



Historical Average Growing Degree-Days Accumulated Since March 1. (Wisconsin Agricultural Statistics Service)

State of Wisconsin Department of Agriculture Trade & Consumer Protection

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> Wet, cool weather continue to hamper planting efforts around the state. In parts of the state corn that is up looks yellow from cool, overcast weather. Large numbers of army worm moths have been reported in some southern counties and black cutworm infestation was reported in Dane Co. (see

> Forest tent caterpillars continue to chomp away in the northern part of the state. Caterpillars were seen as far south as Vernon Co. (see FOREST, SHADE TREE, ORNAMEN-

Growing degree	days from	n March	1 throug	h June 6	were:				
Site	2000N (ormal	Base	Base					
	GDD*1	GDD	GDD	48	40				
SOUTHWEST									
Dubuque, IA	591	724	638	629	1153				
Lone Rock	536	655	607	560	1081				
SOUTHCENTRAL									
Beloit	608	666	635	652	1191				
Madison	530	596	605	568	1074				
Sullivan	559	605	583	591	1129				
Juneau	540	604	538	583	1099				
SOUTHEAST									
Waukesha	497	570	570	530	1046				
Hartford	495	566	533	535	1034				
Racine	438	535	565	476	956				
Milwaukee	424	497	544	457	927				
EAST CENTRAL									
Appleton	448	517	475	475	942				
Green Bay	388	444	447	413	863				
CENTRAL									
Big Flats	487	563	521	497	978				
Hancock	483	553	519	496	975				
Port Edwards	442	472	512	448	905				
WEST CENTRAL									
LaCrosse	538	715	592	557	1048				
Eau Claire	482	632	518	501	965				
NORTHWEST									
Cumberland	444	533	477	458	906				
Bayfield	301	281	281	287	654				
NORTH CENTRAL									
Wausau	392	485	465	400	828				
Medford	392	475	451	403	828				
NORTHEAST									
Crivitz	366	443	393	378	814				
Crandon	376	425	375	376	787				
¹ Data from Bill E	Bland et. al.	Soil Sci	ence. Univ	. of Wisc	onsin-Madisor				

Bill Bland et. al., Soil Science, Univ. of Wisconsin-Madison. GDD (Growing Degree-Days) are synonymous with degree-days above modified base 50°F, with no low temperature below 50°F or above 86°F used in calculation. See map for Historical Average Growing Degree Days.

<u>CORN</u>

Black Cutworm – A severe **black cutworm** infestation was observed in a western Dane Co. corn field earlier this week. Significant amounts of leaf feeding and unusually high numbers of cut plants were detected. A rescue treatment was applied to control the infestation. The leaf feeding damage and defoliation observed was caused by 3rd instar larvae, while 4th and 5th instar larvae were responsible for cutting corn stems at or below the soil surface. Plants cut above the growing point may withstand the larval feeding injury, but those cut below the growing point will not.

Management decisions are based on the average larval instar, the number of days of feeding that remain, and the estimated cutting potential. The goal of scouting at this point in the season is to assess the prospective severity of future stand loss, and to decide whether treatment is justified. A post-emergence insecticidal treatment should be considered when 5% of corn plants are damaged *and* larvae are 6th instar or smaller. Scouting is generally not necessary after corn has reached the 5-leaf stage. Corn plants beyond this stage have grown large enough in diameter that they are no longer vulnerable to cutting.



Cutworm Leaf Feeding Injury

www.ipm.iastate.edu/ipm/icm/2000/5-8-200/ileaffeed.html

European Corn Borer – At this time last year DATCP pest surveyors were just beginning to find **European corn borer** egg masses in the southern half of the state. A few adults were observed in grassy areas bordering corn fields, but no egg masses were detected during this week's survey efforts. Most regions of the state have surpassed 450 DD (base 50), the point at which egg laying is expected to begin. Female moths are attracted to the tallest or earliest planted corn for egg laying. The earliest egg masses of the year are often concentrated along field edges in the tallest fields in a given area. Shothole feeding and windowpaning are indicators of 1st instar larval activity. When this type of damage is observed, unroll and examine damaged leaves for live larvae. Newly emerged larvae are white with a black head, but are very tiny and difficult to see. They often feed deep inside the whorl, and are not capable of chewing completely through the corn leaf. **European corn borers** rarely feed on plants below 17-21 inches Tall. Deciding whether to treat corn in the whorl stage is based on the percentage of infested plants and the number of larvae per infested plant.



