

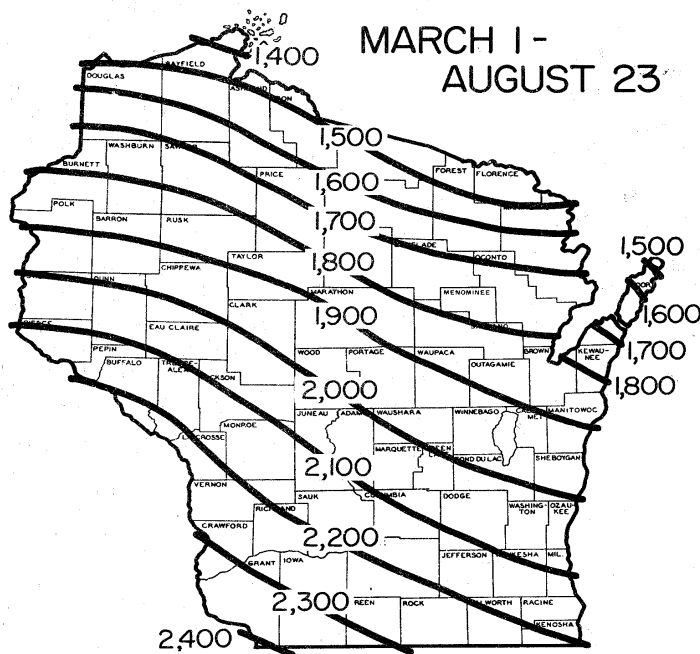
Weather and Pests

Weather conditions moderated in the past week, but temperatures continued to lag behind normal for this time of year. Crop development continues along slowly but surely, with conditions being fair to good overall. It now appears that the most significant impediment to crop success this season may not be the pests, but the temperatures. Corn development is two weeks behind schedule in most areas and most fields are in urgent need of warmer weather to reach maturity. Insect activity has slowed across the state thanks to cool evening

Growing degree days from March 1 through August 19:

| Site | GDD* | 2003 GDD | Normal GDD | Base 48 | Base 40 |
|----------------------|------|----------|------------|---------|---------|
| SOUTHWEST | | | | | |
| Dubuque, IA | 1956 | 2077 | 2314 | 2097 | 3285 |
| Lone Rock | 1844 | 2056 | 2178 | 1986 | 3145 |
| SOUTHCENTRAL | | | | | |
| Beloit | 1903 | 2017 | 2201 | 2039 | 3217 |
| Madison | 1827 | 1991 | 2119 | 1975 | 3124 |
| Sullivan | 1803 | 1917 | 2072 | 1913 | 3098 |
| Juneau | 1791 | 1912 | 1968 | 1926 | 3082 |
| SOUTHEAST | | | | | |
| Waukesha | 1760 | 1832 | 1999 | 1875 | 3050 |
| Hartford | 1728 | 1843 | 1956 | 1862 | 3005 |
| Racine | 1705 | 1746 | 2064 | 1820 | 2971 |
| Milwaukee | 1658 | 1743 | 2025 | 1777 | 2904 |
| EAST CENTRAL | | | | | |
| Appleton | 1511 | 1817 | 1811 | 1660 | 2709 |
| Green Bay | 1431 | 1624 | 1747 | 1584 | 2617 |
| CENTRAL | | | | | |
| Big Flats | 1664 | 1950 | 1981 | 1789 | 2892 |
| Hancock | 1615 | 1469 | 1855 | 1739 | 2827 |
| Port Edwards | 1527 | 1832 | 1943 | 1634 | 2702 |
| WEST CENTRAL | | | | | |
| LaCrosse | 1902 | 2087 | 2160 | 2007 | 3202 |
| Eau Claire | 1665 | 2021 | 1959 | 1772 | 2874 |
| NORTHWEST | | | | | |
| Cumberland | 1293 | 1822 | 1837 | 1331 | 2350 |
| Bayfield | 1055 | 1391 | 1334 | 1077 | 1997 |
| NORTH CENTRAL | | | | | |
| Wausau | 1327 | 1686 | 1822 | 1415 | 2418 |
| Medford | 1281 | 1625 | 1759 | 1357 | 2338 |
| NORTHEAST | | | | | |
| Crivitz | 1278 | 1593 | 1681 | 1385 | 2379 |
| Crandon | 1190 | 1522 | 1628 | 1243 | 2199 |

*GDD above base 50 deg. with 86 deg. upper limit



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

temperatures. The second flight of European corn moths has peaked throughout southern and west central Wisconsin. Black light traps documented light moth activity, which suggests the fall population may be light as well. Late-season pests, including the corn earworm and western bean cutworm are expected to begin to show up in more substantial numbers in the week ahead.

Alerts

Giant Hogweed We are continuing to look for sites of giant hogweed (*Heracleum mantagazzianum*). USDA survey personnel found giant hogweed at four sites in Iron County earlier this year. This plant, a member of the carrot family, blooms in August on flower stalks up to 15 feet tall.

