

# WEST COAST VETERINARIAN

JUNE 2018 | Nº 31

## THE DOGS OF AHOUSAHT

**A YEAR IN THE LIFE**

OPHTHALMIC EXAMINATION  
OF THE VERY YOUNG PATIENT

**WILL SPAY FOR FOOD**

**Q&A WITH THE OFFICE  
OF THE REGISTRAR OF THE CVBC**



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AND WELLNESS

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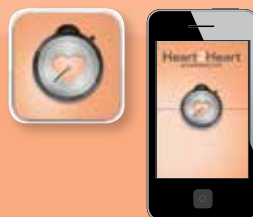
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**COREY VAN'T HAAFF, EDITOR**  
Corey hangs on to—and doesn't want to let go of—this puppy at the BC and Alberta Guide Dogs Gala in Vancouver.

»» **TO THE EDITOR**

Letters from members are welcome. They may be edited for length and clarity. Email us at [wcveditor@gmail.com](mailto:wcveditor@gmail.com).

»» **ON THE COVER**

These dogs followed Dr. Holly Tillotson throughout her visit. As long as she threw the ball for them, they were happy.

**I**t was with some sadness that I read Lauren Fraser's piece on equine behavioural euthanasia. It reminded me of a time I would rather forget, when I had to euthanize my gorgeous 18-month-old purebred German Wirehaired Pointer, Matilda, who had attacked one of my other dogs right in front of my eyes, ultimately killing her, and then repeated the same behaviour six weeks later, almost killing another.

I will never forget the car ride, with me sobbing and apologizing to Matilda, and her looking at me from the passenger's seat as we made our way to our veterinarian to euthanize this beloved and otherwise healthy dog. And I remember vividly, as well as the belief that I had totally failed her, the feeling that I could not simply pass the problem on to someone else in order to provide her with the continued ability to live. I could not find her a new home where she wouldn't be around other dogs, because I would never be sure she wouldn't turn on something else. Her behaviour (and likely my reaction to it) had led to her death.

Veterinarians must deal with this issue often, and the ethical weight that rests with them must be so heavy at times as to be almost unbearable. And yet this is the job of a veterinarian: critical thinking and ethical decision-making that can result in the difference between life and death. And the decision-making is often done under the very observant eye of the animal owner.

I'm in awe of the courage and strength of character required for veterinarians to perform rescue work under such circumstances. Dr. Elaine Klemmensen writes of her work improving equine health in underdeveloped communities where the veterinary care is provided by and supported by volunteers, and where supplies—and time—are in short supply. Dr. Holly Tillotson writes about the First Nations community of Ahousaht and her work building trust before delivering veterinary care. When she says that dogs there once had only one hope—being injured badly enough to get off the island yet not badly enough to die—I realize how bad it had to be—and had to remain—until such trust permitted change.

Email: [wcveditor@gmail.com](mailto:wcveditor@gmail.com)

## MEET OUR NEW STAFF

In April, the Chapter welcomed Valerie Vanderploeg as its new Admin and Communications Coordinator, replacing Debbie Crowe who retired.

The Chapter was also successful in its application to hire two summer students through the Canada Summer Jobs program. Ziko Dozie will work on increasing our membership and will contact lapsed or non-members throughout the summer, before he heads to UBC Okanagan Campus to pursue his engineering degree. Risham Johar will be working on creating a print directory, using his marketing and design education to make the directory useful and easy to navigate, before returning to finish high school. Please join us in welcoming both of these students, and please expect to hear from them in July and August.



**VALERIE VANDERPLOEG,**  
ADMIN AND COMMUNICATIONS COORDINATOR



**ZIKO DOZIE**  
SUMMER STUDENT



**RISHAM JOHAR**  
SUMMER STUDENT

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**MARNIE FORD, PhD, DVM, Dipl. ACVO**, graduated from OVC in 2000 after completing a Bachelors in Zoology at UBC and a PhD in Physiology at Monash University in Australia. After a rotating small animal internship at the University of Minnesota in 2001, Dr. Ford achieved diplomate status from the American College of Veterinary Ophthalmologists in 2006, following an ophthalmology residency at the University of Missouri – Columbia.



**DAVID FRASER, CM, PhD**, joined UBC in 1997 as NSERC Industrial Research Chair in Animal Welfare. His work has led to many innovations in animal housing and management, from designing better pig pens to reducing highway accidents involving wildlife. He was appointed Member of the Order of Canada in 2005 for his work in animal welfare science.



**LAUREN FRASER, CHBC**, is an IAABC-certified horse behaviour consultant. She helps horse owners address behaviour problems, using evidence-based, low-stress techniques. Currently enrolled in an MSc program in Clinical Animal Behaviour through the University of Edinburgh, she is also an



educator, offering monthly workshops for horse owners, and RACE-certified online courses for equine veterinarians.

**ELAINE KLEMMENSEN, DVM**, graduated from WCV in 1991. After 20 years as owners of West Kootenay Animal Hospital, she and her husband are now volunteer veterinarians working with international aid projects, including the Mexi-Can veterinary project, the Equitation Initiative, World Vets, Maun Animal Welfare, and the Canadian Animal Assistance team.



**HOLLY TILLOTSON, DVM**, graduated from WCV in 1992. She worked in the Lower Mainland until moving to Vancouver Island where she had a small ruminant practice and worked as a locum. Currently, she is a partner in a small animal clinic in Port Alberni. Holly is working on a certificate in veterinary forensic science.



**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.



Dr. Al Longair, Chapter Vice President, with Dr. Meg Sleeper and Valerie VanderPloeg at the Chapter's Regional CE Seminar on Cardiology held in Nanaimo.

# WCV

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WEST COAST  
VETERINARIAN



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## THE DOGS OF AHOUSAHT



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SPECIAL  
TEAR-OUT  
POSTER FOR MEMBERS ONLY  
MENTAL HEALTH AND WELLNESS



**H**ello, all. As I write this, I am currently rocking back and forth in my car on the ferry from Tsawwassen to Victoria, on my first five-day hike of the Juan de Fuca Trail, with only my constant companion, Oscar, for company. I'm hoping to see what beautiful BC has to offer. Maybe I'll be lucky and see some sea lions and whales. I think it is important to take risks in life and challenge myself, and this is such a challenge. Hopefully, I make it back in one piece.

We have been busy beavers at Chapter headquarters, and we have a lot to update you on. One of our biggest recent projects was consulting on a proposed standard of care for breeders and sellers/brokers of dogs and cats in BC. We were invited to comment and consult on this document by the BC Ministry of Agriculture. We are quite honoured to have been approached by the Ministry, and see this as the beginning to a joint partnership. Our Animal Welfare Committee was strongly involved in this consultation, and we think we brought some very good recommendations and comments to the document on behalf of BC veterinarians.

The CVMA conference is fast approaching. Vancouver is hosting it this year, July 5 to 8, in the new JW Marriott Parque Hotel, and I am chairing it on behalf of Vancouver. We will have lots of world-class veterinary CE and a large trade show. The CVMA will be chartering a yacht for the social evening, which promises to be a great night. The Chapter and the CVMA will be hosting two delegates for the Emerging Leadership Program, and we look forward to their reports in the next issue. I hope to see a lot of BC veterinarians there.

The CVMA-SBCV Chapter's own annual Fall Conference and Trade Show will be held November 2 to 4. Check out our website for a list of speakers, [www.canadianveterinarians.net/SBCV](http://www.canadianveterinarians.net/SBCV). Tickets go on sale in July.

On another note, our Chapter office has moved. Corey used to run our office from her home office, but starting June 2018 we have moved to a fully fledged office. Our postal address remains unchanged. We have also hired a new assistant and two summer students to keep up with our workload. One of the students' jobs is to put together a hard-copy directory which some of you have been asking for.

As you are all aware, declawing has now officially been banned by the CVBC. This is amazing news and a great accomplishment spearheaded by Dr. Margie Scherk. The CVMA-SBCV Chapter would like to thank CVBC Registrar Luisa Hlus for consulting with us on this.

I hope you all had the absolute best summer. We look forward to more updates, new programs, and further involvement with anything BC-veterinary related. **WCV**



Dr. Sarah Armstrong and her dog Oscar part way along the Juan de Fuca Trail.

*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 as a locum veterinarian.*

**I**n conjunction with the Veterinary Drugs Directorate and the Canadian Animal Health Institute, the CVMA developed a diagram outlining the dates and intent of the different changes that may affect veterinary practices: [www.canadianveterinarians.net/policy-advocacy/veterinary-oversight-of-antimicrobial-use-in-canada](http://www.canadianveterinarians.net/policy-advocacy/veterinary-oversight-of-antimicrobial-use-in-canada).

Please note the following new and revised position statements: Responsibility of Veterinary Professionals in Addressing Animal Abuse and Neglect, Veterinary Dentistry, and Capture of Wild Animals for the Pet Trade.

In March, the CVMA participated in a One Health Roundtable on Antimicrobial Resistance hosted by the Public Health Agency of Canada. More information about Veterinary Oversight of Antimicrobial Use in Animals in Canada is available under the Policy & Advocacy section of the CVMA website.

In its submission to the federal Government on its proposed approach to the regulation of cannabis, the CVMA emphasized three main points: the right for veterinarians to authorize client access to medical cannabis for veterinary patients; the need for labelling to protect animals; and the benefits of including certain cannabis products in the low-risk Veterinary Health Products category. Read the full letter in the National Issues section, under the Policy & Advocacy tab of our website.

The CVMA raised several concerns and made suggestions to Health Canada on the Fee Proposal for Drugs and Medical Devices during its consultation period. The CVMA strongly supports veterinarian access to effective animal health products for the benefit of clients and patients.

Ticks are active! The CVMA, in partnership with Merck Animal Health, has provided engagement tools to help you stay ahead of the tick invasion. Access Q&A videos, social media videos, and social media graphics at [www.canadianveterinarians.net/practice-economics/practice-tools-national-tick-awareness-month](http://www.canadianveterinarians.net/practice-economics/practice-tools-national-tick-awareness-month).

The reference tool *Opioids: Risk Evaluation/Mitigation Strategies in Veterinary Medicine* is a brief summary of current knowledge and best practices, a potential reference for the veterinary healthcare team, and a resource for further discussions. Find it under the Practice & Economics tab on the CVMA website.

The 2018 CVMA RACE-approved Convention will be held in Vancouver from July 5 to 8. Signature events include the CVMA Summit, National Issues Forum, and Emerging Leaders Program. Register/find more information at [www.canadianveterinarians.net/science-knowledge/annual-convention](http://www.canadianveterinarians.net/science-knowledge/annual-convention).

The 2018 Provincial Suggested Fee Guides and 2017 Non-DVM Wage Reports are now available. Visit the Business Management section of the CVMA website for your fee guide and report.

The CVMA welcomes the following new council/committee members: Dr. Debbie Barr, National Issues Committee; Dr. Marie-Claude Blais, Council, FMV/AVC Representative; Dr. Leighann Hartnett, Animal Welfare Committee & Environmental Advisory Group; and Drs. Ted Kilpatrick and Emiko Wong, Animal Welfare Committee. **WCV**



*Troye McPherson, DVM, was born in Cape Breton, NS, and graduated from the Ontario Agricultural College in 1984 and the Ontario Veterinary College in 1989. Dr. McPherson is a member of the American Association of Feline Practitioners, is currently the CVMA representative for the Federation of Veterinarians of Europe, and has served on the Council of the Nova Scotia Veterinary Medical Association twice. She lives in Dartmouth with her husband, Patrick, five Border Collies, and four cats.*

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**[www.homewoodhealth.com](http://www.homewoodhealth.com)**

**Additional mental health and wellness resources are listed at:**

[www.canadianveterinarians.net/documents/mental-health-support-resources](http://www.canadianveterinarians.net/documents/mental-health-support-resources)

**GORDON LESLIE DAVIS, DVM | DECEMBER 2, 1922 – FEBRUARY 2, 2018**



Dr. Gordon Davis was a native of Milner, BC, and upon graduation from OVC, moved to Ladner in 1945 to begin a very long and distinguished career, known not only as veterinarian but as well for his community service. Dr. Davis became part of the fabric of the Ladner-Richmond equestrian and farming community; he was the consummate country vet. His career, like many of our colleagues of that era, bridged the period when veterinarians relied most heavily on experience and diagnostic acumen and our present-day access to all of the modern diagnostics, anesthetics, and medications. His skills as a veterinarian were only outmatched by his humble personality, his sense of humour, and his dedication to his clients and patients. He was known by his colleagues for his surgical

and diagnostic skills and for his constant pursuit of knowledge. He was always available to provide help and advice to a student or fellow practitioner.

Dr. Davis was known for his tireless community service and his work with the Kinsmen, Standardbred Horse Association, and the BC Racing Commission. Dr. Davis was the President of the BCVMA in 1955. He was often called upon to speak, not only due to his knowledge, but his warm and often humorous recollections of previous history. He was regularly called upon for his parliamentary skills at association meetings. In his retirement years, Gordon will be fondly remembered as a "coffee shop regular" in Ladner where he enjoyed the company of many of his veterinary colleagues.

He was predeceased by 26 days by his wife Genevieve to whom he was married for 71 years. Genevieve was a very active participant in the veterinary practice and the BCVMA auxiliary. They both had a life well-lived and will be missed dearly by our profession and community.



# RABBIT HEMORRHAGIC DISEASE

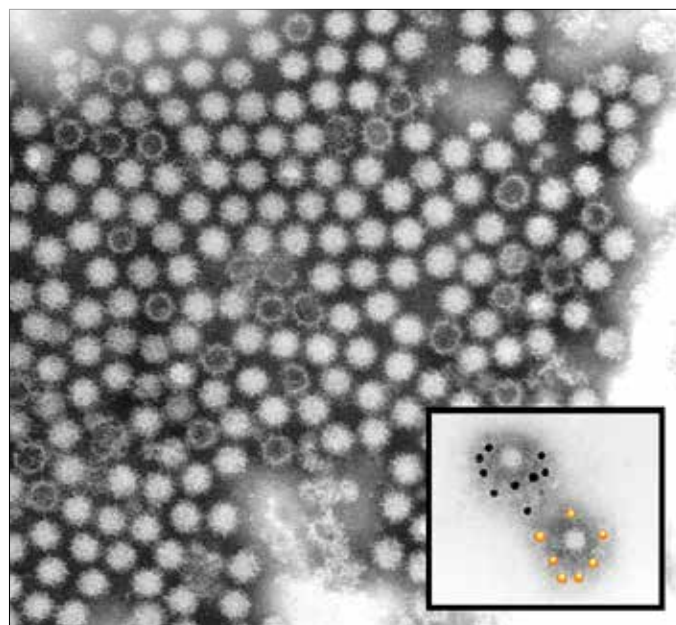
**BC** is experiencing an outbreak of a disease considered rare in Canada. Rabbit Hemorrhagic Disease (RHD) is an extremely contagious and lethal disease of European rabbits (*Oryctolagus cuniculus*) caused by a Calici virus. This disease does not affect humans and is not known to affect other animals. It was first detected in China in 1984 and has been seen since in over 40 countries, including the USA. It is also used for biological control of invasive rabbits in Australia and New Zealand.

