

Using IPM to Create Safe, Decent Affordable Housing

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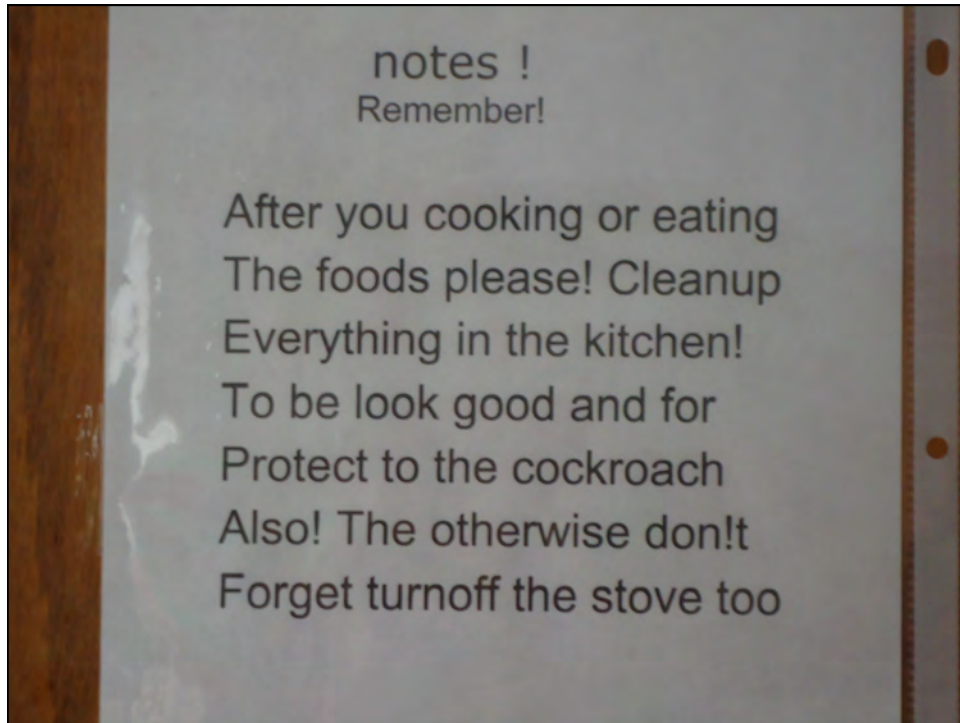
🐦 [@StopPests](https://twitter.com/StopPests)

📘 facebook.com/StopPests

What makes you feel important?

The Scientific Method

1. Define the Problem
2. Research the Topic
3. Make Observations
4. Form Hypothesis
5. Experiment
6. Analyze Data
7. Draw Conclusions
8. Communicate Results



Challenge: Take a bug to dinner

1. Meet someone new
2. Learn their name and what makes them feel important
3. Have them lead you in a conversation about bugs
4. Teach them how to use IPM



MARK PETERSON / REDUX FOR TIME
People sample various bug dishes at the Bug Chef Cook-Off at the Broad Appétit Food Festival, downtown Richmond, Virginia.

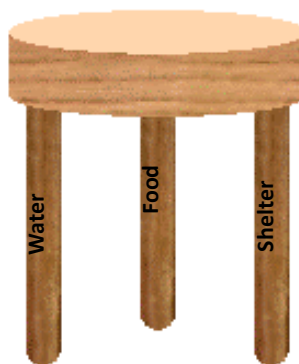
Time Magazine <http://ti.me/W9QLKE>

Integrated Pest Management (IPM)

- 1. Inspect and monitor**
2. Identify
3. Scale the response to the level of infestation
4. Respond
 - Non-chemical control
 - Changing people's behavior
 - Chemical control
 - Biological control
5. Evaluate effectiveness

Think like the enemy

- Entry
- Food
- Water
- Shelter



Why do we want people to care?

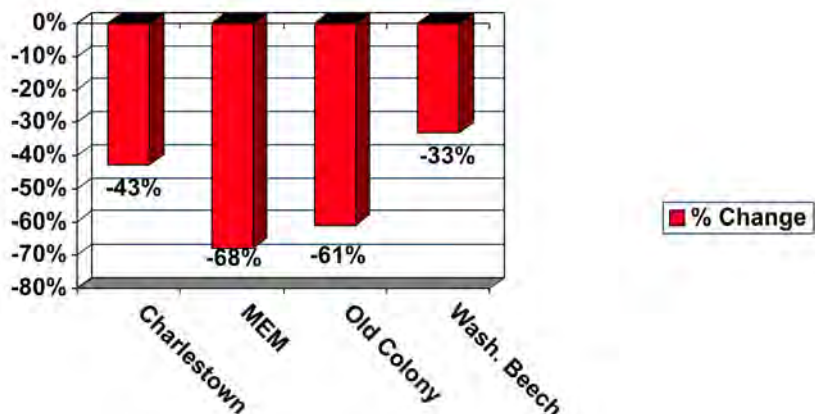
IPM Funding Diversification

	Food Security		Human Health	
	Ag	Urban	Ag	Urban
Environment & Sustainability	Manage invasive species and other pests (weeds, diseases, insects, mammals)	Access to food in cities		Manage pests in affordable housing and schools
	Reduce pesticides in groundwater and soil		Reduce pesticide exposure	Reduce pesticide use; decrease asthma and stress (from bed bugs)
Processes: Increase awareness of IPM through communication, training, and education; Develop partnerships and commitment.				

