



USDA, National Agricultural Statistics Service

# Indiana Crop & Weather Report

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Released: July 23, 2007  
Vol. 57, No. 29

## CROP REPORT FOR WEEK ENDING JULY 22

### AGRICULTURAL SUMMARY

The much needed precipitation farmers were hoping for finally arrived last week, according to the Indiana Field Office of USDA's National Agricultural Statistics Service. Most of the state received some rain which temporarily relieved the drought like conditions existing in many areas around the state. Subsoil moisture remains mostly deficient. Soybean development made good progress aided by the moisture and cooler weather. Spraying of fungicides and herbicides continued. Harvesting of winter wheat is virtually complete. Baling of straw and second cutting of hay crops continued. Shortage of hay exists in some areas.

### FIELD CROPS REPORT

There were 5.0 **days suitable for field work**. **Corn condition** improved and is rated 48 percent good to excellent compared with 66 percent last year at this time. Eighty-five percent of the **corn** acreage has **silked** compared with 70 percent last year and 63 percent for the 5-year average. Eleven percent of the corn acreage is in the **dough** stage compared with 7 percent last year and 8 percent for the average. Seventy percent of the **soybean** acreage is **blooming** compared with 51 percent last year and 56 percent for the average. Nineteen percent of the soybean acreage is **setting pods** compared with 11 percent last year and 17 percent for the average. **Soybean condition** improved and is rated 45 percent good to excellent compared with 64 percent last year at this time.

**Winter wheat harvest** is 99 percent complete compared with 97 percent for both last year and the 5-year average. The second cutting of **alfalfa hay** is 90 percent complete compared with 82 percent last year and 77 percent for the average. Major activities during the week included: attending county fairs, cleaning out grain bins, maintaining irrigation equipment, scouting fields, spraying, cutting and baling hay, mowing roadsides and taking care of livestock.

### LIVESTOCK, PASTURE AND RANGE REPORT

**Pasture condition** is rated 0% excellent, 11% good, 31% fair, 33% poor, and 25% very poor. Slightly improved pastures and cooler temperatures aided livestock.

### CROP PROGRESS TABLE

Crop	This Week	Last Week	Last Year	5-Year Avg
Percent				
Corn Silked	85	66	70	63
Corn in Dough	11	3	7	8
Soybeans Blooming	70	53	51	56
Soybeans Setting Pods	19	6	11	17
Winter Wheat Harvested	99	97	97	97
Alfalfa Second Cutting	90	78	82	77

### CROP CONDITION TABLE

Crop	Very Poor	Poor	Fair	Good	Excellent
Percent					
Corn	6	14	32	41	7
Soybean	5	15	35	39	6
Pasture	25	33	31	11	0

