Panel Discussion

Wednesday, December 14
Dairy Session Panel Discussion
Dr. Joe Helms, Moderator

Q. Did you collect a lot of data?

A. Sure, I had a whole bunch of data. I wouldn't talk about that if you paid me. You want me to give it to you straight? One of the biggest problems we have as we get these farmers ready to deworm their cows is that some smart guy comes along with an anthelmintic that is not on the market. Now, those good dairymen know better than that. It is not labeled for use in cows of breeding age. If it is not labeled for use, we don't use it. It worries me quite a good deal.

Q. Dr. Todd, I have a question for you. Do you ever use Baymix on real high producing cows and can you relate to us some of the effects on their milk production?

A. Yes, well. The two best herds we ever worked in were in North Carolina and they had rolling herd averages of 22,000 lbs. We had 1,000 lbs. per cow increments. That was astonishing. I didn't think we would get anything like that. In 18,000 lbs. rolling herd average in Wisconsin, we have 185 lb. increments, and I feel that is just experimental error. I think if we went back to those we would get an opposite result. It pretty much depends on what the guy is doing and what he is feeding at the time. But, the better the cow, the more she is affected by the worms, or so it appears to us.

Q. Is there any new information on the etiology of foot lameness?

A. I do not have any good data on that. When we participated in that world meeting on foot lamenesses in Utrecht, I did not get anything spectacularly new there. There is a Dr. Berg at Missouri that has come up with an organism that he thinks may be tied in with this a great deal. I would contact him if I were you. Because he is the man that is doing the work on foot rot, so-called foot rots or infectious pododermatitis of all types, and he excited many of the world workers at that time insofar as a little different cause than what they had been associating with many of the infectious pododermatitis cases.

Q. Can you slip membranes under 42 days?

A. In my experience I'll slip membranes before 42 days, the way I feel in my own mind. I'm very cognizant of the controversy, and I think that it is healthy for us to have this type of controversy. I think it relates to the type of training the individual has and I think there's some merit, some strong merit, in using only fluid in calves under 42 days, if you are not confident with your technique. If you are at all rough, you are going to have some problems. The data is very impressive from Les Ball. Very impressive. And it makes us all think. And as I work with students, and I am working with students after three or four years in practice, the student that is not able to adequately retract the uterus, uncoil the horns and gently evaluate the total horn has no business slipping membranes. If he is doing a direct retraction approach and clawing and pawing in there and trying to uncoil a 35-day pregnancy that feels like the animal is in estrus, they feel the same way, he's going to be in trouble. I think it leads directly to the amount of manipulation to the horn. In my own mind I am very comfortable with fetal membrane slip at this point. I may change my mind. We can do a very adequate diagnosis based on fluid alone if we recheck the animal. If you are a little bit uncomfortable with it, stay away from the membrane slip, based on Les Ball's very interesting data.

Q. What is your scale of charges?

A. The service cost with a veterinary program. What we did was to set fixed realistic values. In other words, it costs us so much money to have the veterinarian come to the farm, and then it was on a per-examination basis, $2 per routine postpartum exam. The therapy-type treatments were what it would actually cost the dairyman for that type of therapy. The values were derived from current realistic values at that time at what it would actually cost to have the animal examined. To get the veterinarian there, examine the animal and then its therapy.

Q. How do you handle a fracture in the foot?

A. The first one I saw I tried to put a cast on it and afterwards I thought it was already in a cast! I usually put a shoe under the other claw, though, and let the animal bear weight on the sound claw and trim the fractured claw very short and try to keep them confined. If it is a bull, I don't want him out running over a thousand acres every day. I try to keep them confined. But the big factor is to take weight off that claw. They don't get a real firm healing. You'll get some fibrous healing in there after about a month to six weeks, but it often takes about four months to get good healing. So, to elevate the sound claw and get the weight off the affected one is what we really do with them. It works very well.

