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ARE FLIES BUGGING YOUR CALVES?

From May to October, flies can be a problem for your livestock operation, with peak levels occurring from mid-July to mid-September. The two most common fly species in livestock operations are house flies and stable flies. Bites can be painful and cause restlessness in animals. Further, animals are less likely to consume feed with flies on it, and flies can be a source of disease spread. Some pathogens that can be spread by flies include bacteria that cause mastitis and Infectious Bovine Keratoconjunctivitis (Pinkeye). In order to prevent flies from negatively impacting productivity and becoming a food safety hazard, fly control in livestock operations is essential. Preventing a population build up is easier than controlling established populations. Take proactive steps control flies before your facility is heavily infested. Controlling and eliminating flies at early life stages (eggs or larvae) is most effective. Look for larvae (maggots) to determine the locations where flies are laying eggs and target these areas in your control and prevention strategy. Flies can move up to one kilometer, so ensure your fly control program targets all potential breeding sources within this radius. Flies have been known to transmit pathogens from farm to farm, so talk to any neighbours with livestock about their fly control program. Cattle will often bunch together, head-to-head, and stomp, kick, and swish their tail at flies. If you see this behaviour in your herd, you likely have a fly problem and your herd is expending energy to escape flies rather than eating and resting.

Sanitation Flies breed on wet organic matter such as wet bedding, manure, and spoiled or spilled feed. For this reason, keeping all areas free of organic matter should be the first step in fly prevention and control. It takes about 21 days for an egg to develop into a fly. Cleaning up wet organic material weekly can disrupt the life cycle of the fly, removing eggs, larvae, or pupae before they become adult flies. Pay special attention to often wet or soiled areas such as feed troughs and around water bowls. All stored feed, bedding, and manure should be covered if possible. Bedding may need to be cleaned out more frequently during summer months to ensure it stays dry. Some producers have success with switching to sand bedding during the summer months. Sand is not organic, so flies cannot use it to lay eggs. Sawdust and wood savings are also less attractive to breeding flies than straw.

Manure and soiled bedding should be removed from the barn as far as possible. Composting and turning or tilling a compost pile weekly should prevent flies from reproducing. For manure in a lagoon, preventing crust from forming on the surface will eliminate breeding sites. Finally, spreading manure thinly on crop land and harrowing pens or pastures to break up manure will help to dry it and prevent fly breeding.

Taking steps to keep the barn dry is essential. Ensure the barn is graded to avoid standing water. If this is not possible, other steps to dry the area such as placing shavings down to absorb the water (and then cleaning up the wet shavings) may be effective. Repair water leaks or any other sources of moisture. Keeping vegetation around the barn well maintained may also help to reduce the amount of flies in your barn. Fans can disrupt flies and dry damp areas. Ensure any milk or milk replacer is immediately cleaned up, not left out where it will attract flies. Garbage cans should be covered as well as emptied and cleaned frequently. Pay special attention to young stock areas, as they tend to be ideal breeding ground for flies. It is essential to control the breeding sites of flies before taking any other pest control steps. If the breeding sites are not managed, attempts to control infestation will be ineffective.

Traps Sticky tape or traps are effective in controlling minor fly infestations if placed where flies congregate. However, these must be changed frequently. Sticky traps are also useful when assessing the degree of fly infestation in a facility as well as determining the species that are most prevalent, allowing you to make informed control decisions. Ensure that sticky traps are placed well out of reach of animals, including dogs and cats if applicable, and will not contact animals even if they fall from where you have secured them. **(Continued on page 2)**

HORSE FEED

Our Bronco Horse feed has been changed to "Premium Sweet Feed". It is the same nutritional value, just a different product name.

CLOSED FOR LABOUR DAY

We will be closed September 5th for Labour Day. Please order your feed accordingly.

FUTURES MARKET

BEEF

AUGUST	115.92
OCTOBER	114.07
DECEMBER	114.60

PORK

AUGUST	68.98
OCTOBER	59.05
DECEMBER	54.75

ORDER DESK

Ways to place your order:

Toll-free: 1.800.265.2203

Fax: 519.655.3505

Email: orders@wsfeeds.ca

Online: www.wsfeeds.ca

FLIES CONTINUED...

Insecticides Insecticides may be necessary in moderate to high levels of fly infestation. Always make sure you read and follow all label directions on chemical fly control products. Ensure you are following all the appropriate regulations set out by the Ontario Ministry of the Environment and Climate Change. Baits must be placed in areas where livestock cannot get access to them and where they cannot contaminate feed or water. Space or area sprays spread a fine mist throughout an enclosed area and kill adult flies on contact. Residual sprays are applied to adult fly resting areas such as walls and posts.

