Wisconsin Crop Weather

Compiled by the Wisconsin Field Office of
USDA's National Agricultural Statistics Service

December 19, 2006 Annual Crop Weather Issue

REVIEW OF THE 2006 CROP YEAR

2006 - Warm Growing Season

Warm temperatures were the highlight of the 2006 growing season. Weather patterns allowed for an extremely fast start to spring planting. Early planting and above normal growing degree days helped crops mature at a rapid pace. However, cool and moist weather in the fall kept harvest progress at or behind normal levels. Rains during the second half of the growing season improved soil moisture and the conditions for pasture, hay, and the fall-seeded wheat.

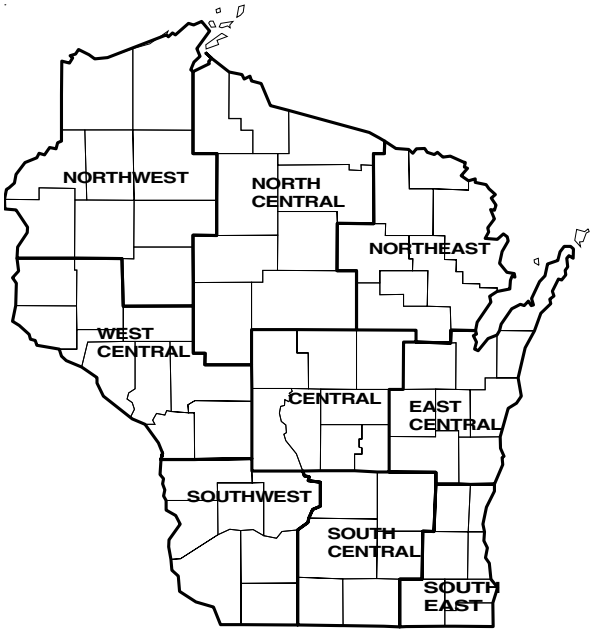
Temperatures from June to September were 1.4 degrees above normal in 2006. This was the second straight growing season with above normal temperatures. However, 2006 was not quite as warm as 2005 when temperatures averaged 3 degrees above normal. The growing season ended with September and October cooler than normal.

Precipitation in 2006 was sporadic in Wisconsin. Moisture levels varied across the state and within counties. Total precipitation for April through September was at 20.5 inches, 1.8 inches below normal. Conditions were not as dry as 2005 when the state received only 17.8 inches during the same time period. Moisture levels were lowest in northwestern and east central counties. The lack of rain in those areas caused many crops to struggle. Other areas got rain at important stages of crop development. Rains came in May, just after many crops were planted. Precipitation returned in late summer during the critical pollination stage for several major crops. Timely rains and adequate growing degree days led to many reports of better than anticipated yields.

Monthly Weather

Multiple snow storms hit the state during the first three weeks of **December** 2005. At the end of the month, warmer temperatures arrived and rain was received in many areas. The warmer temperatures and rain reduced snow cover in the southern half of the state. Moderate snow cover was still present in the northern half of the state at the end of December. Temperatures averaged 1 degree above to 3 degrees below normal during the month. Precipitation ranged between 0.32 and 1.19 inches. Abnormally warm temperatures highlighted **January's** weather. Temperatures averaged 13 to 16 degrees above normal during the month. Most areas of the state received normal to above normal precipitation for the month. Light snow cover was reported in northern counties. Warmer temperatures and rain melted most snow cover in central and southern parts of the state. Temperatures averaged 2 degrees below to 1 degree above normal during **February**. Snow cover was present in northern counties during most of February. Storms during the middle of the month brought snow cover to central and southern counties. Overall for the winter, many areas experienced below normal precipitation. Temperatures in Wisconsin were slightly above normal for **March**. Average high temperatures during the month reached the low 40's. Northern areas of the state received 1.03 to 2.33 inches of precipitation; southern areas received 2.19 to 3.56 inches. Snow cover could still be found in northern areas of the state.

April weather was 5.9 degrees warmer than normal and precipitation was 0.13 inches below normal. Warm temperatures in early April melted any remaining snow and allowed farmers to get started with spring tillage and oat planting. Low temperatures were in the 20s early in the month. Highs reached into the 70s across the state at the end of the month. Scattered rains were reported each week. Soil moisture conditions were at 6 percent very short, 30 percent short, 55 percent adequate, and 9 percent surplus at the end of April.



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Temperatures were 0.9 degrees above normal and rainfall was 0.95 inches above normal in **May**. Rains delayed fieldwork during the month. Storms moved across the state during the second week of May as rain totals ranged from 1.64 inches in Madison to 2.82 inches in La Crosse. Conditions were a little drier by the last week of the month when there were 5.1 days suitable for fieldwork. Soil moisture conditions improved to 2 percent very short, 8 percent short, 72 percent adequate, and 18 percent surplus by month's end.

June's weather was warmer and drier than normal. Temperatures were 0.8 degrees above normal, while precipitation was 1.67 inches below normal. Farmers were able to finish spring fieldwork rapidly in early June. The weather also allowed for a quick first hay cutting and a good start on the second cutting. Rains that did come were scattered and offered little relief for crops starting to show stress. Soil moisture conditions declined during the month. Conditions were rated as 13 percent very short, 34 percent short, 47 percent adequate, and 6 percent surplus on June 25.