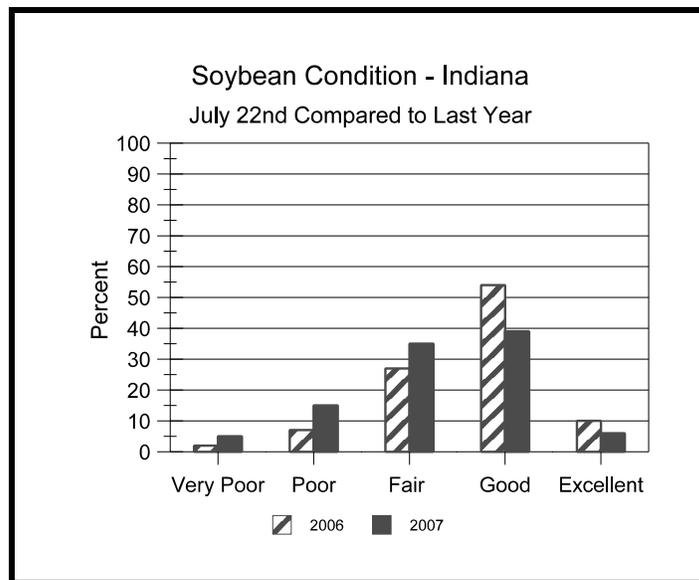
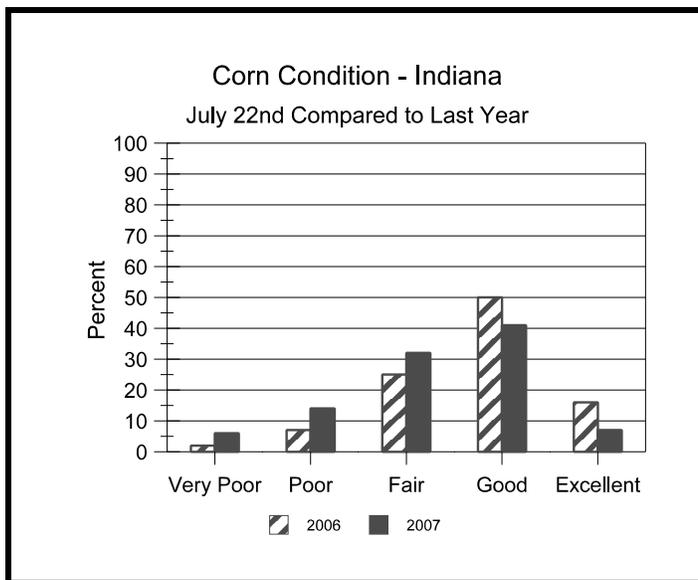
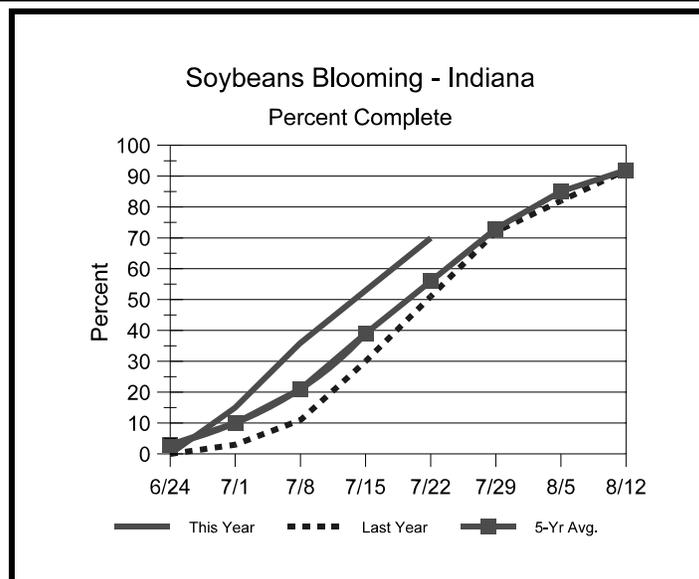
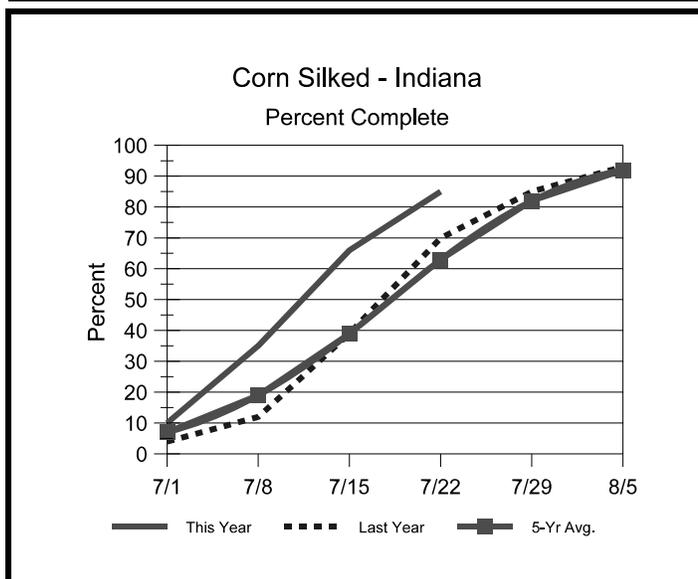
### SOIL MOISTURE & DAYS SUITABLE FOR FIELDWORK TABLE

