A Realistic Herd Health Program

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"The need to develop ongoing herd health management programs in beef cow-calf production units is less apparent than in dairy or feedlot operations." This statement made in the introduction to Beef Cow-Calf Herd Health Management by Jimmy L. Howard, D.V.M., M.S. is indeed an understatement for cattlemen in North Mississippi. Beef cattle people have been traditionally hesitant to become involved with detailed records and legal contracts.

Since the goal of the cattlemen is to maintain and improve a profit margin, a workable herd health program is a *must* for beef producers in the 1980's. Our herd health program was developed with major emphasis on preventive medicine.

Most herd owners in North Mississippi are receptive to working herds at least twice a year. I have found if you have one thing that the cattleman needs, then you can sell yourself, and therefore sell herdwork. Examples in our practice have been when the cattlemen thought the veterinarian was the only source of anaplaz vaccine, pregnancy testing of cattle, and now it is the State of Mississippi paying for certification of herds for brucellosis. The first step is to sit down with the cattleman and decide his goals and your goals. Typical production goals of the cattleman might be:

- 1. A twelve month calving interval.
- 2. A 90% weaned calf crop.
- 3. A ninety day calving season.
- 4. Weaning weights of 40% of the mothers normal weight (400 lbs. to 480 lbs.).
- 5. Annual cow death loss limited to accidental causes.
- 6. Preweaning death loss less than 2%.
- 7. Postweaning death loss less than 1%.

Your goals as a veterinarian might be:

- 1. All cattle vaccinated against common disease each year.
- 2. All cattle wormed twice a year.
- 3. A brucellosis free and certified herd.
- 4. All adult cows and bulls have Ectrin ear tags for fly control and ear tags for identification.
- 5. All animals treated with delice and grub kill in the fall.
- 6. All bull calves castrated and implanted each year.
- 7. All cows pregnancy tested and open ones culled each fall.
- 8. All cattle dehorned in the herd.
- 9. All bulls soundness examined each winter.

Once our goals have been outlined, then we implement the herd health program. Almost all the herdwork is done on the farm while some emergency cases are hauled to the clinic. We try to work herds in the spring (March through May) and in the fall (September through November) because summers are much too hot for herdwork. Our portable beefmaster chute is carried to the farm each time we work cattle. If working pens have grown up in weeds the cattleman is warned to clip all areas before introducing cattle into these areas for herd working.

Cattle worked in the spring receive vaccinations for blackleg, malignant edema, and acute cervical hemorrhagic edema (Siteguard M–Wellcome), 5-Way Leptospirosis combined with Vibriosis and IBR-PI₃ are optional if these have not been a problem in the herd. All bulls are vaccinated with Anaplaz[®] (Fort Dodge) in addition to the above vaccinations for cows. Cows are no longer vaccinated for anaplasmosis due to the high incidence of the N. I. syndrome in calves born to cows immunized with Anaplaz[®]. Cattlemen are warned about anaplasmosis and a program of low level tetracycline free choice feeding is encouraged.

Worming of adult cattle is usually done without nose clamps with Haloxon boluses (Halox[®], Loxon[®]-Wellcome), TBZ paste, or tramizole jel wormer. Tramizole injectable wormer is used, but most owners do not like it as well as the other wormers. No dehorning is done in the spring because flies can be a problem. The nose can then be caught if necessary and identification of cattle or lost tags can be replaced. Ectrin ear tags for fly control are applied to cows (one each) and bulls (two each). These fly tags are numbered at the office by the secretary and the numbers correspond with their ear tag numbers.

The record system we have depends upon the ear tag, the fly tag number, and the brucellosis identification number. Each cow is placed on a brucellosis test chart and the ear tag is placed in the "Remarks" column. Small index cards have the herd history, the number of cows and calves worked each time, vaccinations, wormings, and charges on them. Each herd owner is supplied with a small book with the cow's number, calving status, calf's number, and any other observations on her individual page. An identity program for all cows, bulls, and calves is a must for the herd owner to take supreme interest in what you are doing.

Calves receive vaccinations for blackleg, malignant edema, acute cervical hemorrhagic edema, 5-way Leptospirosis, and IBR-PI₃. Worming is done with TBZ paste because of the relatively low toxicity and we switch to Loxon[®] or tramizole jel on the next morning. Brucellosis calfhood vaccinations are given to eligible heifers (3 to 8 months).

