

Nursery and Landscape Pest Scouting with GDD50 – JUNE 2023

Tim Waller – twaller@njaes.Rutgers.edu

(pg. 1)

Projected GDD50 accumulation - June 2023

Region	Location	26-May	2-Jun	9-Jun	16-Jun	23-Jun	30-Jun
Southern	Upper Deerfield (NJ50)	527	643	785	940	1108	1286

Group	Common Name	Scientific Name	GDD Min (50F)	GDD Max (95F)	Ref.	Developmental / Target Stage / Notes	Favored Host Plants
Leafminer / Midge / Fly	Balsam gall midge	<i>Paradiplosis tumifex</i>	550	700	4	Galls apparent	Conifer
Scale / Adelgid / Whitefly / Psyllid	Juniper scale	<i>Carulaspis juniperi</i>	550	700	7	Egg hatch	Conifer
Borer - Clearwing moth	Greater peach tree borer	<i>Synanthedon exitiosa</i>	575	710	4	Adult emergence	Malus, Prunus, many
Scale / Adelgid / Whitefly / Psyllid	Cryptomeria scale	<i>Aspidiotus cryptomeriae</i>	600	800	3	First crawler emergence	Conifer
Caterpillar	Bagworm	<i>Thyridopteryx ephemeraeformis</i>	600	900	1	Larvae (early instars) - ONLY CONTROL WINDOW	Conifer
Scale / Adelgid / Whitefly / Psyllid	Cooley spruce gall adelgid	<i>Adelges cooleyi</i>	600	1000	7	Nymphs active - Douglas fir (control target)	Conifer
Beetle	Elm leaf beetle	<i>Xanthogaleruca luteola</i>	600	1300	7	Larvae (2nd generation)	Elm
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>Pseudaulecaspis 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
Hemiptera (true bugs)	Hairy chinch bug	<i>Blissus leucopterus</i>	765	870	1	1st generation (50% - 2nd instar)	Turf
Scale / Adelgid / Whitefly / Psyllid	Oak lecanium scale	<i>Parthenolecanium quercifex</i>	789	-	6	Crawlers (1st generation)	Oak, hickory, birch, many
Lacebug	Azalea Lacebug	<i>Stephanitis pyrioides</i>	802	1029	1	Eggs / Nymphs 3rd Generation	Rhododendron
Borer - Roundhead / Longhorn	Roundheaded appletree borer	<i>Saperda candida</i>	802	1129	1	Adults	Many
Mites	Oak spider mites	<i>Oligonychus bicolor</i>	802	1265	1	All Stages	Oaks
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
Caterpillar	Mimosa webworm	<i>Homadaula anisocentra</i>	880	-	1	Larvae (1st generation)	Mimosa, Honeylocust
Weevil	Bluegrass billbug	<i>Sphenophorus parvulus</i>	884	1003	1	Larvae 20%	Turf
Beetle	N. masked chafer beetle	<i>Cyclocephala borealis</i>	898	905	1	1st adults	Turf
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
Scale / Adelgid / Whitefly / Psyllid	European fruit lecanium scale	<i>Parthenolecanium corni</i>	932	1645	6,1	Crawlers - control target	Shade trees
Beetle	Japanese beetle	<i>Popillia japonica</i>	950	2150	5	Adults emerge and feed	Many
Borer - Flathead / Metallic beetle	Emerald ash borer	<i>Agrilus planipennis</i>	1000	1200	4	Peak adult activity	Ash
Scale / Adelgid / Whitefly / Psyllid	Pine tortoise scale	<i>Toumeyella parvicornis</i>	1000	1200	4	Egg hatch ends, last of crawlers	Conifer
Cicadellidae	Spotted Lantern Fly	<i>Lycorma delicatula</i>	1000	-	9	Adults	Many
Beetle	Redheaded flea beetle	<i>Systema frontalis</i>	1028	1570	8	2nd generation of un-hatched eggs	Many
Leafminer / Midge / Fly	Locust leafminer	<i>Odontota dorsalis</i>	1029	1388	1	Adults	Locust
Scale / Adelgid / Whitefly / Psyllid	Fletcher Scale (Yew)	<i>Parthenolecanium fletcheri</i>	1029	1388	1	Crawlers (1st generation) - control target	Yew, many conifers
Caterpillar	Walnut Caterpillar	<i>Datana integerrima</i>	1029	1514	2	Larvae Treatment	Juglandaceae
Weevil	Bluegrass billbug	<i>Sphenophorus parvulus</i>	1094	1217	1	Larvae (40%)	Turf
Scale / Adelgid / Whitefly / Psyllid	Indian wax scale	<i>Ceroplastes ceriferus</i>	1145	-	6	Crawlers (1st generation)	Many
Beetle	Oriental Beetle	<i>Anomala orientalis</i>	1147	-	6	Adult emergence	Many

