

“Scratch That Itch:”

Exterminating Bedbugs Through
Partnerships With Private
Enterprise.

Objectives of this presentation

- How to set up an Integrated Pest Management Class
 - Why you should
 - Who is your audience
 - Why Pest Management companies will want to be involved
 - What is the class like

A Little History

- In 2014, Kansas City, Missouri Health Department had been receiving more and more bedbug complaints for over five years
 - The Health Department had no ordinances for enforcement
 - Other pests, such as cockroaches and mice were also being reported on a regular basis
- However, the City had neither funding nor regulations designed to fight bedbugs

A Little History

- Complaints had also escalated into letters to the editor/calls to public officials, etc.
- Educational presentations and media appearances were being made on a regular basis to educate the public about bedbugs
- The public, however, wanted **ACTION!**



A Summary of the Problem(s)

- People expect that the Local Health Agencies will regulate bedbugs
 - But bedbugs don't spread disease, therefore, they're not a health hazard, they're a nuisance
- The public is generally unaware of the health effects of pests such as cockroaches and mice
- The public is generally unaware of the practice and benefits of integrated pest management (IPM)

A Solution that helps resolve those problems

- What if you gave a class that taught the general public about IPM?
 - It would cover the topics of:
 - The principles of IPM
 - The health effects of pests
 - Information about common pests; mice, cockroaches and bedbugs
- And what if you could get pest management companies to agree to give discounts to people who take the class and pass a brief exam?

Why is this a Sound Solution?

- It costs virtually nothing
 - Just the time to deliver the presentation and minor printing costs
- It actually does provide valuable information to the public
- It helps to counter the many, many myths that are out there

We decide to give it a try

- We contacted several pest control companies that we had done business with in the past
- We arranged a “dry run” with members of our own staff
- We informed our contacts in the media that we were going to be starting the class and we were accepting enrollees
- Classes began

Why Should Pest Management Companies Agree to Participate?

- Customers, and more importantly, educated customers
 - They did suggest adding preparation instructions to the class
- They are recognized as practitioners of the most effective form of pest control available today, IPM
- We do not control the level of discount they give, they do

Who is your Audience?

- We do not restrict our audience to residents of Kansas City, MO
 - Anyone can participate
 - However, due to insurance restrictions, only homeowners can receive the discount
- Timing is also a factor
 - Oddly enough, the highest percentage of no-shows seems to be for classes held on the weekends and evenings
 - So much so, we basically stopped having classes then
- Classes can also be held off-site for sufficiently large audiences

Mechanics of the Class

- Keep a spreadsheet/list of possible attendees that can be informed of upcoming classes
- Design a database
 - Keeps track of people who have registered, class attendees, prints certificates and discount coupons following successful class completion
- Someone needs to write and deliver the actual class
 - In addition to the presentation, you'll need props, hopefully available from your pest management professional/hardware store

Contents of the Class

- What is IPM?
 - The basic principles
 - Exclusion
 - Identification
 - Sanitation (What does clean smell like, etc.)
 - Food, water and shelter
 - Specific, safest control 1st, general control as a last resort
 - “The less places pests have to hide the easier they are to treat”

What is Integrated Pest Management?

- Integrated Pest Management (IPM) is using a variety of methods to control pests in the least expensive ways that causes the least amount of damage
- In other words: “Doing the mostest with the leastest that’s the safest and the cheapest”
- ❖ **Integrated**-The variety of methods including sanitation, repair, exclusion, removal of food, pesticides, etc.
- ❖ **Pest**-Anything living that exists where you don’t want it to be
- ❖ **Management**-Covers a lot of things like: “What’s a tolerable level of pests?” “What is this pest?” “How much do I want to spend to get rid of it?” etc.
- But what it really boils down to is this: *“What are the most effective, least damaging actions can I take that will help me control this pest?”*

Why use IPM?



