



USDA, National Agricultural Statistics Service  
**Indiana Crop & Weather Report**

USDA, NASS, Indiana Field Office  
 1435 Win Hentschel Blvd.

Suite 110  
 West Lafayette, IN 47906-4145

(765) 494-8371  
 nass-in@nass.usda.gov

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**CROP REPORT FOR WEEK ENDING MAY 18**

**AGRICULTURAL SUMMARY**

Heavy rainfall during the week halted field work in many areas of the state, according to the Indiana Field Office of USDA's National Agricultural Statistics Service. Planting of corn is running about 7 days behind last year and 8 days behind the 5-year average pace. Soybean planting is about 9 days behind last year and 11 days behind the 5-year average. Standing water may result in the need to replant some corn and soybean acreage. Emergence and growth of the major field crops continues to be slow due to the cool, wet conditions.

**FIELD CROPS REPORT**

There was **1.0 day suitable for field work**. Sixty-eight percent of the intended **corn** acreage has been **planted** compared with 89 percent last year and 82 percent for the 5-year average. By area, 75 percent has been planted in the north, 78 percent in the central region, and 37 percent in the south. Thirty-five percent of the corn acreage has now **emerged** compared with 57 percent for both last year and the 5-year average. Twenty-three percent of the intended **soybean** acreage has been **planted** compared with 63 percent last year and 51 percent for the 5-year average.

Thirty-six percent of the winter wheat is **headed** compared with 51 percent last year and 59 percent for the 5-year average. Winter wheat **condition** is rated 63 percent good to excellent compared to 39 percent last year at this time. Some wind and water damage is being reported in a few southern counties.

Major activities during the week included: spraying fungicides on wheat, equipment maintenance, fertilizer applications, spraying herbicides, hauling grain to market, hauling manure, and taking care of livestock.

**LIVESTOCK, PASTURE AND RANGE REPORT**

Pasture condition is rated 19% excellent, 54% good, 21% fair, 5% poor and 1% very poor. Pasture condition continues to improve with plenty of precipitation. Livestock remain in mostly good condition.

**CROP PROGRESS TABLE**

Crop	This Week	Last Week	Last Year	5-Year Avg
Percent				
Corn Planted	68	61	89	82
Corn Emerged	35	19	57	57
Soybeans Planted	23	19	63	51
Winter Wheat Headed	36	13	51	59

**CROP CONDITION TABLE**

Crop	Very Poor	Poor	Fair	Good	Excellent
Percent					
Pasture	3	7	28	46	16
Winter Wheat	1	5	21	54	19

