Disease Concerns with New Herd Introductions

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Most Kansas producers have been impacted in one way or another by the drought over the past few years. With El Nino on its way, many producers are weighing the ins and outs of restocking as forage conditions allow. Anytime new additions are brought in from an outside source, disease introduction/potential control should be a key part of any rebuilding plan.

The source and type of animal that is purchased will change the management of the animals when they arrive at the new operation. What did you buy? Young heifers to develop? Open cows? Why are they open? Pregnant cows/heifers? Does the genetic merit of the female (and the mating) match your production goals? What was the previous management? Do they match up with my current calving window? Is the group made of individuals mixed together from different sources? Are they single sourced? These are all questions to ask before purchasing new additions. In an ideal scenario, new purchases would come from a single source with known herd and health management. However, many times that information may not be passed to the buyer, so caution should be implemented when introducing them to the home herd.

There are several modes of disease transmission of particular concern for the cow/calf herd. Nose to nose contact, blood transmission, fecal/urine exposure, or sexually transmitted being common routes. Each disease has a different period between exposure of a pathogen and signs of disease appearance. This is known as the pre-patent or incubation period. During this period, cattle can look completely healthy but begin to shed pathogens and transmit disease. For common viruses and bacteria, the time can be days to weeks, but in some circumstances the pre-patent period can even be years (Johne's Disease, Bovine Leukosis). Depending on the diseases of concern, it is a common recommendation to separate or isolate new animals from the rest of your herd for 30-45 days. This allows any animals harboring common transient infections (viruses), to run their course. This isolation or quarantine time also gives producers the opportunity to introduce the new animals to the new environment, feed and watering situation, and implement their own herd health program on these new animals. This is especially important if the previous management history is unknown. During isolation, it is important to monitor new animals closely for disease. Some symptoms of concern include abortions, manure consistency, drop in body condition score, or looking depressed.

When implementing the herd health plan on new additions, it is very important that producers discuss this with their local veterinarian. If previous vaccination history is unavailable, veterinarians may suggest specific types of products on animals with unknown history. For example: pregnant cows that have only ever had killed vaccines or with no vaccination history, modified live vaccines would not be recommended. However, for open cows or heifers, the MLV vaccine might be recommended if that is the herd program. Other herd health products such as dewormers or parasiticides should also be considered. Remember, it only takes one new addition that is carrying lice during the winter months to infest an entire herd, so complete and consistent implementation of herd health requirements is essential.

The timing of introducing new animals can also raise concern. One of the riskiest times of introducing new animals is during calving season. The simple act of bringing in a graft calf or a nurse cow from an outside source has the potential to cause major scour issues in the herd. Another period of concern is during the early breeding season. This time of year is not often thought about as a key transmission time due to lush pastures, vast space, and fresh air, but several common transient infections can wreak havoc on breed up rates as early embryos can be

easily impacted by pathogens at this time. Unfortunately, the impacts of disease transmission during the early breeding season are not felt until pregnancy detection time.

Disease testing is often discussed as a tool to utilize when purchasing new animals. Ideally female replacements and breeding bulls would already be tested for certain diseases prior to arrival, however that does not always occur. Two key diseases that are commonly tested for and should be considered due to the diseases' potential for large economic loss are Trichomoniasis (Trich) and (BVD). At minimum, all new non-virgin bulls should be trich tested prior to breeding turnout. As for BVD, consider only purchasing BVD-PI negative tested animals, or have background information on home herd vaccination and background of the animals prior to purchase. There are a multitude of other diseases that can be tested for prior to purchase or during the quarantine period. However, to ensure the best investment of resources, the home herd disease status is an important consideration to know before large scale testing is conducted on new arrivals. Anaplasmosis, Johne's, Bovine Leukemia Virus, and Neospora are all diseases of concern for cattle producers, however home herd status of these diseases and their carrier prevalence will dictate the need for testing.

Whether you are weighing the options of rebuilding your herd numbers, replacing yearly culls, or expanding your herd, these principles of biosecurity are good to keep in mind. As with any herd health decision, consulting with your local veterinarian is a critical step within the process.

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