

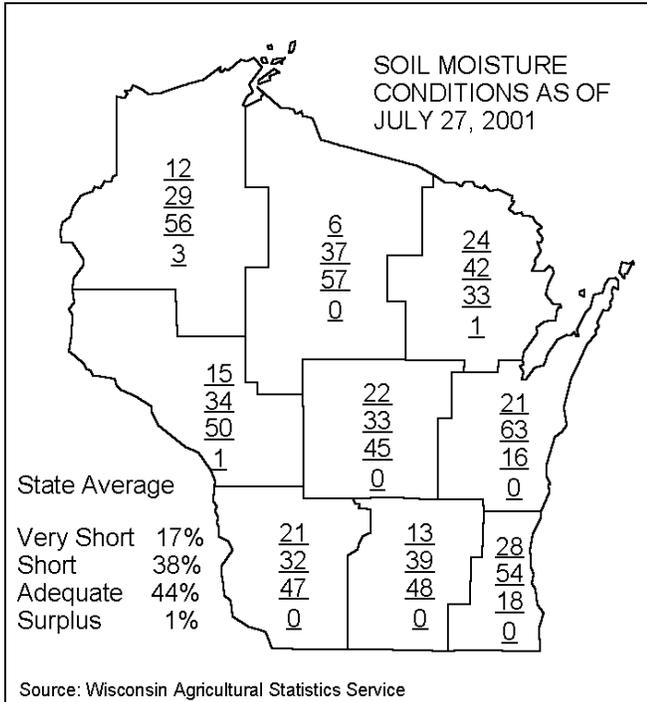


COOPERATIVE PEST SURVEY BULLETIN

State of Wisconsin
Department of Agriculture
Trade & Consumer Protection

Agricultural
Resource
Management

BUREAU OF PLANT INDUSTRY P.O. BOX 8911 MADISON, WI 53708-8911
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WEATHER AND PESTS

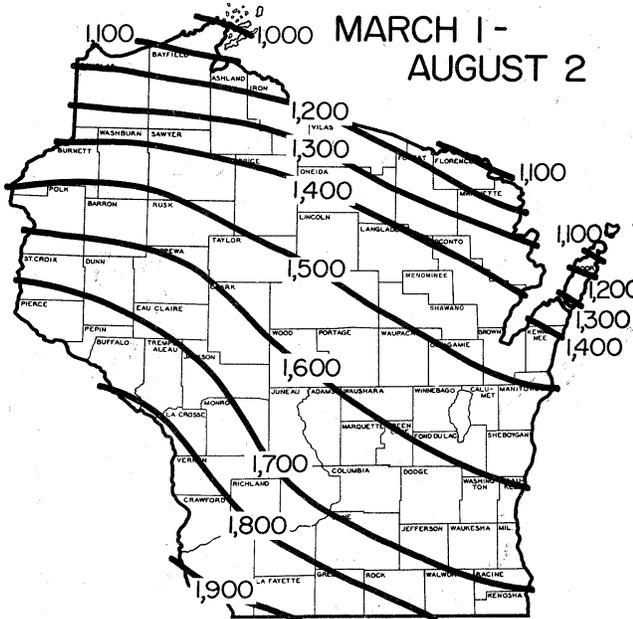
Feast or Famine! As this Pest Bulletin is being written eight inches of rain is making its way through and over the ground in Dane county and surrounding areas. Other areas of the state fared much better for precipitation.

Soybean aphid numbers have increased dramatically in some counties (see **SOYBEAN** section). Daylily rust has been found in Wisconsin for the second time (see **ALERTS**).

