

2008 PLANT PHENOLOGY
JOURNAL

This journal contains the average cumulative degree-days for phenological events at Secret Arboretum at Wooster, Ohio from 1997-2001. These data were compiled by Daniel A. Herms, Department of Entomology, The Ohio State University, Ohio Agricultural Research and Development Center, Wooster, Ohio.

This phenological sequence can be used as a biological calendar to forecast pest activity because it remains highly constant from year to year. Cumulative degree-days were calculated using a base temperature of 50 degrees Fahrenheit and a starting date of January first.

Phenological observations pages have been included to monitor plant and pest activity. First bloom is defined as the date on which the first flower bud on the plant opens revealing pistils and/or stamens. Full bloom is defined as the date on which 95% of the flower buds on the plant have opened. Additional information can be obtained at: phenology.osu.edu.

LINK TO CHECK DEGREE-DAYS

<http://www.oardc.ohio-state.edu/gdd/>

<p>34 GDD Silver Maple First Bloom</p>	<p>40 Cornelian Cherry Dogwood First Bloom</p>	<p>42 Silver Maple Full Bloom</p>	<p>44 Red Maple First Bloom</p>
<p>60 Japanese Pieris First Bloom</p>	<p>75 Red Maple Full Bloom</p>	<p>83 Star Magnolia First Bloom</p>	<p>86 Forsythia First Bloom</p>

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NOTES

2007 DATA

Plant Name	First Bloom Date	GDD	Full Bloom Date	GDD
Gold Tide forsythia				
Royal Star' star magnolia				
PJM rhododendron				
Koreanspice viburnum				
Coralburst crabapple				
Charles Joly' common lilac				
Red Rothomagensis' Chinese lilac				
Vanhoutte spirea				
'Miss Kim' Lilac				
Redosier dogwood				
Red Prince' weigela				
Autumn Jazz arrowwood viburnum				
Goldflame' burnald spirea				
Abbotswood' potentilla				
Oakleaf hydrangea				
Acutiloba' cutleaf elderberry				
Blushing Bride' rose-of-Sharon				

92 GDD Eastern Tent Catapilar Egg Hatch	96 Cornelian Cherry Dogwood Full Bloom	116 Norway Maple First Bloom Forsythia Full Bloom	127 Sargent Cherry First Bloom
128 Larch Casebearer Egg Hatch	129 Red Maple Full Bloom	133 Saucer Magnolia First Bloom	137 Flowering Quince First Bloom

2006 DATA

142 GDD Bradford Pear First Bloom	144 European Pine Sawfly Egg Hatch	145 Weeping Higan Cherry First Bloom	147 PJM Rhododendron First Bloom
149 Norway Maple Full Bloom	150 Inkberry Leafminer Adult Emergence	151 Sargent Cherry Full Bloom Star Magnolia Full Bloom	153 Allegheny Serviceberry First Bloom

Plant Name	First Bloom Date	GDD	Full Bloom Date	GDD
Gold Tide forsythia				
'Royal Star' star magnolia				
PJM rhododendron				
Koreanspice viburnum				
Coralburst crabapple				
Charles Joly' common lilac				
Red Rothomagensis' Chinese lilac				
Vanhoutte spirea				
'Miss Kim' Lilac				
Redosier dogwood				
Red Prince' weigela				
Autumn Jazz arrowwood viburnum				
Goldflame' bumald spirea				
Abortswood' potentilla				
Oakleaf hydrangea				
Acuniloba' cutleaf elderberry				
Blushing Bride' rose-of-Sharon				

2005 DATA

Plant Name	First Bloom	GDD	Full Bloom	GDD
	Date		Date	
Gold Tide forsythia				
'Royal Star' star magnolia				
PJM rhododendron				
Koreanspice viburnum				
Coralburst crabapple				
Charles Joly' common lilac				
Red Rothomagensis' Chinese lilac				
Vanhoutte spirea				
'Miss Kim' Lilac				
Redosier dogwood				
Red Prince' weigela				
Autumn Jazz arrowwood viburnum				
Goldflame' burnald spirea				
Abbotswood' potentilla				
Oakleaf hydrangea				
Acutiloba' cutleaf elderberry				
Blushing Bride' rose-of-Sharon				

155 GDD Spring Snow Crabapple First Bloom	162 Spruce Spider Mite Egg Hatch	164 Bradford Pear Full Bloom	169 Allegheny Serviceberry Full Bloom
174 Saucer Magnolia Full Bloom	178 PJM Rhododendron Full Bloom	179 Weeping Higan Cherry Full Bloom	182 Chokeberry First Bloom

PHENOLOGY GARDEN OBSERVATIONS

LOCATION _____

185 GDD Korean Spice Viburnum First Bloom	189 Japanese Flowering Crabapple First Bloom	191 Eastern Redbud First Bloom	192 Gypsy Moth Egg Hatch
197 Donald Wynman Crabapple First Bloom	205 Korean Spice Viburnum Full Bloom	206 Azalea Lacebug Egg Hatch	209 Spring Snow Crabapple Full Bloom

	FIRST BLOOM		FULL BLOOM	
	DATE	DEGREE DAY	DATE	DEGREE DAY
FORSYTHIA				
ROYAL STAR MAGNOLIA				
PJM RHODODENDRON				
KOREANSPICE VIBURNUM				
CORALBURST CRABAPPLE				
COMMON LILAC CHARLES JOLY				
VANHOUTTE SPIREA				
MISS KIM LILAC				
RED TWIG DOGWOOD				
RED PRINCE WEIGELA				
ARROWWOOD VIBURNUM				
GOLDFLAME SPIREA				
POTENTILLA ABBOTTSWOOD				
OAKLEAF HYDRANGEA				
CUTLEAF ELDERBERRY				
ROSE-OF-SHARON				

