Where Now, Brown Cow?

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Thank you, Society for Theriogenology and College of Theriogenologists, for this Bartlett Award, which places me in the company of colleagues I consider to be giants. As I read many of their acceptance speeches, I noticed a common thread – surprise and humility. As Dr. Youngquist said, this is all very genuine. Another common thread is pride in theriogenology with the admonition not to rest on our laurels. That is where I will try to go, with this question: Where is theriogenology going in beef cattle consultation?

First, I must acknowledge a few people who have inspired me, serving as role models and mentors in getting me here to this podium today. You know in my early years as a veterinarian, I had a hard time holding down a job. I must introduce my wife, Betsy. In our first seventeen years of marriage we moved six times. Fortunately, she was always there. Some stops had a finite ending, such as the Air Force, or graduate school, but others pretty much came as surprises to us. As a teacher, Betsy is a molder of people. Her positive attitude helped me develop my goals and some good character traits. Her writing skills helped me get through many drafts of my thesis. She is still at work on me, but the clay is getting brittle.

You know the saying, “Behind every successful man is a surprised wife.”? Well, I might add that in my case, it was a surprised veterinary faculty. So, for you faculty here, be careful of the students you might wonder about. Some of us do okay. Of course, we might need wake up calls.

My parents had a great deal to do with me getting here. I think I was born to be a theriogenologist. My mother said my first word was, “Cowwww.” I am sure she repeated that word many times before I spoke it. My father, as a rancher, loved his cows. Dad said, “Take care of your cows and they’ll take care of you.” It turns out we had a breeding and calving program similar to that recommend by the late Dr. Jim Wiltbank. The difference was it was based on Dad’s experience rather than science that did not at that time exist. We did not have any late calvers because Dad sold them if they did not calve by a certain date. We had big replacement heifers because they got special care during the last half of gestation. If they rarely suffered a dystocia they got early assistance and they bred back early. We also had all cows identified not by ear tags, but by names such as ‘Spot-nose’ or ‘Two-tit’. We had no records of weights except shipping weights which were always greater than the neighbors had.

How I loved those cows and the horses we used to tend them. As a budding scientist I was most in awe of the calving season in the spring and the breeding season in the summer. One summer when I was ten, Dad and I were riding the range observing the cattle and we saw a cow being bred. I decided to be brave and asked the question “Is that
the way people do it?” After a long silence he replied, “Yes, but don’t tell anyone.” I never heard another word about this topic from either parent.

Veterinarians have been important role models for nearly everyone in this room, and I have had several. First was Dr. MacCullough, our veterinarian in Kremmling, Colorado, 40 miles away. He was a good veterinarian, a gentleman, and a great people person. He was also the county agent for Middle Park, Colorado, plus being the 4-H leader. Ranch kids got a double dose of Mac. We thought he knew everything there was to know about livestock.

When I graduated from high school I went to Colorado A&M, now Colorado State University. I enrolled in animal husbandry, instead of pre-vet, even though I wanted to be a veterinarian. Competition to get into vet school was very tough and coming from a graduating class of seven, I thought I could not compete. Much to my surprise, I made very good grades. I also made friends with several veterinary students who convinced me to apply. I have always been grateful for the advice of those students, one of whom is past president of this Society, Dr. Bob Snyder.

By the time I was in senior clinics I found a niche in large animal medicine, obstetrics, and pathology. My favorite rotation was at the Artificial Breeding Service Unit, commonly called the Bull Farm. I was there at the time the Rocky Mountain Society for the Study of Breeding Soundness in Bulls was founded under the tutelage of Dr. Harold Hill, with Dr. Lloyd Faulkner as his lieutenant. Dr. Harold Hill was a man of conviction. Like another Professor Harold Hill, who sold 76 trombones, he influenced the sale of many more than 76 electric ejaculators. Dr. Faulkner was a new faculty member at the time. His enthusiasm for animal reproduction soon became apparent to the students. I was lucky to draw the Bull Farm for my week of Christmas vacation duty and was the sole student to spend the entire week with Dr. Faulkner on a bull testing trip to the southern Colorado mountains. This was the beginning of my love affair with bulls.

