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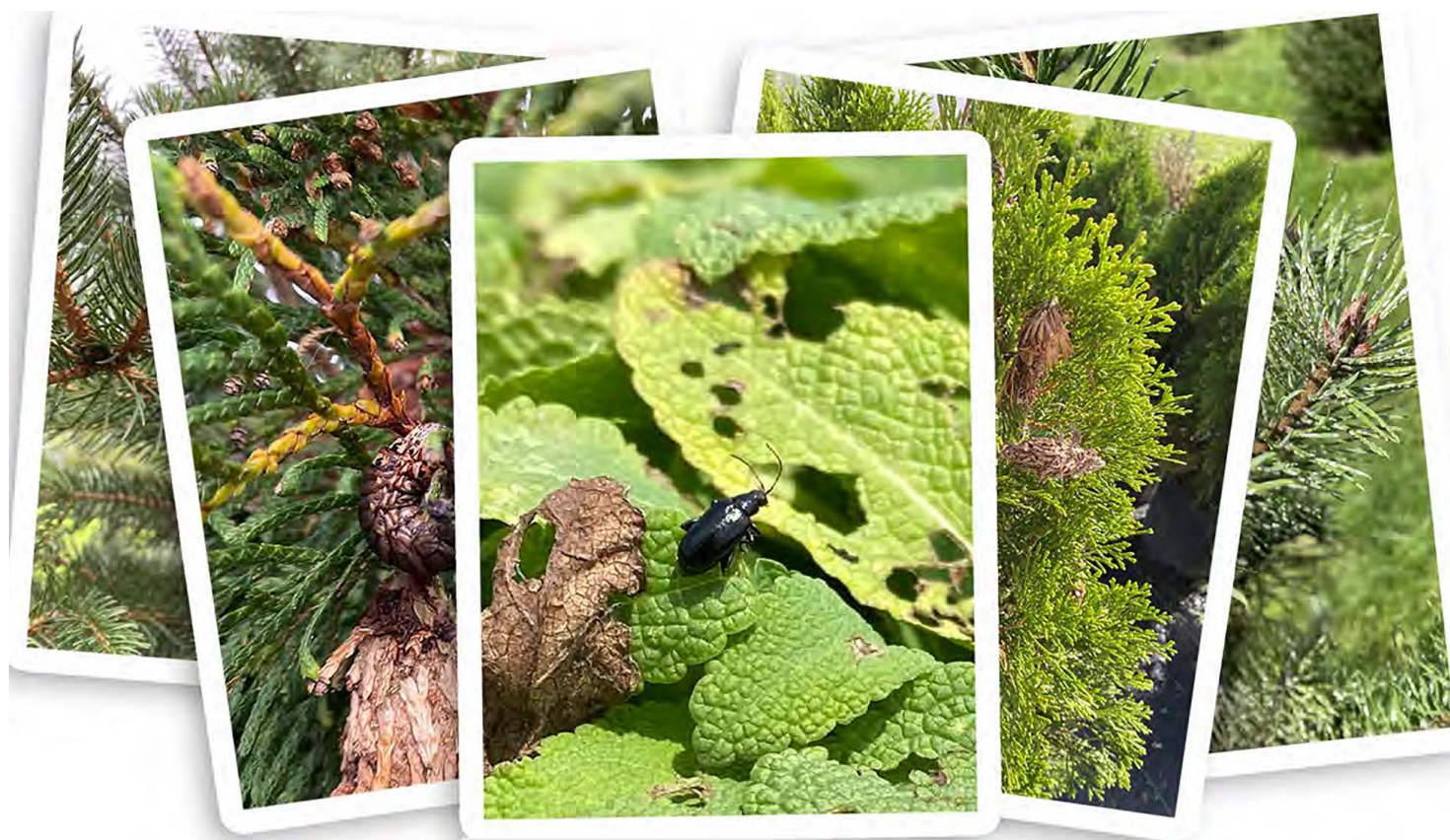
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Beta-version 2023

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Nursery & Landscape Pest Scouting Scouting with growing degree-days



Rutgers Green Industry Working Group

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Nursery and Landscape Pest Scouting with GDD50 – JULY 2023

Tim Waller – twaller@njaes.Rutgers.edu

(pg. 1)

Projected GDD50 accumulation - July 2023

Region	Location	30-Jun	7-Jul	14-Jul	21-Jul	28-Jul	4-Aug
Southern	Upper Deerfield (NJ50)	1167	1352	1544	1738	1933	2127

