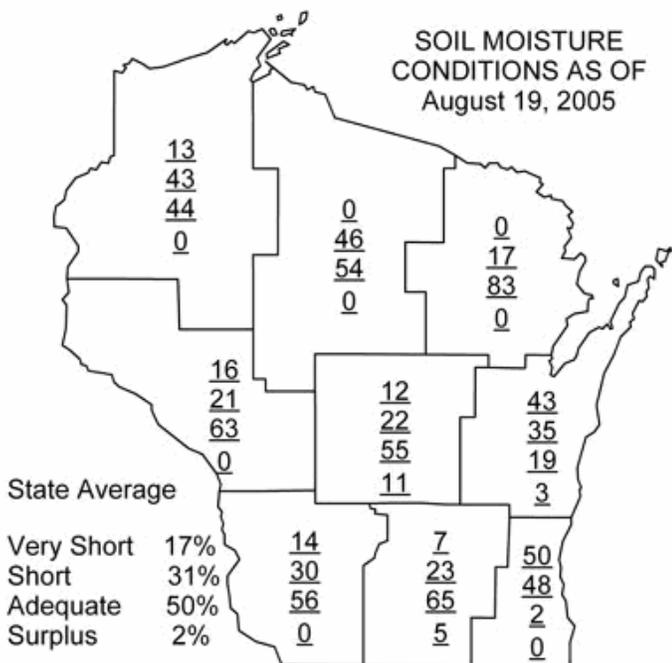


Wisconsin Pest Bulletin

Your weekly source for crop pest news, first alerts & weather information for Wisconsin.

Volume 50 Number 20 Date 08/26/2005

<http://pestbulletin.wi.gov>



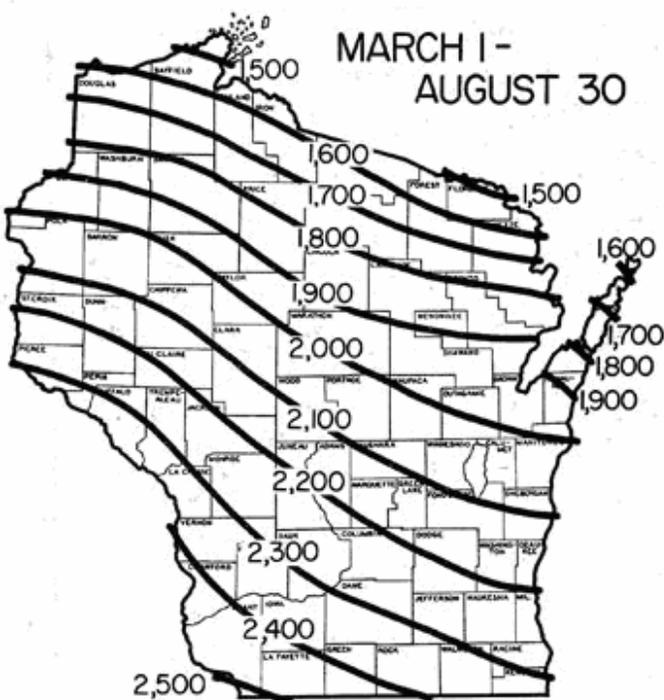
Source: USDA, NASS, Wisconsin Field Office

Weather and Pests

Another growing season is swiftly passing, and Wisconsin farmers are turning their attention to harvest activities. Hints of the approaching autumn are visible in the changing countryside. There is clarity and crispness to the late summer sky, green landscapes are turning to shades of gold, and a shortening of day length has become noticeable. Nighttime air temperatures have cooled, providing the most comfortable sleeping weather one experiences in Wisconsin, and making just a bit more challenging to get up in the morning.

As farmers look ahead to harvest, southwestern Wisconsin residents continue recovery efforts following last week's severe storms. In total, 28 tornadoes touched ground in Dane, Lafayette, Richland and Sauk Cos., destroying more than 400 houses and causing an estimated \$27 million in damage.