	This Week	Last Week	Last Year
Percent			
<b>Topsoil</b>			
Very Short	20	33	1
Short	35	39	7
Adequate	45	28	77
Surplus	0	0	15
<b>Subsoil</b>			
Very Short	28	31	2
Short	39	42	10
Adequate	33	27	77
Surplus	0	0	11
<b>Days Suitable</b>	5.0	6.4	4.7

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# Crop Progress



## Other Agricultural Comments And News

### Potential for Corn Recovery from Drought Stress?

Published 18 July 2007

URL: <http://www.kingcorn.org/news/articles.07/Drought-0718.html>

As the latest round of thunderstorms tease drought-stricken areas of Indiana with the hope of meaningful rainfall, growers are wondering whether renewed soil moisture at this point in the season will markedly benefit their drought-stressed corn crops. The simple answer is “yes”, but the magnitude of the yield benefits will vary depending on the severity of damage already done to the crop.

In some areas of the state, drought-stressed corn is 2 to 3 feet tall and struggling to put out tassels and silks. Such severe examples of drought stress undoubtedly also translate to potential ear sizes that have already been severely compromised, in which case perfect weather from this point forward will only preserve the limited yield potential remaining in these fields.

How severely has yield been limited in such severely stressed fields? The severity of drought stress in many fields is too variable to easily estimate yield loss on a whole field basis. Within areas of some fields, eventual yield loss may be nearly 100% either due to outright death of plants or total failure of pollination or total abortion of ears. Within less severely stressed areas of the same fields, yield potential will range all over the map due to variability for potential ear size, success during pollination, and kernel survival following pollination (Nielsen, 2007a).

Agronomists often point out that ear length potential is more easily affected by stress than row number potential during the ear size determination phase prior to pollination (Nielsen, 2007b). However, that does not mean that row number determination is immune to the effects of drought stress. It is not uncommon to find potential kernel row numbers on ear shoots dissected from plants in severely stressed fields that are 4 to 6

(Continued on Page 4)

