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**HISTORICAL ANALYSIS OF POPULATION  
WEIGHTED HEATING DEGREE-DAYS  
FOR  
CANADA 1939 - 1984**

by

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**CLI-2-86**

**Downsview, Ontario  
1986**



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ATMOSPHERIC ENVIRONMENT-WEIGHTED HEATING DEGREE-DAYS FOR CANADA  
1939-1984

## INTRODUCTION

Nearly everyone has come at some time in their lives with the idea of degree-days. For more than half a century the concept has endured not only the rigours of scientific scrutiny but also the harsh realities of practical application. It has proved valuable in a host of widening applications.

# HISTORICAL ANALYSIS OF POPULATION WEIGHTED HEATING DEGREE-DAYS

The temperature and its effect on energy consumption, be it residential, the weighting of heating degree-days according to population statistics to give a more realistic index of heating demand, and energy consumption, is the subject of the present work.

This study differs significantly from that of Gullett and Phillips (1981), but dual heating seasons are provided for each of the provinces, and it utilizes population weighting factors derived from data for each of the Canadian census reporting districts. The extension of the inclusion of data to June 1984 enhances the timeliness of the database.

## BACKGROUND

by

A heating degree-day (HDD) is used as a measure of the negative departure of the outdoor air temperature from a reference point, usually 16°C. On such days, heating fuel is required to maintain an indoor air temperature roughly proportional to the degree of coldness of a place for a given duration.

The theory was first developed by heating engineers with the American Gas Association in the late 1930's. It was shown that a linear relationship does in fact exist between heating fuel consumption and the outside air temperature. It was determined that the amount of heating fuel needed to maintain an indoor air temperature of 20°C is directly proportional to the number of degrees that the outside air temperature falls below 16°C. It follows that the amount of fuel required is roughly twice as much heating fuel on a day with a 20°C minimum, of course, holding prevailing meteorological conditions as fixed. This relationship is not linear, however, and some researchers complain that it lacks theoretical foundation (Meyer, 1973). Of the numerous techniques that have been devised to improve upon the accuracy and utility of the heating-degree-day concept, some pay particular attention to the variation in temperature over each hour of the day; others take into account the types of construction materials used, insulating factors and energy conservation measures; while still

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## HISTORICAL ANALYSIS OF POPULATION-WEIGHTED HEATING DEGREE-DAYS FOR CANADA

1939-1984

### INTRODUCTION

Nearly everyone has come in contact at some time in their lives with the idea of degree-days. For more than half a century the concept has endured not only the rigours of scientific scrutiny but also the harsh realities of extensive empirical testing. Degree-days have proven their value in a host of wide-ranging applications from sophisticated government and industry energy planning and operational programs, to plant growth studies in agriculture, to monitoring and verification by homeowners of residential heating fuel bills.

Many attempts have been made over the years to modify the calculation of degree-days in an ongoing effort to find new and improved ways of relating temperature and its effects on man and his activities. One such modification, the weighting of heating degree-days with population statistics to give a more realistic indication of actual heating energy consumption, is the subject of the present work.

This study makes use of the procedure developed by Taylor (1981), but differs significantly from her work in that it examines forty-five individual heating seasons on a provincial/territorial and national basis; and it utilizes population weighting factors derived from census data for each of the Canadian census reports during the period 1939-1984. The inclusion of data to June 1984 enhances the timeliness of the data base.

### BACKGROUND

A heating degree-day (HDD) is defined as a measure of the negative departure of the mean temperature for a day from a given base temperature, usually 18.0°C. The accumulation of these departures over days, weeks, months, seasons or any desired period can be used as an indicator of the degree of coldness of a place for a given duration.

The theory was first developed by heating engineers with the American Gas Association in the late 1920's. It was shown that a linear relationship does in fact exist between heating fuel consumption and the outdoor air temperature. It was determined that the amount of heating fuel needed to maintain an indoor air temperature near 21°C is directly proportional to the number of degrees that the daily mean temperature of the outside air is below 18°C. It follows then that a day with 10 HDDs requires roughly twice as much heating fuel as a day with 5 HDDs, assuming, of course, similar prevailing meteorological conditions on both days. This relationship is not flawless, however, and some researchers complain that it lacks theoretical foundation (Mayer, 1977). Of the numerous schemes that have been devised to improve upon the accuracy and utility of the heating degree-day concept, some pay particular attention to the variation in temperature over each hour of the day; others take into account the types of construction materials used, insulating factors and energy conservation measures; while still

others attempt to incorporate important climatic influences such as wind effects, cloudiness, sunshine and solar radiation. All have merit and all have some shortcomings. A fundamental restriction in the application of most "modified" techniques, however, is some loss of simplicity in the procedure, that is, in terms of a readily available easily applicable technique for use, not by researchers, but rather by industry and the general public. In short, the degree-day concept enjoys widespread public appeal because it is simple, and because it works!

The present study incorporates another approach to modifying heating degree-days, with the application of population weighting factors, to reflect the impact of growing provincial and territorial populations upon national heating energy demand. To reaffirm statements by Taylor (1981), Quayle and Diaz (1980) and others, it is reasonable to hypothesize that because energy is used by people, heating degree-days and energy consumption are necessarily people-oriented. Thus, if heating degree-days are assigned proportionately greater significance in regions having higher population densities and correspondingly less influence in more-sparsely inhabited districts, an index is produced that is positively correlated to actual heating fuel consumption. Because of this high correlation, population-weighted HDDs have great utility in studies of past heating energy demand, and more importantly, in the preparation of future energy use scenarios and in many energy planning processes. In the United States, the National Oceanic and Atmospheric Administration (NOAA) has for several years calculated population-weighted heating and cooling degree-days and these are published weekly in the Environmental/Resource Assessment and Information bulletin. Historical data are also available from the U.S. Department of Commerce (1980).

#### DATA AND ANALYSIS

Heating degree-days for a station are tabulated when the arithmetic mean of the maximum and minimum temperatures for the day is below 18°C. For days when the mean is warmer than the base, no degree-days are counted. Accumulations of degree-days over various time periods result in monthly and seasonal totals.

For the purposes of this study, a number of stations in the Atmospheric Environment Service (AES) surface climatological networks were strategically selected to represent each of the major census districts. The census districts were those defined by the 1976 Census of Canada (Statistics Canada, 1977) and subsequently modified by Taylor. More detailed information about the selection of regional and sub-regional boundaries may be obtained by a review of Taylor's paper, Population-Weighted Heating Degree-Days for Canada (1981).

One climate station is chosen for each census district based on criteria relating to completeness and length of the observational record and on centrality of the location to the district. In all, 58 AES observing stations are used which is somewhat fewer than in the Taylor study. This is

done to simplify the calculations but with little or no sacrifice in accuracy or representativeness. Monthly HDD totals for each of these stations are obtained from the AES national climatological archive to June 1984 and these constitute the basic climatic data input to the procedure.

#### PROVINCIAL AND NATIONAL WEIGHTING FACTORS

The factors used in weighting the HDD totals provincially are calculated by dividing the population of each district by the total population of the relevant province. Similarly, the national weights are obtained by taking the ratios of the district populations to the total national population. In this manner, different sets of weighting ratios are prepared for each census tract for various periods of time.

Two extensions of the Taylor study are evident. First, the method employed here produces weighted HDD values provincially and nationally by month for each heating season from 1939/40 to 1983/84 inclusive, unlike the Taylor method which weights only the long-term average values for the 1941-70 "normal" period. Second, the current approach uses population figures from each of the Canada census reports during the period from 1939 to 1984 (Statistics Canada, 1973, 1982). These census data are employed to represent the demographic status of the nation for periods ranging from 5 to 8 years as shown in Table 1.0.

Each monthly total of HDDs is multiplied by the relevant weighting ratio and the resulting monthly values are summed by station and by province to give provincial totals for each heating season (July to June). Tables 2.0 to 2.11 present the provincial/territorial population-weighted HDD totals for each month for each season and the corresponding season totals from 1939/40 to 1983/84. The period means (45 years) are also given monthly and seasonally. These mean values, because they are averages derived from values weighted by district population relative only to the total provincial population, (as opposed to the national population) may be considered to be representative of weighted averages for each province as a whole (Figure 1.0). Also shown in Figure 1.0 are the thirty year means derived from the same base data but averaged over the current 1951-80 normal period. These "normal" values when compared with the unweighted normals for the same period, as mapped in Figure 1.1 (Environment Canada, 1984), give some idea of the effect that weighting has on the temperature-only based indices. It is felt that a more realistic indicator of heating energy demand on provincial and national scales is thus produced. In general, the weighted averages are somewhat lower than the unweighted means for the same stations. For instance, the weighted average calculated from the 7 stations selected to represent the province of Ontario is 4205.2 while the unweighted 1951-80 mean for the same stations is about 12% higher at 4717.3. This rather large difference is due to the broad range and opposing influences of both temperature and settlement data over the north/south breadth of the province.

Specifically, from south to north throughout the province, the climate becomes considerably more harsh with progressively colder ambient temperatures with increasing latitude. Settlement data on the other hand are inversely related with generally decreasing population totals from south to north. It follows therefore that by weighting HDDs with population factors in Ontario, the northern areas would account for significantly smaller portions of the total heating energy requirement than they would if using the unweighted data. Obviously the sparse populations when converted to weighting ratios tend to lower the HDD totals. The opposite is true for southern areas of the province, where the weighted HDDs account for proportionately more of the total heating energy demand.

A somewhat different situation exists in some of the smaller provinces. For example, New Brunswick, a relatively small and homogenous province in demographic and climatic terms, does not show this kind of variation and has a weighted average of 4823.2 compared with a corresponding unweighted value of 4818.6. A graphical presentation of the variation from season to season for each province for each of the forty-five heating seasons is given in Figures 2.0 to 2.11. In addition, the long-term mean season total and the 1951-1980 mean annual total and their standard deviations are given, as well as the highest and lowest season totals for the entire period. These plotted data are the season totals shown in the right-most column of Tables 2.0 to 2.11. Figures 3.0 to 3.11 show the forty-five season monthly means of provincial population-weighted HDDs extracted from the summary lines of these same tables.

A similar procedure to that outlined above was employed to calculate the monthly and seasonal totals weighted by district population relative to the national population. The resulting provincial contributions to the national totals were grouped by major geographic region; British Columbia, the North (YT, NWT), the Prairies (ALTA, SASK, MAN), Ontario, Québec, the Atlantic Provinces (NB, NS, PEI, NFLD); and are given in Tables 3.0 to 3.5 and the composite for the nation in Table 3.6. Figures 4.0 and 4.1 pictorially display these same data. Examination of these reveals the contribution of each major geographic region to the total national heating energy demand. The variation from region to region and season to season may be equated with corresponding variations in total heating energy demand.

Table 3.7 also shows these varying regional inputs to the national demand for heating energy. British Columbia, sparsely populated in northern colder regions, and more-heavily inhabited in southern warmer regions, contributes on average only 6.6% to the national demand. As is expected, the far north, which consists of a massive land area where extreme cold is prevalent throughout much of the year but where people are few, adds a mere 0.5%. The Prairie Provinces with a relatively large landmass, cold winter temperatures and light to moderate population densities account for 22.1%. The most heavily-settled area of the country, the province of Ontario, having a large areal extent and experiencing average January temperatures ranging from  $-25^{\circ}\text{C}$  in the north to  $-4^{\circ}\text{C}$  in the south, contributes the most

to the national heating energy load at 30.9% or nearly 1/3 of the national total. Québec rates a close second with 29.4% and the Atlantic provinces with a comparatively small area, sparse population and moderate Maritime climate contribute 10.5% to the total picture.

## DISCUSSION

Population-weighted HDD values monthly and seasonally are calculated for each province (Tables 2.0 to 2.11) and for the nation (Table 3.6). For Canada as a whole, the season average population-weighted HDD total for the forty-five heating seasons is 4680.3 and for the 1951-80 period is 4632.8. The long term average is close to the 4685.7 calculated by Taylor for the 1941-70 period. The slightly lower mean for the 1951-80 period may have resulted from climatic differences or it may be the result of differences in the calculation itself. Recall that Taylor used only one set of weighting ratios for the entire 1941-70 period while the current method uses no less than six as indicated by Table 1.0.

Detailed examination of Table 3.8 makes possible the identification of areas of probable high heating energy demand during specific heating seasons. The seasons of 1942/43, 1939/40, 1955/56, 1945/46, 1946/47, 1949/50, 1947/48, 1964/65, 1977/78 and 1943/44 are noteworthy as the ten coldest in order of decreasing severity. The 1942/43 season, that with the highest total population-weighted HDDs during the period, totalled 5211.1 or 111% of the long-term national average. Interestingly, the nation as a whole has been experiencing near "normal" heating energy demand situations since the 1955/56 season with only 12 of the subsequent 28 seasons exhibiting weighted season totals above the long-term average (Table 3.6); and then by no more than only 3%. The ten mildest heating seasons, 1982/83, 1952/53, 1957/58, 1948/49, 1963/64, 1979/80, 1953/54, 1954/55, 1975/76 and 1980/81 are presented in Table 3.9. The 1982/83 season, the warmest during the period, was only 93% of the long-term national average. Little variation is observed in the national totals from season to season. With a long-term season mean of 4680.3 and a calculated standard deviation of 176.3, the national season total is likely to be in the range from 4504.0 to 4856.6 about 2/3 of the time. In other words, there is a 68% probability that in any one heating season, the total population-weighted HDDs will be within  $\pm$  1 standard deviation ( $\pm$  176.3) of the mean (4680.3).

It is also interesting to observe that while large geographic regions of Canada may be experiencing above average heating energy demand, other large areas may be simultaneously subjected to below average demand. As a further complicating factor, the areal influence of these regions may be offset by differences in population distribution. For example, during the

1939/40 season colder than average temperatures existed throughout most of the east from Ontario to Prince Edward Island while in the west from Manitoba to British Columbia, warmer than average conditions prevailed. On closer examination, however, one sees that 72% of the population, according to the 1941 census data, was resident in the region of high energy demand. Therefore, what may at first appear to have been an east/west temperature balancing situation may in reality have been quite the opposite, at least in terms of impacts on energy requirements for space heating. It is evident that complex, opposing and sometimes ill-defined patterns of regional and national energy demand may exist while others may be more distinct. During the seasons of 1942/43 and 1977/78, most of the nation (except for parts of the far north), that is, close to 100% of the population experienced higher than average energy demand. These two seasons were significantly different in severity, however, with 1942/43 ranking first and 1977/78 only ninth (Table 3.8). On the other side of the balance, 1982/83 registered as the most benign on record with all of the nation (except for the NWT), again almost 100% of the population, having lower than average energy demand (Table 3.9). The data in Tables 3.8 and 3.9 correlate well with known anomalous temperature occurrences. Many of these have been documented in various climatic reports and summaries such as Climatic Perspectives published weekly by Environment Canada and the report, Climatic Anomalies and Unusual Weather in Canada During 1982 (Environment Canada, 1983).

#### FURTHER STUDY

A detailed analysis of energy consumption statistics for residential space heating in Canada is recommended. These data are available from Statistics Canada in publications such as Quarterly Report on Energy Supply Demand in Canada 1980-IV (Statistics Canada, 1981) and an attempt should be made to correlate these with the seasonal population-weighted heating degree-day data presented here. Other work could involve the development of an areal weighting scheme similar in approach to the population weighting technique used in this study.

An important extension of the current procedure would be the development of a technique for estimating or predicting future heating energy demand for specific regions of the nation, taking into consideration the effects of population distribution, as was done in this study.

Further statistical analysis of the data presented in the present study would also be of benefit to energy resource planners. Additional investigations into the nature and complexity of energy demand patterns in Canada are needed as this study does little more than create a tantalizing awareness of their existence. A better understanding of these relationships or teleconnections would be valuable in the preparation of national energy use scenarios.

## CONCLUSIONS

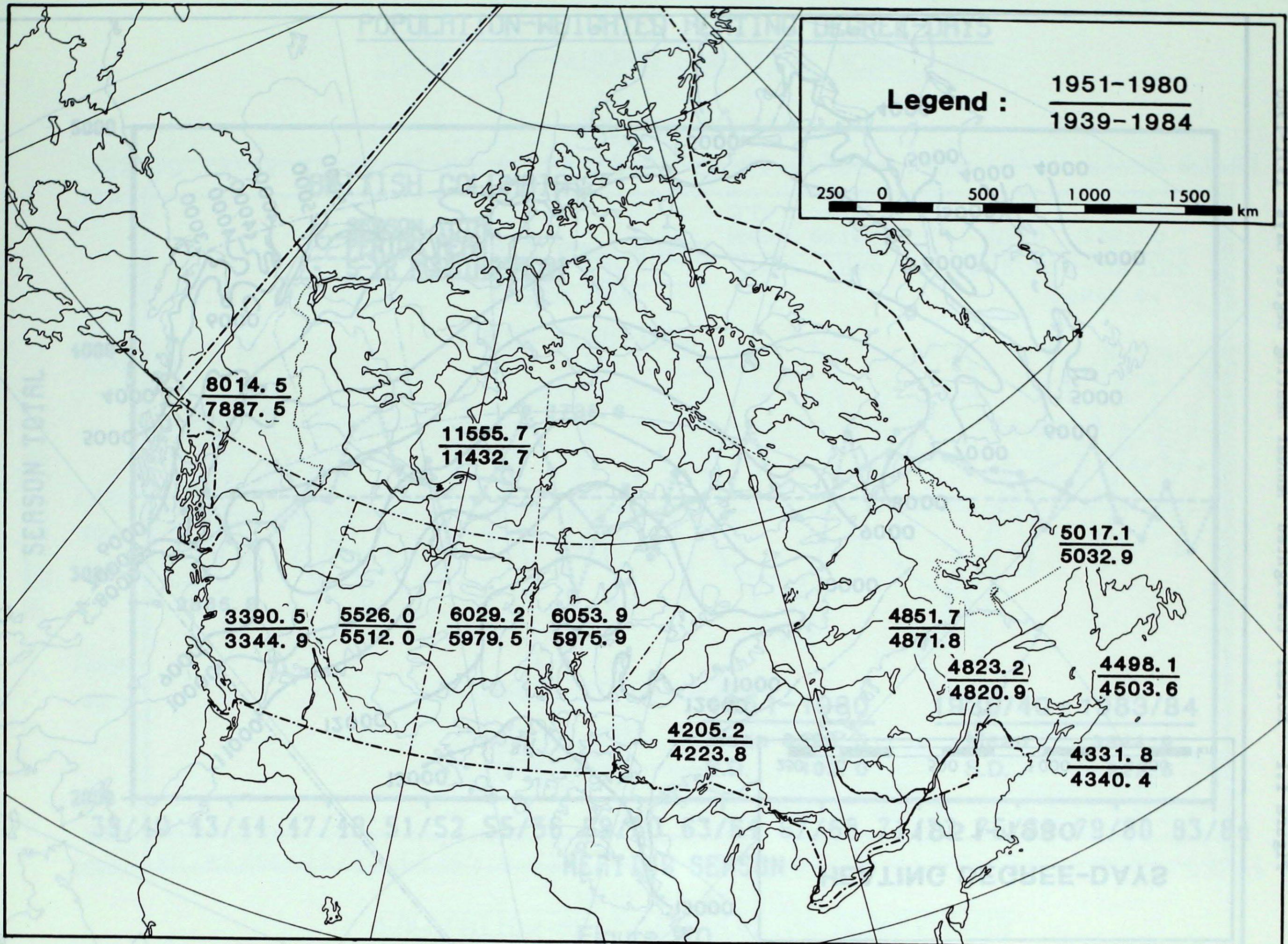
Using the technique developed by Taylor in 1981 the feasibility of weighting historical series of heating degree-days by population statistics is demonstrated. The use of changing regional population figures obtained from Canada census reports permits the calculation of more realistic weighting ratios. The influence on heating energy demand of Canada's emerging population is thus more accurately reflected. The technique is viewed as a tool for use primarily in planning operations and should be of considerable interest to heating/cooling energy planners and strategists in various economic sectors of society. The preparation of heating energy consumption scenarios for energy demand projections would benefit from the use of population weighting techniques described in this study as well as from statistical analysis of the resulting data. The database created for and by this project has potential for many applications in regional and national energy demand/use studies.

## ACKNOWLEDGEMENTS

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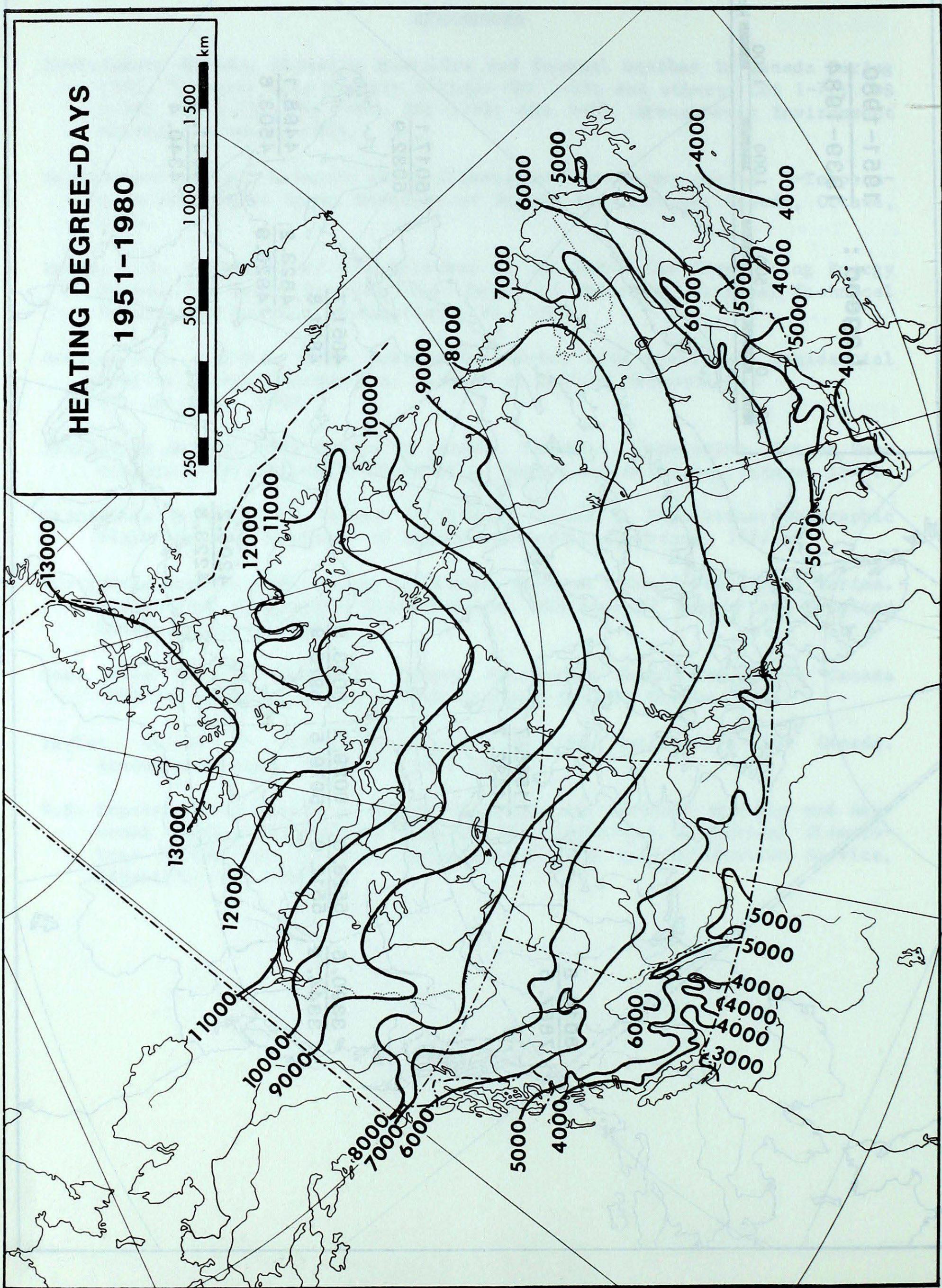
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**Figure 1.0**

Long-Term Season Mean (1939-1984) and 1951-1980 Annual Mean of Population-Weighted Heating Degree-Days by Province

