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SUMMIT VETERINARY

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PHARMACY INC

from the editor



COREY VAN'T HAAFF

y relationship with veterinarians and veterinary medicine is long. I grew up with dogs and, at the very least, there were always annual visits for vaccinations. Somewhere in adulthood, I stumbled upon a career as a journalist. I had more dogs and a vet whom I relied on for advice on everything from health issues to breed selection as I expanded my dog family. Then, in the 1990s, the provincial government appointed me to the governing body of the BCVMA—what is now the College. My job was to represent the public interest in all things veterinary.

I completed six years on Council, followed by another six on the Inquiry Committee. In that time, I gained and lost dogs, and learned more about both veterinary medicine and veterinarians than I ever imagined existed. And when I left my work with the BCVMA, it was with a heavy heart. I am a huge fan of veterinarians and count myself fortunate that I have been able to meet so many and serve the profession in an interesting and unique way.

So it was a special event when I was invited to become the editor of West Coast Veterinarian. I had been writing about business and human medicine, along with regular features in Modern Dog Magazine, and I was excited about working again with veterinarians. I was even more thrilled to bring my entire team with me to this publication: Paula Grasdal as art director and designer, Clélie Rich as copy editor, Inga Liimatta in ad sales, and Westwood Printing as printer and mailing house.

I am committed to making this magazine the best representation of BC veterinarians. It is your voice, your content, your vehicle to communicate with each other and with colleagues across Canada. Please contact me at **wcveditor@gmail.com** with any ideas, comments, criticisms, or commendations; all are welcome.



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WCV MARCH 2012

WCV CONTRIBUTORS



SARAH ARMSTRONG, DVM, graduated from OVC in 2007. During vet school she was a member of the student initiative Global Vets and travelled to East Africa. Following graduation she worked full time in general practice and worked part time at a local emergency practice in Southern Ontario before moving permanently to Vancouver, BC, where she currently works at the Vancouver Animal Emergency Clinic. Sarah is also on the CVMA-SBCV Chapter Board of Directors.



DAVE HUFF, DVM, is now retired. He founded the Huff Animal Hospital in Tsawwassen, and was the high profile veterinarian for the Vancouver Aquarium during his practice years. He is a past president of the BCVMA.

KATH KLASSEN, DVM, graduated from WCVM in 1985 and has been with the Vancouver Animal Emergency Clinic (VAEC) since 1989. In 2007, Kath's responsibilities transferred from emergency medicine to the transfusion medicine team, Vancouver Animal Blood Services.



DARREN OSBORNE, MA, is the Director of Economic Research with OVMA and has been involved with fee surveys and economic research of Canadian veterinary practices for 20 years. Darren works with the CVMA Business Management Program to prepare the annual Recommended Fee Guides for each province.



KATHRYN WELSMAN, DVM, graduated from OVC in 2007 and practiced emergency medicine in the Lower Mainland until recently moving to Clinton, BC, where she works as a locum while taking advantage of the beautiful location for outdoor activities.

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WEST COAST VETERINARIAN ISSUE 5/6

West Coast Veterinarian is the quarterly magazine of CVMA-SBCV Chapter

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VETERINARIAN



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cvma president's report

SERVING THE NEEDS OF BC VETERINARIANS

BY LLOYD KEDDIE, DVM

his affiliation between the CVMA and SBCV to create the CVMA-SBCV Chapter has allowed for the delivery of the best possible value to veterinarians in the province of British Columbia. With over 450 members in 2011, the CVMA-SBCV Chapter enhances the provision of both national and provincial services in the most cost-effective way, increases the group purchasing power of our members in BC, and avoids overlaps and redundancy in the offer of services.

At the national level, here are just a few initiatives the CVMA has been working on for you lately:

REGISTRATION IS OPEN FOR THE CVMA'S 64TH ANNUAL CONVENTION BEING HELD IN MONTRÉAL, QUÉBEC, FROM JULY 11 TO 14, 2012. Learn à la Montréal! as you choose from three days of small animal topics with three concurrent streams; three days of equine and bovine topics; one day of Animal Welfare, Integrative Medicine, and Small Ruminants. Attend the Summit of Veterinary Leaders on July 11 with this year's theme, Member Wellness—the Art of Maintaining Your Sanity. Participate in a dry lab, visit the exhibit area, enjoy exciting social events, and re-unite with former colleagues and friends. While you're in town, experience the joie de vivre that is Montréal. To register online, go to www.canadianveterinarians.net and click the 64th CVMA Convention graphic on the bottom right side of our homepage. Questions? Contact Sarah Cunningham, Assistant, Conventions & Special Programs, at scunningham@cvma-acmv.org or 1.800.567.2862, ext. 121. And mark your calendars for the 65th CVMA Convention! This national event will be held in Victoria, British Columbia, from July 10 to 13, 2013, at the beautiful Fairmont Empress Hotel and the Victoria Conference Centre. It will be jointly hosted by the CVMA and the CVMA-SBCV Chapter.

CARE FOR CATS HAS DECLARED MAY AS THE 'PURRFECT' MONTH TO RAISE AWARENESS ABOUT THE MOST POPULAR PET—THE CAT. The focus this year is preventive healthcare as studies have shown there has been a decrease in the number of visits to veterinarians by cat owners over the last 10 years, and, at the same time, the overall health of our cat population has declined. Throughout the month of May and for the rest of the year, a number of resources will be available for download through www.careforcats.ca to help educate everyone in the community. Care for Cats has a long-term goal to increase the value of owned, homeless, and feral cats in Canadian communities and, in doing so, to address the issue of cat overpopulation in Canada. With veterinarians, municipal animal services, animal welfare, and pet industries across Canada working together, Care for Cats will help improve the overall health of cat populations, address concerns about the feral cat population, and reduce the number of

adoptable cats that are euthanized. The CVMA, as the communications lead, has developed a variety of tactics to help increase the scope of the project and to support the industry and in particular the animal wellness sector.

THE 2012 BRITISH COLUMBIA SUGGESTED FEE GUIDE HAS BEEN RELEASED BY THE CVMA BUSINESS MANAGEMENT PROGRAM.

The provincial suggested fee guides are only one of several valuable tools that the CVMA provides to help you manage your practice. Members can download a copy of the 2012 British Columbia Suggested Fee Guide by visiting the National Veterinary Economic Hub at www.canadianveterinarians.net.

THE CVMA EMERGING LEADERS PROGRAM WILL BE HELD THIS YEAR ON WEDNESDAY, JULY 11, DURING THE 64TH CVMA CON-

VENTION. The program, called Leadership: The Secret Ingredient for Good to Great... for your Practice and our Profession!, will be led by Dr. Rick DeBowes, co-founder of the American Veterinary Medical Association Veterinary Leadership Experience. It is a unique, interactive workshop aimed at supporting and developing leadership skills within Canadian veterinarians and promoting a Canadian leadership network within the profession. In addition to the 20 participants who will be selected by the provincial VMAs (two participants per province), this year's program will also be open to a limited number of paid participants. Interested candidates who have graduated within the last 10 years can apply. To be considered for a full sponsorship (this includes travel to Montreal, accommodation, and participation in the program), please send in an essay of up to 500 words describing the types of leadership positions you currently find yourself in and how you envision yourself to be a more effective leader after participating in this one-day, action-packed, dynamic session. Please send your application to the CVMA-SBCV Chapter at CVMA-SBCV@cvma-acmv.org. For additional information on the program and the application process for paid participants, contact the Project Coordinator at the CVMA. Oliver Hoffmann, at ohoffmann@cvma-acmv.org.

AS PART OF YOUR CVMA NATIONAL MEMBERSHIP BENEFITS, CV-MA-SBCV CHAPTER MEMBERS CAN NOW TAKE ADVANTAGE OF

CAR RENTAL AND HOTEL DISCOUNTS. Members can now obtain exclusive car rental discounts and benefits through National Car Rental and Enterprise Rent-A-Car. As well, CVMA can help you save money with your next hotel booking anywhere around the world. Whether you are travelling for business or pleasure, you can save as much as 50% and take advantage of below-market rates averaging between 5–20% better than other popular online hotel booking services. To take advantage of these two discount programs, log into the CVMA website using your personal CVMA ID or password and go to the Membership Benefits & Services section.

THE THEME FOR THIS YEAR'S WORLD VETERINARY DAY ON APRIL 28, 2012 IS ANTIMICROBIAL RESISTANCE. The rapid

emergence and spread of antimicrobial resistance is a major threat to current and future antimicrobial drug use. Antimicrobial resistance in agriculture and veterinary medicine impacts animal welfare, public health, food safety, and environmental health. Antimicrobial stewardship encompasses the multiple approaches required to ensure the long-term sustainability of antimicrobial therapy. The CVMA was a member of the organizing committee for the Antimicrobial Stewardship in Canadian Agriculture and Veterinary Medicine Conference held in the fall of 2011. The goal of the conference was to identify the obstacles to good stewardship and to shed light on what needs to change. As a result of the conference, the CVMA became a member of an Ad Hoc Antimicrobial Stewardship Committee. The committee met in February 2012 for the first time to begin discussions on action items coming from the Stewardship Conference. These items include proposed changes to veterinary drug regulations relating to 'own use importation' (OUI) and active pharmaceutical ingredients (API). The CVMA recognizes the public health implications of antimicrobial use in veterinary medicine and takes the responsibility of protecting both animal and human health and welfare very seriously.

MARK YOUR CALENDAR FOR ANIMAL HEALTH WEEK FROM SEPTEMBER 30 TO OCTOBER 6, 2012, AND GET READY FOR AN OPPORTUNITY TO EDUCATE CLIENTS ON THE IMPORTANCE OF PREVENTIVE VETERINARY CARE. Animal Health Week is an annual national public awareness campaign organized by the CVMA to help veterinarians and veterinary clinics promote animal health and wellness and responsible pet ownership. A number of promotional tools, information, and merchandise items will be available to assist you with your promotion activities in your community. Look for more information coming soon about the 2012 Animal Health Week Campaign.

