



USDA, National Agricultural Statistics Service

Indiana Crop & Weather Report

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Released: May 14, 2007
Vol. 57, No. 19

CROP REPORT FOR WEEK ENDING MAY 13

AGRICULTURAL SUMMARY

Farmers made tremendous progress planting both corn and soybeans as most of the state received very little precipitation during the week, according to the Indiana Field Office of USDA's National Agricultural Statistics Service. Topsoil is getting dry in some areas, and farmers are hoping for moisture to help with germination and emergence of corn and soybeans. Planting progress for both corn and soybeans moved ahead of both last year and the 5-year average pace.

FIELD CROPS REPORT

There were 5.9 **days suitable for field work**. Seventy-eight percent of the intended **corn** acreage has been **planted** compared with 71 percent last year and 63 percent for the 5-year average. By area, 80 percent has been planted in the north, 84 percent the central region, and 63 percent in the south. Thirty-four percent of the corn acreage has **emerged** compared with 35 percent last year and 36 percent for the 5-year average. Thirty-nine percent of the intended **soybean** acreage has been **planted** compared with 30 percent last year and 33 percent for the 5-year average.

Ninety-four percent of the **winter wheat** acreage is **jointed** compared with 95 percent for last year and 97 percent for the 5-year average. Winter wheat **condition** is rated 37 percent good to excellent compared to 83 percent last year at this time.

Major activities during the week included: repairing equipment, soil preparation, spraying herbicides, applying fertilizer, hauling manure and taking care of livestock.

LIVESTOCK, PASTURE AND RANGE REPORT

Pasture condition is rated 9% excellent, 51% good, 35% fair, 5% poor, and 0% very poor. Pastures and hay crops have mostly recovered from the frost damage that occurred in April. Livestock remain in mostly good condition.

CROP PROGRESS TABLE

Crop	This Week	Last Week	Last Year	5-Year Avg
	Percent			
Corn Planted	78	42	71	63
Corn Emerged	34	8	35	36
Soybeans Planted	39	10	30	33
Soybeans Emerged	5	NA	5	9
Winter Wheat Jointed	94	79	95	97
Winter Wheat Headed	31	10	43	42

CROP CONDITION TABLE

Crop	Very Poor	Poor	Fair	Good	Excellent
	Percent				
Pasture	0	5	35	51	9
Winter Wheat 2007	7	17	39	34	3
Winter Wheat 2006	0	2	15	60	23

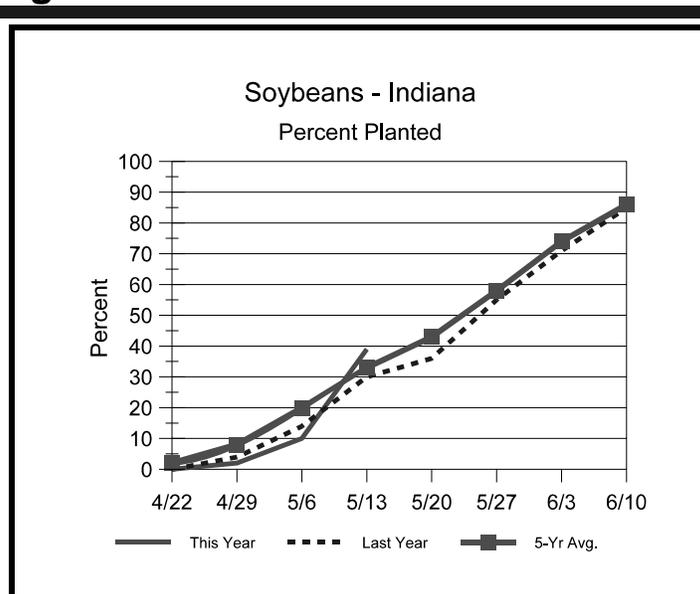
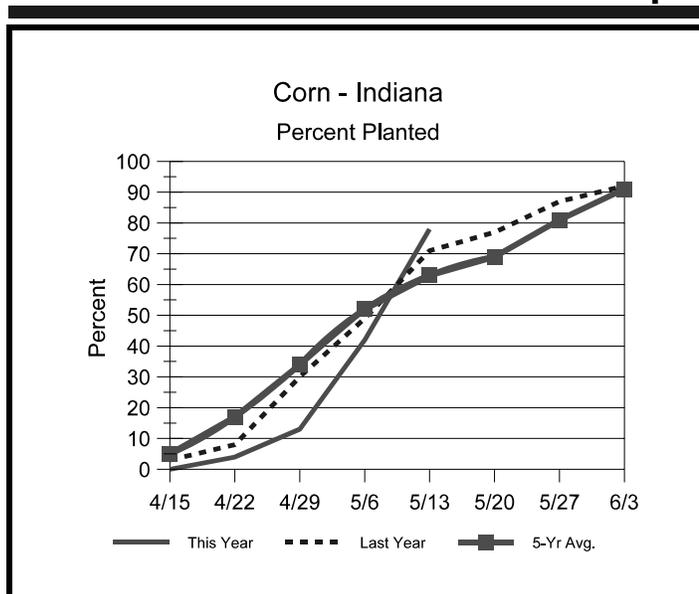
SOIL MOISTURE & DAYS SUITABLE FOR FIELDWORK TABLE