Growing degree days from March 1 through August 1 were:

Site	GDD* ¹	2000 GDD	Normal GDD	Base ¹ 48	Base ¹ 40
SOUTHWEST					
Dubuque, IA	1821	1822	1900	1782	2963
Lone Rock	1703	1714	1800	1652	2830
SOUTHCENTRAL					
Beloit	1847	1720	1800	1734	3036
Madison	1716	1612	1700	1696	2840
Sullivan	1787	1612	1675	1684	2959
Juneau	1750	1634	1606	1669	2895
SOUTHEAST					
Waukesha	1712	1581	1675	1661	2844
Hartford	1699	1577	1605	1666	2817
Racine	1622	1535	1700	1664	2710
Milwaukee	1591	1479	1625	1604	2665
EAST CENTRAL					
Appleton	1576	1479	1500	1580	2641
Green Bay	1468	1364	1440	1503	2508
CENTRAL					
Big Flats	1620	1517	1625	1556	2683
Hancock	1624	1514	1585	1586	2688
Port Edwards	1531	1446	1600	1546	2558
WEST CENTRAL					
LaCrosse	1761	1859	1800	1619	2867
Eau Claire	1667	1703	1650	1564	2736
NORTHWEST					
Cumberland	1552	1456	1550	1508	2586
Bayfield	1132	1029	1000	1178	2001
NORTH CENTRAL					
Wausau	1417	1352	1500	1439	2403
Medford	1406	1313	1485	1472	2390
NORTHEAST					
Crivitz	1379	1256	1351	1396	2380
Crandon	1364	1209	1300	1361	2311

¹Data from Bill Bland et. al., Soil Science, Univ. of Wisconsin-Madison.



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

Daylily rust - Daylily rust has now been confirmed in two Wisconsin counties, Iowa and Waukesha. Daylily growers and collectors should be very careful when ordering daylilies from Florida. See the links below for helpful information on daylily rust.

<http://www.ces.uga.edu/Agriculture/plantpath/daylilyrust.html>

<http://www.ianr.unl.edu/pubs/horticulture/nf450.htm>

<http://doacs.state.fl.us/~pi/enpp/pathology/daylily-rust.html>

<http://www.pestalert.org/Detail.CFM?recordID=43>

<http://www.aphis.usda.gov/npb/daylily.html>

CORN

Corn Rootworm - Considerable variation in corn rootworm beetle counts was observed during this week's survey efforts. Counts in Rock and Walworth Co. fields fell below the economic threshold of 0.75 beetle/plant, with numbers ranging from 0.3 to 0.5. In contrast, several Adams, Winnebago, Jefferson and Sauk Co. fields had counts near or just exceeding the threshold. One field surveyed in Fond du Lac Co. had a count of 4.7 beetles per plant, and a substantial amount of silk clipping was observed. Averages in Lafayette, Grant and Vernon ranged from 0.04 to 4.6 beetles per plant,

and silk clipping was common in fields with more than an average of 2 corn rootworm beetles per plant.

County	No. Beetles per Plant	Above Threshold?
Adams	0.8	yes
Jefferson	1.0	yes
Fond du Lac	4.7	yes!
Jefferson	0.75	at
Winnebago	1.0	yes
Winnebago	0.8	yes
Rock	0.3	no
Rock	0.5	no
Sauk	1.4	yes
Walworth	0.4	no

European Corn Borer – Five newly-deposited egg masses per 25 plants were detected in a pollen shed stage corn field in Lafayette Co. The egg masses were found on both the upper and lower leaf surfaces on the leaf just above the primary ear. In Grant, Lafayette, Walworth, Rock, Winnebago, Juneau, Fond du Lac, Sauk and Richland Cos. 5th instar larvae and pupae were detected. Levels of infestation remain highly variable, ranging from 0% in a Rock Co. fields

to 36% in Adams Co. In the far northeast, Marinette and Oconto Cos. average levels of infestation ranged from 10-30%.

Corn Earworm - Early instar larva were infesting 16% of the ears of fresh market sweet corn in a Dane Co. field on July 27. Damage was limited to silks and terminal kernels of bicolored sweet corn. This week, pheromone counts included three moths in Coon Valley (Vernon Co.) and one moth in Chippewa Falls. Last week five moths were caught in Coon Valley. Only a few moths are appearing in black light traps, however, corn earworm activity can be expected to increase in the next two or three weeks.



