



USDA, National Agricultural Statistics Service
Indiana Crop & Weather Report

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CROP REPORT FOR WEEK ENDING APRIL 20

AGRICULTURAL SUMMARY

THIS REPORT IS THE FIRST CROP AND WEATHER REPORT FOR THE 2008 GROWING SEASON. A SERIES OF WEEKLY CROP PROGRESS REPORTS WILL BE PUBLISHED EACH MONDAY AT 4:00 P.M. ET THROUGHOUT THE CROP SEASON. These reports will cover planting and harvesting activities, crop development, weather data, and timely crop management information provided by farmers, FSA, and Purdue University experts. For the earliest possible access, look for these reports on the internet shortly after the 4:00 P.M. release time. Our home page address is located at the bottom of this publication. Follow the links to view the text and Pdf files.

FIELD CROPS REPORT

There were 2.4 **days suitable for field work**. Only a few scattered corn fields have been planted at this time. Last year 3 percent of the **corn** acreage had been **planted** and the 5-year average is 13 percent.

Twenty-seven percent of the winter wheat acreage is **jointed** compared with 42 percent last year and 49 percent for the 5-year average. Winter wheat **condition** is rated 62 percent good to excellent compared to 28 percent last year at this time.

Major activities during the week included: spreading dry fertilizer, soil preparation, anhydrous ammonia applications, preparing planting equipment, spraying herbicides, hauling grain to market, hauling manure, and taking care of livestock.

LIVESTOCK, PASTURE AND RANGE REPORT

Pastures have experienced some re-growth with the recent moderate temperatures. However, many producers continue to feed hay to allow pastures to recover from last year's dry conditions. Hay supplies are rated 35 percent very short, 31 percent short, 32 percent adequate and 2 percent surplus. Livestock remain in mostly good condition.

CROP PROGRESS TABLE

Crop	This Week	Last Week	Last Year	5-Year Avg
Percent				
Winter Wheat Jointed	27	11	42	49

CROP CONDITION TABLE

Crop	Very Poor	Poor	Fair	Good	Excellent
Percent					
Pasture	11	16	31	34	8
Winter Wheat	2	5	31	51	11

SOIL MOISTURE & DAYS SUITABLE FOR FIELDWORK TABLE

	This Week	Last Week	Last Year
Percent			
Topsoil			
Very Short	0	0	0
Short	0	0	0
Adequate	50	26	71
Surplus	50	74	29
Subsoil			
Very Short	0	0	0
Short	0	0	1
Adequate	49	38	71
Surplus	51	62	28
Days Suitable	2.4	0.7	3.4

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Crop Progress

Other Agricultural Comments And News

Corn Planting Date is Important, But....

- Early planting favors higher yields, but does not guarantee higher yields.
- Statewide averages for planting date and yield are not strongly related.
- Planting date is but one of many yield influencing factors.

Published 12 April 2008

Conventional wisdom says that the prime planting window for maximum corn yields in much of Indiana opens about April 20 and closes about May 10. This "window" typically opens about one week later across the northern tier of Indiana counties (cooler conditions) and about one week earlier across the southern tier of Indiana counties (warmer conditions).

Very little corn, if any, has been planted in Indiana to date. By itself, this is not much cause for concern because typically only a very small percentage of acres are ever planted by this date in Indiana. However, the specter of delayed planting is clearly on the horizon because little other spring fieldwork has been completed due to the frequent and sometimes excessive rainfall in recent weeks. For many growers, tillage operations, herbicide applications, and nitrogen fertilizer applications must be completed first before they can consider planting their crops.

What are the consequences of a delayed start to planting? How important a predictor of statewide corn yield is planting date anyway? Does late planting in and of itself guarantee lower than normal yields? Interestingly, the planting date effect on statewide average corn yield is not clearcut.

If one reviews USDA-NASS crop progress reports for the past 17 years ([USDA-NASS, 2008](#)), there is NOT a strong relationship between planting date and yield on a statewide basis. Specifically, departures from annual trend yield are not strongly related to corn planting progress. Figures 1 through 3 illustrate this relationship for three measures of planting progress; percent acres planted by April 30, percent acres planted by May 15, and percent acres planted by May 31. Even though one can technically define a linear relationship between departure from trend yield and planting progress by April 30 or May 15, the relationship only accounts for about 24% of the variability in yield departure year to year (Fig's 1 & 2). In other words, a number of yield influencing

factors (YIFs) other than planting date affect the ultimate maximum yield for a given year.

