

Pest Profile



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Common Name: Western Subterranean Termite

Scientific Name: *Reticulitermes hesperus*

Order and Family: Isoptera: Rhinotermitidae

Size and Appearance:

	Length (mm)	Appearance
Egg		
Larva/Nymph	3.2 – 3.3mm	<i>WORKERS:</i> The workers are by far the largest caste in the Western Subterranean Termite colony and the one that does the damage; they are a creamy translucent color and soft bodied. Western subterranean worker termites are about 1/8" and have no wings and no eyes. <i>SOLDIERS:</i> The Western Subterranean soldier termites have an orange colored rectangular armored head with mandibulate pinchers which they use to crush members of the ant family - their arch enemy in the insect world. The Western subterranean termite soldier has a fontanelle (frontal gland pore or hole) on their forehead used to squirt a white sticky latex, mainly as a defense mechanism against ants.
Adult	9.5mm (winged-adult)	<i>QUEEN:</i> The queen termite is much larger

		<p>than her offspring and can produce more than 2,000 eggs a day.</p> <p><i>ALATE CASTE:</i> The western subterranean termite swarmers are about 3/8" long (including wings) with a dark brown body and a small fontanelle (frontal gland pore) on their heads. Their wings are brownish grey with two dark solid veins along the forefront of the front wings. The front wing is distinctly larger than the hind wing.</p>
Pupa (if applicable)	N/A	

Type of feeder (Chewing, sucking, etc.): Chewing.

Host plant/s: In California forests, woodlands, and deserts, termites commonly feed on felled trees and stumps, grasses, bushes, or other pieces of dead or decaying wood. Termites can be highly beneficial as they degrade woody debris, return nutrients to the soil, and provide an energy-rich food source to a variety of predators. Their tunneling efforts help to ensure that soils are porous, contain nutrients, and are healthy enough to support plant growth. Termites rarely injure or kill trees.

However, a minority of termite species can be very destructive to wood in buildings, including furniture and many other wood-based products. For example, each year thousands of housing units in California require treatment for the control of these insects. The most common subterranean termites, *Reticulitermes*, can be encountered in nearly all regions of the state, from the sand dunes of the coast to the upper elevations of the mountain ranges and even in some of the desert areas. The species of *Reticulitermes* are the most destructive termites found in California. They are small in size compared to dampwood and drywood termites, but mature colonies can contain hundreds of thousands of individuals.

Description of Damage: Most subterranean termite species consume wood at about the same rate, but three factors can make some species potentially more voracious and damaging than others. These factors include the environment in which they live (termites eat more wood when conditions are optimal over a longer period of time), the size of the insects (larger insects eat more wood), and the number of insects (larger colonies eat more wood).

One of the chief means of shared feeding is called trophallaxis or the mutual exchange of gut contents between colony members. Trophallaxis also permits the efficient use of nutrients, recognition of colony members, distribution of chemicals involved in caste regulation, and the transfer of cellulose-digesting protozoans. Many members of a termite colony cannot feed themselves, so they rely on other colony members to feed them.

References:

Cranshaw, W. (2004). *The Ultimate Guide to Backyard Bugs: Garden Insects of North America*. Princeton University Press.

Subterranean and Other Termites. (2016). [UC Online Pest Management Guide](#).