This is the third occurrence of the disease in Canada. The first was seen in Manitoba in March of 2011. That case was a true mystery as it was confirmed in one of three pet rabbits housed indoors. No source was ever determined, and the other two rabbits that were co-housed were never affected. The second confirmed presence of the disease was August 2016, in Quebec in backyard pet rabbits. Again, the source was never identified, but the disease was contained.

The BC case was first confirmed in March with feral rabbits in Nanaimo. Feral rabbits are European rabbits that have been abandoned by their owners and released to urban/wild greenspaces. Feral rabbits are considered wildlife in BC. Currently, RHD is confirmed in Parksville, Coombs, Courtenay/Comox, Richmond, Delta, and in and around Nanaimo. It has been confirmed in shelter, sanctuary, and commercial rabbit operations.

The strains of the RHD virus in each of these outbreaks have been different. Manitoba and Quebec both had more traditional strains of RHD. In BC, the strain of RHD virus has been confirmed as most aligned with an unusual variant strain referred to as RHDV2. RHDV2 has been detected in France, Italy, Spain, Portugal, and Germany. The strain found in BC most resembles a strain isolated in Spain in 2011 from rabbits vaccinated for the traditional RHD strain.

This new variant differs from previously known RHD viruses in several respects. Unlike RHDV, RHDV2 is reported to affect very young rabbits, even nestlings, and spontaneous deaths are considered rarer. RHDV2 is associated with the disease taking a more prolonged course to death because of massive liver damage. Observations of feral rabbit populations are not detailed enough to confirm exactly how the virus circulating in BC is



acting but general observations do not support that it is acting in this manner.

What has been reported in the feral rabbits suggests a highly lethal, rapidly spread disease with a short incubation period (one to three days).

We are still investigating the reported spread of this disease. It is impossible to control the spread through the feral rabbit population or to protect this population. A vaccine from France has been ordered under an emergency release import permit through the Chief Veterinary Officer's office. This was done to try and protect the pet and commercial rabbits. The vaccine was only available in limited quantities for the first shipment which arrived April 17th. All doses have been pre-sold to clinics that reached out to have it made available to them. A second shipment was received May 3rd. The next order and shipment will occur shortly. If you are interested, please contact the Chief Veterinarian by email: [jane.pritchard@gov.bc.ca](mailto:jane.pritchard@gov.bc.ca). [WCV](#)



*Jane Pritchard, DVM, MVetSc, graduated from OVC in 1977, and completed a Masters in Anatomic Pathology at WCVM in 2000, continuing as an Associate Professor in the Department of Pathology for two years before embarking on a career with the BC Ministry of Agriculture in 2004. With the exception of a two-year international development project in China from 2007–2009, she has remained with the BC Government. In 2013, she was appointed to the role of Director of the Plant and Animal Health Branch, and Chief Veterinary Officer for the Province of British Columbia.*

#### References

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# MENTAL HEALTH AND WELLNESS RESOURCES

A CVMA study conducted in 2012 determined that just over 50% of Canadian veterinarians who participated in the study had suffered from burnout, and 19% of respondents had, at some point, considered committing suicide. Mental health and wellness is recognized as a topic that needs to be addressed within the veterinary profession. The following list is meant to provide resources, information, and support to BC veterinarians.

## HOMEWOOD HEALTH EMPLOYEE AND FAMILY ASSISTANCE PROGRAM

Distress phone line available 24/7 to all British Columbia veterinarians.

**1.800.663.1144**  
**1.888.384.1152 (TTY)**  
[www.homewoodhealth.com](http://www.homewoodhealth.com)

## CANADIAN ASSOCIATION FOR SUICIDE PREVENTION

BC-wide contact number:  
1.800.784.2433

BC Mental Health Support:  
604.310.6789

Greater Vancouver Area local crisis centre:  
604.310.6789

Sunshine Coast/Sea to Sky Crisis Centre:  
1.866.661.3311

[www.suicideprevention.ca/incrisis-now/](http://www.suicideprevention.ca/incrisis-now/)

## CANADIAN MENTAL HEALTH ASSOCIATION, BC DIVISION

CMHA BC provides online services, phone support services, and educational courses about mental well-being and addiction recovery.

**604.688.3234**  
**1.800.555.8222 (BC toll free)**

[www.cmha.bc.ca](http://www.cmha.bc.ca)

## TED TALKS ABOUT MENTAL HEALTH

A collection of 5 playlists about mental health, self care, suicide, depression, and individual tales about overcoming mental illnesses.

[www.ted.com/topics/mental+health](http://www.ted.com/topics/mental+health)

## VETS 4 VETS GROUP

CVMA-SBCV Chapter members can access this resource with and without VIN membership. Vets 4 Vets is a VIN Foundation initiative to help all veterinarians in need of support both on an individual basis and via group support networks.

[vets4vets@vinfoundation.org](mailto:vets4vets@vinfoundation.org)

## VETS IN RECOVERY

CVMA-SBCV Chapter members can access this resource with and without VIN membership. Vets 4 Vets is a VIN Foundation initiative to help all veterinarians recover from addictions via online support and weekly group telephone meetings.

[vets4vets@vinfoundation.org](mailto:vets4vets@vinfoundation.org)

## PETS PLUS US:

### THE SOCIAL SIDE OF PRACTICE

Veterinary Wellness CE Modules (4) led by Debbie Stoewen, DVM, MSW, RSW, PhD, with a focus on communication, compassion fatigue, compassion satisfaction, and risk factors for suicide among veterinary professionals.

**1.800.700.3391**

[care@petsplusus.com](mailto:care@petsplusus.com)

[www.petsplusus.com/pethealth/social-side-of-practice](http://www.petsplusus.com/pethealth/social-side-of-practice)

## MOOD DISORDERS ASSOCIATION OF BRITISH COLUMBIA

The BC Resources guide compiled by the MDABC provides a comprehensive list of mental health resources available to British Columbia residents with URL, email, and telephone (including TTY) contact information.

[www.mdabc.net/bcresources](http://www.mdabc.net/bcresources)

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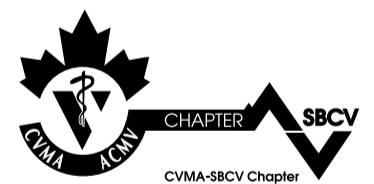
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# MENTAL HEALTH AND WELLNESS

## What Every Veterinarian Needs to Know

By Kathryn Welsman, DVM

### SOME BASIC TERMINOLOGY

**Compassion fatigue** is the loss of emotional resources due to repetitive exposure to highly emotional situations. It is somewhat of a natural consequence for those acting in caregiver roles, such as veterinarians, where the caregiver experiences the pain or suffering of others. Compassion fatigue occurs when the demands of caring exceed the caregiver's personal ability to be empathetic to the person who is suffering.

**Burnout** is defined as being emotionally overextended and drained due to work, which can happen in any workplace.

**Suicidal ideation** is a general term for suicidal thoughts prior to or leading up to an actual suicide attempt.

For veterinarians seeking more information or for any veterinarian who thinks he or she might need some help, there is plenty available, and it is confidential. Any veterinarian in BC can call Homewood Health (604.243.8996). There is also a list of mental wellness resources available at:

[www.canadianveterinarians.net/documents/mental-health-support-resources](http://www.canadianveterinarians.net/documents/mental-health-support-resources).

**B**ecause I'm a veterinarian, I'm at a higher risk of suicide and other mental health concerns such as compassion fatigue. Consistently, papers and reviews indicate that veterinarians have a higher suicide rate compared to the general population. Nobody told me that when I dreamed of becoming James Herriot.

Our jobs demand us to be emotionally involved in our cases even if we just don't have the desire or energy. We are being asked to listen to the human story behind the animals we see and to feel so many human emotions.

The suicide of Dr. Sophia Yin, who was well known for her work around less stressful veterinary care, pushed the topic of suicide and mental health into the spotlight among veterinary professionals. I remember wondering how someone like Dr. Yin could commit suicide when, from an outsider's view, she had a flourishing and respected career in something she obviously loved. So, I asked Dr. Sally Foote, a long-time friend and co-worker of Dr. Yin's, what caused her to commit suicide. She said, "No one can say what was going on in Sophia's life that was a deciding factor for her to choose death over life. Only she knows that. I feel we all want a logical or causal explanation for a suicide. We look at their life through our own experiences to find an answer that is actually dismissing their personal story."

This is likely not news to Dr. Brian Furlong. As chief of staff for Homewood Health ([www.homewoodhealth.com](http://www.homewoodhealth.com)), he is an expert in emergency psychiatric care, and he has treated many veterinarians in his lengthy career—usually at a time when they are in acute crisis. I asked him why veterinarians are at a high or higher risk for mental health crises than many other professionals. He said it is a chicken-and-egg scenario. The profession demands and attracts high-achieving perfectionists who jump through many hoops not only to get into vet school, but also to succeed until graduation. Those exact same traits can be our downfall as we ourselves can be our biggest critics and expect perfection from ourselves once we set out into the fast-paced world of veterinary medicine. Dr. Furlong thinks that, in addition to our own perfectionism, society puts enormous pressure on us to be perfect as well, as society today is less accepting of errors. He went on to say that, throughout his career, a common theme for veterinarians in crisis has been the stress of a College complaint, and among professional groups, veterinarians are particularly reluctant to reach

out for help during a complaint process as we don't want anyone to know what we are going through. We are ashamed to show our perceived imperfection. This can be very isolating and can increase someone's stress level to the point of depression and, potentially, suicide. This isn't to say, however, that every veterinarian who receives a complaint is suffering from mental health issues, but the complaint becomes another risk factor.

Dr. Furlong also believes that because we operate in very small teams with little support, compared to physicians in big hospital settings, this can be isolating. There is no one to unload on, as many veterinarians would be very reluctant to discuss emotions or problems with their technical staff. We talk about death a lot as veterinarians and even more so in emergency practice, probably. Here are some interesting figures for one of those emergency shifts. Euthanizing 12 animals + 4 discussions about the possibility of death + 2 CPR events + 2 DNR forms signed = 20 discussions about death. Seriously, who talks about death that much, day in and day out? It certainly isn't the norm in most people's jobs. I asked Dr. Furlong about this issue and whether veterinarians see death in a more sterile way than the general population, which could lead to an easier justification for suicide. He says that the way veterinarians perceive death is something addressed in the literature, but he doesn't know of a concrete answer that says our exposure to death leads us to a mental health crisis.

He indicated that it is very rare for someone to suffer an acute mental health crisis because of one factor; it is usually multi-factorial, with issues in both personal and professional realms, but there is often a tipping point that moves us from coping to not coping. Already long hours now exacerbated by technology, demanding clients, the ever-present and annoying Dr. Google, clients with unrealistic expectations, financial burdens from employers or clients, trying to juggle family and work, not taking time away from the job, managing employee conflict, lack of resources to do your job properly, poor management, feeling trapped in this profession—take your pick. Whatever the issues may be, you also then need to factor in the personal side of things that might tip the scales such as being a new parent, dealing with a sick family member, financial concerns, student debt, divorce, or previous medical conditions.

Dr. Foote added her opinion to these risk factors, saying, "Shame is a huge factor. If we are not the highest producing, most intelligent, energetic, loyal, generous with our time and expertise at the cost of our personal life, we are not good veterinarians and that is shameful. If we have money problems, that is shameful. If we have addiction problems, that is shameful. If we have mental health problems, that is shameful. If we change our career, that is shameful. From that shame, there is silence and that makes the problem worse."

Dr. Furlong says that even though we have come a long way, stigma is still a major factor for a veterinarian considering seeking help for mental health issues. Will I be perceived as weak? Like I can't hack it? That I'm a bad vet?

It does take a lot of strength and resilience to continue to face death and make the decisions to end life. Certainly not a profession for the faint of heart. Some say that our industry draws in certain highly emotional individuals. Over time, it chips away at self-worth. Some of us may feel that we are pretty good at keeping our jobs and emotions separate, and others that there is no such thing as compassion fatigue; you either make it in this profession or you don't.

Personally, after immersing myself in the topics of compassion fatigue and mental illness, I realize just how important it is to understand how the perfect storm of issues, sometimes out of the blue, can create a mental health crisis. Each of us needs to be open-minded to the fact that everyone deals with things differently, and that no one is weak or can't hack it. My hope is that this article sparks a conversation in your practice as it might help someone when you least expect it. And my hope for those who need help is that they reach out to the right resources and get it. BC resources are located on the other side of this poster.

This article was excerpted from a longer article appearing in the September 2016 issue of *West Coast Veterinarian* and is reprinted in this CVMA-SBCV Chapter poster for members with permission of the author Dr. Kathryn Welsman. [www.canadianveterinarians.net/documents/west-coast-veterinarian-magazine-fall-2016](http://www.canadianveterinarians.net/documents/west-coast-veterinarian-magazine-fall-2016).



# FROM CLASSROOM TO EXAM ROOM

BY CHLOE GUSTAVSON



School's out for summer! A moment of celebration immediately after year-end practical exams.

It is said that veterinary students can never get enough clinical experience. While our first thoughts about summer tend to be the anticipation of a break from the books for a little while, we all know full well that within those four months lies incredible opportunity. If, at the height of exam time, you asked us what we need more of, I suspect many would answer: more coffee, more sleep, more time to study. The reality is that we are here because we are motivated individuals who work hard. We are encouraged and eager to make the most of our summers, to apply and demonstrate our knowledge, to continue to

be challenged, and to practise critical skills. The experiences that take us out of the classroom and put us into the exam room are what make this journey worth it.

