

Keys to Pests in and Around the Home

Indoor Pests

Habit	Pest Description	Control
Flying	Clothes Moths: d-2 inch wingspan, buff-colored moth, found in closets, bedroom, etc.	Locate infested fabric, carpeting, etc. Check underneath wool rugs for larvae. Vacuum and shampoo or dry clean. Store cleaned fabrics in sealed bags or cedar chests.
	Indian Meal Moth: e inch long moth, outer 2 to b of wings reddish-copper colored, usually found in kitchen, pantry.	Locate infestation and dispose of infested material. Store food in airtight plastic or glass containers or in the freezer. Check stored bird seed, pet food and dried foods.
	Drain Flies: tiny (2mm), gray, fuzzy, moth-like insect, found in bathrooms, near sinks.	Clean drains with enzyme cleaner; manually clean traps.
	Fungus Gnats: tiny, black, gnat-like fly, found around houseplants, standing water.	Keep plant saucers dry, allow plants to dry between waterings. If necessary, repot plants with fresh potting media.
	Fruit Flies: C inch long, tan colored fly, red eyes, found in kitchen, around bird cages or recycling bins.	When possible, store fruit or vegetables in the refrigerator. Do not keep fruit or vegetables on counters for extended periods. Rinse cans and bottles for recycling.
	House Flies: C to 3 inch long, dull gray flies, found in and around homes. (See also maggots).	Locate larval breeding sites and eliminate them. This includes timely removal of trash and keeping garbage cans dry and clean as possible. To prevent adults from entering homes, tighten screens, windows and doors. Seal all holes and entry points. Make sure all vents are tightly screened. Trap adult flies with baited fly traps or sticky fly tape.
	Blow Flies, Greenbottle Flies, and Bluebottle Flies: Similar to house flies (see above), but metallic blue or green in color, found in and around the home. Breed in dead animals, feces and/or garbage, depending on species.	Locate and eliminate the larval breeding site. Examples of breeding sites include a dead mouse, squirrel, or bird in the attic or chimney, pet feces in the yard or dirty garbage cans. Locate and remove a dead animal. Timely removal and proper disposal of pet waste. Clean garbage cans regularly. Control of adults same as for house flies.

Educating People To Help Themselves

Local Governments - U.S. Department of Agriculture Cooperating

Cluster Flies: $\frac{1}{4}$ inch long, dark gray, non-metallic flies. Sluggish fliers, not related to garbage or manure. Larvae parasites of earthworms. May suddenly appear indoors around windows or lamps in the fall, spring or winter. Adults enter homes in late August to overwinter and occupy attics and/or wall voids that are warmed by winter sun exposure (most often southern)

.Prevention is best control. In summer, seal up access openings. Place tight screens over vents. Caulk or seal cracks and holes. Inside the home, swat or vacuum any flies that appear.

Carpet, Cigarette and Drugstore Beetles: $\frac{3}{16}$ inch or less, oval to round beetles, brown, multicolored or black, found in any room. May fly to windows or lamps.

Vacuum all areas thoroughly. Put clean woolens away in sealed containers. Check stored food products and spices for infestations and dispose of infested material. Store all herbs, spices and dried food products in airtight containers. Check for dead mice, old bee or hornet nests, etc., in wall voids or attic. These beetles feed on dead insects and dead animals.

Bark Beetles: $\frac{3}{16}$ inch or less, cylindrical, red, black or brown in color, found around windows, lamps, wood piles near fireplace, especially in winter. Emerge from logs used for firewood.

Check fire wood logs for small, round holes in the bark. Only store enough firewood for a day or two in the home to help prevent emergence of the beetles.

Wood Borers: $\frac{1}{2}$ inch or larger, narrow, variously colored, long or short antennae, some metallic. Associated with firewood. May see sawdust under firewood and oval, or D-shaped exit holes in bark of logs.

Only store enough fire wood for a day or two in the home to help prevent emergence of the beetles.

Flying Ants (Reproductive Form): small to large, brown to black, pinched waist, six legs, 2 pairs of wings. Found in basement, attic, kitchen, or other rooms in home and outdoors.

Identify ants. Block entry from outdoors. Use bait stations to control indoors. Granular bait and bait stations available for outdoor use.

Termite Swarmers: Dark brown, $\frac{3}{16}$ inch, 4 long wings of equal length, fluttery flight habit, indoors or outdoors. Reproductive form of subterranean termites, usually emerge from area of infestation.