**Figure 1.1** Normal "Unweighted" Annual Heating Degree-Days 1951-1980



## POPULATION-WEIGHTED HEATING DEGREE-DAYS

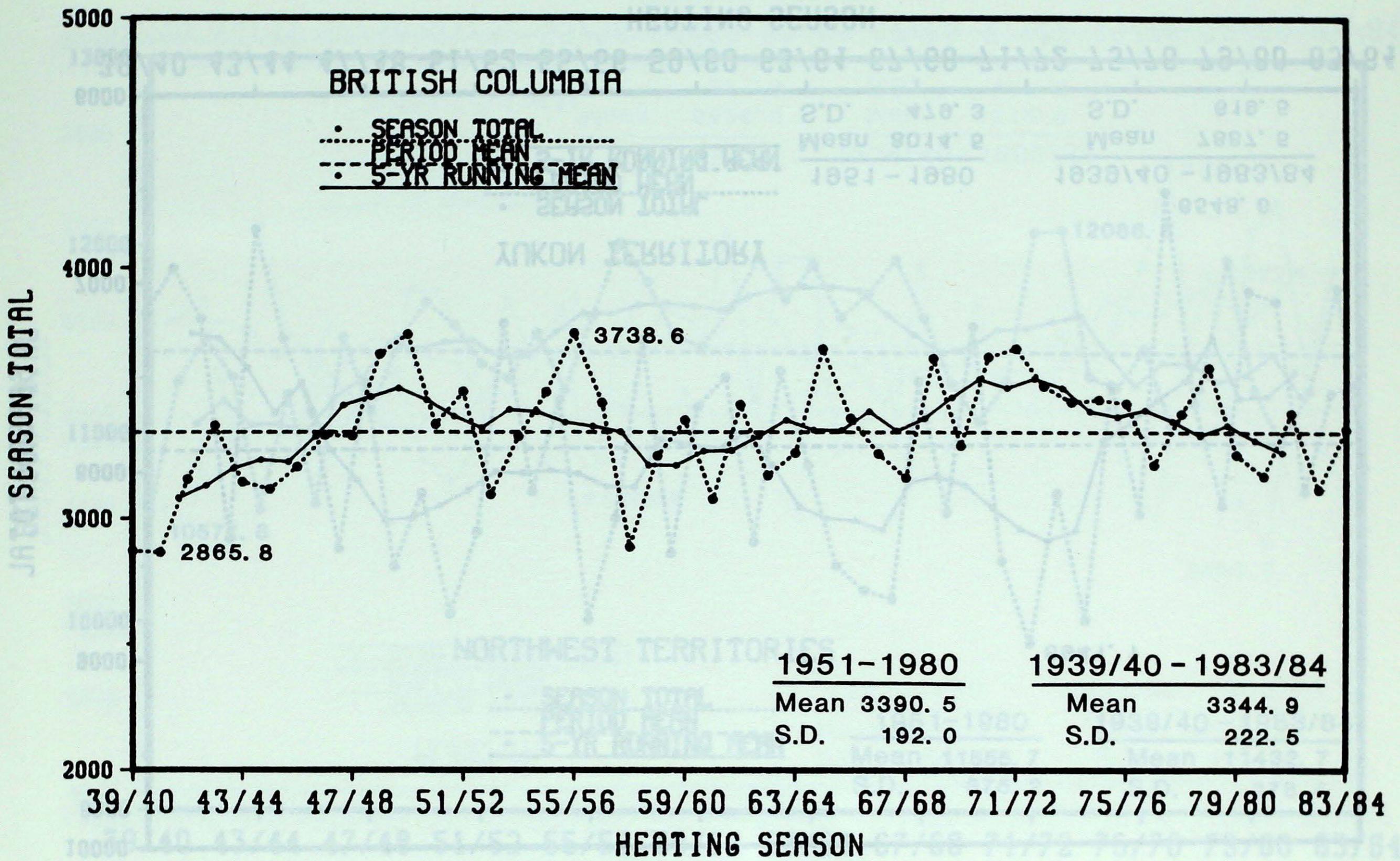


Figure 2.0

POPULATION-WEIGHTED HEATING DEGREE-DAYS

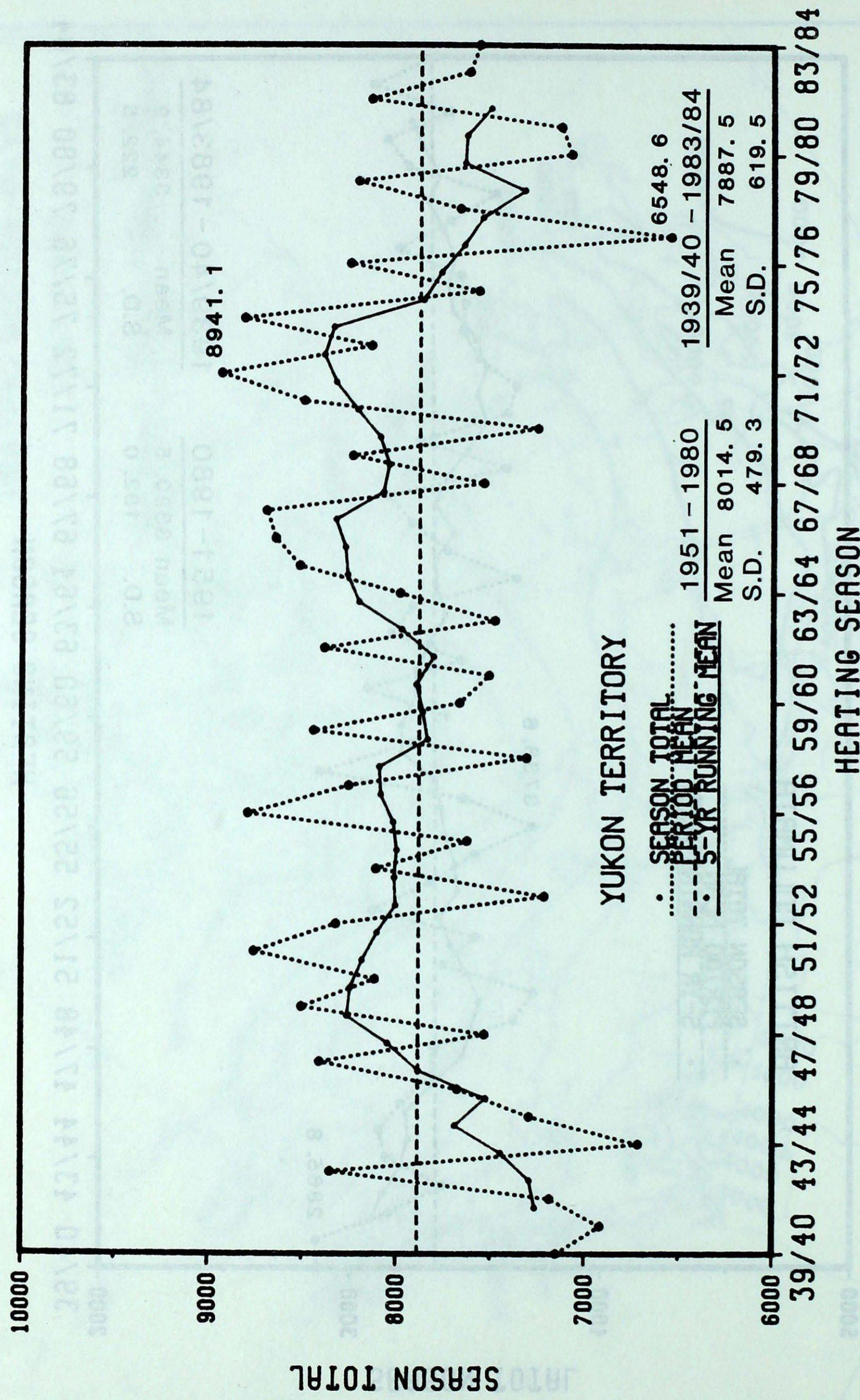


Figure 2.1

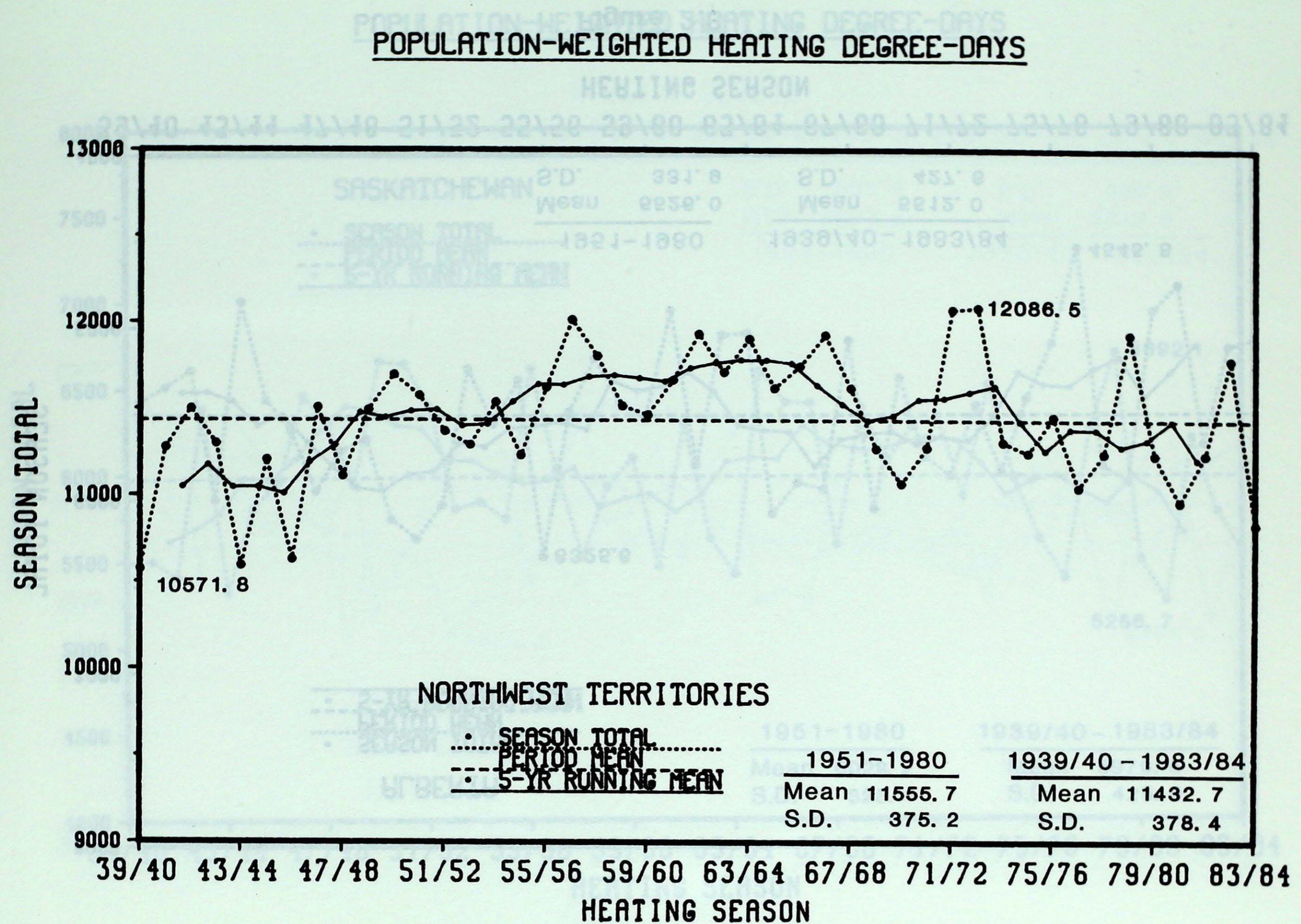


Figure 2.2

## POPULATION-WEIGHTED HEATING DEGREE-DAYS

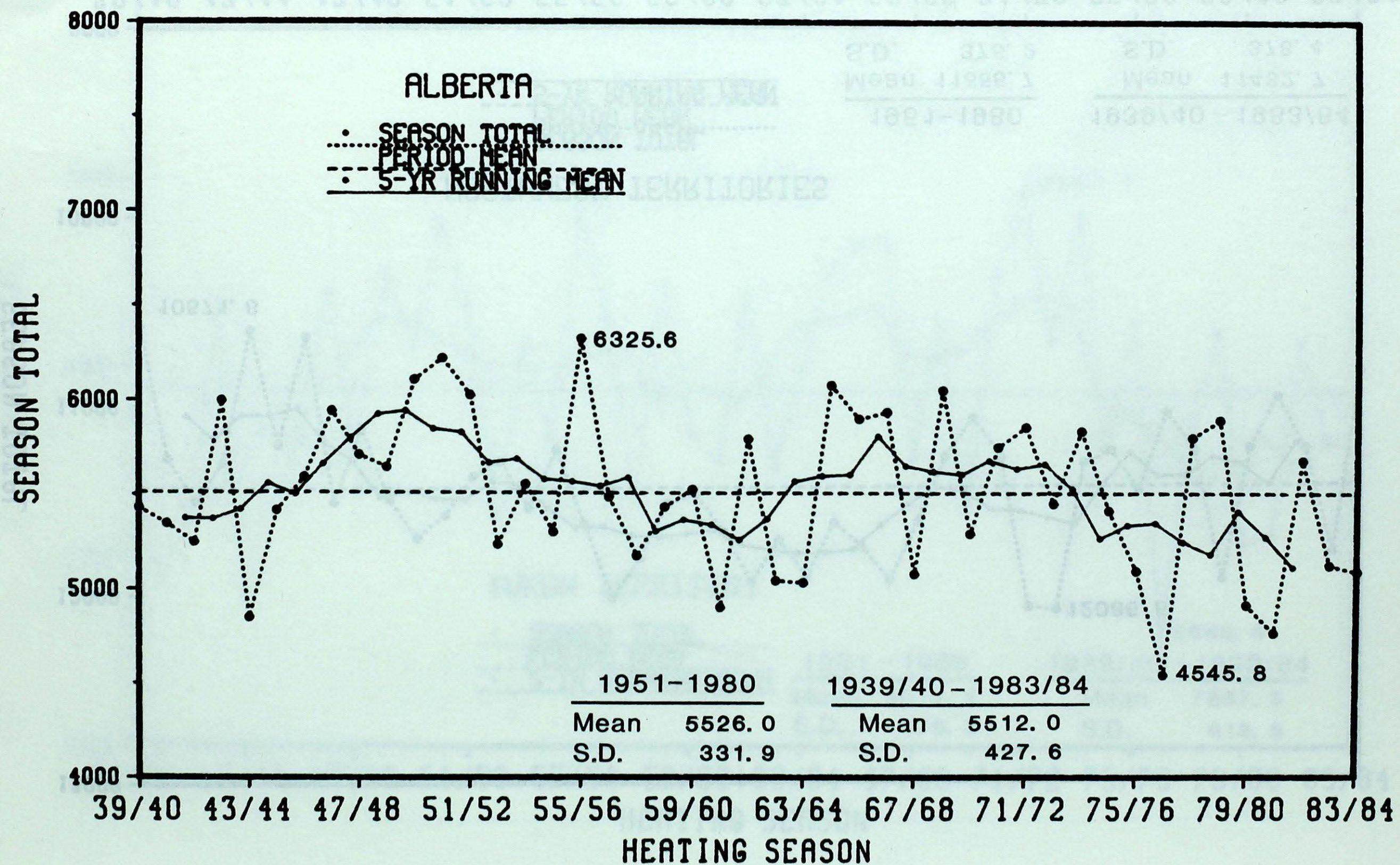


Figure 2.3

## POPULATION-WEIGHTED HEATING DEGREE-DAYS

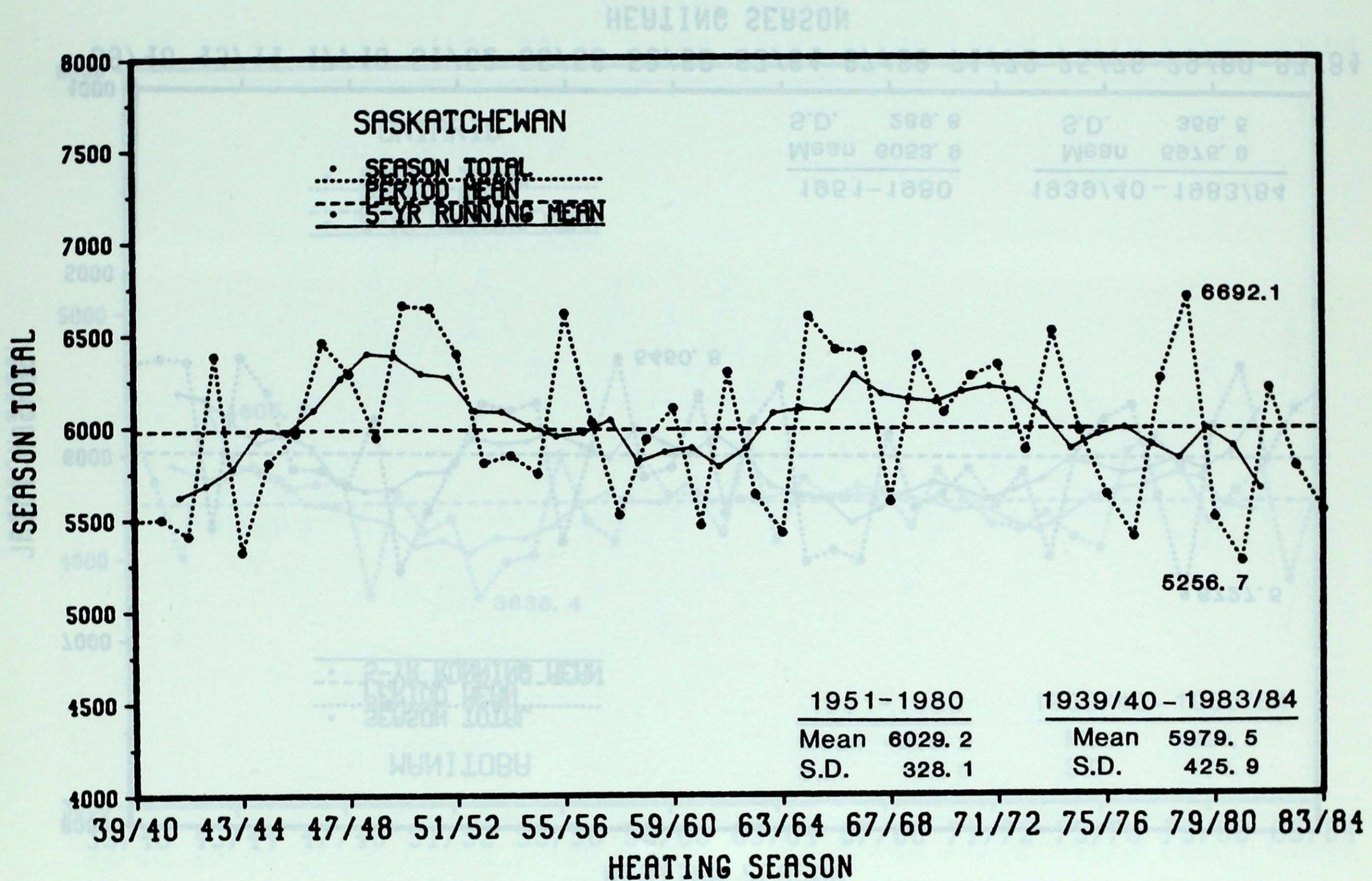


Figure 2.4

## POPULATION-WEIGHTED HEATING DEGREE-DAYS

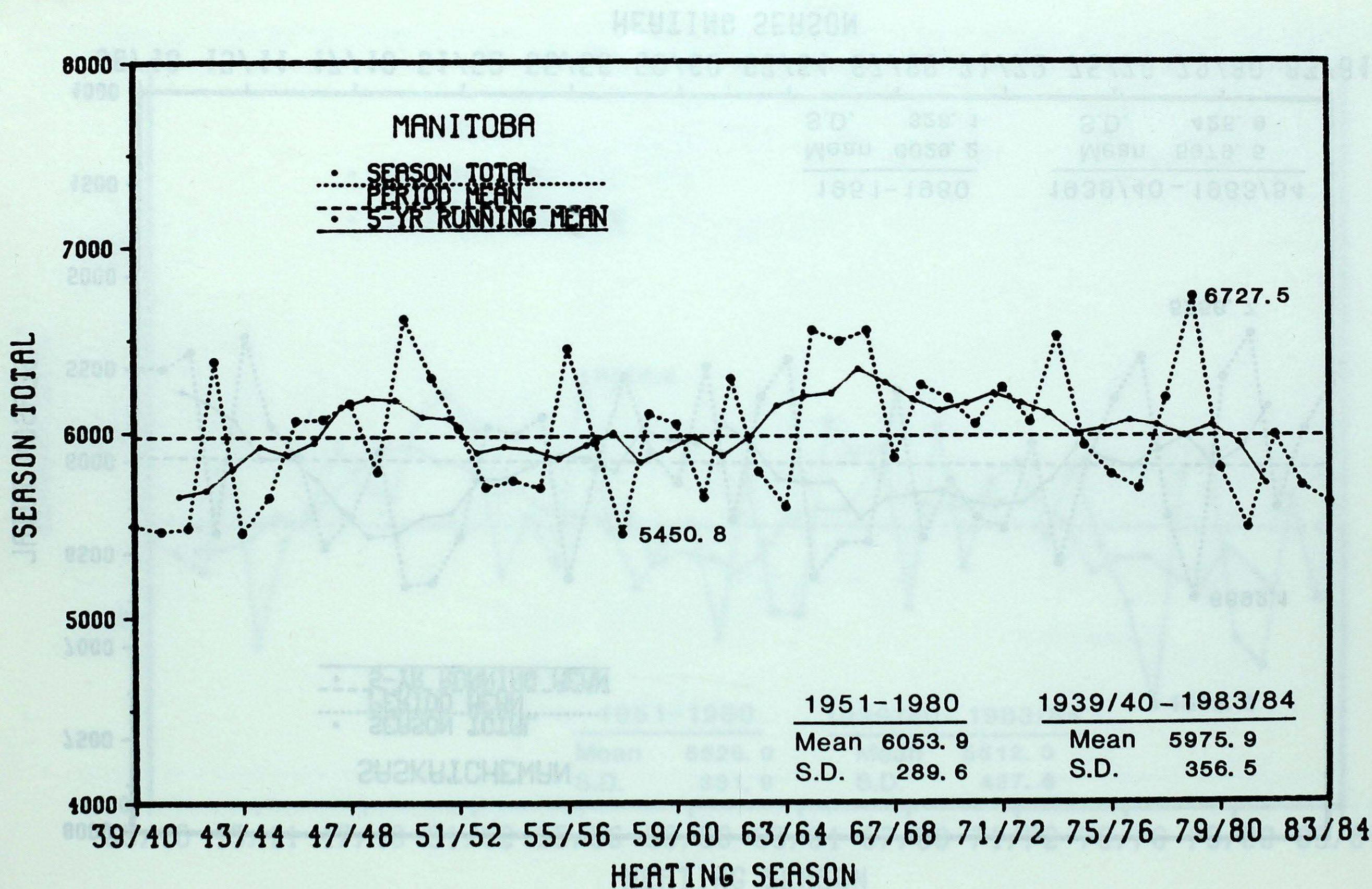


Figure 2.5

## POPULATION-WEIGHTED HEATING DEGREE-DAYS

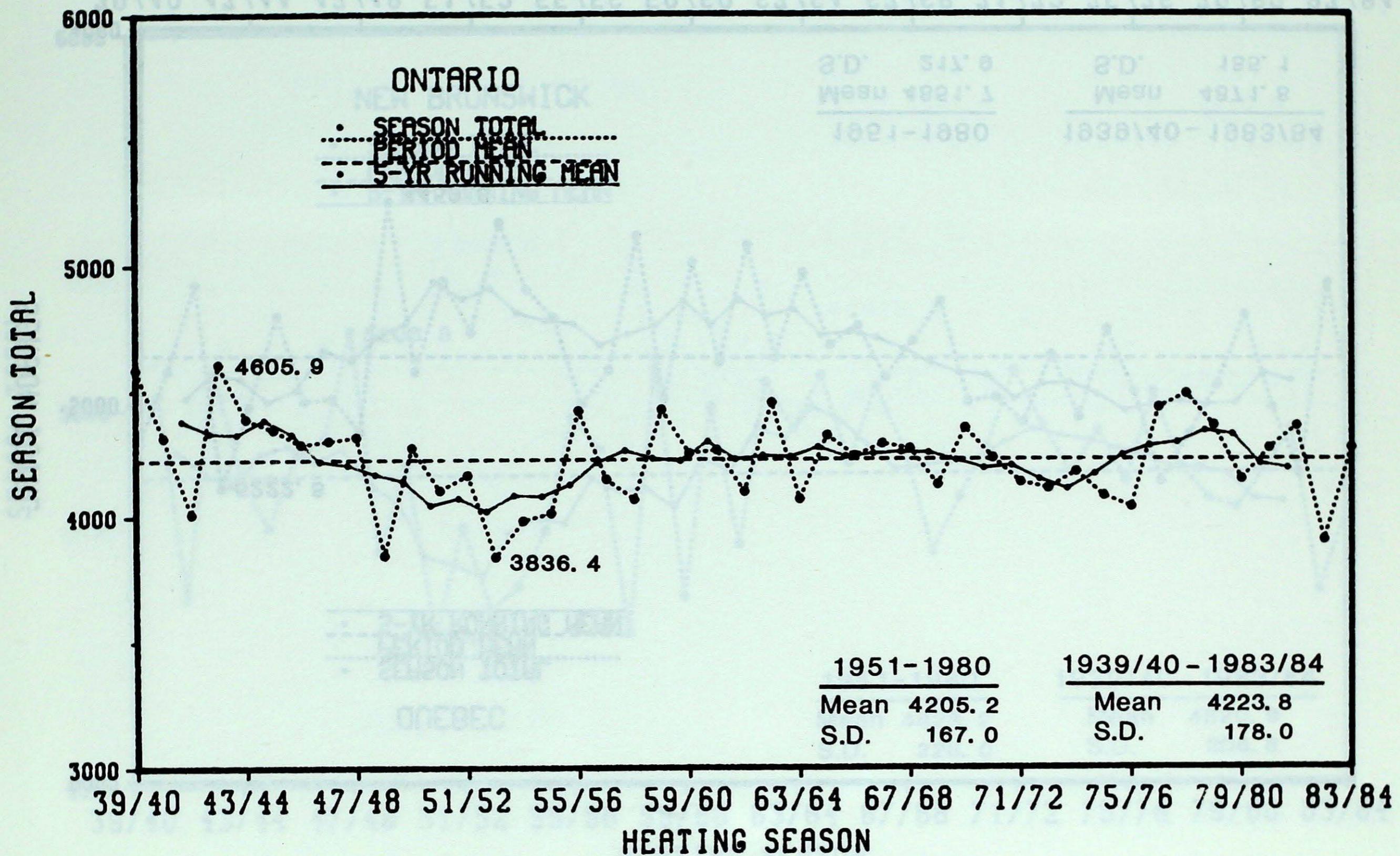