	This Week	Last Week	Last Year
	Percent		
Topsoil			
Very Short	1	0	0
Short	12	1	0
Adequate	76	72	41
Surplus	11	27	59
Subsoil			
Very Short	0	0	0
Short	3	0	2
Adequate	84	79	64
Surplus	13	21	34
Days Suitable	5.9	4.2	2.7

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Crop Progress



Other Agricultural Comments And News

Requirements for Uniform Germination and Emergence of Corn

Rapid, uniform germination and emergence of corn help set the stage for maximum grain yield at the end of the season. Without such a successful start to the season, the crop is behind the proverbial “eight-ball” right from the beginning. The good news is that there are only four simple requirements for uniform germination and emergence of corn. The bad news is that one or more of the requirements are sometimes absent in one field or another.

Adequate and uniform soil moisture at the seed zone. Adequate soil moisture is most simply defined as not too dry and not too wet. Most growers know what “adequate” looks and feels like. Uneven soil moisture in the seed zone can be caused by variable soil characteristics, tillage patterns, unusual weather conditions and uneven seeding depth. Uneven soil moisture throughout the seed zone is the primary cause of uneven emergence, the results of which can easily be yield losses of 8 to 10 percent. Remember that uneven seedbed soil moisture can be described as “adequate” versus “too wet” as well as “adequate” versus “too dry.”

Useful Tip: When seedbed conditions are dry, make sure that your choice of seeding depth ensures uniformly adequate soil moisture for the germination of the seed. Even though a 1.5 to 2 inch seeding depth is a good choice for many conditions, don’t hesitate to increase seeding depth to 2.5 to 3 inches if that is the depth where the uniform soil moisture is located. Planting shallower than 1.5 inches increases the risk of poor or uneven germination during subsequent drying of surface soils.

Adequate and uniform soil temperature at the seed zone. Corn will germinate and emerge slowly and unevenly when soil temperatures are less than 50°F. When soils warm to the mid-50’s or warmer, emergence will occur in seven days or less if soil moisture is adequate. Thermal time from planting to emergence is approximately 120 growing degree days (GDDs) using the modified growing degree formula (Nielsen, 2007b) and air temperatures or about 130 GDDs if using soil temperatures.

Uneven soil temperature in the seed zone can be caused by variable soil texture, soil color, soil drainage, surface residue cover in reduced tillage systems and seeding depth control.

Temperature variability during germination and emergence is most critical when average soil temperatures are hovering about the critical 50°F minimum threshold value.

