

WEST COAST VETERINARIAN

MARCH 2015 | Nº 18



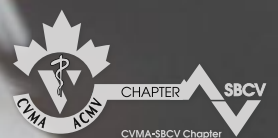
LIFE IN THE CHICKEN BARN

THE VETERINARY
SPECIALISTS ASSOCIATION
OF BRITISH COLUMBIA

MENTAL HEALTH
PROBLEMS IN PETS

LIFE AND WORK
AS A CONTINUUM

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from the editor



COREY VAN'T HAAFF
EDITOR

» TO THE EDITOR

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

It is a pleasure to introduce a new columnist in this issue of WCV—Dr. Jane Pritchard. She's likely no stranger to many of you—she is the province's chief veterinarian—but she is new to our magazine, and we are happy she will be sharing issues and trends with us each issue.

We also have another "On Balance" contribution, this time by Brenda Phipps who has retired from veterinary practice to pursue a career as a transformational life coach. Brenda reminds us to stop trying to please everyone (you can't) and to stop taking things personally (I often do). Finding the right balance between work and family and fun isn't a mathematical formula; it's a balance of reduced stress and increased quality of life. Luckily, Brenda shares some tips.

For more than a year, the editorial committee has been discussing doing a chicken story, with high hopes of a fascinating peek into chicken medicine along with a chicken on the cover. We got more than that. A few weeks after we assigned the story, avian influenza broke out, and suddenly poultry veterinary medicine was front and centre.

Enjoy this issue and as always, let us know what you want to read and whether or not you'd like to write it.



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in memoriam

DR. DONALD NEALE

In November 2014, Don Neale passed away after a five-year battle with cancer. Not many knew of his battle as he continued to live each day to its fullest. Don was a very passionate man, and his main passions were family, fishing, and veterinary medicine.

He was very well known and respected in the veterinary community of Vancouver Island. Always attending seminars with his veterinary team, he seemed to know everyone, likely because he opened his first vet clinic in Ladysmith in 1976. In 2001, he decided to retire and take up fishing. However, in 2002, he returned to veterinary medicine and opened Oceanside Animal Hospital in Parksville. He still spoke of fishing, almost daily, but realized he needed to be working with the animals. He was such a skilled and compassionate veterinarian. Clients and patients adored him.

Don is greatly missed, but his presence and influence lives on at Oceanside Animal Hospital. His team is so saddened by this loss, but so blessed to have had the pleasure to know and work with him. [WCV](#)



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IDEXX
LABORATORIES

WCV CONTRIBUTORS



STEVEN CHAPMAN was born and raised in Fort St. John, BC, and over the summers has returned home to work at the local small animal practice. He likes to spend his spare time playing guitar, stone carving, and being outdoors, particularly camping, hiking, and fishing. Steven is our student liaison and is in his second year at WCV.



MARNIE FORD, PhD, DVM, DACVO, graduated from the Ontario Veterinary College in 2000 after completing a Bachelors in Zoology at the University of British Columbia and a PhD in Physiology at Monash University in Australia. Her research interests have focused primarily on retinal function and toxicological retinal degeneration. In 2004, she moved back to Vancouver and opened West Coast Veterinary Eye Specialists. Dr. Ford actively volunteers in Vancouver for the VPD, VECTOR, and Emergency Social Services.



MICHAEL KING, BVSc, MS, DIPLOMATE ACVS, graduated from Massey University Veterinary College in 2000. After an internship in his home town of Auckland, New Zealand, he then completed a residency in small animal surgery at Virginia Tech in the USA and became a Diplomate of the ACVS in 2007. After 18 months in London, England, he returned again to Auckland, to work in New Zealand's largest private referral practice. In October of 2011, Michael took a position as a surgeon at Canada West Veterinary Specialists, in Vancouver, BC.



REBECCA LEDGER, PhD, is a companion animal behaviour scientist and clinical ethologist from Vancouver, BC. Originally from the UK, Dr. Ledger was awarded her Bachelor of Science degree in Biology from the University of London, her Master's Degree in Applied Animal Behaviour and Animal Welfare from the University of Edinburgh, and her Doctorate in the assessment and treatment of behavioural disorders in shelter dogs from Brunel University.



BRENDA PHIPPS, DVM, graduated from AVC in 1990. Now retired from private practice, she enjoys life near the ocean in the White Rock area. Certified by the Life Mastery Institute, Brenda provides structured coaching for clients who are seeking to create a more fulfilling life by their own design.



STEWART RITCHIE, BSc (Agr), MS, DVM, DIPLOMATE ACPV, received a Bachelor of Science in Agriculture from the University of British Columbia, and a Master of Science from the University of Arkansas. He is a 1987 Graduate of the Western College of Veterinary Medicine and a Diplomate in the American College of Poultry Veterinarians. He is the founder/owner/operator of Canadian Poultry Consultants Ltd., a multi-veterinarian practice devoted to the prevention of diseases in poultry, and the owner of S. J. Ritchie Research Farms Ltd., a commercial broiler farm dedicated to commercial broiler chicken research.

WCV

MARCH 2015

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WEST COAST VETERINARIAN ISSUE 18

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

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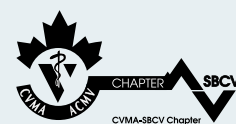
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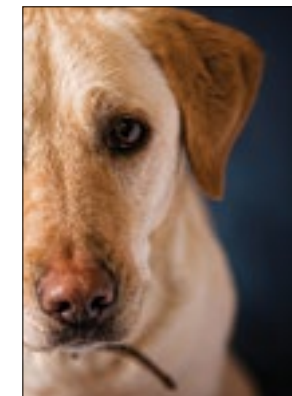
LIFE IN THE CHICKEN BARN



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march

BY JEAN GAUVIN, DVM

A new year brings the start of new initiatives and the continuation of important priorities for the CVMA, all to strengthen our collective voice on the national and international scenes, and to defend our profession and advance the interests of all veterinarians.

At the end of 2014, CVMA reviewed and provided feedback to the Honourable Rona Ambrose, Minister of Health, regarding a plan released in the fall, "Antimicrobial Resistance and Use in Canada: A Federal Framework for Action." While CVMA supports the three pillars of the Framework—surveillance of resistance and use in humans and animals, stewardship, and innovation—the Framework should not state that Canada's actions on antimicrobial resistance and use are aligned with international organizations and partners. Until Canada addresses antimicrobial regulatory voids (e.g., "Own Use Importation" and importation as active pharmaceutical ingredients) that do not allow for effective control over antimicrobial use, such claims cannot be made. CVMA has also urged the government to include veterinary stakeholders in the development of the Framework's action plan that will provide details on how the specific antimicrobial issues within the three pillars will be addressed. As the responsible use of antimicrobials remains a priority issue for CVMA, we will continue to advocate for a national cross-sector antimicrobial strategy that encompasses the spheres of human and veterinary medicine and brings Canada into alignment with international standards.

