



Prevention is the Cure

Fall treatment applications mean fewer fire ant headaches for farmers.

by *Megan Klein*

As the sweltering summer heat gives way to the cooler days of fall, many farmers, ranchers and their cattle experience relief from the frustrations of fire ants. This temporary reprieve, however, often causes farmers and ranchers to neglect what some experts consider the most important fire ant prevention time of the year.

Imported fire ants (IFA) are no longer just a painful nuisance. Since the first U.S. infestation in 1930, fire ants have produced colonies in most southeastern states. The U.S. Department of Agriculture (USDA) projections show that the population has the potential to increase and spread west to California and north to Virginia.

According to the USDA, these pests are responsible for \$750 million in damage every year. This cost stems from time and money spent repairing damaged hay-cutting equipment, paying veterinarian bills for injured calves, covering crop damage and caring for pastures that are laden with mounds.

Lawrence “Fudd” Graham, research fellow at Auburn University, says he gets calls in the late spring and summer from farmers and ranchers who are frustrated with fire ant populations and want to get rid of them quickly. While there are multiple methods to managing fire ants, he recommends a programmed approach to fire ant control.

“Often ranchers will get fed up with their fire ant situation, apply a treatment, fix the problem temporarily and do nothing until the colonies have built back up and they get frustrated enough to apply treatment again,” Graham says. “If you want to keep fire ant populations at a manageable level, the trick is to be proactive, consistent and strategic in your treatment practices instead of reacting in frustration to out-of-control populations.”

Colony life cycles

To be as proactive and efficient as possible, Graham and other experts encourage farmers and ranchers to take

advantage of a variety of available options when selecting a control program to fit their operation’s individual needs.

Some products quickly kill ants on contact or when ingested. Others, known as insect growth regulator (IGR) baits, neutralize the queen until the colony runs its lifespan and neither worker ants nor replacement queens — or “swarmers” — remain.

Henry Dorough, Alabama regional Extension educator, explains that fire ants, like many other insects, swarm in the warm seasons to produce new colonies. He says the most effective way to control a fire ant infestation and prevent swarmers from starting new colonies is to make sure the queen dies.

“Worker ants will continue defending the territory as long as the queen is alive,” Dorough says. “So it is best to use the queen as part of your overall management strategy.”

The normal life span of a worker ant is

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60-90 days. When applying an IGR bait, farmers or ranchers will begin to see results in four to six weeks as the workers complete their life span. As a result of the colony's growth regulation, there will be fewer workers to care for the queen, and she will not replenish the colony.

Fall treatments for clean springs

Rather than a quick-fix option, Graham sees baits as a longer-term, more sustainable solution.

“I like baits for several different reasons. One, they are very safe to use. Two, they are easy to apply. And three, for the control that you get they are very economical,” Graham says. “You need to be proactive with ant baits, because there is a delay in the time it takes for a bait to work. Normal toxicant baits are going to take two weeks to a month to work. IGR baits, depending on the time of year you put them out, are going to take four to 12 weeks to get a complete kill.”

Alabama cattle producer Greg Street owns a herd of approximately 60 Angus cows. When fire ants started taking over his pastures, altering his cattle's grazing routines and damaging his equipment, he approached Dorough to find a solution.

Dorough conducted mound counts and found an average of 236 mounds per acre in Street's pastures. Infestations of that severity disrupt the grazing patterns of cattle and lower productivity. He began plot tests using different treatment application methods.

“I was glad Henry wanted to do the application tests,” Street says. “I haven't had any damaged equipment since we started the treatments, so it must be working.”

Dorough ran tests using Amdro Pro, Extinguish Professional Fire Ant Bait and Esteem Ant Bait, which are the only fire ant baits labeled for use in cattle pastures and hayfields. He found the costs of the treatments were similar, but the application timings and effectiveness varied.

“One application of Amdro Pro cost almost \$11 per acre and achieved good control, but two applications had to be made to achieve the same control as one application of the IGR baits, which doubled the cost to \$22,” Dorough says. “The IGR baits, Extinguish and Esteem, ran closer to \$13 per acre but gained significant control with only one application per year.”

Extensive research by Texas A&M

University and Auburn University has shown that the timing of fire ant treatments is as crucial to treatment success as the product that is used.

“Fall applications of fire ant treatments allow you to start the spring clean,” Graham says. “I would suggest using fire ant baits in pasture and hayfield treatments probably once a year in the fall.”

Some researchers suggest quick control means quick reinfestation. Strategic treatments provide longer-lasting results.

“Using fast-acting baits like Amdro Pro in the spring will control ants in the immediate area, but when other colonies swarm, your land will be reinfested and you'll have to treat again to regain control of the population,” Dorough says. “With an IGR fall treatment program, you really only need to apply once in the fall to gain 90% control through next season's swarms and well into the summer months.”

Even with these options ranchers should

not expect a quick solution to an established infestation. Graham urges growers to adopt a proactive approach to fire ant treatment, using a combination of the various chemistries to address current problems and to prepare for future maintenance.

“Fall applications mean you can start your spring clean,” Graham says. “By applying baits in the fall you will have longer control, cleaner fields for your first hay cutting and better grazing pastures.”

Producers can develop a fire ant management program that best suits their operation by contacting their local Extension office or visiting www.extension.org/fire+ants, www.ars.usda.gov/fireant or <http://fireant.tamu.edu/> for the latest research and information.



Editor's Note: Megan Klein is an account coordinator for Archer Malmo, which provided this article on behalf of its client, Valent.



► Fire ants can quickly turn respectable pastures into unsuitable land for grazing. Proper management and timely application of fire ant baits control existing colonies and prevent future infestations.