What is Causing the Burgeoning Shortage of Food Animal Veterinarians? Are There Solutions?

There is a subject that I continually hear about from most dairy or food animal veterinarians I talk to, whether in person or via electronic means. They often bring the subject up; no prompting is necessary. There is a concern that there are not enough young veterinarians, new or recent graduates, interested in entering food animal or dairy practice. Student indebtedness and finances are apparently one important factor. A familiar story is that dairy veterinarians cannot justify paying starting salaries of approximately $120,000 per year that small animal practices offer, which are often supplemented by signing bonuses, student loan repayment plans and housing allowances. (Based on my experience over the last 40 years, I don’t think income is the primary driver for many dairy or food animal veterinarians. However, the income discrepancy, even adjusting for inflation, between small animal and food animal or mixed practice definitely appears to be increasing. More on both of these points follows below.)

Veterinary graduate indebtedness and starting income

The American Veterinary Medical Association has just released some new figures regarding graduate veterinarian indebtedness, income, and types of practices entered. These come from the 2023 AVMA Graduating Senior Survey:

- 17% of veterinary graduates reported having no student debt. (The report referred to “higher rates of family assistance in covering tuition”, but with no numbers regarding that.)

- 50% of veterinary graduates reported having some student debt up to $200,000.

- 33% of veterinary graduates reported having student debt > $200,000. (No information was reported regarding how high the mean debt > $200,000 was, or what the maximum reported debt was.)
Mean debt across all graduates from 33 veterinary colleges was $154,000.

Excluding those graduates with no debt, the mean debt was $185,000.

69% entered private practice.

25% entered internships.

2% entered public practice.

4% reported not having accepted a position at the time of the survey.

69% entered companion animal practice. (To me, there are certainly companion animals that are not in the traditional small animal dog and cat categories, but this seems to be a term for small animal practice.)

9% entered mixed animal practice.

2% entered food animal practice.

1% entered equine practice. (It surprised me that this proportion was that small, and especially that only half as many students entered equine practice as those entering food animal practice. I have never perceived this in any class of veterinary students I have taught.)

There were some interesting statistics and breakdowns regarding new graduate income, but no data for only those entering food animal practice:

Mean starting income for private practice was $125,000.

Mean for public practice was $87,000.

Mean for residencies was $46,000. (The fact that this was less than for internships, below, was a surprise to me. Also, I have never heard of any veterinarians doing residencies right out of veterinary school, and none were reported in the breakdowns above.)

Mean for internships was $53,000.

Mean for companion animal practice was $133,000.

While there was no data given, it was stated that, “equine practice [was] rapidly closing the gap”. Therefore, in order for mean income for private practice to be $125,000, the mean starting income for mixed animal and food animal practice combined calculates to $84,000. (I am often told that dairy practices can justify paying up to $90,000 to new graduates; this is somewhat near that number.)

Therefore, mean starting income for mixed and food animal veterinarians is approximately $50,000, or 37%, less than that for companion animal veterinarians.

Some interesting data regarding other forms of compensation besides salary:

Mean signing bonus (64% of graduates received) was $20,000.

Mean moving allowance (37% received) was $6,000.
• Mean student loan repayment (16% received) was $16,000.

• Mean housing allowance (3% received) was $11,000.

• No information regarding what proportions of graduates received any combination of two or more of the above compensations was provided.

Taken together, the above data confirms the commonly verbalized story: newly graduated food animal veterinarians have less mean total starting income than that of graduates entering small animal practice.

Exposure to and formal instruction in food animal and dairy veterinary skills

As mentioned earlier, income is not the main reason why veterinary students choose their species of interest during veterinary school. There is at least one other important reason why we are heading toward a major deficit in the number of dairy veterinarians. Food animal and dairy clinical experiences are often no longer required, and are not necessarily promoted to many veterinary students. Several well established veterinary colleges are phasing out most or all of their clinical experiences - especially any required experiences - and applied clinical teaching in dairy or food animal medicine, reproduction, and surgery. As is typical in the U.S., we have many students who do not come from any agricultural background and some enter veterinary school with negative ideas regarding “factory farming” and perceived animal welfare problems on farms. Students may also be concerned that if they did not grow up in it, food animal husbandry and veterinary care will be too hard for them to become proficient at. Increasingly, their exposures to required experiences with food animals are few or none. Their preconception, often more negative and/or daunting than it was years ago, regarding food animal work has little or no opportunity to change through exposure to the reality of animal stewardship on farms and ranches, and the rewarding nature of working with farm animals and their owners.

When vet students from 3 graduating classes (2019 - 2021) were surveyed at the University of Minnesota, their major reasons for choosing their species of interest were: Upbringing (73%), Mentors outside of veterinary school (51%), Courses during vet school (41%), Mentors/teachers in vet school (37%), and Belief that species of interest will lead to a better match with lifestyle desired (63%). Job pay as a reason for types of animals in practice was only cited as a factor by 23% of students. (How often low income discouraged students from food animal work was not studied.)

What experiences are associated with vet students being more likely to be interested in food animal practice?
Growing up in a rural area or on a farm, but also: 4-H participation, Future Farmers of America (FFA) participation, had shown or worked with cattle or horses, had shadowed a “large animal” veterinarian.

We cannot increase the supply of food animal veterinarians by increasing the proportion of students who come from farms, which of course is small. However, in Utah, we have large numbers of urban and suburban students who participate in FFA and 4H. Our veterinary student population arrives with a relatively high exposure to animal agriculture and raising some type of “farm” animals or birds, with the majority of them from non-farm backgrounds. Of the 30 to 32 students per year who attend their first 2 years of vet school at USU, we typically have 8 to 12 per class that express interest in food animal, mixed, or equine practice. After graduation, there are usually 5, sometimes more graduates from among our 32 students who went through USU entering some form of dairy practice based on my direct contact with them.

From the results above, echoed by many other recent studies and information that space does not permit here, there are some practices that should be revisited, re-emphasized, or in some cases, reinstituted to introduce more veterinary students to food animal and dairy practice:

• 4-H and/or FFA experience including raising and showing at least one species of animals or birds, including for non-rural students. In Utah, this often begins with outreach to K - 3rd grade students.
• Working with and being mentored by large animal veterinarians before admission to veterinary school.
• Agricultural animal rotations in some form being required in the curriculum of all veterinary schools and colleges.
• Positive promotion of, and rewarding experiences in working with food/agricultural animals while in veterinary school.
• Mentoring by faculty and offering elective classes to students showing interest in food/agricultural animals while in veterinary school.

The shortage of dairy and food animal veterinarians will not be easily or rapidly solved, but acknowledging it and taking the above steps to address it are important beginnings. What do you think about this?

Save the Date - Utah State Dairy Extension Workshops in February 2024

More details will follow, but be sure to save the date for whichever location is closest to you and your clients: There will be a Dairy Extension Workshop on Tuesday Feb. 27, 2024 in Cache Valley and the same program will be presented on Wednesday Feb. 28 in Delta, UT. The program is being finalized at this writing, but subjects will include risk management, water optimization, dry cow treatment, and a good work environment on the dairy farm as well as some others yet to be determined. The workshops will include lunch. We hope to see you and your clients.

I wish you all a great holiday season and a happy new year in 2024. Thanks again for all that you do in our industry. Please let us know your comments and suggestions for future topics. I can be reached at (435) 760-3731 (Cell), or David.Wilson@usu.edu.

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