Contact professional pest control company.

Jumping

Fleas: $\frac{1}{16}$ - $\frac{1}{8}$ inch long, brownish black and flattened side to side. Wingless, but strong jumpers and bite.

Thoroughly vacuum carpeting, upholstery, under furniture and along baseboards. Dispose of bag when finished. Use product containing the insect growth regulator methoprene to control flea larvae. Control fleas on pets. Follow all label directions, contact veterinarian for best control on pets. If there are no pets in the home, raccoons or squirrels may be nesting in chimney or attic.

Cave or Camel Crickets: large, over 1 inch, hump-backed, wingless, brown, with long antennae and legs, usually found in basement. Don't chirp.

Prevent entry by tightening screens, weather-stripping doors and windows. Dehumidify basements. Keep pet foods and dry food products in tight containers.

House or Field Crickets: large, over 1 inch, winged, black or brown, cricket-like, usually found in basement or ground floor. Chirp.

See above

Springtails: tiny, **C** inch or less, gray to white insects, jump, in bathrooms, around flower pots, or areas of high humidity.

Dehumidify area. Clean mold and mildew. Allow media in potted plants to dry out between waterings or repot with fresh media.

Running, Walking or Crawling

Millipedes: 1 inch or longer, dark brown, many short legs, curl up and die indoors, usually found in basement or near outside entry door.

Prevent entry to home. Weather-strip doors, install new thresholds, caulk around basement window frames. Dehumidify damp basements.

House Centipedes: over 1 inch, grayish-yellow, with 3 longitudinal dark stripes, a pair of very long, slender antennae on the head, 15 pairs of long legs arranged along the sides of its body. Move rapidly, primarily found in basements, damp closets and bathrooms. May be seen in any room or outdoors.

Predatory, feed on insects and spiders. Escort outdoors.

Spiders: size variable, 8 legs, color variable, yellowish to black, smooth or hairy, may or may not have web.

Predators, feed on insects and other spiders. Check for other insects in house that may be source of food for spiders. Many enter house in fall. Caulk and seal cracks around doors and windows.

Silverfish or Firebrats: flattened, about **2** inch with 3 tails, gray or tan, found in boxes, cabinets, bathrooms, near furnace, other warm areas etc.

Dehumidify area, store books and papers in sealed containers.

Earwigs: brown, **2** inch long, with pincers on rear.

Occasionally enter home. Swat or escort outdoors. Keep debris, mulch and other hiding places away from house.

Carpet and Cigarette Beetle larvae: **3** inch long or less, carrot-shaped, furry, found in closets, bathrooms, kitchens, etc.

Vacuum all areas thoroughly. Put clean woolens away in sealed containers. Check stored food products and spices for infestations and dispose of infested material. Store all herbs, spices and dried food products in airtight containers. Check for dead mice, old bee or hornet nests, etc., in wall voids or attic. These beetles feed on dead insects and dead animals.

Carpet and Cigarette Beetle Adults: **3** inch or less, oval to round beetles, brown, multi-colored or black, found in any room.

See above.

Sawtoothed Grain Beetles: 1/10 inch, narrow, brown, 6 saw-like projections on each side of thorax (middle section of body), found in pantry, garage, any room in house when grain, dried fruit or bird seed may be stored.

Vacuum adult beetles. Locate infestation and dispose of infested material.

Pillbugs and Sowbugs: **2**-: inch long, segmented, gray, oval some roll up into a ball. Usually found near ground-level door.

Prevent entry to home. Weather-strip doors, new thresholds. Need moist environments, die quickly indoors.

Cockroaches: **2** inch or larger, brown to black, long antennae, flattened, kitchen and or bathroom, often seen at night.

Have species identified. Sanitation primary control. Use baits containing hydroprene (growth regulator).

Booklice: very tiny (1-2 mm long), gray to light brown insects, some may be winged. They are found in or around stored papers and books.

Dehumidify area, store books and papers in sealed containers.

Ants: small to large, brown to black, pinched waist, six legs, usually in kitchen, occasionally in other rooms.

Identify ants. Block entry from outdoors. Use bait stations to control indoors. Granular bait and bait stations available for outdoor use.

Bird Mites: very tiny, mite-like, bite, come into house through windows, vents, etc.