July weather was 3.8 degrees hotter than normal and precipitation was 0.59 inches below normal. High temperatures hit 100 degrees in many parts of the state during the month. The lack of rain impacted crop conditions and lowered soil moisture levels. Conditions were worse for farmers in northern Wisconsin. Soil moisture levels hit a low point in early July when the largest percentage of the state's cropland was rated in very poor to poor condition. On July 9, soil moisture was at 30 percent very short, 37 percent short, 32 percent adequate, and 1 percent surplus. Shortly thereafter, rains brought relief for many crops which were starting to pollinate. Unfortunately, only limited rain fell in the northwestern district, negatively impacting crops for the remainder of the growing season. The rest of the state experienced improved soil moisture levels by the end of the month.

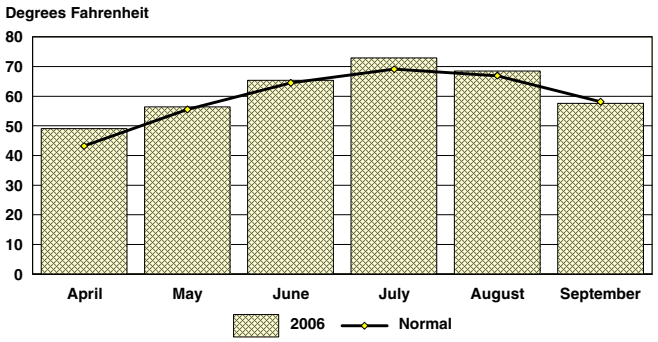
Temperatures in **August** were 1.6 degrees above normal and precipitation was near normal. Rains were steady throughout the first week in the north, giving crops a boost. Temperatures in western parts of the state topped 100 during the first week as well. Things cooled down for the remaining weeks and several storms moved across Wisconsin. A powerful hail storm hit west central counties on August 23. The storm caused isolated but significant damage to many crops. Soil moisture levels were 5 percent very short, 19 percent short, 65 percent adequate, and 11 percent surplus on August 27.

September was the only month during the growing season that had below normal temperatures. Temperatures were 0.5 degrees below normal and rainfall was 0.36 inches below normal. Rains during the second and third week of the month slowed corn and soybean harvest progress. Several counties in northern and central Wisconsin reported light frost during the third week of the month. Minimal crop damage was reported from the frost. Farmers continued harvesting between storms during the month.

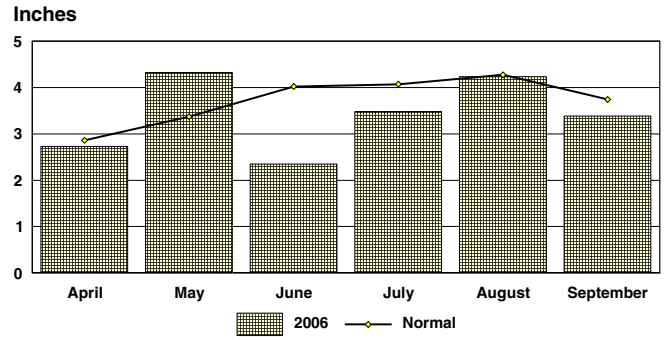
Weather during the first week of **October** was warm and humid. High temperatures reached the 80s and rainfall totals ranged from 0.28 in La Crosse to 1.77 inches in Eau Claire and Green Bay. During the second week, temperatures 6 to 9 degrees below normal brought frost to many areas of the state. Below average temperatures and additional rain during the second and third weeks of the month caused harvest delays. Drier weather at the end of the month allowed farmers to get back into the fields on a more consistent basis.

November's weather was more conducive for fieldwork than October's. While temperatures varied, minimal rainfall helped keep tractors and combines working in the fields. Temperatures were 4 to 6 degrees below normal during the first week of the month, but 4 to 8 degrees above normal the second week. November ended with another week of temperatures 6 to 9 degrees above normal bringing a close to most fieldwork. Soil moisture conditions finished the growing year at 5 percent very short, 13 percent short, 71 percent adequate, and 11 percent surplus.

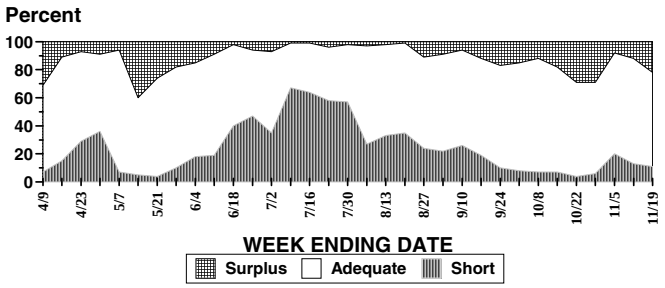
AVERAGE MONTHLY TEMPERATURE
WISCONSIN, 2006



