



USDA, National Agricultural Statistics Service

Indiana Crop & Weather Report

USDA, NASS, Indiana Field Office
1435 Win Hentschel Blvd.

Suite 110
West Lafayette, IN 47906-4145

(765) 494-8371
nass-in@nass.usda.gov

Released: August 4, 2008
Vol. 58, WC080408

CROP REPORT FOR WEEK ENDING AUGUST 3

AGRICULTURAL SUMMARY

Only spotty rains fell across the state bringing little relief to drying soils, according to the Indiana Field Office of USDA's National Agricultural Statistics Service. Most irrigation systems have been running as crops and pastures are beginning to show signs of drought stress. Aphids and spider mites remain at low thresholds in the soybean crop. The second cutting of hay is nearing completion with some producers already working on third cuttings. Hay has been slow to dry down due to the high humidity.

FIELD CROPS REPORT

There were 5.8 **days suitable for field work**. **Corn condition** declined and is rated 67 percent good to excellent compared to 44 percent last year at this time. Eighty-six percent of the corn acreage has **silked** compared with 97 percent last year and 93 percent for the 5-year average. Eight percent of the corn acreage is in the **dough** stage compared with 40 percent last year and 35 percent for the 5-year average. Seventy-three percent of the **soybean** acreage is **blooming** compared with 90 percent last year and 85 percent for the 5-year average. Eighteen percent of the soybean acreage is **setting pods** compared with 54 percent last year and 49 percent for the 5-year average. **Soybean condition** declined and is rated 63 percent good to excellent compared with 44 percent last year at this time.

Virtually all of the **winter wheat** has been **harvested** at this time. The second cutting of **alfalfa hay** is 90 percent complete compared with 98 percent last year and 95 percent for the 5-year average.

Major activities during the week included: attending county fairs, reporting crops and signing up at FSA offices, mowing roadsides, scouting fields, spraying herbicides and fungicides, baling hay, hauling grain to market, and taking care of livestock.

LIVESTOCK, PASTURE AND RANGE REPORT

Pasture condition declined and is rated as 15% excellent, 46% good, 28% fair, 8% poor and 3% very poor. Livestock remain in mostly good condition.

CROP PROGRESS TABLE

Crop	This Week	Last Week	Last Year	5-Year Avg
	Percent			
Corn Silked	86	68	97	93
Corn in Dough	8	NA	40	35
Soybeans Blooming	73	52	90	85
Soybeans Setting Pods	18	10	54	49
Alfalfa – 2nd Cutting	90	81	98	95

CROP CONDITION TABLE

Crop	Very Poor	Poor	Fair	Good	Excellent
	Percent				
Corn	3	8	22	49	18
Soybean	3	8	26	49	14
Pasture	3	8	28	46	15

SOIL MOISTURE & DAYS SUITABLE FOR FIELDWORK TABLE

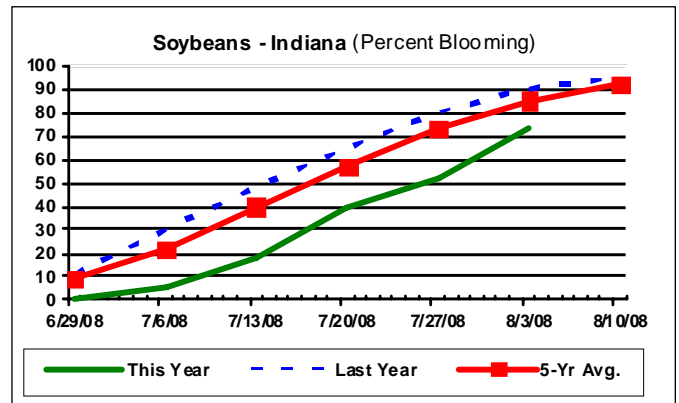
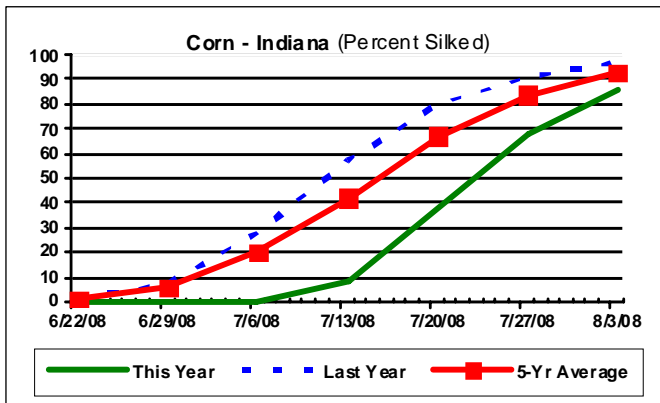
	This Week	Last Week	Last Year
	Percent		
Topsoil			
Very Short	3	2	29
Short	26	23	40
Adequate	66	72	31
Surplus	5	3	0
Subsoil			
Very Short	3	2	33
Short	18	16	41
Adequate	72	74	26
Surplus	7	8	0
Days Suitable	5.8	6.0	6.5