European Corn Borer Shothole Feeding

http://www.ipm.iastate.edu/ipm/icm/1997/6-30-1997/ iecbshothole.html

FORAGES



Alfalfa Blotch Leafminer-Characteristic comma-shaped leaf mines were readily found in Kenosha Co. alfalfa fields. Counts ranged from 12-23 mines per 50 stems. Alfalfa blotch leafminer leaf mines can occupy anywhere from 20-80% of the total leaflet surface. It is not

http://datcp.state.wi.us/static/pestbull

clear whether leafmining results in yield loss.

http://ipmworld.umn.edu/chapters/venette.htm

Alfalfa Plant Bug – Adult and nymphs were observed in regrowth alfalfa fields. Sweep net counts ranged from 0.3 to 1.5 adults and nymphs per sweep in fields surveyed. No fields surveyed had populations exceeding the economic threshold for **plant bugs**.

Meadow Spittlebug – Adults were detected in regrowth alfalfa in Dane, Grant and Iowa Cos. Adults are brown, wedge-shaped and mottled with gray and black markings. Most adults emerge in mid-June, and remain active throughout the summer. Egg laying doesn't occur until September and only one generation of **meadow spittlebug** occurs each season.

VEGETABLES

Potato seed rot and Rhizoctonia root rot – A reporter from the central sands area detected **potato seed rot** at end of fields where there were compactions and in low lying areas. Cool wet soils at planting followed by high temperatures favor seed piece decay and **seed rot**. **Potato seed rot** is caused by *Erwinia caratovora* var. *caratovora* and *E. caratovora* var. *atroseptica*. **Rhizoctonia root rot** was also reported in several fields in the central sands area. Cold and wet soils have slowed plant emergence. Even fungicide treated seed pieces didn't escape the infection from **rhizoctonia**. Under such condition **rhizoctonia root rot** may cause poor and uneven stands and subsequent yield reduction.

Downy mildew - Downy mildew was observed on canning peas during the past week in south central WI. Affected leaves exhibited yellow blotches and distorted growth. New infections appeared as tiny necrotic lesions on the leaves. Loose mats of tan to gray mycelium was observed on the undersides of affected leaves. The **downy mildew** fungus was sporulating profusely and further spread is likely if wet and cool conditions prevail. This is not a common problem, but growers should check their fields for symptoms and give your extension agent a call if symptoms are observed. **(UWEX)**

Late blight - Conditions continue to be favorable for initiation of late blight problems although no late blight has been reported anywhere in the state as of Wednesday. We've already surpassed the treatment threshold of 18 severity values at Antigo and Plover and are approaching threshold at Grand Marsh for the earliest emerging potatoes. Severity values appear to be accumulating more slowly at Hancock. We are double checking our data at the Hancock site, but it appears that the duration of high relative humidity periods is somewhat less at Hancock than the other locations. Given the continued damp and cold

weather, the reported presence of volunteer potatoes in fields of corn, beans, peas, carrots, etc., and potato plants touching in the row and soon to touch between the rows, it seems prudent to begin spraying with fungicide. It is important to establish the first fungicide residues on the lower plant canopy and to protect this foliage from early season infection. The risk is simply too great to delay the start of the spray season much longer. There is a long list of available fungicides that are effective for late blight control. These include mancozeb, metiram, chlorothalonil, cymoxanil (Curzate), dimethomorph (Acrobat), propamocarb hydrochloride (Previcur) as well as TPTH and fixed coppers. Gavel is also registered for late blight control, but supplies will likely not be available until late in June. Coverage is key and now is a good time to recalibrate your sprayer or to visit with your custom applicator to insure that the entire field will be treated with the best possible coverage for the duration of the season. (UWEX)

<u>APIARY</u>

Apiary program – Beekeepers and "beekeepers-to-bee" mark your calendars! The 2001 Summer Meeting of the Wisconsin Honey Producers Association is on Saturday, July 21 in Berlin at the K of C Hall.

