

Tree Termite (*Nasutitermes costalis*) Eradication Effort

Interim Progress Report **October 7, 2003**

Steven Dwinell, Assistant Director
Agricultural Environmental Services
3125 Conner Boulevard
Tallahassee, Florida 32399
850-488-7447

Introduction

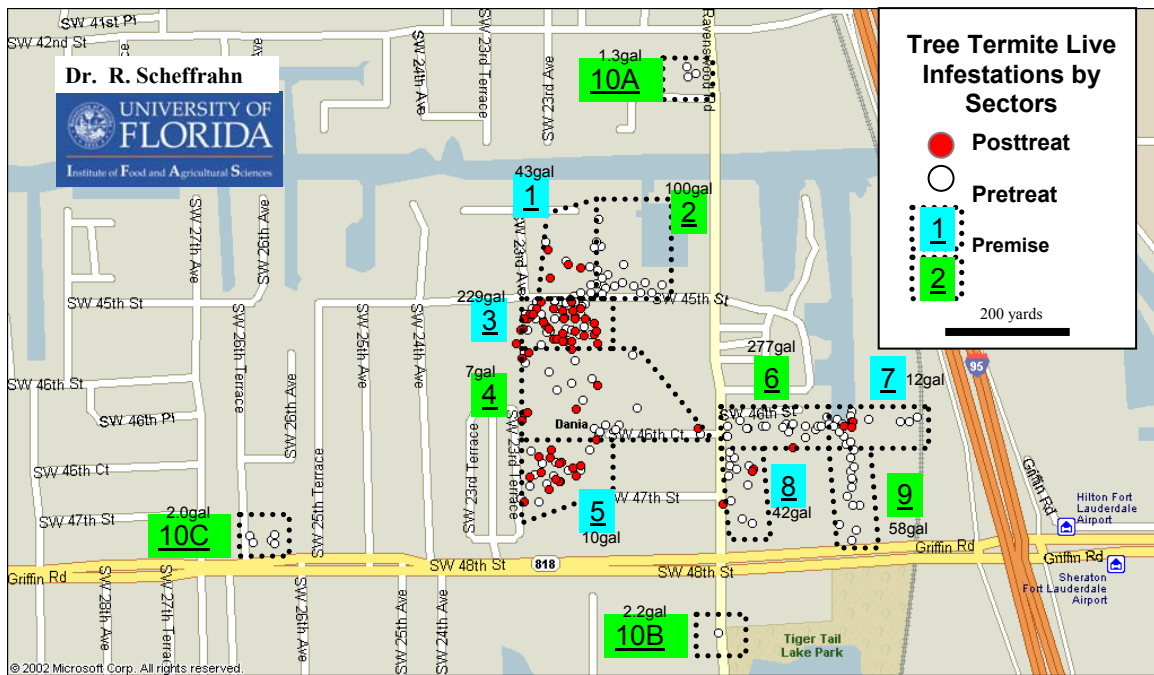
Subsequent to the April 23, 2003 eradication effort, a number of activities have taken place in the attempt to eradicate the Tree Termite, *Nasutitermes costalis*. These include a post treatment survey of activity in the treated area, applications of additional insecticide in several of the treatment blocks on September 12 and 15, 2003, and the development of a plan for treating two remaining areas of high termite activity.

Survey of the treated area

Dr. Rudi Scheffrahn and staff of the Ft. Lauderdale Research and Education Center, Institute of Food and Agricultural Sciences, conducted a survey of the treated area to determine the level of activity (active foraging and active nests) several months after treatment. The survey was completed in June of 2003. The survey showed populations that were visibly reduced compared to pretreatment levels. No activity was observed in sectors 2, 9, 10A, B, or C. Continued activity was noted in isolated spots in sectors 1, 4, 6, 7, and 8. High levels of activity were observed in sectors 3 and 5.