## “BEING WITH OUR ANIMAL FRIENDS BRIGHTENS OUR DAYS.”

Being with our animal friends brightens our days. This past semester, my class enjoyed many hands-on labs as part of our Clinical Examination and Diagnosis course. Through-

out our training, we continue to evaluate the spectrum of normal, appreciating the individual variations, in hopes that normal will become second nature by the time we are faced with the abnormal head on. From cranial nerve assessment in the dog to equine re-breathing exams, we are certainly able to add new skills to our metaphorical toolbox. Along with the critical thinking practised in clinical pathology, and a familiarity with the methodical approach to medical imaging, students

spending the summer in clinical practice will certainly be able to put their understanding to the test.

Many upper-year students will be participating in a variety of unique externship placements, in addition to refining our skills by working in veterinary hospitals. Last summer, student Alyson Guy completed a comparative animal externship at the University of Missouri. There, she received training in anesthesia and established a working knowledge that she hopes to build upon while gaining clinical experience at a small animal practice this summer. At the end of our school year, cat enthusiasts were invited to participate in a low-stress feline handling workshop led by some of our wellness practitioners as timely preparation for transitioning to summer jobs alongside companion animal veterinarians.

Though I predict many of us will be taking TPRs on a daily basis, there are additional avenues of veterinary medicine that my classmates have chosen to explore right here at the College. Students inspired by the strong research focus of the WCVM's many accomplished professors can take part in active projects over the summer. Within the Department of Veterinary Microbiology, Joy Wu will be putting the analytical skills developed during our second-year parasitology labs into action. She will be part of a team assessing samples from Arctic foxes and Sable Island horses in contributing to Canadian wildlife health. Classmate Marguerite Speelman will take a clinical approach to research experience, working on a canine nutritional study. She is excited to be a part of a project within the Department of Small Animal Clinical

## “WE CANNOT FORGET THAT WITH EVERY ANIMAL COMES A PERSON.”

Sciences and to see how their findings may influence clinical practice. Several students accept summer positions working at the WCVM's Veterinary Medical Centre. From May to August, first-, second-, and third-year students will spend their days in the small and large animal clinics and specialty departments such as field service, pharmacy, radiology, and exotics. Being in our teaching hospital is a valuable experience that can help better prepare us for interactions with colleagues, patients, and clients in our fourth year.

In aligning career development with community service, student volunteers will join a WCVM graduate's mobile clinic providing veterinary care to rural and remote Manitoba. Travelling further abroad, students of the WCVM's Global Vets club and student ambassadors for Veterinarians Without Borders spend the entire year fundraising to embark on trips overseas to volunteer in developing nations. These commitments will take them as far as South America, Southeast Asia, and Sub-Saharan Africa as part of veterinary teams with the goal of helping implement positive and lasting solutions in response to local concerns for livestock, street animals, and surrounding wildlife. Student Hannah Reid volunteered with the Canadian Animal Assistance Team on spay/neuter clinics in northern BC last summer. She will take the skills she learned there to Thailand, where she will volunteer at a dog and cat shelter helping care for stray animals. Conveying her excitement regarding her upcoming adventure, Hannah said, “Helping pets in need is why I decided to pursue a career in veterinary medicine. I believe experiencing how different countries practise and view animal health will shape me into being the best veterinarian I can be.”

In all the environments we find ourselves in, we cannot forget that with every animal comes a person. As such, core communications lessons are woven throughout our veterinary program. Last semester, several of our professors participated in a series of lunchtime talks for students to learn about communicating medical mistakes, sharing with us their honest and valuable insight. As we shadow our mentors in these summer months, it is important that we think back to our lectures on open-ended questioning and reflective listening, in appreciating that our clinical skills do not always involve a stethoscope or a scalpel handle. Wherever it may be that veterinary students are spending their time off, we may be away from the classroom, but we are most definitely still learning. To be a professional is to learn for life—and we are certainly getting off to a good start. **WCV**



Chloe Gustavson obtained a BSc from the University of Victoria prior to coming to WCVM. She calls Vancouver's North Shore home, where she most enjoys spending time near the ocean with her dog, Leo. Upon graduation she plans to return to BC to work in small animal practice.

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# A NEW ETHIC FOR ANIMALS

BY DAVID FRASER, CM, PhD

**“NORTH AMERICA NOW HAS OVER 70,000 COMMUNICATION TOWERS THAT ARE ESTIMATED TO KILL 6.8 MILLION BIRDS PER YEAR.”**

**H**uman concern over the treatment of animals has evolved through two major stages, and now it needs to evolve again.

The first stage, dominant during the 1700s and 1800s, was an attempt to stop deliberate acts of cruelty to animals. With this focus, most early animal protection organizations were called societies “for the prevention of cruelty to animals.”

The 1900s saw the increasingly standardized—even mechanized—use of animals in food production and biomedical research. In that context, the old anti-cruelty narrative was clearly inadequate because few of the concerns involved deliberate cruelty. The concern, rather, focused on ways of using animals that limited their freedom and affected their quality of life. Thus, the focus changed to protecting animals not from cruelty but from the hardships that result when we use them for our purposes.

Today, we have entered a new phase of human-animal relations when human populations and technology are harming animals on a vast scale but in ways that are barely recognized.

Since 1950, we have seen the explosion of communication systems based on tall transmission towers. From the start, it was clear that the towers were injuring and killing huge numbers of birds, mostly because migrating birds (many of which fly at night) are disoriented by the lights on the towers and fly nearby until they hit one of the supporting cables. North America now has over 70,000 communication towers that are estimated to kill 6.8 million birds per year.

Road-based transportation has also exploded. Roads affect animals in many ways, but just the huge number of animal-vehicle collisions is now an important cause of injury and death. Research studies to date indicate that cars in Europe injure and kill tens of millions of animals per year, including a half-million deer and other ungulates, and that vehicles in North America now kill more vertebrate animals than hunting.

Picture windows, another deadly invention of the last century, are made from large plates of glass that are mostly invisible to birds. After years of research, ornithologist Daniel Klem estimates that windows kill a billion birds per year in North America and billions worldwide.

These dangers, and many others, act in fairly direct ways, but many human activities harm

animals indirectly, often by altering the processes and balances of nature.

Habitat destruction is a well-recognized example. In North America, grizzly bears and wolves have lost 40 to 50 per cent of their former habitat, and the severity is far greater in densely populated parts of the world. Singapore, for instance, has lost 95 per cent of its lowland tropical rainforest, and about 60 species of birds disappeared from the country during the 1900s.

Chemical changes are also deadly. In central Canada, rain acidified by industrial pollution is thought to have killed most of the life in 14,000 lakes. Even worse, nutrients from fertilizer, manure, and municipal sewage are commonly washed into water bodies where they over-nourish algae and create a huge biomass. The algae then decompose, and the process consumes the oxygen in the water and creates dead zones where virtually all animal life dies. Dead zones now affect a quarter of a million square kilometres of coastal waters (an area roughly the size of Great Britain) and kill an incalculable number of animals by suffocation or starvation in collapsing ecological systems.

Introduction of exotic species is another major cause of harm. A classic example was the introduction of rabbits into Australia where their exploding numbers prevented the natural regeneration of plants and caused native animals to starve.

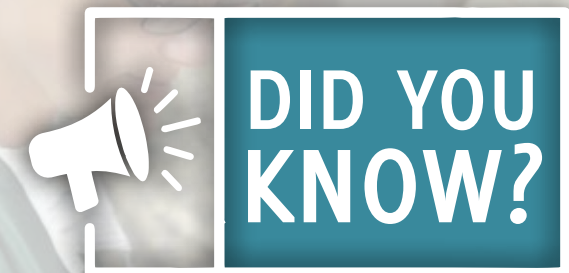
Of all these insults, climate change may prove to be the worst. Climate change is expected to shrink or eliminate areas suitable for certain species, especially on islands and mountains where there is limited scope for animals to relocate. Altered patterns of rainfall could devastate animals, especially in Africa where animals already struggle with periodic water shortages. A warming trend has also begun to spread disease, for example, by expanding the range of insect vectors. However, the greatest harms of climate change are expected to be biotic effects that disturb the timing of ecological processes. For example, milder weather causes the peak abundance of insect larvae to fall outside the time when some nestling birds have the greatest need for food.

All of these issues—from communication towers to climate change—are typically viewed as problems of conservation, not animal welfare. But a little reflection shows that they are acting on a huge scale to cause such classic animal welfare problems as injury, disease, suffering, and loss of mates and

**“VEHICLES IN NORTH AMERICA NOW KILL MORE VERTEBRATE ANIMALS THAN HUNTING.”**

young. Currently, however, such problems are largely overlooked in animal welfare circles because they do not fit the existing narratives of cruelty or of oppressive use.

In this century, therefore, our ethic for animals needs to evolve again to include the vast but unintended harms that our growing population and technology are causing to the non-human inhabitants of the planet. This must bring animal welfare and conservation—which to date have functioned mostly as separate movements with different goals—to combine forces in order to confront the many challenges that they have in common. [WCV](#)



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# TONIC OF WILDNESS

BY VERONICA GVENTSADZE, MA, PhD, DVM

**“I HAVE LEARNED TO KEEP THE SORDID LITTLE SECRET OF A PETLESS CHILDHOOD TO MYSELF.”**

**T**hose of us who work in private practice are guardians of the human-animal bond which often begins in early childhood. Many of our clients acquire pets with the express purpose of teaching their children responsibility and kindness toward animals. At this point, I must come out and make a rare confession: I did not grow up with any domestic animals or pets, nor did I want them desperately enough to wear down my parents. My mother, who herself had grown up on a homestead on the border between Russia and Finland, insisted that it was a cruelty to leave a dog all alone in a city apartment while the family was at work or in school. To this day, I feel that I could never own a dog under such circumstances, although much of my work is devoted to making this possible for clients. I have learned to keep the sordid little secret of a petless childhood to myself after receiving reactions that range from genuine pity to apprehensiveness. One might think that I had been afflicted by a disability or had spent my childhood in a loveless orphanage. Of course, there were summers in the countryside where I helped tend the rabbits and piglets, joyful encounters with other people's dogs and cats, and feeding birds through the bitterly cold winters. But this is not the same as ownership of, and daily responsibility for, an animal.

And yet I have never felt deprived. Recently I learned that I am in good company: Henry Bergh, the founder of the ASPCA who revolutionized the way America thinks about animals, never owned pets or any domestic animals either as a child or in his adult life. My first pet, long-awaited and long-prepared-for, was a precious gift, as

were all the others that followed. I can say with full conviction that it is not necessary to grow up with pets or to keep them at all times of one's life. Forgoing pets for the right reasons, or waiting patiently until the time and circumstances are right, can teach children far more responsibility and appreciation for living beings in the long run. Familiarity does not always breed contempt, but familiarity without mindfulness does breed complacency. How often have we heard statements like “I've always had [insert species of pet]” from owners whose experience turns out to be little more than a set of bad habits founded on ignorance about the nature and needs of animals under their care? And how often have such bad habits been passed on to children?

I may have grown up without pets, but never without animals. I subscribed to nature magazines for kids and read them avidly (we had no TV in our home). Every weekend, rain or shine, we would take the suburban train to the outskirts of Moscow to watch the occasional hare or red fox run across a meadow, or a beaver going about its business on a pond. I envied those animals and their freedom even if I knew their lives were neither cozy nor safe. Bears and wolves were the stuff of fairy tales and legend, and I hoped I would one day live to see these mysterious beings. I was taught to love animals I would never own, sometimes never encounter in person. Thoreau wrote, “We need the tonic of wildness... At the same time that we are earnest to explore and learn all things, we require that all things be mysterious and unexplorable, that land and sea be indefinitely wild, unsurveyed and unfathomed by us because unfathomable. We can never have enough of nature.”<sup>1</sup>

I grew up on this tonic, even if diluted to suit the constitution of a child. Wildness meant to me that no animal can be taken for granted, that any animal's trust must be earned and never abused, and that there will always be something we will never understand about our everyday companions. Admittedly, not everyone cares about wild animals who want nothing to do with humans and who will never love us back for all our efforts to help them. As doctors to pets, we transcend and fight against natural selection and treat each animal as unique and precious. As scientists, we know that individuals of a wild species matter not a bit in the eyes of nature, and that only survival of the species as a whole is important. But we cannot pretend or hope that nature will sort itself out if only we leave it alone, because our interference has already changed it. We have introduced variables that wild animals were never meant to deal with, and we are responsible for mitigating the consequences. Most of us will not, and do not need to, become wildlife experts, but we have a duty of mindfulness toward wild animals. And not only for their sake, but for our own.

The meme “Who rescued whom?” holds true not only for household pets and domestic animals. My colleagues are literally killing themselves over failure to satisfy the impossible emotional demands of private practice. This situation is untenable. We cannot wait for the public to change their expectations; we must help our profession from the inside.


<sup>1</sup>Henry David Thoreau, *Walden*. Chapter 17.

<sup>2</sup>Mazet JA, Hamilton GE, Dierauf LA. Educating veterinarians for careers in free-ranging wildlife medicine and ecosystem health. *Journal of Veterinary Medical Education*. 2006 Fall; 33(3): 352-60.

PHOTO BY ALLAN RICHARD COLTON

**“WILDNESS MEANT TO ME THAT NO ANIMAL CAN BE TAKEN FOR GRANTED, THAT ANY ANIMAL'S TRUST MUST BE EARNED AND NEVER ABUSED.”**

We need a sense of perspective, a sense of where we and our pets belong in a vast world outside the clinic walls. Over the last century, our profession has evolved at breakneck speed from an agricultural and public health occupation to a highly sophisticated service industry with lives of family members at stake. This takes a huge emotional toll on us. The good news is that the profession continues to evolve, with growing recognition of our emotional health and needs, and ways of maintaining such health. Groups like the UK's *Vets: Stay, Go, Diversify!* reflect the realization that there can and should be life beyond clinical practice even when the latter remains our primary activity. We must diversify the areas of our concern. The recent outbreak of rabbit hemorrhagic disease (RHD) in BC has reminded us that people look up to us as experts on animals we may not deal with often, if at all, be they feral, domestic, or truly wild. It is our duty to educate ourselves on pressing issues such as RHD, the wolf cull, challenges to marine mammals from tanker traffic, and myriad other issues that affect the wildlife of BC, not to mention the world at large. These animals need the authority of the veterinary profession on their side. Dr. Jonna A.K. Mazet, Director of the Wildlife Health Center at the University of California (Davis) School of Veterinary Medicine, writes, “It is time that we integrate ecosystem health into our curricula to nurture and enhance an expansive way of looking at veterinary medicine and to ensure that veterinary graduates are prepared to excel in this new and complex world, in which the health of wildlife, domestic animals, and people are interdependent.”<sup>2</sup>

Fire can be fought with a different kind of fire. Despite the pain and disappointments, my campaign to clean up abandoned telegraph wire that is killing moose and caribou has saved me from many a dark moment I used to spend brooding over the unmet expectations of pet owners and my own perceived and real failures. I am reminded of the words from a song from my distant childhood: *I am not alone as long as I am with you, trees, birds, and clouds.* 



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.

