



Improving Fire Ant Management Practices

Impact Statement

The Problem/Issue:

Fire ants affect nearly everyone in Alabama. They can adversely affect our health, agriculture, wildlife, and environment. It has been estimated that fire ants cost Alabamians \$175,000,000 per year. Fire ant management is frequently crisis oriented, relying on the use of harsh chemical insecticides. As a rule, people spend too much money and time, and use too many pesticides trying to control fire ants. Environmentally safe fire ant products are currently available for use. However, they are often applied improperly.

What's Been Done:

A sustainable approach to fire ant management can make fire ants easier to live with while reducing social, economic and environmental costs. The Alabama Cooperative Extension System's goal is to increase the general level of knowledge about fire ant management by 20 to 25 percent. A tiered training approach has been used. In 2000, 40 county agents were trained in fire ant management. In 2001, educational publications and teaching materials were developed with input from these county agents (www.aces.edu/dept/fireants). For 2002, Extension trained the next tier of trainers, who are called fire ant management advisors. By teaching those who are likely to pass on their knowledge, training efforts and dollars are extended. In 2003, Extension continued our education efforts in fire ant management. Goals included providing information to the employees at garden centers and extending efforts to reach Alabama cattlemen. The first goal was important because garden center employees advise so many homeowners on fire ant management. The second goal was a priority because Alabama's 4 million acres of grass pastures harbor approximately 160 million fire ant colonies.

In 2003, Extension conducted 22 educational sessions for trainers. An average of 22 people attended each session. Educational materials used included slide sets, videotapes, posters, mound models and publications. Master Gardeners, cattle producers, turfgrass managers, garden center employees, city employees, county agents, garden club members and civic club members were trained in sustainable fire ant management. Seven additional sessions were conducted for the general public.

Videoconferencing was used to bring the expertise of two Extension specialists from Texas A&M University to county agents and cattlemen in three Alabama counties. The presentations prepared for this training session were re-recorded by the Texas Cooperative Extension Service and distributed on DVD. A companion

publication, "Managing Fire Ants in Cattle Production Systems" was authored by specialists at Auburn University and Texas A&M University and will be published in spring 2004.

Youth programs that featured fire ants and their management were included in Farm Days, 4-H club meetings and environmental tours and field days.

Field demonstrations were conducted in seven counties with six using baits and one using a broadcast granular insecticide.

Eight county agents are participating in the decapitating fly project. This project, administered by the Alabama Fire Ant Management Program, involves releasing and monitoring the establishment and spread of a biological control agent of the fire ant.

County agents in four counties conducted multiple field visits to garden centers to discuss fire ant management and training opportunities for employees.

Fire ant educational materials were distributed to nurseries and garden centers in Jefferson County, the state's largest metropolitan area.

Why We Care:

Pre- and post-testing were not continued in 2003, but it is assumed that results are similar to 2002 when the general level of knowledge of fire ant management advisers increased by 29 percent.

Hopefully, each fire ant management advisers will help 20 others manage fire ants in a sustainable way equaling 8,800 and members of the general public who were trained will contact several of their neighbors equaling 462. Of the 20,000 publications that were handed out, it is hoped that 4,000 will be read and will cause individuals to change their fire ant management practices. This adds up to 13,262 people. Switching from crisis-oriented fire ant management to a sustainable approach will reduce costs per household from \$100 to approximately \$30, which would result in a cost savings of \$928,340 ($\$13,262 \times \70).

The training done with youth today will lead to a new generation of fire ant managers. In future years, it is hoped that the decapitating flies will make an even greater contribution towards improving the lives of all Alabamians.

According to the reported days worked on this project, 21 Extension employees allocated a total of 192 days to this project in 2003. The value of this professional time is \$26,183. For every dollar spent by Extension, a \$35.45 return was observed.