AVERAGE MONTHLY RAINFALL, WISCONSIN, 2006



SOIL MOISTURE RATINGS, WISCONSIN, 2006



MONTHLY TEMPERATURES: 2006 GROWING SEASON AND NORMAL*

District	April 1/		May 1/		June 1/		July 1/		August 1/		September 1/	
	2006	Normal	2006	Normal	2006	Normal	2006	Normal	2006	Normal	2006	Normal
	Degrees Fahrenheit											
NW	49.6	41.7	56.8	54.4	65.9	63.1	73.1	68.1	67.9	65.9	56.5	56.6
NC	47.2	40.4	54.7	53.2	63.7	61.8	71.2	66.4	65.9	64.2	55.1	55.3
NE	46.9	41.3	54.4	53.6	62.8	62.5	70.6	67.0	66.1	64.8	56.2	56.0
WC	50.5	45.2	57.7	57.4	67.0	66.4	74.6	70.8	69.8	68.3	58.1	59.3
C	49.9	44.5	57.1	56.7	65.7	65.8	73.5	70.2	68.8	67.7	58.0	59.0
EC	48.2	42.8	55.1	54.6	64.5	64.1	72.7	69.5	69.1	67.9	59.4	59.8
SW	50.9	46.1	57.7	57.9	66.7	67.2	74.2	71.4	70.7	69.0	59.0	60.5
SC	50.8	45.8	58.2	57.8	66.5	67.2	73.8	71.3	70.7	68.9	60.0	60.6
SE	49.9	45.0	56.6	56.3	65.4	66.0	73.2	71.2	71.6	69.4	61.5	61.4
STATE	49.1	43.2	56.4	55.5	65.3	64.5	72.9	69.1	68.5	66.9	57.6	58.1

1/Preliminary estimates, 2006. * Normal is defined as the 30-year average for the years 1971-2000. Source: State Climatologist.

MONTHLY RAINFALL: 2006 GROWING SEASON AND NORMAL*

District	April 1/		May 1/		June 1/		July 1/		August 1/		September 1/	
	2006	Normal	2006	Normal	2006	Normal	2006	Normal	2006	Normal	2006	Normal
	Inches											
NW	1.90	2.39	2.61	3.29	2.14	4.19	2.75	4.29	3.91	4.44	2.40	3.89
NC	1.12	2.40	4.31	3.31	1.77	4.01	4.28	4.06	4.90	4.36	2.30	4.03
NE	1.29	2.65	5.47	3.29	1.70	3.69	4.75	3.70	4.42	3.81	3.49	3.74
WC	3.36	3.05	3.60	3.69	2.63	4.24	2.48	4.45	5.69	4.54	3.81	3.82
C	3.10	3.02	4.63	3.52	1.81	3.88	2.91	4.13	4.26	4.22	3.57	3.72
EC	2.46	2.81	6.12	2.95	1.97	3.51	3.07	3.38	1.66	3.86	3.22	3.42
SW	5.58	3.55	4.21	3.60	3.44	4.35	3.47	4.33	3.76	4.46	4.98	3.42
SC	4.66	3.47	5.03	3.40	3.85	4.19	3.92	4.07	4.41	4.24	4.63	3.51
SE	3.74	3.48	4.95	3.13	2.81	3.76	3.86	3.82	3.63	4.22	3.97	3.48
STATE	2.73	2.86	4.32	3.37	2.35	4.02	3.48	4.07	4.23	4.27	3.38	3.74

1/Preliminary estimates, 2006. * Normal is defined as the 30-year average for the years 1971-2000. Source: State Climatologist.

COMPARATIVE TEMPERATURE AND PRECIPITATION DATA

District	Average Temperature						Total Precipitation					
	June - September						April - September					
	Normal*	2002	2003	2004	2005	2006 1/	Normal*	2002	2003	2004	2005	2006 1/
	Degrees Fahrenheit						Inches					
NW	63.4	65.4	64.1	61.7	65.8	65.9	22.5	28.1	20.2	22.0	17.4	15.7
NC	61.9	64.5	62.9	61.2	65.6	64.0	22.2	28.3	19.6	20.0	17.0	18.7
NE	62.6	65.0	63.2	61.7	66.2	63.9	20.9	25.4	21.3	18.1	16.8	21.1
WC	66.2	68.7	67.1	65.0	68.7	67.4	23.8	27.4	18.4	27.9	21.7	21.6
C	65.7	68.0	66.1	64.4	68.8	66.5	22.5	25.2	19.7	24.6	18.3	20.3
EC	65.3	67.9	65.1	64.0	68.7	66.4	19.9	19.9	19.7	21.9	15.0	18.5
SW	67.0	69.0	67.3	65.5	69.7	67.7	23.7	24.5	19.1	27.7	20.1	25.4
SC	67.0	69.5	67.6	66.0	70.3	67.8	22.9	20.6	19.0	25.2	16.8	26.5
SE	67.0	69.5	66.7	65.5	70.1	67.9	21.9	22.3	16.3	24.0	15.1	23.0
STATE	64.7	67.0	65.2	63.4	67.7	66.1	22.3	25.5	19.5	23.1	17.8	20.5

1/Preliminary estimates, 2006. * Normal is defined as the 30-year average for the years 1971-2000. Source: State Climatologist.