- It works
 - The Boston Housing Authority noted a 68% reduction in pest calls after starting an IPM program
- It is sustainable
 - Pests can develop resistance, become bait shy or even change behaviors if only one method is used
- It doesn't poison the environment or you

Principles of IPM

- **Set Action Thresholds**
Seeing a single pest isn't always a problem
- **Monitor and Identify Pests**
Not all insects are harmful
Control measures can be very different for similar species
- **Prevention**
As a 1st line of defense the structure should be made as pest-unfriendly as possible
Sealing up cracks and crevices where pests can hide and reproduce
Establishing a “no-pest strip” around the structure (an open barrier where the pest must cross in order to gain entry)
Sanitation and opening up areas for easy cleaning and monitoring
- **Control**
If, after all this, pest control is still required, the method utilizing the least risk is used
Work from the specific to, at last resort, the general

What attracts pests?

- Pests are attracted by the presence of three things

- Food

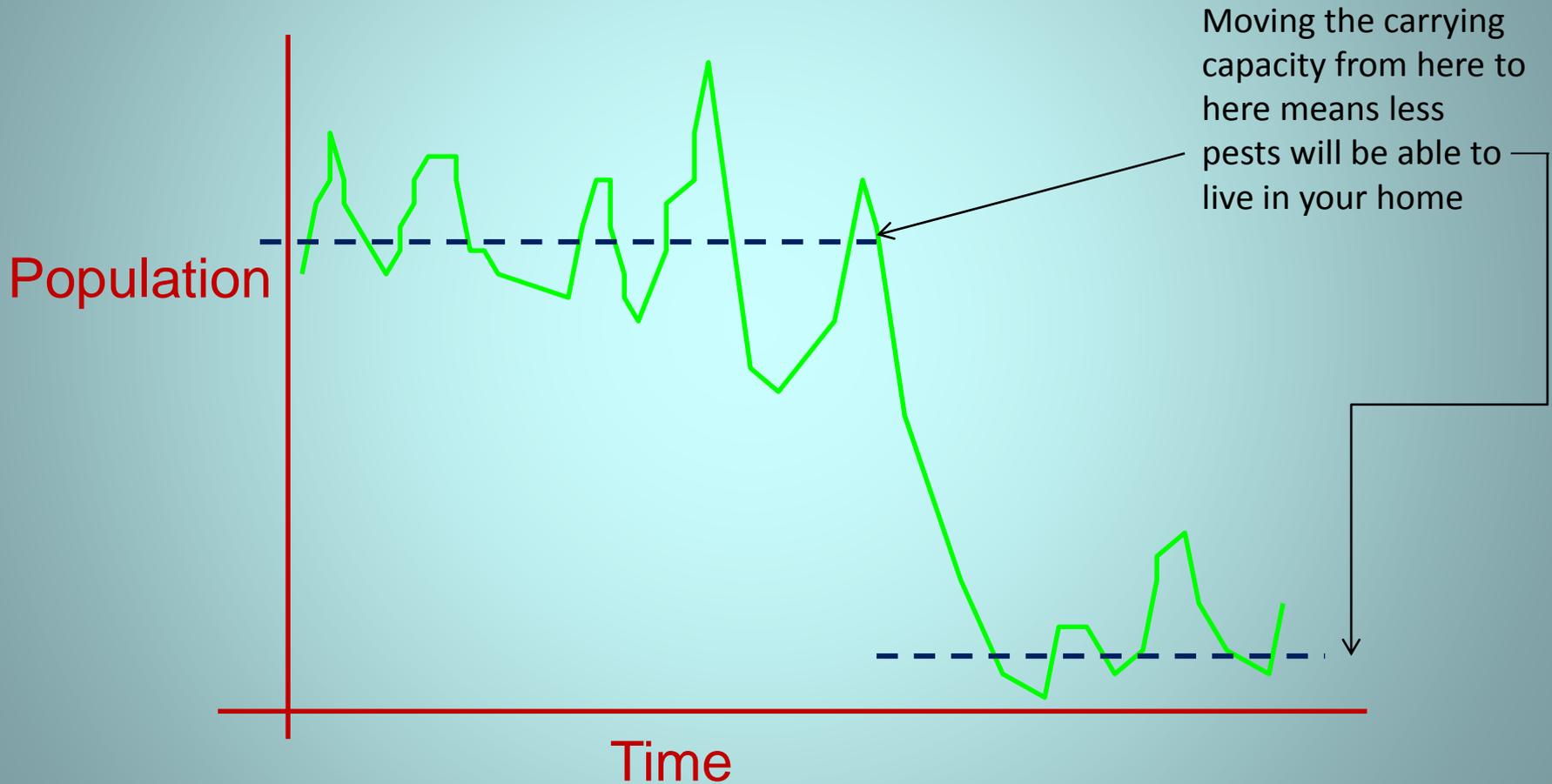
- Water

- Shelter



- If you remove any one of those three things, the pest cannot survive

“Carrying Capacity” is the amount of pests supported by the available food, water and shelter in an environment



How do you lower the Carrying Capacity?