Throughout 2015, to promote the value of veterinary healthcare and increase the understanding of the many roles of veterinarians, we are running an awareness campaign that targets our public audiences on Facebook and Twitter. In consultation with our Communications advisory group, a series of veterinary healthcare statements has been developed to draw attention to a variety of topics such as companion and large animal health, public health, antimicrobial stewardship, the human-animal bond, preventive healthcare options, and more. Watch for this on our Facebook and Twitter feeds so you can share these important messages with your own networks throughout 2015. You can find the CVMA on Facebook at www.facebook.com/CanadianVeterinaryMedicalAssociation and on Twitter in English @CanVetMedAssoc and in French @Assoccanmedvet.

Your **2013 Provincial Economic Report** and **2013 Report on Veterinarians in Government, Industry and Academe** are now available for British Columbia. As a CVMA-SBCV Chapter member, you can access these reports by logging into the CVMA website under the Practice & Economics > Business Management > Reports section.

Our editorial committee is looking for **Associate and Assistant Editors** for *The Canadian Journal of Veterinary Research*. If interested, contact

the Managing Editor of Journals, Heather Broughton, at hbroughton@cvma-acmv.org.

CVMA is getting into the Western spirit and holding its annual convention from **July 16 to 19, 2015**, in Calgary, Alberta. In partnership with the Alberta Veterinary Medical Association, and in collaboration with the Canadian Association of Animal Health Technologists and Technicians, this unique four-day convention features 118 hours of potential CE sessions and speakers from Canada, the United States, and Europe. With sessions focusing on small animal, equine, bovine, and ruminant medicine, in addition to animal welfare and business management issues, there is something of interest for everyone. And for the first time, table topics will be presented at the University of Calgary's Faculty of Veterinary Medicine Showcase. You can find out more about these sessions on the CVMA's website (www.canadianveterinarians.net). Online registration for the 2015 CVMA Convention is now open.

I look forward to your continued support as a CVMA-SBCV Chapter member in the upcoming year so that we may continue to be the influential organization that Canadian veterinarians need as our profession faces many challenges of the changing times.

We welcome your comments and inquiries at the CVMA office. Please contact us by email admin@cvma-acmv.org or by telephone 1-800-567-2862. Your feedback is extremely valuable to us.



Jean Gauvin, DVM, graduated from the Faculty of Veterinary Medicine at the University of Montreal in 1980. He taught in universities and colleges for several years before devoting himself exclusively to private practice. He has more than 20 years of experience in the field of electronic (radio, television) and written media. In 2000, he was the recipient of the CVMA's Small Animal Practitioner of the Year. Fluent in both official languages, he is frequently called upon to give lectures across Canada. Dr. Gauvin and his wife Lyne have two sons, Charles and Alexandre. They live with a Wire-haired Teckel named Maya; Gaston, an orange tabby cat; and Caroline, the turtle.

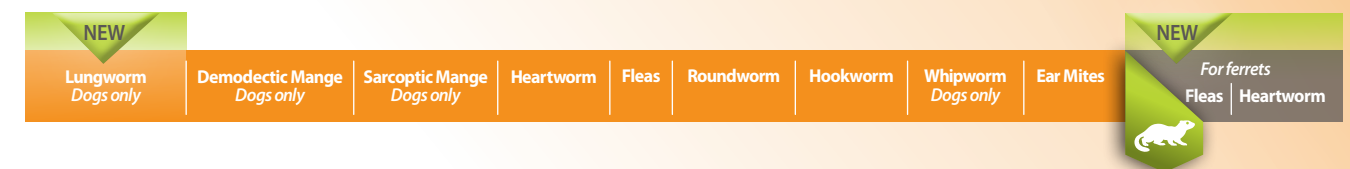


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²Mehlhorn H, Mencke N, Hansen O. (1999). Effects of imidacloprid on adult and larval stages of the flea *Ctenocephalides felis* after *in vivo* and *in vitro* application: a light and electron-microscopy study. *Parasitol Res.* 85(8-9): 625-637.

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BY SARAH ARMSTRONG, DVM

It's the start of a new year, bringing new beginnings for us all. I am writing my first President's Report in a local coffee shop, enjoying its ambiance, but wistfully pondering the typical overcast, rainy Vancouver scenery outside. I am already dreaming of the beautiful cherry trees that will flower when this issue goes to print in March.

I am thrilled to be elected as the third president of the Chapter. As some of you may know, I joined the Chapter six years ago, when it was a budding society under the direction of Diane McKelvey. My ambitions are the same now as they were then: to strengthen our veterinary community in BC through involvement and engagement. I think we all have grown accustomed to operating behind closed doors as individual units, but we need to see the potential in working as a team and supporting one another. I see this as an area of focus for the Chapter: bringing our professional community together.

I am also honoured to be part of the growing demographic of female veterinarians. As a woman, I understand and respect what is unique to females in the medical profession: maintaining work-life balance, becoming the primary breadwinners in the family unit, and fitting motherhood into our careers, among other issues. I have always felt welcomed in this society from the very beginning as a young female veterinarian, and was always encouraged to express my viewpoints and comments on various topics.

Some of the programs and initiatives the Chapter will be working on in 2015 include: moving ahead with our new graduate mentorship program, recruiting new members, retaining past members, working on outstanding CE for our fall 2015 conference, and discussing the restructuring of our membership fees with the CVMA.

The new graduate mentorship program will be developed by the Chapter in conjunction with WCVM and Dean Doug Freeman. I, for one, am very excited about this program. The Chapter decided to focus on one area of mentorship to keep things simple in the beginning, and if that is successful, we will consider adding on other avenues of mentorship. We also want our members to know that we hear you on the issue of annual fees, and that we are trying to come up with some creative ways to lower them. Our dilemma is that we are a Chapter of the CVMA, and both societies need to agree on fee restructuring.

Lastly, I would like to thank the past president of the Chapter, Marco Veenis, for all of his hard work and dedication to our veterinary community. He has been a tremendous president and leader, and one I look up to as a mentor. He has left mighty big shoes to fill, and I hope to do him justice as president in 2015.

