

## 21<sup>st</sup> Century Beef Production

Beef production is an ever-changing business. With those changes come new ideas and new challenges. One such change has been the move away from veterinary services and toward the use of animal scientists and other governmental agencies as sources of State funded expertise. While many of these sources are useful, nothing in life is really free.

There have been good reasons for the shift we have seen. Traditional large animal veterinary services usually include single animal care, emergencies, and sporadic herd care. In many cases, paying for these services randomly in response to individual crises has become UNECONOMICAL for the average producer that is not involved in an integrated herd health program.

Over the years beef producers have had varying perceptions of veterinary medicine. Most producers have seen their local veterinarian as strong in the areas of diagnosis, treatment, reproduction, and breeding services, but weak in overall herd health and nutrition for their herd.

My goal is to change this by offering a complete herd health program with the production goals and bottom line profit of the producer as the number one focus.

*Where do you fit in?*

There are several different levels of interaction between producers and veterinarians. Some of these are listed below.

### Differing Clientele Status:

		<b>Vet-Client Relationship</b>	<b>Production Plan?</b>	<b>Comments</b>
<b>A</b>	Non client	None	NO	Low priority standing with veterinarian, No emergency services
<b>B</b>	Typical Client – not using Herd Health plan	Minimal	NO	Services by request, preference in scheduling over non-registered clients
<b>C</b>	Pre- Herd Health Status	“Get to know” time	YES	Planned services to start a herd health program
<b>D</b>	Full Herd Health Status	Close working relationship	YES	Three Levels (1,2,3) of interaction

As we have discussed, if you fall into the A or B categories, some veterinary visits to your farm may not be profitable. But for those producers interested in decreasing costs and increasing net profits, using veterinary services offered as part of an integrated herd health program is a key part in accomplishing those goals.

Question 1: *Is a herd health program right for you?*

A complete herd health type program best fits producers who:

- 1.) Have a breeding herd of cows that generate sufficient work to be efficient and economical – this may be 50 head or 500 head depending on the situation.
- 2.) Are interested in (and willing to) developing production goals
- 3.) Are interested in (and willing to) developing a basic record keeping system
- 4.) Are interested in improving and willing to using an effective breeding program
- 5.) Already know or are willing to learn how to body condition score (BCS), will follow the BCS schedule, and make recommended nutritional changes as needed. (For Level 1 or 2 Herd Health farms)
- 6.) Have herds that are closed and have adequate facilities available for quarantine of new animals
- 7.) Are willing to discuss all significant changes in management policy BEFORE they are made effective. (Level 1 or 2)
- 8.) Are willing to conduct response trials if needed to determine efficacy of changes to program
- 9.) Have herds that are free of TB and Brucellosis
- 10.) Are willing and prepared to submit all dead animals for necropsy.

These are the ideal qualities, and while many producers have some degree of success without one or another, optimum production will be hampered without a complete program.

Question 2: *On what areas do Herd Health programs focus?*

While there are a myriad of different aspects of beef herd management there are **three key areas** that when focused on can increase production and thus profitability.

KEY AREAS:

- 1.) Breeding                      10-fold effect on income (Reproduction)
- 2.) Growth                        2-fold effect on income (Nutrition)
- 3.) Carcass quality            1-fold effect on income (Genetics)

For Example:

Reproduction impacts important results such as:                      **Objective\***

• Length of calving season	60 days
• Number of cows breed	90%
• Weight of calves at weaning	Varies, sooner born – more they weight
• Calving pattern (% born/21 days)	60-70%
• Heifer calving age	12 months

Nutrition impacts important results such as:                      **Objective\***

• Overall cow/calf health	Minimum 2% calf loss
• Weight of calves at weaning (AWW)	Varies by birth date and genetics
• Ratio of AWW calves to AW cows	
• Calving pattern (% born/21 days) – if keeping heifers in herd	varies
• Heifer calving age	24 months (or sooner)

Genetics impacts important results such as:                      **Objective\***

• Weight of calves at weaning	Varies by birth date and genetics
• Calving pattern (% born/21 days) – if keeping heifers in herd	varies
• Calving ease	Dystocia rate of less than Heifers = 10% Cows = 2%

\* These are example goals, but the actual objective set for any particular farm will vary depending on current conditions, and may change from year to year.

Beef profits come from one primary source: the sale of calves. The more calves, and the more they weight, the more profit. The outline above demonstrates how each of these three key areas affects calve numbers and weights. It also shows how reproduction touches every area.

The key to knowing if you might benefit from a herd health program is first by knowing how your herd stacks up industry standards and to other herds in your area. Therefore the key to improving production is RECORD KEEPING, and then using those records in the decision making process. Considering the upcoming requirements for animal identification now is a great time to begin a record-keeping herd health program.

Question 3: *How do I know if I need a herd-health program for my herd?*

In order to know if your current management is adequate or if a herd-health program may benefit your productivity you must have a minimum of information to evaluate. For those who do not have records, a minimum of one years worth of records is required.

To accomplish this most producers enter a phase termed the "Pre-Herd Health" status.

Question 4: *What is the "Pre-Herd Health" status?*

This is a time in which the veterinarian and the producer work together to gain the necessary information to analyze the herd.

