

union. Insertion of this device in the distal portion of an everted uterus with the back end against one's chest facilitates reduction of an edematous uterus without putting a hand through it. This greatly eases the chore of completely inverting the uterus once it is back inside the abdomen.

I have found that with an increasing number of requests to talk to 4-H and farmers' groups, visual aids are a great help in making points and illustrating pathology. By carrying a camera and a few lenses in the practice vehicle at all times, pictures of cases are taken that would otherwise be left unphotographed. I carry my camera, lenses, and a rechargeable flash unit in a small, sturdy, and dust-proof case. It keeps the equipment safe and ready for use at any time. In arranging the slides, I first view them on an old X-ray viewer and then store them in a 20-slide plastic sheet available from 20th Century Plastics, Inc., 3628 Crenshaw Blvd., L.A., California 90016. These sheets can then be put in any notebook where all slides are ready for quick previewing and assembly for a showing. The slides are thus kept dust-free, dry, and out of harmful light rays.

### **Record Keeping to Improve Bovine Reproduction**

**Roland S. Jeans, D.V.M.**  
*Evansville, Wisconsin 53536*

Many of us spend a great deal of time doing pregnancy and sterility checking of cows. It can be a very satisfying and rewarding part of bovine practice, but let's face it, it's just not the most appealing part of practice. To get the most out of the procedure, a good system of recording the information you obtain should be developed.

The system should be easily used yet provide records so that both you and the owner or herdsman can tell at a glance when to dry a cow up or if the cow is a problem and should be rechecked. We have all probably developed the ideal system, but it can't be used in all dairies. If the owner or herdsman will not spend the time to use your system, then you must vary it or utilize something different to get the needed information recorded.

I would like to talk about the various systems that are utilized in our practice. The first system is merely a masonite or hardboard sign over each cow to record facts about her. Some of these are home creations and some are adaptations of signs that bull-studs have available for individual identification. This method is most often utilized in our practice where natural service is used and accurate breeding dates are not always available. This system can give you a limited amount of information, but not general health records or previous lactation history to see if she has been a problem breeder before.

The dairyherd monitoring wheel is not utilized by a lot of our herds but some people do like it and will

spend the necessary time to use it. It does require some time to keep it accurate and most often must be used with some other written record such as a notebook to record the information needed for problem cows or from lactation to lactation.

A manila folder type record, developed by Michigan, is a very good system to record in detail almost all of the lifetime history of an individual cow. There are areas for breeding, calving, production, mastitis treatment, reproductive problems and other disease problems to be recorded. Also, with the use of color tabs on the top edge, you can mark months for calving, drying off, or when to watch for heat. The information may be somewhat harder to retrieve quickly, but it is there for the dairyman who will spend the time to put it there.

This last system is the one we use most often since it is easy to use and has room to record all the necessary information on each individual cow. This card can record four lactations so prior breeding history about the breeding cycles of the animal can be examined. By using the color tabs, various categories of cows can be marked, such as pregnant animals, cows ready to be bred, and cows to be checked postpartum. This system, except for the cards, is purchased from Acme Visible Index in either 38- or 60-pocket sizes.

As nice as these last systems look, I can show you some that are covered with dust and cobwebs because they are never touched. I'm sure that many of you have other systems that fit the needs of you and your clients. No matter what the system, the most important thing is that it be used.

(Several 2x2 slides were used to illustrate this presentation.)

### **Some Instruments for a Dairy Practice**

**Raymond Husmann, D.V.M.**  
*Breeze, Illinois 62230*

I wish to present to you three instruments that have been useful in our practice, which consists of family dairy farms of 50 to 100 cows.

The first is a vacuum gauge to which three rubber hoses may be attached. A rubber hose with a 16 gauge needle can be inserted into the inflation to observe the vacuum stability at the teat end. Next a rubber hose without the needle may be placed on the milking cluster in place of the short pulsator hose to observe the pulsator action. A slightly larger diameter hose, the narrow end of an inflaton, may be attached to the vacuum gauge and this used on a stall cock to check for vacuum line restrictions and check the accuracy of the milking machine vacuum gauge. We use this instrument as a survey tool while on the farm for a sick call. If our findings indicate a possible machine-related mastitis problem, we return later with more sophisticated equipment.

Some of our dairymen raise registered bulls to sell and often we are called to place a ring in their noses.

