



# Indiana Crop & Weather Report

United States Dept of Agriculture

Indiana Agricultural  
Statistics Service

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## CROP REPORT FOR WEEK ENDING OCTOBER 26

### AGRICULTURAL SUMMARY

Harvesting of soybeans and corn moved along at a rapid pace last week as farmers took advantage of the favorable weather conditions, according to the Indiana Agricultural Statistics Service. Many farmers finished harvesting their soybean fields during the week. Weekend showers halted field activities in many areas of the state. Seeding of winter wheat and fall tillage also made excellent progress during the week before the showers arrived. Corn harvest is 4 days behind last year's pace and 8 days behind average. Soybean harvest is 2 days behind last year and about 1 day behind the average pace.

### FIELD CROPS REPORT

There were 5.8 **days suitable for fieldwork**. Fifty-two percent of the corn acreage is **harvested** compared with 63 percent last year and 68 percent for the average. By area, 48 percent of the corn acreage is harvested in the north, 52 percent in the central region and 59 percent in the south. **Moisture** content of harvested corn is averaging about 19 percent.

Virtually all of the soybean acreage is **mature** except for some of the late planted fields and double cropped soybean fields. Eighty-four percent of the soybean acreage is **harvested** compared with 87 percent last year and 85 percent for the average. By area, 91 percent of the soybean acreage is harvested in the north, 86 percent in the central region and 66 percent in the south. **Moisture** content of harvested soybeans is averaging about 12 percent.

Eighty-eight percent of the **winter wheat** acreage is seeded compared with 87 percent last year and 81 percent for the average. By area, 91 percent of the winter wheat is seeded in the north, 84 percent in the central region and 88 percent in the south. Fifty-six percent of the winter wheat acreage has **emerged** compared with 60 percent last year and 55 percent for the average.

Other activities during the week were moving grain to market, chopping corn stalks, spreading fertilizer and lime, cleaning up and repairing equipment, tiling fields, hauling manure and taking care of livestock.

### LIVESTOCK, PASTURE AND RANGE REPORT

**Pasture condition** is rated 8 percent excellent, 55 percent good, 29 percent fair, 6 percent poor and 2 percent very poor. Tobacco stripping has begun. Livestock are in mostly good condition. Fall calving in beef herds is winding up.

### CROP PROGRESS TABLE

Crop	This Week	Last Week	Last Year	5-Year Avg
Percent				
Corn Harvested	52	35	63	68
Soybeans Harvested	84	64	87	85
Winter Wheat Planted	88	59	87	81
Winter Wheat Emerged	56	24	60	55

### CROP CONDITION TABLE

Crop	Very Poor	Poor	Fair	Good	Excellent
Percent					
Winter Wheat	1	1	23	69	6
Pasture	2	6	29	55	8

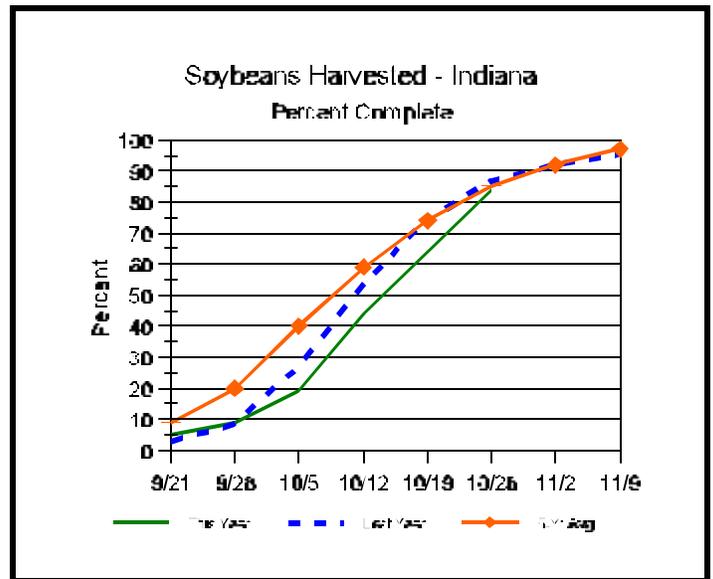
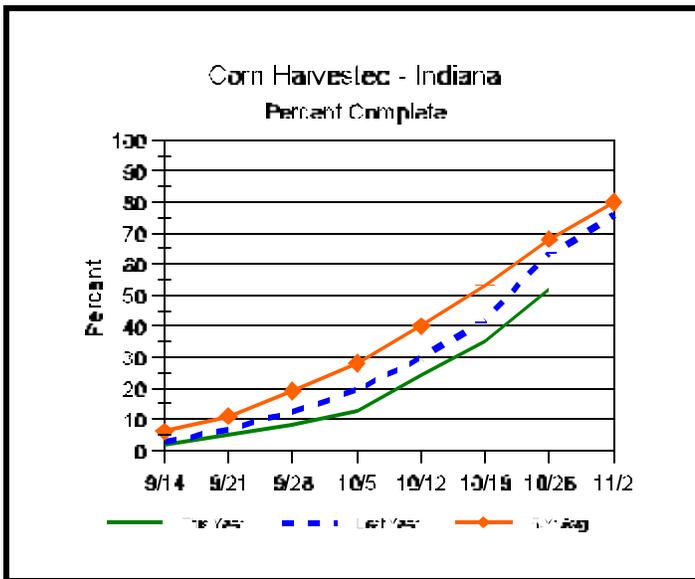
### SOIL MOISTURE & DAYS SUITABLE FOR FIELDWORK TABLE