We look forward to corresponding with our CVMA-SBCV Chapter members in the months ahead. Your feedback is extremely valuable to us. If you have an inquiry or a comment to share, please contact the CVMA office at admin@cvma-acmv.org or 1.800.567.2862. Our Member Services Department will gladly assist you.



Lloyd Keddie, DVM, has been part of the veterinary profession for over 37 years. He has found working within the context of the powerful human/animal bond very gratifying, and the sense of fulfillment he experiences as a result of a dynamic and challenging career as a mixed animal practitioner is immeasurable.

cvma-sbcv chapter president's report

BY MARCO VEENIS, DVM

have just returned from Edmonton where
I attended the Alberta VMA AGM on behalf
of the CVMA-Society of BC Veterinarians
Chapter. While there I was thinking about
why they seem to have less problems in
their profession than we do.

It was not until a proposal was brought

It was not until a proposal was brought forward directing Council to find ways of supporting members facing disciplinary complaints that it dawned on me. The proposal stirred a lively debate, but passed with a clear majority. There was an overwhelming feeling that, even though a member might have broken the rules, this person is still a respected member of the veterinary community and deserves the support of his or her peers. Whether or not it is feasible to implement such a program given all the possible legal concerns is a discussion for another day, but the fact that they are ready to reach out and help shows a deep respect and concern for their colleagues.

In our province some of this mutual respect and support has suffered over the last years. Our profession has been in turmoil, and many are disenchanted with organized veterinary medicine in our province. Although our Society has no part in past events, we do suffer the consequences. The current CVBC is limited to a regulatory role, so it is not their task to reunite the veterinarians in British Columbia and make them feel proud again that they belong to a profession that the public looks up to. That is our job; we are the Society for British Columbia's veterinarians.

In order for our Society to be successful we all need to do our share. I know some of you dread the idea of joining a committee, going to meetings, or sitting on a board. The beauty is that you do not need to. You can start small, in your own clinic, at the gym, in church, or when you pick the kids up at daycare. No matter where you are or what you do, you can be an advocate for our profession through your actions and demeanour. Veterinarians are members of one of the most trusted professions, and we need to keep it that way. Show the public you are worthy of that trust through your actions in your daily life. You can organize that field trip for the kids,

help clean up your neighbourhood park, or start your local Pets and People group. Call your local competitor and ask her or him out for lunch. Share your success stories and epic failures, and you will see that you have more in common than you thought possible. Most important of all, join your Society so that together we can build a brighter future for all veterinarians in the best place in this world.



Marco Veenis, DVM, graduated with distinction from Utrecht University in the Netherlands and practiced in Holland for nine years before moving to Canada in 1998. For the past 10 years he has

raised his family and run a successful small animal clinic in Kelowna. Marco enjoys the daily challenges that practice presents him with and is proud to be a member of BC's veterinary community. As an immigrant and newly minted Canadian, he is grateful for the opportunities Canada has offered him and likes give back to his community by volunteering his time for organizations like the CVMA-SBCV Chapter.

The Board of the CVMA-SBCV Chapter is aware of recent media attention on the subject of cosmetic surgery on animals. We are actively monitoring this situation and working to provide members with accurate and current information as soon as it becomes available.

The CVMA position on cosmetic surgery is that it opposes surgical alteration of any animal, for purely cosmetic purposes.

The CVMA believes that cosmetic surgery is unnecessary. Surgical alterations in cases of injury or for reasons of health are not considered cosmetic. Examples of cosmetic procedures include tail docking in the equine, bovine, or canine species; tail nicking/setting in the equine species; ear cropping in the canine species; onychectomy in any species other than the domestic cat.

The CVMA recommends that breed associations change their breed standards so that cosmetic procedures are not required.

veterinary continuing education

April 28-29, 2012

ULTRASOUND & TIBIAL TUBEROSITY ADVANCEMENT WORKSHOPS Victoria, BC www.vetnovations.com

June 5-7, 2012

THIRD INTERNATIONAL SYMPOSIUM ON BEEF CATTLE WELFARE Saskatoon, SK www.beefwelfare2012.ca.

June 22-23, 2012

FELINE TOPICS—WHAT'S NEW? Vancouver, BC www.ivseminars.com

Hosted by International Veterinary Seminars

July 11-14, 2012

CVMA CONFERENCE Montreal, QC www.canadianveterinarians.net

Join your colleagues from across Canada in fabulous Montreal this summer. A top notch scientific program with best medicine practices and timely topics and lots to do for the whole family—including the famous Just for Laughs Comedy Festival. The conference brochure including the full scientific program and registration information is available on the CVMA website.

July 24-28th, 2012

7TH WORLD CONGRESS OF VETERINARY DERMATOLOGY Vancouver, BC www.vetdermvancouver.com

The WCVD is returning to North America for the first time since 2000, and the meeting will offer state of the art research, supporting studies, and workshops as well as continuing education tracks for practitioners.

September 20-22, 2012

SASKATCHEWAN VMA ANNUAL CONFERENCE Saskatoon, SK www.svma.sk.ca

September 20-22, 2012

AMERICAN ASSOCIATION OF BOVINE PRACTITIONERS 45TH ANNUAL CONFERENCE Montreal, QC www.aabp.org

October 14-16, 2012

CANWEST VETERINARY CONFERENCE Banff, AB www.canwestconference.ca Hosted by the Alberta Veterinary Medical Association

October 22-23, 2012

41ST ANNUAL DELTA EQUINE SEMINAR Vancouver, BC

The most popular equine seminar in the Pacific Northwest returns to Vancouver in late October. Speaker information to be announced shortly.

November 3-4, 2012

CVMA-SOCIETY OF BC VETERINARIANS CHAPTER FALL CONFERENCE

Sheraton Vancouver Guildford Hotel, Surrey, BC www.canadianveterinarians.net

The 2nd CVMA-Society of BC Veterinarians Chapter Fall Conference will be bringing you top quality continuing education, close to home. Check the website for program and registration information.

December 1-5, 2012

AMERICAN ASSOCIATION OF EQUINE PRACTITIONERS 58TH ANNUAL CONFERENCE Anaheim, CA www.aaep.org

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INTERESTED IN A BEHAVIOURAL SEMINAR IN BELIZE? Or a dermatology conference in Dusseldorf? You can find information on veterinary continuing education events around the world at www.vetagenda.com.

SPOTLIGHT ON CONTINUING EDUCATION COMMITTEE

BY JOHN BASTERFIELD, DVM

y first order of business as Chair of the Continuing Education Committee is to explain the cancellation of the 2012 Midwinter Ski Meeting at Silver Star. As much as this conference has become a tradition over the years, registration numbers for this year's event were at a record low with less than a dozen people registered. The Directors had to make the hard decision to cancel the meeting to prevent a significant loss of money for the Society. Until our numbers have grown significantly, the Society will not be able to speculate on financial success, nor can it ask the sponsors to continue to support us if there is poor turnout to an event. The 2011 Golf Tournament experienced a similar lack of interest and demonstrated to us that the programs offered in the past, at venues offered in the past, and with themes offered in the past may no longer be of interest to our members. Other reasons may include a general fatigue with matters related to the BCVMA, or perhaps the economy. We could speculate on the reasons, but the reality is we can't afford the risk if our members don't support a program. We apologize to those who had registered for the Ski Meeting and who would have enjoyed the CE and the recreation that accompanied it.

TELL US WHAT YOU WANT. WHAT YOU REALLY REALLY WANT...

The demographic of veterinarians has changed significantly over the past decade, and so have technologies for learning. There are many part-time DVMs now who have chosen a greater degree of balance in their lives outside of the profession. Continuing education now takes place in front of a computer monitor, using resources like VIN. There is a greater use of referral services for difficult cases.

However, there are members who still enjoy the meetings and conferences where we can see familiar faces, and catch up with classmates and colleagues and enjoy the support and information provided by drug companies and suppliers.

The mandate of the CE committee is to establish for you an exciting program of CE that will be cutting edge, relevant, and foster greater skills for the participants to take back to practice. We would like to build a strong relationship with members based on openness and accountability for the programs we will provide. This is your Society, you chose to support it, and we are here to support you.

The Fall Conference held in Surrey in November 2011 was very well attended and provided a great kick start to what we will be providing this year and in years to come. What we need now are suggestions from you, our members, for the type of content you want, and ideas for venues to consider. Your CE committee is open to suggestions for venues that may appeal to today's veterinarian.

JOIN US

We are looking for a large animal practitioner to join our committee to assist in providing a relevant, dynamic program for Food Animal and Equine medicine and surgery. If you are interested in spending a little time enriching yourself and others, please step forward by contacting the office at cvma-sbcv@cvma-acmv.org or 250.652.6384.

USE THE DISCUSSION FORUM TO SHARE IDEAS

The Discussion Forum on the CVMA-SBCV Chapter website is a tool available to all members, and I am hoping that it will become an active forum for matters veterinary and beyond for our members. Prior to joining with the CVMA our previous forum was actively receiving ideas and was being moderated by Dr. Marco Veenis. I would like to thank Marco for his massive effort during that initial experience with the forum. The discussion forum we have now is accessed by going to the CVMA website, clicking on the CVMA-SVBC Chapter box (http://canadianveterinarians.net/ sbcv-forum.aspx), signing in, and going to the Discussion Forum link located on the right side of the page. Once on the Forum page you will be able to click on the CE discussion and help us toss some ideas around. Bookmark or save the page in Favorites for easier future access. Or you can email us and tell us what you think.

We are your Committee; we need your ideas and support to make this a great year. So think about it, discuss it with colleagues and be part of the success of the CVMA-SBCV Chapter.

John Basterfield (Chair) jbasterfield@shaw.ca Tatjana Mirkovic Barrie Hume Michael Hannigan



John Basterfield, DVM, has practiced in Greater Victoria since 1980; initially in mixed practice and now solely in small animal medicine and surgery as a partner at the Juan de Fuca Veterinary Clinic.

