



Indiana Crop & Weather Report

INDIANA AGRICULTURAL STATISTICS
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Released: Monday, 3PM

October 19, 1998

Vol. 48, #29

West Lafayette, IN 47907

CROP REPORT FOR WEEK ENDING OCTOBER 18

Farmers had a good week for harvest, according to the Indiana Agricultural Statistics Service. Dry weather allowed soybean harvest to advance 18 percent and corn 15 percent. Wheat seeding fell behind average despite making good progress during the past week.

CORN

Ninety-nine percent of the **corn** is **mature** (safe from frost). Forty-five percent of the corn acreage has been **harvested**, remaining about a week ahead of average. By region, 45 percent has been harvested in the north, 41 percent in the central, and 53 percent in the south. **Moisture** content of harvested corn is averaging around 18 percent.

SOYBEANS

Ninety-eight percent of the **soybean** crop is reported to be **mature**. Seventy-four percent of the soybean acreage has been **harvested**, behind 85 percent last year and the 75 percent average. By region, 78 percent has been harvested in the north, 79 percent in the central, and 57 percent in the south. **Moisture** content of harvested soybeans is currently averaging around 12 percent.

WINTER WHEAT

Sixty-two percent of the **winter wheat** acreage has been **seeded**, behind the 68 percent average. Thirty-one percent of the crop is **emerged**, behind 38 percent last year, but ahead of the 29 percent average. **Condition** of the crop is rated 59 percent good to excellent, compared to 54 percent at this time last year.

OTHER CROPS

Pasture condition is rated 1 percent excellent, 25 percent good, 44 percent fair, 22 percent poor and 8 percent very poor. **Tobacco harvest** is 97 percent complete, compared with 94 percent last year and the 99 percent average.

DAYS SUITABLE and SOIL MOISTURE

For the week ending Friday, 6.8 days were rated **suitable for fieldwork**. **Topsoil moisture** was rated 7 percent very short, 29 percent short, 62 percent adequate, and 2 percent surplus. **Subsoil moisture** was rated 12 percent very short, 33 percent short, 54 percent adequate, and 1 percent surplus.

CROP PROGRESS

Crop	This Week	Last Week	Last Year	5-Year
				Avg
Percent				
Corn Mature	99	98	97	97
Corn Harvested	45	30	24	32
Soybeans Mature	98	93	99	97
Soybeans Harvested	74	56	85	75
Wheat Planted	62	44	77	68
Wheat Emerged	31	18	38	29

