



Featured Creatures

Subterranean Termites

Fossil records suggest that ancestors of today's modern termites may go back as much as 200 million years, and today there are around 2,200 different species known throughout the world. Some parts of the world have no termites, generally cold climates such as much of Canada and northern Asia. Termites are found in every state in the US except Alaska.



They're not royalty, just absolutely essential

Full-grown workers are soft-bodied, wingless, blind and creamy white. In early stages, they are fed predigested food by the king and queen. Once workers are able to digest wood, they provide food for the entire colony. The workers undertake all the labor in the colony such as obtaining food, feeding other caste members and immatures, excavating wood, and constructing tunnels. Workers mature within a year and live from 3 to 5 years.

Do I have swarming ants or termites?

Flying ants and swarming termites are often difficult to recognize apart. Termites have relatively straight, beadlike antennae while ants have elbowed antennae. Termites have two pair of wings (front and back) that are almost equal length and size. Ants also have two pair of wings but of unequal size; the front wings are much larger than the hind wings. The abdomen of the termite is broadly joined to the thorax (chest) while the abdomen and thorax of the ant are joined by a narrow waist called a petiole.

Bug Trivia: Could termites help us in "Going Green"?



Termites may produce up to two liters of hydrogen from digesting a single sheet of paper, making them one of the planet's most efficient bioreactors. Termites achieve this high degree of efficiency by exploiting the metabolic capabilities of about 200 different species of microbes that inhabit their hindguts. The microbial community in the termite gut efficiently manufactures large quantities of hydrogen; the complex lignocellulose polymers within wood are broken down into simple sugars by fermenting bacteria in the termite's gut, using enzymes that produce hydrogen as a byproduct. A second wave of bacteria uses the simple sugars and hydrogen to make the acetate the termite requires for energy. The Department of Energy is studying if it can be determined which enzymes are used to create hydrogen, and which genes produce them. This process could potentially be scaled up with bioreactors to generate hydrogen from woody biomass, such as poplar, in commercial quantities.

"We Have Service Down To A Science"