

WEST COAST VETERINARIAN

JUNE 2017 | Nº 27

A BIRD IN THE HAND

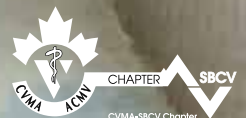
CHRONIC PAIN
STRUGGLING WITH
ARTHRITIS AND OBESITY

PUBLIC CONCERNS ABOUT
FARM ANIMAL WELFARE

NOT BORN TO BE WILD

RAT RESCUE

ANIMAL BITES AND RABIES
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COREY VAN'T HAAFF
EDITOR

» TO THE EDITOR

Letters from members are welcome. They may be edited for length and clarity. Email us at wceditor@gmail.com.

» ON THE COVER

Britney, a Blue-Fronted Amazon, was found at the refuge in a carrier and leg-deep in feces from lack of care. Photo courtesy of Night Owl Bird Hospital.

In the first three months of 2014, both my Dad and my oldest sister died, each of cancer. Two months ago, on April 6, 2017, my little Chihuahua Clara died of the complications of congestive heart failure. I got more cards in the mail for Clara than for my other family members combined.

This says something about the importance of my pets in my family, and the esteem with which my animals are held, not just within my family but within my circle of both friends and colleagues. More than 50 people took the time to comment about my loss on Facebook: friends and family, work colleagues, elected officials, each one expressing their sorrow at my loss, and their acknowledgment of the immense love I had for Clara and still have for all my other pets.

And I am not alone in this. My friends and family all celebrate milestones with their animals. I've seen more dog and cat and horse and chicken photos than I ever imagined I would, and the reasons are all the same: people are crazy over their pets. It's why, I think, the time is perfectly right for our Chapter to strike its Animal Welfare Committee, and it's why more than 10 veterinarians currently make up this committee (compared to the 5 veterinarians who serve on the Editorial Committee for *West Coast Veterinarian*). I'm keen, as an observer rather than participant, to see what topics the Animal Welfare Committee chooses to pursue, and I'm pretty happy that there is sure to be a public education and awareness component to some of their work.

In the meantime, I am hugging my doggies a little tighter right now, as I await the results of a splenectomy due to the presence of a tumour in Tikka, another of my dogs.

Email: wceditor@gmail.com



This issue carries the last Student Liaison column by Amber Backwell who has written for us for the past year. Amber moves on to her fourth-year work at WCVM. Her rotations will take her to Cincinnati, Australia, and Prince Edward Island. We wish her success in her travels and look forward to when we next hear from her as a fully qualified Doctor of Veterinary Medicine.

In the fall issue, you will find the first piece by Chloe Gustavson, WCVM class of 2020. We welcome Chloe to our pages and to her new position as CVMA-SBCV Chapter WCVM Student Liaison.

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THERESA BURNS, DVM, DIPL. ACT, PhD, received her DVM (with distinction) and MSc in Theriogenology from WCVM and her PhD in Epidemiology from the University of Guelph. She is Board Certified with the American College of Theriogenologists. She works at the Centre for Coastal Health as a veterinary epidemiologist and volunteers with Veterinarians without Borders Canada, the College of Veterinarians of BC, and Chilliwack Community Services.



TARA EDWARDS, DVM, DIPL. ACVSMR (Canine), CCRT, CVPP, CVMA, graduated from WCVM in 2002. Before moving to Lake Country Veterinary Specialist Hospital in the Okanagan in 2016, Dr. Edwards was responsible for the rehabilitation service at the Toronto Veterinary Emergency Hospital. Her areas of interest include improving the quality of care for geriatrics with arthritis and raising the bar for pain management.



ELENI GALANIS, MD, MPH, PhD, FRCPC, obtained her medical degree from the Université de Sherbrooke in 1995 and a Master of Public Health from Harvard University in 1998. She has worked at Health Canada and with the World Health Organization Global Foodborne Infections Network. Dr. Galanis is currently working on provincial enteric and zoonotic disease surveillance, control, and prevention at the BCCDC.



MARINA VON KEYSERLINGK, BSc, MSc, PhD, grew up on a cattle ranch in British Columbia. She joined UBC's



Animal Welfare Program in 2002, and was appointed as a NSERC Industrial Research Chair in 2008. She is recognized internationally for her research on care and housing for dairy cows and calves.

MELISSA MCLAWS, DVM, PhD, graduated from WCVM in 1998. After a couple of years in mixed practice, mostly in Kelowna, she returned to study and obtained a PhD in Epidemiology from the University of Guelph in 2005. Since 2010, she has been working as a consultant at the UN Food and Agriculture Organisation on surveillance and control of foot and mouth disease. She is the Public Health Veterinarian at the BCCDC.



LYN VARGAS, VOA, is a Veterinary Technician student at Thompson Rivers University and a Veterinary Office Assistant at Hillside Veterinary Hospital in Victoria. She has had an interest in animals since she was a child and grew up loving all species, breeds, and sizes. She runs Scratches Rat Rescue in Victoria.



DANIEL WEARY, D PHIL, is a Professor and NSERC Industrial Research Chair at UBC. He studied biology at McGill and Oxford, and went on to co-found UBC's Animal Welfare Program where he still works and co-directs this active research group. He was recently awarded UBC's Killam Research Prize.



KATHRYN WELSMAN, DVM, graduated from OVC in 2007 and practised emergency medicine in the Lower Mainland until moving to the Interior of BC and started working as a locum.

WCV

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WEST COAST
VETERINARIAN



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In February, the CVMA submitted comments to the Canadian Food Inspection Agency on the Federal Regulations Amending the Health of Animals Regulations (Part XII) Statutory authority Vol. 150, No. 49. The CVMA expressed support for the general direction being taken by the proposed Regulations, but listed further modifications to ensure the new Regulations are effective and meaningful to strengthen the humane treatment of animals during transport. The CVMA strongly supports the reduction of time intervals that animals may be transported without feed, water, and rest, but feels the proposed maximum intervals are still longer than optimal.

Veterinary community members and partners gathered at a workshop in Ottawa in February to identify the most relevant types of data to collect for a national veterinary prescription-based antimicrobial use surveillance program. Outputs from the workshop will shape information-gathering methods to determine how and what kind of antimicrobial use surveillance data can and should be collected to close gaps and optimize the efficiency and effectiveness of data collection.

The following new and revised position statements are available under the Policy & Advocacy section of the CVMA website:

- Cutting, Reduction and Removal of Healthy Teeth in Dogs
- Partial Digital Amputation (onychectomy or declawing) of the Domestic FELID
- Importation of Dogs into Canada

Forward booking is the process of booking a pet's next visit before it leaves the practice after their current visit. Visit partnersforhealthypets.org/forward_booking.aspx to learn more on how to implement this program consistently and effectively in your practice.

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Online registration for the 2017 CVMA Convention is now open. The CVMA Convention offers a strong,

RACE-approved, scientific program, with over 40 speakers and a total of 127 CE credits available to DVMS and 72 CE credits available to RVTs.

- Convention – July 13 to July 16, 2017 in Charlottetown, Prince Edward Island
- Early Bird registration – June 2, 2017
- 2017 CVMA Summit – *The Future of Veterinary Medicine: Embracing Change & Innovation* (sponsored by Wood Wyant) – July 13, 2017
- National Issues Forum – *Is Alternative Medicine No Longer an Alternative?* – July 13, 2017
- 2017 Emerging Leaders Program – sponsored by Virox Animal Health, the workshop offers veterinarians and veterinary technologists an opportunity to explore their approach to personal and professional accomplishments and their working relationship with colleagues.

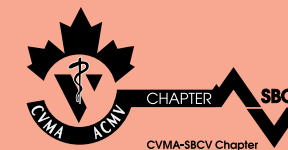
For more information on the convention, visit the Science & Knowledge section of canadianveterinarians.net.

I and the staff of the CVMA, as well as the board and staff of the CVMA-SBCV Chapter, value your continued support as a CVMA Chapter member so we may continue to provide a voice for Canadian veterinarians. The CVMA and the CVMA-SBCV Chapter welcome your comments and enquiries. [WCV](#)



Troy Bourque, DVM, originally from Fredericton, NB, graduated from the Atlantic Veterinary College in 2000. Dr. Bourque was a mixed animal veterinarian for 14 years in Okotoks, until 2014, when he began working as an emergency veterinarian at Fish Creek 24-Hour Pet Hospital in Calgary. He now also works at

Big Rock Animal Clinic in Okotoks, practicing small animal medicine. Dr. Bourque was involved in the Alberta Veterinary Medical Association (ABVMA) for 14 years and served on council from 2006 to 2012, and as president in 2010. He has been involved with the CVMA for over five years on various committees including the Executive Committee, the Communications Advisory Group, and most recently as the Chair of the Veterinary Pharmaceutical Stewardship Advisory Group.



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Stephanie Valberg, DVM, PhD, Dipl. ACVIM, Dipl. ACVSMR (Equine), will speak on muscular disorders including diagnostic approaches, exertional and non-exertional rhabdomyolysis, PSSM, shivers and cases: diagnostic approach and management of myopathies.

Carrie J. Finno, DVM, PhD, Dipl. ACVIM, will present on neurologic disorders including examination and localizing diseases, EHV-1, WNV, spinal cord ataxia, lower motor neuron diseases, and cases: diagnostic approach and management.

Organized by the Equine Committee of the CVMA-SBCV Chapter, the 46th Annual Equine Seminar will be held at the Town and Country Inn, Delta, BC. Registration includes coffee breaks, lunches, and a seafood buffet on October 23, 2017.