COMMITTEE NEWS

COMMITTEE WORK GETS UNDERWAY

The Society is beginning the work of developing a committee structure so that we will be able to respond to the needs and interests of BC veterinarians. Many members volunteered at the Fall Conference, but there is still an opportunity for more of you to be involved. We invite you to join us and help shape the future of the CVMA-SBCV Chapter. George Guernsey, DVM, is coordinating the committee setup. You can reach him by email at guernseyvet@ shaw.ca, or leave your contact information with the Society office, cvma-sbcv@cvma-acmv.org or 250.652.6384.

Your participation is welcome on any of the following CVMA-SBCV Chapter committees:

CONTINUING EDUCATION COMMITTEE

Currently working on getting member input for continuing education preferences and conference locations.

John Basterfield, DVM, **Chair**; Barrie Hume, DVM; Tatjana Mirkovic, DVM; Michael Hannigan, DVM, **Board Liaison**.

ECONOMIC SURVEY COMMITTEE

Works with the CVMA Economic Survey staff to provide input and feedback on the annual British Columbia Economic Survey.

Dan Thompson, DVM, Chair; Rob Ashburner, DVM, Board Liaison.

FINANCE COMMITTEE

Provides input on the budget and oversees financial planning for the Chapter.

Rob Ashburner, DVM, Chair.

GOVERNMENT RELATIONS COMMITTEE

Monitors and responds to provincial government issues that may affect veterinarians and veterinary practice in the province.

Dave Kirby, DVM, **Chair**; John Cruickshank, DVM; Rob Ashburner, DVM, **Board Liaison**.

MAGAZINE EDITORIAL COMMITTEE

Provides input, story ideas, content, and general direction for West Coast Veterinarian, the Chapter's quarterly publication.

Sarah Armstrong, DVM, **Chair** and **Board Liaison**; Kathryn Welsman, DVM.

MEMBERSHIP COMMITTEE

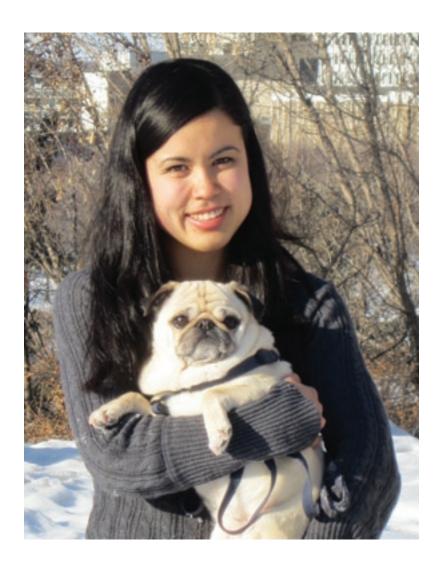
Works on plans and initiatives to promote membership in the Chapter. Sue McTaggart, DVM, **Chair**; Rick Stanley, DVM, **Board Liaison**.

STUDENT LIAISON COMMITTEE

Sarah Armstrong, DVM, Chair; Kailee Price, Student.

student corner

Each issue, WCV
presents a profile of
a veterinary student.
This issue, please
meet KAILEE PRICE
who is attending the
Western College of
Veterinary Medicine,
and who writes here
about student life.



eterinary school! I still find it hard to believe I am here. However, I find it equally hard to believe that less than a year ago I had never heard of an omotransversarius, had no clue what the anion gap could tell you, and would definitely not be able to identify a horse eosinophil. And after spending so much time with them, it is hard to believe that the friends I have made here are not people I have known my whole life.

Coming from Vancouver and not knowing a single person living in Saskatoon, I felt like I had pretty much moved to another world when I arrived here in August. I will admit that I had never heard of a block heater and realized I had been taking

the Lower Mainland's curbside recycling programs for granted. While I miss seeing mountains, it is definitely nice to bike to school on completely flat roads, and even if I have to wear ski goggles and use studded bike tires for my commute, it is a nice trade-off to not arrive soaking wet with rain. I still wake up every morning completely shocked that it is not pouring rain outside!

My experience at the WCVM has been wonderful so far. The classes have been very interesting, and the schedule is well organized with midterms spread out over the term and Wednesday afternoons off. But the best part is going to school with a group of like-minded people sharing similar passions and experiences. It makes studying fun when you make it into 'Anatomy Parties' with classmates' pets running around your apartment and way too much delicious food (we do actually accomplish plenty of studying too somehow). And on Thursdays, it's great to relax at Wings Night at the local pub with a group of classmates and discuss whether you should order the dill pickle or honey garlic wings before playing a game of pool.

The camaraderie between the different year vet students is also terrific. For our first couple of midterms, the second-year class provided us with a table full of fruit, doughnuts, cookies, and an assortment of other baked goods to enjoy before or after our exam. I've been on intramural sports teams with the second years and have even joined a hockey pool with a bunch of the third years. And who could forget Happy Hour!? Each vet class takes a turn at providing food and selling drinks one evening for everyone in the vet college, with lots of music, mingling, and most importantly—skits! It is great watching all the hilarious skits that vet students come up with involving comparisons between vet med and other professions, impossibly crazy fictional classmates, various professors playing games or chasing giant poster board-sized bacteria around the library, or vet students dancing, running, and singing around the vet building.

Probably one of the biggest challenges has just been getting used to sitting in class all day trying to take notes and learn things from every class, let alone just trying to stay awake. There is a lot of sitting involved in the same classroom in the same seat. And with frequent lunchtime talks, hopefully with pizza or sandwiches, various club activities before or after school, and no shortage of study material, it is definitely quite a hectic schedule. We all wonder what exactly we did with all our free time in undergrad!

One of my favourite experiences so far was carrying on the WCVM tradition of going Christmas carolling at some of our professors' houses . Our class got on a school bus and drove off into the country—and ended up pulling into the wrong person's driveway! What a shock for that poor man when he saw 40 vet students on his doorstep one wintery night! Luckily we found our actual destination soon enough and had a great time eating delicious goodies and singing Christmas carols accompanied by a harp, violin, and triangle.

Veterinary school has definitely been quite the adventure so far, and I am really looking forward to the next three and a half years here. I am also excited to have taken on the position of Student Liaison for the Society of BC Veterinarians and am looking forward to providing a connection between this organization and the students at the Western College of Veterinary Medicine.

Kailee Price is a first-year WCVM student from Surrey, BC. She is also the CVMA-SBCV Chapter's first student liaison. Her role will be to communicate the Chapter's vision and current news/events to our BC veterinary students at WCVM, and she will also be distributing our magazine to these students.



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RULE IS NOW ACKNOWLEDGED TO HAVE BEEN **BASED MORE ON** FAITH THAN DATA

THE TRANSFUSION TRICGER

BY KATH KLASSEN, DVM

WHAT IS IT?

In veterinary medicine, we often follow an algorithm that specifies the institution of a given therapy at a specific threshold. We follow a DKA protocol that dictates the levels of glucose and or insulin to be infused at a given blood glucose level; we titrate the amount of various electrolytes we add to IV fluids according to the patient's blood level. However, when you try to pin down the origin of some of these rules, they turn out to be dogma, veterinary lore that has been repeated so many times in texts that no one questions it; upon investigation, it may be that the origin of the received wisdom was some obscure, unsupported claim from a very early reference. Such was the case with the transfusion trigger in the field of human medicine.

HOW IT CAME TO BE

Back in the 1930s, John Lundy pioneered the field of blood banking at the Mayo Clinic. He and another anaesthesiologist published an article recognizing the detrimental effect of anemia on oxygen (O₂) transport to the tissues. They advocated a preoperative blood transfusion if the hemoglobin (Hb) was less than 8–10 g/dL. This was the origin of the 60-year reign of the empiric 10/30 rule whereby an empiric threshold of Hb level of 10 g/dL and a packed cell volume (PCV) of 30% resulted in the automatic decision to transfuse

WHY IT CHANGED

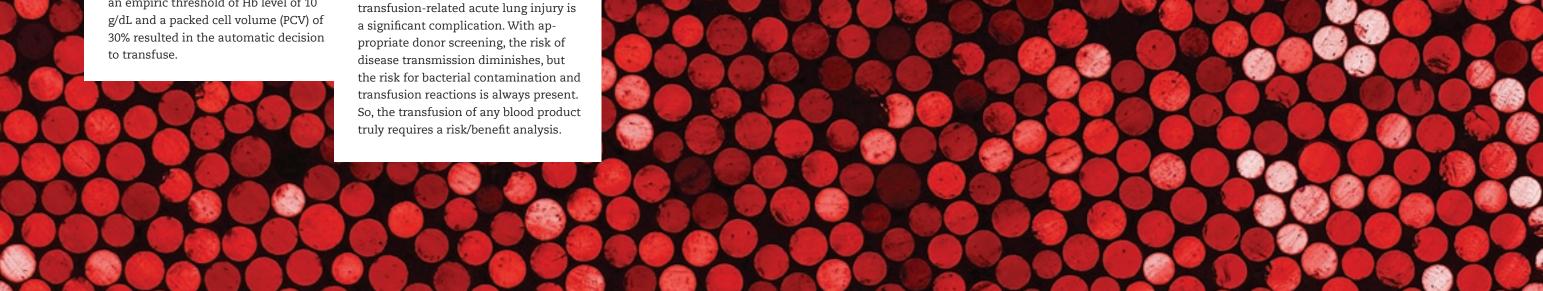
The 10/30 rule is now acknowledged to have been based more on faith than data. But why not err on the side of caution and give plenty of blood whenever the PCV drops below 'normal'? This must have been the rationale in human medicine, where there was a tendency to continue with the liberal transfusion strategies of the 10/30 rule despite the recommendation to lower the trigger to a Hb of 7g/dL (a PCV of 21%), and more importantly, to not base transfusion decisions on PCV alone. This change in policy was based on a large body of evidence for improved outcomes and decreased mortality with the more restrictive transfusion strategy.

Since the adoption of this restrictive strategy in the 1980s, information has accumulated about stored blood products, and why their use may not provide the expected increase in tissue oxygenation, or may even have detrimental consequences. These include storage lesions that result in decreased red cell deformability and increased aggregation, with a resultant decrease in oxygen-carrying capacity and micro vascular flow; depletion of 2,3-DPG so that transfused cells have a temporarily diminished ability to deliver oxygen; and immunosuppressive and pro-inflammatory effects. In humans, transfusion-related acute lung injury is









WHAT'S WRONG WITH TRANSFUSING BASED ON THE PCV?

