

# Article

## Survey of western Canadian veterinary practices: A demographic profile

Murray D. Jelinski, Katrina K. Barth

**Abstract** – A mixed-mode survey was used to describe the demographics of the veterinary profession in western Canada and to assess the demand for veterinary practitioners. Data were received from 655 practices (response rate = 52%), providing demographic data on 1636 individual practitioners. Most (60%) respondents self-classified their practices as exclusively small animal, while 25% and 4% were mixed animal or exclusively food animal practices, respectively. Across all practices, 77% of practitioners' time was devoted to small animals and the average mixed animal practice devoted 60% of practitioners' time to small animals. After accounting for practices that did not respond, there were ~300 full-time equivalent (FTE) vacant positions for veterinary associates; however, only 12% of practices were in urgent need of hiring an associate veterinarian. This report informs both prospective employees and employers on the state of the marketplace for veterinary associates, and provides an overview of the demographics of the veterinary profession in western Canada.

**Résumé** – **Enquête auprès des pratiques vétérinaires de l'Ouest canadien : un profil démographique.** Une enquête de type mixte a été utilisée pour décrire les données démographiques de la profession vétérinaire dans l'Ouest canadien et évaluer la demande de praticiens vétérinaires. Des données ont été reçues de 655 pratiques (taux de réponse = 52 %) et ont fourni des données démographiques sur 1636 praticiens individuels. La majorité (60 %) des répondants ont classé leur pratique comme traitant exclusivement des petits animaux, tandis que 25 % et 4 % étaient des pratiques mixtes ou exclusivement pour animaux destinés à l'alimentation. Dans toutes les pratiques, 77 % du temps des praticiens était consacré aux petits animaux et la pratique mixte moyenne consacrait 60 % du temps des praticiens aux petits animaux. Après avoir tenu compte des pratiques qui n'ont pas répondu, il y avait ~300 postes équivalent temps plein (ETP) vacants pour les vétérinaires salariés. Cependant, seulement 12 % des pratiques éprouvaient un besoin urgent d'embaucher un vétérinaire salarié. Ce rapport informe les employés et les employeurs éventuels sur l'état du marché pour les vétérinaires salariés et présente un aperçu des données démographiques de la profession vétérinaire dans l'Ouest canadien.

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### Introduction

A survey of the western Canadian veterinary profession conducted in 2006 found that 64% of all veterinary practices were exclusively companion animal oriented, wherein they devoted 100% of time to small animals and equine practice (1). Conversely, only 4% were considered to be exclusively

food animal practices. When examined at the level of the individual practitioner, 73% of all practitioners' time was devoted to small animals, 11% to beef cattle, and 9% to horses. The survey also estimated that western Canada had ~350 vacant full-time equivalent (FTE) positions, with companion animal practitioners being in the greatest demand. Furthermore, 60% of practices were 1- and 2-person practices and the larger multi-person practices ( $\geq 4$  veterinarians) were twice as likely as the smaller practices to be looking to hire.

While the 2006 study provided insight into the demand for veterinary associates, the finding of 350 FTE vacant positions seemed incongruent with the relatively low number of employment positions advertised on-line or in print. Therefore, a second survey was conducted in 2008, but this time practices were asked to qualify how motivated or determined they were with regards to their hiring intentions (2). As per the 2006 study, there was a large number of vacancies (314 FTEs); however, only 8% of practices were "in urgent need of another veterinarian and would hire anyone who is qualified for the job." This second survey confirmed that while many practices may be passively

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Department of Large Animal Clinical Sciences (Jelinski), Western College of Veterinary Medicine, University of Saskatchewan, Saskatoon, Saskatchewan S7N 5B4; 245 Kingsmere Blvd, Saskatoon, Saskatchewan S7J 4J6 (Barth). Address all correspondence to Dr. Murray Jelinski; e-mail: murray.jelinski@usask.ca