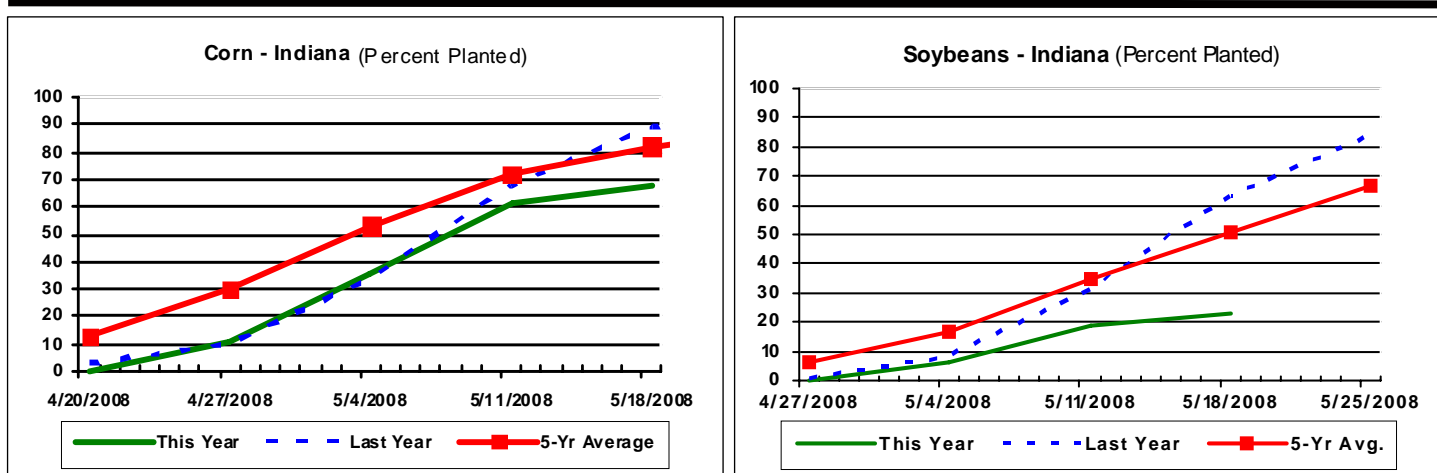
**SOIL MOISTURE & DAYS SUITABLE FOR FIELDWORK TABLE**

	This Week	Last Week	Last Year
Percent			
<b>Topsoil</b>			
Very Short	0	0	3
Short	0	0	18
Adequate	37	45	75
Surplus	63	55	4
<b>Subsoil</b>			
Very Short	0	0	1
Short	0	1	8
Adequate	49	59	86
Surplus	51	40	5
<b>Days Suitable</b>	1.0	3.5	5.7

**CONTACT INFORMATION**

--Greg Preston, Director  
 --Andy Higgins, Agricultural Statistician  
 E-Mail Address: [nass-in@nass.usda.gov](mailto:nass-in@nass.usda.gov)  
[http://www.nass.usda.gov/Statistics by State/Indiana/](http://www.nass.usda.gov/Statistics_by_State/Indiana/)

# Crop Progress



## Other Agricultural Comments And News

### Late Planting/Replanting & Relative Hybrid Maturity

- Planting delays continue.
- Consider switching to earlier maturity hybrids by early June.
- Check seed availability with seed dealers now.

Published 12 May 2008

Frequent rains of recent weeks delayed the start of corn planting throughout Indiana. Rains late last week and over the weekend will further delay the completion of planting, especially in the southern third of the state. Rainfall over the 7-day period ending 8 am EDT May 12 ranged from 2 to 4 inches throughout central, eastcentral, and southern Indiana (Fig. 1). Rainfall amounts elsewhere in the state ranged from one-half to 2 inches.

As of May 11, the Indiana office of USDA's National Ag. Statistics Service estimated that only 61 percent of the state's corn crop was planted compared to the most recent 5-year average of 72 percent (USDA-NASS, 2008). The good news is that this year's planting pace is not the slowest in recent memory. The two slowest planting years in the past five were 2002 and 2003 (Fig. 2). In contrast, the fastest planting year in the past five was 2004. The 2008 pace is between the slowest and fastest of the past five years and is interestingly not that much slower than that of last year.

The planting delays are greatest in the southern third of Indiana, where USDA-NASS estimates only 34 percent completion as of May 11 in contrast with 61 and 74 percent completion in the northern and central areas of the state (USDA-NASS, 2008). With more rain in the current forecast for the coming week, many of those planters will likely not return to the fields before next week. Consequently, much of the remaining 39% of the state's corn crop will be planted later than desired. Additionally, a few early-planted fields may require replanting if plant populations are reduced due to soggy soils and/or disease.

Some of the locals who frequent the Chat'n Chew Café are beginning to question whether they should consider replacing their remaining full-season corn hybrids with shorter-season versions. They worry that full-season hybrids planted from here on out may not mature safely before the first killing fall frost. After all, hybrid maturity ratings are closely associated with the accumulation of Growing Degree Days (GDDs) after planting (Fig. 3) and there are only so many GDDs available in a given growing season prior to killing fall frosts.

