

How does the U.S. Deal with Termites ?

Training and Integration

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www.granovsky.com

Why Granovsky ?



Rob's racehorse in Palermo, Argentina



1969 - 1972

TAMU

1978 - 1983

OCCURRENCE OF TERMITES

IN 131 RANDOMLY SELECTED HOMES OF VARIOUS AGES IN CORPUS CHRISTI, TEXAS

AGE OF HOME, YEARS	TOTAL TERMITES	DRYWOOD TERMITES	SUBTERRANEAN TERMITES
1	0	0	0
5	40	20	20
10	65	45	20
20	75	60	15
40	90	75	15

GAI since 1984

ORKIN

Termites: Conditions Conducive to Infestation
1987 Video and Training Workbook

> 50 R&D projects with termites since 1984

Argentina	Brasil	Mexico	EE.UU. / USA
<p>Salta</p>	<p>Sao Paulo</p>	<p>PVR</p>	<p>BASF</p>
<p>Mendoza</p>	<p>Dow</p>	<p>GMB</p>	<p>Syngenta</p>

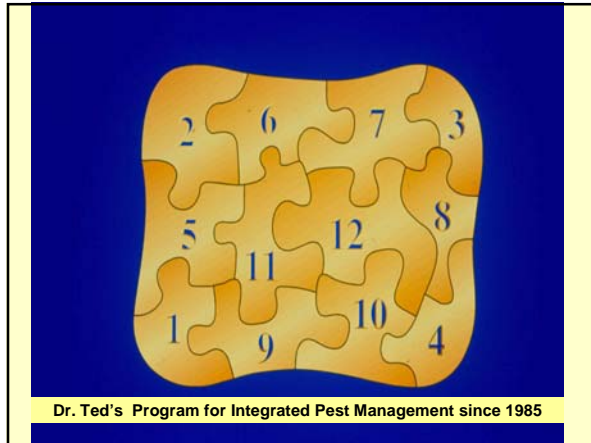
Plus site inspections for condominium associations and > 75 legal causes.

Key Questions:

1. What **TREATMENT TECHNIQUES** are used in the U.S.A. ?
2. Do **TRAINING REQUIREMENTS** exist ?
3. How are **PRODUCTS** selected, distributed and used ?
4. What systems of **OVERSIGHT** exists for termite work ?
5. Who really is the **KEY INDIVIDUAL** when doing termite control ?

Termite Management Success, Five KEYS:

1. **Specialized Professional Staff**
2. **Site Evaluation & Sales**
3. **Trt. Methods & Products**
4. **Equipment**
5. **Documentation**



Integrated Pest Management

(Dr. Ted's IPM System since January 1985)

1. Education
2. Inspect & Identify
3. Exclusion
4. Communication & Cooperation
5. Trapping & Detection
6. Sanitation
7. Mechanical Control
8. Physical Control
9. Professional Staff
10. Chemical & Equipment
11. Quality Assurance
12. Documentation



TERMITE Integrated Pest Management

<p>1. Education</p>	<p>2. Inspect & Identify</p>
<p>3. Exclusion</p>	<p>4. Communication & Cooperation</p>


TERMITE Integrated Pest Management

<p>5. Trapping & Detection</p>	<p>6. Sanitation</p>
<p>7. Mechanical Control</p> <p>Graded Basalt Termi-Mesh Called Physical Barriers by some</p>	<p>8. Physical Control</p> <p>Cold = Liquid Nitrogen Heat = > 50°C inside wood Low Humidity = Stress</p>




TERMITE Integrated Pest Management

			
9. Professional Staff		10. Chemicals & Equipment	
			
11. Quality Assurance	12. Documentation		



Which of you has a desire to provide the **WORST** of ALL termite service ?