Fly control in dairy operations It is extremely important to control fly populations in the milk parlour and milk house, as flies can pose a food safety risk. These areas are especially attractive to flies, if they are wet or milk residue is left on any surface. Screens and well fitted doors can prevent flies from entering the milk house, and doors should be closed as much as possible. You may need a separate pest control plan for your milk parlour and milk house, as some pest control measures or chemicals may be prohibited.

Cleaning your facility to eliminate fly breeding grounds is essential and will minimize the need for insecticides. For more information on pest control in your facility, talk to your feed representative (Calfcare).

NEW THOUGHTS ON AN AGE OLD QUESTION: SHOULD WE FEED FORAGES TO CALVES?

Just like cows, calves can experience ruminal acidosis, and just like for cows, forages may play a role in helping calves overcome this challenge. Rumen development requires a source of fermentable carbohydrate, so good quality calf starters typically contain a high concentration of starch. However, calves tend to eat big meals in proportion to their body and rumen size, and high starch levels in starter feed can lead to acidosis. The form of the starter also influences the risk of acidosis. Grains need to be finely ground to form a good quality pellet, but this reduction of particle size makes the starch more rapidly available in the rumen. Heat and moisture used in the pelleting process also make starch more fermentable. A textured starter containing whole or minimally processed grains and a supplemental pellet does not prevent calves from eating large amounts of starch at once, but the starch in coarse grains will be available only after calves chew and break down the grain, which often happens as they ruminate several hours after eating. As a result, calves eating textured starter will have lower risk for acidosis than calves fed a pelleted diet. When the starter is a cause of acidosis, adding forage to the diet will help buffer the rumen. In some cases, particularly older calves who are eating more starter, feeding forage improves starter consumption. We tend to generalize forages for calves, but forage physical form and nutritional quality affect intakes of both starter and forage. Calves seem to eat chopped hay more consistently than long hay and will sometimes prefer highly palatable hay over starter. Consumption of low quality chopped hay tends to be quite consistent, and in 3 independent studies intake of chopped straw was about 4% of calves' total dry feed intake. In some cases bedding can supply this small amount of straw, so type and frequency of bedding may also influence the time at which calves need to be offered forage.

When designing a calf feeding program, we need to balance the risk of acidosis with adequate grain intake to stimulate rumen development and ensure a smooth transition at weaning. If we feed too much forage too early, calves may not consume enough energy, because forage is less energy dense per unit than grain and the complex, structural carbohydrates in forages are digested at a slower rate than starch in grain. Forage is also bulky and can quickly fill the limited space in a calf's digestive tract, sending the brain a signal to suppress appetite. In addition, as mentioned above, the VFA produced from forage fermentation do not stimulate rumen development, and forage intakes can be highly variable. Keratin buildup on the rapidly growing rumen papillae is another potential issue related to diet, as it has been suggested that it may reduce the absorptive capacity of rumen papillae and alter early rumen development. Either forage or textured starters with whole or partially processed grains have demonstrated that they can provide physical abrasiveness that helps to prevent the buildup of keratin. Using textured starters instead of forage to maintain a healthy rumen prior to weaning can be advantageous since textured starters won't reduce energy intake and slow down rumen development like forage does.

Starter ingredient composition, physical form, and intake level are important factors to consider when making a recommendation as to when forage should be fed, and these will change with different management practices. In the past it has been suggested that forage be fed to calves when starter consumption reaches 5 to 6 pounds per day, at around 7 to 8 weeks of age. This recommendation is appropriate for textured starter with coarsely processed or whole grains. However, when feeding a completely pelleted starter with high amounts of ruminally digestible starch, forage should be fed by 5 to 6 weeks of age to prevent acidosis. Lowering the starch concentration in the pellet could also prevent acidosis and the need to feed forage, but at the high price of reduced rumen development by weaning time. It is important to continue meeting calves' nutrient requirements after weaning to support growth. When calves stop receiving milk starter consumption increases rapidly, and good quality, high starch starters need to be supplemented with forage. The amount of forage to be added will depend on forage quality, starter composition, and the physical form of forage and starter. A good quality textured starter/grower will need to be supplemented with only 5 to 10% forage up to 16 weeks of age. The need for forage when feeding pelleted starters will depend on the starch and fiber level in the pellets. High fiber pellets will not require forage in the diet as the pellets effectively contain that forage, however pellets alone typically do not provide enough abrasiveness to prevent keratin buildup. (Xavier Suárez, Coleen Jones and Jud Heinrichs, Penn State University)