In addition to the potential to become invasive, giant hogweed (like cow parsnip) exudes a clear sap which causes human skin to become sensitive to ultraviolet light, leading to painful blisters and possibly scars. Giant hogweed is listed on the Federal Noxious Weed list. Giant hogweed looks similar to the native cow parsnip, but they can be differentiated by the following:

| | giant hogweed | cow parsnip |
|-------------------|---------------------------|--------------------|
| Height | 12-15 ft | 4-6 ft |
| Leaf size | 3-5 ft across | 1 ft across |
| Stem | prominent purple blisters | purple streaks |
| Pubescence | coarse hairs | fine hairs |

If you believe you have an infestation of giant hogweed, please call the DATCP Pest Survey at 800-462-2803 or USDA-APHIS at 608-231-9545.

Eriophyid mite on Echinacea -- An eriophyid mite believed to be previously-undescribed has been found on purple coneflower. See FOREST AND LANDSCAPE section for more information.

Looking Ahead

Redheaded flea beetle - This relatively large flea beetle was abundant in soybean fields surveyed in Clark Co. east to Door Co. Interestingly, redheaded flea beetles seem to replace the conspicuously-absent bean leaf beetles as the primary defoliating insect pest in soybean fields north of Portage Co. Populations appear to be relatively high in northern fields this season. See SOYBEAN section for additional information.

Western bean cutworm (WBCW) - Additional moths were detected at black light trapping sites near Mazomanie this week. WBCW is a late-season pest that is still uncommon in Wisconsin at this time; however, more frequent sightings indicate we will need to consider WBCW as a potential late-season corn pest in Wisconsin in years to come. The WBCW larvae are similar in appearance to corn earworm larvae, which are also

present in corn late in the season, but markedly different in behavior. See CORN section for more details.

European corn borer - Moth activity continued to increase across the state for a third consecutive week, but catches are generally very low. While the second moth flight is expected to taper off rapidly within the next two weeks, the most effective treatment period for second generation corn borers, 1500 DD-2100 DD (base 50°F) remains open across the state. Scout fields now for second generation larvae.

Corn rootworm - It's not too late to scout to estimate this season's population and to determine if a soil insecticide may be necessary next spring for fields going back into corn, but a scouting regimen has to begin NOW. Scout in the next day or two, then two more times before the second week of September.

Variiegated cutworm - A high catch at the Marshfield black light trapping site indicates central Wisconsin growers should continue to look for cutworm activity in late-planted corn fields and other susceptible crops.

Corn

European corn borer - Moth activity, as monitored at scattered black light trapping sites, continued to increase across the state for a third consecutive week. With the second flight having peaked throughout much of the state, a decline in moth numbers is expected to begin in the next week or two. Recent black light trapping catches have hinted at a very light second flight of moths and low evening temperatures have helped to limit mating and egg laying activity. This suggests that Wisconsin corn growers may experience a light impact from second generation larvae this fall. The second moth flight is expected to taper off rapidly within the next two weeks, but in the meantime, the most effective treatment period for second generation corn borers, 1500 DD-2100 DD (base 50°F) remains open across the state. Scout fields now for second generation larvae.

Corn rootworm - Adult activity appears to have been hampered by cool conditions in recent weeks. The emergence of adults should be complete by the end of the month, and scouting should wrap up by the first or second week of September. For those who have not yet started scouting, it's not too late. Scout once this week, once next week, and once the following week. Count the number of beetles per plant on a total of 50 plants (5 plants in 10 separate areas) and calculate the average number of beetles per plant. If a count exceeding 0.75 beetle per plant (38 beetles per 50 plants) is noted during any one of the three scouting trips, consider treating the eggs with a soil insecticide prior to planting the field to corn next spring. For now, late-planted sweet corn or field corn that still has green silks will continue to

provide attractive feeding places for corn rootworm beetles.

True armyworm - Moths continue to be detected at black light trapping sites. Continue to monitor for larval activity in corn.

Corn earworm - The significant flight of this species can be expected to occur soon. Moths have been captured at nearly all black light trapping and pheromone trapping sites to date, and this week counts were registered at the Coon Valley, Lancaster, Mazomanie, Sparta, and W. Madison sites. Counts are still very low (less than five moths per trap), but growers should see an increase in the next week or two.

Western bean cutworm (WBCW) – More sightings of this insect have occurred in recent years, suggesting that we should more closely monitor the activity of this potential pest in future seasons. Currently the western bean cutworm is an occasional late-season pest of field corn in Wisconsin. Because WBCW occurs at the same time as corn earworm, it's likely to be mis-identified during scouting. WBCW larvae can be distinguished from corn earworm larvae by the dark stripes just behind the head and the lack of small dark spines or stripes on the side of the body. Also, while the two occur at the same time of year, they are vastly different in behavior. Unlike the corn earworm, WBCW larvae are not cannibalistic, so a single ear may contain up to 10 larvae. Generally one larva per plant may not cause severe damage, but several per ear can significantly affect yield. WBCW larvae feed on the kernels in the ear tips and along the ear, leaving ears partially consumed or seriously scarred. In addition to the direct grain loss, this pattern of feeding makes ears more susceptible to ear molds that reduce quality. WBCW larvae are generally present in corn ears into September, while their damage is evident until harvest.