# WILL SPAY FOR FOOD

BY ELAINE KLEMMENSEN, DVM

*The life you have led, doesn't need to be the only life you have.*

— Anna Quindlen

Knowing it is time for a change is easy, if you listen to your heart. Actually setting the wheels in motion to make that change is the hard part. For most of us, it is fear that holds us back. Fear of failure, fear of judgment, fear of disappointment. It is far too easy to listen to that voice in your head, the one ruled by fear, instead of taking a chance and seeing where life can lead you if you are willing to make a change.

I love to travel, and in 2011, I had the opportunity, together with my then-11-year-old daughter, to volunteer for four days with the Mexi-Can Veterinary Project in Jaltemba Bay, Mexico. This was my first international sterilization project, and it planted a seed. But how do you marry a career in private veterinary practice and raising a family with a desire to see the world? It isn't always easy, especially if you live in a rural community and are married to another veterinarian with whom you own a practice. Our solution was to book locums and drag our kids around the world on family adventures. Eventually, those children grew and left to pursue their own adventures, leaving us at home, running our business, and just a little envious of the exciting journeys they were about to embark upon. Perhaps this was the catalyst we needed.

In 2017, Rob and I decided it was time. Time to see where life might lead two middle-aged veterinarians, if they were willing to sell their practice, embrace the unknown, and embark on a new journey. Prior to the sale of our practice, we had started to explore the world of international volunteerism and found that not only was there a huge need worldwide for veterinary volunteers, but also we were well suited to this type of work. We would return from each project energized, with a renewed passion for our chosen profession. To date, we have worked with the Equitarian Initiative, World Vets, the Canadian Animal Assistance Team, the Maun Animal Welfare Society, the Spanky Project, and currently Carriacou Animal Hospital. These projects have taken us to Costa Rica, Ecuador, Botswana, Cuba, and Grenada.

So what inspires successful practice owners to give it all up, to live on the road, and work for free? It would be easy to stay home, keep on doing



Dr. Klemmensen with an amputee from Botswana.

what is comfortable, and experience the world through yearly vacations and the Discovery Channel. In many ways, it would also be the safe path, but by doing so we would miss out on so many life-changing experiences. And perhaps more importantly, we would miss out on meeting the remarkable human beings who have opened their homes and shared their lives with us.

In Costa Rica, I worked with a group of dedicated equine veterinarians with the goal of improving working equine health by harnessing the passion and expertise of volunteer veterinarians. Despite the fact that it had been 20 years since I had done any work with horses, the Equitarian Initiative volunteers accepted me, a small animal vet, without reservation. Perhaps, in part, because I provided some comic relief!

The people we have met and the stories they have shared with us are remarkable. I recall one spry, older gentleman who arrived with his very elderly horse for the free clinic explaining why his horse was so important to him. During certain times of the year, the river flooded, cutting off his access to town. His horse, however, could still cross the river, allowing him to get to church on Sundays and maintain his contact with the community. The love he shared with his equine companion was just as strong as any we Canadians share with our pampered pets.

Working with World Vets in Ecuador, I marvelled at how quickly—over the course of one week—a group of individuals with unique personalities, backgrounds, and a wide range of ages became fast friends. The small town we were working in was well aware of our presence. Early each morning, as we boarded a bus to head to the campaign, local people would run up, dogs in

**“WORKING WITH VERY LIMITED RESOURCES AND SUPPLIES, WE STERILIZED AND VACCINATED ANIMALS UNTIL WE WERE READY TO DROP.”**

tow, and ask if we could take their pets to be sterilized. We would each grab a pet, bring it on the bus, and head off with a few extra surgeries for the day. If you are travelling solo, volunteering with World Vets provides you with an instant group of like-minded travelling companions, accommodation, and the chance to experience a new culture while providing veterinary care in a unique part of the world.

In Cuba, we joined forces with the Spanky Project, founded by Canadian Terry Shewchuck and named after his beloved dog. The Spanky Project arose from Terry's love of Cuba and a desire to improve the lives of the dogs and cats he met during his travels. This group of passionate people works with the University of Havana veterinary school and local Cuban veterinarians to exchange ideas and to provide much needed materials and medications and most importantly mentorship to the Cuban veterinary community. Working with the students and enjoying the energy and enthusiasm they brought to the project was very rewarding. Many students commented that they would learn more about small animal anesthesia, surgery, and recovery during the Spanky Project than they would in the entire university curriculum. Some of the Cuban veterinarians volunteering this year had participated in past campaigns as students themselves. After being mentored by Spanky volunteers, they were back to give their time, improve their anesthesia and surgical skills, and help mentor a new group of students during the 2018 campaign. A great example of international collaboration and sustainability.



Botswana and the Maun Animal Welfare Society (MAWS) hold a very special place in our hearts. Rob volunteered with MAWS, through the Canadian Animal Assistance Team, in April, and in November, we both signed up for a six-week commitment. Through their dedicated clinic located in Maun, as well as remote outreach clinics, MAWS provides free veterinary services to low-income villagers across Botswana. Living in the MAWS cottage, we woke early to enjoy a chorus of birds and cicadas as we prepared for the long day ahead. Working with very limited resources and supplies, we sterilized and vaccinated animals until we were ready to drop. It took us back to our early years building our own practice, and we came home each night, exhausted but happier than we had been in years.

The stories of how these animals arrive in our care humbles us. We are reminded again and again of the resilience of our patients and their will to survive, thrive, and be happy. Old Girl came to us after having boiling water thrown on her back for stealing eggs. During her stay at MAWS, we saw her fearfulness disappear and her sweet, gentle nature emerge. Little Pup stayed with us after surgical repair of a preputial injury, and within days was bossing around the adult dogs. Often, amputation is a practical and life-saving option in countries with little resources and non-existent surgical aftercare. I fell in love with one amputee from a cattle outpost who had lost her paw after being caught in a snare. She arrived in skeletal condition but still running happily on the stump of her infected metatarsals. A proper amputation gave her the gift of a pain-free life. The affectionate nature of these animals and their joyful exuberance in the face of such a harsh existence is both heart-warming and heart-breaking, in equal measures.

In a small village in Botswana, we met a young boy of 12 years who arrived at the outreach clinic with his dog and another small child in his care. He asked if he could stay with his dog during the surgery because, in his words, “My dog is a good dog, but he is afraid and will be comforted by my presence.” We advised him this was just fine, and as we sedated and started surgery on his much-loved dog, Rob began to talk to him. The boy intently watched as Rob performed an ovariohysterectomy and explained what he was doing. When Rob paused, the boy looked at him and said thoughtfully, “So, sir, I can see that what you are doing here helps the dogs and people of Botswana, and for that we are grateful, but what I am wondering is how this benefits you?” Rob had a great response. He said the

**“WE MET A YOUNG BOY OF 12 YEARS WHO ARRIVED AT THE OUTREACH CLINIC WITH HIS DOG AND ANOTHER SMALL CHILD IN HIS CARE. HE ASKED IF HE COULD STAY WITH HIS DOG DURING THE SURGERY BECAUSE, IN HIS WORDS, “MY DOG IS A GOOD DOG, BUT HE IS AFRAID AND WILL BE COMFORTED BY MY PRESENCE.””**

From top left, counterclockwise: Dr. Rob Klemmensen demonstrating cat spay to Cuban vet students, Dr. Elaine Klemmensen and owner pose for a photo during Equitarian Initiative, Costa Rica; Patient arriving for checkup at Carriacou Animal Hospital, Grenada.



From left to right: Surgical suite at World Vets, Ecuador; Dr. Klemmensen with orphaned puppy, Maun Animal Rescue, Botswana.

benefits to us were not something you could see or touch, like money. He said that we love visiting Botswana and think it is a very special place. We love the wild animals, and by sterilizing the dogs and vaccinating them, we were helping to keep both the dogs and the wildlife healthier. I could see the boy was both a little surprised and also proud that we loved his country and wanted to help. They talked about the idea of “paying it forward,” and Rob said that we were lucky to be in a situation where we could help the people and dogs of Botswana. He said, “Perhaps someday you will remember us, and how we helped your dog, and this will remind you to help someone too. By paying it forward, each of us can do our part to make the world a better place.”

With any volunteer project, there are also frustrations. At the end of a long day, we have asked ourselves what it is about this work that draws us in and keeps us coming back for more. The days are long and hard, and we usually come home hot, tired, and smelling of urine. We are practicing veterinary medicine with the most basic of tools to service the most needy population of pets. We often feel at a loss when it comes to making a diagnosis, and we try our best to help and not harm. Our patients bleed easily and profusely during surgery, our clamps don't clamp, our suture is sometimes on a spool requiring our old eyes to thread needles all day, and our scissors are as dull as the ones you buy for a first grader. Yet we make do, we struggle, we laugh, and at the end of the day, it feels good to be dog tired and know we have done some good today. If we are honest, we started this journey for selfish reasons, looking for adventure and escape from the stresses of practice ownership. But it became so much more. How do you tell someone how good it feels to take care of an animal in need and to see the relief and thanks on the faces of those you help? How do you explain the amazing ability to make—in just a few days or weeks in a community—friends and deep connections that will last a lifetime?

As a middle-class Canadian, I live a life of privilege, compared to the vast majority of the world's population. Working as a volunteer veterinarian has driven home this point and also made me realize how very little I need to be happy. I have discovered that what often appears straightforward on the surface is actually very complicated. As a volunteer, it is important to critically consider the impact you have on a culture and the long-term ramifications of your actions. This work has challenged me to be more resourceful, open-minded, and adaptable. But perhaps, most of all, it has taught me that there really is more good than bad in the world (despite what the media may lead you to believe), and if you travel with an open mind, an open heart, and a big smile, you will be amazed at where they will take you. [WCV](#)



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# THE DOGS OF AHOUSAHT

BY HOLLY TILLOTSON, DVM

THIS SPREAD: Dr. Tillotson's group is met by a dockside greeting party led by "Sunshine."

One day a month, for the better part of the last five years, my commute to work has changed drastically. I live in Parksville and work in Port Alberni, so on a normal day, I drive along Cameron Lake, through Cathedral Grove, over the Alberni summit, and into the Alberni Valley. I am at work in 40 minutes. One day a month, however, that is just the first leg of three I have to travel. This is the day I go to the Alberni-Clayoquot BC SPCA and meet up with Irene and Deb. I transfer my backpack to their truck, and we head out on a windy, two-hour drive to Tofino.

free-roaming cattle there and, if you are lucky and the tide is out, sometimes you can see them gathering on the beach, eating sea lettuce and eel grass. It is incongruous to see these beasts wandering along the shore and grazing. Further along, we weave and wind between the islands, and I marvel at the place where we live and at how lucky I am to call this day a day at the office.

There is only one short stretch of open water where it is usually more windy, and the water tends to be more wild. We quickly pass by and find ourselves again in the shelter of the islands. As we round the last corner into the

bay at Ahousaht, I search the docks for the dogs but see none. Just boats, resting along the docks, and maybe one or two people active on the dock; loading or unloading a boat. Sometimes, there are kids

fishing or maybe swimming off the end of the dock. On a hot day, there is often a group of little kids, dripping wet, laughing, betting each other that they can jump higher or further into the water. They don't really notice we are there, watching them.

As we tie up at the dock, we begin to unload ourselves and our stuff, and from nowhere, unannounced, and without warning, come the dogs. It's a mixed bag of greeters. Maybe five or six; all curious, all very forward, and ready to be our guides. Another incongruity for me. I am from a small town where the sight of a dog wandering anywhere off leash and alone just does not happen. But here they are, dogs running, playing, being a pack all on their own. No one seems to notice—well, no one but me. Even after years of coming here, I still notice them. Most

of them are bright, eager for attention, happy to walk close enough to brush up against you once in a while. In the early days, there were a couple of larger dogs that loved to jump up and give me a full-frontal hug. If I wasn't prepared for the jolt, I'd end up on the ground, turtled on my backpack, but I'm wiser now.

When I first started going to Ahousaht, we would set up for the morning in the youth centre. People would bring their dogs in for vaccines, deworming, and flea control, all donated by the SPCA. Many of the dogs were in rough condition: terrible coats, broken teeth, lameness, and generally poor condition. I would go over the dog's bodies, finding issue after issue, and I would look back at the owners, and they would be smiling, so proud of their dogs, and happy that I was paying them attention. It quickly became clear that these people loved their dogs, so I soon found myself explaining what it looked like when a dog was ill, or what could be done to treat it. I taught the absolute basics of health care: talking about how to feed dogs, how to water them, and the need for grooming. We came prepared with donated brushes, combs, collars, leashes, food, and water bowls, and we gave those things out to anyone and everyone who needed or wanted any of them.

It is a tough life for the dogs of Ahousaht. When you walk around the reserve and look at the dogs, you start to realize there are only one or two old dogs, little to no middle-aged dogs, and there are no adolescents. Dogs fight for food, for breeding rights, and for territory. They get run over by cars, from time to time they get shot, and they are attacked by wolves. They are affected by parasites, open wounds, poorly healed broken bones, and infectious disease—parvovirus is a fact of life on the island. Combined, these factors explain the low survival rate of pups born on the island. The rare old dogs are often the ones that are cared for by someone who takes them in at night, who keeps them close to the house, and who doesn't allow them to run with the other dogs.

