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AUGUSTA COOPERATIVE FARM BUREAU, INC. 1205B RICHMOND RD. STAUNTON, VA 24401



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## A FOUNDATION FOR CATTLE HEALTH: NUTRITION, VACCINES AND DEWORMERS

## EVALUATE YOUR HERD HEALTH PROTOCOL TO DETERMINE IF YOUR CATTLE ARE SET UP FOR SUCCESS, OR IF A FOUNDATIONAL ELEMENT IS MISSING.

Did you know, nutrition can impact the effectiveness of health protocols, including vaccinations and dewormers? It's true. In fact, it's often said that without quality nutrition, there's no foundation for a health program to be built upon.

Feeding cattle to a high plane of nutrition helps ensure vaccine and dewormer investments pay off. When cattle receive proper nutrition, the immune system will have energy to function optimally which can help the effectiveness of vaccines and dewormers.

When a disease challenge occurs, the immune system is activated, and it requires an extraordinary amount of energy to function. On a lower plane of nutrition, the immune system may have suboptimal function in cattle, leaving little reserves to devote to growth and other maintenance functions. Higher planes of nutrition can help cattle to maintain growth, even in the face of a disease challenge.

Consult your veterinarian to develop a health protocol tailored to local challenges and your needs.

## HERE ARE A FEW CONSIDERATIONS WHEN EVALUATING YOUR CURRENT CATTLE HEALTH PROTOCOL:

#### PLANE OF NUTRITION

The foundation of any health protocol should be built on feeding cattle to a high plane of nutrition and ensuring calves have been through a 45-day preconditioning program. Covering these basics can help you realize the monetary benefit of healthy cattle.

Feeding calves a high-quality starter feed at weaning provides an adequate baseline for nutrition. Consider a starter feed that delivers a high plane of nutrition. And, they contain ingredients to help prepare calves' natural defenses and optimize their response to stress and health challenges.

In a cow herd, maintaining a quality nutrition program with year-round mineral and supplemental feeds when needed will keep those animals in the best shape for optimal immune function.

#### **VACCINATIONS**

A general vaccination program could include coverage against the following diseases:

#### Viral Pathogens

- Infectious bovine rhinotracheitis virus (IBRV)
- Bovine viral diarrhea virus (BVDV) types I and II
- Bovine respiratory syncytial virus (BRSV)
- Parainfluenza-3 virus (PI-3V)

#### **Bacterial Pathogens**

- Mannheimia haemolytica
- Pasteurella multocida
- Clostridium
- Leptospirosis (cows)
- Vibriosis (cows)

Most protocols call for administration of the first round of cattle vaccines at two to three months of age, with a booster vaccination at weaning. However, this isn't always the case and is typically dependent on when a producer handles calves.

Try to avoid adding extra events to vaccinate calves. Eliminating the number of stress events will help optimize the effectiveness of the cattle vaccines and increases compliance. Vaccinate calves coinciding with cow vaccination schedules or during herd events, such as branding, weaning or pregnancy checks.

Regular cow vaccinations and boosters can also support your calves' passive immunity by improving the quality of antibodies passed through colostrum.

Adhere to the manufacturer's label recommendations when administering cattle vaccines and boosters. Straying from the recommended timing and dosage can compromise protection and nullify manufacturer guarantees.

#### CATTLE DEWORMER

There are more options than ever to safely and effectively deworm cattle. Oral drenches, pour-ons and injectables are the traditional methods. Feed-through products like blocks and pellets are newer alternatives to control worms.

Management style often drives which type of dewormer you use. If you handle cattle more regularly through a chute, oral drenches and injectables may be the best fit. Otherwise, a feed-through product may be a solution for your operation when cattle don't frequently go through a chute.

When selecting a cattle dewormer, know the active ingredient for the parasiticide.

The following parasiticides are available:

- Moxidectin
- Ivermectin
- Fenbendazole
- Oxfendazole
- Eprinomectin
- Albendazole
- Doramectin

The parasiticide you choose is dependent on which species of worm you have locally. Your veterinarian can help determine which mode of action works best for your herd.

Resistance is a concern in nearly all classes of dewormers. Implementing a few different strategies can help improve program efficacy.

#### WHAT HAPPENS IF I SKIP CATTLE DEWORMING?

Internal parasites in cattle can cause huge economic losses on an operation. In fact, it was estimated that internal parasites cost the U.S. cattle industry approximately \$3 billion annually. When an internal infection occurs and visible signs go undetected, it can negatively impact cattle efficiency and performance. Worst of all, you may not even realize your cattle are being affected.