Figure 2.6

## POPULATION-WEIGHTED HEATING DEGREE-DAYS

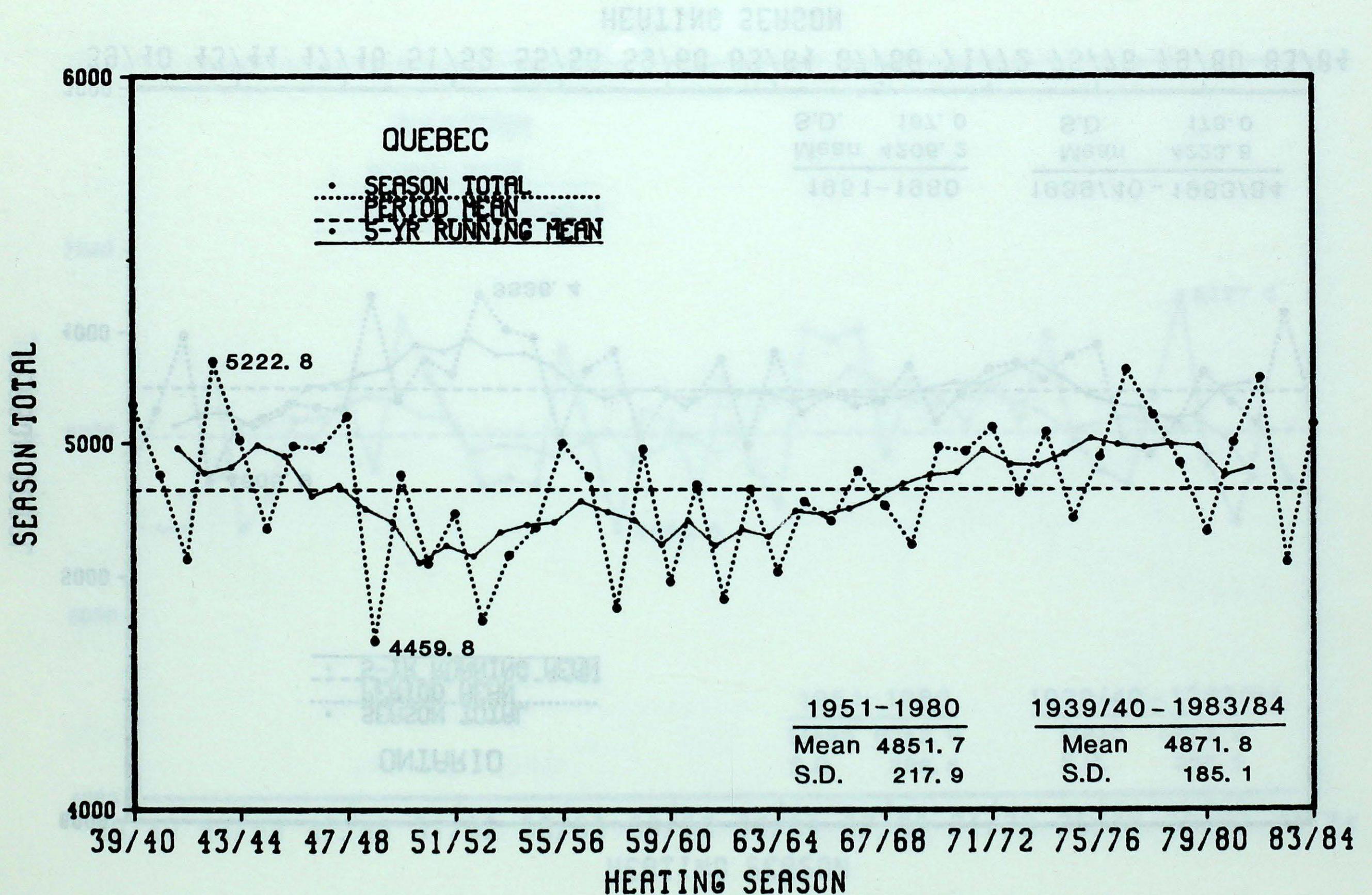


Figure 2.7

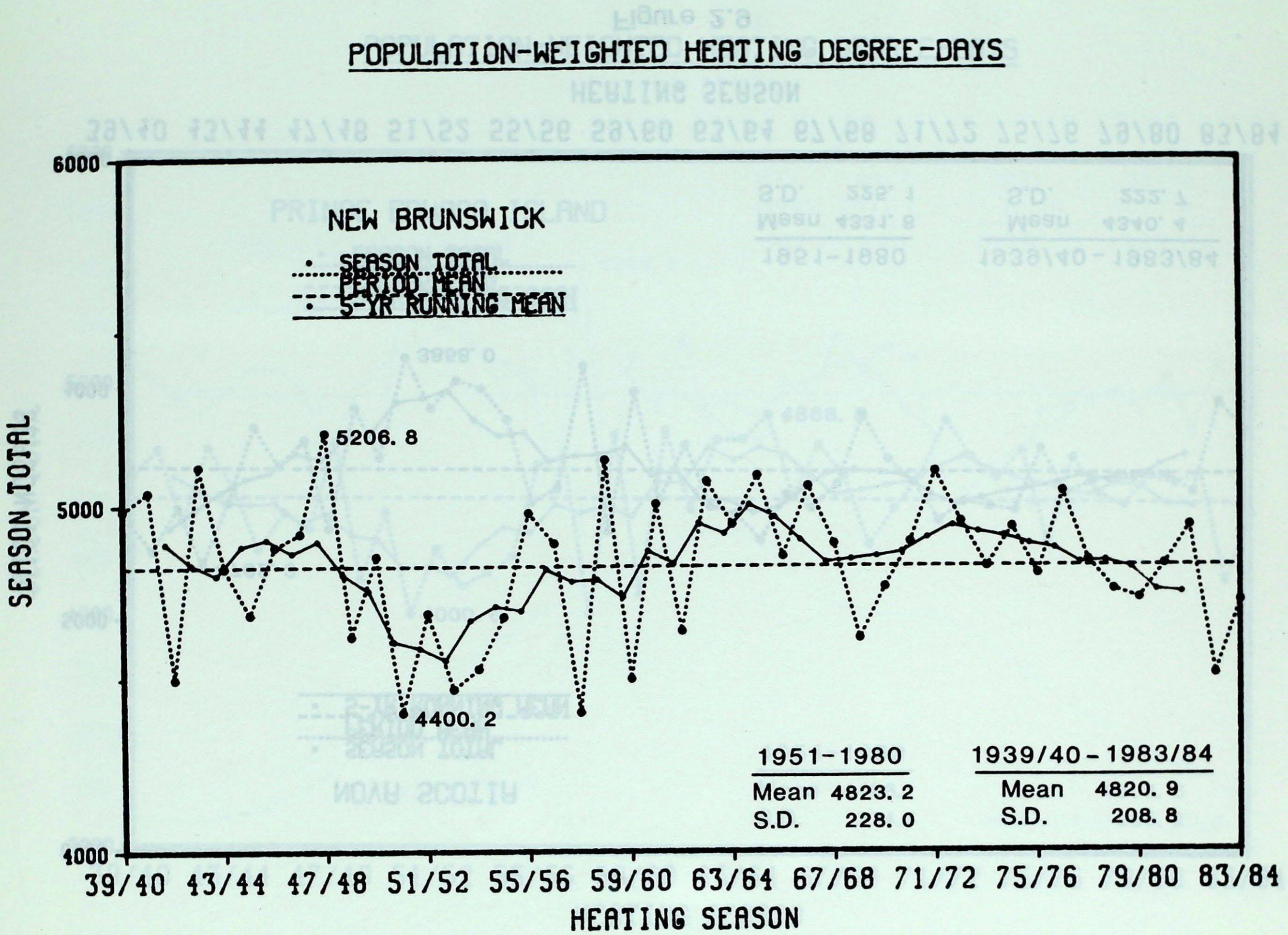


Figure 2.8

## POPULATION-WEIGHTED HEATING DEGREE-DAYS

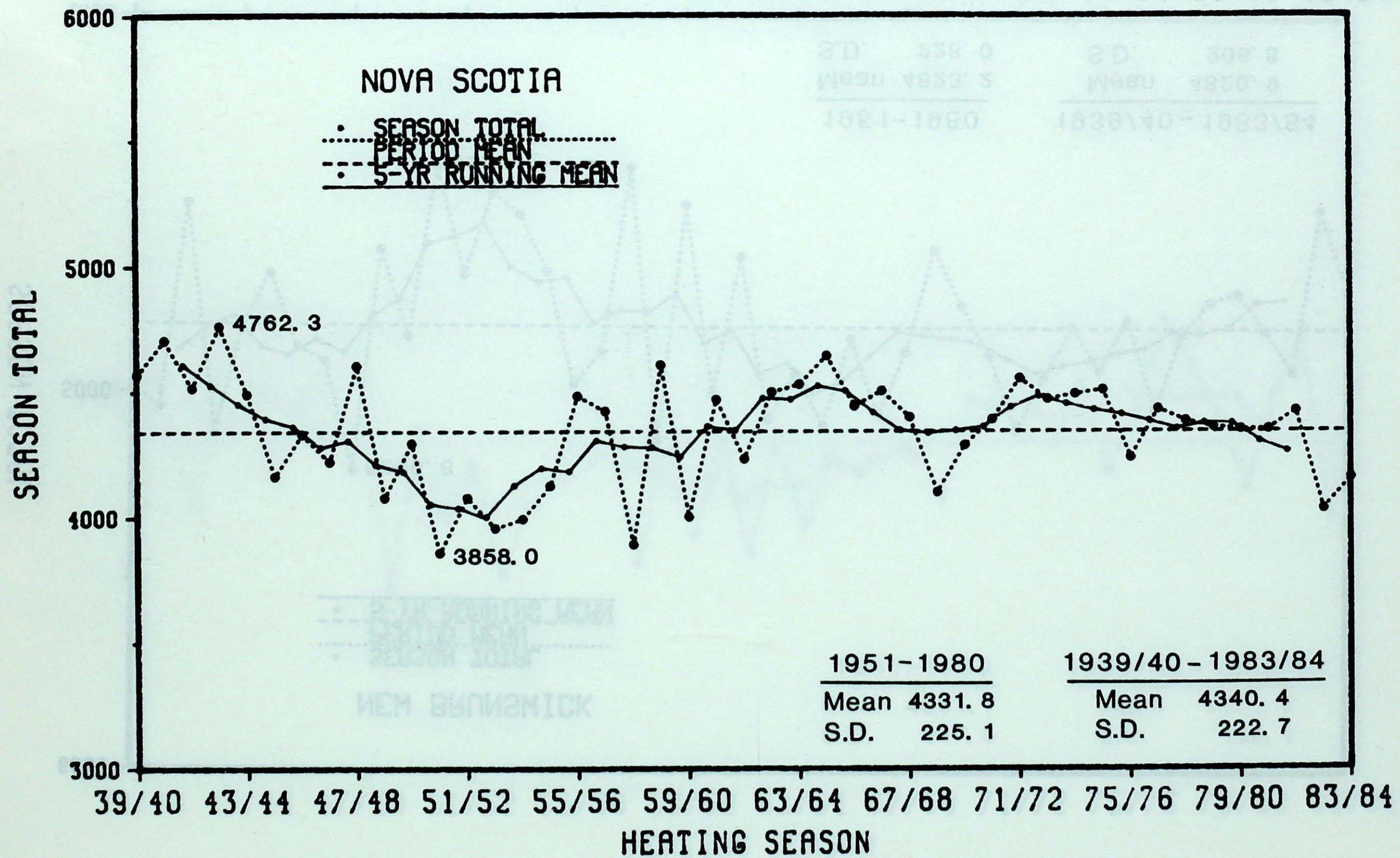


Figure 2.9

## POPULATION-WEIGHTED HEATING DEGREE-DAYS

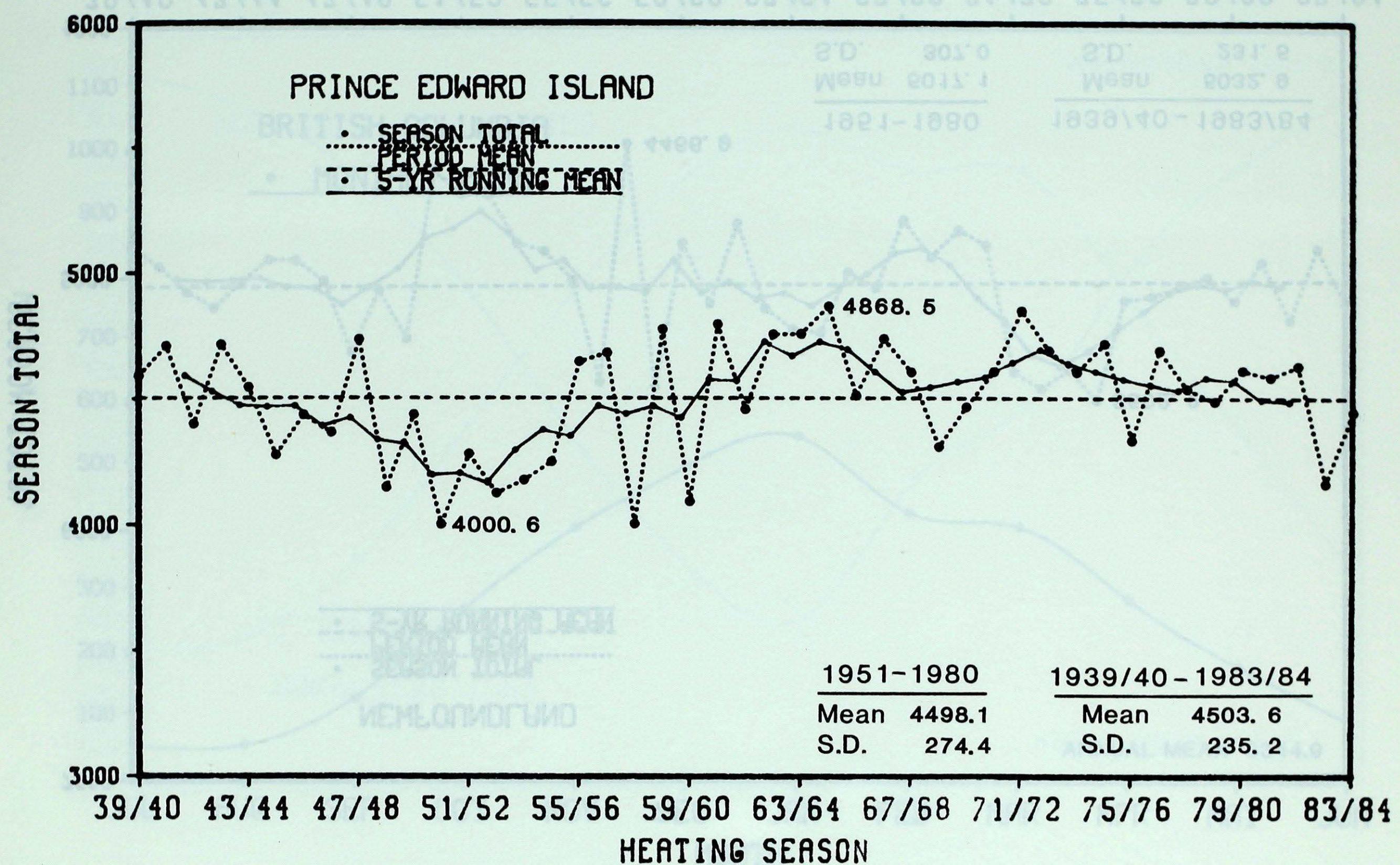


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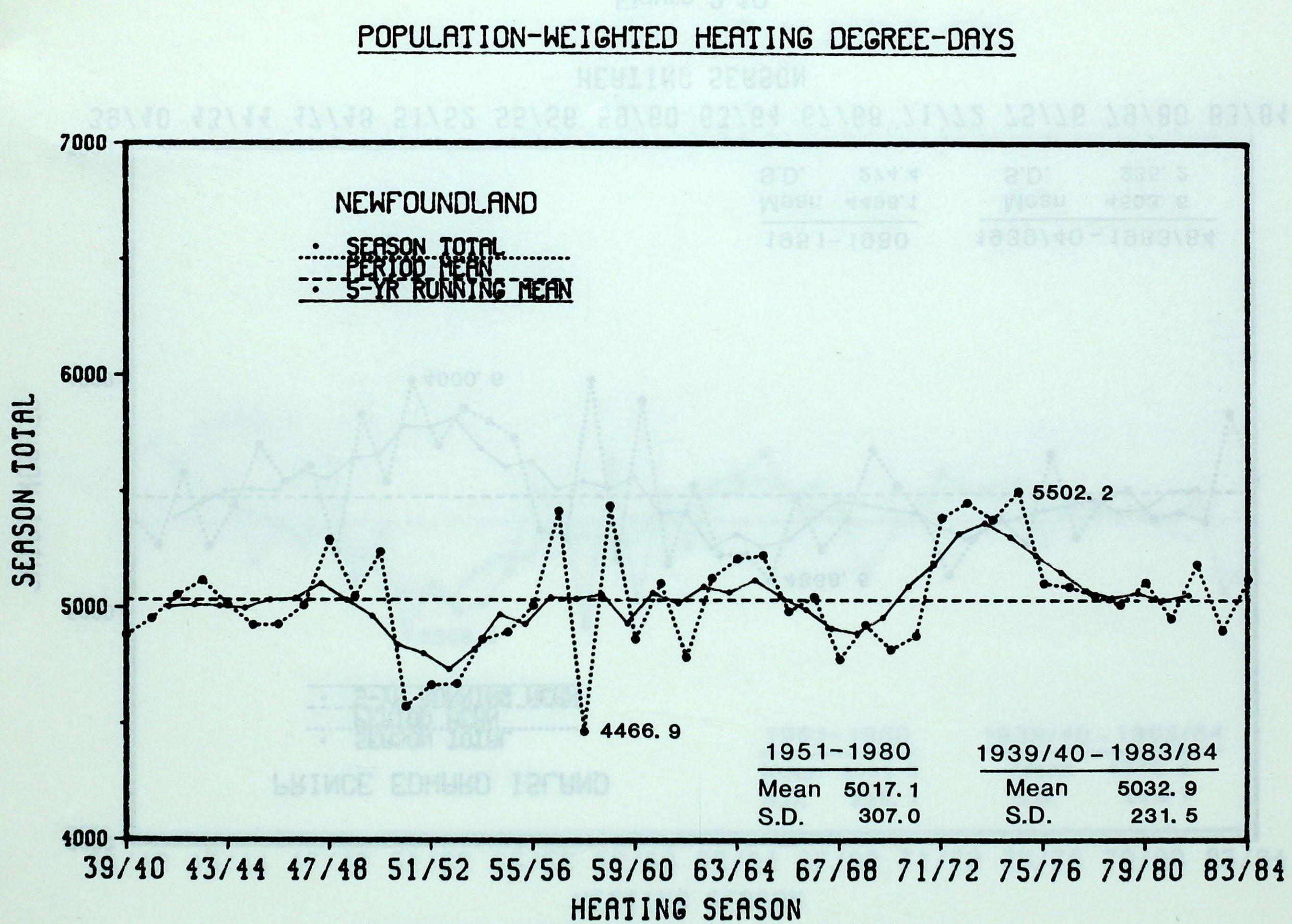


Figure 2.11

POPULATION-WEIGHTED HEATING DEGREE-DAYS

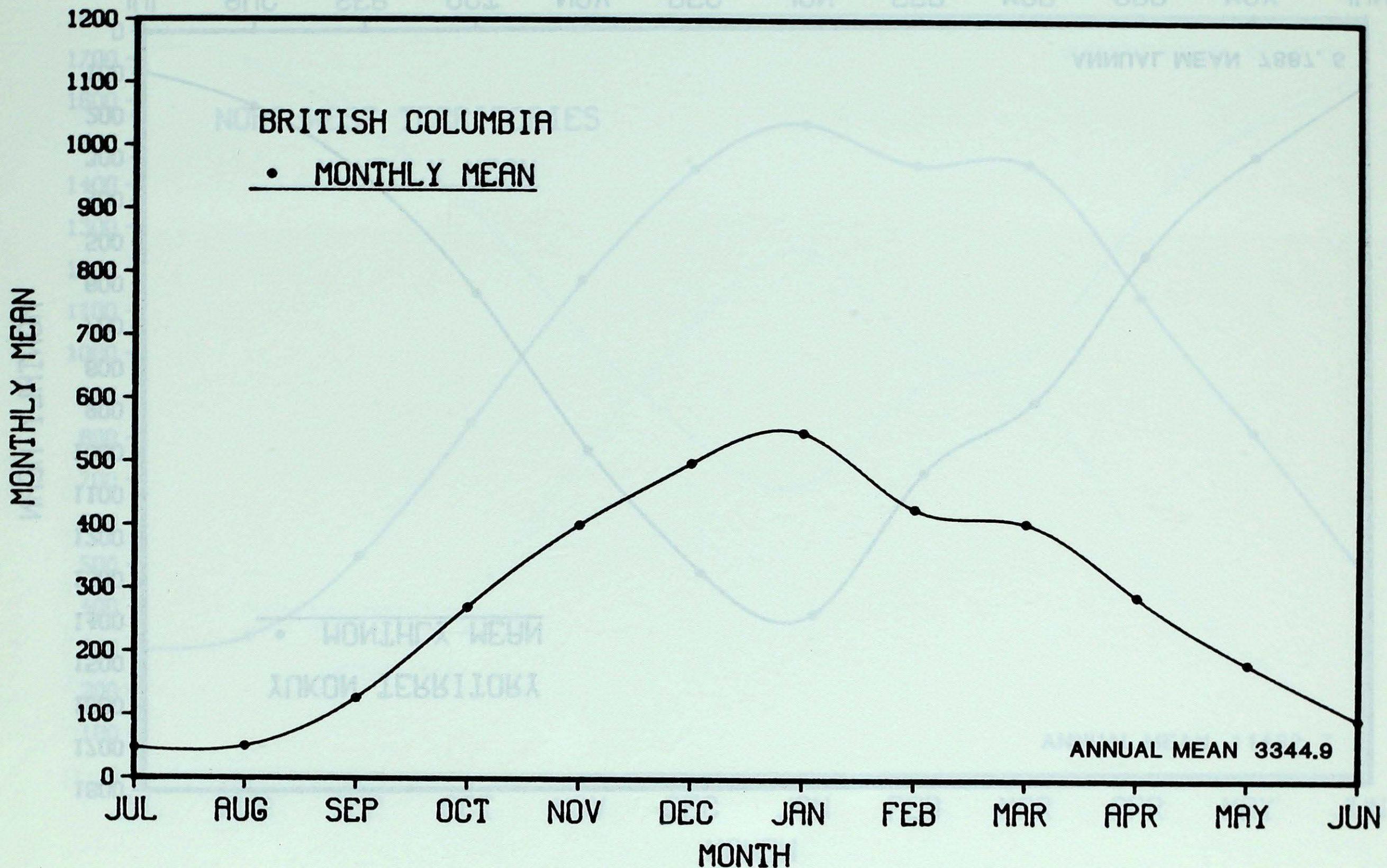


Figure 3.0

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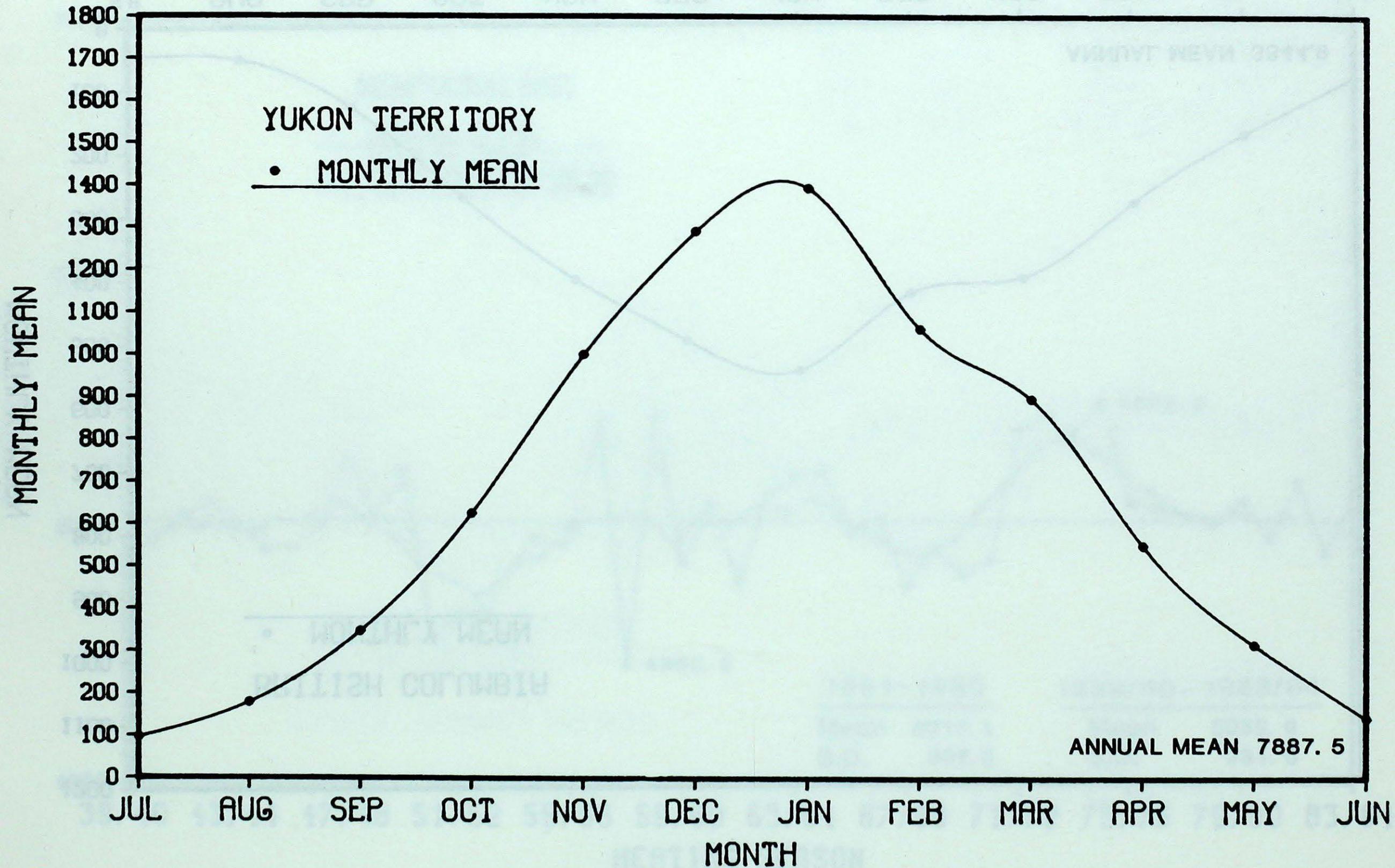