Fortunately, we know from previous research (Nielsen et al., 2002) that corn hybrids adjust their GDD needs downward as planting is delayed. This means that late-planted hybrids mature in fewer than expected GDDs from physiological maturity in corn decreases nearly 7 GDDs per day of delayed planting after May 1. For example, a hybrid planted June 1 will mature approximately 210 GDDs sooner than it would if planted May 1 (30 days times 7 GDDs per day of delayed planting).

The bottom line from this research is that a given hybrid maturity can be planted later than we once thought possible and still mature safely before a killing fall frost. Nevertheless, at some point on the calendar, growers eventually need to consider switching to earlier maturity hybrids to minimize the risk of frost damage in the fall.

The tables that follow summarize the delayed planting effect on hybrid GDD requirements and present the results in terms of "safe" hybrid maturities for a range of delayed planting dates (see Nielsen & Thomison, 2003, for more information). Both tables assume "normal" GDD accumulations for the remainder of the growing season and a fall frost date that is based on a 50% risk of frost occurring by a given date for individual crop reporting districts around the state (Indiana State Climate Office, <http://iclimat.org>).

Table 1 targets physiological maturity occurring the same week that a killing frost is expected to occur. Table 2 targets physiological maturity occurring the week before a killing frost is expected to occur. The "safe" hybrid maturities listed in Table 2, therefore, are a bit less risky relative to maturation and killing fall frosts.

The hybrid maturities listed in the tables are described in terms of "CRM" or comparative relative maturity ratings as defined by Pioneer Hi-Bred (2008). Pioneer publishes relative maturity data for hybrids in terms of both CRM ratings and GDDs from planting to physiological maturity. Such data can be used to define the relationship between CRM ratings and GDD requirements (Fig. 3). That relationship coupled with our previous research on the effects of delayed planting on GDD requirements allow me

(Continued on Page 4)

# Weather Information Table

## Week ending Sunday May 18, 2008

Station	Past Week Weather Summary Data							Accumulation				
	Air Temperature				Precip.		Avg	April 1, 2008 thru May 18, 2008				
							4 in	Precipitation			GDD Base 50°F	
	Hi	Lo	Avg	DFN	Total	Days	Soil Temp	Total	DFN	Days	Total	DFN
<b>Northwest (1)</b>												
Chalmers_5W	76	40	54	-9	1.45	5		4.93	-1.04	20	222	-92
Francesville	74	37	54	-8	0.72	5		4.69	-1.00	20	232	-36
Valparaiso_AP_I	73	39	54	-6	0.63	4		3.24	-2.94	16	258	+8
Wanatah	73	36	53	-7	1.19	4	57	5.37	-0.54	21	210	-2
Winamac	73	39	53	-8	1.11	5	52	5.40	-0.29	20	233	-35
<b>North Central(2)</b>												
Plymouth	72	39	52	-10	1.15	4		5.98	-0.08	20	230	-54
South_Bend	72	36	53	-7	1.54	5		5.34	-0.30	21	279	+46
Young_America	74	42	55	-7	1.65	4		8.13	+2.49	20	252	-10
<b>Northeast (3)</b>												
Columbia_City	70	41	54	-6	1.84	6	53	6.01	+0.40	23	232	+19
Fort_Wayne	70	40	55	-6	1.61	5		5.10	-0.26	22	281	+34
<b>West Central(4)</b>												
Greencastle	77	42	55	-9	1.47	4		8.73	+2.21	19	234	-115
Perrysville	79	41	57	-6	1.27	5	61	6.01	-0.21	20	288	-14
Spencer_Ag	75	42	55	-7	2.90	5		8.92	+2.07	19	259	-47
Terre_Haute_AFB	76	43	57	-7	1.56	4		6.08	-0.50	15	322	-25
W_Lafayette_6NW	75	40	55	-7	2.02	5	54	6.77	+0.72	24	263	-5
<b>Central (5)</b>												
Eagle_Creek_AP	75	44	56	-7	1.54	4		7.23	+1.19	21	345	+9
Greenfield	74	43	55	-8	1.40	5		7.40	+0.78	25	265	-34
Indianapolis_AP	76	44	57	-7	1.45	4		6.08	+0.04	20	367	+31
Indianapolis_SE	74	43	55	-9	1.38	4		5.53	-0.91	21	270	-48
Tipton_Ag	74	42	54	-7	2.35	5	57	7.43	+1.27	24	240	+3
<b>East Central(6)</b>												
Farmland	73	41	54	-7	1.49	5	56	6.65	+0.91	23	230	+2
New_Castle	73	43	54	-6	1.13	5		6.35	-0.34	24	242	+7
<b>Southwest (7)</b>												
Evansville	79	45	60	-7	1.00	4		9.44	+2.58	19	437	-29
Freelandville	76	45	57	-7	2.85	4		11.52	+4.65	20	332	-38
Shoals_8S	78	40	56	-8	2.49	4		12.86	+5.64	20	297	-62
Stendal	78	42	58	-7	1.76	5		12.61	+5.12	23	403	-10
Vincennes_5NE	79	44	58	-6	2.58	6	57	11.25	+4.38	19	373	+3
<b>South Central(8)</b>												
Leavenworth	77	44	58	-6	1.87	5		11.33	+3.90	29	393	+27
Oolitic	74	39	55	-8	2.87	5	57	12.14	+5.31	24	279	-44
Tell_City	78	40	59	-7	1.74	4		11.72	+4.06	22	431	+3
<b>Southeast (9)</b>												
Brookville	74	41	57	-5	1.57	5		8.05	+1.43	25	315	+41
Greensburg	73	45	57	-6	2.15	4		7.80	+0.87	23	334	+23
Scottsburg	76	43	57	-7	1.99	5		8.71	+1.87	23	383	+9

