Northwest Veterinary Associates, Inc.

Kent Henderson, DVM
Stephen Wadsworth, DVM
Peter Averill, DVM
Allison Maslack, DVM
Jennifer Hull, DVM
Elizabeth Brock,DVM
Thomas Linden, DVM

April 2017 Newsletter

Prepared by: Dr. Allison Maslack

Spring has sprung and it's a perfect time to catch up on vaccinations, especially for animals that may be going to pasture. I hope this newsletter topic review reminds you to check in with your Veterinarian about what diseases your animals may be at risk for in order to update your vaccine protocol to best suit your farm.

Even though the snow has just barely melted, it's safe to say that the flies will be out before we know it. With flies comes increased chance of disease- the main being pinkeye. Pinkeye, or infectious bovine keratoconjunctivitis, is the most common eye disease of cattle (beef and dairy) in the U.S. By far the most common cause of pinkeye is the bacteria Moraxella bovis (M. bovis), however there are other viruses and bacteria that can cause similar disease or exacerbate the condition. Pinkeye causes both economic losses to producers as well as pain and suffering in affected animals that negatively impacts their overall animal welfare. Common signs of pinkeye include: excessive tearing, frequent blinking or squinting, inflammation of tissues around the eye (conjunctivitis), decreased appetite due to eye pain, corneal cloudiness, and corneal ulceration. It can affect one or both eyes, and generally is worse in younger animals. If not properly treated, corneal infections and ulcers can result in corneal scars or even eyeball ruptures leading to permanent blindness.

Other organisms- including respiratory viruses such as Infectious Bovine Rhinotracheitis (IBR), Mycoplasma species, and a somewhat emerging bacteria Moraxella bovoculi (M. bovoculi)- can also cause similar disease, often independent of flies. Risk factors for these infections include mineral deficiencies, immunosuppression from disease or parasites, overcrowding, and poor ventilation. M. bovoculi was first reported in 2007 and it has been isolated from cattle with pinkeye in our practice – with seemingly high prevalence in certain areas of Franklin County.

Pinkeye as a disease is most common in summer months with increased exposure to sunlight, and dry, dusty conditions. Plant awns and tall abrasive grass can also predispose disease by causing corneal damage. Certainly, flies increase the chances of exposure and spread of M. bovis and M. bovoculi bacteria by feeding around the face and eyes of affected cattle and then transferring infected eye fluids to other animals. The disease can also be spread in the environment by hay feeders and even by humans, particularly when not wearing gloves or not applying disinfectants to halters/objects involved in handling affected animals.

Once signs of pinkeye infection are in your herd- controlling spread can be challenge, so it's very important to practice preventative measures like vaccination before an outbreak occurs. Vaccination is clearly the main source of prevention, although producers can still experience variable results with today's vaccines. At Northwest Vet's we have several types of M. bovis vaccine, as well as an autogenous vaccine of local M. bovoculi strains. There are slight differences in the vaccines and some require a second booster shot, so talk with your Veterinarian about what vaccines are best for your herd. It is extremely important to vaccinate well in advance, ideally at least four weeks, prior to flies and exposure so that the animals will have enough time to mount an effective immune response. It is also important to make sure that animals have adequate levels of trace minerals such as copper and selenium for a properly functioning immune system.

In addition to vaccinating, fly control is very important prevention factor to reduce the risks of disease spread between animals in your herd or from nearby herds. Traditional methods include insecticide-containing ear tags, dust bags, and topically-applied products such as Ultrabos. It is also important to practice good hygiene to avoid inadvertently spreading infective bacteria between animals. Use disposable gloves when handling pinkeye-affected cattle and disinfect halters between cattle.

Treatment of pinkeye is recommended, not only to ease the pain associated with the disease and prevent permanent blindness, but also to limit disease spread. Moving the animal from the outdoors into a darker environment will also help with healing. M. bovis pinkeye is susceptible to a wide variety of antibiotics; however, only two are specifically labelled for the treatment of pinkeye: tulathromycin and oxytetracycline. M. bovoculi, on the other hand, does not seem to respond as readily to treatment with oxytetracycline. It is important to discuss your pinkeye treatment program with your Veterinarian, especially if what has typically worked in the past is no longer working.