Scouting for WBCW should begin as soon as the first moths of the season are caught. In corn, check 20 consecutive plants at five separate locations. If 8% of the plants have an egg mass or young larvae are found in the tassel, an insecticide application may be justified. Timing of the application is critical, as control is difficult once the larvae reach the ear tip. Applications should be timed for when 70%-90% of the eggs have hatched. Thorough scouting is the only way to determine when this occurs.

Forages

Forage pest complex – Populations of most forage insects are waning across Wisconsin, thanks to the recent cool evening temperatures. **Potato leafhopper** nymph production has decreased considerably in the last two weeks. Counts of adults averaged 3.7 per sweep in north

central alfalfa fields. **Plant bugs** averaged fewer than 4.4 per sweep, while **green cloverworms** averaged 1.1 per sweep. **Grasshoppers** were also common inhabitants of northern alfalfa fields, where counts averaged five per sweep. Most of these insects will persist into fall, especially grasshoppers and leafhoppers, but with average daily temperatures on the decline, it is more than probable that forage insect populations will continue to decline as well.

Soybeans

Soybean aphid – The 2004 soybean aphid survey is expected to be completed next week; however, summary maps showing distribution and peak populations will not be available until November. Once completed, the survey will have documented aphid levels in nearly 300 soybean fields in 60 Wisconsin counties. Preliminary survey findings suggest aphid pressure was dramatically lighter this season than in any previous year. In fact, the current statewide average number of aphids per plant, based on data entered thus far, is 9.6. That compares to 770 per plant at this time in 2003. Also, very few fields with 100% incidence (aphids on 100% of the plants) were encountered this season. The statewide average incidence is 30% for now. Last season, 100% of the plants were affected in nearly every field surveyed. The 2004 survey has also found a relatively high number of aphid-free fields. A total of 62 of the 192 fields surveyed thus far, or 32%, were recorded as having 0% infestations, or aphid-free. During this week's survey in Clark, Langlade, Lincoln, Marathon, Oconto, Shawano, Taylor and Wood Cos. a total of 12 of the 24 fields (50%) surveyed had no soybean aphids. In sum, 2004 has been an exceptionally light year for the soybean aphid. More comprehensive survey results will be available in next week's Bulletin.

Grasshoppers – Adults are the most significant defoliators in the northern and west central parts of the state. In Clark, Langlade, Lincoln, Marathon, Oconto, Shawano, Taylor and Wood Co. field margins, 20%-65% defoliation was common. While defoliation was heavy in many northern and west central fields, the grasshopper feeding appeared to not be affecting the pods. As soybean plants begin to dry in the weeks ahead, defoliating insects like grasshoppers, flea beetles and bean leaf beetles may turn to the succulent pods as a source of moisture. In the late summer and fall, soybean pods should be examined on a routine basis. If 8% or more of the pods are damaged and pests causing damage are present, then rescue treatment may be warranted.

Bean leaf beetle – Very little bean leaf beetle activity has been detected in the last two to three weeks. Reports of beetle sightings in the west central district were received this week, but no beetles were detected in

central and northern soybean fields north of Portage Co. Defoliation levels do not appear to be significant at this time. It is likely, however, for low-level populations of beetles to still be present in southern soybean fields. Southern soybean growers are encouraged to continue to scout for pod feeding by second generation beetles in the next two weeks. Overall, we will likely see minimal bean leaf beetle activity during the remainder of the season.

Redheaded flea beetle (*Systema frontalis*) – This relatively large flea beetle species was frequently encountered in northern and central Wisconsin soybean fields this week, from Clark Co. east to Door Co. Interestingly, where the range of the bean leaf beetles appears to end in the central part of the state, the flea beetles range begins. The redheaded flea beetle appears to be a pest of northern and central Wisconsin soybeans, while the bean leaf beetle primarily occurs in the south. Unlike the bean leaf beetle, the concern with flea beetles stems solely from their role as defoliators; the redheaded flea beetle species is not reported to transmit soybean viruses.

Redheaded flea beetles appear entirely black at first glance, but upon closer inspection, an orange-red color can be detected on the head. Like all flea beetles, this species is equipped with enlarged, powerful hind legs for jumping. An assessment of redheaded flea beetle activity should be included in routine evaluation of defoliation in general. This insect's impact is the greatest in combination with pressure from other soybean defoliators.