Wishing everyone a wonderful and prosperous 2015. As always, the Chapter welcomes any input from its members. If you have a new idea or would like to comment on something we are (or aren't) doing, please contact our executive director, Corey Van't Haaff.



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

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BY JANE PRITCHARD, DVM, MVetSc

When I signed up to do a regular column, I thought it would be an excellent opportunity to introduce the Province of British Columbia's new Animal Health Act to practicing veterinarians.

The Act and its supporting Regulations are scheduled to come into force in early 2015 and will make the reporting of many diseases to the office of the Chief Veterinarian of BC mandatory for veterinarians. The list of diseases is within the Reportable and Notifiable Disease regulation.

Reportable Diseases include environmental toxins, infestations, syndromes, or transmissible disease that are reportable for the purpose of implementing preventative, control, or eradication measures. In other words, provincial protocols are implemented in response to the first identification of these diseases. Notifiable Diseases are listed and required for the purpose of implementing varying levels of monitoring and response measures. These measures can help determine the presence, identity, nature, effects, or spread of a disease or syndrome, minimize the risks of trade disruption, or can be for other reasons in the public interest. The Animal Health Act and Regulations are available at http://www.bclaws.ca/civix/content/complete/statreg/524872423/14016_f/?xsl=/templates/browse.xsl.

I also wanted to take this opportunity to give you a brief summary of the outbreak of Avian Influenza (AI) in the Fraser Valley.

On December 1 2014, the Ministry's Animal Health Centre in Abbotsford received submissions from two separate poultry producers, (one turkey, and one broiler breeder) with high mortalities, both of which ended up testing positive for the Highly Pathogenic Avian Influenza strain H5N2. At the time of writing this column, December 30, the virus has been confirmed at eleven commercial premises—three turkey, one table egg, and eight broiler breeder farms stretching from Langley to Chilliwack—and two back yard flocks, one with H5N2 and one with H5N1 (updated February 2015).

The response to the outbreak was swift. As soon as the Animal Health Centre confirmed the positive Avian Influenza PCR tests, we were in touch with the industry and the Canadian Food Inspection Agency (CFIA) to enact the emergency response protocol. The Foreign Animal Disease Emergency Support Plan (FADES Plan) protocol outlines the roles and responsibilities of the different public health, emergency response, and agriculture ministries and agencies involved. As part of the response, the CFIA and the BC government activated a Joint Emergency Operation Centre in Abbotsford, with trained Ministry of Agriculture staff on the ground working with other provincial Ministry staff, our federal colleagues, and poultry industry partners to take all steps necessary to ensure human and animal safety.

The two affected farms immediately imposed a voluntary quarantine

on their farms, and the industry at large immediately enacted biosecurity precautions and measures to reduce the risk of additional cases.

The Federal Minister of Agriculture declared a primary control zone in BC to reduce the risk of the spread of avian flu. The primary control zone is bordered by the Pacific Ocean, the US and Alberta borders, and Highway 16, and any movement of poultry within the control zone requires a permit from the CFIA. A robust surveillance program was established in the Fraser Valley testing on farm mortalities, but this has now been discontinued as the outbreak moves into Post Outbreak Surveillance based on serological testing.

The outbreak marks the first time a Eurasian strain of AI has been diagnosed in BC, the first time an AI outbreak began as a high pathogenic strain, and the first time a high pathogenic strain of AI was known to be carried within migratory wild waterfowl. They are also the most virulent strains of AI seen in Canada to date. Both strains are a mixture or re-assortment of the Eurasian highly pathogenic H5N8 circulating in Korea, China, and Europe, and local low pathogenic strains circulating in migratory and resident wild waterfowl on the West Coast.

Not unexpectedly, the H5N2 and H5N1 and the parent H5N8 have shown up in wild, captive, backyard, and commercial birds in Washington, Oregon, and California. In BC, wild bird surveillance has also been increased to see what threat may or may not still exist in resident waterfowl.



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.

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THE 2015 SCVMA SYMPOSIUM

BY STEVEN CHAPMAN

When planning winter travel vacations, most people envision warm, tropical locations, like Mexico or Hawaii. Consequently, the -40°C temperatures commonly seen in Saskatoon do not make it a popular winter destination. However, from January 8–10th, veterinary students from across Canada braved the frigid temperatures to visit the WCVVM for the 2015 Students of the Canadian Veterinary Medical Association (SCVMA) Symposium. Put on by an exceptional, well-organized group of volunteering students, the event was a fantastic success. The theme of the event was “Prairie Zebras—When you hear hoof beats, think horses, but beware, lest you be trampled by zebras,” hinting at the abnormal scenarios veterinarians face from time to time. Symposium conferences are held every year, with the host school rotating between the five veterinary colleges in Canada. It is an excellent way for students to meet future colleagues, share ideas, learn together, network, and develop new friendships. The weekend involved a showcase of both the city of Saskatoon and the WCVVM through tours, lectures, wet labs, and social events.

The weekend began with a day of tours around the Saskatoon area. Students could choose from a wide array of activities such as cross-country skiing, visiting the Saskatoon Zoo Society, shopping, outdoor ice-skating, police dog demonstrations, or dog sledding and snowshoeing in Waskesiu, SK. After an action-packed day, students came in from the cold and connected on a less formal note over a taco dinner, with movies, board games, or karaoke to follow.

Friday morning began with lectures put on by influential speakers and professors of the WCVVM. The word “lecture” is a poor way to define these talks, because every single one that I attended was incredibly inviting, informative, eye-opening, and valuable. These talks were much more inspiring than a standard lecture, as the topics tended to focus on practical life lessons for our future careers. The speakers shared their own stories and struggles with us to help prepare us for any difficulties of our own. Some of the exceptional sessions offered that morning included: animal welfare and euthanasia, community outreach, mindful careers, common myths of animal behaviour, medical and surgical errors, and vaccine development for chronic wasting disease. After lunch, alongside new friends from different backgrounds, everyone attended two wet labs where they were either introduced to unique topics or practiced critical skills. These included bovine semen collection and evaluation, canine rehabilitation, equine laparoscopy, ultrasonography of bovine reproductive tracts, care of small ruminants, equine acupuncture, and dynamic endoscopy. Following a full educational day, it was time to relax—after all, we did learn that one should have a balanced lifestyle. We strengthened our new friendships over dinner and a Winter Masquerade-themed dance, complete with an awesome live band.