Figure 3.1

POPULATION-WEIGHTED HEATING DEGREE-DAYS

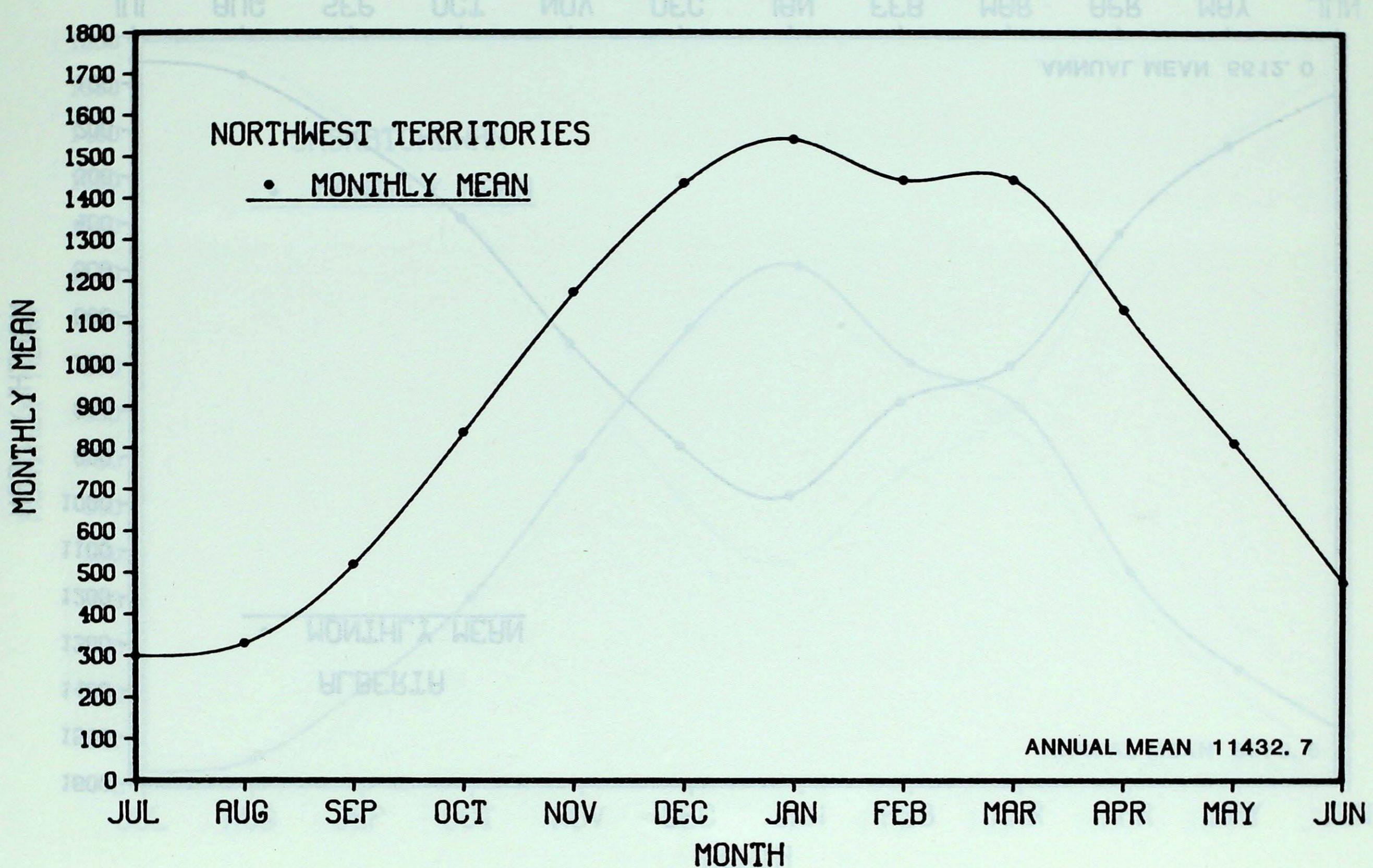


Figure 3.2

## POPULATION-WEIGHTED HEATING DEGREE-DAYS

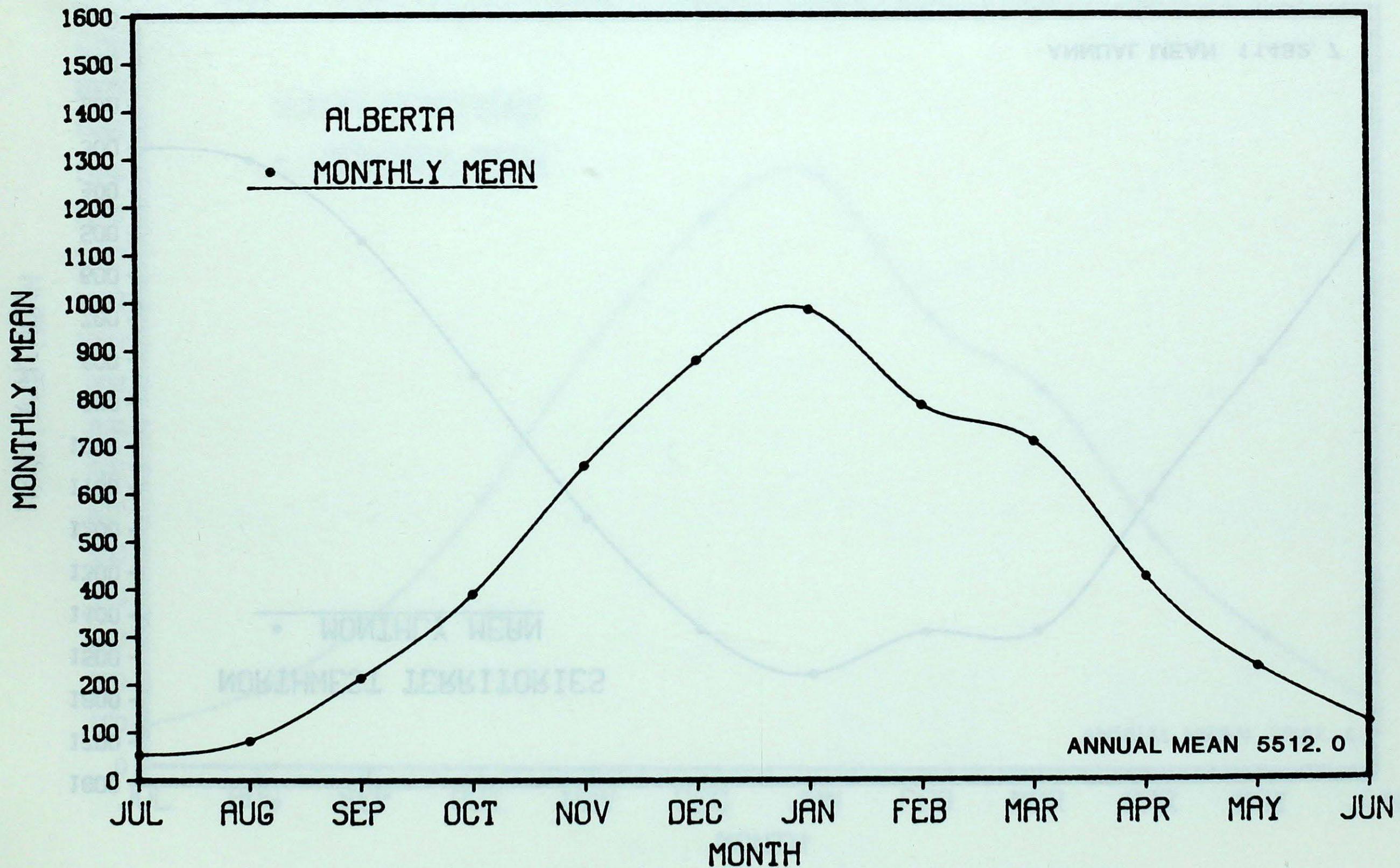


Figure 3.3

## POPULATION-WEIGHTED HEATING DEGREE-DAYS

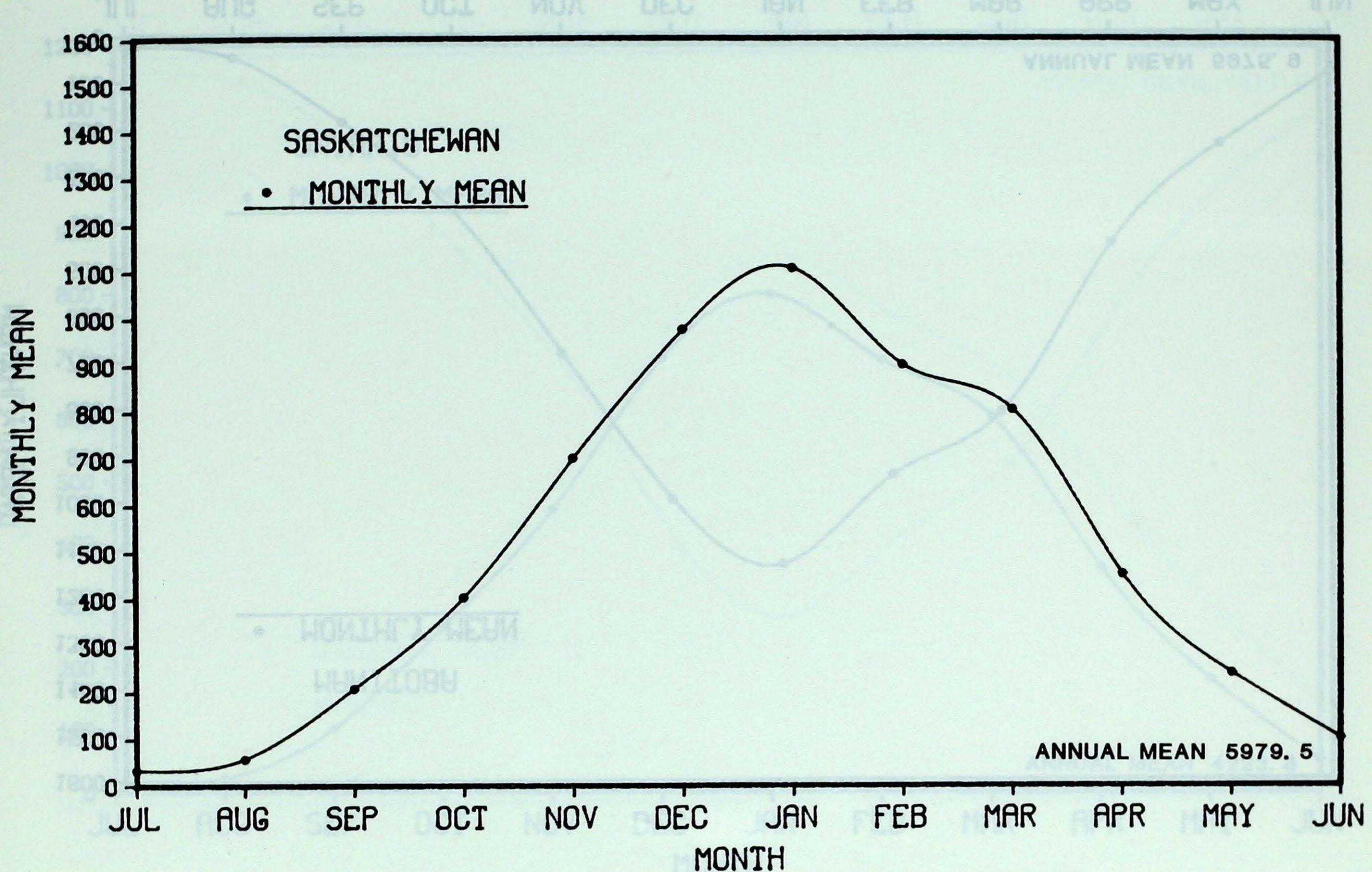


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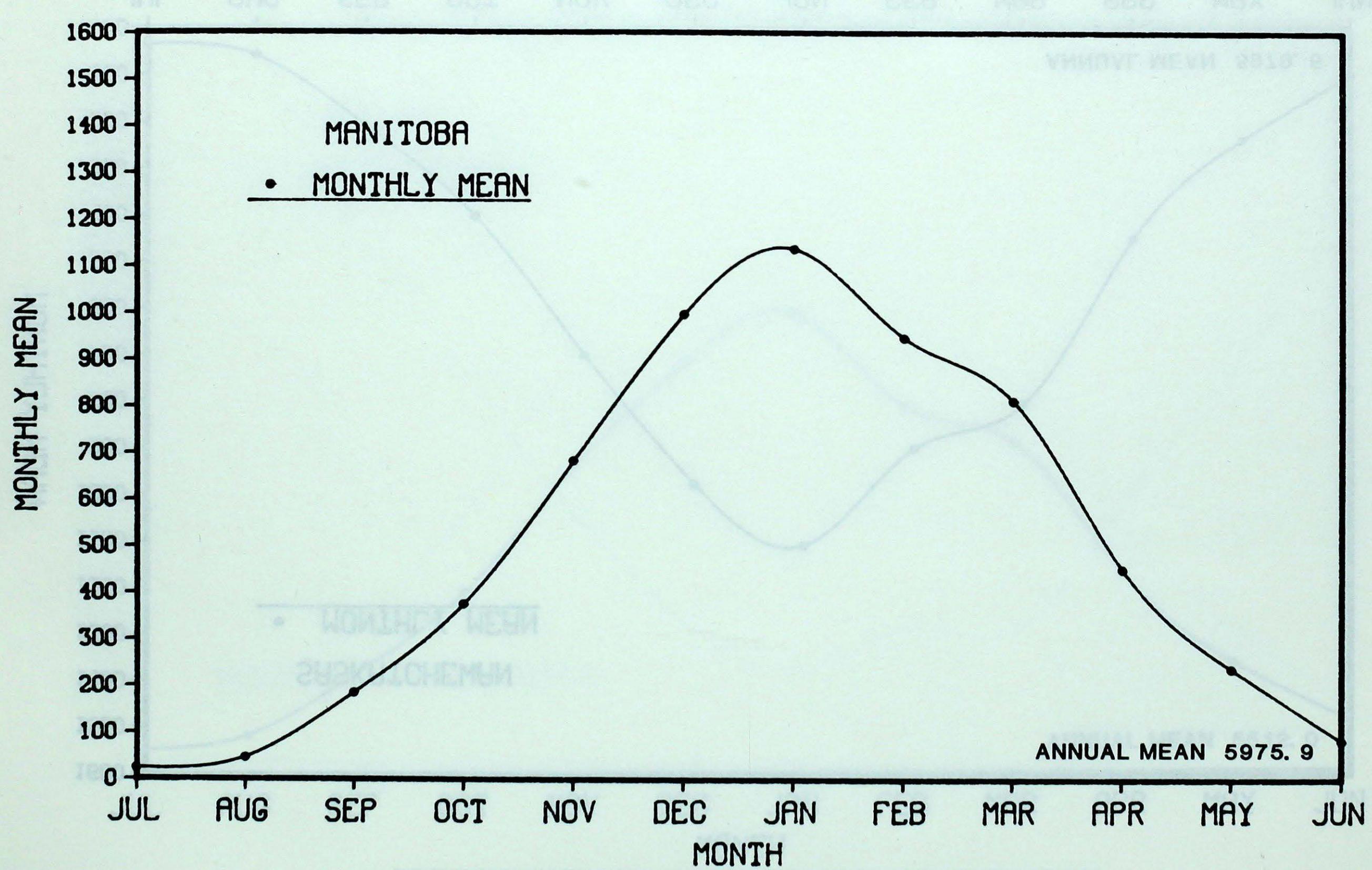


