

Tips For Dairy and Beef Operations

It sounds simple but overall sanitation is the most important and effective way to control flies. The smart thing is to clean up the 10% of the farm that's probably making 90% of your flies and let Fly Predators take care of the rest. You'll spend less and get better results.

Identify the Fly. The first step is to identify the insect(s) that are plaguing you and your animals. This is important as the variety of flies that bother your animals can come from dramatically different sources and knowing where to attack the problem is essential. For example, House Flies primarily reproduce in moist (not too wet and not too dry) manure, but Biting Stable Flies prefer rotting vegetation (spoiled feed and silage) over cow manure and Horn Flies and Face Flies reproduce only in pastured cattle manure that is undisturbed. Most of the common dairy pest flies are easy to identify by simply looking at your animals. If the flies are primarily on the legs or flanks, causing the cows to bunch and stomp, those are Stable Flies. If they are small and primarily on the back, those are Horn Flies. House Flies can be anywhere but they will be the large ones on the face around the eyes and muzzle.

Find the Maggots. The second thing to do is look for larvae (maggots) as this will tell you where your fly breeding "Hot Spots" are. You'll find larvae in moist manure areas or the wet edges of a silage pile or bunker, or the bottom of a round bale feeder, the spilled material outside a feed bunk or under a conveyer. Scratch below the surface to find them as they'll never be on top. See a maggot or two, no big deal just make sure there are some Fly Predators near here. But if you see lots of maggots, this is a prime hot spot to clean up quick and put more Fly Predators near here. To control Horn Flies you will need to put Fly Predators in the pastures every 150ft.

Management Your Manure. For most commercial livestock operations manure management is THE most important variable in any House Fly control program simply because this is the largest single source of (from a fly's perspective) "the good stuff". There are two variables with manure that you can most easily change. The first is the quantity of manure, the second is the moisture content of that manure.

Move It. Hauling manure at least a 1/4 mile away in the summer no less often than every seven days is one option. This distance and time is important as flies generally travel no more than 1/4 mile (they can go farther) and they take at least 8 days to go from an egg to an adult fly at summertime temperatures (85°F). So rather than cleaning out the barn and piling it right next to it (which insures that ALL the flies coming off that manure will make it to your barn) stockpile it near where you will be spreading it far away.

Sink It. A fly larvae has to be in a medium that is between 40-60% moisture or it simply won't complete its development. Increase the moisture of your manure by holding it in a liquid lagoon as a fly can't reproduce

underwater. But make sure that you do not let a solid crust form on that lagoon or you will have a huge fly factory there. The top of the cap will be too dry and the bottom next to the water will be too wet, but somewhere in the middle will be just the perfect moisture for optimum fly production. The cost of diesel or electricity to agitate it regularly, or adding bacteria to help keep it liquid, or installing a solids separator can be great investments in fly control.

Pile It and Compost It. In areas that receive regular summer rains collect the manure frequently and stockpile it in a pile. When you do this the manure that is deeper than six inches from the surface becomes too hot for a fly larvae to survive due to decomposition. So even if the pile is mountainous only the outer surface will reproduce flies. If you are not turning it, one big pile is better than a bunch of small piles as you are trying to minimize the surface area. A compost barn that is rot-tilled daily produces very few flies. Likewise composting in rows and turning frequently is very effective for creating great fertilizer and few to no flies.

Dry It. For areas that receive little moisture during the summer a good choice is to dry the manure. Best is daily collection and spreading manure thinly on crop areas or a concrete pad. Running a harrow or screen drag around your pens and pastures to break up the pats into smaller faster drying pieces can be very effective. Keep in mind that you are in a race with the flies as you want that manure to be less than 40% moisture by the 5th day from new. This is because at the optimum temperature of approximately 85°F it takes at least 5 days for a pest fly to pupate (form its cocoon) which is a really critical time for the moisture level. If it's drier than 40%, the fly's puparium (cocoon) doesn't form properly and that particular fly is toast.

Clean It. Do the best you can to clean stalls, corrals, paddocks, pens, drainage areas, loafing sheds, calf barns and hutches, feeding aprons, spilled feed and other decaying organic matter at no more than a seven day interval. If you remove the pupae before the flies have emerged, (8 days minimum) the difference can be enormous.

Don't Overlook Spoiled Feed. The Biting Stable Fly prefers rotting vegetation, not cow manure. So if you have these bad boys bothering your cows look for maggots in the wet spoilage at the outer base of a silage pile or on the front edge of the bunker, in a bedded pack barn by the fence, in calf hutches and pens bedded with straw, spoiled feed in front of or behind a feed bunk, the old feed at the bottom of round bale rings or the bottom of square bales. The best way to fix this is to spread out that spoiled feed and dry it. If you can, bed your calves with sawdust or sand, not straw during fly season.