	This Week	Last Week	Last Year
Percent			
<b>Topsoil</b>			
Very Short	0	1	6
Short	7	6	23
Adequate	85	81	65
Surplus	8	12	6
<b>Subsoil</b>			
Very Short	4	3	19
Short	10	10	35
Adequate	81	81	45
Surplus	5	6	1
<b>Days Suitable</b>	5.8	4.5	5.1

### CONTACT INFORMATION

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## Crop Progress



### Other Agricultural Comments And News

#### **Why Were My Soybean Yields Soooo Low???**

The 2003 growing season was anything but normal. Average yields on early-maturing Indiana soybeans were as dreary as the weather that pounded the crops all season.

Farmers harvesting Group II soybeans report yields ranging from 11 bushels per acre to more than 50 bushels per acre, with most between 25 bushels and 35 bushels an acre. A typical yield for Group II soybeans would be around 45 bushels per acre.

Group II soybeans are grown in northern Indiana counties while Group III and IV soybeans, which mature later, are produced in central and southern Indiana. Since they develop on a different timetable than later-maturing soybeans, Group II varieties were hardest hit by ill-timed storms and dry weather in August.

Two things contributed to the Group II soybeans yielding significantly less than they've yielded in the past. The torrential rain on the Fourth of July weekend saturated soils over much of the northern two-thirds of the state, resulting in deteriorated root systems on these soybean plants. The nodules disintegrated or rotted; two to three weeks were required for the nodules to re-establish to the extent that they could fix an adequate supply of nitrogen for the plant.

Cooler air and soil temperatures also beset waterlogged soybean crops. Many plants failed to

produce adequate carbohydrates to support the root system during this period.

Another major cause of reduced yields is related to seed size. Group II soybeans had reached late R-6 growth stage by the August dry period. As a result, the plant did not abort pods or seed but developed much smaller seed. A number of producers have reported seed size ranging from 4,000 to 4,400 seeds per pound. An example of this impact on yield would be to compare a normal seed size to a very small seed size. For this example, let's look at a soybean variety with a normal seed count of 3,000 seeds per pound and a yield of 45 bushels per acre. If you had the same number of seeds per acre but a seed count of 4,000 seeds per pound, then the yield would be about 33.75 bushels per acre – or more than an 11 bushel per acre reduction in yield as a result of the reduction in seed size.

The yield of Group III soybean is a little higher. The culprit is the same wet-then-dry growing season that hurt Group II varieties. The very dry conditions in late July and August occurred at a time when pods of Group III soybeans were fully developed (late R-4 or early R-5). The plant, in an attempt to survive, aborted the seed. So we have some Group III fields with fully developed pods and no seeds within those pods. One field that I examined, more than two-thirds of the pods were fully developed with no seed within the pod.