Iowa State Image Gallery

<http://www.ipm.iastate.edu/imagegal/lepidoptera/cearworm/3936.102cearworm.html>

Corn Leaf Aphid – Heavy infestations, ranging from 40-90% of plants with 40-50+ aphids per plant, and resultant honeydew deposits on tassels were observed in all fields surveyed, but sooty mold is not yet evident. Recent heavy rainfall may act to reduce aphid numbers, and produce conditions favorable to the development of fungal pathogens that control corn leaf aphid populations.

Leaf Blights – The dry weather of the last few weeks has apparently suppressed the spread of corn leaf blights, which are remarkably absent for this stage of the growing season. Examinations of corn fields throughout the state have found only very low levels of common maize rust and the occasional trace level occurrences of eyespot. Recent rains may change the situation, but for now, most corn fields are showing a distinct absence of leaf diseases.

FORAGES

Potato Leafhopper – The decreasing number of nymphs being observed in alfalfa fields throughout the state indicates reproduction may be slowing, however, severe hopperburn is still being observed in a number of counties, especially in

drier fields and in older regrowth. Excessive numbers of adults were detected in Jefferson and Sauk Co. fields, where 60- 80% hopperburn was noted in fields surveyed. Counts in Juneau, Winnebago Fond du Lac, Marinette and Oconto Cos. fell below the economic threshold, ranging from 0 to 1.2 leafhoppers per sweep, in 6-8' and 12-14' alfalfa.

Pea Aphids – Counts in excess of 40 **aphids** per sweep were observed in Rock, Walworth and Jefferson Co alfalfa fields. Fewer than 13 per sweep were detected in Sauk, Adams and Juneau Cos. No wilting or stunting attributable to **pea aphid** feeding was observed. Control is not warranted unless counts exceed 100 **aphids** per sweep.



<http://ohioline.ag.ohio-state.edu/~ohioline/b827/b827123a.html>

VEGETABLES

Late blight - The rains have resumed and pose a threat to additional spread of **late blight**. IPM scouts are reporting additional fields with symptoms of **late blight**. While the general scenario is a few infected leaves here and there, the distribution of **late blight** throughout central WI poses a concern. Long periods of high relative humidity and leaf wetness could pose problems for containment of **late blight** as we move into the last month of maintaining foliage health. The area of **late blight** concern also continues to expand with **late blight** as far south as Coloma and north to the Antigo area. Fungicide spray programs should continue on a 5-7 day interval until vine kill. For the most part, control of **late blight** is excellent. This was achieved by careful, but not excessive use of fungicides to maintain protection of all foliage as we have moved through the growing season. Severity values have increased substantially during the past week, especially in northeastern WI. Growers should plan their spray programs accordingly.

As we move through the month of August, individual fields reach maturity and are killed in preparation for harvest. Hot spots of **late blight** should be vine killed to reduce inoculum

spread to neighboring plants. Individual fields, where the risk of **late blight** is considered high due to distribution of **late blight** symptoms within the field or in adjacent fields, should be vine killed as soon as the desired tuber size and yield are reached. The fungicide spray program should be continued until all foliage including stems is killed with vine desiccant. Late season stem infections continue to sporulate and can provide a significant amount of inoculum that is readily washed into the soil. On sandy soils, sporangia and zoospores are easily washed through the hill where, if they come in contact with tubers, can infect and initiate tuber decay. Harvesting fields with green infected stems poses an additional threat by direct exposure of tubers to inoculum as tubers move through the harvester. There is generally sufficient moisture to favor infection of tubers and disease progress during the early storage period. Thus thorough vine kill well in advance of harvest is essential.

Current P-Day and Severity Value Accumulations (as of August 2, 2001)

Location	P-Day	Severity
	Total	Value Total
Antigo emerging 5/18	496	104
Antigo emerging 6/01	434	84
Grand Marsh emerging 5/10	533	65
Grand Marsh emerging 5/23	450	61
Hancock emerging 5/10	563	52
Hancock emerging 5/22	481	51
Plover emerging 5/10	570	120
Plover emerging 5/20	505	115
Plover emerging 6/01	442	100

SOYBEANS

Two Spotted Spider Mite – Localized damage was evident in a Vernon Co. soybean field. Hot, dry weather favors the development of this pest.

