Insect and Arachnid Pests Found In & Around Homes and Buildings in the Las Vegas Valley

These are some of the more common pests found in the Las Vegas Valley. Only three present any danger to humans and pets. The Bark Scorpion, Black Widow and the Brown Recluse Spider. Each of these pest are of the Arachnid family and have eight legs and no antennae. Insects on the other hand have six legs, antennae and some species fly. If you have any questions about any of these or any other pests, please call 395-7323. We would be glad to answer any questions you may have.

STINGING AND VENOMOUS INSECTS

There are a number of stinging and venomous insects in the Southern Nevada area which present a public health problem. Wasp and Bee nests are often found near human habitats and present a threat to the population. Africanized Honey Bees have officially colonized the entire Las Vegas valley.



There are several spiders in Las Vegas which are a concern to Homeowners and Businesses alike. The most common is the Black Widow Spider (*Latrodectus hesperus*.) It is sometimes called the Hour Glass Spider because of the sometimes visible red hourglass figure on the underside of the abdomen. The spider has venom which is reportedly 15 times more toxic than a rattlesnake's. The most susceptible victims are children and the elderly, however even a healthy adult may experience severe illness and trauma. The spider's toxic venom, secretive habits and initially painless bite make it particularly dangerous. Bites generally occur while working in the garage or yard - for instance, while cleaning up a wood pile or reaching behind or under an object. Because the Black Widow Spider prefers dark and seldom disturbed areas, these are the areas where control efforts should be concentrated. Once these areas are identified, use precautions when clearing the area or treating with an over the counter insecticide.

The Brown Recluse, commonly known as the "violin spider" because of its black violin-shaped marking on its back, is light to medium brown with long legs in relation to its body size. This spider is incredibly dangerous though not as common in Las Vegas as the Black Widow. These "violin spiders" may be found in any number of places including the following locations around the home: discarded boxes; refuse piles; among piles of newspapers; in darker corners of hallways, bedrooms, and basements; the attic; firewood piles (often under the bark); under rocks; even in old clothes which have not been worn for a while. In fact, the most likely way to be bitten by a Brown Recluse is to put on old clothes, trapping the spider near the skin. For the most part however the Brown Recluse will run away and hide when disturbed, thus earning its name.

The principle injury inflicted by the brown recluse is the severe tissue damage which occurs at the site of the bite.

Envenomization causes the area to swell up as the underlying cells are killed and sloughed off. The pain is severe and may last several days. Often the healing of a bite requires hospitalization and several weeks of healing. Most victims develop a "scoop-like" scar at the bite area which may be as small as a dime or as large as a dollar bill.



Africanized Honey Bees - noted for their aggressive stinging behavior - are descendants of escaped African bees imported into Brazil in 1956. After establishing themselves in South America, Africanized Honey Bees (AHB's) advanced up the coasts into Central America. By 1990 they had established themselves in Texas and began spreading to other southern states.

AHB's look and act very much like their European counterparts but exhibit some very important differences. For example, the AHB's can display an ultra-defensive behavior (read as Aggressive) when they or particularly their nests are disturbed. The major threat of AHB's is in their tendency to swarm in large numbers and for extended distances when threatened. EHB swarms may sting an intruder once or twice (one sting per Bee) for a transgression of their territory and perhaps chase an intruder as far as 100 feet from the nest. On the other hand, AHB's will attack in swarms and inflict multiple stings, possibly numbering in the hundreds, (one sting per Bee) to a victim. Also, AHB's will chase an intruder up to 1/4 mile. Another important difference is the period of defensive agitation AHB's exhibit. While the EHB's remain agitated for 8 or more hours before their reaction subsides. These traits and some reports of AHB's seriously stinging and even killing pets, livestock and humans has earned the AHB's the name "Killer Bees."

AHB's react to various disturbances which can occur at a greater distance from an AHB nest than an EHB nest. For example, Vibration or Noise caused by power equipment such as lawnmowers or leafblowers can precipitate an attack. Also Motion or movement near a colony (within perhaps 50 feet) can cause the AHB's to attack as well. Nests may be found in many locations

likely to be disturbed by humans. Nesting sites include: empty boxes, cans, buckets or other containers; old tires; abandoned or infrequently used vehicles; lumber piles; cavities in fences, trees or the ground; sheds, garages, and other out buildings; under decks or under the eves of your house.



Yellow jackets and other Wasps

Yellowjackets are social insects that live in nests. They are medium-sized black wasps with yellow and white markings. Depending on the type of yellowjacket, nests may be found under eves, or within holes on utility poles or trees. They may also be found in abandoned rodent burrows, or other underground cavities. When disturbed, Yellowjackets can inflict multiple stings that are very painful and may be life threatening to those with hypersensitive reactions to the venom.

