

fall below -20°F . which is an important factor for fruit growing in the area. On the other hand in the Haliburton-Algonquin Park area, extreme minimum temperatures of -45° to -50°F . have occurred.

April marks the return of spring and by mid-May mean temperatures are everywhere above 50°F .; the high percentage of sunshine and ample rainfall stimulates rapid growth. Temperatures warm up more rapidly in spring in eastern Ontario than in the southwestern part of the province, and consequently there is little variation in summer temperatures throughout the whole area. The summers, though warm, are not excessively hot and except for Essex and Kent Counties mean July temperatures do not reach 70°F . at most stations. Periods of oppressive heat accompanied by high humidity resulting from the invasion of air from the heated interior of United States are usually of short duration. Extreme maximum temperatures have exceeded 100°F . almost everywhere in Southern Ontario. Autumn sets in gradually and is usually a pleasant season. During the autumn anti-cyclones may drift slowly over the eastern part of the Continent, producing calm, mild, hazy days and cool nights—the period of "Indian summer".

The Great Lakes exert a modifying influence on frost at stations in their close proximity. Pelee Island enjoys an average frost-free season of 197 days and the lake influence shows up at other stations near Lakes Huron, Erie and Ontario where the growing season unrestricted by freezing temperatures averages about 160 days. With increasing distance from the lakes there is a corresponding increase in the variation of frost dates and generally a shorter frost-free season. On the upland plateau in southwestern Ontario the season free of frost is four months or less in the Mount Forest-Dundalk area. In eastern Ontario the growing season reaches 160 days at some points along the north shore of Lake Ontario but gradually decreases to less than 100 days in the highlands of Haliburton and Algonquin Park where a minimum of 46 days is reached at Madawaska.

Sunshine totals for the year vary from 1,800 to over 2,000 hours in Southern Ontario. December is the duller month with most stations averaging only about two hours of sunshine per day. However, there is a relatively high percentage of bright sunshine during the growing season with the four months May-August receiving more than 200 hours each month with a peak of nearly ten hours per day in July.

Precipitation is fairly uniformly distributed throughout the year in Southern Ontario with no pronounced wet or dry season. The mean annual amount ranges from 27 to 40 inches and is usually adequate for successful agricultural operations. The heaviest precipitation falls on the western slopes of the highlands facing Lake Huron and Georgian Bay with definite rain shadows in the lee of these uplands. A belt of heavier precipitation also occurs in the area between the St. Lawrence and Ottawa Rivers. The driest sections are Prince Edward County, Manitoulin Island, the Harrow-Leamington area, the Niagara Fruit Belt and the Camp Borden area south of Georgian Bay.

The greater part of summer rainfall results from showers and thundershowers of short duration and wholly overcast or rainy days are comparatively rare during the months of June, July and August. Thunderstorms may be expected to occur on 20 to 30 days each year in Southern Ontario. Hail occasionally accompanies summer thunderstorms and while these storms are infrequent they may cause severe damage to fruit, tobacco and garden crops. The peninsula of Southern Ontario is usually outside the tornado belt of central United States but in recent years such storms have occurred particularly in the Windsor-Sarnia area. Small "twisters", which do a considerable amount of local damage, are usually reported each summer in different parts of the province.

The distribution of winter snowfall in Southern Ontario is quite similar to that of total precipitation. The smallest amounts of 40 inches or less occur in Essex and Kent Counties and in the Niagara Fruit Belt where the snow cover usually lasts less than three months. The greatest amounts fall on the upland slopes facing Lake Huron and Georgian Bay when cold air saturated and warmed in its passage over the water is forced to ascend the colder highlands. Stations in the centre of this snow belt receive from 100 to 125 inches of snow and the snow cover lasts four to five months. On many winter days in Southern Ontario temperatures are critically close to the freezing point, and consequently,