

| Pest Scouting - Growing Degree-day Ranges | | | | | (150-250 GDD50) | | |
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| CROP | Common name | Scientific name | GDD50 Range | | GDD50 Reference | Developmental / Target Stage | Extension & Industry Resources |
| | | | min @5°F | max @5°F | | | |
| Malus, Prunus, many | Eastern tent caterpillar | <i>Molacosoma americanum</i> | 90 | 190 | 2 | Larvae treatment before tents apparent (near 150 GDD50) | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/mole-caterpillar/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/mole-caterpillar/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/mole-caterpillar/ |
| Elm, service berry | Woolly elm aphid | <i>Eriosoma americana</i> | 121 | 246 | 2 (G) | Control target | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/woolly-elm-aphid/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/woolly-elm-aphid/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/woolly-elm-aphid/ |
| Conifer | Hemlock woolly adelgid | <i>Adelges tsugae</i> | 150 | 150 | RU | Eggs and 10% hatch | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/hemlock-woolly-adelgid/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/hemlock-woolly-adelgid/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/hemlock-woolly-adelgid/ |
| Conifer | Spruce spider mite | <i>Oligonychus ununguis</i> | 150 | 175 | 4 | 1st egg hatch | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/spruce-spider-mite/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/spruce-spider-mite/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/spruce-spider-mite/ |
| Conifer | Spruce needleminer | <i>Endothenia albolineana</i> | 150 | 200 | 4 | 1st larvae active | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/spruce-needleminer/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/spruce-needleminer/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/spruce-needleminer/ |
| Conifer | Balsam gall midge | <i>Parasiphia tumefex</i> | 150 | 300 | 4 | Adults laying eggs | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/balsam-gall-midge/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/balsam-gall-midge/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/balsam-gall-midge/ |
| Witchhazel, River Birch | Spiry witchhazel gall aphid | <i>Homamelastes spinosus</i> | 171 | - | 6 | Control target | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/spiry-witchhazel-gall-aphid/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/spiry-witchhazel-gall-aphid/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/spiry-witchhazel-gall-aphid/ |
| Birch | Birch leafminer | <i>Fenusa pusilla</i> | 190 | 290 | RU | Larvae (1st generation) | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/birch-leafminer/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/birch-leafminer/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/birch-leafminer/ |
| Conifer | Spruce spider mite | <i>Oligonychus ununguis</i> | 190 | 363 | RU | Immatures/Adults | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/spruce-spider-mite/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/spruce-spider-mite/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/spruce-spider-mite/ |
| Honeylocust | Honeylocust pod gall midge | <i>Dasiineura gleditsiae</i> | 192 | 229 | RU | Larvae | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/honeylocust-pod-gall-midge/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/honeylocust-pod-gall-midge/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/honeylocust-pod-gall-midge/ |
| Holly | Holly leafminer | <i>Phytomyza ilicis</i> | 192 | 290 | RU | Egg hatch | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/holly-leafminer/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/holly-leafminer/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/holly-leafminer/ |
| Holly | *Native holly leafminer | <i>Phytomyza illicicola</i> | 192 | 298 | 2 | Egg hatch | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/native-holly-leafminer/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/native-holly-leafminer/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/native-holly-leafminer/ |
| Rhododendron | Rhododendron borer | <i>Synanthedon rhododendri</i> | 192 | 298 | 2 | Typical treatment window | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/rhododendron-borer/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/rhododendron-borer/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/rhododendron-borer/ |
| Larch | Larch sawfly | <i>Pristiphora erichsonii</i> | 192 | 299 | 2 | Typical treatment window | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/larch-sawfly/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/larch-sawfly/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/larch-sawfly/ |
| Andromeda | Andromeda lacebug | <i>Stephanitis tokyay</i> | 192 | 303 | RU | Adults | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/andromeda-lacebug/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/andromeda-lacebug/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/andromeda-lacebug/ |
| Rhododendrons | Rhododendron gall midge | <i>Cinodiplasis rhododendri</i> | 192 | 363 | RU | Larvae | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/rhododendron-gall-midge/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/rhododendron-gall-midge/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/rhododendron-gall-midge/ |
| Willows, Cottonwood, Poplar | Imported willow leaf beetle | <i>Plagiodes versicolora</i> | 192 | 448 | RU | Larvae/Adults | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/imported-willow-leaf-beetle/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/imported-willow-leaf-beetle/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/imported-willow-leaf-beetle/ |
