



Local Enhancement & Appreciation of Forests

Improving city life one tree at a time

Common Pests and Organic Controls

PEST	TREE SPECIES AFFECTED	WHAT IS IT?	PREVENTION	CONTROL	FURTHER INFORMATION
Aphids	tulip tree, nannyberry, maples, alders, birches, dogwoods, basswood	Tiny green to black, reddish brown, or dusty grey insects usually found in colonies which suck plant sap.	Do not over fertilize with nitrogen	<ul style="list-style-type: none"> • Encourage native predators and parasites • Spray plants frequently with a strong stream of water to knock aphids off • Use mild soap spray or homemade garlic spray 	City of Toronto
Borers and Bark Beetles	maples, cherries, pines, ashes, oaks, alders, basswood	Larvae of beetles bore into wood of trees. Attacked patches of bark exude gummy sap, turn dark and die. If bark dies entirely around trunk, the tree will die	avoid injury to bark	<ul style="list-style-type: none"> • remove injured limbs as soon as damage occurs 	City of Toronto (Asian long-horned beetle, bronze birch borer, bronze poplar borer, elm bark beetle, emerald ash borer)
Webworms	ashes, pines	Caterpillars feed on leaves, eating holes until only a dry leaf skeleton remains	<ul style="list-style-type: none"> • Attract parasitic wasps with nectar or pollen • Remove host weeds in garden vicinity 	<ul style="list-style-type: none"> • Knock caterpillars off leaves into pail of soapy water • Remove webs and destroy by burning or immersing in soapy water 	Missouri Botanical Garden



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Gypsy Moth	basswood, birch, oaks, serviceberry, pines	European Gypsy Moth is a defoliating insect that can severely weaken or kill trees. It is a major introduced pest in North America	Attract birds to your yard by planting appropriate plants	<ul style="list-style-type: none"> In spring, trap caterpillars by wrapping burlap around trunk of tree destroy caterpillars from this shelter every afternoon Scrape brown or yellow egg masses off trunks into bucket of soapy water 	City of Toronto
Leaf Miners	birches, oaks	Larvae of these insects tunnel between leaf surfaces, feeding on leaf tissue	Encourage native parasites with nectar plants	Destroy overwintering sites for insects by collecting and removing fallen leaves in fall	Agriculture & Agri-Food Canada
Leaf Skeletonizers	hackberry, birches, oaks, cedar, basswood	Insects that specialize in eating the soft green tissue of leaves, but leave the network of veins. Often leave the top and bottom layers of leaf skin, giving leaves brown, papery appearance.	Maintain plant health	<ul style="list-style-type: none"> Destroy overwintering sites for insects by collecting and removing fallen leaves in Fall Insecticides are often ineffective as the pests are inside the leaves and do not have contact with sprays 	City of Toronto (elm leaf beetle, European gypsy moth, Japanese beetle) Ontario Ministry of Natural Resources & Forestry (birch skeletonizer)
Spider Mites	spruces, pines, cherries, basswood	Minute, 8-legged bugs which suck juice from cells on the undersides of leaves	Attract parasitic wasps and woodpeckers	Place a ground sheet under tree to catch larvae and destroy daily in soapy water	University of Maryland Extension



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Scales	ashes, hackberry, oaks, maples, redbud, alders, birches, dogwoods	Small insects which suck plant sap, weakening the plants	Attract native predators and parasites with nectar and pollen plants	<ul style="list-style-type: none"> • Prune and destroy infested wood • Release predatory beetles 	City of Toronto
Tent Caterpillars	alders, birches	A native insect that rarely occurs in large enough numbers to cause tree death in Toronto. Populations peak every 10-12 years, then quickly return to tolerable levels	Attract natural predators	<ul style="list-style-type: none"> • Insecticides are generally ineffective against mature larvae • Caterpillars return to their tents during cool, wet weather and in evening prune and destroy nests during this time 	City of Toronto (eastern tent caterpillar)
Weevils	pinus, spruces	Small beetles that feed at night consuming needles. Worst damage is from larvae feeding on roots and burrowing in crown of plants	Avoid injury to tree	<ul style="list-style-type: none"> • Destroy overwintering sites • Drench soil around roots with parasitic nematodes 	Government of Canada (white pine weevil)
Adelgids	pinus, hemlock	Insects that suck sap from undersides of limbs. They cover themselves with white powdery material		<ul style="list-style-type: none"> • Spray with soapy water solution • Spray with dormant oil in late winter before grown begins 	OMAFRA (eastern spruce gall adelgid, Cooley spruce gall adelgid) Canadian Food Inspection Agency (hemlock woolly adelgid)



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Carpenter Ants	Any tree with decaying wood	Large (8-11mm in length) black ants that live in colonies. They do not eat wood – their presence is usually an indicator of wood decay.	Because carpenter ants only chew decaying wood, preventing wood decay is most important in preventing colonies of ants from colonizing a tree.	<ul style="list-style-type: none"> • Monitor tree and have it assessed for safety by a certified arborist • Do NOT seal or fill cavity 	City of Toronto
Fall Cankerworm	Oaks, ashes, maple, basswood, beech, birch, elm, hickory	Insect larvae, also known as loopers or inchworms, that feed on buds and new leaves in severe infestations causing heavy defoliation. May result in tree death if coupled with other stresses.	<ul style="list-style-type: none"> • Encourage parasitic wasps, birds, and ground beetles • Maintain plant vigour – healthy trees can releaf after being defoliated in early summer 		City of Toronto
Leaf Rollers	Willows	Green caterpillars with brown heads that spin webs at branch tips, pulling leaves together and feeding on enclosed buds, leaves and developing fruit.	Encourage parasitic wasps such as Trichogramma	<ul style="list-style-type: none"> • Apply dormant oil sprays just before buds break in spring to kill egg masses • Check branches of young trees weekly and remove caterpillars 	Agriculture & Agri-Food Canada (poplar leaf rollers)



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Lace Bugs	Alders	Small insects with distinct lacelike pattern on wings and heads that suck plant juices on undersides of leaves, resulting in speckled white or grey blotched appearance on leaf surfaces.		Spray with insecticidal soap	City of Toronto
Sawflies	Pines, tamarack, spruces, ashes, birches	Insect larvae that look like hairless caterpillars that feed in groups and can quickly defoliate portions of a tree. There are many different species of sawflies, each prefers specific plants	<ul style="list-style-type: none"> • Maintain plant health • Monitor trees in spring for caterpillars 	<ul style="list-style-type: none"> • Hand pick larvae and drown in buck of soapy water • Knock caterpillars off tree with strong water spray • Spray with insecticidal soap 	University of Minnesota Extension
Spruce Budworms	spruces, balsam fir, tamarack, hemlock	Caterpillars 1" long, dark reddish-brown with white spots and black head that eat needles. Infestations can reduce tree growth and, if prolonged, lead to tree death	Maintain plant health	<ul style="list-style-type: none"> • Hand pick larvae and drown in buck of soapy water • Knock caterpillars off tree with strong water spray 	Agriculture & Agri-Food Canada