

# Iowa Crops & Weather



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For the month of December 2003

## Variable Weather in December

**Agricultural Summary:** Fluctuating temperatures and much-needed precipitation arrived in Iowa during December. With a large amount of fieldwork completed this fall, many farmers have been preparing for 2004. Fertilizer application ranked above both last year's application percent and the 5-year average. Agricultural activities during December included purchasing seed, chemicals, and fertilizer for the 2004 season.

At the end of December, the average depth of **snow cover** across Iowa was 2 inches, compared to zero inches at the same time last year. The average depth of **frost penetration** for the state was 7 inches, compared to last year's 5 inches. **Soil moisture** rated 9 percent very short, 38 percent short, 50 percent adequate, and 3 percent surplus across Iowa. While melted snow from an early December storm aided in replenishing soil moisture supplies, much of the state could use more before spring.

**Field Crops Report:** **Grain movement** from farm to elevator was rated 25 percent none, 39 percent light, 33 percent moderate, and 3 percent heavy. **Hay and roughage availability** rated 10 percent short, 82 percent adequate, and 8 percent surplus. **Quality of hay and roughage** supplies rated 7 percent poor, 40 percent fair, and 53 percent good. **Utilization of stubble fields for grazing** rated 27 percent none, 24 percent light, 31 percent moderate, and 18 percent heavy.

**Livestock, Pasture, and Range Report:** **Hog and pig losses** in December were higher than last year at 18 percent below average, 79 percent average, and 3 percent above average. **Cattle and calf losses** were also higher than last year at 29 percent below average, 69 percent average, and 2 percent above average. Temperature swings negatively affected livestock health. Cattle were still feeding on stalks during December, which has helped conserve winter feed.

## Preliminary Iowa Monthly Weather Summary -December 2003-

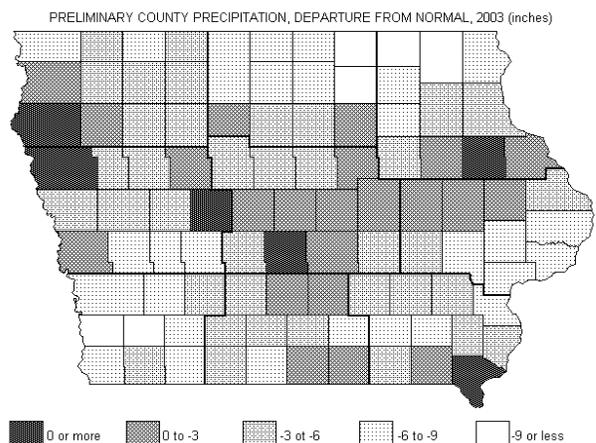
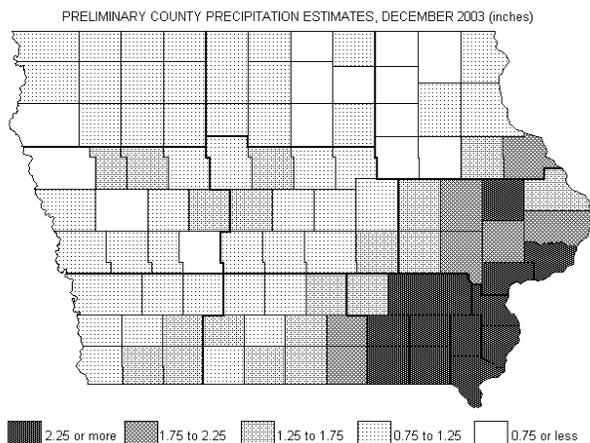
**General Summary:** December temperatures averaged 28.1 degrees or 5.5 degrees above normal while precipitation

totaled 1.33 inches or 0.10 inches above normal. This ranks as the 32nd warmest and 48th wettest December among 131 years of records.

**Temperatures:** Cold weather made only brief appearances during the month. Below normal temperatures were confined to only 5 days (10th-13th and 19th). The coldest weather came on the 11th and 12th when the only sub-zero temperatures of the month were recorded. Afternoon high temperatures climbed only into the single digits in northwest and north central Iowa on the 11th while Northwood reported the month's lowest temperature with a morning low of -7 degrees on the 12th. Daytime temperatures reached into the 50's in some part of the state on the 1st, 8th, 21st, 26th, 27th, 28th and 30th. A few 60's were even reported on the 27th with Shenandoah reaching 62 degrees.

**Heating Degree Day Totals:** Home heating requirements, as estimated by heating degree day totals, averaged 2% greater than last December but 14% less than normal. Thus far this heating season (since July 1), heating degree day totals are running 5% less than last season at this time and 9% less than normal.

**Precipitation:** Storm systems brought frequent snow to Iowa during the first one-half of December while an average of only 0.16 inches of precipitation fell during the second half of the month. Three storm systems accounted for most of Iowa's precipitation. The first storm on the 2nd-3rd deposited snow over the western two-thirds of Iowa with 8 to 10 inches accumulating from Spencer to Fort Dodge. Just two days later another storm dropped snow across all of Iowa with 2 to 3 inch amounts common over the northeast two-thirds of the state. Finally, unseasonably heavy rain fell across east central and southeast Iowa on the 9th-10th with Keokuk recording 4.08 inches of precipitation. This last storm system also brought snow and high winds to all of the state with up to 6 inches of snow falling in southwest Iowa. Preliminary monthly precipitation totals varied from 0.53 inches at Tripoli up to 5.22 inches at Keokuk. Keokuk's precipitation total was their second highest ever for December (5.71 inches fell in 1982). A statewide average of 8.5 inches of snow fell during the month. This is 1.2 inches more than the normal December snowfall and is Iowa's highest monthly total since a record 25.5 inches fell in December 2000.