Soybean Aphid – Reproduction shows no signs of slowing as the average number of soybean aphids per plants continues to increase throughout the state. Nearly every field surveyed in southern Wisconsin was assigned the highest rating possible (4), meaning counts were in excess of 100 aphids per plant. Counts farther north, in Portage, Langlade and Marinette Co. remain low, at fewer than 25 aphids per plant. Producers with heavily infested fields are encouraged to pay close attention to predator and parasite numbers before implementing control measures. The average percentage of predators seems to rise in response to increasing soybean aphid numbers, and in some cases may be high enough to keep aphid numbers down, without the use of chemical control.

Date	County	Ave. Rating	Ave.# Aphids/Plant	Ave. % Plants w/ Predators
8-1	Adams	4	100+	67%
7-30	Fond du Lac	4	100+	45%
7-30	Grant	4	100+	NA
7-31	Jefferson	4	100+	55%
8-1	Juneau	4	100+	60%
8-1	Lafayette	2	11-25	NA
8-1	Lafayette	4	100+	NA
8-1	Langlade	2	11-25	NA
7-30	Marquette	2	11-25	NA
8-1	Marquette	4	100+	100%
7-30	Portage	2	11-25	NA
7-31	Richland	4	100+	NA
7-31	Rock	4	100+	25%
8-1	Sauk	4	100+	40%
8-1	Sauk	2	11-25	10%
7-31	Vernon	3	26-99	NA
7-31	Vernon	4	100+	NA
7-31	Walworth	4	100+	30%
7-30	Winnebago	4	100+	10%

APIARY

APIARY PROGRAM—Soybean fields are now being treated with pesticides to control **soybean aphid**. **Soybean aphids** are new to the state and are causing serious problems for soybean growers. Beekeepers should contact farmers around their apiaries, so they can be notified in advance when sprays are taking place. Call your Apiary Program at (608) 224-4575 for more information on **ATCP 29.51 Advance notice of pesticide applications (1)** or see May 11 issue of this bulletin.

Unfortunately the only pesticides available for soybean aphid control **are highly toxic to bees if bees are visiting the area**, for example to forage on blooming weeds. However if bees are not present in the field these pesticides can be legally applied even to blooming soybeans!

Fortunately **honeybees** are rarely seen in soybean fields because soybeans do not provide good forage to bees and soybeans do not rely on honeybees for pollination. As a precautionary measure beehives in the immediate vicinity of soybean fields can be closed down briefly during pesticide application and the following 24 hours by covering the hive entrance with wet burlap. The burlap must be kept wet to prevent overheating. Soybean growers can help by controlling weeds in and around fields so bees are not attracted to the area. Beekeepers experiencing bee kills should call their local DATCP pesticide inspector or state apiarist immediately. It is important not to remove any dead bees or any other evidence!

GINSENG

PLANT DISEASE DIAGNOSTICS CLINIC—Dr. Brian Hudelson reports ginseng seedlings with symptoms of

Mystery Seedling Disease testing positive for **Fusarium** and **Cylindrocarpon**. Mature plants with **Phytophthora Root Rot** and two year old plants with **Rusty Root** were also submitted to the clinic.

FOREST, SHADE TREE, ORNAMENTALS AND TURF

Leaf crumpler - Damage was evident on peking cotoneaster at a nursery in Dane Co.

Yellownecked caterpillar - Small larvae were found attacking hawthorn and river birch at a nursery in Dane Co.



Bronze birch borer - Whitespire birch in a Dane Co. nursery were being attacked by this metallic wood-boring beetle while paper birch were being attacked in a Chippewa Co. nursery.

Spiny elm caterpillar - Poplars were being defoliated at a nursery in Lincoln Co.

Spider mites - Daylilies in a Dane Co. nursery had light amounts of damage while assorted roses in a Chippewa Co. nursery had moderate amounts of damage.