PHENOLOGY GARDEN PERENNIAL OBSERVATIONS

LOCATION _____

	FIRST BLOOM		2007 DATA	
	DATE	DEGREE DAY	DATE	DEGREE DAY
LENTEN ROSE				
SIBERIAN IRIS				
FALSE INDIGO				
LEOPARDBANE				
BEE BALM				
BEARDTONGUE				
JAPANESE ANEMONE				
BUTTERFLY WEEED				
DIANTHUS				
PURPLE CONEFLOWER				
GERANIUM				
DAYLILY				
GARDEN PHLOX				
MAY NIGHT SALVIA				
AUTUMN JOY SEDUM				

213 GDD Carolina Silverbell First Bloom	214 Flowering Quince Full Bloom	215 Birch Leafminer Adult Emergence	217 Coralburst Crabapple First Bloom
219 Elm Leafminer Adult Emergence	221 Chokeberry Full Bloom	224 Alder Leafminer Adult Emergence	227 Honey Locust Spider Mite Egg Hatch

NATIONAL PHENOLOGY
NETWORK

CHINESE LILAC

245
Ohio Buckeye
First Bloom

Eastern Redbud
Full Bloom

263
Flowering
Dogwood
First Bloom

Coral Burst
Crabapple
Full Bloom

234
Common Lilac
First Bloom

260
Hawthorne Leaf
Miner
Adult
Emergence

230
Honey Locust
Plant Bug
Egg Hatch

253
Hawthorne
Lacebug
Adult
Emergence

229 **GDD**
Wayfaring Tree
Viburnum
First Bloom

251
Donald Wyman
Crabapple
Full Bloom

Stage

Date

First Leaf
95% Leaf
First Bloom
Full Bloom
End Bloom

2007 Observation

First Leaf
95% Leaf
First Bloom
Full Bloom
End Bloom

2006 Observation

First Leaf
95% Leaf
First Bloom
Full Bloom
End Bloom

274 GDD Imported Willowleaf Beetle Adult Emergence	281 Red Chokeberry First Bloom	290 Wayfaring Tree Viburnum Full Bloom	303 Pine Needle Scale Egg Hatch First Generation
308 Cooley/Spruce Gall Adelgid Egg Hatch Eastern Spruce Gall Adelgid Egg Hatch	309 Vanhoutte Spirea First Bloom	315 Common Lilac Full Bloom	328 Winterking Hawthorne First Bloom

330 GDD Lilac Border Adult Emergence	351 Red Chokeberry Full Bloom	353 Doublefile Viburnum First Bloom	363 Pagoda Dogwood First Bloom
365 Red Weigela First Bloom	374 Ohio Buckeye Full Bloom	375 Holly Leafminer Adult Emergence	406 Vanhoutte Spirea Full Bloom

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NOTES

1923 GDD Euonymus Scale Egg Hatch	1978 Magnolia Scale Egg Hatch	2145 Banded Ash Clearwing Borer Adult Emergence	

417 GDD Beauty Bush First Bloom	422 Miss Kim Lilac First Bloom	435 White Fringe Tree First Bloom	444 Doublefile Viburnum First Bloom
445 Snowmound Spirea First Bloom	446 Red Prince Weigela First Bloom	467 Black Locust First Bloom	478 Common Ninebark First Bloom

479 GDD Pagoda Dogwood Full Bloom	497 Oyster Shell Scale Egg Hatch	498 Miss Kim Lilac Full Bloom	517 White Fringe Tree Full Bloom
534 Arrowwood Viburnum First Bloom	547 Bronze Birch Borer Adult Emergence	548 Black Locust Full Bloom Multiflora Rose First Bloom	565 Red Java Weigela Full Bloom

924 GDD Panicked Goldenrain Tree First Bloom	957 Azalea Bark Scale Egg Hatch	970 Japanese Beetle Adult Emergence	1047 Green Spirea Littleleaf Linden Full Bloom
1073 Southern Catapa Full Bloom	1158 Bottlebush Buckeye First Bloom	1251 Panicked Goldenrain Tree Full Bloom	1347 Rose of Sharon First Bloom

867 GDD Fall Webworm Egg Hatch	874 Minosa Webworm Egg Hatch	884 Fuzzy Deutzia Full Bloom	892 Winged Euonymus Scale Egg Hatch
894 Spuce Bud Scale Egg Hatch	899 Greenspire Littleleaf Linden First Bloom	913 Southern Catapa First Bloom	917 Bumald Spirea Full Bloom

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566 GDD Sweet Bay Magnolia First Bloom	568 Potato Leafminer Adult Emergence	571 Juniper Scale Egg Hatch	577 Black Vine Weevil First Adult Feeding
583 Snow Mound Spirea Full Bloom	592 Beauty Bush Full Bloom	593 Chinese Dogwood First Bloom	596 Common Ninebark Full Bloom

621 GDD Arrowwood Viburnum Full Bloom	622 Japanese Tree Lilac First Bloom	624 Bumald Spirea First Bloom	635 Washington Hawthorne First Bloom
643 Multiflora Rose Full Bloom	702 Greater Peach Tree Border Adult Emergence	727 Fuzzy Deutzia First Bloom Red Prince Weigela Full Bloom	731 Washington Hawthorne Full Bloom

748 GDD Calico Scale Egg Hatch	767 European Fruit Lecanium Scale Egg Hatch	783 Striped Pinescale Egg Hatch	808 Japanese Lilac Full Bloom
815 Rhododendron Borer Adult Emergence	830 Dogwood Borer Adult Emergence	835 Oakleaf Hydrangea First Bloom	851 Cottony Maple Scale Egg Hatch