"Housing managers must

realize early detection will

provide savings due to reduced

treatment costs...," says Vail.

Volume 20

### A Little Monitoring Goes a Long Way

Over the years, Midwest Pesticide Action Center has spent much time and ink singing the praises of bed bug monitoring. The <u>B.I.T.E.</u> <u>Back! newsletter Vol. 18</u> featured the passive pitfall trap as the most

cost effective monitor, at just \$12/month per apartment, and how to use it. Now there's a new study showing they can cost even less to use and still detect low-level infestation. According to the study published in the *Journal of Economic Entomology*, just one passive pitfall trap placed in a studio or one-bedroom apartment can detect low-level

bed bug infestations *four out of five times*, indicating that a simple monitoring plan can both detect bed bugs and lower management costs.

Researchers at the University of Tennessee found that even a few pitfall traps (A and B) can detect low-level infestations in a studio or one-bedroom apartment four out of five times. Pitfall traps were found to be much more effective in detecting low-level infestations than sticky traps (D and C). Photo credit: Karen Vail. Ph.D.

Researchers <u>tested</u> two pitfall-style traps, ClimbUp Insect Interceptors and BlackOut BedBug Detectors, and one sticky trap, the Bedbug Detection System (all shown above). Over the course of the 8-week testing period, the ClimbUp and BlackOut pitfall monitors detected bed bugs 88% and 79% of the time, respectively. The sticky monitor did not fare as well, with only a 39 percent detection rate. Best of all, placing just one pitfall monitor was just as successful as placing two or four!

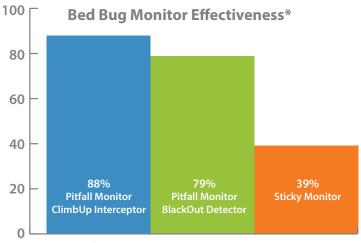
Karen Vail, Ph.D and lead author of the study, noted, "The lower cost of using fewer monitors and less time required to place them may encourage pest management professionals and housing managers

to use them more frequently and thus detect bed bugs before they spread."

The reduced number of pitfall monitors took an average of four weeks to detect the bed bugs, while greater numbers of monitors, based on previous studies, can detect bed bugs in just one to two weeks. The four

week range, however, still fits within the typical one to three month interval of most housing pest management inspection plans.

Although bed bugs can target any human dwelling, they are a significant concern for multi-unit and low income housing where the bugs can spread easily and resources for pest management are often limited. Elderly or disabled residents are particularly vulnerable as they may have trouble recognizing the signs of an infestation. Pitfall monitors offer a simple low-cost monitoring option essential to detect low-level infestations and nip them in the bud.



Percent effectiveness over 8 week testing period (1-4 traps per unit)

\*According to Bed Bug (Hemiptera: Cimicidae) Detection in Low-Income, High-Rise Apartments Using Four or Fewer Passive Monitors, K. M. Vail J. G. Chandler

# B.I.T.E.Back!

### What Lurks in the Laundry?

You know the saying, "Don't air your dirty laundry in public!" That goes double around bed bugs, that is, if you don't want to take them home with you. As it turns out, bed bugs are attracted to dirty laundry. This behavior may explain bed bugs' penchant for long-distance travel as hitchhikers in luggage and provide clues for how to stop them from inviting themselves home with unwitting travellers.

It has long been suspected that air travel and the increase in relatively frequent, short stays in hotels, motels, and the like has contributed to the global resurgence of bed bugs that often hitchhike out on luggage.

Researchers in England wanted to know why and devised a study to test the theory that dirty laundry might be the answer.

Bed bugs are attracted to human odors, which helps them find us in bed along with the carbon dioxide exhaled and body heat. This new study shows that the body odor left on dirty clothes is alone enough to attract bed bugs. Piles of soiled laundry in a suitcase or hotel room is a magnet for bed bugs and explains, in part, their hitchhiking behavior. By managing dirty laundry better when traveling, it is less likely to attract any bed bugs present and reduces the likelihood of taking home an unwelcome passenger.

B.I.T.E. Back! newsletter Vol. 19 includes a list of travel tips to protect against bed bugs, such as how to inspect a hotel room and how to launder clothes upon returning home to kill any bed bugs that may have hitched a ride. As we move into the holiday season, careful management of travel clothing will be an important strategy to prevent bringing home bed bugs along with the leftovers.

## **Keep Your Laundry Safe from Unwanted Hitchhikers while Traveling**

Bed bugs are attracted to dirty laundry. Here are a few steps you can take to keep your dirty laundry safe from bed bugs.

**Upon arrival:** Inspect your hotel room for signs of infestation (see tips in *B.I.T.E. Back Vol 19*).

**During your stay:** Keep your suitcase closed, with clothes inside the suitcase. Put dirty laundry in a sealed plastic bag. Do not leave dirty clothes on the floor or on the bed. For maximum safety, keep your luggage covered in a plastic bag.

**Before leaving your hotel room:** Inspect your clothes and the interior and exterior of your suitcase for bed bugs.

When you arrive home: Store clothing in a sealed plastic bag until it can be laundered. Put all clothing, clean or dirty, in a hot dryer (120 degrees) for at least 20 minutes. The heat will kill bed bugs from eggs to adults.



## **Upcoming Events**

**Midwest Grows Green Lawn & Land Forum Workshop** - Encourage your local park or school district to participate in this full-day workshop on Monday, November 13th. Find out more and register at bit.ly/LLFworkshop.

**MPAC** at the IAPD/IPRA Soaring to New Heights conference - We'll be presenting on how to manage outdoor spaces without synthetic pesticides on January 18th. Find out more and register at <a href="https://www.ilparksconference.com">www.ilparksconference.com</a>.

Visit <u>midwestpesticideaction.org/mpac-events</u> to stay up-to-date on our upcoming events!

#### **MPAC** is here for You!

Like what we do? Help us do more by donating now. Your support helps us inform and empower communities to protect people, pets, and pollinators from pesticides. You can impact the life of a child in a daycare, school, or at home; a senior in subsidized housing; or protect a butterfly from toxins as it feeds. Act now (bit.ly/donateMPAC) because it's never too soon to make a difference.



Partial funding for this newsletter provided by the Chicago Department of Planning and Development.



Go to <u>midwestpesticideaction.org</u> to download bed bug factsheets and other useful information.