

Summer 2009 Weather Summary for Northeast Montana

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June showed great variation in temperature and precipitation. A rather large area, mainly north of the Missouri River, ended up with less than half of their normal rainfall for the month, while several locations could not even manage 25% of normal. Twenty-one stations received less than an inch of rain, in what is normally the wettest month of the year. The driest locations were 0.37 inches at Fort Peck, 0.38 inches at Content, and 0.40 inches in Nashua. On the other hand, seven places south of the Missouri River had over 3.00 inches for the month, led by 4.06 inches at Winnett 6NNE, 3.40 inches at Zortman, and 3.39 inches at Wibaux 2E. The greatest 24 hour rainfall from any location reported was 2.20 inches at Circle 17NW on the 21st.

June averaged cooler than normal, the first ten days either being the coolest start ever to the month of June or at one of the coolest. Many locations had a day or two where highs were only in the 40s, very unusual in June and in many cases record cool highs for the date. On the 7th, Carlyle reported a high of only 38 degrees, which is almost unheard of for a high temperature anywhere in northeast Montana in June. In fact, there have been very few other high temperatures that could ever be reported in June going back to the 1800's. Brockway 3WSW and Mildred 5N could only manage 41 degrees for highs on the 7th, while Opheim 10N, Opheim 12SE, and Glendive could only manage highs of 42 degrees on the 6th or 7th. Freezes were very common in the first ten days of June, in one of the most widespread late season freezes in recent years. More locations than not dropped to freezing at least once. Bloomfield was the coldest, reporting 22 degrees for a low on the 8th, while Opheim 10N, Opheim 12SE, and Scobey 4NW were the 2nd coldest, with lows of 26 degrees.

After the 10th though, temperatures were very typical of a normal June, with even a few hot days late in the month. Malta 7E was the hottest, reporting a high of 107 degrees on the 26th, while Glasgow #2 had 102 degrees, Nashua and Jordan 43 ENE, 101 degrees. Four stations reported at least a trace of snow, a rare occurrence in June, especially any snow that accumulates on the ground. Measurable snow in June has not been reported in recent years, but Wibaux 2E did receive 1.0 inches of snowfall on the 6th, and several other locations in Wibaux and Prairie County had around 2 inches of snow, something not seen since 1950.

The severe weather season had a very slow start, with no severe weather at all between May 24th and June 24th. This is very rare to go that long without some type of severe weather. June 30th reminded northeast Montanans that severe weather is a force to be reckoned with as several significant storms brought damaging macroburst winds to Sidney and a tornado northwest of Carlyle. The tornado was captured on video by Tempest Tours, a storm chasing tour group. There were many great photos of storms taken from this evening. Damages in the Sidney area were over \$100,000 as winds around 65 mph caused trees to topple and damage to homes, vehicles and power lines. The heavy rainfall of 2 to 4 inches in an hour didn't help the situation as storm drains clogged with leaves. Eldgar negar

July had temperatures averaging a little below normal, while rainfall was generally above normal, but it did vary greatly. Although four stations recorded less than an inch of rain for the month, which is well below normal, there were ten stations that ended up with over 3.00 inches total for the month. This was led by 5.89 inches at Sidney, 5.40 inches at Medicine Lake, and 5.15 inches at Wolf Point. Driest in July was 0.43 inches in Saco, 0.77 inches at Winnett 12SW and at Hinsdale 21SW. Two locations had over 2.00 inches of rain within 24 hours.

Cool weather, and plenty of days with highs in the 70s was common in July. Many stations even

had a day or two where the high was only in the 60s, which is not very common in July. Culbertson had a high of only 61 degrees on the 15th, while Zortman had a high of 62 degrees. Opheim 12 SE had a high of 62 degrees on the 10th. The Port of Raymond had highs of 63 degrees on several dates. The most significant hot weather of the summer occurred between the 18th and 26th, when most locations had at least a few days into the 90s. Flatwillow and Terry reported the hottest days, highs of 101 on the 23rd. Glasgow, Glasgow #2, Jordan, Malta 35S, and Mildred 5N all came in 2nd, with highs of 99 degrees.

Although no freezing temperatures occurred, at least 8 spots fell into the upper 30s for lows. It was 37 degrees at Opheim 10N, and Opheim 12SE, while lows of 38 or 39 degrees were noted at 6 other spots. These readings occurred around the 16th or the 30th.

July did not have a lot of significant severe weather, but there were two tornados reports that were confirmed. The first was northwest of Glendive on July 5th. It was very short lived and caused no damage. Another tornado was spotted just west of Frazer on July 13th. It actually touched down twice briefly and also caused no damage.

August was cooler and wetter than normal. Every location had at least 1.00 inch of rain for the month. The driest locations were Bloomfield 9NNE with 1.07 inches, 1.20 inches at Malta 7E, and 1.33 inches in Saco. Meanwhile, 4 locations came in with over 4.00 inches of rain, which is more than 3 times the normal. This was led by 4.94 inches at the Port of Raymond, 4.49 inches at Brockton 20S, and 4.32 inches at Wolf Point. Around the 15th, many observing stations picked up over an inch of rain within 24 hours, a few even more than 2 inches, including Culbertson, Circle 17NW, and Scobey 4NW.

There weren't any significant heat waves during the month. In fact, no location reached 100 degrees, which is very unusual for August. Hot weather was limited to just a few days here and there, in some cases only a day or two above 90 degrees. The hottest reports were 99 degrees at Brockway 3SW, and Circle on the 12th; 98 degrees at Flatwillow on the 27th, and at least seven places that reached 97 degrees, mainly on the 11th or 12th. There were quite a few 60s for high temperatures noted too, more common than typical in August. Most of those occurred around the 16th. In fact Zortman could only manage a high of 56 degrees, Opheim 12SE 58 degrees, Baylor and Carlyle 60 degrees. There were no freezes, although seven observing sites did fall into the 30s for lows, some more than once. The coldest reported was 35 degrees at Scobey 4NW on the 1st, and at Culbertson on the 30th, and 36 degrees at Glendive on the 9th.

Severe thunderstorms did make an appearance during the month, but the most significant was the bow echo that raced across Garfield County on August 14th. Widespread crop damage from hail and winds will leave a significant economic impact in the area. Crop losses will likely end up in the millions of dollars area, but final damages are still being assessed at this time.