| Privet | Privet thrips | <i>Dendrothrips ornatus</i> | 192 | 618 | 2 | Typical treatment window | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/privet-thrips/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/privet-thrips/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/privet-thrips/ |
| Lilac, ash, privet, many | Lilac / Ash Borer | <i>Podosema syringae</i> | 200 | 299 | RU | Adults - 1st Treatment | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/lilac-ash-borer/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/lilac-ash-borer/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/lilac-ash-borer/ |
| Spruce | Spruce budworm | <i>Choristoneura fumiferana</i> | 200 | 300 | 5 | Larvae | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/spruce-budworm/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/spruce-budworm/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/spruce-budworm/ |
| Elm | Elm leafminer | <i>Fenusa ulmi</i> | 215 | 240 | 5 | Adult emergence | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/elm-leafminer/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/elm-leafminer/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/elm-leafminer/ |
| Wild and cultivated roses | Roseslug sawfly | <i>Endelomyia aethiops</i> | 230 | - | 6 | Egg hatch / early instars | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/roseslug-sawfly/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/roseslug-sawfly/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/roseslug-sawfly/ |
| Deciduous, many | Hawthorn lacebug | <i>Corythucha cydoniae</i> | 239 | 363 | RU | Nymphs/Adults | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/hawthorn-lacebug/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/hawthorn-lacebug/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/hawthorn-lacebug/ |
| Conifer | Arborvitae leafminer | <i>Argyresthia thuella</i> | 245 | 360 | RU | Larvae Treatments | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/arborvitae-leafminer/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/arborvitae-leafminer/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/arborvitae-leafminer/ |
| Prunus | American plum borer | <i>Euzophera semifuneralis</i> | 245 | 440 | 5 | Adult flight, egg laying | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/american-plum-borer/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/american-plum-borer/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/american-plum-borer/ |
| Boxwood | Boxwood mites | <i>Eurytetranychus buxi</i> | 245 | 600 | RU | All Stages | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/boxwood-mites/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/boxwood-mites/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/boxwood-mites/ |
| Lilac | Lilac leafminer | <i>Colpoptila syringella</i> | 246 | 363 | 5 | Larvae Treatments | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/lilac-leafminer/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/lilac-leafminer/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/lilac-leafminer/ |
| Holly | Holly leafminer | <i>Phytomyza ilicis</i> | 246 | 448 | RU | Larvae Treatment | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/holly-leafminer/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/holly-leafminer/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/holly-leafminer/ |
| Yew | Taxus mealybug | <i>Dysmicoccus wistariae</i> | 246 | 618 | RU | Adults/Crawlers | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/taxus-mealybug/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/taxus-mealybug/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/taxus-mealybug/ |
| Conifer | Pine sawflies (Red-headed) | <i>Neodiprion lecontei</i> | 246 | 1388 | RU | Larvae (1st generation) | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/pine-sawflies/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/pine-sawflies/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/pine-sawflies/ |
| Boxwood | Boxwood leafminer | <i>Monarthropalpus flavus</i> | 249 | - | 6 | Adult emergence | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/boxwood-leafminer/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/boxwood-leafminer/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/boxwood-leafminer/ |
| Conifer | Eastern spruce gall adelgid | <i>Adelges abietis</i> | 250 | 310 | 5 | egg hatch, galls begin forming (not a control target) | http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/eastern-spruce-gall-adelgid/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/eastern-spruce-gall-adelgid/ http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/pests/eastern-spruce-gall-adelgid/ |
| <p>Note: Growing degree-day values utilize daily average air temperature with a minimum temperature threshold (a.k.a. "base") of 50° or GDD50 (max. temp. threshold set at 65°). These values are accumulated from a single date, such as January or March 1st to the 15th GDD. Provided GDDs are cooling degree-days and should be treated as such.</p> <p style="text-align: center;">Daily GDD50 = $(\text{Max} + \text{Min temp.}) / 2 - 50$ (min temp. threshold)</p> | | | | | | <p>References</p> <ul style="list-style-type: none"> 1. http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/ 2. http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/ 3. http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/ 4. http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/ 5. http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/ 6. http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/ 7. http://www.ontario.ca/govt/agriculture/forestry/pests-and-diseases/ | |