The Flying Four: Common Flies of Concern to Dairy Farmers

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Face Fly (Musca autumnalis)



- Found around eyes and nose.
- Both males and females feed on nectar and spend 95 percent of their time off-host.
- Females lay eggs in fresh manure (< 10 minutes old).
- Adults fly long distances.

Problem: Females feed on facial secretions and can cause pink eye.

Solutions:

- Treat when 10-15 flies are feeding per animal.
- · Control with insecticides.
- Reduce dense vegetation in pasture.
- Unaffected by parasitic wasps.

Horn Fly (Haematobia irritans)



- · Found on back, withers, shoulders belly and udders.
- Head typically facing down.
- Adults are obligate ectoparasites and leave host to lay eggs in dung pats.

Problem: Males and females blood feed 20-30 times a day, which reduces calf weights and milk production and can transmit mastitis-causing bacteria.

Solutions:

- · Monitor flies on animals with images.
- · Control with sanitation, vacuums and insecticides.

House Fly

(Musca domestica)



- Found on rear of animal and wet surfaces.
 Eggs are laid in compost
- Eggs are laid in compost, manure and other decomposing wet material.

Problem: Annoyance and mechanical vectors for numerous pathogens.

Solutions:

- Monitor weekly with spot cards.
- Treat when spot cards are > 20 percent spotted.
- Control with sanitation, insecticides and parasitic wasps.

Stable Fly (Stomoxys calcitrans)



- Adults are found blood feeding on legs.
- Head typically facing upward.
- Immatures develop within hay feed and any wet decomposing organic material.

Problem: Blood feed multiple times a day causing anxiety and open wounds for secondary infections.

Solutions:

- · Monitor flies on animals by counting flies on front leg.
- · Monitor flies with traps around facilities.
- Treat when approximately 10 on front legs of animal.
- · Control with sanitation and parasitic wasps.

Common Solutions for All Flies:

- Sanitation: Remove wet organic material to prevent the next generation of flies from developing.
- Exclusion: Use netting, fans and/or screens to keep flies out of facilities.

 Record and Rotate: Insecticide active ingredients to prevent development of resistance.



Sources:

- Painting of cow: Meredith Tarkington
- Image of stable fly: bugguide.net/node/view/1093163
- Image of horn fly: bugguide.net/node/view/683558
- Image of house fly: https://bugguide.net/node/view/1284785
- Image of face fly: bugguide.net/node/view/1111093
- More Information: veterinaryentomology.org
- Insecticide and Active Ingredient Database: veterinaryentomology.org/vetpestx

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