For more information, email deltaequineseminar@gmail.com or call Dr. David Paton at 604.856.3351 or Dr. Marian Dobson (for registration) at 604.888.2323.

www.deltaequineseminar.com

It has been a long winter/spring this year. I am thankful that summer has arrived and we can finally enjoy beautiful BC. I have lived in Vancouver for more than eight years now, and I still haven't been to many of BC's islands, the Northern regions, or even past Kelowna. I am hoping to rectify this this summer by hiking the Juan de Fuca Marine Trail, visiting Savary Island and Salt Spring Island, and going east to Nelson. I hope all of you get the chance to get some downtime and enjoy your summers. It is so important that we take time for ourselves, especially in our profession.

A lot is happening with the CVMA-SBCV Chapter this summer. Both Dr. Marco Veenis, our Past President, and Dr. Christiane Armstrong, the Chapter's CVMA Provincial Rep, will be attending the CVMA conference in Charlottetown, PEI. Dr. Armstrong will attend the convention and meetings as the CVMA's BC Provincial Rep, and Dr. Veenis will attend, on my behalf, the presidents' meetings. Attending the CVMA convention as a provincial association is very important. It is a time to enjoy our Canadian veterinary community, and the presidents' meetings are an opportunity to share information and find out what other provinces are having issues with—their issues are ones which we can learn from as well. It is great to find out more about some of Canada's national issues and bring these topics back to our province to educate our members. The yearly CVMA Conference is also our opportunity for the CVMA-SBCV Chapter to meet up with the CVBC and its president to share information about our two organizations.

A notable feature of the annual conference is the Emerging Leaders Program (ELP). The ELP is a CVMA-run session which has as its goals the education of new veterinarians on how to cope with a variety of veterinary specific challenges (such as conflict resolution, etc.) in a highly interactive setting over two

days. Every year, the CVMA-SBCV Chapter chooses two candidates to attend this session following the criteria that the candidates are CVMA-SBCV Chapter members who graduated in the last ten years. Candidates are selected based on their applications in which they discuss what leadership means to them. I and two other directors have attended the ELP, and I can attest that this is an excellent program. It is one which every recently graduated veterinarian could benefit from. If you have not applied yet, and you qualify, please consider applying next year. Our ELP candidates are also encouraged to write about their experiences in the fall issue of *West Coast Veterinarian*.

Lastly, the CVMA-SBCV Chapter is overdue for some strategic planning. Our last strategic planning session was in 2013. We have decided to hold a session this June 25, 2017. Strategic planning is a time for our association to reflect on what we have accomplished, re-evaluate our goals, and come up with some novel solutions to newly identified problems. We will also use this time to brainstorm how our Chapter can serve its members to the best of its abilities. Some topics we will cover this year include One Health, self-promotion and the continued promotion of the profession, future CE, lobbying, working with the College, and more. Stay tuned. [WCV](#)



Sarah Armstrong, DVM, graduated from OVC in 2007. Following graduation, she worked full time in general practice and worked part time at a local emergency practice in Southern Ontario before moving to Vancouver, BC, where she currently works at Ambleside Animal Hospital.



We are pleased to announce that Lindsay Ramage has won the BCVTA Technician of the Year Award for 2017. Lindsay, pictured here (left) with Gayle Paquet, President of the BCVTA, has been instrumental in improving workplace processes, even before she became an RVT. She works as Practice Manager at Newton Animal Hospital, and has tirelessly participated on the BCVTA (AHTBC) Executive Board, completing two terms each as Secretary, Vice President and President, and providing support to the Board and members. Her positivity, diplomacy, problem-solving skills, and cool head provided great direction for strategic planning and progression. Lindsay is very deserving of this prestigious award, as she exemplifies what it means to be a Registered Veterinary Technologist.



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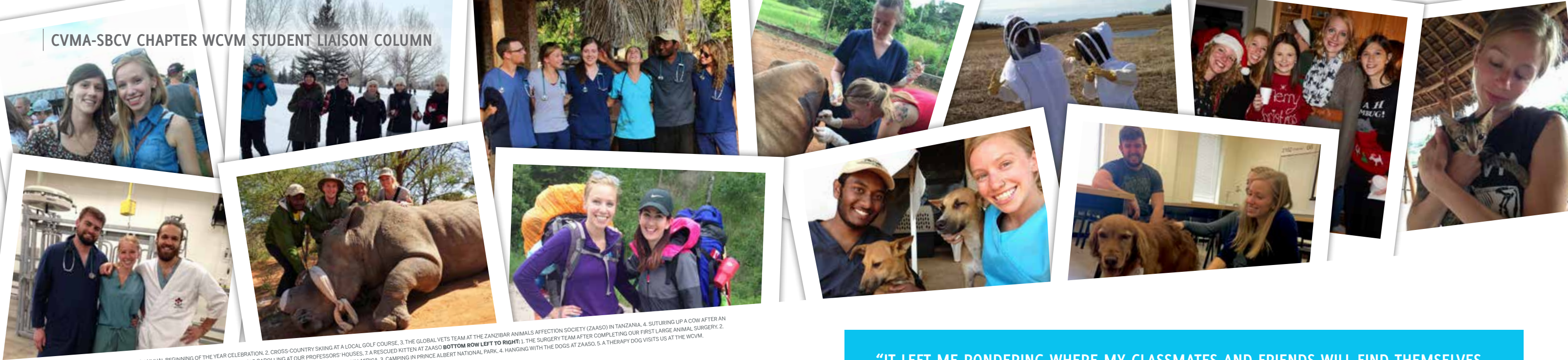
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TOP ROW LEFT TO RIGHT: 1. THE WCVM'S ANNUAL BEGINNING OF THE YEAR CELEBRATION. 2. CROSS-COUNTRY SKIING AT A LOCAL GOLF COURSE. 3. THE GLOBAL VETS TEAM AT THE ZANZIBAR ANIMALS AFFECTION SOCIETY (ZAASO) IN TANZANIA. 4. SUTURING UP A COW AFTER AN EMERGENCY C-SECTION. 5. THE WCVM'S HONEYBEE OPERATION. 6. ANNUAL CHRISTMAS CAROLLING AT OUR PROFESSORS' HOUSES. 7. A RESCUED KITTEN AT ZAASO. 8. THE SURGERY TEAM AFTER COMPLETING OUR FIRST LARGE ANIMAL SURGERY. 9. THE GLOBAL VETS TEAM HELPING TO DEHORN RHINOS WITH CHAMPION WILDLIFE TO PROTECT THEM FROM POACHING IN SOUTH AFRICA. 10. HANGING WITH THE DOGS AT ZAASO. 11. A THERAPY DOG VISITS US AT THE WCVM.

SAYING goodbye

I recently had the opportunity to witness a number of my friends who are in their fourth year of veterinary school say their goodbyes to each other. Lauren, one of my most cherished friends, was leaving Saskatoon the next day to complete her final school rotation at the Calgary Zoo, after which she would continue heading west in order to start work as a fully fledged veterinarian. Of course, I was personally sad that she was leaving and that we would no longer be able to have our weekly coffee shop study sessions anymore, but it was the interactions between Lauren and our other friends in fourth year that were the most poignant. There were a lot of heartfelt hugs, a few tears, and many promises of seeing each other again in the future. It was an emotional night, to say the least.

Similar thoughts and emotions came to me the following week when, leading up to the school's Happy Hour (put on by the fourth-year class for their final time), we were shown promotional videos/skits

throughout the week encouraging us to attend. One video in particular perfectly depicted the range of emotions associated with finishing veterinary school, including thinking about all of the memories made during the four years here and how difficult the final goodbyes would be. Again, I was left feeling rather touched.

The reality is that the four years we spend in veterinary school fly by in the blink of an eye. I remember starting first year a few years ago so vividly, as if it were just last week. Now, I'm wrapping up my third year here, and I'm at a complete loss as to where the time went (and how we've managed to cram so much knowledge into our heads during this time). What's more, much of fourth year is spent in smaller groups doing clinical rotations, some of which are spent in other cities (or provinces or countries) if we choose to organize fourth year that way. As a consequence, it is actually the end of third year that may signify the parting of ways for many people.

"IT LEFT ME PONDERING WHERE MY CLASSMATES AND FRIENDS WILL FIND THEMSELVES UPON GRADUATION, WHO WILL REMAIN LIFELONG FRIENDS, WHO WE WILL LOSE TOUCH WITH, AND WHAT LIFE HAS IN STORE FOR ALL OF US"

We recently had our third-year 'draft day'—the day when students select all their fourth-year clinical rotations based on a series of the students' randomized lists. I was very lucky in the selection process and managed to draft all the rotations that I was interested in taking. This includes a six-week externship at the Cincinnati Zoo (arranged prior to draft day) as well as a four-week rotation at the University of Melbourne in Australia (followed by a month-long lull in my school schedule to do some sightseeing in Australia). I'm also away from Saskatoon for most the summer—for part of it, I'll be in Prince Edward Island doing a cardiology rotation at the Atlantic Veterinary College, followed by a stint back on the West Coast. Overall, there are a lot of exciting things coming down the pipeline for me, but it also means that I will be away from the veterinary college and my life and friends here for a good portion of the year. And after I return from Australia in the spring, I will only have three months left before veterinary school is finished, and I head west again.

All in all, thinking about these upcoming changes combined with witnessing my friends in fourth year say their goodbyes the other night really rattled me. It left me pondering where my classmates and friends will find themselves upon graduation, who will remain lifelong friends, who we will lose touch with, and what life has in store for all of us. I hope to maintain close ties with a number of people at the veterinary college, but the reality is that life often gets in the way—people will move away, start families, form new relationships, and so on, and eventually the time spent and relationships made in veterinary school will be distant

memories. On the other hand, perhaps this won't be the case. I'm sure that many of us will do our best to keep in touch, and it's inevitable that we will also run into each other at veterinary conferences or events, as well as converse on various veterinary matters over the years. Social media (for instance, our class Facebook page) will make it even easier to keep in touch after graduation.