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**Table 1.** Percent of veterinary practices by type and province. Practice type was based on how the respondents' self-classified their veterinary practices ( $n = 655$ )

|                  | SA<br>( $n = 391$ ) | EQ<br>( $n = 32$ ) | FA<br>( $n = 28$ ) | MA<br>( $n = 169$ ) | CA<br>( $n = 23$ ) | LA<br>( $n = 12$ ) |
|------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|
| BC ( $n = 274$ ) | 74                  | 7                  | 2                  | 12                  | 4                  | 1                  |
| AB ( $n = 227$ ) | 55                  | 5                  | 7                  | 26                  | 3                  | 4                  |
| SK ( $n = 101$ ) | 32                  | 0                  | 6                  | 59                  | 1                  | 2                  |
| MB ( $n = 53$ )  | 56                  | 2                  | 4                  | 32                  | 6                  | 0                  |
| Weighted mean    | 60                  | 5                  | 4                  | 25                  | 4                  | 2                  |

SA — Practice is exclusively (100%) small animals; EQ — Practice is exclusively (100%) equine; FA — Practice is exclusively (100%) food animals, MA — Practice is a combination of equine, food animals, and small animals; CA — Practice is exclusively (100%) companion animals, which includes both small animals and equine; LA — Practice is exclusively (100%) large animals, which includes food animals and equine; BC — British Columbia; AB — Alberta; SK — Saskatchewan; MB — Manitoba.

looking to hire at any given time, the actual number in urgent need of an associate was far less.

In the previous 2 surveys, most survey respondents had self-classified their practices as being exclusively companion animal oriented. This was consistent with a retrospective study that examined the demographics of the western Canadian veterinary profession over a 16-year period, 1991 to 2007 (3). In this study, 60% of practices listed in the veterinary directories were companion animal (small animal or equine) practices, whereas 32% and 8% of practices were classified as mixed or food animal practices, respectively.

The purpose of this study was to provide a more contemporary overview of the demographics of the veterinary profession in western Canada, and to assess the demand for veterinary associates.

## Materials and methods

### Survey questionnaire

A short survey, consisting of 8 questions, was sent to all veterinary practices in western Canada, which includes the provinces of British Columbia (BC), Alberta (AB), Saskatchewan (SK), and Manitoba (MB). The first 4 questions were dedicated to gathering practice and practitioner level demographic data. In addition to providing the practice's name and location (postal code), each respondent was asked to self-classify their practice into 1 of 6 types: exclusively (100%) small animal (SA); exclusively food animal (FA); exclusively equine (EQ); exclusively companion animal (CA), which included equine and small animal; exclusively large animal (LA), which included food animal and equine; and all other forms of private practice ("Other"). Respondents also provided the following data for each veterinarian within their practice: college and year of graduation; gender; average number of hours worked/wk; and the amount (%) of practice time each veterinarian devoted to small animals, beef, dairy, equine, swine, poultry, "other," and managing the practice.

Questions 5 to 7 were used to assess the quantitative and qualitative demand for veterinary associates. Veterinary practices that were looking to hire were asked to provide the salary being offered and how many hours/wk the new associate was expected to work. In addition, they were asked to select which statement best described their level of urgency regarding hiring intentions:

- 1) *Not actively looking, but would hire if an ideal veterinary associate approached you;*
- 2) *Not urgent, but have a potential candidate in mind;*

**Table 2.** Mean (median) percent of time that practices which self-classified as mixed animal practices devoted to small animal, equine, and food animal practice, stratified by province

|                             | Small animal | Equine | Food animal |
|-----------------------------|--------------|--------|-------------|
| BC ( $n = 31$ )             | 71 (71)      | 16 (6) | 13 (5)      |
| AB ( $n = 59$ )             | 59 (60)      | 12 (7) | 29 (24)     |
| SK ( $n = 58$ )             | 57 (56)      | 8 (8)  | 35 (36)     |
| MB ( $n = 17$ )             | 53 (50)      | 14 (5) | 33 (28)     |
| Weighted mean ( $n = 165$ ) | 60 (60)      | 12 (6) | 28 (25)     |

BC — British Columbia; AB — Alberta; SK — Saskatchewan; MB — Manitoba.