Growing Degree Days through August 25 were:				
Site	GDD*	2004 GDD	Base 48	Base 40
SOUTHWEST				
Dubuque, IA	2417	2070	2246	3832
Lone Rock	2314	1943	2262	3680
SOUTH CENTRAL				
Beloit	2423	2010	2251	3812
Madison	2348	1930	2298	3720
Sullivan	2369	1908	2223	3743
Juneau	2342	1895	2253	3701
SOUTHEAST				
Waukesha	2269	1865	2190	3609
Hartford	2269	1832	2235	3606
Racine	2204	1811	2204	3522
Milwaukee	2175	1762	2149	3491
EAST CENTRAL				
Appleton	2135	1605	2138	3426
Green Bay	2022	1524	2041	3301
CENTRAL				
Big Flats	2251	1759	2181	3584
Hancock	2218	1710	2148	3541
Port Edwards	2168	1616	2125	3469
WEST CENTRAL				
LaCrosse	2412	1605	2269	3828
Eau Claire	2241	1524	2240	3580
NORTHWEST				
Cumberland	2018	2005	1997	3285
Bayfield	1565	1765	1540	2707
NORTH CENTRAL				
Wausau	1984	1418	1971	3225
Medford	1969	1360	1984	3207
NORTHEAST				
Crivitz	1917	1296	1910	3172
Crandon	1834	1366	1817	3017



Historical Growing Degree-Days Accumulated Since March 1, 2005 (Wisconsin Agricultural Statistics Service)

Looking Ahead

Corn rootworm - Beetles continued to concentrate in fields with fresh silks this week, particularly sweet corn. Counts in excess of 2.0 beetles per plant were common (more than double the economic threshold of 0.75). A number of Jefferson Co. and eastern Dane Co. fields had approximately 5-10% of the kernels missing due to impaired pollination from corn rootworm silk clipping. Poor seed set may occur in west central fields as well, where heavy populations were noted during the recent corn rootworm survey. In addition, last week's high winds and thunderstorms caused severe lodging in fields that suffered root damage earlier this spring. Jefferson Co. growers were assessing the damage when fields were sampled this week. See the **CORN** section for final results of the annual corn rootworm beetle survey.

Twospotted spider mite - Although populations appear to have crashed in a majority of fields, a small number of heavily infested fields continued to be detected in southeastern counties. Racine and Waukesha Co. growers reported persistent mite problems, indicating mite populations should be monitored for at least another week or two.

European corn borer - The second flight peaked nearly three weeks ago, and counts at black light trapping sites have been on the decline since then. Survey specialists continue to report mixed findings when it comes to second generation corn borer infestations. In most south central fields, infestation levels are less than 20%, although the occasional 55-64% infested field has been encountered. The annual fall survey for European corn borer, scheduled to begin next week, should shed some light on the situation.

Corn earworm - Another round of high moth captures at several pheromone trapping sites indicates that the major moth flight is still in progress and possibly gaining momentum. The highest capture of 178 moths this week was registered at New Richmond, but considerable numbers of moths were also reported from Janesville (89) and Chippewa Falls (47). Sweet corn producers in particular, should continue to be wary of infestation at this point in the season, as late planted sweet corn in the silk stage is highly vulnerable to attack. Expect egg laying and the number of larvae to increase in tips of sweet corn ears and corn with fresh green silks in the week ahead.

Armyworm - A capture of 36 moths this week at New Richmond in northwestern Wisconsin suggests armyworm activity has not fully subsided. The larvae responsible for much of the severe injury observed in northern and central districts earlier in the month have pupated, and the captures this week are the adults of that damaging generation. Three generations of armyworm and a partial fourth are developed in the Midwest, but rarely does more than one generation become destructive. As we know, there are always exceptions to the rule. Stay alert to the possibility of late season armyworm feeding in susceptible crops.

Codling moth - In general codling moth activity lessened this week, but above-threshold counts continued at a few reporting sites such as Dodgeville (Iowa Co.) and Wausaukee (Marinette Co.). As stated in last week's issue, if warm temperatures persist in the next few weeks, a partial third generation of codling moths could develop in southern

Wisconsin orchards. Given this possibility, controls should not be relaxed until moth numbers drop off.

Corn

Corn rootworm - The annual survey for corn rootworm beetles found heavy adult rootworm populations across much of the state, with the exceptions of the north-central and northeast districts. The statewide average of 1.6 beetles per plant more than doubled the 0.75 beetle per plant threshold that entomologists consider to indicate a potential for corn rootworm problems in continuous corn the following year. Corn rootworm beetle populations were especially high in the southwest and southeast districts where averages of 3.2 and 3.8 beetles per plant were recorded, respectively.

Surprisingly little lodging was encountered during the statewide survey, although it is apparent from the counts observed that a considerable amount of root feeding by larvae occurred this summer. One possible explanation for the discrepancy between actual root damage and observed lodging may have been the lack of rain and high winds during July and early August. Consequently, some yield loss that was in fact due to larval root feeding this summer may be attributed to drought stress. See the table below for corn rootworm beetle survey results by district. Summary maps will be available in the final Wisconsin Pest Bulletin issue of the season.