Ash plant bug - Green ash at nurseries in Dane and Jefferson Cos. had moderate amounts of damage.

Bristly rose slug - Assorted roses at a nursery in Chippewa Co. had moderate amounts of damage from this sawfly pest.

Zimmerman pine moth - Small numbers of pitch masses were observed on Austrian pine at a nursery in Dane Co.

Fall webworm - Scattered webs on various deciduous trees at a nursery in Dane had large webs engulfing parts of the tree.

Honeylocust spider mite - Honeylocust trees at a nursery in Dane Co. had heavy numbers of this pest. Most trees were dropping large amounts of yellowing foliage.

Rhizosphaera needle cast - Blue spruce at nurseries in Dane and Rock Cos. had moderate amounts of this fungal disease.

Dothistroma needle blight - Light amounts of needle blight were found on Austrian pine at nurseries in Dane and Jefferson Cos.

Frogeye leaf spot - Crabapples in a Dane Co. nursery had moderate amounts of this fungal foliar pathogen.

Tar spot - Light to moderate amounts of **tarspot** were found on silver and freeman maple at nurseries in Chippewa and Dane Cos.



Cedar-quince rust - Moderate to heavy amounts of twig galling and fruit infection were observed on thornless cockspur hawthorn at a nursery in Dane and Jefferson Co. .

Anthracnose - A light infection was found on river birch at a nursery in Jefferson Co.

Lily leaf streak - Light amounts of leaf streaking were observed on many varieties of daylily at a nursery in Dane Co.

Sphaeropsis blight - A small number of shoots on scotch pine were infected with this fungus at a nursery in Dane Co.

Needle rust - Infected needles of blue spruce and white spruce were found at a nursery in Lincoln Co.

Verticillium wilt - Green ash and norway maple at a nursery in Jefferson Co. were showing symptoms of this wilt disease.

STATE/FEDERALPROGRAMS

GYPSY MOTH PROGRAM - Trappers are continuing to check traps statewide. As of 8/1/01, trappers have checked 10,342 traps and have caught 20,208 male gypsy moths. Counties with the highest totals are: Brown (4,608), Kenosha

(512), Marinette (8,991), Oconto (908), Ozaukee (798) Waukesha (1,732), and Waupaca (598). See map for more information and please note that counties in the eastern part of Wisconsin with zero for moth count means the traps have not been checked yet. This does not include cooperators data. Trap checking will continue for about 2 more weeks.

Trap takedown may start as early as August 13 in the south depending on the phenology model and field reports.

For more information about the GYPSY MOTH PROGRAM, please call our hot line at 1-800-642-MOTH or visit our website at <http://datcp.state.wi.us/static/gypsymoth>

FRUIT

Apple maggot – The threshold for treatment is five on a baited trap and one on an unbaited trap. Some orchard blocks are reaching threshold levels now. The females insert eggs into the apples when they land on the fruit. The only way to prevent infestations is to get the flies before they attack the fruit. Females may lay eggs over an extended amount of time and infest many apples in the process. **(Consultant in part)**

Codling moth - **Codling moths** are causing a few blocks within some southwestern orchards to be sprayed. The second flight of moths may occur over about 2 months, beginning in early July. The larvae from these moths will overwinter if allowed to survive. **(Consultant in part)**

European red mite – There has not been a resurgence of **European red mites** where treatments were applied at petal fall or first cover. Otherwise, mites continue to cause problems. Mites do well in hot, dry weather. Preventative management early in the season that keep mites at low numbers is more effective than late season eradication efforts. Heavy summer populations are often attacked by predators and will have fewer overwintering eggs. **(Consultant in part)**

