

# Northwest Veterinary Associates Newsletter

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## Don't let flies “bug” your bottom line



Now that the spring mud season is (almost) over, it's time for the hot weather and fly season! So, before things get swarming out of control on your farm, now is the time to establish your dairy's fly control program. Flies are more than just a nuisance and can be very costly to a dairy's bottom line. They are particularly detrimental to replacement heifers, by decreasing feed intake and spreading diseases such as pinkeye and mastitis. When deciding on what preventive methods are appropriate for your dairy it is important to recognize the fly species which you are dealing with.

The most common irritating flies are:

- **Horn flies**- These flies spend most of their time on the animal and take 20 to 30 blood meals a day. They often point their heads toward the ground -- giving them a "V" appearance, as they lay eggs in fresh manure.
- **House flies**- House flies spend their time feeding on decaying organic matter and spoiled feed. They usually lay eggs in rotting organic matter, such as old hay or manure. This species causes only mild irritation.
- **Stable flies**- These flies take 2 to 3 painful blood meals per day, usually on the legs of cattle. After, they rest in trees and shade. The painful bites will cause cattle to bunch up, stomp and kick. Drop in milk production may even be seen.
- **Face flies**- Face flies spend most of their time around the mouth and eyes and feed on tears and saliva with their sucking mouth parts. They cause irritation and can spread the bacteria that causes pinkeye.

### Flies and disease

In addition to spreading the pinkeye bacteria, flies can also threaten udder health. Biting flies, like horn flies, congregate on the teat ends and can transmit mastitis-causing bacteria as they feed and cause damage to the tissue. In heifers, such lesions become an ideal place for bacteria to colonize and eventually enter into the developing udder.

The good news is that these health issues can be minimized with an appropriate fly control program. The overall item that will generally result in the largest economic return for your investment is effective sanitation. This includes not only manure management but also the elimination of any moist, decaying organic matter. Pay close attention to spoiled commodities, silage bunks or bags, leaks in augers, old wet hay, calf hutches, bedded packs, under and next to feed troughs, and fence lines. Remember that generally 90 percent of your dairy's flies will be developing in less than 10 percent of its physical area; therefore, the elimination or cleaning up of those areas will greatly decrease your fly populations.

### Your tools for fly control can include, but are not limited to the following:

1. **Sanitation** – Manage your manure and eliminate sources of decaying organic matter.

## 2. Chemicals –

- **Ear tags** are a good solution for flies that spend most of their time on the host, such as horn flies and face flies. They have a limited life-span, so most people recommend waiting to attach them during fly season. There are several products, and rotating between organophosphate- and pyrethrin-based ear tags will help slow fly resistance to the chemicals.
- **Pour-on** fly control can help protect against all species of flies. The product is applied to the poll and back. These treatments can be more labor intensive and may need to be repeated, but offer highly effective broad-spectrum control.
- **Environmental control** can be effective to control fly populations by reducing their nesting environment. Products such as sprays or granules can be applied to calf hutches and other structures flies land, and kill adult flies on contact. Similarly, there are premise sprays and granules formulated to kill the larval stages of the flies. Most products last about 3 months, however re-treatment interval depends on many factors such as sanitation and weather conditions.

\*At any one time, only 15% of a fly population exists as adult flies. So, relying on just one insecticide to kill just adult flies is an inefficient approach.\*

3. **Parasitic wasps** – Coupled with good sanitation management, parasitic wasps can provide an effective and economical way to keep the fly population in check. Regular releases are required to maintain effective fly control. Wasps attack the pupal stage of the fly and kill it before the adult fly can emerge and lay additional eggs. Release should be started just before fly populations start to increase and continue through the fly season.
4. **Sticky tapes and traps** – These help to keep the adult fly population reduced. Specifically designed traps are required for stable flies.
5. **Baits** – Baits help to reduce egg-laying adults and complement good sanitation. Baits are only effective against house flies and resistance can be a problem.
6. **Feed additives** – Several different types of products can be used in the feed that pass through the animal, killing the fly larvae in the manure. They are most effective in reducing the flies developing in the manure; however, some may be damaging to the beneficial insect population (parasitic wasps and dung beetles). Remember there are many non-manure fly breeding areas (waste feed, silage, wet hay, etc.) that will continue to produce heavy populations of flies even if using these products.

Once your fly control plan is established, don't forget to evaluate its effectiveness. This is as simple as walking around your dairy- look for maggots and note those areas that need to be cleaned up or dried out. Monitor adult fly numbers and look out for decreased milk production, pinkeye lesions, and increased incidence of mastitis.

Fly control on a dairy is not difficult, but a plan is necessary to make any program work. There are no magic bullets that will overcome poor sanitation. No two years are the same and wet winters and springs will usually result in a much worse fly problem than dry ones. A one-size-fits-all fly control plan for all dairies doesn't exist. Each dairy has its own unique facilities and management, and each fly control program will have to be individually designed to meet your dairy's specific needs.

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