

# Information and Advice Regarding:

ANTS

BED BUGS

BLUEBOTTLES

CLUSTERFLIES

COCKROACHES

FLEAS

HOUSEFLYS

HORNETS MICE

RATS

# **ANTS**

## **What is the garden ant?**

One of the most common insects invading our homes; it is an active insect and nests outside in grass, walls and under paving. It enters buildings in search of food. The Garden Ant is relatively large at 3 to 5mm long, dark brown to black in colour.

Ants have developed different individual groups to carry out specific tasks:

- workers (they are sterile females)
- fertile males
- queens (fertile females)

## **What should I know?**

The worker ants build and maintain the nest, look after the young and find food. They are attracted to sweet foodstuffs, which they take back to the nest and feed to the larvae and queen. Flying ants are the reproductive males and females. They have wings and mate in a swarming flight during a few days in July or August. Mating takes place in the air and females then seek out a nest site where she stays for the winter. The following spring (April) she lays her eggs, the larvae hatch in 3-4 weeks and are fed by the queen until they pupate. The first worker ants then emerge.

## **What should I do?**

Breckland Council does not offer a service to treat ants. However there are a number of over the counter products that can be bought.

Although frequently inaccessible and difficult to destroy, ant nests must be eradicated if infestations are to be successfully controlled. The nests of the Garden Ant can be located by following their trails and by looking for small piles of fine earth. These actions can be taken:

- Pour boiling water on the nest - it will control the infestation for a short time.
- Squirt a residual insecticidal powder into the hole (use a powder product that lists ants on the label).
- Food sources should be protected.
- Flying ants should be controlled by using an appropriate insecticidal aerosol for flying insects.
- Residual insecticidal lacquer can be applied around doors, skirting, windows, ventilators, ducts and drains. Attention should be given to small cracks. If you regularly experience problems with ants use this treatment during late spring.
- Some products cause the workers to destroy their own nest, for example sugar based liquid bait containing borax. The workers are attracted to the bait and carry the insecticide back to the nest.

## **Will the treatments affect other animals or pets?**

Most products are not harmful to pets, but some are. Always read the label on any product you consider buying, and follow the instructions very carefully using the precautions stated on the product.

# **BED BUGS**

## **What is a bed bug?**

The adult bed-bug is an insect, quite flat and an oval shape around 5mm long, 3mm wide and reddish brown in colour. Bed-bugs do not fly, so they must crawl or be transported, usually in clothing, luggage, books and furniture.

Bed bugs feed on blood, they can survive for long periods of time without feeding. Bed-bugs are usually associated with poor, overcrowded and unhygienic conditions. In domestic premises most infestations are found in the bedroom. Their hiding places will be close to where their host sleeps - in the bed frame, mattress, bedside furniture, skirting boards or wallpaper, in fact anywhere that affords a dark hiding place during the daylight hours for these nocturnal creatures.

## **What should I know?**

Bed-bugs' habit of biting a person and feeding on their blood can cause severe irritation in some people; however, they are not known to carry disease. The very thought of being preyed upon by such creatures is often sufficient to encourage immediate action to control them.

There are a number of factors that are helping to maintain the numbers of bed-bugs. Increased use of central heating and the resultant warm conditions stimulate continuous activity and feeding over the winter months. Even the movement of second hand furniture may transfer bed-bugs from one property to another.

## **How do they live?**

The female lays pearly white eggs. As they are only 1mm long, they fly into cracks and crevices in bed frames, furniture, and wallpaper, anywhere that remains dark throughout the day. They will lay about 150 eggs that hatch in 10 to 20 days and will reach adulthood in nine weeks. This can be considerably longer in low temperatures. Adults live for up to 18 months, usually feeding weekly, but can survive for over a year without blood.

## **What should I do?**

You will need professional help to deal with an infestation of bed-bugs.

