did say that it prevented cardiac necrosis and some of the other complications with it. So since that time we have used this on approximately 12 cows. We do use, however, subsequent fluid therapy if necessary with this technique but I do feel if used properly it is something to try. I don't want a lot of lawsuits on my hands if it doesn't work or you manage to kill the cow, but I have found out that it is best when you use nitroglycerin tablets to leave the cow and don't get her up right away. Because if you get her up right away with the nitroglycerin there is a rapid fall in blood pressure and she becomes almost to the point of being unconscious and you swear that you killed her. But the nitroglycerin is rapidly excreted from the bloodstream after it is absorbed. I have used it two and three times consecutively within the same approximately half-hour treatment and in my hands we felt that it has been of some benefit to us. We also feel that it is very hard earlier to determine if there is any metabolic acidosis, but we do feel that with the IV fluid therapy, being Ringer's solution and bicarbonate given at the rate of about 30-60 grams or more of just bicarbonate solution in sterile distilled water, we seemed to have a better response. Now I realize that this is not a proven technique and maybe because of the other techniques employed with IV fluids and the bicarbonate therapy we have been getting better results. I was impressed by these little tablets and so we carried them in our bags and I think it would be interesting for you to try them. I'll repeat the dosage again. We use nitrostat tablets. They are available in any local pharmacy. They retail for \$2.65 for a hundred. Our pharmacist gives us a discount on them. So it is about \$1.30 per hundred. They are 0.4 mg per tablet which is 1/150th of a grain and I have been giving between 15 and 20 tablets vaginally. You put them on your hand and you work them in the mucosa and they are absorbed rapidly. If you monitor the heart before and after you give them, I think you will see the difference. Thank you very much.

Elevating the Bovine Foot

Gary Kramer, D.V.M.

Lima, Illinois

Tonight I would like to discuss with you the problem of elevating the bovine front foot. This has always been something that I have never looked forward to and upon graduation from college the first farm that I arrived at that I had to attempt to trim a foot my first question was where is the tilt table? The farmer looked a little puzzled about that and so I became baptized in a hurry as to the real world and the way it actually is. Oftentimes as bovine practitioners we are called upon to examine feet for various reasons. Maybe a complaint of lameness for an unknown reason. Perhaps an obvious injury to the foot or to do a corrective trimming in the hope that in the future we will be able to prevent a problem from developing. The problem is to elevate the foot with the proper restraint so as to not injure the cow or more importantly not to injure yourself, and to do it quickly with a minimum of time and equipment. When it comes to front feet we have the advantage that in some cases we can use Rompun on the animal and we can go ahead and cast her and put her down in this manner. But the unfortunate thing is, as I am sure many of you are aware that when you do this, unfortunately many times we don't have an ideal spot to drop a cow; maybe all the calf pens are full of calves and the alleyway is narrow and slippery! It's 10 below zero and the snow is coming down outside and that is not ideal either so what do you do with a cow? Well, if you are like me, most of the time you end up getting in beside her and you snuggle up to her and you pick the foot up and about that time she thinks maybe this isn't too bad-"You know this foot has been hurting me all day and I've been standing on the other one"-and suddenly you have the lame foot and she decides to kind of lean on you a little bit and the next thing you know you have about 900 lbs. on you or it seems like that much! And so you go ahead and try to do your best but you are never really totally satisfied. Sometimes you try to tie the foot to a stanchion divider or things like this but there again this is something that is very prone to causing possible injury to the cow and this is something we want to avoid at all costs. So anyhow with this particular technique, it really doesn't take much effort to hold the foot up. I am essentially holding the foot with just one hand.

I'm not holding the weight of the cow, I am simply holding the weight of the leg and I think anybody can tolerate that quite easily. The apparatus that I devised to accomplish this basically is a wire structure that I bought at the local hardware store. There is a chain that comes with this that normally wraps around the post. That would normally go on the bottom. I simply removed that and that's an 18-inch OB chain hanging down there. There are two hooks there. On the other end that's a log chain hook that I bought also at the hardware store and I simply removed the little fastener that normally hooks on to the barb wire in the fence stretching procedure. The way I go ahead and set this up here I more or less play it by ear with whatever is available as far as hooking this up. I have a beam hook that I hook into a beam above the cow and I try to position this immediately above the shoulder of the animal. Sometimes you have a closed in feeling, you don't have anything available that way. So I go ahead and I just hook it right into the stanchion. And there is really no difficulty with that either. I hook an OB chain just around her shoulder and this is all I've really done. I go ahead and I put tension on and simply what it does is, it just more or less relieves the weight of that cow that you would normally have to incur yourself if you were trying to pick up the foot. Surprisingly enough I was quite surprised the first time I tried it. The cows really don't fight it. I put it around there and with no difficulty at all you can tighten it up. Essentially you tighten it enough so that their toes are just barely tapping on the floor. That basically is sufficient to accomplish what you want to do. Dr. Herrick talked about putting on the wooden shoe tonight. We do quite a few of these in our practice and we really like them. It's quite easy to apply one of these to a cow, standing. She'll stand there for 20 minutes and she is perfectly content with very little struggling generally speaking. You can go ahead and apply one of these wooden shoes without any difficulty at all. Sometimes you can also apply a cast if it is necessary.

Apparent Anestrus

Merrill M. Townley, D. V.M.

Chamois, Missouri

The subject that I would like to talk about is the same one that many have talked about earlier, the apparent anestrus. We have had the teaser bulls and testosterone and all of these things. But back in Missouri, where I come from, we have relatively small dairies, under 100 cows. They are mostly family operated, so catching these cows in heat is still pretty important to us and I suspect that in all size dairies the medical part of our job would be a lot easier and a lot more effective if every cow was caught in heat and recorded. Many times we spend extra time dealing with the anestrous cow when if they just had simply caught her in heat and bred her that's all that there would have been to it. Of course when you go to shooting for a twelve-month interval, if that cow is either missed in heat or if she is bred and she has a first heat after the first breeding and you miss her, you end up checking for an open cow that you would have known was open in three weeks if they had used the proper detection. Now we use head detector tabs and they are important but I don't think that anything will replace the good record keeping system and the good management of watching the cows and finding them in heat. The record system that I use is nothing different from what most of you use but we use a barn record and we make it up and mimeograph it and put a piece of carbon in it. I keep a copy and he keeps it in the barn and I take a copy home, the day that I'm there. We do these on monthly visits and then I do the same thing with an examination record. I used to record these on cards and kept a set of cards too but then I found that became pretty time consuming and we now have the family actually keep their own barn record. I mean they record them on their own herd cards and they are the standard cards. It works well because they get used to doing all these things themselves. But the thing that I really came to talk about is the one method that we use in the families. It is a reward system. Our dairies have mostly large families and of course my favorite expression is, "If we only had the fertility in the dairy barn that we have at the house we would be a lot better off!" We have families of five