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Continued from pg. 1

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Scale / Adelgid / Whitefly / Psyllid	Euonymus Scale	<i>Unaspis euonymil</i>	1150	1388	5	2nd generation targeted treatments	Euonymus
Sawfly - Wasp	Dogwood sawfly	<i>Macremphytus tarsatus</i>	1151	1500	1	Larvae Treatment	Dogwood
Aphids / Thrips	Tuliptree aphid	<i>Illinoia liriodendri</i>	1151	1514	1	Nymphs / adults	Tulip
Leafminer / Midge / Fly	Boxwood leafminer	<i>Monoarthropalpus flavus</i>	1200	1400	5	Larvae Treatment	Boxwood
Weevil	Northern pine weevil	<i>Pissodes nemorensis</i>	1200	1400	4	2nd generation adults active	Conifer
Weevil	Pales weevil	<i>Hylobius pales</i>	1200	1400	4	Adults 2nd generation	Conifer
Weevil	Pine root collar weevil	<i>Hylobius radicis</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
Scale / Adelgid / Whitefly / Psyllid	Azalea whitefly	<i>Pealius azaleae</i>	1250	1500	5	Adults/nymphs (2nd generation)	Rhododendron
Caterpillar	Bluegrass sod webworm	<i>Parapediasia teterrella</i>	1250	1920	1	Larvae	Turf
Mites	Privet rust mite	<i>Aculus ligustri</i>	1266	1515	5	Second typical treatment window	Privet
Cicadellidae	Leafhoppers	<i>Species within Cicadellidae</i>	1266	1544	1	Nymphs / adults	Many
Lacebug	Lacebugs (on hawthorn)	<i>Corythucha cydoniae</i>	1266	1544	1	Nymphs / adults	Many
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
Scale / Adelgid / Whitefly / Psyllid	Pine Needle Scale	<i>Chionaspis pinifoliae</i>	1290	1917	3	Crawlers emerge (2nd generation) - control target	Conifer
Mites	Two spotted spider mite	<i>Tetranychus urticae</i>	1300	2000	1	Nymphs / adults	Many
Beetle	N. masked chafer beetle	<i>Cyclocephala borealis</i>	1377	1579	1	Adults (90%)	Turf
Leafminer / Midge / Fly	Lilac leafminer	<i>Caloptilia syringella</i>	1388	1644	5	Typical treatment window	Lilac
Scale / Adelgid / Whitefly / Psyllid	Hemlock scale	<i>Abgrallaspis ithacae</i>	1388	2154	5	Typical treatment window	Conifer

Metallic borers are coming! Be ready

Bronze Birch Borer for Station UPPER DEERFIELD NJ (NJ50)

NJ50 has 93% data quality score (average since March 1 (temperature only)).

[full model online](#)

Model starts Jan 01, 2023.

Date	DDs cumu	Events
Jan 1	5	* START *
Mar 23	260	Prepupal larvae in OW cells under bark
Apr 6	401	Beginning of pupation
May 1	752	First adults exit trees
May 14	956	10% adult emergence
May 22	1107	50% adult emergence
May 23	1127	* NOW *
Jun 5	1424	Beginning of egg hatch and larval tunneling
Jun 12	1621	90% adult emergence
Jun 26	2053	Adult activity and egg hatch ended, larvae continue tunneling

Emerald Ash Borer for Station UPPER DEERFIELD NJ (NJ50)

NJ50 has 93% data quality score (average since March 1 (temperature only)).

[full model online](#)

Model starts Jan 01, 2023.

Date	DDs cumu	Events
Jan 1	1	* START *
May 17	553	First adult emergence approx. beginning
May 23	627	* NOW *
May 26	660	10% adult emergence
Jun 7	875	50% adult emergence
Jul 3	1498	95% adult emergence
Aug 9	2517	Last adult emergence approx. end

USPEST.ORG "Push-Alert" System

Contact Tim Waller for more information

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WE **R** HERE WHEN YOU NEED US