CORN

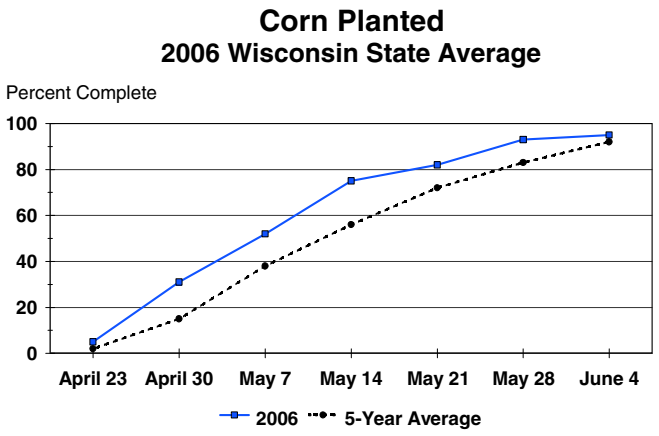
Warm April weather allowed farmers to get a quick start to corn planting. Planting activity started in southern Wisconsin by the middle of April. Corn growers in northern counties started planting on lighter soils by the third week of April, despite the concern over low soil temperatures. Early planting progress levels were ahead of previous years. Thirty-one percent of the corn was planted by April 30, compared to 23 percent the previous year and the 5-year average of 15 percent. Planting corn at a rapid pace continued during May. A few farmers had finished corn and switched to soybeans the first week of May. Storms towards the end of May slowed progress. However, farmers were able to find enough dry days to complete planting by the end of May. Ninety-three percent of the corn was planted on May 28, compared to 91 percent in 2005 and the 5-year average of 83 percent. The majority of remaining fields would be planted for corn silage after a forage crop was harvested.

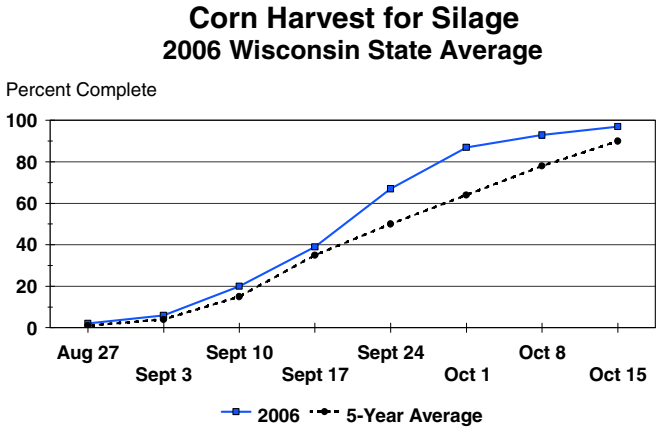
Corn was emerging at the start of May. Persistent cool, wet weather during the month delayed corn emergence. Producers in eastern and northern counties had to replant several fields due to the rain. Hard rains crusted fields in eastern counties, causing some farmers to use a rotary hoe to improve emergence. Although the weather caused a few problems for growers, 64 percent of the crop was emerged on May 28, while the 5-year average was at 47 percent. Warmer, drier weather arrived at the end of May and beginning of June, quickly improving corn conditions. Corn greened-up and the majority of the crop was rated as good to excellent. Unfortunately, weeds also thrived in the warm, humid weather. Farmers started spraying corn fields in early June. Emergence was 93 percent complete on June 11, compared to the 5-year average of 83 percent. At that time the corn crop was in good shape in most of the state. Producers in eastern counties were not as lucky. Storms continually brought rains during May and June. Several farmers in those counties struggled to get corn planted and achieve good stands with the wet fields. Those that dodged most of the storms were able to get their crop in on time and by mid-June it looked good.

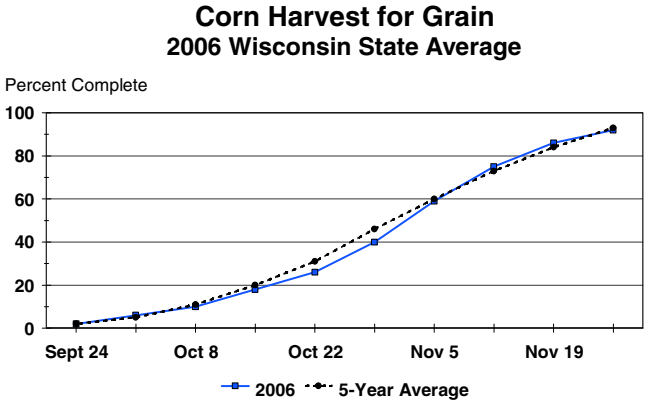
June and July were hot and dry across much of the state, stressing the crop. Corn was silking by mid-July. Several storms brought rain to southern Wisconsin during the second half of July. Precipitation came at the critical pollination stage for corn and bolstered the crop in the southern half of the state. While the major corn growing areas received rain at an important time, corn in many northern and central counties did not fare as well. Crops were stressed during pollination in the northern half of the state, especially the northwestern district. August brought more timely rain to southern Wisconsin and beneficial precipitation to producers in northern counties. Conditions improved for the state's corn crop and silking was 95 percent complete on August 13.

Silage choppers got moving the last two weeks of August though progress slowed due to several storms. As fields dried in September, most of the fields were harvested. Silage harvest was 87 percent complete on October 1, 23 percentage points ahead of the 5-year average.

