



# Indiana Crop & Weather Report

United States Dept of Agriculture

Indiana Agricultural Statistics  
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## CROP REPORT FOR WEEK ENDING MAY 22

### AGRICULTURAL SUMMARY

Most farmers have finished planting of their intended corn acreage, but some replanting will be necessary, according to Indiana Agricultural Statistics. Rain, wind and strong thunderstorms occurred during the week, causing some damage along with ponding of water in low lying areas of several fields. Soil conditions remain very dry in some areas, especially in the northwestern region. Planting of soybeans made good progress during the week. Growth and development of emerged corn and soybean plants remain slow. Spraying was a major activity. Weeds are a problem in most of the fields not yet tilled or planted. First cutting of hay crops gained momentum during the week. Alfalfa weevil is evident in some hay fields.

### FIELD CROPS REPORT

There were **3.5 days suitable for fieldwork**. Ninety-five percent of the intended **corn** acreage is planted compared with 96 percent last year and 77 percent for the 5-year average. By area, 98 percent of the intended corn acreage is planted in the north, 94 percent in the central region and 91 percent in the south. Seventy-four percent of the corn acreage has **emerged** compared with 86 percent last year and 65 percent for the average. Seventy-three percent of the intended **soybean** acreage is planted compared with 76 percent last year and 58 percent for the average. By area, 83 percent of the soybean acreage is planted in the north, 69 percent in the central region and 62 percent in the south. Thirty-seven percent of the soybean acreage has **emerged** compared with 57 percent last year and 41 percent for the average.

Sixty-five percent of the **winter wheat** acreage is **headed** compared with 88 percent last year and 81 percent for the 5-year average. Winter wheat **condition** is rated 68 percent good to excellent compared with 82 percent last year at this time. First cutting of **alfalfa hay** is 13 percent complete.

Major activities during the week were tillage of soils, spraying chemicals, repairing equipment, cutting and baling hay, attending FSA offices, hauling manure and taking care of livestock.

### LIVESTOCK, PASTURE AND RANGE REPORT

**Pasture** condition is rated 14 percent excellent, 61 percent good, 22 percent fair, 2 percent poor and 1 percent very poor. Livestock are in mostly good condition.

### CROP PROGRESS TABLE

Crop	This Week	Last Week	Last Year	5-Year Avg
	Percent			
Corn Planted	95	89	96	77
Corn Emerged	74	51	86	65
Soybeans Planted	73	57	76	58
Soybeans Emerged	37	12	57	41
Winter Wheat Headed	65	43	88	81
Alfalfa First Cutting	13	NA	15	12

### CROP CONDITION TABLE

Crop	Very Poor	Poor	Fair	Good	Excellent
	Percent				
Corn	1	7	32	53	7
Winter Wheat 2005	2	7	23	54	14
Pasture	1	2	22	61	14

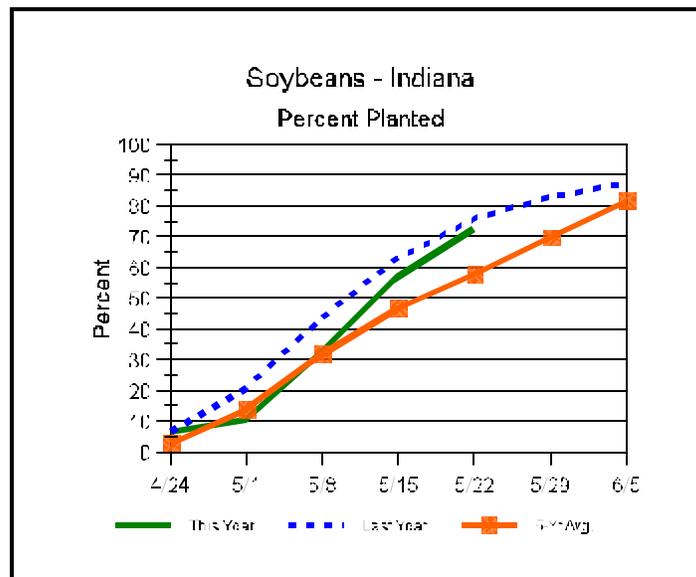
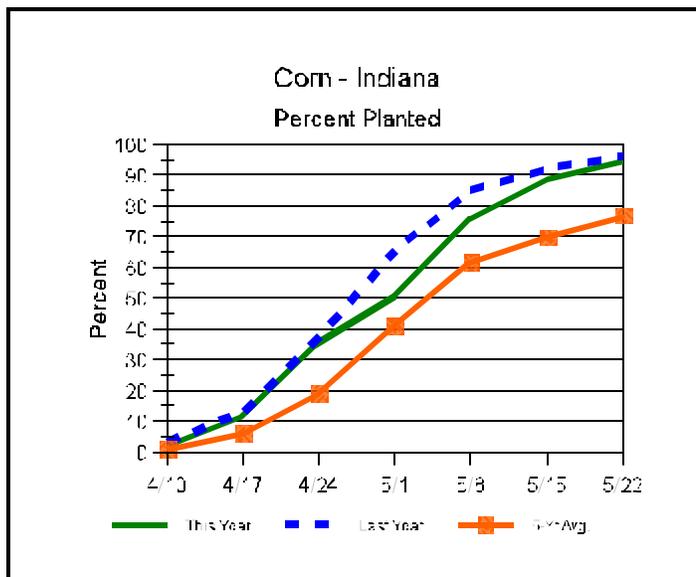
### SOIL MOISTURE & DAYS SUITABLE FOR FIELDWORK TABLE

