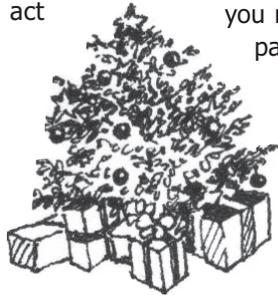


## Unwanted Winter ‘Guests’

**H**omes and commercial buildings often experience increased pest problems during the holidays and the winter months ahead. Our warm indoor environments this time of year act like beacons for many pests.

**Fall invaders become active**—many of the pests that invade in late August and September, like stink bugs, flies, and others “wake up” on warmer winter days and start coming out of cracks and crevices indoors. Some of these can stain curtains and walls with their excretions. Vacuum up small numbers.



**Holiday feasts**—Crumbs and spills attract all sorts of pests. Clean them up, place trash in containers with tight-fitting lids, and empty trash cans regularly. If you need to leave dirty dishes and pans overnight, place them in a sink full of soapy water.

**Pests in holiday food gifts**—It is surprising that food gift packs such as dried fruits, crackers, etc., are sometimes infested, or become infested, with beetles, moths, and other pests. Check these items, and don’t plan on storing them in your cupboards for long periods.

**Christmas tree pests** sneak indoors hidden in fresh Christmas trees. They include spiders, beetles, aphids, and many others. These are often in a sluggish state in the cold, but once the tree is indoors and warmer they start becoming active. Try rinsing the tree with a strong jet of water before you bring it indoors.

Also watch for **ants** moving their nests indoors, **invading rats and mice**, pests coming from **firewood**, and **bed bugs** brought in from travels or overnight guests.

## Protecting What is Precious

**Did you know** that as recently as 1935, when this country had a much smaller population, **4,000 Americans were dying every year from malaria?**

In fact, modern professional pest control has greatly improved the quality of our daily lives *in so many ways*. Because of it, many pest-transmitted diseases have been greatly reduced in this country. We live longer and healthier lives, without fear of sometimes deadly diseases like malaria, yellow fever, louse-borne typhus, and many others.



bed bugs, which people for decades knew only through nursery rhymes, have come back with a vengeance. Cockroaches cause many people to suffer from allergies, and rats still bite about 45,000 people annually—often children and babies. Stinging and biting pests like fleas, ticks, wasps, and spiders inflict harm on even more people and pets when they are not controlled on a regular basis.

Because of professional pest control services, we are able to better protect your valuable homes and property from pests. Termites, carpenter ants, and other wood-destroyers left uncontrolled can severely damage a building. Still other pests damage and spoil stored food, fabrics, and other household items.

Ongoing professional pest control greatly improves the quality of our daily lives!

Yet there are other pest-transmitted diseases that we all need to vigilantly watch for. Tick borne diseases are flourishing, and there are deadly pest-transmitted diseases like hantavirus, encephalitis, and plague, plus pest-spread germs that cause everyday illnesses, like common food poisoning.

Of course, those nasty blood-sucking

### 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!



**“This is the best home we’ve picked to winter in yet!”**

## A Fond Farewell from Dr. Moore!



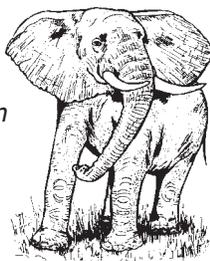
This will be the **last newsletter** produced by Dr. Wayne Moore. He has written and produced the newsletter for 34 years, and finds it is time to move on to other things.

Dr. Moore says, "I have really enjoyed researching and writing this newsletter for you all, and hope you have enjoyed reading it as much as I liked putting together all this news and useful and fascinating information!"

"I've also worked hard to give you *reliable* information. As someone with a Ph.D. in Entomology, I have seen many, many times when pest control information on the internet has been misleading or just plain wrong. Don't always believe what you read or hear, but trust the company who brought you this newsletter to give you reliable information! Thank you for reading these newsletters, and for all the encouraging feedback you've given me over the years."

## Ants are Mightier than Elephants

Here's a case where tiny insects change the behavior of animals about a *billion times* more massive than they are. Researchers discovered that African elephants don't eat foliage of trees that have ants on them—they will even avoid their favorite tree species. Elephants avoid any trees with ants because the angry ants crawl up inside the elephant's sensitive trunks and sting them.



These same stinging ants have no effect on tree-feeding giraffes, because giraffes use their long tongues to swipe the ants away from their short snouts.

## Ancient Lice Comb Discovered



A 3,700 year old lice comb has been discovered in Israel. What makes this discovery so notable is that it has written on it *the oldest full sentence known using an alphabet*. It uses an early language of the ancient Canaanites.

The sentence says, "**May this tusk root out the lice of the hair and the beard.**"

There are other full sentences that have been discovered that were written before that, but they were written with symbols, such as in Egypt and Mesopotamia. The Canaanite written language with its alphabet was the basis for ancient Greek and Latin, and in turn many modern European languages.

The comb has many fine, worn down teeth used to remove lice and their eggs. Surprisingly, the ancient remains of a louse was found still between the teeth! The fact that the comb was made of imported ivory from elephants, and the sentence mentions a beard, suggests it belonged to an elite man.

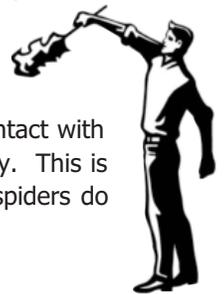
The lead researcher observed, "Throughout human history lice have been a perennial problem. And this inscription nicely reveals that even the rich and famous in ancient times were not exempt from such problems."

## Spider Web Discoveries

Recent research at Oxford University shows that spider webs are not as passive as we have always thought at catching prey. The threads of spider webs are actually coated with electrically conductive glue that *causes the web to pull closer to* and 'grab' electrically charged particles, including airborne particles, droplets, and even insects.

This actually boosts a web's effectiveness at catching passing insects. *It may also explain how strands of spider webbing so quickly get dusty in homes*—they apparently pull in dust and other air-borne particles that then get stuck on the sticky strands, resulting in those ugly, dust-covered strands.

Other new research in Brazil has documented that *certain kinds of orb-weaving spiders coat their webs with neurotoxins* that partially paralyze prey that come into contact with them. It makes their webs more effective in catching prey. This is a new development, and it is possible that some of our spiders do the same.



## What's the biggest ant? A Gi-ant!



A giant ant, big enough to use in a science fiction movie, was found fossilized in rock that is about 50 million years old. The ant was a queen that was an amazing two inches long—really dinosaur-sized for an ant.

Discovered in Wyoming, this is the largest ant ever found in the Western Hemisphere.

Note: there never has been people-sized ants, except in science fiction. Two inches is huge for an ant, even in pre-historic times!