Professional Staff: Abilities and Needs

		
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Knowledge of the Technician

		1. Inspector – species, where, equipment, math skills, how to sell treatment, good public relations skills, TRAINED & EXPERIENCE !
		2. Treatment – where, how, math skill, right equipment, care of client property, work quality.
		3. Helpers – informed, work with care and follow instructions.

Technician Needs

- 1. Specialized Termite Workers**
- 2. Training and Testing Systems**
- 3. Manuals & Videos, e.g. State / Company specific materials and Conditions Conducive to Infestation**
- 4. Know and “visualize” a wide variety of CONSTRUCTION ASPECTS**
- 5. Field Experience = Hands On, GET DIRTY !**
- 6. Years of experience & stability for termite workers**
- 7. PRE and POST Treatment Monitoring of Activity, e.g. Granovsky Monitoring Board and Green Eye**

Monitoring Termite Activity

GMB 	DOW 	GNEye 
		
Termite Detection Issues		

Octa-Study = Sub-T Detection

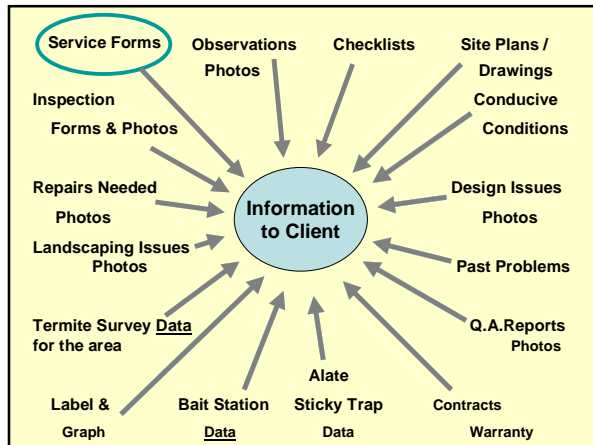
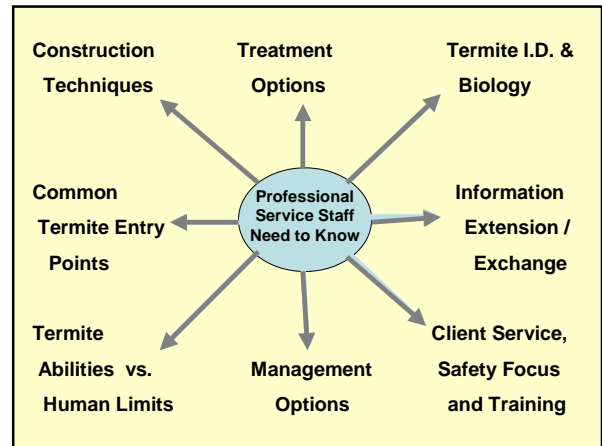
BASF Dow FMC GMB Syngenta Whitmire NEW Whitmire OLD Wood Stake

100.0%

86.2%

Granovsky Monitoring Board

Less than 15% for the poorest !



Service Staff

Dress, communicate, work and complete work in a way which demonstrates solid technical training, experience and professional attitude.

MUST BE many things to many people !

The KEY INDIVIDUAL !

Technicians They really are humans and should be strongly supported !

1. Train them well and provide ANNUAL re-trainings
2. Pay them AT LEAST = 25% to 30% of productivity
3. Manage time = > PRODUCTIVITY = > \$\$\$ / Euros
4. Organized ? Service vehicle & equipment
5. Presentation = How do they look ?
6. Communication Skills
7. Respect their opinions and Encourage Questions
8. They are KEY to a strong business !!

Market Size = TERMITES vs. ANTS

Revenue By Type Of Service

2000 vs. 2002

35.2 %

2002 in U.S.A.

ALL Pest Control Services =

62.85% = Homes

37.15% = Commercial

TOTAL for Termites, both Home & Commercial was 35.2% of the whole market vs. 38.6% for Ants !