Western Yellowjacket (Vespula pennsylvancia) This yellowjacket is a major pest species in California. In the Summer months it is often seen in and around trash receptacles and picnic areas. They nest in abandoned rodent burrows and live in colonies of 500 to 5000 workers.

- Common Yellowjacket (Vespula vulgaris) This Yellowjacket can be a pest because adults are attracted by protein or sugar sources. It is also considered to be a beneficial species because workers prey on caterpillars and other insects.
- Paper Wasps (polistes spp.) Paper wasps are social insects that annually produce new nests of paper. These colonies
 are started in the spring by a single fertilized female wasp (queen). The colonies are very small early in the season as
 the queen alone has to perform all of the chores involved in building the colony and feeding the developing young.

Late in the season the size of the colonies rapidly increases as more wasps are raised to assist in colony development. The nest is abandoned in fall and is not reusedthe following year. The wasps disperse as individuals and seek protected areas to overwinter.

Paper wasps primarily feed on insects and can be one of the most beneficial insects to the gardener concerned with plant pests such as caterpillars. However some paper wasps, in particular a few species of yellow jackets, also are scavengers and can become a considerable nuisance around garbage and at outdoor events where food is served. All of the paper wasps are capable of producing a painful sting but do not leave the "stinger" behind as to honeybees.

Polistes wasps (Polistes spp.) make paper nests of an open-cell construction, typically under the eaves of buildings. Polistes wasps are slender and reddish-brown in color marked with yellow. The Polistes wasps are very beneficial predators of caterpillars and do not scavenge garbage. They often enter houses in the fall, seeking a place to hibernate. They rarely sting at this time unless handled.



Bark Scorpions

Loving the night, as most spiders also do, and hiding by day, scorpions all sting with the tip of their "tail"--the last few segments of their abdomen. From small species that reach maturity at three-fourths inch to humongus nine-inches, scorpions have crab-like pincers used only to hold and tear apart their prey. Insects are their primary source of food.

Most victims report no more pain than that inflicted by a irritated honeybee. An attack of the species Centruroides may be different. In North America only the Centruroides is a known killer of humans. They are usually old-straw-yellow or yellow with dark longitudinal stripes, and reach from two to 7.5 centimeters in length. Their pincers are long and slender as opposed to bulky and lobster-like. The sting, immediately and exquisitely painful, is increased by a light tap on the site. Deaths have almost exclusively been in small children, the elderly, and the severely allergic. This scorpion is only found in Mexico and the extreme southwestern United States.

First aid for any scorpion sting should involve cooling the wound which allows the body to more easily break down the molecular structure of the venom. Cooling also reduces pain. Use ice or cool running water if available. On a warm night, a wet compress will help. Keep the victim calm and still. Panic and activity speed up the venom1s spread. If the scorpion was Centruroides, post-sting manifestations may include heavy sweating, difficulty swallowing, blurred vision, loss of bowel control, jerky muscular reflexes, and respiratory distress. These serious signs are cause for quick evacuation to a medical facility. Antitoxins are available in many areas where dangerous scorpions live.

OTHER OCCASIONAL INVADERS



Cockroaches

There are several species of cockroaches in southern Nevada but the most common one is the oriental cockroach. This roach is most commonly referred to as a "waterbug". The cockroach has incomplete metamorphosis meaning that there are three basic life stages egg, nymph (babies) and adult. The nymphs or babies of the waterbug resemble the adults but are lighter brown to reddish in color and are smaller than the adults.

Like many other species of roaches, waterbugs are nocturnal. This means they become active and search for food during the night especially in the hot Vegas nights. They will eat practically anything they can find, even slime that builds up in drains and garbage disposals in the kitchen. The oriental cockroach can contaminate food with their saliva and feces and also carry salmonella bacteria, which can cause food poisoning.

Oriental cockroaches are more sluggish than other roaches, neither moving as fast nor climbing as well because of the lack of sticky pads under their feet. Their preferred habitat is at or below ground level in damp areas, such as under patios, water boxes, crawl spaces, and tree roots. They like temperatures of 68 degrees F. or higher. Unlike other roaches, the oriental is able to survive outdoors under vegetation and is often seen outside in summer months. During very dry or cold weather, they will often move indoors in search of moisture or warmth.