The last day began with informative sessions on topics such as depression and mental health, foreign animal disease outbreaks, starting a practice, owner compliance, and odd cases of pathology. We then attended a lunch served by the CVMA executive and closed the day with a very motivational speech by the keynote speaker, Dr. Richard DeBowes. He touched on what it takes to be a great veterinarian, emotional intelligence, social leadership, and team building. With everyone inspired by the weekend’s events, the 2015 SCVMA symposium came to a close with a formal dinner and dance banquet at the Radisson hotel in Saskatoon.

The SCVMA Symposium was a great weekend that helped to create a nationwide community between the new members of the veterinary profession. This event would not have been possible without the hard work and dedication of our symposium executive, speakers, faculty, and our sponsors. “We were really pleased with how everything ran and had a really successful turnout to the academic activities as well as the social events,” said Kaitlyn Waddington, the President of the Symposium executive. “The feedback from attendees on the lectures and wet labs was really positive, and it was great to see the students and faculty from WCVVM come together to host billets, give lectures, run wet labs, and share in all the other weekend events.”

I was very lucky to be attending the WCVVM when it was the weekend’s host, and I cannot wait to see what the Ontario Veterinary College has in store for next year’s symposium. [WCV](#)



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COMING SOON

THE VETERINARY SPECIALISTS ASSOCIATION OF BRITISH COLUMBIA

BY MARNIE FORD, PhD, DVM, DACVO, AND
MICHAEL KING, BVSc, MS, DIPLOMATE ACVS



The human–animal bond has become an increasingly important factor in veterinary medicine over recent years, with more than 85 per cent of clients now stating that they view their pets as family members. While this means a greater commitment to the health and well-being of their animals, it has also led to increased expectations, both in the type of care available and in the success of treatment.

Most people routinely deal with specialists in human healthcare and are familiar with the concept of specialization. Access to specialists is also readily available in veterinary medicine. A veterinary specialist is a board-certified veterinarian who has undergone further post-graduate training in a defined area of veterinary medicine. After completing additional years of rigorous training, and examination, these veterinarians are experts in their areas of study. Continued education after attaining board certification is also required by the different specialty colleges. Credited continuing education (CE) is largely derived from focused publications and attendance at specialty conferences, both for veterinary and human medicine. In addition, a large part of uncredited CE comes from frequent communication between colleagues of the same specialty or in other related fields. More information about each of the specialties, their requirements, and scope of training can be found by visiting the American Board of Veterinary Specialties at www.avma.org/ProfessionalDevelopment/Pages/default.aspx.

In an effort to augment the already high level of veterinary care available in British Columbia, the specialists of this province have come together and formed the Veterinary Specialists Association of British Columbia (VSABC).

The VSABC only recognizes the specialties that are recognized by the American Veterinary Medical Association via the American Board of Veterinary Specialties. This constitutes 22 specialty organizations comprising 40 distinct specialties. Of these, 15 specialties are currently represented by the VSABC: anesthesia, cardiology, dentistry, dermatology, emergency and critical care, feline practice, internal medicine, neurology, oncology, ophthalmology, pathology, radiology and diagnostic imaging, large animal surgery, small animal surgery, and sports medicine and rehabilitation. VSABC members are available for referral or consultation throughout the province, both at specialist clinics or hospitals, and via mobile practice.

“CLIENT TRUST IS MAXIMIZED WHEN CLIENTS PERCEIVE THAT A VETERINARIAN IS FOCUSED MOST ON THE CARE OF THEIR PET”

WHAT ROLE CAN SPECIALISTS PLAY IN SUPPORT OF GENERAL PRACTICE?

Surveys of pet owners show that they judge veterinarians based not only on perceived expertise, but also on empathy with their patients, and how informative they are about treatment options. It is no revelation that client trust is maximized when clients perceive that a veterinarian is focused most on the care of their pet and not on what seems primarily in the best interest of the practice. What is more surprising is that 90 per cent of clients would prefer to hear about all available treatment options, even if costs would be outside of what they are prepared to spend.

Clinics that focus on these aspects are more successful in increasing patient visits, services performed, fees charged per visit, and overall client loyalty.

In both human and veterinary medicine, client complaints against veterinarians more commonly involve communication issues (primarily, clients feeling they were inadequately informed about aspects of their pet's care) rather than technical errors (over 60 per cent in one survey from the Ontario Veterinary College). A 2009 study of veterinarians and veterinary clients in the UK showed a dramatic disparity between client assumptions of the type of care being given to their pet, compared with what was actually provided. With the rise of information available on the Internet, clients are now much more likely to be

at least partly aware of different treatment possibilities for a particular condition, and to have less trust in their veterinarian if these options are not addressed in consultation.

Though referral is frequently not indicated (and often declined), as client expectations increase, discussing the option of specialist care for those cases where it is appropriate is becoming more necessary to avoid complaints or litigation should there be any complications during treatment.

Studies looking at quality of life among veterinarians show that consultations where a positive and collaborative relationship is built with the client result in much higher career satisfaction. This also leads to better productivity for the practice and greater longevity of employment. Having specialists available as a resource for information about current techniques, as well as a referral option for second opinions or continued care, can enhance the client relationship with the veterinarian, as well as decrease concern about appropriately treating more complex or unfamiliar cases.

As veterinary knowledge continues to expand, the ability of veterinary students to have a comprehensive understanding of the diseases they will be expected to treat, and the procedures needed to treat them becomes increasingly more difficult. A 2011 study of new graduates in the UK showed that they had a relatively low confidence in their skills, combined with an unrealistically high expectation of how technically proficient they should be upon beginning clinical practice, with the corresponding levels of stress. Having specialists in the area ready to provide advice or consultation on cases where the new graduate is uncertain can help, and can smooth the transition from student to veterinarian.

By definition, the limited focus of a specialist means they cannot and should not replace the service provided by the family veterinarian. There are situations, however, when referral of a patient or consultation with a specialist are appropriate. These include when a diagnosis is proving difficult, a rare or complicated disease has been diagnosed, the patient is not responding to standard treatment, the veterinarian is unfamiliar or inexperienced with treating a particular condition, a challenging or state-of-the-art diagnostic test or procedure is indicated, or intensive hospitalized care is required.