The second instrument I wish to present to you makes this job a little easier. We obtained these cutting-edge tongs from a local veterinary supplier. One side of the pincer part of the tongs has a cutting edge, and with a squeeze and slight twist the nasal septum is punctured. The pincer part of the tongs also has a concave surface to allow you to slide the bull ring right over the tongs and makes it easier to put the screw in the ring. One can normally place a ring in a yearling bull on the end of a halter rope, as the control of the animal is increased by your grasp on the tongs.

The third instrument is a metal rod, 30 inches in length with a smooth wooden ball on each end. We use this instrument as an extension of one's arm in attempting to get a complete replacement of the prolapsed uterus. First, replace the prolapsed uterus and then by using this instrument attempt to complete the replacement. We have had no problems with excessive straining, re prolapsing, or the need for more than simple interrupted suturing of the vulva.

### Use of a Large Cattle Trocar

**Max C. Joseph, D.V.M.**

*North Vernon, Indiana 47264*

Use of the large cattle trocar is not original in our practice. It goes far back in veterinary medical history and I think its demise is unjustified. I was introduced to its use by one of my best friends, a veterinarian licensed and practicing from 1903 to 1963.

The term "general practice" must have been coined to describe our practice and it carries on through the bovine portion of the operation. This means that we have all types of cattle operations with an assortment of owners ranging from the full-time professional cattleman to the part-time hobbyist who may be a production line worker in one of the local industries. The variety of methods concocted to overload the ruminant digestive system is mind-boggling and some of the facilities we find never cease to amaze me. If this presentation does no more than provide you an "out" when you are at your wit's end, then hopefully this time is not wasted.

The object of our attention is a large trocar utilizing a cannula nine inches long by seven-eighths inch in diameter with a flange on one end. Holes are drilled in each ear of the flange in order to anchor the cannula to the skin after it is placed in the rumen.

The trocar is used as a safe, quick, easy and fairly efficient method of removing excessive or toxic rumen contents. We use it in any type of rumen overload when results cannot be obtained by more conservative treatment. It is a very good substitute for rumenotomy in many cases. Considering the shock to the animal in major abdominal surgery, I feel it may be preferred course of action in many cases. A scalpel is used to make a two-inch horizontal incision low in the left flank, going through the skin and into but not through the muscle layers. Location of the incision

would be very near to the fold in the flank and a little anterior. The trocar with cannula is then thrust sharply into the rumen and withdrawn from the cannula. A halter, tail-hold, and sometimes a nose lead are the only restraints required.

The cannula can be moved in any direction in the rumen to aid in the expulsion of contents, whether gaseous, liquid or semi-solid. Directing the cannula forward, down and medially usually will remove the most fluid contents. Moving the cannula in and out with a kind of pumping action will facilitate the flow. Insert a stomach tube through the cannula and pump five gallons or more of water into the rumen; remove the stomach tube and allow fluid contents to escape. This procedure may be repeated as often as you feel necessary. We sometimes instruct the owner to instill water a few hours later with a hose from a hydrant. If the animal is not extremely toxic, it isn't necessary to devote a lot of time at this point—let the cow and the farmer worry about it.

It seems well to finish by pumping in your favorite compound of ruminatorics, antacids, detoxicants and laxatives. In toxic, acidotic or dehydrated animals we include intravenous fluid therapy depending on the conditions found.

The last thing we do is to suture the cannula to the skin with one-fourth inch umbilical tape. The cannula is to be left in place for a minimum of three days and probably should not be left over five days. The sutures are cut and the cannula withdrawn. No further treatment is necessary, except in fly time some fly spray or screw worm spray should be used occasionally. The hole into the rumen may require three weeks or so to close but will not cause trouble.

The greatest problem we have had is in delaying our decision too long before using the trocar. Needless to say, we don't save them all. We have used the trocar for twenty years and I can't remember a real complication caused by it. It is safe in advanced pregnancy—I have used it two or three times on cows that calved normally while the cannula was in place.

We include in our fee a five dollar deposit on the cannula to encourage the owner to return it.

I think you will especially appreciate this instrument when faced with a barn full of foundered cattle on a busy day or a cold night or, better yet, a barn full of cattle and no barn. Thank you.

### A Successful Treatment for Cows with Clinical Signs of Fatty Liver Syndrome

**Paul G. Eness, D.V.M.**

*Ames, Iowa 50010*

The fatty liver syndrome (FLS) of dairy cows is similar to some other bovine nutritional problems in that the incidence of the disorder is reflected by economic conditions at play in the cattle industry. Reports of the condition appear to be again on the in-