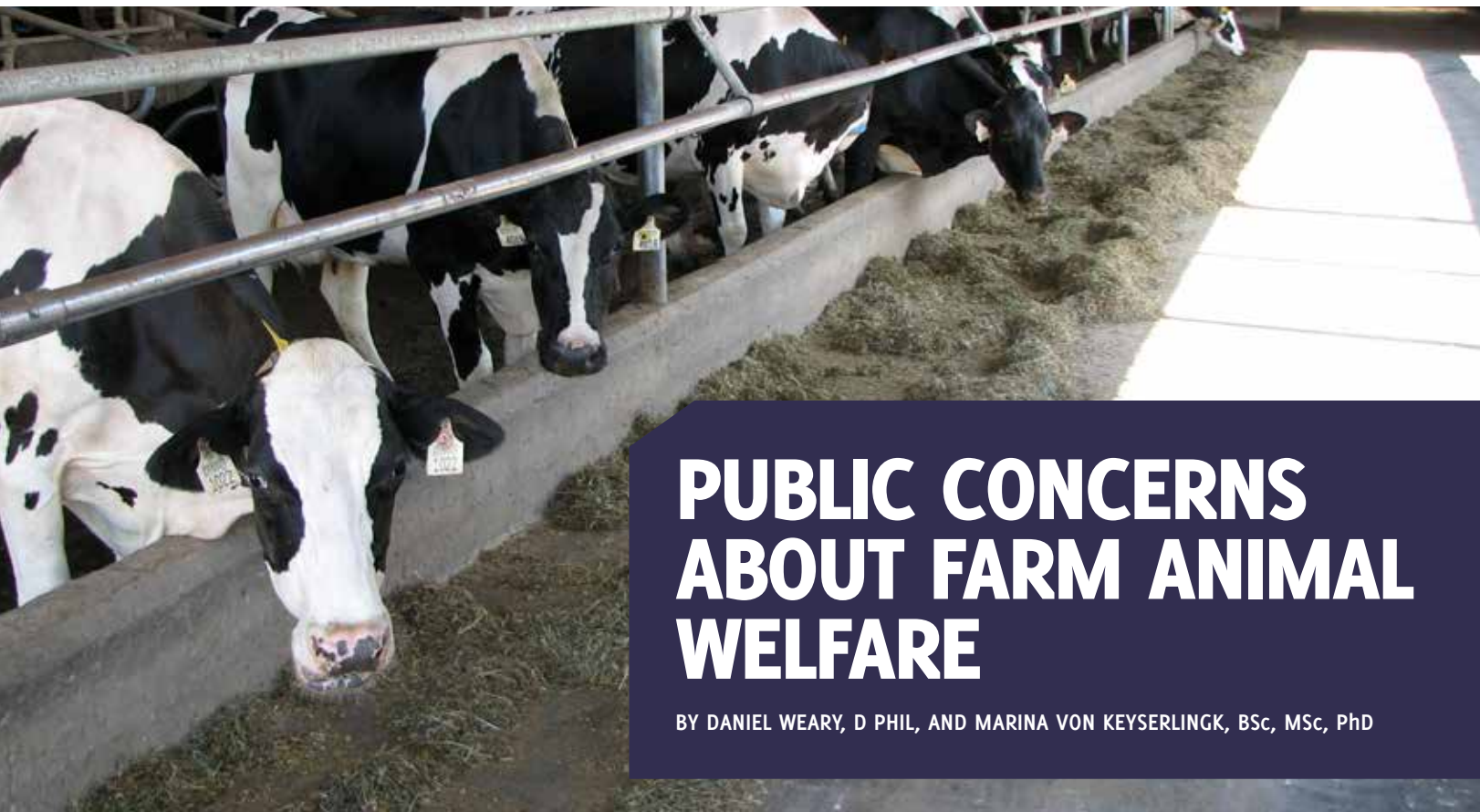
In summary, the point of this article is not to make you saddened or nostalgic about your veterinary school experience, but to serve as a gentle reminder to cherish the time you have. Whether you're still in veterinary school or in another stage of your life or career, make the most of the time you have and try to value both the good and the not-so-good times and the lessons learned from it all. The veterinary career is a great and expansive one, with a whole world of opportunities just waiting for us, and I'm ecstatic to see where it takes my classmates and me. But in the meantime, I'm going to enjoy the rest of my time here, honour the friendships I've made, and hopefully get some studying done in between it all.

On a final note, this is my last article for *West Coast Veterinarian* as I feel that my upcoming year of school and travel will not afford me the time to act as the CVMA-SBCV Chapter WCVM Student Liaison any further. I hope you enjoyed my articles as much as I enjoyed researching and writing them. Thank you for reading! [WCV](#)



Amber Backwell was born and raised in London, ON, and moved to BC in 2009 to pursue a Masters of Public Health. She is looking forward to returning to BC upon graduation from WCVM to work in a mixed animal practice and hopes to be involved in wildlife medicine one day. When not in school, she likes to hike, camp, ride horses, and do anything else involving the outdoors. She is currently in her third year of the DVM program at the WCVM.

PHOTOS COURTESY OF AMBER BACKWELL



PUBLIC CONCERNS ABOUT FARM ANIMAL WELFARE

BY DANIEL WEARY, D PHIL, AND MARINA VON KEYSERLINGK, BSc, MSc, PhD

PHOTO COURTESY OF UBC DAIRY EDUCATION AND RESEARCH CENTRE

“WE ENCOURAGE TWO-WAY CONVERSATIONS AS A MORE EFFECTIVE WAY OF ADDRESSING CONCERNS”

this view, if the public is educated about what farmers do, then criticisms will wane. Two studies by our group research have shown that this response can also backfire; efforts to educate the public about livestock farming can actually increase criticism of the farming practices. In one study, we asked people about their attitudes to various housing systems for pregnant sows, and found that people became less willing to accept the use of the industry standard gestation crates after they learnt more about them and the alternatives. In another study, we found that the public became more critical of dairy practices after visiting a working farm, in part because they learned about practices, such as cow-calf separation, that they were not previously aware of.

In contrast to one-way educational efforts, in which the industry tells the public what farming is all about, we encourage two-way conversations as a more effective way of addressing concerns. For example, inviting the public onto farms allows farmers to both hear the concerns of their visitors and explain their practices. If a particular concern is brought up time and time again, then this may also motivate changes on the farm. When done right, this type of engagement can feed into a cycle of continuous improvement, starting with a conversation, leading to reflection and the development of modified practices, and then going back for more engagement to ensure that new practices resolve the initial concerns without creating new ones.

As an example, consider the many public events we host at our UBC dairy farm in Agassiz. Perhaps the most common question that visitors ask is why the cows are not on pasture. This comment reflects what we know to be a widely held concern about the importance of pasture access for cows. We have experimented with different types of pasture access such as free choice between the barn and pasture during the pasture season, as well as other types of outdoor access when the pasture is too wet to use. We have found that people are often receptive to these hybrid solutions when these are explained.

In conclusion, neither hiding practices nor one-way education of the public is effective in addressing public concerns about livestock farming. Instead, we advocate for a more difficult but also hopefully a more successful approach: a process of engagement between farmers and the public that, in the long term, motivates changes that bring farming practices in line with public expectations. **WCV**

THIS ARTICLE IS AN ABBREVIATED VERSION OF A LONGER PAPER AVAILABLE ONLINE: WEARY, D.M., AND M.A.G. VON KEYSERLINGK. 2017. ANIM. PROD. SCI. DOI: 10.1071/AN16680

“CLOSED DOORS GIVE THE OUTSIDER THE SENSE THAT THERE MUST BE SOMETHING TO HIDE”

People are becoming increasingly concerned about how farm animals are reared, in part because their introduction to modern farming sometimes comes in the form of videos or pictures documenting abuse and other contentious practices. In this article, we will argue that two of the potential methods of responding to these public concerns are ineffective; instead, we advocate for a new approach.

One response to public concerns is to keep farm practices hidden from view. But the appearance of secrecy can accentuate concerns, as closed doors give the outsider the sense that there must be something to hide. An example of how efforts to reduce transparency can be harmful comes from the so-called ag-gag laws used by some states in the United States—legislative action that attempts to prevent the publication of undercover videos. In one study, UBC’s Animal Welfare Program research group found that when people were made aware of ag-gag restrictions, they were less likely to trust farmers and more likely to support the introduction of new animal welfare laws. Knowing about the ag-gag laws also resulted in respondents believing that the welfare of the animals (and environmental conditions) on farms was poorer. Thus, attempts to restrict the outflow of information as a way to protect livestock farms from public criticism can actually lower public trust and support for farmers and farming practices.

Another view expressed by some farmers is that criticisms about farm practices are rooted in the public’s ignorance about farming. According to

BAYER

WTF!

*what the flea!

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CHRONIC PAIN STRUGGLING WITH ARTHRITIS & OBESITY

BY TARA EDWARDS, DVM, DIPL. ACVSMR (CANINE), CCRT, CVPP, CVMA

“LONG-TERM EXPOSURE TO PAIN SIGNALS RESULTS IN ALTERED PAIN PHYSIOLOGY. THE BODY MAY HAVE DECREASED PAIN THRESHOLDS, SPONTANEOUS ELECTRICAL ACTIVITY, LOSS OF DESCENDING PAIN INHIBITION, EXAGGERATED RESPONSES TO STIMULI, AND ACTIVATION OF PAIN PATHWAYS”

As our pets live longer, there is an increased risk they will experience discomfort and pain. Understanding the difference between acute and chronic pain becomes imperative when trying to raise the bar for patient care. Acute pain may not be a pleasant experience, but it is meant to be protective. Like an alarm system, it is a helpful reminder for the body to rest and promotes healing of injured tissue. Compared to acute pain, chronic pain has the potential to become debilitating as it does not serve a useful purpose.