- Sanitation is the 1st step
 - Cleaning is best done by soap, water and elbow grease
 - Chemical smells in many cleaning agents contaminate bait
 - Cleaning is not the only step, however
- Vacuuming cuts down on Pest numbers
 - Vacuum everything, floors, walls, ceilings, furniture
- Repair cracks and crevices and seal openings
 - Don't let them in and, if they do get in, don't give them anyplace to live



Some notes on Cleaning

- Don't dry-dust or dry-sweep
- Always try to use the least toxic cleaning method
 - For example; soap, water and “elbow grease”
 - Frequently change water
- Remember, nothing smells “clean”
 - “Clean” doesn't have a smell
- When vacuuming, move slowly and be thorough
 - Use a beater bar and HEPA filter

Which number is your living room?

Clutter Image Rating: Living Room

Please select the photo below that most accurately reflects the amount of clutter in your room.



1



2



3



4



5



6



7



8



9

Clutter
Image
Rating,
developed
by Dr. Randy
Frost and the
International
OCD
Foundation

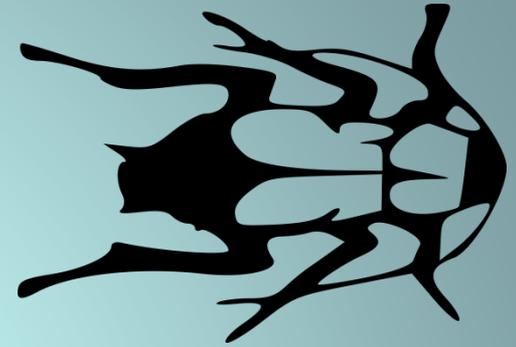
Another Important Step: Monitoring

- It's important to know your pest
 - Treatment varies, depending on the pest
 - Use the right treatment for the right pest
- Monitors are the “early warning system” of pest control
 - Monitors are not intended to end a pest problem, only to determine if the problem is present
- Monitors are important, as is observation
 - It's important to use the appropriate monitor



Contents of the Class

Specific Pests



- Cockroaches
 - Types of Cockroaches
 - German, Brown-banded, American, Oriental
 - Why they are Health Hazards
 - Asthma, allergens both alive and dead
 - Methods of control
 - Exclusion, baiting, sanitation, vacuuming
 - Preparation for Treatment

Contents of the Class

Specific Pests



- Rats and Mice- What's the difference?
 - What are rodents and why do they matter?
 - Why are they health hazards
 - Methods of control
 - What is the difference between control for rats and mice?
 - Exclusion, traps, baits, habitat modification
 - Preparation for treatment



Contents of the Class

Specific Pests



- Bedbugs
 - What they are, what they eat, why anyone can get bedbugs
 - Methods of inspection
 - Live bedbugs must be found!
 - Methods of Control
 - Advantages and disadvantages of Heat and Chemical treatments
 - Vacuuming
 - Preparing for either Heat or Chemical Treatment

Class Handouts

- General Information Sheet for IPM
- Information Sheets for every pest discussed
- Vacuum setup instructions
- Clutter scale photos for living room, bedroom and kitchen
- Preparation instructions for all pests (as approved by all the participating pest management companies)
- List of participating pest management companies (for those who pass their exams!)

What about the Exam?

- 20-25 questions, multiple choice
- Open book
- Difficult enough to make participants feel they've learned something, not so difficult that the vast majority don't pass
- You should, when teaching the class, frequently state that "this just might be on the test" when something is going to be on the test

Lessons Learned

- While this is not a 100% solution to the problem, it's a start
- One area that this solution does not directly address is that of rental units and apartment dwellers.
 - The knowledge helps everyone, but no discount is given due to insurance issues
 - Direct treatment will have to come through a different route

Contact Information

Michael Swoyer

Supervisor of Rat Control

Kansas City, Missouri Health Department

(816)513-6010

Michael.swoyer@kcmo.org