



CATTLE CORNER

Fly Control for Organic Dairies

by Jade Archer, Certification Specialist

There are many different types of external pests found on the organic dairy farm. Fly pests in particular cause annoyance, irritation, and stress to livestock. Fly pests can cause a reduction in grazing time, reduced feed conversion efficiency, a decrease in weight gain, decreased milk production, and disease transmission which may have animal welfare impacts as well as negative financial implications.

Three of the most common flies found in pasture settings include the face fly, the horn fly and the stable fly.

1) Face Fly —



A relative to the house fly, the face fly has a tendency to be found around eyes, nose and face. Only female flies will be found on livestock. Females feed off of secretions because they contain proteins that help them develop eggs. These are non-biting insects, but can scratch/lacerate. The diseases that the face fly carry include pinkeye and eye worm. The habitat for face flies is fresh undisturbed manure.

2) **Horn Fly** — Most commonly found on the sides of animals but, during the heat of the day, the horn fly will move to the top of the back. Both the male and female flies are biting and will take 20 blood meals a day. Similar to the face fly, the habitat for horn flies is fresh undisturbed manure. Eggs are most often laid in manure that is less than 20 minutes old.

3) **Stable Fly** — The stable fly has a tendency to accumulate on the lower legs of livestock. These are very aggressive biting flies. Livestock will stomp their legs in an attempt to stop the stable flies from feeding. Localized hair loss where animals have been bitten is common. Stable flies will also bite dogs, humans, etc. Both males and females actively feed. The stable fly habitat is not in fresh manure like the face and horn flies, but in moist organic matter (e.g., silage areas, feed bunks, large round bales, compost areas).

Pasture fly management — an integrated approach

- **Cultural measures**
 - Face and horn flies do not enter darkened barns or stables. Offer your livestock shelter and shaded areas.
 - Monitor your livestock to understand the fly population on the farm. Get up close to standing animals and observe the face, back and legs for flies. Look at 5-10 animals, check weekly at the same time of day and keep records.
- **Mechanical control**
 - Traps are effective at reducing the population of flies. Traps work by attracting the flies by mimicking the host's movement or color.
 - Chain/drag harrow through pasture to disrupt the life cycle of flies in manure.
- **Biological control**
 - Dung beetles are natural enemies of flies that can be found in livestock pastures. Some dung beetles live in manure, and dung beetle larvae compete with maggots for food.
 - Parasitic wasps.
 - Pastured poultry.
- **Insect repellents**
 - May require repeated applications. Please remember to check with your certifier before purchasing a new material to verify it is approved for organic use.

If you have any questions about fly management on organic dairy farms please contact MOFGA's farmer programs livestock and dairy specialist, Jacki Perkins, or your certification specialist.

