

Unit five : Housekeeping maintenance

6.2 PEST CONTROL

6.2.1 INTRODUCTION

- Pest is an organism which has characteristics that are regarded by human beings as injurious or unwanted.
- Cause economic loss to the hotel properties and health problems by carrying, spreading and transmitting contagious and often fatal diseases.
- You cannot avoid the “uninvited guests” – the pests.
- It is not only embarrassing , speaks badly of a hotel where one sees rats, cockroaches, and lizards running around.

6.2.2 PEST CONTROL

- Insect pests enter buildings seeking food, shelter or surroundings having the right temperature and humidity.
- The key to successful pest control is eliminating one or more of these conducive factors.
- Sanitation/housekeeping is an important part of control.
- Using right product in the Wright manner -satisfactory control.

6.2.3 ANTS

- Color – black, red, brown or yellow.
- Pinched waist and
- Elbowed antennae
- Wingless or winged.
- Places – kitchens and bathrooms where there is food and water.

6.2.3.1 Control of Ants

- Sanitation
- Clean up food and beverage spills from floors and countertops immediately.
- Baits

6.2.4 COCKROACHES

- They are nocturnal/night in habit and attack food, paper, clothing, shoes, and dead insects.
- Most likely to be found kitchens, larders/store rooms and restaurants, where food, warmth and moisture present provide the necessary ecological requirements.

6.2.4.1 Control of Cockroaches

- Hygienic storage and disposal of food and waste and cleanliness of areas.
- Insecticides

6.2.5 LIZARDS

- Lizards are typically dry land animals loving the sun and its heat.
- Lizard control is usually carried out in the warmer periods of the year.
- Lizards are cold blooded animals and hence in the cold season they tend to hibernate in the warm corners of the house to restore their body temperature.
- During the warmer periods they come out and can be seen crawling up and down the walls.

6.2.5.1 Control of Lizards

- Found mostly behind picture frames, curtains, shelves and window frames.
- They enter the hotel through the ventilators and windows. Hence the windows and ventilators should be properly meshed.
- As the lizards thrive on insects, the most effective way of controlling lizards is to control the insects in the house.
- Lizards are carnivorous and prey on other insects. Hence they cannot be controlled using bait.
- Chemicals such as dichlorophos, malathion etc. sprayed on the body kills the lizard instantly.
- Fumigation is carried out using Aluminum Phosphide.

6.2.6 FLIES

- The majority of flies is diurnal/day time .
- Flies are many types and most are attracted to food and food waste.

6.2.6.1 Control of Flies

- Aerosol sprays are useful in getting rid of the many varieties that may gain entry to a hotel building.

6.2.7 BEES

- The honey bee is man's oldest insect friend known and it to this insect that we owe honey, beeswax and proper fertilization of many of our crop plants for bumper yield.
- As with man, the honey bee too has its periods of depression.
- On cloudy days when they are unable to forage for nectar, they get "frustrated" and need to "take out their frustration" on others. On these days we need to be cautious.
- Most individuals who fear bees do so because of their potent sting.

6.2.7.1 Control of Bees

- A variety of insecticides are effective including bendiocarb, carbaryl, diazinon, malathion and propoxur.
- The dust formulation of these products is preferable to spray formulations when bee and wasp nests are in enclosed places.

6.2.8 WASPS

- These wasps generally do not attack people.
- They nest in loft/roof and empty spaces in the walls where they can go unnoticed for a long time.
- They usually go outdoors in search of food, but when they are not able to get food, they come into the living area and become a threat to the inhabitants of the house / rooms.



6.2.8.1 Control of Wasps

- If the nest can be found, control of wasp is simple.
- Simply spray bendiocarb, carbaryl, chloropyrifos, diazinon, or resmethrin into the nest opening of the aerial nesters.
- For ground nests dust formulation of any of the above insecticides is preferable.

6.2.9 SPIDERS

- The house spider is so cosmopolitan and so widely distributed that it is difficult to trace its original homeland.
- The house spider selects its web sites at random. If the web does not yield prey, it is abandoned and another site is selected. Eventually the spider end up constructing webs where food is most available.

6.2.9.1 Control of Spiders

- Improved storage, use of air tight boxes and bags, elevation of materials off the ground, discarding unwanted items, and periodically sweeping or vacuuming under furniture and behind mirrors and pictures are all helpful control measures.
- Dust formulation lightly applied to the web can be quite effective.
- Residual formulations include those based on bendiocarb, bromine, chloropyrifos, malathion, propetamphos, propoxur, pyrethrum, resmethrin, and runnel.