There are two main housing areas on the reserve, separated only by a short drive. The dogs living in each area have formed packs, and they don't mix. When they do mix, there is instant bedlam. Occasionally, a short skirmish ends with one group chasing an outsider back to his territory, tail between his legs. At other times, though, the fight is ferocious, intense, and sometimes to the death. Once, while hiking along a gravel road near the school, a little black terrier appeared out of nowhere. This dog was very out of place—likely a house dog that somehow slipped outside—a move that can be fatal here. I dropped my pack on the gravel and started running toward him. Irene

**“BUT HERE THEY ARE, DOGS RUNNING, PLAYING, BEING A PACK ALL ON THEIR OWN. NO ONE SEEMS TO NOTICE—WELL, NO ONE BUT ME.”**

Once there, we park the truck, gear up with our packs, and head down to the dock. We usually arrive just after 10 am, intending to take the 10:30 boat; sometimes, there is a boat ready to go, sometimes, there are two or three, and sometimes, there are none. It's okay though; if you wait a few minutes, somebody will come along in a boat, and if they are not themselves going to Ahousaht, they are on the radio and will find out when the next boat is coming. There is always someone coming, and we always get to where we need to go pretty much on time ... Island time, that is.

It's about a 40-minute boat ride from the west coast town of Tofino to Ahousaht, which is on Flores Island. Only minutes on the water, we pass another First Nation, Opitsaht, which is on Meares Island. There are

Several dogs escort the group around the reserve for the entire day.



Volunteers help to bring dogs for vaccination.



Time for a quick photo.

PHOTOS COURTESY OF HOLLY TILLOTSON

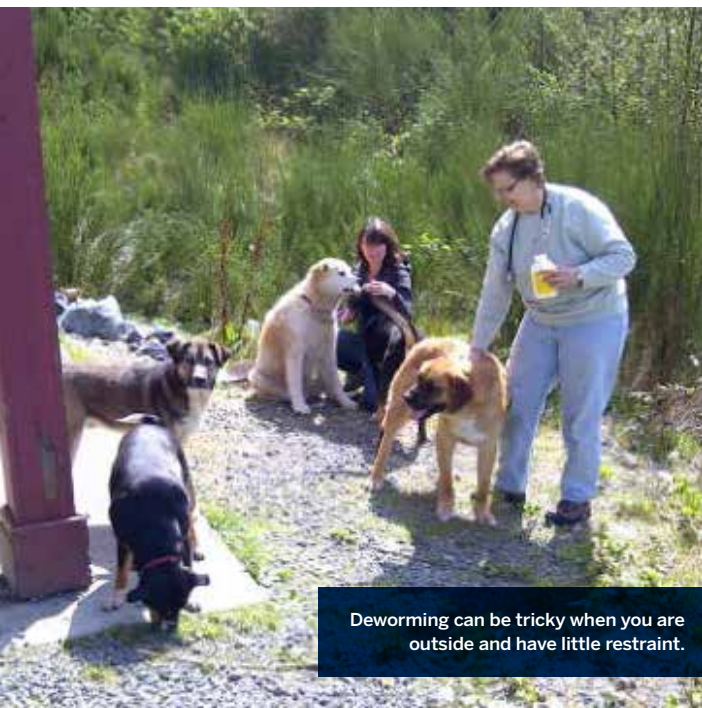


Finding a ball to play with.

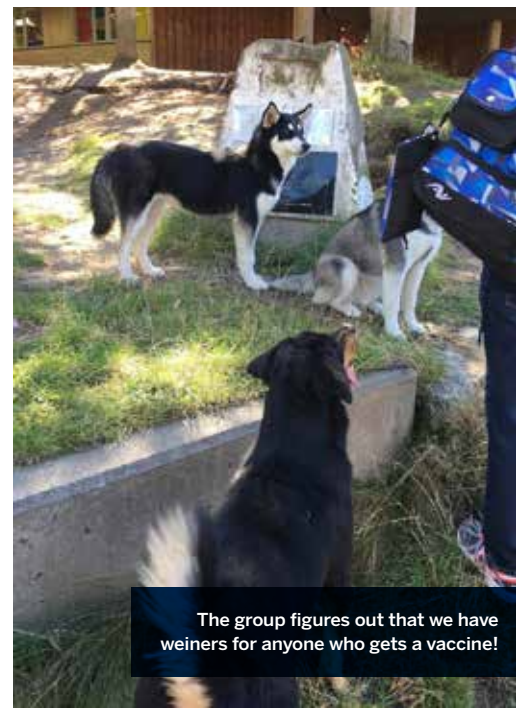


Taking a break in the shade on a hot day.

**“FROM A POPULATION PERSPECTIVE, THE WOLVES DO HELP TO KEEP THE DOG NUMBERS DOWN, THOUGH FROM AN ANIMAL WELFARE PERSPECTIVE, THIS IS TRAGIC.”**



Deworming can be tricky when you are outside and have little restraint.



The group figures out that we have weiners for anyone who gets a vaccine!



Residents bring their dog for a booster vaccine.

and thick, it was hard to see the injuries, but they were there—multiple puncture wounds, a couple of lacerations, and thankfully not much bleeding. We had no idea who owned the dog; no one we talked to had ever seen him before. In that instance, we felt we had no choice but to take him with us off the island that day .

The plight of the dogs has changed over time since the SPCA has been going to Ahousaht. For many years, it seemed that if you were a dog born on the island, the only path to a long life was to get off the island—and the only way off the island was to be injured badly enough that you had to leave, but not badly enough to die. In the years before I became involved, the SPCA would bring the most atrocious cases in. Hairless dogs with severe Demodex and associated skin disease, dogs with legs broken

**“FOR MANY YEARS, IT SEEMED THAT IF YOU WERE A DOG BORN ON THE ISLAND, THE ONLY PATH TO A LONG LIFE WAS TO GET OFF THE ISLAND—AND THE ONLY WAY OFF THE ISLAND WAS TO BE INJURED BADLY ENOUGH THAT YOU HAD TO LEAVE, BUT NOT BADLY ENOUGH TO DIE.”**

and healed so poorly the limbs were now useless, severely underweight and heavily parasitized dogs, one dog with an infected eye socket from an eye lost months before, and of course skinny, matted, broken-toothed, torn-eared dogs that were just done.

The dogs wouldn't just come singly either; there was often two or three at a time. The SPCA told me that they once

brought out 27 dogs in one trip; all with a wide range of issues that needed attention. Now, after decades of the SPCA's work and with my small contribution, the dogs are in better health, and people are now calling the SPCA when they see a dog in need.

In fact, many people in Ahousaht now sign up on Facebook when they know we are coming so that they can get on the list to see a veterinarian. And we've changed our own behaviour. Now, we don't stay in one place anymore; we hire a local individual for the day to

drive us from house to house, and I try to see everyone on the list. It's getting harder to do that, though. As more and more people know about us coming, there are more and more to see, yet I am still talking about the same things: basic care, feeding, watering, and protecting the dogs.

The general conditions of the dogs are better for sure, even since I have been going there, but I am not naive. The single greatest effector of general health remains the activity of the wolves. Because these wolves take the young and the weak, I only see the strong survivors when I'm in Ahousaht. We don't go during the bad weather months, and so last year, when I got there for my first visit of the year, I was shocked at how many dogs were missing. In fact, every dog that I had on my list to see from the previous fall was gone. Every single one. I talked to the residents, and they said that the wolves had been especially active. Normally, when the wolves come through the reserve, they only stay for a few days, but this last winter they stayed two weeks and worked their way through the most vulnerable dogs.

From a population perspective, the wolves do help to keep the dog numbers down, though from an animal welfare perspective, this is tragic. At the peak, Irene estimates there were three hundred dogs on the reserve. When I became involved, there were about 80 dogs, and that stayed mostly constant until last year, when there were about 40 dogs.

Yet my goal this year is to build upon the fact there are fewer dogs, clearly in better condition, and to ensure they stay this way, I will be talking more about spaying and neutering.

As we finish up for the day and head to the dock with the occasional patient to transport out for advanced care, we are accompanied by our dog hosts who have followed us since we arrived. They seem to know we are going and want to say farewell. Once in a while, a dog hops on the boat with us, over and over again. We put them back on the dock as many times as it takes before the boat can get away. They watch us as we disappear out of the bay, and they head back up the dock once more. [WCV](#)



Volunteers talk to residents to screen dogs coming for vaccination.

was closer, and she, too, had started to run. As the little dog trotted along the road, he had no idea of the drama he had set in motion. Before either us got close to him, two dogs were upon him. They attacked with force and fury. We ran screaming toward them. The little black dog was caught in the jaws of both dogs and was being pulled and yanked; he was screaming, the larger dogs snarling and growling, dust flying.

We managed to kick the big dogs off, and the little dog landed in a blackberry patch in the ditch. His coat was long, and he was immediately entrapped within the thorny vines. He screamed and tossed in the bush which only made the entanglement worse. Irene threw me her jacket, and I covered him so that he might calm down enough for me to help him. He slowly calmed, and I began the process of disentanglement. He was twisted in the bush as if being spun by a tornado. After some time of cutting his fur and cutting the vines, I managed to free him. He was panting—fearful and hurt. I kept him wrapped in the jacket, and we made our way to a shaded area away from the big dogs where I could get a closer look. With his coat being black and long



West Coast Veterinarian is pleased to introduce this new column. Each four-part column is written by one veterinary specialist about one topic that has four distinct life phases. The articles will appear over the course of one year, highlighting the topic and what veterinarians should know about the topic and the life stages of animals. For our first topic in this new column, we introduce the ophthalmic examination.

# OPHTHALMIC EXAMINATION OF THE VERY YOUNG PATIENT

BY MARNIE FORD, PhD, DVM, Dipl. ACVO

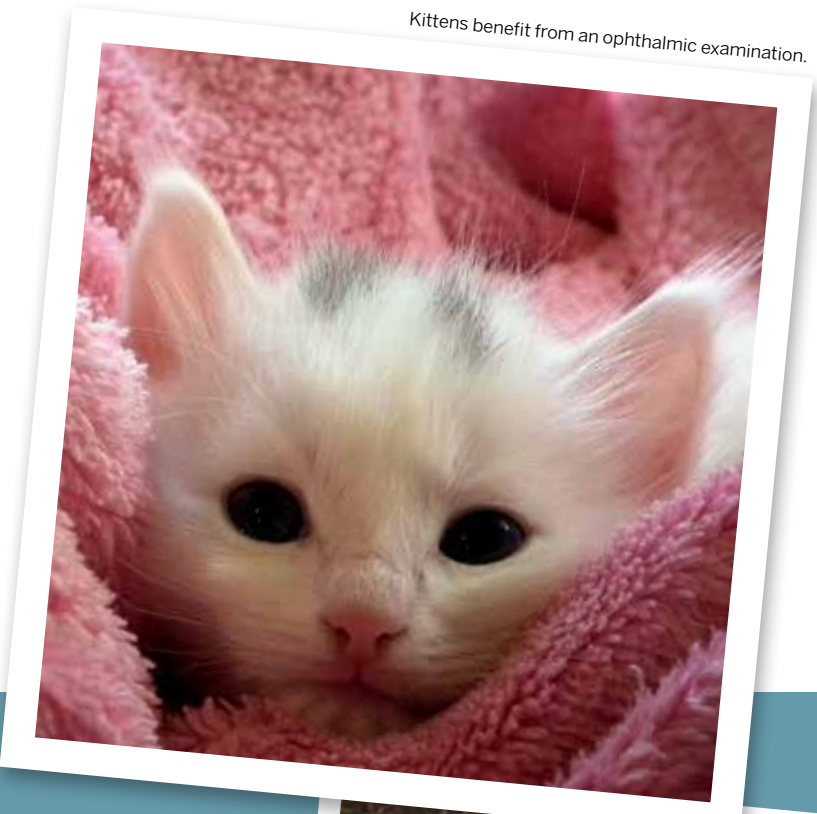
Ophthalmic examinations are a necessary part of every physical examination. Commonly identified congenital or acquired abnormalities can often be identified at different life stages between congenital to senior patients. Assigning a specific age in months or years to each life stage varies between breeds. This column aims to examine commonly identified ocular abnormalities that may be identified during examinations at different life stages. Owing to breed differences, the life stages identified can blur temporal boundaries and are discussed broadly as congenital (first three months of life), juvenile (first quarter of life), adult (middle half of life), and senior (last quarter of life).

**A** well-planned new puppy/kitten examination at eight to ten weeks of age is critical in the establishment of a healthy VCPR relationship. It is as much about educating the owner as it is about examining the patient in a quiet, low-stress environment. The examination should be fun and avoid triggering anxiety or aggression, thus establishing no-fear exams for the lifetime of the patient. The prognosis for good ocular function and cosmesis is increased with early identification and treatment of complex ophthalmic conditions.

Wiggly puppies can be vertically or horizontally suspended behind their armpits with no support of feet or spine so that they are floating in space, and kittens can be lightly scruffed or wrapped in a towel. I believe these techniques mimic how mother dogs and cats calm and transport their offspring. It

is also helpful for future ophthalmic examinations if owners desensitize the animal to bright lights shone briefly in the eyes or touching around the face and reinforce good behaviour with treats throughout the exam. Minimal ophthalmic testing is needed with very young patients. More thorough testing is needed when increased or persistent squinting, tearing, redness, rubbing, cloudiness, or vision deficits are noted.

Ophthalmic examinations begin with an evaluation of vision, which is challenging in very young animals. Can the pet follow a cotton ball when tossed near the eyes? Menace response is a learned response that is not consistently present in patients under three to four months of age and is more subtle and incomplete in cats. Direct and consensual (indirect) pupillary light reflex (PLR) testing is best performed in a dark room with a strong focal light source. An indirect PLR from the stimulated eye



Kittens benefit from an ophthalmic examination.



Kaos, the cute Jack Russell Terrier puppy.



Tux demonstrating a technique for holding a young dog for examination.

**“PREMATURE OPENING OF THE EYELIDS IS A SERIOUS CONDITION THAT CAN CAUSE EXPOSURE KERATITIS, CORNEAL ULCERATION, AND POSSIBLE GLOBE PERFORATION AND UVEITIS.”**

(illuminated eye) to the contralateral eye aids in evaluation of retinal function of the stimulated eye as well as iris sphincter muscle function of the contralateral eye. A PLR can be consistent with, but does not verify, cortical vision.

Congenital ankyloblepharon is the normal closure of eyelids in dogs and cats at birth, with eyelids typically opening at 10 to 14 days of age. Premature opening of the eyelids is a serious condition that can cause exposure keratitis, corneal ulceration, and possible globe perforation and uveitis. Lubricating ointments, used around the clock, protect vulnerable ocular surfaces. Pathologic ankyloblepharon is an infrequent and often bilateral failure of opening of the palpebral fissure. Ophthalmia neonatorum develops via infection underneath the closed lids and must be considered if the closed lids are swollen, and/or a small amount of purulent exudate is noted at the medial canthus. Opening the palpebral fissure can be attempted by warm packing with saline compresses, followed by gentle massage to open the lids. However, it is possible that the cornea may have ruptured underneath the closed lid. The exposed tissues can be lavaged using a 1:50 povidone-iodine aqueous solution (not scrub), and subsequently treated with a topical antibiotic four to six times daily. Symblepharon is the acquired fibrotic adhesion of conjunctiva to cornea, or conjunctiva to adjacent conjunctiva. This condition is most commonly seen in kittens as a consequence of fetal or neonatal herpes virus infection.

