

## They're Back: IPM and Bed Bugs

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## Why are they back?

- GLOBAL TRAVEL & IMMIGRATION
- PESTICIDE USE
  - Change in available pesticides
  - Change in use patterns
  - Possible resistance
- LACK OF KNOWLEDGE



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## LACK OF PUBLIC AWARENESS?



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## INTEGRATED PEST MANAGEMENT

Combination of all available methods  
to manage pests with pesticides as  
a last resort.



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## INTEGRATED PEST MANAGEMENT

- IDENTIFICATION
- INSPECTION
- PLANNING
- EDUCATION
- SANITATION
- EXCLUSION
- TREATMENT
- MONITORING



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## IDENTIFICATION



- Confirm that bed bugs are actually present
- Get a positive ID



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**Oval, Flat (or)  
Long, Cigar-shaped**



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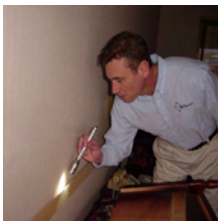
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## **INSPECTION**



- Very thorough
- All potential harborage sites
- Inspect adjacent rooms (above, below & both sides).



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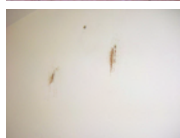
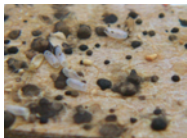
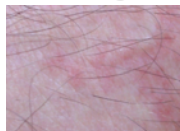
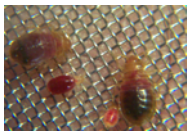
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**What are we looking for?**



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## BITE REACTIONS

- No reactions
- Small inflammations
- Severe allergic reactions

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## Where do we inspect?

- Mattress & bedding
- Night stands
- Headboards
- Bed frames
- Dressers
- Picture frames
- Pipe chases
- Outlet covers

- Baseboards
- Floor cracks
- Paneling
- Peeling wall paper
- Wheel casters
- Decorative items
- Luggage
- Others?



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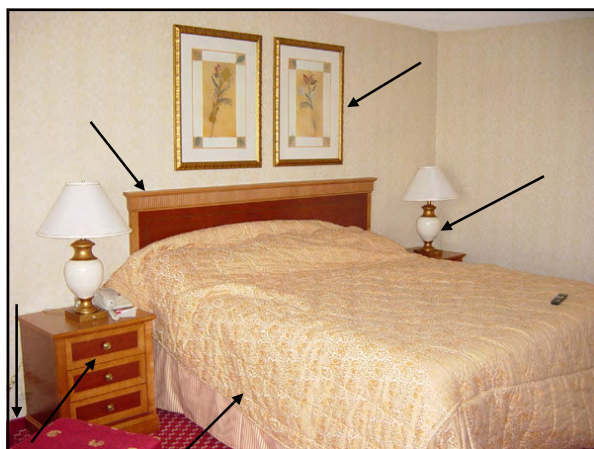
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## PLANNING



- Client cooperation
- Pricing
- Contracts



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## EDUCATION



- Yourself
- Your technicians
- Your customers



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# COPESAN UNIVERSITY



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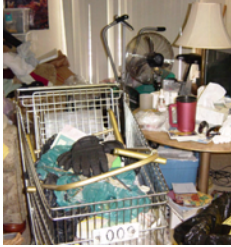
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## SANITATION



- Clutter provides harborage for bed bugs
- Makes inspection & treatment difficult



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## EXCLUSION



- Bed bugs can find harborage in any crack or crevice.
- Difficult to physically exclude them from a facility
- Chemical exclusion?



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## HOT OR COLD



- Steam treatments
- Freeze smaller items
  - Temperatures of minus 22°F or below



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## CHEMICALS



- Treat every existing and potential harborage
- Residual liquids & dusts
- Insect growth regulators
- Fumigation



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## MONITORING



- Detect and eliminate pests before they become a problem
- Confirm that the treatment was successful



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## WAR ON BUGS

- Hospitality and Tourism industry impacted.
- The Hawaiian Legislature introduced a legislation (SCR 69) to promote awareness and to help prevent bed bug infestations.



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**THANK YOU!**



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