Figure 1 is a map showing survey results and treatment locations. (Courtesy of Dr. Rudolph Scheffrahn, IFAS-Ft. Lauderdale Research and Education Center)

Figure 1. Results of Post-Treatment Survey



Additional Treatment

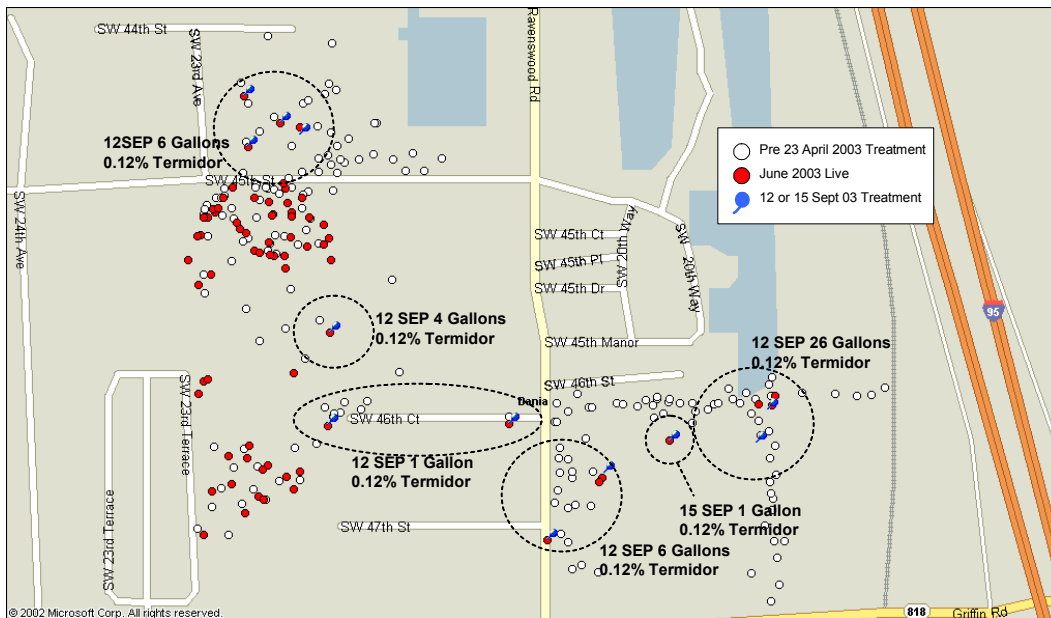
As a result of the detection of continued termite activity, additional treatment was applied to sectors 1, 4, 7 and 8 on September 12 and to sector 6 on September 15, 2003.

A total of 0.44 lbs of fipronil, formulated as Termidor SC, EPA Reg. No. 432-901, was applied in 44 gallons of mixture at a concentration of 0.125%. Table 1 below provides the date and amount of termiticide application per section. Figure 2 below provides the location of application (Courtesy of Dr. Rudolph Scheffrahn, IFAS-Ft. Lauderdale Research and Education Center).

Table 1 Date of application and amount applied per section.

Date	Treatment Sector	Gallons of mixture applied	Pounds of fipronil applied
12-Sep-03	Sector 1	6	0.06
12-Sep-03	Sector 4	5	0.05
12-Sep-03	Sector 7	26	0.26
12-Sep-03	Sector 8	6	0.06
15-Sep-03	Sector 6	1	0.01

Fig 2. 12 & 15 SEP 03 Retreatment Sites for *Nasutitermes costalis*, Dania Beach,



Development of a treatment plan for Sections 3 and 5.

A survey of Sections 3 and 5 on September 11 showed active nests and foraging in several areas of these blocks. A portion of Section 3 had heavy vegetation and leaf litter which concealed nests and foragers. Other portions of this area were open and nests were visible at bases of trees and on stumps. After consulting with a representative of the Florida Department of Agriculture and Consumer Services Division of Forestry, Mr. Alex de la Paz, it was decided that a piece of forestry equipment, a gyro tractor, could be used to mulch the heavy vegetation and provide access to the nests and foraging areas. Nests and foraging areas will unavoidably be disturbed in this process, but insecticide applications can be made shortly after the treatment to kill exposed termites, and then again after several months to kill emerging nests.

Arrangements will be made over the next few months to carry out this plan to eradicate the termites in this area.