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



Late Planted Corn: Enough Time to Mature?

Published 29 July 2008

As Indiana's corn crop enters the final stretch of the season, folks with late-planted corn are looking ahead on the calendar and wondering whether their fields will mature safely before the arrival of a killing fall freeze. Technically, 97% of Indiana's corn crop was planted as of June 15 (Fig. 1, [USDA-NASS, 2008](#)), but more than the usual number of acres were replanted later than that as a result of poor stand survival due to the June floods and field ponding events.

The developmental consequences of the late finish to corn planting, the lateness of many replanted fields, and the relatively cool start to the growing season are reflected in the delayed silking progress of the state's corn crop to date (Fig. 2, [USDA-NASS, 2008](#)). As of 27 July, Indiana's corn silking progress is 1.5 to 2 weeks behind the most recent 5-year average and closely resembles the progress of the 2002 and 2003 crops.

If the comparison to those years holds through to maturity, quite a bit of Indiana's corn crop may mature from late September through mid-October (Fig. 3). That prospect is the reason why folks are looking to the calendar and praying that the first killing fall freeze does not come early this year.

Most agronomists consider 28F as the definition of a killing fall freeze for corn. Frosts that occur at higher temperatures may damage leaves, but typically do not kill the whole plant. Climatologists work with years of weather data and develop probability tables that offer some guidance on when to expect such damaging killing fall freezes.

Based on such climatological historical normals for Indiana ([National Climatic Data Center, 2008](#)),

a killing fall freeze occurs 10% of the time, on average, by the 10th of October in Indiana and ranges from as early as the first week of October to the last week of October depending on the area of the state. Fifty percent of the time, on average, a killing frost freeze occurs by the 26th of October in Indiana and ranges from as early as mid-October to as late as mid-November.

Given that perspective on fall freeze dates, what can be said about the likelihood that a given field of corn will mature safely (physiological maturity, kernel black layer) prior to a killing freeze? One of the simplest means by which to estimate maturity date may be in terms of number of days after silking.

Results from earlier research on corn development with delayed planting (Nielsen et al., 2002) suggest that corn planted in mid- to late-June in Indiana and Ohio will typically mature from 68 to 71 days after silking (Fig. 4). The number of days from silking to maturity increases with later-planted corn primarily because growing degree day (GDD) accumulation per day decreases dramatically toward late summer and early fall (Fig. 5) and so it simply requires more calendar days for a late-silking crop to accumulate a minimum number of GDDs to reach physiological maturity.

These results do not bode well for late-planted corn that silks during the first or second week of August, because they suggest that physiological maturity of such late-silking corn may not occur until mid- to late-October where the risks of a killing fall freeze increase. Furthermore, grain of late-maturing crops will not dry as quickly in the field prior to harvest because of the naturally cooler temperatures of that time of the year (Nielsen, 2008).