Mad bee disease? - The French and Canadians contend that imidacloprid, the chemical in Gaucho®, Admire® and many other insecticides is causing devastating losses of honey bees in their countries. It is claimed that at extremely low dose,s imidacloprid affects the bee's sense of direction. They become disoriented and fail to return to the hive. At higher exposures, the chemical most likely kills bee in the field. The chemical is systemic and may be present in nectar and pollen of blooming plants that were treated. The residual imidacloprid picked up from the soil by subsequent crops or weeds may affect pollinating insects that visit those flowers. No such effects have been documented in Wisconsin so far. Beekeepers are encouraged to contact the Apiary Program at (608) 224-4575, if they suspect any problems with imidacloprid. The chemical is currently labeled for a variety of crops including potatoes. It is proposed to be labeled for use on blueberries, cranberries, beans, corn and citrus.

The Apiary Inspectors of America organization has contacted EPA and submitted comments asking to reexamine the research demonstrating the effect of this insecticide on pollinating insects.

GINSENG

Plant disease diagnostics clinic – Dr. Brian Hudelson reports three year old plants with **phytophthora root rot** and two year olds with **rusty root**. Seedlings were submitted with **tip-over** and **mystery seedling disease (MSD).** Another seedling sample showed **pythium** infections of the root. **Ginseng research garden** – Dr. Michael Drilias reports herbicide study plots are showing that experimental products applied to three year old plants early in the season when ginseng is actively growing may affect ginseng foliar growth negatively.

Workshop announcement - "Growing Opportunities in Native Plants" workshop at the Yellow Creek Botanical Institute, Asheville, North Carolina will be held on June 22 and 23. Advanced registration of \$35 for both days or \$25 for one day will be accepted until June 15. For registration information, call Rob Jordan at 828-479-4733.

FOREST, SHADE TREE, ORNAMENTALS AND TURF

Dothiora taxicola - This is a fungal disease that is causing needle and shoot blights on Colorado blue spruce, black hills spruce and white spruce. This fungus, provisionally identified as Dothiora taxicola, was reported in the literature to only affect yews. Other than yews, not much is known of its host range. Dothiora taxicola was first detected in Wisconsin in 1999 from a nursery in Calumet Co. Since then it has been detected at several nursery growers and dealersand Christmas tree growers in Brown, Marathon, Monroe, Vernon, Sawyer, Jefferson and Oneida Cos. The fruiting bodies are generally seen on twigs and branches. Based on our observation in the DATCP's Plant Industry Lab., the fruiting bodies are mature in May and June. With the right conditions these ascospores may cause infection. Besides its presence in nurseries and Christmas tree fields Dothiora taxicola is also of major concern if it becomes established on wild conifers in Wisconsin. Its impact could be significant on the native white spruce plantations.

Eastern Tent Caterpillar - Caterpillars were being found on many trees and shrubs at a nursery in Fond du Lac Co. and at a cut flower grower in Vernon Co. A DNR forester in the northwest part of the state has had some calls coming in from concerned homeowners. (**DNR in part**)

Imported willow leaf beetle - Larvae were feeding and some were beginning to pupate at nurseries in Fond du Lac, Sauk and Vernon Cos.

Spruce needle miner - Light to moderate numbers of larvae were found on spruce at nurseries in Fond du Lac, St. Croix and Sauk Cos.

Pine spittlebug - Light to moderate numbers of spittle masses were found on Scotch and Austrian pine at a nursery in Waukesha Co.

Fletcher scale - Light to heavy infestations were found on yews at nursery dealers in Barron, Eau Claire, Juneau and St. Croix Cos.

