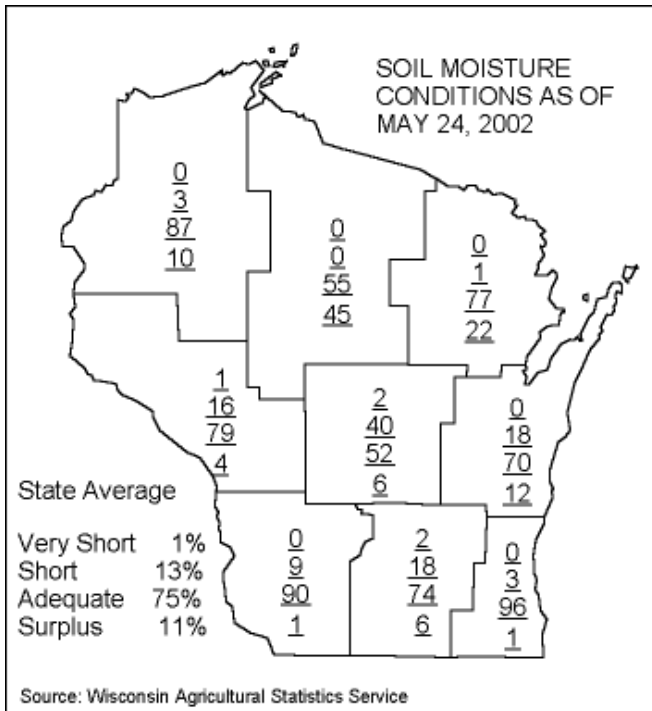


# Cooperative Pest Survey Bulletin

## Agricultural Resource Management

Bureau of Plant Industry

WI Department of Agriculture, Trade & Consumer Protection, PO Box 8911, Madison, WI 53708-8911 Phone: 1-800-462-2803 Fax: 608-224-4656 Web: Wisconsin.gov

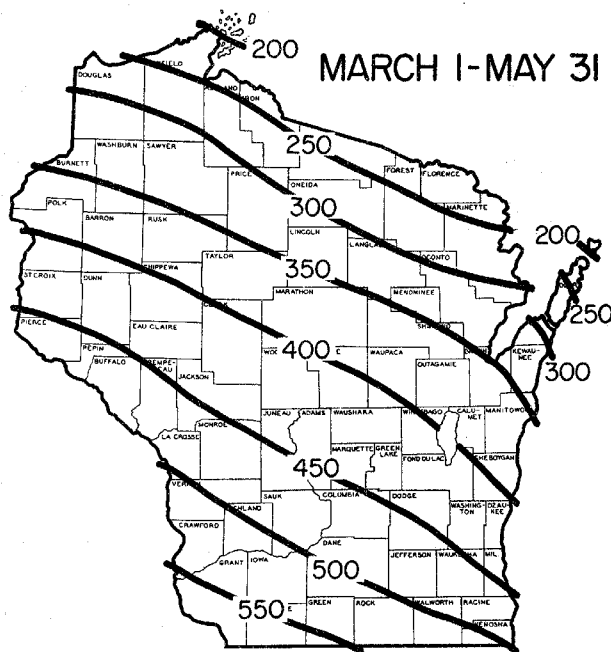


### WEATHER AND PESTS

Farmers and growers weary of cold, wet conditions got a reprieve this week with an average of 6.5 days suitable for fieldwork. Early planted corn is taking several weeks to emerge. Apple trees were reported still blooming in Shawano and Oconto Cos.

Growing degree days from March 1 through May 29 were:

Site	GDD*	2001 GDD	Normal GDD	Base 48	Base 40
<b>SOUTHWEST</b>					
Dubuque, IA	426	553	560	432	853
Lone Rock	395	500	520	386	791
<b>SOUTHCENTRAL</b>					
Beloit	401	569	545	381	823
Madison	368	494	500	363	756
Sullivan	376	523	490	359	780
Juneau	357	504	445	359	736
<b>SOUTHEAST</b>					
Waukesha	348	468	450	322	727
Hartford	335	464	440	331	697
Racine	322	415	475	297	671
Milwaukee	306	400	450	302	647
<b>EAST CENTRAL</b>					
Appleton	277	413	390	276	603
Green Bay	224	356	350	223	524
<b>CENTRAL</b>					
Big Flats	352	447	440	338	702
Hancock	339	445	435	327	684
Port Edwards	307	406	420	292	629
<b>WEST CENTRAL</b>					
LaCrosse	406	494	618	388	794
Eau Claire	320	435	425	313	653
<b>NORTHWEST</b>					
Cumberland	249	393	400	234	531
Bayfield	155	269	200	137	360
<b>NORTH CENTRAL</b>					
Wausau	248	358	375	240	537
Medford	218	355	350	207	485
<b>NORTHEAST</b>					
Crivitz	194	335	325	186	461
Crandon	192	339	310	178	432



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

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.

