

## Shoo Fly

**Minimize your horse's discomfort during the fly season by using our three-pronged defense.**

*By Cindy Hale*

"I know an old lady who swallowed a fly. I don't know why she swallowed the fly..."

Chances are, the old lady mentioned in the folk song above was visiting a stable during warm weather. Horses plus manure plus a warm environment equals flies. Swarms of them. The ubiquitous horse fly, the bee-like bot fly and the nasty black fly are but a few of the winged pests that torment our horses. But you don't have to surrender to the annual onslaught. By using a three-pronged attack, you can help your horse endure the fly season with minimal discomfort.

### Prevention

Beyond just plain torture that causes a horse to endlessly swish his tail or stomp his feet, persistent flies can also bring disease. The tiny flies that feast on the moisture of your horse's eyes may carry infectious conjunctivitis, an inflammatory eye disease that causes redness, swelling and itching. If you notice that your horse breaks out in tiny, crusty bumps each fly season, he may have an allergic dermatitis brought on by a reaction to the saliva of the biting flies. Even worse is an infestation of habronema, a tiny parasite harbored by certain flies. When the habronema larvae hatch, they invade surrounding tissues, causing an ulcerative condition called a "summer sore." Often the only treatment is to have the summer sore excised. Using preventive methods to ward off an invading army of flies is your first line of defense.

Begin by eliminating the flies' favored breeding ground: manure. Merely cleaning corrals and stalls and stockpiling the manure a few yards away isn't sufficient. Neither is dumping the soiled bedding in the arena or pasture: This only provides hotel accommodations for flies that then travel a short distance back to the horses for dining festivities. Manure disposal is one of the biggest management problems horse owners face. Fortunately, though, gardeners, landscape companies and commercial mushroom growers view your horse's used bedding and manure as a valued commodity. However, you'll usually have to deal with a middleman who'll haul away the manure (destined for compost) for a nominal fee. Towns with a substantial horse population often provide contracted service with their waste management company to collect manure-filled trash bins on a pre-arranged schedule.

Another step is to reduce ready food supplies for the flies. Besides what your poor horse has to offer, flies' taste buds are drawn to anything moist, sweet and slightly spoiled. If you feed grain, alfalfa, molasses, carrots, horse treats or sugar-based supplements, check feeders and surrounding areas for leftovers that might go bad. Besides posing the threat of colic for your horse, spoiled feed ranks high on the fly's gastronomical wish list.

Finally, moisture draws flies. If your horse lives in an outside paddock or corral, sprinkle shavings over his favorite "potty spot" to keep the ground as dry as possible. Also repair any leaking automatic waterers or punctured water tubs. The constantly damp soil around them is a magnet for flies.

### Protection

Your second line of defense is to protect your horse from the ravages of flies. Invest in one or more barrier methods to fend off the pests.

Since flies are particularly attracted to the natural moisture produced by the tear ducts of your horse's eyes, you'll need to purchase a fly mask. Masks are made from soft, flexible mesh material that looks like a very soft window screen. Though styles from manufacturers vary, the basic design covers the horse's eyes and attaches with a hook-and-loop fastener under the jaw. Some styles go one step further and include ear pockets, but make sure your horse will accept wearing such a fancy hat.

Without a face mask to protect your horse, flies may actually begin to dine on the tender flesh around the tear ducts. If this happens, you'll notice pink areas where the normally dark skin has become de-pigmented. Flies may also deposit eggs within the folds of the eye's lower lid. This will require diligent flushing with sterile saline solution, or veterinary attention to remove the eggs.

Another protective garment for your horse's face is a crocheted ear bonnet. What began as an item of necessity on the grand prix jumper circuit, where a horse distracted by gnats on the way down to a huge oxer could spell disaster, quickly became an equine fashion statement. The cotton bonnets are made in many colors and include a "v" of woven tassels that

dangle discreetly above the forelock, swishing flies from the horse's face. Nowadays, not only do jumpers wear the crocheted bonnets, but so do dressage horses and pleasure mounts.

On the lower end of the horse, flies are notorious for biting horses' legs until they become sore and raw. This is primarily because horses can't help but be standing in damp bedding or next to manure at least part of the day, so their legs are always in the vicinity of the flies' playground. As flies bite through the skin of the lower leg, tiny scabs form. The blood draws more flies. They bring along bacteria, and soon the oozing skin is infected. Patches of hair may fall off, leaving bright pink, inflamed skin exposed. To help ward off these lower leg assaults, you can purchase leg wraps made from the same material as the mesh face masks. Trimmed in fleece and held in place with a hook-and-loop fastener (much like shipping boots) these leg wraps keep your horse from stomping his feet constantly in protest.