Ash plant bug - Light amounts of damage were recorded from green and white ash at nurseries in Fond du Lac and Vernon Cos.

Hawthorn leaf miner - Mines were nearly complete and damage was light to moderate on hawthorns at a nurseries in Fond du Lac and Waukesha Cos.

Spiny witch-hazel aphid - River birch at nurseries in Fond du Lac and Waukesha Cos. had light to moderate numbers of leaves affected by this insect.

European pine sawfly - Small amounts of damage were noticed on Scotch pine at a nursery in Waukesha Co.

Cooley spruce gall adelgid - Moderate numbers of adelgids were observed on the under surface of douglas-fir needles at a nursery in Waukesha Co.

Honeylocust plant bug - Small numbers of nymphs were knocked from the branches of honeylocust at a nursery in Fond du Lac Co.

Euonymus caterpillar - Large numbers of tents were seen on *Euonymus europaeus* at a cut flower grower in Vernon Co. In a Fond du Lac Co. nursery a few tents were seen on *Euonymus alatus*.

Viburnum shoot tip borer - Moderate damage was evident on *Viburnum lentago* at a nursery in Fond du Lac Co.

Pistol and cigar casebearers - Small numbers of these unusual caterpillars were found on crabapple at a nursery in Fond du Lac Co.

Ash rust - Small amounts of this rust were found on green and white ash at a nursery in Fond du Lac Co. The alternate host is cordgrass (*Spartina* spp.).

Venturia shoot blight - Light to heavy amounts of damage were observed on aspen at nursery dealers in Barron and Juneau Cos. and at a nursery in Fond du Lac.

Anthracnose - The most commonly affected trees observed with **anthracnose** at nurseries in Fond du Lac and Waukesha Cos. were oak, ash and maple.

Black spot - Light to heavy amounts of leaf spotting were recorded from nursery dealers in Barron, Dunn, Eau Claire, Juneau, Milwaukee, Sheboygan and Waukesha Cos.

Dothistroma needle blight - Moderate amounts of browning were noted on Austrian pine at a nursery in Waukesha Co.

Cedar-apple rust - Crabapples at nursery dealers in Juneau and Sauk Co. had light amounts of **rust** on their leaves.

Septoria leaf spot - Light to moderate amounts of leaf spots were showing up on spirea and dogwood at nursery dealers in Juneau and Sauk Cos. and at a nursery in Fond du Lac Co.

Rhizosphaera needle cast - White spruce at a nursery in Waukesha Co. had moderate amounts of this disease.

Rhizoctonia canker - Many crabapples and maples were killed by this fungus at a nursery in Jackson Co. Normally associated with soil borne disease this fungus was recovered from six different trees.

Bacterial blight and leaf spot - Nursery dealers in Dunn, Pierce, Polk and Washburn Cos. had light to moderate amounts of damage on lilacs in their sales area.

Botrytis blight - Many peonies with flower buds ready to open were being attacked by this fungal pathogen at a cut flower grower in Vernon Co. It was also noticed on various perennials at nursery dealers in Barron and Sheboygan Cos.

Rose mosaic virus complex - 'Nearly wild rose' at nursery dealers in Polk, St. Croix and Washburn Cos. had symptoms of this incurable disease.

Phomopsis canker - A few Russian olive trees at a nursery in Fond du Lac Co. had numerous cankers caused by this fungus.

Leaf blight of honeysuckle - This fungus was showing symptoms on Arnold's red honeysuckle at a cut flower grower in Vernon Co.

Leaf blotch of horsechestnut - Red horsechestnut showed beginning symptoms of this fungal disease at a nursery in Fond du Lac Co.

Verticillium wilt - Sugar and amur maples had moderate amounts of damage at a nursery in Fond du Lac Co.

Hail damage - Various fruit and shade trees showed heavy amounts of damage at a nursery dealer in Pierce Co. In Vernon Co. a cut flower grower had heavy amounts of damage on *Baptisia* plants. Other shrubs had light amounts of damage.