A variety of veterinary diseases could potentially contribute to the chronic pain cycle. These may include internal organ disease, skin or ocular disease, dental disease, neurological disease, cancer, and a variety of orthopedic diseases. We need to strive to do our best with each acutely painful patient as poorly managed acute pain can slowly evolve into a maladaptive pain scenario. In humans, prior surgery is an independent predictor for future post-operative pain. The older pet that has had a previous ovariohysterectomy and dentistry for dental disease, has advanced arthritis, and is now scheduled for an elective cruciate surgery, needs to have a tailored perioperative pain management plan.

With respect to chronic pain, long-term exposure to pain signals results in altered pain physiology. The body may have decreased pain thresholds, spontaneous electrical activity, loss of descending pain inhibition, exaggerated responses to stimuli, and activation of pain pathways. The more pain pathways are utilized, the more efficient the body becomes at transmitting and processing more pain. This process is also known as wind-up or central sensitization. Chronic pain can continue to linger even when the initial painful insult is no longer present. Chronic pain, also known as maladaptive pain, can become a separate disease process and negatively impacts the body. It can be difficult to treat in both human and veterinary medicine.

PHOTOS COURTESY OF TARA EDWARDS

Even in humans, pain is often unrecognized and inadequately treated. With non-verbal patients, veterinary medicine has an even bigger challenge. Assessing for acute pain has become an expected standard of care for our trauma, medical, and surgery patients. Assessing for chronic pain is difficult as the symptoms are difficult to recognize, and our patients often don't complain. Instead, our patients slowly adapt and change their activity patterns. We need to acknowledge that getting older is not the only reason an animal will stop doing what they like to do. Owners' observations are required for chronic pain and mobility assessments. Owner feedback can provide invaluable clues which help to identify the subtle and slow changes in behaviour that can occur over time. Good online resources for chronic pain assessment tools include the Helsinki Chronic Pain Index, the Canine Brief Pain Inventory, and the ACVS Canine Orthopedic Index.

The most significant contributors to chronic pain in my patient population are arthritis and obesity. Both these diseases limit movement, impact cartilage health, contribute to muscle atrophy, cause weakness, and alter normal biomechanics. Chronic changes to mobility or changes in posture, weight bearing, and gait can lead to activation of pain-sensing pathways which contributes to secondary muscle pain—an often-overlooked source of discomfort in our patients. Arthritis and obesity are sources of chronic inflammation which can exacerbate each other. This slippery slope of arthritic patients becoming overweight because of reduced mobility, overweight patients developing arthritis at faster rates, and the struggle of managing an arthritic overweight patient is a real challenge.

Similar to the challenges of identifying chronic pain in our patient population, there is also a lack of recognition of obesity among owners and the health care team. Despite obesity being easily recognizable and the most common nutritional disease, it is often difficult to

“WE NEED TO REMOVE EMOTION WHEN DISCUSSING WEIGHT AND FOCUS ON THE HEALTH RISKS OF REDUCED LIFE EXPECTANCY, INCREASED RISK FOR DISEASE, AND REDUCED QUALITY OF LIFE”

discuss with owners. Obesity is spreading like an epidemic; recent statistics reveal that 59 per cent of cats and 54 per cent of dogs are either overweight or obese. Adipocytes are releasing a variety of hormones that have effects locally and systemically. Increased body condition scores are associated with an increase in inflammatory markers which means that overweight and obese patients are in a state of chronic inflammation. This pro-inflammatory state activates pain sensors, increases pain perception, and aggravates joint degeneration. Obesity ultimately compounds pain, mobility, and quality of life, and impacts the human-animal bond.

Arthritis is quoted to affect 20 per cent of the pet population, likely a conservative estimate as many of our patients suffer in silence. The prevalence of arthritis in our quiet feline patients is alarming. A retrospective study in 2002 looked at the radiographic prevalence of osteoarthritis in our feline population. Interestingly, 22 per cent of cats over one year of age and 90 per cent of cats over twelve years of age had radiographic evidence of degenerative joint disease. Arthritis is a multi-dimensional disease that starts with joint dysfunction leading to pain and altered mobility. Unfortunately, pain is often present before visible changes in mobility. By the time our patients present with mobility changes or lameness, they are in a moderate amount of discomfort and no longer candidates for simple conservative management.

Chronic pain management, like any other chronic disease process, is life-long and requires good client communication and support. We need to advocate for client education to promote earlier diagnosis and compliance with our treatment recommendations. Obesity in companion animals is a human disease (often a combination of overfeeding and lack of exercise) that requires clients to understand the impact that excess weight has on mobility and chronic pain. We need to remove emotion when discussing weight and focus on the health risks of reduced life expectancy, increased risk for disease, and reduced quality of life. As with many areas of practice, managing chronic pain becomes more successful with the involvement of the entire veterinary team.



Feline patient participating in therapeutic exercises to maintain mobility

Chronic pain treatment goals include managing pain and improving functional ability. Treatment plans need to be individualized and based on thorough examinations. Due to the progressive nature of diseases like arthritis, frequent re-evaluations are required throughout the life of the pet as any change in function is often an indicator of increased pain. One of the common reasons for a lack of success with arthritis management is failing to adjust treatment plans over time. From a multimodal perspective, there are several areas to focus on with arthritis, including controlling pain and inflammation, slowing down the progression of arthritis, improving joint function, maintaining muscle strength, preventing injury, promoting physical fitness, and achieving or maintaining ideal body weight.

Chronic pain involves multiple pathways which often require various pharmaceuticals that target different levels of pain processing. NSAIDs are the hallmark of initial therapy since arthritis is an inflammatory disease process. NSAIDs can help to increase activity, thereby maintaining muscle mass and assisting with weight loss. Gabapentin and Amantadine are great add-on choices for chronic or maladaptive pain. In human medicine, pain medications are rarely discontinued in maladaptive pain patients. We need to remember that it takes time to change central sensitization, and patients should be re-evaluated prior to adjusting medications.

Despite pharmaceuticals targeting inflammation, providing pain relief, and modulating neurophysiology, we cannot forget about slowing down the progression of arthritis. Disease-modifying agents help slow down the progression of arthritis by protecting or promoting cartilage health. These products should be utilized as part of a multi-modal treatment plan and not as replacements for appropriate pain-relieving medications or modalities. The earlier we initiate certain supplements, the better chance we have at modulating cartilage damage. Common disease-modifying agents include glucosamine, chondroitin, omega 3 fatty acids, green-lipped mussels, avocado soybean unsaponifiables, and injectable chondroprotectants.

Nutrition can play an integral role in managing weight, inflammation, and joint disease. Weight loss is the single most important factor to assist with reducing pain in overweight arthritic patients. Achieving ideal body weight is also critical for maintaining joint health and slowing down the progression of arthritis. Determining the current body condition score is the first step in diagnosing and addressing obesity as it allows you to determine the ideal body weight. Knowing the ideal body weight is crucial for calculating the appropriate dose of calories. Choosing an appropriate prescription diet targeted for weight loss (not weight maintenance or obesity prevention) is important. Weight-loss diets are complete and balanced with a reduction in calories and high fibre content to support an effective weight-loss program. Appropriate levels of protein are also important to maintain lean body mass which is required for joint stability in any arthritic patient.

Physical medicine supports the body to heal and promotes physical well-being. It is an invaluable service for a patient suffering from chronic pain with conditions such as obesity and arthritis. A tailored rehabilitation program can focus on reducing pain and inflammation, improving joint health and mobility, maintaining and improving muscle mass, encouraging proprioception to reduce the risk of injury, and encouraging physical fitness and safe weight loss. There are a variety of modalities that can assist with the management of chronic pain and the mobility-compromised patient such as manual therapy, massage therapy, thermotherapy,

“EVERY PATIENT WALKING INTO OUR CLINICS SHOULD BE ASSESSED FOR PAIN. THE EARLIER WE DIAGNOSE DISEASES SUCH AS ARTHRITIS AND OBESITY, THE EARLIER WE CAN IMPLEMENT OUR MULTI-MODAL STRATEGIES”

cryotherapy, low-level laser therapy, acupuncture, land-based treadmills, underwater treadmills, and therapeutic exercises. Providing guidance for owners regarding recommended and allowable activity is important in promoting safety and avoiding painful flare-ups. Low intensity exercise can be beneficial to support the loss of fat while maintaining muscle, improve joint and muscle function, reduce lameness scores, increase oxygen capacity, improve fatigue resistance, and increase energy expenditure. Controlled and structured leash walks are preferred over uncontrolled off-leash activity for the arthritic and obese patient. Clients should start within the pet's tolerance, provide adequate rest, and learn what is too much.

Alerting the veterinary team by identifying which pets are chronic pain patients while in the clinic is important when ensuring cautious handling and nursing care. Remembering sore joints during positioning for procedures, increasing traction on slippery floors, using extra bedding in kennels, and providing mats for examinations can improve patient comfort. Minimizing pain and maximizing mobility is important; at the very least, we do not want to exacerbate a patient's pain level while in our care.

