

Offering Beef Herd Consultations and Nutritional Guidance: the Veterinary Technician's Role

Rachel Heitkamp, BS, RVT

Miami Jacobs Career College, Troy, OH 45373

Abstract

Traditionally, the benefit of including a veterinary technician on the professional team lies in the area of patient care and clinic organization. A technician's ability to "see what needs to be done and doing it" is of great value. This traditional skill set in the area of patient care and clinic organization can be carried through to help the veterinarian add value in the avenues of herd consultation and nutritional guidance. The technician can be utilized as a liaison between the producer and the veterinarian. Technician responsibilities include fielding calls from the producers, initiating the consultation and/or nutrition work, compiling background information, completing maintenance tasks, and transitioning the program throughout the year. This pairing ensures that tasks are being completed, and allows the veterinarian to make final recommendations.

Résumé

Traditionnellement, le fait d'inclure un technicien vétérinaire dans l'équipe professionnelle était considéré avantageux au niveau des soins au patient et de l'organisation de la clinique. La capacité du technicien à « voir ce qu'il y a à faire et à le faire » a une grande valeur. Cette compétence traditionnelle exercée au niveau des soins au patient et de l'organisation de la clinique peut aussi aider le vétérinaire à améliorer ses services dans le contexte de la consultation de troupeau et des choix d'alimentation. Le technicien peut servir de liaison entre le producteur et le vétérinaire. Les responsabilités du technicien sont entre autres de répondre aux appels des producteurs, de lancer les travaux de consultation et de nutrition, de compiler les informations de base, de réaliser les tâches de maintenance et de voir au bon déroulement du programme tout au long de l'année. Ce jumelage assure de terminer les tâches et permet au vétérinaire de faire des recommandations finales.

Introduction

The Integrated Resource Management (IRM) program for beef cattle views its purpose as "an organized effort to enhance the profitability of individual cattle operations" and "a concept based on the interrelationship of all business resources".² Areas of focus in which

an operation could be categorized include: records, genetics, fertility, marketing, environment, health, and nutrition. While reviewing these areas, one must keep in mind the ability to decrease cost of production, decrease labor, increase the value of the product sold, and to complete the above while upholding good environmental practices.¹

Role of the Technician in Consultation Program

As the coordinator, the technician will become the frontline of the program. It is important that the technician keeps the line of communication open with the producers and creates a non-judgmental and welcoming environment. The producers must feel comfortable discussing their operation and asking for help.

Once a herd consultation program is established, it works well to conduct annual farm visits around the same time each year. Producers should be contacted to establish a date, and be reminded to send in two to three short and long-term goals, as well as any current topics they would like to discuss. This will allow for time to research relevant topics.

Different tasks are associated within the seven categories mentioned above. Some areas have higher technician involvement than others.

1. **Records** Here lies the area of highest involvement. It is key to have a tentative timeline in place and to remain organized to deal with the high volume of work this area creates. Throughout the year the technician must send out, receive back, and input many records. All cow-calf producers will utilize calving and weaning information, with some producers sending in additional yearling records. Maintenance records that will need to be collected include replacement heifers, purchased cows, cull cows, and bull information.

After inputting the above records, annual reports can be formulated. These reports may vary somewhat, depending on the computer program being used and the preferences of the program veterinarian. Examples of reports include: Cumulative Standardized Performance Analysis (SPA) production, annual SPA production, calving distribution, annual production summary, weaning, Cow Most Probable

Producing Ability (MPPA), and individual cow summary. Formulating the reports can become somewhat tedious, but is of great importance. One must pay close attention to detail, and be sure that the data appears to be computing correctly. Prior to passing the information on to the veterinarian to analyze, the technician can flag areas of interest on the reports.

2. **Genetics** Prior to the breeding season, bull selection criteria can be obtained from producers and used to help select natural service or artificial insemination sires. An initial round of possibilities can be selected and presented to the veterinarian for review. Genetic information on the cows should be obtained before sire selections are made. With the overall focus of the herd in mind, genetic trends of cows can be monitored.
3. **Fertility** Many herds struggle to keep a tight calving season. A timeline can be made prior to the breeding season to outline the desired date for the first and last calf to be born, and the turn-in and turn-out date for the bull.
4. **Marketing** Technician involvement in this area is minimal and depends on the needs of the producer. If a technician has specific interest in areas such as preconditioned calf sales or replacement female marketing options, they can provide assistance to herds desiring these services.
5. **Environment** Keep a list of experts in this field. Stay informed on government programs and/or workshops that are being offered and relay the opportunities to the producers.
6. **Health** This area is primarily handled by the local herd health veterinarian. Work closely with the veterinarian to find out existing health protocols and aid in building upon them if needed.
7. **Nutrition** This is an area where a technician can add value to the program. Many herds are in need of nutritional guidance. Under the direction of the program veterinarian, the technician can gather information and help develop a nutritional program for an operation (to be discussed in further detail below).

