Lakewood Exterminating

How To Control Pests At Your Home With Products You Can Purchase Locally.

Most Common Pests In Lakewood

1. Mice
2. Small Ants (Sugar/ Odorous House Ants, Pavement Ants)
3. Grey Squirrels
4. Spiders
5. Rats
6. Bed Bugs

Other Pests

- **Yellowjackets And Other Stinging Insects**
- **Cockroaches**
- **Fleas**
- **Centipedes**
- **Carpenter Ants**
- **Fruit Flies**
- **House Flies**
- **Pantry Moths**
- **Silverfish**
- **Springtails**
- **Mosquitos**
- **Ticks**
- **Clover Mites**
- **Carpet Beetles**
- **Other Wildlife**

Figure Out What You Need And Need To Do

Before you run to the store in search of products that state they kill your target pest, develop a strategy.

Keep in mind that we all need food, shelter and water.

In order to control the population of any pest, consider manipulating these factors in the environment.

Can you remove food sources? (Rodents= Bird feeders, Spiders= flying insects, fleas= feral cats, other wildlife)

Can you remove shelter? Pests love to hide in the shadows. Eliminating clutter is key. Another example would be caulking around cabinets for cockroaches.

Manipulating the environment like this is called “cultural control” methods. There are two other control methods: Mechanical (vacuuming, steaming, traps) and Chemical.

First and foremost, your plan of action should implement cultural and mechanical control methods. Then use chemical control as a supplement to your plan, if you choose to use it.

Mice: You Have Mice Because You Have Entry Points Outside Of The Structure.

Recommended Supplies:

- Inspection: Strong Flashlight, Knee Pads, Rubber Gloves, stool/ladder.
- Repairs: Strong Scissors. Copper Mesh (Chore Boy), Spray Foam, Sealant (not caulk), Potentially ¼” Hardware Fabric, and Mortar.
- Control Materials: Traps/ Rodenticide. Adhesive (to stick traps to sill plate), paper lunch bags (to place traps in), and food attractant for traps. Also have disinfectant and Ziploc baggies for carcass removal.

What To Do First: Interior Inspection

Locate Areas of Activity:

- Look for droppings. Mouse feces are the size of rice kernels.

Mice do not defecate in a specific latrine area. Mouse droppings will be scattered throughout infested locations. Locations with droppings are ideal areas to set traps.

Follow CDC guidelines on how to clean fecal matter. Generally, you will want to treat it with disinfectant, let it sit for 10-15 minutes. Then remove it in a way not to cause any particles to go airborne.

Look for sebum markings

- Mice and other rodents have an oily material called sebum on their bodies. This protects them from the elements (water especially).
- Mice will also follow pheromone (scent trails). Therefore, they will most often follow the same pathways.
- When these paths become well used over time, sebum is left behind. Inspecting for visibly greasy residues can aid in identifying pathways, lead you to nesting sites/ entry points, and aid in trap placement.

Look for nesting sites.

- Look for burrows and pathways in insulation.
- Mice will leave circular divots in insulation on top of basement foundation walls and in attics.
- Mice will expose their pathways by tamping down insulation in attics over time.
- By tracking mice back farther into the unfinished areas of the home, you can increase efficiency of your trapping efforts.

What To Do Second: Inspect Outside For Entry Points

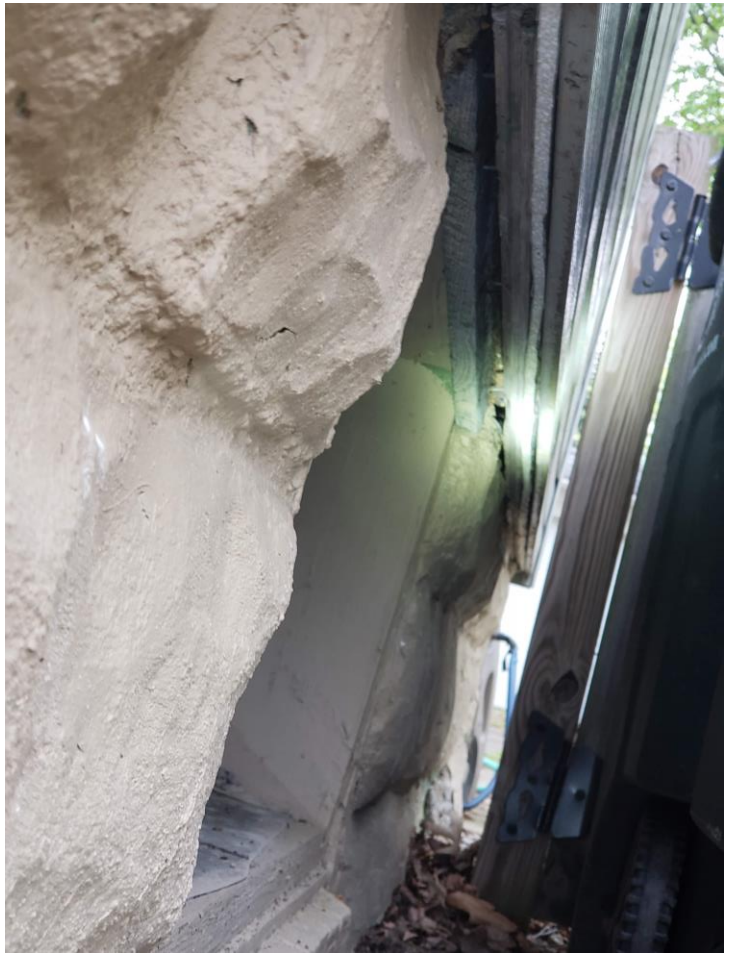
Look for entry points along the foundation.

Gaps around AC conduit is the most common entry point for mice.

Check gaps in mortar joints, vents and other utilities as they enter the structure.

Look Under Decks And Porches

- Many Lakewood homes have terra cotta foundation block underneath decks and porches. Same material as clay pots. The mortar between the blocks often deteriorate, along with the blocks themselves.
- Check along the rim joist on top of the foundation.
- Check where support joists attach to the structure.

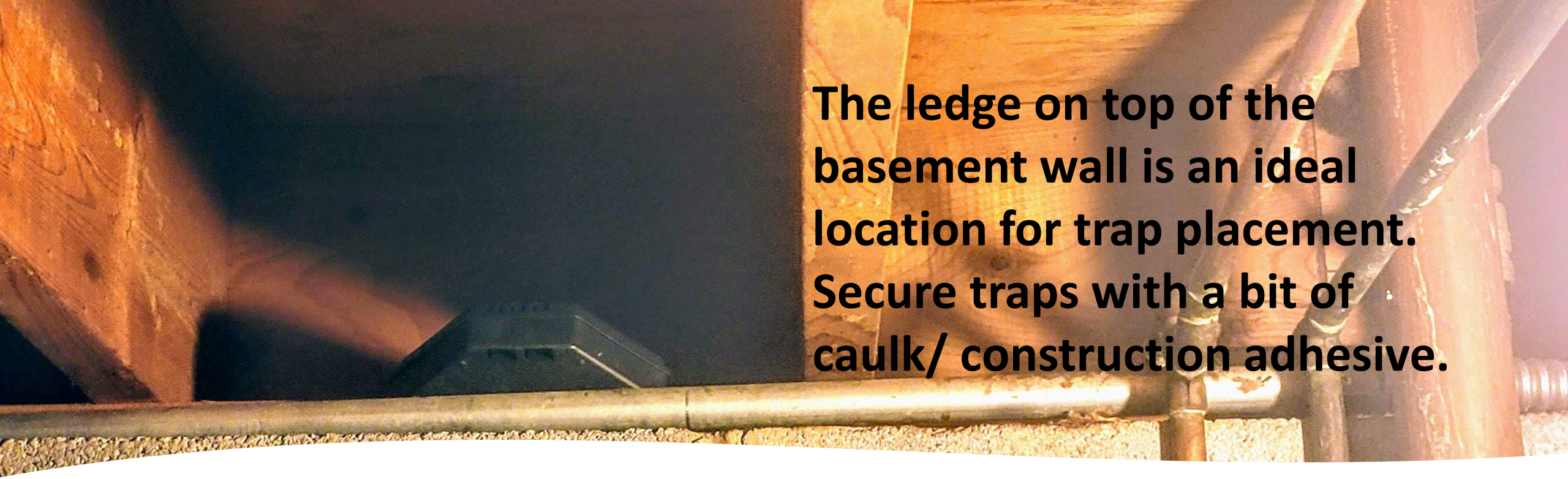


<u>Other Areas To Check Out:</u>

- **Inspect the junction of additions and the main foundation wall.**
- **Inspect the siding gap- which is the area between the top of the foundation and under the bottom row of siding.**