Congenital abnormalities include persistent pupillary membranes (PPMs), and eyelid or corneal dermoid in dogs and cats, or eyelid agenesis (EA) in cats. EA is most commonly located bilaterally in the temporal upper eyelids. Surgical repair of EA is often mandatory. Dermoids occur on the eyelid (hamartoma) or limbus (choristoma). Surgical repair of EA or dermoids can be performed when anesthetically safe; until then, application of a lubricant to protect the cornea against trichiasis is recommended. PPMs are the most common manifestation of anterior segment dysgenesis, which is a broad range of malformations that may also include corneal opacity, lens malformation and cataract, microphthalmia, microphakia, and retinal malformation. PPMs may exist as iris to iris, iris to cornea, or iris to lens strands, and these may lessen with age.

Congenital changes that may be not obvious until the patient is a little older include microphthalmia, entropion, and cataracts. Microphthalmia can occur at various stages of fetal development. Entropion may be present congenitally but often

worsens with age, increasing risk of corneal ulceration. Young animals will not grow out of it. To avoid surgical under- or over-correction of entropion, animals are treated with either application of a corneal lubricant or by placement of temporary tacking sutures until the patient is of sufficient age for blepharoplasty. Cataracts can be congenital or nutritional; nutritional cataracts are induced by milk replacer diets at critical periods of postnatal lens development.

Ophthalmic examinations can be challenging but when started early, and by using a systematic approach that is fun and painless, proper diagnoses can be achieved. **WCV**



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# BEHAVIOURAL EUTHANASIA OF THE HORSE

BY LAUREN FRASER, CHBC

**“WHILE BEHAVIOURAL EUTHANASIA OCCURS LESS FREQUENTLY IN EQUINE PRACTICE THAN IT DOES IN COMPANION ANIMAL PRACTICE, IT IS IMPORTANT FOR EQUINE VETERINARIANS TO UNDERSTAND WHEN BEHAVIOURAL EUTHANASIA MAY BE WARRANTED.”**

**A**lthough never an easy task, recommending euthanasia to a client is made somewhat easier if a horse is physically suffering, and their quality of life is poor. But what if the client's horse is otherwise healthy and sound, and instead has a serious behaviour problem? While behavioural euthanasia occurs less frequently in equine practice than it does in companion animal practice, it is important for equine veterinarians to understand when behavioural euthanasia may be warranted.

There is scant information available on equine behavioural euthanasia for horse owners and veterinarians. However, the Ohio State University (OSU) Veterinary Medical Center has created a set of guidelines on behavioural euthanasia for companion animal owners. I have found these guidelines useful when consulting with owners of horses with severe behaviour issues, and I recently presented on this topic at the Progressive Equine Behaviour and Training Forum in Florida.

The OSU guidelines suggest three alternative options to consider before euthanasia, and these can be adapted to equine practice.

## RULE OUT MEDICAL CAUSES

Pain is a common cause of unwanted behaviour in horses. A horse displaying unwanted behaviour should always be examined by an equine veterinarian for evidence of pain. Even behaviours which, at first glance, may appear to be training issues can have underlying physical causes. For example, the horse who refuses to trailer load may have stifle or hock pain, or the girthy horse may have undiagnosed gastric ulcers. Unwanted behaviours which have a sudden onset, or those which involve displays of aggression or evasion, such as bucking under saddle, particularly deserve a thorough workup.

## SEEK PROFESSIONAL HELP

Academically-trained animal behaviour professionals should be consulted when dealing with behaviour problems in horses, particularly for issues that involve aggression, anxiety, or fear. The use of punishment-based training protocols is generally not recommended, nor necessary, to resolve most behaviour problems in horses, and their use may worsen existing problems or create new ones. As the horse

Not all horse behaviour problems can be safely or permanently resolved, which may require veterinarians to counsel clients about behavioural euthanasia.

training industry is unregulated, and training methodologies are not standardized, veterinarians should refer clients to behaviour professionals with appropriate education in the use of evidence-based protocols, such as counter-conditioning and systematic desensitization.

While the use of psychopharmacological agents to support behaviour modification work is less common for horses, certain anxiolytic drugs, hormones, pheromones, or nutraceutical products may prove helpful when used in conjunction with behaviour modification protocols.

## CONSIDER FINDING A NEW HOME FOR THE ANIMAL

Managing and retraining a horse with behaviour problems may sometimes be best accomplished by rehoming the horse. The existing owner may not have the time, experience, or financial resources to aid in resolution of the problem. Unfortunately, these qualities may also be challenging to find in a new owner.

When rehoming a horse with behaviour issues, full disclosure of the problem may reduce any potential liability if future displays of the behaviour result in human injury; disclosure also affords the horse the best opportunity to get the help it needs to overcome the problem.

Ideally, prior to enlisting the help of an appropriate trainer, any new home should ensure the horse has had a thorough veterinary workup to rule out physical causes for the behaviour. As moving homes can be stressful for horses, allowing sufficient undemanding downtime for the horse to settle in prior to retraining can be helpful.

If none of these options are viable, the OSU document lists four factors to consider when making the decision to euthanize.

## ENVIRONMENTAL FACTORS

A comprehensive behaviour modification plan often includes changes in the environment or management of the horse to avoid triggering the problem behaviour during retraining. For example, a horse who kicks at anyone entering its stall may be taught to present its head over the stall door so that it may be haltered safely from outside. These changes are usually short-term, but may be permanent in rare cases, and they may be difficult or impossible for an owner to implement at their current or future facility.

Relapse of the problem behaviour may also occur during behaviour modification, making liability a serious concern for owners of horses with behaviour problems that are potentially injurious. Some owners may simply be unable to comply with the changes required to avoid relapse, or relapse may occur despite their hard work.

## “REHOMING HORSES WITH KNOWN SERIOUS BEHAVIOUR ISSUES CARRIES ETHICAL AND LEGAL IMPLICATIONS.”

Rehoming horses with known serious behaviour issues carries ethical and legal implications. Failure to disclose known issues can result in injury, or even death, to an unsuspecting new owner. In light of this, most reputable companion animal rescue organizations will not accept animals with specific behaviour problems such as aggression, rather than assume the liability associated with rehoming. It is feasible, and understandable, that horse rescues in Canada may adopt similar policies.

## REHOMING IS NOT AN OPTION

Despite the availability of qualified help and the best intentions of an owner, some behaviour issues cannot ever be permanently resolved. Horses with specific issues may realistically be unsafe in any environment.

Rehoming horses with known serious behaviour issues carries ethical and legal implications. Failure to disclose known issues can result in injury, or even death, to an unsuspecting new owner. In light of this, most reputable companion animal rescue organizations will not accept animals with specific behaviour problems such as aggression, rather than assume the liability associated with rehoming. It is feasible, and understandable, that horse rescues in Canada may adopt similar policies.

## SUFFERING

Many behaviour problems in horses are a result of underlying stress or fear, which can impact their mental and physical health. They may also suffer from further stress and a decreased quality of life due to misguided attempts to manage the problem, or when subjected to last-ditch efforts involving aversive and unproven training practices. The fact that this is a common occurrence in the horse world underscores the need for veterinarians to help owners find qualified professionals to help with behaviour problems.

Horses with behaviour problems may languish in inadequate facilities, physically and mentally unstimulated, especially if their owners become fearful of working with them. Horses may also experience neglect when given away to companion-only homes if the new owner has limited knowledge of horse care.

## SEVERITY OF THE PROBLEM AND PROGRESSION OF SIGNS

Unwanted behaviours which result from pain or fear may increase in frequency, or worsen, if the root cause is not addressed. They may generalize or begin to occur well in advance of the initial triggers that prompted the behaviour. Behaviour problems that have been occurring for an extended period of time are often more resistant to change, resulting in a poor prognosis for resolution.

It is important to remember that while a humane death is not a welfare issue, for horses with serious behaviour problems, living may very well be. Horses with behaviour problems are frequently passed from owner to owner, subjected to aversive training, and/or neglected. Some behaviour problems present a real risk of injury or death to those working with the horse, and thus rehoming such horses may be a future liability to private owners or rescue organizations.

As with companion animals, horse owners may feel guilty when considering euthanasia for behavioural reasons, especially if the animal is otherwise healthy and sound. Owners may feel they will be judged for their decision and may find it difficult to discuss the topic with friends and family. Guiding clients toward supportive resources should be part of a euthanasia consultation. At a time when owners are feeling conflicted and need professional advice about such a difficult, emotional decision, it is important for the veterinarian to have a clear perspective of the factors that must be considered when deciding if euthanasia is warranted.

The full OSU document can be found here: <https://vet.osu.edu/vmc/sites/default/files/import/files/documents/pdf/vmc/Behavioral%20Euthanasia%20fact%20sheet.pdf>. [WCV](#)



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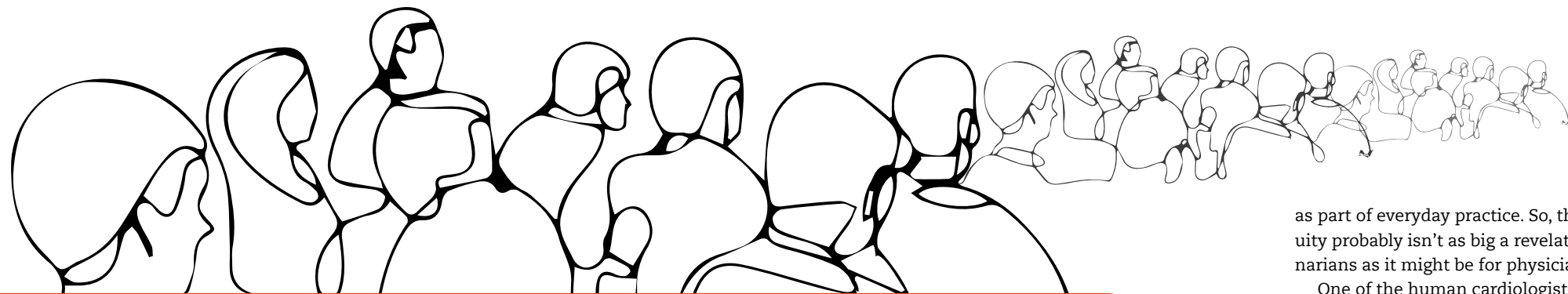
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\* Based on *Bordetella bronchiseptica* challenge.  
1. Gore T, Headley M, Laris R, Bergman JGHE, et al. Intranasal kennel cough vaccine protecting dogs from experimental *Bordetella bronchiseptica* challenge within 72 hours. *The Veterinary Record*, 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](https://www.aaaha.org/public_documents/professional/guidelines/caninevaccineguidelines.pdf). Accessed November 24, 2016  
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**“I THINK IT’S GREAT THAT WE GET HELP FROM OUR HUMAN COUNTERPARTS; HOWEVER, THERE SEEM TO BE FEWER EXAMPLES OF WHEN VETERINARIANS GET TO HELP HUMAN DOCTORS.”**

# TWO EYES, ONE HEALTH?

BY KATHRYN WELSMAN, DVM

If you had wandered into the Eye Care Centre at the University of British Columbia (UBC) in early February and had listened to one of the lectures, you might have been scratching your head and wondering if UBC had opened up a vet school.

Why?

Well, the lecturer that day was none other than the CVMA-SBCV Chapter’s own Dr. Marnie Ford, a Board-certified veterinary ophthalmologist. She was delivering the lecture “Veterinary Ophthalmology: A brief overview of common medical and surgical conditions.” So, the speaker was a vet, and the topic was about veterinary medicine—but the audience wasn’t veterinarians, it was human ophthalmologists.

What could a veterinary ophthalmologist be teaching human eye docs?

The lecture was part of the UBC ophthalmology department’s Grand Rounds. According to Lynn Lau, the coordinator, the audience was ophthalmologists from various subspecialties, including glaucoma, neurology, pediatrics, cataract, and retina, as well as ophthalmology residents and medical students. In other words, a bunch of people who know a little bit about eyes. No

pressure, Dr. Ford.

**“THE AUDIENCE WAS OPHTHALMOLOGISTS FROM VARIOUS SUBSPECIALTIES, INCLUDING GLAUCOMA, NEUROLOGY, PEDIATRICS, CATARACT, AND RETINA, AS WELL AS OPHTHALMOLOGY RESIDENTS AND MEDICAL STUDENTS. IN OTHER WORDS, A BUNCH OF PEOPLE WHO KNOW A LITTLE BIT ABOUT EYES.”**

I wasn’t entirely sure what Grand Rounds meant, so I asked Ms. Lau. She said, “Grand Rounds are educational in nature and involve real patient cases. Each session is an hour long and worth one continuing education

credit. Grand Rounds consist of a resident presenting his or her case for the first eight to ten minutes, the speaker discussing the case for thirty minutes, and then a Q and A.”

Just to give you an idea of what would normally be covered at these rounds, previous topics have included “Fat is our friend: The use of adipose tissue in oculoplastic surgery,” “Ocular side effects of common cancer treatment,” “Vasculopathies affecting the eye and brain,” “Retinal vascular occlusions,” and “Retinal hemorrhages in infancy—a view from the brain.” The speakers were from UBC, the University of California, the University of Montreal, the University of Ottawa, and Boston University School of Medicine, just to name a few. I’m assuming these folks are no

small peanuts in their respective fields, so it sounds like Dr. Ford fits right in.

I asked Dr. Ford why she thought a veterinarian could—or even should—lecture to human ophtho folks.

“I think that human clinicians are beginning to realize the importance of recognizing and studying similar disease in other species,” she said. “This concept is not new and has been utilized for decades in veterinary medicine. Veterinary medicine really stemmed from human clinicians stretching their resources to treat animals. From that increasing need, the profession of veterinary medicine branched off to become its own field of study. With more limited resources, I believe that veterinarians have an inherent requirement to explore medical options in other species (including humans). I do not believe this option has been as well utilized in the human field and, as a consequence, I believe that many diseases, including ophthalmic conditions, are being treated in humans and animals in parallel but often differently.”

