

BEST PRACTICES FOR FOOD PLANT INSPECTION

Dr. Austin M. Frishman

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PREFACE

Austin M. Frishman, Ph.D., BCE Emeritus

For more than 50 years, Dr. Frishman inspected food plants throughout the U.S., Canada, and the Caribbean. He helped pioneer some of the IPM practices currently used as standard procedures.

His desire to share his knowledge on how to conduct such inspections and share techniques and critical approaches to doing inspections lead him to create this resource.

At the age of 80, it was Ethan Vickery of VM Products who encouraged him to do so.



INTRODUCTION

Inspecting for insects and other wildlife came very easy for me at a young age. It was exciting to do, and I still get a high when finding something alive close to 75 years later. I still feel the same excitement that was there when I was three years old. Everyone should be so lucky to maintain a piece of their childhood in their life.

I am much better at it now because I know more about where and how to look based on the biology of what I am searching for. Hopefully, I can raise your positive excitement by showing how I inspect for different pests.

I never realized I inspired people, but in the last 15 years or so, people write me and tell me how they got into the industry. Many talk about how they were the child of a pest control operator sitting in the audience. They say what I said got them excited to want to go into the industry. That's touching. I still probably talk to at least three former students each week and I haven't taught since 1980.

As mergers happen and outsiders purchase companies, the challenge is to teach the love of the industry that the technician brings. At the same time, there's a need for understanding the uniqueness of our customer relationship, and how we need to better communicate our value to them.

In this resource, I cover in detail safety tools and techniques for different insects and other urban pests, most based on the concept "Think like the pest you are trying to find".



TECHNIQUES

Hunters and fishing people are not lucky when they consistently catch the “big one” They study the area. Based on their knowledge of the species they hunt or fish, they learn to position themselves for the kill. Hunting for pests works on the same principle. Here are my best tips on how to find what you are looking for in and around food plants.

- **Inspections require a knowledge of biology but incorporates a bit of art**

The art is in the development of finetuning techniques. For both new people and experienced ones, this section should help you upgrade your inspection techniques, resulting in finding more pests if they are present.

- **Go at night**

Three simple words but they mean a lot. Most pest management firms have their technicians work daylight hours 8 AM to 5 PM, but many pest activities occur at night after dark. You will learn a lot about pest activity this way. It does not have to be all night, just once it is dark.

- **When you enter a dark room or closet, leave the lights off**

Turn on your flashlight and look around. When you see any pest activity, turn the lights on and watch the insects run (cockroaches). They will lead you to where they harbor.

- **Read the spider webs**

People who fly fish read spider webs and select the correct fly to fish with based on what they see in the web. You check the web to see what insects may be present. The spiders go to the lights.



- **How to look really look**

When you are walking, you cannot possibly see everything you pass. Stop and stare. Look at one item at a time.

Example: Ceiling light shields, columns, fans. You may see six or seven of these items by standing in one position. Based on what you see will tell you where to take a closer look.

- **How to look into space**

We are trained to look at solids. Your eye focuses on the solids, not open space. Flying pests fly through space, not solids. Small flies or beetles may be present by the hundreds, but you will not notice them unless you look into space. Concentrate. It takes a few seconds to actually look at space.

- **Swaying to the right and left**

Stand still to see if an exit door is not sealed properly. Sway and look at the side of the door as well as the top and bottom. If you see any light, then insects can enter.

- **Test direction of airflow to see if air curtains are working properly**

Air curtains should blow air outward to prevent insects from entering. Test with a small piece of tissue. Open the exit door and gently drop the tissue on each side of the door and in the middle. In each case, the tissue should blow outward. Sometimes the center of the opening properly works, but the edges are not set correctly. They have to be readjusted.

- **Stop and Listen**

Those of us who enjoy nature and the beauty of the outdoors stop and listen. Do this in a food plant. You may hear a bird chirping or a machine grinding improperly.



- **Smell deeply**

Wave your hand, inhale deeply in areas where you suspect sanitation is poor and/or flies may be breeding. Rancid odors dictate a closer look. You should get good enough to smell cockroaches and tell which species without ever seeing them.

- **Kick an Open Trash Can**

If red-eyed fruit flies are in it, they will fly up, and then most will return within seconds.

- **Pull Items from Under a Table**

This requires bending down and searching. You are looking into dark comfort zones where pests hide.

