

Fly control takes 1-2-3 approach

By North Carolina Cooperative Extension on March 16, 2017



Cleanliness in dairies and feedlots is paramount when it comes to fly control. Here, old corn stalk bedding in a dairy provides ideal conditions for the development of stable-fly larvae and pupae. (Photo by Melina Florez-Cuadros, Department of Entomology, University of Nebraska–Lincoln)

Face, stable, horn and house flies are economically important fly species. Flies transmit disease, including mastitis and pinkeye, and uncontrolled populations reduce milk production and heifer growth.

Face flies feed on tears, saliva and mucus on the faces of cattle. House flies feed on manure and decaying organic materials, while stable and horn flies feed strictly on blood.

Face and horn flies lay eggs in fresh manure pats in pastures; meanwhile, stable flies and house flies lay eggs in any rotting organic matter.

Elimination of fly problems is not possible, but fly control can reduce the numbers of these pests to an acceptable level.

Fly control consists of three main types: physical, biological and chemical.

Pesticide resistance is a growing problem; therefore, any chemical-control measures must be supplemented with physical and biological control.

Strict sanitation and mortality management, especially around calving areas, silos, grain bins and hay racks, plus prompt manure removal and disbursement help control these pests.

Biological fly control uses natural enemies to reduce fly populations. Parasitic wasp larvae are the most common biological-control method used by cattle producers. These insects may be purchased from biological-supply houses. The small adult wasps do not sting cattle or humans; instead, they hunt and kill fly pupae.

Many bird species feed on flies, among them bluebirds, purple martins, tree swallows and barn swallows. An individual bird can capture and eat hundreds of flies daily.

Open pastures with wooded borders are the sites bluebirds frequent most often. If this describes your location or if you have seen bluebirds nearby, put out bluebird nesting boxes 100 yd. apart at the edge of fields.

Purple martins prefer to dwell in communities. You can encourage them to move onto your farm by hanging groups of gourds for them to nest in.

Electronic pass-through stations are another effective control method. The cattle pass through a short tunnel. Black lights encourage the flies to leave the animal and pass through electric-charged panels where the flies are electrocuted.

Chemical-control methods exist for different life stages. Make certain any pesticide selected for application directly to animals is approved for use in lactating dairy cattle. For maximum effectiveness, use larvicide products as well as chemicals that kill adults.

When it comes to horn and face flies in operations that use grazing as a method for cow feeding and/or housing, chemical-impregnated ear tags and fly blocks are a popular fly-control method. Other chemical-control methods include foggers, exit-lane dusters and pasture back rubs.

Chemical-control methods may be less effective than other options, primarily due to development of pesticide resistance. Reduce pesticide-resistance problems by taking the following steps:

- Read and carefully follow all pesticide label directions.
- Begin your fly-control program in very early spring when flies first appear.
- Use a combination of physical-, biological- and chemical-control methods.
- Alternate products by their mode of action; do not use the same chemical all year.
- If ear tags are used, replace ear tags as effectiveness wanes.
- Remove ear tags at the end of the fly season.
- Frequently check and replace chemicals used in exit-lane dusters or pasture back rubs.
- Monitor and maintain all pesticide-applicator equipment.

For more information: <https://caldwell.ces.ncsu.edu/FlyControlforDairyCattle/>