Apple Insect Trapping Results

County	City	Date	STLM	RBLR	CM	OBLR	AM	AM
							board	ball
Crawford Co.								
	Gays Mills-E2	7/22-7/29	552	59	2	2	2	
	Gays Mills-W2	7/23-7/30	20	2	0	2	0	0
Richland Co.								
	Hill Point	7/16-7/30	244	3	2	0	0	3
	Richland Center-E	7/22-7/29	94	42	10	0	1	
	Richland Center-W	7/22-7/29	704	60	4	0	1	
Iowa Co.								
	Dodgeville*	7/26-8/2	131	41	9	0	2	
Dane Co.								
	Waunakee	7/25-7/31	192	4	0	3		
	Deerfield	7/25-7/30	250	0	1	2	0	2
Juneau Co.								
	Mauston	7/23-7/29	253	4	1	0	0	
Trempealeau Co.								
	Galesville	7/23-7/30	80	0	0	0	0	0
Dunn Co.								
	Menomonie	7/23-7/30	340	27	0	0	0	1
Pierce Co.								
	Beldenville	7/23-7/30	52	9	1	1	0	0
	Spring Valley	7/24-7/31	422	20	0	1	0	0
Fond du Lac Co.								
	Malone	7/23-7/30	8	4	1	1	0	1
Marquette Co.								
	Montello*	7/22-7/29	104	36	0	4	1	3
Ozaukee Co.								
	Mequon	7/24-7/30	20	0.5	0	0.5	0	1
Racine Co.								
	Rochester*	7/26-7/31	55	0	8	0	1	8
Brown Co.								
	Oneida	7/23-7/29	13	4	2	0	0	0

* indicates NEW COOPERATOR!

Black Light Trapping Results July 25 to August 1:

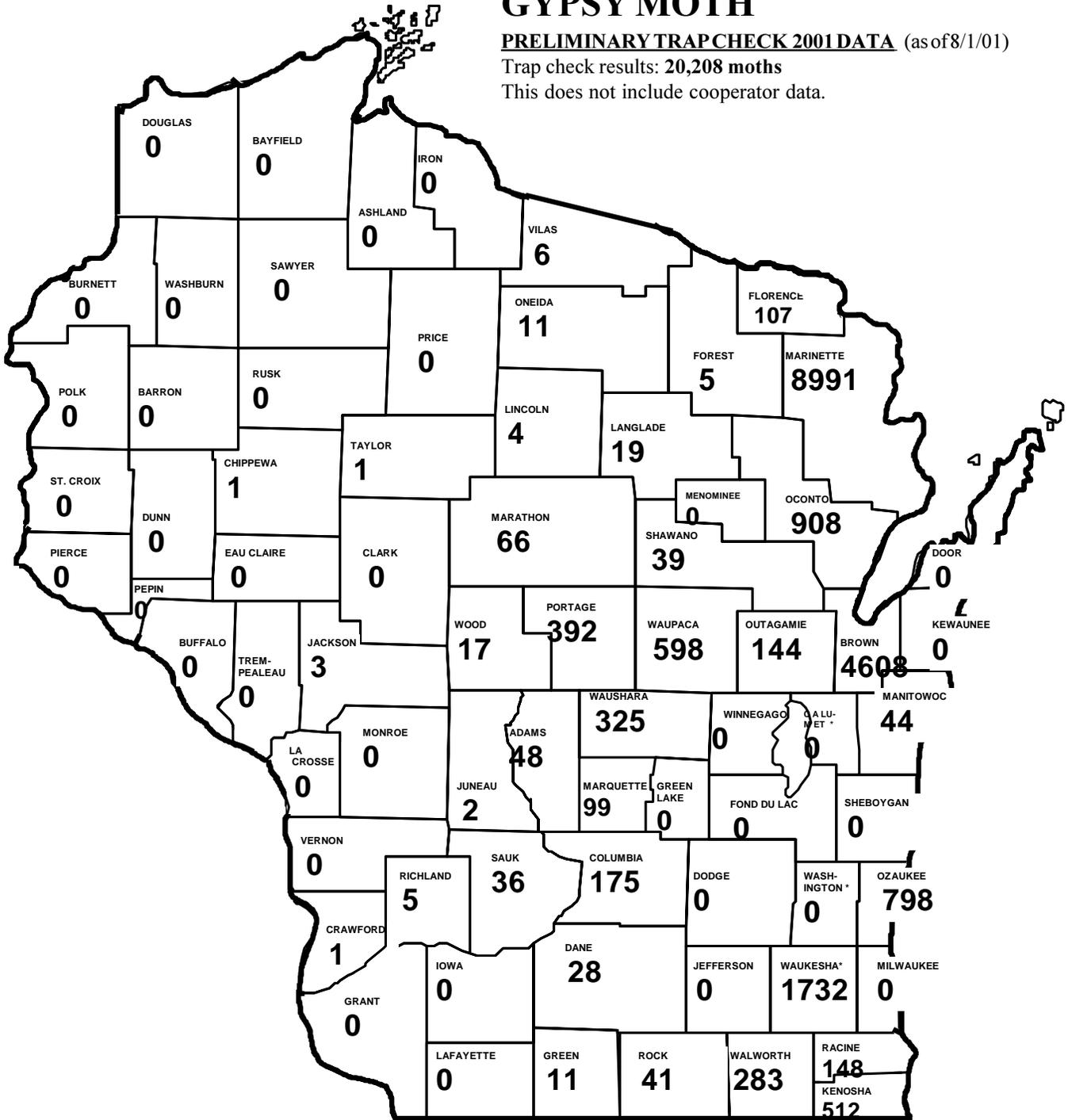
	<u>Chippewa Falls</u>	<u>Marshfield</u>
Euro. Corn Borer	45	1
Black Cutworm	1	22
Dingy Cutworm	-	8
Variegated Cutworm	-	23
Diamond Back Moth	-	27
Cabbage Looper	-	19
Corn Earworm	1	-