Useful Tips: Dark-colored soils will typically warm more quickly than light-colored soils. If soils dry differently across the field, the drier areas will typically warm faster than the wet areas. Uneven residue cover (surface trash) in reduced tillage systems causes significantly lower soil temperatures under the heavier cover than under barer spots in the field. Uneven seeding depth exposes deeper planted seeds to slightly cooler seed zones than seeds placed shallower. Consider row-cleaning attachments for the planter to move aside the surface trash during planting and expose the seedbed to sunlight and its warming effects. Consider strip tillage practices in the future to better manage surface trash in a reduced tillage

Adequate and uniform seed-to-soil contact.

In order for the kernel to absorb moisture quickly and uniformly, soil must be firmed completely around the kernel. Seed-to-trash contact results from “hair-pinning” of surface trash into the seed furrow during no-till planting when soil and/or trash are too wet for adequate coulter cutting action. Seed-to-clod contact results from planting into cloddy fields created by working soil too wet. Seed-to-rock contact is, needless to say, not good for proper germination either. Seed-to-air contact results from open planter furrows when no-till planting into excessively wet soils. Germination of kernels lying in open planter furrows is dependent on rainfall keeping the open furrow environment moist.

Useful Tips: Whippers, wipers, movers, fingers, and other similar trash management gadgets for the planter are most beneficial when you are challenged with rocky, cloddy, or trashy surface soil conditions. They help clear the way (literally) for the planter’s double-disc openers to more easily do their job of creating an optimum seed furrow. Other planter attachments that help press the kernels into the seed furrow can improve seed-to-soil contact and seeding depth uniformity when seedbed conditions are otherwise challenging.

Weather Information Table

Week ending Sunday May 13, 2007

Station	Past Week Weather Summary Data							Accumulation				
	Air Temperature				Precip.		Avg 4 in Soil Temp	April 1, 2007 thru May 13, 2007				
	Hi	Lo	Avg	DFN	Total	Days		Precipitation			GDD Base 50°F	
							Total	DFN	Days	Total	DFN	
Northwest (1)												
Chalmers_5W	90	40	66	+7	0.00	0		4.25	-1.07	11	310	+69
Francesville	86	39	64	+6	0.07	1		4.34	-0.80	13	285	+85
Valparaiso_AP_I	82	40	64	+7	0.07	1		3.11	-2.47	9	285	+99
Wanatah	84	40	63	+8	0.11	1	66	5.40	+0.03	12	252	+98
Winamac	85	42	64	+7	0.72	2	64	4.98	-0.16	13	285	+85
North Central(2)												
Plymouth	84	42	64	+6	0.00	0		5.27	-0.19	14	257	+43
South_Bend	84	42	65	+8	0.00	0		4.61	-0.55	12	298	+127
Young_America	86	41	67	+9	0.13	1		3.63	-1.40	10	324	+130
Northeast (3)												
Columbia_City	86	38	63	+7	0.24	2	58	3.94	-1.13	13	255	+102
Fort_Wayne	87	35	64	+7	0.12	2		3.82	-0.99	17	299	+116
West Central(4)												
Greencastle	84	42	65	+5	0.17	1		4.67	-1.01	13	341	+71
Perrysville	90	42	68	+9	0.16	1	72	3.71	-1.85	13	404	+175
Spencer_Ag	86	43	66	+8	0.23	1		5.47	-0.56	14	355	+120
Terre_Haute_AFB	85	42	68	+8	0.37	2		4.94	-0.87	14	415	+147
W_Lafayette_6NW	88	40	66	+9	0.00	0	72	4.26	-1.14	12	338	+138
Central (5)												
Eagle_Creek_AP	86	47	68	+8	0.45	1		4.69	-0.70	14	417	+160
Greenfield	85	45	67	+7	0.54	1		5.80	-0.10	19	358	+135
Indianapolis_AP	86	48	69	+9	0.33	2		4.17	-1.22	16	417	+160
Indianapolis_SE	86	44	66	+6	0.72	1		6.18	+0.52	16	355	+114
Tipton_Ag	87	41	65	+8	0.68	2	67	4.21	-1.35	14	309	+136
East Central(6)												
Farmland	85	40	64	+8	0.14	1	64	4.85	-0.28	14	283	+117
New_Castle	84	43	65	+8	0.31	1		5.78	-0.19	12	322	+151
Southwest (7)												
Evansville	88	51	72	+10	1.25	3		6.14	+0.10	16	519	+144
Freelandville	85	48	69	+8	0.26	2		4.14	-1.84	14	445	+155
Shoals	88	44	68	+8	0.40	3		6.12	-0.17	16	415	+132
Stendal	89	52	73	+11	0.29	1		5.67	-0.95	15	539	+212
Vincennes_5NE	88	49	70	+10	0.34	2	70	4.39	-1.59	15	468	+178
South Central(8)												
Leavenworth	85	49	69	+9	0.28	3		6.68	+0.05	17	463	+174
Oolitic	85	45	67	+8	0.01	1	67	5.61	-0.40	14	384	+134
Tell_City	87	57	72	+10	1.40	1		6.91	+0.02	14	513	+171
Southeast (9)												
Brookville	89	46	68	+9	0.00	0		3.81	-1.99	13	409	+203
Greensburg	85	45	69	+10	0.00	0		5.00	-1.11	15	417	+179
Scottsburg	89	47	70	+9	0.16	2		7.64	+1.55	16	441	+147

