## The Peoria Weather Bureau Chronicles

Back in the old days, observers at the Weather Bureau office in Peoria took several observations each day. These consisted of temperature, precipitation, snowfall, barometric pressure, cloud cover, and sunshine. While specific observation sheets were used to log the data, remarks and comments on the weather were either hand-written or typed onto separate pages.

Here are some of the notable events in Peoria, as recorded by Weather Bureau observers.

## May 1908:

"Considerable damage was done by a wind storm which struck the city about 3 a.m. May 5th. Many small boat houses, docks, boats etc. were damaged on Peoria Lake. Large windows were broken in two store buildings, the glass falling outward, suggesting the tornadic character of the wind movement. This was also evidenced by the fact that a tile from the roof of one building was lifted several feet in the air and dashed against a cupola. The barograph trace at the station exhibited a marked fall and a sudden rise, at the time. The highest wind velocity recorded at the Weather Bureau Office at the time, however, was but 36 miles per hour. The damage occurred about two miles distant."

## September 1908:

"An auroral display of more than usual brilliancy was observed on the night of the 28th-29th, beginning about 10 p.m. 28th, and continuing past midnight. The extremeties of the arch were about 90 degrees apart, from azimuth 135 degrees to 225 degrees, and the crown of the arch reached fully to altitude 70 degrees or 75 degrees. 'Streamers' were observed which seemed to drift vertically, from west to east."

## March 1909:

"Solar halos were observed on the 2nd, 16th, and 23rd and lunar halos on the 2nd and 5th. The solar halo on the 16th was unusually brilliant and was visible for two hours beginning shortly after sunrise. Two distinct rings respectively about 22 degrees and 45 degrees in radius appeared, the prismatic colors in the outer circle being distinct. Six 'mock suns' were visible, two on each side and two above the sun. Bands of white light extended both horizontally and vertically through the sun, crossing the halos at the mock suns."

## April 1909:

"The hail stones which fell at the station on the 29th were unusually large, some of them measuring seven inches in circumference. They were disk like in shape and were formed of the characteristic rings or layers."

## May 1909:

"A light earthquake shock was felt on the 26th at 8:38 a.m. The vibrations could be distinguished for about four seconds, and were pronounced enough to rattle doors and windows, dishes etc. The only damage reported was the shaking down of a chimney on a residence in the city."

## December 1909:

"The December precipitation was slightly above normal and largely fell as snow. The total snowfall, 18.0 inches, was unusually large, and included a 24-hour fall of 9.2 inches, on the 24-25th. The month closed with 7.1 inches on the ground and quite evenly distributed. Sleighing was excellent after the 7th, and the ice crop is exceptionally good, the thickness at end of month being 10.0 inches (measurement on Lake Peoria)."

## **April 1910:**

"An unusual atmospheric surge occurred at 6:50 pm. of the 21st. The wind which had for two or three hours averaged 9 miles per hour from the southeast, abruptly changed at 6:50 pm. to 20 miles from East; then to southeast at 6:54, and southwest at 7:00 to 7:06 pm.; then back again to south and southeast at about 9 miles per hour after 7:07 pm. The barograph pen declined sharply .06 inch prior to 6:56 pm., and rose again almost immediately. The cloudiness consisted of Ci.S. [cirrostratus] and A.S. [altostratus] from the west."

#### May 1910:

"Comet observations had been made since late April whenever the sky was sufficiently clear, and as far as other duties would permit with the assistant observer absent through most of May. ... May 18th, the observer remained on duty to 2:00 am. of 19th. Meteorites were observed at 6:45, 8:52, 9:55, 10:05, and 11:21 pm., and 12:10 am. of 19th. Their general direction of movement was from S.E. to N.W., with visible

paths about 20 degrees in length and appearing to be confined to no particular portion of the sky. Except what seemed to be an apperance of the zodiacal light about 9:30 pm., no other phenomena were noted."

## April 1911:

"The heavy snowfall of the 2nd was accompanied by thunder, which continued at intervals from 9:10 a.m. to 12:50 p.m., closely resembling the thunder that often accompanies Spring or Autumn rains of that type. The occurrence of thunder of such frequency and duration with a snowstorm is decidedly unusual."