Urban
 Manage pests in affordable housing and schools.
 Reduce pesticide use; decrease asthma; and decrease stress.

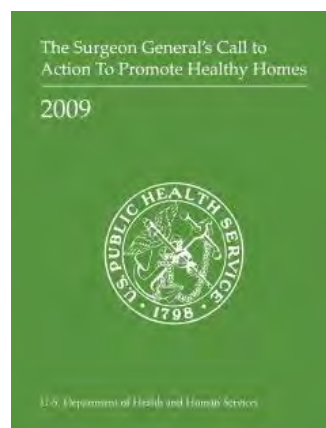
Boston's success

Percent Change in Total Pest Work Orders



Why do I want people to care?

- IPM is part of a nationwide Healthy Homes movement to reduce housing-based health hazards
- A healthy home is:
 - Dry
 - Clean
 - Ventilated
 - Safe
 - Contaminant-free
 - Maintained
 - **Pest-free**





Goal

To improve pest control in affordable housing by teaching everyone who works, lives, and plays in housing how to use integrated pest management.

Mission

To eliminate high-level infestations of public health pests from affordable housing.

Call to Action

Prevent pests, promote health

IPM works

At properties, an IPM program will

- increase communication and cooperation among staff, contractors, and residents;
- decrease the amount of pesticides being applied;
- result in fewer pests; and
- reduce complaints about pests from both residents and staff members.

2007-2012 StopPests Outputs and Impacts

- Developed trainings
- Trained trainers
- Trained/supported Public Housing Authorities
- Funded peer educators
- Networked with associations and work groups
- Produced pertinent educational materials
 - www.stoppests.org
 - StopPests Blog
 - Bed Bug Protocol
 - IPM: A Guide for Affordable Housing

2012-2016 StopPests Deliverables

- Develop and replicate an IPM implementation process for housing providers to follow;
- Coach at least 70 housing providers through the process; providing—as needed— pre-training guidance, on-site training, and post-training technical assistance;
- Evaluate IPM in the participating housing communities and gather the data needed to assess a return on investment (ROI) of the program's efforts; and
- Actively work to eliminate documented obstacles to IPM in affordable housing

"Documented Obstacles"

- Poor management which results in poor unit access, no housekeeping enforcement, high staff turnover, etc.
- Influencing factors outside of the traditional scope of IPM (i.e. social factors, cultural factors, poor management, physical and cognitive disabilities including hoarding, etc)
- Pest control is not a priority
- Lack of resources/staff to fulfill existing mandates
- The pest management industry needs to make a profit on affordable housing services
- Availability of qualified and willing pest management firms

"Documented Obstacles"

- IPM vary between specific recommendations made for individual infestations and general IPM recommendations and are not always based in science/ the real world
- Lack of awareness:
 - by management of existing problems and solutions;
 - by residents of responsibilities, reporting and resources;
 - by maintenance of their role; and
 - by the pest management pros that they can do more
- Frustration of staff who work with residents
- Lack of resident cooperation
- StopPests is a free service, so housing providers don't have "skin in the game" when working with us

Pest control in affordable housing: a **wicked problem** (Rittel & Webber, 1973)

It may also be framed as a **social mess** (Horn, 2007):

- No unique “correct” view of the problem;
- Different views of the problem and contradictory solutions;
- Most problems are connected to other problems;
- Data are often uncertain or missing;
- Multiple value conflicts;
- Ideological and cultural constraints;
- Political constraints;
- Economic constraints;
- Often a-logical or illogical or multi-view thinking;
- Numerous possible intervention points;
- Consequences difficult to imagine;
- Considerable uncertainty, ambiguity;
- Great resistance to change; and
- Problem solvers are out of contact with the problems and potential solutions.

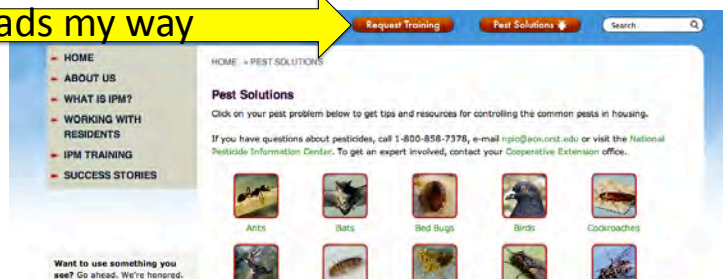
Solving wicked problems

- A collaborative approach: all stakeholders are engaged in order to find the best possible solution for all.
- Key advantages include
 - higher stakeholder commitment,
 - more comprehensive and effective solutions, and
 - fewer resources having to be used by any one stakeholder.
- Key disadvantages include increased
 - transactions costs and
 - the fact that the skills of collaboration are in limited supply.

Ways you can help

improve pest control by teaching everyone how to use integrated pest management.

1. Send me your ideas
2. Take a bug to dinner
3. Support  @StopPests  facebook.com/StopPests
4. **Send leads my way** 



THANK YOU!

My gratitude goes to

- Dr. Forschler for the invitation
- Dr. Strand for the logistical help
- Dr. Lim, Caroline, Tiffany, and John for transportation, company, and culinary delights
- The department for funding this opportunity
- You all for attending!

Questions?

- StopPests in Housing Program
- Career options
- Bed bugs
- Hoarding
- Delusional infestation
- GreenPro
- ACE/BCE

