

together to control the factors of environment which influence animal health.

The practice of a veterinary consultant for a feedlot will involve the following areas: (1) promoting health; (2) nutrition; (3) sanitation and pest control; and (4) economics.

The list could probably go on and on, but the main thing I would stress is that a veterinary consultant for a feedlot, dairy or ranch must become very specialized and he will have to work very diligently at educating himself to meet these very difficult standards.

The Way I Look at a Veterinary Consultant

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Before I discuss with you the way I look at a veterinary consultant, let me review the previous associations we have had with veterinary consultants. I was employed by the Department of Animal Pathology at the University of Arizona for four years. While in that position, I worked closely with veterinarians. Their consulting was primarily with practitioners who in turn were feedlot consultants.

Later, I spent two years conducting large animal research for a major pharmaceutical firm. In that position, I utilized the consultation of veterinarians to help direct and conduct studies. For the last seven years I have worked as a nutritional consultant for feedlots. As a consultant, I have worked with 25 to 30 feedlots in 11 different states. Presently, the two of us in our firm are consulting with 11 feedlots in Mexico and 13 organizations in the United States. Two of our 13 U.S. clients are not directly involved in the business of feeding cattle.

All the feedlots that we have worked with either in the past or at present have used the services of veterinarians. The type of service offered has ranged from an on-call basis for castrating big bulls and operating on water bellies to considerable involvement at the management level directing herd health programs. We have consulted with feedlots for several years and never met their veterinarian. At other times, we have worked closely with the veterinarian in establishing over-all management and operational programs. As in any situation like this, we have seen good men with excellent programs as well as the incompetent with no program at all.

Now, with this brief history, let me tell you the way I look at a veterinary consultant. First, I think he is essential to the operation of a successful feedlot. We insist that the feedlots with which we

work retain the services of a consulting veterinarian. Secondly, when I consider all the veterinarians that we have worked with, I consider him a second class citizen at the feedlot. There are exceptions, of course, but in the main the veterinarian is a member of the cowboy crew and is not a part of management.

His spectrum of the operations within a feedlot is very narrow. He is concerned with the health of a particular animal or a pen of cattle. Seldom does he become involved with other aspects of the feedlot's operations. This is in contrast to the way we work with feedlots. Our degree of success, indeed our very livelihood, depends upon the continued financial success of our client feedlots. We have no other source of income; the veterinarian does. At the very least, he has an income from a classical large animal practice. More often he has a general practice. He often realizes an income from dispensing drugs. Seldom is he in a position that food on his table tomorrow depends upon some feedyard's profit and loss statement today.

Over the years we have found that good sound nutrition is a very small part of what makes a successful feeding operation. In order for our programs to succeed, we have to be certain that performance in all other areas of the operation is good. These areas would include: record keeping and accounting; customer relationship; feed milling and mixing; feeding; feed pen management; cattle management, including animal health and buying; and selling of both commodities and cattle.

I firmly believe that in order for the veterinarian to become a significant part of a feedlot operation and make his health program work, he is going to have to take an active interest in these other areas as well. To show you what I mean, let me relate to you an actual experience. Instead of a

nutritional consultant being involved, let us assume that it is a veterinary consultant that is involved. The manager of one of your feedlot accounts, situated in the northern Texas panhandle, calls you one evening. He informs you that a customer has shipped two loads of 300-lb. crossbred Mississippi heifers that should come in sometime during the night. You both are aware that the weather forecast is for the first cold snap of the season. Temperatures are expected to approach zero degrees fahrenheit. This particular feedlot started into business last spring, and this will be their first winter. The manager would like for you to look at the cattle in the morning and meet with the working crew before the cattle are processed. Your schedule is open so you agree.

Now, we must make one other assumption. You are hungry! This feedyard has retained you for \$750 per month, and you need every cent of it. Therefore, you are up early the next morning and arrive at the feedlot before anyone else. The feedlot is lighted and as you drive by the receiving pens you see that the calves made it in. You know that you will have to take a close look at those cattle in the daylight. In the meantime, you decide to drive down some of the feed alleys just to see how things look.

As you do so, you see that a few cattle in each pen are up eating. There is frost around their faces and a few of them are humped up a bit, obviously feeling the temperature. Finally, you come to one pen where the cattle are not eating. Being a biologist, you wonder why. You get out of your car. There is plenty of feed in the bunk; it is not frozen and does not smell moldy. It is the high energy ration, which is correct. You recall the cattle when they came in and that was 80 or 90 days ago.

You get up on the feed bunk and look across the pen. Several head are up but do not seem to be moving to the feed bunk or water trough. You know that cattle that do not eat, do not drink; but you also know that cattle that do not drink, do not eat. You crawl through the bunk fence and head for the water trough. The ground is hard and extremely rough, and you begin to think of the foot problems the whole feedlot is going to have.

At the water trough you see the problem. The water is frozen solid. Back in your car, you cover the rest of the feedlot in short order. Altogether, there are five pens without water, and the cattle in all five pens are on the high energy ration. You begin to think ahead. The man who makes the feed assignments is part of the mill crew and has a poor appreciation of animal husbandry. Also, you have never discussed this kind of problem with him. All

he will do is reduce the amount of feed to be put in those five bunks. The rations will remain the same, and he will never question why those pens did not eat as usual last evening and this morning.

The next man that will become involved will be the feed truck driver. His only concern is that the reduced amount of feed he has to put out for these cattle means fewer trips for the day, and he can be home 20 minutes earlier tonight.

