

## Variable Winters

When the mild winter of 1943-44 came to a close, many old timers were ready to assert that the cold, snowy weather of pioneer days was a thing of the past. Off-hand observations tend to emphasize the changes in climatological conditions. A study of available weather bureau statistics, however, coupled with a generous use of old newspaper files, reveals no pronounced trend in the weather during any season of the year in Iowa.

There are plenty of reasons why the winters of yesteryears should seem colder. In the first place both the log cabin and the early frame houses lacked the heating equipment and the insulation in use today. Secondly, modern Iowans can travel from Davenport to Council Bluffs faster and more comfortably by automobile than the pioneer could cross the average county in his bob-sled. Roads were not well graded in pioneer days, there were no slat fences to serve as snow breaks, nor were State highway crews maintained to remove the snow from the main-traveled roads. Today, the radio gives almost hourly warning of an approaching snowstorm so that there is relatively little danger of Iowans being caught unpre-

pared. Finally, the commonplace is soon forgotten whereas unusual weather, such as a raging blizzard or a balmy Christmas, makes an indelible impression.

While not overlooking the "long winter" of 1842-43, the severe winter of 1856-57, or the great blizzards of 1864 and 1888, it might also be well to remember that exactly the opposite type of weather was experienced in many winter months. As early as 1836 Albert Miller Lea observed that "we often have fine pleasant weather in mid-winter" and declared that even as far north as Prairie du Chien there was "never so much snow" as to interrupt traveling. James Newhall considered wintertime in Iowa "decidedly more cheerful than dreary." The season of "sleighting and hunting is upon us," he wrote, "with all their accompanying allurements. Our young Nimrods are buckling on their armor for the sports of the forest; parties form hunting campaigns for the elk and deer; young lovers rig out a 'jumper,' and with their smiling lassies, hie away to the minister or magistrate to tie the 'true-lover's knot'; and 'quiltings,' mirth, and weddings make the prairie fireside resound with their joyous notes of rural pastime."

Iowa newspapers frequently confirm the high estimates of Lea and Newhall on Iowa's mild winters. The winter of 1838 was so pleasant that the editor of the *Iowa News* saw a Dubuque

farmer plowing his field on New Year's Day. Six years later, on December 27, 1844, the *Bloomington Herald* expressed delight over the "mildness of our Iowa climate" when Christmas dawned "as balmy and delightful as one could expect to witness in the month of May." The day was unmarked by the appearance of "sleighs, buffalo robes, and the merry jingle of sleigh-bells, with which our eyes and ears have been so often greeted in colder climate and which to the eye of a genuine son of New England, are so indispensably necessary to a proper observance of the day."

Apparently such winters were common during the next few years, for it was not until 1848 that a Davenport editor reported a real December snowfall. The sleighing was never better, he declared, than that enjoyed during the Christmas-New Year season of 1848-49 and did much "to make amends for the deficiency" of the previous four or five years.

The value of a warm winter was not overlooked by Iowa editors. "The fine weather we are having these days is worth hundreds of thousands of dollars to Iowa," declared the *Keokuk Daily Gate City* of December 5, 1855. "The farmers are enabled to finish up their fall work," while thousands of immigrants would have time to finish their new houses. Many emigrants, both native American and foreign, came to Iowa during the

late fifties, lured in part by Nathan H. Parker's praise of Iowa's climate in his *Handbook for 1856*. After observing that the Hawkeye State occupied three degrees of latitude, Parker called attention to "some variations" in the winter climate. "In the northern part the winters are cold and dry, but short. Spring comes on early, so that the farmer commences his work in the month of March, seldom as late as April. In the southern portion of the State the winters are more mild, and spring somewhat earlier. The climate is free from the sudden changes of New England, and from the long drizzling rains and foggy weather of portions of the Middle States, and those States within the influence of the Great Lakes."

Similar mild winter seasons were enjoyed during the 1860's. The editor of the *Weekly Gate City* recorded that Christmas at Keokuk in 1867 dawned cloudy with a weak attempt at rain. As the hours passed the clouds disappeared and the "warm sunlight and genial breeze made it very pleasant out-doors, if one could move along unmindful of the mud under foot."