# Weather Information Table

**Week ending Sunday October 26, 2003**

Station	Past Week Weather Summary Data							Accumulation				
	Air Temperature				Precip.		Avg	April 1, 2003 thru October 26, 2003				
							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	82	31	51	+1	0.24	2	55	39.44	+15.22	75	2958	-241
Valparaiso_AP_I	84	37	52	+2	0.82	2		26.59	-0.14	77	2782	-145
Wanatah	84	34	51	+3	0.96	3	56	28.07	+2.49	83	2562	-214
Wheatfield	83	35	52	+4	0.78	2		37.14	+12.51	73	2824	-8
Winamac	82	31	48	-3	0.71	2	51	31.89	+7.22	79	2758	-164
<b>North Central(2)</b>												
Plymouth	82	36	51	+1	0.65	2		28.13	+2.67	78	2676	-402
South_Bend	82	39	52	+3	0.77	2		25.12	+0.28	75	2829	-56
Young_America	81	33	52	+3	0.11	2		34.74	+10.72	71	2945	-74
<b>Northeast (3)</b>												
Columbia_City	80	33	49	+1	0.62	2	51	31.70	+7.74	86	2691	-59
Fort_Wayne	78	30	51	+1	0.48	2		33.85	+11.87	73	2779	-252
<b>West Central (4)</b>												
Greencastle	80	30	52	-1	0.40	1		36.41	+8.77	73	2806	-633
Perrysville	83	34	54	+4	0.17	2	58	30.08	+4.36	69	3173	-15
Spencer_Ag	80	33	54	+4	0.83	1		34.05	+6.56	90	3128	-80
Terre_Haute_AFB	81	35	56	+5	0.01	1		26.99	+0.99	65	3324	-87
W_Lafayette_6NW	82	33	53	+4	0.25	2	57	32.07	+7.71	78	3032	+14
<b>Central (5)</b>												
Eagle_Creek_AP	79	36	54	+4	0.47	1		31.02	+6.67	72	3232	-145
Greenfield	79	33	52	+2	0.70	1		35.75	+9.07	80	3014	-230
Indianapolis_AP	79	37	55	+4	0.70	1		36.92	+12.57	74	3332	-45
Indianapolis_SE	79	36	52	+1	0.85	1		32.16	+7.20	71	3059	-311
Tipton_Ag	79	35	51	+2	0.46	3	57	37.45	+12.36	75	2777	-141
<b>East Central (6)</b>												
Farmland	78	31	50	+2	0.77	1	50	34.71	+10.72	71	2861	+17
New_Castle	75	30	49	-1	0.78	1		32.77	+7.16	66	2488	-429
<b>Southwest (7)</b>												
Evansville	82	41	61	+7	0.58	1		25.81	+1.07	74	3858	-74
Freelandville	80	38	57	+5	0.50	1		32.42	+6.70	69	3477	-49
Shoals	81	37	57	+5	1.37	1		33.42	+5.62	77	3411	-8
Stendal	80	41	58	+6	0.57	1		28.86	+1.39	64	3665	-27
Vincennes_5NE	83	41	59	+7	0.30	2	59	33.16	+7.44	92	3555	+29
<b>South Central(8)</b>												
Leavenworth	80	38	57	+5	1.79	1		32.97	+5.00	96	3464	+70
Oolitic	78	33	56	+5	1.12	1	55	33.33	+6.54	82	3248	-4
Tell_City	80	45	61	+6	2.50	1		31.91	+3.85	69	4027	+216
<b>Southeast (9)</b>												
Brookville	80	30	53	+4	1.28	2		30.09	+4.32	75	3261	+180
Milan_5NE	78	33	53	+3	0.81	1		36.28	+10.59	109	3127	+46
Scottsburg	79	32	55	+3	2.15	1		33.40	+6.92	85	3264	-246

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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## Why Were My Soybean Yields Soooo Low??? (Continued)

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Harvest of Group III and IV varieties is well under way in central and southern Indiana. Most of these fields are yielding better than Group II varieties, but many farmers are reporting that the yields are still off 10 to 15 bushels from normal. Southern Indiana soybeans were expected to give higher yields than last year. Many of these soybeans were either planted late or are double-crop soybeans and were severely damaged by the frost of October 2 and 3. Some of these fields will not be harvested as a result of the freeze.

In addition to the cold/wet soils early followed by excessive rains and then a dry-hot period in late July and early August, the soybean plant suffered from other stresses. A number of diseases were present across Indiana in a number of fields and included; root rot diseases, soybean cyst nematode, sudden death syndrome, white mold and charcoal rot.

Additionally, many soybean fields were infested with the soybean aphid, which caused additional stress to an already stressed plant. However, early results indicate that tillage system had no impact on soybean yield this year.

This year's soybean yield situation perhaps could best be summarized by stating that weather extremes resulted in compromised root systems in most soybean fields which were further stressed by a number of other factors. In other words, anything that could have gone wrong with soybeans occurred this year sometime during the growing season. Compound stresses always have a more pronounced impact on yields than a single stress.

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