- **There are a bunch of other potential entry points. If you are interested Check out our YouTube video on How Mice Get Into Homes.**

3. https://youtu.be/Z55ft0M8B2I



Mouse Trapping

- Most people catch around 6 mice.
- 10 traps is a good number to set out for normal infestations.
- 4 traps in the kitchen on the corners of appliances (stove, dishwasher, refrigerator).
- 6-10 traps in the basement on the sill plate.


VICTOR
PROFESSIONAL
Place Small Amount of Food In Tray.


S for mice
f
s
VICTOR

This is not how you set a trap!

- Equip Yourself Against The Wraith Of Tiny Ants!

There Can Be Hundreds Of Thousands Of Ants In A Colony.
*000,000

- **Not many of these ants leave their nests.** At least until they get older. Once an ant is at the tail end of their usefulness, they are cast off as foragers.
- And some, if not many, find their way into your home.

  <u>20 ants is a lot of ants to find inside.</u>
- Consider how spraying those 20 ants in the kitchen, will control a colony of ants that likely spreads across yours' and your neighbor's sidewalks and driveways.
- What is spraying your foundation going to do to the population of ants outside?

Ants Inside

- Imagine a horde of ants exposing dropped food bits in your dining room.
- Or them relentlessly sneaking in for some cat food.
- All those ants have a pheromone trail leading from their nest to that food.
- It is a lot like those Sebum markings for the mice. While ants don't leave dark goo behind, you can follow the line of ants.
- And if you have problems doing so, then strengthen the line of ants by putting out a delicious treat for them. Some capfuls of sugar water or whatever they might like.
- If there are a lot of ants in your house, drawn to specific locations, surely you will be able to track them back to a crevice.
- Once you do, you can place an assortment of ant bait at that point. That has cut off the part of the pheromone trail leading to your living space.

********This is The Same Principle of Inspecting For Mice In Basements And Setting The Traps Along Their Pheromone Trails On The Basement Rim Joist.

Ants Outside

Use the same concept outside as you did inside.

- **Find And/ Or Develop Ant Trails.**
- **Track As Far Back To the Nest(s) As Possible.**
- **Treat Directly.**

#1 Thing You Need To Know

- **Follow The Pesticide Label! The Label Is The Law.**

Take the time to read the instructions.

1: This tells you where you can apply the pesticide.

2: This tells you what you need to do to protect yourself, other people, and the environment.

Brand Name	Active Ingredients	%
Liquid Residuals		
Bug B-gone Lawn and Landscape	Bifenthrin	0.3
	Zeta-Cypermethrin	0.075
Ortho Home Defense Bed Bug	Bifenthrin	0.25
	Imidachloprid	0.05
	Piperonyl Butoxide	0.45
Ortho Home Defense Max	Bifenthrin	0.05
Ortho Home Defense	Bifenthrin	0.05
	Zeta-Cypermethrin	0.0125
Ortho Bug B-Gon	Bifenthrin	0.05
Spectracide Ant Shield Spray	Lamba- Cyhalothrin	0.03
Black Flag Flea and Tick	Lambda-Cyhalothrin	0.01
	Pyriproxyfen	0.01
Spectracide Bug Stop Home Barrier	Gamma-Cyhalothrin	0.025
Bio-Advanced Home Insect Killer Plus Germs	Sodium O-Phenylphenate	0.3
	Beta-Cyfluthrin	0.05
Black Flag Home Insect Conentrate	Deltamethrin	0.32

Aerosols

Spectracide Termite Foam	Prallethrin	0.025
	Lamba- Cyhalothrin	0.01
Spectracide Foam Carpenter Bee	Prallethrin	0.025
	Lamba- Cyhalothrin	0.01
Raid Wasp and Hornet	Prallethrin	0.02
	Cypermethrin	0.05
Spectracide Wasp And Hornet	Prallethrin	0.025
	Lamba- Cyhalothrin	0.01
Real Kill Wasp And Hornet	Prallethrin	0.02
Real Kill Ant and Roach	Prallethrin	0.02
	Cypermethrin	0.05
	Lamba- Cyhalothrin	0.025
Black Flag Spider and Scorpion	Prallethrin	0.025
	Lamba- Cyhalothrin	0.03
	Tetramethrin	0.15
Hot Shot Ant Roach and Spider	Imiprothrin	0.075
	Lamba- Cyhalothrin	0.025
Home Defense Max	Bifenthrin	0.05
Raid Ant and Roach	Imiprothrin	0.06
	Cypermethrin	0.1
Black Flag Flea And Tick	Gamma-Cyhalothrin	0.005
	Pyriproxyfen	0.016
Terro Spider Killer	Pyrethrins	0.05
	Cypermethrin	0.02
Hot Shot Kitchen Bug Killer	Pyrthrins	0.1
	Piperonyl Butoxide	1
Raid Bed Bug Killer	3-Phenoxybenzyl…	0.4
	N-octyl….	1
	Imidacloprid	0.05

Granules

Spectracide Ant Shield Granules	Lamba- Cyhalothrin	0.04
Terro Ant Killer Granules	Lamba- Cyhalothrin	0.04
Amdro Perimeter Granules	Zeta-Cypermethrin	0.029
	Bifenthrin	0.115

Bait

Spectracide Ant Shield Stakes	Indoxicarb	0.005
Hot Shot Maxxattrax Ant Bait Stations	Indoxicarb	0.05
Hot Shot Maxattrax Roach Bait Stations	Indoxicarb	0.1
Hot Shot Clear Roach and Ant Bait	Dinotefuran	0.05
Hot Shot Liquid Roach Bait	Dinotefuran	0.05
Combat Max Ant Bait Syringe	Fipronil	0.001
Combat Roach Bait Stations	Fipronil	0.03
Combat Roach Bait Syringe	Fipronil	0.01
Amdro Ant Perimeter Bait	Hydramethylnon	0.88
Raid Ant Bait Stations	Avermectin B1	0.01
Amdro Ant Killing Bait Stations	Propxur	0.25
Terro Outdoor Ant Stakes	Borax	5.4
Terro Liquid Ant Bait	Borax	5.4

https://irac-online.org/modes-of-action/

Pesticide Resistance And Modes Of Action

Pesticides are classified into different classes, based on how they effect the target pest.

Repeated use of certain classes of insecticides over time can lead to pesticide resistance.

Additionally, it may be beneficial to implement multiple Modes of Action when controlling pests.

Class 1 Propxur and Dichlorvos - Acetylcholinesterase (AChE) inhibitors - Nerve action

Older pesticides that are mostly banned due to health concerns. Dichlorvos kills pests through vapors (No Pest Strips/ Bed Bug Luggage Kits)

Class 2 Fipronil - GABA-gated chloride channel blockers - Nerve action

Slow acting pesticide used to control social insects such as ants and termites. Used in retail baits for cockroaches and ants.

