

The Eastern Subterranean Termite was introduced to Toronto in 1938 and has since become established in homes throughout the city. Termites are a primitive group of insects that live in large colonies. A single colony may consist of millions of termites, and may cover a single yard or half a city block in size. Subterranean termites do not keep one central nest, but instead have many feeding and reproductive sites, and move as the food sources are depleted. A colony consists of various forms of termites, the most abundant being workers and nymphs. Workers are white in colour, about 6 mm in length. Nymphs are slightly longer, and in the spring usually develop into wingless reproductive forms, or less commonly grow wings and disperse to new areas. The soldiers function is to defend the colony, and they are relatively few in number.



An Eastern subterranean termite worker



Termite shelter tube on a tree bark

Host and Damage:

Subterranean termites consume cellulose and do not leave sawdust, unlike carpenter ants, which only excavate wood for a nest site. **Subterranean termites can occasionally feed on trees, but it is usually only dead trees or dead parts of live trees that are colonized by termites as a food source. Termites do not kill trees, but attack dead parts of live trees.**

Subterranean termites nest in the ground and come above ground to attack dead wood or other cellulose materials. They must have constant contact with their nest underground, as they require a certain level of moisture to survive. Once disconnected from their nest and the ground, with no moisture, they will soon perish. If the food source does not contact the soil, they can build mud tunnels or tube shelters to reach it several feet above the ground. Termites are quite difficult to detect. The presence of shelter tubes along the sides of buildings or trees is the best indication of termite presence.

Specific Management Practices for Control of the Subterranean Termites:

- There is no evidence that trees are a point source for termite infestation. Removing trees which have termites feeding in them does not remove termites from the area of infestation as they nest in the soil.
- Living and structurally sound trees with the presence of termites do not need to be removed. Removing a living tree will also kill the remaining roots and the dead wood tissue in the soil creates more favorable conditions for termites.
- The tree may be removed only if it is structurally unsound. Eliminating the food source by pruning dead wood, removing dead tissue and wood debris from a tree is recommended. Shelter tubes built on the tree can be scraped off if noticed.
- There is presently no safe, effective and environmentally compatible method for protecting trees from termites.
- The best defense for homes is the breaking of wood to soil contact. There are chemical control options as well, which is a task for a registered pest control company.

General Management Practices to Improve Plant Health:

- Water your trees during dry spells. Infrequent, but deep soaking preferably during the early morning hours is recommended. Water absorbing roots are located in the upper 25 cm of the soil and extend outward well beyond the canopy dripline.
- Place organic mulch, (e.g. wood chips), or living mulch, (e.g. ground covers) around the tree base to keep the soil moist for longer periods and encourage healthier roots.
- Avoid any unnecessary excavating, grade changes, soil compaction, root cutting or hard resurfacing around trees as these activities destroy vital roots which may lead to tree decline or death.
- Refrain from using high levels of salt or herbicides around trees.

Forest Health Care is a holistic approach to tree care that focuses on improving the health of trees in an urban environment. Our objective is a healthy, sustainable urban forest. Trees in urban forests are often stressed by compacted soil, drought, poor planting and pruning techniques, air pollution, road salt, damage from construction and much more. Trees planted in the right sites and properly maintained are less likely to suffer and are more resistant to pest problems.

Pest problems are managed using a decision making process that considers the following:

- Identification of the host and the pest.
- Monitoring of the host and the pest.
- Selection of the appropriate management strategy.
- Evaluation of the management plan.

Our focus is on pest management programs that are environmentally, socially and economically sound.