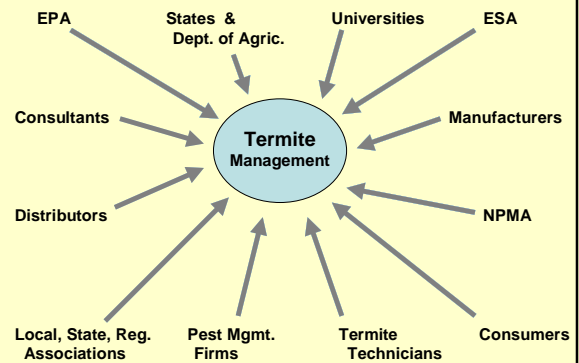
PPT: G:Ctrl, XI-2003, Houston, TX

Which urban pest generated the most business in 2008 for U.S. pest control firms ?

Ants	30	Termites	26
Rodents	14	Cockroaches	12
Bed Bugs	11	Stinging insects	2
Other	7	Ticks	0

Source: PMP Online Opinion Survey
Values: Numbers are % of business done

Roles Played in U.S. Termite Market



1. Federal Aspects = EPA Set National Standards



- Requirements for Termiticide registrations
- Testing program via USDA - Field plots
- Labeling (labels & promotional items)
- Applicator training requirements
- Documentation of applications



2. State Aspects / Departments of Agriculture



Certify and Oversee Applicators

- Licensing Nearby state reciprocity
- Testing General and Categories
- Documentation Required Forms
- Inspections Evaluate Paperwork & Complaints
- Re-Certification Oversee Continuing Education



3. Universities



Especially through Land Grant System 1855

- Mission = 3 legged stool
 - Research
 - Extension (County Level)
 - Educational
- Entomologists B.S. M.S. Ph.D.
Years = 4-5 2-3 4-7
- Professional Activities



Books

Training Manuals

Extension Publications

B-5075
4/08

4. Entomological Society of America



ESA



Board
Certified



ACE

Publication of Scientific Research on Termites

Annual Regional Meetings

Annual National Meetings Symposia Posters

Presentations on termites

5. Consultants

- Independent vs. "tied in" consultants
- Product research and Market research
- Presentations & written materials
- Litigation assistance
- Trainings sponsored by consultant
- Training videos and manuals
- Direct consumer assistance



Techletter
Carpenter Ant Damage to Wood
Just How Serious Is It?
Executive Reports
IPM Plan for Flying Insects at Sports Stadiums and Similar Facilities

Pinto & Associates, Inc.

TERMITES:
CONDITIONS CONDUCTIVE TO INFESTATIONS
TECHNICIAN'S WORKBOOK
A Guide to the Inspection of Existing Homes
for Termite Subterranean Fungus and Moisture

Granovsky Associates, Inc.

6. Chemical Manufacturers

- Sponsor research with Universities and Consultants



- Technical specialists = Typically Ph.D. Entomologists
 - Coordinate and Conduct Termite Research
 - Assist larger pest management firms with issues
- Sales representatives
 - Work with Distributors & Pest Mgmt. firms
 - Sales efforts and presentations
- Sponsor training programs / consultants



PREMISE
FOAM IN A CAN

Bayer Environmental Science

Some of the Termiticides Used in the U.S. Market			
Name	Chem. Class	Activity @	Mode of Action
Bifenthrin	Pyrethroids	Nervous	Na Channel Modulator
Imidacloprid	Neonicotinoids	Nervous	Acetylcholine Receptor
Hexaflumuron	Ins. Gro. Reg.	Endocrine	Chitin Synthesis Inhib
Chlorfenapyr	Pyrroles	Metabolic	Oxidative Uncoupler
Fipronil	Phenylpyrazoles	Nervous	Cl Channel Agonist
Indoxacarb	Oxadiazine	Nervous	Na Channel Blocker
Chlorantraniliprole	Anthranilic diamide	Muscle	Ryanodine