- **Get on your back and slide under a sink so you can look straight up under the sink**

Another excellent location to find cockroaches.

- **Where applicable and pipe collars are loose, pull open and check.**

- **Request that heavy items (ex: pallets of product) stored against walls be pulled out so you can check the floor/wall junction**

- **Using open palms, feel for warmth**

Check these areas closely.

- **Use air from an empty hand duster to "flush" for cockroaches**

- **Do not use pyrethrins**



- **Check behind and under insect light traps for insects**

Check under rodent bait stations. When anchored, this is difficult. See if sticky traps can be placed inside the bait stations. If the station is bolted to a heavy stone, lift the stone and look at the flattened ground.

- **Look up at light shields and see what may be caught inside**

If in doubt, open and check it.

- **Check under the liner of trash cans**

- **Check trash cans to see if anyone threw away old sticky traps with insects on them**

- **Lift suspended ceiling tiles in corners or near columns to inspect the void above**

- **Check that FIFO (First in/First out) is working properly**

Check areas where the oldest vulnerable products sit

- **Ask politely to different people in different areas if everything is OK**

Check the pest log reports before you begin the inspection.

- **Pick at cracks in the floor for compact food that may have insects**

- **Use your flashlight and extended mirror to reach into areas where you can not easily get your hand**

Example: Above door frames, in tight draws.

- **Shine your light at an angle on wide wall areas**

You will see more area than if you shine the light in a straight beam on one spot.



- **When looking down a dark floor drain, shine a strong beam directly onto the surface of the water**

Wait a few seconds (up to 10). Look for undulating movement from fly larvae. The strong light increases their movement.

- **Each time you visit a facility, ask questions to learn more about the account**

Example: There seems to be a new machine in the processing area. What is it for?

- **Keep a careful record of what area you inspected the last few times**

It is not possible to cover the entire grounds and structure in one visit. This way you know what you have not covered on your next inspection.

- **Ask yourself how you can improve on the value of the inspection you give?**

Do not become complacent. Drive yourself to be the best at what you do. You have to work at giving each customer the comfort level that they are receiving the value they pay for each inspection. Start with communicating what you do and find on each visit. You can call this an exit summary.

- **Share and learn from other inspectors**

Join appropriate associations including at least one food group. Read their trade magazine. No person is as strong alone as when he joins a good team.



- **Try to make a conscientious effort to alter the sequence and direction you undertake each inspection**

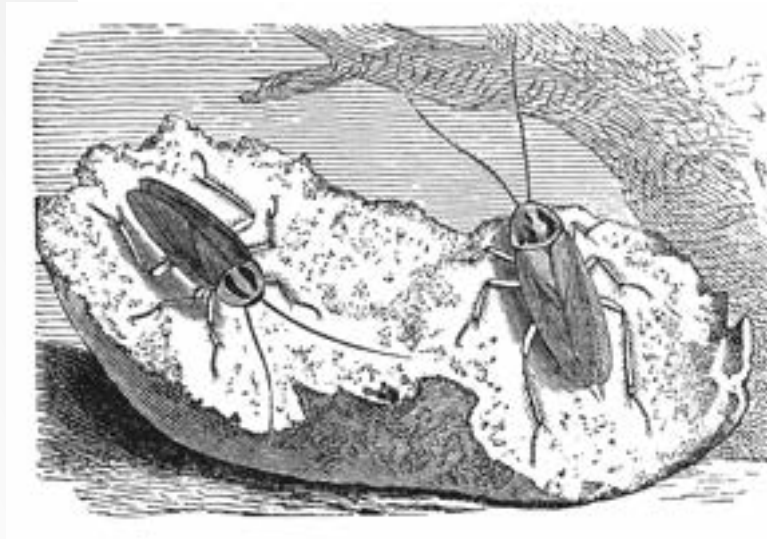
On the exterior, one time go clockwise, the next time counterclockwise. The same goes for the perimeter of any given room. You will see things from a different perspective.

- **Do not spend an equal amount of time in each area of a facility**

Select the more vulnerable areas to spend more time. The same goes with the frequency you do it. If it becomes necessary to add more inspection time, request it and explain why in writing.

- **At the end of the inspection, you should have worked up a sweat and at the end of the day feel like you need a rest**

Mediocre inspectors result in half-effort results. Great inspectors go all out. Be the best you can. I try to do like a child does when they play hide and seek. The pest hides and you seek. Have fun.



