

CHAPTER 7. HAIL

Hail causes more than a billion dollars of property damage nationally each year, mostly to crops. The southeast corner of Wyoming lies within the nation’s “Hail Alley”. Together with adjacent portions of Colorado and Nebraska, this region of Wyoming is battered by more hailstorms than any other part of the United States. Climatological data shows this area of Wyoming averaging five to nine days annually when hail is reported. While Converse County is just west of “Hail Alley”, damaging hailstorms have still occurred.

History

Converse County experiences hail storms almost every year and sometimes several hail storms occur in one year. Most of these storms do not cause property damage. There have been 25 hailstorms with reported damage in Converse County since 1955. (National Climate Data Center) This equates to one damaging hail storm roughly every two years. Since 2001, over the past ten years, 25 non-damaging hail storms have been reported in the years 2001,2004, 2005-2010.

The data were derived from the monthly Storm Data reports generated and released by the National Oceanic and Atmospheric Administration’s National Climate Data Center. Other sources are unpublished reports from the Wyoming Office of Homeland Security, newspaper accounts, and periodicals from public libraries. The table represents hailstorms that have caused damage, injuries, or loss of life. If hail more than one inch is produced in a thunderstorm, it qualifies as severe according to NCDC criteria.

Table 7.1 Damaging Hail Storms in Converse County

Date	Location	Estimated Damage	Information
6/26/1955	North Platte Valley	not available	
5/29/1959	Douglas Airport	\$ 25	
6/15/1962	Glenrock 5 SE	\$275 crops	Hail up to 1-inch in diameter reported
6/15/1962	Douglas	\$275	Hail up to .75-inch diameter did minor damage in Douglas
5/21/1970	Glenrock 10 E	\$275 crops	Public reported 1.75 inches of hail over open range.
5/21/1970	Glenrock 5 W	\$275 crops	Public reported 2/75 inches of hail over open range.

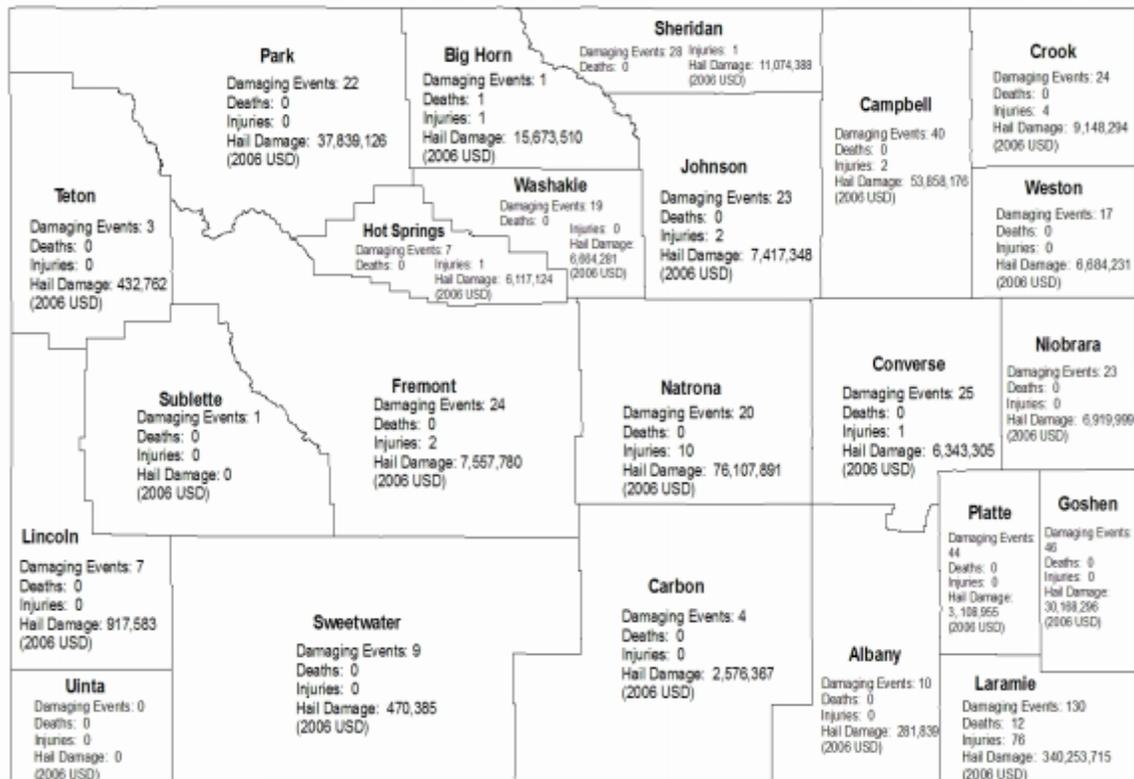
Date	Location	Estimated Damage	Information
7/28/1977	Douglas	\$275,000	Hail up to 1/5 inches in diameter fell over a wide area. Damage to field crops, gardens, buildings, and cars.
7/22/1984	Douglas	\$27,500	Hail to a depth of 8 inches hit a campground. Damage to trailer homes in campground.
8/18/1989	Douglas	\$27,500	1 injured while trying to seek shelter. Severe thunderstorm with pea to dime-size hail. Minor damage to homes and cars.
8/15/1996	Douglas	\$30,000	
8/19/1997	Glenrock	\$ 2,000	A few golf-ball sized hailstones with large amount of pea-sized stones.
8/29/1997	6 N Glenrock	\$ 2,000	
7/1/1998	7 E Bill	\$4,000	Golf-ball sized hail 7 miles E of Bill
7/1/1998	40 NW Douglas	\$7,000	Golf-ball to baseball-sized hail. Covered ground on several ranches 40 miles NW of Douglas.
7/19/1998	Douglas to Glendo	\$ 27,500 prop \$ 275,000 crops	Golf-ball sized hail from storm path nearly 2 miles wide. Major damage to crops, minor damage to buildings, mobile homes, and vehicles.
7/12/2009	Douglas	\$ 15,000	

Impacts

Hailstorms have occurred in every county in Wyoming, although hail damage has only occurred in twenty-two counties. Sublette and Uinta counties have no recorded hail damage. Figure 7.1 below shows the distribution of the number of hailstorms, number of deaths and injuries, and amount of crop and property damage in reported dollars. The total documented hail damage for all years for Converse County is \$6,343,305 in 2006 dollars. According to the Wyoming State Hazard Mitigation Plan (2008), Converse County ranked 13th of 23 Wyoming counties in total hail damages.

There has been a number of damaging hail events in Converse, with significant events occurring approximately every two years. Based on the past documented storm damage (1977) converted to 2010 dollars it is suggested that \$.5 million, be used as the potential cost of the worst-case future hail storm in Converse County. Future hailstorms will impact private and public property such as cars, roofs, equipment, buildings, and agricultural crops and livestock.

**Wyoming Hail Damage Data:
Damage by County in 2006 USD (1926 - 2006)**



Wyoming State Totals:
Damaging Events: 554
Deaths: 13
Injuries: 99
Hail Damage: 633,533,522



Figure 7.1 Hail Damages by County

Summary

PROPERTY AFFECTED: Medium

POPULATION AFFECTED: Low

PROBABILITY: High

JURISDICTION AFFECTED: All