

A Pilot Program for Subterranean Termite IPM in South Florida

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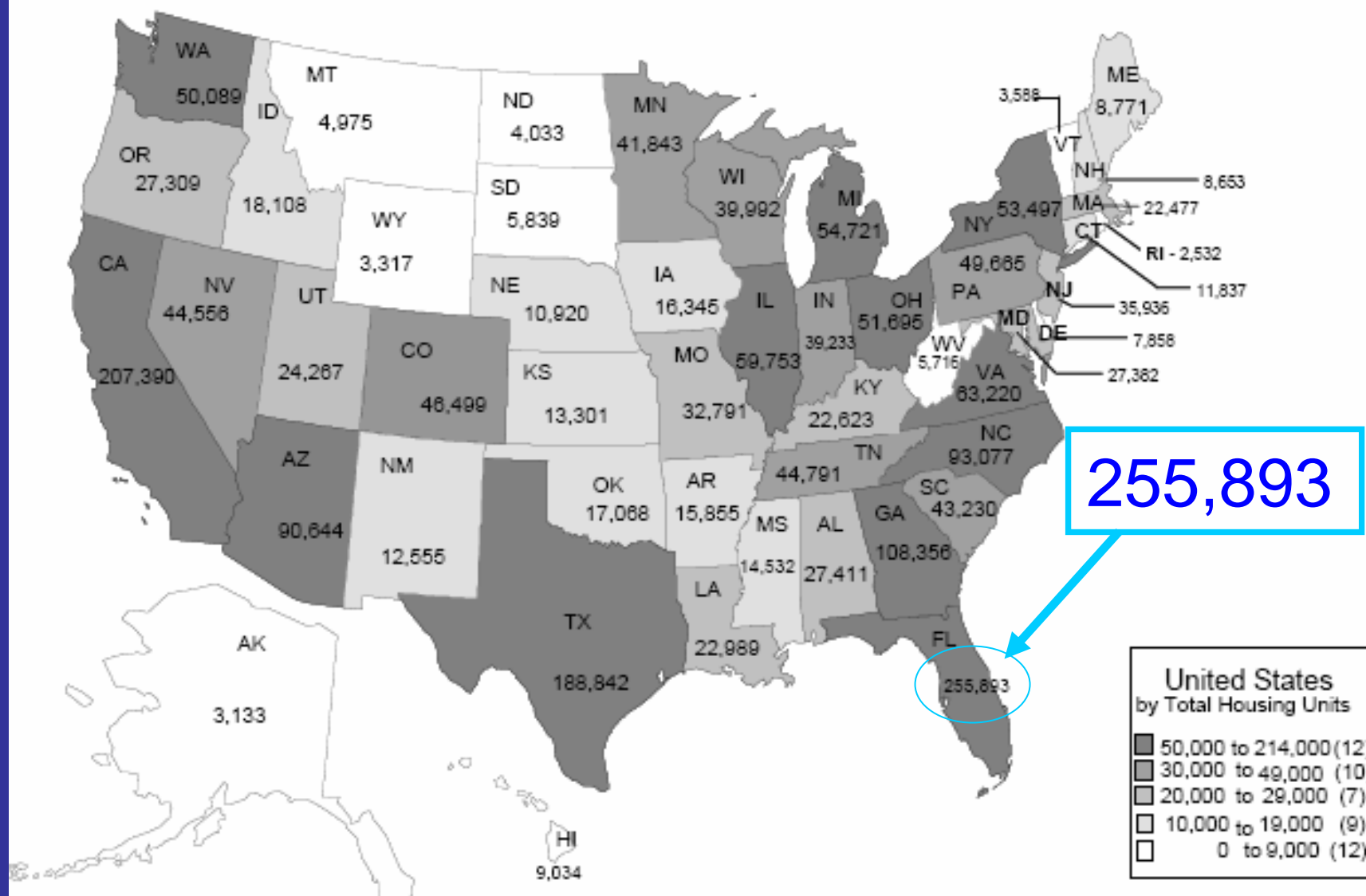
Many factors make subterranean termites and their control a particular problem in Florida and emphasizes the need for subterranean termite IPM

- 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.