## ALERTS

**European corn borer** – The first moths of the season were captured at a black light trap near Mazomanie in western Dane Co.. See **CORN** for more details.

**Black cutworm** – Seedling corn is susceptible to cutting at this time. Growers are encouraged to scout fields frequently through the 4<sup>th</sup> leaf stage.

**Potato leafhopper** – Migrants have arrived. Currently counts are low, but populations can be expected to increase rapidly with the warm temperatures ahead. See **FORAGE** section for scouting procedures and economic thresholds.

**Bean Leaf Beetle** – Counts as high as three **bean leaf beetles** per foot of unifoliate soybean row were reported in Dane Co., with populations of the beetle also causing damage in newly-emerged soybeans in Rock Co. Surveyors sweeping for corn flea beetles in field margins across the southern part of the state also report finding **bean leaf beetles** in their nets regularly, a change from previous years. Despite this apparent increase in beetle numbers, control may not be warranted. Economic threshold information from the University of Illinois indicates that beetle counts of 16 adults per row foot on early seedlings and 39 adults per row foot of V2 beans are required for economic injury.

Bean leaf beetle



image courtesy of Iowa State Entomology Image Gallery  
<http://www.ent.iastate.edu/imagegal/coleoptera/beanlb/>

In addition to direct feeding damage, the bean leaf beetle also vectors **Bean Pod Mottle Virus (BPMV)**. Control measures aimed at the vector have not been shown to reduce the incidence of the virus, as the beetles may move into fields over a long period of time. More information on the **bean leaf beetle**, and on **BPMV** is available from the

UW Soybean Health Home Page at <http://www.plantpath.wisc.edu/soyhealth/BLBEETLE.HTMdsen1254.html>  
 (Information from UWEX in part)

**Online pesticide information**- The Wisconsin Department of Agriculture, Trade and Consumer Protection has online information about all pesticide products registered for use in Wisconsin. The data may be searched by Company Name, Product Name, Pest, Pesticide Type, Ingredient, Site, Formulation, or by multiple criteria. One may also search for restricted use pesticides (RUP) but only by company name. Also available is information on licensed application businesses, dealers of restricted-use pesticides, and individual applicators (private and commercial) who are certified to apply pesticides. For application businesses and dealers, one may narrow the search by entering a city, county, or zip code. For individual applicators, one may additionally search for all applicators certified in a specific pest control category. The URL is <http://www.kellysolutions.com/wi/>

## CORN

**European corn borer** – Two moths were captured in a blacklight trap near Mazomanie, in Dane Co. earlier this week.

Typically the first moths of the first flight can be expected at 374 DD (base 50°F), which has been exceeded in the southwest and throughout much of the southcentral region. The first eggs are generally laid once 450 DD have accumulated. Based on fall abundance survey results, where a statewide average of 40 larvae per 100 plants was documented, we expect this first flight to be moderate throughout much of the state. Favorable weather conditions at the time when the larvae of this first flight are hatching can lead to problems, especially in early-planted corn fields. Temperatures and moisture conditions in upcoming weeks will be the ultimate factors in determining any impact of the first generation of larvae.

**Armyworm** – Blacklight trap catches were low again this week. Larvae are active in grassy field margins and small grains. The abundant migratory populations documented earlier this month have the potential to give rise to numerous larvae. In general, the feeding damage caused by this first generation of larvae is insignificant, but more larvae mean more moths, which can ultimately lead to heavy second generation larval damage in July. Growers should continue to follow blacklight trap counts. A majority of our blacklight cooperators are just getting their traps out this week, so more counts will be available from stations throughout the state in upcoming weeks.