Remove bird nests from gutters, vents, air conditioners, etc. Vacuum mites indoors.

Clover Mites: very tiny, reddish brown, globe shaped body, yellowish legs. First pair of legs much longer than other, held in front of body. Crawl up sunny sides of buildings, enter through cracks, around windows, doors, and vents. Live primarily in lawns, feed on grass, cause no damage. Generally a problem in newer lawns and new home sites.

Vacuum any mites indoors. Exclude mites by caulking around window and door frames and any cracks. Use weather stripping where possible to keep them from crawling under windows. A temporary method of excluding mites is to seal up windows with masking tape. Outdoors, a barrier strip should be installed around the foundation. It should be at least 18-24 inches. The area can be mulched with black plastic and gravel or sparsely planted with marigolds, zinnias, iris, tulips, yew, arborvitae or barberry. Sulfur dust on this area will also repel the mites.

Boxelder Bugs: red and black insects on south side of house, come indoors.

Tighten window screens, seal cracks, screen vents, control outdoors with a mild soap solution (test on small area to make sure it won't damage siding and plants). Vacuum indoors.

Ladybird Beetles: color variable, orange to red, some with spots, **3**, round beetle, around windows, screen porches, side of house on sunny day in fall.

Sweep up indoors and release outside, harmless. Predators of aphids. Seal up entry points on outside of house.

Clover Mites: very tiny mites, large numbers on sunny exposure, often come in windows, stain red when crushed.

Seal cracks and holes, vacuum indoors.

Maggot or Caterpillar-like

Fly Maggots (larvae of House or Blow Flies): whitish, **2** inch or slightly longer, no visible head, in trash, crawling across floor, possibly from fireplace or vent.

Locate source of infestation, possibly dead bird or squirrel in chimney, attic, etc. and remove. Dispose of maggots in home.

Indian Meal Moth larva: whitish, **2** inch, brown head, in stored products, crawling up walls, etc.

Locate infestation and dispose of infested material. Feed on various stored products including: cereals, grain products, bird seed, dried fruit, etc. Store food in plastic or glass containers with tight lids.

Flea Larvae: worm-like, whitish in color, and about $\frac{1}{5}$ inch long when mature. Found in carpeting, cracks in hardwood floors, bedding of pets. (see also Fleas under Jumping)

Thoroughly vacuum carpeting, upholstery, under furniture and along baseboards. Dispose of bag when finished. Use product containing the insect growth regulator methoprene to control flea larvae. Control fleas on pets. Follow all label directions, contact veterinarian for best control on pets. If there are no pets in the home, raccoons or squirrels may be nesting in chimney or attic.

Bees and Wasps

Description	Probable Insect	Control
Large (up to 1.4 inches), brownish with dull orange stripes, may fly at night, strips bark from trees and shrubs, especially lilacs.	European Hornets: nest in hollow logs, trees, outbuildings, etc. Only true hornet in North America	Control difficult, nest location may be difficult to find if near a wooded area. May need to consult professional pest control company for control.
2-1 inch, black and yellow, not fuzzy, aggressive, may nest in ground or in a gray papery sphere attached to house, tree or shrub.	Yellowjackets: tend to be a problem late summer into early fall.	Locate nest during the day. Use wasp and hornet spray after dark, and follow label directions. Do not shine flashlight directly on nest opening. If nesting in a wall void, do not seal opening to outside, as they may chew through interior walls.
1 inch, black with white or yellow markings, long legs, narrow waist, nests in gray, papery sphere in tree or shrub.	Bald-faced Hornets: actually aerial nesting yellowjackets.	Locate nest during the day. Use wasp and hornet spray after dark, and follow label directions. Do not shine flashlight directly on nest opening.
1 inch, brown with various markings, long, thin legs, narrow waist, nests in papery exposed nest attached to eaves or porch.	Paper Wasps: generally not aggressive.	Control usually not necessary. If near entry or high traffic area, use a wasp and hornet spray after dark. Follow label directions.
Medium to large, hairy, black and yellow, common at flowers, nests in ground.	Bumble Bees: beneficial pollinators.	Control usually not necessary.
Large bees (approx. 1/2 inch), shiny black abdomen, bore 1/2 inch round holes in wood. Males have spot on face and no stinger. Males fly around and establish mating territory, only appear threatening. Resemble bumble bees, but larger.	Carpenter Bees: feed on pollen and nectar, do not eat wood, only nest in it.	Treat holes with labeled insecticide, plug with wooden dowel. Freshly painted surfaces tend to deter them. They prefer weathered or unpainted wood.
2 inch, brown, fuzzy bee, common on flowers, nests in trees, commercial hives and occasionally in structures.	Honey Bees: gather pollen.	To remove swarms, contact a local bee keeper. If nesting in a wall in a home, contact a professional pest control company. After bees are killed, comb and honey should be removed promptly from wall voids to avoid attracting other insects and mice. There will also be a strong odor from the honey and dead bees. The honey may also seep through plaster walls.
1/2-1 inch, fuzzy bees, nest in loose soil in lawns, banks, etc.	Ground Bees: pollinators, some parasitic on other insects, aerate soil.	Not aggressive. Males have no stinger. They establish a mating territory and only appear threatening. They are only around for a few weeks. No control necessary.
Large (1 1/2 inches), black with yellow markings on abdomen, hover above the lawn, non-aggressive, nest in loose soil.	Cicada Killers: feed on cicadas.	Control generally not necessary.