So, what can happen if internal parasites in cattle are not controlled?

- Sacrifice feed efficiency. The major internal parasites that flourish in cattle reside in the digestive tract of infected animals, specifically in the abomasum and small and large intestines. The stomach and intestinal lining are disrupted as a result. When these linings are disrupted, the digestive and absorption processes decrease allowing internal parasites to use nutrients meant for the animal. This can lead to reduced nutrient utilization and feed efficiency.
- Reduce potential for gain. A decrease in feed efficiency and nutrient utilization means performance will suffer. Animals may not reach target weights on schedule.
- Decrease reproductive performance. Poor weight gain prior to the breeding season can lead to decreased reproductive performance. If cows and replacement heifers haven't reached the desired weight and body condition score at time of breeding, pregnancy rates could suffer.

The investment in deworming can be well worth the cost. When choosing a cattle dewormer, it's important to select one that matches your production goals and operating procedures to get the best return on your investment.

## **Augusta Co-op Solution**

### **Eprinex, Pour On, 5.0 Liter** Delivers internal and external parasite control in

cattle in one convenient low-volume application. For control of gastrointestinal roundworms, lungworms, grubs, mites, lice, and horn flies (for 7 days after treatment). Safe for use on any age and class of beef cattle and lactating dairy cows. Zero slaughter withdrawal. Zero milk withdrawal. Weatherproof formula and treats 200 animals that weigh 550 lbs each.



SKU -30253

#### HERE ARE A FEW ADDITIONAL CATTLE DEWORMING TIPS:

- Use the proper dosage: Underdosing and overdosing a cattle dewormer can result in ineffective control or development of resistance, respectively. Always follow label recommendations.
- Rotate dewormers: Using different worm control classes helps reduce resistance by changing which ingredients the worms are exposed to.
- Rotate pastures: Rotating cattle amongst pastures spreads manure to other parts of the farm or ranch, rather than concentrating the manure's worm load in one pasture and increasing the spread among the herd.

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- Implement refugia: Refugia is a strategy where you leave certain cattle untreated, so worms have a refuge animal to go to within the herd. It decreases the selection pressure of worms to particular dewormers. There are a few ways to manage refugia:
- Deworming approximately 90% of the herd and leaving the other cattle untreated, known as selective non-treatment. As cattle age, they gain immunity to parasites, so older animals are good candidates for selective non-treatment.
- Only deworming when parasites are present. You might skip deworming when worm loads are lower, during the hottest time of the year in the South or during the coldest time of the year in the North.
- Deworming newly arriving cattle and not treating resident cattle when parasite loads are low.
- Not rotating dewormed cattle into a new pasture until they have had a chance to shed worms.

If you feed a high plane of nutrition, but still see cattle dropping body condition, it could be a sign of a worm problem.

Your veterinarian can perform fecal egg counts to monitor worm burdens directly. If the tests show high egg counts, you might have a potential resistance issue and may need to try another deworming strategy.

#### SET THE FOUNDATION, STICK TO PROTOCOL

Cattle health programs don't have to be too complex. Provide a foundation for health through quality nutrition and stick to the appropriate vaccines and dewormers as advised by your veterinarian. This strategy will go a long way when it comes to optimizing cattle health.

# FEEDING WEANED CALVES TO TACKLE RESPIRATORY CHALLENGES

RESPIRATORY CHALLENGES COME WITH A HEFTY PRICE TAG, BUT THERE'S AN INNOVATIVE SOLUTION TO HELP TACKLE THOSE CALF HEALTH CHALLENGES HEAD ON WHEN WEANING CALVES.

Calf health challenges are costly and widespread. And despite improving vaccinations, management practices and genetics, USDA feedlot data shows respiratory challenges aren't decreasing.

One in five head is affected by respiratory challenges costing the beef industry about \$1 billion annually. It's a staggering economic loss, but overcoming it starts at the producer level.

What can you do to join in the fight against respiratory challenges? Start by monitoring calf health and the impact of respiratory challenges on your operation.

#### POOR CALF HEALTH CAN LEAD TO A HEFTY PRICE TAG

Studies show a respiratory challenge could cut a calf's rate of gain in half for 30 days or more. Assuming healthy calves gain around 3 pounds per day, that's 45 potential pounds lost per calf.

And guess what? Health-challenged calves don't catch up. If the days spent feeding weaned calves is equal, you've lost 45 pounds of out-weight compared to a healthy calf.