(Continued on Page 4)

Weather Information Table

Week ending Sunday August 3, 2008

Station	Past Week Weather Summary Data							Accumulation				
	Air Temperature				Precip.		Avg	April 1, 2008 thru August 3, 2008				
							4 in	Precipitation			GDD Base 50°F	
	Hi	Lo	Avg	DFN	Total	Days	Soil Temp	Total	DFN	Days	Total	DFN
Northwest (1)												
Chalmers_5W	87	55	72	-2	0.27	2		16.69	+1.08	49	1684	-289
Francesville	87	55	74	+2	0.84	3		15.58	-0.04	50	1705	-109
Valparaiso_AP_I	90	56	76	+4	0.04	1		7.08	-9.32	41	1803	+21
Wanatah	90	50	74	+2	0.07	2	84	11.55	-4.41	48	1650	-54
Winamac	87	58	74	+2	0.29	3	72	16.35	+0.73	50	1697	-117
North Central (2)												
Plymouth	90	58	75	+2	1.41	4		14.95	-1.34	53	1693	-200
South_Bend	90	58	76	+4	0.00	0		10.92	-4.37	46	1804	+37
Young_America	86	60	74	+2	0.19	2		19.75	+4.68	49	1757	-99
Northeast (3)												
Columbia_City	88	53	74	+3	0.36	2	65	15.96	+0.64	49	1658	-29
Fort_Wayne	89	58	76	+3	0.01	1		16.13	+1.94	51	1862	+11
West Central (4)												
Greencastle	87	57	73	-3	0.40	3		31.09	+13.20	53	1742	-352
Perrysville	90	55	75	+2	0.44	3	82	22.83	+5.80	52	1958	-6
Spencer_Ag	89	59	75	+2	0.57	3		33.12	+14.85	57	1908	-61
Terre_Haute_AFB	89	57	75	+1	1.10	3		26.26	+9.01	45	2023	-68
W_Lafayette_6NW	87	55	74	+1	0.73	2	77	17.42	+1.75	57	1829	-27
Central (5)												
Eagle_Creek_AP	89	63	77	+3	0.17	2		26.16	+10.10	56	2072	+0
Greenfield	87	60	75	+2	0.27	3		26.89	+9.19	58	1828	-152
Indianapolis_AP	88	64	77	+3	0.15	2		22.25	+6.19	53	2095	+23
Indianapolis_SE	87	60	75	+0	0.24	2		24.45	+7.70	49	1828	-224
Tipton_Ag	88	54	73	+2	0.49	2	79	18.81	+2.93	56	1740	-59
East Central (6)												
Farmland	88	55	73	+2	0.92	1	79	18.14	+2.52	51	1693	-58
New_Castle	85	56	73	+0	0.24	2		23.68	+6.51	54	1694	-97
Southwest (7)												
Evansville	95	64	81	+3	2.17	3		22.08	+5.46	46	2422	-2
Freelandville	89	63	77	+2	1.44	4		24.49	+7.24	50	2119	-44
Shoals_8S	92	58	76	+1	2.73	4		23.37	+4.68	50	1957	-123
Stendal	92	63	78	+2	1.60	6		26.84	+8.44	69	2247	-26
Vincennes_5NE	92	63	78	+3	2.15	3	83	21.67	+4.42	43	2194	+31
South Central (8)												
Leavenworth	92	63	78	+4	1.58	4		22.07	+3.15	73	2213	+138
Oolitic	89	60	76	+2	1.06	3	80	24.08	+6.34	53	1885	-100
Tell_City	91	64	80	+3	1.04	2		21.05	+2.33	42	2337	+36
Southeast (9)												
Brookville	90	60	77	+4	0.15	2		20.13	+2.99	56	1956	+78
Greensburg	89	60	76	+4	0.32	3		25.59	+8.40	52	1996	+59
Scottsburg	90	61	77	+2	1.38	6		21.49	+3.94	60	2158	+12

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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.