So what's the deal? Why is it that every corn agronomist known to man preaches about the importance of timely planting and yet the statewide statistical data suggest that planting date accounts for only 24% of the variability in statewide yields from year to year? Let's think more closely about this seeming paradox.

It is true that corn grain yield potential does indeed decline with delayed planting after about May 1 ([Nafziger, 2008](#)). The yield loss per day varies from about 1 bu/ac/day early in May to nearly 2 bu/ac/day by the end of May. Yield potential decreases with delayed planting because of a number of factors, including a shorter growing season, insect & disease pressure, and moisture stress during pollination.

However, the good news is that planting date is but one of many YIFs for corn. What is important to understand is that yield loss to delayed planting is relative to the maximum yield possible in a given year. In other words, if all the other YIFs work together to determine that the maximum possible yield this year is 200 bu/ac, then the consequence of a 10-day planting delay beyond May 1 (at 1 bu/ac/day) would be a yield potential of 190 bu/ac (i.e., 200 bu/ac potential minus 10 bu/ac due to delayed planting). However, if all the other YIFs work together to determine that the maximum possible yield this year is only 160 bu/ac, then the consequence of a 10-day planting delay beyond May 1 (at 1 bu/ac/day) would be a yield potential of 150 bu/ac (i.e., 160 bu/ac potential minus 10 bu/ac due to delayed planting). Make sense?

Consequently, it is possible for early-planted corn in one year to yield more than, less than, or equal to later-planted corn in another year depending on the exact mix of YIFs for each year. That is the reason why statewide average corn grain yields frequently vary by plus or minus 10% from the expected trend yield from year to year.

For example, the crop years 1997 and 1993 represent early and late planting dates in Indiana (Fig. 2). About 80% of the state's crop was planted by May 15 in 1997, but only 46% of the crop was planted by May 15 of 1993. Yet, the earlier planted 1997 crop yielded 8.3% BELOW trend yield for that year and the later planted 1993 crop yielded 3.4% ABOVE trend yield. Why? Important differences in YIFs between the years other than simply planting date.

(Continued on Page 4)

Weather Information Table

Week ending Sunday April 20, 2008

Station	Past Week Weather Summary Data							Accumulation				
	Air Temperature				Precip.		Avg 4 in Soil Temp	April 1, 2008 thru April 20, 2008				
	Hi	Lo	Avg	DFN	Total	Days		Precipitation			GDD Base 50°F	
							Total	DFN	Days	Total	DFN	
Northwest (1)												
Chalmers_5W	74	29	51	-2	0.12	2		2.00	-0.35	8	51	-9
Francesville	74	26	50	-1	0.09	3		2.10	-0.38	8	49	+7
Valparaiso_AP_I	75	27	52	+3	0.69	1		1.93	-0.72	6	57	+18
Wanatah	76	23	50	+2	0.64	2	53	2.84	+0.30	10	44	+16
Winamac	75	27	50	+0	0.24	2	44	2.23	-0.25	8	51	+9
North Central(2)												
Plymouth	76	26	51	-1	0.34	2		2.46	-0.12	8	53	+6
South_Bend	76	25	53	+4	0.06	1		2.42	-0.18	8	68	+35
Young_America	75	28	51	+1	0.09	2		2.23	-0.05	8	60	+20
Northeast (3)												
Columbia_City	76	28	51	+3	0.06	1	46	2.40	-0.02	8	60	+33
Fort_Wayne	78	27	52	+2	0.08	1		1.99	-0.27	8	66	+30
West Central(4)												
Greencastle	73	27	49	-5	0.15	1		2.89	+0.49	6	57	-12
Perrysville	75	27	51	-2	0.12	2	51	2.62	+0.04	8	55	+0
Spencer_Ag	75	29	49	-4	0.09	2		2.32	-0.28	7	70	+11
Terre_Haute_AFB	74	28	51	-3	0.12	1		1.77	-0.76	5	83	+12
W_Lafayette_6NW	76	27	51	+2	0.14	3	52	2.06	-0.37	10	53	+10
Central (5)												
Eagle_Creek_AP	76	31	52	-2	0.19	2		1.90	-0.52	7	89	+25
Greenfield	75	29	50	-3	0.03	1		2.08	-0.56	9	69	+20
Indianapolis_AP	77	32	53	-1	0.19	2		1.94	-0.48	7	100	+36
Indianapolis_SE	75	28	50	-4	0.08	3		2.38	-0.05	10	72	+15
Tipton_Ag	75	28	49	-1	0.16	3	54	2.62	+0.04	9	56	+24
East Central(6)												
Farmland	76	26	49	-1	0.14	2	50	2.29	-0.09	8	57	+28
New_Castle	75	29	49	-2	0.08	2		2.84	+0.15	8	57	+25
Southwest (7)												
Evansville	74	31	51	-6	0.78	3		5.67	+3.03	8	113	-6
Freelandville	73	34	52	-3	0.46	3		3.72	+1.23	9	85	+3
Shoals_8S	74	25	48	-7	0.39	3		5.47	+2.82	9	80	-1
Stendal	74	34	53	-4	0.66	3		6.60	+3.68	10	110	+12
Vincennes_5NE	75	31	51	-4	0.53	3	51	3.52	+1.03	7	103	+21
South Central(8)												
Leavenworth	76	32	52	-4	0.33	4		5.26	+2.19	12	108	+23
Oolitic	75	28	49	-5	0.11	3	49	2.91	+0.29	10	80	+12
Tell_City	76	33	53	-4	0.41	3		5.56	+2.36	11	116	+11
Southeast (9)												
Brookville	78	28	50	-2	0.03	1		2.76	+0.27	10	78	+30
Greensburg	76	30	52	-2	0.02	1		2.79	+0.15	8	98	+39
Scottsburg	76	28	51	-4	0.23	3		3.14	+0.37	9	110	+28

