

Abbey Hill community-wide fire ant control project 2007
Allen, TX-Collin County

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Initial Contact

On May 12, 2007, a Community-Wide Fire Ant Management Project was initiated in the Abbey Hills Subdivision, Allen, TX in Collin County. Brian Gallimore, secretary and treasurer of the homeowner association emailed after reading about previous community-wide efforts on <http://fireant.tamu.edu>. Mr. Gallimore had previously wanted to have a community-wide program within his neighborhood, but did not know a good starting point. The Abbey Hill Subdivision is approximately 32 acres with 103 homes. In February of 2007, Mr. Gallimore invited me to speak with the other members of the homeowner association to discuss fire ant management and offer suggestions in fire ant baiting within the subdivision. During that meeting, it was decided that a community-wide fire ant baiting project would begin on May 12, 2007. Also, I would advise them on fire ant management practices and survey the residents to evaluate satisfaction with the fire ant baiting project.

Methods and Materials

Mr. Gallimore and the rest of his homeowner association board discussed various fire ant baits and compared price, availability and length of control. They decided to use Extinguish® Plus applied at a labeled rate of 1.5 pounds per acre. Extinguish® Plus is a commercial blend of hydramethylnon (0.365%) and s-methoprene (0.250%) manufactured by Wellmark International. From the Extinguish® Plus product, the hydramethylnon produces a fairly quick reduction of fire ants within 2 to 4 weeks, while the s-methoprene (an insect growth regulator) produces a slow reduction of fire ants that requires 2 to 6 months.

The HOA chose to purchase 25 pounds of the product, while the other 25 pounds was donated by Wellmark International. Also a contract with the current lawn care company was made to apply the bait using a Spyker® drop spreader using homeowner association funds. In addition to the homes, a 3 acre park in the middle of the subdivision where the neighborhood children would gather to play was also treated by the lawn care professionals.

The HOA used their website, direct emails, flyers and word of mouth (neighbor to neighbor) to promote the community-wide event. The first baiting event occurred on May 12, 2007 and 86 households (83.5% of total households) participated in the event, 2 households (2% of total households) did not want to participate and 15 households (15% of total households) failed to respond. Abbey Hill decided to apply a fall application of Extinguish® Plus on September 29, 2007, which may have been too late based on some satisfaction surveys. In the Dallas area, we received so much rain in the late summer and early fall that most residents began seeing multiple fire ant mounds within their yards prior to fall re-treatment.

Correspondence with Brian Gallimore in late 2007 indicated that Abbey Hill would continue the bait application in 2008 with further participation of Texas Cooperative Extension in the effort. Mr. Gallimore said that his neighbors seemed pleased with the level of fire ant control and all seemed to want to participate in the efforts in 2008. Hopefully, the chance of rainfall will be slight on some weekend in September or early October so the baiting application can be scheduled on time instead of several weeks later.

Results and Discussion

To determine participation of Abbey Hill residents, a pre survey was administered in May 2007 to assess the fire ant situation within the neighborhood. Then in September 2007, a post customer satisfaction survey was administered to assess the impacts of the project. A copy of the pre survey and results can be found in Appendix 1 and a copy of the post survey and results can be found in Appendix 2.

