Marketing Veterinary Services to Small Beef Producers

W. Mark Hilton, DVM, DABVP-Beef Cattle

Purdue University, School of Veterinary Medicine, 1248 Lynn Hall, West Lafayette, IN 47907-1248

I am certain that most of you work with herds that are classified as "small" beef herds. The National Cattlemen's Beef Association (NCBA) defines a small herd as less than 100 cows. The most current survey of beef herds shows that 91.7% of all beef herds and 50.3% of all cows in the United States are in small herds. In Canada, small is classified as less than 47 cows; 70% of farms and 29% of cows are in small herds. If we move to herds with less than 122 cows, this equates to 93% of farms and 67% of the cattle.²

These small herds (Table 1) tend to be herds where the cow-calf segment is not the primary source of income, but profitability and enhancement of the enterprise is many times a goal. We will not be dealing with "hobby herds" which have a low probability of enhancing the profitability of your business.

Table 1.

1996 data		Number of cows 1-49 1-100		Ave herd size
US	% of herds % of cows	79.8 30.8	91.7 50.3	30
Canada	% of herds % of cows	1-47 70 29	1-122 93 67	45

I was in a three person mixed practice in DeWitt, Iowa for fifteen years and we were able to increase our revenue by 90% in the beef cow-calf portion of our practice from 1988 (start of Total Beef Herd Health Program) to 1997. I am quite certain that you can also increase your revenue by initiating some new cow-calf beef programs in your practice.

The beef cow-calf enterprise has critical success factors, and you need to be involved in enhancing the probability of success in these critical success factors.

Various studies show that the critical success factors include: 6,7

- 1. Knowing your cost to produce 100 lb of beef.
- 2. Becoming a low-cost, high-profit producer.

- 3. Reducing feed cost for the cow herd.
- 4. Learning to optimize vs. maximize. Adding an extra pound of weaning weight is not always cost-effective.
- 5. Learning that herd improvement does not come from doing one thing 100% better, but from doing 100 things 1% better.

As we look at the entire beef cow-calf enterprise, we can divide it into the following segments:

- Herd Health
- Fertility
- Nutrition
- Genetics
- Environment
- Records
- Marketing

While you as a practitioner surely don't need to be an authority in all these areas, if you want to enhance your business, you should find your areas of expertise and work in these areas.⁵

Examples of each include:

1. Herd Health.

- A. **Developing a vaccination program.** Each herd should have a customized program so that procedures are done on time. An example of the one we use is included as Appendix I.
- B. **Biosecurity.** Include on your vaccination outline your thoughts on adding healthy animals to the herd.
- C. **Specific disease control programs.** An example would be having a Johne's testing program for a seed-stock herd so they can develop a "Johne's tested negative" herd.

2. Fertility.

- A. Replacement heifer selection and development. This subject has received much attention over the last few years. You as the herd health veterinarian need to be involved in:
 - selection
 - nutrition
 - prebreeding examinations and vaccinations
 - synchronization recommendations
 - determination of length of breeding season
 - selection of AI or natural service sires

SEPTEMBER, 2001 83

- B. **Synchronization programs.** With more than 10 synchronization programs available for your beef clients and more being added almost daily, you are best qualified to develop the program that is best for the herds you service.
- C. Tying it all together. In herds where calving distribution is less than ideal, open cows exceed goals and calving season is excessively long, a program to address how nutrition, genetics and environment impact herd fertility would be profitable for your producers and you.

3. Nutrition.

- A. Cow herd nutrition. With yearly cow feed accounting for 56.7% of the variation in profitability of the cow herd3, a science based nutrition program should be an absolute. Too many herds do not have an accurate inventory of feedstuffs available for winter feeding, nor do they have analysis for those feedstuffs. In work done in Nebraska, researchers showed that "forage testing and allocation of feeds for best use allowed producers to save an average of \$25 per cow in feed supplements without jeopardizing performance or herd health."1 With many computer ration programs available, formulating cost-effective yet simple rations can be an excellent practice builder.
- B. **Purchased feed consultation.** Many herd owners purchase unnecessary supplemental feeds. The use of protein blocks and energy tubs are rarely cost-effective. Your advice here could be a real money saver for the producer. Just remember to charge for this advice as a part of your nutrition program.
- C. **Mineral program.** Standardized Performance Analysis (SPA) data shows no correlation between dollars spent on cow mineral and total herd profit.⁴ My experience is that those producers spending the most on minerals are wasting a lot of money. Instead of a haphazard nutrition program, offer a complete program that ties all elements together in one package.

