

DAIRY NEWSLETTER

Tricks and Tips for Fly Control

Managing fly populations in dairy operations is a constant concern for most producers. High fly populations can cause stress for the animals and negatively affect milk production and dry matter intake. Flies can also act as disease vectors and can carry pathogens including mastitis causing bacteria. Dairy barns are the perfect breeding ground for flies. The barns offer flies perfect conditions such as heat, moisture and plenty of organics (feed & manure).

This newsletter will briefly outline how to effectively control the fly population. The most important thing to take away is that flies multiply quickly. A single fly has the potential of producing 64,000 offspring by mid-summer. Therefore early intervention at the beginning of the season decreases fly pressure throughout the summer.

In the barn, visible adult flies represent only 15% of the population; eggs, larvae and pupae that are hidden in the manure and bedding account for the other 85%. A fly control program for increased biosecurity is a necessity.

This year the fly population seems to be particularly high with Stable flies which inflict painful bites and feed on blood. They typically frequent the lower parts of the animal especially the front legs. They are most abundant in years that are hot and wet.

<u> Tip 1</u>

Controlling fly breeding areas with moist organic material is very important and cost effective. The biggest contributors on most dairies are **straw packs** and **calf pens**.

The life cycle of the fly from larva to adult is accelerated in hot, humid weather to as short as 7-10 days. Removing bedding every week will help break the reproductive life cycle and reduce new flies in the population. Be sure to scrape out corners where bedding builds up. Increasing ventilation will keep bedding drier and protect the cows while resting. Portable fans can be used in areas where the fly population is particularly high.

Flies preferentially lay their eggs in straw packs over bedding with wood shavings or sand. Consider changing from straw to one of the other bedding sources for the summer months.

The exterior of the barn should also be considered. Keeping grass around the barn, bunks and other outbuildings cut short reduces the breeding ground.



<u> Tip 2</u>

Watch and monitor fly volumes – using **sticky papers** and **wires** are a good monitoring tool and a great first step in fly control. Install them in areas that flies normally congregate. The papers and wires seem to "find" the flies before we even notice them, and are great to start as early as possible in the year. They are most effective if they are installed in high fly traffic areas.

<u> Tip 3</u>

Effective and efficient use of **insecticides** is important:

Watch where the flies tend to congregate; these are ideal areas to start applying space spraying insecticides. Prior to applying a surface spray, ensure the area is clean and dry to get full effect of the product. Follow label directions.

If further control is still needed, use granular bait. This can be mixed with pop (coke) to be able to paint on walls if flies congregate there. Flies tend to feed within 4 feet of the ground, so concentrate on applying products on this area of the wall.

IMPORTANT TIP: use small amounts of granular bait in many different areas and refresh daily, baits lose their effectiveness quickly once they are put out in the environment.

Pour-ons, like Cylence, and sprays labelled for use directly on the animal are our <u>last</u> line of defence. Prevention is always more effective than treatment. Products that have residual action for several weeks are most effective.

Fogging the barn is a quick, instant way to knock down the present adult fly population. Fog the barn with a fast acting pyrethrin based insecticide when the barn is empty. Leave for 2 hours and ventilate the barn well before re-entry. Spray cans that are labelled for use in the milkhouse can be used to reduce the adult fly population here.

For a long acting effect apply a residual insecticide to walls, posts, window ledges and ceilings. This application will ensure residual insecticide activity for several weeks. Remember to rotate insecticide to prevent resistance. Exterior applications can also be made with an approved insecticide. This application will provide more contact surfaces to kill flies. Repeat outside application at least once a month due to the sun and rain breakdown of the insecticide.

Take Home Message:

There is no silver bullet in fly control, but each method adds to the overall effectiveness. When the population seems to be increasing, add another method of control; together they will be synergistic and help reduce the fly population.

The real trick to fly control is to start **EARLY!** Control breeding areas as much as possible; add more levels of control as required. Flies are a biosecurity issue and so control is important. Your veterinary team is a good resource for advice.