Additional Services Offered

In addition to services offered on an individual herd basis, a consultation program can offer events. A year-end meeting open to the producers enrolled in the herd program is a great way to bring everyone together and share ideas. This meeting should focus on additional ways the program can help increase value within the

herds, as well as have a facilitated discussion in which producers can share items/processes that have and have not worked for them throughout the year.

An annual field day is also a great component to include in a herd program. Each year the members can vote on a topic they are interested in learning more about. A field day open to the public can be organized to create awareness of the program and to allow hands-on learning. Some examples of field days include pasture walk, tour of an ethanol plant, and presentation by an expert on cattle handling.

Nutrition Services

Many beef producers want to improve nutrition in their herd. Throughout the last several years, the options of feeds available have shifted due to the increase of byproduct feeds. This shift in available feeds has also brought about different methods of feeding. Many producers are aware of the different feeds available, but can become overwhelmed when it comes to overhauling their nutrition program. Working together, the veterinarian and technician have a great opportunity to not only help the producers in this area, but to add value and increase revenue in their business.

Role of the Technician in Nutritional Guidance

When focusing specifically on herd nutrition, the role of the veterinary technician is different than that of the role they play in implementing the overall herd consultation program. Nutrition consulting is typically led by the veterinarian with the technician contributing through data collection and the processing of nutrition information. Together the producer and veterinarian evaluate the current nutrition program and develop a general concept of where they want the program to go. The producer is then turned over to the technician for him or her to collect the necessary information to fill in the gaps and evolve the current ration into the vision created by the producer and the veterinarian.

Steps Taken in Building the Ration

1. Send the producer the Ration Request Form and Preliminary Feed Ration Sheets

To avoid redoing steps, it is important to obtain as much information as possible at the start of the process. The Ration Request Form should include the production group, current ration, feedstuffs available, feed company utilized, feedstuff inventory, quantity limitations, and method of feeding. The Preliminary Feed Ration Sheets will vary by production groups and depends somewhat on the computer program being utilized. Some values will include feeding period start and end, breed, gender,

body condition score, desired body condition change, and production stage.

2. Obtain current feed analysis on all feed products

Explain to the producer the importance of having exact knowledge of the nutrients in the feeds. Having this information allows the ration to be tailored specifically to the herd and will save money in the long run. Always obtain a complete analysis of all byproduct feeds, hays and silage samples. Book values can be used for grains (corn, sorghum, oats) and very low quality feeds like corn stalks and bean stover.

3. Discuss options and methods of feeding

Utilize the information gained from the Ration Request Form to get an idea of the goals for this production group and how the producer may want to allocate the feeds. It is also important to understand how the producer plans to feed the ration. Will they utilize free choice, full feed, or limit feed options? The answers to these questions are very important, as the producer may not have realized all of their options. This is a great opportunity to explain different scenarios and potentially save the producer feed, time and money.

4. Formulate the ration

Utilize a computer program to formulate the ration. Give the producer a few different options to open their minds to different methods and the associated benefits. Also include their current ration. Their current ration can show that they are on track, or demonstrate room for improvement.

5. Submit the ration

After completing the ration, submit it to the veterinarian for approval. Be sure to point out any concerns you may have and listen to suggested changes.

6. Deliver the ration formulation

Once the ration formulation is reviewed by the veterinarian and changes have been made, it can be sent to the producer. Be sure to include verbal explanations of the ration, as it may help the producer understand the positives and negatives of a particular option. Encourage the producer to call with any questions, and mark down a time to call the producer in one to two weeks. This follow-up call will allow you to answer any questions the producer may still have, and allows feedback on how the changes you suggested worked in their herd.

Conclusion

As the demands of veterinary medicine evolve, so should the ability and expertise of the veterinary technician. When paired with the right veterinarian, the veterinary technician can add great value to a beef herd consultation and nutrition program. Although the associated tasks may seem foreign at first, the learning curve will ease, and the demands of the program will level out. Once slower times of the year can be filled in with the challenges and fulfillments of maintaining a beef herd program. A new light will be shed on the role of a veterinary technician, and the producer, veterinarian, and technician will all emerge truly benefitting from the process.