With the known frequency of arthritis and obesity, every patient walking into our clinics should be assessed for pain. The earlier we diagnose diseases such as arthritis and obesity, the earlier we can implement our multi-modal strategies. We need to excel at history taking, mobility evaluations, body condition scoring, and nutrition counselling. By appropriately addressing obesity and arthritis, we can improve patient care by focusing on the prevention of disability which ultimately impacts the number of patients suffering from chronic pain in our practices. **WCV**



LEFT Molly is a senior patient being managed for physical fitness, weight loss, chronic degenerative joint disease, and neuropathic pain from a soft tissue tumour affecting her sciatic nerve



A BIRD IN THE HAND

BY KATHRYN WELSMAN, DVM



PAGES 20 AND 21
Sasha, Hybrid Macaw.
THIS PAGE
Dr. McDonald with
Lucky, Military Macaw.
PAGE 23 Iago taking
medication.

Big birds. Little birds. Colourful birds. Ugly birds. Pet birds. Wild birds. It really doesn't matter what kind of bird it is, they all have one thing in common which terrifies me—they have wings that flap.

I kid you not. Lots of people have weird phobias. Some people don't like spiders, others don't like snakes. Me? I don't like things that flap. I'm not sure when or how this fear came about but my sister tells me it was one eventful evening when I was a teenager, staying in an old and rather drafty farm house in the south of France. I got up to use the bathroom and turned on the light and many many many moths took flight around my head. I ran screaming back to my bed and dove under the covers. My sister also tells me I was only dreaming and there were no moths. Nightmare or reality I will never know, but to this day this is probably the reason I don't like anything that has wings: moths, butterflies, bats (don't get me started on bats), and, of course, birds.

Alas, as a veterinarian, I can't always avoid certain creatures, and I've run into a few birds along the way. I always tell clients that I will see their bird, but really,

I'm not the most proficient. So, it is a good thing that there is a veterinarian like Dr. Anne McDonald who dedicates her practice entirely to birds, especially this past year when her skills were needed to help several hundred parrots.

Dr. McDonald owns Night Owl Bird Hospital in Vancouver. She started Night Owl with two colleagues in 1984 when she was working at an emergency clinic and saw a need for avian care in Vancouver. She was always around birds growing up, including owning some budgies (which likely means she had a more positive experience in her formative years than I did!). Providing avian care seemed like a natural fit. Night Owl also used to treat reptiles, but for the past ten years or so, Dr. McDonald and her staff have only seen birds. This is a unique situation—Night Owl has the distinction of being the only hospital in Canada solely dedicated to birds, according to Dr. McDonald. Pet birds, including backyard chickens, are the majority of her patients, and the most common issues she handles are trauma- and husbandry-related. Wildlife makes up a smaller percentage of her patients, and she also volunteers her time with two rescue

organizations. She is busy providing care to patients from around British Columbia, so I don't imagine she could have wanted to add 600 rescue parrots to her patient list, which is exactly what happened last year.

If you've ever been to Coombs, on Vancouver Island, you may have driven past or perhaps even visited the World Parrot Refuge (WPR). The WPR started in Abbotsford in the 1990s to provide a safe place where unwanted parrots could live out their lives, and later it moved to Coombs. Many of the birds at the refuge had behavioural issues that their former owners couldn't deal with, such as feather picking and screaming. Other birds came to the WPR as part of their owners' succession plans. In other words, when owners died before their parrot died, the parrot was sent to the WPR. So, I can see how a place like the refuge would have been very popular as parrots can live well into their 70s or 80s. Unfortunately, due to that overwhelming need for a place for these parrots to go, the refuge was soon bursting at the seams, like many rescue organizations. Although the refuge was a massive facility with many indoor and outdoor flight areas, it was likely meant to house only 300 birds, according to Dr. McDonald, not the 1000 it sometimes did. So because of this overcrowding, the conditions at the refuge had started to deteriorate until last summer, when things ultimately imploded.

In early 2016, the founder of the WPR died, leaving no plan in place for running the refuge, and—very importantly—no more money to maintain the facility and birds. Simply do a Google search, and you will find a plethora of articles and photos about the situation at the WPR this past year. Without funds, it was impossible to keep the refuge's nearly 600 parrots cleaned, fed, and healthy. On top of the lack of funding, an eviction notice was given to the refuge's Board of Directors, so that the parrots needed to be off the property in less than two months last summer. That started the ball rolling on one of the biggest animal rescues in Canadian history.

Enter Dr. McDonald and Greyhaven Exotic Bird Sanctuary. Dr. McDonald explained her connection to the refuge like this. "Approximately six years ago, the SPCA contacted me for input as they had become involved through concerns about the husbandry issues, which I provided. The unfortunate reality was that, at that time, the power of enforcement of the SPCA was much less than it became several years later." Fast-forward to 2016. Dr. McDonald said, "One of my clients from Vancouver Island asked me to become involved in finding a suitable solution for the care of these birds whose lives literally were in peril. I called Horst

Neumann [the landlord/widower] and asked what he had planned. He said that he had no one that he would work with on Vancouver Island. He stated that he didn't have the financial resources to look after the birds and that he soon would be bankrupt. He said he would welcome my help."

It's lucky that Dr. McDonald is on the Board of Directors of Greyhaven Exotic Bird Sanctuary in Surrey. She, in turn, asked for their help.

Greyhaven took on the 600 parrots. The conditions the birds were living in were quite terrible. Greyhaven's website says, "Conditions at the refuge were truly appalling. The birds were living in dark, dirty, rat-infested enclosures. Many of the birds were ill, underweight, mutilated, or injured due to fighting and self-harm." Normally, Greyhaven would have helped place about 150 birds a year, so having an influx of 600 new parrots would have been a large task. That's probably the understatement of the year! You know the expression, "it's like herding cats." Herding cats would be a major problem. Caring

for and re-homing 600 parrots would be a colossal undertaking. Where do you put that many birds? Who has the resources and knowledge? How do you transport them?

The birds ended up in several different locations, with 50 going to Dr. McDonald's clinic and another 30 to the home of one of her staff members. Just think about that for a second—most of us likely have no more than 10 or maybe 15 patients in our clinics at any one time under our care. Having 50 patients would mean doing a pretty amazing tap dance to get all of them assessed and treated on a daily basis. Some stayed on the island at the SPCA, and the majority were in a house in Vancouver rented by Greyhaven. Dr. McDonald says that Greyhaven has a very good track record of finding suitable homes for parrots, even those that have

**"THE MOST COMMON
ISSUES SHE HANDLES
ARE TRAUMA- AND
HUSBANDRY-RELATED"**

PHOTOS COURTESY OF NIGHT OWL BIRD HOSPITAL



become problem birds. The ideal new owner is one with the experience, time, resources, and expectations that are in line with what the bird needs. It is very important for potential new owners to be aware that these parrots are likely to bite and scream. Dr. McDonald pointed out that many bird bites are unintentional. She gave the example of an older bird with arthritis who is trying to step up onto your hand and might use his beak on your hand to help stabilize himself, which

parrots were made. She said the conditions had gotten so bad that her eyes were stinging and her voice changed after working in the building. From a veterinary point of view, some of the common injuries seen were due to self-mutilation or fighting such as feather picking, bites to nostrils, and limb fractures. Other issues were sinusitis, chronic airway disease, enteritis, arthritis, and air sacculitis. Despite the many medical and behavioural challenges, euthanasia was considered a last resort, and surprisingly, very few birds have been euthanized. According to Dr. McDonald, a group of about 85 cockatiels had systemic candidiasis and spironucleosis, and about 25 per cent of them died, unfortunately. Dr. McDonald thinks there was a one per cent mortality rate, approximately, excluding the cockatiel group, which was quite remarkable given the complex nature of this rescue.

Since August 2016, Greyhaven has rehomed approximately 300 parrots, but it hasn't been an

easy road. Dr. McDonald says that over the winter it has been hard to fly the birds to new homes, given the concerns about climate control on airplanes. So, she is hoping that this spring will allow more birds to be moved.

Dr. McDonald said the funding for this massive rescue operation has been personal donations mainly, along with some larger donations from local

can be perceived as biting for someone without the knowledge. So, rehoming a parrot doesn't seem quite as simple as rehoming a cat. It seems more like finding a new home for a horse—not just anyone can take on a horse. The same goes for parrots.

Dr. McDonald spent several days a week making the trek from the Lower Mainland to Vancouver Island to provide veterinary care, while plans for moving the

“JUST THINK ABOUT THAT FOR A SECOND—MOST OF US LIKELY HAVE NO MORE THAN 10 OR MAYBE 15 PATIENTS IN OUR CLINICS AT ANY ONE TIME UNDER OUR CARE. HAVING 50 PATIENTS WOULD MEAN DOING A PRETTY AMAZING TAP DANCE TO GET ALL OF THEM ASSESSED AND TREATED ON A DAILY BASIS”



THIS PAGE LEFT TO RIGHT

The current shelter housing the remainder of the refuge birds; Britney's Xray: old right femoral fracture with severe malunion, bilateral hip dysplasia, severe osteoarthritis in knee joints and tarsal joints, cardiomegaly, arteriosclerosis, air sacculitis.

TOP LEFT Iago before; **RIGHT** Iago after; **BOTTOM LEFT** Lucky Loo and Coco sharing food.



companies. She personally has provided time and financial resources that are beyond comprehension. My question “Are you overworked?” was somewhat rhetorical. I’m not sure what I thought she would say since the idea of running a practice and then being in

“WITHOUT HER KNOWLEDGE AND DEDICATION TO THIS RESCUE, THE OUTCOME FOR THESE BIRDS COULD HAVE BEEN MUCH MORE BLEAK”

the fray of this situation made my head hurt. She just said, “You could say that!” Apparently, Dr. McDonald isn’t only a talented avian veterinarian with a massive heart, she is also very humble. Without her knowledge and dedication to this rescue, the outcome for these birds could have been much more bleak. Instead, this story, although nowhere near its conclusion, has success written all over it because of the hard work of those involved.