Sanitation is the key to preventing roach infestations. Good housekeeping, plus moisture control, such as not over watering in summer and winter months. Keeping water away from the foundation of the home, many flower beds up against the home is a major culprit of infestations. Eliminate sources of food and water by cleaning up crumbs and spills, putting away pet food after pets eat, and picking up dog feces (a delicacy for oriental roaches) on a daily basis will also help in the control of roaches. Place your garbage outside in cans with tight fitting lids or tightly sealed bags. Home repairs are another prevention method. Fix damp conditions, such as leaking irrigation boxes or other plumbing leaks. Apply a caulking compound to crevices indoors, and repair cracks in the foundation and wall to reduce harborages and lessen the chance that cockroaches can enter. Caulk openings in kitchens and bathrooms where plumbing pipes pass through walls.

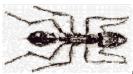


Firebrat Silverfish and Firebrats

Silverfish and Firebrats are amongst the most primitive of all insects this is because of gradual metamorphosis. They can be found almost anywhere, but their preference is for warm, moist locations. Some favorite spots include furnace, hot water heaters and bathrooms as well as any other damp, warm areas. Firebrats maybe found outdoors as well. Firebrats are frequently introduced with newly installed dry wall, as they are able to chew on the paper backing. They also feed on a variety of food products including dried food, starches, paper, glues, pastes, linen and even non-organic fibers.

Although both seek heat, silverfish prefer more moderate temperatures between 70 and 80 degrees F whereas Firebrats may be found in areas where temperature are more than 20 degrees higher such as near ovens or in steam tunnels. One may also find these insects in attics.

Control of these pests involves removal of their food source where possible. After that, insecticide treatment in common hiding areas such as cracks, beneath plumbing fixtures, in basement or attics areas or any place that a problem is noted.

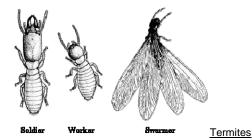


Argentine Ants

Argentine ants are light brown to dark brown in color. They are a severe pest in the Southern Nevada area and have been found in more isolated occurrences further north. The population of a colony may vary from a dozen to many thousands and the number of queens from one to hundreds. During the warmer months, satellite nests are highly mobile and usually established close to a food source. In midsummer and early autumn there is a very large increase in numbers in the colony. It's been estimated that infestations grow at a rate of more than 600 ft. per year in diameter. They also compete very well with other ant species, both by fighting and by monopolizing all available food. Argentine ants replace almost all other ants. Nests are found typically next to or under buildings where there is moist soil, along sidewalks, beneath patios and plants, and near good sources of food and water.

Treatment is needed with this type of ant; first step is to remove all available food and water from the home. Baits work well to control this ant, but does need time too take effect due to the feeding habits of the colony. Ants feed each other by trophallaxis, which is the mouth-to-mouth transfer of foods from foraging workers to nest tending workers to reproductive and larvae. Ant baits are very effective, provided the right ones are employed and homeowners can have the patience to let them work. General pest control treatments are also an effective tool in controlling this ant to keep them from entering structures of the home, this will provide quick knockdown of foraging ants but will not control the colony that can potentially be 1200 ft. away.

STRUCTURAL PESTS



Termites or White Ants, are common names for a soft-bodied social insect of the order Isoptera. Termites are easily distinguished from ants by comparison of the base of the abdomen, which is broadly joined to the thorax in termites; in ants, there is only a slender connection (petiole) joining these segments. In addition, the antennae of termites are beadlike or threadlike, while ant antennae are elbowed. Termites have chewing mouthparts. They feed chiefly on wood, from which they obtain cellulose. In primitive species cellulose is converted into various sugars by specialized protozoans and in the more highly evolved termites by specialized bacteria living symbiotically in the termite's digestive tract. There are nearly 2,000 species, most are tropical, and some build huge mounds to house their colonies. These mounds, up to 40 ft. high, are a characteristic feature of the landscape in parts of Africa and Australia.



Carpenter Ants

Carpenter ants, vary in size and color but are usually large (1/4-1/2 inch) and blackish. Occasionally, swarms of winged carpenter ant reproductives will emerge inside a home. Carpenter ant swarms usually occur in the spring and are a sure sign that a colony is nesting somewhere inside the structure.

Besides being objectionable by their presence, carpenter ants damage wood by hollowing it out for nesting. They excavate galleries in wood which have a smooth, sandpapered appearance. Wood which has been damaged by carpenter ants contains no mud-like material, as is the case with termites. Shredded fragments of wood, similar in appearance to coarse sawdust, are ejected from the galleries through preexisting cracks or slits made by the ants. When such accumulations are found (typically containing dead ants and bits of insects which the carpenter ants have eaten), it's a good indication that a carpenter ant nest is nearby. Oftentimes, however, the excavated sawdust remains hidden behind a wall or in some other concealed area.

