



Protecting Penned Animals From Fire Ants

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The red imported fire ant, *Solenopsis invicta* Buren (Hymenoptera: Formicidae), poses serious threats to many insects, small mammals and young animals. Although this is true for animals that are roaming free, in a large corral or pasture, confined animals are at an even higher risk of attack. Confined livestock for 4-H or FFA programs (such as rabbits, chickens, pigs, sheep and goats), pets in kennels, horses in stables and exotic animals in zoos are a few just of the many vulnerable areas where fire ants can become a problem.

Fire ants cause a number of problems for managers of penned animals. They are primarily a nuisance because workers coming into contact with ant mounds or sources that have attracted ants can suffer from multiple stings that may be medically serious (see Fire Ant Plan Fact Sheet, FAPFS #023, on the Texas Fire Ant Project web site, <http://fireant.tamu.edu>). Occasionally, foraging ants are recruited to moisture associated with newly born or hatching animals, stinging animals multiple times and occasionally killing them (see FAPFS022). In addition, the ants are attracted to electrical and utility units and can cause equipment failure (see FAPFS011).

Attraction to manure and feed. Fire ants are omnivorous, feeding on a variety of food sources, although certain insects are their primary food source. They are also attracted to sources of water when conditions are dry. Many times, confined animals produce manure that breeds high populations of flies and other manure or dung-feeding insects. Fire ants are naturally attracted to these areas and build nests nearby with foraging trails that lead into the penned area. Not only can the fire ants feed on the manure insects in the pen, but they are also attracted to many types of animal feed. Fire ants have been known to feed on dry dog food, livestock feeds containing molasses and other types of “sweet” or oil-containing feeds. An animal may also be stung in the mouth if it feeds on fire ant-infested feed. Animals may go off such infested feed for a short period of time.

Prevention and control considerations. Integrated pest management considerations and management alternatives for eliminating problems caused by red imported fire ants include cultural, non-chemical practices as well as judicious use of selected insecticides (see Texas Cooperative Extension publications B-6043, “Managing Imported Fire Ants in Urban Areas,” and B-6076, “Managing Red Imported Fire Ants in Agriculture”, and FAPFS019, “Red Imported Fire Ant Management Considerations for Beekeepers”).

Non-chemical preventive practices. To keep fire ants from causing these problems, only give the amount of feed that the animal can eat and not leave any remaining in the bunk or bowl. Also be sure that the feed or food is stored in a way that ants cannot get into it. Some pet bowls (e.g., Fool-A-Bug®) claim to prevent insects from accessing food.

Keep cages and premises as clean of all food sources and sources of excess water as possible. Remove excrement, soiled bedding, and boards or other debris. Fix leaky faucets and improve drainage if feasible. For caged fowl, remove cracked eggs.

Ants can get into cages housed on supports or benches by crawling up the legs or support beams. Barriers can be used, such as placing legs in cans of soapy water or other suitable fluid. Other non-insecticidal barrier concepts are discussed in B-6043. In addition, ants occasionally gain access by crawling on objects such as tree limbs, clothes or electrical cords (not major power lines) touching or connected to the cages. These should be removed and/or re-positioned to prevent ant entry, taking care and using safe practices including cutting off power before performing this activity.

Regularly inspect the area around the pens for fire ant mounds (see FAPFS007), properly identifying the ant species (see FAPFS010 & 013) and consider all management options (see FAPFS012).

Chemical control options. Always select products with directions for treating the site(s) where the animals are located. Fire ant baits are recognized as one of the least toxic approaches for treating fire ants around animals (see B-6099, “Broadcast baits for fire ant control,” and FAPFS014, “Fire ant control methods around pets”). In the case of goats, sheep, cattle, horses, pigs, and dogs in outdoor corrals and other animal holding areas, certain fire ant bait products (e.g., Extinguish®, containing s-methoprene; Amdro®Pro or Siege®Pro, containing hydramethylnon) can be broadcasted applied as directed at a rate of 2 to 3 oz/ 5,000 sq. ft. or 1½ lbs per acre or applied to individual ant mounds. Avoid direct exposure of animals to bait granules. Justice®, containing spinosad, should be applied at 1½ oz / 1000 ft² or 3 lbs per acre, but it is not registered for broadcast application in pastureland. Whenever feasible, treat an area around the penned animals at least 120 ft. wide for maximum protection of these sensitive sites from ants foraging from nearby colonies (Martin et al. 1998. SW Entomol. 23:221-228).

Treating around rabbit cages should involve a combination of fire ant bait products applied beneath and around the vicinity of the cages and, if necessary, application of a long-acting contact insecticide to the cage legs and ground around supports to prevent fire ants from getting into cages. One product, Y-Tex® GardStar® 40% EC containing permethrin, is registered for treating fire ants in and around pens and kennels and can be used both as a surface spray and a mound drench. Take all necessary precautions to see that the sprays do not contact the rabbits or their cages.

For poultry and caged fowl, treatment options must include careful planning (see B-6076 for management options for poultry houses, livestock barns and feedlots). For caged birds not in contact with the ground, fire ant bait products registered for use in these sites will work well, although ants may be more attracted to competing food sources if sanitation practices are poor. If birds (including ratites - ostriches and emus) are housed on the ground in pens or yards, chickens, ducks or turkeys will eat any bait particles they can reach. In those cases, confine birds in their enclosure (e.g., chicken coop) prior to applying the bait to the yard, or apply in such a way the birds can not reach the bait. Also, if concerned about fowl eating bait, consider applying the bait at night while the birds are roosting. In warm weather, fire ants will usually collect most of the bait by morning.

Many other types of treatments for individual imported fire ant mounds may be suitable for use around animal pens, including hot water drenches or products containing orange oil containing d-limonene and synergized pyrethrins (see FAPFS012, 036, 039). Some of these alternatives are considered “organic” and leave very little, if any, residues and will provide relatively fast control of offending fire ant mounds. All things considered, it is still difficult to totally protect penned animals from fire ant stings. This fact sheet will provide some clues and suggestions for reducing the potential for fire ant-related problems.

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For more information regarding fire ant management, see Extension publications B-6043, *Managing Red Imported Fire Ants in Urban Areas*; B-6076, *Managing Red Imported Fire Ants in Agriculture*; B-6099, *Broadcast Baits for Fire Ant Control*; or L-5070 *The Texas Two-Step Method Do-It-Yourself Fire Ant Control for Homes and Neighborhoods*. Also visit our web site at <http://fireant.tamu.edu>.

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