**Black cutworm** – Cutting of corn plants by **black cutworm** should be anticipated once 300 DD (base 50°F) have accumulated following a significant flight of moths. Our

largest flight in the southwest counties occurred during May 1-8, when degree days were between 170-229 at Madison. 300 DD, in addition to 170-229 means cutting can be expected to occur by 470-529 DD in the Madison area (with normal temperatures). However, growers should be cautioned that this degree day forecast is only a loose estimate based on the date of a concentrated capture of **black cutworm** moths, which was not actually pinpointed to a particular evening this spring. In our network of pheromone traps placed throughout the southwest corner of the state, no concentrated capture of 8-9 moths in a 2-night period was documented. The heaviest captures of 5-6 moths in two consecutive evenings occurred between May 1 and 8, which is the count being used to make this forecast. In other years, 1995 for instance, cutting was estimated to occur at 414 DD in the Madison area. Insect and plant development has been unusually slow this season, but corn is emerging now in Dane Co. and throughout the south. Corn is susceptible to **black cutworm** attack shortly after emergence. Growers should be scouting fields frequently through the 4<sup>th</sup> leaf stage, checking 50 consecutive plants for leaf feeding, cutting, and wilting. When cut seedlings are observed, check soil around the base of the plant for larvae. The dark gray, greasy-looking larvae are nocturnal feeders. The first generation, which is active into June, often causes the most significant damage.

**Corn flea beetle** – Adults were detected at a number of sites in Dane Co.. Based on the cool spring temperatures we experienced until just recently, it is likely that these are **overwintered** adults rather than individuals that migrated into the state from more southerly locations. The presence of **corn flea beetles** in seedling corn can be especially problematic. In addition to transmitting **Stewart's wilt** of corn, a disease of export significance, **corn flea beetles** also physically damage corn foliage by chewing long lesions in the leaves. At this time it's not entirely clear how great a risk the presence of **corn flea beetles** pose for growers, but these findings indicate we could see a return of **Stewart's wilt** this summer, especially in the southeastern region of Wisconsin.

#### FORAGES



**Corn flea beetle**

Photo courtesy of Marlin Rice  
Iowa State University Department of Entomology



© Penn State College of Agricultural Sciences  
**Potato leaf hopper adult and nymph**

**Potato leafhopper (PLH)** – Migrants have arrived. Adults were observed in fields of 14-16" alfalfa in Dane and Green Cos., where counts ranged from 0.2- 0.5 **leafhoppers** per sweep. In the south most fields examined during routine survey work were cut last week or earlier this week, which may temporarily reduce populations, but growers will need to monitor alfalfa stubble carefully. **Potato leafhopper** feeding on regrowth can cause stunting and delay plant development.

Because **potato leafhopper** is a migratory insect pest, damage potential is based on weather patterns, and isn't easy to predict from year to year. Damage is often first visible along field margins, and problems are most severe when conditions are dry. Fortunately we've had some rainy evenings along with the increase in temperatures. Additional photos of leafhoppers can be found at [http://www.ento.psu.edu/extension/factsheets/potato\\_leafhopper\\_veg.htm](http://www.ento.psu.edu/extension/factsheets/potato_leafhopper_veg.htm)

**Potato leafhoppers** damage alfalfa by removing fluids from the tissue and injecting toxins into the plant. **Potato leafhopper** injury, known as **hopperburn**, is characterized by v-shaped yellowing on leaflet tips. Damage is not immediately evident, and once **hopperburn** does appear, losses have already occurred. Consequently, it is important to diagnose **potato leafhopper** problems early in the season.

Sampling is critical following the first cutting. Begin sampling for **potato leafhopper** now. Using a 15" sweep net, take 20 sweeps in 5 separate areas of the field. Calculate the *average number of leafhoppers per sweep*. Use the following table to decide whether treatment is warranted. When sampling, be sure to get a representative sample, and avoid wet fields and field edges. In most cases, populations can be reduced by cutting early. Treatment is not necessary for growers within 7 days of their normal cutting

Height of Alfalfa (inches)	Ave. # PLH per Sweep
<3	0.2 adult
3-6	0.5 adults
6-12	1.0 adult or nymphs
12-14	2.0 adults or nymphs

schedule.

**Alfalfa weevil** – Moderate numbers of larvae were swept in Dane Co. alfalfa, ranging from 12-17 per 25 sweeps. The fields surveyed had anywhere from 5-15% tip feeding, but overall, damage appeared light. First and second instar larvae were observed in 12-14” and 14-16” Marquette and Adams Co. alfalfa fields.

**Pea aphid** – Both adults and nymphs were observed in Dane and Green Co. alfalfa fields, but counts remain relatively low. With the warmer temperatures ahead, populations can be expected to increase rapidly. All aphids detected in the southcentral counties surveyed this week were wingless.