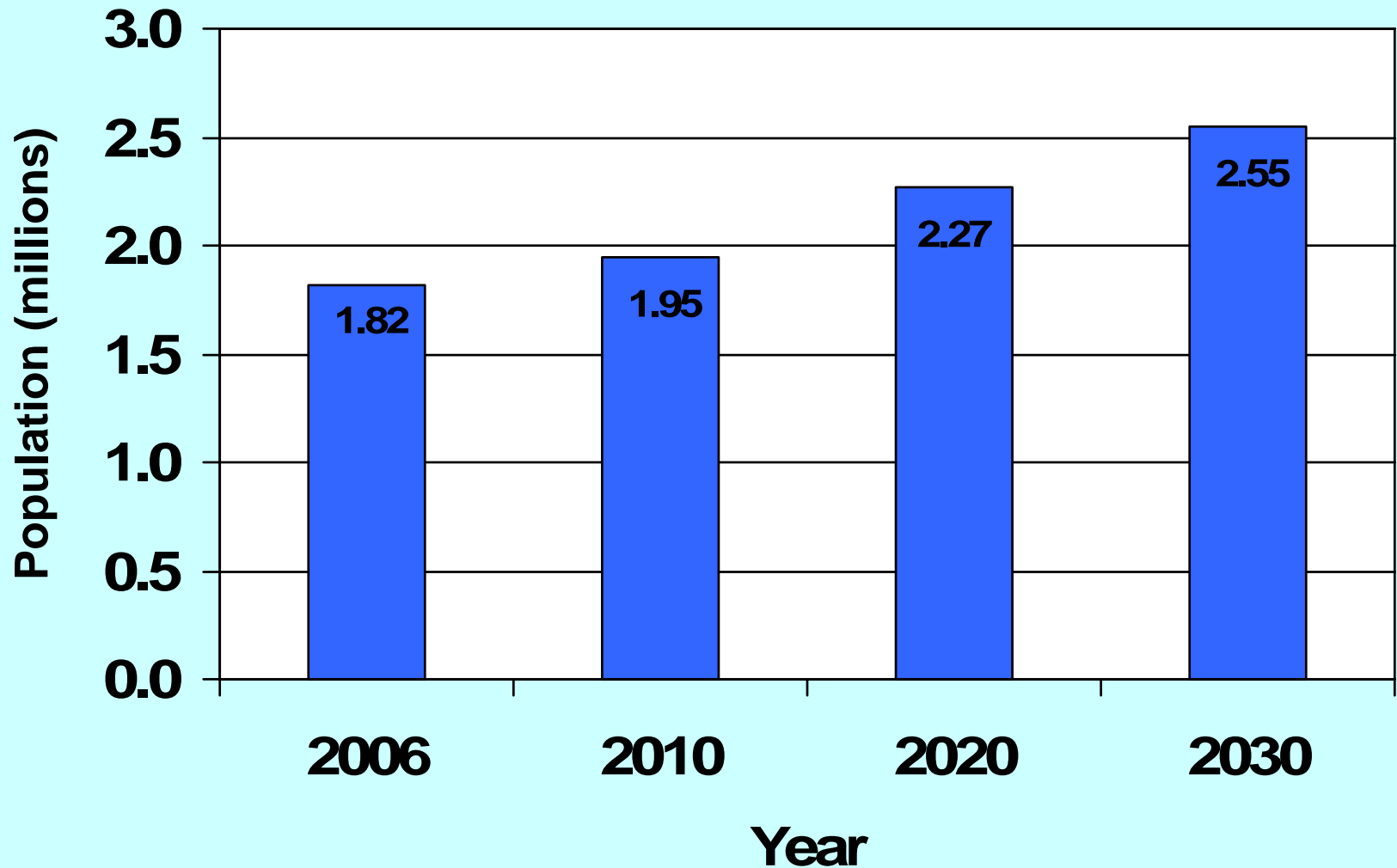
Subterranean Termites of Florida

- 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, *Amitermes floridensis*

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



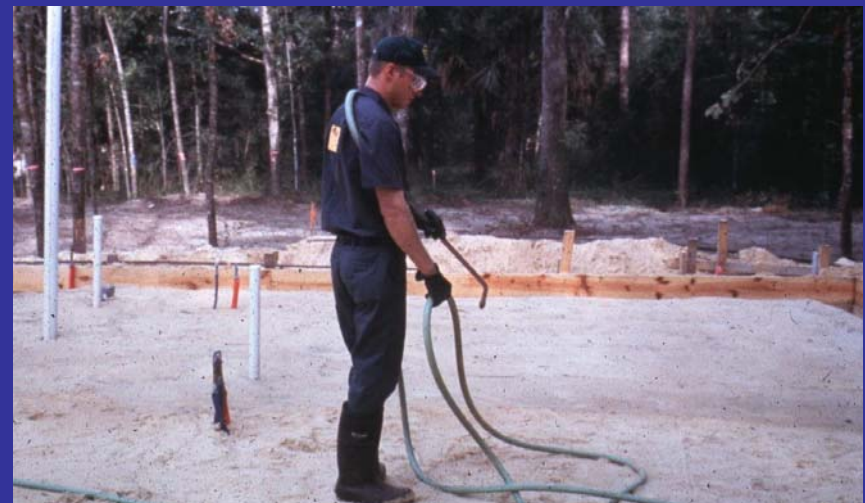
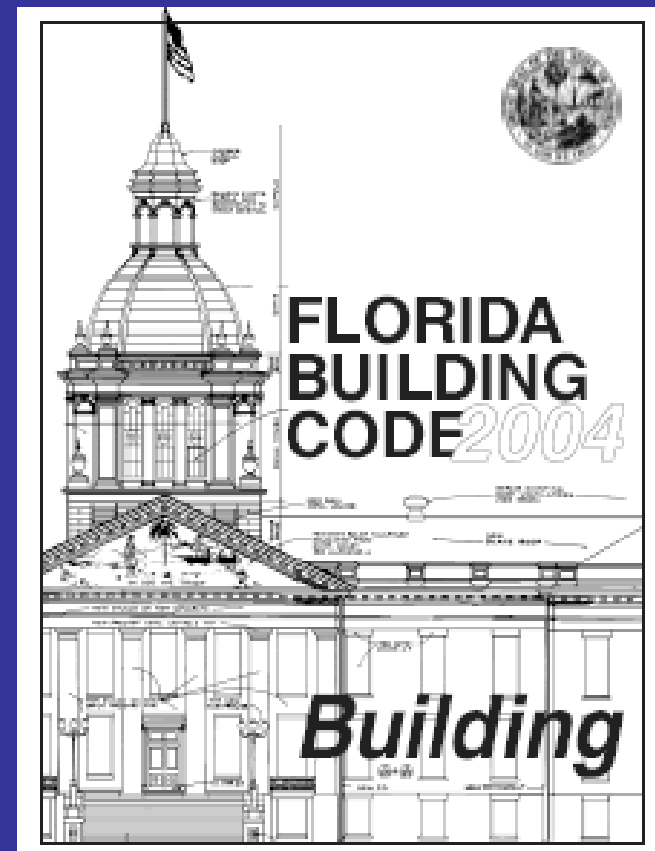
Projected growth in Broward Co.*



* 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 x 380 = 1,028,660 gallons
- $324,389 - 2,707 = 321,682$ existing single units
- 1% of existing homes = 3,217 x .80 (liq. termiticide treatment) = 2573 homes x 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
- $1,857,359 \text{ gal.} \times 78 \text{ oz./100 gal.} \times 0.091 \text{ a.i.} \times 1 \text{ lb./16 oz.} = \mathbf{8,240 \text{ lbs. active ingredient}}$

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 Kern
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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



Outreach:

Broward Co.

Water Matters Day

March 11, 2006

Interacted with over 200 people





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