4. Genetics.

A. **Heifer program.** Selecting AI sires to use on virgin heifers to reduce dystocia while maintaining adequate growth can be extremely beneficial to overall herd profit. If dystocia rates in heifers has exceeded farm/ranch goals of less than 15%, selecting bulls to reduce dystocia should be a short-term goal. Our recommendations are as follows based on heifer genetics:

Table 2.

Heifer Genetics	BW EPD Angus Bulls	BW EPD Red Angus Bulls
Primarily British Heifers British x Continental or Primarily Continental Heifers	< 2.0 < 0.0	< -1.0 < -3.0

We want all AI sires used on heifers to be ≥ .90 for BW EPD accuracy for enhanced confidence.

B. Cow Herd Program. Many herds have used breeds of bulls that have not necessarily improved their overall profitability. We've lost heterosis in the quest for the elusive carcass premium. Nearly every steer feed-out contest in the United States has cattle of approximately 50% British and 50% Continental cattle finishing as the high profit group. The largest benefit of heterosis though is in the cow herd. Research at Montana State University showed that crossbred cows netted \$70 more profit per year than straightbred cows.3 According to Dr. Ed Uvacek the average cowherd has lost \$5.50/cow/year over the last 27 years. Adding back cow-herd heterosis should be high priority.

5. Environment.

- A. **Handling Facilities.** We kept numerous plans for cattle handling facilities in our office for our clients to use. We never charged for this service, but I feel any improvement in facilities is a plus for the veterinarian.
- B. Management-intensive Grazing (MiG). This is another case of "where's the profit for the clinic?", but MiG fitted nicely into our overall philosophy of making the beef herd a low-cost, low-maintenance business. If you have an interest in MiG, you will likely do work for clients that embrace this technology. I have found these producers to be excellent clients. Most are very progressive and want to add more of your programs to their business. Speaking at their meetings was a real positive for our practice.

6. Records.

A. Herd Production Records. This should be the first program you offer to your most progressive clients. Only about 15% of our clients joined our Total Beef Herd Health Program, but those that joined this entire program said the records portion was the most

valuable part of the entire program.

I have experience with both the Cow-Calf 5 and CowSense computer programs and find advantages and disadvantages to both. The analysis of the records is the key to making this a profit center for your clinic. We charged a specific rate per cow for entering and analyzing the data, and our regular hourly rate for the time we spent with the herd owner talking about herd goals and what the records were telling us with regard to the future of the herd. Success with a records program involves:

- · promptly entering data
- · promptly producing reports
- personal evaluation of reports.

If you simply send the owner a stack of paper with numbers, your records program will be a failure.

B. Herd Financial Records. With the development of the NCBA's Standardized Performance Analysis (SPA) we have an excellent aid for analyzing total herd profit. Very few clinics will likely offer a total SPA program - input to analysis. The time commitment can be quite substantial. What we have done is work with the extension specialist that inputs the data, but we have only been involved on the analysis side. We generally talk about the SPA data at the same time we are making our AI bull recommendations in March/April. If you have clients that truly want to stay on the leading edge of profitability in their beef business, this is the place to start. You will see quite dramatically that herds must become low-cost, high-profit herds to prosper.

Table 3. Management Strategies that Impact Profitability. Research results from an analysis of 225 SPA data sets collected in Illinois and Iowa.

