



Fumigation Service & Supply, Inc.

2019 Food Plant IPM, Fumigation, and Decontamination Seminars

[FSS](#) is proud to announce our 2019 Food Plant IPM, Fumigation and Decontamination Seminar opportunities. Our long-standing commitment to education continues with the announcement of our Chicago, Illinois and, Atlanta, Georgia single day educational sessions. Content from industry-leading speakers on such topics as food safety and security, food plant auditing, integrated pest management, fumigation options for structures and commodities, food plant decontamination for control of pathogens, remote monitoring systems for rodents and insects and pertinent topics from many other industry professionals too!



Come... visit... network... and most importantly learn about the many changes our industry is experiencing and how these changes can help you protect your commodities, foodstuffs, human/pet health and ultimately your reputation, brand and future.

Additional Information and Registration Coming Soon!





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FSS names Beau Bridwell, ACE as Regional Manager of New Southeastern Region



[Fumigation Service & Supply, Inc.](#) is expanding coverage to the South. Introducing our newest region and newest Regional Manager, Beau Bridwell, ACE.

We are proud to announce our latest endeavor to expand our coverage area and offer our signature DynamicIPM Services to Georgia, Alabama, and Southeastern Tennessee. While this is a new endeavor for the traditionally Midwest-based company, FSS is responding to an increasing need for specialized services around the art of monitoring, prevention, and control of stored product pests in structures and commodities. FSS has a unique skillset and a reputation for delivering results with safety, quality, and integrity. We believe there is always a need for options when it comes to the challenges of stored product pest control. Our IPM, Fumigation, and Decontamination service suite will help fill that void. We have tasked Alabama native James “Beau” Bridwell, ACE to help us establish our presence and support our clients with exceptional customer service that our new clients will come to love.

James “Beau” Bridwell, ACE started his career in the pest control industry in 2008. Starting out as a route assistant, he has since held positions from Pest Control Technician to District Manager to Business Development Manager. Realizing the significance and rewarding career of protecting our food supply from pest infestation, Beau has a growing passion for our DynamicIPM Services approach that will prove to be invaluable to clients interested in solving challenging pest problems and protecting their brand. Beau is currently licensed in multiple Southern states in Pest Control and Fumigation. He holds continuing education certificates from Purdue University and the NPMA. Beau is also an Associate Certified Entomologist and has applied to Pi Chi Omega, a fraternal organization dedicated to furthering the science of pest control.

Beau enjoys building long lasting relationships and problem solving while protecting your brand name products and reputation. When he’s not working, Beau enjoys spending time with his family, Alabama football, and traveling.

We are very excited to have Beau be a part of our family. Congratulations to Beau and his partner Amber on their most recent addition to their family! From all of us, welcome to FSS. Roll Tide!

You can reach Beau at b.bridwell@fumigationzone.com.





Pat Kelley, BCE

Identifying Clothes Moth Damage and Frass – Part 1

This is part of a two-part article on how to recognize clothes moth damage and frass on wool clothing.

It has been many months since you wore that favorite red sweater of yours, but now that the cooler temperatures have started to creep in you immediately go to look for it in your closet. As you pull it off the shelf, you notice a dirty spot around the collar. Extending it away from you, you now see gaping holes in several areas that were not there before. You scream to yourself, “What Caused This!”.

It is likely that your mind jumps to the conclusion that you have clothes moths, but how can you tell for sure? The first part of this two-part article will lay out what signs to look for that suggest that your damage was caused by clothes moths compared to mechanical damage, damage by carpet beetles or by other means. Part 2 will detail what the appearance of the frass looks like for the webbing clothes moth, and the casemaking clothes moth and how moth frass may appear different than carpet beetle frass.



Webbing clothes moth damage on wool will present itself as silken tubes as seen in the first photo or as frass-covered feeding tubes as seen on the photo above. Occasionally, you might also find cream colored larvae and live and dead adult moths. Photos by E. Estabrook, Insects Limited, Inc.

Part 1: Damage

When you first notice a hole in a sweater or other clothing, the first thing that you should examine is how clean or dirty the area is around the hole. Using a good magnifying glass to closely inspect the area around the hole will make it easier to see some of the detail.



Insect Damage: When insects cause damage, they will almost always leave clues of their presence. When it is clothes moths causing the damage, these clues will be in the form of dirty frass (insect excrement), wisps of silk webbing, feeding tubes, and pupal cases. When the damage is caused by carpet (Dermestid) beetles, the clues will be frass pellets and numerous larval shed skins near the damage. Holes caused by insects feeding on wool will often have a slightly depressed area surrounding the hole where the insect has grazed on the surface of the textile but not all the way through.

Mechanical Damage: If there is no dirt or frass surrounding the hole and the item has not been recently cleaned, there is a good chance that the damage was caused by another means. Mechanically caused holes can form when sharp metal edges on desks, tables or in other work areas snag and cut the fabric as we walk past or lean against these surfaces. If you find multiple articles of your clothing with damage and that damage is all in the same physical spot on the clothing (E.g. All the holes are located just below your belly button or at the same point on your right side, etc.) and there is no evidence of insect activity around the holes, then they were likely caused by a sharp edge that you don't even realize that you came in contact with. It could possibly even be your clothing getting caught in the seatbelt of your car day after day.