# **BLUEBOTTLE FLIES**

## **What is a bluebottle fly?**

Also called "blowfly", bluebottle flies are metallic blue, green, or black in colour and are noisy in flight. With an average size of 8–10 mm, they are slightly larger than houseflies but resemble them in habits. Among the important members of this group are:

- Screwworm.
- Bluebottle fly.
- Greenbottle fly.
- Cluster fly.

## **What should I know?**

Bluebottles breed on dead and decaying animal matter. If you have an unusually large number of these flies in your property you should consider the following:

- There is a dead animal, for example a mouse, rat, squirrel, or bird, somewhere in or near the house
- There is some rotting meat (not necessarily a large amount) somewhere near or in the house.

The most likely place to find a dead animal or bird is in the loft, or under the floorboards. Finding the source and disposing of it is the most effective way of getting rid of bluebottle flies.

## **What should I do?**

The use of insecticide will kill individual flies but will have limited long term effect.

# **CLUSTER FLIES**

## **Description**

There are four main species of fly collectively known as cluster flies. They are:

- The Autumn Fly (*Musca autumnalis*) - a small fly of about the same size and colour as the housefly, but with a yellow abdomen.
- The Common Cluster Fly (*Pollenia rudis*) - a larger fly of a dull, dark, dusty brown/grey colour with a "tessellated" abdomen.
- The Green Cluster Fly (*Dasyhora caynella*) - about the same size as a housefly, shiny green/blue in colour.
- The Yellow Swarming Fly (*Thaumatomya notata*) a smaller species of hibernating fly, yellowish body/black markings, sometimes confused with the fruit fly.

## **Biology and Habitat**

Cluster flies are very common. The adult flies hibernate during the winter months in roof spaces of houses and/or farm buildings. After this time the flies lay their eggs in the earth and/or animal dung. As the soil temperature increases in late spring, the eggs will hatch. The larval stage is parasitic, entering earthworms and feeding upon them until emerging as an adult fly. There may be two to four generations of flies in a single year.

The common cluster fly prefers a warm wet summer, whereas the autumn fly prefers dryer, hotter conditions.

Cluster flies migrate from the outside conditions into the lofts of house and/or farm buildings during the winter months. Obvious signs of an infestation include large quantities of lethargic/dead flies around windows. Once in the roof spaces the flies will stay in hibernation until the spring.

## **Importance**

There is no risk to public health.

Cluster flies do not damage property however they will die and become very unsightly if they do not successfully hibernate.

Water tanks in the loft spaces should be covered.

Cluster flies are not to be associated with dead animal bodies or faeces and there are no maggots.

## **Control**

Cluster flies emit a clustering pheromone that encourages them to hibernate together and for subsequent generation to follow to the same property.

For small infestations around windows and behind curtains, they can be removed with the use of a vacuum cleaner. For large infestation in loft spaces, treatment is best carried out after the first frosts of winter, this usually ensures that all of the hibernating flies are in the treatment area. The treatment best designed at this time is to treat with an insecticide space spray, Ultra Low Volume application through a Micro-Gen machine, will quickly knock down any flies present.

## **What to do next**

Please note that treatment is usually only effective when the weather has turned colder and the flies have taken shelter back in the property.

# **COCKROACHES**

## **What is a cockroach?**

There are two types of cockroach commonly found in this country - the Oriental Cockroach and the German Cockroach. Cockroaches are quite large insects which can be distinguished by their size and colour.

The Oriental Cockroach is the larger of the two types in adult form.

They are dark brown or black in colour and 20-24mm long with long whip-like antennae.

## **What should I know?**

The German Cockroach, sometimes known as the Steam Fly, are yellowish brown in colour with two dark marks on their thorax.

Adults are 10-15mm long, also with whip-like antennae. Cockroaches can be found infesting all types of buildings from blocks of flats to industrial premises.

They are nocturnal and spend the day hiding in cracks and crevices around such areas as sinks, drains, cookers, skirting boards, service ducts and fridge motor compartments.

Cockroaches will feed on almost anything, from faecal matter to food intended for human consumption. Cockroaches have been found to carry diseases causing bacteria on their bodies. These bacteria are then transferred onto anything the cockroach touches.