Class 3 Pyrethroids Pyrethrins - Sodium channel modulators - Nerve Action

Most retail liquid “sprays” are pyrethroids. Provide a quick knockdown. Some are contact sprays with no residual. And some have lasting effects once the spray has dried (residual).

Class 4 Neonicotinoids - Nicotinic acetylcholine receptor (nAChR) competitive modulators – Nerve Action

Slow acting pesticide used in retail ant and cockroach baits. Sometimes added to bed bug control products due to their resistance to pyrethroids.

Class 6 Avermectins - Glutamate-gated chloride channel (GluCl) allosteric modulators - Nerve and muscle action

Slow acting stomach poison used in ant baits.

Class 7 Pyriproxyfen - Juvenile hormone mimics - Growth regulation

Insect Growth Regulator used in retail flea control products. Controls juvenile insects by their effect on molting hormones.

Class 8 Borax - Miscellaneous nonspecific (multi-site) inhibitors

Borates prevent pests from getting nutrients from food. Insects do not become resistant to borates.

Class 20A Hydramethylnon - Mitochondrial complex III electron transport inhibitors - Energy metabolism

Used in retail ant bait.

Class 22A Indoxacarb - Voltage-dependent sodium channel blockers - Nerve action

Used in retail ant bait. Uses the insects' enzymes to create a toxin from the active ingredient.

Class 27 Piperonyl Butoxide – Synergist

Does not work alone as a pesticide. Often mixed with pyrethroids to help counteract pesticide resistance in pest populations.

Carpenter Ants:

- Carpenter ants have a main colony with a single Queen. Carpenter ant eggs need high humidity. Therefore, the main colony is within a tree.
- Worker ants move older larvae into areas with lower humidity to be raised into adults. These sites are called satellite colonies.
- They are primarily constructed in water damaged wood.
- If you have water damaged wood components of the home, these might be areas to inspect:

Around Windows and Doors, Behind Gutters, Around Chimneys, Porch Pillars, Plumbing Leaks, Around Downspouts.

Carpenter Ants

Carpenter Ants Are Nocturnal.

- Track Them After It Gets Dark.
- Go Outside With A Flashlight.
- Find Them.
- Place Bait Next To The Ants.

Search Out The Main Colony And The Satellite Colony.

- Look at tree trunks, stumps, fence posts, and around the foundation.
- Consider that the tree with the queen might not be on your property.

One Hot Spot Is On Top Of Your Overhead Garage Door.

One Way To Identify Carpenter Ants:

They Have Hairy Butts.

Bait		
Spectracide Ant Shield Stakes	Indoxicarb	0.005
Hot Shot Maxxattrax Ant Bait Stations	Indoxicarb	0.05
Hot Shot Maxattrax Roach Bait Stations	Indoxicarb	0.1
Hot Shot Clear Roach and Ant Bait	Dinotefuran	0.05
Hot Shot Liquid Roach Bait	Dinotefuran	0.05
Combat Max Ant Bait Syringe	Fipronil	0.001
Combat Roach Bait Stations	Fipronil	0.03
Combat Roach Bait Syringe	Fipronil	0.01
Amdro Ant Perimeter Bait	Hydramethylnon	0.88
Raid Ant Bait Stations	Avermectin B1	0.01
Amdro Ant Killing Bait Stations	Propxur	0.25
Terro Outdoor Ant Stakes	Borax	5.4
Terro Liquid Ant Bait	Borax	5.4

- Keep in mind that Terro/ Borax Bait at 5.4 % is not labelled for carpenter ants.

Carpenter Ants Can Be Picky Eaters

- Carpenter ants primarily feed on dead insects. Therefore, they can be picky feeders when trying to use ant bait on them.
- Granular bait seems to be the most effective in relation to their feeding habits.
- Alternatively, you can spray the base of tree trunks (up and out several feet).
- You can also treat satellite colonies in walls/ window and door voids with foam pesticides.

Spectracide Termite Foam	Prallethrin	0.025
	Lamba-Cyhalothrin	0.01
Spectracide Foam Carpenter Bee	Prallethrin	0.025
	Lamba-Cyhalothrin	0.01

Squirrels:

1

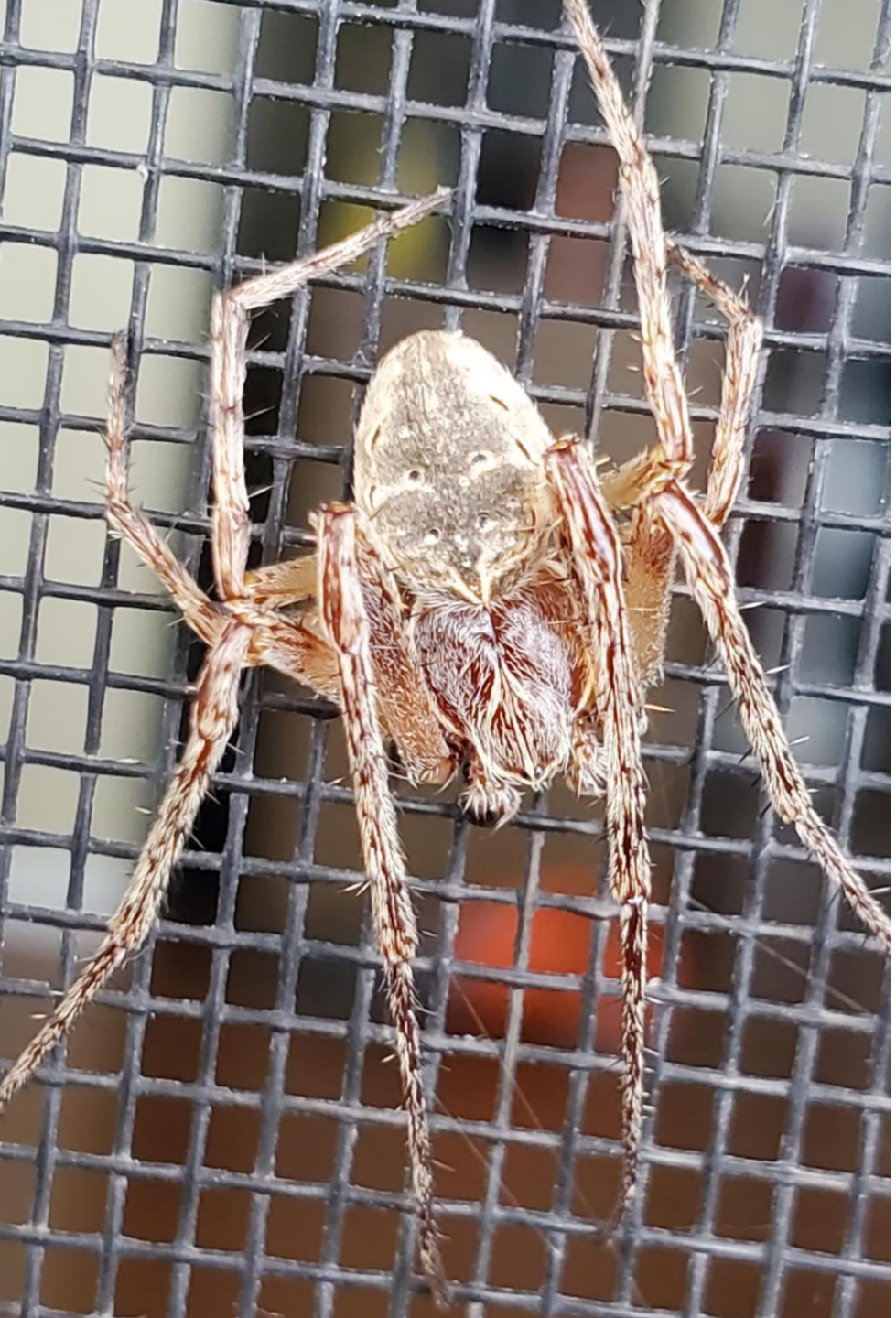
Grey Squirrels Love Old Houses

2

General Rule Of Thumb: Keep Tree Branches 15+ Feet Away From The Roof.

