## **MECHANICAL CONTROL STRATEGIES**

Mechanical control strategies modify trees using equipment or hands-on actions to address damaged or diseased plant material and pests without using chemicals or biological agents.

Examples of mechanical controls include:

- Cutting down and removing trees that repeatedly host high populations of pests or cannot be saved from fungal infections
- Using correct pruning practices to remove diseased or infested twigs and branches
- Correctly treating or destroying cut trees and pruned diseased/infested plant materials to prevent spread
- Using correct pruning practices to increase air circulation, light and heat in tree interiors to treat fungal infections
- Pruning trees strategically to reduce the potential of wind-throw damage
- Removing and dislodging pests by hosing off trees with high pressure water streams or applying sticky barriers to trunks to intercept insects
- Trenching between healthy and diseased trees to cut root grafts between trees through which fungal infections spread



Asian longhorned beetle infestation in Chicago. The only means of control available is to identify which trees are infested, cut them down and chip them into tiny pieces.

Photo credit: Michael T. Smith, Bugwood.org



Lycorma delicatula (spotted lanternfly) nymphs on brown sticky band Photo credit: Lawrence Barringer, Pennsylvania Department of Agriculture, Bugwood.org