	This Week	Last Week	Last Year
	Percent		
<b>Topsoil</b>			
Very Short		4	0
Short	2	14	2
Adequate	66	64	65
Surplus	26	18	33
<b>Subsoil</b>			
Very Short	2	1	2
Short	8	13	10
Adequate	73	75	71
Surplus	17	11	17
<b>Days Suitable</b>	3.5	4.8	2.5

### CONTACT INFORMATION

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# Crop Progress



## Other Agricultural Comments And News

### Tips for Staging Damaged Corn

The current debate amongst the regulars down at the SunShine Café centers on the burning question of how to identify the age of a corn plant that has recovered from rather severe leaf damage. Some may wonder why this topic is worthy of vigorous debate. The reason lies with the fact that a number of post-emergence corn herbicides can only be applied to corn up to a label-specified leaf stage (Table 7 in 2005 Weed Control Guide for Ohio and Indiana). Growers and applicators obviously need to be able to accurately stage corn plants to determine whether they are still within the herbicide label restrictions.

The issue for debate stems from the fact that many early-April planted corn fields suffered moderate to severe leaf injury from several frost/freeze events in late April and early May. The lowermost one to three leaves were often killed outright, but the plants usually recovered from the damage once sunshine and warm temperatures returned. Unfortunately, the dead leaf tissue does not recover and will eventually slough off as the plants continue to grow.

The hotly debated question is whether the leaf stage of a recovered plant begins anew with the healthy leaves or whether the dead leaves (which may no longer be visible) should be counted. In other words, should a 5-leaf plant that has lost two lower leaves to frost injury now be considered only a 3-leaf plant?

The answer is: A 5-leaf plant is a 5-leaf plant no matter how many lower leaves are damaged, dead, or otherwise missing.

As long as the dead lower leaves remain attached to the plants, leaf staging is reasonably simple. Count the dead leaves and any additional ones with visible leaf collars (Nielsen, 2004a). The challenge occurs when the dead lower leaves slough off and decompose or blow away. Now how do you count leaves if you are not sure whether the lowermost remaining leaf is #2 or #3? This problem is easily solved when staging V7 or older corn because one can then split stalks to identify the 5th node and its respective attached leaf (Nielsen, 2004a). Because stalk development is essential nil for corn plants V5 or younger, this strategy for staging corn does not work for younger plants.

Here are two alternatives for staging damaged young corn:

1. Walk damaged and recovering fields soon while dead lower leaves of damaged plants are still attached. Mark ten consecutive plants with plot flags or garden stakes. Identify & record the leaf number of the lowermost healthy leaf (one likely to remain attached for some time) of each plant. Mark each such leaf by simply ripping off a third or half of the leaf. To simplify future leaf staging, mark the same leaf number on each of the 10 consecutive plants. When you come back in a week or later to stage the plants again, find the marked leaf on each plant and continue counting the number of leaves with visible leaf collars.

