## Northeast Montana 2007 Weather Summary

January was drier and much warmer than normal. There was a short cold spell at midmonth, but mild temperatures and highs in the 30s and 40s dominated most of the month. The coldest temperature was -27 degrees at Opheim 12SE on the 12th, while Flatwillow was the warmest with a high of 66 degrees on the 25th. Most of the precipitation occurred at mid-month with Carlyle 13 NW reporting the most, 0.38 inches. Most places had under a tenth of an inch, and some with nothing, or only a trace.

February was colder than normal with above normal precipitation. Subzero lows were common and there were even a few highs below zero the first half of the month. Opheim 10 N was the coldest reported with a low of -34 degrees on the 14th. Grassrange 13 NE reported the warmest temperature of 60 degrees on the 5th. Three to six inch snowfall amounts were common on the 11and 12th. At months' end up a storm brought up to a foot of snow in Petroleum and southern Garfield counties. For a number of areas it was the snowiest February since 1979.

March was warmer and a little wetter than normal. Carlyle 13NW had the most precipitation with 1.73 inches. But there were a few dry spots with under a tenth of an inch, including 0.02 inches at Hinsdale 21SW, and 0.09 inches at Glasgow. The month started cold, and most of the snowfall occurred early. The most unusual weather was the record warmth on the 12th, when at least 11 stations reached the upper 70s. This was the earliest it has ever been that warm. More record highs in the 70s occurred between the 20th and 26th. Glendive and Savage were the warmest reported with highs of 80 degrees. Coldest was -14 degrees at Opheim 10N on the 3rd. Carlyle 13 NW, and Brusett led with the most snowfall, 11.0 inches.

April was wetter than normal with near normal temperatures. Most locations had over an inch of precipitation for the month and seven sites had over 2 inches. Brusett led with 3.14 inches. There were dry spots again too. Raymond Border Station had only . 04 inches, and Brockton 17N had 0.05 inches. The month started cold, with even a day or two of below freezing highs. Spring suddenly returned at mid-month with most highs in the 60s and 70s from then on. Savage had 85 on the 29th, the warmest reported. Coldest was 2 for a low at Opheim 12SE on the 6th. Carlyle had the most snowfall, 11.8 inches.

May was unusually wet, and it was the wettest on record in some places including Glasgow. Hinsdale 4SW led with 9.58 inches for the month. Even the locations with the least amount of rainfall this May were wetter than normal. Temperatures had two distinct faces, the first 18 days being warmer than normal with frequent highs in the 70 s and 80 s. several locations topped out at 90 for highs during this period. The last 13 days were quite cool, with highs in the 50 s and 60 s common. The coldest in the area was 28 degrees at Opheim 10N on the 28th. Numerous locations had no freezing lows reported in May. Most unusual too, was that no snowfall was reported anywhere in northeast Montana during May. Some minor flooding occurred during the month, mainly in Phillips and Valley Counties.

June had close to normal temperatures and rainfall. The most rainfall was 4.88 inches at Zortman, while Glendive was driest with 0.60 inches. There were no major cool or hot spells although the last day or two of the month finished hot. Flatwillow came in with 103 degrees for the hottest reported. The coldest was Port of Morgan having a low of 32 degrees on the 16th. A destructive severe thunderstorm, with hail up to baseball-size, struck parts of Valley, McCone, and Richland counties on the $16^{\mathrm{th}}$, causing over $\$ 30$ million dollars in damage to crops and property. The path of damage was over 200 miles long, and struck Glasgow, Nashua, Frazer and Vida especially hard with widespread hail and wind damage. There was also some widespread flooding that resulted from flash floods in the Antelope Creek drainage in Valley County, and in Prairie County.