My grade-10 social studies teacher told us, "It's always about oil." Physiology is not my strong suit, but I think it's fair to say that in the body, "It's always about oxygen." The PCV (as a reflection of the body's Hb) is one of the crucial determinants of oxygen delivery to the tissues (DO₂). DO₂ is a product of three factors: the Hb level, the degree to which that Hb is saturated with oxygen, and the cardiac output. In a healthy animal at rest, oxygen delivery is up to four times greater than oxygen consumption, so a significant decrease in Hb can occur before an anaerobic threshold is reached, with resultant tissue hypoxia. However, the PCV is not a reliable indicator of the body's red cell mass and Hb level, because the PCV we measure is dependent on the plasma volume.

In the emergency clinic, we have a high index of suspicion of significant blood loss when we see a peracute decrease in TP preceding any change in PCV. With the acute loss of blood volume, the PCV stays the same, or may temporarily increase relative to the TP due to responses like splenic contraction and peripheral vasoconstriction, under-representing the loss of red cells; meanwhile, secondary to compensatory mechanisms to preserve volume with fluid shifts, there is dilution of the TP.

Eventually, with fluid resuscitation, further fluid shifts and compensatory renal conservation of fluid and electrolytes, we may see a PCV that is spuriously low due to hemodilution. In *The ICU Book*, Dr. Marino states, "Use of the hematocrit to estimate acute blood loss is unreliable and inappropriate."

Probably one of the main reasons the PCV has figured so prominently in decisions to transfuse is that it is so easily measured, unlike some of the other parameters that might indicate the adequacy of tissue oxygenation. In the veterinary clinical setting, we aren't able to measure the gastric intramucosal pH, so it's not really a useful value. Increases in lactate levels and base deficits in the face of adequate fluid resuscitation are more logical indicators of the need for transfusion, as are azotemia and S-T segment ECG changes. In the awake patient, physical exam findings (mucous membrane colour and capillary refill time, heart rate, respiratory rate and blood pressure, mental status, and exercise tolerance) should all be considered in determining the need for transfusion, especially in acute blood loss where the PCV has not had time to change.

There is no consensus of veterinary opinion on the interpretation of the PCV in anemia. Signs of hypovolemic shock are expected with the loss of more than 30% of a patient's blood volume, but multiple studies show that the body can tolerate the loss of Hb to a fairly low level if hypovolemia is avoided; with adequate fluid resuscitation for blood loss, tissue oxygenation can be maintained due to decreased blood viscosity, changes in microcirculation, and other compensatory mechanisms that increase cardiac output. In chronic anemia, the level of oxygen saturation

increases as levels of 2,3-DPG increase and shift the oxygen dissociation curve.

Dr. Jen Devey supports a fairly liberal

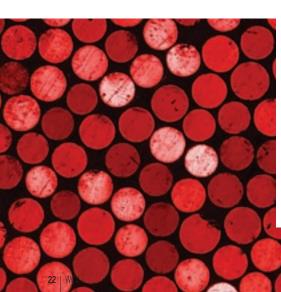
transfusion strategy, aiming to keep the PCV close to 30% in critical or acutely anemic patients. Dr. Urs Giger states, "... although the optimal PCV may be above 30%, oxygen delivery in a normovolemic resting animal can be maintained down to a PCV of 10% (although this is inadequate under most disease conditions). Thus there is no specific transfusion trigger in all patients...because transfusion carries inherent risks, blood should never be given without a clear indication or before exhausting alternative therapies." Dr. Jutkowitz quotes a PCV of 18% as safe in an otherwise healthy patient, and while a cat with chronic anemia may be okay at 12-15%, an animal with acute loss or hemolysis might require a transfusion at 20-25%. Criticalist Dr. Laurence Braun states, "It's not as simple as adhering to an arbitrary number which would dictate when the patient must absolutely be transfused. In general, though, we feel that anemia related symptoms usually occur at a hematocrit of 15% and under, and transfusion should be considered at this point, even more so if the bleeding is ongoing, regardless of how chronic the anemia is. While red cell transfusions may not be immediately required if the symptoms of anemia are mild (such as exercise intolerance), they should be given when the symptoms are severe enough (syncope, tachypnea, tachycardia, and hypotension)."

SHOULD I CHANGE MY TRANSFUSION STRATEGY?

From my perspective as a provider of blood products to the veterinary community, veterinarians are not overtransfusing based on an obsolete trigger. I would suspect most veterinarians do not have difficulty deciding when a transfusion is appropriate, but they may encounter such barriers to transfusion as owner cost concerns, unavailability of the appropriate product, or staff unfamiliarity with administering blood products. In turn, the unpredictability of the market makes it a challenge for blood banks to meet the demand for blood while trying to avoid ever having to discard valuable blood products that expire before they are used.

VAEC established Vancouver Animal Blood Services (VABS) in 2003 to help meet the needs of the BC veterinary community for fresh frozen plasma, frozen plasma, packed red blood cells, and transfusion supplies. The veterinary staff at VAEC are happy to help answer any questions about blood products or their use. VABS product literature including product descriptions and administration guidelines is included with each blood product purchase and is available online at www.animaler.com.





A TRIBUTE TO REX MEARS, DVM

BY DAVE HUFF, DVM

n October 13th, 2011, the veterinary profession in Canada was diminished by the loss of a true gentleman.

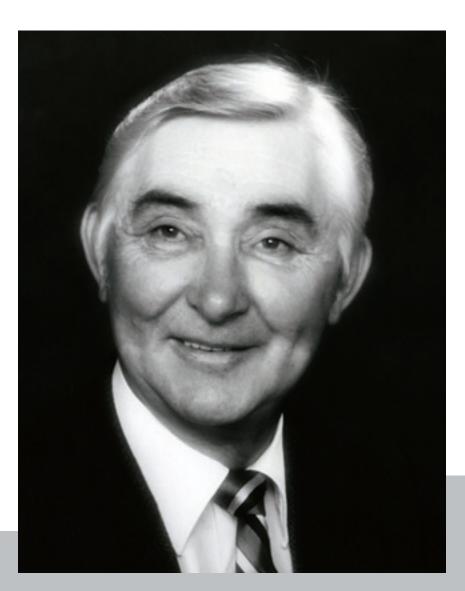
Rex Hawthorne Mears was born in England in1928 and graduated from the Royal Veterinary College in 1954. After emigrating to Canada in 1957, he established a mixed animal practice in Salmon Arm for many years before moving to Vancouver where he practiced small animal medicine and surgery at the Dunbar Veterinary Hospital until his retirement in 1987.

Rex took very seriously what he felt as an obligation to serve his profession. He was a past president of the BCVMA and a past president and life member of the CVMA. He served for several years as registrar of the BCVMA, and during his retirement he was a valued participant in the task force that formed the CVMA-SBCV Chapter. He was proud, and rightly so, of his role in establishing and guiding the Pet Food Certification Committee of the CVMA. He was also a member of the Advisory Council for the Western College of Veterinary Medicine. His small animal hospital was a superb facility that over the years attracted many highly skilled associates, who with Rex's mentoring went on to establish successful careers in the profession.

He was a man of impeccable professional standards, and a touchstone for ethical behaviour in the profession. For myself and many others virtually all ethical conundrums could be solved by asking oneself the simple question, "What would Rex do?"

Rex indeed will be remembered for all the above, but to his friends and colleagues he was so much more. Rex was full of life and larger than life. He was courageous beyond measure in handling what life sent his way. In an age when veterinary medicine was replete with colourful characters, Rex still managed to stand out from

the crowd. He was a raconteur without equal, who could hold a table of friends and colleagues transfixed by his hilarious and usually ribald anecdotes far into the evening. Greeting one and all with his trademark "How are you, old cock?", he was always the first to say yes to a party, and was usually among the last to leave, after exhausting one and all and leaving them mired in—one of



his favourite expressions—"helpless mirth."

A few years back Rex became the instigator of our annual and highly anticipated Beer and Pizza Nights for colleagues and friends we rarely saw any more. Rex had noticed the good news that when you got together with colleagues you had not seen in ages, the result was inevitable...a great evening of re-connection and fun, amidst a flood of oft-repeated and shamelessly exaggerated anecdotes. But he also noticed the bad news that these gatherings seemed to occur almost exclusively at funerals. Rex was not the first to make this observation, but he was one of the few to actually do something about it...and so Beer and Pizza Night was born.

Soon Beer and Pizza Night had even spawned a few field trips with Rex and others: one a tour of David Paton's superb new large animal surgery, and another more recent trip to Malcolm and Stephanie Bond's farm on Salt Spring Island. In spite of the considerable challenges these outings posed, Rex loved the trips, and his zeal in participating in them was inspirational. To see Rex, with his two prosthetic legs, navigate the two ferries to Salt Spring Island, hop onto a six-wheeled all-terrain vehicle and go bouncing wildly over the pastures and through the forest with Mal at the helm on a gorgeous late summer day was—and here comes that word again—inspirational.

We finished our visit to Mal and Stephanie's farm at a restaurant over the water where Rex insisted on descending three precipitously steep flights of stairs to allow all of us to sit in the sunshine over the water. Even though a table had been arranged inside for us, Rex wanted the whole over-the-water experience, and more to the point, he wanted his friends to have that experience.... So he did the stairs. Both ways. We sat in the sunshine for two hours—Rex and Bea, Mal and Stephanie, Barb and I, and Nick Bussanich. Rex had fish and chips and a cold beer, regaled the gathering with anecdotes from days past, tempted Mal into political debate, and punctuated the whole episode with hilarious

Virtually all ethical conundrums could be solved by asking oneself the simple question, "What would Rex do?"

bouts of risqué humour. I remember thinking, "It doesn't get any better than this!"

Many of you may not have had the pleasure of knowing Rex, but stories like this not only reveal the true essence of our friend but also contain life lessons that retain their validity across generations.

Rex would want you to know that even though Beer and Pizza Nights are first and foremost occasions of great merriment, it was always his hope that on a more subtle and usually unspoken level the group would serve as a reservoir of mutual support. And it does.