Potatoes

Mid August and still **no late blight** reported anywhere in Wisconsin. **Early blight** continues to advance in some fields, prematurely defoliating the vines and reducing the yield potential. It appears that many growers who applied boscalid fungicide earlier in the season continue to see good early blight control, so we might factor this into our decisions for next year. In our Hancock trials, those treatments with one or more sprays using boscalid in conjunction with a protectant program continue to look the best in terms of early blight control. It appears that early season use of strobilurins alternated with boscalid mixed with a protectant fungicide also provides some of the best early blight control. (Walt Stevenson, UW-Madison)

Current P-Day and Severity Value Accumulations for 2004
(<http://www.plantpath.wisc.edu/wivegdis/index.htm>)

Calculation Date 8/18/04

| Location | P-Day | Severity Value |
|---------------------------|-------|----------------|
| | total | total |
| Antigo emerging June 4 | 529 | 50 |
| Antigo emerging June 12 | 475 | 43 |
| Antigo emerging June 24 | 386 | 39 |
| Grand Marsh emerging 5/12 | 689 | 127 |
| Grand Marsh emerging 5/17 | 665 | 121 |
| Grand Marsh emerging 5/22 | 630 | 117 |
| Hancock emerging 5/12 | 694 | 100 |
| Hancock emerging 5/17 | 670 | 94 |
| Hancock emerging 5/22 | 635 | 90 |
| Plover emerging 5/11 | 707 | 90 |
| Plover emerging 5/25 | 625 | 73 |
| Plover emerging 6/20 | 439 | 41 |

Vegetables

Focus on **Corn earworm (CEW)**. Sweet corn is most attractive to CEW moths during the late tassel and early silking stages. Although CEW moths can potentially lay eggs just about anywhere near the upper half of corn plants, the moths prefer to lay most of their eggs on fresh silks. Following egg hatch, the young (1/8 inch in length) larva will rapidly move down the silk channel to begin feeding on the kernels. Once larvae are feeding within the protection of the husk, it is virtually impossible to control the larvae with insecticide sprays. As silks begin to turn brown, and as ears mature, moths will move to nearby sweet corn that is just beginning to silk. CEW will also lay eggs in snap bean, tomato and pepper fields, but sweet corn is usually the preferred host, when given a choice.

Given the damage potential for CEW in sweet corn, action thresholds are very low. For both fresh and processing sweet corn, insecticide sprays should begin when 4% of the plants have eggs or young larvae present on the silks. Unlike ECB, CEW eggs are laid singly, and are easy to see if you have good eyesight (or have a 10X hand lens). Egg hatch rate is also highly dependent upon temperature. (Excerpt from Aug 9 *Minnesota Fruit and Vegetable News* article by Bill Hutchinson and Erik Burness, U of Minn. Dep't of Entomology)

Cabbage looper – The cool weather may be keeping cabbage looper activity at bay in Wisconsin; however, in Minnesota, CL populations in untreated research plots are above threshold according to the August 16 *Minnesota Fruit and Vegetable News*. Continue to scout for larvae and damage.

Imported cabbageworm – Lots of ICW mating activity was observed in Manitowoc, Calumet, Kewaunee, Door and Brown counties in the past week. East central growers of cole crops, turnip, radish, mustard, and nasturtiums should scout for eggs. See the July 30 Bulletin for scouting directions and threshold

information.

Squash vine borer - A DeForest (Dane Co.) resident reports approximately 50% of his zucchinis are infested with 1 ¼", almost fully grown, larvae. Squash vine borer-ridden zucchini plants can generally be diagnosed by looking for the point where the borer enters the stem. The entry point will often have yellow granular or sawdust-like frass exuding from it. The best way to reduce the chance of future squash vine borer infestations is to destroy vines soon after harvest to kill any larvae still inside stems, and disk or plow the soil in fall or spring to destroy overwintering cocoons. On a separate note, if a plant wilts but there is no evidence of squash vine borer activity. It's likely that another pest may be the culprit. Other possible causes of wilting are root feeding by cucumber beetle larvae, or a bacterial wilt infection.

Squash bug – Squash bug damage has been observed in Dane County. Pumpkins and squash are preferred hosts, but gourds, melons and other vine crops are also at risk. Damage first appears on leaves or the fruit as yellow spots that later become brown and dry. Wilting of the vine can also occur. The wilting caused by SB may look similar to bacterial wilt but is not as detrimental. Bacterial wilt is spread by the **striped cucumber beetle**, not the squash bug. It is important to know which pest is attacking your crop before you treat. The SB is dark brown or gray, is ¼ to ½ inch long, and looks flattened. When crushed, the SB gives off an disagreeable odor. Squash bugs nymphs will congregate at the base of the plant, under leaves, or rocks, and will quickly disperse if disturbed. Eggs are laid in clusters of 12-16 in a v-shaped mass. Scout for SB eggs on the undersides of leaves. Treatment threshold is one egg mass per plant. The SB is commonly confused with the stinkbug, which is also gray, flat and gives off an odor; however, the stinkbug is not a pest of vine crops.

