Collembola

You might not recognize the word collembola. You might not even know them by their common name, springtails. However, if you find these tiny, primitive insects hopping around your house you will definitely call them by some name! Springtails come in an astounding range of sizes, shapes, and colors, but are always less than 1/8 inch in length and never have wings.

To the untrained eye, springtails may be confused with fleas. There are three reasons: they ‘jump,’ they are small, and they can be found indoors. Though it does seem like they are jumping, it’s a misnomer because in actuality they use a small appendage on their tail end to vault themselves into the air, sometimes as high as 4 inches! This appendage, called a furcula, is unique.

continued on page 2
Collembola (continued from page 1)

to springtails and helps these little critters vault away from threats. Fleas, on the other hand, use their supersized hind leg muscles to leap. Adult cat fleas (the most common infesting flea) are 1/8 inch long, so they are noticeably bigger than most springtails. When it comes to choosing between the lesser of two evils, springtails definitely come out on top of the bloodsucking fleas. Springtails feed on decaying plant matter and are often found in association with their food sources: fungi, damp soil, and around decaying wood. Unfortunately, they also thrive in places with excess moisture, especially in mulch and leaf litter that often surrounds houses, downspouts, and around air conditioning drain lines. Springtails fit into a class of pests known as occasional invaders. They don’t infest and breed indoors and generally don’t cause any significant damage or harm, but can continually find their way inside when conditions are right and are a major annoyance to homeowners.

To get rid of springtails in your home, there are two areas to address: conditions conducive to their presence, and entry points into the structure. As mentioned above, springtails need moisture and decaying plant matter to survive and thrive. Moving mulch and vegetation a little bit away from the structure can go a long way in keeping springtails at bay since they avoid these moisture and food deserts. If you have a prized garden next to your house that you don’t want disturbed, focusing on exclusion makes sense. Keep doors closed, tightly fit sweeps on those that lead outside, and tightly seal any basement windows that may be at or near ground level.

If you are finding springtails inside (they can seemingly appear out of nowhere!) or are having difficulty with moisture reduction and exclusion, please give us a call so we can come out and take care of it for you!

Warehouse Beetle

The warehouse beetle, *Trogaderma variable*, is a very important pest of stored grain products worldwide. Adults are about 1/8 inch long, rounded, brownish-black insects, with a variable mottled pattern of lighter brown small scales on their back. It often requires an insect identification expert to correctly separate this species from similar pest beetles, which is why it’s a quarantined pest in many countries.

These tiny beetles feed on a wide range of organic material including grain, flour, pet food, dead insects, pasta and pollen. Warehouse beetles develop from egg to adult in about 35-40 days and are one of the most heat-tolerant of the common grain-infesting pests. Each larva sheds its skin (molts) five or six times, and each cast skin has more than 3,500 tiny setae, which are like tiny, stiff hairs that break off easily and can cause irritation on contact with human skin. Adult warehouse beetles can fly fairly well, so where they are found may not indicate the breeding/feeding source of the infestation.

To control this pest, your pest management professional will do a careful survey to detect, and then discard infested foods and other items. When needed, a properly labeled insecticide will be precisely applied to limited target spots near the infestation. Remember that these pests can thrive in dry pet foods and sometimes even in stored bird seed. Recently developed pheromone products are currently available to pest management professionals to assist in surveillance. Tackling this beetle can be daunting so let the professionals handle proper identification and treatment!
The best way to protect your family from tick and mosquito bites is to stop bites before they happen. In addition to wearing long sleeves and pants and performing tick checks after spending time in tick habitat, many people supplement their protection by using insect and tick repellents. Personally applied repellents have a long history of effectiveness; on the other hand, many other products that claim to repel mosquitoes (like candles), are not very effective. Beginning early this year, you may notice some of the personal insect repellent products you use have a new graphic on them. This repellency awareness graphic (pictured) is a new feature devised by the United States Environmental Protection Agency (EPA) to help consumers better understand how to interpret the claims made by insect repellent manufacturers and better protect themselves. The EPA now allows companies to include the new repellency awareness graphic on product labels of skin-applied insect repellents if they submit sufficient data that meet current testing protocols and standard evaluation practices that show how long their products are effective at keeping ticks and mosquitoes away. Participation in this new program is voluntary and companies that produce insect repellents do not need to take part. This graphic is intended to help consumers easily identify the repellency time for mosquitoes and/or ticks by featuring a picture the pest and how many hours you can expect them to be repelled after applying the product to your skin.

Due to their public health importance, ticks and mosquitoes are the only two pest groups featured in the new graphic. There are many species of ticks found in North America and there are some serious diseases that they can transmit to humans via bites including Rocky Mountain spotted fever, Heartland virus, relapsing fever, and others. Lyme disease, transmitted by the black-legged, or deer, tick, is certainly the biggest concern and most common tick-borne disease in North America. Although most common on the East Coast and Midwest, there has been a band of Lyme activity identified on the West Coast. There are over 20,000 identified cases of Lyme annually, which can be treated with antibiotics if diagnosed early on. If you suspect Lyme, look out for the following symptoms and seek out a physician: a rash with a bulls-eye appearance that appears around the site of the bite (though this does not always appear), lethargy, lesions, and potentially chronic arthritis, especially in the knee joints. It’s better to err on the side of caution when it comes to Lyme disease because when left untreated for a while it can cause lifelong problems.

Fortunately, most of the serious mosquito-borne diseases present in the world are not a problem in North America. Though we don’t have to worry about malaria or yellow fever, there are other diseases transmitted by our mosquitoes. West Nile virus attracts the most attention, but St. Louis encephalitis, Eastern (and Western) equine encephalitis, and other mosquito-borne diseases do occur in the United States. Within the last year, you may have even heard of two tropical diseases being contracted in Florida (dengue fever and chikungunya). It’s always best to play it safe and protect yourself and your family when you know mosquitoes are out and about!

If you are noticing ticks and mosquitoes around your home, please give us a call and we will help protect your and your family from those pesky, and potentially dangerous, unwanted bites.
Insects and other pests need the same things we do: food, shelter, and water. Unfortunately, we often provide them with one or all of those things! Eliminating or reducing moisture in and around your home will go a long way in decreasing insect populations. In addition to being a necessary component of life, water also makes wood more attractive to termites and carpenter ants, encourages fungal growth, and serves as a breeding material for mosquitoes and some other types of flies.

Even if you don’t suspect that you might have moisture problems, it’s probably worth investigating. Check out some of the common possible causes of accumulated moisture around your home. Mulch and vegetation abutting your house attract pests like earwigs, termites, springtails, and centipedes by holding moisture against your foundation. If reasonable, inspect your gutters and downspouts to see if they are properly installed, clear of debris, and that water is draining away from the structure. If you use a sprinkler system, check to see if sprinkler heads are aimed away from the structure so you aren’t unnecessarily soaking your house and drawing in pests! Two other possibilities include beneath air conditioning units and leaking hoses.

If you aren’t confident in diagnosing or fixing moisture issues, give us a call and we will assess the situation and make sure you’re property isn’t unwittingly attracting and keeping pests around.