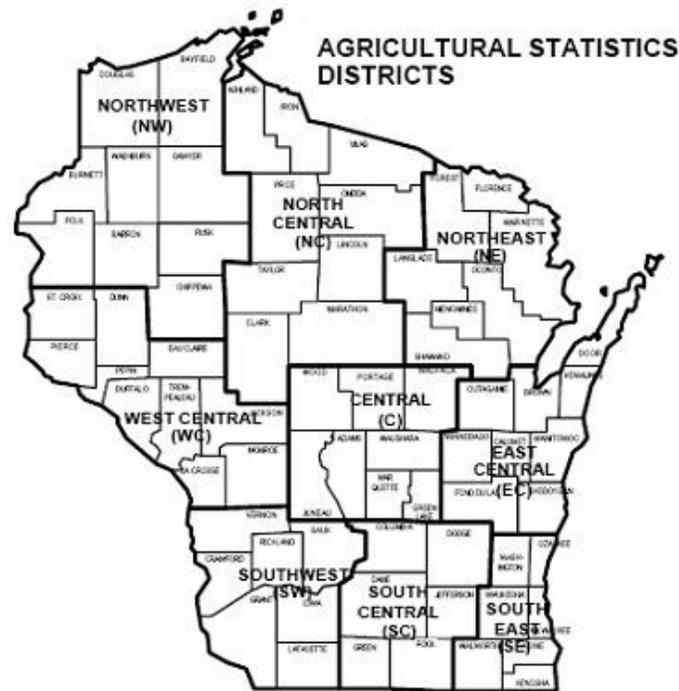
Annual Corn Rootworm Beetle Survey Results (Counts made August 1-24, 2005)		
District	Average No. beetles per plant	No. fields sampled
Northwest	0.4	15
North Central	0.8	15
Northeast	0.3	10
West Central	0.8	31
Central	0.9	32
East Central	1.1	38
Southwest	3.2	34
South Central	1.9	49
Southeast	3.8	19
State Average	1.6	243

European corn borer - Black light trap counts declined for a second consecutive week, in part due to cooler nighttime temperatures. As day length shortens and temperatures drop in the weeks ahead, we can expect European corn borer larvae to enter diapause, and prepare to overwinter as mature fifth instar larvae in corn stalks or other suitable host plants. Activity of corn borers will not resume until temperatures exceed 50°F next spring.

The threat posed by the second generation is unclear. Surveys of grain cornfields in the past week found highly variable levels of infestation, ranging from 0-64%. Second through fifth instar larvae were observed tunneling into corn

ears and stalks. Fourth and fifth instar larvae were most commonly noted in the ears, and their well-developed, circular tunnels could be seen by breaking off the tips of the infested ears.

European corn borer black light trap counts for the reporting period of August 18-25 were as follows: New Richmond 21; Lancaster 3; West Arlington 13; Mazomanie 2; West Madison 10; Janesville 13; Chippewa Falls 6; Manitowoc 5; Hancock 3; Wausau 7; Marshfield 22; Plover 7; Plainfield 0.



Corn earworm - Since the first substantial influx of moths arrived in Wisconsin the week of August 8, significant flights have been documented at scattered pheromone trapping sites statewide. Scouting and control sprays (where needed) should begin immediately after pheromone trap captures of moths are reported. High captures of 344 moths near New Richmond during the week of August 12, plus an additional 178 moths registered this week, should alert growers to the potential for problems in northwestern Wisconsin corn fields with fresh silks.

Weekly Corn Earworm Pheromone Trapping Results			
Site	Dates	Count	Trap Type
Chippewa Falls	8/18-8/25	47	Hartstack
Coon Valley	8/19-8/25	9	Hartstack
Janesville	8/19-8/25	89	Hartstack
Mazomanie	8/18-8/25	15	Hartstack
Mazomanie	8/18-8/25	0	Scentry
New Richmond	8/19-8/25	178	Hartstack

Corn with green silks, generally sweet corn at this time, will prove highly attractive to corn earworms in the coming weeks. Again, this insect pest is generally more of a concern in fresh market sweet corn where no amount of larval

contamination is tolerated by consumers. Contamination is also a concern for processed sweet corn, but to a lesser extent since the corn is exposed to washing processes that often effectively flushes the larvae from the ears. Growers can expect corn earworm larvae to feed on the developing kernels for approximately three weeks before dropping to the ground to pupate in the soil.

Captures of corn earworm moths in pheromone traps this week were: Janesville 89 (Hartstack); Chippewa Falls 47 (Hartstack); Mazomanie 15 (Hartstack), 0 (Scentry); Coon Valley 9 (Hartstack); and New Richmond 178 (Hartstack).