## **How do they live?**

The female Oriental Cockroach can produce up to five egg capsules. These capsules are 12mm long and each contain up to 16 eggs, they hatch 6 to 12 weeks later.

The German Cockroach can produce four to eight egg capsules at monthly intervals. The egg capsules are smaller than the Oriental Cockroach - 6mm long, but contain up to 30 eggs.

# **FLEAS**

## **What is a flea?**

Fleas are flattened from side to side and this allows them to move easily through the hairs or feathers of the host; they are well known for their jumping capability. Their colour varies from a light brown to almost black, but they are normally a reddish brown. Their body length ranges from just 1mm to 8mm long and is slightly oval in shape.

Most fleas have a pair of small, simple eyes, but some are blind - usually those that live underground. The flea can jump great distances for its size, over 200 times its own body length.

## **Important**

Treated premises can be re-occupied by children, pets and other animals once the sprayed surfaces are dry. Please ventilate the property for at least 24 hours following the treatment. By continuing to use some form of flea control on your pets, this will help to avoid a re-infestation in the future. Contact your vet for advice on flea control treatment. Destroy old pet bedding as this may be heavily infested. Keep the affected area well aired as fleas enjoy humid conditions.

## **What should I know?**

There are approximately 3000 species of fleas in the world. All are blood suckers and temporary parasites of warm blooded animals, mainly mammals, but a few will feed on birds. Fleas usually require a specific host, but will often feed on other animals if their preferred host is not available. The life cycle of the flea usually takes place in the resting place of the host; in the nest or burrow or other habitation. Eggs are laid by the female and are white and oval in shape and 0.5mm in length. The female may live for several months and lay 20-39 eggs per day.

The egg hatches in about a week, depending on the temperature. The small maggot like larvae search for food, feeding on organic remains which may include undigested blood left by the adult. The larvae grow and when adult lie in wait for a passing host.

The pupa may remain dormant for up to 6 months. This complete cycle takes about a month if conditions are right. Adult fleas feed on blood and their bites can cause intense irritation at the bite site. Of all the fleas, the cat flea is responsible for 75% of all flea infestations.

## **What should I do?**

As all development stages of the flea will be found in the habitat of the host, it is essential that this area is thoroughly treated. If there is any pet that might carry fleas, then the animal must be treated using an insecticidal shampoo or powder, available from your vet. The bedding of the animal must be cleaned regularly. If you use a vacuum cleaner, put a small amount of crawling insect powder inside the bag.

When fleas are found in a property where there are no pets, then a careful search for old birds nests in the loft or eaves may prove worthwhile. If there is a heavy infestation, you may require professional help. Please read our Rodents, Insects and other Pests page.

# HOUSEFLIES

## What is a Housefly

### The Common Housefly (*Musca domestica*)

This fly is very common in the UK, often found in large numbers in the vicinity of poultry and pig farms, and waste processing and disposal sites. The adult flies are 6-8mm long with a wingspan of 13-15mm, a grey thorax (the part of the body between the head and abdomen) with four longitudinal dark stripes.

The female fly lays clusters of around 100 eggs on various forms of moist decaying organic matter including animal manure, rubbish and waste food. Typically the eggs hatch within 48 hours into white-ish maggots which then pupate into adult flies. The adult fly rarely lives for more than a week or two, and the entire life cycle is between 10 and 60 days, depending on temperature. The adults readily disperse from breeding areas and enter buildings elsewhere. They are highly active indoors.

The common houseflies have an average flight range of at least 8km (5 miles). They are usually first seen in late May, with their population usually being highest in August and September. Breeding usually ends in October. However, in warm environments adult houseflies can remain active and reproduce throughout the year.

### The Lesser Housefly (*Fannia canicularis*)

The lesser housefly is smaller than the common housefly and the adult flies are typically 4-6mm long with a 12mm wingspan, a grey thorax and three longitudinal stripes which are less pronounced than those of the common housefly. Lesser houseflies are frequently encountered around poultry houses.