6.2.10 BED BUG

- Reddish brown in color.
- Are able to survive sometimes many months without food.
- They are nocturnal/night time by habit.
- Feed by sucking human blood and deposit their eggs in cracks of woodworks, behind wallpapers, pictures etc.
- They give out unpleasant smell.
- Their bite causes irritation and results to large red patches.



6.2.10.1 Control of Bed Bug

- Controlled by spraying with suitable liquid insecticide, heat treatment or by fumigation which is normally carried out by experts.
- Mattresses should be treated only at the seams and should not be soaked in spray.
- Mattresses should be allowed to dry and should be covered when used.

6.2.11 MOSQUITOES

- Mosquitoes received very little attention until it was found that they were the cause for malaria and other diseases.
- Mosquito is found abundantly in the tropical region and there are stray occurrences of them even in the arctic region.
- Not all mosquitoes are blood suckers, and most of them are attracted to light. Hence light traps are used in order to obtain information about them. Only the females suck blood. The male feeds on pollen and nectar.
- The vast majority of them prefer fresh water but some live in salt marshes and brackish water. Still others are happiest in water contaminated with sewage.

6.2.11.1 Control of Mosquitoes

- Control consists essentially of destroying the larvae and their breeding places.
- Tin cans and all objects that hold water should be eliminated and the rain barrels and cisterns are treated periodically.
- Drainage provides permanent control and is used to eliminate small pools, swamps and marshy areas; ditches, and creeks are cleaned up so that the water flows evenly and does not stagnate or back up.

- Prevention of bites is an essential feature in the prevention of mosquito borne diseases. All buildings should be screened to prevent entry of these insects.
- A mixture of indalone, Rutgers 612 and dimethylphthalate is a good general repellent.
- Aerosol bombs containing pyrethrum, rotenone or DDT are used to kill mosquitoes in small areas.
- DDT is used to spray wells and screens, and is effective for long periods, but kills slowly, and should be used carefully.

6.2.12 RATS

- Rats, mice and squirrels are from the same family – the Rodents.
- Mostly found in kitchen and dining areas than in bedrooms.
- Are attracted by scraps of foods, candles, soaps etc.

6.2.12.1 Control of Rats

- Hygienic storage and disposal of leftover foods and all kinds of waste and cleanliness of all areas where food is handled are important to prevent infestation.
- Snap traps: trapping is done when the use of poisons is dangerous.
- ANTU, Arsenic, Barium Carbonate, Phosphorous paste, Fluoroacetamide,, Zinc phosphide are the chemicals used to kill the rats.
- Most of these chemicals are spread between two slices of bread in the form of a sandwich and placed at the right place to trap the rats.

6.2.13 SILVERFISH

- Wingless insect and silver gray in color
- The silverfish is nocturnal, shuns light and is most often seen when uncovered in dampish places like the kitchen and the scullery.
- Live in moist places and mostly found in basement around pipes, drains, sinks etc.
- It feeds on carbohydrate substances such as starch used for wall paper paste and is recorded as biting small irregular shaped holes in linen, cotton and artificial silk especially if starched.



6.2.13.1 Control of Silverfish

- They can be prevented by regular cleaning of cupboards and surroundings of sinks, pipes etc and
- Insecticide powders can be sprinkled where silverfish has been seen.

6.2.14 TERMITES

- Termites are insects that cause serious damage to wood and paper. They actually eat wood as food, and like ants, live in colonies.

6.2.14.1 Control of Termites

- Using insecticides



Swarmer



Worker



Soldier



Queen



King

6.2.15 BATS

- Bats are natural reservoirs or vectors for a large number of pathogens including rabies.