References

1. Hilton W Mark: Marketing beef cow-calf production medicine programs in private practice, in Anderson, Rings (eds): *Current Veterinary Therapy V. Food Animal Practice*. St. Louis, Saunders Elsevier, 2009, pp 576-580.
2. National Cattleman's Beef Association: *What is IRM?*

American Association of Bovine Practitioners

Prudent Drug Usage Guidelines

The production of safe and wholesome animal products for human consumption is a primary goal of members of the AABP. In reaching that goal, the AABP is committed to the practice of preventive immune system management through the use of vaccines, parasiticides, stress reduction and proper nutritional management. The AABP recognizes that proper and timely management practices can reduce the incidence of disease and therefore reduce the need for antimicrobials; however, antimicrobials remain a necessary tool to manage infectious disease in beef and dairy herds. In order to reduce animal pain and suffering, to protect the economic livelihood of beef and dairy producers, to ensure the continued production of foods of animal origin, and to minimize the shedding of zoonotic bacteria into the environment and potentially the food chain, prudent use of antimicrobials is encouraged. Following are general guidelines for the prudent therapeutic use of antimicrobials in beef and dairy cattle.

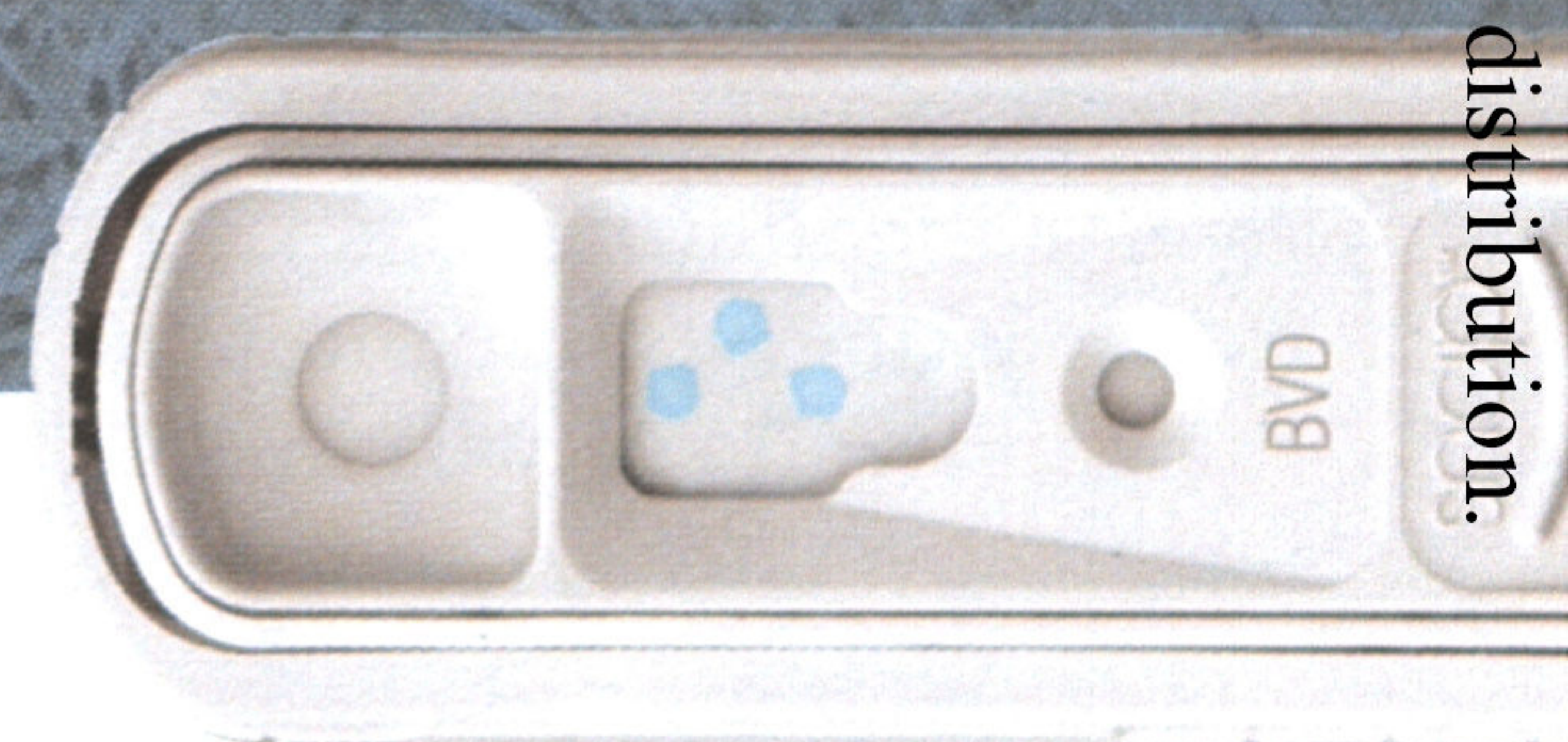
1. The veterinarian's primary responsibility to the client is to help design management, immunization, housing and nutritional programs that will reduce the incidence of disease and the need for antimicrobials.
2. Antimicrobials should be used only within the confines of a valid veterinarian-client-patient relationship; this includes both dispensing and issuance of prescriptions.
3. Veterinarians should properly select and use antimicrobial drugs.
 - a. Veterinarians should participate in continuing education programs that include therapeutics and emerging and/or development of antimicrobial resistance.
 - b. The veterinarian should have strong clinical evidence of the identity of the pathogen causing the disease, based upon clinical signs, history, necropsy examination, laboratory data and past experience.
 - c. The antimicrobial selected should be appropriate for the target organism and should be administered at a dosage and route that are likely to achieve effective levels in the target organ.
 - d. Product choices and regimens should be based on available laboratory and package insert information, additional data in the literature, and consideration of the pharmacokinetics and pharmacodynamics of the drug.
 - e. Antimicrobials should be used with specific clinical outcome(s) in mind, such as fever reduction, return of mastitic milk to normal, or to reduce shedding, contagion and recurrence of disease.
 - f. Periodically monitor herd pathogen susceptibility and therapeutic response, especially for routine therapy such as dry cow intramammary antibiotics, to detect changes in microbial susceptibility and to evaluate antimicrobial selections.
 - g. **Use products that have the narrowest spectrum of activity and known efficacy *in vivo*** against the pathogen causing the disease problem.