Carpenter ants nest in both moist and dry wood, but prefer wood which is moist. Consequently, the nests are more likely to be found in wood dampened by water leaks, such as around sinks, bathtubs, poorly sealed windows/ door frames, roof leaks and poorly flashed chimneys. Nests are especially common in moist, hollow spaces such as the wall void behind a dishwasher, or in a

hollow porch column. Since there often will be no external signs of damage, probing the wood with a screwdriver helps reveal the excavated galleries. Another technique for locating hidden nests is to tap along baseboards and other wood surfaces with the blunt end of a screwdriver, listening for the hollow sound of damaged wood. If a nest is nearby, carpenter ants often will respond by making a "rustling" sound within the nest, similar to the crinkling of cellophane.

Carpenter ants may establish nests in a number of different locations. It is important to realize that these locations can be either *inside or outside the structure*. Carpenter ants actually construct two different kinds of nests: parent colonies which, when mature, contain an egg-laying queen, brood and 2000 or more worker ants, and satellite colonies which may have large numbers of worker ants but no queen, eggs or young larvae. The carpenter ants inside a home may have originated from the parent colony or from one or more satellite nests. For example, the ants may be coming from the parent nest located outdoors in a tree stump, landscape timber or woodpile, or from one or more satellite nests hidden behind a wall in the kitchen or bathroom, or perhaps from wood dampened by a roof leak in the attic.

The extent and potential damage to a home depends on how many nests are actually present within the structure, and how long the infestation has been active. Although large carpenter ant colonies are capable of causing structural damage, the damage is not normally as serious as that from termites. In some cases, the damage may be relatively insignificant, but this can only be determined by locating and exposing the nest area.

RODENTS



Mice are considered one of the most troublesome and economically important rodents in the United States. House mice live and thrive under a variety of conditions. They are in and around many homes, they consume and contaminate food meant for humans and other animals. They often cause damage to structures or property and can transmit diseases such as salmonellas.

Droppings, fresh gnawing, and tracks indicate areas where mice are active. Mouse nests made from fine shredded paper or other fibrous material are often found in sheltered locations. House mice have characteristic musky odor that identifies their presence. Mice are occasionally seen during daylight hours.

Control involves three aspects: sanitation, mouse proofing and population reduction. Because mice can survive In very small areas with limited amounts of food and shelter it doesn't take much to attract them to your home. Keep food sealed in bags and also keep pet food in sealed containers mice love nothing more than a good pet food that is readily available. The most important form of rodent control is to exclude them from your home. Seal openings that are more than ¼ inch to exclude mice. Steel wool will also help in reducing mice entering through pipe openings. Doors, windows and screens should fit tightly with no gaps.

Population reduction can be achieved by having a qualified pest control professional use trapping and baiting techniques through out your home. Sound and electronic devices do not work and should not be used in control of rodents because rodents will quickly become accustomed to regularly repeated sounds and will not scare.





<u>RATS</u>

Rats and mice are a community wide problem; when one house has rats it is likely the whole block has rats! That is why they are difficult to control on an individual homeowner basis. Domestic rodents including rats and mice have been implicated in the spread of the Plague and cause a large economic loss by chewing on building materials and personal belongings, feeding on food stuffs and contaminating food with urine, feces, and hair.

RAT FACTS

Rats may establish nests in these areas:

- Italian Cypress
- Algerian Ivy
- Bougainvillea
- Oleander
- Palm Trees
- Yucca
- Other heavy shrubbery
- Wood and lumber piles
- Storage Boxes

Rats prefer to feed on the following:

- Oranges
- Avocadoes
- Other ripe fruits
- Walnuts
- Natal Plums
- Pet food left out at night
- Snails
- Grass Seed
- Bird Seed

The homeowner should be alert for these signs of rat activity:

- Damaged, partially eaten oranges, avocadoes, or other fruits.
- Broken snail shells under bushes, on fences, near nesting sites.
- Signs of gnawing on plastic, wood, or rubber materials.
- Greasy rub marks caused by the rat's oily fur coming in repeated contact with painted surfaces or wooden beams.
- Rat droppings are usually signs of significant rat activity. The droppings are randomly scattered and will normally be
 found close to a rat runway, feeding location, or near shelter. They are dark in color, pellet shaped, and are about 1/2
 inch long.
- Droppings found in forced air heaters, swimming pool heater covers, and water heater closets.
- Visual sightings in or around the premises, on utility cables, tops of fences, or in trees.

For More Information Contact REALTY PEST SERVICES - info@realtypest.com - (702) 433-9765