- 3) *Advertising by "word of mouth" and/or proactively contacting specific veterinarians;*
- 4) *Using multiple avenues of advertising, some degree of urgency, but new hire must fulfill specific hiring criteria;*
- 5) *Need someone immediately, willing to compromise on hiring, would consider hiring a locum as a bridge to a full-time hire.*

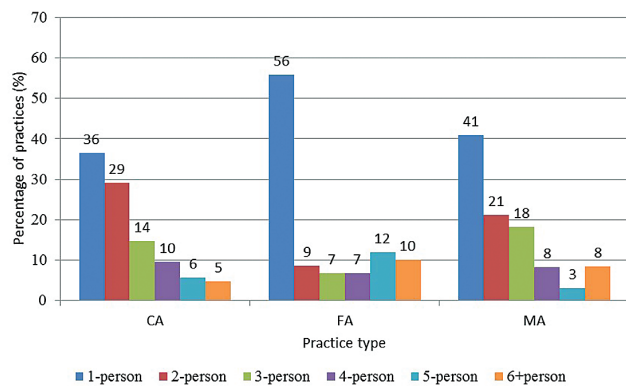
The last of the 8 survey questions asked respondents to indicate which strategies or methods they were currently using to attract another veterinary associate.

### Survey administration

The sampling frame was generated from the veterinary directories (printed and on-line) of the 4 western provincial veterinary medical associations. In May, 2014, there were 1294 veterinary practices listed in the 4 directories and each was mailed a survey package comprised of a covering letter explaining the purpose of the survey; the survey questionnaire; and a self-addressed, postage-paid, return envelope. Respondents were also provided with the option of sending the completed surveys by facsimile (fax). Practices with e-mail addresses ( $n = 749$ ) were sent a reminder 2 wk after the initial mailing; 106 of which were returned as undeliverable. Within 1 mo of the initial mailing, an on-line version of the survey was created (FluidSurveys™) and e-mail notifications were sent to all the nonresponders advising them of the on-line option for completing the survey. A second survey package was mailed in July, 2014 to all nonresponders. Two additional e-mail reminders were sent over the next 2 to 6 wk and returns were accepted until October 1, 2014.

### Data management and analysis

Data from the completed surveys were entered on a commercial spreadsheet program (Microsoft Excel 2013) and imported into a statistical software package (SPSS Version 22; SPSS, Armonk,



**Figure 1.** Percent of practices by size (number of veterinarians/practice) and by practice type: companion animal ( $n = 438$ ), food animal ( $n = 41$ ), and mixed animal ( $n = 166$ ).

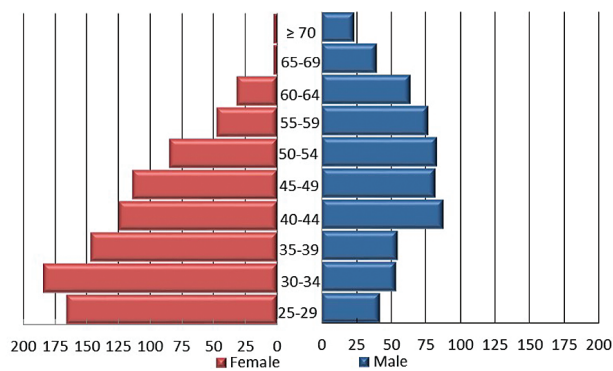
New York, USA). Data collected online (FluidSurveys™) were also imported into Excel and collated with the other results. Descriptive statistics were performed on each outcome variable and analytical statistics were used to assess the data at a level of significance of  $P < 0.05$  (two-tailed). Student's  $t$ -test and analysis of variance (ANOVA) were used to assess the normally distributed data. The Chi-square test statistics was used to analyze the frequency, such as the survey response rates by province and the number of practices looking to hire by practice size.

The mid-point was used for all salary or work week data provided as a range. Vacancies were analyzed as either part- or full-time positions with full-time employment being defined as working  $\geq 35$  h/wk. The number of part- and full-time vacant positions were summed and reported as the total number of full-time equivalents (FTEs).

The Kruskal-Wallis test statistic was used to determine if the level of urgency related to hiring varied by practice type and size of practice (number of veterinarians). If a practice was looking to hire multiple associates, then only the primary position (first vacancy listed in the survey response) was included in the analyses. Only the primary or first vacant position listed was analyzed because it was assumed that this position would have the highest level of urgency.