The many mild winters of pioneer days led the *Winterset Madisionian* of December 26, 1872, to query: "Has Our Climate Changed?" The editorial continued at some length on the mild winter and fortified its conclusions by quoting the *Good Health Magazine*. "We do not have those continual piercing and sharp winds that made our

winters so very severe a few years ago. Our climate is getting more and more friendly." The editor of the *Sioux City Weekly Times* also lamented the absence of snow in 1872. "It promises to be dull here, in the way of amusements, during the holidays," he wailed. "The absence of snow, no doubt, is the cause of it. Christmas is no more like Christmas without sleighing than Fourth of July is like New Year's." But Sioux Citians had their fun at Christmas time nevertheless, for the editor observed that "racing oxen in the streets is all the rage now."

If Fort Dodge shivered in the big blizzard of January 12, 1888, the town fairly basked in the delightful weather three years later. "The balmy breezes of Monday," declared the *Fort Dodge Messenger* of January 22, 1891, "brought out a few tennis players with net and rackets and a regulation set was played on one of the local courts in the afternoon. All of which be it remembered occurred right here in Fort Dodge in the state of Iowa, upon the 19th day of January, A.D., 1891."

Such variable winters have been recognized in Iowa since pioneer times. "The past week has been marked by very undecided weather," declared the *Davenport Gazette* of December 23, 1841. "It was cold, warm and pleasant; snowed, hailed and rained; froze, thawed and froze again; calm, blustering and mild; in brief, as a Yankee

would say, we have had 'considerable weather,' — enough, however, to suit the most fastidious taste, if properly proportioned." Three years later, on January 18, 1844, the *Davenport Gazette* observed: "Our weather is as fickle as fortune. Alternately it smiles and frowns upon us till fatigued we, for once, sigh for sameness. If we were not right sure the clerk of the weather, like our Legislature imitating Congress, would disregard a petition, we would get numerous signers for cold weather."

The winter of 1909 illustrates how variable Dame Nature could be in Iowa. It was marked by the heaviest snowfall ever recorded in the State. And yet, a Sidney editor saw the "unusual spectacle" of Fremont County farmers plowing in January. The Marshalltown *Times-Republican* felt that if the present weather man continued in office Iowa would be "alternating her apple and peach trees with orange trees and planting pineapples along with potatoes." Writing in the Des Moines *Register* Isaac Brandt declared that the first month in 1909 was the "most pleasant January" he had seen in fifty-three years of Iowa residence. "When we have weather like this it is certainly nonsense for anyone to leave for the rainy days that they will meet in California. While I like the splendid weather we are now enjoying, I hate to think of the disappointment

that we will meet when old Jack Frost makes up his mind to pay us another visit."

Scarcely had Brandt penned these words when Jack Frost put in his appearance, bringing one of the worst blizzards ever experienced in Iowa. "The high winds caused the snow to drift badly, blew down hundreds of windmills and thousands of telegraph and telephone poles. All street car and railroad train service was practically abandoned, and many head of livestock would not face the wind and flying snow to seek shelter. The maximum velocity of the wind during the storm ranged from 31 miles an hour at Dubuque to 72 miles an hour at Sioux City, and was probably higher on the prairies."

The greatest amount of snowfall at any Iowa station occurred in the calendar year of 1909 at Northwood — 113.4 inches; the greatest 24-hour snowfall was 20.0 inches at Humboldt; the greatest monthly snowfall was 32.0 inches at Perry; and the State average was 49.0 inches. After comparing these figures with the State average of 30.0 inches between 1892 and 1960 and the record low of 13.5 inches that fell in 1922, one can readily grasp the difference between light, average, and blizzardy winters.

The following are the heaviest annual Iowa snowfalls in inches since systematic records were inaugurated in 1892:

1951.....53.2 in.	1960.....42.2 in.	1897.....38.8 in.
1959.....49.3 in.	1929.....41.8 in.	1901.....38.5 in.
1909.....49.0 in.	1898.....40.3 in.	1932.....38.5 in.
1936.....48.9 in.	1945.....39.8 in.	1905.....38.3 in.
1940.....46.4 in.	1952.....39.5 in.	1912.....38.0 in.

