

# **Termite**

Scientific Name: Isoptera

Class: Insecta
Order: Blattodea

Family: total of 12 families (over 3,000 species)



Termites are called "white ants" because of their pale coloring and physical similarities to ants. However, ants have a narrow waist that segments their bodies, termites do not. Also ant antennae are segmented, while termite's antennae are straight. Termites, like ants, have winged reproductive forms. The king and queen termites are large, over one inch in length, whereas the worker and soldier termites are smaller.

# Range

Most termite species are found in the tropics, but several dozen species are found in the United States, except Alaska. Due to their soft cuticles, termites do not inhabit cool or cold habitats. There are 3 ecological groups of termites: dampwood, drywood, and subterranean.

#### **Habitat**

Depending on the species, termite nests are found underground, in dead trees and stumps, in the tops of live trees, and in wooden structures. Tallest termite mound was found in the Congo at 42 feet. Ants are among the biggest predators of termites.

#### Gestation

Life cycle begins with an egg, but the process is an incomplete metamorphosis. Egg, nymph, and adult. Sometimes an egg can have 4 molts and then nymph 3 molts. Nymphs first molt into workers, then some workers molt to soldiers or alates. Workers become alates only by molting into alate nymphs. This process can take months depending on food availability, temperature, and colony population.

### Litter

The queen only lays 10-20 eggs in the very early stages of the colony, but lays as many as 1,000 a day when the colony is several years old.

### **Behavior**

Termites are likely to have originated during the Jurassic time. Termites are blind, communication occurs through chemical, mechanical, and pheromonal cues. They have a caste system. The lowest level is the worker who is sexually and developmentally immature. Workers take part in building the nest, getting food, and caring for young. Soldiers are the next step up. They also are immature, but have well developed mandibles for defense. Reproductive alates are winged males and females.

## Reproduction

Alates swarm in warm weather and form pairs. They lose their wings and become kings and queens of new colonies. Termite queens have been known to live between 30 to 50 years.

## Wild Diet

Termites obtain nutrients from wood and plant materials, but they can't digest their own food. They have symbiotic protozoa and bacteria in their guts to break down the tough plant fibers.