Northern corn leaf blight - This disease can be readily found in cornfields statewide. At times, northern corn leaf blight can develop into a serious problem, particularly on some hybrids grown by seed corn producers. The fungus, which produces long light-brown lesions on corn leaves, was noted on 14-52% of the plants in grain corn fields surveyed in Dane Co. and 11-44% of the plants in Jefferson Co. fields.

Ear mold - The fungi responsible for ear mold are beginning to develop on the tips of ears in south central cornfields. Ear mold fungi typically grow more active on corn as the crop matures. Thus far, symptoms were noted in fewer than 6% of the ears in fields sampled; however, this percentage is expected to increase in the next few weeks.

Western bean cutworm pheromone trap catches from August 18-25, 2005.		
County	Location	No. of WBCW moths
Winnebago	Oshkosh	1
Brown	Henrysville	1
Calumet	Brillion	0
Dane	McFarland	2
Dane	Mazomanie	1
Fond du Lac	St. Cloud	4
Kewaunee	Kewaunee	0
Manitowoc	Two Creeks	0
Manitowoc	Cleveland	0
Outagamie	Freedom	0
Shawano	N Polaski	1
Marathon	Rothschild	0
Sheboygan	Sheboygan	0
Grant	Lancaster	1

Forages

Potato leafhopper - Surveys of Jefferson and Dane Co. fields this week found nymph production has not slowed as much as previously thought. In fact, nymphs were quite abundant in fields this week, and they far outnumbered the adults. In 16-28 inch Jefferson Co. fields, sweep net counts ranged from 1.4-7.1 leafhoppers per sweep, averaging 3.3 per sweep. Nymphs of all stages were swept, ranging from very tiny to nearly mature. In Dodge and Columbia Co. fields, fewer leafhoppers were detected, and a larger portion of the population was made up of adults. Counts in Dodge Co. fields ranged from 0.9-1.9, and averaged 1.5 leafhoppers per

sweep. At the Marshfield research station, 20% hopperburn was observed in 14-16 inch fields where nymphs and adults numbered 0.2-0.6 per sweep.

Alfalfa caterpillar - These bright green caterpillars with a white longitudinal stripe are still a common, though less numerous, inhabitant of southern and central Wisconsin alfalfa fields. Counts of one to four larvae per 10 sweeps were the norm in Jefferson, Dodge, Waupaca and Waushara Co. fields. Larvae ranged from second to fifth instar, most were third or fourth instars.

Alfalfa plant bug - Very little change in populations was noted since last week or the week before. Both adult and nymph alfalfa plant bugs continue to maintain a presence in alfalfa fields, but their numbers are not especially high, nor do they warrant control measures. Sweep net counts of nymphs and adults in Jefferson Co. fields ranged from 1.4-3.1 this week, and averaged 2.1 per sweep. Counts in Dodge Co. ranged from 2.0-2.7 per sweep, and averaged 2.4. In Marathon, Waupaca and Waushara Co. fields, lower counts in the range of 0.2- 2.0 per sweep were detected.



Alfalfa plant bug nymph

USDA/ARS

Corn rootworm - The relative abundance of the northern, western and southern corn rootworm species in alfalfa fields may be an indicator of the magnitude of this season's population. Sweep net counts of 1.4-2.4 beetles per sweep (14-24 per 10 sweeps) were documented in Jefferson Co. fields, where counts averaged 1.9 per sweep. Rootworm beetle counts in Dodge Co. averaged 1.8 per sweep. The northern species were more numerous than both the western and southern species in the south central alfalfa fields that were sampled in the past week.

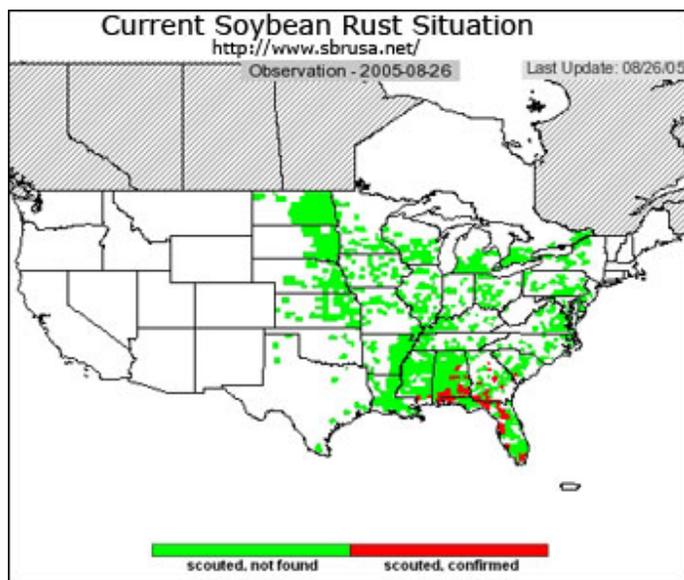
Pea aphid - This insect has grown scarce in south-central alfalfa fields sampled in the past week, seldom averaging more than 5-10 aphids per sweep. Recently pea aphid activity has slowed considerably, and little change in numbers is expected to occur before the final hay crop is harvested.

