

## Seven Hidden Benefits of our Services



Most people are very happy simply to be rid of invading and obnoxious pests. They don't realize our professional pest control services deliver many 'hidden' benefits—helping them live a healthier, better life. A few of these are listed below.

**1. Less cleaning.** Pests are dirty, and require cleaning up their dead bodies, droppings, webs, etc. *You've got better things to do!*

**2. Fewer illnesses.** There is a strong link between pests and many diseases, from food poisoning to certain

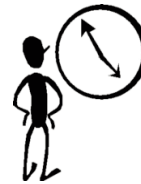
kinds of asthma. *Who wants the agony?*

**3. Fewer bites and stings.** No one wants to worry about fleas, spiders, rats, bees, wasps, and other pests stinging them, or sucking out their blood.

*Give blood to a blood bank instead!*

**4. Use fewer pesticides yourself.** Statistics show that homeowners are 67 times more likely to misapply pesticides than a professional. *Store fewer pesticides and free up storage space.*

**5. Peace of mind.** Our expertise allows us to choose effective but less toxic pesticides and other treatments, use less



pesticide, properly store it and dispose of it, etc. It's better and safer for people and our environment. *It's the right thing to do.*

**6. Save money and time.** Spending time and money repairing or cleaning things damaged by pests is aggravating, a *waste of time* and an *unnecessary expense*.

**7. Give yourself more time and energy** for family, hobbies, and other important things. Add up all these things, and you can see that having us professionally eliminate pests *makes your life more enjoyable*.

So smile a little more...and enjoy a *safer and better life!*

## How Do Pests Survive Winter?

The short answer is: **VERY WELL!**

Insects have developed many clever ways to survive winter, so even though you may not see certain pests now, when the weather starts to warm they're right back again!

Many pests that survive the winter outdoors *move* to a spot where they will be less exposed to the coldest temperatures, and the winds that can dry them out. They might crawl into cracks in homes or under bark, crawl under piles of leaves or other debris, or burrow into the soil or under the edges of sidewalks. All these places are warmer in the winter than the outside air temperature.

Carpenter ants and many other pests *produce glycerol* in their bodies, a type of natural anti-freeze that allows them to survive even freezing temperatures. Ants also simply move their colonies deeper



into the ground where it's warmer, and they may cluster together to stay warmer on colder days.

Some insects go into a state of *diapause* (an almost complete shut-down of their body functions) as winter begins.

In this condition they are able to survive low temperatures that would normally kill them.

Some pests spend the winter in certain *weather-resistant life stages*, which for most insects is the egg or pupa.

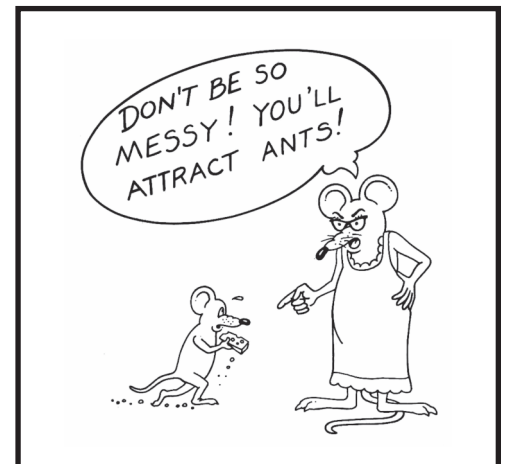
These stages survive weather extremes that would easily kill the larva or adult.

Pests that spend their entire life indoors, like cockroaches, fabric, and stored product pests, often continue eating and reproducing all winter. If the temperature inside is very low they just become less active, and may stop reproducing until it warms up a little.



### THANK YOU!

To both our new and long-time customers we say "THANK YOU" for your valued business and many referrals! We wish you MERRY CHRISTMAS, plus PEACE, HAPPINESS, PROSPERITY and especially GOOD HEALTH this new year!



## Squirrel Hides 175 Pounds of Nuts



A red squirrel in North Dakota hid 175 pounds of black walnuts from a nearby tree in a Chevrolet Avalanche pickup, many of them packed in the engine area.

The owner had to dismantle parts of the car to get the nuts out. The effort took seven hours and he still was not able to get them all. There are even more nuts deep inside the car frame where he can't reach them. The nuts he took out filled seven five-gallon buckets.

That's one very busy squirrel!

## A New Species of American Dog Tick

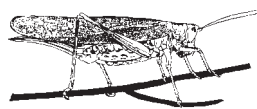
We may think that most species of important insects in this country have already been found and named, *but then something unexpected like this happens*. Newly published research shows the ticks we thought were all American dog ticks is actually not one species, but two.



The study shows that American dog ticks in the eastern half of our country are a different species from what was thought were the same ticks in the West. There are physical differences between the two species, but they are so small that they were never noticed before. Genetic differences confirm these are two species.

American dog ticks are one of the most widely distributed ticks in North America. They suck blood from dogs and other animals, and bite humans as well. These ticks transmit a variety of pathogens—four main diseases including the widespread Rocky Mountain spotted fever. Now that we know that there are actually two species, further studies may find that the diseases they transmit are different.

## Buggy, Buggy Night



On a July night in 2019, the National Weather Service detected clouds above Las Vegas. But what looked like rain clouds was actually a cloud of biblical proportions. It was eventually estimated that there were **45 million grasshoppers**, or 30 metric tons, in the air above the city that night. The dazzling night lights of Las Vegas that are meant to attract people had attracted an invasion of something else!

Over a number of nights the grasshoppers piled up on the sidewalks there, crawling about. This wasn't even one of the fabled locust species that eats every plant in its path—it was another grasshopper that had survived in unusual numbers because of extra moisture at the start of the year. These and other night-flying insects are being attracted to our well-lit cities in increasing numbers.

As weather radar has become more sophisticated, radar sightings of "bug-clouds" have become more common. Huge clouds of various bugs have been seen around the country many times. For instance, recently a giant cloud of ladybugs, 80 miles wide and long, was detected in the air high above Southern California. Even bats have shown up on radar in the air in San Antonio, Texas, and thousands of birds (martins) have been detected flying in Ohio.

## Asian Giant Hornet News

One nest of these was discovered and destroyed in the fall of 2020, and three nests were discovered in 2021, the last one in late September. All four nests have been discovered in the same area in Washington, not far from the Canadian border. They were all in tree cavities, with this latest one 15 feet above ground.

A massive effort has been underway to find and destroy nests of this new invading hornet before it spreads. At 2 inches long and with a 3 inch wingspan, these hornets are the world's largest.

They aren't especially aggressive towards humans but they pack a particularly painful and potentially life-threatening sting. Another big concern is that they mass attack honey bee colonies. In less than 2 hours they can kill an entire hive of 30,000 honey bee adults, then they take the larvae and pupae back to feed to their own young.



## Silent Night, Holy Night



If it wasn't for the destructive nature of mice, a famous Christmas carol, "Silent Night, Holy Night", would never have been written. Here's the story:

Just before Christmas in 1818, in the small town of Oberndorf, Austria, Father Joseph Mohr discovered to his horror that mice had chewed up the bellows of the church organ, making it unusable.

To have something appropriate to play, Father Mohr and his friend Franz Gruber set out to compose a simple melody that could be played on a guitar. Working all night, these two men took words Father Mohr had written two years earlier, and produced the song. On the following night, Christmas Eve, this most famous Christmas carol was sung for the first time in public, accompanied by the instrument still undamaged by mice—a guitar. The original guitar can still be seen in a nearby museum.