SAFETY

Before we tackle the safety tips, let us go over some commonsense items which in the past has cost an inspector their job.

- Never talk politics, religion, or negativity about a competitive firm. Remember, the Chinese proverb, "People who throw mud, lose ground."
- Do not discuss in one location what you found in another place.
- Do not post on Facebook, Twitter, or other media, any confidential information you know about a food plant.
- Never taste a product or take something from within the plant without permission. Cameras are recording in many locations.
- Take no photographs without permission.
- Do not repeat off-color jokes or swearing.

Now for practical safety tips:

- Get a good night's sleep, be alert and concentrate on what you are there for.
- Watch where you put your fingers. Motor fans spin without you seeing it.
- Use a probe before reaching into suspect areas.
- Some items are very hot. Find out what they are before you touch them.
- Wear goggles where needed.



SAFETY (Continued)

- Wear a hard hat everywhere.
- Before standing up, raise a screwdriver above your head and come up slowly. Much like a scuba diver who does not want to get hit with a motor boat propeller.
- On windy roofs walk while crouched low.
- When walking, do not put your hands in your pockets.
- Going up and down steps (even two steps) hold the handrail.
- Wear ear plugs where mandated.
- Wear knee pads. It will save your knees. Wear them all the time while inspecting.
- Wear goggles where needed.
- Wear a respirator where needed. You need a medical test to prove you are able to wear a respirator.
- Learn how to lift heavy items (feet not spread).
- When you come around a corner of an aisle, stop and look before you turn. Sometimes a forklift unattended was left up. You can walk right into the blades.
- If an open area has plastic strips to block pest activity, look before passing this area. A forklift drive could come through and hit you.
- Before you go behind stacks of pallets and products to check a floor wall juncture, make sure a responsible person knows you went behind the product.



SAFETY (Continued)

- If you inspect an elevator pit, see that it is safe to do so. Check with someone who knows.
- Do not rub your eyes if you are in a spice processing area. Chili pepper can be very painful.
- Learn how to position a ladder and go up and down. There are training materials available that teach this.
- Always go up in a cage with a lift loft. Wear a safety belt if required.
- Take a physical at least once a year. Eat well, exercise and watch what you weigh.
- Avoid opening electrical boxes unless given permission. It is best to have an electrician do it for you.
- Before you go behind stacks of products, look to see if any are leaning. If so, watch where you go.
- Do not wear loose clothes or other loose items. They can get caught in machinery.



SAFETY (Continued)

- Do not touch hot pipes.
- When walking by a swinging door, stay to the side or place your foot firmly against the door.
- Learn where blowout and explosive areas are. Avoid where possible.
- Do not walk behind trucks backing up.
- With more robotic machinery in food plants and warehouses, electronic pickers zip along on a track. They go up a slot, pick a product and then zip on to the next location. They do not stop for an inspector. Watch out. They really move quickly.
- Slippery floors. Some floors are extremely slippery. You have to move very slowly and work at keeping your balance.
- All rodent bait inside rodent bait stations must be firmly attached so it cannot easily spill or fall out. Whenever possible avoid any use of rodenticide within a food plant including the warehouse area. We can get control with mechanical devices indoors.

Fifty years ago, I set a goal, maybe not to be the fastest inspector in town, but hopefully the oldest. At 80+ years, I made it. Now it is your turn.



TOOLS

Depending upon the type of facility, you may need some specific types of equipment when inspecting. Here is a list of the most common items carried:

First, what you should not have on you.

- Jewelry
- Long fingernails
- Cuffs on your pants
- Chewing gum and tobacco, cigarettes, candy, or any open food and drink items
- Open cuts
- Caps on pens

All of these items can result in contaminating product. Ask your client if there are any other items you should avoid.

Now, what equipment should you have?