Dr. Ford did elaborate that she wasn’t sure that this was the specific reason she was asked to give the talk. Apparently, Dr. Gardiner, a human ophthalmologist at BC Children’s Hospital, had a patient whose parent is a veterinarian. That veterinarian refers cases to Dr. Ford. The link was made that there are veterinary ophthalmologists in BC, so Dr. Gardiner approached the Grand Rounds coordinator and asked if Dr. Ford could speak.

Dr. Ford also pointed to the Zoobiquity movement. The website states, “Zoobiquity springs from a simple but revelatory fact: Animals and humans get the same diseases, yet physicians and veterinarians rarely consult with one another. Zoobiquity explores how human and non-human animal commonalities can be used to diagnose, treat, and heal patients of all species. Drawing on the latest in medical and veterinary science—as well as evolutionary and molecular biology—Zoobiquity proposes an integrated, interdisciplinary approach to physical and behavioral health.”

I think it’s interesting that human physicians need to be told they should compare notes with veterinarians, whereas we often look to human medicine for research

as part of everyday practice. So, the concept of Zoobiquity probably isn’t as big a revelation for most veterinarians as it might be for physicians.

One of the human cardiologists behind Zoobiquity apparently had an aha moment when she started to help at the Los Angeles Zoo. In an interview with the Boston Globe, she said that she believes that her fellow human physicians have much to learn from their veterinary counterparts—and that we shouldn’t see human and animal medicine as separate fields. She was involved with a case where the veterinarians were explaining capture myopathy to her. She told them that it sounded very similar to takotsubo cardiomyopathy in humans. What was most shocking was that veterinarians had known about capture myopathy for decades prior to the human disease being identified.

In some ways, the One Health movement might only be one-way. The concept of One Health, which has become fairly mainstream, doesn’t push physicians to look to veterinarians for treatment solutions. The US Center for Disease Control says, “One Health recognizes that the health of people is connected to the health of animals and the environment. The goal of One Health is to encourage the collaborative efforts of multiple disciplines—working locally, nationally, and globally—to achieve the best health for people, animals, and our environment.” This is a great concept and is definitely a step toward more collaboration, but we really should maybe aim toward an even more integrated approach, making the One in One Health more inclusive of veterinarians.

When you think about it, Dr. Ford epitomizes the One Health ideal. She has unique skills compared to a human eye doc. She looks at the eyes of horses, cows, birds, cats, dogs—and on one particularly exciting occasion, apparently—a hippopotamus. Her human counterparts look at—well—human eyes. They are extremely specialized, whereas veterinary ophthalmologists are more generalists and thus do an awful lot of comparing and extrapolating. Maybe that is what pushes us outside of the box more often. I mean, really, do you think Dr. Ford learned how to enucleate a hippopotamus eye in her residency? I’m thinking that would be a no.

If I had to guess, she had to extrapolate from what she knows of other species to make this work. One member of the audience at her lecture commented, “I didn’t know you [veterinary ophthalmologists] did all those surgeries.” She said that “... Woke me up to realize how limited my profession is viewed. In no way do I mean any disrespect; this just reinforces in my mind how far we have to go in bridging the gap between

human and veterinary approaches to the same diseases.”

There was a lot of other feedback from the audience, and it was obvious the lecture was very positively received, with comments such as “I really appreciate the special effort Dr. Ford put into preparing this talk—it was obviously not a canned talk,” and “Good job for presenting a huge topic in a very short time. Extremely interesting and useful as we do get asked for an opinion about pets.” Someone else must have been thinking along the same lines as Dr. Ford when they commented, “Excellent talk, very interesting, and lots of opportunity for collaboration.”

I asked Dr. Gardiner if she thought the lecture was relevant to her profession. She said, “It was relevant in that we see similar kinds of problems. Sometimes, we have the same approach, other times we don’t. However, vets are limited by costs, insurance, and practicalities of visually rehabilitating various animals [that human ophthalmologists aren’t].”

**“WHAT WAS MOST SHOCKING WAS THAT VETERINARIANS HAD KNOWN ABOUT CAPTURE MYOPATHY FOR DECADES PRIOR TO THE HUMAN DISEASE BEING IDENTIFIED.”**

This got me thinking about other times human and animal professionals learn together. I sat in on a lecture given by a human physician about zoonotic diseases a few years ago at a conference. Surprisingly, Dr. Gardiner said she took a basic science course at Stanford that included veterinary residents. She said she supposed the basic science of ophthalmology is not much different, whether it is for animals or people. It was optics, anatomy, and physiology of the eye and visual pathways. This is probably not an isolated incident, as I recall hearing that anesthesia residents at the Ontario Veterinary College attended training at the closest human medical school.

I wondered if there were more examples like this, so I posed that question to the VIN community. One anesthesiologist said she had spent six weeks as part of her residency in a human hospital; another indicated that the ophtho gang at U Penn had trained together. Yet another said Tufts used to allow veterinary surgery residents to train with the human dental school for oral and maxillofacial surgery. Interesting that there were several examples like this. However, these were all veterinarians training at human facilities, not the other way around.

I also know of examples where human specialists helped perform procedures in very specialized cases on animals, such as pediatric cardiac surgeons helping with congenital defects in puppies, or a human ophthalmologist providing eye care to an animal housed at a zoo in Europe.

I think it’s great that we get help from our human counterparts; however, there seem to be fewer examples of when veterinarians get to help human doctors, or when human doctors train at veterinary schools. I wonder why that is?

A veterinary ophthalmologist providing a lecture to human doctors—this probably isn’t the first time something like this has happened, but I imagine it is still fairly rare. I asked Dr. Ford if she had any reservations about doing the lecture. Her resounding answer was no. “I was so excited to give this lecture, albeit nervous, and was so happy with the reception I received.”

Alas, no vet school has been opened at UBC. However, it feels like a very positive step that human physicians are reaching out to the veterinary community, and I hope we see more of this in the future. [WCV](#)

# Q&A

WITH THE OFFICE OF THE REGISTRAR OF THE CVBC

The CVMA-SBCV Chapter occasionally gets questions from our members who ask us to pose such questions to the experts. In this case, we posed the question to the College of Veterinarians of BC regarding the use of compounded human medications for animals. If you have a question you'd like the Chapter to find an answer to, send your question to [wveditor@gmail.com](mailto:wveditor@gmail.com). We do not use members' names in our questions.



What does the law in BC or Canada say about compounded human medications (gabapentin, metronidazole, buprenorphine, etc.) used commonly in veterinary patients? If no veterinary label exists, is this considered off-label usage? And if off-label, should we always get owner consent or have drug label warnings about off label warnings for compounded medication?



Regarding "off-label" drug use—any use for a drug that has not specifically been approved by Health Canada (and therefore included on the packaging/package-insert) is "off-label" use. For the purposes of veterinary medicine, therefore, any human-labelled product is definitely an off-label use. For those products that are labelled for "Veterinary Use Only," if the purpose for which it is being prescribed is not specifically detailed in the product monograph, then it too is off-label.

Any compounding (whether of a veterinary-labelled product, human-labelled product, or API – Active Pharmaceutical Ingredients) is also considered off-label use.

The CVBC expects that, before using or prescribing any medication in an off-label manner. Registrants will explain the reasons for their recommendation and any possible concerns or risks involved in using the intended drug in the intended format, and will document that informed consent from the owner has been obtained.

For further information, I also direct you to the CVMA's own Guidelines for the Legitimate Use of Compounded Drugs in Veterinary Medicine and its Decision Cascade poster, that "provides veterinarians with a quick reference guide to support the responsible use of medications."

THE OFFICE OF THE REGISTRAR,  
COLLEGE OF VETERINARIANS OF BC

## THERAPEUTIC DECISION CASCADE FOR ANIMAL AND PUBLIC SAFETY

To support responsible use of medications<sup>1</sup>, giving due consideration to both animal and public health, veterinarians should follow the Decision Cascade when prescribing medications for their patients.  
Choose the first available level on the cascade below:

**Approved Veterinary Drug - DIN**  
(Label Instructions)

**Approved Veterinary Drug - DIN**  
(Extra Label Drug Use - ELDU)

**Approved Human Drug - DIN**  
(ELDU)

**Compounded Product\*:**  
from Approved Veterinary Drug - DIN (ELDU)

**Compounded Product\*:**  
from Approved Human Drug - DIN (ELDU)

**Compounded Product\*:**  
from Active Pharmaceutical Ingredient - API (ELDU<sup>2</sup>)

\* Foreign approved veterinary drugs obtained through Health Canada's special authorization scheme may be an alternative option available to veterinarians when considering the use of a compounded drug.  
<sup>1</sup> ELDU does not apply to pesticides and biologicals (vaccines).  
<sup>2</sup> ELDU is not permissible in livestock feeds without a veterinary prescription. ELDU is not recommended by Health Canada with drugs/classes of Very High Importance in human medicine which are listed as Category I Antimicrobials.



## THE APPROPRIATE USE OF COMPOUNDED PRODUCTS

Compounding is both **necessary and beneficial** for the treatment of veterinary patients. However, a **potential exists** for **causing harm to animals and to consumers** when compounded drugs are used. This includes the potential for **treatment failures, adverse reactions and death as well as for the risks associated with the development of antimicrobial resistance in bacteria of both animal and public health concern**. Compounded products are not subject to the same efficacy, safety, and quality assurance testing that licensed products are.

### GENERAL GUIDANCE:

Compounding of products for the treatment of an **individual** patient/herd or flock should be used only for **therapeutic** purposes and only when there are **no other commercially available options** for that specific patient/herd or flock.

It is **necessary** to obtain **informed consent** from the client before prescribing a compounded product. The client must be aware of the **potential risks** and available alternative treatments.

Health Canada strongly recommends against extra-label use of Category I Antimicrobials in mass-medication situations.

Practitioners should reference the Canadian Veterinary Medical Association Guidelines for the Legitimate Use of Compounded Drugs in Veterinary Practice.

### IMPORTANT POINTS TO CONSIDER:

**Compounded drugs are not generic drugs.** Generic drugs are second or subsequent entries to the Canadian market once a patent has expired on the initial drug marketed. Generic products undergo pre-market assessment by Health Canada to **ensure bioequivalence** and then are subject to all post licensing **quality assurance testing standards** as with all licensed pharmaceuticals.

**Compounded drugs** are a result of the **combining or mixing together of two or more ingredients** (of which at least one is a drug or pharmacologically active component) to create a **final product** in an **appropriate form for dosing**. It can involve the use of raw chemicals or the alteration of the form and strength of commercially available products. It can include reformulation to allow for a novel drug delivery. Compounding does not include mixing, reconstituting, or any other manipulation that is performed in accordance with the directions for use on an approved drug's labeling material.

**Prescribing a compounded drug is considered ELDU.** As such, the veterinarian is responsible for the safety and efficacy of the prescribed drug and, when used in food producing animals, for establishing adequate withdrawal times to avoid harmful residues. The Canadian global Food Animal Residue Avoidance Databank (CgFARAD) is **unable to provide withdrawal times for compounded drugs**.

**In the absence of Health Canada regulatory controls, veterinarians** must be aware that, when prescribing a compounded drug, they are **solely responsible for both its potency and purity**, as well as for **all outcomes, including adverse events (which may include lack of effect)**.

Compounding is considered to be legitimate if the product is available but the appropriate method for dosing or dose concentration does not exist and a practical alternative does not exist. **Cost is not a defensible reason for prescribing a compounded drug.**

This document is intended for guidance only; it is not to be used as legal interpretation.

CVMA-SBCV Chapter members can access the Therapeutic Decision Cascade for Animals and Public Safety through the member portal of the CVMA website, [www.canadianveterinarians.net](http://www.canadianveterinarians.net).

The Decision Cascade appears here with the permission of the CVMA.

## COMMITTEE ACTIVITIES

The Animal Welfare Committee recently sent its delegate, committee chair Dr. Rick Stanley, to the 2018 National Animal Welfare Conference. AWC member Dr. Bettina Bobsien also attended (and presented).



The 2018 National Animal Welfare Conference was held April 21 to 24 in Calgary. This is the fifth annual animal welfare conference hosted by Humane Canada (formerly the Canadian Federation of Humane Societies). The name change reflects the organization's mission and vision.

There were daily plenary sessions for all attendees, as well as five concurrent education streams which made choosing sessions just that much tougher than in previous years. Education streams included Applied Animal Welfare Science, Wildlife Welfare, Farm Animal Welfare, Sheltering for Change, Standards Guidelines and Certifications, Animals in Research, Advocacy, Humane Education, Resource Development, Leadership and Change Management, First Nations and Dogs, and Disaster Preparedness.

Dr. Stanley attended the Applied Animal Welfare Science and Wildlife Welfare streams. The Applied Animal Welfare Science was hosted by Dr. David Fraser of the Animal Welfare Program at UBC and was entitled Science Serving Animal Welfare. He outlined the accomplishments in the program's 20-year history, highlighting the many graduates from Canada and many foreign countries. He also said that the [former] BCVMA was one of the foremost contributors to the program. One question from the audience was that if the goal of Animal Rights Activists was to eliminate all use of animals for human food, was the Animal Welfare program for food animals not in conflict with this goal? Dr. Fraser responded that the first book supporting this notion was written in 1984, and since that time the consumption of animal protein has increased every year. This increased consumption supports the study and improvement of animal welfare based on science. Dr. Fraser introduced the concept of One Welfare which recognizes the many connections between animal welfare, human welfare, and the integrity of the environment.

The remainder of the sessions were presented by five graduates of the UBC program. The topics included wildlife rehabilitation, oil spill response, captive wildlife and exotic pets, human-wildlife conflicts,

compassionate conservation, and wildlife cruelty investigations. As well, the speakers also presented research on improving companion animal welfare by understanding fear and aggression in cats and dogs, facilitating multi-stakeholder agreements involving animal care and handling practices such as Codes of Practice for many farm animal species, building an ethical culture of science that reduces and replaces the use of animals in teaching, and research and testing with the use of models and computer simulation that have not only replaced animals but have actually improved education for biology students. It is interesting that drug testing using artificial means often had more relevance to human responses than animal testing did. In fact, what happens with mice and rats may be of no benefit to show how these pharmaceuticals will affect humans. In another experiment, designed to improve the relationship of humans with animals in science, laboratory rats were trained to do tricks such as fetch a ball and pull on a string to get a treat. These activities, when demonstrated to students and animal researchers, resulted in a change of attitude towards the rats which resulted in improved animal handling and welfare.

