



DAIRYINFO

W-S Feed & Supplies, Ltd.
1805 Sawmill Road
Conestogo, ON N0B 1N0
Canada

1.800.265.2203

www.wsfeeds.ca

Taking service to another level!

Establishing & Maintaining an Internal Parasite Control Program for Dairy Cattle

Dairy producers are very concerned about the cost of production. Losses, especially those caused by preventable disease such as gastrointestinal parasitism, become extremely important, especially when feed costs are high. The loss due to poor utilization of feed is directly related to the level of parasites present. The cost of parasites begins with a depressed immune system, poor growth in calves, and reduced reproductive efficiency in breeding animals as well as the direct effects of reduced feed intake, feed efficiency, and milk production. Knowing how to minimize or prevent these losses can be very valuable to the efficiency of any operation, since losses caused by internal parasites are cumulative in the animals, affecting all age groups of cattle from young calves to adult cows. Profitability attained from improved efficiency due to parasite removal can be determined by subtracting the cost of the annual deworming program in an operation from the potential losses incurred by parasitism if left unchecked.

Foremost in the economic analysis is the ability to detect the presence or absence of parasites within a herd. To date, the best method to determine whether parasites are present within a herd is by conducting a fecal check - counting the number of parasite eggs present in a specific sample size and identifying the type(s) of parasite(s) present based on the characteristic size and shape of the eggs found. Adult female nematode parasites living within the gastrointestinal tract lay eggs that pass out in the manure. The eggs hatch, producing larvae, which molt several times until they reach an infective stage. These infective larvae are mobile, moving away from the manure to nearby vegetation where they can be consumed by cattle, starting the life cycle over again. When parasite eggs are passed down the gastrointestinal tract and excreted in the manure, they can be found by floating the eggs out of the manure using a special flotation exam. There are many different types of fecal exams, but the only flotation test that is sensitive enough to use with adult dairy cattle is called the "Modified Wisconsin Sugar Flotation Method." It is the only fecal exam that has sufficient sensitivity to consistently find parasite eggs in adult dairy cattle harboring parasites, where these cows can excrete in excess of 40 kg of manure daily.

Risk Factors and Production Losses ~ With internal parasites, it is well established that even a few parasites present during early lactation become a detriment to achieving production potential. Parasitized cattle are harmed, not only by the parasites themselves, but also by the indirect damage the parasites cause to the

immune system. Grazing cattle have the greatest risk, since their exposure to parasites is higher than cattle housed on dirt lots or in a confined facility. Deworming studies* have demonstrated that lactating dairy cows may lose from 190 to 580 kg of milk/lactation due to internal parasites. The greatest responses came from high-producing herds (with some exposure to internal parasites) dewormed at freshening and again six to eight weeks later. These studies [also] showed that by removing parasites during the period of greatest stress during early lactation, production losses due to internal parasites could be prevented.

Additionally, studies showed that deworming replacement heifers to help prevent parasite infections provided the producer with one of the best tools for raising healthy heifers. Replacement heifer deworming trials conducted in Minnesota, Wisconsin, Virginia, and Vermont demonstrated strategically dewormed heifers reached breeding size 28-68 days sooner than non-dewormed heifers.

Control Strategies ~ Knowing whether parasites are present on your operation is the key to establishing a control strategy. Determining how much exposure the animals have or have had to a parasite-contaminated environment is the first step. The easiest way to determine this is to know how much time these animals have spent in confinement on concrete. Parasite contamination on concrete is usually very low except where bedding and manure build-up occur. Parasite transmission in dairy herds predominantly occurs on pasture, exercise lots, and dirt lots. The fecal exam using the *Modified Wisconsin Sugar Flotation Technique* remains the best way to determine whether parasites are a problem in a dairy herd.

Once parasite presence is established, a control strategy can be implemented. Three steps are necessary for successful prevention of parasites: (1) select the correct product; (2) select the correct treatment time; (3) establish a maintenance program.

Conclusion ~ For animals to remain an economical food supply source, efforts to increase efficiency must continue. Deworming dairy cattle is a venture beyond treating clinical disease; the treatment of parasites should be aimed first at the elimination of the threat of economic loss and later at the prevention or elimination of the parasites.

(*58 studies by Bliss and Todd, or Todd, Bliss, Grisi, and Crowley in WI, VT and PA, 1973-1978; published in *VM/SAC*)

(Edited from an article by Dr. D.H. Bliss, *Veterinary Parasitologist*)

Interested in discussing topics in this newsletter, or want to do a better job feeding and managing your cows? Call us!

Our goal is to help you. That's the W-S Feed commitment!

VOLUME 7 – Number 4 – April 2017

RENAISSANCE... THE TEAM FOR SUCCESS!



Are You Ready When Heat & Humidity Strike?

Hot and humid weather comes quickly... when it comes! And with it comes heat stress! It is vitally important to be prepared before temperatures climb, in order to alleviate the potential impact of heat stress on livestock, including issues like reduced feed intakes, lower production and numerous health-related considerations. Preparations for summer heat and humidity may include a review of the barn's ventilation system, checking that you have sufficient fans, and that they are clean and in good working condition. This will help to manage necessary airflow. Also, take a closer look at summer rations. Summer rations may need to provide your cows with supplemental energy as an aid in reducing the effects of heat stress. Call us today and let's review ideas on dealing with heat and humidity this year, and averting heat stress before it becomes a reality! It is important to review feed and management protocols and procedures each year in the quest to better deal with heat stress!



W-S Feed & Supplies, Ltd.
1805 Sawmill Road
Conestogo, ON N0B 1N0
Canada

www.wsfeeds.ca

Taking service to another level



Establishing & Maintaining an Internal Parasite Plan...

Are you ready when heat & humidity strike?

Think Spring!

APRIL 2017

CHECK IT OUT!