Spalding Fly Predators

Questions? 1-800-560-6441

Help Line 8AM to 6PM PST M-F


Spalding Fly Predators

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Fly Predators® Release Instructions

Controlling pest flies effectively with little or no pesticides on large livestock facilities is absolutely possible. To do so it helps tremendously if you know what kinds of pest flies you have and where they are coming from. You don't need to be a "fly geek" to have good ongoing control with the least amount of work and expense. But a little bit of knowledge goes a long way, so please take the time to read this information. Your animals (and spouse) will thank you for it.

General Instructions

Wait! Don't release your Fly Predators until you see a dozen moving around. They are shipped in the pupal (cocoon) stage which are the little black things. Normally they'll start emerging within 2-7 days after arrival in summer, (later when cooler) but it's OK if they're emerging on delivery. They look like tiny little ants with wings. Like this ⇒  When it's cool, keeping them in a warmer area (80-85°F) will speed up their emergence. When it's hot keep them under 100°F and out of direct sunlight while in the bag.

After emergence starts, release them in the next day or two as holding them longer than 5 days after that may reduce their effectiveness. Sometimes they are quite stinky, but that does not indicate a problem. Call if none have emerged on the 7th day after delivery in summer (14th day when high temps are 72°F or less). We guarantee live delivery and will replace if necessary.

Release your Fly Predators where pest flies are reproducing. This is often not where you see the adult flies. Sprinkle them out near all areas where there is, *or was*, fresh manure (or other rotting organic matter) that remains moist. This is where flies reproduce and Fly Predators find and kill them at the pupal stage. Fly Predators themselves do not need or eat moist manure, so don't leave some behind for them. It's best to remove all manure or spread it to get it dry within 5 days.

Put Fly Predators out proportionally to how much manure or rotting organic matter is in each area. Put some near the manure corner of corrals, the pasture rough areas, the manure pile as well as arenas and dry lots. Put them along fence lines or places where they won't get stepped on. For the barn leave 5-10% in the bag and hang it in breezeway.

Fly Predators can travel up to 150 feet, but it's better to get them within 50 feet of fly breeding areas. Flies can't reproduce in dried manure or feed, so don't put Fly Predators there. Even if you muck out daily, put some where manure was if the spot is kept moist from urine. Flies reproduce in rotting vegetation as well as manure. Put Fly Predators near any spoiled hay, feed, round bale feeders, grass clippings, etc.

Try to dry up moist areas such as near water troughs, leaky faucets, under stall mats, etc. Wetter than normal weather usually produces more flies. In that case add more Fly Predators to keep control.

Watch Out for ants, birds and chickens all of which will eat the pupae that Fly Predators are in at arrival. If you have free range chickens or ants put the Fly Predators in open sacks hung off the ground. Hiding them in grass can help with birds.

Keep pesticide sprays away from Fly Predators. They are much more sensitive to pesticides than pest flies. If you have to spray a horse do it away from any fly breeding area; i.e. not in the stall. If you use a residual spray apply it only to pest fly resting areas (a sunny wall, ceiling rafters) avoiding pest fly reproduction areas (manure, rotting vegetation). Fly Predators will only be found in the reproduction areas.

Fly Predators stop pest fly reproduction but do not affect existing adult flies. It takes about 30 days from first release to see a difference if you start after the pest flies populations have built up. If the fly pressure is great, use double or triple the normal Fly Predator quantity for the first few months to catch up *and* aggressively reduce adult flies as quickly as possible. For every adult fly you see, half of them will be females who can lay 900 eggs during their 21 day lifetime. Stopping this reproduction quickly helps your Fly Predators gain back control.

To get adult flies you can use traps, sticky paper or bait as these will not harm Fly Predators. Pick the right trap for the kind of flies that are bugging you. Most traps are for House Flies. If you have biting Stable Flies (found typically on legs and cause stomping) get a biting fly trap. Put attractant traps (usually water filled) *away* from your house or barn as these draw flies from a wide area. Sticky traps don't draw from a wider area and are OK in barns, but need to be in bright areas. Wide area spraying is often counter productive as it will decimate the Fly Predators and other beneficials so the pest flies will build up even faster without any natural control.

Flies travel 1/4 mile or more, so if neighbors have animals suggest they use Fly Predators too or put some of yours there.

Good manure management makes a huge difference. The less manure there is on the property, the less flies you'll have. Do the best you can to remove it, dry it or concentrate it into one area. If you see a reduction in flies, but still have too many, try 50-100% more Fly Predators for a month or two.

More tips and instructions (also Instrucciones Espanol) at: www.spalding-labs.com

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