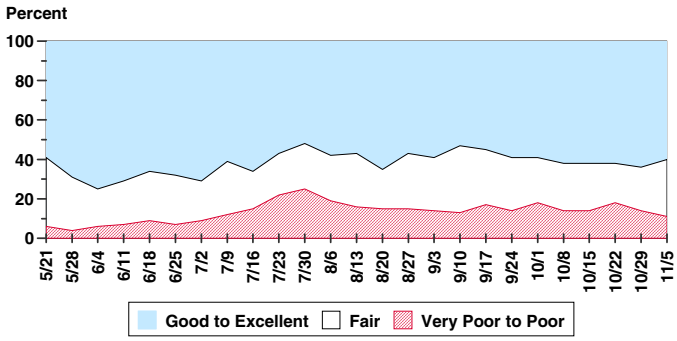
Harvesting corn for grain began in southern counties by the middle of September. Early harvest pace was comparable to historic trends. Six percent of the crop was harvested on October 1, close to the 5-year average of 5 percent. Most of the early harvested corn was high moisture corn. Weather in early October helped dry down the crop, and farmers started harvesting dry corn. However, progress lagged behind recent years because many farmers had the crop dry in the fields as much as possible to save on drying costs. Harvest was only 40 percent complete on October 29, compared to the previous year's 55 percent and the 5-year average of 46 percent. Fields dried out in November allowing the rest of the crop to be harvested. Yields in southern counties were better than anticipated for many growers. Variable yields were reported in the northern and eastern portions of the state. Ninety-two percent of the corn crop was harvested by November 26, behind the 96 percent reported in 2005 and the 5-year average of 93 percent.







Corn Conditions
2006 Wisconsin State Average



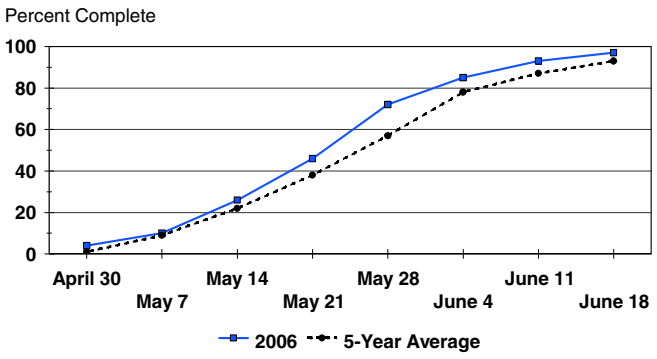
SOYBEANS

Farmers took advantage of field conditions in late April, getting a jump on soybean planting. Progress moved slowly in early May, due to rainy, cold weather and producers concentrating on finishing corn planting. After the corn planters were parked, bean planting activities intensified. Seventy-two percent of the crop was planted on May 28, even with the previous year, but ahead of the 5-year average of 57 percent. Warm, dry weather in early June provided ample planting days and farmers finished planting by mid-June.

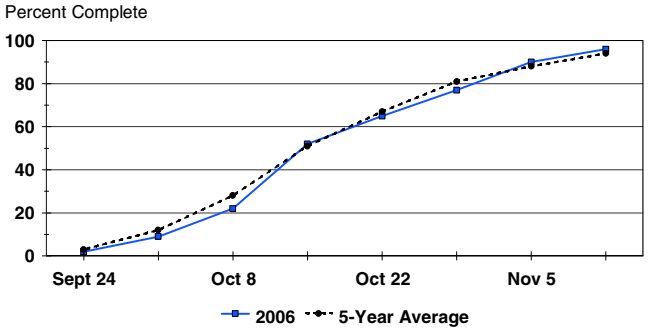
Getting soybeans in the ground early did not lead to early emergence in 2006. Cooler temperatures slowed emergence and caused concerns about plant populations in May. As things warmed-up in early June, plants started growing faster. Fifty-nine percent had emerged by June 4, compared to 55 percent in 2005 and the 5-year average of 44 percent. Spraying started in early June as farmers tried to stay ahead of weeds. Most areas were able to achieve effective weed control by the time all the crop had emerged at the end of June.

Soybeans started blooming in early July and began setting pods by the middle of the month. Dry weather stressed bean fields during the critical pollination phase in the northern two-thirds of the state. Producers in southern counties received a big rain in the middle of July helping the crop. At the end of July, 78 percent of the soybeans had bloomed, ahead of the 5-year average of 64 percent. Forty-eight percent of soybeans had set pods by July 30, compared to the 5-year average of 25 percent. At this same time, 18 percent of beans were rated very poor to poor, 28 percent fair, and 54 percent good to excellent.

Soybeans Planted
2006 Wisconsin State Average



Soybeans Harvested
2006 Wisconsin State Average

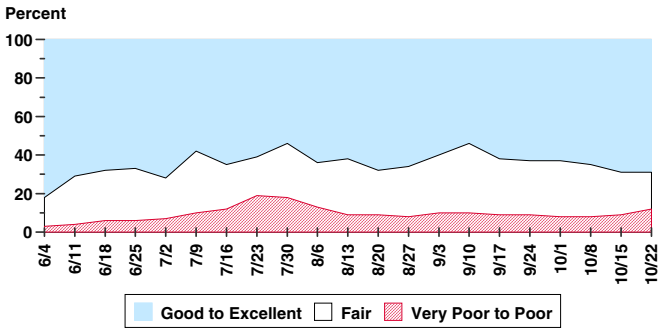


Aphids became an issue for many growers in southern Wisconsin during the first week of August. All fields had bloomed and the majority had set pods by the middle of August. At the same time, several areas in central and southern Wisconsin had soybean leaves turning color. Soybean plants started dropping leaves by the start of September, comparable to recent years.