# Weather Information Table

## Week ending Sunday July 22, 2007

Station	Past Week Weather Summary Data							Accumulation				
	Air Temperature				Precip.		Avg 4 in Soil Temp	April 1, 2007 thru July 22, 2007				
	Hi	Lo	Avg	DFN	Total	Days		Precipitation			GDD Base 50°F	
							Total	DFN	Days	Total	DFN	
<b>Northwest (1)</b>												
Chalmers_5W	89	51	69	-6	1.51	3		12.17	-1.86	35	1734	+69
Francesville	85	50	69	-5	1.75	4		13.31	-0.86	39	1654	+132
Valparaiso_AP_I	86	52	70	-4	1.12	1		7.34	-7.62	28	1715	+229
Wanatah	87	48	69	-4	1.69	4	77	11.96	-2.48	37	1586	+167
Winamac	85	52	69	-5	1.91	4	73	12.84	-1.33	39	1666	+144
<b>North Central(2)</b>												
Plymouth	87	52	69	-6	1.73	4		13.13	-1.73	42	1607	+20
South_Bend	90	53	71	-3	2.33	3		10.80	-3.09	30	1753	+284
Young_America	85	50	69	-6	1.04	4		9.95	-3.67	38	1747	+194
<b>Northeast (3)</b>												
Columbia_City	86	51	69	-4	1.54	4	72	9.00	-4.98	40	1601	+200
Fort_Wayne	86	51	70	-5	1.14	4		8.87	-4.00	39	1771	+228
<b>West Central(4)</b>												
Greencastle	87	50	69	-8	1.84	4		13.07	-2.83	36	1723	-43
Perrysville	88	51	70	-5	2.58	4	79	11.78	-3.55	34	1930	+276
Spencer_Ag	85	53	70	-6	1.87	3		18.24	+1.89	38	1770	+118
Terre_Haute_AFB	88	52	71	-6	1.54	3		14.60	-0.86	38	1930	+166
W_Lafayette_6NW	86	50	70	-5	1.36	4	76	13.30	-0.79	38	1793	+236
<b>Central (5)</b>												
Eagle_Creek_AP	88	55	72	-5	0.64	4		9.32	-5.05	39	2011	+264
Greenfield	86	53	70	-6	1.01	4		10.30	-5.33	44	1824	+162
Indianapolis_AP	87	55	72	-4	0.53	4		8.68	-5.69	39	2043	+296
Indianapolis_SE	86	52	70	-7	0.64	3		12.15	-2.73	41	1825	+101
Tipton_Ag	87	50	68	-6	1.29	4	75	10.81	-3.37	41	1693	+189
<b>East Central(6)</b>												
Farmland	86	46	67	-7	0.86	3	74	10.37	-3.81	41	1659	+199
New_Castle	85	50	68	-6	0.45	3		9.96	-5.55	33	1697	+203
<b>Southwest (7)</b>												
Evansville	94	57	77	-2	0.83	2		10.70	-4.46	36	2250	+186
Freelandville	89	57	73	-4	0.67	2		10.32	-5.33	38	2045	+216
Shoals	91	50	71	-6	1.67	2		13.95	-2.93	35	1894	+140
Stendal	92	56	76	-2	1.04	3		12.39	-4.44	37	2264	+339
Vincennes_5NE	91	56	74	-3	0.62	2	78	13.52	-2.13	39	2124	+295
<b>South Central(8)</b>												
Leavenworth	93	56	75	-2	0.57	3		13.33	-3.72	40	2064	+312
Oolitic	89	53	71	-4	1.25	3	75	12.73	-3.26	34	1835	+167
Tell_City	91	58	77	-2	2.33	3		15.55	-1.45	28	2228	+280
<b>Southeast (9)</b>												
Brookville	88	53	72	-3	0.63	4		10.93	-4.40	30	1901	+334
Greensburg	86	54	72	-3	1.07	3		13.11	-2.38	36	1956	+323
Scottsburg	92	50	72	-5	1.98	4		15.44	-0.36	37	1999	+187

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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## Potential for Corn Recovery from Drought Stress? (Continued)

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fewer than normal. For a normally 16-row hybrid, such reductions in kernel row number translate to reductions in yield potential of 25 to 38%. Coupled with likely reductions in ear length potential, the yield potential in such severely stressed fields is quite low regardless of future rainfall.

Admittedly, there are areas of the state where crops look much better and have suffered only marginal drought stress to date. Rainfall received in these areas will help sustain a relatively good yield potential by better ensuring favorable conditions through the remainder of the grain filling period. If near-drought conditions prevail in fields with reasonably good yield potential, one consequence will be a heightened risk of weakened stalks or outright stalk rot development if plants resort to remobilizing (aka cannibalizing) stored carbohydrate reserves from the stalk tissue to the developing kernels over the next 30 days or so (Nielsen, 2005).

### Related References

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The INDIANA CROP & WEATHER REPORT (USPS 675-770), (ISSN 0442-817X) is issued weekly April through November by the USDA, NASS, Indiana Field Office, 1435 Win Hentschel Blvd, Suite 110, West Lafayette IN 47906-4145. Periodicals/Second Class postage paid at Lafayette IN. For information on subscribing, send request to above address. POSTMASTER: Send address change to the USDA, NASS, Indiana Field Office, 1435 Win Hentschel Blvd, Suite 110, West Lafayette IN 47906-4145.