

Fly Control in March?

- How effective was our fly control last year?
- Using an integrated pest management (IPM) approach, what will be the most effective methods this fly season?
- Selecting fly control methods
- Scheduling fly control activities

How effective was our fly control last year?

We usually assess fly control effectiveness based on fly numbers. If we actually used monitoring techniques like baited traps or spot cards there will be numbers to use. Click <u>HERE</u> for advice on making traps and using spot cards.

When baited traps captured over 250 flies per week or spot card counts exceeded 100/card per week our control effectiveness was marginal.

Or, maybe we did not use either of these methods. Our best eye-ball estimates are recalled like this, "Flies not too bad in early summer but by August and September we were just overrun with flies," or "Not too bad last summer, even in late August and September there were not too many around."

On the farm I had the advantage of having a weekly calendar that hung in an open work area. Because I wrote notes on these pages I saved them. One winter while I was going over these to pick off information about vaccinations I realized that the pages from late summer into early fall were just awful – just covered with fly specks. Yes, you are correct – that was the year we had very ineffective fly control. Maybe you want to give some thought to how you might build spot cards into a routine you already have on the farm.

Using an integrated pest management (IPM) approach, choose fly control methods for this season

So, now you have a guess on what did or did not work this past year. We know that an IPM approach to fly control will be more effective than using a single strategy. The parts of an IPM program are:

- 1. Cultural control Practice sanitation; Use sticky tapes, paper and ribbons; Maintain a fly-free zone in the milk room; Prevent flies from emigrating from the facility
- 2. Biological control Parasitoid releases help keep ahead of fly hatches

3. Chemical control – these include space sprays, baits, larvicides, residual premise sprays and whole-animal sprays.

Experience on dairy farms has shown that an IPM approach to fly control that includes combinations of cultural, biological and chemical methods will be most cost effective in keeping fly populations below economically injurious levels.

Selecting and Scheduling fly control methods and activities

Waste management is the most important step in an effective fly management program. It needs to have priority during spring, summer and fall seasons. Get rid of manure, moist hay, silage and grain. Immature flies live in this waste and, depending on temperature, will mature in 10 to 21 days. Routine weekly removal of these kinds of waste will break the fly life-cycle and de-populate your calf housing. Watch out for waste feed at the ends of mangers, wet waste near waterers, and avoid accumulation of waste calf starter grain near hutches and calf pens.

Removal of tall grass and weeds near outdoor housing will get rid of environments that tend to provide hiding places for flies, as well. This is a chore for the entire growing season.

Biological controls include what have been called "smart bombs." These parasitic wasps or parasitoids live only to kill fly pupae. On farm it takes about three weeks for the egg to adult wasp maturation. Since the fly life cycle is much shorter than three weeks it is easy for the fly population to get ahead of this natural predator as the summer progresses.

If you choose to release extra parasitoids (wasps) remember that they come to you as immature insects in killed fly pupae. Then you can distribute them from hutch-to-hutch or around in a calf barn at locations most likely for flies to lay eggs. Check with your veterinarian to be sure you purchase the right species for your geographic area.

There are general guidelines for parasitoid release. These include when to start and stop the release. And, how many wasps to release each week. The experience can vary a lot from farm to farm. By monitoring fly populations during the fly season each farm can tailor the release schedule to be most cost effective. Ask for advice from your supplier.

The Cornell Extension publication, "Integrated Management of Flies in and around Dairy and Livestock Barns," (click <u>HERE</u> to access) reminds us, "It is important to understand, however, that no single fly management strategy such as parasitoid releases alone will provide long-term control."

2016 Integrated Pest Management Guide for Organic Dairies is available at this URL <u>https://ecommons.cornell.edu/handle/1813/42899</u> or click <u>HERE</u>.

Reference: Accessed 3/1/2017 <u>https://vet.entomology.cals.cornell.edu/arthropod-identification/chicken-recommendations/house-flies</u>

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Remember to search for "Calves with Sam" blog for profit tips for calf rearing.