Figure 3.5

POPULATION-WEIGHTED HEATING DEGREE-DAYS

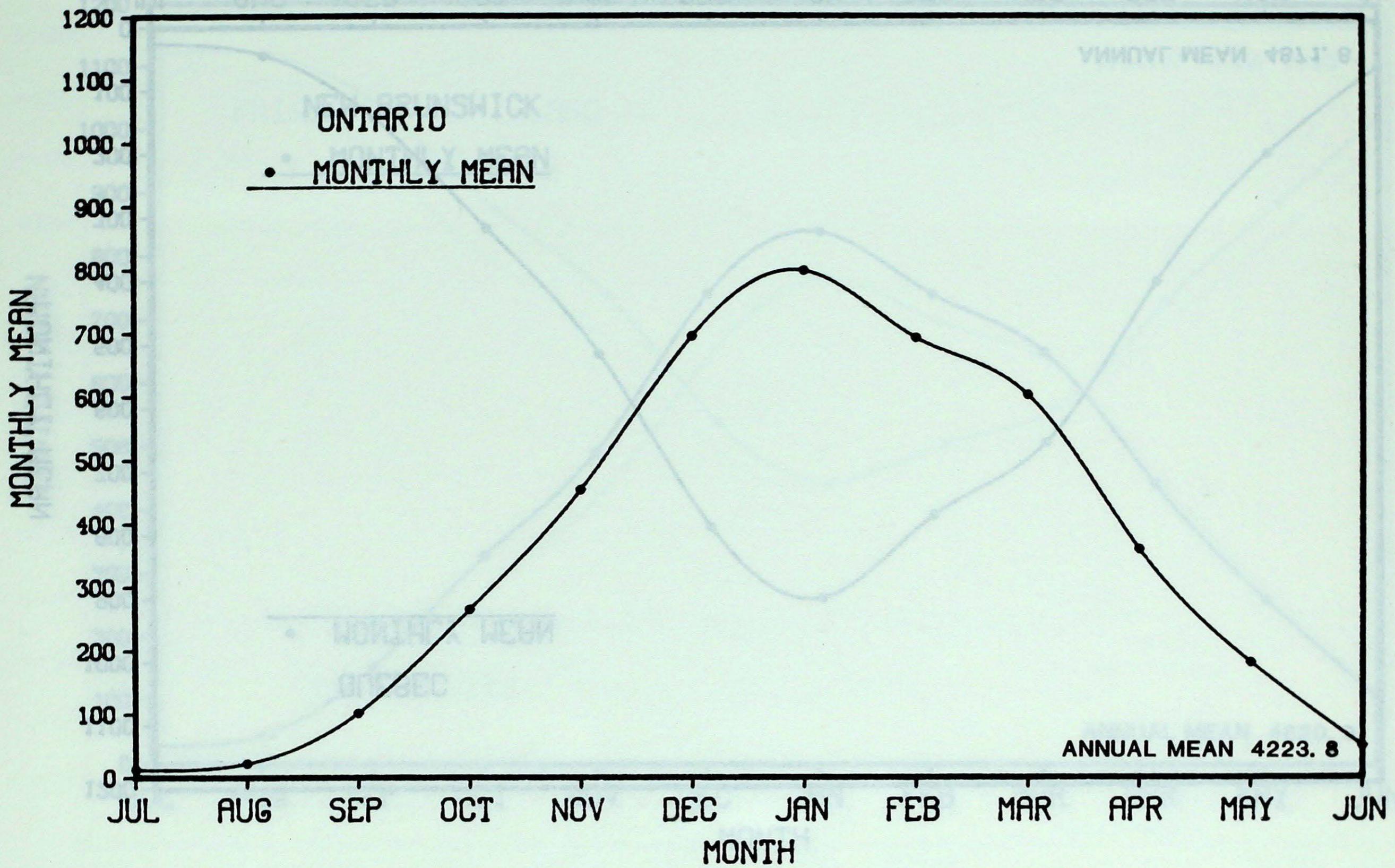


Figure 3.6

POPULATION-WEIGHTED HEATING DEGREE-DAYS

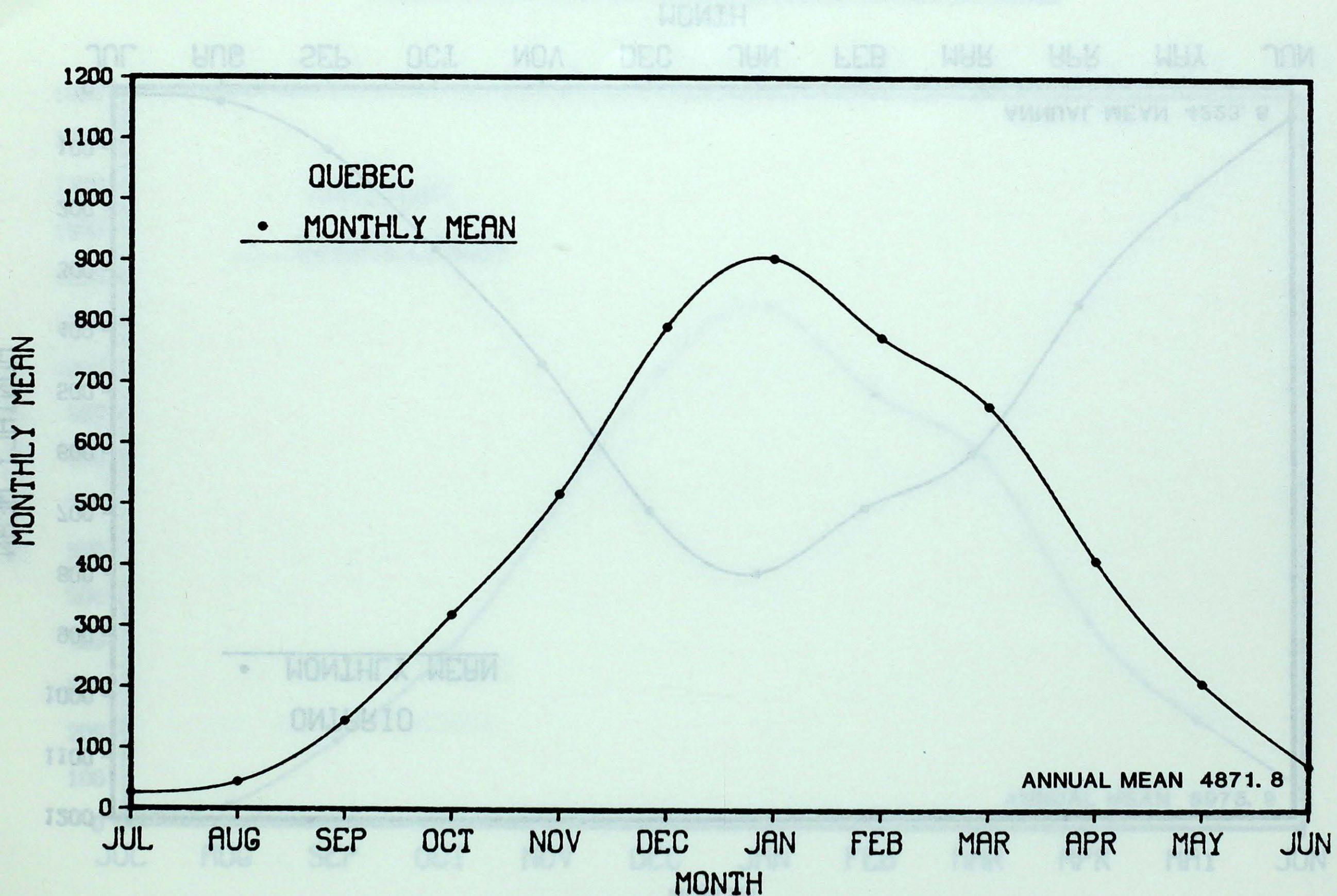


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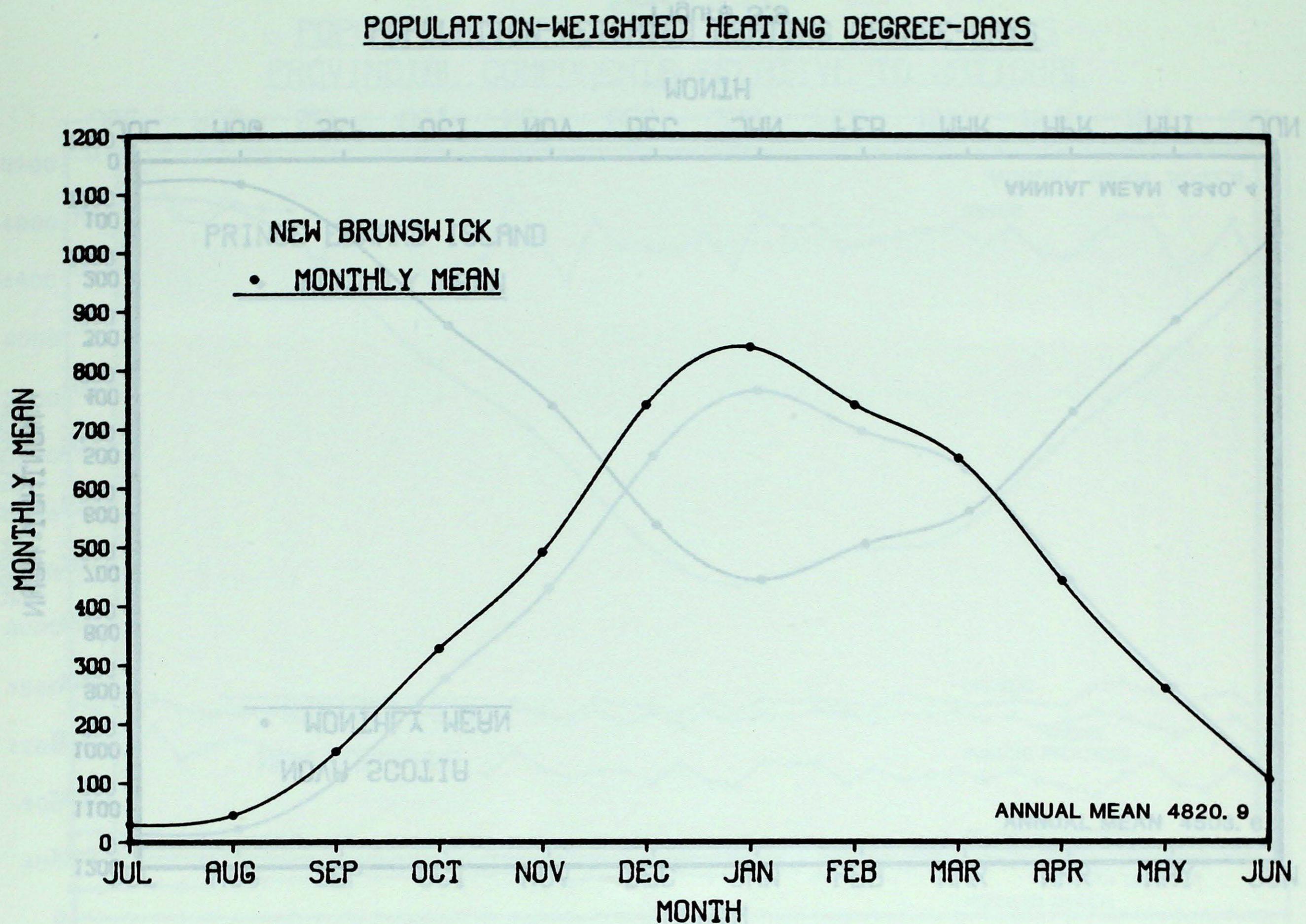


Figure 3.8

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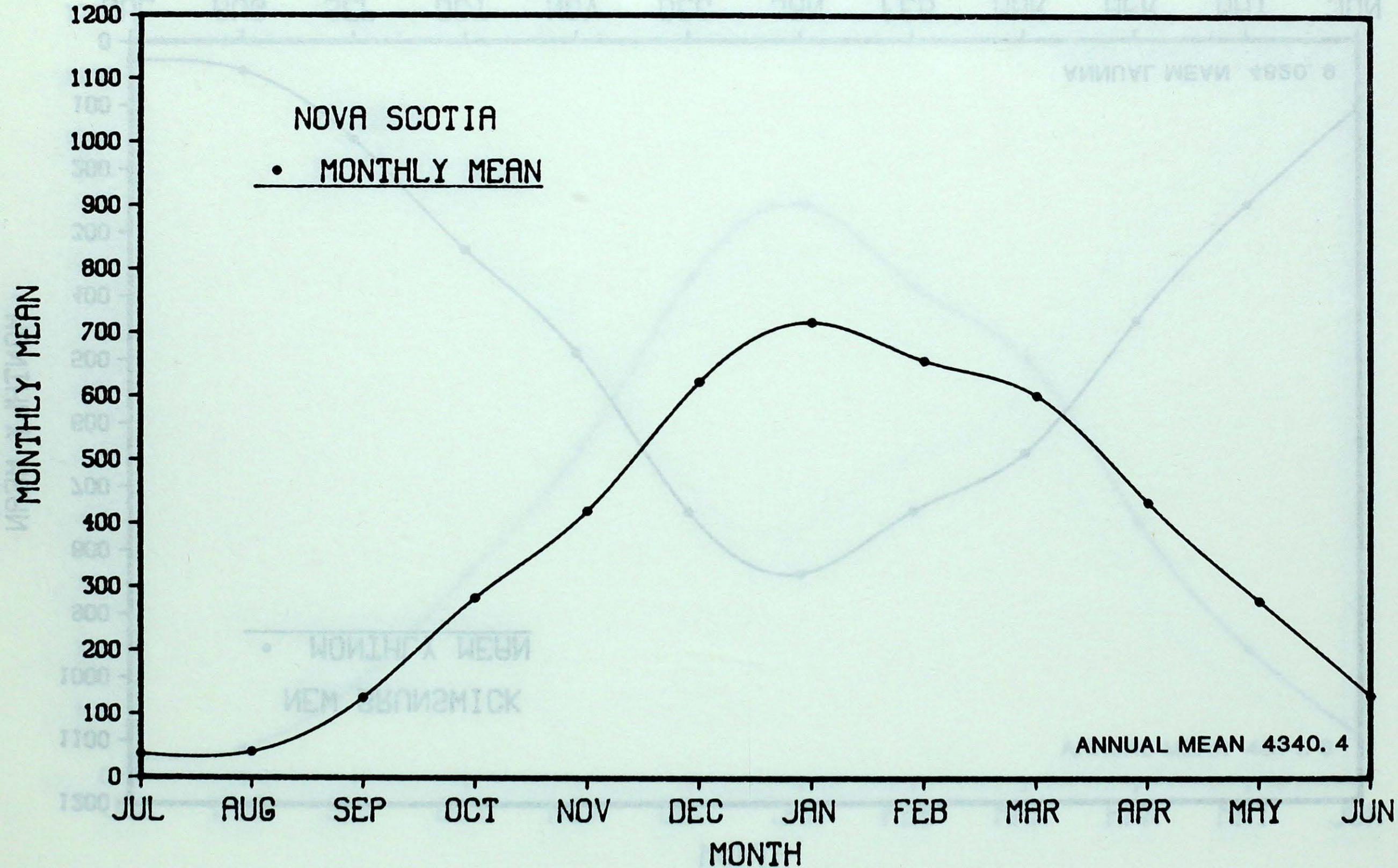


Figure 3.9

## POPULATION-WEIGHTED HEATING DEGREE-DAYS

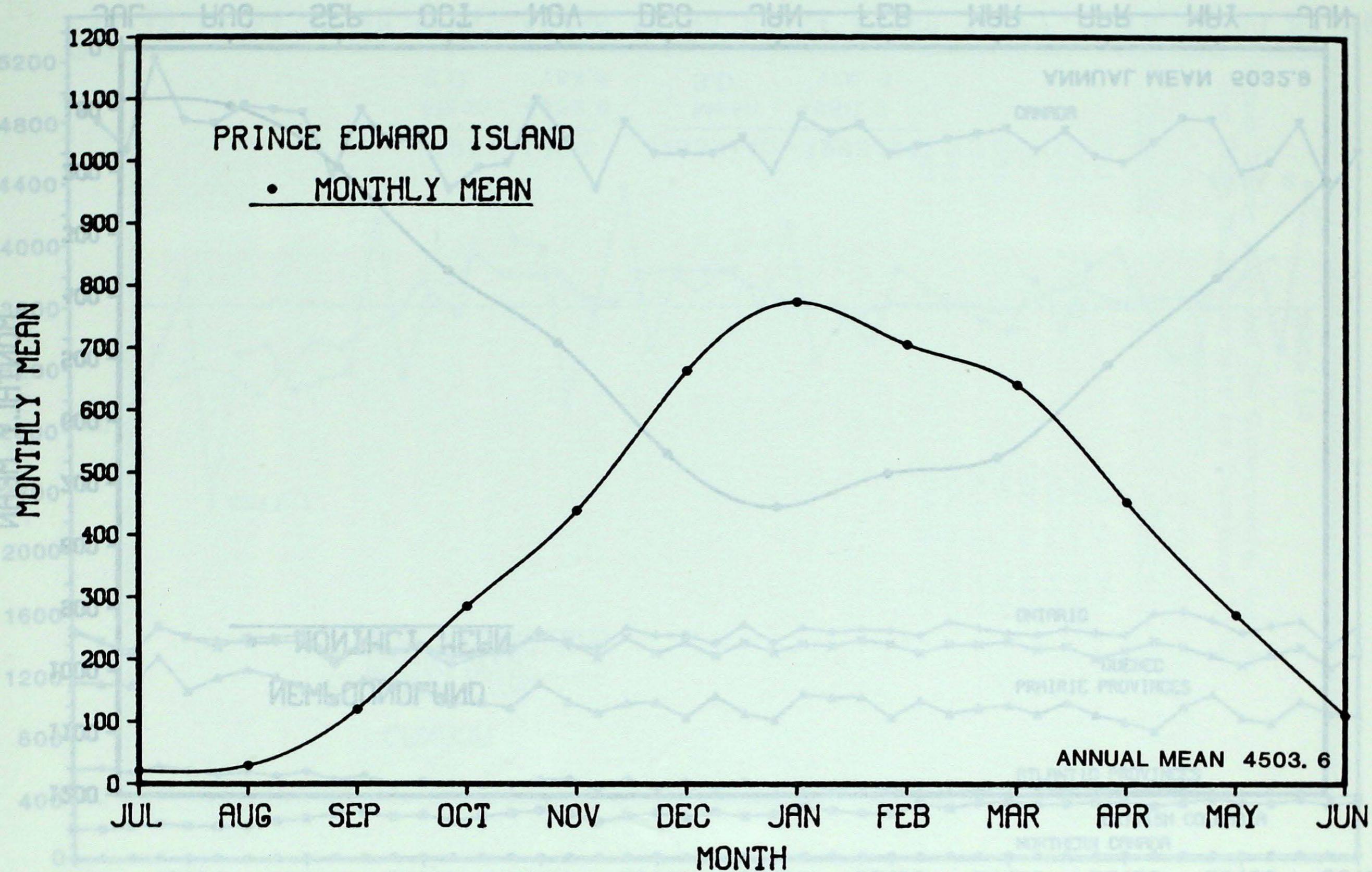


Figure 3.10

Figure 4.0

## POPULATION-WEIGHTED HEATING DEGREE-DAYS

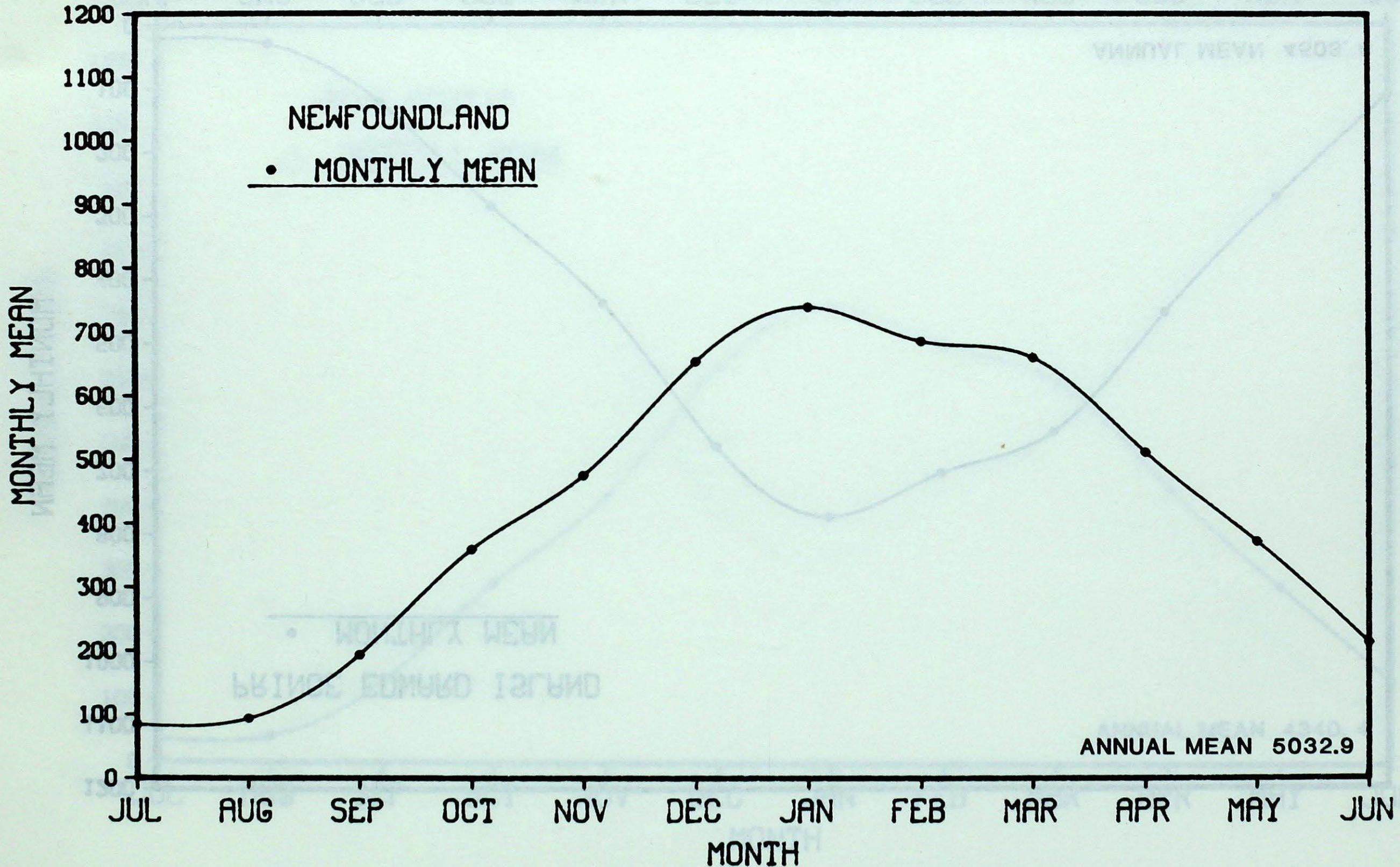


Figure 3.11

POPULATION-WEIGHTED HEATING DEGREE-DAYS  
PROVINCIAL COMPONENTS RELATIVE TO NATIONAL

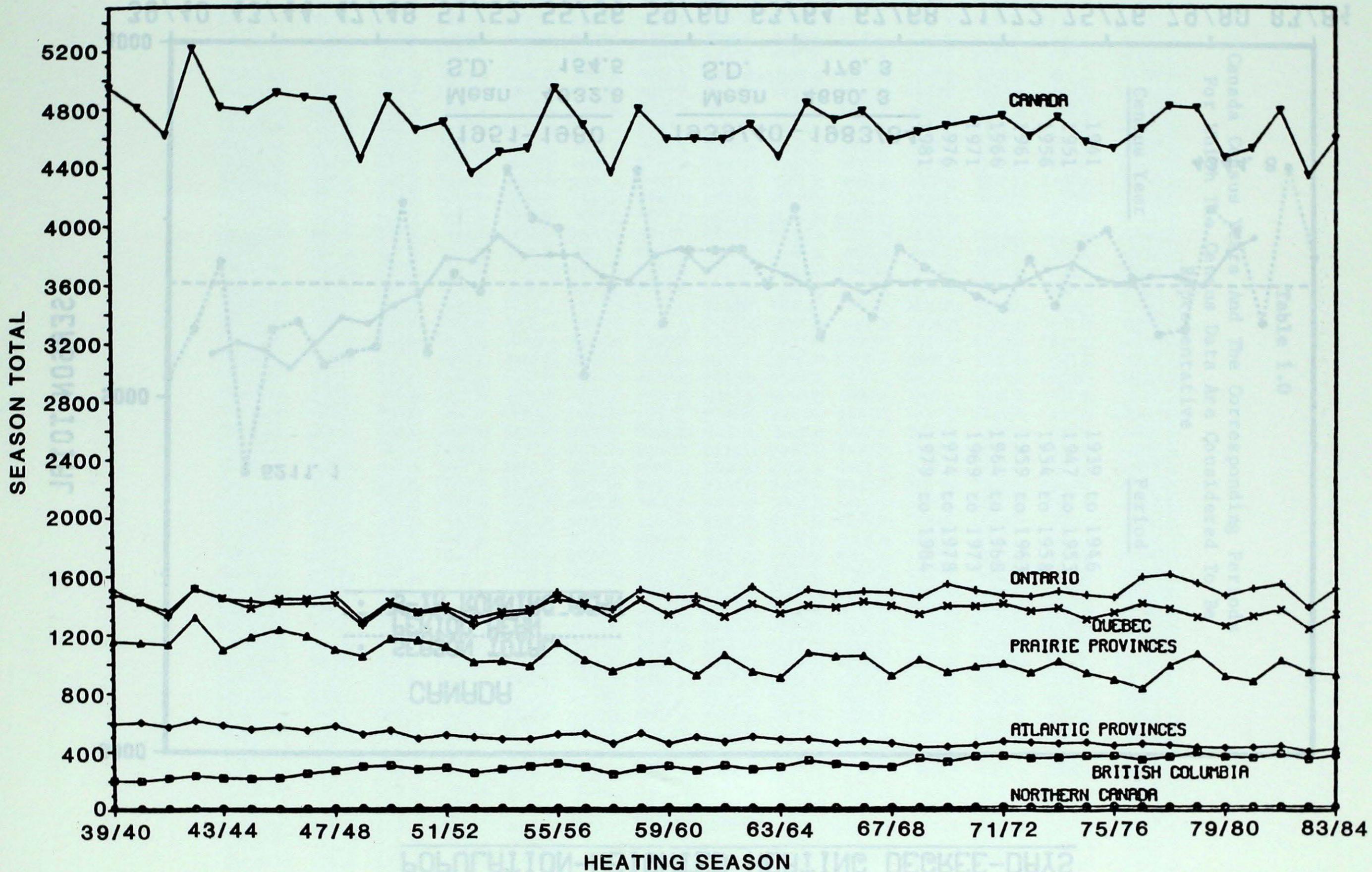


Figure 4.0

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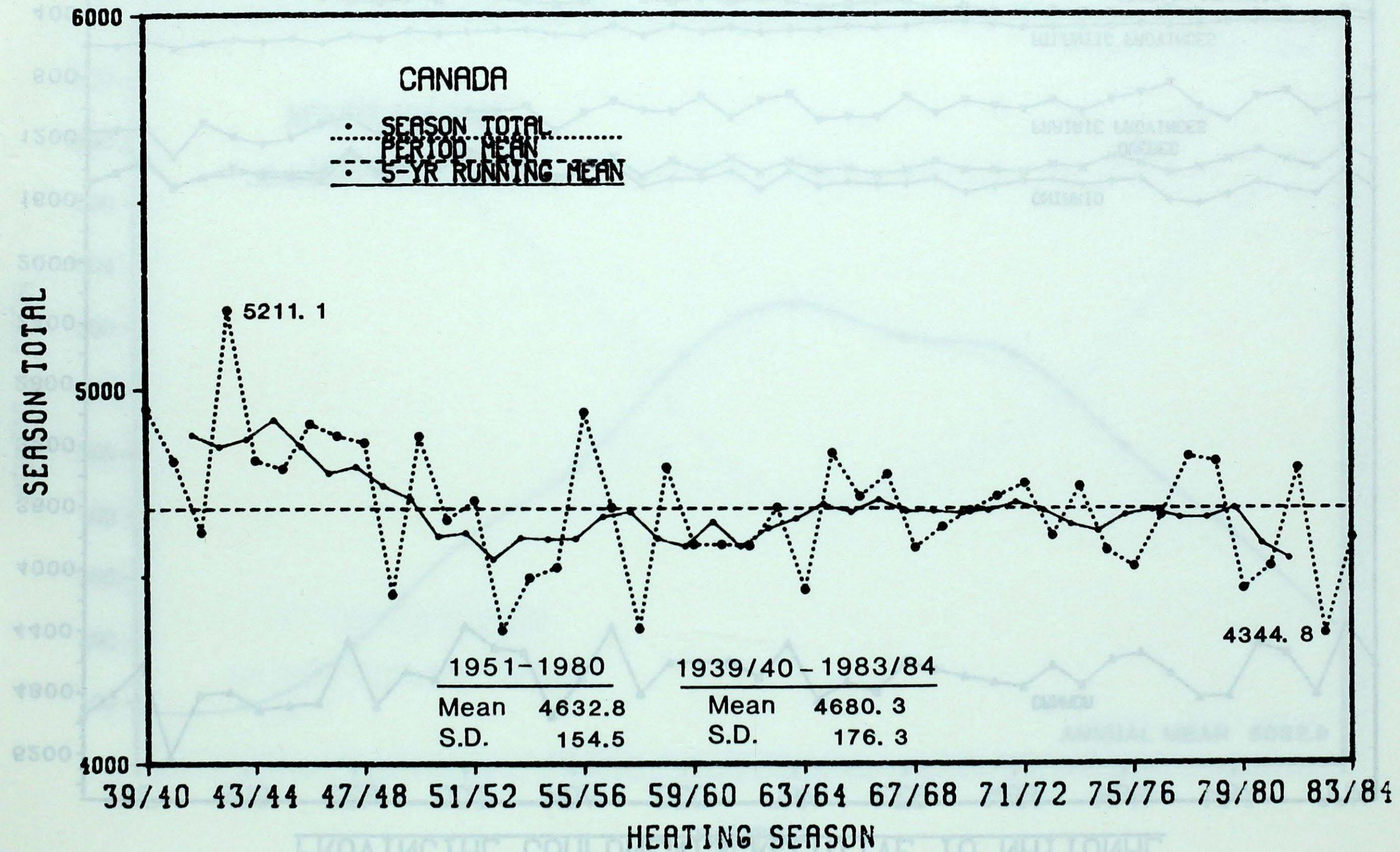


Figure 4.1

**Table 1.0**

**Canada Census Years And The Corresponding Periods  
For Which The Census Data Are Considered To Be  
Representative**

<u>Census Year</u>	<u>Period</u>
1941	1939 to 1946
1951	1947 to 1953
1956	1954 to 1958
1961	1959 to 1963
1966	1964 to 1968
1971	1969 to 1973
1976	1974 to 1978
1981	1979 to 1984

