

History of Winter Carnival Events in College Archives and Snowfall Observations in Williamstown, MA, 1913-2010

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ABSTRACT

In areas where winter temperatures often hover around freezing, annual snow accumulation totals can be highly variable, with slightly colder winters having high total accumulation and slightly warmer winters bringing more rain. A long-term record of snow accumulation in the area around Williamstown, Massachusetts (USA) dating back to 1913 documents that variability, with observed monthly accumulation totals for most years and annual accumulation totals during the monthly data gaps. Decadal mean snowfall totals dropped around the 1970s, with mean accumulation of 89.69 cm annually before the 1970s, compared to 70.56 cm after 1970. The bulk of this difference comes early in the snow season, with dramatically lower snow accumulation recorded in October through December during the last 50 years. Records from the Williams College archives, including issues of the student newspaper dating back to the late 1800s, provide context for these observations. Of particular interest are the activities around Winter Carnival, a mid-February event that has historically included building snow sculptures, skiing, and other snow-based celebrations but that in recent years has often been snow-free. For a region that depends in part on winter tourism, the increasing unreliability of winter snow cover has economic impacts, in addition to hydrological and ecological impacts.

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