- Inspection report (see separate section for details)
- Two strong flashlights that are explosion-proof and a third flashlight you can attach to your forehead
- A holder to hold the flashlights
- Spatulas of different sizes
- Hard hat
- Ear plugs with string, not small plugs
- Disposable gloves, not cheap ones
- Pencils (ink freezes in cold storage locations)
- Pens
- Pad or electronic device to record information



TOOLS (Continued)

- Multifunctional pocketknife
- Pouch to hold your tools
- Appropriate work shoes
- Warm jacket, hat, and gloves when inspecting cold storage areas
- Hammer
- Infrared camera
- Humidity meter
- Hair net
- Goggles
- Respirator
- Identification badge
- Maps of the facility you are inspecting along with key telephone numbers of people to contact
- Different size plastic zip lock bags for collecting and labeling specimens
- Hard plastic container to collect specimens
- Sticky paper to label specimen containers and a waterproof pen to mark them.
- Extension mirror (stainless steel) not plastic
- GPS device that can show you an aerial view of the roof and surrounding area.
- Knee pads
- Dental tools (to pick in small area for grain insects)
- Ladder (usually provided by the client)



TOOLS (Continued)

- Scrapper
- Long probe (to poke into dark areas where spiders, etc. may be present)
- Magnetic band-aids
- Sticky trap monitors you may be placing early in the inspection to check later in the day or the next day
- Small aspirator to collect samples
- Smartphone
- Long sleeve shirt
- Handy wipes
- Disinfectant
- Waterproof pad to be able to write notes in the rain
- Access to drinking water and sports drink
- Magnifying glass or portable stereo microscope
- Tyvek jumpsuit
- Keys to different types of rodent bait stations (so you inspect the interior)
- Booties (nonslip)
- Collapsible extension probe to reach debris back under tables against walls
- Banana - You need to eat one every day to provide you with potassium so you do not get muscle cramps
- Hand duster with nothing in it to puff flush insects
- Gusto - the right attitude and enthusiasm go a long way to make the hunt enjoyable and actually exciting

Note: This list is based on over 50 years of inspecting food plants. You may come up with a few items as you gain your own experience.



THE INSPECTION FORM

Some clients prefer to have a punch list of items to check with points given to each item. They want to know what "score" they achieved. This is because some outside auditor has such a system and they want to achieve a certain minimum score. This way they can answer their customers when asked what their score is.

The problem with this is that you easily fall into a robotic mindset. You go down the list and concentrate only on these items.

I prefer to start with a blank sheet of paper and see what we can find.



THE INSPECTION FORM

Regardless of the form you use, it should include:

- Name and address of the facility inspected
- Date of last inspection
- List of areas inspected. Use separate pages for each area so the report can be shared whereby a person may only see their own section.
- Number of inspections you completed. Ex: 1,2,3 etc. since the first one
- Name of the inspector in print and a place for a signatures
- Time started and time ended
- Person or persons accompanying them (where appropriate)
- A highlight section
- What was taken care of (before you left). (Example: spilled product, Aisle 8)
- Details of what you found area by area
- Who you reviewed the summary with
- Recommendations
- Items that were corrected from your last inspection report

Such a report gives you an opportunity to praise the client if they did some positive items and point out to others what needs to be done with some type of importance or priority.



12 COMMANDMENTS FOR AN INSPECTOR ENGAGING IN A PEST INSPECTION

1. We do not kill pests. It is to seek hidden pests and conditions but make appropriate recommendations to solve the problems.
2. Set priorities what has to be done 1st, 2nd (budget in mind).
3. Do not spend equal time in each area.
4. Look for something different each time you come.
5. Do not run "triplines", Bar code fixation.
6. Have a plan and have as many facts as possible before starting your inspection.
7. Allow flex time for the unexpected.
8. Be obsessed to inspect locked and inaccessible areas.
9. Think beyond, way beyond, what you are looking at.
10. Be compassionate, but firm. Communicate well.
11. Learn something new every time you visit a specific account.
12. Never become complacent. Keep a very positive attitude.



INSPECTIONS: WHO NEEDS THEM? WHY ARE THEY NECESSARY?

Inspections do not eliminate pests. They do not kill or repel pests, but they are a necessary step in determining:

- Do you need to apply any pesticides? If so, where and how?
- Is any pest proofing needed? If so, where and how?
- Are sanitation practices up to par? If not, where and why?
- Were any new environmental factors or procedures recently implemented in your account that can affect pest management procedures? If so where and what are they?
- How successful was your last treatment in eliminating a previous pest situation?



Inspections are approached in several different ways. The use of monitors (Pheromones, sticky traps) help maximize the efficiency of an inspection. These devices are working 24/7. You are only there for a relatively short time. ·

Asking people who work in an account also helps. Find out who the first person is who comes in, in the morning and turns on the lights. They are most likely one of the first people to spot cockroaches and/or rodents.