## September 1911:

"The total rainfall of the month is the greatest monthly total on record at this station for any month since the beginning of cooperative observers' records in December, 1855; and is more than half the total for the entire year of 1910. In the storm of the 6th, 0.12 inch was recorded in one minute, 0.27 inch in three minutes, and 1.15 inches in 20 minutes, all periods beginning at 7:54 p.m. Thunder was unusually frequent and severe from 7:55 to 8:15 p.m. and some damage was done by lightning."

## November 1911:

"The weather of late afternoon and night of the 11th included a temperature fall of 50 degrees in 5 hours beginning about 4 P.M., and a fall of 65 degrees in 16 hours beginning about 2 P.M.; also the occurrence within a few hours time, of clear and cloudy sky, rain, hail, sleet, snow thunder, lightning, and high wind."

## January 1912:

"In the two weeks [3rd through 16th inclusive] were two periods of 80 hours, and 62 hours, respectively, in which the temperature was continuously zero or below. Colder extreme temperatures have been recorded, but January, 1912 is the coldest winter month on record in Peoria."

#### March 1912:

"Running ice continued at the Lower Bridge from about the 20th to the end of the month, being worst on the 29th. The old bridge was put out of commission on the 26th. by ice and high water and was abandoned, the new bridge being nearly ready for traffic. Some damage was done by ice to the Upper Bridge, and also to house boats and summer cottages along the shore of lake and river; but probably not to exceed a total of one-thousand dollars. Some of the running ice from Peoria Lake was said to be 30 inches thick. Navigation opened on the 28th with the arrival of the Keystone State."

#### February 1914:

"The most noteworthy feature of the month was the snow storm of the 22nd and 23rd, in which the fall was heavy from shortly after 4 p.m. until midnight or early a.m. of the 23rd, the heaviest coming between 7:30 p.m. and 10:30 p.m. The snow was much drifted by the accompanying high wind and tied up most of the railroads preventing the movement of trains for a day or two. Drifts in some places in the country were said to be 8 feet high."

#### May 1914:

"About 11:50 a.m., May 7, 1914 an incipient tornado was observed to the northwest of the station. An unmistakable funnel cloud extended downward from a cloud base which was at an angular altitude of about 15 degrees above the horizon. The funnel at the greatest development observed reached about one-third or half the distance to the ground. The funnel was small and during the ten minutes of observation varied considerable in form, and in density and color, and also swayed somewhat, the lower portion at one time being nearly horizontal. Thunder had been heard at 11:45 a.m. in the northwest and the line of shower clouds, moving from about west southwest, passed over the station giving rainfall of 0.15 from about 12:05 p.m. to about 1:10 p.m., the heaviest falling about 12:30 p.m. In the southern part of the city, a mile or so from the station, the heaviest rain fell slightly later than at the station, probably about 12:35 p.m. and was attended by a sharp fall of hail. The hail stones appear to have been mostly about the size of peas and lasted about two to five minutes in some blocks of the city, the ground being quite thickly covered at the end."

## **August 1915:**

"The month was the coldest on record at this station, and without doubt the coldest August in this vicinity in 60 years. Light frost was reported in several places on the morning of the 31st, but no damage resulted."

## January 1918:

"What was evidently a meteor, is reported seen about 5:50 p.m. of the 22nd. It was first noted in the northwest, moved toward the observer and to the south of her, exploding in what appears to have been the W.S.W., at an altitude of perhaps 15 degrees above the horizon. Its path was at first a pale yellow light, very bright, turning to deeper red and increasing in brilliance as it approached. The movement seemed very slow, due probably to its progress nearly toward the observer. Its brightness was at first equal to that of a large arc light of the street corner, and increased to two or three times that. Toward the last sparks scattered from the sides of path, and color resembling the blue portion of a furnace flame was seen in addition to the deep red of the path. At the time of exploding it seemed near enough to hear the report, but no sound was noted. This report was furnished this office by Mrs. Robt. Scholes, whose husband is a prominent attorney and former member of the state legislature."