3

Traps need to be placed over the entry point, and adjacent to the entry point outside. Trap must remain over the entry point for 1 week- prior to removal and repair to the entry point.



Spiders

2 Types Of Spiders:

Active Hunting

These are *wolf spiders, black jumping spiders, grass spiders*.

Basically, the spiders that'll run after their prey.

Passive Hunting

These like the Charlotte's Web spider/ *orb weavers*. The ones that have webs to catch their prey.

Tips

For Active Hunting Spiders:

- **Use Sticky Traps In Areas Of Activity.**
- **Eliminate harborage such as clutter.**
- **Treat the cracks and crevices where they live.**
- **Control the pests that they feed on.**

- **<u>Tips</u>**

For Passive Hunting Spiders:

- Minimize the light that attracts flying insects, which is spider food. Closing blinds/ curtains at night helps. Along with using motion detectors on exterior security lights. Alternatively install yellow exterior light bulbs that do not attract flying insect spider food.
- If you don’t want the webs, don’t give them flying bugs to catch.
- Get a telescopic pole in the painting section of the home improvement stores. Purchase a webster duster from the window cleaning area.
- Use the two to knock down spiders and their webs.
- Perform web removal in conjunction with the natural sprays or the synthetic sprays. You can also spray the duster head with pesticide and then wipe effected areas.

- People commonly state that spiders are good since they eat other insects.
- This is basically telling you that spiders are around your house because you have other insects for them to eat.
- The key to controlling spiders is by minimizing their food sources.
- First, you can identify your spider by using this guide from Ohio Department of Natural Resources.
- https://ohiodnr.gov/static/documents/wildlife/backyard-wildlife/Common%20Spiders%20of%20Ohio%20Field%20Guide%20pub5140.pdf
- Then you can look up what that spider likes to eat. Then attempt to manage the population of those insects.
- For example, many spiders found in our basements feed on potato bugs. These can be easily controlled by placing sticky traps in areas that spiders are found. You can also control them with applying granular bait.

Norway Rats

- Norway Rats enter homes through the exterior (like mice). Or through the sewer lines.
- Most of the time it is a single rat that enters a home.
- Once a rat gets inside, it searches for food and nesting material.
- Dog/ pet food is the most common food source within a home.
- Rats cache food, just like squirrels store acorns.
- Once a rat stores enough food, it will be more difficult to catch.
- Rats are neophobic. Which means they fear new objects.
- As a result, if a rat has become familiar with your home before you set traps, then the traps will be seen as a new object. At that point, the rat will be more difficult to catch.
- You will want to remove all potential food sources including pet food, food waste in the garbage, produce sitting on counters, and any contained food that the rats can compromise.
- You will want to “properly” set traps as soon as possible.
- In many cases a plumber is required to make the proper repairs. A proper inspection should be performed to evaluate how it has gained access to the home.

Deer Mouse

House Mouse

Norway Rat

Inspecting for Entry Points

- First, you will want to check the sewer lines.

Most Lakewood homes have a basement toilet stall. Check this for a dried trap.

Check to make sure you have a strainer on all floor drains.

This includes your laundry drain basin.

Keep in mind that there can be breaks in the drain stack above the basement.

- Second, inspect outside. In most cases, when rats enter from the exterior, there is a food supply close by.

This is usually from bird feeders or someone feeding wildlife nearby.

Inspect the exterior as you would for mice.

Rat holes need to be larger than a sharpie marker.

These are usually significant sized holes, think golf ball sized holes.

Open Floor Drain

Broken Sewer Line

Toilets

Cleanout Lid Detached

Gaps Around Floor Drain Strainers

Rats Outside

- Weep holes like this, vents air under your porch. In many cases there are no screens blocking rodents from entering. As a result, you have a haven for rodents.
- Rats commonly enter homes from the sewers opposed to gaps outside the structure. Yet when they do, there is usually a confined space for them to occupy. These enclosed front porches are a good example. Or rear additions with a crawlspace separate from the basement.
- In search of rat burrows and nests outside; you will find a worn path, tamped down vegetation, or some semblance of a runway. Burrow entrances are often on the top of an elevated area, such as a retaining wall.
- You may also see gnawed lattice (see picture on the right).


Rat Feces Is Approximately The Size Of A Tic Tac. Mouse Feces Is About The Size OF A Rice Kernel.

Trapping Tips

- Use the proper sized trap. ***Do not use mouse-sized traps.***
- ***Avoid Glue Boards.*** Trying to catch a rodent the size of a kitten on a postcard sized area of glue is a bad idea. In most cases, the rat will escape from being stuck. As a result, the rat will likely be very hesitant to approach new objects. It can cause them to become "**trap shy**".
- ***Use a few different styles of traps*** (Plastic Snap Traps, Wooden Snap Traps) Place a different kid of bait/ food attractant on the different styles of traps. That way if it avoids a certain appearance or odor, you have some options that could be more attractive.
- ***Use a lot of traps.*** In most cases, 25 snap traps in a basement is a good amount to set.
- ***Look for food caches.*** Look under appliances (dishwasher too), cabinet bases, under basement stairs, etc. If a rat has food stored, it is very unlikely to stick its head in your traps.
- ***Juvenile Rats are easier to catch.*** Older, more experienced rats are often more "neophobic" and "trap-shy". Alpha- Males are the most difficult to catch.

Trapping Rats Can Make You A Hero or a Zero

Rats can be very difficult to catch if:

- They have food stored. Or if they have other food sources available.
- Have set off a trap yet were not caught.
- Are an alpha male.
- If traps are not set properly.

When Rats Won't Touch A Trap:

- Add more traps.
- Pre-bait by placing traps with food on them, without setting the trigger. Once a rat feeds from the trap, set it.
- If a rat has gotten ahold of your food, you can use that specific food on a trap (preferably set these traps in the same location that the food was taken from.)
- Disguise traps by placing floor sweepings or dryer lint over the traps.

Best Food To Bait The Traps With:

- Anything the rat may have already eaten from your home.
- Slim Jim beef jerky
- Bacon fat

Bed Bugs

- Bed Bug Treatments Are Best Left To Professionals.
- They are one of a couple species of living organisms that can mutate their mitochondrial DNA. As a result, they get stronger by inbreeding.
- Most infestations start by introducing a single pregnant female.
- Due to this, bed bugs become resistant to pesticides more readily than other pests.
- Most retail bed bug products are pyrethroid based. Since so many people have been applying pyrethroid products, they do not work all that well anymore.
- In resistant populations, you could spray a bunch of bed bugs directly and only kill 60- 80% of them.