The Wildlife Welfare session was devoted to the topic of Predator Poisoning and Wolf Culls. The panelists described how wolves are misunderstood and how the use of poisons such as Strychnine, Compound 1080, and Sodium Cyanide for killing is inhumane, in addition to being dangerous to humans and non-target animals. Wolf culling programs have been ineffective in improving wild ungulate (wolf prey) populations, and factors such as habitat loss are truly the reason for population declines in prey species.

The second day of Wildlife Welfare began with educating the public in understanding how pets and wildlife interact in the urban environment to the detriment of both, and how pet owners can become more responsible in improving the well-being and safety of their pets and wildlife.

The second session was presented by Geeta Seshamani, Senior Wildlife Conservationist and Co-Founder of Wildlife SOS. This movement was started as an extension of her helpline for domestic animals in distress in India. The formation of Wildlife SOS resulted in a landmark conservation success to end the brutal dancing bear trade through the rescue of 628 dancing bears. Kartick Satyanarayan described how Wildlife SOS engaged with the families of the men who possessed the bears. In order to improve their lives and incomes, Wildlife SOS taught the women skills, such as sewing, to add to the family income, and funded costs for their children to attend school. The final step was to purchase the bears from the men and help them to start sustainable businesses. Wildlife SOS has expanded its program to include rescue of leopards and two species of bears, as well as elephants. In addition, Wildlife SOS leads community projects to avoid human-primate conflict in expanding cities.

“WOLF CULLING PROGRAMS HAVE BEEN INEFFECTIVE IN IMPROVING WILD UNGULATE (WOLF PREY) POPULATIONS, AND FACTORS SUCH AS HABITAT LOSS ARE TRULY THE REASON FOR POPULATION DECLINES IN PREY SPECIES.”

Two Co-Directors of the Wildlife Rehabilitation Network of BC hosted a session that described how the formation of their network is an attempt at tabulating barriers faced by wildlife rehabilitators. The goal is that through consultation and dialogue, they can improve the methods by which these organizations can deliver services. The last session was presented by Dr. Sara Dubois regarding Trophy Hunting in BC and the recent decision to ban hunting of Grizzly Bears in BC. This law, which is political in nature, received pushback by most hunters but is supported by a majority of citizens in BC. This decision is described as compassionate conservation supported by public opinion versus the existing model of the assessment of animal populations and allowing hunting where populations can be sustained.

Bettina presented the topic Equine RRSP – Retirement, Rescue, Slaughter, and Public Attitudes. The focus of her talk was making responsible choices around an aging equine population, and the plight of horses without responsible caregivers. The presentation generated some interesting discussion and questions. It also opened some doors to potential collaboration between animal welfare agencies and veterinarians to assist with some humane education and services for horses living on reserves. For example, we learned that euthanasia of horses with terminal injuries is frowned upon by elders in some tribes. But cultural differences with respect to animals were cracked wide open at the plenary session the following day entitled The Past, Present and Future of Dogs on Native Reserves, which was a bit of a ground-breaking event.

Josh Littlechild delivered the presentation. Josh is the Tribal Law Officer of the Ermineskin Cree Nation in Alberta. The first half of his presentation was around his community's historical relationship with animals, particularly dogs, and the legends and stories he grew up with that preserve that history. The backdrop of this was a steady stream of photos of members of his band posing with a wide variety of dogs at home, on the ranch, and with children. Josh explained that part of the cultural clash with animal welfare agencies around animal care is rooted in his people's historically nomadic lifestyle, where on average each family group had 20 to 40 dogs. The dogs were viewed as a resource, and used as draft animals, companions, guardians, and a subsistence and ceremonial food source. The use of dogs as a ceremonial food source persists which resulted in audible gasps of dismay in the audience of approximately 400 delegates. Josh was emotional when he described his tribe's connection to dogs, which made the cultural divide at that moment even harder to comprehend. Josh went on to ask that animal welfare agencies should seek permission from band leaders before intervening on or near reserves with regard to “un-owned” dogs. He explained that, in his culture, dogs were as nomadic as his people were, and the transition to “sedentary” life confined to reserves has been a challenge. In his view, confining

a dog to a building, a fence, or a tether flies in the face of the basic nature of the animal. He went on to describe how some dogs on reserve that might be labelled as strays are “owned” by five or six families. On Josh's reserve, they have developed an animal control program which has improved the return rates of dogs that have been apprehended by off-reserve agencies. Josh stressed that bands are highly diverse in both their views and cultural traditions, and that any off-reserve assistance must include communications with band council members to assure their efforts are needed and appropriate.

In closing, Josh addressed the goal of the Truth and Reconciliation movement in bringing Canadians together. In his view, collaborating with native communities in furthering animal welfare on reserves might serve as a gateway to true reconciliation. His parting thought was that the animal welfare bridge might serve as a message to the rest of the world. If we can right historical wrongs in this way, we can show the world what Canadians are really made of. So, animal welfare advocates, can you take up the challenge to do this work, when the conversation started with the consumption of dog meat? In the words of Barack Obama, “Yes, we can,” if we are truly ready to respect each other's cultural norms.

The conference next year is in Montreal, returning to Vancouver in 2020. If you have expertise in an area of animal welfare or animal welfare projects, we encourage you to submit an abstract. If not, try to attend. We guarantee you will learn something surprising, new, and possibly inspirational. We also need to ensure veterinary engagement continues in the animal welfare movement. [WCV](#)



Dr. Rick Stanley, CVMA-SBCV Chapter member and chair of the AWC, and his German Shepherd.



CVMA-SBCV Chapter member and AWC member Dr. Bettina Bobsien presenting at the 2018 National Animal Welfare Conference.

PHOTOS COURTESY OF HUMANE CANADA / [HTTPS://CONFERENCE.HUMANECANADA.CA/NAWC\\_2018](https://conference.humanecanada.ca/NAWC_2018), PHOTOS AND DR. RICK STANLEY

## OBSOLETE PESTICIDE COLLECTION

The obsolete pesticide and livestock medication disposal program that was delivered in the Vancouver Island and Fraser Valley regions of the province from October 3–19, 2017 at six participating ag-retail and municipal locations was a huge success, with 22,832 kg of agricultural pesticide and 1,469.5 kg of livestock medications being collected and safely disposed of via high-temperature incineration. Since the program was first delivered in 1999 as part of the crop protection industry's commitment to product stewardship, over 354 tons of obsolete pesticide has been collected in BC during collections in 1999–2000, 2002, 2005–07, 2009, 2011–12, 2014–15, and 2017, all at no cost to program participants. Collections are projected in the Okanagan, Kootenay, and Interior regions in fall 2018, the Peace region in 2019, and Vancouver Island and Fraser Valley again in 2020.

## CUBA'S HORSES

The horses in Cuba primarily work for a living, pulling a cart or a carriage. Without their horses, many Cubans would not be able to make a living or feed their families. Unfortunately, outside of the main tourist locales, these hard-working equines frequently suffer from any—or perhaps all—of a variety of ailments and health concerns: malnutrition, parasitism, inadequate farriery, and ill-fitting tack and harnesses. Any one of these issues would render a working horse's day-to-day life a misery.

If you're planning a vacation to Cuba, you can help. Clean out your tack room, then fill an old or second-hand suitcase. Some airlines allow travelers to take one extra (free) piece of luggage when the contents are for humanitarian aid? Your gently used tack qualifies. Check out Cuba's Horses for more information and to see their wish list of especially needed supplies.

If you have questions about other equine-related items or are willing to take veterinary medical supplies, please contact Dr. Bettina Bobsien at [bettinadv@gmail.com](mailto:bettinadv@gmail.com).

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#### COMPANION ANIMAL

Cannabis and Companion Animals, Endocrinology (diagnostics and therapeutic problems), Critical Care, Dermatology, Cardiology

#### VETERINARY TEAM

Hospice and Palliative Care, Effective Recommendations Exam Room Barriers Communicating Costs, Social Media and Online Presence

#### EQUINE

Topics: Antimicrobial/Infection Therapy, Emergencies, Dermatology

#### VETERINARY TECHNOLOGIST

Critical Care Nursing – What To Do in The First Five Minutes, Respiratory Emergencies, Transfusion Medicine; Large Animal Medicine for Technologist

#### FOOD ANIMAL

Pharmacology, The Business of Food Animal, Practical Medicine Tips for Practitioners

#### OTHER EVENTS

ABVMA/UCVM Wetlabs, ABVTA Pre-Conference CE session and AGM, Keynote Lunch Presentation

FULL PROGRAM AND ONLINE REGISTRATION – JULY 2018  
[WWW.CANWESTCONFERENCE.CA](http://WWW.CANWESTCONFERENCE.CA)

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JUNE		SEPTEMBER			
19 – 21	<b>UCVM Beef Cattle Conference</b> Calgary, AB <a href="http://vet.ucalgary.ca/thesummit/?utm_source=vet.ucalgary.ca/beef&amp;utm_medium=redirect&amp;utm_campaign=redirect">http://vet.ucalgary.ca/thesummit/?utm_source=vet.ucalgary.ca/beef&amp;utm_medium=redirect&amp;utm_campaign=redirect</a>	25 – 28	<b>43rd World Small Animal Veterinary Congress and 9th FASAVA Congress</b> Singapore <a href="https://wsava2018.com/">https://wsava2018.com/</a>		
22 – 23	<b>Ophthalmology in General Practice</b> Vancouver, BC <a href="http://www.ivseminars.com/seminars/registration/ophthalmology_in_general_practice-vancouver">www.ivseminars.com/seminars/registration/ophthalmology_in_general_practice-vancouver</a>	26 – 29	<b>2018 Canadian Embryo Transfer Association and American Embryo Transfer Association Joint Scientific Convention</b> Montreal, PQ <a href="http://www.ceta.ca/convention.html">www.ceta.ca/convention.html</a>		
26 – 27	<b>7th International Conference on Diseases in Nature Communicable to Man</b> Saskatoon, SK <a href="http://homepage.usask.ca/~vim458/incndcm2018/incndcm2018.html">http://homepage.usask.ca/~vim458/incndcm2018/incndcm2018.html</a>	OCTOBER			
<th colspan="2">JULY</th>		JULY		22 – 23	<b>2018 Delta Equine Seminar</b> Delta, BC Equine Dentistry Beyond Floating Teeth, with Dr. Jack Easley; Equine Ophthalmology on the Farm & Practice Management for the Mobile Practitioner with Dr. Ann Dwyer. The seminar will be held at the Coast Tsawwassen Inn, Delta, BC. Lunches each day and a seafood buffet dinner on Monday October 22 are included. Early registration closes October 1, 2018. <a href="http://www.deltaequineseminar.com">www.deltaequineseminar.com</a>
5 – 8	<b>CVMA Convention</b> Vancouver, BC <a href="http://www.canadianveterinarians.net/science-knowledge/annual-convention">www.canadianveterinarians.net/science-knowledge/annual-convention</a>	NOVEMBER			
<th colspan="2">AUGUST</th>		AUGUST		2 – 4	<b>2018 CVMA-SBCV Chapter Fall Conference and Trade Show</b> Vancouver BC Dr. Marty Becker and Fear Free™ The Fall Conference features sessions in Cardiology, sponsored by VetStrategy; Kidney Disease, sponsored by IDEXX Canada; Ophthalmology, sponsored by VCA Animal Hospitals; and Pathology, sponsored by WCVMA. The Trade Show Reception is sponsored by NVA. Tickets on sale July 2018. <a href="http://www.canadianveterinarians.net/sbcv/events.aspx">www.canadianveterinarians.net/sbcv/events.aspx</a>
7 – 9	<b>Vet Vacation CE</b> Vancouver, BC <a href="http://veterinarycalendar.dvm360.com/vet-vacation-ce-vancouver-canada">http://veterinarycalendar.dvm360.com/vet-vacation-ce-vancouver-canada</a>				
10 – 11	<b>Managing the Trauma Patient</b> Seattle, WA <a href="http://www.ivseminars.com/seminars/description/managing_the_trauma_patient-seattle">www.ivseminars.com/seminars/description/managing_the_trauma_patient-seattle</a>				

## AS REPORTED IN THE MEDIA

### BRITISH COLUMBIA FISH FARMING AND ANTIBIOTICS

<https://seawestnews.com/british-columbia-fish-farming-and-antibiotics/>

### DEADLY RABBIT VIRUS IN DELTA FORCES RESCUE GROUP TO RELOCATE 100 ANIMALS

<http://vancouver.sun.com/news/local-news/deadly-rabbit-virus-in-delta-forces-rescue-group-to-relocate-100-animals>

### BC ISSUES WARNING TO PET RABBIT OWNERS AS VIRUS SPREADS TO LOWER MAINLAND

<http://www.cbc.ca/news/canada/british-columbia/b-c-issues-warning-to-pet-rabbit-owners-as-virus-spreads-to-lower-mainland-1.4587233>

### VETERINARIAN WARNS PET OWNERS AFTER DOG NEARLY EATS RAT POISON IN OAK BAY

<https://vancouverisland.ctvnews.ca/veterinarian-warns-pet-owners-after-dog-nearly-eats-rat-poison-in-oak-bay-1.3865750>

### BC ZOO QUARANTINES RABBITS TO PROTECT THEM FROM DEADLY DISEASE

<https://www.theglobeandmail.com/canada/article-bc-zoo-quarantines-rabbits-to-protect-them-from-deadly-disease/>

### REGINA VET WORRIES MORE PETS WILL INGEST LEGAL MARIJUANA

<http://leaderpost.com/news/local-news/regina-vet-worries-more-pets-will-ingest-legal-marijuana>

### TICK SEASON IS UPON US

<https://www.insidehalton.com/opinion-story/8369177-tick-season-is-upon-us/>

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Dr. Jacqueline Pearce is a BC native and an accomplished veterinary ophthalmologist who has practiced extensively in Missouri, Illinois, North Carolina and Kansas before joining our team. Dr. Pearce enjoys seeing exotics in addition to dogs and cats. Her areas of interest include medical treatment of inflammatory ocular diseases, medical management and surgical repair of corneal injuries, intraocular surgery and blepharoplasty. Dr. Pearce is also the first veterinary ophthalmologist in British Columbia to offer endolaser surgery for the treatment of glaucoma in pets.

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