#### March 1918:

"The auroral display on the night of the 7th was probably the most brilliant seen in this section in many years. It began shortly after 7 p.m. and continued with varying but pronounced brightness till after 10 p.m., and with diminishing or faint illumination until after midnight. A considerable variety of forms appeared at different times, including a diffuse ill-defined glow, the arch, streamers, and irregular "clouds" of light. The colors seen were white, pink, a tinge of green, and orange; the effect was the most beautiful in the memory of many. ... The most notable display seen by the writer was at 9:35, when streamers or pillars of light on all sides were focused at the zenith, with a broad area of pink glow to northwestward which deepend to orange at about altitude 40 degrees, azimuth 130 degrees; the entire north at the same time being covered with irregular glow or patches of whitish light, with a flickering or dancing movement through it all."

## May 21, 1918:

"Tornado began near southwest corner of Stark county about 8 p.m. (summer time), moved toward east-northeast, passing over southern part of Penn Twp., and about 8 miles south of the town of Bradford. The destruction was less at the beginning about 12 miles southwest of Wyoming, but increased. Width of destruction reported as 'severe' ranged in places from 300 feet to 80 rods. Seven houses, ten barns, numerous smaller farm buildings, as well as orchards and oat fields, were destroyed. One person was seriously injured, and several slightly. Damage to crops in Stark county estimated at \$1,000. Damage to buildings, etc. more than \$200,000.

"A pendant funnel cloud was reported by many observers. Arrangement of wreckage indicates rotary winds. At one place a house was split in two, one part blown directly east and the other directly north of the foundation. Large trees were blown down toward the east, and 60 feet to northward a large corn crib was blown directly west."

## April 1920:

"The snowfall on 3-4th was 7.6 inches, with 7.0 inches in the 24 hours from 5 p.m. to 5 p.m. Ground was covered until the 7th. Drifts, 4 to 6 feet deep on some roads, remained till the 16th. No such storm has occurred before in April since at least 1886, and old settlers state not in 60 years or more."

## June 1920:

"A small tornado formed about 5 miles north of station about 1:35 p.m. of the 22nd, and was observed until about 1:45 p.m., by which time it had begun to break up and also became hidden by intervening rain. At its largest development, the funnel cloud was about 50 feet or more in diameter at the top, and tapered to a point at perhaps one-fourth the distance to the ground. The air whirl is said to have reached the ground but caused no material damage."

## May 26, 1922:

"A series of excessive showers occurred, mostly between Noon and 3 p.m., over a narrow belt of territory covering middle and eastern Peoria and then northward over Keller, Alta, and past Mossville and the hills on its west. A brief and very heavy rainfall is reported southeast of Pekin. Lacon, in the line of heaviest rain, reported only about 1 1/2 inch. ... The writer visited a number of the points where measurements were reported. It is believed the depths here given are conservative. The Weather Bureau gage measured 1.74; the kiosk [Main and Adams Sts] more than 7 inches, Maywood and California Sts., 10 inches; at Waterworks plant, 2.50 inches; Alta and vicinity, 8 to 10 inches; at Fruit-frost substation No. 2, 12 inches; Rome 3 inches."

## February 1924:

"The notable feature of the month was the sleet, or glaze, storms of the 4-5th and 16-17th. The first damaged trees, stalled auto traffic, broke down 3500 ft. of traction trolley wires and 10 to 45 poles in a stretch, totaling a reported damage of \$200,000 in this vicinity. The second storm gave about the same thickness of ice and similar inconvenience, but had less opportunity for destruction, and less wind. In each, the ice was half an inch thick, and remained on some trees and shrubs for a week."

## March 1924:

"A deposit of reddish mud was noted in the city after the thunder shower of the morning of the 29th, as though splashes of mud had been left by large drops of rain. The station was at the edge of that shower and no noticeable deposit was recorded here. A yellowish haze was noted at the cloud levels, in the morning from 6 a.m. to the coming of the shower."

# June 28, 1924:

"The storm of early a.m. was the worst in the vicinity of Peoria since that of June 10th, 1902. The recent storm damaged some localities by wind, others by heavy rains.

"The wind damage was largely to trees and lighter buildings. In some localities, houses were unroofed, substantiaul farm buildings demolished, and even small orchard trees leveled. Some of the worst destruction occurred a short distance west of Hanna City, in portions of Peoria, along several miles of the road west from Washington, Ill., at Cloverdale, and in the north portion of Pekin. At Cloverdale, and hear Hanna City and Washington, buildings were scattered 1/4 to 1/2 mile. West of Washington all telephone poles were blown down and occasionally tumbled father into the fields.