So what can you do to honour the memory of Rex Mears?

Rex would want you to sit down today and compose a list of colleagues you have not seen in ages, and invite them over some evening for beer and pizza. He would encourage you to cast a wide net—I guarantee you will be amazed at who walks through the door and I guarantee that you will be enriched by the experience.

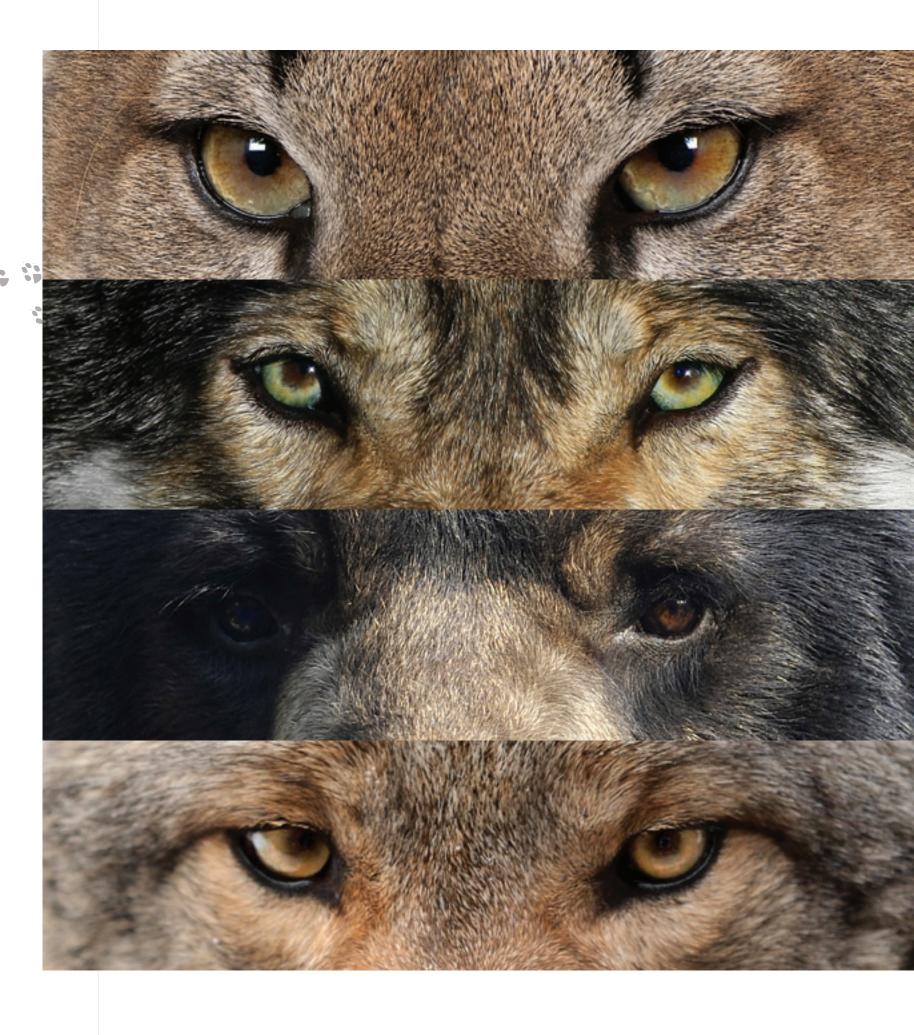
Oh and by the way, while you're there, please raise a glass to the original "Old Cock."

PREDATORS A LIVESTOCK WHODUNNIT

BY KATHRYN WELSMAN, DVM

recently attended a lecture put on by the BC Conservation Officers (CO) aimed at teaching local ranchers how to recognize which predator might have attacked their livestock. Attendees consisted primarily of cattle ranchers, so I was definitely the odd person out. As the only veterinarian in the room—and a small animal veterinarian at that—I started to wonder what I had gotten myself into! Around the province, we occasionally hear troubling incidents of bear or cougar attacks on humans. For ranchers, however, livestock killed by these animals is a more common reality, leading to lost income and troubling livestock welfare issues. The knowledge that there is a predator in close proximity to their home and children is especially concerning.

During the presentation, ranchers learned how to recognize signs unique to each predator, allowing them to determine which animal is killing their livestock, so they can take steps to prevent future occurrences, and apply for government compensation for their loss. Until recently, the COs had been performing this time-consuming task in all cases where compensation was requested. With short staffing and large coverage areas, sometimes it would be days before a CO could get out to the carcass, sometimes in very remote areas. This delay meant carcasses would often be badly scavenged by the time a CO arrived. Under the new program, trained ranchers can now do the investigative work, and submit photos and findings to the COs for compensation from the Ministry of Agriculture. As veterinarians, your clients may ask you to assist them in these investigations by examining livestock that have been killed or injured by predators.





Before the course began, I unfairly assumed that this might be a simple review of our veterinary school post mortem classes. Within a few minutes of listening though, I realized I was in for some serious education—the sort that wasn't taught at OVC! How many of us studied the gestation of a black bear? Or the breeding season of wolves? What about the average weight of a male cougar, or the differences between a cougar print

and a wolf print? Some of these questions we might infer from our domesticated animal knowledge, and these were some of the basics that were covered on this course. Then we got into the meat of the issues, such as the differences in the attack and feeding methods of the bear, coyote, wolf, and cougar. The presenters also discussed how the location the carcass is found in relates to predator type. These were just some of the investigative points that the COs wanted to bring to our attention.

The morning started with bears—both grizzlies and black bears. The presenting CO described grizzlies as thinkers, compared to black bears, which are more opportunistic and reactive to their surroundings. He related a story about a grizzly that systemically wore down the battery at a garbage dump in northern BC by laying his shoulder into the fence, draining the battery to exhaustion, and then climbing over it. These are extremely fast, powerful, and nocturnal omnivores with an ability to detect scent that is equal to, or better than, that of dogs. According to the COs' statistics, a black bear's order of preference for livestock, from most preferred to least, are cattle, sheep, goats, poultry, swine, and finally, household pets. Horses are usually only attacked by grizzly bears.

The key identifier of a bear attack is often a large bite or crush wound, somewhere along the thoraco-lumbar spine, as the bear attacks from the hind end and grabs on, working its way cranially.

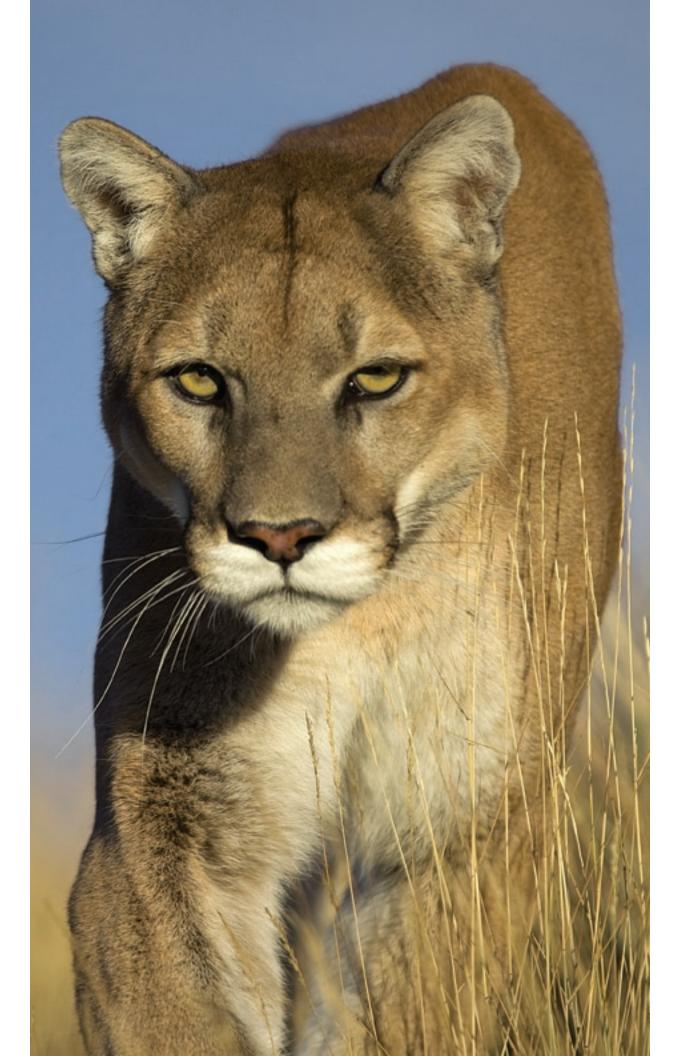
Another telltale sign of a bear feeding on live-stock is what looks like a de-gloving injury on the limbs. The CO also described bear attacks as inefficient, with livestock often having severe wounding prior to death. They described carcasses with crushed vertebrae, which made me think twice about walking alone in the woods! Bears will often drag their carcasses to a covered area and then semi-bury their kill, allowing it to rot. Bears don't have any problem with eating rotten meat, maggots and all, as opposed to cougars, which prefer fresh meat.

The discussion then turned to wolves. The CO wanted the ranchers to understand that the concept of wolves killing for fun is not true. In reality, they simply kill in a relatively ineffective way, which could therefore be considered an inhumane way. He described them as nocturnal, smart, secretive, and very protective of their territory. He described wolf packs as being similar to drug gangs in their turf-war mentality. They will turn and kill each other for control of territory, weeding each other out, and guarding their territory from other packs. I think I would prefer the wolves over the gangs, if I had a choice! There are several keys to recognizing a wolf attack. The first is to recognize their paw prints, and to be able to differentiate between coyote, wolf, and cougar print. The key difference between the prints are the shapes of the pad and the evidence of nail marks. Simply seeing the tracks isn't enough though, since the predators could potentially scavenge on another animal's kill. In a true kill, one or two wolves usually attack the hind limbs of their prey, aiming for the rectum and vulva. This causes significant soft tissue damage, and tail pull injuries or completely severed tails might be seen. The other method is to attack the flank fold area and pull away the skin and musculature exposing the abdominal cavity. Of course, the prey won't always die immediately of their injuries—and thus could be presented for veterinary care. Wolves will usually wait until their prey has become recumbent due to shock from pain and blood loss prior to feeding. Another sign on the carcass might be what look like claw

marks, which could falsely lead you to believe that a cat or bear might be responsible. Don't be deceived, however; these are usually just canine teeth marks on the hide. As a veterinarian, it would be important to recognize the significance of the injuries, how severe they might be, as well as whether the rancher might receive compensation if the animal is destroyed as opposed to prolonged treatment.

