



Parks, Forestry & Recreation

Urban Forestry Branch

355 Lesmill Rd
Toronto, Ontario, M3B 2W8

Forest Health Care

European Starling

The European Starling (*Sturnus vulgaris*) is a native of Eurasia and North Africa. The starling can be described as a stocky, medium-sized black bird with a short tail. In flight, the starling has a distinctly triangular shape. Starlings breed from March through July. In spring and summer, breeding pairs disperse rather than stay with concentrated flocks. Nests are bulky collections of sticks, dried grasses, other fibers, paper and similar debris.



A flock of starlings



The European Starling

Hosts and Damage

Starlings are not a health concern to urban forests. They can be very destructive to such agricultural crops as strawberries, blueberries, grapes, tomatoes, figs, peaches, apples, and cherries. However, more than half of their diet is made up of insects, especially moths and butterflies (and their caterpillars), beetles (especially their larvae, grubs in lawns), crickets, and grasshoppers. Starlings feed their young entirely on insects.

As summer progresses, the flocks increase in size to hundreds or thousands of birds. In the evening, these large flocks may come together from miles around to establish large communal roosts to spend the night. Starlings produce a number of characteristic rasping, squawking, or squeaking calls, most of which are harsh and unpleasant to hear. They are excellent mimics and frequently imitate the calls of many other species of birds. Since Starlings are somewhat migratory in their habits, they may move from the northern breeding areas to more southerly regions in the fall months.

Specific Management Practices for Control of the European Starling:

- Starlings can be driven from their roosting sites by harassing the flock at dusk for three or four consecutive nights or until they find a different roost. Spraying birds with water or making excessive noise usually works well. Start harassment as soon as the birds begin roosting. Don't wait until the roost is well established and the birds develop a strong attachment to the site.
- Balloons with eye-spots, kites with hawk silhouettes, and streamers placed around roosting sites may also be effective. Models of owls, hawks, snakes and cats have all been used.
- Starling distress calls, recorded on cassette tape and played by the homeowner through a hookup to loud speakers sometimes provides good results. Programmable sonic repellents featuring bird distress cries and predator calls on microchip are available in retail markets.
- Ultrasonic bird repellents are also available in retail markets, however they are mostly designed for partially enclosed facilities and some of them may cause hearing loss in dogs.
- Commercial bird control services use a combination of live hawks and falcons and other human methods. Contact your local Pest or Animal Control companies if professional attention is required.

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.