"At Peoria the gale lasted six minutes, ranging from 40 to 62 miles per hr. At 3:30 a.m. it rose suddenly from 20 mi per hr to 62 mi from SSE, then blew successively for about one minute each, from S, SW, West, and then two minutes from NW, and dropped immediately to 25 miles or less. The barograph in the Weather Bureau office showed an instant drop of .18 inch, and instant recovery, during the passage of the gale. ...

"It is thought that the Hanna City, Peoria, Washington, damage was all done by the same portion of the storm; while that at Pekin was by another squall, and the Cloverdale-Dutch Hill destruction may have been a third.

"In Peoria and Tazewell counties 4 persons are reported killed and 17 injured; while the wind damage is estimated at close to a half million dollars."

## December 1924:

"Freezing rains on the 16, 17, 18th, did great damage to trees, wires, poles, in central Illinois, including Springfield, Decatur, Bloomington, and eastward to the state line or beyond. Peoria was rather heavily coated, but damage practically ceased at about 5 miles from the city. To southward and southeastward, scores of miles of wires, over 20,000 poles, and scores of thousands of trees, were destroyed. Some trees were split to the ground; the ice load in some measured instances was 7 to 15 times the weight of the tree. Heavy transmission wires attained an ice diameter of nearly 4 inches. A field fence of woven wire was coated into a solid sheet of ice."

## October 1926:

"The river rose at Peoria to 25.02 ft on the 9th. This is the highest since 1844, excepting local effect of ice jam in March 1849. The water covered the Rock Island track and surrounded Eckwood Park, deep enough for rowing a boat around the park, and across Water St into the lower end of Main St. Above Peoria, the river covered nearly 2,000 ft of the hard road in the Mossville-Rome section, being 18 inches deep in places. To south of American Milling Co plant 1,000 feet of the roadway was covered to depth of 2 ft at the deepest. In the Banner drainage district one stretch of 500 ft and another of 1500 to 1800 ft, were covered; the deepest being 5 1/2 to 6 ft. ... The damage to property in cities and towns along the river, including Peoria, Pekin, Havana, Beardstown, and others, are estimated at \$1,000,000, making a total \$3,700,000 in the Illinois Valley. The above estimates are believed conservative."

## November 1926:

"On the 17-18th 9.7 inches [of snow] fell; while the greatest total snowfall here for an entire November (1884 to 1925) was 5.0 inches in 1895."

# <u>January 1927</u>:

"The snowfall of 13.6 inches between noon of 12th and noon of 13th is apparently the heaviest 24-hoiur fall since February 28, 1900. The snow interfered considerably with traffic for several days.... The district of the State Highway administration, comprising about 11 counties from Marshall and Tazewell west to the Misssissippi, reports that one road to east was blocked one day, and the other Macomb-Bushnell vicinity to the west for two days; all others kept open, though there was some delayed traffic. To keep roads open and clear them up after the drifting, required the use of 20 tractors with graders, 29 heavy trucks with snow plows attached, and about 500 men, for several days. Total cost \$20,000."

#### May 1927:

"On the 18th some hail fell over a belt 10 miles wide or more, in many places 'half covering' the ground. ... Stones 1 1/2 inches in diameter were noted at this station. In south Peoria and East Peoria many were reported as large as baseballs, and some considerably larger irregular masses were seen. ... No such hailstorm has occurred in that suburban section in at least the preceding 50 years.

"After an inch or more of rain between 2 and 3 a.m., the afternoon of the 18th saw more than 4 inches fall in about four hours over an area apparently 5 to 15 miles wide and perhaps 75 miles long, extcending from northern Fulton county across south-central Peoria county, the southern half of Woodford, north and northeastern Tazewell, to central McLean county. ... Kickapoo Creek received a 2-inch rain in its upper watershed in early a.m., and the heaviest afternoon rains covered only its lower portion. The two flood waves undoubtedly coincided to a considerable extent. Stages reached from Edwards 15 miles or so to the mouth were 11 to 18 inches higher than ever recorded before.