Chemical Damage: Another common cause of holes in clothing are chemicals that eat through the fabric. If chemicals, such as bleach or acidic cleaners are accidentally splashed onto clothing or picked up on the clothing as we lean against tables or place our arms on countertops, these can cause the fabric to become brittle and break away. This can leave small or large holes in the clothing itself. Look for signs of discoloration or material that breaks easily away when you touch it.

Excessive Heat Damage: Burn holes caused by cigarette ashes or small embers from a grill or fire can burn or melt holes into clothing without us even knowing it. When this occurs, the area around the inside of the hole may appear black or melted. A simple sniff test may indicate if fire was involved.

Since cotton and synthetic materials are not a food source to clothes moths or carpet beetles, holes in these types of materials will almost always be caused by sharp edges, chemicals, or just plain wear and tear. The exception to this rule can occur when cotton or synthetic fabrics are hanging or laying directly adjacent to heavy populations of clothes moths on wool, feather or other natural fibers. If the cotton or synthetic materials have

human perspiration or food stains on them, these can be attractive to the clothes moth larvae and small areas of damage can occur. In this circumstance the clothes moth larvae are looking for nutrients in the stains such as salt or food nutrients. Cotton and synthetic fabrics are not a food source for insects and the damage should be minimal.



*A close examination of a hole in a sweater reveals a cylindrical pupal case and loose frass indicating that casemaking clothes moth, *Tinea pellionella* caused this damage. Photo by P. Kelley, Insects Limited, Inc.*

Look for Part 2 on how to recognize clothes moth damage and frass on wool clothing in next month's [Fumigants & Pheromones Newsletter](#).

Fumigants & Pheromones

Insects Limited, Inc.



James Feston

New Product: Freezer Treatment Bags

With the decreased use of chemical moth-proofing (remember moth balls?), the incidence of clothing and rugs damaged by the clothes moth has increased significantly in recent years. Freezing items of clothing can be one of the easiest and best options available for the general public but many are unsure of just how to go about that task. [Insects Limited](#) has started to market freezer-specific bags just for this purpose so that people can perform this treatment themselves in their own homes. We have known for some time that clothes moth adults, larvae, and eggs can be killed with exposure to freezing temperatures. Items that you wish to treat can be placed in the large metalized treatment bags and frozen in a home freezer (after you find space behind the hash browns and TV dinners), removed after one week, and allowed to warm up for at least 24 hours (to avoid condensation on the object). Clothing or treated objects can be left in the bag at room temperature to continue to protect the item or can be swapped out for the next round of clothing and the treatment will be repeated. The kit comes with 5 large bags that can each hold up to three full size ugly Christmas sweaters. This is a product that is safe, effective, and pesticide-free.

Let's discuss the process that you might go through to determine if freezing is for you. [Insects Limited](#) regularly advises frustrated and dismayed homeowners that are encountering this pest for the first time or have struggled to maintain control from year to year. The problem can quickly feel overwhelming after learning that there is no silver bullet or magic wand to get these pesky creatures out of your life for good. Ultimately, the long-term solution takes on a multi-pronged approach.

Assessment

The first prong is to assess the situation. You want to use monitoring tools like [pheromone traps](#) to see if you are dealing with a widespread infestation throughout the house or apartment, or if is coming from a single point source like a "new" sweater from the thrift store or a wool rug that you reclaimed from Grandma's storage unit.



Disposal

Next is disposal of the items beyond help. This is the worst part of a moth infestation and the call is up to you on each damaged item. Heavily damaged items that are beyond help should be removed promptly by placing them immediately in a plastic bag and then into an outdoor trash receptacle to avoid spreading eggs or larvae.

Treatment

The last step is to identify items you want to treat. Remember, you don't have to treat your whole wardrobe. Clothes moths are very picky eaters. They stick to the three main clothes moth food groups: wool, fur, and feathers. They almost never deviate from these three basic items. (I know you panicked when you found some holes in your cotton tees or saw them landing on your bath towel, but I promise it wasn't them and the moths don't like terry cloth! Clothes moth damage is ragged and messy. Watch a [video of clothes moths](#) in action.

You also don't have to treat at-risk items that you wear at least once a week. Clothes moths like to eat in peace and don't want to spend time with you out-and-about any more than you do with them.

So now that you have narrowed the list of items to treat to a much more manageable level, it's time to look at your options. The difficulty in treating for clothes moths with traditional insecticidal treatments is that they are often not approved for use directly on clothing. This leaves you with only a handful of other treatment options. Despite the damage they do and their reputation, clothes moths can be fragile creatures. Washing clothes with some of the older, top-loading, high-powered models of washers and drying the clothes with power-hungry dryers at the highest heat setting will kill all life stages of the clothes moth. Unfortunately, many of the clothing and objects the moths infest don't stand up well to this mechanical stress. There is also conjecture now that newer, more power efficient front-loading washers and low-heat energy efficient dryers do not have this same lethal effect on the moths and this is leading to higher moth populations. Another option is dry cleaning. Dry cleaning will kill all life stages but can become costly depending on how expansive your wardrobe and some dry cleaners will not accept clothing with an active moth population on it.

For years, [Insects Limited](#) has provided pheromone monitors to assist homeowners in locating clothes moth infestations and have also advised homeowners on both professional and at home clothes moth treatment options. We hope that by providing these new [Freezer Treatment Bag Kits](#), that we can allow frustrated homeowners to control damaging clothes moths themselves and do it safely and effectively.



To learn more about identifying clothes moth damage and frass, be sure to read [this article](#) by Pat Kelley.