1 inch long, blue-black wasp, yellow stripe on each side of abdomen, fly over lawn during the day.	Scoliid Wasps: not aggressive.	Parasites of white grubs. Do not attack people. Control not necessary. Adults often seen visiting golden rod flowers in late summer.
Mud nests, resembling organ pipes or small clay pots attached to buildings, fences, tree twigs or other sheltered surface. Wasps are 2-1 inch long, narrow-waisted, bluish-black or black with yellow, white or orange markings.	Mud Daubers, Potter and Mason Wasps: provision nests with spiders or caterpillars. Harmless.	No control necessary.

Wood Destroying Pests

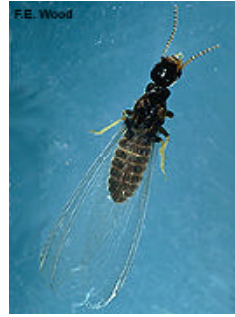
Description	Probable Insect	Control
Mud tunnels from ground to wood, up to 3 inch long, white, ant-like insects in wood, wood soft.	Subterranean Termites	Contact professional pest control company.
Brownish-black to black, 1/4 inch long, 4 translucent wings of equal length, fluttery flight habit, indoors or outdoors.	Subterranean Termite Swarmers: reproductive form of subterranean termites, usually emerge from area of infestation. (See illustration on next page for comparison with ants.)	Contact professional pest control company.
Large brown to black ants, 3/8 to 1 inch, winged or wingless, in house, outdoors, or on trees, often near damaged wood, coarse sawdust.	Carpenter Ants: do not eat wood, only nest in it.	Locate nest and treat, repair or replace damaged wood. Repair any water problem.
3/8-1/2 inch oval holes in wood, may be powdery sawdust, may hear chewing noise, generally in structural timbers or log homes.	Old House Borers: larvae are round headed borers, cream colored, 1 3/8 inch long when mature, with dark mouthparts. Adult beetles are 1/2-1 inch long, black or brownish, slightly flattened, with long antennae.	Determine if infestation is active. Contact a professional pest control company.
1/8 inch or smaller, round holes, possible fine sawdust, often in soft woods, structural timbers, pine flooring, imported furniture, bamboo fences, etc.	Powderpost Beetles (furniture or deathwatch beetles and false powderpost beetles): larvae cream colored and much smaller than old house borers. Adult beetles 1/8-3/8 inch, brown to black, cylindrical or flat and elongate (depending on species).	Determine if infestation is active. Replace damaged wood if possible. Contact a professional pest control company.
2 inch round holes in wood, large bees with shiny black abdomen seen flying in area or boring into wood.	Carpenter Bees: feed on pollen and nectar, do not eat wood, only nest in it.	Treat holes with labeled insecticide, plug with wooden dowel. Freshly painted surfaces tend to deter them. They prefer weathered or unpainted wood.

Flying or Winged Ant



- Elbowed antennae.
- Front wings longer than hind wings, tinted brown.
- Pinched or “wasp-waist”.
- Body black, brown, or reddish,

Winged or “Swarmer” Termite



- Straight antennae.
- Front and hind wing similar in shape and or equal length, pale, translucent.
- Body extends straight back from head, does not have pinched or “wasp-waist”.
- Body blackish-brown to black.