White mold of snap beans -- Conditions continue to favor white mold development. Treatment with fungicide at 10% bloom helps to protect the susceptible flowers from infection. Treatment possibilities include Topsin M, Rovral and the new fungicide Endura. Timing is critical for white mold control and the window of opportunity for control is short, coinciding with peak bloom. Cool weather can prolong this window, while warm weather can shorten the time between bloom and harvest. Once pin beans appear, the window is essentially closed because of preharvest interval restrictions on the pesticide labels. The PHI for Topsin M and Rovral is 14 days while the PHI for Endura is 7 days. Treatment with fungicide once white mold symptoms have appeared contributes very little to control. If white mold is observed at harvest, consider the application of Contans, a biological material, before the crop residue and white

mold infected material are tilled into the soil. This will help to rot the overwintering sclerotia of the white mold fungus and greatly reduce the level of primary inoculum when the next susceptible crop is planted in the field. (Walt Stevenson, UW-Madison)

Downy mildew of onion -- Most production areas are seeing at least some symptoms of this disease. Normally downy mildew is more of a curiosity in Wisconsin, but with the cool wet summer we've seen so far, conditions have favored this disease. Initial symptoms include pale green elongated patches on individual leaves covered with a grayish violet, furry growth. This is most evident early in the morning or during periods of wet weather. Affected leaves gradually become a pale green to yellow and affected leaf tips fold over and collapse. According to the literature, some individual plants may become systemically infected and later the bulbs become soft and shriveled. Thus control and containment in the field seems to be important. The fungicide of choice at this point in the growing season is Ridomil Gold MZ since this combines a systemic fungicide with a protectant mancozeb. The fungus has a long latent period between infection and sporulation (9-16 days) so it is often difficult to judge immediately whether sprays are helping. Most fields are within 3-4 weeks of lifting and spraying of production fields should continue until the tops are desiccated. (Walt Stevenson, UW-Madison)

Powdery mildew of pumpkin -- Pumpkins continue to slowly enlarge and are going to need every warm day remaining to make a good crop. Powdery mildew can reduce the vigor of vines and affect fruit sizing. Fungicide sprays of Procure, Topsin-M, Nova or one of the strobilurins will help to slow spread of powdery mildew. There are several pumpkin varieties with powdery mildew resistance. Growers should be taking a hard look at these new varieties as a way to reduce inputs in future years. (Walt Stevenson, UW-Madison)

Apiary

Fall medicating – It's time to think about winterizing your colonies. It's not enough to kill varroa mites in the hive. To overwinter successfully, the colony needs to raise a healthy population of worker bees to last through winter. If using CheckMite+ä, strips should be in place by mid-September after removal of honey supers. Cull weak colonies and only feed the strongest. Hives with three deeps or equivalent and 75-95 lbs of food reserve, a young prolific queen and proper mite control measures have the best chance to overwinter.

For more detailed information about honey bee control treatments please call the Apiary Program (608) 266-7132 or visit our website at <http://www.datcp.state.wi.us/>, keyword "apiary".

Forest and Landscape

Bronze birch borer – A localized but heavy infestation of bronze birch borer was observed on ‘Crimson Frost’ birch at a nursery in Manitowoc Co. Bronze birch borer adults emerge from late May into June, when black locust and multiflora rose are blooming. They first feed on leaves before mating and laying eggs. Trunk sprays should begin within the first week of adult emergence. Imidacloprid can be applied to the soil or injected in early spring to kill the young larvae. For more information see Extension publication <http://cecommerce.uwex.edu/pdfs/A2692.PDF>

Viburnum crown borer – A heavy infestation of this pest was found on compact American cranberry viburnum at a nursery in Waukesha Co. For more information see Extension publication <http://www.uwex.edu/ces/wihort/gardenfacts/XHT1046.doc>

Pine needle scale – Heavy infestations were found on mugo pine in Waukesha Co. and on Scotch pine at a nursery in St. Croix Co. Crawlers were noticed at the infestation in Waukesha Co. For more information see the Christmas Tree Pest Manual at <http://www.na.fs.fed.us/spfo/pubs/misc/xmastree/>

Redheaded flea beetle – It seems to be a good year for this occasional pest. This week it was found in moderate to heavy numbers feeding on weigela at a nursery in Manitowoc Co.

Spider mites – Numbers of spider mites seem to be increasing throughout the state on a variety of trees and shrubs. For more information see Extension publication <http://www.uwex.edu/ces/wihort/pests/Two spotted Mite.htm>

Eriophyid mite on Echinacea – A previously unidentified eriophyid on purple coneflower flowers has been identified as belonging to the genus *Aceria*. There are about 110 species from this genus associated with plants from the Asteraceae. For some time, the symptoms now believed to be caused by the eriophyid were thought to be associated with aster yellows somehow, though atypical. Identification to species level (or naming, if necessary) is in progress.

Powdery mildew – This is the time of year when powdery mildew really starts to become noticeable. Serviceberry from nurseries in Clark, Manitowoc, Marathon Portage and Waukesha Cos. had moderate amounts of powdery mildew infecting the foliage. Other plants with moderate to heavy amounts of powdery mildew this week include lilac, horsechestnut, nannyberry viburnum, white oak, rose and honeysuckle vine.