Tagging of calves is done at this time also. Some of the better producers tag, castrate with elastic bands (with little incidence of tetanus) and administer the oral corona and rotavirus vaccines to the newborn calves.

Castration (from two days up) using the Whites Improved

emasculator method and implanting (Ralgro[®] or Compudose[®]) the bulls can be done in the spring.

The summer is spent on various emergency calls to see sick animals. Common things seen are pneumonias, interdigital fibromas, foot-rot, individual anaplasmosis cases, eye problems, prolapsed cervix, purple mint (pulmonary emphysema) toxicity and various other toxicities (motor oil poisoning, poisonous plants, cotton poisoning, and fertilizer poisoning).

Cattle worked in the fall (September through November) are brucellosis tested (tail bled) mainly for certification, anaplasmosis tested (where carriers need to be detected), and 10% spot checked for leptospirosis. Tuberculosis (TB) testing is done mainly in registered herds. Cattle that have a history of leptospirosis are given a 5-way leptospirosis injection at this time (every six months, if possible).

Worming cattle with TBZ paste is done in the fall because it seems to be more compatible with the pour-ons for lice and grub control. Warbex (Bo-anna) and Fenthion (for Zebu cattle) are used for pour-ons.

Retagging of adult cows, pregnancy testing and dehornings are all done in the fall working. Dehorning is done with the Keystone[®] (adult cows) and the Barnes[®] (calves) and packed with sterile cotton and coated with a pine tar preparation. We have had trouble in the past with dehorning because we used a roll of synthetic cotton instead of natural cotton to pack the horns.

Cows are culled on the basis of being open, bad teeth, bad udders, poor feet, disease or unsatisfactory characteristics of calves.

Calves are revaccinated for 3-way muscle group (Siteguard-M), 5-way leptospirosis, IBR-PI₃ before weaning, and all heifers not calfhood vaccinated for brucellosis in the spring are done at this time. It is my opinion that IBR-PI₃ Nasal Vaccine is better than the injectable vaccines because the interferon effects helps with eye problems and GI diarrhea in calves.

Dehorning, castration, and implanting of bulls (Ralgro[®] or Compudose[®]) not done in the spring is done at the fall working. Implanting of bulls or steers is recommended every ninety days.

Bulls are usually worked in December, January, and February. All bulls on the farm are subjected to a meaningful breeding soundness evaluation. Such an evaluation includes a general physical examination. Realistically, he must be able to *see* and *eat* and *walk*. He also must be able to mount and make intromission. If he needs any kind of surgery, then the bull is culled. Examination of the penis and prepuce is most easily accomplished at the time of semen collection. The testicles are palpated and should have good size and no inflammatory processes present. The epididymides should be checked for alterations in their size, form, and consistency.

An internal examination by rectal palpation is next and should include the pelvic urethra as an anatomic reference point, the prostate, vesicular glands, ampullae, and internal inguinal rings.

Semen collection is by electroejaculation and the criteria for semen quality include productivity (estimated indirectly from scrotal circumference), percent of normal spermatozoa, and the degree of vigor of spermatozoa. Using the Society for Theriogenology and the American College of Theriogenology scoring system, if either his scrotal circumference score or his spermatozoa morphology score is less than 24, then the bull is culled. Also if his total score is less than 60, then he is culled.

When the cattleman has to select new bulls all of the requirements for keeping bulls have to be met and also we recommend only buying virgin bulls, checked for anaplasmosis, brucellosis, and leptospirosis titers.

All bulls are wormed, tested for brucellosis, pour-ons applied for lice and grubs and given the first dose of Anaplaz[®] vaccine If they are new bulls, the second dose of Anaplaz[®] is given when we work the herd in March, April, or May.

Winter months are usually spent on normal calf deliveries and also dystocias. Other problems relating to calving (such as prolapsed uterus) are also commonly seen. Scour problems in young calves are a common problem in winter at which time the oral calf scour vaccines are recommended.

All cesarean sections are done in the clinic using the midline technique. We have a table that was salvaged from an embryo transfer venture that is about the height of the floor of a stock trailer. The cow is tranquilized or not tranquilized according to her temperament and cast on the table and all four legs are secured to the leg stands. The table inclines to lift the rear legs up so that the cow's intestines do not push out through the incision which is made under local anesthesia. After the surgery, the cow is rolled back into the trailer and transported home with the live calf hopefully.

In summary, I feel if the veterinarian has communication with the cattlemen in the area, then a profitable and meaningful herd health program can be established.