Variable	% variation	\mathbb{R}^2	В
Feed cost, \$	56.7	.567	94±.06
Depreciation cost, \$	8.6	.653	88±.12
Operating Cost, \$	4.9	.702	$-1.00 \pm .15$
Calf weight, lb	4.6	.748	$.54 \pm .07$
Capital charge, \$	2.4	.772	$-1.38 \pm .27$
Calf price, \$/cwt	2.7	.799	$3.40 \pm .66$
Weaning percentage	1.7	.816	$2.03 \pm .52$
Herd size	0.7	.823	$17 \pm .07$

 \mathbf{R}^2 = the (cumulative) percent of herd-to-herd variation in profit determined by each factor.

Example

56.7% of the herd-to-herd variation in profit is due to feed cost

Only 4.6% (.748-.702) of the variation in profit is due to calf weight

B = this number is the change in profit resulting from an increase of one unit of that given variable.

Example

A \$1 increase in **feed cost** results in a \$.94 decrease in profit, plus or minus \$.06.

A 1 pound increase in **calf sale weight** (all other factors remaining the same) would be expected to result in a \$.54 increase in profit. In this database the average sale price was \$.77, this \$.23 difference is due to several factors including that as calves get heavier they are worth less per pound, and while every cow is included in the other factors (i.e., paying a feed bill) only a certain percent will wean a calf.

A \$1 increase in **calf sale price** would return \$3.40 per cow.

Even though we know there are **economies of scale** in the cow/calf business, herd size does not show up as being one of the primary factors. The economies of scale show up in the important items such as feed cost, and depreciation cost, and thus, if a smaller producer can keep these items in line, they can be competitive.

7. Marketing.

- A. Feeder cattle alliances. There is much written lately about marketing alliances. We continue to have too much variation in our fed beef cattle, and programs to help reduce that variation are a real positive. A veterinarian that works with numerous herds could incorporate this concept into his total "herd health" plan.
- B. Replacement female alliances. As carcass premiums and discounts continue to widen, having a more uniform, profitable cow-herd will become more important. Fewer herds should be trying to produce their own heifers and some smaller herds may find this as a niche market. We had numerous clients that produced high quality replacement heifers. In these herds, open heifers tended to sell for about \$100 per head over market and bred heifers about \$200 more than ones at the sale barn. We considered having our own bred female sale for our TBHH members, but never did it mainly due to our producers' success selling these females privately.

So, how do you market your new or expanded services?

Numerous surveys have shown that bovine veterinarians are a trusted and well-respected source of in-

SEPTEMBER, 2001 85

formation for our clients. This reputation is a tremendous advantage when trying to market new programs to our clients.

When we initiated the Total Beef Herd Health Program (TBHHP) we wrote about it in our newsletters, talked about it at client meetings and had a farm tour to our "pilot herd". Our newsletters focused on prevention versus treatment of problems. This was not a new concept for our clients, so they readily embraced this idea.

After a few years of discussing various aspects of prevention, i.e., calf scours, dystocia, extended calving season, high percent open cows, etc., we decided to initiate the total program. We had a meeting for our most progressive clients (about 35 families) and explained the Total Beef Herd Health Program. We outlined the cost and also the expected revenues based on an average Iowa herd. The return was 8:1 for our very conservative example. We then told them we would only take 10 herds the first year. This was to encourage them to sign up quickly if they were truly interested. We had five commit that night and five more over the next week. I did have to "twist the arm" of one producer to join and that turned out to be a mistake. He only participated for two years.

Two years after we initiated the program, we were ready to add a few more herds. We organized a herd tour to our shining star of the TBHH program. The owner is a well-respected cattleman and he did nearly all the talking. He outlined what he had gained from the program and at the end of the tour he said, "joining the Total Beef Herd Health Program is the smartest thing I've ever done for my beef herd." That was a real surprise to me because the owner is fairly quiet and never wants to appear boastful. We added another eight herds in the next few days.

I truly feel that the opportunities for expansion of services in beef cow-calf production medicine exist. Find your areas of interest and expertise and develop a program that will benefit your clients and you.