For the pre survey, 30 (36%) out of the 83 households completed and returned the survey in May. When asked about how severe a problem fire ants are in the following areas: 1) around your home: 10% (3) felt they were no problem, 30% (9) felt they were a slight problem, 50% (15) felt they were a moderate problem and 3.3% (1) felt they were a severe problem; 2) in playgrounds: 0% felt they were no problem, 13.3% (4) felt they were a slight problem, 33.3% (10) felt they were a moderate problem and 13.3% (4) felt they were a severe problem; 3) in parks, green belts or common areas: 0% felt they were no problem, 16.7% (5) felt they were a slight problem, 33.3% (10) felt they were a moderate problem and 13.3% (4) felt they were a severe problem; 4) in sports fields, golf courses: 0% felt they were no problem, 20% (6) felt they were a slight problem, 20% (6) felt they were a moderate problem, and 3.3% (1) felt they were a severe problem. For this question, most people checked boxes for one or two categories instead of checking boxes in all four categories. When asked how often do you treat for fire ants, 10% (3) responded yearly, 83.3% (25) responded 2-6 times a year, 3.3% (1) responded weekly and 13.3% (4) responded professionals handle the fire ant treatments. When asked how much they spent yearly on fire ant control, 10% (3) spent \$1-10, 50% (15) spent \$11-25 and 40% (12) spent \$25-100. When asked what method was used to previously treat for fire ants, 63.4% (19) treated mounds, 13.3% (4) broadcast bait and 23.3% (7) used a combination of mound treatments and broadcast baits. When asked to describe feelings toward fire ants, 40% (12) said they were mostly a nuisance, 56.7% (17) said they were dangerous to everyone, 63.3% (19) said they were dangerous especially to children, 33.3% (10) said they move in if neighbors do not treat. When asked how they felt about fire ant treatments, 33.3% (10) felt they do not work, 23.3% (7) responded they were too expensive and 16.7% (5) felt they caused pollution. Finally when asked if they would be willing to participate in a program that treated for fire ants if it cost less than methods currently used, 80% (24) responded yes, 3.3% (1) responded no and 16.7% (5) responded that they need more information.

For the post survey, 11 (13%) out of the 83 households completed and returned the survey in October. When asked if they participated in the community-wide fire ant management effort, 100% (11) responded yes. When asked how severe of a problem fire ants are following the management effort in the following areas: 1) around the home: 9%

(1) responded no problem, 55% (6) responded a slight problem, 27% (3) responded a moderate problem and 9% (1) responded a severe problem; 2) in playgrounds: 27% (3) responded no problem, 45% (5) responded slight problem, 0% responded moderate and severe problem; 3) in parks, green belts or common areas: 18% (2) responded no problem, 36% (4) responded slight problem, 0% responded moderate and severe problem; 4) sports fields and golf courses: 27% (3) responded no problem, 9% (1) responded slight problem and 0% responded moderate and severe problem. For this question, most people checked boxes for one or two categories instead of checking boxes in all four categories. When asked what are your opinions about this fire ant management program for the following categories: 1) worth the time and effort: 73% (8) responded yes, 9% (1) responded no and 18% (2) were unsure; 2) saved money: 55% (6) responded yes, 9% (1) responded no and 36% (4) were unsure; 3) reduced fire ant problems: 73% (8) responded yes, 18% (2) responded no and 9% (1) was unsure; 4) better for the environment: 64% (7) responded yes, 9% (1) responded no and 27% (3) were unsure; 5) helped to better understand fire ants: 36% (4) responded yes, 55% (6) responded no and 9% (1) were unsure. When asked how often they made additional fire ant treatments, 27% (3) responded never, 27% (3) responded yearly, and 45% (5) responded 2-6 times a year. When asked how much extra money they spent on the extra treatments, 18% (2) responded \$0, 9% (1) responded \$1-10, 45% (5) responded \$11-25, and 27% (3) responded \$25-100. However, some of the respondents that did not make additional treatments said they spent money. This could have skewed these percentages. Finally when asked about continuing the fire ant management plan, 100% (11) responded that they would like to continue.

For 2008, we plan to schedule at least two meetings to discuss the fire ant management program. We also plan to incorporate fire ant information within four of their monthly newsletters. Hopefully, this will allow more of the residents to have a better understanding about the biology of fire ants.

Appendix 1: 2007 Pre Survey Instrument.



Community-Fire Ant Management Interest Survey

1) Please indicate how severe of a problem fire ants are in the following areas of this neighborhood:

	NO PROBLEM	SLIGHT PROBLEM	MODERATE PROBLEM	SEVERE PROBLEM
Around your home	(10%)	(30%)	(50%)	(3.3%)
In playgrounds	(0%)	(13.3%)	(33.3%)	(13.3%)
In parks, green belts or common areas	(0%)	(16.7%)	(33.3%)	(13.3%)
Sports fields, golf courses	(0%)	(20%)	(20%)	(3.3%)

2) About how often do you treat for fire ants, or have them treated professionally?