You are fully aware that there are not likely to be any sick cattle in these pens since the cattle have been on feed for a considerable length of time. Therefore, if the pen riders are following your instructions, they will ride the pens with new cattle this morning and not get to these pens until after lunch. Now, if management is tied up all morning with customers and fat cattle buyers, the pen riders will be the first ones to find the frozen water troughs. You know that they will throw out the ice, turn up the heaters and adjust the floats.

You know what happens next. We have cattle that have been out of feed and water for about 18 hours. They are going to drink, then go to the bunk and make up for lost time. We could have an "overload" situation like we have never seen before. Besides many sudden deaths, we can expect founder to show up in the next month or so which will require some cattle to be railed before they are ready. When the remaining are sold fat, they could be docked \$2 to \$4 per head for abscessed livers that will be condemned. These pens hold 200 head each. With 1,000 cattle involved, the loss could amount to many times your annual charges.

The solution, of course, is to get the high energy feed out of the bunk and away from the cattle. It must be replaced with a low energy ration, perhaps the starting ration. Then the water can be made available. Once the cattle are full of roughage, they can be put back on the high energy feed without fear.

By this time it is getting light and the employees are beginning to arrive at the lot. You go to the mill manager, explain the situation and further explain what needs to be done and why. Then you are back to the original purpose of today's visitation, the calves and the working crew.

Once you have the processing crew lined out, you look for the manager to fill him in on what you have done with his people thus far this morning. You are informed that he is in town having breakfast with the Board of Directors and will not be at the feedyard until after 9:00 a.m. Therefore, you go back to the pens that were without water to see how things are going. A truck is there and the old feed is being scooped out. You notice that where the feed is being moved with the

shovel, an occasional piece of metal is sifted out. You look closer and you see several pieces of baling wire, a piece of welding rod and two bolts. You know that the mill is equipped with magnets, but does anyone ever clean them off?

Further examination of the feed reminds you that they are still doing a lousy job of steam flaking the grain. From what you have read, together with your previous experience, you know this is costing about 10% of the grain conversion. You rapidly compute that they use approximately 200 tons of grain each day. With grain at \$50 per ton, the feedlot or its customers are losing around \$1,000 per day. That also adds to more than your fee.

The manager still is not back, so you may as well go to the mill and find out what can be done about the hardware in the feed. You are informed that the principle magnet is situated at the top of the finished feed leg, just above the distributor. It was so cold and windy yesterday that no one thought it was worth it to climb the leg and clean off the magnet. You explain to the mill manager how important it is to keep the feed free of the metal. You tell him that they may lose 30 or 40 head during the next several days because of it. By now you subconsciously make the comparison with your annual fee. You let him know that he must either get his men to clean the present magnet or convince the general manager that he needs a \$3,000 self-cleaning rotary magnet.

While in the mill, you remember the quality of the flaked grain. Since you visit several feedlots during any month that are doing a much better job of flaking grain, you decide to compare steam pressure settings. They are running their boiler at 60 psi and their down-stream pressure is 10 psi. You know that this gives them very little heat but a lot of moisture. You also know that they are processing new crop grain and should not require much moisture, but it does need to be well cooked. At other mills you have seen settings more like 100 psi at the boiler and 25 or 30 psi at the rolls. You make a note that you must set aside an entire day to come back and work with the man that is responsible for the grain processing.

Your next stop is the office where you summarize the problems that you observed and the steps you took to rectify them. Once that is done you leave. A few miles down the road, you recall one other problem that was not discussed. You stop at the country service station and call back to the manager. You inform him that you were at the feedlot that morning before anyone else was around. You were able to enter the premises and wander all about without notice. If you so desired,

you could have stolen several head of cattle. You recommend that a night watchman be hired. You point out that besides serving guard duty he could check for frozen water troughs during the night.

We could go on with the example, but I think we have enough different areas for discussion. Now, I ask, was the receiving program for the new calves the veterinarian's problem? Are sudden deaths, overeating, founder and liver abscesses your problem? If they are, then procedures for handling the feed in the pens with the frozen water troughs are your problem. Should metal in the feed concern you? If it does, then magnets in the feed mill must concern you. Should the quality of grain processing come under the jurisdiction of the veterinary consultant? If it does, then the pressure of the steam in the boiler must receive his scrutiny. Should the unattended feedyard at night draw comment from the veterinarian?

My answer to all of these questions is yes. My reason for the yes answer is that I believe that a feedlot consultant is a consultant first and a veterinarian or nutritionist second. I realize that if veterinarians should adopt this same attitude, it would mean more competition for nutritional consultants; but if consultation is performed as I visualize it, then the competition would be good competition. This I would welcome since only bad competition can hurt my business.

In conversations that I have had with veterinary consultants about greater involvement in feedlot operations, many have commented that their training has not prepared them for such activity. If their education stopped when they graduated from school, that is true. No one could be a successful feedlot consultant until he has had considerable experience. My sophomore year in college I took a course in single entry agricultural accounting. This in no way prepared me for making recommendations to feedlots about their record keeping and accounting. Feed mill design and operation had to be learned out of school. In fact, schooling has simply provided me with the basics from which I could learn. I believe that the veterinarian, upon graduation, has the same tools for a beginning.

By way of summary, I have tried to make two main points. First, I do not think the veterinarian is ever going to become a truly key man in successful feedlot operations until such time that consulting becomes his only practice. Secondly, once he has made the decision to be a full-time consultant, I believe that he will have to become knowledgeable and fully involved in all aspects of feedlot operations.