CROP CONDITION

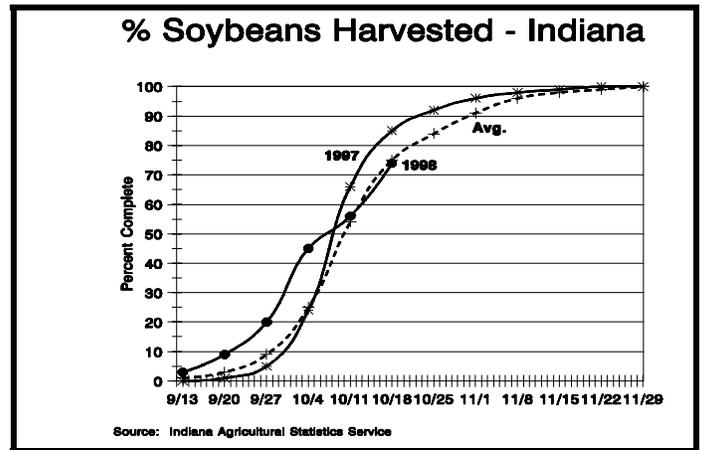
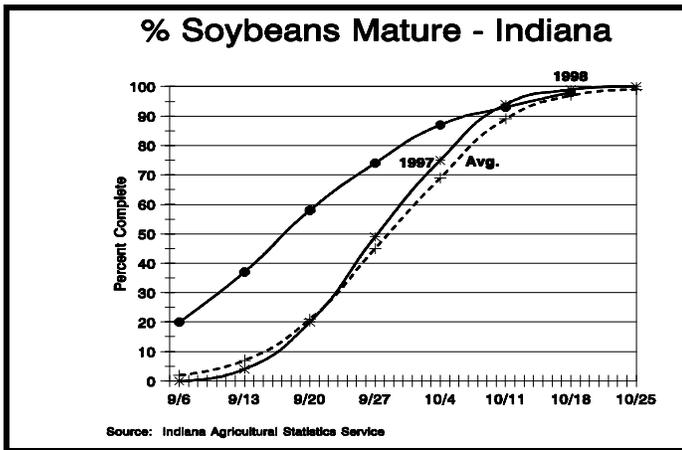
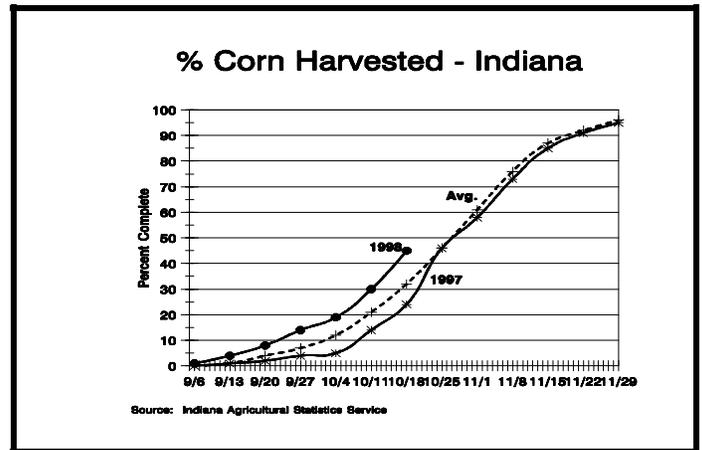
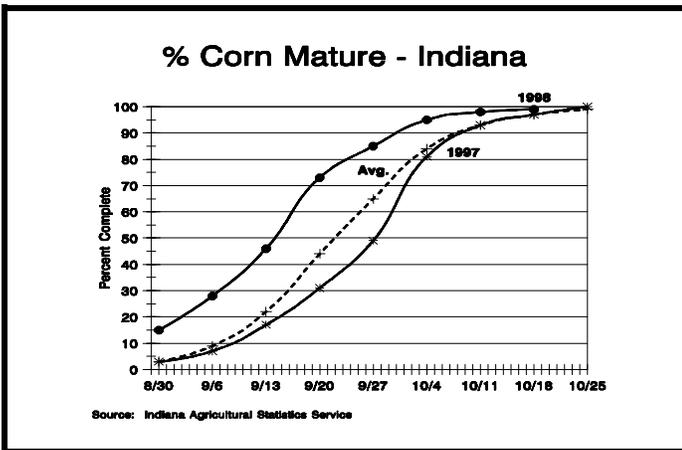
Crop	Very Poor	Poor	Fair	Good	Excel-
					lent
Percent					
Winter Wheat	0	4	37	51	8
Pasture	8	22	44	25	1

SOIL MOISTURE

	This Week	Last Week	Last Year
			Percent
Topsoil			
Very Short	7	5	9
Short	29	18	33
Adequate	62	64	57
Surplus	2	13	1
Subsoil			
Very Short	12	9	13
Short	33	40	36
Adequate	54	44	50
Surplus	1	7	1

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Crop Progress



Handle the Short-Term Storage Crunch

Farmers who store grain short-term this year should consider adapting flat structures or upright silos that are already on their farms as low-cost alternatives to steel or concrete bins.

“Deciding to store grain short-term is a matter of availability,” says Harold Keener, Ohio State agricultural engineer. “If there is a place on the farm that’s generally used to store machinery or other things, it can be adapted to store grain for quick removal when markets improve.”