Anthracnose – This week’s featured anthracnose is birch anthracnose caused by *Discula betulina*. It was found in light to moderate amounts at nurseries in Manitowoc, St. Croix and Waukesha Cos. on river birch. This disease is usually not severe enough to warrant treatment. It is more prevalent when we have wet, cool spring weather. In nursery situations where an adequate number of leaves need to be maintained on the tree, copper or sulfur fungicides at budbreak and leaf expansion may lessen the severity of the disease. Raking fallen leaves can also lessen the severity by removing inoculum. For more information see Extension publication <http://www.uwex.edu/ces/wihort/gardenfacts/XHT1001c.doc>

Black knot – Moderate numbers of knots were found on pink flowering cherry and summer glow cherry at nurseries in Manitowoc and Wood Cos. Management of black knot includes pruning out infested twigs and branches at least 3 to 4 inches beneath the knot. Spores can be produced on these pruned out galls so these branches should be destroyed. Wild *Prunus* species should be removed from areas adjacent to nursery plantings. If black knot is a perennial problem fungicides can be used to control the disease. Applications should be made in the spring during shoot elongation to protect the new growth. For more information see Extension publication <http://www.uwex.edu/ces/wihort/gardenfacts/XHT1056.doc>

Pine needle rust – Red pine at a nursery in Clark Co. had moderate amounts of this needle disorder. The fungus that causes this disease requires an alternate host to complete its life cycle. The alternate hosts are primarily goldenrod and aster. This disease is most common on young trees up to sapling size. Management of the alternate hosts in and around the trees is the most effective way to reduce the severity of this disease. If possible remove the alternate hosts in and around the planting area either mechanically or with registered herbicides. Mow the alternate hosts before August to reduce the amount of leaves with inoculum. Pines can be protected with fungicides in late summer. For more information see the Christmas Tree Pest Manual at <http://www.na.fs.fed.us/spfo/pubs/misc/xmastree/>

Eastern gall rust – Heavy amounts of gall rust were reported on Scotch pine at a nursery in Clark Co. Management includes pruning out branch galls when they are first observed, especially ones near the main trunk. To protect seedlings, fungicides may be applied in spring and early summer. Treatment of larger trees is not recommended as it is not economical. For more information see the Christmas Tree Pest Manual at <http://www.na.fs.fed.us/spfo/pubs/misc/xmastree/>

Lirula needlecast – Light amounts of this fungal needle disease were recorded from balsam fir at a nursery in Lincoln Co. For more information see the Christmas Tree Pest Manual at <http://www.na.fs.fed.us/spfo/pubs/misc/xmastree/>

Spruce needle drop – This week's positive counties include Jefferson, Lincoln, Manitowoc, Marathon, Pierce, Portage and Waukesha Cos.; hosts include Colorado, Black Hills and white spruce.

Spruce budworm – there has been some defoliation and mortality of white spruce in the Nicolet National Forest this year. According to the Forest Service folks spruce budworm and/or SNEED (a needle disease of spruce) are taking their toll on white spruce trees aged 35+ years. A similar phenomenon is occurring on the Chequamegon National Forest at a larger scale than in the Nicolet. Mortality has occurred quickly in some stands and salvage operations have already been approved for many areas. (Linda Williams, DNR)

Calendar

Aug 21 West Madison Horticulture Field Day West Madison Ag Research Station, Verona, WI, 10:00 to 3:00. There will be vegetables of all types to taste, herbal vinegars, roasted garlic and peppers, sweet corn, and Asian vegetables. There are also four seminars in the building: Invasive Weeds, Insects in the Garden, Diseases in the Garden, and Prairie Plants. For more information contact Asst. Superintendent Judy Reith-Rozelle, 8502 Mineral Point Rd., Verona, WI 53593-9689 at 608-262-2257 or fax 608-829-3074.

August 26 Central Wisconsin Corn and Soybean Field Day at the Tom Storandt farm in Adams County. Registration will start at 10:00 a.m. There is no charge for attending and lunch will be provided. For more information call Don Genrich at 608-339-4237.

August 26 Greater Sauk Graziers Network Summer Pasture Walk at the Jim & Tammy West farm outside of La Valle at Topics include: CRP converted dairy grazing, Brome/Quack over-seeded with red clover; "Going Organic" what are the requirements? Call 608-985-7160.

August 28 Beef Grazing/Pasture Walk at the Vince Metcalf farm in Montello. Vince was recognized as the Master Shepard by the Wisconsin Sheep Breeders in 2003. He has a flock of 130 ewes and lambs. For more information call 608-297-9153.

September 1 Agronomy/Soils Field Day at the Arlington Research Station. Tours and exhibits of current crops and soils research. Lunch and refreshments will be available. For more information contact the UW Dept. of Agronomy at (608) 262-1390.