## Snow Cover and Frost Penetration for the month of December

Item	Districts									State	Last Month	Last Year
	NW	NC	NE	WC	C	EC	SW	SC	SE			
Snow cover	5	0	2	2	2	1	1	2	1	2	NA	0
Frost penetration	14	11	7	6	6	2	5	5	3	7	NA	5

NA = Not available.

**December Weather Summary For Iowa Agricultural Statistics Service  
Prepared by AWIS, Inc.**

STATION	AIR TEMPERATURE				PRECIPITATION			HDD TOT	HDD DFN	DAYS OF 32 COLD	DAYS OF 28 COLD
	HI	LO	AVG	DFN	TOTAL	DFN	DAYS				
<b>North West District</b>											
Estherville	51	-2	25	8	0.42	-0.31	5	1,246	-222	30	28
Sioux Center	50	1	27	8	0.99	0.15	4	1,166	-226	30	27
Spencer	53	-2	26	8	0.39	-0.32	4	1,200	-242	30	25
Spirit Lake	49	-4	25	9	0.78	-0.11	6	1,237	17	31	30
<b>North Central District</b>											
Britt	53	-2	24	5	0.59	-0.77	6	1,259	-155	31	27
Humboldt	54	0	25	5	1.19	0.18	5	1,231	-167	31	28
Mason City	56	-1	26	8	0.53	-0.68	6	1,202	-244	30	26
Northwood	52	-7	25	8	0.68	-0.46	9	1,243	-236	30	29
<b>North East District</b>											
Decorah	46	-5	27	7	0.52	-0.69	8	1,165	-207	28	26
Dubuque	56	2	29	9	1.67	-0.29	8	1,099	-248	24	21
Elkader	58	-4	27	6	1.10	-0.30	6	1,167	-16	30	28
Independence	58	-3	27	7	0.74	-0.79	5	1,185	-97	29	26
Waterloo	61	2	29	10	0.46	-0.84	8	1,105	-281	28	24
<b>West Central District</b>											
Audubon	61	6	28	5	0.68	-0.51	4	1,155	-130	30	29
Carroll	61	5	27	7	1.44	0.48	6	1,159	-199	30	26
Castana	57	3	28	5	0.62	-0.21	7	1,146	-247	30	27
Guthrie Center	63	2	29	7	0.75	-0.53	4	1,116	-198	30	28
Harlan	62	7	28	5	0.87	-0.14	6	1,128	-242	30	26
Jefferson	62	5	28	8	1.51	0.55	5	1,130	-228	30	25
Logan	61	4	29	7	0.86	-0.21	5	1,117	-196	30	29
Rockwell City	59	0	26	5	1.13	0.20	5	1,212	-124	31	28
Sioux City	56	9	30	9	0.42	-0.36	6	1,078	-261	28	24
<b>Central District</b>											
Ames	64	7	30	9	0.77	-0.34	6	1,078	-281	27	20
Boone	63	4	28	7	1.67	0.33	6	1,138	-206	31	28
Des Moines	64	10	32	9	0.86	-0.46	7	1,012	-248	23	18
Eldora	60	2	27	7	1.16	0.01	6	1,169	-203	30	26
Marshalltown	62	4	29	7	0.62	-0.67	5	1,121	-212	28	24
Newton	62	7	29	6	0.96	-0.17	5	1,109	-184	30	26
Perry	63	5	29	7	1.14	0.08	6	1,117	-208	30	27
Toledo	60	5	28	7	0.69	-0.56	6	1,141	-197	29	28
<b>East Central District</b>											
Cedar Rapids	59	4	30	8	1.80	0.21	7	1,078	-232	26	22
Davenport	57	2	31	6	2.43	0.51	8	1,039	-181	25	18
Iowa City	61	7	32	7	2.29	0.73	8	1,021	-191	25	17
Lowden	59	0	28	6	2.37	0.26	8	1,124	-176	28	24
Maquoketa	56	0	28	5	2.16	0.36	7	1,147	-158	27	25
Muscatine	59	7	31	5	2.77	0.80	8	1,055	-335	27	19
<b>South West District</b>											
Clarinda	63	6	30	7	1.33	0.15	7	1,065	-187	30	27
Glenwood	63	4	31	7	1.02	-0.16	5	1,055	-179	30	27
Oakland	64	6	30	8	1.03	-0.04	8	1,078	-233	30	25
Red Oak	65	8	31	6	1.10	-0.11	9	1,038	-185	29	24
Sidney	63	8	32	7	1.09	-0.07	5	1,030	-195	29	23
<b>South Central District</b>											
Allerton	62	10	31	7	1.71	0.40	8	1,061	-419	28	25
Beaconsfield	62	10	30	6	1.17	0.06	6	1,062	-190	29	24
Chariton	64	10	31	8	1.15	-0.21	7	1,034	-231	24	22
Indianola	65	9	31	7	1.13	-0.25	5	1,048	-215	29	24
Leon	64	11	31	7	1.56	0.20	7	1,035	-214	28	23
<b>South East District</b>											
Bloomfield	61	9	32	5	2.48	0.92	7	1,027	-140	26	23
Burlington	58	8	33	7	4.07	2.09	10	977	-209	22	14
Ottumwa	62	6	32	7	2.22	0.79	6	1,005	-210	25	19

Precipitation (rain, melted snow or ice) in inches. Precipitation Days = Days with precipitation of 0.01 inch or more. Air Temperatures in Degrees Fahrenheit. Copyright 2004: AWIS, Inc. All Rights Reserved.