



Urban Integrated Pest Management

Kitchen Pests

Insect
Fact **6**
Sheet

The kitchens in our homes contain an array of stored food items that serve as welcoming habitats for many insect pests, commonly referred to as “pantry” pests. These include a variety of beetles and moths that are capable of infesting and destroying a variety of dried foods. Since many dried food items are only used occasionally, they spend a good deal of time sitting on the shelf inviting a would-be invader to take up permanent residence.

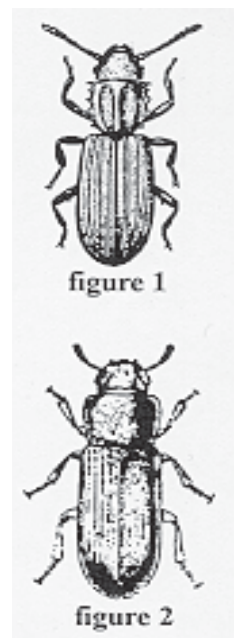
The eggs, larvae or adults of such pests usually come into the home accidentally in infested products from the food market. They then spread to other products on the shelf. However, infestations are usually not discovered until the homeowner begins to observe small beetles or worms crawling across the counter top, webs in the oatmeal, the cast skins of larvae under the sink or in the cupboards, or a moth flying around the kitchen. By this time, the invaders could be well established and can cause considerable damage if not eliminated.

Stored food pests

A variety of insects infest our stored foods, but the most common in New Hampshire are the saw-toothed grain beetle, confused flour beetle, dermestid beetle and indian meal moth. A description of each of these pests follows. Other less common pests include the larder beetle, Mediterranean meal moth, foreign grain beetle, rice weevil, cigarette and drug store beetle and spider beetle. They all generally feed on the same foods and the control measures are similar.

Saw-toothed grain beetle

The saw-toothed grain beetle, (*figure 1*), our most common kitchen pest, is a slender, flat, brown beetle approximately one-tenth of an inch long. It gets its name from the six saw-tooth like projections on either side of the thorax (mid section). Both the larvae and the adults feed on a variety of dried foods. The adults live an average of 6-10 months, but may live as long as three years. Eggs are laid in the food and hatch in three-five days. The resulting larvae mature in about two weeks, then pupate and emerge as adults in about one week. The life cycle from egg to adult is about three-four months.

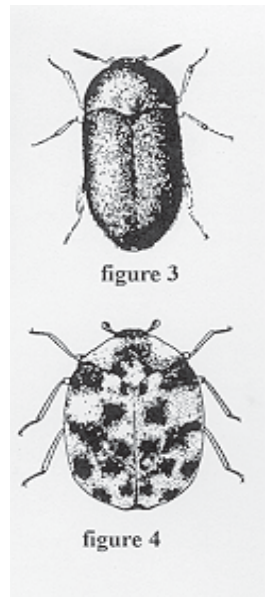


Confused flour beetle

The confused flour beetle, (*figure 2*), is a reddish-brown beetle about one-seventh of an inch long with minute punctures on the head and thorax and ridges on the hind wings. The life cycle is similar to the saw-toothed grain beetle except the average beetle lives about one year and the life cycle takes about six months.

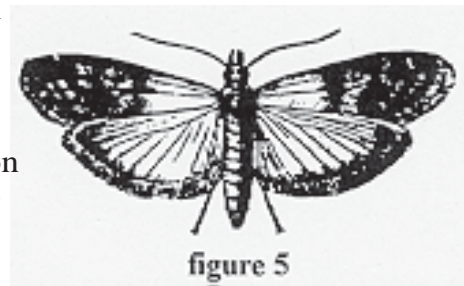
Carpet beetles

Dermestid beetles, as a group, are best known as scavengers that feed on animal matter such as hides and wool products. Several species, including the black carpet beetle, (*figure 3*), varied carpet beetle, (*figure 4*), and larder beetle feed on a variety of stored foods and are common kitchen pests. The larvae are very destructive and are readily recognized by long hairs or tufts of hair protruding from their bodies. They vary in color from brown to almost black and in size and shape depending upon the species involved. The adults also vary in size and color depending on the species.



Indian meal moth

The Indian meal moth, (*figure 5*), is the most common moth species in New Hampshire kitchens. The adult moth has a wing span of about 3/4 inch and the forewings are banded whitish-gray and copper in color. Eggs laid on stored foods hatch into small whitish larvae within a few days. The larvae feed on the food and spin webs as they crawl around. This webbing is often the first evidence of an infestation. The life cycle is completed in six to eight weeks.



Control of stored food pests

Good sanitation is important in preventing the spread of an infestation. Spilled food that gets into cracks, under sinks, under the refrigerator and dishwasher and behind drawers will harbor insects and keep an infestation going. Periodic cleaning and vacuuming will help discourage an infestation from spreading should you accidentally bring them into your home.

If the problem is discovered early, before food becomes badly infested, measures can be taken to salvage food through heat sterilization or cold treatment. Spread the contents out on a tray and heat in an oven at 130F for 30 minutes, or place in a deep freeze at 0F for four days. Repackage in tightly closed containers such as glass jars or cans. Badly infested food should be destroyed or disposed of by sealing the containers and placing in the garbage.