**Meadow spittlebug** – As many as 160 nymphs per 25 sweeps were observed in a few Dane, Marquette, and Green Co. alfalfa fields this week. **Meadow spittlebugs** are commonly found in alfalfa and they rarely cause economic damage. The adults, which appear later in summer, do not damage alfalfa. Control can be considered when an average of 1 nymph/stem is observed. **(UWEX in part)**

**VEGETABLES**

**Asparagus beetle** - First adults were observed in Dane Co. on May 27. Mating and egg laying were occurring, and lady beetle adults were already preying on the eggs.



**APIARY**

**APIARY PROGRAM** – Cold conditions during the previous week may have caused an interruption in brood rearing in honey bee colonies. The queen stops laying eggs in response to low temperatures which results in an absence of eggs for a short while. To the unsuspecting beekeeper this colony may appear queenless but subsequent inspection a week later usually proves the queen is alive because eggs are now present.



**HEARTLAND APICULTURE SOCIETY**- Their first conference will be held on July 11-13, 2002 at Goshen College, in Goshen, Indiana . The program includes presentations, demonstrations and talks on over 40 topics for beginning and experienced beekeepers. A few of these topics are: Seasonal management, new ideas in varroa mite control, honey basics, making increases with nucs and divides, queen rearing for beginners, essentials of using bees for crop pollination. For more information, please check <http://www.heartlandbees.com/> or call Tom Webster at (502) 597-6351.

**HUMANS AND ANIMALS**

**Carpenter ants**- These structural pests are beginning to swarm in Sauk and Dane Cos. **(UWEX)**

**Wood and deer tick**- These common parasites were reported in Price Co. **(UWEX)**

**Horse flies**- These pests are showing up in woods areas in Marquette Co. **(UWEX)**

**Black flies and mosquitoes-** Increased populations were noted in Price Co. (UWEX)

#### FOREST, SHADE TREE, ORNAMENTALS AND TURF

**Aphids** – Light to moderate numbers were found on spirea, apple and peppers at nursery dealers in Fond du Lac, Grant, Jefferson and Sheboygan Cos.

**Azalea sawfly-** Larvae were found feeding in Dane Co. (UWEX)

**Bagworm** – A few bags were found on columnar juniper at a nursery dealer in Ozaukee Co.

**Earwigs-** These household pests were found defoliating perennials in Dane Co. (UWEX)

**Eastern tent caterpillars-** These common caterpillars were 3/4 inch to one inch in Marquette Co. (UWEX)

**Fletcher scale** – Small numbers of scales were found on densiformis yews and little giant arborvitae at nursery dealers in Columbia, Fond du Lac and Grant Cos.

**Forest tent caterpillar-** Surprisingly, no reports of forest tent caterpillar problems have been noted yet in Price or Marathon Cos. (UWEX)

**Spittlebug** – Potentilla at a nursery dealer in Grant Co. had light numbers of spittle masses.

**Thrips** – Light to heavy amounts of damage were seen on various annuals at nursery dealers in Calumet, Jefferson, Juneau, Sheboygan, and Waushara Cos.

**Anthracnose** – Daylilies at several nursery dealers in Grant Co. had light amounts of this disease. No **daylily rust** was observed.

**Black spot** – Light to moderate amounts of this rose disease were found mostly on flower carpet roses at nursery dealers in Calumet, Columbia, Dodge, Fond du Lac, Grant and Ozaukee Cos.

**Botrytis** – ‘Tis the year for this disease. Light to severe amounts were found on various bedding plants and hanging baskets at nursery dealers in Calumet, Fond du Lac, Grant, Jefferson, Juneau, Ozaukee and Sheboygan Cos.

**Cedar-apple rust** – Junipers at nursery dealers in Grant, Ozaukee and Sheboygan Cos. had moderate amounts of small galls forming.

**Cercospora leaf spot** – Moderate amounts were found on privet at a nursery dealer in Calumet Co.

**Golden twig canker** – Trace amounts of this disease of pagoda dogwood were found at a nursery dealer in Marathon Co. At a Door Co. nursery dealer, numbers of cankers was heavy.

**Impatiens necrotic spot virus** – Heavy amounts of this virus were found on impatiens, New Guinea impatiens, coleus, begonia and verbena at a nursery dealer in Sheboygan Co.

**Peach leaf curl** – Red haven peaches at a nursery dealer in Fond du Lac Co. were severely infected with this fungal pathogen.

