

A Pilot Program for Subterranean Termite IPM in South Florida

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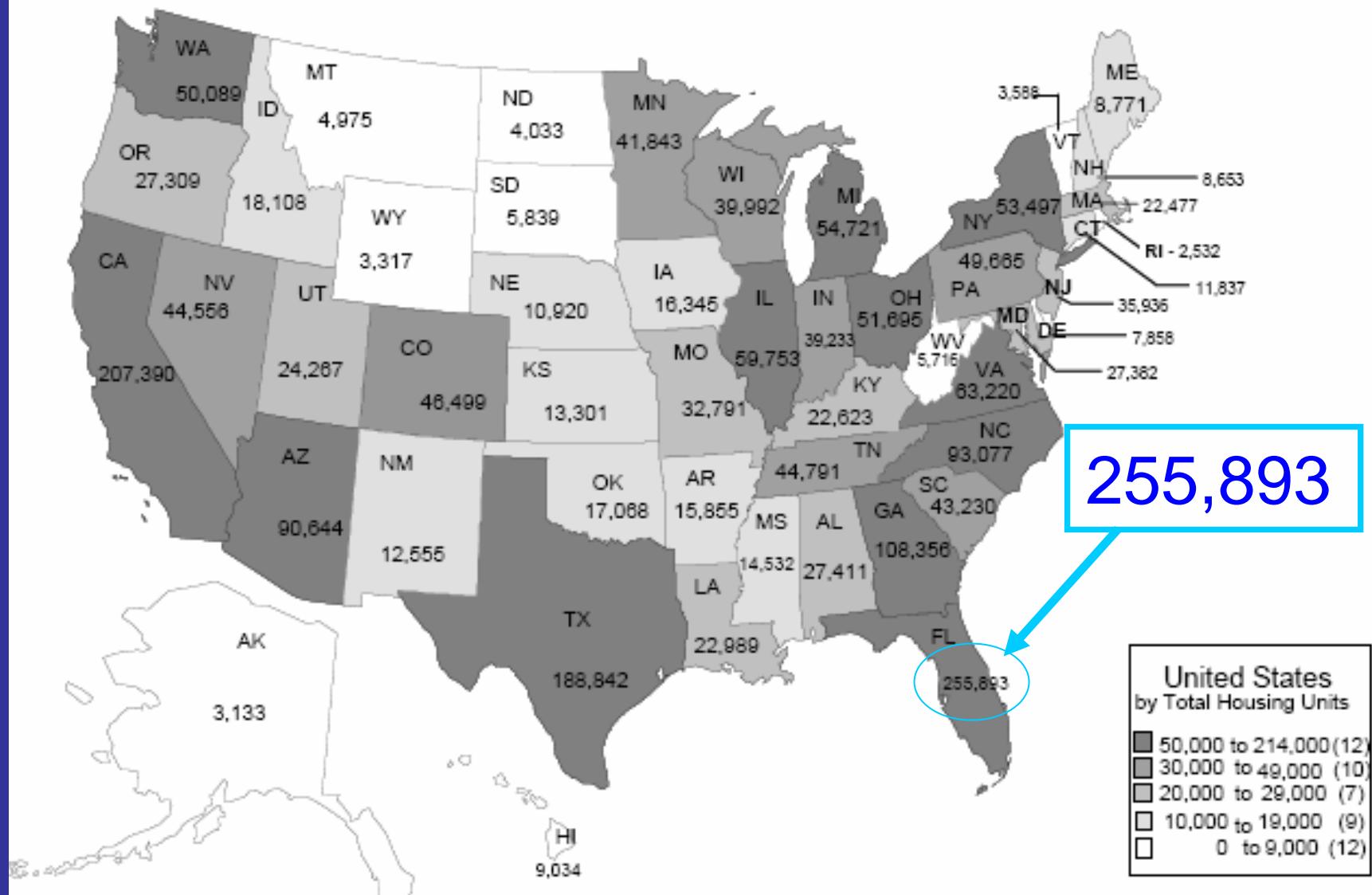
Many factors make subterranean termites and their control a particular problem in Florida and emphasizes the need for subterranean termite IPM

- Temperate to tropical climate.
- Several termite species, including invasive non-endemics.
- Increasing population.
- Rampant development and re-development.
- Porous soils.
- Numerous waterways and bodies of water.