The eggs of the lesser housefly are laid on various forms of moist decaying organic matter including animal manure. The eggs will usually hatch within 2 days, at temperatures of 25oC. Development from egg to adult emergence can take in the region of 3 weeks, although cooler conditions prolong this period. The Lesser Housefly have erratic flight patterns and are often seen flying around light fittings in large numbers.

When the weather cools in late summer/autumn the pupae will enter 'diapause', and adult flies will then not emerge until the onset of warm weather in the following spring. During the winter the fly will typically hibernate as a pupa or in the later larva stage, the pupae are dark brown in colour and ridged. These will eventually hatch into adults as temperatures and day-length start to increase again in the early spring. The lesser housefly tends to prefer cooler conditions than the common housefly. It is more active at lower temperature, it will breed at lower temperatures and it will tend to become a problem earlier in the year than the common housefly, often as early as March and April. In particularly cool or warm weather, the lesser housefly will tend to seek out more suitable locations, such as inside buildings. In more settled mild weather the flies will spend considerable time outside.

## What should I know?

As a result of their indiscriminate feeding habits they can transmit disease to humans including stomach upsets and diarrhoea.

## What should I do?

Breckland Council does not offer a service to treat for houseflies. Controlling fly infestations firstly requires identification and control of the source but the following will help:

- Securely bag your household rubbish to keep flies away from waste food.
- Compost heaps should be covered or in purpose built containers. This will minimise larvae emergence and promote fermentation temperatures at which the larvae can not survive.
- Clear/clean drains and gullies often - particularly in and around kitchens to remove food waste.
- Fly papers hung from the ceiling can be used to collect flies inside the property and to aid identification.
- On agricultural premises farm manure should be kept as dry as possible, especially in poultry houses where leaking water drinkers can provide ideal, moist breeding conditions.
- Dead birds, animals or rodents should be located and removed. If locating them proves difficult use a strong air freshener or rodent deodorant to mask the smell.
- The entry of adult flies into buildings can be prevented by the use of fly screens, air curtains, bead curtains or self-closing doors fitted with rubber flaps.

# **HORNETS**

## **What is a hornet?**

The hornet is commonly mistaken with the wasp but they are larger at 20-25mm long whereas the wasp is approx 14mm in length. They have brown and yellow or black and white bands at their tail (their abdomen). Hornets nests are also much larger than wasps nests. Their ability to give a painful sting makes these insects feared by people.

Nests may be found in roof spaces, wall cavities and air grates of buildings, hanging from trees as well as underground.

## **How do they live?**

In the Spring, the queen leaves her hibernation site and seeks a site for the nest. She constructs the nest from wood pulp which is moulded into the outer shell of the nest

The eggs are laid and tended by the queen until they hatch to produce the larvae which she also feeds and tends. When fully grown, the larvae pupate and emerge as sterile workers to take over the job of building the main nest and foraging for food. Towards the end of the summer the queen lays a number of eggs which produce males and these mate with the new queens.

As the weather becomes colder the nest will die out, except for the new queens, which fly away to find hibernation sites over winter. The old nests are not re-colonised the following year.

## **What should I do?**

Adult hornets become a problem when they forage for sugary foods such as jam, fruit, etc in the late summer. The hornets that appear indoors can be treated by using a quick knockdown insecticidal aerosol spray.

If the nest is in the ground, an insecticidal dust can be applied around the entrance of the nest. Care must always be taken to read the instructions on the pesticide container before you buy it and professional help may be required. The old nests are not re-colonised the following year, so the treated nests need not be removed.

The most common wasps are the German Wasp and the Common Wasp. Their bodies have the characteristic black and yellow bands across the tail section (their abdomen). They are fairly large insects approx 14mm in length.

It is the wasps' ability to give a painful sting which makes these insects feared by people.