September 30 - October 4 World Dairy Expo Madison, Wisconsin. For more information please visit the WDE web site at

<http://www.world-dairy-expo.com/gen.main.cfm>

Black Light Trapping Results

| Trap Site | Date | ECB | AW | BC | VC | SC | DC | Cell | FL | CabL | CEW | WBCW |
|----------------------|-----------|-----|----------|----|----|----|----|------|----|------|-----|------|
| Southwest | | | | | | | | | | | | |
| Lancaster | 8/12-8/19 | 55 | 3 | 0 | 2 | 0 | 11 | 2 | 14 | 2 | 2 | 2 |
| South Central | | | | | | | | | | | | |
| W Arlington | 8/12-8/19 | 28 | 1 (fall) | | | | | | | 2 | 4 | |
| W Madison | 8/12-8/19 | 20 | 4 | 0 | 4 | 0 | 24 | 0 | 2 | 0 | 2 | |
| Mazomanie | 8/12-8/19 | 20 | 4 | 0 | 11 | 3 | | | | | 5 | 8 |
| West Central | | | | | | | | | | | | |
| Sparta | 8/12-8/18 | | | | 2 | 8 | 37 | | | | 2 | |
| Coon Valley | 8/13-8/20 | | | | | | | | | | 2* | |
| Central | | | | | | | | | | | | |
| Marshfield | 8/12-8/19 | 2 | 12 | 2 | | 2 | | | 2 | | 0 | |
| Plover | 8/12-8/19 | 32 | | | | | | | | | | |
| Plainfield | 8/12-8/19 | 0 | | | | | | | | | | |

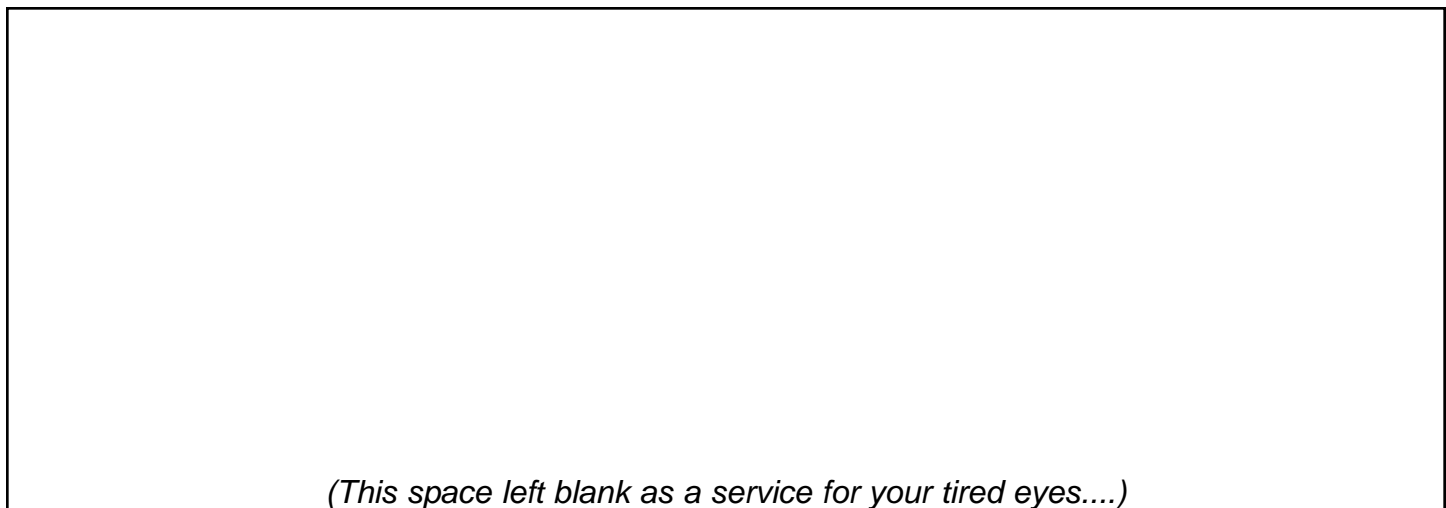
ECB--European corn borer; **AW** --armyworm; **BC**--black cutworm; **VC**--variegated cutworm; **SC**--Spotted cutworm; **DC**--dingy cutworm; **Cell**--celery looper; **CEW**--corn earworm; **FL**--forage looper; **CabL**--cabbage looper