VETERINARY SPECIALISTS ASSOCIATION OF BRITISH COLUMBIA

VSABC members function as an extension of your practice, providing specialist care for referred patients, as well as an information source for you through phone consultation and CE events. The members of the VSABC intend to host both formal seminars and informal roundtable discussions with the referring veterinary community. The locations, frequency, and size of such meetings will be varied in response to demand and in an effort to provide the greatest accessibility to the referring veterinary community.

An additional objective is to increase awareness in the public sphere that specialty options are available in veterinary medicine, hopefully making it easier for referring veterinarians to discuss and incorporate those options into their patient care plans. Most veterinary specialists request a referral from the family veterinarian to ensure appropriate initial recommendations are made, and so that ongoing communication and post-consultative care may be provided. Patient care by specialists cannot be as effective without the continued collaboration with the family veterinarian. This partnership between specialists and general practitioners is what results in the very best standard of care being made available to all our veterinary patients.

Every veterinarian can benefit from the services offered by a veterinary specialist. This includes veterinarians practicing not only with companion animals, but also with equine, food animals, birds, marine animals, and wildlife. In an effort to promote accessibility, specialists from almost every discipline are available at fixed major city locations or routinely visit neighbouring clinics. Some specialists will travel routinely between different clinics outside of the Lower Mainland, including Vancouver Island, on a bi-monthly or monthly basis or by invitation to more remote locations. All specialists are available by telephone consultation for advice regarding case management and when indicated, review of lab testing, photographs, or digital recordings. When consultation for a case extends past the scope of skill or knowledge, your specialist, through close connections with their colleges and associations, can be a portal to help facilitate additional resources with other specialists both in Canada and in other countries.

“BY DEFINITION, THE LIMITED FOCUS OF A SPECIALIST MEANS THEY CANNOT AND SHOULD NOT REPLACE THE SERVICE PROVIDED BY THE FAMILY VETERINARIAN”

WHAT SHOULD WE EXPECT FROM EACH OTHER?

To help improve the relationship between specialists and referring veterinarians, in 2003 a committee of veterinarians in New England developed a series of guidelines for both parties. They identified clear medical records as being the cornerstone of communication between veterinarians, and that the referring veterinarian has a responsibility to provide a concise summary of recent pertinent history to the receiving specialist, including any lab work or other diagnostic results. Ensuring such information is readily available helps prevent any delay in initiating appropriate therapy, or any unnecessary repetition of diagnostics. It also minimizes the risk of any legal liability for the general practitioner or the specialist.

In turn, the specialist has an obligation to communicate with the referring veterinarian as soon following consultation as possible, and with regular updates while the patient remains under the specialist's care. Though the referring veterinarian transfers primary case management at the time of referral, they should feel free to contact the specialist to discuss the case, with the specialist expected to make every effort to be available. The committee emphasized that optimum patient care occurs when the referring veterinarian and specialist have open, efficient methods of communication.

To contact a member of the VSABC, and to sign up for notification of upcoming events, please visit our website at www.vsabc.info. The website is designed to clearly list the specialty services represented and provides a list of individual clinicians with a link to their individual or clinic websites for further contact information. In addition, the website provides important links to access the various specialty colleges so you and your clients can learn more about the training requirements and skills developed for each of the specialties. **WCV**

MISSION STATEMENT

OF THE VETERINARY SPECIALISTS ASSOCIATION OF BRITISH COLUMBIA

The Veterinary Specialists Association of British Columbia (VSABC) and its members are committed to:

- providing state-of-the-art specialized health care for animals through the support of the veterinary general practitioners and the public of British Columbia
- promoting and educating the public and fellow veterinarians regarding the role and availability of veterinary specialty medicine
- fostering partnerships with all veterinarians, support staff, and industry representatives



LIFE IN THE **CHICKEN** BARN

BY STEWART RITCHIE
BSc (AGR), MS, DVM, DIPLOMATE ACPV

Just recently, on Grey Cup Sunday, I got a call from a chicken producer regarding an increase in mortality. The birds were necropsied and tissues were retrieved. It reminded me of the chilly weekend in February 2004, the weekend before Valentine's Day, when a chicken producer called me to say there was excessive mortality he wanted me to look at. I drove out to my office/laboratory and necropsied the sample of dead birds. The necropsy revealed a diagnosis of deep pectoral myopathy, with "wet" lungs in a couple of birds. Samples of these lungs were removed and submitted to the provincial diagnostic laboratory. The tissues were positive for Avian Influenza (AI), and that was our index case for the 2004 High Path AI (HPAI) outbreak.

And on Grey Cup Sunday, here we were again. The 2014 call and subsequent chicken mortalities appeared to represent what may have been the index case for the 2014 HPAI outbreak.

In both cases, and especially in 2004, it felt like a 747 Jumbo Jet just missed my head. Was it luck, or had I really listened to what our epidemiology professor taught, so many decades ago? In 2004, the AI outbreak was an extremely stressful event. In a very short period of time, our valley was being depopulated. The future looked bleak and the stress was palpable.

But in 2014, it was different. This time, what we learned in 2004 was used to more quickly contain and thus not to spread the disease. What created the most anxiety for me was "What if I had delayed the diagnosis—after all I was in Vancouver, ready to pick up a visiting friend at the airport and ready to enjoy the Grey Cup game? What if I had not driven home to look at the birds, and what if I had not advised the producer not to sell his roosters?" It appears that requesting an AI diagnostic workup on the one farm had stimulated another farm to also look for AI, creating more what ifs.

There is still much work to do, and a lot of epidemiology still needs to be completed. Epidemiology in the face of an outbreak is important, but in the face of an outbreak of HPAI, it is very important that the virus be contained and destroyed, and quick monitoring established. A Canadian Food Inspection Agency (CFIA) epidemiological report should be available for the next generations, which will help them avoid making the same critical mistakes made in the past. We were fortunate that many of us were around in 2004, and we used that experience during the 2014 outbreak. It is still very important, however, that thorough, accurate, and precise epidemiological reviews are published, so that our chicken producers in 2050 and beyond will have all the information required.



LEFT & PAGE 20 Hens and roosters at a broiler hatching egg farm.
RIGHT Day-old broiler chick.
PAGE 25 Bulk complete feed delivery.

This is the life of a chicken veterinarian. One minute, I am looking forward to a football game, and the next, I am analyzing dead chickens. I attribute this ability to be a quick change artist to my upbringing. I grew up in a feed mill owned and operated by my parents, from whom I learned how to work hard and to be adaptable, both of which helped create the foundation of resilience needed for the interesting career that lay ahead of me. I also learned to put together vitamin and trace mineral premixes, and the lure of the science of nutrition was very strong, right from the beginning. This led me to study poultry nutrition at the University of British Columbia and then to work in graduate school at the University of Arkansas where I was fortunate to work for and with some of the most generous and globally recognized poultry nutritionists in the world at that time.