Unlike bears or cougars, wolves don't drag their prey into shelter areas if killed in the open. Wolves eat their prey where it dies, unlike bear and cougar which have the power to drag the carcass to a safer eating ground. Additionally, wolves systematically remove stomach and intestinal contents and won't eat them, so you may see these scattered around the dead animal. Some of the images shown during the lecture were quite impressive, including those that showed most of the ribs chewed off by the wolves. It puts a whole new perspective on our family dog chewing on a few bones now and again!

The presenter then focused on coyotes, which are the most common predator in British Columbia, preying mainly on smaller animals. These animals attack usually at dawn or dusk and will be repeat offenders if they have been successful in the past. One of the important recommendations made was that the ranchers should not allow the coyotes around the calving/birthing grounds at any time or allow them to clean up the placentas, which can be common practice. This sort of pattern encourages the coyotes to snatch a young animal when the placentas are all gone. The victims on the coyote list usually start with sheep, then calves, and then poultry. Unfortunately, Fluffy the house cat can be the meal of last resort. It is all too common for pets to disappear, probably having fallen victim to the



local coyotes. Coyotes attack alone or in pairs, chasing the animal until they tire, and then make several bites on the ventral neck. This method pierces the jugular and carotid, as well as collapsing the trachea. They might also rip at the flank fold similar to a wolf attack.

When the CO talked about bears and canine predators, he seemed fairly matter-of-fact about them, and how to deal with them. On the topic of cougars, however, there was an element of awe and perhaps extra caution in his tone. He described them as the true predators, being extremely powerful, persistent, and extremely patient. Like other predators, sheep, goats, and cows are targets, but the cougar may also look to horses and humans, especially children. Like household cats, cougars can sit silently a few feet from a sidewalk in a wooded area and watch kids come and go. I must admit some naivety about these furry felines, as the only personal encounter I've had with a cougar was a young kitten that was orphaned and brought into see me at around 8 weeks of age. The clinic staff got a bit attached to him and named him Dougie. He now goes by the name of Andre at a big cat sanctuary in the US, as the BC policy isn't to rehab any cougars. When I think back, he was still a formidable presence with an intense stare with his amazing blue eyes and the ability to stalk even at his young age and small size. I try to imagine what it would be like to run into a full-grown adult! In order to get a sense of a full-grown cougar's threat potential, I picture the horribly fractious domestic short hair that we have all seen in practice, then multiply that in size and weight.

Cougars kill very cleanly and efficiently—so you have to give them credit for that at least. According to the CO, cougars attack by aiming for the base of the skull, causing neurological damage, and aiming for the neck region like coyotes. Often these big cats will clean up all the exposed blood from their victim prior to eating it, so a very clean, bloodless carcass is common. This is in comparison to a wolf or coyote kill that is messy and bloody. The COs described cougars as fairly fastidious eaters—only wanting the good

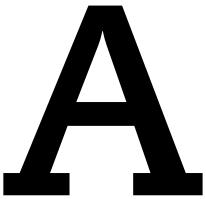
meat and leaving the gut and hair, not unlike our house cats, who are also particular about what they will eat. These big cats will drag and bury much like a bear but will not eat a carcass once it turns rancid.

Some of the other investigative points that the COs discussed were whether the animal was immediately alive prior to when it was eaten by the predator, as opposed to scavenged. This is an important distinction when compensation is discussed. A timeline of events, including when the owner last saw the dead animal, its health, and when the carcass was found, are important. Predator sighting history by the owner, and other local farmers, and scat or tracks are also relevant.

As a small animal practitioner I'm not likely to be asked on a professional level to help determine the cause of a livestock death, but I'm certain that large animal veterinarians around the province could encounter such a request. Looking back on some of my previous small animal cases, I can recall instances where this type of mechanism of injury arose. One such case was brought to me on an emergency basis, where a dog was found dead in the owner's back yard with large wounds around its back legs. The client wanted my opinion on what killed it, as they had suspected a bear. In retrospect, with the benefit of this course, I think a bear and cougar could have been ruled out, and given the location of the property it was not likely a wolf. This leaves the possibility of a coyote, and the characteristics of the wound were consistent with that animal. If only I'd had this course at that time—I might have cracked the case quickly.

As veterinarians, we need to seek out learning opportunities outside of typical continuing education. In doing so, we connect with others who work with animals, and share unique skills and knowledge with each other. Conservation officers are just such partners. They have a difficult job in balancing the need to protect our wildlife, protect humans, and protect livestock—a very hard balance to achieve!





bout three years ago, I applied to join the Canadian Veterinary Reserve (CVR). The CVR, a joint initiative with the CVMA and CFIA, is in essence, a group of over 400 volunteer veterinarians who are "on call" for large-scale animal disasters occurring in Canada. These would include foreign animal disease (FAD) outbreaks such as Avian Influenza (AI), or Foot and Mouth Disease (FMD), or natural disasters such as flooding or earthquakes. The CVR members can be asked to assist anywhere in Canada with a future goal of having an international presence.

Upon acceptance into the CVR, I attended several webinars about the history and goals of the CVR, as well as information on topics such as the Incident Command System (ICS), and how the CVR would function within a command structure during a disaster. As a veterinarian, I had never thought I would be learning about a chain of command or how I would fit into the ICS. In reality, many animal disasters won't just have veterinarians responding. There will likely be municipal, provincial, and federal government agencies present, including agriculture, environment, and public health. Additionally one might expect animal welfare groups, farming groups, police services, and the media, depending on the type of disaster. As veterinarians, we need to know how we would work with these groups, as we could be considered the newcomer to disaster response, and we won't often be the lead agency involved in a disaster.

The CVR was established in 2006 with the following vision: "A nationally and internationally recognized emergency response partner and a competent resource that is available to be called upon in the event of large-scale animal disease outbreaks and civil emergencies affecting animal health and welfare." This is a large goal, and one that the CVR appears to be well on its way to achieving.

After completing the initial Webinars, I attended an All Hazards pilot training program. I was part of a group of individuals with various backgrounds in veterinary medicine, and our task was to brainstorm ideas on how to provide training for civil emergencies and what many of the issues might be during a response. Included in the group were professors and deans from the veterinary colleges, veterinary specialists, veterinarians who had spent time assisting in the aftermaths of Hurricane Katrina, the terrorist attacks on the World Trade Center, and the China earthquakes. We also had the privilege of working with the veterinarian who coordinated the emergency preparedness for the AVMA. There were lab animal, government, small animal, large animal, and zoo animal veterinarians amongst the group, as well as those with military and firefighting experience.



Up until this point, the disease outbreak

HOW PREPARED DO YOU FEEL YOUR COMMUNITY IS

TO RESPOND TO A DISASTER

WHERE ANIMALS MIGHT BE AFFECTED?

Other issues that arose during this pilot project were personnel preparedness for an emergency and the preparedness of our individual veterinary clinics. It also raised the discussion of the ethics and standards of care during a disaster, as well as dealing with personal stress and equipment needs. I left this workshop with many important concepts and questions for myself.

I then attended the Foreign Animal Disease training in Ottawa, provided by the CFIA. This was an enlightening course on how the CFIA is set up to respond to an outbreak. In recent years, several disease outbreaks have served to demonstrate the need to have a very fast and robust response to such problems. The BSE issue in Alberta, followed by several AI outbreaks in BC and Saskatchewan were catalysts to developing this group of reservists. The large-scale AI outbreaks in BC lasted such a lengthy period of time that the manpower of the CFIA was being drained and over-worked, hence the need to be able to rotate in CVR members to assist the CFIA in their role.

Currently, the CFIA is particularly concerned about the seven big diseases that would have potentially devastating effects on animal and human health, as well as the economy. These are African Swine Fever, Notifiable Avian Influenza, Classical Swine Fever, Foot and Mouth Disease, Newcastle Disease, Swine Vesicular Disease, and Vesicular Stomatitis. I had memories of learning about all of these diseases during vet school, however they were pretty foggy, as I have been practicing only small animal medicine since graduation. This was a crash course in these diseases, with particular emphasis on what we would be seeing on a farm and how we would diagnose, contain the disease, and then decontaminate. We focused in particular on FMD and AI as the CFIA has deemed these the most likely threats. The CFIA has developed Hazard Specific Plans for these two diseases. These plans include an overview of the diseases, the authorities and principals of control, the emergency response

(including movement control, eradication, surveillance, and tracing), and lastly the proof-of-freedom-of-disease procedures.

After participating in the CVR training to date, I've found it to be an eye opener to another aspect of veterinary medicine going on around the country that many of us in the veterinary community are not aware of. Since taking this course and signing up for the CVR, I've become more keenly aware of animal diseases, not only within our country but those that are causing problems in the US and countries around the world. I watch the news coverage on natural disasters in a more critical way and wonder what is being done for the animals and what type of veterinary response might be needed. It was during the FAD course that the tsunami and earthquake hit Japan, which provided real-time discussion for our classes. We started to think about what the animal issues might be such as disease outbreaks, animal welfare, mass euthanasia, radiation, family pets that need housing, farming and agriculture collapse, just to name a few.

Perhaps these are issues for all veterinarians in BC to consider. How prepared do you feel your community is to respond to a disaster where animals might be affected? In BC, a disaster could strike in any number of ways. An earthquake devastating Vancouver, a tsunami hitting Vancouver Island, wildfires affecting ranch land throughout the province, flooding in the Lower Mainland, AI affecting the poultry industry, FMD affecting the cattle—these are a few to consider. We must ask ourselves if we, and our community, are ready. What about your clinic? Do you have evacuation plans for your pets and livestock? These are things that I would challenge you to consider and perhaps start discussing with your family, staff, and greater communities as well.