TABLE 2.0  
POPULATION-WEIGHTED MONTHLY AND ANNUAL HEATING DEGREE-DAYS  
BRITISH COLUMBIA

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	ANNUAL
1939/40	57.7	40.9	129.6	273.9	310.5	384.8	478.7	404.6	336.0	235.1	145.9	73.6	2871.5
1940/41	34.1	32.8	76.6	215.4	445.0	443.5	445.4	380.4	310.9	224.7	175.7	81.1	2865.8
1941/42	21.2	43.0	156.2	250.0	353.2	472.5	515.8	412.7	393.0	256.8	177.9	104.4	3156.7
1942/43	27.5	32.8	115.0	230.9	421.4	465.9	648.2	409.1	439.3	257.0	215.1	109.0	3371.1
1943/44	44.3	47.2	105.4	246.1	356.6	490.0	481.0	437.8	414.5	257.8	180.1	85.1	3146.0
1944/45	37.8	47.1	94.3	220.9	354.0	513.9	465.8	404.1	403.8	322.1	154.0	99.4	3117.1
1945/46	33.9	44.4	154.6	258.6	427.4	487.9	471.5	411.8	382.2	290.4	139.1	104.5	3206.2
1946/47	44.1	45.1	119.8	312.4	464.9	513.3	580.5	412.5	366.4	249.4	142.3	81.3	3331.9
1947/48	36.0	53.3	120.1	250.1	415.8	455.3	495.6	503.0	425.3	326.9	192.8	55.3	3329.4
1948/49	49.4	63.7	145.1	288.3	409.4	580.0	659.9	526.1	401.3	270.3	155.8	105.6	3655.0
1949/50	58.2	58.3	109.1	316.5	309.4	547.2	839.5	441.8	431.5	316.8	227.7	78.0	3734.0
1950/51	40.0	41.4	120.5	288.9	418.6	422.9	550.8	458.8	493.5	283.2	178.3	79.0	3375.7
1951/52	32.0	55.6	122.8	282.7	403.5	577.3	576.0	441.6	414.7	284.0	187.1	128.6	3505.9
1952/53	44.4	53.3	103.8	225.5	412.8	443.4	446.8	397.1	387.0	289.8	169.9	121.7	3095.6
1953/54	38.6	36.8	116.0	243.8	331.0	435.5	619.1	394.4	451.8	341.6	181.4	137.6	3327.5
1954/55	79.8	73.5	127.7	292.3	307.9	456.3	505.2	458.7	500.8	336.8	243.0	122.8	3504.9
1955/56	80.2	66.1	140.4	283.2	521.3	572.0	541.8	538.3	448.0	270.8	146.8	129.7	3738.6
1956/57	33.3	39.2	135.6	297.8	422.1	492.8	675.9	500.7	397.9	268.6	119.1	78.8	3461.7
1957/58	65.8	60.4	75.5	286.2	391.2	436.5	426.9	349.4	380.5	271.7	105.9	37.3	2887.4
1958/59	10.8	24.2	126.6	261.8	428.5	455.8	519.9	451.8	389.0	291.5	199.4	90.8	3250.2
1959/60	37.1	71.3	149.5	271.6	435.8	466.7	544.8	428.2	416.8	265.3	204.6	100.6	3392.2
1960/61	28.8	74.5	146.4	240.8	395.9	484.6	463.1	368.4	361.7	284.7	172.8	55.9	3077.6
1961/62	25.7	17.8	151.7	305.0	439.5	518.4	532.5	417.7	450.5	271.3	217.7	105.5	3453.4
1962/63	61.0	59.4	120.0	242.3	342.4	438.3	595.5	354.9	395.3	282.8	179.9	100.1	3172.1
1963/64	60.1	37.8	76.7	227.7	393.5	478.7	479.8	428.4	425.0	320.4	224.0	109.6	3261.5
1964/65	67.0	70.8	167.1	273.5	435.7	616.4	549.3	432.9	450.7	282.6	229.0	100.6	3675.7
1965/66	41.5	48.2	168.2	241.6	383.1	512.1	552.6	418.7	400.8	304.9	203.7	124.6	3399.9
1966/67	67.7	51.6	102.4	283.8	400.0	441.4	483.7	398.9	442.9	332.1	195.6	59.1	3259.2
1967/68	40.8	18.3	79.5	252.8	383.9	502.3	518.3	411.0	355.7	312.7	181.5	107.1	3163.8
1968/69	39.4	72.0	141.1	286.6	380.8	600.3	747.4	473.9	401.8	294.5	152.7	47.7	3638.3
1969/70	48.1	78.8	134.4	285.8	372.2	448.0	546.9	388.6	393.7	317.6	203.9	72.8	3290.8
1970/71	48.7	53.2	174.6	308.0	439.7	544.6	561.6	433.1	458.5	302.8	187.1	132.5	3644.3
1971/72	59.4	28.1	160.5	301.0	390.7	614.3	633.4	477.8	384.6	351.4	170.7	106.4	3678.2
1972/73	52.9	36.8	188.9	328.1	388.5	569.9	553.7	423.3	386.1	294.2	185.9	119.4	3527.7
1973/74	56.0	76.4	116.7	286.0	471.7	455.2	560.4	409.3	411.7	281.1	234.5	105.8	3464.7
1974/75	76.1	48.7	89.7	257.9	389.8	442.1	559.2	512.8	442.5	336.0	203.3	116.3	3474.3
1975/76	41.5	76.5	113.3	280.3	414.0	503.6	490.6	447.3	459.5	290.4	202.4	140.2	3459.5
1976/77	52.5	80.9	106.2	273.0	390.5	450.7	544.8	356.9	402.2	259.4	209.7	87.7	3214.4
1977/78	63.6	42.5	156.3	285.7	443.0	560.3	537.5	406.6	371.8	281.8	203.8	65.4	3418.5
1978/79	33.4	55.7	148.0	258.9	467.4	566.7	654.6	476.3	371.7	295.2	178.0	95.9	3601.9
1979/80	40.8	30.3	90.7	245.7	428.0	439.2	616.9	416.8	416.0	248.2	171.1	111.4	3255.3
1980/81	59.2	72.4	136.5	255.0	364.7	487.5	432.6	403.6	345.0	300.7	176.6	135.8	3169.8
1981/82	49.8	28.7	117.4	291.5	351.6	521.5	591.0	448.1	426.9	333.9	199.6	60.2	3420.3
1982/83	58.7	57.0	113.1	267.8	461.2	497.3	432.7	367.3	347.0	274.2	150.3	90.2	3116.9
1983/84	58.1	31.3	158.1	287.7	361.6	632.1	482.1	384.2	340.9	289.0	224.0	109.3	3358.2
MEAN	47.5	50.6	126.7	270.3	400.7	498.6	546.9	427.1	405.0	290.1	184.4	97.0	3344.9

TABLE 2.1

POPULATION-WEIGHTED MONTHLY AND ANNUAL HEATING DEGREE-DAYS  
YUKON TERRITORY

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	ANNUAL
1939/40	86.2	210.3	410.3	746.9	898.6	931.4	1119.0	1015.1	830.3	432.2	320.3	148.7	7149.3
1940/41	74.8	217.7	294.5	526.5	1062.5	1031.8	1252.9	923.4	745.6	376.7	296.5	113.2	6916.1
1941/42	115.9	146.2	397.1	664.8	1076.5	1334.7	900.7	848.0	822.2	526.3	242.4	110.1	7184.9
1942/43	81.2	185.2	320.5	511.4	1141.8	1587.1	1486.8	1022.1	1019.1	538.6	316.9	140.8	8351.5
1943/44	124.3	204.8	325.0	565.6	708.3	875.0	1059.5	969.3	902.9	569.9	292.8	117.9	6715.3
1944/45	104.3	201.8	342.4	532.2	910.6	1136.9	1135.8	929.4	810.9	693.5	316.3	181.2	7295.3
1945/46	135.3	194.7	385.4	590.2	1219.5	1170.4	1216.7	971.5	893.0	562.5	258.9	78.3	7676.4
1946/47	122.6	203.6	338.7	638.2	1220.5	1556.3	1497.8	1099.6	666.0	568.9	294.7	202.5	8409.4
1947/48	89.2	275.1	363.8	525.0	787.0	963.8	1097.3	1279.4	1037.6	692.9	272.9	151.2	7535.2
1948/49	128.5	231.5	374.9	548.2	1059.9	1515.3	1346.9	1355.4	823.9	520.8	384.3	216.8	8506.4
1949/50	121.5	166.6	280.4	628.9	759.5	1456.9	1577.7	1293.4	843.1	605.8	300.6	83.6	8118.0
1950/51	99.4	185.9	300.6	667.9	1435.9	1189.2	1514.3	1248.5	1079.6	528.2	293.5	217.7	8760.7
1951/52	69.7	156.5	274.6	818.7	926.2	1435.7	1651.2	993.3	912.1	579.2	359.5	149.1	8325.8
1952/53	89.7	208.9	369.8	542.0	733.8	1072.8	1532.9	886.7	945.2	489.6	250.4	98.2	7220.0
1953/54	93.3	183.9	349.8	620.7	955.8	1098.1	1512.8	1219.5	866.2	758.4	318.0	137.4	8113.9
1954/55	100.7	146.8	378.4	574.2	766.0	1282.5	1112.2	1117.7	1032.7	563.0	368.8	188.4	7631.4
1955/56	69.9	220.1	366.0	609.0	1297.3	1482.4	1477.5	1227.8	1010.1	574.5	308.5	151.8	8794.9
1956/57	107.3	166.2	374.3	758.2	883.3	1543.0	1472.8	1087.4	843.1	576.7	323.2	124.3	8259.8
1957/58	121.6	97.0	305.2	659.7	855.7	1322.1	1006.6	1178.3	908.0	449.3	313.6	97.9	7315.0
1958/59	84.0	169.3	386.7	752.3	951.9	1213.6	1719.5	1047.5	1010.1	627.7	352.4	133.2	8448.2
1959/60	140.4	255.2	350.8	756.7	1014.3	1066.7	1248.8	946.4	979.1	505.8	256.4	151.1	7671.7
1960/61	120.5	166.4	349.2	597.4	1006.2	1001.7	1238.4	1056.2	909.5	604.8	337.8	127.3	7515.4
1961/62	89.4	163.5	336.4	659.1	1152.7	1595.2	1368.7	1011.8	991.3	522.2	338.9	162.3	8391.5
1962/63	82.9	111.4	383.4	518.9	911.2	1182.0	1303.1	892.5	1011.5	583.8	304.4	200.1	7485.2
1963/64	97.3	135.8	296.6	535.5	1240.0	984.3	1359.3	950.6	1164.9	641.6	466.4	117.2	7989.5
1964/65	114.6	177.0	355.8	534.5	1005.1	1655.2	1502.9	1255.8	805.9	564.1	358.0	194.4	8523.3
1965/66	83.2	195.9	348.4	675.3	1162.5	1281.4	1883.7	986.7	946.0	600.3	364.5	123.8	8651.7
1966/67	86.9	221.9	338.0	696.0	1261.4	1375.0	1441.8	1088.9	1088.9	604.2	363.6	133.8	8700.4
1967/68	115.6	136.6	312.5	578.6	983.8	1194.5	1455.9	1033.1	700.3	581.4	318.1	134.6	7545.0
1968/69	74.8	154.8	386.1	634.6	920.9	1525.2	1815.6	1051.9	855.1	440.3	318.7	64.7	8242.7
1969/70	142.8	288.7	316.4	551.8	991.5	1001.8	1410.5	882.1	656.1	526.0	318.2	171.3	7257.2
1970/71	87.4	204.1	410.0	721.0	1008.9	1322.3	1803.8	998.8	931.0	563.0	337.3	113.3	8500.9
1971/72	70.7	175.0	359.2	684.6	1047.2	1460.9	1647.4	1316.9	1026.5	687.2	327.8	137.7	8941.1
1972/73	70.2	141.8	432.9	747.1	900.9	1390.0	1562.3	1116.2	829.1	475.4	322.0	156.9	8144.8
1973/74	115.2	206.1	337.9	640.4	1354.3	1239.2	1691.3	1145.5	1017.1	535.8	360.0	178.2	8821.0
1974/75	120.7	188.2	335.7	644.0	873.0	1067.5	1462.3	1109.7	842.1	522.4	281.2	125.6	7572.4
1975/76	74.1	187.7	333.1	652.9	1187.6	1452.7	1283.2	1251.4	923.5	459.4	317.5	135.7	8258.8
1976/77	63.8	134.1	277.4	604.9	703.5	1144.0	1091.9	706.2	873.0	523.6	288.2	138.0	6548.6
1977/78	89.9	92.1	327.8	533.1	1172.5	1582.6	1235.3	898.0	772.0	513.8	303.4	154.3	7674.8
1978/79	74.0	120.6	267.4	624.1	1076.7	1210.9	1439.7	1539.8	843.7	545.3	317.6	156.6	8216.4
1979/80	62.3	105.8	281.4	650.0	764.5	1302.8	1453.6	871.1	814.4	425.9	245.9	102.0	7079.7
1980/81	76.0	182.1	404.4	475.2	816.4	1760.4	793.7	974.3	671.6	600.5	202.9	176.9	7134.4
1981/82	103.3	157.3	349.2	592.8	781.7	1209.5	1838.7	1025.3	1020.4	585.1	357.4	127.0	8147.7
1982/83	51.0	161.9	314.4	748.9	1069.0	1172.6	1342.3	947.8	914.1	463.6	320.5	118.4	7624.5
1983/84	79.7	179.4	418.2	553.4	902.0	1672.4	1302.7	924.5	682.3	439.5	301.3	116.1	7571.5

MEAN      95.7      178.1      345.8      624.3      999.1      1290.0      1392.6      1059.9      894.9      550.0      315.8      141.3      7887.5

TABLE 2.2

## POPULATION-WEIGHTED MONTHLY AND ANNUAL HEATING DEGREE-DAYS

YEAR	NORTHWEST TERRITORIES												ANNUAL
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	
1939/40	291.0	311.4	522.4	866.4	1098.8	1229.1	1264.1	1379.8	1333.0	1021.9	737.5	516.3	10571.8
1940/41	300.2	372.7	434.6	805.4	1215.2	1450.4	1526.6	1290.6	1434.5	1205.3	809.2	430.9	11275.6
1941/42	250.1	362.3	579.4	868.6	1298.7	1453.0	1498.0	1509.5	1282.0	1111.9	772.0	514.2	11499.6
1942/43	274.1	351.6	575.9	695.7	1214.1	1443.6	1554.4	1420.4	1450.4	1013.1	849.9	455.0	11298.2
1943/44	275.5	258.1	477.8	738.8	1113.3	1396.4	1434.7	1424.1	1387.4	905.3	825.6	355.7	10592.6
1944/45	320.3	321.1	512.4	827.7	1099.2	1337.9	1485.8	1347.9	1314.5	1273.4	853.5	510.9	11204.6
1945/46	310.7	317.5	539.6	825.2	1197.7	1479.8	719.6	1536.7	1323.4	1103.0	768.2	507.0	10628.5
1946/47	302.2	308.1	576.2	930.8	1184.3	1415.5	1596.2	1326.4	1302.8	1181.1	859.7	522.2	11505.5
1947/48	323.0	348.2	500.1	624.8	1076.8	1233.5	1503.9	1534.5	1524.5	1207.2	781.8	452.1	11110.3
1948/49	234.8	274.2	456.7	810.1	1101.9	1514.8	1596.5	1578.9	1417.7	1116.1	863.6	526.5	11492.0
1949/50	343.4	286.2	467.4	860.0	1159.9	1420.6	1781.2	1472.6	1372.8	1167.3	836.7	526.5	11694.5
1950/51	344.4	368.1	492.2	964.4	1209.5	1386.2	1523.7	1517.0	1432.9	1123.1	748.3	464.5	11574.3
1951/52	314.5	294.9	514.5	861.1	1197.9	1558.2	1606.8	1514.5	1436.5	1002.9	641.9	424.4	11368.1
1952/53	304.0	371.8	553.8	907.8	1199.5	1293.1	1624.5	1330.9	1413.1	973.0	829.3	489.1	11289.8
1953/54	312.4	295.8	498.4	862.7	1077.8	1539.5	1641.0	1385.9	1405.2	1214.4	816.2	486.8	11536.2
1954/55	261.5	208.5	436.9	828.1	1149.4	1472.7	1512.4	1557.9	1518.5	1039.5	792.5	451.5	11229.3
1955/56	287.8	341.2	531.0	744.6	1187.1	1461.7	1476.4	1506.6	1506.4	1124.0	954.4	500.2	11621.4
1956/57	270.8	366.3	572.6	925.1	1217.4	1637.9	1661.9	1459.5	1363.2	1123.1	880.6	535.0	12013.5
1957/58	352.8	335.3	499.0	806.2	1261.1	1565.9	1490.0	1554.5	1389.8	1258.2	767.5	524.5	11804.7
1958/59	310.5	297.8	460.6	774.1	1252.2	1429.3	1474.3	1425.9	1484.2	1144.4	915.8	546.6	11515.7
1959/60	341.8	379.8	519.8	938.4	1177.6	1289.5	1589.7	1460.8	1542.2	1159.6	703.9	361.6	11464.6
1960/61	282.0	303.9	517.5	818.7	1232.5	1354.0	1629.0	1377.2	1646.1	1156.6	881.1	467.9	11666.6
1961/62	261.9	369.1	607.5	975.1	1154.0	1457.1	1661.3	1528.2	1345.9	1191.3	929.4	452.8	11933.7
1962/63	279.7	329.8	496.3	835.3	1239.7	1461.2	1615.1	1372.3	1640.7	1062.5	883.4	495.5	11711.5
1963/64	317.6	333.0	569.8	839.3	1084.8	1429.1	1666.9	1511.3	1604.6	1245.5	777.1	526.7	11905.7
1964/65	321.4	322.0	523.6	849.4	1126.9	1466.8	1551.7	1543.9	1437.9	1141.3	825.7	508.3	11618.9
1965/66	318.1	359.8	606.5	900.4	1152.9	1462.6	1697.8	1435.3	1425.9	1198.7	747.4	440.2	11745.7
1966/67	267.1	305.1	474.5	936.3	1309.9	1375.9	1628.6	1520.6	1513.9	1226.5	822.8	545.7	11926.9
1967/68	333.2	358.1	581.1	774.7	1250.9	1327.0	1607.9	1456.0	1377.9	1213.0	877.4	462.7	11619.9
1968/69	346.5	362.8	472.2	692.9	1102.2	1391.6	1562.6	1279.6	1496.9	1108.9	886.6	567.1	11269.8
1969/70	279.4	307.1	487.7	744.8	1185.6	1245.8	1502.1	1475.4	1386.7	1154.2	877.8	422.2	11068.9
1970/71	268.1	315.1	507.3	808.4	1174.8	1599.9	1462.2	1365.6	1422.7	1110.8	801.7	439.0	11275.6
1971/72	263.6	347.6	490.6	735.9	1242.6	1538.3	1663.3	1604.3	1463.6	1245.1	900.3	579.9	12075.0
1972/73	367.3	394.7	647.5	1014.2	1268.0	1561.3	1538.4	1468.0	1503.3	1205.8	730.8	387.2	12086.5
1973/74	245.7	264.3	463.6	734.6	1096.8	1429.4	1641.8	1439.8	1518.3	1241.7	778.2	454.5	11308.8
1974/75	262.7	343.9	597.6	964.2	1096.4	1438.5	1685.9	1340.9	1512.5	995.7	658.6	349.1	11246.1
1975/76	294.4	291.9	511.3	809.6	1122.8	1550.0	1577.5	1514.6	1537.4	980.9	769.5	495.2	11455.1
1974/75	262.7	343.9	597.6	964.2	1096.4	1438.5	1685.9	1340.9	1512.5	995.7	658.6	349.1	11246.1
1975/76	294.4	291.9	511.3	809.6	1122.8	1550.0	1577.5	1514.6	1537.4	980.9	769.5	495.2	11455.1
1976/77	270.6	366.5	508.2	823.5	1174.4	1504.4	1402.4	1439.3	1383.4	1026.1	719.0	428.0	11045.6
1977/78	283.2	343.9	440.1	769.9	1134.8	1425.9	1489.5	1237.9	1487.2	1160.6	898.8	571.3	11243.2
1978/79	393.9	400.6	529.2	1042.3	1274.7	1318.1	1448.6	1614.1	1533.6	1115.2	757.0	503.9	11931.2
1979/80	296.1	381.7	567.0	918.5	1038.6	1446.6	1575.3	1301.1	1435.7	1120.4	702.9	448.8	11232.6
1980/81	334.5	299.6	556.4	822.4	1215.0	1423.1	1314.6	1286.4	1312.4	1196.9	760.3	440.5	10962.2
1981/82	283.0	291.5	479.7	719.8	1059.0	1374.7	1665.1	1401.2	1467.3	1183.5	809.6	500.9	11235.3
1982/83	292.9	344.7	547.4	789.6	1286.2	1534.1	1541.4	1485.3	1450.6	1138.8	954.4	419.8	

TABLE 2.3

## POPULATION-WEIGHTED MONTHLY AND ANNUAL HEATING DEGREE-DAYS

## ALBERTA

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	ANNUAL
1939/40	52.1	66.2	236.9	507.2	490.1	680.6	1039.4	859.5	691.4	485.3	185.6	135.5	5429.7
1940/41	67.3	69.9	140.4	356.9	827.7	814.7	961.8	777.0	676.8	322.7	245.0	86.6	5346.8
1941/42	24.7	92.7	306.6	390.9	602.9	872.8	731.2	802.5	601.4	419.1	259.3	144.9	5248.9
1942/43	58.5	89.9	219.5	370.2	797.5	986.9	1129.9	692.0	850.7	342.1	288.1	172.1	5997.3
1943/44	45.7	77.0	188.7	346.6	514.6	685.6	783.0	810.8	761.5	319.8	188.7	127.7	4849.9
1944/45	66.3	89.9	188.6	291.0	675.1	816.9	901.5	788.9	616.4	558.7	279.1	144.8	5417.2
1945/46	45.4	69.7	258.4	382.7	863.0	979.3	873.3	815.7	562.0	335.8	263.1	145.3	5593.6
1946/47	47.9	99.0	222.8	460.6	783.8	957.6	900.2	908.9	765.8	408.7	248.7	138.6	5942.7
1947/48	26.0	128.0	245.2	353.5	689.7	792.0	763.4	986.7	845.4	606.1	202.2	73.2	5711.5
1948/49	44.2	83.3	191.8	355.8	612.7	1010.6	1044.8	1010.5	668.8	294.2	202.5	127.3	5646.6
1949/50	64.9	57.2	181.1	459.8	440.0	1062.1	1414.0	805.4	785.0	474.8	260.1	103.2	6107.7
1950/51	56.5	123.0	187.7	470.0	817.9	864.9	1063.1	864.5	911.0	451.5	217.2	193.6	6220.9
1951/52	58.3	138.4	263.6	536.6	682.1	1015.8	1121.8	777.2	792.0	313.0	197.1	131.8	6027.6
1952/53	75.6	94.3	179.9	338.0	563.0	747.0	1021.1	645.1	678.0	509.9	246.1	139.9	5237.8
1953/54	74.7	65.8	199.6	306.1	529.8	708.0	1228.8	617.7	753.2	643.5	273.1	157.5	5558.0
1954/55	59.5	106.4	231.6	391.3	478.9	688.7	837.1	821.4	857.7	455.2	284.3	92.9	5304.8
1955/56	66.9	75.6	253.4	386.8	966.6	1054.0	1099.4	909.2	732.1	479.3	193.3	109.0	6325.6
1956/57	53.2	74.4	228.1	447.5	524.6	860.8	1041.5	840.7	675.5	420.2	202.1	121.5	5490.2
1957/58	50.1	111.3	158.4	508.0	590.0	746.5	741.9	860.4	750.4	400.8	142.1	119.2	5179.3
1958/59	56.7	40.8	218.6	345.6	666.6	820.2	1091.3	818.3	543.3	404.6	307.2	124.2	5437.4
1959/60	37.5	136.9	256.3	454.9	693.4	652.1	948.0	808.2	758.0	384.4	264.5	136.4	5530.6
1960/61	29.3	86.9	193.3	353.8	682.4	773.2	778.5	695.2	612.1	458.2	210.8	31.8	4905.4
1961/62	40.3	29.6	288.4	432.7	690.3	1031.4	889.9	876.0	803.2	370.8	252.5	93.5	5798.6
1962/63	78.6	82.3	193.1	328.0	544.1	772.6	1007.6	677.1	603.3	401.9	258.7	100.7	5048.0
1963/64	38.3	51.5	113.4	292.3	697.1	859.9	851.4	581.3	812.3	417.6	227.9	94.2	5037.2
1964/65	34.1	95.4	282.9	321.4	696.6	1147.1	1021.2	830.5	822.0	435.4	260.2	135.0	6081.8
1965/66	33.0	59.5	365.2	304.9	747.6	885.4	1216.8	781.5	644.8	518.2	201.6	146.6	5905.1
1966/67	60.1	107.7	144.3	411.6	818.4	853.1	1001.9	745.9	843.3	550.7	266.8	137.5	5941.2
1967/68	46.0	33.6	96.8	378.9	602.4	858.2	1010.0	711.2	527.8	435.1	251.9	131.3	5083.2
1968/69	70.4	119.0	217.0	400.0	598.0	1047.2	1364.1	857.3	722.3	327.1	219.5	114.7	6056.4
1969/70	72.3	66.7	217.8	492.1	558.0	735.3	1050.3	661.3	725.9	438.1	224.0	55.0	5296.8
1970/71	37.3	58.1	232.8	429.0	775.7	1031.1	1085.2	697.4	734.3	390.1	175.2	110.7	5756.8
1971/72	69.2	20.5	243.7	410.9	644.7	1036.6	1101.0	954.2	660.3	443.0	199.1	79.3	5862.6
1972/73	100.2	43.5	333.8	458.9	622.5	990.3	851.1	754.9	566.4	439.1	185.2	110.5	5456.4
1973/74	49.3	89.6	208.5	403.0	906.8	863.4	1053.0	701.4	805.8	383.7	298.1	79.4	5842.0
1974/75	57.7	124.6	241.1	321.1	580.3	685.9	872.1	875.2	766.4	519.2	253.4	122.9	5419.9
1975/76	26.7	119.2	175.4	412.5	650.4	845.3	841.4	705.9	677.1	322.4	172.5	150.0	5098.7
1976/77	41.4	46.9	136.1	416.3	562.6	775.9	880.7	486.9	604.3	304.3	212.3	78.2	4545.8
1977/78	77.9	141.7	234.7	373.9	694.2	1024.2	1068.8	826.3	638.5	400.3	241.8	84.2	5806.6
1978/79	47.4	107.7	206.4	334.8	713.9	897.6	1030.2	1057.0	604.2	505.7	288.6	106.4	5900.0
1979/80	43.4	60.4	140.8	324.8	570.7	763.3	1007.5	746.5	713.8	271.7	178.1	95.9	4917.0
1980/81	48.1	135.8	224.6	327.3	527.3	965.4	661.6	651.5	515.2	385.1	194.9	131.9	4768.6
1981/82	57.6	29.9	169.5	406.2	510.6	845.8	1225.0	865.7	746.3	494.1	249.7	86.1	5686.6
1982/83	51.3	103.9	193.6	365.6	748.7	789.0	803.3	659.9	661.2	396.4	246.5	109.2	5128.5
1983/84	41.9	28.2	250.1	372.1	619.5	1125.7	761.4	542.5	625.8	346.1	270.4	109.4	5093.1