Based on a \$1.20 per cwt market price, that's \$54 of lost profit per calf. Add an extra \$30 for time and money to doctor the calf, and each respiratory-challenged calf can cost approximately \$90.

However, there's more to the story. Respiratory challenges at weaning can lead to longer-term consequences that often go unnoticed.

#### OVERLOOKED CONSEQUENCES

Following the same math, if a respiratory challenged heifer gets bred the first time, she'll calve 45 pounds lighter than her contemporaries. And she's still growing, so it takes more for her to catch up body condition post-calving.

A first-calf heifer that is playing catch-up on body condition will have a hard time getting bred back. If she does breed back, it will probably be later in the breeding season. And, the later she gets bred, the further she will fall behind in subsequent breeding seasons.

Additionally, producers who retain ownership could miss out on profit for every respiratory-challenged calf they send to the feedlot.

Cattle never diagnosed with respiratory challenges have heavier carcasses and more muscle on the rail, meaning a more valuable carcass. But even if you don't retain ownership, calf health status affects your reputation.

Healthy cattle build a positive reputation with cattle buyers. A good reputation can result in better prices and less time spent marketing.

Proactive strategies when weaning calves and innovative feed technology can make having more healthy calves a reality.

#### FEEDING WEANED CALVES FOR A STRONG START

Keeping calves healthy begins well before weaning. It starts with proper sanitation, vaccination, weaning calves using low-stress methods and feeding weaned calves proper nutrition.

When weaning calves, they face many barriers to health while their immune system is at its most vulnerable. Even the best calf health management can be infiltrated by respiratory challenges.

The good news? There's an innovative weapon in the fight against weaning time stressors and respiratory challenges.

RX3® Immune Support Technology is a precise combination of prebiotics, probiotics and plant extracts exclusively available in Purina® Precon® Complete.

Feeding weaned calves Purina® starters with RX3® Immune Support Technology does more than provide high-quality nutrition. Research shows the technology primes a calf's immune system, so it can better recognize respiratory challenges and bounce back quickly.

Keeping calves healthy means less time and money invested in reacting to respiratory challenges, putting more potential dollars back in producers' pockets.

Ron Scott, Ph.D.

### **Augusta Co-op Solution**

# Purina, Precon Complete, Non-Medicated, 50 lbs.

An updated version of Purina's very popular and excellent performing Preconditioning/Receiving Chow. A complete pelleted ration for preconditioning calves on the farm or receiving calves in a backgrounding program. NON-MEDICATED. Nothing is more palatable to newly weaned or received cattle with years of data to support performance results! Designed to help calves cope with the stress as well as to encourage improved animal gain

and performance during the initial weaning and preconditioning period. Contains built in forage sources and is designed to be fed as a sole ration until calves are transitioned to the next ration. Now includes Zinpro Availa 4 Organic Trace Minerals for even more support of the immune system. A complete weaned calf diet. Pellets work well in a feeder. Puts the calf on the road to 40-80 lbs. of weight gain during the weaning process. For calves 400 lbs. and heavier.

SKU - 0004689

# 3 REASONS TO PUT WEIGHT ON YOUR COWS THIS WINTER

Research has shown that body condition is directly related to reproductive performance and thus profitability in cow calf operations. Now that the calves are weaned, winter is the perfect time to focus on putting weight back on those cows for little investment.

There are three main reasons that the time immediately after weaning is a great time to add condition to your cows, for very little investment.

- 1. Those cows are no longer lactating. It is difficult to increase a cow's body fat stores during lactation and it is not uncommon for a productive cow to drop in body condition during lactation. Lactation takes a large portion of energy each day for a cow. The priorities for partitioning energy from the diet in a beef cow, are first, for maintenance, then lactation, and then gain. By removing the lactation energy requirement, you immediately push all that energy after maintenance into gain.
- 2. The cow's maintenance energy requirement was mentioned in number 1 above. Maintenance energy requirements increase as temperatures increase or decrease from a cow's thermal neutral zone. The thermal

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- neutral zone is a moving target that is greatly impacted by, for example, hair coat, moisture and wind. Many would agree that cow's maintenance energy requirements will be lower with the average temperatures we see in October and November, versus January or February. This lower maintenance energy requirement frees up more energy for weight gain.
- 3. While the maintenance energy requirements are lower in late fall and early winter versus January due to warmer temperatures, a spring calving cow will also have lower fetal energy requirements during mid-gestation in the fall and early winter than she will need through late gestation and next spring prior to calving. Here again, this means more of her daily energy intake can go to weight gain today, versus 2-3 months from now.