GYPSY MOTH

PRELIMINARY TRAPCHECK 2001 DATA (as of 8/1/01)

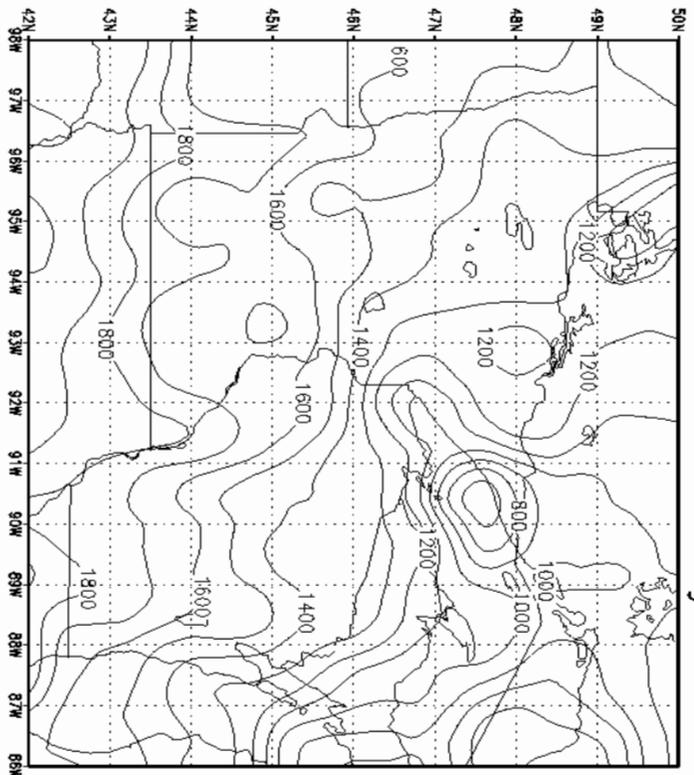
Trap check results: 20,208 moths

This does not include cooperator data.



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Base 50F D.D. from 1 Jan to 1 August 2001

Web Site of the Week

USDA Animal and Plant Health Inspection Service (APHIS) – This site serves as a gateway to the world that is APHIS. Information on new threats, invasive species, biotechnology permitting and more. Everything from the Federal government’s response to karnal bunt and citrus canker to information on the Beagle Brigade. <http://www.aphis.usda.gov/>