It’s a level of hard work and commitment that has been more than noticed; it’s been awarded. Dr. McDonald was just named the recipient of the CVMA Humanitarian Award for 2016 because of her involvement in this rescue. [WCV](#)



ABOVE Dr. McDonald with Lily, Yellow-Naped Amazon.

TIPS

When I was interviewing Dr. McDonald for this article, I had to admit to her that my comfort level around birds is sketchy at best, and the idea of treating birds day in and day out sort of makes me want to cry. Not that I don’t think they are worthy of veterinary medicine or that they are unbelievably amazing creatures, but simply because I’m just not that comfortable with them. I sincerely hope I’m not the only person with this issue. Hopefully, someone else reading this article can benefit from Dr. McDonald’s wisdom and the top ten tips she gave me when I asked for some practical advice for veterinarians who may need a bit of a refresher!

1. Assume that the patient has been ill longer than the history indicates, that it is dehydrated, and likely more sick than it appears.
2. Birds that appear to be eating may not be swallowing—check the crop for food. Birds that are ravenous shouldn’t be weak or have a low body score, so consider maldigestion or malabsorption.
3. If a bird is truly acutely ill with a normal body score, strongly consider a toxicity such as lead.
4. The single best prognosticator is the trend in morning weights (empty gut). Assess droppings for fecal content, polyuria, undigested seed, and melena.
5. Any cage can be changed to an incubator-type setup by elevating the floor with a false bottom (zap-strapped or twist-tied in place) with a protected heating pad set on low setting over the top of the cage. Any impervious container with Saran Wrap or Press ‘n Seal over the top can be changed into a functional oxygen unit.
6. For smaller birds, use insulin syringes for injections, remember to warm fluids, supply spray millet, and provide additional heat.
7. Consider ligating a bleeding feather just proximal to the area bleeding, rather than pulling the feather.
8. For all parrots, avoid using the wing (ulnar/brachial vein) for venipuncture as hemostasis is a huge issue and can bleed out.
9. Use oxygen face masks, especially in small birds during handling/procedures (blood collection, ultrasound, emergencies). Consider pre/post oxygenation.
10. Sedation with intranasal midazolam and butorphanol helps ease handling of a terrified patient. If a patient starts to pant during handling, stop. Have a spray water bottle handy.

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NOT BORN TO BE WILD

BY VERONICA GVENTSADZE, MA, PhD, DVM



Rabbits are animals of paradoxes and extremes. Hunted for meat since prehistoric times and later domesticated for this purpose, they are fast gaining popularity as pets. Both despised and revered as symbols of fertility, they get trotted out as Easter decorations to be forgotten for the rest of the year. Happy to live in homes when properly trained and well-treated, they retain a wildness that emerges after a few minutes of hopping in the open. Domestic rabbits come in a great variety of fancy breeds, but, like the dog, they are the same species: the European rabbit, *Oryctolagus cuniculus* (“digger of tunnels,” as recorded by the fact-loving Romans). Their wild streak is often an unwelcome surprise to people conditioned to expect nothing but fluffy innocence meant for cuddling. Colonies of abandoned rabbits have become a sad if cute sight on university campuses, fields around regional airports, and some rather unlikely places.

In the fall of 2016, a total of 110 feral rabbits living on the median strip of Helmcken Road in Victoria were relocated to a retirement ranch in Texas where they are hosted by a former US marine and guarded from coyotes by a team of dogs and donkeys. The reason they could not be kept in BC for rehoming is that, by law, rescue organizations are forbidden to pick up feral rabbits. This is because domestic rabbits are an invasive species according to Schedule C of the current Wildlife Act. Once abandoned, domestic rabbits find

themselves in legal no man’s land: they are not eligible for the same organized rescue as stray cats and dogs because now they are wild animals, but neither are they eligible for wildlife rehabilitation because they are a non-native species. The moment an owner abandons a rabbit, the animal is no longer a pet but officially a pest. The upshot—pun intended—is that such rabbits are fair game to anyone who might want to kill them in a way that’s not downright inhumane. The BCSPCA has no legal authority to stop such culling. While it might be tempting to criticize the Ministry of Environment for callousness, their position does more justice to the proud and survivalist nature of this species than do all the Disney myths of wide-eyed timidity. Moreover, the grey area left to rabbits by the Wildlife Act is both larger and friendlier than the black-and-white one. It appears that there is nothing to prevent a private citizen from restoring feral rabbits to pet status by catching them and assuming ownership, even if it only lasts long enough to bring them to a rescue

organization. Thus, many rabbits legitimately end up at the SPCA for sterilization and rehoming. This is how I met my own rabbit, now a beloved if rather spirited pet.

The current Wildlife Act highlights a double standard by which we measure the impact of non-native species on the environment. Rabbits are diggers who mess up gardens and, in rare cases, undermine buildings and roads. (In even rarer cases, they are responsible for archaeological—well—digs.) Unlike feral or free-roaming house cats who are also an invasive species in North America, they do not kill, and so far they have not been known to compete for territory or resources with the two species of rabbits native to North America. Their damage is to the economy rather than to the environment, and historically sins against property have been punished far more severely than sins against birds and other native animals. Clearly, rabbits do not enjoy the same emotional attachment that gives official protection to feral or free-roaming cats and stray dogs. But maybe some good can come out of this. After all, when efforts and resources are focused on rescuing animals who’ve found themselves without homes, there is an implicit lifting of responsibility from those who create the problem in the first place. Most people are neither cruel nor entirely irresponsible, but many are not very good at planning in a culture that worships multitasking and acquisitions. When an overwhelmed and unprepared owner learns that their rabbit has a good chance of going to a retirement ranch in Texas, they are more likely to set it loose on the median strip of Helmcken Road in Victoria than to rehome it properly or to persist in understanding its nature and needs

“RABBITS ARE INDEED FRAGILE, AND WORKING WITH THEM CAN BE NERVE-WRACKING, BUT THESE ARE NOT POISON DART FROGS OR BIRDS OF PARADISE”

so that they can keep it. From this standpoint, it might be more edifying for a prospective owner to see a story about feral rabbit culling than one about a happy-ending rescue. This is by no means a criticism of the valiant and generous work done by rescue organizations and individuals, but a call to identify our own responsibility and role as veterinarians in the matter. And therein lies a problem.

The designation of rabbits as an exotic species for the purpose of veterinary education and clinical practice is both outdated and unjustified. It alienates these animals from the mainstream of veterinary attention and care, and sends the message that we as a profession are incompetent or unwilling to deal with rabbits unless we’ve received specialized training. I’m afraid it also sends the message that we don’t take rabbit owners nearly as seriously as dog and cat owners. Rabbits are indeed fragile, and working with them can be nerve-wracking, but these are not poison dart

frogs or birds of paradise. There are striking yet entirely explicable parallels between the digestive and dental ailments of rabbits and those of another widespread grass-eater, the horse. (Not to mention that a rabbit can kick like a horse when picked up against its will.) The term exotic elicits a smile from anyone who knows how common these animals are among the common people around the world. In Europe, the “poor man’s pig” has acquired a new career as the not-so-poor man’s show jumper as hurdle-hopping competitions

are becoming all the rage. But where is the supply to meet this growing demand? In my locums, once word got out that I kept a rabbit of my own, people with pet rabbits came out of the woodwork, happy that someone was willing even to see their pets if not to provide specialized care. For them, it was as much about validation of their worth as rabbit owners as about my medical knowledge, which is still at a beginner’s level on this count. The attention was flattering, but a sad reflection on the lack of my profession’s preparedness for a new reality. For motivational purposes, I’m tempted to gush about the joys of rabbit ownership and the things these animals can teach us about the world, but such is not the purpose of this article. In fact, I’ll be the first to say that no one has an obligation to like rabbits. But as a profession, we have an obligation to do something about an abandonment crisis resulting from lack of respect for a species as well as lack of knowledge about it. Besides educating ourselves on medical treatment, nutrition, and optimal care of rabbits, we can be proactive in promoting that education: for instance, calling on our schools to make rabbit medicine part of the veterinary curriculum instead of the poor relative of an elective. After all, the logic behind making us reluctant small-animal types learn about cows and horses was that we must be prepared to treat large (i.e., useful) animals as well as our chosen kitties and doggies. Well then, right here is a food animal, athlete, and pet that we’ll be seeing a lot more of in the future. [WCV](#)



VERONICA GVENTSADZE, MA, PhD, DVM, graduated from Ontario Veterinary College in 2008. She moved to Squamish, BC where she worked for two years as an associate veterinarian in a small animal practice. She currently travels across BC as a locum and enjoys learning something new from each practice.

PHOTO COURTESY OF VERONICA GVENTSADZE

SCRITCHES RAT RESCUE

BY LYN VARGAS, VOA*



PHOTOS COURTESY OF LYN VARGAS

When I was 15, I got my first rat, Chii, from the local pet store. She was the first pet I had sole responsibility for, and in many ways, she started it all—my enthusiasm for rats and for Scritches Rat Rescue. Chii was my constant companion as I wandered around school or the city, and she taught me many lessons, some good and some hard. Her passing taught me the hardest lesson of all: that some people will always think of rats as disposable pets. It's hard to convince people, especially

at home, looking online to find a cage mate for my rat when I stumbled upon about a hundred ads on various websites claiming all sorts of things. The first I came upon were simple enough: "Please take this rat off my hands, my child won't care for it," or "We're moving!" or even, "I think we are allergic to our pet." These were sad, but innocent enough. Then I fell farther down the rabbit hole and found ads like "Adopt by the end of the day, or they are snake food." I was horrified, to say the least. It's not that I don't like or respect reptiles

and their needs—I have a bearded dragon—but I was disturbed by the number of people attempting to breed rats to be desired family pets, but when they got tired of it all, sending the rats off to be reptile food. This sparked a fire in me—all these rats and no one to get them the help they needed. I sent my husband a message while he was at work that day, saying, "I

"I WAS DISTURBED BY THE NUMBER OF PEOPLE ATTEMPTING TO BREED RATS TO BE DESIRED FAMILY PETS, BUT WHEN THEY GOT TIRED OF IT ALL, SENDING THE RATS OFF TO BE REPTILE FOOD"

those who have never owned rats or are first-time rat owners, that rats are not a quick \$10 buy from the local pet store. I estimate the start-up cost of a rat to be about \$350 for cage, bedding, food, toys, places to hide, and things to chew.

