

### **USDA**, National Agricultural Statistics Service

# **Indiana Crop & Weather Report**

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> Released: June 9, 2008 Vol. 58, WC060908

### **CROP REPORT FOR WEEK ENDING JUNE 8**

#### AGRICULTURAL SUMMARY

Severe flooding occurred in many central and southern portions of the state with some areas receiving over 11 inches of rain during the week, according to the Indiana Field Office of USDA's National Agricultural Statistics Service. The Governor has already declared nearly half the counties in Indiana as disaster areas. Many fields that were planted and several that are yet to be planted will most likely lay idle this year due to the lateness of the season. Wind and water damage were also reported to hay and wheat crops. Straight line winds and a tornado damaged many homes and buildings.

#### FIELD CROPS REPORT

There were 2.6 days suitable for field work. Ninety-four percent of the intended corn acreage has been planted compared with 100 percent last year and 97 percent for the 5-year average. By area, 98 percent has been planted in the north, 96 percent in the central region, and 82 percent in the south. Eighty-three percent of the corn acreage has now emerged compared with 99 percent last year and 93 percent for the 5-year average.

Seventy-three percent of the intended **soybean** acreage has been **planted** compared with 98 percent last year and 89 percent for the 5-year average. By area, 89 percent has been planted in the north, 73 percent in the central region, and 43 percent in the south. Fifty-one percent of the soybean acreage has now **emerged** compared with 90 percent for last year and 77 for the 5-year average.

Ninety-eight percent of the winter wheat acreage has **headed** compared with 99 percent for both last year and the 5-year average. Winter wheat **condition** is rated 75 percent good to excellent compared to 32 percent last year at this time.

### LIVESTOCK, PASTURE AND RANGE REPORT

Pasture condition is rated 23% excellent, 44% good, 26% fair, 6% poor and 1% very poor. Livestock are under stress in the flooded areas and some death loss has been reported.

### **CROP PROGRESS TABLE**

This	Last	Last	5-Year		
Week	Week	Year	Avg		
Percent					
94	88	100	97		
83	69	99	93		
73	61	98	89		
51	28	90	77		
98	90	99	99		
48	32	86	66		
	94 83 73 51 98	Week Week   Per 94 88   83 69 73 61   51 28 98 90	Week Week Year   Percent 94 88 100   83 69 99   73 61 98   51 28 90   98 90 99		

### **CROP CONDITION TABLE**

Crop	Very Poor	Poor	Fair	Good	Excel- lent		
	Percent						
Corn	4	10	31	46	9		
Soybean	4	10	38	42	6		
Winter Wheat	1	4	20	53	22		
Pasture	1	6	26	44	23		

### SOIL MOISTURE & DAYS SUITABLE FOR FIELDWORK TABLE

	This Week	Last Week	Last Year				
	Percent						
Topsoil							
Very Short	0	0	26				
Short	1	2	40				
Adequate	50	68	33				
Surplus	49	30	1				
Subsoil							
Very Short	0	0	10				
Short	1	2	40				
Adequate	55	68	49				
Surplus	44	30	1				
Days Suitable	2.6	4.5	6.3				
CONTACT INFORMATION							

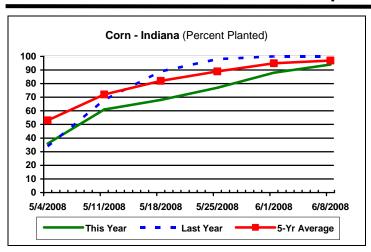
# CONTACT INFORMATION

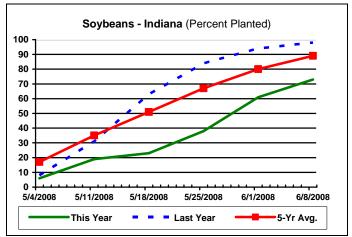
-- Greg Preston, Director

--Andy Higgins, Agricultural Statistician E-Mail Address: nass-in@nass.usda.gov

http://www.nass.usda.gov/Statistics\_by\_State/Indiana/

### **Crop Progress**





### Other Agricultural Comments And News

### **Effects of Flooding or Ponding on Young Corn**

### Originally published 1996, Updated June 2008

Recent intense rainfall events (technically referred to as "toad stranglers" or "goose drownders") have caused flooding of low-lying corn fields or ponding in poorly drained swales within fields. Other areas within fields, while not technically flooded or ponded, may remain saturated for lengthy periods of time. What are the prospects for recently submerged corn fields?