MEAN      53.0      82.9      214.7      389.6      657.2      876.0      981.6      781.4      704.7      421.9      233.1      116.0      5512.0

TABLE 2.4

POPULATION-WEIGHTED MONTHLY AND ANNUAL HEATING DEGREE-DAYS

## SASKATCHEWAN

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	ANNUAL
1939/40	14.7	43.0	187.2	494.4	540.4	731.2	1101.9	872.2	768.4	489.7	149.6	102.9	5495.6
1940/41	33.5	38.5	105.4	309.5	813.6	885.8	1030.4	878.3	754.1	392.4	189.9	70.0	5501.3
1941/42	13.3	55.0	245.2	391.2	635.7	874.6	857.9	862.7	671.8	414.5	259.7	127.7	5409.4
1942/43	46.0	65.0	231.4	371.1	777.3	1051.6	1237.3	829.9	944.8	374.7	309.5	143.4	6382.2
1943/44	14.9	39.4	198.1	320.8	602.0	799.0	842.1	925.3	920.2	372.9	170.4	115.4	5320.5
1944/45	40.1	63.9	168.0	303.2	707.7	930.0	1016.6	883.3	638.7	557.4	331.6	161.8	5802.4
1945/46	43.0	48.3	260.9	399.0	841.7	1049.7	1013.4	941.3	623.1	330.2	291.1	119.6	5961.2
1946/47	24.1	69.1	215.2	487.8	806.6	1057.7	1013.9	1005.5	878.4	478.8	301.4	115.2	6453.7
1947/48	14.5	59.8	241.0	318.6	784.9	981.5	997.1	1054.4	942.8	610.2	203.6	73.8	6282.3
1948/49	28.2	29.2	128.3	368.0	679.5	1069.2	1166.3	1071.5	775.3	312.4	200.7	109.0	5937.8
1949/50	42.0	30.7	207.6	467.4	517.4	1111.7	1490.1	934.1	896.3	558.3	277.9	119.3	6652.9
1950/51	54.2	90.0	189.4	417.3	820.6	1014.6	1175.6	961.3	1027.4	519.8	196.0	171.5	6637.7
1951/52	49.4	108.5	247.8	507.0	786.0	1113.6	1191.8	872.0	872.4	310.9	214.0	115.8	6389.3
1952/53	59.4	74.8	172.3	414.0	631.2	851.7	1036.2	818.6	802.4	532.8	287.5	117.5	5798.6
1953/54	43.0	32.0	196.1	310.6	548.7	835.9	1287.9	643.0	849.4	628.2	318.9	144.0	5837.6
1954/55	37.5	73.5	235.0	405.6	531.4	766.6	1005.4	961.5	977.2	404.9	253.9	87.4	5739.6
1955/56	39.6	38.4	242.0	382.9	942.3	1121.0	1118.7	1003.6	871.0	563.4	229.9	54.5	6607.2
1956/57	47.5	58.2	232.7	412.5	652.2	968.7	1162.9	913.9	785.9	480.6	194.7	105.8	6015.6
1957/58	17.0	71.8	186.9	460.9	663.4	867.8	859.5	925.6	752.0	392.2	177.8	140.1	5514.8
1958/59	52.5	43.0	204.7	380.7	730.8	966.0	1181.7	942.6	616.4	432.8	290.7	81.8	5923.6
1959/60	21.0	67.7	237.6	522.3	778.5	770.8	1107.7	930.0	868.4	449.3	222.8	116.7	6092.9
1960/61	16.4	42.8	162.0	385.2	730.0	899.0	972.6	803.8	679.7	504.1	229.0	34.1	5458.7
1961/62	33.1	15.3	287.8	419.8	707.8	1136.3	1075.1	1013.4	870.3	420.5	253.1	54.1	6286.5
1962/63	49.6	55.6	202.5	338.2	559.0	894.0	1174.9	873.4	694.5	413.6	275.4	93.0	5623.7
1963/64	15.1	25.6	120.9	255.7	664.6	980.5	947.8	769.1	927.8	404.3	205.2	99.7	5416.4
1964/65	12.1	84.5	262.3	369.9	719.7	1180.9	1178.1	976.8	990.4	453.4	268.2	93.1	6589.4
1965/66	27.6	61.5	368.1	340.3	804.4	906.7	1340.2	966.1	702.9	535.8	237.0	116.9	6407.4
1966/67	31.9	75.5	144.7	418.2	864.4	953.3	1094.5	959.4	880.1	584.1	277.4	115.0	6398.5
1967/68	36.2	38.5	102.5	427.6	670.8	959.9	1092.7	864.1	592.9	432.3	256.6	108.0	5582.1
1968/69	52.9	113.7	189.1	406.4	625.2	1062.7	1354.9	916.6	888.3	365.9	240.9	158.2	6374.8
1969/70	48.7	35.0	194.4	548.5	636.1	842.2	1141.5	878.9	919.2	486.5	286.5	46.7	6064.3
1970/71	24.6	54.6	221.8	445.0	757.2	1122.3	1224.2	857.0	828.7	445.2	198.5	82.1	6261.3
1971/72	72.3	23.2	210.7	433.9	691.7	1092.3	1245.3	1080.8	781.3	447.8	183.0	61.2	6323.3
1972/73	88.1	35.0	314.0	504.2	680.0	1119.7	918.3	837.2	573.6	475.6	221.6	94.6	5862.0
1973/74	31.5	33.0	219.0	376.6	882.7	1026.7	1221.2	892.6	928.0	477.6	335.0	81.2	6504.9
1974/75	23.7	118.4	272.8	366.6	633.8	773.7	1014.9	953.1	894.0	551.8	257.0	105.0	5964.9
1975/76	11.2	102.3	218.3	404.6	666.1	959.2	1008.4	795.8	826.6	355.6	180.4	90.6	5619.2
1976/77	26.5	36.3	155.7	475.6	710.2	960.9	1174.9	663.2	651.5	325.4	134.8	74.8	5389.8
1977/78	42.0	144.0	217.3	368.1	739.1	1121.0	1244.4	958.8	732.6	423.2	181.5	76.2	6248.4
1978/79	48.0	82.6	180.3	369.3	818.8	1053.7	1226.1	1125.4	800.0	594.1	312.8	81.0	6692.1
1979/80	17.1	67.1	153.9	391.0	622.0	847.8	1113.3	915.0	845.2	281.4	155.4	85.9	5495.1
1980/81	27.1	89.1	216.1	389.0	600.7	1020.2	878.7	759.5	571.3	387.8	203.6	113.6	5256.7
1981/82	25.1	12.2	173.2	456.6	540.0	972.6	1367.0	943.3	829.1	509.2	266.1	102.0	6196.4
1982/83	30.5	83.3	217.8	407.8	773.5	919.1	922.0	782.7	765.6	479.5	297.1	93.8	5772.7
1983/84	21.5	12.9	246.7	384.8	627.8	1240.1	938.8	643.7	740.4	335.1	264.1	76.1	5531.8
MEAN	34.4	58.7	208.5	402.8	700.4	974.7	1105.9	899.1	803.3	451.0	239.8	100.7	5979.5

TABLE 2.5

## POPULATION-WEIGHTED MONTHLY AND ANNUAL HEATING DEGREE-DAYS

## MANITOBA

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	ANNUAL
1939/40	6.9	25.1	170.1	483.8	550.5	748.5	1069.5	883.4	794.8	463.4	203.9	96.6	5496.4
1940/41	19.9	40.5	87.7	277.8	749.0	901.2	1054.0	919.3	797.7	389.5	164.3	65.8	5466.8
1941/42	14.8	59.3	191.9	388.6	690.6	895.2	902.5	925.6	656.6	406.7	270.7	80.8	5483.2
1942/43	40.2	52.8	227.0	329.5	745.1	1095.4	1239.6	899.2	934.2	407.2	292.2	120.5	6383.0
1943/44	3.6	30.0	190.5	303.8	642.5	876.2	865.6	987.8	900.0	391.8	172.0	93.2	5457.0
1944/45	26.7	51.9	161.9	327.5	625.0	931.6	1040.2	883.4	613.2	509.0	347.6	131.7	5649.6
1945/46	37.9	34.7	235.1	403.9	780.5	1081.7	1064.0	1040.2	678.2	371.9	242.8	91.6	6062.5
1946/47	13.8	43.8	187.6	450.7	680.0	936.9	1002.2	1015.9	828.0	504.3	315.7	91.5	6070.2
1947/48	19.1	31.5	211.4	262.4	752.5	1028.7	1100.5	1035.6	905.9	527.9	209.4	70.9	6155.9
1948/49	11.4	20.8	77.9	310.2	646.3	1013.1	1136.7	1090.0	829.0	363.3	217.7	69.2	5785.7
1949/50	33.7	25.3	191.7	413.4	572.1	1066.7	1410.7	994.7	907.1	590.0	282.0	122.7	6610.0
1950/51	50.4	88.1	162.8	356.9	788.1	1090.0	1169.6	910.9	907.2	472.9	172.8	121.6	6291.4
1951/52	43.8	74.0	222.2	447.1	773.1	1057.7	1163.0	853.1	824.3	292.5	206.6	61.2	6018.7
1952/53	25.8	51.5	144.2	419.0	618.8	839.7	1080.9	904.7	782.5	494.0	253.4	86.9	5701.5
1953/54	26.3	19.4	194.3	278.3	539.8	895.7	1289.2	692.5	832.3	556.0	322.5	91.3	5737.6
1954/55	18.1	45.8	204.9	387.3	565.4	813.3	1093.6	996.0	1001.6	315.0	194.8	62.9	5698.7
1955/56	16.2	11.6	188.4	350.6	839.6	1138.5	1108.9	1009.4	898.5	578.0	283.5	24.0	6447.4
1956/57	32.8	38.3	236.7	332.1	636.8	1000.2	1205.0	935.0	776.7	445.2	195.1	110.4	5944.4
1957/58	3.1	52.1	197.7	349.5	673.4	905.6	944.6	932.7	671.5	385.2	202.9	132.5	5450.8
1958/59	40.0	53.0	170.2	344.9	682.7	1084.9	1215.8	982.5	731.5	450.7	270.5	69.3	6095.9
1959/60	13.6	25.4	187.9	503.1	809.0	782.4	1104.0	946.1	906.1	488.1	192.4	83.8	6041.8
1960/61	22.6	20.6	151.6	356.9	682.4	1014.2	1079.9	823.9	706.5	510.8	237.7	37.9	5645.0
1961/62	18.8	10.5	230.9	371.2	658.9	1108.2	1186.3	1066.3	823.8	531.4	239.0	39.0	6284.0
1962/63	29.9	36.6	190.6	311.9	597.4	952.3	1198.2	985.0	755.3	412.1	263.7	51.3	5784.2
1963/64	10.9	24.4	126.7	184.6	618.3	1053.6	1016.5	878.4	963.6	412.1	195.7	108.7	5593.5
1964/65	8.7	84.8	224.4	361.6	692.4	1150.7	1230.9	1022.5	994.2	447.8	259.2	67.6	6544.8
1965/66	38.4	74.2	308.6	343.4	771.9	875.5	1396.9	1030.3	741.0	521.5	302.1	81.4	6485.3
1966/67	7.5	48.1	145.2	409.7	846.6	1051.1	1118.3	1092.9	853.2	568.9	312.3	89.7	6543.5
1967/68	35.2	64.7	99.3	425.9	661.1	935.9	1136.4	1009.0	675.1	438.7	275.3	99.3	5855.9
1968/69	48.6	98.8	148.3	393.7	634.8	1039.4	1265.4	912.0	897.1	374.1	258.6	177.7	6248.4
1969/70	35.2	14.0	190.0	496.6	653.5	882.1	1173.0	947.8	953.2	512.8	281.5	38.0	6177.6
1970/71	16.4	44.3	182.3	388.3	696.6	1131.6	1156.9	890.5	789.1	451.9	243.0	48.1	6039.0
1971/72	63.8	35.7	163.2	376.9	720.5	1042.2	1253.9	1091.5	813.9	458.3	155.8	59.7	6235.4
1972/73	62.6	56.6	254.5	484.0	742.1	1169.2	989.1	915.5	561.0	495.4	234.1	86.7	6050.9
1973/74	27.5	15.1	193.3	331.5	786.0	1072.4	1268.6	1004.4	925.9	499.0	315.2	75.1	6514.0
1974/75	6.4	79.0	256.3	381.6	639.5	829.1	1067.7	971.5	907.3	495.1	206.1	83.8	5923.2
1975/76	12.8	73.6	220.9	362.8	605.0	1004.0	1119.4	870.2	871.6	371.0	201.7	54.4	5767.4
1976/77	19.6	37.0	167.8	475.5	715.5	1122.3	1201.1	819.1	661.6	332.8	78.3	60.6	5691.2
1977/78	18.5	126.1	185.3	326.6	688.4	1118.1	1224.4	996.3	810.9	455.7	133.5	95.1	6179.1
1978/79	37.5	77.1	148.9	366.5	793.0	1106.5	1252.0	1144.4	802.4	576.2	338.1	84.9	6727.5
1979/80	13.8	75.3	170.7	427.5	685.5	867.8	1148.1	984.4	873.2	317.3	149.8	86.4	5799.9
1980/81	16.2	53.6	217.9	433.7	610.9	1050.7	974.8	783.5	597.7	428.1	236.9	76.8	5480.8
1981/82	18.0	15.5	178.4	407.1	518.5	966.2	1356.4	922.8	800.6	477.6	181.0	137.1	5979.1
1982/83	12.3	81.2	196.0	377.3	734.8	894.1	961.2	822.5	744.4	483.3	322.2	75.0	5704.2
1983/84	13.5	8.2	191.2	385.5	597.3	1195.5	1064.4	706.6	782.6	334.6	274.4	60.8	5614.4
MEAN	24.3	47.3	186.3	375.6	682.5	995.9	1135.6	945.1	810.7	451.3	238.0	83.4	5975.9

TABLE 2.6

## POPULATION-WEIGHTED MONTHLY AND ANNUAL HEATING DEGREE-DAYS

ONTARIO

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	ANNUAL
1939/40	12.7	5.9	116.0	297.2	511.3	636.6	882.2	724.8	714.8	426.2	190.5	67.8	4586.0
1940/41	20.5	37.5	94.9	318.2	502.6	681.3	819.3	699.5	690.0	275.1	147.5	28.7	4315.1
1941/42	6.7	38.6	86.9	266.4	434.0	645.1	781.4	731.4	533.7	287.3	162.4	35.9	4009.8
1942/43	18.6	24.1	124.3	258.0	478.5	785.0	878.8	681.1	668.8	457.5	191.6	39.6	4605.9
1943/44	6.3	24.5	135.2	291.6	493.3	746.6	687.3	721.7	685.3	430.6	117.2	48.9	4388.5
1944/45	8.7	17.6	91.6	285.9	453.6	766.9	943.0	674.1	427.5	318.4	267.2	91.0	4345.4
1945/46	19.6	21.2	108.1	306.2	468.0	775.4	772.7	745.0	424.6	364.8	205.4	75.5	4286.5
1946/47	13.3	38.8	81.9	214.7	428.4	687.8	743.7	738.7	635.0	416.9	235.0	66.0	4300.1
1947/48	14.3	12.5	111.1	143.3	483.1	733.1	874.0	757.5	619.5	314.7	204.1	47.9	4315.0
1948/49	5.9	11.8	57.6	293.5	361.7	633.2	697.1	629.9	615.3	346.5	159.2	33.0	3844.5
1949/50	8.0	13.4	128.9	204.6	511.2	642.5	674.6	711.4	695.4	449.2	176.7	56.6	4272.4
1950/51	18.1	27.4	115.1	234.0	486.2	718.9	746.6	654.7	569.8	347.9	141.1	41.9	4101.8
1951/52	9.9	25.9	104.8	252.8	550.4	700.1	739.6	653.5	607.3	293.5	191.9	33.0	4162.6
1952/53	8.3	17.5	86.5	340.4	421.6	599.5	695.3	598.8	531.1	339.3	155.7	42.3	3836.4
1953/54	16.1	14.6	106.6	229.0	387.0	606.8	842.1	565.8	622.8	347.4	207.9	34.6	3980.8
1954/55	13.8	25.4	105.0	240.9	437.6	692.0	788.3	667.9	625.5	264.5	126.2	23.7	4010.8
1955/56	4.2	8.5	102.3	229.4	491.4	765.6	755.1	674.2	662.1	412.3	257.8	54.7	4417.6
1956/57	17.4	26.9	161.8	223.0	444.3	654.2	865.2	623.6	554.0	328.6	202.5	44.0	4145.5
1957/58	10.6	31.9	97.0	282.5	390.1	612.3	750.7	748.7	527.1	313.2	208.9	92.6	4065.6
1958/59	13.7	27.8	88.6	264.7	434.9	830.9	834.9	741.9	636.8	352.2	154.4	42.0	4422.7
1959/60	4.1	8.8	82.6	288.8	516.7	647.3	754.0	675.1	742.3	345.3	142.3	40.8	4248.1
1960/61	16.5	14.0	64.9	265.1	404.9	756.6	861.5	616.4	578.5	406.8	215.7	60.8	4261.7
1961/62	14.6	15.1	62.0	207.7	446.5	674.6	829.7	755.6	573.7	358.9	127.0	30.6	4096.0
1962/63	14.9	16.1	125.7	251.4	473.4	734.5	862.6	794.4	586.0	344.0	205.1	41.9	4449.9
1963/64	12.6	33.8	138.0	153.3	378.1	817.1	696.0	689.7	597.2	360.1	125.3	65.0	4066.1
1964/65	6.3	48.5	110.5	298.0	428.2	676.7	803.8	701.2	647.5	412.6	127.7	58.1	4319.2
1965/66	30.4	42.2	98.1	305.3	470.9	592.6	825.2	651.7	548.5	381.4	246.6	45.0	4237.9
1966/67	6.3	16.5	114.0	287.9	431.2	690.4	683.3	770.6	636.1	365.6	268.7	15.8	4286.3
1967/68	21.9	24.0	106.6	273.3	510.4	631.8	841.6	762.7	541.1	290.1	200.7	74.3	4122.6
1968/69	11.8	10.0	95.7	279.3	442.2	729.2	883.7	715.2	629.7	335.1	173.3	43.0	4348.1
1969/70	7.4	16.1	83.8	216.1	411.4	738.0	856.5	650.2	647.3	395.7	173.6	33.2	4229.4
1970/71	13.6	25.9	57.5	153.3	464.7	620.6	757.8	752.6	672.6	425.8	124.0	64.0	4132.3
1971/72	20.0	25.5	80.0	334.5	494.9	682.0	708.9	720.8	456.6	345.2	208.0	31.4	4107.8
1972/73	7.9	9.0	105.0	204.8	441.9	696.8	746.9	732.9	616.3	332.8	235.2	44.5	4174.0
1973/74	11.0	12.8	132.8	323.2	445.1	605.8	696.1	632.5	644.2	450.0	93.2	31.1	4077.9
1974/75	8.7	16.6	126.1	234.4	348.2	720.1	859.2	613.7	567.7	312.4	205.3	21.6	4034.1
1975/76	15.5	29.0	115.6	342.9	533.7	817.6	918.5	677.0	490.0	311.8	117.7	60.1	4429.2
1976/77	11.7	35.9	89.3	283.6	421.8	710.3	852.9	776.4	674.0	407.1	156.6	63.7	4483.4
1977/78	16.1	18.3	110.7	290.0	461.7	673.7	818.2	827.1	524.7	375.8	190.0	51.3	4357.6
1978/79	12.7	32.6	101.0	298.7	397.0	618.0	744.3	751.5	614.6	339.0	133.9	100.2	4143.4
1979/80	7.1	6.7	109.4	338.7	493.9	783.3	880.5	566.0	543.6	323.1	179.6	34.4	4266.2
1980/81	8.9	11.3	119.8	340.0	432.7	651.1	895.4	709.0	613.2	404.3	100.7	67.9	4354.2
1981/82	9.5	44.3	100.7	246.0	421.8	559.6	711.9	609.0	542.3	375.2	232.8	48.4	3901.6
1982/83	7.5	7.6	77.3	264.4	446.8	770.5	855.3	569.6	699.4	315.3	223.6	30.3	4267.7
MEAN	12.5	22.3	101.3	264.1	452.3	694.1	797.2	691.0	601.2	358.4	180.5	49.1	4223.8