Dr. Faulkner has been a guiding light for much of my professional career. When I was practicing in Clayton, New Mexico, I consulted him often about reproductive problems in cattle. Eventually my phone calls did not solve enough of those problems or satisfy my curiosity. I had to know why more than how. In January 1966, I was at a Colorado State short course where Dr. Bartlett was a speaker. I asked him about training opportunities in bovine reproduction. He suggested that if I could give up practice I should look for a residency or go to graduate school. The next month I put a ‘practice for sale’ notice in JAVMA and called Dr. Faulkner about attending graduate school at Colorado State. He had the perfect opportunity for me. Dr. Ed Carroll was going to Cornell, July 1, 1966, to work on his master’s degree, and the temporary job was mine. All I had to do was let him know by May 1st. How simple things were then. However, it was not to be. My practice was making good money and I couldn’t find the right buyer. So finally I had to call Lloyd and reject the offer. By this time I was determined, so I kept the practice for sale; in the spring of 1967 I had a contract. I called Lloyd again but this time he had nothing. My heart sank, but Lloyd will sometimes play with your emotions, and after a long silence he said, “I think I can get you a better deal for what you want.” Dr. Jim
Wiltbank was joining the Department of Animal Science at Colorado State on July 1, 1967, and he would be needing graduate students. This was like hitting the jackpot, so in August 1967, we were off to Colorado State University.

My project of parturition and dystocia was perfect. In practice, I had had many hours relieving almost every type of dystocia imaginable. I soon discovered how little I knew and some things I knew were indeed cowboy folklore and veterinary myth. I learned the importance of statistics, objectivity, and questions. One of Dr. Wiltbank’s favorite questions was, “Is that right? Show me the data.” “What do you mean, tending towards significance? It is either significant or it is not significant.”

One of the most important spin-offs of my time with Dr. Wiltbank was the contact I made with eminent reproductive physiologists in animal science departments at other universities. I established and maintained good relations with them. After I started teaching at Oklahoma State University, I found that we needed animal science more than they needed us. After all, they had the cattle which I needed for my teaching and projects.

Drs. Faulkner and Wiltbank were greatly responsible for me getting a fellowship with Syntex Research in Palo Alto, California. I joined Dr. Bill Brown there. Syntex had high hopes for their estrus synchronization and artificial insemination project, so they purchased International Beef Breeders in Denver, Colorado. Bill and I were transferred there. At IBB we rode the exotic cattle boom and did very well selling continental European bull semen. We did well that is, until the boom became bust and Syntex preferred profits to debts. Sadly, International Beef Breeders became history. Many years would pass before estrus synchronization became a practical reality. Now estrus synchronization and AI are used extensively in the seedstock industry and are making inroads into commercial cattle operations, especially with replacement heifer breeding programs.

In 1976 I found a home at Oklahoma State University, Department of Medicine and Surgery, with Dr. Fayne Oberst as department head. Here the theriogenologist that I was born to be finally matured when in 1977 I became diplomate in the ACT right here in St. Paul. My responsibilities were teaching food animal theriogenology. I continued research with parturition and dystocia in beef heifers and conducted estrus synchronization field trials for pharmaceutical companies.

In the 90’s, several years before I retired, I received an appointment in veterinary extension and continuing education. I had already been involved in short courses and national veterinary meetings, but this gave me expansion into producer meeting and joint producer-veterinary meetings. The success of these meetings led to my becoming the veterinary member of the Oklahoma Integrated Resource Management – Standard Production Analysis (IRM – SPA) team. The team consisted of extension faculty from animal science, range management, agricultural economics, entomology, and veterinary medicine.
These years were most gratifying because the team became a major advisor to producers ranging from well-meaning hobby ranchers to major seedstock and commercial breeders. They were all interested in the IRM – SPA records, especially financial analysis. We found that the most profitable producers were often not the most productive ones but those that had coupled good production with reduced expenses. For years the emphasis had been on excellent pregnancy rates, excellent weaning rates, and heavy weaning weights. These are important but are often achieved with the great financial expense of excessive feed costs, excessive machinery costs, and excessive labor costs. The profitable producers kept these expenses to a minimum and had above average production rates.