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# **MICE**

## **What is a mouse?**

The house mouse originated in central Asia. In the UK it is found in a wide range of urban and rural buildings; although it is mainly a house dweller it may live outdoors for part or all of the year. If it gains entry into the house it may be found in kitchen cupboards, under floors, in roof spaces, in pipe or cable ducting or airing cupboards.

Mice can cause a great deal of damage by eating and contaminating food and damaging materials by gnawing. The house mouse may also carry disease which can be transmitted to people and domestic animals.

## **What should I know?**

House mice can breed throughout the year, producing up to 10 litters but usually five or six. For food they prefer seeds and cereal products, but they will eat soap, wax and putty.

The house mouse is brownish grey or grey in colour. The length of its head and body is 80-100mm and the tail is 80-100mm. They are small and slender in build and weigh up to 20g. The nose is pointed, the ears are large and hairy and they have pink feet. House mice are not solitary creatures, if you see a mouse there will usually be a small family of two or three mice present.

## **What should I do?**

Mice can be difficult to control because of the rate at which they breed. It is best to remove food scraps, rubbish and keep buildings tidy. Mice can squeeze through very small openings so all holes should be filled in, thresholds fitted to doors if necessary and airbricks and ventilators covered with wire gauze.

To eradicate mice there are two choices - either trapping or poisoning. Traps can be bought from DIY stores; there are humane transparent plastic box models available that use a trap door to lock the mouse inside - you can then take the trap out into the countryside and release the animal.

For best results several traps should be used, set 2 metres apart. The baited end should be placed nearest to the wall at right angles away from pets and children. The best bait is peanut butter but you can also use chocolate, flour, porridge oats, sugar or breadcrumbs - contrary to popular belief cheese is not good bait.

- Make sure that the mice do not have access to food stored in your kitchen.
- Check and repair all small gaps in the external walls of your property. A mouse can crawl into a hole that you can fit a pencil into.
- There are also several mouse poisons available from chemists, hardware shops and supermarkets.
- You may, however, wish to seek professional treatment.

# **RATS**

## **What is a rat?**

The Brown Rat or sewer rat is brownish grey in colour. Its body is about 200-270mm in length and is large and thickset. The nose is blunt, it has small eyes and the ears are short, thick and finely haired. The fur is shaggy and coarse. The tail is shorter than the head and body and is about 165-205mm long.

Young rats reach maturity in two to three months; they average four to seven litters a year, with 8-12 pups per litter. They live in colonies.

## **What should I know?**

Rats will invade buildings in search of food and shelter. They may transmit disease, soil and destroy materials and damage buildings. The Brown Rat is common throughout Britain.

They return to their nests to die and if these nests are in warm areas of houses and buildings an offensive odour may become apparent which can last up to 14 days.

## **How do they live?**

The Brown Rat prefers to live underground in tunnels, usually in sewers. They venture above ground in search of food, water and nesting materials. They move quickly and are excellent climbers and active burrowers. They eat about 10% of their body weight daily and require a regular supply of water.

Rats need to gnaw to keep their incisor teeth worn down as they grow constantly, all the gnawing creates a lot of damage to the fabric of a building, especially in woodwork.

Rats use 'runs' from one place to another. This route becomes soiled with grease and dirt from their fur and they constantly leave droppings which are banana or sausage shaped. The amount of droppings can indicate the size and duration of the infestation.

## **What should I do?**

You may wish to consider the following to reduce potential food sources and harbourage sites, removing food and nesting sites will make your property less appealing to rats.

- Remove potential nesting sites by keeping your garden clean and tidy, cut back overgrown areas.
- Remove food sources by clearing up any windfall fruit as soon as you are able to.
- Do not put out excessive amounts of food for birds. Use a special bird feeder and regularly sweep up any food that spills onto the ground.
- Keep rubbish in proper containers with lids on until the day of collection.
- Place compost bins over galvanised steel mesh and ensure that the lid is tightly fitted.
- Keep your home in good repair; rats only need a gap of 15mm to gain entry.
- Ensure that drain inspection covers are in place and are in good repair.