- Minimal Initial assessment:

- 1.) Get to know farm and objective and goals of owner
- 2.) Create farm profile – usually have to develop basic data, requires 1 year worth of data

Minimum Farm Data:

- Must develop individual cow records (weight, age, parity, etc)
- Weaned calf crop (%)
- Average wt. of calves at weaning (AWW)
- Ratio of AWW calves to AW cows
- Determine calving pattern (% born/21 days)
- Determine length of calving season
- Gross and Net income per cow exposed to breeding

Optional Farm Data: Risk Analysis

- 3.) While gaining farm info (first year) NO production recommendations are made except for health emergency situations (such as large scale death loss).
- 4.) Producer receives consultation to instruct on what and how to obtain needed data (billed as hourly service)
- 5.) In the future, equipment rental available if needed

In addition to setting up data collection methods, the following veterinary service are provided during the first year:

- Routine vet services (herd checks, illnesses, etc)
- Discount bulk ordering
- Additional consultation as needed (fee per event)

In some cases after collecting the required data some producers find out that their current management system is producing adequate results. These producers may choose to maintain a Level 1 (see below) working relationship. For producers whose data shows room for improvement, a Level 2 or 3 working relationship is recommended.

Point 5: *Planned Herd Health programs- Full Herd Health Status:*

After a minimum of one years worth of data has been collected and analyzed it is time to move into a full-scale herd health program. The obtained data will allow the producer, veterinarian, or both to determine realistic objectives for the herd and continued record keeping will allow those objectives to be evaluated on an annual basis.

Herd Health programs should be customized for each producer, but in general will fall into three levels:\*

Level 1 – Traditional services:

- Herd health done on regular basis
- Owner makes all decision (services, scheduling, etc) *without input from veterinarian.*

Level 2 – More structured herd health program:

- Herd health done on regular basis - Flexible prescheduled care
- Owner and vet work together to decide what services to institute based on goals of the operation, year round preemptive preventative health care plan instituted and maintained.
- Vet contacts owner as new pertinent information arises, issues reminders as service dates approach, etc.
- Owner responsible for daily/weekly herd checks, calls if has problem, has necessary help available, etc
- Veterinarian regularly checks with producer to address issues, answer questions, etc.

Level 3 – Max/Min

- Veterinarian assumes full responsibility for herd health management and plans, and executes the strategic tasks; makes production schedule and decisions.
- Owner involvement is minimal. Owner maintains farm staff and makes sure that instructions of the veterinarian concerning herd management and care are followed. If more help than the normal farm staff can provide is needed while the veterinarian is on the farm, it is the responsibility of the veterinarian to either arrange such help or contact the owner to be sure arrangements are made.
- Annual reports issued that review production results and goals

\* Chart (next page) provided for a more detailed description

Depending on the level of involvement, in a year-round integrated herd health program the veterinarian participates in the following areas:

- 1.) Management of Reproduction
- 2.) Preparation and management of calving
- 3.) Management of calves – monitoring of disease prevention
- 4.) Diagnosis and management of decreases in production levels
- 5.) General advice
- 6.) Evaluation of performance

<b>Standard:</b>	<b><u>Examples</u></b>	<b><u>LEVEL</u></b>
	Pre-breeding exams (male and female) -	1*-2-3
	Fall: Pregnancy checks, weaning tasks -	1*-2-3
	Calving season: Available for problems as they arise -	1*-2-3
 <b>Variable: Depends on the program</b>		
	Collect and analyze data, make recommendations -	2-3
	Provide advice on medical issues (vaccines, etc) -	1*-2-3
	Identify clinical and sub-clinical disease -	1*-2-3
	determine best herd and individual treatment plan -	
	Investigate herd outbreaks or sudden deaths -	1*-2-3
	Nutritional surveillance and recommendations -	2-3
	Survey of disease records -	2-3

\* At the request of the producer.

In order to participate in these areas the veterinarian must be on the farm. The number of farms visits will vary, but minimums do apply:

Scheduled visits:

Absolute minimum of 2 visits per year (can be adequate for herds with one, short breeding and calving season)

- 1.) Pre-breeding check several weeks prior to the breeding season
- 2.) Pregnancy exam 6-8 weeks post breeding season.

Recommended minimum visits for an integrated year-round program: 4 visits

- 1.) Pre-breeding
- 2.) Pregnancy diagnosis
- 3.) Winter feeding and management
- 4.) Pre-calving/calving

While most of the time, veterinarians and producers (with occasional outside correspondence) are capable of making sound production decisions, a truly integrated program will call upon other experts at times.

Question 6: *What is meant by an "integrated" approach?*

Under varying circumstances, even the most specialized veterinarian may be deficient in some areas of beef cattle production; therefore in some cases a team effort is indicated. An integrated production team consists of:

- 1.) Producer
- 2.) Veterinarian
- 3.) Local extension agent
- 4.) Beef extension agent
- 5.) Other specialist as needed: Ag. Economist, Banker, Soil Conservationist, etc.

The veterinarian is the ideal coordinator of such a team because of their everyday field expertise and diverse training background.

Question 7: *How do I get started?*

Getting started is simple. Just call us to schedule an on farm visit/consultation. We can go over your current operation and your future needs. From there the choice is up to you.

A price projection for each Level of involvement should be possible after an initial herd visit and after a few months of data collection have been completed. Pre-herd health costs above normal operating cost are generally relegated to an initial visit to set up the data collection and any needed follow up.

Even within this highly structured approach, there is much room for customization to each individual farm. If you are interested in instituting a herd health program please call (1-877-662-5838) to set up an appointment.