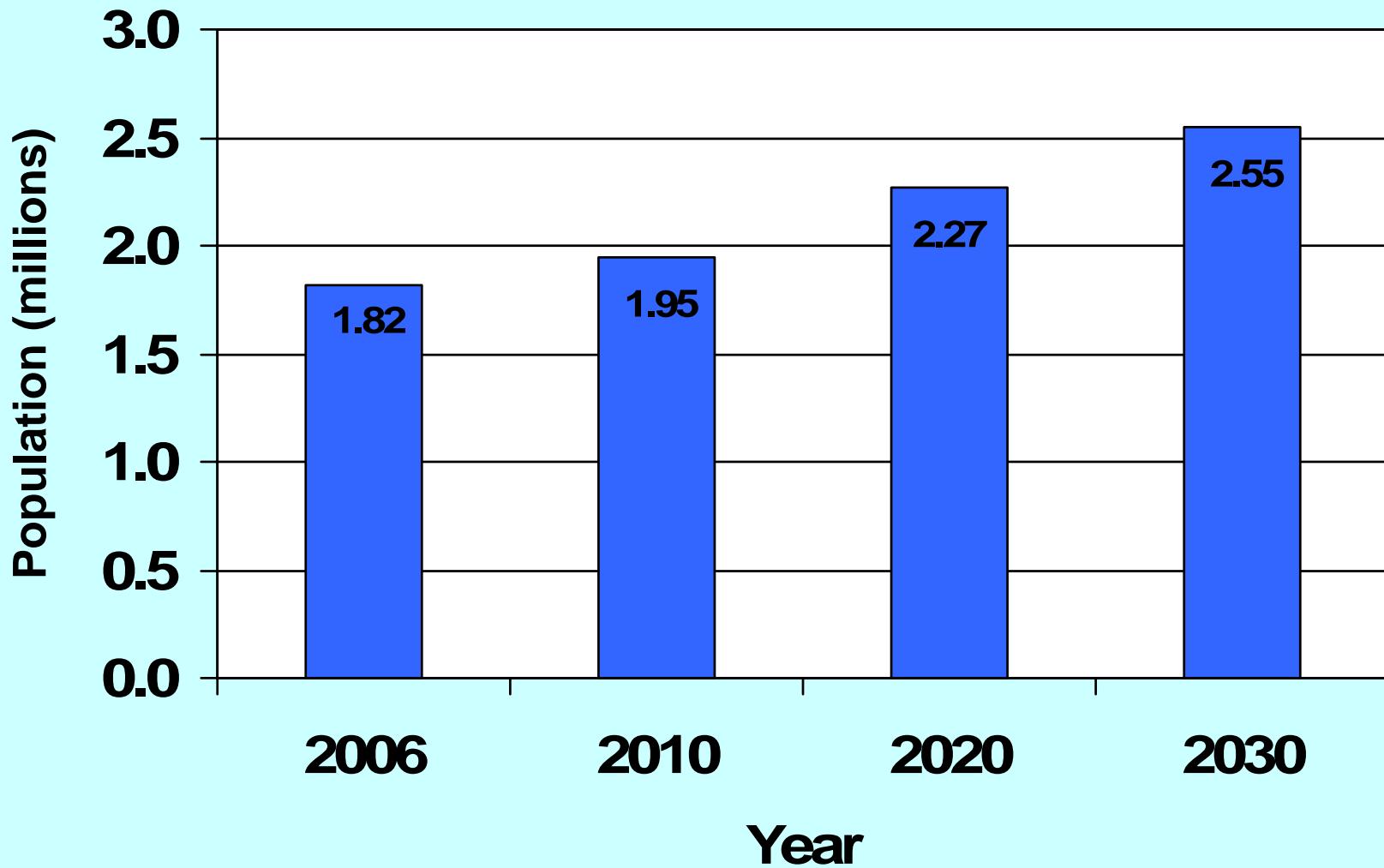
Subterranean Termites of Florida

- Formosan subterranean termite, *Coptotermes formosanus*
- Asian subterranean termite, *Coptotermes gestroi*
- West Indian subterranean termite, *Heterotermes* sp.
- Tree termite, *Nasutitermes corniger*
- Cuban subterranean termite, *Prorhinotermes simplex*
- Eastern subterranean termite, *Reticulitermes flavipes*
- *Reticulitermes virginicus*
- *Reticulitermes hageni*
- Florida dark-wing Subterranean Termite, *Amithermes floridensis*