Raid Bed Bug Killer	3-Phenoxybenzyl...	0.4
	N-octyl....	1
	Imidacloprid	0.05
Ortho Home Defense Bed Bug	Bifenthrin	0.25
	Imidachloprid	0.05
	Piperonyl Butoxide	0.45
Bed Bug Mattress And Luggage Kit	Dichlorvos	18.6

Bed Bug Trap

How To Identify Bed Bugs

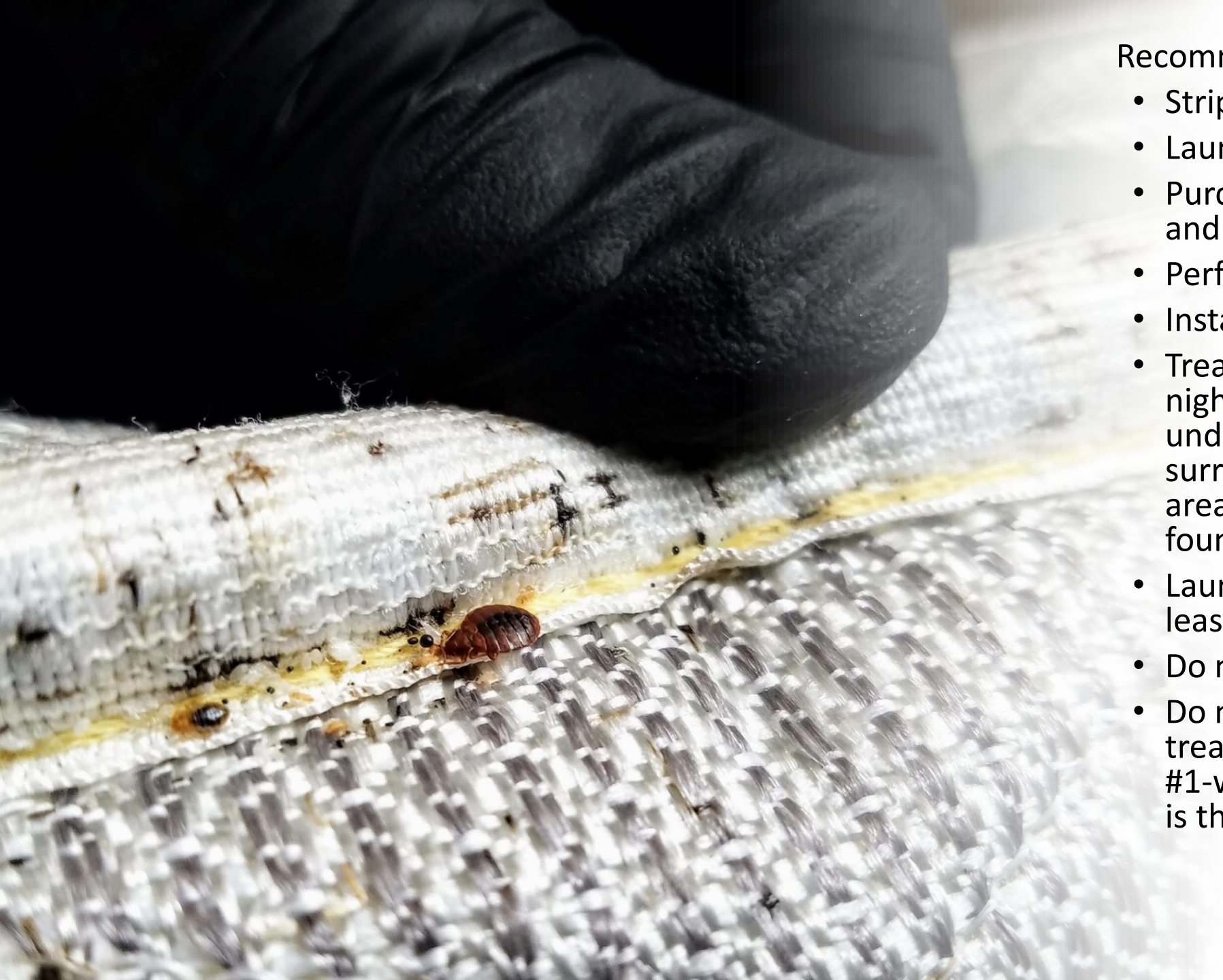
- Bed Bugs Have: Egg Capsules, Nymphs, and Adults.
- Black Feces is also a good identifier, along with shed exoskeletons.
- All life stages are clearly visible to the naked eye.
- Nymph stages look like small adults. The first couple of stages are small and pale yellow. As they molt further, they become larger and darker brownish-red.

Where To Inspect For Bed Bugs

- **Bed Bugs will be found primarily within 5 feet of their host. In this case, they know where we are by sensing our heat, co2, odor/ vibrations.**
- **They can be found in secondary areas, when pesticides have been applied improperly, and when the population grows to a greater extent.**
- **Bed Bugs are soft bodied. Therefore, they prefer to sandwich themselves between two objects for protection.**
- **Except for in extreme cases, bed bugs do not remain on the human body after feeding.**

Hotspots:

- The head of the bed.
- Mattress seams.
- Plastic corner pieces of box springs.
- Under the box springs, hiding around the edge of the black dust cover.
- Headboards.
- Couches.



Recommendations:

- Strip the bed.
- Launder bedding.
- Purchase high quality mattress and box spring encasements.
- Perform “focused vacuuming”.
- Install encasements.
- Treat bed frame, headboard, nightstands, under baseboard underneath the bed, couch and surrounding areas, and other areas where bed bugs were found.
- Launder bedding and inspect at least once per week.
- Do not abandon infested rooms.
- Do not remove furniture before treating it and containing it. (The #1-way bed bugs are introduced is through used furniture).

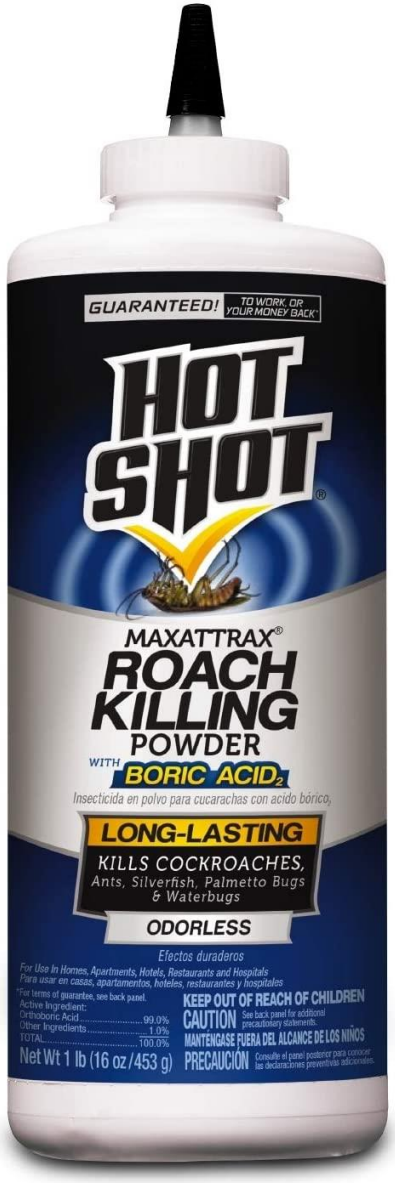
Stinging Insects: Yellowjackets, Carpenter Bees, Bumblebees, Bald Faced Hornet, Paper Wasp

- The best piece of information about DIY stinging insect control is that **many of the "wasp and hornet sprays" are contact sprays**. There are **two types of pesticides: Contact and Residual**. Contact sprays are knockdown products. They kill the pest fast (so you don't get stung), yet they don't have a residual. **Once contact sprays dry, they have no effect on the pest.** Point being, if you are controlling a yellowjacket nest inside of a wall void/ crevice, contact sprays: 1. Likely won't reach the actual nest. 4. Kill the pest before they can transfer the product to the nest. 3. Stop working before control is achieved.
- In many cases, these products can cause yellowjackets nesting inside walls to start coming inside the structure.
- **Residual pesticides continue to control pests after the treatment has dried.** Residual pesticides is one reason that bed bugs went nearly extinct. Older, now banned pesticides, had a long residual. People would apply them inside continuously. As a result, there was a semi-permanent "layer of protection" inside most households. Due to pesticides' persistence in the environment, they were taken off the market. Now the proper way to control pests is not by spraying your baseboards. It is through integrated pest management. This includes monitoring pest levels and utilizing cultural and mechanical control methods over chemicals. On top of that, we now have baits for ants and roaches. Once these rolled out, the "layer of protection" wore out and bed bugs returned.

Many residual products also have the “benefit” of killing the pest quickly (kills on contact).

Yet for social insects like ants and yellowjackets, you don’t really want that. The product needs to be transferred back to the colony to achieve control. Therefore, you want pesticides to kill them slowly.

