

BOWIE COUNTY, TEXAS, PRECINCT 4 IMPORTED FIRE ANT
MANAGEMENT INITIATIVE

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ABSTRACT

Texas state statutes authorize the establishment of red imported fire ant (*Solenopsis invicta* Buren) control efforts based and funded at the county level. One county commissioner in Bowie County, Texas (Texarkana) responded to public demand and spearheaded a government-constituent partnership to manage fire ants. Through the use of sound management practices and innovative problem solving, the program directly contacted 12% of the precinct's households at an annual cost to the taxpayer of less than \$3.75 per year with an extremely high satisfaction rate. This program could serve as a model for others around the country.

PROGRAM DEVELOPMENT AND EXECUTION

Program Development. During the election campaign of 1998, the senior author used fire ant abatement as a major point in his election bid to become Commissioner, Precinct 4, of Bowie County, Texas. Precinct 4 covers the southwest quadrant of the county including diverse populations ranging from rural to suburban Texarkana. Upon election, Mr. Teel quickly set out to develop a plan modeled after fire ant abatement plans on the Arkansas side of the border that have been in place since the mid-1990's. The major goals of the plan were to increase public awareness of fire ants and provide education on their control as well as to provide some direct government-sponsored relief of the fire ant problem. Thanks to creative ideas and use of existing laws, Teel and his staff were able to initiate the plan in the spring of 1999.

Program Foundations. The basic idea of the plan was to use government equipment and personnel to treat the property of residents in Precinct 4. The first hurdle to clear, however, was the use of equipment purchased with public funds on private property, a practice forbidden under Texas law. Mr. Teel went into the legislative records and found a little-known section specifically allowing just such plans: "77.001. The commissioners court of any county may establish, implement, and conduct a program for the eradication or control of the imported fire ant." With the help of co-authors Lum and Barr, such a plan was developed, submitted and approved by the Texas Department of Agriculture.

Money was the most limiting factor in developing a workable plan. The Precinct 4 budget could not come close to buying fire ant bait at a cost of at least \$10/0.41 ha/year. Therefore, the decision was made to put the burden of pesticide purchases on the participants. This decision left only equipment and personnel costs to Precinct 4. Equipment consisted mainly of inexpensive lawn tractors modified to carry Herd GT-77 spreaders (which were donated by BASF). Therefore, start-up equipment costs were only about \$2,600 for two rigs.

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After hearing the experiences from Arkansas, it was decided baits should not be applied by full-time county employees. Instead, a group of mostly retired gentlemen were hired for two six-week periods in the spring and fall to make the treatments. This creative approach had many advantages. The men were largely working for the fun and interest of the project, not just a paycheck. Most were natives or long-time residents of the area and were familiar with the locations that they would be treating and with the residents themselves. Since they were hired as full-fledged employees of the county, they were covered by appropriate insurance and the legal umbrella of working for the government.

Another stumbling block was the question of liability. With the assistance (and insistence) of the Bowie County District Attorney, a Participation Agreement and highly restrictive Hold Harmless Agreement were developed. Signing these forms was mandatory for residents to participate in the program. This requirement discouraged only a few potential participants.

There were a many effective products and methods for controlling fire ants available. However, in order to simplify equipment requirements and applications, the use of only one product, Amdro® Fire Ant Bait (0.73% hydramethylnon) was mandated. There were several reasons for this choice. Economics and practicality limited treatment products to broadcast baits. Amdro has the advantage of being faster-acting than the others (Barr 2000) and, most importantly, was widely available at many retail outlets. As one person involved in the Arkansas effort put it, "If it ain't sold at Wal-Mart, we don't use it."

The program was administered by co-author, Linda Remer, the Precinct 4 Office Manager. As residents signed up, their paperwork was filed, and their locations and other vital statistics entered into a database. She also hired workers and prepared their daily assignments, among other things. Understandably, the program was quite time consuming before the first treatment, but, after two years of experience, became part of the normal office routine.

Program Execution. As the first step in initiating the program, a series of public meetings were held to both educate residents and sign them up. In Precinct 4, meetings were held in five population centers which also served as treatment concentration points during applications periods. Much of the area is rural, so some residents were interested in having large tracts of land treated. Because of equipment and labor limitations, treatment area was limited to a maximum of two acres, which adequately covered most home sites.

Treatment periods were scheduled for six weeks in May-June and September-October. A week was spent concentrating on participating residences in each of the five population centers. The extra week was used in case of rain and for missed properties. Through a variety of notification methods (direct mail, newspaper, media, etc.) residents were informed of the dates during which their property will be treated. Residents were responsible for purchasing an appropriate amount of Amdro. They were instructed to place the Amdro in a visible location near the house and to place a white surveyor's flag (supplied as part of sign-up) at the property entrance to help workers more easily and positively locate the sites. Each day, Ms. Remer supplied workers with a list of property addresses, descriptions, locations and specific areas on the property to be treated.

Because of labor limitations, no attempt was made by the county to monitor the level of fire ant infestation. The decision to participate was left up to the residents. They were also completely responsible for any "clean-up" of new or remaining mounds and additional treatments between broadcast applications.

Participation and Results. The exact number of participants varied slightly from year to year, but the Bowie County program treated approximately 1,054 properties, twice a year, for the last two years. It was estimated that there were roughly 8,500 households in Precinct 4, so this program reached about 12% of them. Though the program could probably have grown easily, this number was been deemed "manageable" with current resources so there was no official effort to recruit more participants.

Satisfaction with the program was extremely high. Only about 20 participants left the program each year, but an equal number of new participants signed on. A satisfaction survey was conducted after the 1999 effort. Of 67 people interviewed by phone, 43 (64%) reported being "extremely satisfied" with the results, while 20 (30%) reported being "somewhat satisfied." The remainder were not sure. There were *no* respondents who reported being "not pleased" with the results. All but two respondents said they had benefitted from the program enough to want it to continue.

CONCLUSION

The Bowie County, Precinct 4 Fire Ant Initiative managed to strike a workable compromise within the constraints of effective, responsible fire ant control, the economics of tax dollars, and the desires of private citizens. Any elected office involves the challenge of keeping in touch with the public and making them feel that their tax dollars were well spent. The Precinct 4 plan not only helped control fire ants and increases public knowledge of the subject, but made participants an equal partner with government - a relationship that may carry over into other, more important concerns.

The plan was not perfect in any single respect, but it addressed a public need in a sustainable manner and, above all, "kept the customer happy." The bottom line of the Precinct 4 plan was that about 12% of the households were directly served by the county government, twice a year, at an average cost to the taxpayer of a mere \$3.70 per year. The Bowie County Precinct 4 Plan serves as a model for municipalities or other organizations wishing to sponsor fire ant control efforts in Texas.

LITERATURE CITED

Barr, C.L. 2000. Broadcast baits for fire ant control. Texas Cooperative Extension publication, B-6099, 12 pp.