Soybeans

Soybean rust update - While detections in southern states are coming in fast and furious (six new fields in one day in Alabama, and the announcement by Georgia officials that soybean growers in that state will find that "in all likelihood their crop will be infested to some degree by soybean rust this season"), the opposite is true in Wisconsin. For 2005, at least, it appears that the Wisconsin soybean crop has avoided soybean rust. As the crop begins to mature, the window for yield loss from rust infection closes. Spores that arrive now, or even active infections if any were to be detected, will simply not have a significant negative impact.

Phakopsora pachyrhizi requires green tissue to survive, so even if spores yet arrive from the south and successfully infect this season, the pathogen is extremely unlikely to survive a Wisconsin winter. This means that each year, soybean growers will need to monitor the spread of the disease from the likely overwintering sites in the southern U.S., and make management decisions in response to predicted spread information from sentinel plots, and scouting programs.

The American Phytopathological Society is sponsoring a National Soybean Rust Symposium to review the impact of the disease, and plan for next year. Information on the meeting is available at: <http://www.apsnet.org/online/sbr/>



Twospotted spider mite - Surveys this week indicated that populations of this pest are light in most soybean fields, but a few fields were encountered that had localized, patchy distribution of up to 140 mites per leaflet. In the fields surveyed, nymphs were fairly numerous, suggesting population could continue to build if favorable, dry conditions persist. The primary symptoms observed in the few heavily infested fields were gray, splotchy leaf surfaces; no leaf drop was noted. Aggregations of mites were concentrated on the undersides of the leaves toward the base and along the midrib. Continue to monitor the activity of this pest for the next few weeks.

Grasshoppers - Adults have migrated into the interior portions of several soybean fields in southern Wisconsin. Ordinarily grasshoppers are primarily a pest of field margins.

Spot control or spraying of field margins may be warranted in rare cases when defoliation exceeds 30%, or heavy pod feeding is observed.

Frogeye leaf spot - First reported on soybeans in Wisconsin in 2002, this fungal disease (caused by *Cercospora sojina*) was found August 22 in a Richland Co. field. Frogeye is common in southern states, and favored by hot and humid conditions. Symptoms of frogeye leaf spot include angular spots with light gray centers and distinct margins.



Frogeye leaf spot on soybean
X. B Yang, Iowa State University

Vegetables

Cabbage looper and imported cabbageworm - No eggs or larvae were present in an Ozaukee Co, cole crop planting sampled early in the week. In the south central region, a Rock Co. cabbage planting had mid-instar larvae present on only one of five (20%) plants (down from 40% last week.). At the Arlington Ag Research Station, 15 moths were caught in the pheromone trap, and one of five plants had imported cabbageworm eggs or mid-instar cabbageworm and/or cabbage looper larvae. In the southwest, only 35 moths were caught in the pheromone trap at the Lancaster Ag Research Station in Grant Co. (down from 211 last week), indicating that the second flight of moths into Wisconsin is ending. Nine moths were caught in a pheromone trap near Viroqua in the west central region, and a recently treated cabbage planting in Waushara Co. only had mid-instar larvae present on less than one in five plants. Several pupating imported cabbageworm were also observed in Waushara. It appears that cabbage pests are under control for the time being.



Imported cabbageworm chrysalis
R. Klein-Koth, WI DATCP

Forest and Landscape

White pine weevil - Larvae were observed in heavy amounts in Colorado spruce tree tops and light amounts in Norway and Black Hills spruce at a nursery grower in Dunn Co. Pruning dead spruce tops back to healthy tissue and destroying all pruned tops taken from the field will help to reduce the weevil population.

Ash plant bug - Moderate amounts of damage were observed on white and green ash at nurseries in Brown, Calumet, Grant and Walworth Cos.

Balsam gall midge - Moderate amounts were observed in balsam and Fraser fir at a nursery grower in Dunn Co. The needles with galls are starting to turn yellow and will soon fall off, leaving bare stems.

Yellownecked caterpillar - Larvae were starting to eat substantial amounts of foliage at nurseries in Brown and Grant Cos. While the defoliation of individual trees can be spectacular, this insect rarely requires control measures.