# Weather Information Table

**Week ending Sunday May 22, 2005**

Station	Past Week Weather Summary Data							Accumulation				
	Air				Precip.	Days	Avg 4 in Soil	April 1, 2005 thru May 22, 2005				
	Temperature		DFN					Precipitation		GDD Base 50°F		
	Hi	Lo	Avg	DFN	Total	Days	Temp	Total	DFN	Days	Total	DFN
<b>Northwest (1)</b>												
Chalmers_5W	82	40	60	-4	0.55	3		3.13	-3.31	16	369	+11
Valparaiso_AP_I	76	40	58	-3	0.73	2		2.41	-4.25	16	339	+51
Wanatah	75	38	58	-3	0.76	2		2.94	-3.43	17	290	+43
Wheatfield	76	41	58	-4	0.87	2		4.56	-1.66	26	322	+55
Winamac	77	40	59	-4	0.73	1	59	2.98	-3.15	19	357	+49
<b>North Central(2)</b>												
Plymouth	75	41	57	-6	0.57	2		2.38	-4.16	19	306	-19
South_Bend	74	41	57	-4	0.66	2		2.10	-3.96	18	347	+77
Young_America	78	45	59	-4	0.83	1		4.44	-1.67	15	378	+76
<b>Northeast (3)</b>												
Columbia_City	74	37	55	-6	0.54	2	57	2.98	-3.08	17	298	+51
Fort_Wayne	74	39	56	-6	0.57	1		3.45	-2.35	20	318	+33
<b>West Central(4)</b>												
Greencastle	77	41	59	-6	2.07	3		8.10	+1.00	19	359	-37
Perrysville	81	39	61	-3	0.78	2	63	5.55	-1.18	15	431	+87
Spencer_Ag	80	41	58	-5	1.61	1		7.65	+0.18	20	352	+3
Terre_Haute_AFB	79	43	61	-4	1.06	2		6.56	-0.58	20	439	+45
W_Lafayette_6NW	79	40	60	-3	1.00	2	64	3.84	-2.68	19	402	+94
<b>Central (5)</b>												
Eagle_Creek_AP	79	47	62	-3	0.37	1		6.03	-0.53	20	504	+121
Greenfield	76	44	58	-6	0.55	1		7.56	+0.40	20	355	+13
Indianapolis_AP	76	47	60	-5	0.60	1		7.11	+0.55	20	433	+50
Indianapolis_SE	76	46	58	-6	0.45	3		6.73	-0.24	20	384	+20
Tipton_Ag	75	40	56	-5	0.80	1	62	6.28	-0.36	19	301	+26
<b>East Central(6)</b>												
Farmland	74	40	56	-6	0.91	2	54	5.87	-0.34	18	296	+31
New_Castle	71	41	55	-7	0.80	1		7.50	+0.27	15	254	-19
<b>Southwest (7)</b>												
Evansville	82	42	64	-3	0.93	1		4.26	-3.20	16	537	+15
Freelandville	83	44	62	-3	1.25	1		5.16	-2.35	16	487	+68
Shoals	81	41	61	-3	1.33	1		7.04	-0.85	19	473	+67
Stendal	84	42	63	-3	1.88	1		6.51	-1.64	18	559	+94
Vincennes_5NE	84	41	61	-4	1.46	1	64	8.14	+0.63	18	513	+94
<b>South Central(8)</b>												
Leavenworth	84	44	62	-3	1.04	1		6.86	-1.20	16	500	+87
Oolitic	81	41	60	-3	1.80	1	64	7.70	+0.25	20	396	+30
Tell_City	85	46	65	-1	1.36	1		6.92	-1.36	16	606	+125
<b>Southeast (9)</b>												
Brookville	79	41	58	-5	0.47	1		6.47	-0.73	18	380	+66
Milan_5NE	77	43	58	-4	0.88	1		6.84	-0.36	22	380	+66
Scottsburg	83	40	61	-4	1.13	1		7.37	-0.04	20	465	+42

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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## Tips for Staging Damaged Corn (Continued)

- Predict leaf stage development based on thermal time (growing degree days or GDDs) from planting or emergence. The relationship between corn development and temperature is reasonably strong. Emergence requires about 125 GDDs from planting and leaf collar emergence (up to about leaf #10) requires about 85 GDDs per leaf. See my article from last year for more details on how to predict leaf collar development based on thermal time (Nielsen, 2004c). Current year GDD data for various areas of Indiana are available online at the Indiana Climate Page (<http://shadow.agry.purdue.edu/sc.obs-geog.html>).

### Related References

2005 Weed Control Guide for Ohio and Indiana (WS-16). 2005. Table 7: Rainfast Intervals, Spray Additives, and Maximum Crop Size for Postemergence Corn Herbicides. Purdue Univ. & Ohio State Univ. Coop. Ext. Services. Available online at <http://www.btny.purdue.edu/Pubs/WS/WS-16/CornRainfast05.pdf> [URL verified 5/17/05].

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Nielsen, R.L. (Bob). 2004c. Use Thermal Time to Predict Leaf Stage Development in Corn. Corny News Network, Purdue Univ. Online at <http://www.kingcorn.org/news/articles.04/VStagePrediction-0515.html> [URL verified 5/12/05].

Don't forget, this and other timely information about corn can be viewed at the Chat 'n Chew Café on the Web at <http://www.kingcorn.org/cafe>. For other information about corn, take a look at the Corn Growers' Guidebook on the Web at <http://www.kingcorn.org>.

R. L. (Bob) Nielsen, Department of Agronomy, Purdue Univ., West Lafayette, IN. Email: [rnielsen@purdue.edu](mailto:rnielsen@purdue.edu) This article also contains some pictures, which can be viewed at: <http://www.agry.purdue.edu/ext/corn/news/articles.05/LeafStageTips-0517.html>.

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