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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Requirements for Uniform Germination and Emergence of Corn (Continued)

Surface Soil Free From Crust.

Severe surface crusting or compaction will restrict emergence of the coleoptile and cause underground leafing or plant death. Severe sidewall compaction can also limit elongation of the mesocotyl and emergence of the coleoptile.

Useful Tip: Avoid excessive tillage prior to planting the crop, especially if significant rainfall is forecast prior to emergence of the crop. Avoid excessive downpressure on the closing wheels of the planter. Avoid planting "on the wet side" that often results in smeared sidewalls.

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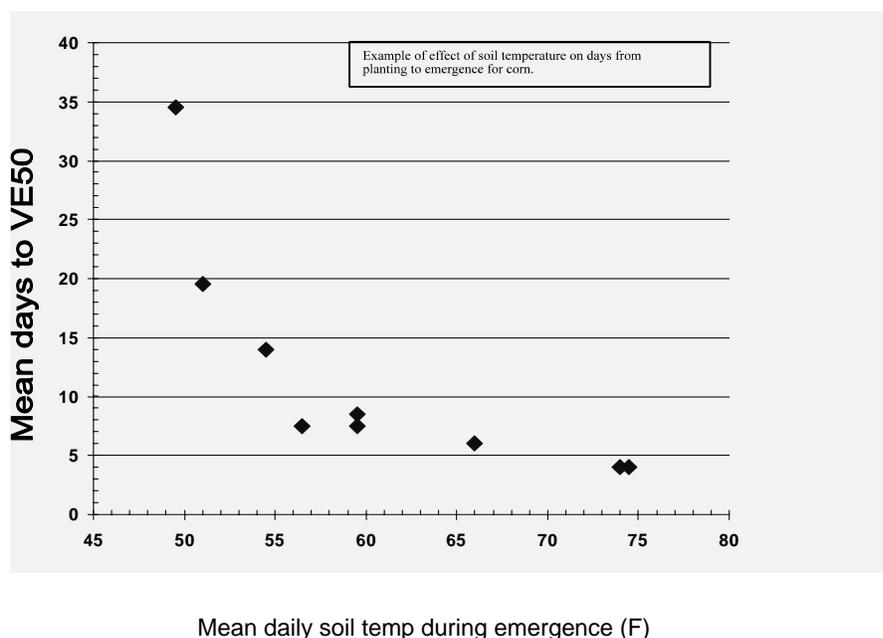
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The INDIANA CROP & WEATHER REPORT (USPS 675-770), (ISSN 0442-817X) is issued weekly April through November by the USDA, NASS, Indiana Field Office, 1435 Win Hentschel Blvd, Suite 110, West Lafayette IN 47906-4145. Periodicals/Second Class postage paid 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.