U.S. New Privately Owned Housing Units Authorized by State: 2004



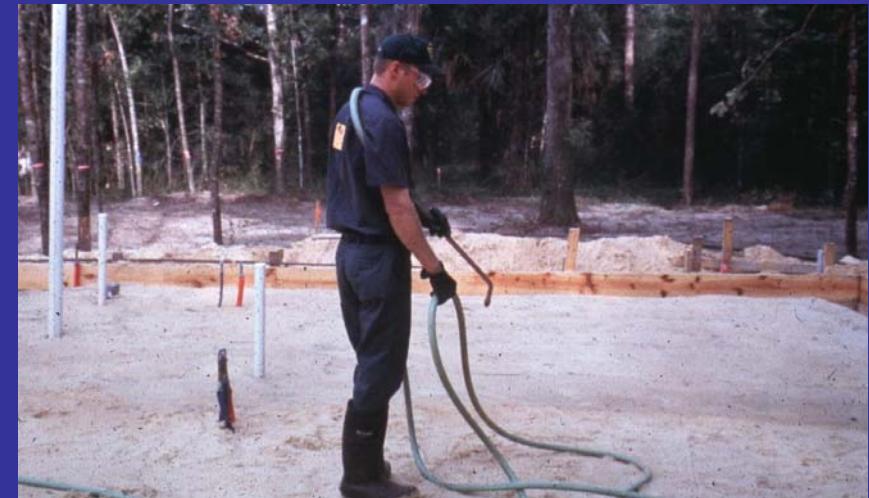
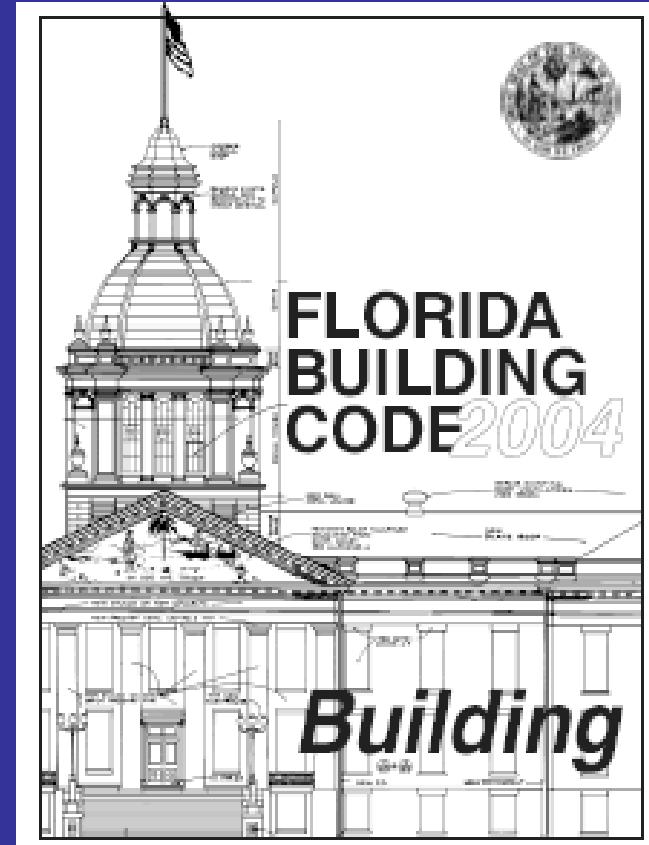
Projected growth in Broward Co.*



* Broward Co. Pop. Forecast Model, Broward Co. Planning Services Division

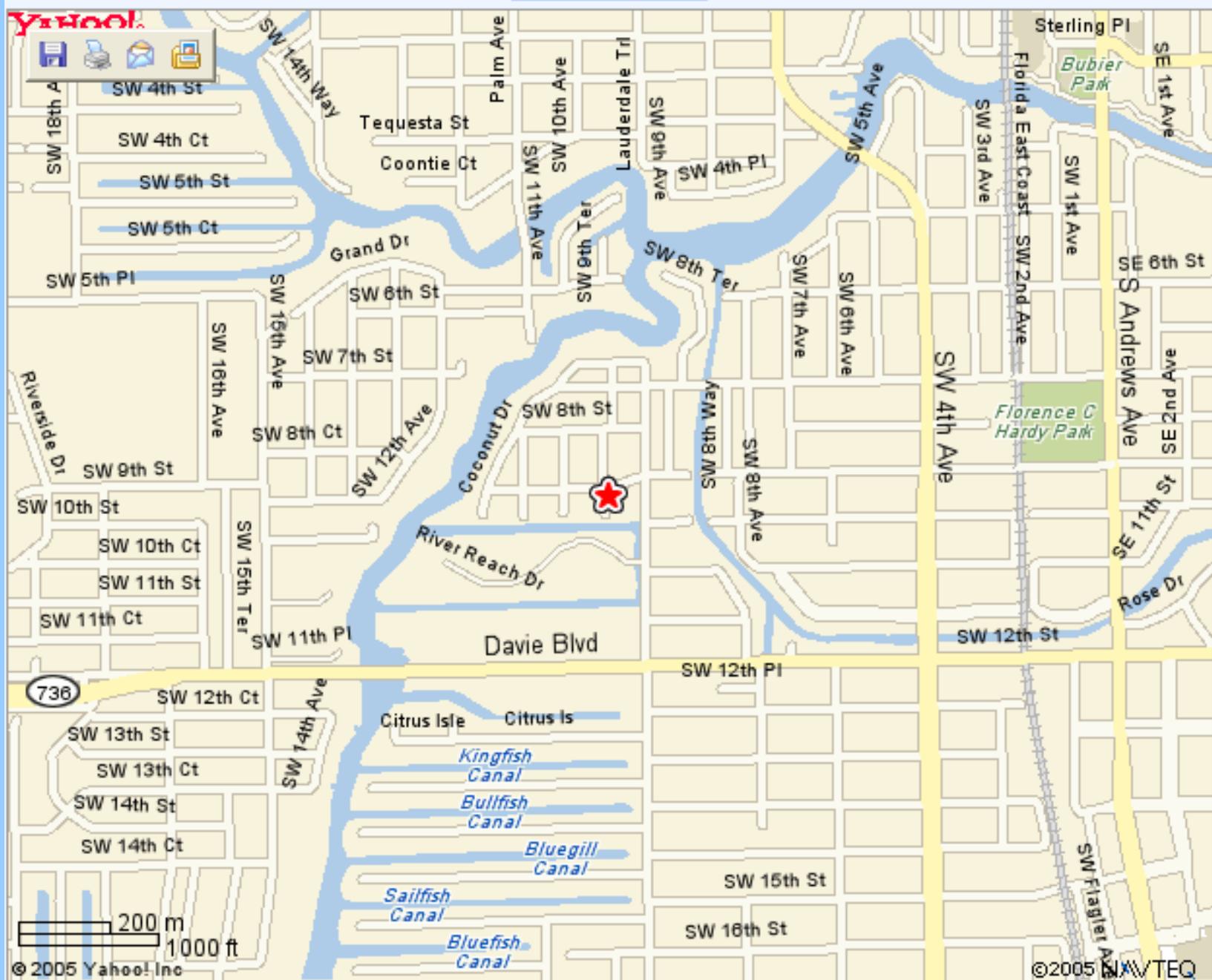
1816.1 Termite protection.