The sarcastic answer is that flooded crops will survive until they die. What this statement means is that no one can tell you with certainty the day after the storm whether a ponded area of a corn field will survive or whether there will be long-term yield consequences until enough time has gone by such that you can assess the actual recovery of the damaged plants. We can, however, talk about the factors that increase or decrease the risks of severe damage or death to flooded soils.

- Corn that is completely submerged is at higher risk than corn that is partially submerged.
  - Plants that are only partially submerged may continue to photosynthesize, albeit at limited rates.
- The longer an area remains ponded, the higher the risk of plant death.
  - Most agronomists believe that young corn can survive up to about 4 days of outright ponding if temperatures are relatively cool (mid-60's F or cooler); fewer days if temperatures are warm (mid-70's F or warmer).
  - Soil oxygen is depleted within about 48 hours of soil saturation. Without oxygen, the plants cannot perform critical life sustaining functions; e.g. nutrient and water uptake is impaired and root growth is inhibited.
- Even if surface water subsides quickly, the likelihood of dense surface crusts forming as the soil dries increases the risk of emergence failure for recently planted crops.
  - Be prepared with a rotary hoe to break up the crust and aid emergence.
- The greater the deposition of mud on plants as the water subsides, the greater the stress on the plants due to reduced photosynthesis.
  - Ironically, such situations would benefit from another rainfall event to wash the mud deposits from the leaves.
- Corn younger than about V6 (six fully exposed leaf collars) is more susceptible to ponding damage than is corn older than V6.
  - This is partly because young plants are more easily submerged than older taller plants

and partly because the corn plant's growing point remains below ground until about V6. The health of the growing point can be assessed initially by splitting stalks and visually examining the lower portion of the stem (Nielsen, 2008b). Within 3 to 5 days after water drains from the ponded area, look for the appearance of fresh leaves from the whorls of the plants.

- Extended periods of saturated soils AFTER the surface water subsides will take their toll on the overall vigor of the crop.
  - Some root death will occur and new root growth will be stunted until the soil dries to acceptable moisture contents. As a result, plants may be subject to greater injury during a subsequently dry summer due to their restricted root systems.
- Concomitant (I found a new word in the dictionary!) with the direct stress of saturated soils on a corn crop, flooding and ponding can cause significant losses of soil nitrogen due to denitrification and leaching of nitrate N.
  - Significant loss of soil N will cause nitrogen deficiencies and possible additional yield loss.
  - On the other hand, if the corn dies in the ponded areas it probably does not matter how much nitrogen you've lost.
- Lengthy periods of wet soil conditions favor the development of seedling blight diseases, especially those caused by Pythium fungi (Sweets, 2008).
  - Poorly drained areas of fields are most at risk for the development of these diseases and so will also be risky for potential replant operations.
- Certain diseases, such as common smut and crazy top, may also become greater risks due to flooding and cool temperatures (<u>Malvick</u>, 2002).
  - The fungus that causes crazy top depends on saturated soil conditions to infect corn seedlings.

