

DAIRY PIPELINE

The USDA estimates production losses due to insects at more than \$2 BILLION. The largest contributors are worms (\$991 million), horn flies (\$730 million), lice (\$126 million), stable flies (\$90 million), and face flies (\$53 million). These losses are not always easy to see and often we see the effects but don't attribute them to insects. High parasite infestations cause reduced weight gain in replacement heifers, reduced milk production, increased mastitis and SCC, decreased disease resistance, and increase the spread of other diseases such as pinkeye.

Some steps to consider when planning a control program include: 1) Identifying the parasite. 2) Gathering information on its life cycle, hosting habits, timing of infestation, and economic thresholds. 3) Assessing the damage being caused and projecting damage that could be caused if nothing is done. 4) Estimate control costs. 5) Determine most effective and economical control method(s).

Chemical controls, biological controls, and cultural controls can all be used to reduce parasite population and a combination is most often advised and needed. Most of us are familiar with chemical controls (ear tags, sprays, pour-ons, etc.). However, we need to take step to reduce resistance to these chemical controls. Remember to rotate products, be conscious of timing of application, and in the case of ear tags don't tag them too soon and take them out at the end of the season. Biological controls can also be very effective and include parasitic wasps, predators, and pathogen. Walk-through fly traps and windbreaks are cultural controls. The least costly control is the removal of moist organic material used for breeding grounds for some insects. This includes spilled feed, silage leaks, manure piles, and rotting hay and straw.

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Calf management tips. We've all seen that high producing dairy cow panting during the dog days of summer. Milk production and ration intake are down and it's obvious that she is really stressed. Calves are also affected by heat stress. Although their body mass isn't as large, they react just as negatively to high heat

and humidity. Body temperature of calves may increase from a normal range of 101 – 102 to as high as 106°F when stressed. At these temperatures respiration rates increase and circulating antibodies decrease. Calves can become more acidotic. The net result is that calves are less able to resist disease and death comes more quickly if intervention doesn't occur promptly.

Calves also grow more slowly because maintenance requirements increase due to the extra effort expended in trying to stay cool. Higher maintenance requirements mean that less of the nutrients she consumes are available for growth. What can be done to minimize heat stress? Keep calves as cool as possible! Wooden or opaque hutches are cooler than the translucent variety. Exercise areas outside the hutch are imperative in the southeast. Opening the vents of the hutch and raising the back end of the hutch can assist in venting excess moisture and heat. Where excessive wind is not a problem, use of 80% shade cloths over hutches is effective. If calves are housed in greenhouses or permanent structures make sure that ridge vents, eaves and side walls are as open as possible. Dairy producers are frequently concerned about calves getting wet during summer thunderstorms, but the impact of heat stress is a far bigger problem. An adequate supply of clean, free choice water is an absolute necessity. Ad libitum water encourages dry starter intake and promotes earlier weaning. Look at those water buckets the next time you feed or are checking on calves. Are the buckets covered in green slime? Is there feed or manure contamination? Buckets should be positioned in an elevated position inside the hutch to prevent fecal contamination. Cleaning buckets frequently with a dilute solution of Clorox or chlorine will retard growth of plant material in the bucket and encourage water intake. Heat stress and water management for calves are one of the "little things" than can dramatically encourage calf growth and reduce disease.

-- Robert E. James

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Farm pest control issues. Fall harvests are closing in quickly, but attention is needed to make sure that the crops aren't the only things we bring in for the winter. Rats and mice can introduce many diseases into a cow herd, not the least of which is Lepto. Lepto can cause spontaneous abortions and kidney damage in cattle. Diseases are past to the herd by droppings and urine left in the feed by rodents. Rodents also damage structures, especially electrical wiring, creating a fire hazard. **Solutions.** Control can be obtained by eliminating tall grass and weeds around the farm, especially near the barns, feed storage, and waste handling facilities. Also, spilled feed or feed left for long periods of time should be removed to lower the availability of food for rodents on the farm. **If you choose to use bait to control rodents, here is a neat idea.** A piece of 1 ½" PVC pipe, about 36" long makes a great bait delivery system. Bait placed in the pipe is not exposed for pets or children, and the pipe, placed along a barn wall or near a corner, makes a "good" hiding place for rodents. Rodents are drawn to the pipe for protection are enticed to feed on the bait while in seclusion.

-- Andy Overbay
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Standard operating procedures to get pregnant cows. What is your plan of attack to get cows pregnant in a timely manner? Similar to all other tasks that take place, management must set procedures that will efficiently get cows with calf. The reproductive cycle starts with an excellent transition period that ensures that cows will move from the dry lot to the milking herd without the occurrence of a postpartum disorder, minimize body condition loss, and allow cycling to occur by 30 days in milk. Synchronization programs such as Presynch or Ovsynch are designed to mandate that every cow receive her 1st breeding within a prescribed window, usually 70 to 80 days in milk. Next - a program to identify open cows that did not conceive at 1st breeding is vital. A heat detection program that includes the use of a heat expectancy calendar of cows bred three weeks prior is essential to identify open cows. Bimonthly rectal exams to identify open cows that were not detected in heat is the next component of the program. When open cows are identified, the program now must dictate what should be done to

allow inseminations. Additionally, a vaccination program that protects against the most common occurring diseases and a mastitis control program to minimize the incidence of infection are both essential components of the total program. Standard operating procedures to obtain pregnant cows is an important component of the reproductive management program.

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**** Upcoming Activities****

Dairy Science Recruiting Day Oct. 23

Area Dairy Conferences

Rockingham Co. Dec 14

Culpeper Co. Dec 15

SW Virginia Tech Dec 16

Franklin Co. Dec 17

Nutrition Cow College, Jan 11-13, 2005

Virginia Tech, tentative

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