Forest Tent Caterpillar (FTC) - Many calls about FTC defoliation and reports of tons of caterpillars came in from Ashland, Clark, Marathon, Portage, Vilas, and Wood Cos. A scattered heavy defoliation was observed on mainly aspen and oak throughout northern Wisconsin, especially in Ashland, Bayfield, Iron, Langlade, Lincoln, Oneida, Price, and Vilas Cos. Larvae were observed feeding on dogwood at a cut flower grower in Vernon Co. The shrubs were adjacent to an oak woods. (**DNR in part**)

Jack Pine Budworm - There is some scattered light defoliation of jack pine in Adams Co. Juneau Co. may have light to moderate defoliation of jack pine. (**DNR**)

STATE/FEDERALPROGRAMS

Gypsy moth program - Trappers have set approximately 5,390 (16%) of the expected 33,412 trap total throughout the state. Pepin County is complete and counties that are 50% complete or better are: Crawford(51%); Florence (59%); Green (59%); and Kenosha (75%). Trap setting will continue for the next 4 weeks.

A majority of the traps will be set along right-of-ways but sometimes it is necessary to go on private property. Trappers are instructed to get landowner permission before setting the trap. However, if the landowner is not available, the trapper will set the trap and leave a "Notice of Gypsy Moth Survey" in the door to let the land owner know a trap has been set on their property. If the landowner objects to having the trap on their property, they can call 800-642-MOTH to request that the trap be removed. Landowner cooperation is appreciated when traps are set on or near their property.

Cooperator traps have been sent out. Those that have requested traps should receive them soon. We are running short of traps and lure so any new requests maybe put off until next year.

Gypsy moth treatment program - Btk spraying for **gypsy moth** has been completed for this year. Approximately 55,000 acres were treated twice with Btk. Pheromone flake applications (~62,000 acres) will occur at the end of June.

For more information on the **gypsy moth** program, please call our hotline at 1-800-642-MOTH.

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County	_			~ .	
City	Date	STLM	RBLR	СМ	OBLR
Grant Co.					
Lancaster	5/20-6/6	0	3		
Crawford Co.					
Gays Mills-E2	5/31-6/6	18	3	0	0
Richland Co.					
Hill Point	5/30-6/4	2	0	0	0
Richland Center-E	5/31-6/6	23	6	0	0
Richland Center-W	V 5/31-6/6	94	0	0	0
Iowa Co.					
Dodgeville*	5/24-5/31	0	0	0	9
Dane Co.					
Deerfield	5/26-6/4	0	0	0	0
Juneau Co.					
Mauston	5/21-5/28	18	3	0	0
	5/28-6/4	10	1	0	
Trempealeau Co.					
Galesville	5/22-5/29	36	0	0	0
	5/29-6/4	20	0	0	0
Jackson Co.					
Hixton	5/23-5/29	32	2	3	
Dunn Co.					
Menomonie	5/30-6/5	21	3	0	0
Pierce Co.					
Beldenville	5/26-6/2	2	3	0	0
Spring Valley	5/29-6/5	21	12	0	
Fond du Lac Co					
Rosendale	5/28-6/4	4	1	0	
Malone	5/2.6-6/4	0	0	0	0
Marquette, Co	0,20 0, 1	0	0	Ŭ	Ŭ
Montello*	5/20-5/27	24	17	1	1
Monterio	5/27-6/3	8	6	1	1
Brown Co	3/2/ 0/3	0	0		-
Oneida	5/28-6/4	12	0	0	0
Ozaukee Co	5/20 0/4	12	0	0	0
Meguon	5/29-6/5	0	0	0.1	
Racine Co	5/27 0/5	U	0	0.1	
Rochester*	5/31-6/6	0	0	0	0
* indicates NFW	COOPERATO		0	0	0
marcates INDW	COULMAIC				

Apple Insect Trapping Results

http://datcp

The Soybean Health Home Page, <u>http://</u> <u>www.plantpath.wisc.edu/soyhealth/index.htm</u> An exceptional page from UW Extension. Plant health bulletins, current research information, variety trial results and lots of good links. A must-visit for soybean growers.





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