**Red spot** – This fungal disease was observed on peonies in light to moderate amounts at nursery dealers in Sheboygan and Washington Cos.

**Rose mosaic virus complex** – Small numbers of infected roses were found at nursery dealers in Calumet, Columbia, Jefferson, Ozaukee, Vilas, Waushara and Washington Cos. Infected roses were ordered destroyed.

**Rust** – Hollyhocks at a nursery dealer in Calumet Co. had moderate amounts of this disease. **Rust** was also found on some Van Houtte spirea at a nursery dealer in Grant Co.

**Septoria leaf spot** – Light amounts of leaf spotting was seen on neon flash spirea and variegated dogwood at nursery dealers in Calumet, Fond du Lac, Grant, Sheboygan and Washington Cos.

**“Mystery fungus on spruce”** – This as yet unnamed malady was seen on Colorado spruce at nursery dealers in Calumet, Door, Fond du Lac, Ozaukee and Sheboygan Cos.

#### STATE/ FEDERAL PROGRAMS

**Gypsy moth Btk Spray-** The Wisconsin Cooperative Gypsy Moth Program is continuing treatments this week and next. On Tuesday, May 29th 8,547 acres were sprayed in Columbia Co. The Wood Co. sites will be treated on Friday, May 31st and the second application will take place the following week. Crivitz area suppression sites will be treated last during the week of June 3 to June 7th.

**Gypsy moth trapping-** Trappers have started trapping throughout the state. We will be setting approximately 27,000 traps statewide. Trap setting will take 4-5 weeks to complete. Trappers wear an orange vest, carry a picture I.D. card, and have vehicle placards in the window or dashboard of their vehicle.

Most traps are set on the right-of-way but sometimes it is necessary to go on private property. Trappers are instructed

to get permission to set the trap but if no one is home, they leave a "NOTICE OF GYPSY MOTH SURVEY" and set the trap. If landowners have any questions or want the trap removed, they can call the GYPSY MOTH HOTLINE. We appreciate landowner permission to set traps on private property.

Apple Development					
Orchard	green tip	latest report	accumulated GDD(base32)*	last week's GDD(base32)*	development stage
Racine	4/15	5/29	891	658	fruit set
Prairie du Chien	4/15	5/28	916	740	fruit set
Fond du Lac	4/15	5/28	880	672	fruit set
Sheboygan	4/15	5/28	690	548	ppf
Pierce	4/17	5/21	468	468	nr
Door	4/20	5/28	482	348	nr
*from Mac green tip					

Trap reports will start next week.

For more information on the GYPSY MOTH PROGRAM, please call our hotline at 1-800-642-MOTH or go to our website at <http://datcp.state.wi.us/> and type "gypsy moth" in the search box.

**FRUIT**

**Codling moth** – Emergence is on the rise at many southern sites and moth activity is likely to increase over the next few weeks. Peak activity can be expected around 500 DD (base 50°F). Egg hatch generally begins following the accumulation of approximately 491 DD.

**Plum curculio** - No adults were observed as of May 29 in Dane Co. They usually attack apple fruit with a bang as soon as the fruits begin developing, probably during the coming week in northern Dane Co.

**Apple Scab** — Data from the apple scab cooperator network indicates that one orchard (near Prairie du Chien in Crawford Co.) has accumulated enough growing degree days to mature their overwintering crop of ascospores, and two more (near Rochester, Racine Co. and near Fond du Lac, Fond du Lac Co.) will reach that point today. All three will be finished with the primary scab season after the next infection period. Reports from a number of orchards indicate that this scab season has been a light one. Several growers are still waiting to assess the damage from last week's freeze.

Updated information from the scab modeling network is available at <http://www.soils.wisc.edu/cgi-bin/aws/scabsummary>

**Cooperator Comments:**

**Dane Co.** –

**Deerfield** - Last year petal fall 5-8-01; this year petal fall 5-25-02.

**DeForest** – A codling moth adult was observed on Cortland foliage on May 29.

**Ozaukee Co.** – Farm experienced freezing temperatures 5 nights in a row 5/17-5/21, requiring irrigation for frost protection on strawberries each night. On May 20, lowest temps recorded on farm were 23.5-27.5°F, depending on locations in orchard. Lots of damage. Some varieties may be OK, some not-hard to tell yet. Sweet cherry crop basically non-existent. Extremely extended bloom periods on apples. Bees still working on the remaining blossoms.