Q. Is there an immunity to parasites?

A. I wish you wouldn't ever say immunity and parasites. There is no such thing. It took us 30 years to understand this. I can prove that a cow will be less severely affected by an exposure to ova cysts than a calf will be. I can prove that if I give a calf repeated exposure to ova cysts it will begin to restrict the development of the next exposure. But, if I wait a month until that local cellular immunity is gone, then they are fully susceptible again. And, moreover, in calves and cows we have this whole series of coccidia. It is not just *Eimeria zurnii* or *bovis*, but is Brazilliensis, Auburnensis, Wyomingensis, etc., that keep coming through! We have some new data on clinical coccidiosis in milking cows, imagine that. There is no question that coccidiosis is a very important disease of cattle. You can't depend on the fact that it is self-limiting because the spectrum of species is such that you limit one and you still have others going in there. We are deeply grateful that we are about to have a new bovine coccidiostat. I have to say I am very sorry about the sulfa compounds because we always felt that Orio F700 was a marvelous thing to suppress coccidia in cattle. But, we have to rework this whole thing.

Q. What can you do if you have a herd problem with foot rot in cattle?

A. I think you can provide good foot care. Keep those feet trimmed back and clean up your lots and you can use foot baths. Whenever I get in a problem, I like to use foot baths again with 2% formalin or 5% copper sulphate and it cuts down terrifically on the cases. If you just have an open lesion without much inflammation, I think you can treat it locally and get away from the fact that you may have to dispose of milk. But whenever you get a real serious infection there with a lot of inflammation, etc., you just have to grin and bear it. Go ahead and put the antibiotic, antibacterial agent into the animal and dispose of the milk for awhile. Oftentimes, if you don't do that you may end up with a suppurative arthritis and not only lose a claw, but lose the whole cow.

Q. How do you get an egg count in manure?

A. If you'll see me afterwards I'll mail you a copy of our technique if you like. We work with 5 gms of manure. We run it through about 25 mls of water and put it in a small beaker. Then run it through a tea strainer. I mean an old-fashioned tea strainer, not a tea bag. Then we throw it down in the bottom of our centrifuge tube. We spin for 10 minutes at 1,200 RPM. Then we take the tube out, decant that water, because all the eggs are in the bottom, and then we fill up our tube with a sugar solution at a specific gravity of 1.25. We spin that after we have mixed the sediment with the first of the sugar solution. Then we spin it another 10 minutes in the sugar solution so the eggs come up. And, if you take care and practice, you can put a cover slip right on top of that tube so that the eggs are spun against the coverslip and then all you have to do is lift off the coverslip and examine it at 100 dia. Now, these little centrifuges cost you a couple of hundred dollars is all.

Q. Are there any new products coming on the market?

A. For liver fluke elimination? Well, mostly what we do is to write to Dr. Rosenberg in Washington and say, "Now, Aaron, when are you going to let that go?" We keep waiting for them to come out on the market because we are that close to having fine new fasiolocides. The problem has been to establish that there is enough of a market that the company can afford to pay out this

money and make this investment to bring the product on the market. There are perfectly splendid fasiolocides working their way through. They are just magnificent. I wish you could see the data. Come to think of it, we published that is in the *Veterinary Research Journal.* You should ask the pharmaceutical company itself how close they are to coming out on the market.

Q. Do you have any statistics on the effect of deworming?

A. Yes, but it is difficult to get a useful statistic. With dairy replacements, we have a statistic, age and breeding size, or average daily gain. The statistic that we have used is weaning weight in purebred herds. The purebreds have to get a birth weight and a weaning weight. There are a number of people who would cooperate with us in Nebraska. It does make a difference because that cow does produce more milk. I just have three little trials on this economics. The advantage we had was 18 lbs. at weaning weight when the cow had been dewormed twice. These were Angus. I just don't have enough data. I have all kinds of counts on worm eggs and parasites in beef cattle herds in the Dakotas and in Montana, and I hesitate to say this because Norm Baker will kill me, there are even worms in beef cattle in California. I swear!

Q. What type of sleeve do you prefer?

A. No comment. I was trained with a rubber sleeve as well, so I think there is definitely an advantage of rubber sleeve. The disadvantage of the rubber sleeves is that if you do not clean them properly and you go inspecting from one herd to the next, even with good cleaning, you can have some sanitation problems. But it is a better device.