Try to avoid using pesticides when at all possible, especially indoors. This will minimize exposure to pesticides. Risk from exposure to toxic materials is much higher indoors than outdoors. It is generally as effective, safer and easier to physically remove an insect or spider from the home than to reach for a can of insecticide. Insecticides do not break down indoors nearly as fast as outdoors. Indoors, pesticides are not exposed to degradation by temperature changes, wind, rain, soil microorganisms, etc. Follow the management techniques listed under controls in this publication to minimize exposure to pesticides and still achieve control of the particular problem.

Selecting Pest Control Companies and Pesticides

Selecting a pest control company is difficult. Begin with recommendations from friends and neighbors. Shop for a pest control company as you would for a doctor or any other professional service. Most companies provide free estimates, at which time they discuss a treatment plan, cost and warranties.

Compare recommended treatment programs and estimates among several companies. A number of termiticides are registered for termite control; use of different compounds and formulations varies among companies. Companies should fully disclose information on the chemical that they will be using in the treatment.

Companies that are members of the Maryland Pest Control Association and the National Pest Control Association have access to all current treatment practices. You can check a company’s reputation by calling the Better Business Bureau. Make certain that the company has an active certification license from the Maryland Department of Agriculture Pesticide Regulation Section.

If you have had a termite problem, it is wise to purchase a contract that includes an annual inspection and re-treatment if necessary. Termite control is difficult. The best company can do the best job and still not completely solve the problem.

Tips on Tick Safety

- Tick bites may occur at any time of the year.
- Avoid wooded areas and brushy, tall grass areas if possible.
- Use a tick repellent containing permethrin on clothing only and a repellent containing DEET on skin not covered by clothing.
- Wear light colored clothing to make tick detection easier.
- Tuck pant legs in socks or boots.
- Make frequent tick checks and promptly remove ticks.
- Remove attached ticks with fine pointed tweezers by grasping the tick at skin level and giving a firm, steady pull until it comes away. Save the tick in alcohol for identification. Treat the bite with an antiseptic.
- Make a record of the tick attachment. Call your doctor if a flu-like illness and or a bullseye-like rash appears at the bite site.



Tick

Additional Publications available from the Home and Garden Information Center at 1-800-342-2507 (in Maryland) or from the web site at <http://www.agnr.umd.edu/users/hgic/>.

- Ants and Their Control. Home and Garden Mimeo HG7.
- Carpenter Bees. Home and Garden Mimeo HG29.
- Carpenter Ants. Home and Garden Entomology. Leaflet 115.
- Clover Mites. Home and Garden Mimeo HG66.
- Cockroaches. Home and Garden Mimeo HG15
- Controlling Spiders in Maryland. Bulletin 241.
- Controlling Wasps. Bulletin 248.
- Crickets. Entomology Leaflet EL50
- Earwigs. Home and Garden Mimeo. HG4.
- Fabric Pests. Home and Garden Mimeo HG80
- Fleas. Home and Garden Mimeo HG27.
- Flies in and Around the Home. Home and Garden Mimeo HG26.
- Lyme Disease in Animals. Fact Sheet 534.
- Lyme Disease and the Deer Tick in Maryland Fact Sheet 595.
- Mining Bees and Ground Nesting Wasps. Home and Garden Mimeo HG104.
- Occasional Invaders. Home and Garden Mimeo HG8.
- Pantry Pests. Home and Garden Mimeo HG67.
- Silverfish and Firebrats. Home and Garden Mimeo HG5.
- Termites, Prevention, Detection and Control. Bulletin 245.
- Wood-Boring Beetles: Old House Borer and Powderpost Beetles. Fact Sheet 689.

Author: Mary Kay Malinoski, Regional Specialist, Home and Garden Information Center, Maryland Cooperative Extension, University of Maryland, College Park, MD.

Protect the Bay Use Pesticides and Fertilizers Wisely

**ALWAYS READ THE PESTICIDE LABEL AND
FOLLOW ALL DIRECTIONS AND SAFETY PRECAUTIONS.**

Mention of trade names does not constitute an endorsement by the Maryland Cooperative Extension, University of Maryland, College Park and University of Maryland, Eastern Shore.

Home and Garden Information Center

1-800-342-2507

<http://www.agnr.umd.edu/users/hgic>