rate using it. I have become so sold on this for two reasons. Number one, it taught me a lot of hardware disease, but secondly, I don't like surgery. I think it is important that you understand the prospective at which something is presented. I have come to the point that if the cow needs surgery and the owner is willing to pay the money to do the surgery, we use

the hardware treatment first, unless she is that cow that is extremely bad. There are a couple of disadvantages to the hardware retriever and I think that one of them is that it is a little messy. There is a certain percent of failure. It is not as messy as demonstrating to your client the quality that commonly should be when the ration is right.

Use of the Plastic Garbage Bag in Replacing a Prolapsed Uterus

Dr. William Newman *Fayetteville, Tennessee*

Fayetteville is located in southern middle Tennessee. We're in an agricultural area and cattle enterprises make up the major portion of agriculture in our area. Our practice is Fayetteville Animal Clinic. We have two clinics, one in Fayetteville and one in Lynchburg, and we have a duplex for interns and residents. Our practice is 80 percent large animal. There are seven of us in the practice. We're all Auburn graduates and the 80 percent large is mostly cattle with about half dairy and half beef. Our clinic contains 16,000 sq. feet and about 60 percent is for our large animal facility. We have two large animal work areas. There is an unloading area for our inside large animal surgery and treatment area. There is an open, south facing, open end shed area where we do most of our routine procedures. There is a chute in that area. We use Foremost chutes in our clinic and we have WW and Foremost portable chutes. In this same open end building we also have in-patient stalls for hospitalization. We have 7 stalls in this building. In our reception we have a large animal drug display on one side of our reception area that is divided between large animal and small animal where we have drugs displayed. And we also have a divided reception area for our large animal clients there, too. We have a stock room from which we service our trucks. Even with our good facilities we still do about half of our work on the farm. And my practice tip tonight has to do with that.

Prolapsed uterus replacement is usually just a hard and messy job and it hasn't changed a whole lot from the way our predecessors in the profession did it many years ago.

Two items that I use, and one of them is not labeled in the topic, are a plastic garbage bag or a cadaver bag (I actually use a Haver-Lockhart cadaver bag, but a large plastic garbage bag works the same) and the other one is a stool and we just call it a dove hunter stool. Hunter suppliers have them, dove hunters in our area use them, but it is just aluminum with a canvass seat that folds up that you can store nearly anywhere because it folds completely flat. In the procedure when I use it, I start out with it unopened (that's

just it lying flat), and when I'm talking about its uses in the cow that is down with a prolapsed uterus and using the routine sternal recumbency with her rear legs pulled out behind her, and placing the garbage bag lengthwise between her rear legs and the uterus just lying flat on it, with this it just leaves you a clean surface to wash it on or to remove the placenta. Most of the time, as you know, they are in mud or dirty conditions. You don't have to hold the uterus up. Water will just run off it. If it's where you can get water to it out of my truck, a lot of times I just back the truck close enough to it. Once I do a pretty good job of soaping it up I even spray it off with that, just under it, not having to lift it up. Then once you have the uterus clean, the bag is still lying there, it never has been opened, and these cadaver bags, even if it is lying in mud nothing ever runs in those things. I don't know, they just run through some kind of press and they are still clean on the inside. So if the cow's head was facing out toward the audience here I would just lift the open end edge of that and lift it back under the uterus and let the uterus come back inside the bag. And once you have it in this position you can treat it with any topical antibiotics or disinfectants or hydrophilic compounds, anything you want to. You're not wasting the compounds. You're not letting it fall back on the ground and contaminate it. It also frees up your assistant to help you a little more rather than just having to pick the thing up. Once I have it in this position in the bag then I set the stool just under the uterus and it holds it up at about pelvic floor level and it gets it up where you're not just having to hold the weight by assistant and it makes it at a level you're ready to work with it at that time. In most cases when I would have it here the bag kind of gets in your way at this time. I do not use the bag around it to replace it. I just still manually push it back in with usually an assistant helping me. You still have to have someone helping hold the uterus up. The stool will try to slide out from under you if you get to relying on it totally. But you've got it up there where it's a lot easier to hold and you've got it clean. And at

