

Figure 2.3: The average snowfall in Houghton County. The total amount of snow per year is extremely large due to the Lake effect. (World Climate)

## SUMMARY

Climate plays an important role in the types of vegetation and wildlife that can survive in a forest. The amount of temperature, precipitation and snowfall are all factors that must be considered when assessing the climate of a particular area. Temperature affects the growth rates of tree species and the plant species that can survive. Precipitation affects hydrology especially when streams are involved, as well as soil composition. Snowfall is very prominent in Houghton County and greatly affects all biotic and abiotic factors of a forest.

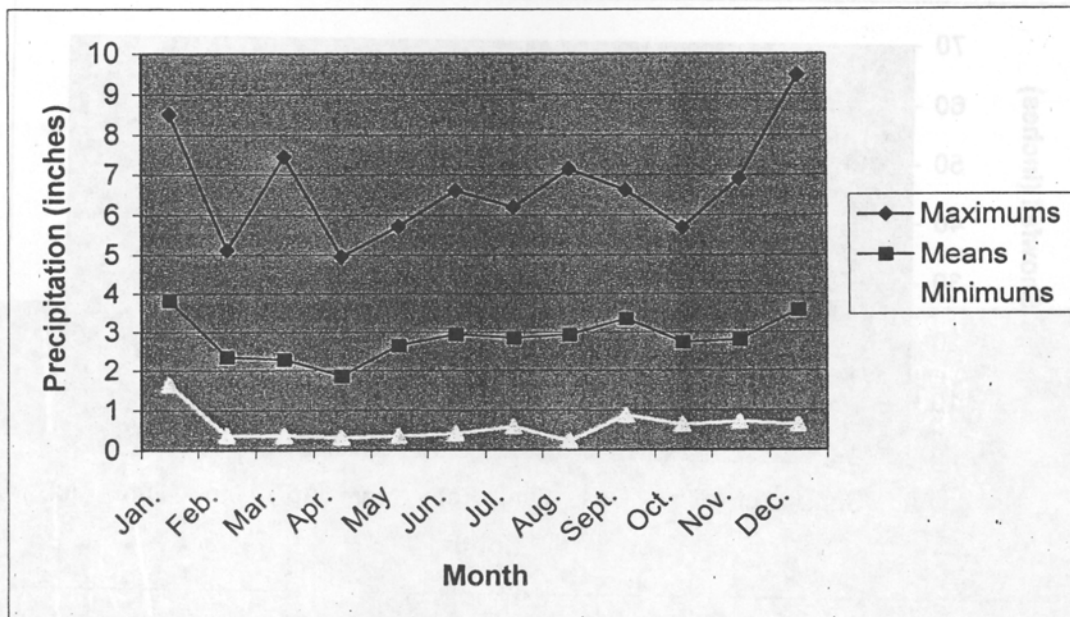
*Precipitation in Houghton from 1961 -1990*

Figure 2.2 The maximum, minimum, and mean total precipitation for Houghton County for 30 year period between 1961-1990. Rainfall effects vegetation, soils, and hydrology. (World Climate)

The amount of precipitation in the Huron Creek wetland leads to some very poorly drained soils. As a result of this variable water table depth, the presence of mottles (due to having both oxidized and reduces states in soil) are common in these areas.

Another factor that affects Huron Creek is excess water that may flow overland towards the stream located in the area. The amount of precipitation also greatly affects the wetland species that grow in an area and their survival rates.

## SNOW

Much of the annual precipitation in temperate and boreal areas is in the form of snow. Snow, which is frozen water, is unavailable to vegetation. This can cause stress in the winter and spring for some vegetation. However, later in the season, melt water may provide a source of soil moisture. As Figure 2.3 shows, Huron Creek is located in an area of high snowfall for most of the year. The Keweenaw Peninsula receives an average of 215.6 inches of snow per year.

## TEMPERATURE

Climate greatly affects the geographic distributions of plants and the types of vegetation that are found in different areas.

*Temperature in Houghton County from 1951 - 1981*

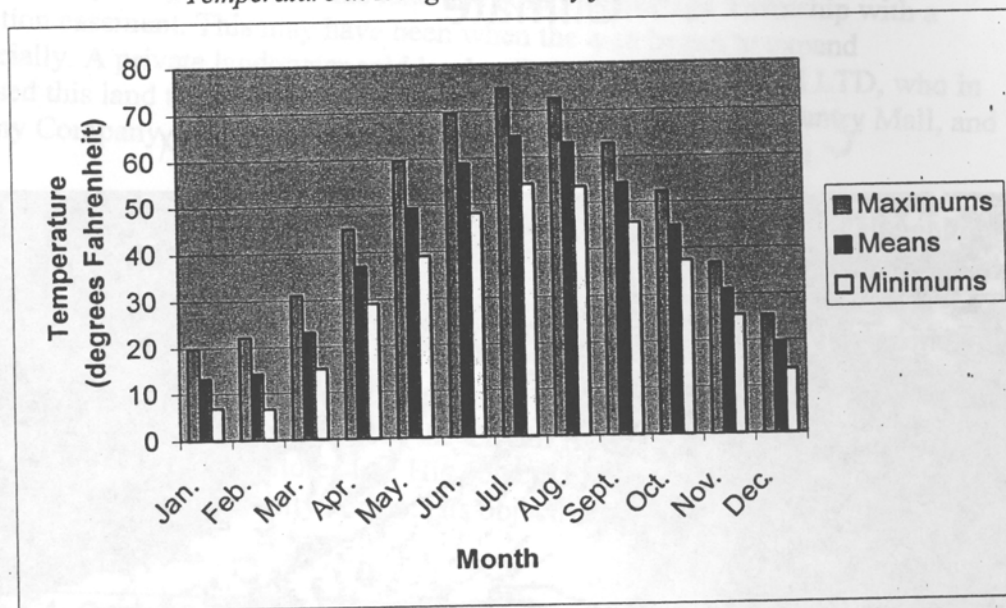


Figure 2.1: The daily maximum, minimum, and mean temperatures for Houghton County for the 30 year period between 1951-1980. Temperature has a huge impact on the vegetation and their growth rate. (World Climate)

As Figure 2.1 displays, the Houghton County area experiences a wide range of temperatures. The mean temperature during the growing season (May-October) is fairly high at 55.8 degrees Fahrenheit. However, temperatures are extremely low for the rest of the year, as cold weather and snow become dominant features, with the mean temperature at 23.1 degrees Fahrenheit.

## PRECIPITATION

Huron Creek wetland is located in an area that receives a fair amount of rain throughout the year, with a total yearly amount of precipitation at 207.8 inches in Houghton County. The mean precipitation during the growing season is 2.9 inches, and during the rest of the year the mean amount of precipitation is 2.77 inches (Figure 2.2). This rainfall affects many different factors, including the vegetation, hydrology and soil types.

Soil erosion and landscape topography are also affected by precipitation since areas with steep inclines are more prone to erosion due to sediments being carried down by the water. This is a factor that affects Huron Creek due to the presence of steep hills bordering the west side of the wetland.