#### PRACTICAL USE OF BODY CONDITION SCORES

Research has shown that body condition is directly related to reproductive performance and thus profitability in cow calf operations. By identifying the body condition of cattle within your herd, you can make informed decisions on a feeding program designed to maximize profitability. Cows will not breed at acceptable rates without adequate body fat. More often than not it is more cost effective to maintain a cow in ideal body condition than it is to allow her to become too thin and then try to put condition back on or to allow her to remain too thin.

#### WHAT HELPS CATTLE MAINTAIN BODY CONDITION?

During winter months, many cattle producers rely primarily on hay as feed. Because hay quality varies so much, anything we can do to increase the efficiency of hay digestion is going to help productivity. While cows will generally gain weight in the fall after weaning, most forages are of poorer quality this time of year. Cows will respond greatly to even a little protein supplementation. Protein supplementation of low quality forages (whether grazed or fed in bales) will increase the digestibility (energy release) and intake (providing even more energy available to the cow). Many cattlemen refer to this as stretching their forage.

#### WHY IS PROTEIN SO IMPORTANT FOR FIBER DIGESTION?

- Low quality forages contain high amounts of hard to digest fiber and protein is key to optimal fiber digestion and intake.
- Ruminally available protein is a limiting factor in fiber fermentation.
- Protein is a key component for microbial adhesion to fiber which is needed to begin the fiber digestion process.
- Protein is also needed for microbial fermentation of fiber to form volatile fatty acids (VFAs) and microbial protein, 2 major energy sources for cattle.
- Additionally, inadequate dietary protein depresses animal performance, in turn depressing appetite which further hinders animal performance.

For all of the reasons above, protein supplementation improves forage digestion and increases forage intake. Research shows that it doesn't take much protein to enact a positive influence. Supplementation with limited amounts (less than 2 pounds) of a high protein supplement increased digestibility and intake of lower quality forages in numerous studies.

### **FALL AGRONOMY PLANNING**

As we enter into late fall/early winter, weed control in small grain crops should be considered. In a lot of cases, we can do a better job controlling weeds during this period while the weeds are small and have an under developed root system.

This can either be done pre-plant or post-plant. Contact us to schedule a time to discuss fall weed control.

Augusta Co-op has a small selection of small grains remaining in inventory. If you have interest in purchasing these items please reach out to Troy Grimm.

Additionally, it is time to start planning corn and soybean seed selection. Augusta Co-op carries NK/Enogen, Dekalb & Asgrow, and Pioneer (Bedford location only). Book now with your Augusta Co-op Agronomy Sales Team to ensure you select the hybrid varieties you want at a discounted pre-pay price. Seed corn deadline is November 17 (8% discount) or again January 15 (6% discount). Fertilizer pre-pay December 1 through January 9 (8% discount). Contact Troy Grimm at (540) 885-1265 x 224.

#### **EVENTS / CALENDAR**

#### HAPPY HOLIDAY PRE-BLACK FRIDAY SALE

Friday, November 12 7:30 AM - 6 PM **Saturday, November 13** 7:30 AM - 5 PMAugusta True Value Staunton location 1205B Richmond Road

Additional information: www.AugustaCoop.com or (540) 885-1265

Huge deals in-store on in-stock clothing. 30% off all Carhartt & Wrangler apparel (men, women & kids). Plus, deals on boots, power tools and much more!

#### AGRONOMY CUSTOMER APPRECIATION DAY

Friday, February 4 11 AM - 2 PM

Verona Greener Valley Supply 963 Laurel Hill Rd, Verona, VA 24482

Additional information: RSVP to Staci Alger at (540) 885-1265 x 253 or SAlger@AugustaCoop.com

#### **AUGUSTA CO-OP VENDOR DAY**

Wednesday, February 23 3 PM - 8 PM

Weyers Cave Community Center

682 Weyers Cave Rd.

Additional Information: www.AugustaCoop.com or (540) 885-1265

Book your 2022 items at drastically reduced rates at our annual vendor day! Door prizes, food, educational seminars and much more!











### Order from our online catalog of over 5000 items

- Pick up in store for FREE
- Ship UPS to your location
- Purchase \$250 worth of product and have it delivered within 30 miles of any Augusta Co-op store location (delivery fee will apply to all orders)

Convenience. Selection. Savings. Made Easy.