QUESTIONS TO ASK BEFORE INITIATING AN INSPECTION

Question

What procedures must I follow in terms of washing my hands in this facility?

Why ask?

Some food plants require you to brush your fingernails each time.

Question

Are there any areas where you store "dead storage"?

Why ask?

This is also called a morgue area. It can be inside or the exterior. It could be old machinery never cleaned before it was taken out of circulation. Again, an excellent pest harborage area.

Question

Can you give me the name of more than one person to contact in case the key contact is not at work or tied up with something important?

Why ask?

If you only have one contact and they retire, leave, or get transferred to another location, you have no backup contact. This is an easy way to lose the entire account.



QUESTIONS TO ASK BEFORE INITIATING AN INSPECTION

Question

Do you have a floor drain cleaning program?

If so, what do you use and how often? Are all drain covers removable?

Why ask?

This is an area often overlooked. Look for drains in closets, hidden by cabinets, and those with sealed lids. Cockroaches, flies, and bacteria all favor these locations.

Note:

When the account is initially sold the salesperson should attempt to gather as much information as possible in terms of the above questions. From a practical standpoint, the technician would not get any inspecting done on the first visit if all they did was ask all of these questions!!!



WHAT SHOULD A COMMERCIAL ACCOUNT EXPECT FROM US?

Having recently inspected a large commercial complex with a roof rat problem, I have to ask myself (out loud), "Is it asking too much to expect that a pest management professional will:

- Provide preventative service rather than wait for the pest situation to arise indoors.
- Either provide or point out construction alterations needed to avoid pest invasion. Do so in writing. ·
- Point out sanitation situations that need correcting.
- Date all devices installed as to when initially installed and signed on each visit.
- Communicate when a pest is sighted in any device, what is it, how many and when.
- Provide quality assurance (at least a call from a supervisor monthly).
- Be certified in the appropriate category.
- Know the biology and proper identification of the pest you are trying to control.
- ·Meet with the customer's contact person on each visit.
- ·Go at it from a new approach, if a pest problem persists.



WHAT SHOULD A COMMERCIAL ACCOUNT EXPECT FROM US?

- Provide a pest log report.
- Keep accurate pesticide records that are also kept on the premises of the client.
- Not discuss findings with inappropriate people on the premises.
- Ask permission before taking any photos.
- Be able to communicate and respond to the client's questions.
- Properly maintain all insect light traps, rodent bait stations, mechanical devices, pheromone traps, and insect monitors.
- Show up on time.
- Follow up on what you promise.
- Take the extra effort to get access into suspect locked areas.
- Go at night if there is a problem (example: cockroaches or rodents). This does not mean that you have to do it all night long, just once it gets dark or very early in the A.M. while it is still dark.
- Have a company I.D. badge and whatever Id. badge the client requires.
- Know the safety rules of the client in reference to ladders, tight spaces, high voltage areas, etc.



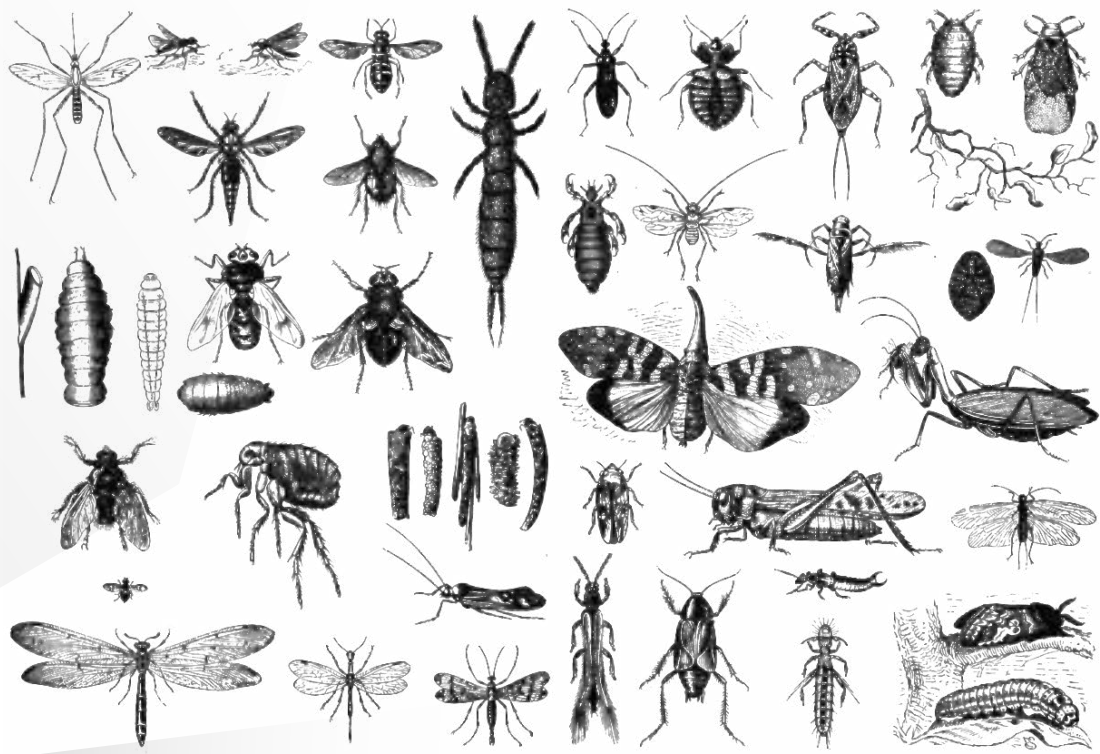
WHAT SHOULD A COMMERCIAL ACCOUNT EXPECT FROM US?