Timely rains during July and August led to crops in southern Wisconsin that were tall and in good condition. Soybeans in northern counties showed stress for much of the summer. However, the August rains also improved conditions for those soybeans.

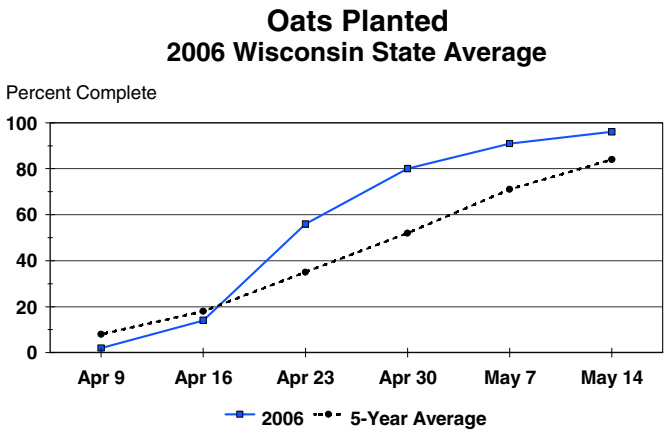
A few farmers began to start harvesting soybeans by the middle of September. A light frost towards the end of September had little impact on beans. Leaves had already changed color and most were being shed. Rain, mist, and cool weather hindered early harvest progress. On October 1 only 9 percent of the crop had been harvested, behind the previous year's 21 percent and the 5-year average of 12 percent. Weather continued to keep combines out of fields for at least a few days each week during October. At the end of October 77 percent had been harvested, behind 2005's 89 percent and the 5-year average of 81 percent. Soybean harvest had wrapped up by the middle of November. Reporters indicated that the sporadic summer rains caused highly variable yields across the state and within counties.

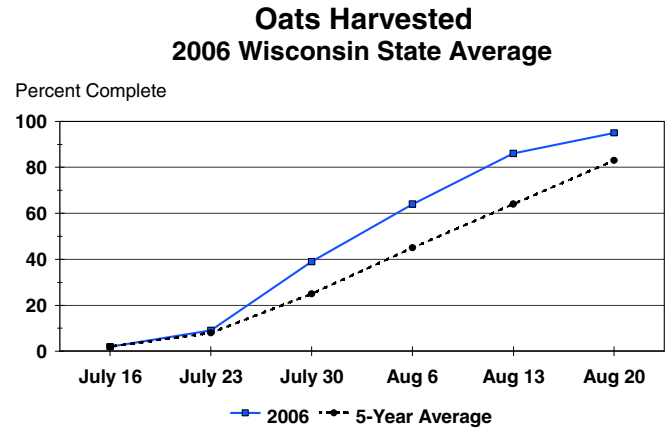
Soybean Conditions
2006 Wisconsin State Average



OATS

Oat planting on lighter soils in southern and central counties started during the first week of April. However, many farmers waited for warmer weather in the middle of April before getting their drills into the fields. Planting progress jumped quickly during the middle of April. Farmers were eager to get their oats seeded and start on corn. Oats planted reached 80 percent complete on April 30, well ahead of 2005's 66 percent and the 5-year average of 52 percent. Planting the remaining oat acres was finished by mid-May. Early planted oats in southern and central Wisconsin were emerging by April 23. Emergence was not far behind in other areas of the state, as warm, wet April conditions aided crops. Oat fields were in great shape by the end of May. On May 28, 97 percent of the crop was emerged, compared to the 5-year average of 84 percent. On that date 91 percent of the crop was rated as good to excellent, 8 percent was rated as fair, and only 1 percent was rated as poor. Early planted fields were heading by the first week of June. At the end of June, most of the crop was headed, and the majority of fields were rated as good to excellent. Harvest for grain started in mid-July; early progress was comparable to the previous 5 years. Harvesters increased the pace and on August 13, 86 percent was combined, in front of the 5-year average of 64 percent.

