

Argentine Ants

by Dave Tamayo, Sacramento County Stormwater Program

A favorite activity of my childhood was collecting the big “red ants” (*Pogonomyrmex sp.* harvester ants) along the railroad tracks, and creating ant habitats in a jar so I could watch them forage and dig. Even better, a friend of mine had his very own red ant colony just outside his kitchen door. Every afternoon, as the fence’s shadow fell across the colony entrance, the red ants would plug the hole, and a few colony members would be left outside. That’s when a swarm of small “black ants” would come in and attack the stragglers. It seemed at the time that the black ants were trying to gain entrance to the colony, but I’m not sure that they ever actually managed that.

Years later, I learned that the black ants (really a dark brown) are Argentine ants, officially known as *Linepithema humile*. I’m writing about them because they are linked to one of the most significant pollution problems in urban creeks. It turns out that efforts to control Argentine ants with pesticide sprays have resulted in toxic amounts of pesticides in urban creeks all over California. Until a few years ago, the pesticides diazinon and chlorpyrifos were used extensively for ants around homes, and were found at toxic levels in creeks almost every time water quality agencies looked for them. Now that these pesticides have been phased out, we are finding their replacements, pyrethroid pesticides, at toxic levels in sediments in many urban creeks. Stormwater agencies are working hard to let people know about effective alternative methods for controlling Argentine ants.

“Argentine” reflects the fact that these ants originated in South America. An invasive species in California for over one hundred years, they have few natural enemies, are responsible for aggressively displacing native ant species, and are spreading almost unchecked in urban areas and irrigated agricultural lands. By out-competing harvester ants, they are even threatening the survival of horned lizards (*Phrynosoma spp.* or “horny toads”), because these reptiles are totally dependent on harvester ants for food.

Unlike most ants (including the same species back in South America), Argentine ants in California do not have genetically distinct colonies (and associated inter-colony aggression), but seem to have formed a statewide “supercolony.” The subcolonies consist of tens of thousands of individuals and have multiple queens. And these ants are superb “farmers” that tend flocks of plant-sucking insects such as aphids and scales, protecting them from predators and moving them from plant to plant, so that they can harvest the honeydew these insects produce.

In urban areas, they do cause some problems outdoors, like spreading aphids and invading pet food bowls, but many people aren’t too concerned until the ants come indoors. Indoor swarms occur mainly at two times in the Sacramento Valley: when the weather gets really hot outdoors, and when it starts to rain. Both of these conditions encourage the ants to seek more favorable conditions indoors. In the summer,

they run out of honeydew outdoors and come indoors looking for food and water. In the winter, they are seeking shelter from rain and cold. Sometimes, in addition to the thousands of workers (about 1/8" long), you will see a few larger (1/4") individuals, which are queens. When you see the queens, that means that they are looking to relocate the colony, or to "bud off" a new colony.

I really like insects, but I draw the line at the familiar black swarm covering virtually every square inch of the kitchen counter. So what will really work to get them out and keep them out of the house? Fortunately, ant control information resources are readily available, many of which are listed [here](#), and these can provide a lot of detail that we can't get into here. But here are some basic tips gleaned from those sites

First of all, spraying insecticides on ants indoors may kill those that you can see (less than 10 percent of the colony), but it is not an effective strategy for long term control, and results in unnecessary pesticide exposure for you. Likewise, spraying the perimeter of your home on monthly basis for "prevention" is also unnecessary, and not the most effective method to control ants. In fact, outdoor perimeter spraying for ants is the primary source of pesticide toxicity in local urban creeks.

The best method for immediate relief from the swarm in your kitchen is to use a spray of soap and water to clean them up. Regular dish soap or citrus cleaner work extremely well.

To reduce future infestations, clean up food and water sources that are attractive to them. Ant scouts are very effective at finding food scraps and leading a column of workers to them.

Exclude ants from your home by finding and sealing the cracks and holes where the trails are coming in. They will look for alternate routes, so this may take some patience and persistence.

Reduce habitat and food sources outside your home. Mulches can be great for plant and soil health, but some are also a favorite nesting site for Argentine ants, so avoid having mulching right next to the house. Excluding ants from trees and shrubs with Tanglefoot (super-sticky goeey stuff available at some nurseries) can reduce access to honeydew producers, which will help limit the size of the colonies in your yard. And you can buy or devise a water or Tanglefoot barrier to keep them away from pet food.

Some people choose to use insecticidal baits that are designed for ants, and they can be very effective while using a small fraction of the amount of pesticides that a spray would contain. Properly formulated baits work on a delayed action so that the workers carry the pesticide back to the nest and spread it among the colony before they die. Baits must be placed in out-of-the-way places. Properly placed, pre-containerized baits will also reduce the chance of people coming in contact with the pesticide, or the pesticide being washed away down the storm drain.

These methods do take some time and effort to be effective, but the end result is longer term control with less pesticide use. For those of you more inclined to hire out this type of work, the Sacramento Stormwater Partnership is participating in the development of a certification program called EcoWise, so that you can easily identify pest management professionals who can control ants using these techniques. EcoWise should be available by this fall, so keep watching Creek Watch and our website for future announcements, or you can contact me at 916 874-8024 for more information.

Learn more about eco-friendly pest control methods at www.BeRiverFriendly.net.