Two schemes were used to classify the veterinary practices. The first scheme was based on the results of the survey in which respondents were asked to self-classify their practices according to 1 of 6 options (SA, FA, EQ, CA, LA, and "Other"). The second classification scheme used the individual practitioner data to calculate the total number of hours each practice devoted to each type of practice (small animals, beef, dairy, equine, swine, poultry, and other) on a weekly basis. These hours were divided by the total number of all hours worked by the practice's veterinarians, which provided the percent of time each practice devoted to each species.

The practices were then categorized into 3 practice types: companion animal (CAP), mixed animal (MAP), and food animal (FAP) practice. The CAP practices devoted 100% of the practitioners' time to small animals (SA), horses (EQ), and Other. The FAP practices devoted  $> 50\%$  of the veterinarians'



**Figure 2.** Population pyramid showing the frequency distribution of veterinary practitioners by age and gender. Age was estimated by adding 26 y to the person's year of graduation.

time to food animals, while the MAP practices devoted 1% to 50% of the practitioners' time to food animals (beef, dairy, swine, and poultry). The same classification scheme was used to classify the individual veterinary practitioners.

## Results

Of the 1294 practices mailed a survey package, 10 were omitted because they had either amalgamated with, or were a satellite of, another practice. Canada Post also returned 28 mailings as undeliverable (moved or unknown address). Therefore, the final sampling frame was comprised of 1256 veterinary practices, 52% ( $n = 655$ ) of which returned a completed survey. Not every practice completed every question, hence the denominator (number of survey responses) changed slightly with each question. Survey response rates varied by province ( $P < 0.001$ ): BC, 51% (274/535); AB, 48% (227/474); SK, 72% ( $n = 101/140$ ); and MB, 50% (53/107).

### Practice data

Table 1 shows how the respondents self-classified their practices; 3 practices self-classified as "Other" and because of this small number they were omitted from the table and analyses. Overall, 60% ( $n = 391$ ) of respondents self-classified their practices as exclusively SA; 5% exclusively EQ, ( $n = 32$ ); 4% CA (small animal and equine), ( $n = 23$ ); 25% MA, ( $n = 169$ ); 4% FA, ( $n = 28$ ); and 2% LA (food animal and equine), ( $n = 12$ ). When combined, the SA, EQ, and CA practices represented 69% of practices. This compares favorably to the classification of practices by the amount of time each practitioner devoted to each species. In this scheme 68% ( $n = 438$ ) of practices were CAP practices (small animal, equine, and other), 26% ( $n = 166$ ) MAP, and 6% ( $n = 41$ ) FAP.

Table 2 provides a breakdown of the MA practices by the amount of time they devoted to the 3 main types of practice (small animals, food animals, and equine). In general, mixed practice is primarily companion animal practice with only 28% of time being devoted to food animals.

Practice size ranged from 1 to 17 veterinarians with the mean (median) being 2.4 (2.0) veterinarians/practice. Figure 1 shows the percentage of practices by size and type (CAP, FAP, and

**Table 3.** Percent of respondents by employment status (full-time, part-time), gender, and practice type. Full-time veterinarians worked  $\geq 35$  hours/week

|                              | Full-time | Part-time |             |
|------------------------------|-----------|-----------|-------------|
| Gender ( $n = 1559$ )        |           |           |             |
| Females ( $n = 931$ )        | 58        | 42        |             |
| Males ( $n = 628$ )          | 76        | 24        |             |
| Weighted mean                | 66        | 34        | $P < 0.001$ |
| Practice type ( $n = 1569$ ) |           |           |             |
| CAP ( $n = 1163$ )           | 59        | 41        |             |
| MAP ( $n = 237$ )            | 87        | 13        |             |
| FAP ( $n = 169$ )            | 81        | 19        | $P < 0.001$ |

CAP — Companion animal practice, practice veterinarian(s) devoted 100% of time to small animals, equine, and "other;" MAP — Mixed animal practice, practice veterinarian(s) devoted 1% to 50% of time to food animals; FAP — Food animal practice, practice veterinarian(s) devoted  $> 50\%$  of time to beef, dairy, swine, and poultry.