Group	Common Name	Scientific Name	GDD Min (50F)	GDD Max (95F)	Ref.	Developmental / Target Stage / Notes	Favored Host Plants
Aphids / Thrips	Tuliptree aphid	<i>Illinoia liriodendri</i>	1151	1514	1	Nymphs / adults	Tulip
Aphids / Thrips	Willow twig aphids	<i>Lachnus spp.</i>	1644	2271	5	Typical treatment window	Willow
Aphids / Thrips	Tuliptree aphid	<i>Illinoia liriodendri</i>	1917	2033	1	Nymphs	Tulip
Aphids / Thrips	White pine aphid	<i>Cinara strobi</i>	1991	2271	1	Adults	Conifer
Beetle							
Beetle	Elm leaf beetle	<i>Xanthogaleruca luteola</i>	600	1300	7	Larvae (2nd generation)	Elm
Beetle	N. masked chafer beetle	<i>Cyclocephala borealis</i>	898	905	1	1st adults	Turf
Beetle	Japanese beetle	<i>Popillia japonica</i>	950	2150	5	Adults emerge and feed	Many
Beetle	Redheaded flea beetle	<i>Systema frontalis</i>	1028	1570	8	2nd generation of un-hatched eggs	Many
Beetle	Oriental Beetle	<i>Anomala orientalis</i>	1147	-	6	Adult emergence	Many
Beetle	N. masked chafer beetle	<i>Cyclocephala borealis</i>	1377	1579	1	Adults (90%)	Turf
Beetle	Redheaded flea beetle	<i>Systema frontalis</i>	1570	1860	8	2nd generation egg hatch	Many
Beetle	Japanese beetle	<i>Popillia japonica</i>	1590	1925	1	Adults (90%)	Many
Borer							
Borer - Caterpillar	Nantucket tip moth	<i>Rhyacionia frustrana</i>	1514	1917	1	Adults 2nd generation	Conifer
Borer - Flathead / Metallic beetle	Emerald ash borer	<i>Agrilus planipennis</i>	1000	1200	4	Peak adult activity	Ash
Borer - Roundhead / Longhorn	Roundheaded appletree borer	<i>Saperda candida</i>	802	1129	1	Adults	Many
Borer - Roundhead / Longhorn	Roundheaded apple tree borer	<i>Saperda candida</i>	1514	1798	5	Typical treatment window	Many
Borer - Roundhead / Longhorn	Sugar maple borer	<i>Glycobius speciosus</i>	2032	2375	5	Typical treatment window	Maple
Caterpillar							
Caterpillar	Mimosa webworm	<i>Homadula anisocentra</i>	880	-	1	Larvae (1st generation)	Mimosa, Honeylocust
Caterpillar	Walnut Caterpillar	<i>Datana integerrima</i>	1029	1514	2	Larvae Treatment	Juglandaceae
Caterpillar	Birch Skeletonizer	<i>Bucculatrix canadensisella</i>	1266	1580	5	Typical treatment window	Birch
Caterpillar	Fall webworm	<i>Hyphantria cunea</i>	1266	1795	2	Caterpillars present - larvae treatment	Many
Caterpillar	Juniper webworm	<i>Dichomeris marginella</i>	1645	1917	1	Larvae Treatment	Conifer
Caterpillar	Mimosa webworm	<i>Homadula anisocentra</i>	1800	2100	1	Larvae (2nd generation)	Mimosa, Honeylocust
Caterpillar	Zimmerman pine moth	<i>Diorcytria zimmermani</i>	1917	2154	5	Treatment window (adult flight-1700 GDD)	Conifer
caterpillar	Orangestriped oakworm	<i>Anisota senatoria</i>	1917	-	6	Egg hatch - early instars	Mainly Oaks
Caterpillar	Bluegrass sod webworm	<i>Parapediasia teterrella</i>	1250	1920	1	Larvae	Turf
Caterpillar	Oak skeletonizer	<i>Bucculatrix ainliella</i>	1798	2155	1	Larvae	Oaks
SLF							
Cicadellidae	Spotted Lantern Fly	<i>Lycorma delicatula</i>	1000	-	9	Adults	Many
"Bugs"							
Cicadellidae	Leafhoppers	<i>Species within Cicadellidae</i>	1266	1544	1	Nymphs / adults	Many
Hemiptera (true bugs)	Hairy chinch bug	<i>Blissus leucopterus</i>	765	870	1	1st generation (50% - 2nd instar)	Turf
Hemiptera (true bugs)	Hairy chinch bug	<i>Blissus leucopterus</i>	1903	2160	1	Second generation- 50%- 2nd instars	Turf
Lacebug	Azalea Lacebug	<i>Stephanitis pyrioides</i>	802	1029	1	Eggs / Nymphs 3rd Generation	Rhododendron
Lacebug	Lacebugs (on hawthorn)	<i>Corythucha cydoniae</i>	1266	1544	1	Nymphs / adults	Many
Leafminer / Midge / Fly							
Leafminer / Midge / Fly	Locust leafminer	<i>Odontota dorsalis</i>	1029	1388	1	Adults	Locust
Leafminer / Midge / Fly	Boxwood leafminer	<i>Monoarthropalpus flavus</i>	1200	1400	5	Larvae Treatment	Boxwood
Leafminer / Midge / Fly	Lilac leafminer	<i>Caloptilia syringella</i>	1388	1644	5	Typical treatment window	Lilac
Leafminer / Midge / Fly	Arborvitae leafminer	<i>Argyresthia thuella</i>	1800	2200	1	Larvae Treatment (3rd generation)	Conifer
Mites							
Mites	Oak spider mites	<i>Oligonychus bicolor</i>	802	1265	1	All Stages	Oaks
Mites	Honeylocust mite	<i>Eotetranychus multidigituli</i>	912	1514	2	All Stages	Honeylocust
Mites	Honeylocust spider mite	<i>Platytranychus multidigituli</i>	912	1514	5	Typical treatment window	Honeylocust
Mites	Privet rust mite	<i>Aculus ligustri</i>	1266	1515	5	Second typical treatment window	Privet
Mites	Two spotted spider mite	<i>Tetranychus urticae</i>	1300	2000	1	Nymphs / adults	Many
Mites	Rust-mites	<i>Nalepella and Setoptus spp.</i>	1644	2030	1	Nymphs / adults	Conifer