July was drier than normal and unusually hot. It was quite a change from the wet weather of May and June. In many cases it was the hottest or 2nd hottest July ever observed. Highs in the 90s and 100s dominated the month. Glendive was hottest with 111 degrees on the 23rd, and even Scobey 4NW and Redstone reached 110 degrees. Most unusual too, were the warm nights where records were reported for the most number of lows temperatures in the 70s. The coldest reported low was 41 degrees at Scobey 4NW on the 11th. Although most stations had had under an inch of rainfall, a few came in with over 2 inches. The most was 3.90 inches at Port of Raymond, while Brockton 17N came in with only 0.10 inches.

August was generally drier than normal but temperatures were near normal. Hot days were plentiful, but unlike July, and more typical of summer, there were several brief cool periods. Glendive was the hottest with 105 degrees on the 1st. The first reported freeze of the season occurred at Scobey 4NW on the 29th. Rainfall amounts were highly variable. Brocton 17N had 5.80 inches. A couple of other stations had over 2 inches, but amounts of under an inch were most common. Driest was 0.05 inches at Hinsdale 21SW. A severe thunderstorm outbreak on the 10th was the second most significant thunderstorm outbreak of the season, with numerous reports of damaging winds, some over 70 mph . Two tornadoes hit, one 14 miles SE of Malta, then other 5 miles south-southwest of Opheim. Both were rated as EF1 tornados.

September was a little warmer than normal with near normal precipitation. Hot mid-summer-like temperatures in the 90s were common the first few days. Jordan 43ENE, Terry, and Mildred 5N all hit 101 degrees. The reminder of the month was typical of early fall with highs in the 60s and 70s most common. The first freeze of the season occurred across nearly the entire area at mid-month on the 14th or 15th. In some cases it was a hard freeze, with lows hitting the teens and lower 20s. The coldest low was 12 degrees at Scobey 4NW. Rainfall was well-scattered, and was led by 2.49 inches at Wolf Point. The dry spot was 0.24 inches at Redstone. There was no snow reported at any location.

October was wetter than normal, and a little warmer than normal. Nearly all of the months' rain occurred on the 5th and 6th, which in most cases was well over an inch for the 2 days, an unusually large amount for October. This was mainly a rain event, but a few places had snow, led by 2.0 inches at Grassrange 13NE. The most precipitation for
the month was 2.10 inches at Brusett, while the least precipitation was Port of Morgan having 0.44 inches. Temperatures fluctuated, but especially the last week or so. Many locations hit the upper 70s and lower 80s on the 24th and 25th. Several locations hit 83 degrees. Coldest readings were also later in the month, and Terry 21NNW came in with a low of 8 degrees for the cold spot for the month

November was drier and a little warmer than normal, but showed two distinct faces. Mild fall weather continued through the 19th, with numerous highs reaching the 50s and 60 s . Then, a taste of winter arrived for the remainder of the month with the first below freezing high temperatures and first below zero low temperatures. Coldest was -22 degrees at Scobey 4NW. On the 11th, Jordan and Mildred 5N hit 69 degrees for the warmest reported in November. Most places reported their first snowfall of the season during this time, which is much later than normal. Amounts were generally light, but Flatwillow came in with 7.0 inches on the 19th. The most precipitation for the month was 0.74 inches at Winnett 12NE. At least a dozen locations reported no measurable rain or snow.

December was drier and warmer than normal. There were a few days with below freezing high temperatures and a few subzero low temperatures, mostly early in the month. Highs in the 40s and 50s were very common too. Terry and Mosby each hit 60 degrees on the 4th. The coldest was -25 degrees at Scobey 4NW on the 8th. Flatwillow had the most precipitation with 0.26 inches, while 11 stations had no measurable rain or snow. Snowfall was scarce, as it was the slowest start to the snowfall season in many years. Zortman had the most snow for the month with 5.0 inches.

Overall, for the NWS Glasgow observation site, 2007 was the $7^{\text {th }}$ warmest on record, averaging 45.4 degrees, and the $9^{\text {th }}$ wettest with 15.05 inches of precipitation. The majority of that precipitation fell in May and June, giving us $65 \%$ of our normal moisture for the entire year. Normally, May and June would make up 35\% of the annual moisture received.