**Table 4.** Percent of respondents by practice type and college of graduation ( $n = 1586$ )

|                             | CAP | FAP | MAP |
|-----------------------------|-----|-----|-----|
| WCVCM ( $n = 1053$ )        | 67  | 13  | 20  |
| International ( $n = 279$ ) | 88  | 6   | 6   |
| OVC ( $n = 156$ )           | 84  | 7   | 9   |
| AVC ( $n = 54$ )            | 79  | 4   | 17  |
| UCVM ( $n = 31$ )           | 65  | 6   | 29  |
| FMV ( $n = 13$ )            | 85  | 15  | 0   |
| Weighted mean               | 73  | 11  | 16  |

AVC — Atlantic Veterinary College, Charlottetown, Prince Edward Island; FMV — Faculté de Médecine Vétérinaire, Saint-Hyacinthe, Québec; OVC — Ontario Veterinary College, Guelph, Ontario; WCVCM — Western College of Veterinary Medicine, Saskatoon, Saskatchewan; UCVM — University of Calgary — Faculty of Veterinary Medicine, Calgary, Alberta; CAP — Companion animal practice, practice veterinarian(s) devoted 100% of time to small animals, equine, and "other;" MAP — Mixed animal practice, practice veterinarian(s) devoted 1% to 50% of time to food animals; FAP — Food animal practice, practice veterinarian(s) devoted  $> 50\%$  of time to beef, dairy, swine, and poultry.

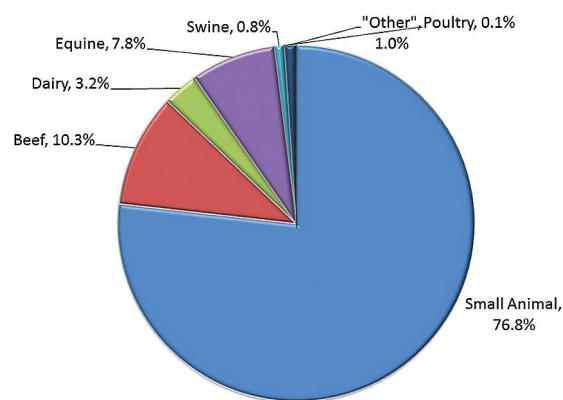
MAP). The most common practice was the 1-person practice and 65% of all practices were either a 1- or 2-person practice.

### Practitioner data

Respondents provided data on 1636 individual practitioners, 59% of whom were female. The population pyramid (Figure 2) classifies the respondents by gender and age; age was estimated by adding 26 y to the number of years since graduation. The pyramid shows a large cohort of young female veterinarians  $\leq 39$  y of age and a large grouping of older male veterinarians 40 to 59 y of age.

Although the profession is more heavily weighted towards females, a greater percentage of males (76%) than females (58%) were working on a full-time basis (Table 3). Furthermore, a greater percentage of CA practitioners were working on a part-time basis compared to their MA or FA counterparts ( $P < 0.001$ ). This latter finding, however, may be confounded by gender; 66% of CA practitioners were females as compared to 53% of MA and 23% of FA practitioners ( $P < 0.001$ ).

The majority of practitioners had graduated from the Western College of Veterinary Medicine (64%;  $n = 1056$ ), followed by the Ontario Veterinary College 10% ( $n = 157$ ); Atlantic Veterinary College 3% ( $n = 54$ ); University of Calgary Faculty of Veterinary Medicine 2% ( $n = 30$ ), Faculté de Médecine



**Figure 3.** Average amount (%) of time that veterinary practitioners in western Canada apportion to each practice type in an average week.

Vétérinaire 1% ( $n = 13$ ), and 20% ( $n = 326$ ) were foreign graduates.

Table 4 is a cross-tabulation of the respondents by practice type and college of graduation. Most (89%) foreign graduates were employed in CAP practice. Caution is needed when interpreting the University of Calgary, Faculty of Veterinary Medicine (UCVM) and the Faculté de Médecine Vétérinaire graduate data because the results are based on a relatively small number of respondents. The 9 UCVM graduates in MAP practice devoted 5% to 35% of their time to food animals.

