boat.
- Pools can be dangerous for dogs and cats. Make sure your pool is fenced in, and supervise your pet's access to pools at all times. It's wise to have a pet-safe egress in your pool, just in case.
- Taking your dog to the beach can be great fun. Be sure not to let him drink too much of the salt water, and provide a shady spot if you're staying awhile. Remember, salt water isn't good for his coat and skin, so be sure to rinse him off with fresh water after swimming in the ocean.
- In late summer, the shallow water of ponds and streams that are drying up can become breeding grounds for bacteria and algae that can be dangerous and even toxic for your dog. If the water smells funny or looks cloudy or discolored, particularly with a blue/green tint, find another spot to cool off.