this time you can replace it usually pretty easy, if there is a such thing as an easy prolapse. Then once you are through it seems one of the dirtiest jobs is always you've got a lot of litter. You've got fluid bottles and dirty sleeves and syringe casings that are laying around. The garbage container in my truck is not that large. Usually it is running over if I don't have it half full already. So then I just take all the trash or non re-usables, put them in the bag and just ask the farmer to dispose of it. The stool and the garbage bag both have other

uses in practice. The garbage bag can be used as an emergency raincoat. If you've ever been to a ballgame as a student you can make a raincoat out of it! Also, the stool sometimes whether you're waiting for the farmer to get the wild OB heifer up to the catch pen, or whatever, sometimes you can trim your fingernails or whatever while you're waiting. And once the job is done you can get back on the road!

Upholstered Freestalls As an Aid to Control of Coliform Mastitis

Dr. Reilly Glore, Montesano, WA.

Acute coliform mastitis is a notoriously difficult condition to treat successfully, hence prevention is the most effective tool for us to use. Recent studies have confirmed previous clinical impressions that a major source of the infectious organism, *Klebsiella pneumoniae*, is sawdust bedding. (1, 2) Various approaches have been advocated to avoid using sawdust for comfort stalls. These include rubber mats, straw, sand, cement, and various combinations of those. One of our clients has conceived of an alternative bedding system which for lack of a better term I call the upholstered freestall.

This is basically the "If you can't kill it, cover it" principle. We have all used this approach any time we drape a surgical field. It is said that necessity is the mother of invention. The seeds of invention for this system were sowed as my client discovered that he had contracted a bad case of AIDS, which for purposes of this discussion is defined as acute income deficiency situation. This condition was exacerbated by a concurrent escalation in sawdust bedding costs. This escalation was the result of reduced supply due to reduced output by the local sawmills which was caused because none of your clients were building new houses in the fall of 1984.

The original thrust was to develop a means of reducing the amount of bedding material needed over time. Shortly after installation, however we noticed other benefits to the system, most notably a dramatic reduction in the number of clinical cases of mastitis in the herds.

Basically what we are doing is using a woven polyethylene material to cover the sawdust bedding in the freestalls. This prevents the cow from removing the bedding, and effectively prevents the udder from being in contact with sawdust harboring excessive populations of pathogens. The system has been installed in both loop stalls and individual wooden type stalls. The only requirement is that the stall have a 1-1.5 inch slope to the rear and no large curb on the back which could interfere with drainage. All installations to date have been in cement bottomed stalls.

Installation in loop stalls is as follows. First the material which is 129 in. wide is unrolled and approximately 36" is layed on the bottom of the stall. Sawdust is added to a depth of 10-12" unpacked. One must be careful to make a trough in the area between stalls where the loops are cut to avoid the formation of bumps due to the inadequate packing of the saw dust where the cows don't lay. Also the sawdust is raked away from the front of the stall where a 2x4 is placed full length to which the material will be fastened. The material is then folded forward and attached to the 2x4 by nailing a 1x2 tackstrip over the material.

For individual type stalls a 48 in wide material is used. It is of considerably heavier weight than the wide material. Again about 12" of the material is layed in the bottom and the stall covered with sawdust. The remainder of the material is fastened with a wood strip to the sides and front leaving enough slack to accommodate settling and compaction of the sawdust. If there are no sides to fasten to, a 2x4 is placed on the ground in between the stalls and the material is tacked to it in the same fashion.

Since most freestall areas are rather innundated with liquified used hay and nephrotically processed water, an initial problem encountered was moisture accumulation on the bedded surface due to contaminated cow foot prints. This was successfully overcome with a generous application of dolomitic lime at weekly or biweekly intervals. Moisture in limed stalls has not accumulated in bedding in place for over 8 months.

The advantages to this system are that labor for maintenance and cost of sawdust needed to replace bedding are greatly reduced. One client calculated that these savings paid for labor to install this system and purchase the polyethylene material in 4 months of use. The stalls are comfortable and hold body heat very well. No evidence of abrasions on the lateral surface of hocks as seen in inadequately bedded stalls has appeared in over 1 year of use. Additional long term benefits are derived from reduced

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