- Have the proper insurance.
- Analyze the counts in any traps and propose a course of action if one is needed.
- Ask help from a supervisor if you do not have enough time to complete the service and/or you cannot solve the pest problem yourself.
- Remove all old rodent bait stations and other control devices left by the previous pest management company if they do not care to pick them up within a few days to a week.
- Remove and replace your own sticky traps and glue boards that contain pests.

If it hurts a little to read this article, adjust the services so the shoe fits more comfortably. Strive to upgrade your image via better service. If you undersold the service to begin with, do more than you expected. Get positive results and ask for an increase explaining why and what you will do.



CASE STUDIES



CASE STUDY I

INEXPERIENCED SALESPERSON SELLS THE WRONG PEST MANAGEMENT PROGRAM

A well-established pest management firm sends me to check a job scheduled for that night. They want to space treat a warehouse area and processing plant with pyrethrin. The pest is an Indian Meal Moth.

Two minutes into the inspection I knew to call the pest management company and cancel the job. They told me it was already sold. I explained to them whatever they charged for the job would not cover the insurance claim they would face. The facility manufactures different flavor teas. People who drink tea have definite palate tastes. Pyrethrin is not a desirable end product to taste.

The company asked what they should do. Pheromone traps were very new at that time. The Indian Meal Moth trap was one of the most effective. They ordered and had shipped 50 traps. They were installed and within 48 hours we had a very good idea where the source of the infestation was. The contaminated product was removed. The area was cleaned, and more traps were placed in the area. From that point on, the PMP firm was paid to inspect, check the pheromone traps and watch for any new infestation.

All incoming goods were inspected before they entered the plant. The original location from where the contaminated product came from was inspected. They needed their own traps and better rotation practices.

Lessons learned:

Train salespeople before you send them out to sell. If they are not sure, train them to ask for help.

Pesticide application is not always the answer.

You can make more money doing the correct job than you can doing poor pest management.



CASE STUDY 2

LOCATING CIGARETTE BEETLES ON A FINISHED FOOD CONTAINER DOES NOT MEAN THAT IS THE BREEDING SOURCE

Employees in a food warehouse find cigarette beetles stuck in a thin film of oil on top of drums with food-grade oil.

By getting a map of what was stored where, more susceptible product was pinpointed. The ceiling lighting above the drums was attracting the beetles. When they hit the lights, they feigned death and fell into the film with oil on top of the drum.

Lessons learned:

Where you find the pest is not necessarily the source of the infestation.

Knowing the biology of the pest helps determine why they ended up where they did.

It was easier to find the source of the infestation by having a map of what was stored where.



CASE STUDY 3

SAW-TOOTHED GRAIN BEETLES WERE FOUND INSIDE SEALED WRAPPED CANDY. THEY WERE IN THE PRODUCT BEFORE IT WAS SEALED.

An inspection revealed:

Cleaning crews were not opening the package line machinery because it took too long to open them in the time they were allotted to clean this area. The exterior of the hollow machinery was solid metal making the inside not visible. When we opened one of the units, some live saw-toothed beetles were found in broken food particles.