Attending the Western College of Veterinary Medicine was tough. I think I was the only student in my class genuinely interested in poultry, and I was really only interested in the prevention of poultry diseases, so I had some challenges with a curriculum that only offered one poultry disease course. Those four

tortuous years prepared me well to understand disease and epidemiology in a way that I could directly apply to the field of poultry medicine.

After graduating, I soon set up shop in one of the poultry hubs of Canada, the Fraser Valley. I first started working for a local poultry veterinarian who incidentally got his start from my parents' vision about servicing their feed clients. In 1989, after a year of introduction to the local industry, I created Canadian Poultry Consultants Ltd, which started out as a one-man practice and is now home to multiple poultry veterinarians. Three years later, I added S. J. Ritchie Research Farms Ltd., a commercial broiler research farm. I have been very fortunate to work extensively in the United States and to be involved in the American Association of Avian Pathologists. I served as the association's president, in 2011, the second Canadian president after Dr. Craig Riddell, my friend and renowned professor from WCVM who helped me limp through vet school. I have also been fortunate over the years to travel and present poultry topics in Asia and Australia, and have made numerous friends in these regions of the world. My plans

for the future include continuing to focus on prevention, and learning more about how organizational behaviour and the prevention of infectious diseases in intensive poultry production systems interact.

Early in my career, I was asked to speak and then to consult in various countries in Asia, including Mainland China. We embarked on building a farm in China and learned the hard way how to build something from scratch in a country that was eager to learn. One of my US colleagues had challenges with shipping baby chicks to Asia. They would arrive stressed and with significant mortality due to dehydration.

This was an intriguing problem that needed only a peek into the natural environment of the baby chick. I looked at cecal droppings from mature broiler breeder laying hens and then used off-the-shelf grocery items along with my knowledge of vitamin nutrition to, in part, recreate and possibly exceed the nutritional qualities of cecal droppings. In nature, a chick would consume these droppings which provide beneficial bacteria and nutrition, and a significant amount of moisture. This work led to the development of the Nutrient Matrix for Avian Neonates or NMAN. There were many ups and downs associated with the development of this product; the downs included learning that the best ideas need intellectual property protection—an important but difficult side of the dog-eat-dog (or chick-eat-poop) business world. Ultimately though, I have learned that along with karma, a truly good product will stand the test of time—this product will soon be available to poultry producers in Canada.

About ten years ago, management deficiencies in the brooding of baby chicks were noted as causing not only reduced efficiency of utilization of feed and reduced weight gains, but also increased incidence of infectious diseases, including coccidiosis and colibacillosis. The Platinum Brooding program developed as a class in our barn where we taught the critical aspects of biosecurity, brooding, and chick diseases. Dr. Victoria Bowes and Dr. Bill Cox provided significant help by presenting information on bio security and chick diseases at almost every class (to date we have conducted over 30 classes at our farm). The Platinum Brooding class is now part of the curriculums of the University of Georgia, Department of Population Medicine, and the University of Arkansas, Center of Excellence in Poultry Science. The class has also been a part of the Aviagen International Poultry School in Alabama for over seven years. The journey goes on with Platinum Brooding as we continue to learn and teach what we learn in an effort to add disciplined management to such a critical part of rearing chickens. I now work very closely with Royal DSM, the company that manufactures those vitamins I was and still am so interested in, and we are in the process of developing a truly integrated approach to what we now call Platinum Poultry Production systems, focused on very innovative integrated disease prevention strategies.

Many years ago, I was asked to present information on intensive broiler production at UBC's Animal Welfare Department—a very well-known department established by Dr. David Fraser. Dr. Fraser still asks us to have his class attend the farm on a weekend every year where we spend as much time as needed in discussing and viewing intensive broiler production. I learn just as much as the students during this class, and one of the main lessons is to be transparent and tell it like it is. I believe the term “factory farm” is not used by those educated in the animal welfare class. Instead, the term “intensive production system” is used. We are often not successful in separating emotion from reality, but these classes offer the opportunity to try.

We also take the time to discuss antibiotic use and other topics of common interest. It is our opinion that questions relative to antimicrobial resistance will be answered through improvements in genetics, nutrition, management, and veterinary medicine. There still appears to be significant misunderstanding by the industry and consumers regarding antibiotic use and other value-added product claims, but with continued efforts of science-based education, we hope to close that knowledge gap while more positively impacting efficiency of resource utilization, reducing waste, and significantly improving food safety and animal welfare.

Avian health is in the news, again with this latest AI outbreak. I am so glad that Dr. Iverson, my epidemiology professor at WCVM, taught us to embrace universal precautions, i.e., always be aware and suspicious



“EPIDEMIOLOGY IN THE FACE OF AN OUTBREAK IS IMPORTANT, BUT IN THE FACE OF AN OUTBREAK OF HPAI, IT IS VERY IMPORTANT THAT THE VIRUS BE CONTAINED AND DESTROYED, AND QUICK MONITORING ESTABLISHED”

when dealing with any unknown disease. (He highly recommended engraving “Anthrax and Rabies” on our post mortem knives.) The outstanding diagnostic capabilities of the local British Columbia Veterinary Laboratory were extremely important (my parents had a lot to do with raising the money to build the original laboratory), and using the lab's services, we were able to quickly determine an etiology. Unfortunately, this story is ongoing, and again it is probably best that the lessons learned be cautiously reviewed, especially in the context of the current outbreak and unresolved epidemiological studies. I will say that the majority of producers in the Fraser Valley are truly outstanding and caring, but there are always weak links, and it is up to us as guardians of poultry health to strengthen those weak links.

I would like to encourage veterinary schools to continue to add poultry science studies to their curriculums, as these studies will undoubtedly produce veterinarians who continue to focus on disease prevention strategies. Maybe consider sitting through one of our Platinum Brooding classes. And if you are interested in seeing how we produce poultry products, give me a call. I will be more than happy to show you around and try to answer your questions. **WCV**

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RECOGNIZING AND TREATING MENTAL HEALTH PROBLEMS IN PETS

THE VETERINARIAN'S ROLE

Many pets suffer from emotional and behavioural conditions that are akin to mental health problems in people. And yet, while family doctors are regularly called upon to diagnose and treat their patients for mental illness, veterinarians are consulted less often.