You can find more information on the CVMA website if you are interested in disaster preparedness in general or joining the CVR: http://canadianveterinarians.net/veterinary-reserve.aspx.





"There is evidence that sterilizing very specific, at-risk subpopulations such as feral cats can contribute to reductions in overpopulation."

ASPCA Position Statement on Mandatory Spay/Neuter Laws

opulation medicine and population control are areas that veterinarians are well educated in and ultimately responsible for. This is why we implement and promote such widespread population control strategies as sterilization and vaccination.

Animal overpopulation of felines and canines is a well-documented problem around the globe,

and is of huge concern to us as veterinarians. Unfortunately felines win the battle in terms of contributing to pet overpopulation. This issue occurs not only globally, but also nationally and locally. The numerous causes of this problem include: intact indoor cats are three times more likely to be returned to shelters than dogs, they are less frequently adopted than dogs, they live quite well in feral colonies even in harsh conditions, and they have huge reproductive capacities.

Feral (or free-roaming) cat populations are a major contributor to feline overpopulation and make up the majority of homeless animals encountered in shelters. Additionally, 97% of the feral cats are intact which makes them more likely to get into fights with other animals, which subsequently will increase their likelihood of coming into contact with a shelter. Cat colonies exist throughout the world and their impact on the environment, public health, and the individual welfare to the cats themselves is of concern. They are an important contributor to feline retroviral reservoirs and a source of potential zoonotic disease transmission. This is of concern to immuno-suppressed people as well as to the outdoor pet cat population.

There are no official statistics for feral cats in Canada, let alone in British Columbia, but statistics in the U.S estimate that there may be as many as 60 million feral cats, or one feral cat per six people. Canada's population is about one tenth the size of the U.S population, so that works out to an estimated 6 million feral cats. Thus, this is definitely of concern here in Canada.

I spoke with Dr. Lawson, the BCSPCA's Chief Animal Officer, about the issue, and he agrees that there are far too many feral cats in BC, and says, "There are tons of feral cat colonies...cats are the number one animal seen in shelter medicine. There are more cats than we can find homes for."

Previous (and current) attempts at controlling feral cat populations have included hunting, euthanasia, poisoning, introducing feline infectious diseases such as panleukopenia, and extirpation to uninhabited islands. These population control measures are not morally or ethically feasible, and they ultimately fail, as they cannot keep up with feline growth rates. Additionally, recent data is supportive that a large majority of the public appears to prefer non-lethal strategies to manage feral cat populations, such as trap/neuter/vaccinate/release (TNVR) programs.

TNVR programs have been around since the 1970s in Europe and the UK, and are becoming increasingly popular in North America. TNVR/ adopt programs have been well documented in the veterinary scientific literature as a proven effective population control measure for feral cat populations. The goal is to have a financially feasible program that is effective at neutering a large population of cats, safe for both humans and cats, and morally acceptable to the public. Veterinarians are central to this process as they perform the surgeries and consult on the health and welfare of the cats.

The program depends on large numbers of volunteers, including veterinarians, and major donor dollars as the costs to run this type of program usually comes with a large budget. Feral cats are trapped by volunteers, and brought to a

shelter location where they are neutered/spayed and vaccinated. The sick animals are usually euthanized, and the healthy animals are then released back into cat colonies, and socialized cats are put up for adoption in the shelter. Also, the processed cats are marked by ear notching for identification. The number of TNVR days needed to keep up with population sizes directly correlates with the targeted cat population. Basically, the bigger the population, the more TNVR dates needed to keep up with growth rates and effectively decrease shelter admit rates and euthanasia rates.

There have been numerous studies conducted in multiple countries and published in a variety of peer-reviewed scientific journals that support TNVR programs. One such study in JAVMA 2003 looked at a population of 155 un-owned free roaming cats and instituted TNVR/adopt over 11 years. They found that of the cats trapped, 75% were feral and 25% were well socialized. At the end of the study the original population had decreased by 66%, and they concluded that a long-term neutering program such as TNVR/ adopt led to a decrease in cat population in urban areas.

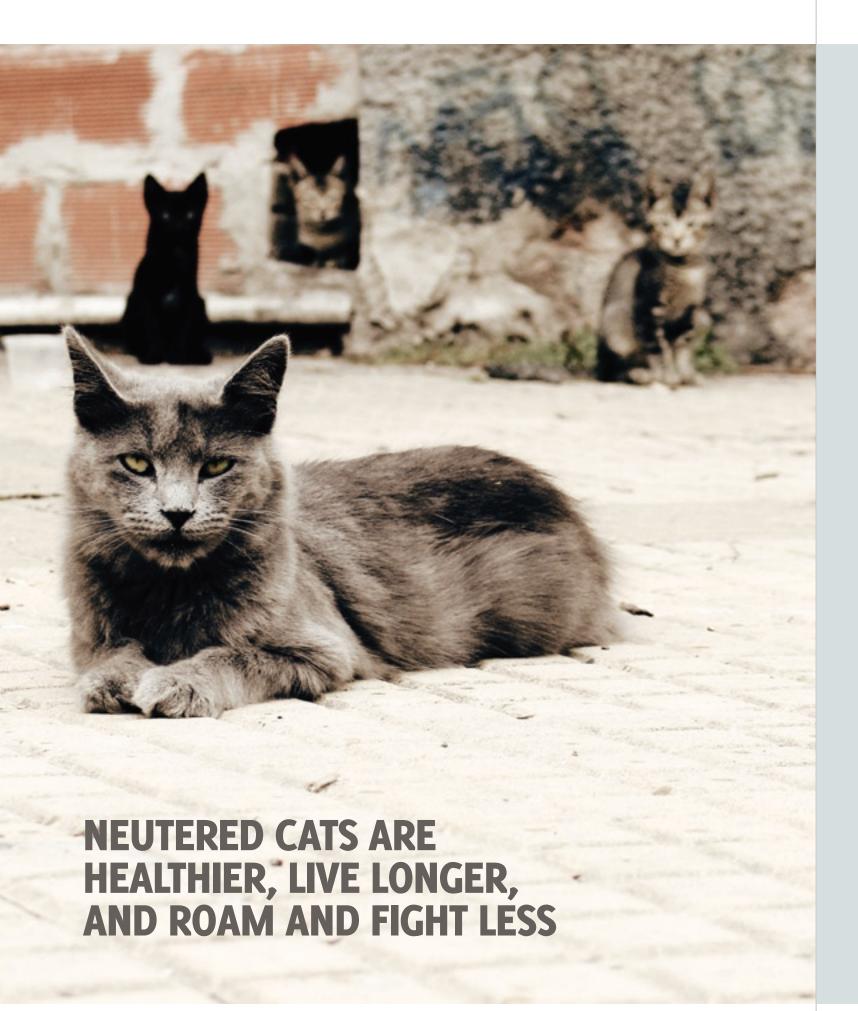
It is well documented that neutered cats are healthier, live longer, and roam and fight less. TNVR programs are endorsed by AVMA, ASPCA, and multiple humane organizations. Many successful TNVR organizations are up and running such as one large organization run in California under Maddie's Fund (www.maddiesfund.com). This organization has helped to neuter over 170,000 cats since 1999 and employs 1000 volunteer veterinarians through their provincial CVMA. It is estimated that it has cost upwards of \$12 million in donor dollars to run. In Toronto, the Toronto Humane Society runs a similar volunteer-based program that has neutered almost 1000 cats in the past two years. More locally, there are a few independent community based organizations that run smaller TNVR efforts such as numerous shelters (including the Delta Community Animal Shelter—see the sidebar for

an interview with shelter manager Sarah Lowe), VOKRA, the BCSPCA, etc.

The BCSPCA runs an annual feral cat spay/ neuter clinic, which is now in its sixth year and neutered 101 animals last year. Dr. Lawson reports that some of the problems encountered in running the program are inadequate staff/ volunteers and fewer and fewer trappers over the years. Legislatively, the BCSPCA is unable to directly get involved in this effort as they cannot trap/neuter an owned cat, because there is no way to prove that a trapped animal is not owned. The way around this issue is to have volunteer trappers from the community bring in trapped feral cats and sign an owned cat waiver. The BC-SPCA also has an open door policy to spay/neuter and vaccinate free of charge feral cats brought in by the public.

The feral cat overpopulation issue is a real one, but we are on the way to decreasing these populations. Better strategies that may be the answer to this problem would involve the community, the City of Vancouver, local veterinarians, and the BCSPCA. What we need is a group of dedicated people to spearhead this project and get local groups together with donor dollars and create a massive TNVR program. This will be the only effective way to decrease feral cat populations.





INTERVIEW WITH SARAH LOWE, DELTA COMMUNITY ANIMAL SHELTER'S SHELTER MANAGER

WHO DO YOU RUN YOUR TNVR IN ASSOCIATION WITH? IS IT RUN THROUGH THE DELTA SHELTER?

Delta Community Animal Shelter is a municipal shelter for the Corporation of Delta. Our TNVR program is run strictly through the shelter and not in association with any other group. However, other groups such as VOKRA have taken some of our cats or kittens when needed.

HOW DOES THE PROGRAM RUN/OPERATE?

It is on a complaint basis. The public calls in and says they have a colony (or we may come by one on our animal control rounds), and we enter a call and respond. We have the person who is complaining monitor the trap, cover it up, and bring it in should a cat be caught. If no cats are caught each day, we ask them to change the food and reset it. Cats are then brought to the shelter for processing, and the trap is left behind to catch any other cats in the colony. What we have found is that there is usually 10 more than what the person actually thinks!

DO YOU KNOW HOW MANY FERAL CATS THERE ARE IN THE DELTA REGION?

Figures for Delta are hard to determine, as there are a lot of cats that we don't know about. We have approximately 15 sterilized colonies being managed at this moment. However, most cats don't go back to the location. We will place them in barns as mousers.

HOW OFTEN DO YOU DO TNVR?

Throughout the year. Occasionally when our shelter numbers increase due to kitten season we may slow down or have colonies waiting, but otherwise it's all year round.