6.2.15.1 Control of Bats

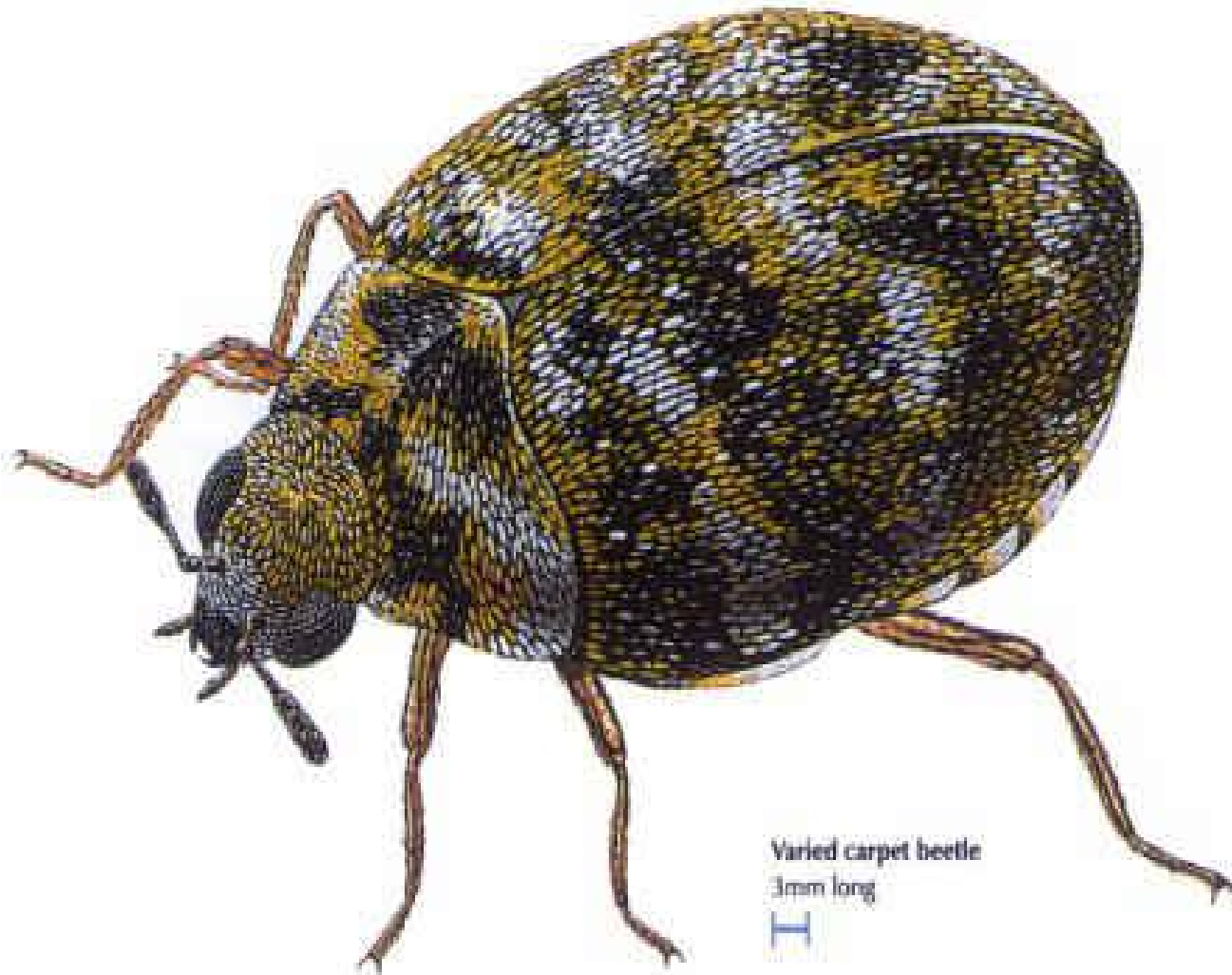
- The simplest procedure for expelling a maternity colony begins with the installation of a bat box.
- After that, the bat box entrances is sealed and removed from the hotel premises. With a little patience and effort, one can completely exclude bats from the hotel permanently and successfully.

6.2.16 carpet beetle

- Mostly seen between April and June.
- It is the larvae of the carpet beetle that feeds on feathers, fur, hair or wool and articles made from these substances.
- They create well-defined round holes along the seams of fabrics.

Control

- Frequent vacuum cleaning of debris from storage cupboards, floorboards, carpets and upholstery.
- Insect killing powders can be sprayed b/n floorboards, under carpet and under felt to kill the larvae.



Varied carpet beetle
3mm long



6.2.17 Moths

- Pale buff in color.
- Seen flying mainly b/n June and October
- Wool, fur, skin and feather materials can be attacked by moths.
- In hotels, materials that need most protection are blankets, carpets and under felts, upholstered furniture and curtains, fur and feather.

Control

- Areas for storing these articles should be clean and protected by moth deterrents and inspected frequently.
- Insecticides, camphor tablet, and naphthalene are commonly used moth deterrents.
- Mothproofing materials like wool.
- In case of heavy infestation/attack fumigation can be carried out by experts.



6.3. Waste disposal

- Hygienic disposal of waste material is extremely important in the control of most pests.
- The waste should be kept in tightly covered bins or plastic sacks.
- The bins/sacks should then be removed by the house porter to the main waste collection area outside the building from where they will be removed by the local authority.