Green products like this kills on contact. They are examples of “contact pesticides”. They have little to no residual effect. One of the reasons it is considered a green product.
Notice that it doesn’t state that it keeps killing for a certain time period.

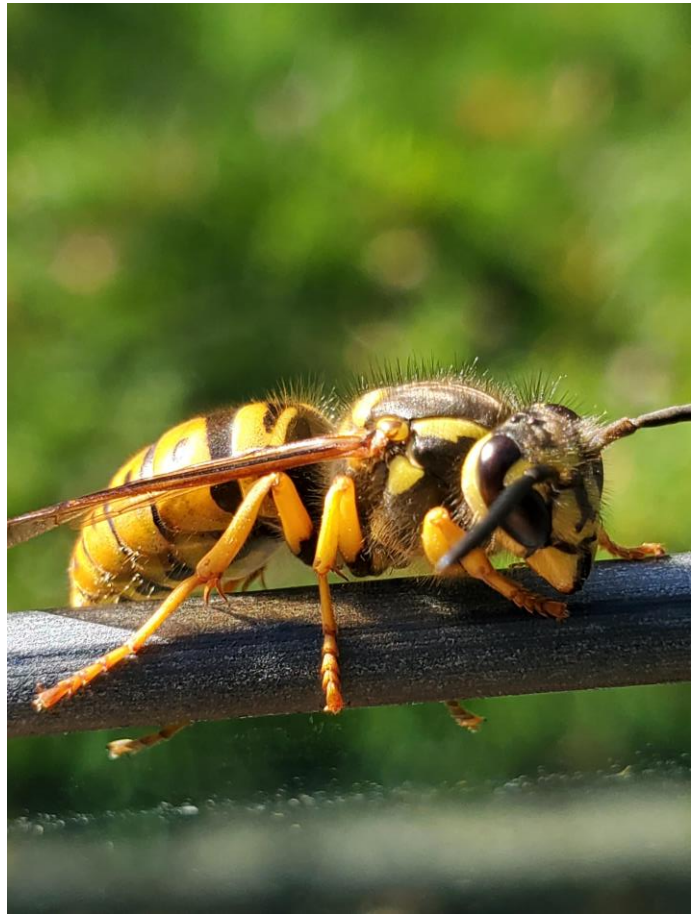


- Use dust to treat yellowjacket nests inside a wall void, in a foundation wall, under siding, in a door frame. It has a residual effect and is easily transported back to the colony.
- A very light application is all that is usually required.
- Compare dust pesticides to snow. Would you walk through a giant pile of flaky white stuff more readily than you would a thin layer of it? The answer is no. And the same goes for insects. If you apply too much, the pest is just going to avoid it.
- A proper dust application should be hardly detectable.

Carpenter bees have bald behinds.

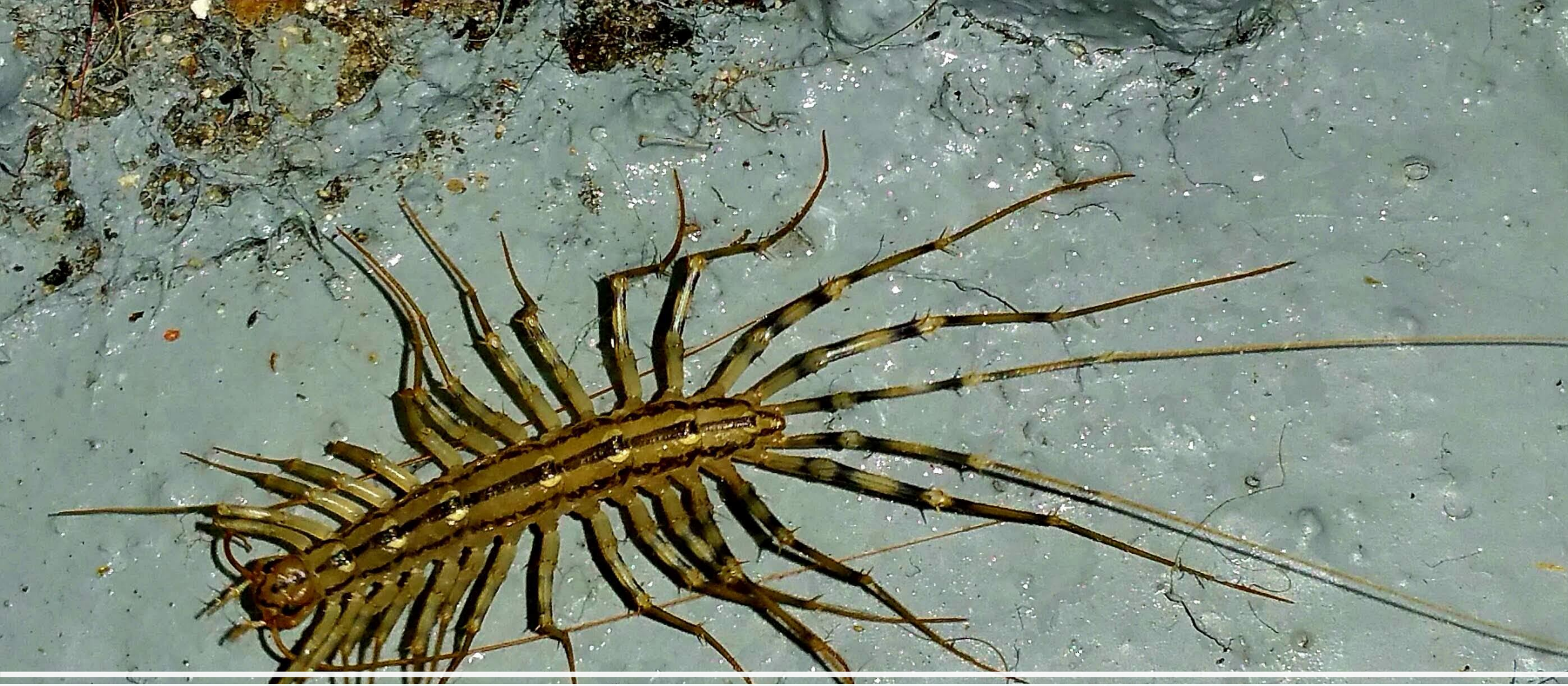
Bumble bees have hairy behinds.

Yellowjacket



Bald-faced hornet

Paper wasp



House Centipedes (not silverfish)

Use Sticky Traps, Reduce Humidity, Control The Pests They Feed On.

Fleas:

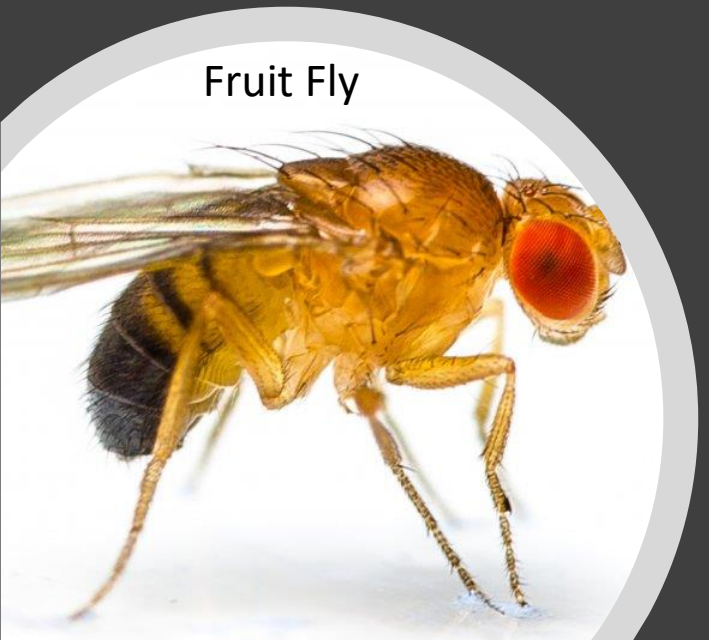
- Treat pets professionally by the vet.
- Treat the interior.
- Treat shaded areas of the yard and under porches and decks.
- Remove potential sources (wildlife living under structures, feral cats, etc.)
- Retreat in 7-14 days.