 - h. Antimicrobials should be used at a dosage appropriate for the condition treated for as short a period of time as reasonable, i.e., therapy should be discontinued when it is apparent that the immune system can manage the disease, reduce pathogen shedding and minimize recurrence of clinical disease or development of the carrier state.
 - i. Antimicrobials of lesser importance in human medicine should be used in preference to newer generation drugs that may be in the same class as drugs currently used in humans if this can be achieved while protecting the health and safety of the animals.
 - j. Antimicrobials labeled for use for treating the condition diagnosed should be used whenever possible. The label, dose, route, frequency and duration should be followed whenever possible.
 - k. Antimicrobials should be used extra-label only within the provisions contained within AMDUCA regulations.
 - l. Compounding of antimicrobial formulations should be avoided.
 - m. When appropriate, local therapy is preferred over systemic therapy.
 - n. Treatment of chronic cases or those with a poor chance of recovery should be avoided. Chronic cases should be removed or isolated from the remainder of the herd.
 - o. Combination antimicrobial therapy should be discouraged unless there is information to show an increase in efficacy or suppression of resistance development for the target organism.
 - p. Prophylactic or metaphylactic use of antimicrobials should be based on a group, source or production unit evaluation rather than being utilized as standard practice.
 - q. Drug integrity should be protected through proper handling, storage and observation of the expiration date.
4. Veterinarians should endeavor to ensure proper on-farm drug use.
 - a. Prescription or dispensed drug quantities should be appropriate to the production-unit size and expected need so that stockpiling of antimicrobials on the farm is avoided.
 - b. The veterinarian should train farm personnel who use antimicrobials on indications, dosages, withdrawal times, route of administration, injection site precautions, storage, handling, record keeping and accurate diagnosis of common diseases. The veterinarian should ensure that labels are accurate to instruct farm personnel on the correct use of antimicrobials.
 - c. Veterinarians are encouraged to provide written guidelines to clients whenever possible to describe conditions and instructions for antimicrobial use on the farm or unit.

Presented by the Bacterial Resistance and Prudent Therapeutic Antimicrobial Use Committee. Board approved March 1999.



Introducing the IDEXX SNAP[®] BVD Test

A new diagnostic solution to detect bovine viral diarrhea virus (BVDV) in just 20 minutes.



US veterinarians estimate that BVDV costs producers over \$30 per head, even after vaccination.¹ Test all new introductions with the IDEXX SNAP BVD Test to identify persistently infected cattle.

The IDEXX SNAP BVD Test:

- Results in 20 minutes
- Easy ear-notch sampling
- Accurate ELISA platform

To learn more about the
IDEXX SNAP BVD Test,
visit idexx.com/snapbvd.



1. Data on file at IDEXX Laboratories, Inc. Westbrook, Maine USA.

Test With Confidence[™]

IDEXX