Since 1892 thirteen out of the fifteen heaviest snowfalls have occurred in the twentieth century. Moreover, the first, second, fourth, fifth, and sixth heaviest snowfalls have occurred since 1936. Even more amazing is the fact that three of the six heaviest annual snowfalls have occurred since 1951. Since 1951 was the record-breaking snowfall year, it is worth recording the reactions of the staid Weather Bureau:

Iowans experienced many weather extremes in the year 1951. In general, the year was cold and wet. Temperatures for the state averaged 45.6° which was 3.0 degrees below the normal. It was the 6th coldest year since State-wide records began in 1873, and the coldest since 1917. Temperatures averaged below the monthly normals for ten months of the year; only in February and May were the monthly averages above normal. The lowest temperature for the State was 43° below zero at Decorah on January 30. . . . Precipitation for the State averaged 42.22 inches, which amount was 10.85 inches above the normal. It was the third wettest year since records were begun in 1873. The annual amount has been exceeded only in 1881 (44.16 inches) and in 1902 (43.82 inches). . . . The total snowfall for the calendar year, 53.2 inches, was the greatest of record (snowfall records began in 1892). In March the average snowfall for the State, 23.2 inches, was the greatest on record for that month. . . . Snowfall amounts were greater than would be expected for the

amount of precipitation. Much of the snow fell during periods of cold weather, and was light and fluffy in character. Several eastern localities received the heaviest December snowfall of record, with Clinton reporting the greatest fall of 27.9 inches. The period from the 12th through the 27th saw the most persistent December cold period of record. Temperatures were below zero on 14 days at Sibley in the northwest, and the cold weather was climaxed by a low temperature of  $-28^{\circ}$  at Sibley and Spencer on the 27th. The rivers in Iowa froze over early during the cold period and remained frozen the rest of the month.

Snow frequently has made Iowa a Winter Wonderland. On December 22, 1952, a general snowstorm insured "one of the most beautiful" white Christmases in Iowa. Eight years later snow and temperature joined to keep the ground snow covered at Des Moines for the "unusually long" period of 75 days, from January 15 to March 29, 1960, inclusive.

Between 1892 and 1961 the heaviest average snowfall has occurred between December and March. Although 4.9 inches fell in October of 1925 the average is only 0.5 inches for that month. The average for November is 2.6 inches and the greatest fall for that month 8.7 inches in 1898. April has averaged only 1.6 inches, but in 1893 as much as 6.0 inches were recorded. The following table shows two things: first, the average snowfall for each winter month between 1892 and 1960; and second, the heaviest State average

snowfall recorded in each of these months, with the year in which it fell.

Month	Average Snowfall	Heaviest Snowfall	Year
December .....	5.9	15.9	1897
January .....	7.0	19.4	1936
February .....	6.7	15.9	1936
March .....	5.6	23.2	1951

Temperature statistics began at Council Bluffs on October 22, 1819, and have been kept at various places in or near Iowa ever since. The coldest temperature ever recorded in Iowa was  $-47^{\circ}$  at Washta in 1912. The coldest month in the past 141 years was January, 1912, with a State average of  $4.2^{\circ}$ , comparable with the next coldest average of  $4.9^{\circ}$  in 1875. The coldest two months were January and February, 1875, with a State average of  $5.6^{\circ}$ . The coldest three months were December, 1874, to February, 1875, with a State average of  $11.8^{\circ}$ . Starting with a cold wave on January 18, 1936, and continuing almost unabated to February 22nd, Iowa experienced its most prolonged period of very low temperature in the 125 winters of recorded weather history.

In recent years the Weather Bureau has been changing its methods of recording weather statistics, dividing the State into nine districts. This system emphasizes the wide difference between, for example, the northwestern Iowa counties and the southeastern counties.

Annual Precipitation		
Division	1959	1960
Northwest .....	32.03	29.81
North Central .....	37.28	26.15
Northeast .....	39.84	35.95
West Central .....	33.20	29.68
Central .....	35.18	34.40
East Central .....	42.72	38.47
Southwest .....	39.28	36.50
South Central .....	42.63	38.67
Southeast .....	42.47	38.28

These figures reveal the variable precipitation for various parts of Iowa. Snowfall records for four months during the same period follow:

	January		February	
1959	20.0"	Clinton #2	26.0"	Cresco
1960	19.7"	Onawa	28.0"	Albia
	March		December	
1959	35.0"	Fayette	10.7"	Maquoketa
1960	25.8"	Albia	10.8"	Fayette

Apparently the winter climate of Iowa is not changing significantly. Variations of temperature and precipitation are still as extreme as they used to be, the memories of old settlers to the contrary notwithstanding.

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