As primary health care providers, why are veterinarians not the client's first port of call when it comes to seeking help for a pet's mental health issues? Conversations with clients indicate that many owners of pets suffering with behavioural problems simply don't expect their veterinarian to have the resources and expertise needed to help. Partly, this is because of a lack of awareness regarding the neurological and physiological basis of many behavioural disorders, which *only* veterinarians can treat.

The stigma associated with mental health disorders in humans also likely extends to how we view behavioural disorders in our pets. Apprehension about the anticipated treatments, such as giving dogs Prozac, deters many owners from seeking veterinary help.

Popular media has further propelled the belief that behavioural problems are training issues and not the same as mental health disorders. Catchphrases like "There are no bad dogs, just bad owners," place the cause of misbehaviour firmly at the feet of the guardian, rather than attributing it to any physical or emotional incapacity of the dog.

These misconceptions mean that many owners miss out on getting veterinary input with their pet's behavioural problems. And, there are welfare implications in doing so. When a medical diagnosis is not available, and when reward-based training techniques have failed to work, many owners resort

BY REBECCA LEDGER, PhD

to using inhumane training techniques, such as electric shock collars, social isolation, tethering the dog, and physical punishment. And any behavioural problem that is not adequately managed can ultimately lead to relinquishment or euthanasia of the pet.

WHEN SHOULD A VETERINARIAN INTERVENE WITH BEHAVIOURAL PROBLEMS?

Not all behavioural problems are related to health. Behavioural problems that arise from a lack of basic training, such as jumping up on people, not coming when called, and general disobedience, can usually be dealt with by teaching dogs operant commands using lure and reward-based techniques. These commands can be taught by competent, positive reinforcement-based trainers.

However, behavioural problems that are emotional in origin, and that have a physiological basis, benefit from a clinical approach. There are many occasions when the veterinarian may need to intervene with what is possibly a mental health issue.

“POPULAR MEDIA HAS FURTHER PROPELLED THE BELIEF THAT BEHAVIOURAL PROBLEMS ARE TRAINING ISSUES AND NOT THE SAME AS MENTAL HEALTH DISORDERS”

TREATING UNDERLYING PAIN, INJURY, AND DISEASE

Veterinarians rely heavily on how an animal behaves and its mood in order to assess its health. Changes in irritability, aggressiveness, activity, and anxiety can be the first signs that alert the pet's caregiver that the animal is unwell. For this reason, behavioural management should start with a physical and neurological examination by the veterinarian, as well as completion of a CBC, urinalysis, and thyroid panel, to identify whether any pain, injury, or disease could be contributing to the behavioural problem.

Behavioural therapy done either by, or under the supervision of, a treating veterinarian increases the chances that the pet will receive the appropriate care for its condition, quickly. The importance of a veterinary oversight process in the treatment of behavioural problems is reflected in the Code of Practice of various professional associations, such as the Association of Pet Behaviour Counsellors (APBC) and the Association for the Study of Animal Behaviour's (ASAB) Clinical Animal Behaviourist certification (CCAB), whose members only see cases on veterinary referral, once the physical health of the animal has been assessed.

TREATING EMOTIONAL ISSUES

Animals that appear normal on a physical and neurological examination may nevertheless have neurological or endocrine imbalances that lead to feelings of anxiety, fear, frustration, and depression, and subsequent behavioural problems. Since only veterinarians can prescribe the medications needed to address these imbalances, their involvement is invaluable.

A good example is the management of fear- and anxiety-related disorders in dogs. Anxiety and fear are emotions that underlie the majority of problems that behaviourists deal with, including aggression, compulsive disorders, separation anxiety, fears and phobias, noise sensitivity, changes in appetite, and sleeping problems. Just like humans suffering from anxiety, anxious animals typically have low cerebral levels of serotonin and its metabolites, as well as elevated levels of cortisol and adrenaline, which prepare the stressed individual for the possibility of fight or flight.

SSRIS AND TCAS

When anxious dogs are treated with SSRI or TCA anti-anxiety medications, which elevate the synaptic levels of serotonin, their anxiety reduces, and the behavioural symptoms of their anxiety also diminish. These effects have been demonstrated in studies time and time again. For example, Simpson et al (2007) found that after 8 weeks of treatment with behavioural therapy and fluoxetine (1-2mg/kg po SID), separation anxiety improved in 72 per cent of patients, compared with 50 per cent of dogs that were treated with behavioural therapy plus a placebo. Similarly, Ibanez et al (2009) found that the behaviour of 75 per cent of dogs experiencing either general anxiety or aggression improved with the administration of fluoxetine.

BENZODIAZEPINES

Benzodiazepines enhance the effect of GABA at GABA_A receptors, leading to sedation, sleepiness, and a reduction in anxiety. The use of these medications has also been shown to be effective in treating dogs with anxiety disorders. For example, Crowell-Davis et al (2003) found that 30 out of 32 dogs experiencing distress during storms improved to varying degrees after treatment with alprazolam, clomipramine, and behavioural therapy over a six-week period. Although systematic desensitization training techniques were still considered vital, the use of medications enhances the swiftness and overall success with which these patients improve.

VETERINARIANS CAN MAKE DOGS MORE TRAINABLE

In addition to having a direct effect on emotional states through the increase of synaptic levels of relevant monoamines, medications can also help dogs to become more trainable. The mechanism for this has slowly been unraveled over many decades of research.

In 1908, Yerkes & Dodson described a relationship between learning, performance, and arousal,

and how there is an optimum level of arousal under which different tasks can be performed. Arousal can be considered to be a measure of how awake, alert, and attentive we are. When our arousal is very low, our attention will also be low, making it difficult for us to attend to a task. On the other hand, if our arousal is too high, performance on the task is impaired, especially if we are feeling anxious. This relationship between arousal and performance is called Yerkes-Dodson's Law.

More recent studies have shed some light on the neurological mechanism by which this effect occurs. Anxiety causes a stress response. Activation of the HPA axis leads to elevated cortisol. And when cortisol levels are too high, cytosolic response element binding protein (CREB) and its ability to transcribe nuclear proteins (which help us to learn and remember) are inhibited.

The effect is that highly aroused, stressed dogs can't learn as effectively as calmer dogs. And, so unless veterinarians are able to treat their patients medically for their underlying anxiety, fear, frustration, and depression that can lead to elevated

cortisol, then training alone may be insufficient. Conversely, dogs treated with medications that lower cortisol are subsequently more attentive, easier to train, and learn faster.