* corn earworm pheromone trap

Apple Insect Trapping Results through August 20, 2004

| | Date | STLM | RBLR | CM | OBLR | AM - Red baited | AM- Red baited-range | AM-Red unbaited | AM yellow | AM yellow-range |
|------------------------|-----------|------|------|-----|------|--------------------|-------------------------|--------------------|--------------|--------------------|
| Crawford Co. | | | | | | | | | | |
| Gays Mills-E2 | 8/12-8/19 | 160 | 2 | 11 | 4 | | 3-27 | 0-2 | | |
| Gays Mills-W2 | 8/9-8/16 | 200 | 2 | 0 | 2 | | | 0 | 0 | |
| Iowa Co. | | | | | | | | | | |
| Dodgeville | 8/12-8/19 | 90 | 6 | 40 | 0 | 33 | | | | |
| Richland Co. | | | | | | | | | | |
| Hill Point | 8/5-8/17 | 100 | 1 | 1 | 1 | | | 2 | 0 | |
| Richland Center -W | 8/12-8/19 | 650 | 11 | 3 | 3 | | 7-23 | 0-2 | 0 | 0 |
| Richland Center-E | 8/12-8/19 | 370 | 4 | 2 | 1 | | 12-46 | 0-2 | 0 | 0 |
| Sauk Co. | | | | | | | | | | |
| Baraboo | 8/12-8/19 | 115 | 0 | 3 | 2 | | 2-4 | 0-1 | 0 | 0 |
| Dane Co. | | | | | | | | | | |
| Deerfield | 8/10-8/17 | 0 | 0 | 1 | 0 | 4 | 2-10 | | 0 | |
| W Madison | 8/12-8/18 | 210 | 8 | 1 | 5 | | | 9 | | |
| Ozaukee Co. | | | | | | | | | | |
| Mequon | 8/13-8/18 | 150 | 0 | 0.3 | 0.5 | 7.3 | | 0-29 | 1.1 | 0-4 |
| Racine Co. | | | | | | | | | | |
| Raymond | 8/12-8/19 | 310 | 11 | 3 | 0 | | | 0 | 0 | |
| Rochester | 8/12-8/19 | ~15 | 1 | 5.7 | 4.25 | 7.4 | 0-16 | 2.23 | 1.1 | |
| Waukesha Co. | | | | | | | | | | |
| New Berlin | 8/12-8/19 | 860 | 0 | 1 | 1 | | | 1 | 1 | |
| Pierce Co. | | | | | | | | | | |
| Beldenville | 8/11-8/18 | 35 | 2 | 0 | 0 | | | 2 | 0 | |
| Spring Valley | 8/13-8/20 | 326 | 0 | 0 | 0 | | 0-2 | 1.5 | 0 | |
| Jackson Co. | | | | | | | | | | |
| Hixton | 8/9-8/17 | 5 | 0 | 0 | 0 | | | 1 | | |
| Marquette Co | | | | | | | | | | |
| Montello | 8/8-8/15 | 816 | 0 | 0 | 0 | 0 | 0 | | | |
| Fond du Lac Co. | | | | | | | | | | |
| Campbellsport | 8/12-8/17 | 0 | 50 | 8 | 0 | | | | | |
| Rosendale | 8/10-8/18 | 33 | 26 | 1 | 0 | 1 | 0 | | | |
| Marinette Co. | | | | | | | | | | |
| Wausaukee | 8/13-8/20 | 30 | 5 | 0 | 1 | | 0 | 0 | | |

STLM--Spotted tentiform leaf miner; **RBLR**--Redbanded leaf roller;**CM**--Codling moth;**OBLR**--Oblique banded leaf roller; **AM**--Apple maggot



(This space left blank as a service for your tired eyes....)



Department of Agriculture,
Trade & Consumer Protection
Division of Agricultural Resources Management
PO Box 8911
Madison WI 53708-8911

Web Site of the Week

Invasive Plants Association of Wisconsin

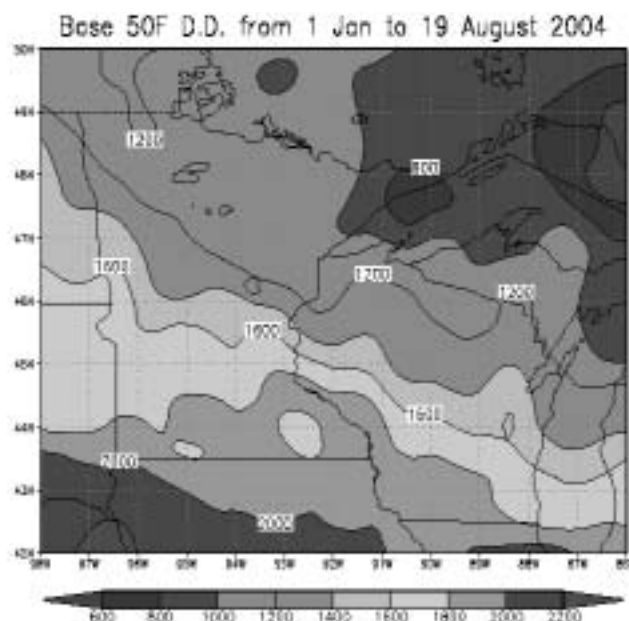
<http://www.ipaw.org/>

“The mission of the Invasive Plant Association of Wisconsin is to promote better stewardship of the natural resources of Wisconsin by advancing the understanding of invasive plants and encouraging the control of their spread.” (from the website) Control information, a rogue’s gallery, a useful calendar and lots of great links. Includes a role for you—the INVASIVE PLANT REPORTING AND PREVENTION PROJECT, a public interactive reporting program.

Quote of the Week

In a world of apples and kisses and shoes,
He wasted his wishes on wishing.

‘Lester’, from *Where The Sidewalk Ends*
Shel Silverstein (1930-1999) American poet



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