Yellownecked caterpillar
R. Dahl, WI DATCP

Hawthorn lace bug - Light amounts of damage were observed on hawthorn trees at a nursery in Brown Co. Lace bugs feed on the underside of leaves causing white to yellow stippling on the upper surface. In severe infestations leaves may fall prematurely and some dieback may occur. Sunny, dry sites are most conducive to lace bug attack.

Honeylocust plant bug - Moderate to heavy defoliation was occurring at nursery in Brown Co. due to the feeding by this insect.

Redheaded flea beetle - Widespread moderate damage was noticed on dogwood and weigela at nurseries in Brown and Calumet Cos.

Broom rust of balsam fir - Brooms were observed at a nursery grower in Dunn Co. Pruning out the brooms will allow the tree to resume its normal shape. Controlling chickweed

(the alternate host of the fungus) will help minimize the number of new brooms formed.

Rust of rosinweed - A moderate to severe infection of rust caused by *Puccinia silphii* was found at a nursery grower in Waushara Co. on rosinweed, *Silphium integrifolium*. The plants had been in the ground for six years and had never had this disease before. Control measures are not known for this rust.



Oak leaf blister - This fungal disease was found on swamp white oak in moderate amounts at a nursery in Brown Co. Infected leaves become puckered and often turn necrotic as the season progresses. This disease is sporadic and control is not warranted.

Spruce needle drop - Colorado spruce at a nurseries in Brown and Calumet Cos. had light to moderate amounts of this malady.

Gypsy Moth

Gypsy Moth Program - As of August 24, trappers have checked 30,106 (88%) of the total traps set (34,225) Trappers have also taken down 4,939 traps (14%), mainly in the southern half of the state, and have caught 173,749 male gypsy moths. Trappers in the far northern regions of the state will start their trap takedown on Monday, August 29. Trap takedown takes approximately 4-5 weeks to complete. All traps should be down by the end of September.

Seven counties have already been completed for takedown. Six counties have had no moth catches. Counties with the highest moth counts are: Marinette - 22,286, Outagamie - 14,530, Adams - 12,408, and Oconto - 10,215.

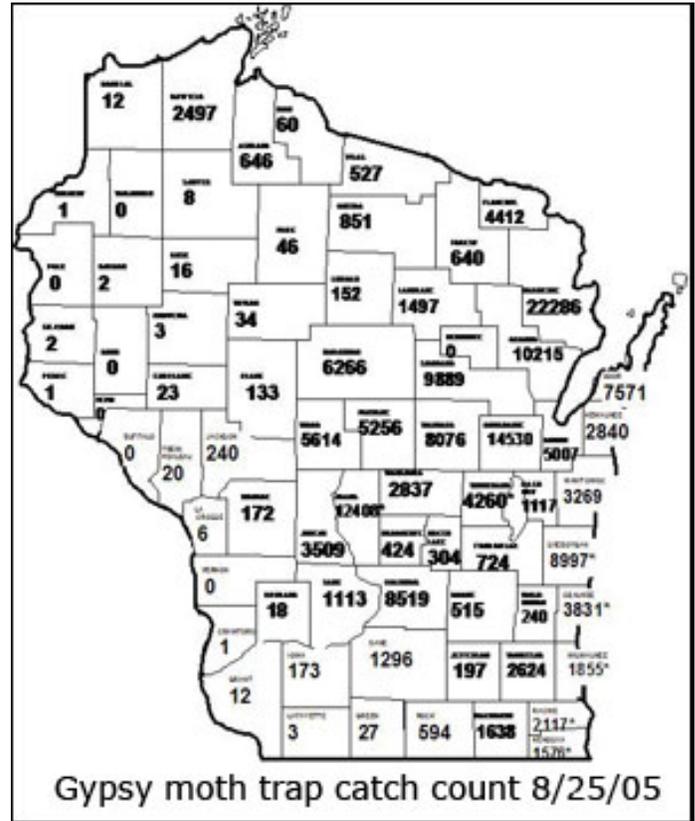
We have received several calls about gypsy moth "nests." The "nests" are appearing on the outer branches of the tree and look like large cottony, spider web-like masses. These are **NOT** gypsy moth egg masses. These web-like nests are produced by the **fall webworm**.

Readers interested in learning more about the fall webworm should visit:

<http://www.bugwood.org/factsheets/webworm.html>.