DFN = Departure From Normal (Using 1961-90 Normals Period).

GDD = Growing Degree Days.

Precipitation (Rainfall or melted snow/ice) in inches.

Precipitation Days = Days with precip of .01 inch or more.

Air Temperatures in Degrees Fahrenheit.

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## Late Planting/Replanting & Relative Hybrid Maturity (Continued)

to estimate "safe" hybrid maturities for a range of planting dates (Tables 1 & 2).

DISCLAIMER: I am NOT suggesting that Pioneer hybrid maturity definitions are the industry standard. Nor am I promoting Pioneer hybrids. I work with Pioneer's hybrid maturity data because a) many farmers and consultants can relate to Pioneer hybrid maturity ratings and b) I cannot easily find similar on-line datasets for the complete hybrid lineup for any other major seed corn supplier.

BOTTOM LINE: The tables indicate that growers in the central and westcentral Indiana plus the entire southern third of Indiana could continue to plant full-season hybrid maturities through at least the end of May. That's good news for southern Indiana where planting delays are the greatest. Growers in the northern third of the state and eastcentral Indiana who routinely "push the limits" of adapted hybrid maturity may want to consider switching to something less than 110 day hybrids before the end of May. In addition to managing the risk of not maturing prior to a killing fall frost, the eventual agronomic decision to switch to earlier maturity hybrids with delayed planting should result in drier grain at harvest (approximately one-half percentage point of grain moisture difference per "day" difference in hybrid relative maturity) and thus lower grain drying costs and less risk of low test weight grain. At a minimum, growers facing further significant delays in planting corn may want to begin talking with their seed dealers about the possible availability of earlier maturity hybrids.

### Related References

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In order to view the various graphics and tables mentioned in the article, go to URL: [http://www.kingcorn.org/news/articles.08/DelayedPlt\\_Hybrids.html](http://www.kingcorn.org/news/articles.08/DelayedPlt_Hybrids.html)

R.L. (Bob) Nielsen, Department of Agronomy, Purdue University, West Lafayette, IN 47907-2054

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