Pantry Moths

- Indian meal moths often come from the store in pet food or dried plant products such as rice, flour, and noodles. The insects can be in the house for months before they are numerous enough to be noticed. The original source of the infestation can be very difficult to trace.

- Alternatively, Indian meal moths can come from the exterior. Wildlife contamination hidden somewhere inside the structure, can cause recurring problems with this pantry pest. Common sources are old birds' nests or other wildlife contamination inside of the chimney. Spent rodent food cache, such as acorn shells, can also start to break down inside the home and cause moths to be present.
- This unique pest can be controlled naturally by removing the food source of the larvae.

- *We recommend that you go through all listed items and dispose of expired or infested products. Including: Cornmeal, flour, oatmeal, cereal, pancake/muffin mixes, nuts, rice, dog bones, dried pet food, crackers, pasta, dried fruit, protein powder and other drink mixes, bird seed, fish food, spices, seasoning packets, tea, soup mix, potpourri, dried floral arrangements, decorative corn stalks, deer antlers, bird and rodent nests, rodenticide bait, and feathers.*
- *Pheromone traps may also be placed around the structure to help locate hidden sources. We recommend placing a few traps away from the pantry.* You do not want to draw more moths into your kitchen. So, place traps in the fireplace, by the chimney cleanout, along the basement rim joist, and in the attic, or attached garage. This will help determine if you purchased an infested product, or if the source lays hidden elsewhere inside the structure.



Small Flies:

- Flies are a sanitation issue.
- Identify the fly species.
- Find the source. This means the larval breeding sites.
- Remove the source. For most fruit fly problems, it helps to clean and then treat drains with bacterial enzyme cleaner.

Larval development areas are found in sweet or vinegar like solutions.
Produce- Onions, Garlic, Melons, Peaches, Bananas, tomatoes.

Garbage, garbage disposals, drains, coffee makers, dishwasher drains and filters, recycling can and bottles, animal and human excrement, mop heads, soiled linens (rags), refrigeration drip pans, food debris under trash can liners, spilled drinks/ syrup, other food that fell and got lost.

(Adult flies regularly rest near breeding sites, especially first thing in the morning.)

Sanitation Recommendations:

Clean floor areas under counters and appliances. Brush and flush floor drains and sink drains weekly. Pay attention to garbage disposals, especially the organic buildup that occurs under the rubber flange of the sink drain.

Eliminate standing water in condensate pans and in sinks, etc. Keep mop heads clean and hang them upright to dry. Remove and launder wash rags, sponges, and dirty linens at least twice per week. Move exterior trash receptacles as far away from entrances as possible.

Wash out beverage containers before placing them in recycling. And clean recycling bins and trash cans at least twice per week. Clean dishwasher filter. Clean or replace the dishwasher drain line if it has organic buildup in the line. Clean coffee or beverage maker filter and parts.

We do not recommend placing homemade fly traps in affected areas, since they may attract more adults into the area that you wish to gain control in.

Filth Flies:

- **There is poop, garbage or something died.**
- **Once again, flies are a sanitation issue.**
- **You should identify the pest, find the source of larval development and remove it.**

Recommendations:
Keep exterior trash receptacles at least 25 feet away from the structure.
Promptly remove animal feces from the ground. Dispose of them in airtight bags.
Attempt to limit the flies' access through doors and windows.

Cockroaches:

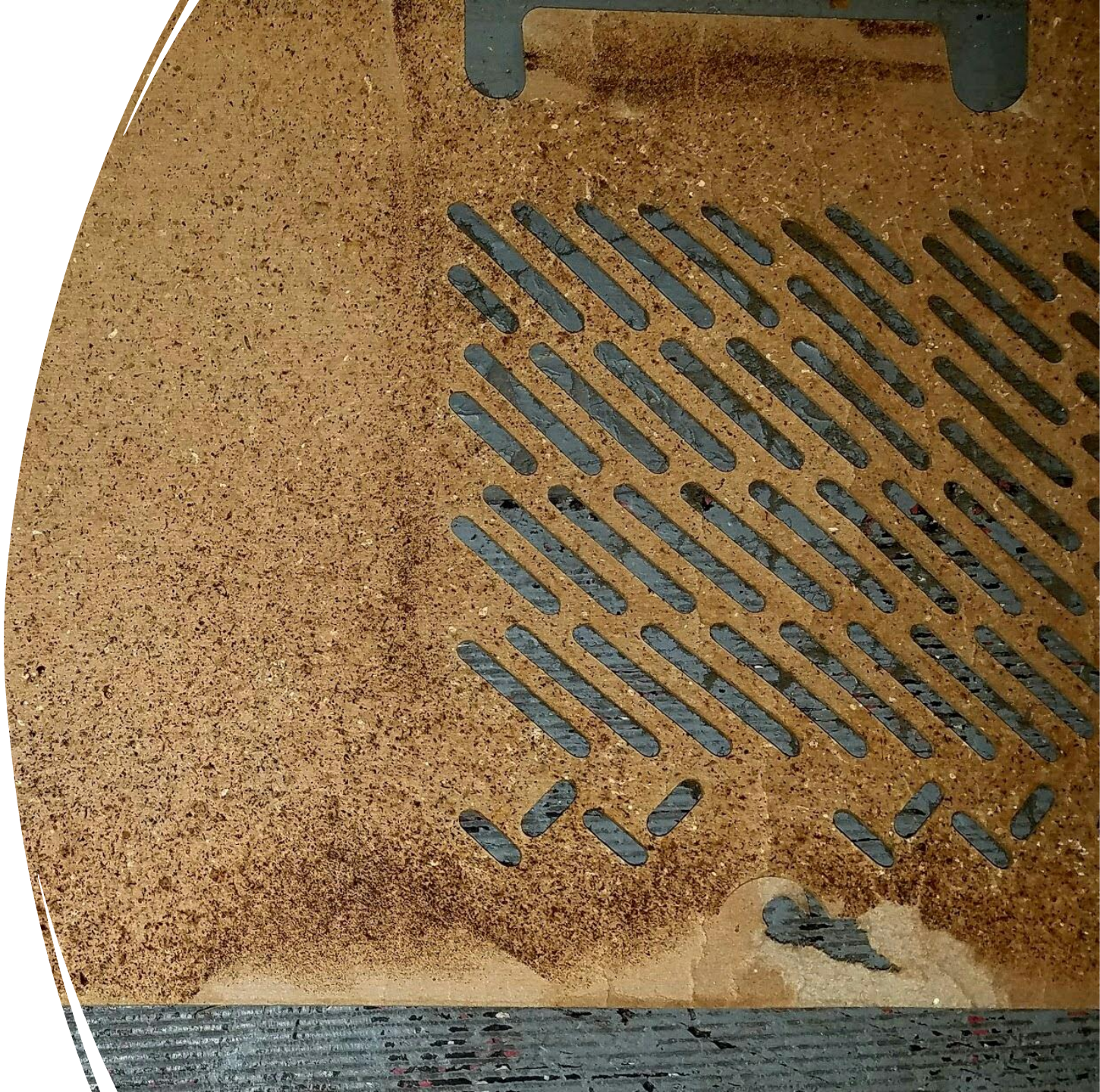
German Cockroaches are the species that infest our kitchens and bathrooms in Lakewood homes.

- Place many “Roach Motels”/ Sticky traps around the effected areas of the home.
- Leave them overnight.
- Remove sticky traps with roaches caught on them.
- Replace them with bait.
- Wait a few days.
- Reapply sticky traps.
- Repeat until control is achieved.