Once I graduated, I had a few more rats on and off, but it wasn't until after I had finished college and got my certificate as a Veterinary Office Assistant that things really started to get crazy. One day I was sitting

think I should open up a rat rescue."

Before we knew it, I was getting several emails a day, and we were picking up every free cage we could find and fixing them up. I had a vision—a dream—and emails about lonely sick rodents piling up, but I had no cash set aside and no plan. So, after the initial rush died down, I started setting money aside from my paycheques and continued to pick up every free item I could find. I invested in the basics of food, bedding,

"A HUGE PART OF THE RESCUE IS TAKING THESE NEGLECTED FELLOWS AND FIXING THEM UP NOT JUST PHYSICALLY BUT ALSO MENTALLY"

toys, and medicine, and the rest sort of fell into place. I couldn't have done any of it without the support of my fellow veterinary professionals. Doctors volunteered their lunch breaks to examine the new intakes and trim teeth, and veterinary technicians lined up to trim toe nails, check vitals, help administer medications, and—when the time came—even monitor anesthesia. Veterinary professionals from all walks of life have played a huge role in the success of Scritches Rat Rescue, and the experiences that we have shared have allowed us all to come together to increase the welfare of our rodent patients. The doctors and veterinary technicians have banded together to enhance their knowledge of exotic pet anesthesia and have brought a safer protocol to the table so that we can expand the services we provide our rescue critters. In return, I have been able to share my tips and tricks for husbandry, which has played a role in educating our clients about upper respiratory infections and their prevention.

Generally, we are treating for upper respiratory disease. I keep a bottle of Baytril (enrofloxacin) in stock at all times and dose out as per my veterinarian. Occasionally, that proves to be not enough so we get compounded doxycycline. We are also usually stocked with Metacam.

We have treated a naked rat for cysts on his skin with dilution of chlorhexidine and viaderm topical. We have also done treatments for overgrown teeth (sedation with midazolam/torbugesic or hydromorphone/midazolam) and Baytril to deal with the infection. We are now doing routine neuters on all male rats regardless of whether we have multi-gender surrenders as altering their reproductive status helps with placing adoptable animals in any home.

A huge part of the rescue is taking these neglected fellows and fixing them up not just physically but also mentally. Some of them bite or are so terrified you can't even catch them to give them their meds let alone convince someone they are cuddly. We put a lot of time into trust-building exercises and after that, we teach them how to handle stress and stimuli, like other pets, noise from music, the vacuum, and even social events. Ideally, all rats that leave the rescue can be handled outside of their cage (whether that is cuddling, or free range, or on a leash really depends on the rat) and are suitable for all levels of pet ownership. Occasionally, we get a rat that has special needs (daily medications) or special skills (excels in agility or recall/free range), but we don't go above and beyond to teach these skills or rehome rats with special needs with first-time owners.

We have had three rats that were deemed unfit for rehoming (severe aggression, medical issues, or related reasons) and they have stayed as permanent family at the rescue. I have always had the mind set that if a rat is unfit to leave that doesn't mean the end of the line for them. We have been the retirement home for a few rats, and I don't see that policy changing any time soon.

So, it isn't all cute baby rodents, and I never for a moment forget the lives some of these rats have lived before coming to Scritches. Ten young males came in once, crammed in a hamster cage, with barely enough room to able to move. We've had rats with their teeth so overgrown they had abscesses on their faces, and even a naked rat who had been abandoned in the middle of winter in a children's park. For any rescue organization, the constant need to clean cages and exercise and entertain the animals is no small feat, not to mention the hours of answering emails, making vet appointments, and meeting with owners to surrender or adopt. Sometimes, it is very heartbreaking work, but there are always those little faces, the heap of emails, and my support network to keep the rescue alive.

Since I opened Scritches, I have become a Veterinary Technician student at Thompson Rivers University. This leaves me less time to contribute to the actual rescue of animals, and I have had to move toward educating and helping to form connections in the community. We reach out through social media, and we started a Facebook page to bring people together in hopes that this would help reduce some of the strain on the rescue as I pull myself back into my education. I am happy to report that, for the most part, this has been a success, and we have connected people in tight situations and needing to rehome their animals with people who are looking for their first ever rat or have recently suffered a loss and are looking to open their hearts once again.

Social media has become a much needed and appreciated resource for sharing the latest articles on husbandry, medical findings, and even international associations such as our favourite, APOPO HeroRats, who detect landmines and tuberculosis.

I look forward to finishing my education and once again being able to provide Victoria's domestic rats with a safe place to be rescued, rehabilitated, and adopted into loving homes. My vision for Scritches Rat Rescue is that the expansion in my knowledge and resources through my education as a Veterinary Technician will benefit the operations of the rescue and the care and ethical treatment of all our rescue critters. For more information, visit our Facebook page, www.facebook.com/ScritchesRatRescue. [WCV](http://www.wcv.com)

*THE RVT COLUMN IS USUALLY WRITTEN FOR US BY AN RVT. WE HAVE MADE AN EXCEPTION IN THIS CASE AS LYN IS A VETERINARY OFFICE ASSISTANT STUDYING TO BE A VETERINARY TECHNICIAN.





Townsend's Big-eared Bat;
Community Bat Programs of BC, www.bcbats.ca

PHOTOS BY CHRISTINA CARRIÈRES / BCBATS.CA & ANIUKOOL MANDOTON / SHUTTERSTOCK.COM



“KEEPING ALL CATS AND DOGS UP TO DATE ON RABIES VACCINATION IS THE BEST STRATEGY TO MITIGATE THE RABIES RISK”

ANIMAL BITES AND RABIES MANAGEMENT IN BRITISH COLUMBIA

BY MELISSA MCLAWS, DVM, PhD; THERESA BURNS, DVM, DIPL. ACT, PhD, AND ELENI GALANIS, MD, MPH, PhD, FRCPC

“RABIES IS TRANSMITTED BY EXPOSURE TO THE SALIVA OR NEURAL TISSUE OF AN INFECTED ANIMAL, MOST OFTEN THROUGH A BITE, SCRATCH, OR CONTACT WITH A MUCOUS MEMBRANE”

Rabies is an almost invariably fatal zoonotic viral infection and kills more than 59,000 people annually, globally, mostly in Asia and Africa. In Canada, rabies rarely infects humans; the last case occurred in 2007. The only case in recent history in BC occurred in 2003, when an adult male was fatally infected with bat-variant rabies virus. Potential human rabies exposures, however, occur frequently and need to be assessed and managed properly, requiring close cooperation between medical and veterinary professionals.

Globally, many variants of rabies virus exist, with each variant adapted to a specific host species (e.g., dog-variant, skunk-variant, bat-variant). Dog-variant rabies virus causes the vast majority of human rabies deaths. Fortunately, vaccination and animal control programs have eliminated dog-variant rabies in Canada.

In Canada, rabies is primarily transmitted by bats, skunks, and foxes;¹ however, the predominant reservoir differs by geographic region, creating the need for unique rabies prevention and testing strategies in each province.

Rabies is transmitted by exposure to the saliva or neural tissue of an infected animal, most often through a bite, scratch, or contact with a mucous membrane. The incubation period in domestic animals ranges from two weeks to many months. Animals may shed the virus in saliva and transmit the disease for several days before showing clinical signs.

RABIES IN BRITISH COLUMBIA

In BC, bats are the only known rabies reservoir species. In 2015 and 2016, 14 per cent of the bat specimens sent from BC to the national reference laboratory tested positive for rabies. Compared to healthy bats, rabid bats are more likely to come into contact with humans and subsequently be tested because of altered behaviour. It is estimated that less than 0.5 per cent of bats are actually infected.²

Other species in BC that have tested positive for rabies between 1969 and 2016 include five cats, four skunks, one beaver, and one horse. All had bat-variant rabies except for two cases, which had the skunk strain. Follow-up studies concluded that skunk and other non-bat rabies strains are not endemic in BC.

RABIES RISK MANAGEMENT IN BRITISH COLUMBIA

Humans

Public health authorities must be informed when rabies is suspected in a domestic animal in order to assess the risk to humans that have been in contact with the animal. Risk mitigation measures will be determined on a case-by-case basis, depending on prognosis and level of suspicion that rabies virus is the causative agent. Measures may include:

- Monitor progression of the case, usually within the veterinary clinic
- Euthanasia and submission for rabies testing to the Canadian Food Inspection Agency laboratory

¹ Canadian Food Inspection Agency. Rabies in Canada. Accessed 28 February 2017. <http://www.inspection.gc.ca/animals/terrestrial-animals/diseases/reportable/rabies/rabies-in-canadeng/1356156989919/1356157139999>

² Pybus, M. J. "Rabies in insectivorous bats of western Canada, 1979 to 1983." *Journal of Wildlife Diseases* 1986 22.3: 307-313.