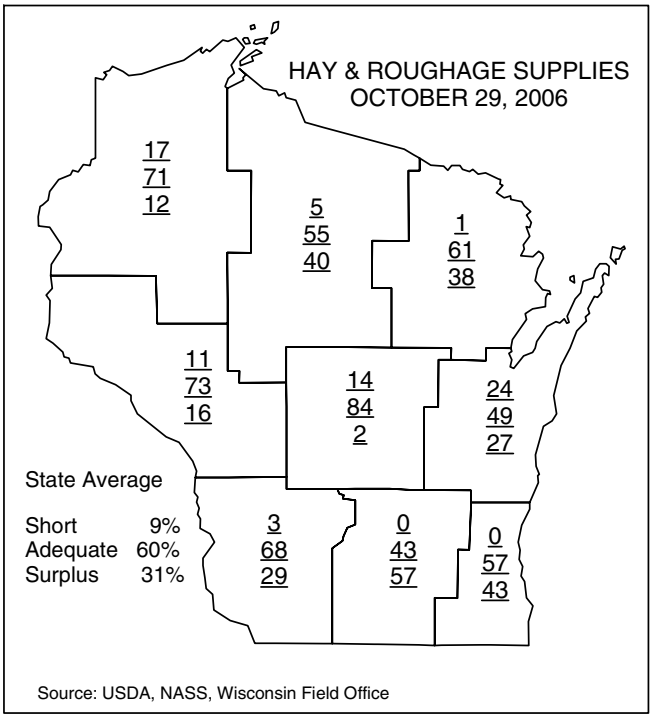


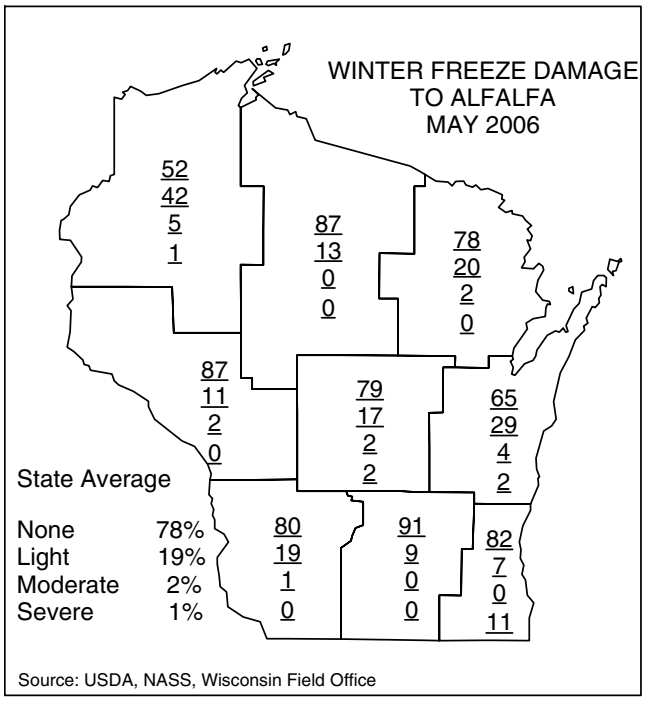


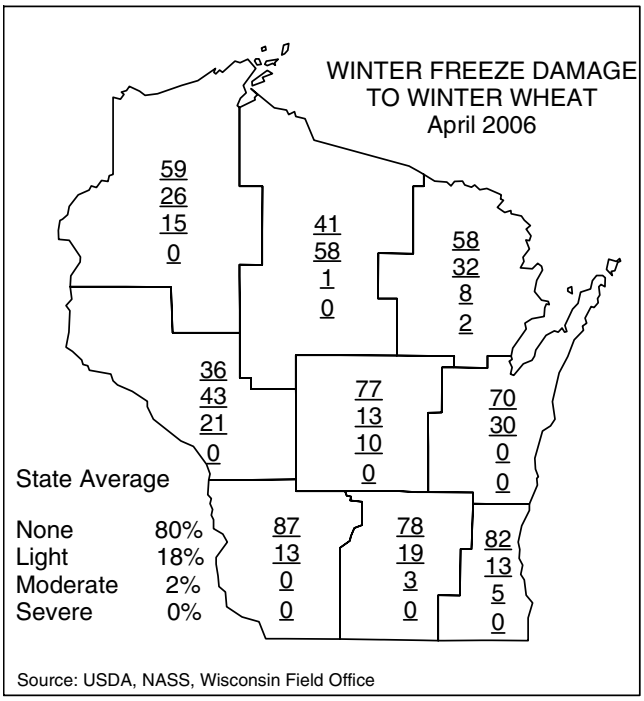
HAY

Alfalfa was greening-up and new fields were being seeded by early April. Spring seeding of alfalfa was completed by the third week of the month. Winter weather was gentle on most fields. Freeze damage to alfalfa was rated at 78 percent none, 19 percent light, 2 percent moderate, and 1 percent severe. The worst of the winterkill was reported in east central and southeast Wisconsin. Warm, wet conditions and the lack of significant winterkill helped the state's hay crop get off to a good start. First hay cutting started earlier than normal, 17 percent of the crop was cut on May 28, compared to the 5-year average of 7 percent. Yields and quality of the first crop were above average in southern portions of the state. Growers in northern Wisconsin reported average yields. Rains in eastern Wisconsin slowed progress during the entire first cutting. Hay cutting on the first crop was finished by the end of June. At the same time, harvest on the second crop began in southern areas. Dry summer weather in northern counties hindered regrowth and reduced yields. The quality of hay in the rest of the state was good and the lack of rain allowed for a rapid harvest. Second cutting hay was reported at 93 percent complete by July 30, compared to the 5-year average of 75 percent.

The third cutting started during the last week of July, ahead of the normal starting time. Regrowth on the third cutting was slow until several storms brought rain at the end of July and beginning of August. Third crop hay produced good quality and yields in most parts of the state. Harvest progress of the third crop was also faster than normal. On August 27, 75 percent of the hay was harvested, ahead of the 5-year average of 59 percent. The fourth cutting started coming off the fields by the end of August. Cutting progressed ahead of normal harvesting patterns during September and yields were good. Rain impacted the quality of the hay cut in early October. Variable precipitation during the growing season caused hay supplies to vary across Wisconsin. Some farmers in northern and central areas of the state reported shortages of hay supplies. Many farmers in southern Wisconsin had surplus hay at the end of the growing season. Hay and roughage supplies were rated at 9 percent short, 60 percent adequate, and 31 percent surplus in Wisconsin.