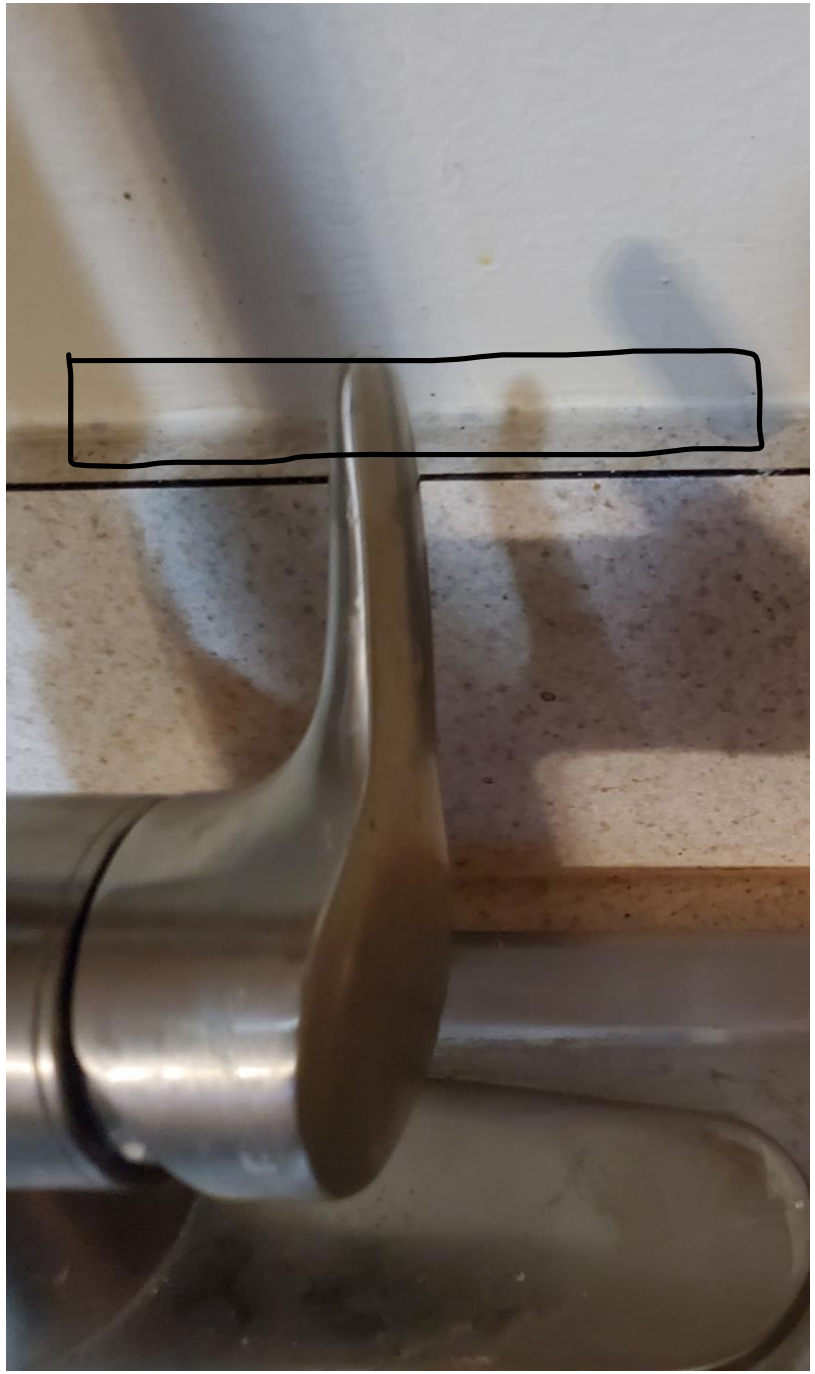
*It can take over a month to achieve control.

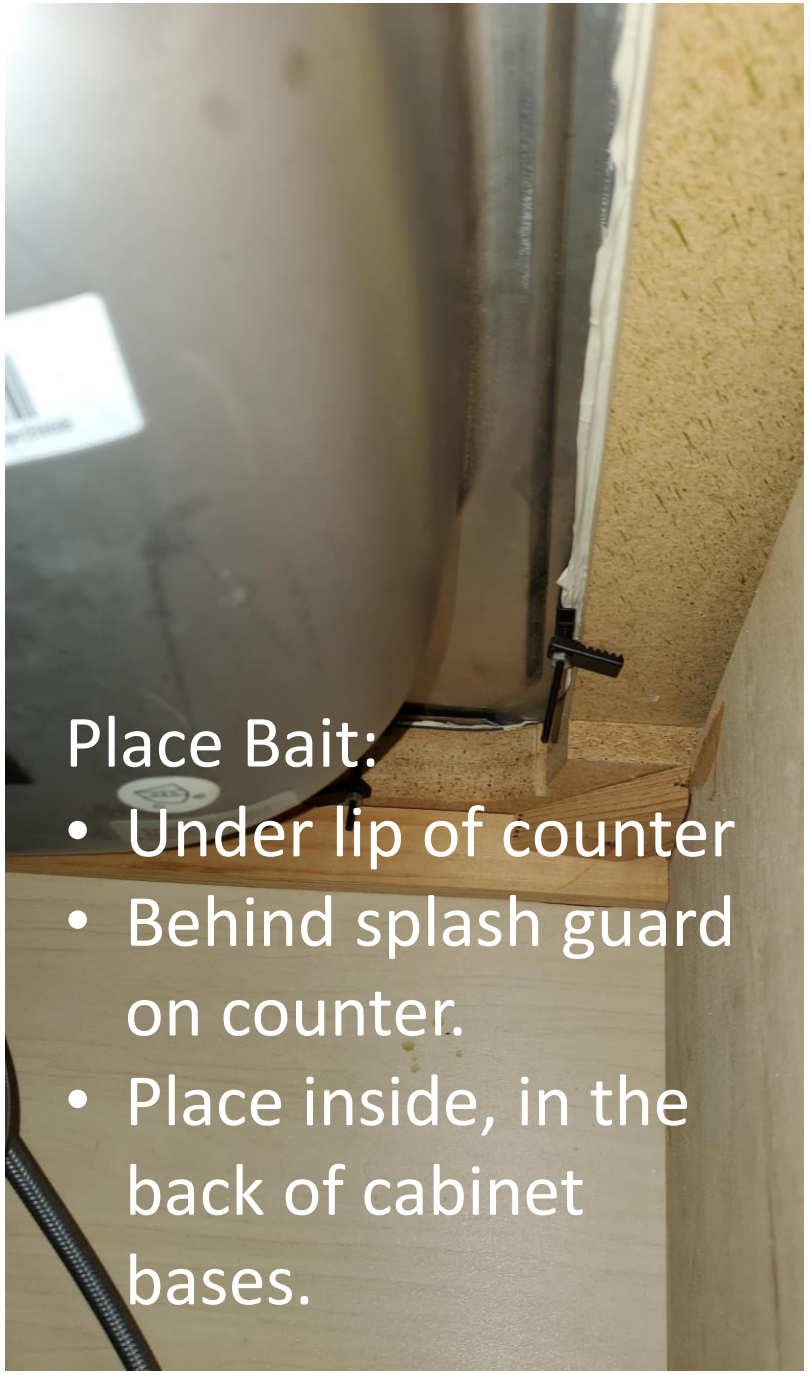
Cockroaches’ main harborage site is behind the fridge.

- This picture is the inside of a refrigerator’s back panel. The debris on it is cockroach feces.



- Also look inside electric outlet covers!




Place Bait:
• Under lip of counter
• Behind splash guard on counter.
• Place inside, in the back of cabinet bases.