Currently IRM – SPA is not the hot topic it once was. Veterinarians and extension personnel have told me it served its purpose by alerting producers to the importance of accurate records. These records have become guidelines and benchmarks for some clients to measure their production and profitability. The financial aspect can point to functions in the operation that are too costly. For example, some producers should perhaps rent pasture instead of expending capital and interest to buy their own land.

So where does theriogenology play a role in beef cattle practice? Long ago theriogenologists like Drs. Oberst, Roberts, Woelffer, and Zemjanis maintained the entrance to a cow herd was through the rectums of cows. This is still true and I don’t want them or me to be called dinosaurs. But today much more is required to meet the needs of progressive cattlemen. To help me think about this I called many veterinarians: practitioners, academicians, extension and industry veterinarians, plus animal science physiologists and cattle producers. I will not acknowledge them to protect the guilty, but I will try to summarize their responses. The few that are pessimistic are pessimistic about rural practice in general. Some find it hard to hire new veterinary graduates, the type of graduate who might be groomed to take over a practice eventually. Also these veterinarians are frustrated by competition from lay technicians and drug suppliers. Some do not like having to change practice services. For example, one practitioner had completed the University of Nebraska, Clay Center, Nebraska, Beef Cattle Management course and had a successful cow-calf practice with significant herd management input, and then his clients began changing to stocker calves and rodeo stock.

Veterinarians who are very much involved in beef cattle reproduction are quite optimistic, with some caveats, about the future of theriogenology in their practices. Those in a specialty practice such as embryo transfer, referral diagnostics, or surgery are busy and not concerned about competition from laymen. They did express displeasure with veterinarians providing laymen with prescription drugs under a quasi veterinarian-client-patient relationship. They do expect to keep abreast of new embryonic procedures. They expect genetic counseling, perhaps based on genetic mapping, to be a necessity for sire and donor selection.

I found rural practice in cow-calf areas to range from fire engine practice (expected) to total herd management consultation (not expected). The latter veterinarians are rare. They basically provide no routine or emergency service, but they have a collegial
relationship with the local practitioner who does provide these services. They limit their clientele to very few, very large ranches.

The in-betweeners are successful, with many making at least fifty percent of their income from theriogenology services. They also direct nutrition and immunization programs with particular attention to maternal and neonatal health. Some do not provide after-hours service unless it is dystocia related and for regular clients. Very few charge specifically for management information. To quote, “Marketing knowledge is easy; charging for it is difficult.” These particular veterinarians developed their practices through personal desire, getting necessary training, and developing desirable clients. Training varied from multiple short courses in many disciplines to graduate degrees and board certification in ACT and ABVP.

All veterinarians I talked with expressed dissatisfaction with the small number of veterinary students interested in food animal and rural practices. They are also concerned with the diminishing theriogenology and production medicine curricula in the DVM programs. Some complained about the scarcity of advanced theriogenology/management training for those with the DVM degree, even though courses and programs do exist. The problem is that most practitioners don’t know where to find these programs or how to plan to take advantage of them. Can’t we do a better job of providing this information, perhaps acting as a clearinghouse?

Those that have completed some advanced training gave some advice based on their experiences. First, there must be the desire and then the plan. There will be financial sacrifices and hardships even when one is absent from the practice for only short periods, such as studying for the qualifying and certifying exams for the ACT. The new knowledge may not produce an immediate increase in income.

Whether in practice or in another field, veterinarians who have met the challenge of additional training are happy with their professional careers. One said fire engine practice is on the way out. An industrial veterinarian believes there is great opportunity for consultation as the cow-calf industry continues to separate into either large business operations or small hobby farms where the bottom line is not as important as pride in the livestock. He mentioned heifer development, estrus synchronization and AI increasing in commercial herds. Management must improve and change for these programs to be successful.