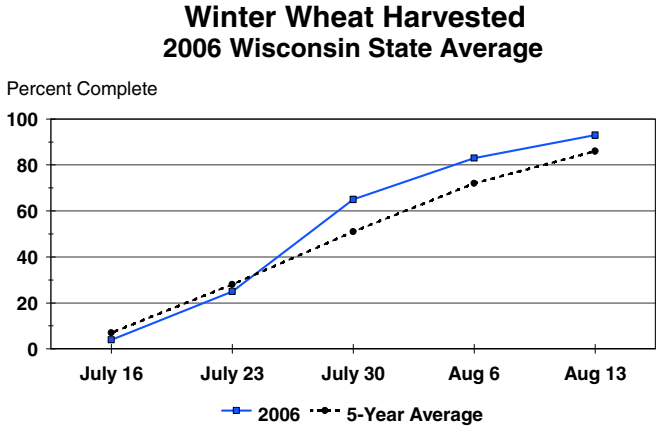






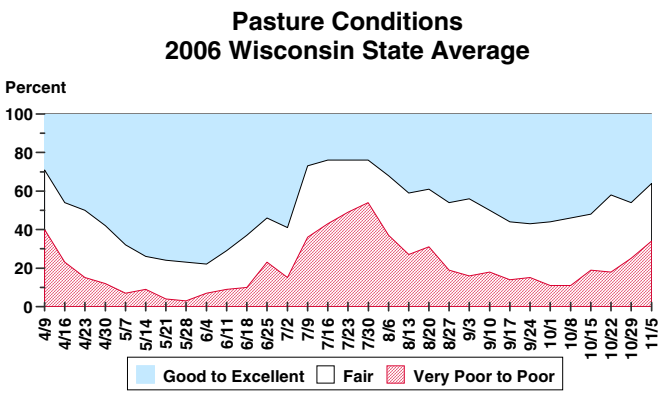
WINTER WHEAT

Winter wheat broke dormancy and got off to a fast start with rain and warm April weather. At the end of April, 88 percent of the crop was rated as good to excellent. Wheat survived the winter with minor freeze damage. Winter freeze damage to winter wheat was rated as 80 percent none, 18 percent light, and 2 percent moderate. Limited winterkill and good spring weather helped the wheat crop remain in good to excellent condition during the summer. Harvest started during the middle of July, slightly behind the normal pace. Combines easily caught up during the first two weeks of harvest. At the end of July, 65 percent of the crop was cut, well ahead of the 5-year average of 51 percent. Most of the crop was off the fields by the middle of August. Many farmers had an excellent wheat crop in 2006. Yield indications showed Wisconsin's farmers achieved a record yield.



PASTURES

Warm April weather helped pastures get a good start to the 2006 growing season. As conditions improved during the month, additional cattle were out grazing. On April 30, pasture conditions were rated at 58 percent good to excellent. Minimal rainfall and hot temperatures in July caused pastures to deteriorate. Fifty-four percent of pastures were rated as very poor to poor by July 30. Things improved for grazers in August and September. Temperatures were closer to normal and rain fell during these months. Conditions slowly got better and by September 24 only 15 percent of pastures were considered very poor to poor.



VEGETABLES

Warm weather allowed for potato planting in central sandy soils by the beginning of April. Other areas of the state were planting by the middle of April. Weather during the growing season was good, with no major disease problems. Peas, carrots, and beets were planted in central and eastern parts of the state by the end of April. Snap beans and sweet corn planting activity started during mid-May. Vegetable planting was slow during May, due to rain and cold weather. Peas progressed forward after the cold May, and were being harvested by the last week of June. Snap bean and cucumber harvest followed a few weeks later in July. Sweet corn started coming out of the fields by the middle of August. Vegetable harvest continued until the end of September. Vegetable yields were highly variable in 2006. Fields that were planted at the correct time and hit good weather did excellent. Other fields had unfavorable weather and didn't yield as well.

MAPLE SYRUP

Wisconsin's maple syrup season started in late February and closed by the end of April. Production was higher in 2006, while sugar content was lower. Most areas experienced favorable sap flow due to the warm days and cold nights. Production in eastern counties was reported as good to excellent, with most taps pulled by the beginning of April.

FRUIT

Fruit tree pruning started in southern Wisconsin during the first week of April. Blooming started in select locations at the end of April. Full bloom occurred by the end of the first week of May. Apple producers in northwestern Wisconsin experienced reduced apple size due to dry conditions. Weather cooperated for producers in other parts of the state during pollination, and trees had good fruit set. Apple harvest started in early September and was nearly finished by the middle of October. Many growers reported that the crop was in good condition with good yields. Tart cherry trees were hit by rain and wind during pollination. Growers also faced early season frosts and the lingering effects from the dry 2005 summer. These factors had a devastating impact on yields. Cranberry vines survived the winter with only minor winter damage and experienced only a few frosts early in the spring. Conditions allowed for good bloom and fruit set early in July. A major hail storm moved through parts of the cranberry growing region on August 23. The storm damaged berries and plants at some marshes. Other marshes that dodged the storm finished the growing season in good condition. Harvest started at the beginning of October and continued until the end of the month. Strawberry growers in southern Wisconsin had good weather for the growing season. Producers in northern parts of the state experienced dry weather and a late spring frost that destroyed some blossoms.