If you have any questions about the Gypsy Moth Program, please call our hotline at 1-800-642-MOTH or visit our website at:

<http://www.datcp.state.wi.us/arm/environment/insects/gypsy-moth/index.jsp>



Apple Insect Trapping Results

County	Date	STLM	RBLR	CM	OBLR	AM red ball	AM yellow
Crawford Co.							
Gays Mills W2	8/15-8/22	100	8	1	0	0	0
Gays Mills E2	8/18-8/25	270	18	7	0	2 (baited) 1 (unbaited)	0
Richland Co.							
Hill Point	8/18-8/24	110	9	1	1	0	0
Richland Center E	8/18-8/25	160	28	2	17	1 (unbaited)	0
Richland Center W	8/18-8/25	85	16	3	3	1 (unbaited)	0
Sauk Co.							
Baraboo	8/18-8/25	255	38	2	5	3 (unbaited)	0
Iowa Co.							
Dodgeville	8/19-8/25	0	0	8	13	12	
Dane Co.							
West Madison	8/18-8/25	0	95	2	11	0	0
Deerfield	8/17-8/24	12	52	3	0	2 (unbaited)	0
Green Co.							
Brodhead	8/18-8/25	9	6	2	1	0	0
Racine Co.							
Raymond	8/18-8/25	359	57	0	9	0	0
Rochester		0	67	2.5	1.5	10 (wild tree unbaited) 2.7 (wild tree baited) 0.08 (unbaited in orchard)	
Kenosha Co.							
Burlington	8/20-8/26	0	1	2	4	0	0
	8/15-8/19	0	1	2	1	0	0
	8/6-8/15	125	0	11	9	0	0
Waukesha Co.							
New Berlin	8/18-8/25	96	12	1	0	0	0
Pierce Co.							
Spring Valley	8/19-8/26	102	4.5	0	0	0.75 (unbaited)	
Marquette Co.							
Montello	8/15-8/23	1008	42	1	0	0	0
Fond du Lac Co.							
Campbellsport	8/19-8/25	200	0	0	0	0	0
Marinette Co.							
Wausaukee	8/19-8/25	50	0	8	0	0	0

Black Light Trapping Results

Trap Site	Date	ECB	TA	FA	BCW	DCW	SCW	VCW	WBCW	CabL	CeL	CEW
Southwest												
Lancaster	8/19-8/25	3			1	29	13		1	0	3	2
South Central												
West Arlington	8/19-8/26	13	2		1	30	3					5
Mazomanie	8/18-8/25	4	0	0	0	116	2	0	0	0	0	2
West Madison	8/18-8/25	10	8		2	60	4		0	1	0	16
Southeast												
Janesville	8/19-8/25	13	39		1	5	1		0		8	11
West Central												
Sparta	8/18-8/24					68	18				1	
Chippewa Falls	8/18-8/25	6										
East Central												
Manitowoc	8/20-8/26	4	7	0	0	36	29	0	0		2	0
Central												
Hancock	8/18-8/25	3	0	0	0	0	0	0	0	0	0	0
Wausau	8/19-8/26	7	7			54	52		5			
Marshfield	8/18-8/25	22	8	0	1	113	23	10	0	0	0	0
Plover	8/18-8/25	7										
Plainfield	8/18-8/25	0										
Northwest												
New Richmond	8/19-8/25	21	36									
ECB- European corn borer, TA- true armyworm, FA- fall armyworm, BCW- black cutworm, DCW- dingy cutworm, SCW- spotted cutworm, VCW- variegated cutworm, WBCW- Western bean cutworm, CabL- cabbage looper, CEW- corn earworm •Blank cells indicate species presence was not determined.												