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(pg. 2)

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Southern	Upper Deerfield (NJ50)	1167	1352	1544	1738	1933	2127

Group	Common Name	Scientific Name	GDD Min (50F)	GDD Max (95F)	Ref.	Developmental / Target Stage / Notes	Favored Host Plants
Scale / Sucking							
Scale / Adelgid / Whitefly / Psyllid	Cooley spruce gall adelgid	<i>Adelges cooleyi</i>	600	1000	7	Nymphs active - Douglas fir (control target)	Conifer
Scale / Adelgid / Whitefly / Psyllid	Sprucebud scale	<i>Physokermes hemicryphus</i>	700	1150	4	Crawlers (1st generation)	Conifer
Scale / Adelgid / Whitefly / Psyllid	White prunicola scale	<i>Pseudaulacaspis prunicola</i>	707	1151	1	Crawlers (1st generation)	Many
Scale / Adelgid / Whitefly / Psyllid	Juniper scale	<i>Carulaspis juniperi</i>	707	1260	1	Crawlers (1st generation)	Conifer
Scale / Adelgid / Whitefly / Psyllid	Calico scale	<i>Eulecanium cerasorum</i>	714	-	6	Crawlers (1st generation)	Many
Scale / Adelgid / Whitefly / Psyllid	Striped pine scale	<i>Toumeyella pini</i>	750	800	4	Egg hatch	Conifer
Scale / Adelgid / Whitefly / Psyllid	Oak lecanium scale	<i>Parthenolecanium quercifex</i>	789	-	6	Crawlers (1st generation)	Oak, hickory, birch, many
Scale / Adelgid / Whitefly / Psyllid	Cottony maple leaf scale	<i>Pulvinaria acericola</i>	802	1265	5	Crawlers (1st generation)	Acer
Scale / Adelgid / Whitefly / Psyllid	Cottony maple scale	<i>Pulvinaria innumerabilis</i>	802	1265	1	Crawlers (1st generation) - control target	Many, shadetrees
Scale / Adelgid / Whitefly / Psyllid	Golden oak scale	<i>Asterolecanium variolosum</i>	802	1266	5	Egg hatch	Oaks
Scale / Adelgid / Whitefly / Psyllid	Japanese maple scale	<i>Lopholeucaspis japonica</i>	829	-	6	Crawlers (1st generation)	Maples
Scale / Adelgid / Whitefly / Psyllid	European elm scale	<i>Gossyparia spuria</i>	831	1388	6,2	Crawlers (1st generation)	Elm
Scale / Adelgid / Whitefly / Psyllid	European fruit lecanium scale	<i>Parthenolecanium corni</i>	932	1645	6,1	Crawlers - control target	Shade trees
Scale / Adelgid / Whitefly / Psyllid	Pine tortoise scale	<i>Toumeyella parvicornis</i>	1000	1200	4	Egg hatch ends, last of crawlers	Conifer
Scale / Adelgid / Whitefly / Psyllid	Fletcher Scale (Yew)	<i>Parthenolecanium fletcheri</i>	1029	1388	1	Crawlers (1st generation) - control target	Yew, many conifers
Scale / Adelgid / Whitefly / Psyllid	Indian wax scale	<i>Ceroplastes ceriferus</i>	1145	-	6	Crawlers (1st generation)	Many
