



Indiana Crop & Weather Report

United States Dept of Agriculture

Indiana Agricultural
Statistics Service

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CROP REPORT FOR WEEK ENDING JUNE 20

AGRICULTURAL SUMMARY

Showers and thunderstorms along with wet field conditions slowed most field activities, according to Indiana Agricultural Statistics. Ponding remains in many fields and river bottoms are flooded. Many farmers were scouting their fields assessing the damage to crops. Some may try to replant drowned out spots, but it will take several days of favorable drying conditions for the wet areas to dry out. Harvesting winter wheat, baling hay and spraying chemicals were taking place on some farms. Wheat fields are rapidly advancing toward maturity. Harvest is gaining momentum in the southwestern area of the state.

FIELD CROPS REPORT

There were 2.2 **days suitable for fieldwork**. Corn **condition** is rated 73 percent good to excellent compared with 58 percent last year at this time. Two percent of the corn acreage has **silked**. Ninety-six percent of the intended **soybean** acreage is planted compared with 89 percent last year and 95 percent for the average. Ninety-three percent of the soybean acreage has **emerged** compared with 81 percent last year and 91 percent for the average. By area, 98 percent of the soybean acreage is planted in the north, 99 percent in the central region and 86 percent in the south. Soybean **condition** is rated 66 percent good to excellent compared with 57 percent last year at this time.

Seventeen percent of the winter wheat acreage is **harvested** compared with 8 percent last year and 13 percent for the average. Wheat **condition** is rated 64 percent good to excellent compared with 65 percent last year at this time. Setting of **tobacco** plants is 76 percent complete compared with 53 percent last year and 77 percent for average. First cutting of **alfalfa hay** is 81 percent complete compared with 80 percent last year and 89 percent for the average.

Major activities during the week were cleaning up and repairing equipment, mowing roads, moving grain to market, hauling manure and taking care of livestock.

LIVESTOCK, PASTURE AND RANGE REPORT

Pasture condition is rated 17 percent excellent, 64 percent good, 15 percent fair, 3 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
Soybeans Planted	96	95	89	95
Soybeans Emerged	93	90	81	91
Corn Silking	2	NA	0	0
Alfalfa First Cutting	81	77	80	89
Tobacco Plants Set	76	60	53	77
Winter Wheat Harvested	17	6	8	13

CROP CONDITION TABLE

Crop	Very Poor	Poor	Fair	Good	Excel- lent
Corn	3	5	19	52	21
Soybean	3	7	24	50	16
Winter Wheat 2004	2	6	28	48	16
Pasture	1	3	15	64	17

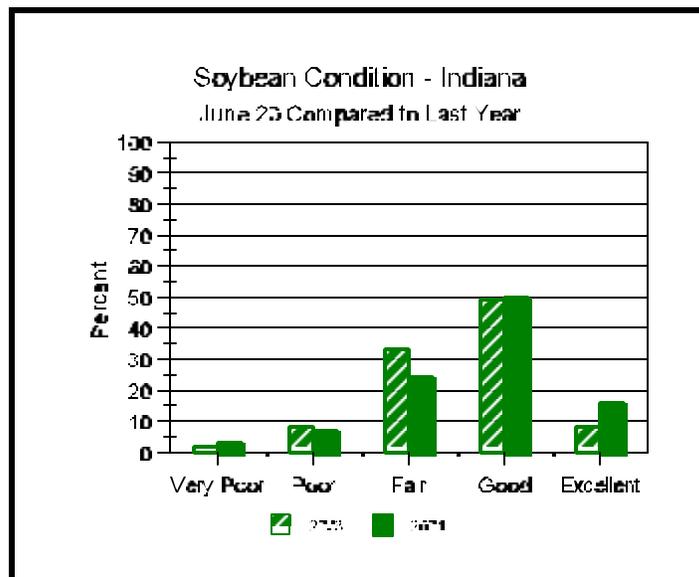
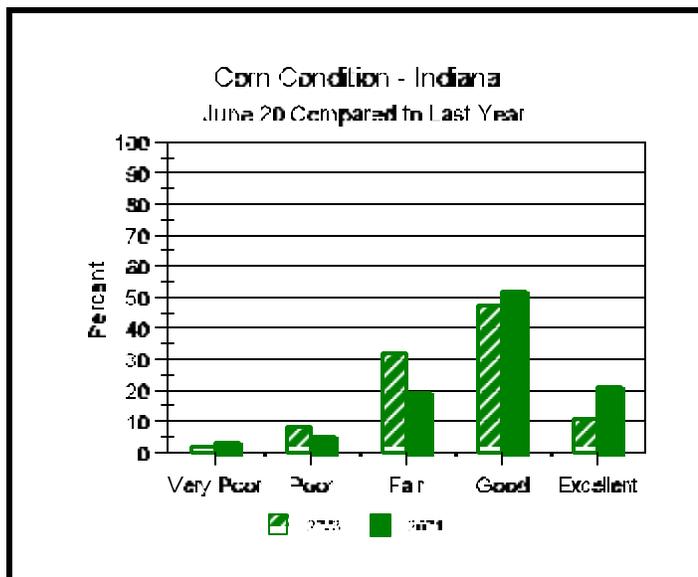
SOIL MOISTURE & DAYS SUITABLE FOR FIELDWORK TABLE