**Pierce Co.** – We are at full flowering now in orchard. We're finally getting some heat and moderate rains that aren't coming as torrential downpours. It's been a strange year weather wise, but finally the weather seems to be matching what the calendar would dictate.

**Richland Co.** – Very small leafrollers active.

**BLACKLIGHT TRAPPING RESULTS**

through May 29

Site	Euro. Corn Borer	Army- Worm	Black Cutworm	Vari. Cutworm	Spot. Cutworm	Corn Earworm
<b>South Central</b>						
Arlington	0	11	1	0	0	0
Mazomanie	2	13	1	0	0	0
Janesville		49				
<b>East Central</b>						
Manitowoc		6	2			
<b>Central</b>						
Marshfield	0	15	1	0	0	0
<b>Northwest</b>						
Chippewa	0	0	0	0	0	0

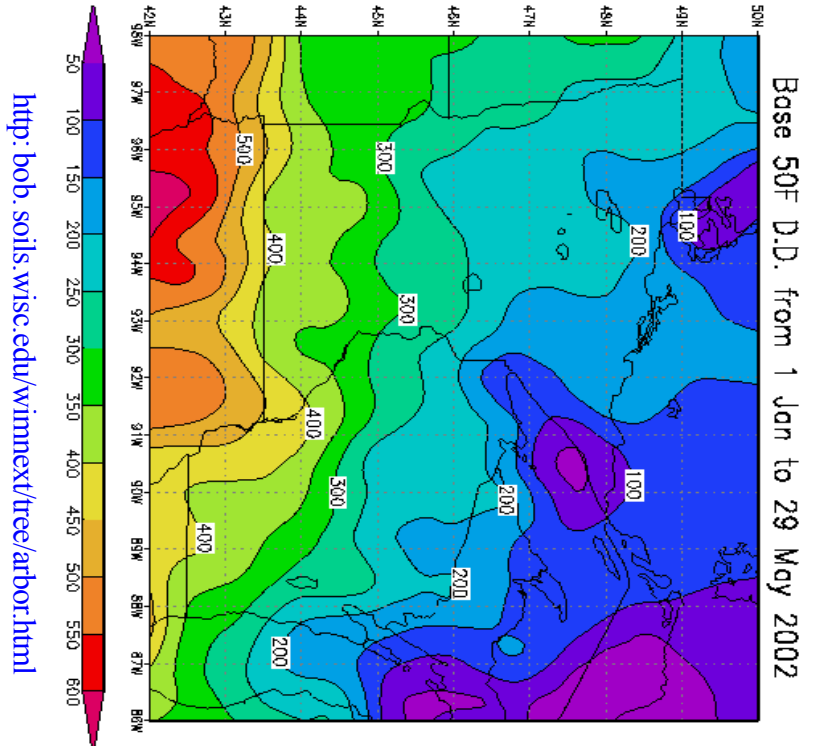
**APPLE INSECT TRAPPING RESULTS**

County City	Date	STLM	RBLR	CM	OBLR
<b>Grant Co.</b>					
Sinsinawa	5/22-5/29		3	4	
<b>Richland Co.</b>					
Hill Point	5/21-5/28	19	3	0	0
<b>Dane Co.</b>					
Deerfield	5/21-5/28	6	0	2	1
<b>Green Co.</b>					
Brodhead	5/21-5/28	0	1	2	0
<b>Pierce Co.</b>					
Spring Valley	5/21-5/28	254	2	3	
<b>Jackson Co.</b>					
Hixton	5/21-5/27	22			
	5/14-5/20	86	2	1	
<b>Trempealeau Co.</b>					
Galesville	5/20-5/27	50	48	0	0
<b>Fond du Lac Co.</b>					
Rosendale	5/20-5/28	91	23	1	
	5/13-5/20	119	31	0	
Malone	5/20-5/27	6	4	0	0
<b>Adams Co.</b>					
Oxford	5/20-5/27	410	21	3	0
<b>Sheboygan Co.</b>					
Plymouth	5/23-5/30	60		1	
<b>Ozaukee Co.</b>					
Mequon	5/21-5/27	100	0.5	0.3	
<b>Racine Co.</b>					
Rochester	5/23-5/30	60	0	7.5	0
<b>Brown Co.</b>					
Oneida	5/19-5/26	50	10	0	0



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**Website of the Week:**

[www.ThinkIPM.org](http://www.ThinkIPM.org)

A gateway to farm services, farmer networks and government services related to Integrated Pest Management in Wisconsin. A good list of UW Extension State Specialists and farmer networks.