Purdue Extension grain storage specialist Dirk Maier agrees. “Indiana elevators and farms will need to use some temporary storage of grains in outdoor piles and suitable existing structures,” he says.

Maier says a key question to answer before deciding to use a building is if it can be cleaned well enough to safely store grain. “If the building previously contained manure, ag chemicals or petroleum products, it may not be possible to completely remove these materials and their odors so that grain will not be contaminated or pick up the odors,” Maier says. “Contamination and

odors can result in marketing discounts or outright rejection at the first point of sale.”

Keener also advises that several factors be considered when determining which method to use for short-term storage. First, consider the amount of corn or soybeans to be stored. The standard bushel occupies 1.25 cubic feet. A 100 feet by 40 feet flat storage filled to a level depth of 6 feet holds an estimated 19,200 bushels. If grain is peaked, storage capacity can be 30,848 bushels. An upright silo 20 feet in diameter filled to a depth of 40 feet will hold 10,000 bushels.

Maier says that dry grain exerts a pressure on walls of about 23 pounds per foot of grain depth. “Unless the building was specifically designed to withstand the pressure of grain or some other granular product, it will need to be reinforced by using cables between walls, or self-supporting interior walls.”

(Continued on Page 4.)

Weather Data

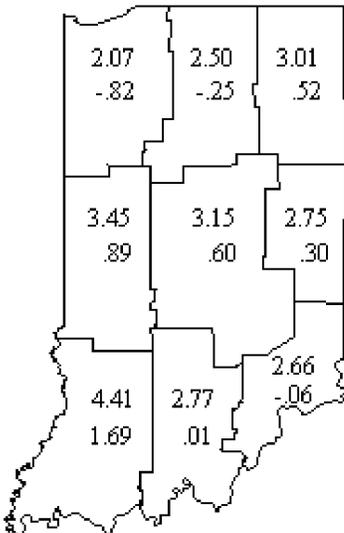
Average Daily Values for week ending Monday morning October 19, 1998

Area	Station	Air Temperature			Precipitation			Growing Degree Days		
		Max	Min	DN	Past Week	Since April 1	DN Since April 1	Past Week	Since April 1	DN Since April 1
NW	Wanatah	67	41	+2	.41	22.24	-2.63	69	3244	+401
	Kentland	72	46	+5	.54	26.79	+2.37	75	3606	+436
	Winamac	70	44	+4	.47	25.99	+2.04	79	3486	+496
NC	South Bend	66	47	+4	.34	22.23	-1.83	69	3436	+513
	Waterford Mills	71	46	+6	.85	26.30	+3.61	73	3450	+489
NE	Prairie Heights	71	46	+8	.69	22.90	-.36	71	3474	+827
	Columbia City	68	44	+4	.78	24.24	+.96	69	3358	+506
	Fort Wayne	68	48	+5	1.05	27.91	+6.58	76	3483	+409
	Bluffton	68	45	+3	.52	27.55	+4.79	71	3549	+399
WC	West Lafayette	71	44	+5	.49	27.93	+4.28	85	3620	+550
	Perrysville	71	45	+2	.64	33.28	+7.16	86	3745	+225
	Crawfordsville	72	42	+4	.69	31.28	+8.26	87	3565	+467
	Terre Haute 8s	76	45	+6	1.06	31.47	+6.10	103	4091	+649
C	Tipton	70	44	+5	.68	34.58	+10.29	82	3394	+390
	Indianapolis	70	47	+4	1.66	34.15	+10.43	79	3880	+476
	Indian Creek	75	47	+7	1.04	30.46	+6.04	84	3878	+645
EC	Farmland	72	46	+7	.73	27.67	+4.50	78	3495	+573
	Liberty	72	43	+4	.87	26.75	+1.68	83	3625	+387
SW	Vincennes	74	47	+5	.92	33.51	+8.55	94	4033	+513
	Dubois	73	47	+5	.59	31.39	+4.01	95	3926	+459
	Evansville	74	50	+5	1.05	27.69	+3.59	100	4302	+443
SC	Bedford	73	43	+4	.61	37.29	+11.37	89	3822	+487
	Louisville	75	54	+7	.52	30.62	+5.50	108	4478	+647
SE	Butlerville	74	43	+2	.64	36.05	+11.34	79	3762	+196

DN = departure from normal.