Dog bites are not provincially reportable in BC unless rabies is a concern. A veterinarian should immediately inform the local public health authorities if they are aware that a person has been bitten or scratched by a dog (or other mammal) with one or more of the risk factors listed below:

- is exhibiting neurological behaviour compatible with rabies at the time of the bite or scratch
- has been imported from, or traveled to, a rabies-endemic area within the last six months
- had known bat contact within the last six months

Animals

As with humans, animals in BC are at highest risk of being exposed to rabies by bats. Pets can encounter bats both outdoors and indoors, and natural curiosity and prey-drive can easily lead cats and dogs to have sufficient contact with bats for potential rabies exposure. Exposure of indoor-only cats occurs regularly when bats enter homes or cabins through chimneys and open windows, and also when cats are outside on leashes, on balconies, or in wire-enclosed play-spaces. Keeping all cats and dogs up to date on rabies vaccination is the best strategy to mitigate the rabies risk. Encounters with animals other than bats are considered low-risk for rabies unless the exposing animal has one of the risk factors listed above for animal bites. If a veterinarian suspects that a dog, cat, or ferret has been exposed to the rabies virus, a post-exposure rabies vaccine should be given as soon as possible in all cases. Other actions will depend on the vaccination status of the animal at the time of the exposure, and may include testing of the exposing animal and/or isolation of the exposed animal within the owner's home.

It is important to note that these risk management procedures are specific to exposures that occur in BC. If the exposure has occurred elsewhere in Canada or globally, then the risk assessment and management must be adapted.

For further details and contact information for public health officials, consult the *BC Rabies Guidance for Veterinarians* on the BC Centre for Disease Control (BCCDC) website (www.bccdc.ca/health-info/diseases-conditions/rabies). The BCCDC public health veterinarian is available for any specific questions or concerns by calling 604.829.2110.


Fortunately, rabies remains a rare disease. Prevention by animal vaccination, public education to limit physical contact with bats, and post-exposure prophylaxis of humans are the mainstays of protection. **WCV**

→ Hill Country Veterinary Specialists have announced the formation of the International Veterinary Point-of-Care Ultrasound Society. For more information, please visit www.IVPOCUS.org.

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 NATIONAL PET ID WEEK
 BC ANIMAL ABUSE PREVENTION DAY
 NATIONAL HAIRBALL AWARENESS DAY
 WORLD VETERINARY DAY
- MAY**
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 NATIONAL SERVICE DOG EYE EXAMINATION MONTH
 PET CANCER AWARENESS MONTH
 EMERGENCY PREPAREDNESS WEEK
 MENTAL HEALTH WEEK
 NATIONAL CHIP YOUR PET MONTH
- JUNE**
 WORLD PET MEMORIAL DAY
 TAKE YOUR CAT TO WORK DAY
 TAKE YOUR DOG TO WORK DAY
- AUGUST**
 INTERNATIONAL ASSISTANCE DOG WEEK
 INTERNATIONAL CAT DAY
 INTERNATIONAL HOMELESS ANIMALS DAY
 INTERNATIONAL DOG DAY
- SEPTEMBER**
 ANIMAL PAIN AWARENESS MONTH
 WORLD SUICIDE PREVENTION DAY
 WORLD RABIES DAY
- OCTOBER**
 ANIMAL HEALTH WEEK
 WORLD ANIMAL DAY
 NATIONAL VETERINARY TECHNICIAN WEEK
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WESTERN CANADIAN SHEEP PARASITE STUDY

LOOKING FOR SHEEP FLOCKS FOR A STUDY ON OVINE GASTRO-INTESTINAL PARASITES IN BRITISH COLUMBIA

Over the past few years, Drs. Michel Levy and John Gilleard as well as summer research students from the UCMV have undertaken surveys of sheep farms in Western Canada to assess the level of gastro-intestinal parasites present. Dr. Camila De Queiroz joined the team in 2016.

The researchers conducted more detailed investigation on anthelmintic resistance of a number of farms in Alberta by on-farm visits to perform fecal egg count reduction tests. The results of this work suggests that many Alberta sheep flocks have high parasite burdens and that ivermectin and albendazole-resistant parasites may be more common than previously thought in the province.

The Alberta Meat and Livestock Agency (ALMA) has approved funding for a more comprehensive research project to run over three years from 2015, and the plan is to continue and survey sheep flocks for parasites. In the upcoming summer of 2017, the researchers are looking to continue and survey more flocks in British Columbia. The project will look at parasite burden and at the efficacy of treatment at the flock level. Molecular techniques for identification of parasites will be developed. Detection of parasite resistance to dewormers and its evolution will be monitored over several years.

If your sheep clients have 20 or more ewes and are interested in this project, please make them aware of this study and ask them to contact us (information at right). As part of the project, we ask producers for consent to share the results with you, their regular veterinarian. If such consent is given, then we will communicate all results to you as well as send you a composite summary of our findings later in the year.

THANK YOU FOR YOUR ASSISTANCE IN THIS PROJECT. IF YOUR CLIENTS ARE INTERESTED IN PARTICIPATING, PLEASE CONTACT THE RESEARCH GROUP AT SHEEPSTUDY@UCALGARY.CA.

IF YOU HAVE ANY QUESTIONS OR CONCERNS, PLEASE DON'T HESITATE TO GET IN TOUCH WITH ONE OF US!

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* Based on *Bordetella bronchiseptica* challenge.
1. Gore T, Headley M, Laris R, Bergman JGHE, et al. Intranasal kennel cough vaccine protecting dogs from experimental *Bordetella bronchiseptica* challenge within 72 hours. *The Veterinary Record*, 2005; 156:482-3
2. Welborn LV, DeVries JG, Ford R, et al. 2011 AAHA Canine Vaccination Guidelines. *JAAHA*. Sept/Oct. 2011; 47:5. Available at: https://www.aaaha.org/public_documents/professional/guidelines/caninevaccineguidelines.pdf. Accessed November 24, 2016

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JUNE

23-24 **Current Thoughts on Managing Common Medical Problems in Practice**
 Vancouver, BC
www.ivseminars.com/seminars/description/current_thoughts_on_managing_common_medical_problems_in_practice-vancouver

JULY

13-16 **2017 CVMA Convention**
 Charlottetown, PEI
www.canadianveterinarians.net/science-knowledge/annual-convention

AUGUST

4-5 **How I manage common feline problems**
 Seattle, WA
www.ivseminars.com/seminars/description/techniques_in_feline_medicine-seattle

9-12 **Vet Vacation CE**
 Vancouver, BC
<http://veterinarycalendar.dvm360.com/vet-vacation-ce-vancouver-canada>

25-28 **CVC Kansas City**
 Kansas, MO
www.thecvc.com/cvc-kansas-city/

26-27 **Small Animal Dentistry**
 Winnipeg, MB
www.mvrma.ca/ce/continuing-education-events/small-animal-dentistry-august-26th-27th-2017-winnipeg

27-31 **33rd World Veterinary Congress**
 Incheon, Korea
www.worldvet.org/events.php?item=143&view=item

SEPTEMBER

4-8 **26th International Conference of the World Association for the Advancement of Veterinary Parasitology (WAAVP 2017)**
 Kuala Lumpur, Malaysia
www.waavp2017kl.org/

8-10 **2017 SVMA Conference, AGM and Trade Show**
 Regina, SK
www.svma.sk.ca/index.php?p=ce-events

29-OCT 1 **WSVMA Pacific Northwest Veterinary Conference**
 Tacoma, WA
wsvma.org/pacific-northwest-veterinary-conference/

OCTOBER

14-17 **2017 CanWest Veterinary Conference**
 Banff, AB
http://abvma.in1touch.org/viewEvent.html?no_header=true&productId=6671

21-24 **2017 AVHMA Annual Conference**
 San Diego, CA
www.avhma.org

23-24 **The 46th Annual DELTA EQUINE SEMINAR**
 Stephanie Valberg, DVM, PhD, Dipl. ACVIM, Dipl. ACVSMR (Equine), and Carrie J. Finno, DVM, PhD, Dipl. ACVIM, from the University of Michigan, will be speaking about all things related to muscle disease and neurological issues in the horse.
 Delta, BC
www.deltaequineseminar.com

26-28 **2017 AETA & CETA/ACTE Joint Convention**
 Orlando, FL
www.ceta.ca/future-conventions.html

27-29 **Primary Care Veterinary Educators World Symposium**
 Columbia, MO
www.aavmc.z2systems.com/np/clients/

NOVEMBER

3-5 **CVMA-SBCV CONFERENCE AND TRADE SHOW** The extended three-day CVMA-SBCV Chapter Fall Conference and Trade Show will be held Friday, November 3 to Sunday, November 5, 2017 at the Pinnacle Hotel Vancouver Harbourfront. The Friday evening session will feature Miranda Sadar, DVM, Dipl. ACZM, speaking about Exotics. Saturday is themed around gerontology and aging, and the palliative pet. Shea Cox, DVM, CVPP, CPLP, will speak on gerontology and the geriatric pet, and Kathy Cooney, DVM, Pet Loss Companionship Certification Program, Companioning the Bereaved, and Founder of Home to Heaven Cooney Animal Hospice Consulting, will talk about palliative care and euthanasia. Sunday will focus on dogs and cats with orthopedic issues. Marco Cervi, DVM, Dipl. ACVS, will be speaking about Orthopedic Issues and Surgery, and David Lane, DVM, Dipl. ACVSMR (Canine), will speak about Orthopedic Rehabilitation. The Trade Show takes place on Saturday, November 4, and Sunday, November 5, 2017.
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3-5 **2017 SAVT Annual Conference, WCVM**
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