Speaking for myself and some others, including a few ACT members, veterinarians interested in cow-calf practice and management might consider an advanced degree in animal science or agricultural business. Some veterinary schools offer clinical residencies with a related master’s degree in epidemiology, nutrition, agricultural economics, etc. Not all these examples satisfy the requirements for becoming a diplomate in the ACT, but nearly all satisfy the needs of the veterinarians. Can’t we become more proactive here?
As I was preparing my manuscript for submission to the Society, my August 2006 BEEF magazine arrived. The cover story featured a picture of a cow asking, “Where’s My Vet?” The magazine reported a survey of producers and veterinarians concerning, and I quote, “… a growing national concern regarding the availability of rural large animal veterinarians.” The AVMA, AABP, USDA, and NCBA have officially expressed concern, but to my knowledge this is the first time a popular trade journal has looked at the issue. I think that is significant because it reflects our consumers’ concerns.

Responses to the BEEF survey are as follows:

1. Veterinarians and producers are in agreement that there is a short term shortage of rural practitioners, leading to long term effects that will become critical.

2. Eighty percent of the producers got general health management information from veterinarians. Livestock media, extension service, and animal health companies followed, in that order.

3. When producers were asked if they sought their veterinarians’ help for breeding, genetics, nutrition, beef quality, etc., only 8 percent said often. Fifty-four percent said seldom or never. Only 12 percent said that they should pay for such services. Twenty-eight percent said the vet had already built a consultation fee into his charge. Thirty-one percent said they should not have to pay for consultation advice. Twenty-four percent said it was difficult to put a price on such a service. (I think they mean that they don’t want to pay for it.)

4. Veterinarians’ responses as to whether or not clients should pay for consultation services were quite different. Forty-eight percent of the vets thought they should be paid for such consultation, 17 percent said they did have payment built into the fee, and 33 percent said it was difficult to price such service. Remember, “It is easy to market knowledge but difficult to charge for it.”

A producer stated, “A rural vet has more to do these days than just C-sections and pregnancy tests… vets face pressure from all directions as they deal with issues like food safety, beef quality, and animal ID.” A veterinarian said, “Many clients only want to use the vet when everything is about to crash and burn. Crash and burn almost never happens when an experienced herd veterinarian has regular contact with animals and management.” My cow’s question regarding numbers three and four is this: “Where is my theriogenologist?”

The BEEF survey is certainly timely for me to build my case. It will be read by thousands of cattlemen and fits in with a general movement by the AVMA to promote rural practice. Some states have legislated financial aid for students committing to this
type of practice; unfortunately, the legislation often goes unfunded. A veterinarian said, “We need support from the states’ beef industry to see that this legislation gets the necessary funding.”

The Academy of Rural Practitioners, a grassroots organization of rural veterinarians, speaks nationally to high school, pre-veterinary and veterinary students, extolling the advantages of rural practice, both lifestyle and financial. ARV is registered as a non-profit group and has been awarded an USDA grant to fund externships for students interested in rural practice. Are any theriogenologists involved? Shouldn’t we be doing a better job of promoting rural practice? This Society and College should be leaders in recruiting, training, and promoting veterinarians to be herd health providers and management consultants. This task should not be as daunting as it may seem. Who better than us? Already two small groups of veterinarians, one in South Texas and the other in the Rocky Mountain states have assumed leadership in forming consultation teams based on the IRM – SPA approach. The pharmaceutical industry and extension service cooperate, but the veterinarians are responsible for finding their own information resources (accounting, nutrition, genetics, etc.). They communicate with clients so they can sell their knowledge instead of waiting for the clients to ask for a service, and they charge a respectable hourly fee. The short term results show that client profits can be substantially increased by identifying management practices which can be improved. The veterinarians claim the program is sustainable, but only time will tell because it will be their responsibility to maintain a knowledge base which will be of value to their clients.

In the past, two momentous events occurred for the Society and College. First was the founding of the Rocky Mountain Society for the Study of Breeding Soundness in Bulls in the early 1950’s, and second was the formation of the American College of Theriogenologists in 1971. These events happened because visionary veterinarians grasped the right opportunity at the right time. In the ensuing years our accomplishments have been impressive, but now is the time for the Society and College to step forward and grasp another opportunity. We must improve and increase our participation in cattle consultation services. To quote Dr. Patty Olsen, “…go forth and procreate! That is what we should be able to do best.” And I might add – if we don’t somebody else will.