Finally, to cover your horse from chest to tail, fly sheets are a reasonable choice. Again, made of mesh material, fly or "scrim" sheets are made to be worn either in a stall or, if made with heavy duty fittings and straps, outside in a paddock. Not only do fly sheets keep those nasty, huge black flies from chomping on your horse's hide, but they also provide a measure of sunscreen protection for dark coats that bleach out in the sun.

#### Taking Action

Once your horse is covered, it's time to go on the offensive, making a gallant effort to reduce the local fly population. Any dent you can make in the number of flies on your property is commendable.

The most familiar method of fly abatement is fly spray. But that's not all there is to the story. Fly sprays can be either insecticides, which kill flies, or repellents, which deter flies from landing on your horse. Insecticides are indispensable around the stable for selective ground spraying, and for nailing flies in the evening when they're sitting on the tack room ceiling. Insecticides approved for use directly on horses are generally short-acting and are often combined with a longer-acting repellent. The milder spray repellents are sold both as ready-to-use in their own spray bottle, or as concentrates that need to be mixed with water. Always read and follow the directions carefully to make sure the concentrate is diluted correctly. Though most ingredients in fly sprays are made from natural compounds (pyrethrins, for example), they are powerful combatants. However, if you're dedicated to using even more benign ingredients, several products are available that are formulated with herbal ingredients such as eucalyptus oil and lavender. Though they may smell inviting, check for their longevity and effectiveness. Unfortunately, in some parts of the country, flies seem to have evolved to be immune to anything but the biggest guns of the fly spray armory.

Beyond just spraying your horse or the stable yard, you can invest in a misting system that periodically sprays a pre-mixed solution from the rafters of your barn. Popular with many large equestrian centers, misting systems appear to be worth the initial investment if for nothing else than chasing the flies out of the barn, giving horses a safe haven.

Various forms of fly traps provide us humans with a sense of gratification as we watch the winged pests struggle to free themselves. (Tough.) Traps are inexpensive, but must be used extensively to make any sort of improvement in the fly situation. They may require some mixing of noxious compounds to form a bait to lure the flies into the trap. Once full, the traps are disposable, but you must keep an eye on their placement — kids and terriers can become entranced with the buzzing of trapped, smelly flies. Fly tapes are also useful, but they must be hung above the heads of horses and humans, lest the sticky goo ends up in mane or hair.

Perhaps the most creative line of attack is the use of fly vectors. Tiny, stingless wasps called pteromalids are natural enemies of fly larvae. There are several suppliers who can provide you with enough of these little good guys to do sufficient damage to the fly count on your property. At regular intervals, the wasps are shipped to you in a box. You simply set them free around manure or damp paddock areas, anywhere flies are likely to breed and hatch. They're an inventive and wholly natural method of fly control. Be aware, however, that pesticides used to kill flies will also wipe out your working wasps.

#### When Flies Force a Vet Alert

When do fly problems warrant a visit from your vet? Here are a few warning signs that your horse may need more help than simple over-the-counter remedies:

Swollen, puffy eyes with discharge. It's too late now to hang a fly mask on your horse's face. First you'll need to have your vet inspect your horse's eyes to check for fly eggs, or larvae that have burrowed into the mucous membranes around your horse's eyes. Your vet might prescribe a follow-up antibiotic eye ointment to clear up conjunctivitis. And then, be extra diligent with the fly mask to prevent a recurrence.

Wounds (especially on the lower legs) that won't heal. OK, this is gross, but flies eat raw tissue, and may actually lay eggs

that hatch into maggots in your horse's wounds. If you see maggots, call your vet immediately. Flies also carry bacteria picked up from feeding on spoiled materials and other infected horses. If you notice swelling, heat and a pus-tinged discharge coming from the wound, call your vet right away. You might also see fly larvae in the wound. Once the wound is cleaned, you will probably need to keep it bandaged until it begins to heal. Antibiotic creams combined with a fly repellent are also available to help avoid this gruesome scenario.

Your horse breaks out in clusters of tiny, crusty bumps that seem to drive him crazy with itching. In some cases, your horse may actually lose the hair from the top of these bumps, leaving him looking moth-eaten and speckled. This condition is usually caused by an allergic reaction to the saliva of the biting flies. While a soothing, medicated shampoo can help make your horse feel better and keep the sores from becoming infected, your vet may recommend an annual allergy shot (actually a long-acting steroid) to alleviate the misery.

After using a fly spray or wipe, your horse breaks out in welts and appears to be in pain. Did you dilute your fly spray concentrate correctly? Your horse may be having a severe reaction to either the strength of the mixture or to one of its ingredients. In fact, some horses with thin skin that are stabled outside have been known to actually blister from oil-based fly sprays, with an effect similar to slathering yourself with baby oil and lying in the sun all day. Your first action is to saturate your horse's coat with cool water (no soap!) and then call your vet for further advice.