References

- 1. Anderson B, Rice D, Kubik D, Rasby R: Forage analyses for dietary diagnosis and management. *Agri-Practice*, 12(3):29-35, 1991.
- 2. Changes in the U.S. Beef Cow-Calf Industry, 1993-1997. Part IV. National Animal Health Monitoring System, May 1998.
- 3. Davis KC, Tess MW, Kress DD, Doorbos DE, Anderson DC: Life cycle evaluation of five biological types of beef cattle in a cow-calf range production system: II. Biological and economic performance. *J Anim Sci*, 72:2591-2598, 1994.
- 4. Dunn B: Factors affecting profitability of Northern Great Plains beef cow-calf enterprise. SPA-EZ Seminar, *American Association of Bovine Practitioners Meeting*, Rapid City, SD, September 20, 2000.
- 5. Hilton WM: Delivery of a production medicine program in an Iowa veterinary practice. Proceedings of the 110th Annual Meeting of the Iowa Veterinary Medical Association, Des Moines, IA, January 1991.
 6. Hughes H: Top four recommendations for improving the profitability of a beef cow herd. The Market Advisor, January 6, 2000.
- 7. Miller A, Knipe R: Characteristics of high profit cow herds. *Improving the Competitiveness of the Illinois Beef Industry*, March 2000.

Appendix I

VACCINATION OUTLINE*

*(Please take this form to your beef herd health veterinarian so he/she can customize it for your operation).

I. Yearling Heifers

- A. At least 30 days prebreeding
 - 1. $IBR-BVD-PI_3$ (modified live) and 5-way Leptospirosis

II. Cow Herd

- A. At least 30 days prebreeding
 - 1. $IBR-BVD-PI_3$ (modified live) at least every 3 years
 - 2. 5-way Leptospirosis
- B. September-October (spring calving herds) or March-April (fall calving herds)
 - 1. Pregnancy examine
 - 2. 5-way Leptospirosis
 - 3. Scour vaccination (if needed)
- C. After a killing frost
 - 1. Deworm
- D. 50 days precalving
 - 1. Scour vaccination (if needed)
 - 2. Separate heifers from cows to calve in two different areas

III. Bulls

- A. At least 30 days prebreeding
 - IBR-BVD-PI₃ (modified live) at least every 3 years
 - 2. 5-way Leptospirosis
- B. After a killing frost
 - 1. Deworm

IV. Calves

- A. At birth
 - Make sure each calf nurses vigorously. If any doubt, milk-out cow and give calf 2 quarts colostrum by 6 hours of age, and 2 more quarts by 12 hours of age.
 - 2. Dip navel with 7% iodine.
- B. Day three (good luck!)
 - 1. Castrate bulls
 - 2. Paste dehorn
- C. When last calf is born (or June 1, whichever is first for spring calving herds)
 - 1. Castrate bulls
 - 2. Hot iron dehorn
 - 3. 7-way clostridium (Blackleg)
 - 4. Fly tag
 - 5. Implant feedlot steers and heifers
- D. One month preweaning
 - IBR-BVD-PI₃-BRSV (modified live product labeled for use on calves nursing pregnant dams)

-or-

- 1. Intranasal IBR-PI $_3$ and killed IBR-BVD-PI $_3$ -BRSV
- 2. 7-way clostridium
- 3. Start calves on 1-3lb/head/day creep feed

- E. Weaning day
 - 1. IBR-BVD-PI₃-BRSV modified live
 - 2. Deworm
 - 3. Treat for lice \pm grubs
 - 4. Weight each calf individually
 - Place ID tag in left ear. (Steers and heifers only)
 - 6. Implant feedlot steers and heifers

Having a health herd program does not end with a vaccination program. It is of utmost importance to buy breeding stock from a herd of known health status. Ask specifically if the herd has ever had cases of serious disease such as Johne's (Mycobacterium paratuberculosis) or clinical BVD. Talking with their herd veterinarian before buying would be a wise decision.

BRIEF SUMMARY

(For full Prescribing Information, see package insert.)

NADA #141-063, Approved by FDA.