Growing Degree Days = daily mean - 50 (below 50 adjusted to 50, above 86 adjusted to 86.)

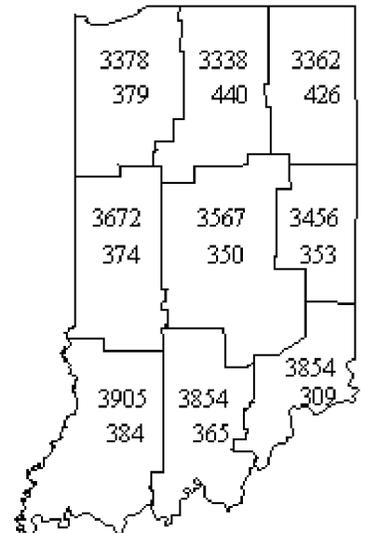
Rainfall for Past 4 Weeks and Departure from Normal



Rainfall of 1 Inch or More for Past 7 Days as of Monday morning



Growing Degree Days and Departure since April 1



Crunch (continued)

Flat structures require limiting the storage depth or building special bulkheads, Keener says. For upright silos, he recommends consulting the manufacturer for proper retrofitting procedures. Moisture also is a major factor. Grain going into flat storage must be dry. For corn, Keener says the moisture should be 14 to 15 percent, and for soybeans, the moisture should be 12.5 to 13.5 percent. Grain can be stored at slightly higher moisture content only when it will be stored for a few months and special care will be taken to aerate it. Poor-quality grain should be stored only at the lowest moisture levels.

Length of storage should be about two to six months, and definitely should not exceed nine months, according to Keener. Aeration requirements should be given special attention, Keener says. Grain needs to be cooled to minimize moisture migration during the initial months of storage.

If grain is to be stored more than two months, an aeration system using either a fully perforated floor or a properly designed duct system needs to be in place. Minimum airflow requirements are 0.1 cubic foot per minute per bushel of grain stored for continuous aeration and 0.5 cubic foot per minute per bushel of grain for fans being operated two days every two weeks.

Structural integrity is key to preventing rain and other forms of moisture to permeate the grain. Don't risk storing grain in a structure that could allow moisture to permeate grain.

Maier emphasizes that minimizing storage time and implementing the four S.L.A.M. management practices: Sanitation, Loading (properly, by removing broken grain, dust and fines), Aeration and Monitoring. Maier, too, believes the term "short" in "short-term" is key. "Grain should be moved out of temporary storages in January and February and no later than March to avoid severe spoilage, self-heating, rodent, bird and insect problems later on," he says.

Maier says there are other storage options, too. "Various smaller, reusable temporary storage structures can be built using polyethylene sheeting, reinforced fiber sheeting, wire mesh, and wood or metal panels for holding grain in smaller volumes," he says. "In Argentina, 23-foot diameter wire-mesh structures that are 9 feet tall, often are used for temporary storage of corn, popcorn, soybeans, and wheat after harvest. The inside walls are lined with sheets of woven plastic mesh to hold around 3,000 bushels of grain."

The INDIANA CROP WEATHER REPORT (USPS 675-770), (ISSN 0442-817X) is issued weekly April through November by the Indiana Agricultural Statistics Service, Purdue University, 1148 AgAd Bldg, Rm 223, West Lafayette IN 47907-1148. Second Class postage paid at Lafayette IN. For information on subscribing, send request to above address. POSTMASTER: Send address change to the Indiana Agricultural Statistics Service, Purdue University, 1148 AgAd Bldg, Rm 223, West Lafayette IN 47907-1148.