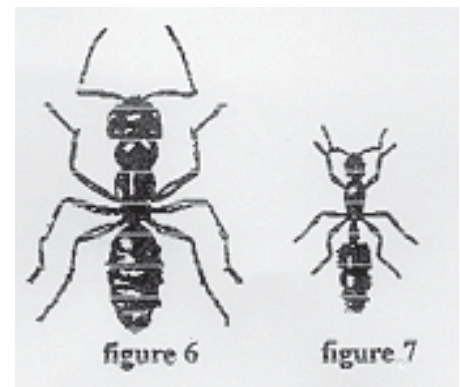
Chemical control becomes necessary when the infestation has spread to several food items and has undoubtedly gotten into cracks and remote areas of the kitchen. Remove all food and kitchenware from the shelves and clean thoroughly using a vacuum. Consult your county Extension Educator (see county office telephone listing at the end of this fact sheet) for specific pesticide recommendations. Treat cracks and corners by spraying lightly. ***Do not overspray.*** Be sure that the pesticide is labeled for ***indoor*** household pests. ***Do not*** contaminate food or feed. Allow the spray to dry before recovering shelves with fresh paper and replacing food packages, dishes and cookware.

Spilled food pests

A number of insects feed on spilled food and debris that works its way into cracks, crevices, behind kitchen appliances or under sinks and cabinets. The most common pests are ants, cockroaches, silverfish and carpet beetle larvae and adults.

Ants

Both the large, black carpenter ant, (figure 6), and the small, red, brown or black, (figure 7), ants are attracted to sweets and other food found in the kitchen. They often come in from nests located outdoors in the ground or under the foundation. Control is best achieved by eliminating the food source and by judicious spot treatments at entrance sites and along the ant route. If the ant nest is located within the house structure, it is necessary to locate and destroy the nest.

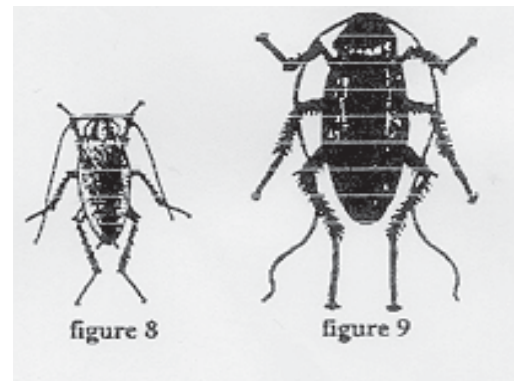


Cockroaches

Our most common kitchen cockroach is the German cockroach, (figure 8), which is slightly over 1/2 inch long and is brown, with two black parallel lines just behind the head. Less common are the American, (figure 9), Oriental and brown-banded cockroaches. The German cockroach will mature in 40 days and will multiply throughout the year.

Silverfish & firebrats

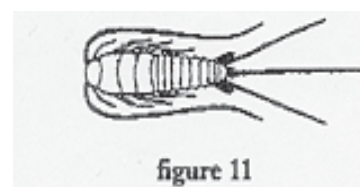
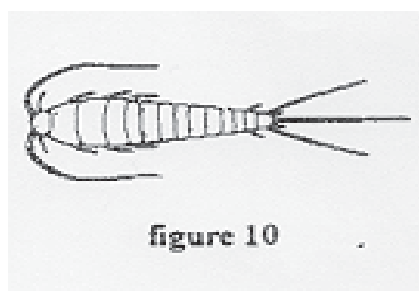
Both silverfish, (figure 10), and firebrats, (figure 11), can be found in kitchens as well as other parts of the house from the basement to the attic. In addition to spilled foods, they feed on wallpaper paste, book bindings, rayon fabrics and starched clothing. Firebrats are found in warmer places (98-102F degrees), such as furnaces, while silver-fish like cooler (72 - 80F degrees) portions of the house such as kitchens, bathrooms and attics. They are silver-gray to greenish-gray in color with three tail-like structures at the end of the body.



Control of spilled food pests

Reduce their food supply by removing spilled food and debris. Use a vacuum cleaner to get those hidden places behind appliances, sinks and in cupboards. Seal or caulk all cracks in walls, around baseboards, water pipes and windows.

Consult your county Extension Educator (see county office telephone listing at the end of this fact sheet) for specific pesticide recommendations. Treat baseboards, cracks and other hiding places with a pesticide that is labeled for ***indoor*** household pests. Do ***not*** contaminate food or feed. Read the label.



UNH Cooperative Extension County Office Telephone Numbers

Belknap

(603) 527-5475

Carroll

(603) 539-3331

Cheshire

(603) 352-4550

Coos

(603) 788-4961

Grafton

(603) 787-6944

Hillsborough

Goffstown

(603)641-6060

Merrimack

(603) 796-2151

Rockingham

Brentwood, NH

03833

(603) 679-5616

Strafford

(603) 749-4445

Sullivan

(603) 863-9200

***Stop!** It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. Contact the NH Division of Pesticide Control at (603) 271-3550 to check registration status. Store pesticides in their original containers in a locked cabinet or shed away from food. Dispose of unused pesticides or empty containers safely, according to NH regulations. If you suspect pesticide poisoning, call the New Hampshire Poison Control Center at 1-800-562-8236.*



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