Ignoring hours spent on practice management, 644 veterinary practices in western Canada, representing 1573 individual practitioners, spent  $\sim 55\,400$  h/wk ministering to animals. Figure 3 shows how the aggregate time of all practising veterinarians in western Canada is apportioned to each type of practice (species) in a typical week. The majority of time (77%) is devoted to small animals, whereas food animals account for 14% of practitioners' time. Nearly half (46%;  $n = 745$ ) of practitioners were exclusively involved with small animals, whereas only 3% of were either exclusively equine ( $n = 43$ ) or exclusively food animal ( $n = 45$ ) practitioners.

### Recruitment data

Overall, 25% ( $n = 163/643$ ) of practices were looking to hire another veterinary associate and there was no difference ( $P = 0.25$ ) in hiring intentions by practice type: 25% CA ( $n = 108/436$ ), 29% MA ( $n = 48/166$ ), and 17% FA ( $n = 7/41$ ). The vacancies were comprised of 183 part and full-time positions with the number of vacancies/practice ranging from 0.5 to 3.0 FTEs. Fourteen practices were looking to hire 2 associates and 2 practices were looking to hire 3 associates. The sum of the vacancies represented 157 FTEs, which after factoring in a 52% response rate, extrapolates to  $\sim 300$  vacant FTEs in western Canada.

The following is the proportion of respondents who identified with 1 of the 5 statements relating to hiring intentions: 23% ( $n = 37$ ) "Not actively looking, but would hire if an ideal veterinary associate approached you;" 17% ( $n = 28$ ), "Not urgent, but have a potential candidate in mind;" 22% ( $n = 36$ ), "Advertising

**Table 5.** Base salaries being offered to full-time employment ( $\geq 35$  hours/week) veterinary associates, stratified by practice type and province

|                      | Mean (\$) | 95% CI (\$)      | Median (\$) | Range (\$)        |
|----------------------|-----------|------------------|-------------|-------------------|
| <b>Practice Type</b> |           |                  |             |                   |
| CAP ( $n = 43$ )     | 76 600    | 73 500 to 79 600 | 75 000      | 60 000 to 100 000 |
| MAP ( $n = 23$ )     | 77 900    | 74 600 to 81 200 | 75 000      | 70 000 to 96 000  |
| FAP ( $n = 9$ )      | 75 300    | 69 800 to 80 800 | 70 000      | 67 500 to 85 000  |
| <b>Province</b>      |           |                  |             |                   |
| BC ( $n = 21$ )      | 77 100    | 72 600 to 81 500 | 80 000      | 60 000 to 100 000 |
| AB ( $n = 30$ )      | 78 400    | 74 800 to 82 000 | 76 250      | 60 000 to 100 000 |
| SK ( $n = 19$ )      | 74 000    | 70 700 to 77 400 | 70 000      | 65 000 to 85 000  |
| MB ( $n = 5$ )       | 77 000    | 69 900 to 84 100 | 75 000      | 70 000 to 85 000  |

CAP — Companion animal practice, practice veterinarian(s) devoted 100% of time to small animals, equine, and “other;” MAP — Mixed animal practice, practice veterinarian(s) devoted 1–50% of time to food animals; FAP — Food animal practice, practice veterinarian(s) devoted  $> 50\%$  of time to beef, dairy, swine, and poultry; BC — British Columbia; AB — Alberta; SK — Saskatchewan; MB — Manitoba.

