

**Eastern Box elder Bug** (*Leptocoris trivittatus*) is a native insect common in the eastern parts of Canada and United States.

In the spring the overwintering insects lay eggs on stones, leaves, grasses, shrubs, etc. The hatched nymphs are red in colour. In the summer they start to feed on fallen box elder seeds. The next stage of their lifecycle, the adult bugs are also red in colour and they feed on the fallen seeds of the female box elder plants in the fall.

These insects are active in the fall when they are looking for winter shelter. Box elder bugs are mostly an annoyance because they tend to creep into buildings. When the temperature in the fall is nice they congregate and often cover windows and doors in droves.

### Hosts and Damage

The presence of the Eastern Box elder Bug is **not a tree health concern**. They feed primarily on the fallen seeds of the Box elder trees (*Acer negundo*). They are considered **common household pests**. Box elder beetles are often a nuisance around buildings where these trees are present. In fall, box elder bugs start to congregate on the south side of the trees, buildings, rocks and other objects that are exposed to the sun. Later, they fly to nearby buildings to hibernate for the winter. These insects are harmless and will not damage any plant material. Most of the damage caused by box elder bugs is left in the form of excrement.



Congregating box elder bugs in fall

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<http://alexandredossantosantunes.com/up/box-elders-bugs>)

## Specific Management Practices for Control of Eastern Box elder Bug

- Focus should be on preventing the insects from accessing homes and buildings. The best way to keep box elder bugs out of building is to make sure that there are no entry points. Filling gaps around windows and doors, repairing holes and using window and door screens will help to prevent their entry.
- The Ontario's Cosmetic Pesticides Ban Act prohibits pesticides to be used for cosmetic purposes on lawns, vegetable and ornamental gardens, patios, driveways, cemeteries, and in parks and school yards. There are **no** exceptions for pest infestations (insects, fungi or weeds) in these areas, as lower risk pesticides, biopesticides and alternatives to pesticides exist. Over 95 pesticide ingredients are banned for cosmetic uses.
- The use of an insecticide labeled for box elder bug control could be applied, by treating the exterior of the building at the time of the swarming in the fall. Treat sidings, windows, doors and the foundation the building with an insecticide. Many pest control companies provide box elder bug control around homes.

## 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 cover plants) around tree bases to keep the soil moist for longer periods and encourage healthier roots.
- Avoid unnecessary excavating, grade changes, soil compaction, root cutting or hard surfacing around trees. These activities destroy vital roots, which may lead to the decline or death of trees.
- Refrain from using 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.