Nuflor® (FLORFENICOL)

Injectable Solution 300 mg/mL

For Intramuscular and Subcutaneous Use in Cattle Only. CAUTION: Federal law restricts this drug to use by or on the order of a licensed veterinarian.

DESCRIPTION: NUFLOR is a solution of the synthetic antibiotic florfenicol. Each milliliter of sterile NUFLOR Injectable Solution contains 300 mg of florfenicol, 250 mg n-methyl-2-pyrrolidone, 150 mg propylene glycol, and polyethylene glycol q.s.

INDICATIONS: NUFLOR Injectable Solution is indicated for treatment of bovine respiratory disease (BRD), associated with Pasteurella haemolytica, Pasteurella multocida, and Haemophilus somnus, and for the treatment of bovine interdigital phlegmon (foot rot, acute interdigital necrobacillosis, infectious pododermatitis) associated with Fusobacterium necrophorum and Bacteroides melaninogenicus. Also, it is indicated for the control of respiratory disease in cattle at high risk of developing BRD associated with Pasteurella haemolytica, Pasteurella multocida, and Haemophilus somnus.

RESIDUE WARNINGS: Animals intended for human consumption must not be slaughtered within 28 days of the last intramuscular treatment. Animals intended for human consumption must not be slaughtered within 38 days of subcutaneous treatment. Do not use in female dairy cattle 20 months of age or older. Use of florfenicol in this class of cattle may cause milk residues. A withdrawal period has not been established in preruminating calves. Do not use in calves to be processed for veal.

WARNINGS: NOT FOR HUMAN USE. KEEP OUT OF REACH OF CHILDREN. This product contains materials that can be irritating to skin and eyes. Avoid direct contact with skin, eyes, and clothing. In case of accidental eye exposure, flush with water for 15 minutes. In case of accidental skin exposure, wash with soap and water. Remove contaminated clothing. Consult a physician if irritation persists. Accidental injection of this product may cause local irritation. Consult a physician immediately. The Material Safety Data Sheet (MSDS) contains more detailed occupational safety information.

For customer service, adverse effects reporting, and/or a copy of the MSDS, call 1-800-211-3573.

CAUTION: Not for use in cattle of breeding age. The effects of florfenicol on bovine reproductive performance, pregnancy, and lactation have not been determined. Intramuscular injection may result in local tissue reaction which persists beyond 28 days. This may result intrim loss of edible tissue at slaughter. Tissue reaction at injection sites other than the neck is likely to be more severe.

ADVERSE EFFECTS: Inappetence, decreased water consumption, or diarrhea may occur transiently following treatment.

DOSAGE AND ADMINISTRATION: For treatment of bovine respiratory disease (BRD) and bovine interdigital phlegmon (foot rot): NUFLOR Injectable Solution should be administered by intramuscular injection to cattle at a dose rate of 20 mg/kg body weight (3 mL/100 lbs). A second dose should be administered 48 hours later Alternatively, NUFLOR Injectable Solution can be administered by a single subcutaneous injection to cattle at a dose rate of 40 mg/kg body weight (6mL/100 lbs). Do not administer more than 10 mL at each site. The injection should be given only in the neck.

NOTE: Intramuscular injection may result in local tissue reaction which persists beyond 28 days. This may result in trim loss of edible tissue at slaughter. Tissue reaction at injection sites other than the neck is likely to be more severe.

For control of respiratory disease in cattle at high-risk of developing BRD: NUFLOR Injectable Solution should be administered by a single subcutaneous injection to cattle at a dose rate of 40 mg/kg body weight (6 mL/100 lbs). Do not administer more than 10 mL at each site. The injection should be given only in the neck.

Clinical improvement should be evident in most treated subjects within 24 hours of initiation of treatment. If a positive response is not noted within 72 hours of initiation of treatment, the diagnosis should be reevaluated.

January 1999

Copyright © 1996, 1998, 1999, Schering-Plough Animal Health Corp. Union, NJ 07083 All rights reserved. 19659038-JBS