WHO FUNDS IT?

It is funded through the shelter budget. We are a department of the Corporation of Delta and so it is included in their regular budget items.

WHAT IS THE PROCEDURE?

We use humane traps and put smelly junky cat food in it and leading up to it to entice the cats to enter them. Depending on the weather it may be covered up; however, we have found that not covering the ends makes it feel more enticing

and safe for the cats to go into. Once the cat goes into the trap, it steps on a panel that closes the door behind it. We really encourage the public who are assisting to fully cover the cage once a cat is trapped as it helps to relax them.

The trapped cats are transported to the shelter where they are placed in a kennel with food, water, litter, and a carrier. The carrier has a blanket over it so the cats can perch or hide inside. The kennel also helps as we can use a stick to close the door of the kennel and then go into the cage when the cat is contained to clean and feed, etc. All cats are marked as feral in the shelter, and in ideal situations they are kept in a quieter location of the shelter, out of public view to help reduce stress. Truly feral cats are very wild by nature and being confined in the cage is incredibly stressful. They usually only eat at night when we are gone, and hide in their cage in the day. If a feral cat is in the shelter too long it can result in health issues, and I have seen one cat die from this. The veterinarians who help with the program usually charge us for the rabies vaccines and donate their surgical time. We don't vaccinate for FVRCP/FeLV as these vaccines need to be boostered, and there is no way to get these cats back in 4 weeks to do this. We put de-wormer in their food as well.

The veterinarians sterilize them and do an ear clip (removing the tip of the ear) so they are clearly marked as processed. The cats are usually sedated cage-side and then neutered. The cat is then placed back in the original carrier to wake up and once awake is returned to the shelter for post-surgical monitoring. After a few days the cats are released to their prospective locations. We advise people who are taking them as barn cats to trap them in a room of the barn (with hiding spots, etc.,) and feed them for a minimum of 2 weeks (ideally 1–2 months). This helps the cat know where to come back to for food. The people who adopt agree to provide fresh food and water, along with shelter access. We are supposed to charge \$20 per feral cat adoption as that covers our cost of the rabies vaccine, but often we don't as we are so desperate to just place them.



20 LESSONS ON VETERINARY FEES LEARNED IN 20 YEARS

BY DARREN OSBORNE, MA

2011 marks 20 years for me in economic consulting in veterinary medicine. Fresh out of school, I started working for R. K House and Associates as an analyst for the Manitoba Veterinary Medical Association Economic Study. The next year came OVMA and then, North America. OVMA currently offers economic consulting as a partner-ship with CVMA and the provinces and works extensively in the US with the Veterinary Hospital Managers Association. The following are generalizations, anecdotes, and analysis from 20 years of economic research and interviews with thousands of veterinarians.

A small increase in fees creates a larger increase in net income. Framed above my desk is a well-used, dog-eared chart clipped from a business magazine that shows a 10% increase in professional fees will yield a 25% increase in net income. Increasing fees means revenue grows while expenses stay the same, and the resulting net income gain is higher. This chart was given to me during one of my first one-on-one interviews in my first few weeks of work while I was interviewing a dentist in Winnipeg. He kept the clipping under his blotter and referred to it often, explaining that it gave him the courage to raise his fees every year. Twenty years later, I am still referring to that chart on a daily basis.

A small decrease in fees requires a larger increase in clients to break even. The same chart shows that the magnitude of the math works in reverse. Decreasing fees means a drop in revenue with expenses remaining constant. Because the difference between revenue and expenses has dropped, more clients are required. The only problem is that the number of clients required is huge. A 10% decrease in fees requires a 50% increase in clients to reach the same net income as before the fee decrease.

Veterinarians don't like to raise their fees. Dealing with the financial side of life is difficult for most veterinarians, so raising fees is a painful exercise. The most financially successful veterinarians don't raise their fees at all—they get someone else to do it. In these successful practices, the manager raises fees annually, and the only one who notices is the manager.

Relationships are more important than price. Back in 1995, OVMA and AAHA produced simultaneous reports that show prices are low on the list of priorities when clients are selecting a veterinarian. In order of priority, clients across North America want a veterinarian who is interested in the wellbeing of the pet, has excellent medical knowledge, and explains things thoroughly. Everything else, including price, is less important.

Veterinarians don't believe studies about clients' attitudes with fees. The 1995 reports on clients' attitudes were met with skepticism and dismissed as either big-city studies or studies with flawed samples. In retaliation, OVMA produced and distributed individual client satisfaction surveys designed to survey clients in individual veterinary hospitals. The individualized results from each hospital were identical to the 1995 reports; relationships are more important than fees.

Clients do not notice increases in fees. Even 10% increases in shoppable fees (vaccine and elective surgery fees) will go unnoticed because price is low on the list of priorities when choosing a veterinarian. I have seen one hospital raise fees 50% across the board in one fell swoop. After one year, one veterinarian who described himself as destitute before the fee increase was able to make a down payment on a house. Over the last 20 years, veterinarians in Ontario have raised fees more than three times the rate of inflation. Over that period, demand for companion animal veterinary medicine has remained unaffected by higher fees. The recession has affected demand, but even those practices with lower fees have been affected.

Large animal veterinarians can raise their professional hourly rate but not their call fee. After BSE gored the demand for large animal veterinary services in Ontario, many veterinarians were forced to take drastic action. Stuck with decreased demand for services, large animal practitioners were forced to raise their fees to stay afloat. To their surprise they found that increases in professional service fees (hourly rate) went unnoticed. Even large increases in professional service fees went unnoticed. Unfortunately, they also found out that the smallest increase in call fees would be met with resistance a lot of resistance.

Large animal clients value service more than price. Individual client surveys conducted in mixed and large animal veterinary practices across the province showed again and again that large animal clients value service and the relationship with their veterinarian ahead of price. Prompt service and a veterinarian who cares about the wellbeing of the farm/herd are more important than price.

Not all procedures are created equal. Veterinarians and clients value procedures differently. Fifteen minutes spent on a recheck exam is not valued as much as 15 minutes of surgery or 15 minutes of an anesthesia. Different procedures have different perceived value because of the different stress, responsibility, and difficulty with the procedure. The perceived value dictates how receptive people are to changes in the price. Theoretically, demand for procedures with higher perceived value is less reactive to changes in price. For example, a 10% increase in anesthesia fees will be met with little resistance, but a 10% increase on recheck exams will get some pushback from clients. The fee guide takes the perceived value of services into account, and each year different sections will get different increases reflecting the differences in the perceived value. The ultimate objective of the fee guide is to increase demand for veterinary medicine by adjusting fees based on the perceived value for each procedure.

Hospitalization fees are not high enough. Suppose you are presented with a sick dog; after all the diagnostics and treatments are done, very little time has passed, yet most of the bill is accounted for. Now is the time for hospitalization. For the next several hours, a lot of work will be spent checking, walking, feeding, cleaning, and watching—for a fraction of the total bill. Hospitalization fees need to increase.

- You can charge for blood collection. Regardless of markup on lab, clients value the expertise associated with venous puncture. Many veterinarians and staff feel that because it is quick and easy, it should be free. From a client's perspective, venous puncture is right up there with rocket science, they can't do it and will pay for it.
- If a client says, "Price is no object," they mean they don't intend to
- There is no relationship between the markup on pet food and demand. Hospitals that sell the most pet food are the ones that believe the most in nutrition regardless of the price.
- Cost base pricing is a waste of time. Almost 10 years ago, I spent the summer deconstructing the profit centres in a veterinary hospital. For X-ray, I calculated the square footage cost, the equipment cost, the wages, and the cost of disposables. Applying this to the frequency of procedures, I calculated the cost base fee. It was a joke. The cost base fee for exams was insanely higher than the current fee; almost 40% more than veterinarians would be comfortable charging. Even crazier was the cost base fee for most lab procedures that came out to be a fraction of the current fee.
- For vaccinations, charge all clients the same fee regardless of the vaccination combination. The problem with multiple vaccine fees is that there is too much room for miscommunication. A client is given a quote for a DA2PP vaccine at the front desk, but after going over the risk factors with the veterinarian the client is given additional non-core vaccines, all in the best interest of the dog. When the client goes back to the front desk, the bill is higher than originally quoted, and there is a problem. The solution is to find out what your most popular vaccine fee is and charge the same fee for all.

Charge two different recall fees; one at full price and the second for free. The full price recall exam fee is used when you spend 10 minutes with the client. Spend the full 10 minutes, provide value for the service and charge the full fee. The free exam is a quick check. The recall exam with a fee attached is scheduled between other appointments. The free recall exam is double-booked on top of other appointments.

There are many ways to raise your fees. The easiest is to increase fees annually. Other options include spreading the increase over two increases, increasing every quarter, or in a very extreme case, divide the increase by 365 and increase fees every day by a fraction of the annual increase. The more the increase is spread out, the higher the amount of administrative work, and the greater the chance of miscommunication errors with clients who have a quote based on the old fees. Every way works, but the easiest is once a year.

Spending on veterinary medicine is pretty far down the list on the average household budget. The average family in Ontario spends more money on restaurants, tires and automotive supplies, gardening supplies, hair grooming services, and art.

Veterinarians do not take fee criticism very well. According to psychologist Dr. Stephen Little, PhD, veterinarians are primarily introverts, and one of the qualities of introverts is that they don't take criticism very well. If someone complains about a fee, it will bother a veterinarian for the entire day, and they will lose sleep over it for a week. Meanwhile, there are more than a thousand other clients who don't have a problem with the fees, but this group goes largely ignored.

Dr. Bernie Pukay said, "Veterinarians are uncomfortable with their prices because most veterinarians cannot afford their own fees." The problem is that many veterinarians do not charge enough to cover their expenses, and their net income suffers. The problem is not that expenses are too high, but rather that fees are too low. The solution is simple raise your fees.

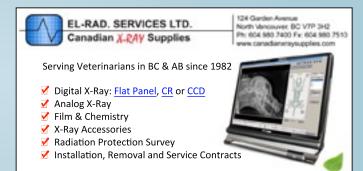
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