HOW CAN OWNERS BE ENCOURAGED TO SEEK VETERINARY HELP FOR THEIR PETS' BEHAVIOURAL PROBLEMS?

Peer-reviewed studies have identified that people are more likely to seek help for their own mental health issues if they have some knowledge of mental health issues and sources of help, if they hold positive attitudes towards seeking help or have had positive experiences with sources of help in the past, and if they have established and trusted relationships with help providers.

As general awareness of the physiological basis of mental health improves, so more people are reaching out to their physicians for help. And what works for us may also work for our pets.

Asking owners about their pet's behaviour during a clinic visit, discussing any behavioural problems evident during an examination, and explaining the similarities between behavioural problems in dogs and our own mental health issues can help owners to consider the mental health of their pets, beyond simply whether the resultant behaviour is a problem for them. This has the potential to be better for the welfare of the patient and will lead to better outcomes for the owner-pet relationship. [WCV](#)

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WORK AND LIFE AS A CONTINUUM

BY BRENDA PHIPPS, DVM

Finding a healthy work-life balance is challenging for most veterinarians and often more so for practice owners. Like many of my former colleagues, I found that a growing and finally overwhelming theme over the course of my 20-year career—which included life as the practice owner of Willow Park Feline Clinic in Calgary—was unhappiness with work, too much stress, and reduced quality of life. I was exhausted and I wanted out. I eventually left private practice five years ago, and now I work as a transformational life coach with people who have decided it's time to find a way to do life differently.

Looking back over my own career, I remember trying to be creative in my search for a healthy balance in spite of the ever-increasing demands placed on both myself and my staff. Like many veterinarians, I put too much pressure on myself to accommodate all my client demands in fear of losing their business. Add that to an already unpredictable workload, and I was cooking up the perfect recipe for burnout. As the years went by, I saw an increasing trend towards extended evenings and weekends. Working longer hours translated into less time for me and my family—despite an increase in resources to do the opposite.

I found that navigating a path to successful living required a willingness to re-evaluate how I managed my work environment, while recognizing that my sense of well-being on the job inevitably carried over into the rest of my life and vice versa. Here are some tips that I found extremely helpful in balancing work with time off as well as reducing stress throughout the work day.

STEP OUT OF THE COMPETITIVE MINDSET

We are all unique individuals, and our practices each have their own style and flavour. Some clients will like you, and some will like your colleague down the road. Focus on having clients you are compatible with and develop a great working relationship with them.

STOP TRYING TO PLEASE EVERYONE

I promise you, it's a losing battle! That goes for your boss, your employees, your coworkers, your clients, and your family. Set a high standard of conduct, stick to it consistently, and set healthy boundaries and goals that include getting some of your needs met.

DON'T TAKE ANYTHING PERSONALLY

Thoughtfully consider feedback and communicate with the rest of your team about solutions that benefit everyone *before* deciding if anything you perceive as criticism warrants changing what you're already doing. Taking things personally—and defaulting to anger or defensiveness—exacerbates stress, hampers effective communication, and chokes out creativity. Shifting your perspective to one of curiosity will invite golden opportunities for growth and improvement.

CLOSE MONDAYS, & FOR LONG WEEKENDS, CLOSE THE SATURDAY AS WELL

Make friends with your 24-hour emergency clinic. This was the single best management decision I ever made. It was also one of the most profitable because it reduced the number of overtime hours and additional part-time staff requirements. No more stress over who gets the long weekend off, and everyone gets more time with family and friends. This is a huge perk for both hiring and retaining great staff, and it works out to nearly one long weekend a month.

“TAKING THINGS PERSONALLY—AND DEFAULTING TO ANGER OR DEFENSIVENESS—EXACERBATES STRESS, HAMPERS EFFECTIVE COMMUNICATION, AND CHOKES OUT CREATIVITY”

MANAGE YOUR APPOINTMENT BOOK TO SUPPORT THE BEST LEVEL OF SERVICE

Practices that emphasize high volume with short time slots are stressful. I found that 30-minute appointments were much more productive and satisfying. Clients felt heard, and I could be more thorough and take my time discussing the best options. When clients understand the value in what you are offering and aren't feeling rushed, it cultivates a sense of trust and partnership. Feeling rushed into a big decision leaves them feeling reluctant to follow through, or gouged when they do.

Cap at 50 to 60 per cent the number of appointments per day allotted for annual check-ups.

Highlight two slots a day that do not get booked in advance, to accommodate the sudden urgent phone calls. These slots can also be used as time to examine drop-offs. Better yet, you and your staff will all get a nice refreshing lunch break to recharge your brains and have a few laughs together.

In my experience, approaching work and life as though they are completely separate entities tends to set up a kind of mental and emotional tug-of-war. Approaching them as more of a continuum and focusing on having a sense of happiness and flow in, and from, one to the other goes a long way. We become more relaxed, less drained, and more open to creative approaches to designing the life we want. [WCV](#)

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IDEXX Laboratories announced the launch of the new IDEXX CardioPet® ECG Device, making cardiac screenings, consultations and collaboration with the board-certified cardiologists of IDEXX Telemedicine Consultants even easier. For more information, see www.idexx.com.

Hill's Pet Nutrition, Inc. has extended its partnership with the Minnesota Urolith Center (MUC) to reduce the worldwide incidence of urinary disease in companion animals and to enhance the global veterinary care of pets with urinary tract disorders. For more information, see www.hillspet.ca.

Dr. Jeff Grognet (DVM) and canine behaviour instructor and behaviourist Mike Annan have announced the **Essentials for Shelter and Rescue Care**, a free course for people who work or volunteer at shelters and rescues. For more information, see www.dog-training.academy.

Trupanion has partnered with VCA in an exclusive new relationship naming Trupanion the preferred vendor among VCA's network of veterinary hospitals across the United States. For more information, see www.trupanion.com/canada.

Boehringer Ingelheim (Canada) Ltd., has launched ULTRATM Fel-O-Vax®, the first and only 1/2 mL vaccine line for cats. For more information, see www.boehringer-ingelheim.ca.

Zoetis Inc. has announced its purchase of the animal health assets of Abbott Animal Health. The purchase expands Zoetis' companion animal product portfolio to bring veterinarians solutions for treating pain and serious illnesses such as cancer and diabetes. For more information, visit www.zoetis.com. [WCV](#)

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