- Never or rarely (3.3%)
- Yearly (10%)
- 2-6 times a year (83.3%)
- Monthly (0%)
- Weekly (3.3%)
- More often (0%)
- Please check here if you use a professional for fire ant control (13.3%)

3) About how much do you spend to control fire ants in a year?

- Zero (0%)
- \$1-\$10 (10%)
- \$11-\$25 (50%)
- \$25-\$100 (40%)
- \$100-\$200 (0%)
- Over \$200 (0%)

4) If you treat for fire ants yourself, what method do you use?

- Mound treatments with granules, drenches, baits or dusts (63.4%)
- Broadcast bait treatments (13.3%)
- A combination of mound treatments and baits at different times (23.3%)
- The Texas Two Step Program (0%)

5) Mark any statements that describe your feelings about fire ants and their treatment.

Ants Themselves

- Mostly a nuisance (40%)
- Dangerous to anyone (56.7%)
- Dangerous to children especially (63.3%)
- They move in if neighbors do not treat (33.3%)

Fire Ant Treatments

- They don't work well (33.3%)
- They are too expensive (23.3%)
- They cause pollution (16.7%)
- I don't use treatments (0%)

6) Would you be willing to participate in a program that treated for fire ants if it cost you less than what you are doing now and reduced your fire ant problems?

- Yes (80%)** **No (3.3%)** **Need more information (16.7%)**

If you would like to participate or need more information, please give us your name, address and phone number and any comments you may have.

NAME: _____

ADDRESS: _____

Phone Number: _____

- Yes, I would like to participate in the fire ant management program.**
 Please send me more information.
 I can not participate in the event, but I give permission to treat my property.

Comments on fire ants, their control, or other:

WE GREATLY APPRECIATE YOUR TIME!!!!

Please send completed surveys to:

**Kim Schofield
IPM Program Specialist
17360 Coit Road
Dallas, TX 75252**

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Appendix 2: 2007 Post Survey Instrument



Community-Fire Ant Management Satisfaction Survey

1) Did you participate in the community-wide fire ant management effort?

- YES (100%) NO (0%) NEW TO THE NEIGHBORHOOD (0%)

2) Whether you participated in the event or not, indicate how severe a problem fire ants are now in the following areas of this neighborhood, since the fire ant management program began:

	NO PROBLEM	SLIGHT PROBLEM	MODERATE PROBLEM	SEVERE PROBLEM
Around your home	(9%)	(55%)	(27%)	(9%)
In playgrounds	(27%)	(45%)	(0%)	(0%)
In parks, green belts or common areas	(18%)	(36%)	(0%)	(0%)
Sports fields, golf courses	(27%)	(9%)	(0%)	(0%)

3) What are your opinions of this neighborhood's fire ant management plan?

	YES	NO	UNSURE
Worth the time and effort	(73%)	(9%)	(18%)
Saved money	(55%)	(9%)	(36%)
Reduced fire ant problems	(73%)	(18%)	(9%)
Better for the environment	(64%)	(9%)	(27%)
Helped me better understand fire ants	(36%)	(55%)	(9%)

4) Other than program treatments, how often do you make additional fire ant treatments?

- Never or rarely (27%) Yearly (27%) 2-6 times a year (45%) Monthly (0%)
 Weekly (0%) More often (0%)

5) How much extra do you spend on those EXTRA treatments in a year?

- Zero (18%) \$1-\$10 (9%) \$11-\$25 (45%) \$25-\$100 (27%) \$100-\$200 (0%)
 Over \$200 (0%)

6) What are your feelings on continuing the plan?

- I would like to continue to participate (100%)
 I would like to participate at the first opportunity (0%)
 I do not wish to participate (0%)
 Need more information (0%)

NAME: _____

ADDRESS: _____

Phone Number: _____

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Please return completed surveys to:

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