**Table 6.** Frequency distribution of hiring strategies used to attract another veterinary associate ( $n = 168$  practices)

| Hiring strategy  | Number (%) of practices |
|--|-------------------------|
| Word of mouth  | 113 (67)                |
| Advertising with provincial veterinary associations                  | 79 (47)                 |
| Not advertising, screen unsolicited applicants                       | 60 (36)                 |
| Advertising in the CVMA  | 47 (28)                 |
| Advertised at a vet college  | 35 (21)                 |
| Plan on hiring a former vet student                                  | 28 (17)                 |
| Contacted veterinary colleges for a recommendation of a new graduate | 26 (16)                 |
| Advertising in a foreign country                                     | 11 (7)                  |
| Arranged to meet with vet graduates at a vet college                 | 8 (5)                   |
| Using a “head hunter” to fill the position                           | 7 (4)                   |

by “word of mouth” and/or proactively contacting specific veterinarians;” 26% ( $n = 41$ ), “Using multiple avenues of advertising, some degree of urgency, but new hire must fulfill specific hiring criteria;” and 12% ( $n = 19$ ), “Need someone immediately, willing to compromise on hiring, would consider hiring a locum as a bridge to a full-time hire.” There was no difference in the hiring intentions by practice size, regardless of whether small practices were defined as having  $\leq 2$  practitioners ( $P = 0.22$ ),  $\leq 3$  practitioners ( $P = 0.18$ ), or  $\leq 4$  practitioners/practice ( $P = 0.50$ ). There was also no difference in the level of urgency to hire across the 3 main practice types ( $P = 0.90$ ).

Table 5 is a cross-tabulation of the salary data by practice type and province. These data were restricted to full-time vacancies ( $\geq 35$  h/wk) and to the primary vacant position. The overall mean salary offered for a full-time position was \$76 700 (median = \$75 000, 95% CI = \$74 800 to \$78 800). There was no difference in the average base salaries offered by practice type ( $P = 0.79$ ) or province of employment ( $P = 0.41$ ).

Table 6 is a summary of the hiring strategies that practices use to attract new employees. “Word of mouth” was the most commonly used strategy (67%), followed by advertising with a provincial veterinary association (47%), and screening unsolicited applicants (36%).

## Discussion

Approximately 52% of all veterinary practices in western Canada responded to the survey, which is comparable to the 64% and

47% response rates for the 2006 (1) and 2008 (2) surveys, respectively. The fact that 1 in 2 practices would take the time to complete the survey is indicative of the level of interest in veterinary demographics and hiring intentions. As for all surveys, some degree of caution is warranted when interpreting the results because answers provided by the respondents may not necessarily reflect how nonresponders would have answered; this is commonly termed a nonresponse error or bias (3). This bias may have arisen when extrapolating the survey’s vacancy data to the broader profession. Twenty-five percent of practices were looking to hire; however, those looking to hire are probably more likely to participate in a survey relating to hiring veterinary associates. Therefore, the extrapolation that western Canada may have as many as 300 FTE vacancies is probably an overestimate of the true number of vacancies.

The survey questionnaire and the methodology used to conduct the survey were very similar to that of the 2006 (1) and 2008 (2) surveys, which allows for some comparison of data across time. This is particularly true of the question related to whether practices were looking to hire, and if so, how many FTE vacancies were they looking to fill? Based on the data generated from the 3 surveys, it would appear that the demand for veterinary associates across western Canada may be weakening. There were 347 FTE vacancies in 2006 compared to 314 in 2008 and  $\sim 300$  in the current study. Furthermore, the number of veterinary practices in western Canada has increased by 14% since 2006. Therefore, while the overall marketplace for veterinarians has been expanding, the absolute number of FTE vacancies has been decreasing.

Although 300 FTE vacant positions sounds like a large number, only 12% of practices were in urgent need of hiring. It is, however, more difficult to gauge this level of urgency to previous studies. The 2006 survey did not capture data related to the urgency in needing to hire, and the 2008 survey only used 3 statements relating to urgency: not actively looking, actively looking, and in urgent need of another associate. In 2008, 8% of practices were in urgent need of a new hire (2), which is similar to the 12% in the current study.

On the other end of the urgency scale,  $\sim 25\%$  of practices looking to hire were relying on veterinarians to approach them, which is twice the number of practices that were in urgent need

of another veterinarian. Another 17% of the practices already had a potential hire in mind and ~25% of practices were using “word of mouth” as the primary means of attracting another associate. These data underscore the need to be cautious when interpreting employment surveys that merely seek to quantify whether practices are in a hiring mode. Ostensibly the veterinary profession in western Canada had ~300 FTE vacant positions for veterinary associates; however, in reality, only ~40 FTEs vacant positions needed to be filled on an urgent basis. For those looking for employment, it is important to appreciate ~65% of the practices in a hiring mode were not actively advertising; therefore, all practices should be canvassed during a job search.