	This Week	Last Week	Last Year
Topsoil			
Very Short	0	0	0
Short	1	2	5
Adequate	51	55	64
Surplus	48	43	31
Subsoil			
Very Short	0	1	0
Short	3	5	6
Adequate	61	65	67
Surplus	36	29	27
Days Suitable	2.2	3.9	4.5

CONTACT INFORMATION

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Crop Progress



Other Agricultural Comments And News

Water, Water Everywhere...

The rain storms of the past week left a lot of things floating or submerged throughout Indiana, including corn fields. Total rainfall over the several day period was greater than 10 inches for some areas in northern Indiana. The consequences of such extreme weather events on crops this late into the growing season are often severe, with few available remedies to recover lost yield potential. Here are a few thoughts to consider relative to water-damaged crops.

- Given the warm soil temperatures, young corn will not tolerate more than several days of outright ponding before whole plant death occurs. Oxygen deprivation quickly results in significant deterioration and death of above- and below-ground plant tissue. See my earlier article for more info (Nielsen, 2004a).
- Older plants will technically tolerate ponding or saturated soil conditions somewhat longer than young corn before death occurs. Crops that survive bouts of ponding and saturated soils will nonetheless suffer significant damage to their root systems. The immediate effects will be stunting of plant development. In the longer term, root systems compromised by ponding and saturated soils today will be less able to sustain the crops IF drought conditions develop later in the growing season.
- For corn, damage to its root system today will predispose the crop to the development of root and stalk rots later in the season by virtue of the photosynthetic stress imposed by the limited root system during the important grain filling period following pollination. Monitor affected fields later in August for the possible development of stalk rots and modify harvest-timing strategies accordingly (Nielsen, 2003).
- Ponding or flooding over the top of young corn plants increases the risk of infection by the soil borne fungus, *Sclerophthora macrospora*, that causes Crazy Top disease (Lipps and Mills, 2000).
- Once the water recedes, deposits of sediment and crop residues that remain on crop plants either outright smother any surviving plants or greatly reduce their ability to capture sunlight and photosynthesize carbohydrates. Ironically, more rain later on may be beneficial to help wash off these deposits.
- Given the warm soils, loss of nitrate nitrogen due to denitrification can easily approach 4 to 5% per day of saturated soil conditions (Hoeft, 2004). Loss of nitrate nitrogen on coarse-textured, sandy soils is also very rapid. Pre-plant or early side-dress applications are at most risk. More recent sidedress applications of nitrate-containing fertilizers (e.g., liquid 28%) are at more risk of N loss than are applications of anhydrous ammonia (Nielsen, 2004b).
- Many cornfields in the affected area are "smack dab" (a Nielsen term, meaning "exactly") in the middle of their rapid growth phase prior to pollination when nitrogen uptake rates are at their peak. Assessing the need for supplemental nitrogen is complicated by the fact that the yield potential of (surviving) ponded corn will be less than normal. Where estimated nitrogen loss is significant (60 lbs or greater) in fields not yet tasseling and yield potential is still reasonable, corn may respond to an additional 50 – 80 lbs of applied fertilizer N up to or shortly after tasseling (Hoeft, 2004).
- Replant considerations for damaged or destroyed corn fields will not be easy decisions, particularly in the northern half of Indiana, given that many damaged fields will not be dry enough to replant for another week. Technically, corn could still be replanted in northern Indiana through the end of June by selecting unusually early maturity hybrids (see Table 1 on Page 4). However, such late replanting is not without risk itself, including the fact that unusually early maturity hybrids are often unadapted to diseases common to an area of the state (Nielsen & Thomison, 2003).