NEW DuPont Termiticides Entering Market			
Indoxacarb Aperion™ Only chem in this class	Oxadiazine Class 22 EPA Reduced Risk Status	Nervous Meta-Active Speed of action High control level	Na Channel Blocker No concern for cross-resistance Bait or Spray Broad-Spectrum
Name	Chem. Class	Activity @	Mode of Action
Chlorantraniliprole Acelepryn™ T/O market AU, JA, NZ, US Altriset™ as a termiticide	Anthranilic diamide Class 28 EPA Reduced Risk Status	Muscle Non-Repellent Systemic	Ryanodine Receptor (Ca depletion)

Five year (2000 – 2005) Syngenta Sponsored Termiticide Field Study in São Paulo, Brasil

Granovsky Asso., Inc. Syngenta PPV Pionera

Thiamethoxam, a neonicotinoid, was utilized in homes with very active infestations of *Coptotermes*. Treated in 2000 and followed for over 5 years. Currently registered & used in: Brasil, Chile, Japan and a few others.

7. Distributors

Keith @ Solutions

Rick @ B&G

Sell Pesticides & Equipment
Source of labels and labeling
Continuing Education programs

Sales to Public

1,800 @ Trainings

N. Ehmann

8. National Pest Management Association

Encourage Professional Development and Behavior

9. Local, State or Regional Associations

Work like NPMA but on a smaller scale.
Joint NPMA membership !



10. Pest Control Firms

Establish termite sales and treatments =
point of chemical selection

Ensure individual training =
keep training records and re-evaluations

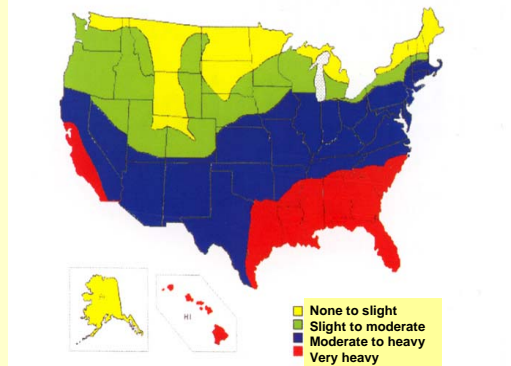


Areas of Greatest Termite Activity in the U.S.

Locations of 100 largest pest mgmt. firms in the U.S.



Areas of Greatest Termite Activity in the U.S.




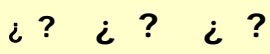
11. Individual Termite Employee Responsibility


- Self-development = BE the BEST !
- Hire the Best . . . "Hire slow, fire fast !"
- Must be provided with Strong Trainings
- Effective Sale of Termite Treatment = Win - Win
- They must make On-Site treatment decisions


Many types of educational experiences are
needed to become a true professional !




Walking 

Questioning 

Investigating 

Observing 
Samples

Thinking (Gray Matter) **Actions** 

<p>Hand Lens</p> 	<p>Resources</p> 
<p>Samples</p> 	<p>Microscope</p> 

12. Consumer Responsibility

Care of Structure / Ownership

Become informed about termites **Do NOT Panic !**

Learn about treatment options. **Take your time !**

Have SITE inspected (OJO on **FREE** inspections !)

Evaluate 3 proposals, at least 3 different firms

Understand basics and limits of work to be done

Prepare areas and cooperate with service provider

Pay for service as per agreement

Re-evaluations at least annually !

“Caveat Emptor” / Buyer Beware

Become Informed !

Consumer should be on-site during ALL inspections !



“How to Select a Termite Control Service” L178 or E369





Listen with Care and ASK QUESTIONS

NO Free Inspections PLEASE !

Each Termite Job is Unique !



Worth1000.com

Each Termite Job is Unique !



Training and Integration are KEY

Granovsky Associates, Inc.

IPM Training > 80 Videos R & D G.A.I. LOGO Service Consulting International



*Solving the Maze of Pest Problems
Since 1984*

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Termites in USA

Board Certified Urban and Industrial Entomologist