- Termite protection shall be provided by registered termiticides, including soil applied pesticides, baiting systems, and pesticides applied to wood, or other approved methods of termite protection labeled for use as a preventative treatment to new construction.



Estimated Termiticide Use in Broward County, FL 2005

- 324,389 single family housing units total
- 380 gallons applied for a 2000 sq. ft. structure
- 2,707 new single fam. units \times 380 = 1,028,660 gallons
- $324,389 - 2,707 = 321,682$ existing single units
- 1% of existing homes = $3,217 \times .80$ (liq. termiticide treatment) = 2573 homes \times 322 gallons (used for post-construction treatment) = 828,699 gallons
- **1,857,359 gallons total termiticide applied in 2005**
- 78 oz. per 100 gallons to make a 0.06% solution
- 9.1% active ingredient
- $1,857,359 \text{ gal.} \times 78 \text{ oz./100 gal.} \times 0.091 \text{ a.i.} \times 1 \text{ lb./16 oz.} = 8,240 \text{ lbs. active ingredient}$



NatureScape: Our Cooperating Volunteer Organization

- Promotes the use of native plants in landscapes to:
 - conserve water, protect water quality, and create wildlife habitat.
 - reduce pesticide usage.
 - reduce pollution and maintain a healthy landscape.
- Supported by Broward Co. mayor



Our goals for a subterranean termite IPM program in FL

- Increase homeowner knowledge and awareness of subterranean termites
- Educate homeowners on treatment options so they can make informed decisions regarding treatment of their homes.
- Reduce termite damage potential by managing termite populations using baiting systems.
- Reduce risk to health and environment by using the least amount of termiticide to control termites.

Termite Biology and
Subterranean Termite
Identification

Dr. Bill Kem
Ft. Lauderdale R.E.C.
University of Florida



**Subterranean Termite IPM Workshops:
NatureScape: Sep. 24, 2005 and Feb. 27, 2006;
City of Hollywood, Mar. 4, 2006**



- Pre- and Post-Workshop test of knowledge
- Presentations on Termite Biology and ID; Termite Treatments; and IPM
- Hands-on materials – wood damage, termites, baits



Interacted with over 200 people

Outreach: Broward Co. Water Matters Day March 11, 2006





Meeting with City of Hollywood
Housing and Community Redevelopment Dept.
March 28, 2006

Termite Monitoring Comparison Study

- A 12 month study involving 20 homeowners, 10 using Dow AgroSciences electronic stations, 10 using wood stakes to monitor their homes for termites.
- Compare installation and inspection time, ease of use, effectiveness in detecting termites.
- Feedback on using the Dow station.





Site visits to inspect electronic monitoring station installations and conduct cultural control survey.

Potential cooperators and outreach opportunities

- Additional workshops
- Broward Home School Association
- Neighborhood Associations
- Homeowner Associations
- Also publish a Subterranean Termite IPM Fact Sheet, Web Site, and Manual