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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Corn Planting Date is Important, But..... (Continued)

Bottom Line

Let's not succumb quite yet to fearmongering triggered by the prospects of a delayed start to corn planting in 2008. "Mudding in" a crop early to avoid planting late will almost always end up being an unwise decision. While important, planting date is only one of many yield-influencing factors for corn.

Another reason that it is probably too early to fearmonger about the anticipated late start to planting is that growers have the machinery capacity to "catch up" quickly once the weather and soil conditions become favorable for planting. The 1992 planting season began as one of the slowest (Fig. 1) but quickly recovered within two weeks to a respectable pace (Fig. 2) and finished the season with the largest POSITIVE departure from trend yield in the past 17 years. We also know from past years' experiences that, on average, 50% of the state's corn crop is typically planted over about an 18-day period (Fig. 4). Furthermore, it is not unheard of for growers to plant 45 to 50% of the state's crop in a single week given good working conditions (Fig. 5).

References

Nafziger, Emerson. 2008. Thinking About Corn Planting Date and Population. The Bulletin (No. 2, Article 7, April 4), Univ. of Illinois Extension. [On-line]. Available at <http://www.ipm.uiuc.edu/bulletin/article.php?id=890>. [URL accessed 4/12/08].

USDA-NASS. 2008. Crop Progress and Condition. USDA, National Agricultural Statistics Service. [On-line]. Available at: http://www.nass.usda.gov/Statistics_by_State/Indiana/Publications/Crop_Progress_&_Condition/index.asp. [URL accessed 4/12/08].

In order to view all the charts with this article, go to URL: <http://www.kingcorn.org/news/articles.08/PltDate-412.html>

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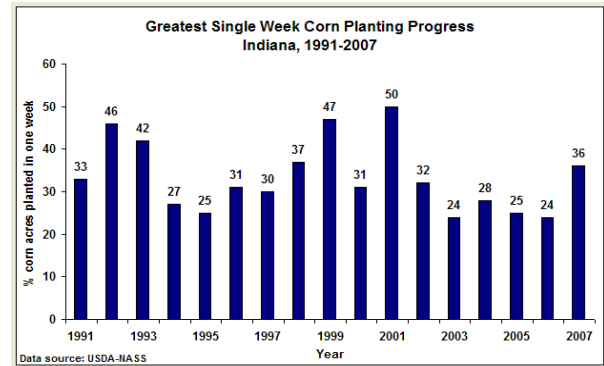


Fig.5. The fastest single week of corn planting progress in Indiana for individual years from 1991 through 2007.

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