"Farm Creek, emptying at East Peoria, drains about 50 square miles that range from rolling topography to steep bluffs, ending in a flood plain of 2 1/2 sq. miles just above the town. ... Into this plain poured the water from the hills, filling it in three hours to a depth of 3 to 8 feet from hill to hill. The Creek channel, not over 60 feet wide and 8 or 10 feet deep, draining into the river, was wholly inadequate. Also, three bridges crossing it had one to three piers each. These caught flood debris and greatly reduced the channel. The water, besides flooding to right of channel, broke over and out through the upper end of the municipal dike at the left that protected East Peoria, and swept through the town, 2 to 4 feet deep on the pavements and deeper across lawns and gardens. It flooded basements and houses and factories, carried away fences and light buildings, pushed some houses off their foundations and undermined others, destroyed the jail and wrecked the Town Hall; and passed on into the East Peoria Drainage District below the town, where it covered 600 acres to an average depth of 4 feet (8 ft in lowest portions), and will require a month for pumping out."

## August 1929:

"Subsequent reports to the University of Iowa indicate that the July meteor seen by many on the evening of the 25th, slanted downward and northward over eastern Illinois. Its brilliance was unusual, lighting more than a million square miles of earth's surface. At Yerkes Observatory, Williams Bay Wis., experienced astronomers started to dodge when they suddenly saw this flaming body apparently headed directly toward them. But it broke or disappered about 24 miles above northeast Illinois. Possibly small pieces may have reached the earth but no finders have yet reported."

## **January 1932:**

"This month at Peoria averaged 10 degrees warmer than the January normal, and has been equalled once and surpassed twice in 76 years; that of 1880 being warmest. The active thunder showers of 14th and the light total snowfall are unusual. Grass remained green and hardy plants in sheltered spots bloomed occasionally till the 29th. Not even shore ice appeared on the river this winter until the 31st."

#### May 1933:

"Wind squalls on the 1st caused \$500,000 damage in Peoria vicinity, and may have been tornadic near Canton, III., where several were killed. Hail on the 10th was the heaviest at this station in 28 years, with stones up to an inch and a half in diam., and caused \$1500 damage in Peoria, chiefly to greenhouses. Half a mile west of station hail was heavier and also followed by two minutes of snow. ... The Illinois river, at 25.4 ft. on 18th, reached the highest flood stage since 1844. ... Floods in recent years are higher because of the narrowing by dikes."

#### **January 1934:**

"The last four Januarys have been unusually warm, averaging 10.6 degrees above normal in this

section. This month is the coldest of the four, being only 8.6 degrees above the 50-year normal, while Jan. 1933 was 14.5 degrees above normal."

## February 1936:

"This is next to the coldest February here in 81 years, and makes this winter (Dec. - Feb.) the coldest on record. That is due to a cold period from Jan. 19th to Feb. 22nd inclusive, which surpasses all previous experience in length and severity of unbroken cold; only twice did the thermometer rise above freezing (to 33 degrees); 26 days fell below zero; 14 days averaged zero or below; 3 days remained zero throughout; and the entire period averaged only 5.2 degrees above zero. The last 10 days of January gave the lowest set of minimum temperatures on record for any period of that length. The cumulating cold froze bare soil 2 to 4 ft. deep, and snow covered fields 6 to 20 inches; channel ice on river to 19 inches, enabled trucking across mile-wide Lake. ... And then, on the 23rd, came a sudden warming to almost April temperatures, that ended 2 months of good snow cover by melting 7 inches in 2 days."

<u>July 1936:</u>
"This month made new temperature records as follows: The extreme of 113 degrees is 6 degrees higher than ever occurred here before. The average of 84.3 degrees is 3 degrees higher than any month. ... 14 consecutive days with 100 degrees is double the length of any earlier hot period. ... The heat and drought seriously damaged all crops except winter wheat, which had ripened earlier. Many oat fields were not harvested. Corn tassels were "burned", fields on thin land began to fire, and the crop prospect July 31st was poorest on record. Dry roadside grasses, fired by dropped match or cigarette, damaged some unprotected farms. Guard strips were plowed along many roads or grain fields."