(Continued on Page 4)

Weather Information Table

Week ending Sunday June 20, 2004

Station	Past Week Weather Summary Data							Accumulation					
	Air Temperature			Precip.		Days	Avg 4 in Soil Temp	April 1, 2004 thru June 20, 2004			GDD Base 50°F		
	Hi	Lo	Avg	DFN	Total			Total	DFN	Days	Total	DFN	
Northwest (1)													
Chalmers_5W	87	46	72	+0	0.69	2	72	16.12	+6.04	28	1021	+98	
Valparaiso_AP_I	83	46	69	-1	0.85	4		9.47	-1.19	30	938	+145	
Wanatah	84	42	69	-2	0.56	5	75	9.31	-0.71	35	880	+139	
Wheatfield	83	44	70	-1	1.02	4		19.24	+9.31	41	936	+165	
Winamac	84	45	71	+1	0.84	5	73	10.37	+0.36	36	977	+149	
North Central(2)													
Plymouth	84	46	70	-1	0.69	4		11.85	+1.41	34	925	+60	
South_Bend	84	47	70	+1	0.52	3		11.15	+1.38	34	993	+221	
Young_America	85	48	72	+2	1.78	3		11.60	+1.89	30	1073	+240	
Northeast (3)													
Columbia_City	84	47	71	+2	1.55	5	72	12.22	+2.34	38	944	+215	
Fort_Wayne	86	49	73	+3	2.11	5		12.72	+3.50	36	1019	+204	
West Central (4)													
Greencastle	85	41	73	-1	2.47	5		12.91	+2.02	36	1072	+83	
Perrysville	89	48	74	+3	1.53	2	80	12.25	+1.52	29	1197	+292	
Spencer_Ag	88	49	75	+4	2.63	5		13.69	+2.23	36	1150	+247	
Terre_Haute_AFB	89	47	75	+4	1.68	5		9.46	-1.19	29	1284	+302	
W_Lafayette_6NW	86	45	72	+2	0.59	1	80	15.80	+5.77	25	1082	+242	
Central (5)													
Eagle_Creek_AP	86	49	74	+3	2.28	5		11.05	+1.11	34	1175	+203	
Greenfield	86	50	74	+2	2.96	5		12.16	+1.63	33	1116	+208	
Indianapolis_AP	88	51	75	+3	2.52	4		13.43	+3.49	34	1250	+278	
Indianapolis_SE	86	48	74	+2	2.03	3		10.72	+0.49	30	1133	+187	
Tipton_Ag	86	46	73	+3	1.74	6	77	11.75	+1.75	31	1045	+247	
East Central (6)													
Farmland	86	48	73	+4	1.34	4	69	12.25	+2.10	38	1056	+288	
New_Castle	84	48	72	+2	1.46	3		13.67	+2.55	28	932	+142	
Southwest (7)													
Evansville	89	54	77	+2	1.02	5		13.37	+2.29	30	1441	+249	
Freelandville	89	50	75	+2	0.81	5		10.16	-1.22	32	1266	+239	
Shoals	88	51	76	+4	0.35	4		14.76	+2.71	34	1280	+297	
Stendal	89	53	77	+3	0.92	5		14.73	+2.29	32	1361	+263	
Vincennes_5NE	91	51	77	+4	1.31	4	72	12.34	+0.96	33	1343	+316	
South Central(8)													
Leavenworth	87	54	76	+5	1.03	3		18.99	+6.85	36	1270	+284	
Oolitic	87	49	75	+4	1.96	5	78	14.30	+2.84	37	1179	+257	
Tell_City	87	57	77	+3	1.99	5		18.18	+5.91	36	1454	+340	
Southeast (9)													
Brookville	88	52	76	+7	1.57	5		11.37	+0.53	33	1153	+312	
Milan_5NE	87	51	75	+6	1.78	5		14.98	+4.14	45	1155	+314	
Scottsburg	87	51	76	+4	1.36	5		21.12	+10.06	37	1241	+220	

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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Water, Water Everywhere... (Continued)

Table 1. Relative hybrid maturities "safe" for replanting in late June throughout Indiana.		
<u>Area of Indiana</u>	<u>Replanting June 21</u>	<u>Replanting June 28</u>
Northwest	96	92
Northcentral	95	91
Northeast	94	90
Westcentral	104	100
Central	102	98
Eastcentral	96	92
Southwest	117	112
Southcentral	108	104
Southeast	109	105
Listed hybrid maturity values aim at reaching maturity (kernel black layer) about 1 week prior to the date of an average fall frost for a given area of the state.		

Related References

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