UW Plant Disease Diagnostics Clinic

CROP	DISEASE/DISORDER	PATHOGEN	COUNTY
FIELD			
Soybean	Bacterial Blight	<i>Pseudomonas syringae pv. glycinea</i>	Calumet
	Brown Spot	<i>Septoria glycines</i>	Grant
	Downy Mildew	<i>Peronospora manshurica</i>	Eau Claire
Oats	Weathering	<i>Alternaria alternata, Cladosporium sp.</i>	Dane
VEGETABLE			
Pepper	Probable Viral Infection	Possible Tomato Mosaic Virus	Rock
Potato (Tubers)	Pythium Leak	<i>Pythium sp.</i>	Waushara
Pumpkin	Cucumber Mosaic	Cucumber Mosaic Virus	Dane
Tomato	Bacterial Speck	<i>Pseudomonas syringae pv. tomato</i>	Rock
	Black Shoulder	<i>Alternaria alternata</i>	Rock
	Blossom End Rot	Physiological	Rock
FRUIT			
Grape	Anthraxnose	<i>Sphaceloma ampelinum</i>	Walworth
Raspberry	Root and Crown Rot	<i>Phytophthora sp., Pythium sp.</i>	Washington
Strawberry	Phomopsis Leaf Blight	<i>Phomopsis obscurans</i>	Walworth
EVERGREEN			
Fraser Fir	Root Rot	<i>Pythium sp.</i>	Sauk
Spruce	Sphaeropsis Canker	<i>Sphaeropsis sapinea</i>	Wood
HERBACEOUS ORNAMENTAL			
Chrysanthemum	Probable Phosphorus Deficiency	Physiological	Unknown
Dracaena	Heat Stress	Physiological	Dane
Geranium	Botrytis Blight	<i>Botrytis cinerea</i>	Dane
Hollyhock	Rust	<i>Puccinia heterospora</i>	Douglas
Hosta	Root Rot	<i>Pythium sp.</i>	Brown
Pachysandra	Volutella Blight	<i>Volutella sp.</i>	Waukesha
WOODY ORNAMENTAL			
Ash (Including White)	Fusicoccum Canker	<i>Fusicoccum sp.</i>	Jefferson
Birch	Bacterial Wetwood/Slime Flux	Miscellaneous Bacteria	Waukesha
Elm	Dutch Elm Disease	<i>Ophiostoma ulmii</i>	Racine
Euonymus	Phomopsis Canker	<i>Phomopsis sp.</i>	Racine
	Sphaeropsis Canker	<i>Sphaeropsis sp.</i>	Racine
Lilac	Root Rot	<i>Phytophthora sp., Pythium sp.</i>	Sheboygan
	Sphaeropsis Canker	<i>Sphaeropsis sp.</i>	Rock
	Verticillium Wilt	<i>Verticillium sp.</i>	Rock
Maple (Including Sugar & Red)	Chlorosis	Physiological	Dane, Kewaunee
Oak (Including Bur)	Anthraxnose	<i>Gloeosporium sp.</i>	Dane, Walworth
	Chlorosis	Physiological	Dane, Kewaunee, Sauk
	Growth Regulator Herbicide Injury	Chemical	Waukesha
	Monochaetia Leaf Spot	<i>Monochaetia sp.</i>	Dane
	Oak Wilt	<i>Ceratocystis fagacearum</i>	Burnett, Jackson, Rock
	Tubakia Leaf Spot	<i>Tubakia sp.</i>	Walworth
	Sphaeropsis Canker	<i>Sphaeropsis sp.</i>	Jackson
Willow	Cytospora Canker	<i>Cytospora sp.</i>	Walworth

Web Site of the Week

Iowa State University Entomology Image Gallery

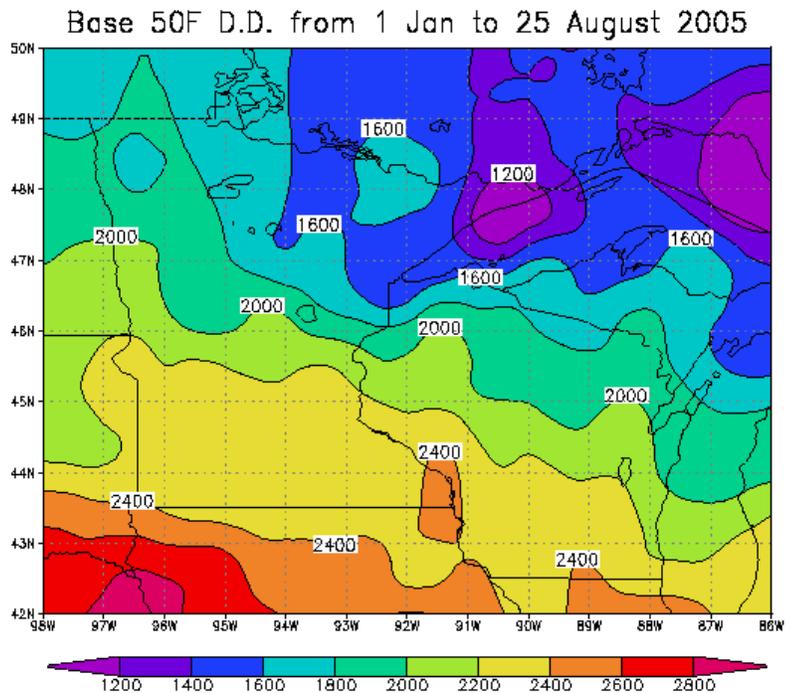
<http://www.ent.iastate.edu/imagegallery/>

So very often, when we search for good images of pests, they come up with the name "Marlin E. Rice" attached. Spectacular images, and a splendid array.

Quote of the Week

Sow the seed, and reap the harvest with enduring toil. Storing yearly little dues of wheat, and wine and oil.

Alfred Tennyson (1809-1892), British poet



<http://www.soils.wisc.edu/wimnext/tree/arbor.html>