Biosecurity at the Fair

Its almost fair time and I’m sure you’d love to bring home a blue ribbon from this year’s dairy show, but how would you like to bring home hairy heel warts, pinkeye or Staph Aureus/Mycoplasma mastitis as well? There is a risk of this transmission taking place at the fair and that should be considered before you load your animals to head for the fairgrounds. Think about it, you may have a closed herd and have contagious diseases controlled at home, but this is the one time a year that your (most prized) animals get moved off farm. Those animals will have contact with other animals in places such as the show barn, wash rack and in the ring. Sure, there are rules against housing and showing animals with contagious diseases such as pinkeye, ringworm, hairy warts, etc., but even with a veterinarian’s approval, cases may slip through the cracks. Be especially aware of your animals’ feet in areas like the milking station and wash area where animals spend an extended amount of time standing. Moist areas create perfect conditions for bacteria that cause heel warts, hoof rot, etc to thrive if an infected cow has had exposure to that area.

By no means should you lock your animals in the barn and quarantine them from the world, you should be proud to show off your animals, just be aware of the risks that may be present. Always remember, an ounce of prevention is worth a pound of cure!

Some precautions to consider at the fair this year include:

- Never feed with equipment used to remove manure
- Water and feed your animals out of your own bucket instead of the “community” bucket
- Use caution at milking station, use your own dip cup
- Make sure not to drastically change diet to avoid bloat
- Have ample fresh, clean water available
- Keep cows comfortable, use fans
- Keep bedding dry
Flies: What Are They Costing You?

There are several types of flies found on dairies, each with specific characteristics, but they all share a common thread: they cut into your profitability! These small creatures are bacteria transports that threaten your livestock with painful bites, stress, blood loss, disease transmission and ultimately, production losses. The flies to be on the lookout for on your dairy include:

**According to USDA data, flies can cause between 5 to 20% loss in milk production and an increased potential for Staph Aureus and environmental strep mastitis in bred heifers.**

**House Flies**

House flies are non-biting nuisances that breed in organic matter including manure, decayed silage, spilled feed, bedding, etc. They can be found all over the dairy and can be especially annoying in the milk house! House flies are a concern because they are very mobile and in their travels spread bacteria. With the spread of bacteria comes the potential for the spread of disease and parasites from animal to animal. Fly contact with surfaces (especially in the milk house) result in bacteria laden fly specks, which are feces and vomit, and can lead to increased bacteria counts in the bulk tank. The little black dots all over everything in the milk house are annoying enough without the potential for eating into your profits! House flies are also the vermin that annoy close by neighbors to no end. Controlling house flies on your farm can save you many headaches with your animals and your neighbors!

**Stable Flies**

Stable flies are biting insects that feed several times each day. Both male and female flies inflict painful bites to obtain their blood meals primarily targeting the legs, bellies and udders of dairy cows. Stable flies breed in moist conditions where eggs and larvae thrive in decaying vegetation, wet straw, manure, silage, spilled feed, etc. Stable flies can travel around in a herd transmitting bacteria and with it, the potentially spread disease and parasites. Since stable flies are blood feeders using sharp mouth parts to feast, they are perfect vectors for blood borne disease like leukosis.

**Face Flies**

Face flies are non-biting flies that prefer to feed on secretions around the eyes, nose and mouth of dairy animals. The face flies use their mouth parts to feed on fluids in and around the eyes causing irritation and subsequent weeping. These flies transport bacteria from animal to animal and are notorious for spreading pink-eye. Face flies breed in manure where eggs are laid and larvae develop.

**Horn Flies**

Horn flies are small (1/3 to 1/2 the size of house flies), biting insects that are voracious blood feeders that can cause significant blood loss when prevalent in large numbers. Both male and female horn flies feed on blood, with females feeding more often. These flies tend to congregate on the heads and backs and sometimes bellies of cows, often causing skin irritation and open sores. Breeding takes place exclusively in fresh manure where eggs are laid and larvae fully develop. Much like the stable flies, horn flies transmit bacteria and diseases. Being a blood feeder, horn flies can transmit blood born diseases via their specialized mouth parts.