## **Weather Information Table**

# Week ending Sunday June 8, 2008

	Past Week Weather Summary Data							Accumulation				
	i							April 1, 2008 thru				
Station	i	Δ	ir	i			Avg	:				
Bedelon	¦ т		 ratuı	ا ا مہ	Prec	in	4 in			GDD Base 50°F		
	¦	I	lacui	<u>-                                    </u>		<u> </u>	Soil	<u> </u>	l	J11 	l god pa	.5C JU I
	  Hi	  Lo	7,770	  DFN	Total	Darra		  Total	   DFN	Dorra	  Total	DFN
Northwest (1)	пт	ПО	IAVG	DEN	IULAI	Days	Temp	TOCAL	DFIN	Days	TOCAT	DFN
Chalmers_5W	90	57	75	+7	0.99	5		8.64	+0.06	28	505	-164
Francesville	86	55	74	+8	1.38	4		7.49	-0.83	28	514	-79
Valparaiso_AP_I	87	55	74	+8	0.92	3		4.69	-4.26	22	535	-28
Wanatah	88	52	74	+9	1.43	4	73	7.58	-0.87	29	477	-35
Winamac	88	56	74	+7	1.85	5	68		+0.27	28	516	-77
North Central(2)	00	30	, 1	. ,	1.05	3	00	1 0.33	10.27	20	310	, ,
Plymouth	88	54	73	+6	1.42	5		8.99	+0.23	30	504	-118
South_Bend	89	54	74	+8	0.54	4		6.22	-1.87	26	557	+16
Young_America	88	56	74	+7	2.44	4		11.91	+3.71	26	548	-44
Northeast (3)	00	30	, 1	. ,	2.11	_			13.71	20	310	- 1 1
Columbia_City	90	52	72	+7	1.18	4	57	9.59	+1.39	29	501	-7
Fort_Wayne	91	53	75	+8	0.92	5	0,	8.35	+0.57	31	590	+19
West Central(4)				_		_		,				
Greencastle	87	55	74	+5	10.23	5		20.51	+11.07	30	527	-197
Perrysville	88	60	76	+8	7.28	5	74	16.46	+7.41	31	619	-32
Spencer_Ag	89	55	75	+7	11.10	7		1	+11.09	30	574	-77
Terre_Haute_AFB	88	57	77	+8	9.38	5		16.49	+7.19	24	681	-36
W_Lafayette_6NW	89	59	75	+8	1.83	4	71	!	+2.16	34	570	-29
Central (5)								'				
Eagle_Creek_AP	89	59	76	+7	5.75	5		16.39	+7.79	33	696	-11
Greenfield	88	57	74	+6	5.18	5		16.04	+6.85	36	581	-73
Indianapolis_AP	89	59	76	+7	5.14	5		12.81	+4.21	30	726	+19
Indianapolis_SE	89	57	74	+5	7.03	6		14.15	+5.13	33	577	-106
Tipton_Ag	91	56	74	+7	3.45	4	73	11.59	+2.97	34	533	-25
<pre>East Central(6)</pre>								•				
Farmland	88	53	73	+7	2.94	4	71	9.92	+1.45	32	507	-31
New_Castle	87	55	73	+6	4.66	5		12.93	+3.37	33	526	-28
Southwest (7)												
Evansville	92	64	81	+9	0.26	1		14.37	+4.62	26	892	+0
Freelandville	89	61	78	+8	4.06	3		16.50	+6.54	30	716	-37
Shoals_8S	91	56	78	+10	1.11	5		15.42	+4.93	32	658	-65
Stendal	91	61	79	+8	2.65	7		16.40	+5.59	37	811	-4
Vincennes_5NE	92	62	80	+10	1.17	4	77	13.23	+3.27	27	770	+17
South Central(8)												
Leavenworth	91	59		+10	1.34			13.22	+2.72	40	797	+69
Oolitic	88	54	76	+8	2.79		75	17.35	+7.45	34	612	-58
Tell_City	91	66	81	+10	0.00	0		13.23	+2.54	27	865	+34
Southeast (9)				_								
Brookville	89	56	75	+8	2.56	4		12.36	+2.88	33	635	+34
Greensburg	90	58	75	+7	8.41			17.55	+7.70	32	680	+22
Scottsburg	91	59	79	+9	1.68	4		12.44	+2.82	33	764	+10

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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The above weather information is provided by AWIS, Inc. For detailed ag weather forecasts and data visit the AWIS home page at <a href="https://www.awis.com">www.awis.com</a>

### Effects of Flooding or Ponding on Young Corn (Continued)

The common smut fungal organism is ubiquitous in [On-Line]. Available at soils and can infect young corn plants through tissue damaged by floodwaters. There is limited hybrid resistance to either of these two diseases and predicting damage is difficult until later in the growing season.

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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.