Subterranean Termites at the Institute of Forest Genetics (IFG)

What are those black tubes?



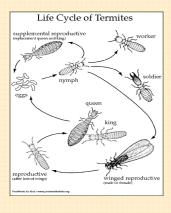
What is a termite?

Termites are wood-eating insects that live in colonies. The termites found in the black tubes at IFG are called subterranean termites. They live underground and forage for wood at the soil surface and in these black tubes.



How big is a termite colony?

Termites are social insects and live in colonies with reproductives, workers and soldiers. Each member of the colony has its own job to ensure survival. Mature colonies in California can range from 5,000 to 500,000 individuals. That's much larger than the entire human population of El Dorado County!



Subterranean termite queens can lay dozens of eggs in one day, so it is no surprise that a colony can become so large. The queen can live up to four years, but once she dies it doesn't necessarily mean the colony dies. There are additional reproductives in a colony that can also lay eggs to ensure survival. In 1993, researchers from the USDA Forest Service and UC Berkeley began a project at IFG to study subterranean termites. These black tubes contain bundles of wood, where the termites live and feed, and provide researchers a way to observe termite behavior that would otherwise be invisible underground.



A wood bundle resting on top of a black tube



Researchers check and replaced wood bundles in the tubes every visit



Subterranean termite soldier and workers up close

How far do termites travel?



Individual termites can travel many feet per day. A colony can forage for food from a distance of several feet to more than 100 feet. Multiple colonies can also forage very close to each other, making it difficult to identify one colony from another.



When do termites swarm?

In order to create new colonies, winged reproductives will fly from the ground and form mating swarms. They pair as kings and queens and burrow into the soil. In Placerville, this usually occurs on sunny days following rain.



Wood bundle infested with subterranean termites

How much wood do termites eat?

Since termites eat wood, they cycle nutrients back into the soil and are therefore very important members of an ecosystem. In Placerville, a subterranean termite colony eats less than an ounce of wood per day. In comparison, subterranean termite colonies in parts of Florida can consume a pound of wood per day. This would represent an 8-foot-long 2x4 every two weeks. Wow!



Subterranean termite feeding damage