Scale / Adelgid / Whitefly / Psyllid	Euonymus Scale	<i>Unaspis euonymil</i>	1150	1388	5	2nd generation targeted treatments	Euonymus
Scale / Adelgid / Whitefly / Psyllid	Azalea whitefly	<i>Pealius azaleae</i>	1250	1500	5	Adults/nymphs (2nd generation)	Rhododendron
Scale / Adelgid / Whitefly / Psyllid	Pine Needle Scale	<i>Chionaspis pinifoliae</i>	1290	1917	3	Crawlers emerge (2nd generation) - control target	Conifer
Scale / Adelgid / Whitefly / Psyllid	Hemlock scale	<i>Abgrallaspis ithacae</i>	1388	2154	5	Typical treatment window	Conifer
Scale / Adelgid / Whitefly / Psyllid	Cooley spruce gall adelgid	<i>Adelges cooleyi</i>	1500	1775	1	Adults/nymphs (Douglas Fir)	Conifer
Scale / Adelgid / Whitefly / Psyllid	White prunicola scale	<i>Pseudaulacaspis prunicola</i>	1637	-	6	Egg hatch / crawler (2nd generation)	Many
Scale / Adelgid / Whitefly / Psyllid	Euonymus Scale	<i>Unaspis euonymil</i>	1700	-	1	Continued 2nd generation treatments	Euonymus
Scale / Adelgid / Whitefly / Psyllid	Cryptomeria scale	<i>Aspidiotus cryptomeriae</i>	1750	2130	1, 4	Crawlers emerge (2nd generation)	Conifer
Scale / Adelgid / Whitefly / Psyllid	Obscure scale	<i>Melanaspis obscura</i>	1774	-	6	Egg hatch / crawler	Many
Scale / Adelgid / Whitefly / Psyllid	Cooley spruce gall adelgid	<i>Adelges cooleyi</i>	1850	1950	1	Galls open (Spruce)	Conifer
Scale / Adelgid / Whitefly / Psyllid	Gloomy scale	<i>Melanaspis tenebricosa</i>	2000	3000	6*	Crawlers emerge. (1 generation) * Approximate range, more data needed.	Maple, many
Scale / Adelgid / Whitefly / Psyllid	Azalea whitefly	<i>Pealius azaleae</i>	2032	2150	5	Adults/nymphs (3rd generation)	Rhododendron
Scale / Adelgid / Whitefly / Psyllid	Maskell scale	<i>Iepidosaphes pallia</i>	2035	-	6	Egg hatch / crawler (2nd generation)	Conifer
Weevil							
Weevil	Bluegrass billbug	<i>Sphenophorus parvulus</i>	884	1003	1	Larvae 20%	Turf
Weevil	Bluegrass billbug	<i>Sphenophorus parvulus</i>	1094	1217	1	Larvae (40%)	Turf
Weevil	Northern pine weevil	<i>Pissodes nemorensis</i>	1200	1400	4	2nd generation adults active	Conifer
Weevil	Pales weevil	<i>Hyllobius pales</i>	1200	1400	4	Adults 2nd generation	Conifer
Weevil	Pine root collar weevil	<i>Hyllobius radialis</i>	1200	1400	4	2nd generation adults active	Conifer
Weevil	White pine weevil	<i>Pissodes strobi</i>	1200	1400	4	2nd generation adults active	Conifer
Weevil	Two-banded Japanese weevil	<i>Pseudocneorhinus bifasciatus</i>	1644	2271	1	Adults	Many