While the number of vacancies provides a measure of the demand for veterinary associates, a better measure of demand is wages (4). In 2008, the average wage in western Canada was \$65 500 (3) compared to \$76 700 in the current study. This equates to an annual increase of ~2.65% (5), which is comparable to the rate of inflation in the provinces of Alberta and Saskatchewan (6). These wage data indicate that there is no significant upward pressure on wages, which occurs when the demand for labor (veterinarians) exceeds supply. Rather, the wage data are indicative of a marketplace wherein the supply and demand for veterinarians is near equilibrium. While the marketplace for veterinarians in western Canada appears to be near equilibrium, reports from the United States suggest that the profession may be heading to a future oversupply of veterinarians.

The National Research Council’s recent report, *Workforce Needs in Veterinary Medicine* (2012), “found little evidence of workforce shortages in most fields of veterinary medicine” (7). These findings were confirmed by the American Veterinary Medical Association’s recent report, *Implications of the 2013 United States Veterinary Workforce Study: Modeling Capacity Utilization*, wherein the authors concluded that the current supply of veterinarians exceeded demand, and estimated that the excess capacity of veterinarians would persist until 2025 (8). If these predictions are correct, then an oversupply of veterinarians in the United States will undoubtedly impact the Canadian marketplace for veterinarians; ~20% of veterinarians in western Canada are foreign-trained (9), many of whom come from the United States. Adding to the supply of veterinarians is the newly established University of Calgary Faculty of Veterinary Medicine (UCVM), which has been graduating ~30 veterinary graduates/y since 2012. These graduates, along with an influx of foreign-trained graduates may explain, in part, why there has been a moderation in demand for new associates.

As per previous studies (1,2,10), the veterinary profession in western Canada is biased towards small animal practice. Approximately 60% of respondents self-identified their practices as exclusively SA and ~77% of all practitioners’ time was spent ministering to small animals. This discrepancy in the percent of practices involved in SA practice and the amount of time practitioners devote to small animals can be reconciled by the fact that the average mixed animal (MAP) practice devoted 60% of practitioners’ time to small animals. This finding confirms anecdotal reports that mixed animal practices have transitioned from being large animal oriented to becoming primarily small animal practices. As the livestock industry continues to con-

solidate and individual livestock operations expand in size (11), larger producers may increasingly patronize exclusively food animal practitioners *versus* obtaining veterinary services from the local mixed practices.

While the 1-person practice remains the most common size of practice, the proportion of 1-person practices is in decline. In 2006, 50% of CA practices were 1-person practices compared to 36% in the current study, and similar reductions have been occurring in MA and FA practices. This movement towards larger multi-person practices may be driven by practitioners seeking to specialize and/or by practice owners looking to become more financially efficient by distributing overhead costs across a larger number of associates. The increase in practice size may also be related to the fact that more veterinarians are choosing to work part-time. The profession is comprised of 60% females, but ~40% work part time. With 80% of graduates being female (12), it is logical to assume that the profession will become increasingly reliant on part-time employees.

Lastly, there was no difference in the hiring intentions of large *versus* small practices, regardless of how “large” was defined. Previously, larger practices were twice as likely to be looking to hire as were the smaller practices (1). Perhaps this is indicative of the marketplace reaching a point of maturity where those who were actively looking to expand have now reached their optimal practice size.

The trend towards fewer FTE vacancies; a relatively low number of practices in urgent need of veterinary associates; and the moderate rise in base salary all point towards a weakening in the demand for veterinary associates. While we assume that the data from western Canada are reflective of what is occurring in other parts of Canada, it would be informative to have data from central and eastern Canada. Having access to pan-Canadian data would provide a much better portrait of the demographics of the Canadian veterinary profession as well as the supply and demand for veterinary associates. Understanding the demand for veterinarians is of importance because governments and veterinary teaching institutions have been increasing the supply of veterinarians while the demand for new associates appears to be declining.

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