The above weather information is provided by AWIS, Inc.
For detailed ag weather forecasts and data visit the AWIS home page at www.awis.com

Late Planted Corn: Enough Time to Mature? (Continued)

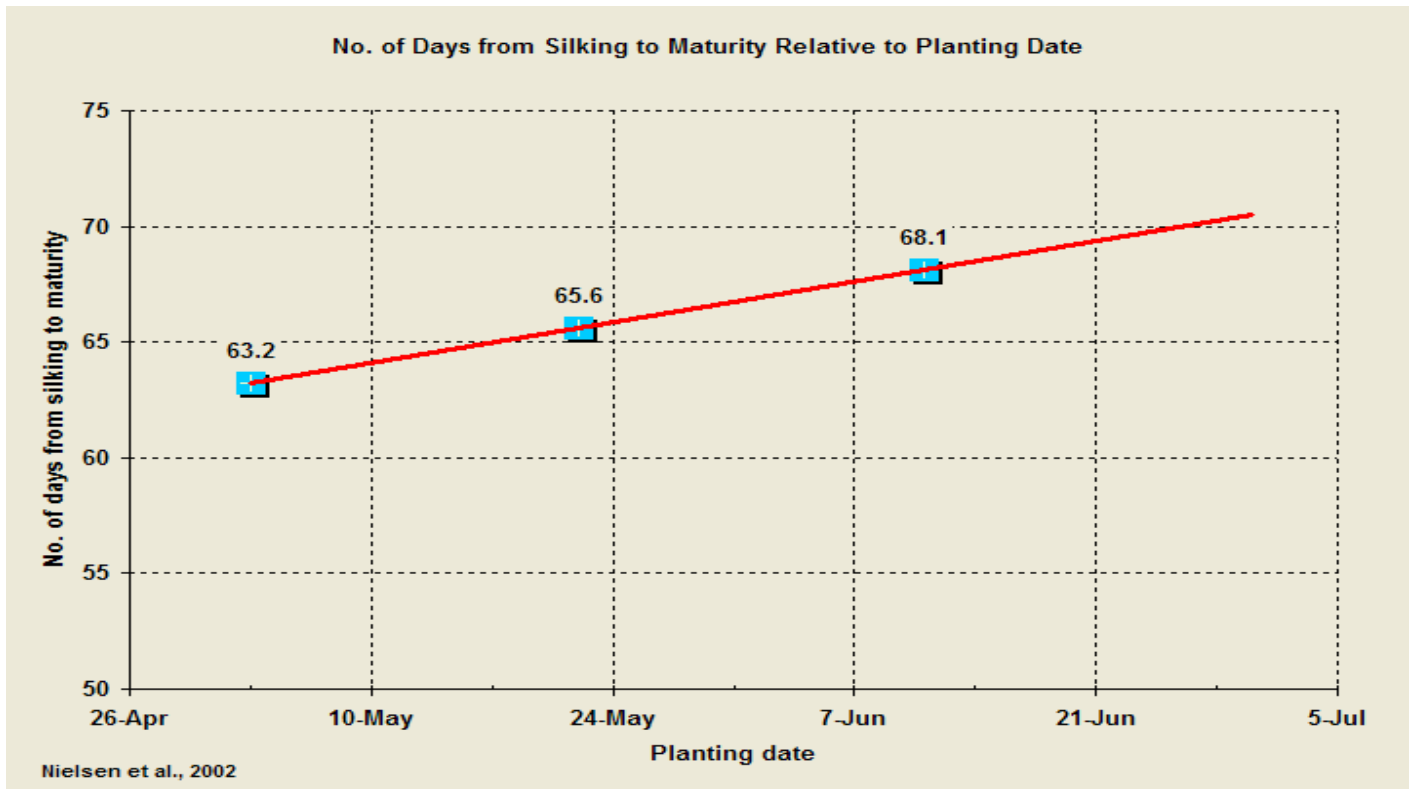


Fig. 4. Number of days from silking to physiological maturity for three corn hybrids and 12 environments in Indiana and Ohio, 1991-1994. Data adapted from Nielsen et al., 2002.

In order to view this entire article and all its charts, go to: URL: <http://www.kingcorn.org/news/articles.08/DaysAfterSilk-0729.html>

R.L. (Bob) Nielsen, Agronomy Dept., Purdue Univ., West Lafayette, IN 47907-2054, Email address: rnielsen@purdue.edu

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.