They vacuumed out each unit and modified the sides of the packing machines so you could look inside without opening the sides of the packing. The machines were redesigned so you could open them up within seconds.

The temperature within the packaging machine was 85 °F. The room was well air-conditioned. Working with the in-house engineers, they were able to blow cooler air into each unit. This lowered the temperature to below 60 °F and the beetles no longer preferred to harbor in this environment.

Lessons learned:

If you can alter the temperature in a given habitat, you can greatly decrease the presence of some pests.

When you learn why a past situation exists (lack of cleaning), you can work on a plan to make it easier to clean.

A combination of more than one approach may be needed to solve a problem.

You have to ask the correct questions to get valuable information.

When someone tells you they can't do something because it takes too much time, figure out how it should take less time.

Pesticide applications were not the answer.



CASE STUDY 4

FINDING A DEAD RAT

When a rat dies it stinks for many days to weeks. The odor is repulsive. When it dies behind a wall or in a hard-to-reach area, it can be almost impossible to find unless you know how bottle flies (Calliphoridae) respond. They can detect the odor of a dead rat from a half mile away or more.

When inspecting, you look for the flies resting on a wall or ceiling tile. It will lead you to the dead rodent. You may have to open a wall to have it removed.

Lessons learned:

Let the flies be your guide.

Know what type of flies you are looking for.



CASE STUDY 5

MICE IN ICE

A cold storage facility has a definite problem with mice. The mice have grown a thick coat of hair. Some are living in mounds of ice against the inner walls.

If I was living in such cold conditions and chewing on frozen food, a warm meal would bring me running. At my suggestion, they took a large cardboard box and cut round holes on all vertical sides just above floor level. The holes were big enough for a mouse to enter easily. A very large glue board was placed in the box to cover the entire inside floor. Pieces of warm chicken were placed on the glue. The cover was placed back on the box with a light bulb attached to an extension cord hanging inside the box. This was to keep the glue from freezing.

We left the cold storage area, came back in about 10 minutes, and more than 15 mice were stuck in the glue. This was repeated several times until the mice were eliminated. The ice created by a faulty cold compressor was repaired.

Lessons learned:

Mice can live in ice if forced to.

Warm home cooking is an excellent attractant.

It can take a week or longer to knock out an entrenched mouse population in a cold storage environment.

Mice living in constant cold, grow thicker than normal fur coats.



CASE STUDY 6

DARK WING FUNGUS GNATS NOT BREEDING WHERE YOU EXPECT

A large office area in a food plant has a dark wing fungus problem. An inspection of the live plants and possible stain on the ceiling revealed nothing. Management is ready to remove all live plants. They already had cleaned all floor drains (this is not where they breed) and were very upset no one could find the breeding source.

An inspection which took several hours until I found it revealed one secretary was saving coffee grinds in a paper bag in her bottom desk drawer. She was going to use them for fertilizer for her plants at home.

We removed the problem, used some lime-colored sticky paper traps to catch the few flies, and held a training session for office staff. No more flies. A few small insect light traps were installed in the office area to help monitor if any new flies would appear in the future.

Lessons Learned:

Persons thinking environmentally may create a pest problem.

Dark wing fungus gnats like most pests do not read a book to see where they are supposed to breed.

It can take time to find a breeding source even in an area that should be easy to inspect.



CASE STUDY 7

PSOCIDS (BOOK LICE) ARE FOUND ON PALLETS IN CANADA

These insects are associated with moist environments where fungus can grow. The client tells me the pallets are kept dry and are not kept outdoors. They make no food product. They produce bottle caps for baby food bottles.

Upon arrival in a snowstorm, we head directly to the plant. As we pull up I see empty pallets being unloaded from a trailer. There is snow on them! They place them in a designated location in the plant. The pallets are wet. Psocids are found on some of the pallets that were there for several days.

Using heaters, they dried the pallets in the floor area. No more psocids. All incoming pallets are inspected to see if they are dry. If not, they are heated.

Lessons learned:

Never assume what the client tells you is always correct.

Learn what the limiting factor is for a pest to survive. For psocids, it is moisture.

The container used to hold finished food must be pest-free. If not, the pest can end up inside the food package. This could be anything from a bird feather, a rodent, or a small psocid,





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**Questions?
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