Got Flies?
Devising a Fly Control Management Plan

You are not going to eliminate flies by any one measure, but devising a management plan and incorporating several fly control methods, you could greatly reduce the number of pests on your dairy. The best way to reduce the effects seen from flies in your herd is to reduce the fly population. Killing fly eggs and larvae is essential in a whole farm approach to fly control since the adult population that is seen is only a small proportion of the entire fly population on your farm.

Cleanliness
Since organic matter is the prime breeding grounds for all types of flies, it would be beneficial to clean bedding areas, manage waste/unused feed and scrape up areas holding manure often to eliminate prime fly breeding grounds.

Chemical
Chemical control can include sprays, larvicides, fly dust and insecticide impregnated ear tags. These products are effective in killing off adult flies. Sprays may include chemicals that are to be applied to buildings and areas frequented by flies as well as chemicals that are applied directly to the animals being affected by the flies. Larvicides are used to target larval flies and can be applied to areas known to harbor fly larvae. There are also larvicides labeled for use as a feed additive so that it passes through the cow and is present in that animal’s manure, deeming that manure unfit as breeding grounds. Fly dust can be placed in a bag and hung in an area where all cows pass through, such as in an alley post milking. Ear tags are impregnated with insecticide that is slowly released to provide animals fly protection. If you are considering using such ear tags, be sure to read the label because not all products are approved for use in lactating animals.

Biological
Fly predators, or parasitoids, are small wasps that help reduce fly populations. These wasps do so by attacking fly pupae and killing it before they are able to become adult flies. The wasps are known as parasitoids because they lay their eggs in the fly pupae where the wasp young parasitize the fly larvae and use the larvae as a food source. There are several companies that propagate and distribute fly predators making them readily available through the mail.

Bait/Traps
Baits and traps are another method to control adult flies on farm. Baits are placed in areas frequented by flies so that adult flies may eat the bait and subsequently die off. There are several types of traps available for fly control including sticky traps and physical traps. Both types are effective when properly placed.

The Heat is ON! Managing Heat Stress

Heat stress was a focus in the June newsletter and now that the dog days of summer are here, don’t forget these keys to maintaining cow comfort:

- Provide unlimited supplies of fresh, cool water (55–650F) for drinking
- Provide ample shade
- Consider fans and sprinklers
- Maintain clean, dry bedding
- Adjust feeding schedules to feed more frequently during the cool of night
Livestock Gross Margin (LGM) for Dairy

Livestock Gross Margin (LGM) for dairy is an insurance program designed to protect dairymen against unexpected declines in their gross margin. Put simply, gross margin is the market value of milk minus feed costs. The program does not set a support price on milk but rather sets a floor price on milk and a ceiling price on feed. Milk and feed prices are determined by using the futures price of milk (Class III) and feed (corn and soybean mean) on the Chicago Merchantile Exchange. Other causes of revenue loss including production loss, damage of livestock, livestock death, etc. are not covered under LGM for dairy.

Unfortunately, at this time, the LGM for dairy program has been suspended due to insufficient funding for subsidies. It is likely that funding will become available in October of 2012, and due to the popularity of the insurance program, now is the time to evaluate your operation and determine if LGM for dairy is a management tool you would like to incorporate into your business plan.

If you have any questions regarding LGM for dairy, call the Garden State Crop Insurance education hotline at 1-800-308-2449.

How Dairy LGM Works

- Quantity of Milk
  - Default feed or Producer feed
- Expected Prices Determined
- Expected Gross Margin (Insurance Guarantee)
- Actual Prices Determined
- Actual Gross Margin
  - (AGM) is Calculated
- Expected Gross Margin
- Minus Actual Gross Margin = Indemnity

Questions about crop insurance? Call a crop insurance agent or our toll free information line 800-308-2449
Or visit us online at http://salem.rutgers.edu/cropinsurance

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