TABLE 2.7

## POPULATION-WEIGHTED MONTHLY AND ANNUAL HEATING DEGREE-DAYS

## QUEBEC

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	ANNUAL
1939/40	26.2	14.9	168.1	352.4	575.2	755.8	943.1	800.6	721.1	463.6	206.6	77.1	5104.7
1940/41	27.8	52.6	131.3	368.4	546.7	804.3	933.3	724.8	725.7	333.1	195.1	70.4	4913.5
1941/42	19.0	69.4	140.2	350.4	518.9	751.6	912.5	769.7	577.4	370.7	140.7	62.7	4683.0
1942/43	29.7	36.6	138.4	293.8	529.5	885.9	980.0	757.0	746.6	524.8	221.3	79.1	5222.8
1943/44	26.1	44.1	160.5	314.5	528.5	871.8	812.4	823.1	733.0	467.4	151.6	74.8	5007.8
1944/45	19.2	26.1	116.7	340.2	490.4	851.3	989.9	736.7	527.9	320.7	258.9	88.0	4766.0
1945/46	23.7	33.6	136.1	361.2	536.9	833.4	910.8	861.8	524.3	430.9	240.9	98.2	4991.9
1946/47	39.5	55.9	104.5	273.4	514.0	805.5	885.1	760.9	640.4	522.7	282.8	100.4	4985.1
1947/48	13.8	30.9	164.2	213.0	528.6	842.0	954.6	884.8	714.6	412.4	223.8	90.0	5072.8
1948/49	19.6	27.6	105.9	329.4	413.3	702.8	810.0	741.9	686.9	375.3	197.6	49.5	4459.8
1949/50	14.7	28.6	152.3	256.2	594.8	720.0	812.6	840.4	769.8	449.8	196.9	77.0	4913.0
1950/51	29.0	50.8	190.4	315.2	474.7	750.9	844.8	741.1	630.3	374.2	192.8	76.7	4671.0
1951/52	24.3	55.4	143.7	305.3	580.4	797.6	877.6	724.7	638.6	374.8	233.6	51.5	4807.6
1952/53	12.8	32.7	128.6	380.4	493.0	715.8	809.9	698.6	619.2	374.4	185.4	64.8	4515.7
1953/54	24.6	49.9	146.0	295.8	431.7	683.3	989.4	656.8	679.9	433.4	231.3	71.9	4693.9
1954/55	41.6	52.2	169.6	296.4	498.3	765.2	916.5	750.3	705.5	372.6	160.0	40.6	4768.7
1955/56	11.0	23.4	151.9	298.8	523.6	887.0	773.8	757.0	755.7	435.6	300.4	80.0	4998.2
1956/57	41.5	58.5	198.6	295.0	507.3	793.0	989.3	725.5	617.0	384.4	224.2	72.4	4906.7
1957/58	27.8	68.4	129.2	283.5	470.5	695.8	798.3	798.6	548.9	360.5	243.9	123.7	4549.2
1958/59	26.2	40.6	128.2	334.7	498.6	838.9	893.9	865.7	713.1	396.0	168.3	77.4	4981.6
1959/60	8.5	26.2	109.7	333.3	540.0	739.6	878.0	683.0	719.6	409.6	121.8	51.6	4620.8
1960/61	24.8	31.6	118.0	323.6	443.9	805.0	998.5	743.1	684.5	405.2	236.3	69.9	4884.3
1961/62	23.6	31.5	78.5	260.9	467.4	707.8	915.0	849.6	585.7	413.0	190.2	50.0	4573.0
1962/63	42.6	30.7	156.1	316.9	534.2	784.9	825.2	831.1	689.5	399.0	209.3	53.0	4872.5
1963/64	27.6	66.1	184.7	213.6	435.2	927.1	782.4	755.4	634.6	387.0	156.6	76.7	4646.9
1964/65	23.1	62.3	143.8	335.4	520.0	752.8	917.3	782.3	647.8	413.9	171.5	68.0	4838.4
1965/66	40.8	58.0	139.1	344.8	567.5	720.4	860.3	726.9	603.6	406.3	255.5	62.8	4786.0
1966/67	24.4	33.3	168.0	315.8	445.1	751.8	790.9	875.3	740.6	440.5	297.8	38.7	4922.5
1967/68	12.1	31.2	125.3	314.3	546.8	736.1	988.3	862.0	612.1	318.6	197.1	83.7	4827.5
1968/69	26.3	74.0	70.9	252.9	559.7	819.9	812.7	685.3	665.1	434.7	246.5	74.0	4722.1
1969/70	29.4	30.7	158.9	332.5	472.4	779.2	1024.1	792.1	671.2	405.9	217.8	73.7	4987.9
1970/71	19.4	38.9	143.1	262.8	473.5	896.3	978.3	752.3	691.6	448.3	200.6	71.1	4976.1
1971/72	31.3	55.5	97.1	243.2	558.6	814.1	868.4	876.3	752.1	464.6	196.2	84.1	5041.6
1972/73	32.8	59.7	132.8	403.6	565.6	853.9	841.0	794.1	508.7	391.6	222.0	58.0	4863.7
1973/74	17.0	39.9	161.8	321.9	545.9	756.9	904.0	813.2	715.0	420.5	281.7	50.8	5028.6
1974/75	20.3	26.5	174.1	366.5	532.6	702.2	855.3	752.3	703.6	469.4	133.0	58.5	4794.3
1975/76	16.1	36.3	155.2	331.1	473.2	816.8	1024.6	777.7	688.5	369.5	225.8	45.6	4960.4
1976/77	23.2	53.2	171.7	377.4	746.6	916.9	966.2	738.8	540.8	404.6	174.0	85.2	5198.6
1977/78	35.4	58.4	169.8	332.3	473.1	800.7	938.2	829.1	740.2	455.4	163.8	78.6	5074.8
1978/79	31.4	46.2	200.7	363.5	558.2	801.4	855.7	894.9	560.8	381.5	180.6	69.5	4944.3
1979/80	25.7	64.0	159.3	323.4	455.3	728.4	855.3	820.2	655.3	370.1	192.6	107.1	4756.9
1980/81	31.9	24.7	183.7	393.5	570.6	944.0	1045.0	580.7	592.4	371.0	196.7	65.6	4999.7
1981/82	26.1	44.5	161.8	395.6	528.1	735.7	1065.8	807.6	690.5	462.0	166.3	91.8	5175.7
1982/83	35.7	86.3	147.4	309.5	483.3	700.7	844.7	720.7	616.9	419.4	236.6	71.9	4673.2
1983/84	25.8	36.2	112.9	333.5	522.0	846.8	983.1	665.7	794.3	387.8	259.5	82.7	5050.3
MEAN	25.6	44.4	145.1	319.1	517.2	790.9	903.5	774.0	661.8	409.5	208.6	72.2	4871.8

TABLE 2.8

## POPULATION-WEIGHTED MONTHLY AND ANNUAL HEATING DEGREE-DAYS

## NEW BRUNSWICK

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	ANNUAL
1939/40	27.0	14.4	164.1	345.8	543.3	715.8	907.7	755.4	671.8	471.6	249.1	118.8	4984.9
1940/41	26.3	59.6	150.4	396.7	512.3	808.3	895.1	678.5	693.4	416.3	263.5	138.5	5038.7
1941/42	31.3	76.6	167.1	350.9	504.6	714.7	650.9	741.3	568.7	415.6	189.5	86.7	4497.8
1942/43	34.0	42.5	127.1	292.3	533.6	850.6	922.5	696.0	699.7	492.4	286.9	133.0	5110.6
1943/44	35.0	56.2	147.1	286.9	497.7	737.1	783.2	792.3	695.9	459.5	207.4	119.5	4818.0
1944/45	23.1	29.2	101.7	343.0	452.8	772.2	848.5	731.0	577.1	377.8	292.8	133.7	4682.9
1945/46	24.0	33.3	145.4	356.9	512.7	762.6	853.8	792.2	550.3	480.4	256.5	110.1	4878.3
1946/47	50.0	49.6	105.7	281.3	505.9	786.4	859.6	681.4	640.4	523.9	281.4	151.2	4916.9
1947/48	9.4	55.1	165.9	274.4	492.1	793.9	892.8	903.5	752.4	466.0	266.9	134.4	5206.8
1948/49	30.3	32.9	148.3	340.4	432.9	693.2	785.7	753.1	646.1	407.0	260.4	89.0	4619.2
1949/50	23.8	39.0	154.7	297.7	558.1	678.5	792.2	817.3	717.8	439.7	230.3	100.9	4850.1
1950/51	34.0	46.2	204.3	329.4	399.9	631.5	758.3	665.1	605.6	365.9	244.0	116.0	4400.2
1951/52	17.2	30.1	120.1	312.1	505.1	767.7	827.3	710.1	623.4	407.4	283.0	82.5	4686.0
1952/53	7.6	25.2	140.0	349.2	498.4	680.5	736.3	661.3	622.6	385.3	256.1	104.7	4467.2
1953/54	20.9	59.1	123.8	312.3	412.3	623.4	885.0	616.8	638.8	445.4	282.4	105.9	4526.1
1954/55	41.4	59.0	173.8	299.0	470.3	662.8	775.8	689.3	680.3	432.1	268.9	122.9	4675.7
1955/56	16.0	37.4	171.3	322.6	503.1	839.0	657.9	771.8	743.0	457.2	339.9	115.5	4974.7
1956/57	50.1	78.0	189.6	316.5	467.3	739.0	994.6	681.4	595.2	422.7	251.2	101.5	4887.0
1957/58	44.9	65.2	143.0	294.7	448.7	619.6	704.0	724.9	555.7	389.7	260.2	150.1	4400.6
1958/59	31.7	40.6	163.2	363.7	514.6	921.6	830.9	819.7	682.0	412.5	215.8	130.8	5127.3
1959/60	17.7	40.9	122.3	330.1	482.8	695.4	809.9	614.3	677.9	441.5	184.9	79.2	4497.0
1960/61	16.1	26.0	141.6	349.5	462.7	736.4	956.9	776.1	708.4	476.1	263.7	86.3	4999.7
1961/62	35.7	33.9	82.8	278.3	441.0	662.1	853.4	842.9	579.5	436.5	282.1	106.0	4634.2
1962/63	97.2	49.6	171.8	327.4	492.4	742.8	775.7	832.5	727.5	480.9	258.6	108.2	5064.7
1963/64	17.2	74.0	205.9	278.7	427.3	882.5	815.3	745.7	664.9	458.0	250.0	121.2	4940.7
1964/65	41.1	74.0	191.5	345.6	539.7	742.6	893.4	761.0	643.3	464.6	278.2	106.3	5081.4
1965/66	38.1	64.2	175.2	368.9	576.7	767.0	735.9	720.0	573.4	455.3	279.6	94.9	4849.2
1966/67	31.0	34.6	185.5	323.7	437.9	669.0	792.8	830.1	791.7	516.6	363.0	74.8	5050.8
1967/68	13.7	21.0	129.6	309.8	493.5	736.2	919.4	836.3	634.5	393.4	278.6	119.6	4885.6
1968/69	19.2	77.8	103.5	262.8	547.7	702.6	770.7	657.0	649.9	465.7	284.7	71.3	4613.1
1969/70	46.5	37.9	149.3	361.1	450.9	649.1	937.6	715.1	622.2	446.2	241.8	103.1	4760.8
1970/71	25.2	33.9	172.2	291.7	477.3	852.0	918.7	735.1	621.9	430.7	216.2	115.9	4890.7
1971/72	27.5	49.8	127.8	280.8	523.3	809.1	850.4	828.9	742.6	502.1	254.7	95.7	5092.6
1972/73	35.5	44.3	137.8	382.4	560.0	844.5	833.9	737.4	585.3	432.9	281.6	72.7	4948.3
1973/74	8.4	22.1	172.5	330.1	531.5	606.2	871.2	752.6	662.1	456.5	339.9	66.3	4819.2
1974/75	27.4	32.2	168.6	401.4	497.6	687.8	833.9	788.4	678.1	485.0	242.7	89.0	4932.3
1975/76	14.9	42.2	136.5	328.0	448.9	792.9	909.3	725.8	658.8	426.6	241.7	72.6	4798.1
1976/77	35.5	38.6	153.8	364.1	554.9	840.4	904.4	732.6	567.2	458.6	255.1	129.7	5034.8
1977/78	27.5	42.9	172.9	318.3	453.5	720.1	856.9	747.7	697.2	484.3	222.7	92.0	4835.9
1978/79	33.1	39.3	217.8	355.4	553.5	762.6	771.7	780.2	556.9	409.1	195.5	76.7	4751.7
1979/80	19.4	59.8	152.4	310.4	424.9	702.6	806.6	785.5	672.8	403.4	268.4	120.6	4726.7
1980/81	38.8	21.3	191.1	370.4	517.2	850.8	942.1	574.4	586.4	411.9	232.7	87.8	4825.0
1981/82	20.6	46.9	161.8	350.7	485.0	635.6	951.4	773.9	668.5	463.3	262.7	115.4	4935.9
1982/83	27.6	85.6	138.7	323.5	455.7	664.9	772.7	713.2	592.0	392.6	262.1	79.5	4508.0
1983/84	22.8	30.3	107.3	309.8	460.1	746.6	881.6	631.1	712.6	455.8	248.1	112.0	4717.8
MEAN	29.2	45.6	152.8	327.1	490.3	740.0	838.4	740.5	649.7	442.6	259.5	105.4	4820.9

TABLE 2.9

POPULATION-WEIGHTED MONTHLY AND ANNUAL HEATING DEGREE-D AYS

## NOVA SCOTIA

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	ANNUAL
1939/40	31.9	17.7	137.1	277.1	484.2	616.3	800.9	703.3	617.9	468.2	264.2	149.1	4567.9
1940/41	39.4	65.1	117.4	358.7	437.4	661.0	793.7	650.7	679.9	441.0	307.9	153.9	4706.0
1941/42	33.7	97.1	185.4	339.7	455.2	636.8	760.8	690.8	553.5	428.8	215.8	118.8	4516.2
1942/43	31.6	51.5	102.0	268.0	473.5	762.2	871.1	626.1	630.8	475.0	292.7	177.8	4762.3
1943/44	35.3	55.5	115.7	261.5	432.6	738.5	699.2	699.0	647.5	451.3	225.8	129.1	4490.9
1944/45	27.1	26.4	91.9	282.3	391.7	627.6	688.8	645.6	548.9	369.0	306.7	157.0	4163.1
1945/46	22.4	22.9	110.2	294.3	430.4	667.8	728.2	680.1	518.7	465.0	258.0	132.4	4330.4
1946/47	49.9	36.0	85.8	242.6	437.3	623.6	714.5	588.0	573.8	465.0	252.5	152.1	4221.1
1947/48	9.6	31.0	114.1	236.8	423.7	671.7	732.8	783.9	688.7	463.7	293.4	153.2	4602.7
1948/49	41.3	30.8	130.6	276.4	381.3	586.7	660.8	634.4	570.0	397.1	268.6	99.1	4077.2
1949/50	21.2	27.7	110.4	254.8	433.9	556.1	683.8	721.8	666.5	445.3	254.4	118.1	4294.1
1950/51	36.7	39.0	169.8	290.4	344.5	515.3	617.1	558.9	539.0	355.9	255.4	136.0	3858.0
1951/52	12.7	19.5	97.8	262.0	406.7	625.4	675.1	612.1	582.9	388.6	293.8	100.4	4076.9
1952/53	10.8	22.0	113.2	279.4	423.4	592.9	615.3	572.9	564.9	362.7	283.1	115.6	3956.2
1953/54	23.0	54.7	107.7	261.3	360.0	508.1	721.5	548.2	579.6	437.1	275.1	116.8	3993.0
1954/55	36.7	55.5	133.5	253.7	408.7	526.3	652.7	612.5	598.5	434.0	273.8	138.3	4124.3
1955/56	34.0	30.2	136.8	281.2	440.4	717.5	575.4	663.9	681.2	450.4	345.5	125.3	4481.7
1956/57	51.6	61.9	159.6	278.1	396.4	608.5	834.5	625.7	584.2	426.8	278.6	115.7	4421.6
1957/58	50.0	54.9	107.4	268.3	374.2	505.5	588.4	610.9	534.4	374.1	267.6	154.9	3890.5
1958/59	34.6	27.4	136.1	308.9	430.8	763.5	733.0	733.5	616.6	417.6	250.3	152.5	4604.9
1959/60	25.7	34.4	102.4	281.9	383.6	577.0	699.9	561.8	619.0	423.5	201.8	89.8	4000.8
1960/61	26.9	21.2	100.8	300.7	397.3	619.6	792.6	696.4	658.5	466.8	280.7	105.5	4467.0
1961/62	55.4	26.6	65.7	223.9	371.0	571.6	713.9	754.1	573.2	422.0	308.9	144.7	4230.9
1962/63	104.6	45.2	141.6	284.4	421.9	631.7	632.3	692.0	648.7	476.0	283.9	134.8	4496.9
1963/64	29.4	55.5	167.8	247.3	379.5	758.6	706.5	663.6	624.9	451.6	277.0	166.0	4527.6
1964/65	57.4	71.5	165.5	287.7	471.8	611.1	746.3	679.7	618.0	475.4	321.7	134.8	4640.9
1965/66	47.0	56.8	159.3	310.2	481.2	637.7	657.9	651.6	549.6	462.3	293.1	133.2	4440.1
1966/67	38.9	27.8	158.3	279.2	360.6	553.3	669.2	713.7	708.7	518.5	357.9	114.7	4500.7
1967/68	16.5	19.6	116.2	260.1	415.6	617.8	785.2	743.2	575.7	393.6	301.5	151.2	4396.0
1968/69	21.0	64.0	82.6	222.2	466.2	590.5	662.9	571.3	590.8	433.2	299.3	93.7	4097.8
1969/70	57.6	31.5	113.6	303.9	370.4	529.0	821.0	626.0	603.1	450.3	256.2	122.0	4284.7
1970/71	38.2	26.3	149.3	252.8	407.1	717.6	787.2	644.4	565.1	414.6	250.1	134.2	4386.8
1971/72	27.3	37.1	111.2	257.2	440.8	668.0	718.5	734.8	657.4	502.2	284.2	111.1	4549.8
1972/73	39.8	43.2	119.2	334.8	483.8	680.2	712.3	664.1	564.4	432.0	302.2	91.8	4467.9
1973/74	24.2	35.1	142.3	303.0	464.5	571.4	743.1	686.9	617.2	422.2	361.7	116.7	4488.3
1974/75	46.8	36.5	135.3	346.8	439.5	563.5	702.2	712.0	627.0	470.2	291.1	133.7	4504.4
1975/76	45.6	36.9	117.1	312.4	398.2	634.4	725.6	619.2	592.8	409.3	255.5	88.2	4235.2
1976/77	30.9	37.6	116.4	306.4	445.4	665.5	772.8	638.3	536.0	440.7	289.1	148.9	4428.1
1976/77	30.9	37.6	116.4	306.4	445.4	665.5	772.8	638.3	536.0	440.7	289.1	148.9	4428.1
1977/78	34.6	30.8	151.2	275.5	391.4	616.5	706.1	680.3	640.9	469.4	256.9	127.4	4381.2
1978/79	44.3	32.8	193.1	308.0	494.7	641.9	652.1	714.9	533.2	419.1	223.4	99.3	4356.9
1979/80	31.9	54.7	131.0	274.2	358.2	604.2	718.6	705.0	626.0	403.7	292.0	147.6	4347.1
1980/81	56.2	33.6	153.4	297.4	460.8	712.4	792.4	537.4	548.1	397.4	243.0	115.4	4347.6
1981/82	39.0	49.9	118.9	298.9	412.8	529.3	795.1	672.6	615.7	432.2	294.6	161.4	4420.3
1982/83	29.8	67.0	110.7	301.0	379.1	563.2	653.7	627.1	554.1	380.2	263.2	99.4	4028.8
1983/84	25.8	34.8	88.3	264.0	400.7	623.3	722.5	555.9	623.7	427.9	260.2	126.9	4153.9

MEAN

36.2

40.8

126.1

282.4

419.2

622.2

716.4

655.7

601.1

433.6

278.0

128.6

4340.4

TABLE 2.10

## POPULATION-WEIGHTED MONTHLY AND ANNUAL HEATING DEGREE-DAYS

## PRINCE EDWARD ISLAND

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	ANNUAL
1939/40	13.0	8.6	112.1	279.8	493.2	641.7	828.1	734.6	632.6	474.9	251.4	120.8	4590.8
1940/41	6.2	43.8	100.0	337.5	450.1	715.8	815.8	671.3	692.8	444.9	291.4	140.2	4709.8
1941/42	16.2	61.3	165.8	317.5	445.6	623.1	802.8	714.4	568.1	419.4	188.0	77.1	4399.3
1942/43	7.3	22.5	85.8	239.9	465.6	776.9	897.9	648.2	653.6	473.7	284.9	159.4	4715.7
1943/44	21.1	29.8	88.8	228.7	436.7	767.4	747.8	760.5	702.1	456.4	202.8	103.7	4545.8
1944/45	17.9	16.5	69.7	288.8	393.8	675.5	729.1	688.2	585.2	382.1	287.8	141.4	4276.0
1945/46	8.3	9.5	98.1	293.7	447.9	695.5	793.6	728.9	556.1	461.3	248.7	94.1	4435.7
1946/47	26.5	12.4	62.0	238.3	456.9	676.7	784.8	622.4	597.5	494.8	254.1	139.8	4366.2
1947/48	0.7	24.2	117.2	237.7	421.7	694.9	782.2	834.0	748.5	475.4	267.5	131.7	4735.7
1948/49	25.3	13.0	111.7	254.0	384.9	601.5	703.9	678.7	604.8	408.1	262.8	98.2	4146.9
1949/50	10.9	26.3	105.2	242.8	461.6	579.7	746.5	794.8	708.2	447.5	234.4	79.2	4437.1
1950/51	19.7	23.8	156.8	303.6	361.6	539.7	693.2	598.6	563.5	353.6	256.8	129.7	4000.6
1951/52	5.0	17.0	91.4	271.6	428.9	679.3	732.6	649.6	618.4	409.0	289.6	88.0	4280.4
1952/53	7.1	15.5	89.5	291.1	456.4	623.1	665.4	607.1	592.5	374.9	291.9	110.0	4124.5
1953/54	9.9	43.7	96.0	283.3	365.8	560.2	781.7	582.6	619.8	464.8	275.5	93.7	4177.0
1954/55	4.5	40.6	133.3	267.7	432.8	567.5	681.5	645.3	635.7	457.7	272.9	110.8	4250.3
1955/56	23.0	20.5	134.5	289.2	467.5	759.7	608.7	718.4	718.9	470.9	327.7	109.3	4648.3
1956/57	35.5	42.6	158.2	269.1	420.3	667.8	902.7	691.6	631.5	469.7	289.0	105.4	4683.4
1957/58	28.2	38.2	104.8	265.7	406.7	557.7	628.5	646.9	560.5	377.9	255.1	132.8	4003.0
1958/59	25.6	12.9	135.0	312.2	458.8	838.4	781.4	774.5	651.3	419.5	236.3	130.9	4776.8
1959/60	8.9	24.8	94.1	283.5	408.4	607.7	737.9	580.6	641.4	448.2	187.5	69.4	4092.4
1960/61	4.1	12.6	96.3	317.6	421.2	647.8	894.1	786.8	733.9	513.9	284.5	84.0	4796.8
1961/62	32.6	23.2	66.8	226.1	386.8	599.8	768.7	822.0	626.7	448.1	322.5	134.7	4458.0
1962/63	98.1	37.2	145.4	293.3	431.9	673.7	685.4	749.2	727.1	519.2	261.1	135.6	4757.2
1963/64	12.6	50.3	160.6	253.0	389.8	811.6	778.8	718.8	660.7	500.3	274.1	148.3	4758.9
1964/65	28.9	48.0	150.5	309.4	507.6	664.9	817.7	737.3	681.9	495.9	304.6	121.8	4868.5
1965/66	15.1	40.4	154.7	311.0	503.7	692.8	687.7	708.1	564.7	458.8	277.6	98.5	4513.1
1966/67	22.3	19.8	139.0	273.1	376.2	584.7	732.7	781.9	771.3	578.0	372.0	88.1	4739.1
1967/68	2.1	1.5	107.2	252.9	429.1	659.9	860.3	809.2	624.2	393.8	307.3	158.5	4606.0
1968/69	9.8	74.6	78.2	244.4	489.3	624.8	705.4	599.5	627.4	466.8	320.2	69.6	4310.0
1969/70	38.1	38.1	116.5	323.5	383.5	544.1	893.4	672.5	635.2	475.3	255.1	93.2	4468.5
1970/71	28.3	28.5	162.0	252.8	425.9	757.8	859.4	697.2	596.0	433.6	232.9	134.6	4609.0
1971/72	25.9	32.6	121.8	264.0	473.3	723.9	779.6	789.3	718.6	552.6	288.5	81.2	4851.3
1972/73	31.5	35.7	119.2	338.4	508.0	757.8	788.2	712.5	597.9	432.2	294.8	76.4	4692.6
1973/74	3.4	25.1	151.8	310.0	482.6	539.2	826.6	722.1	649.3	445.3	361.9	89.3	4606.6
1974/75	36.1	20.2	122.4	371.5	442.2	611.5	773.2	786.3	669.6	508.1	274.4	104.9	4720.4
1975/76	6.7	28.2	92.5	295.9	402.6	690.0	804.1	674.3	628.4	422.1	218.2	72.8	4335.8
1976/77	22.0	27.4	107.9	306.9	511.8	744.6	823.9	689.1	579.5	469.3	297.3	114.4	4694.1
1977/78	25.6	20.7	150.1	280.9	398.9	649.1	746.6	745.5	688.7	500.0	241.3	93.5	4540.9
1978/79	30.2	25.7	187.4	297.5	521.6	704.8	703.8	761.5	556.3	426.7	205.3	71.0	4491.8
1979/80	21.0	47.2	123.5	281.1	388.0	641.0	785.8	774.8	683.2	411.3	320.5	137.8	4615.2
1980/81	46.1	26.8	168.1	329.1	488.7	789.2	862.0	562.5	571.7	418.8	224.3	99.9	4587.2
1981/82	27.4	40.2	133.6	302.3	432.5	564.7	845.4	731.0	664.4	446.3	303.4	140.8	4632.0
1982/83	16.8	60.6	120.4	303.9	409.9	594.2	695.8	666.8	582.5	371.5	255.5	86.2	4164.1
1983/84	21.2	28.6	89.8	267.7	418.2	662.8	800.3	628.9	677.5	474.5	249.5	129.7	4448.7
MEAN	20.6	29.8	119.5	284.5	437.5	661.9	772.6	704.4	640.0	452.2	271.2	109.6	4503.6

TABLE 2.11

YEAR	POPULATION-WEIGHTED MONTHLY AND ANNUAL HEATING DEGREE-DAYS												
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	ANNUAL
1939/40	72.7	89.3	199.0	342.1	508.5	590.5	720.0	709.0	590.1	503.7	343.4	211.7	4880.1
1940/41	49.5	96.2	135.6	354.6	490.4	699.7	746.3	605.5	663.0	508.6	348.2	254.7	4952.1
1941/42	84.2	115.7	270.9	409.0	523.1	627.5	743.9	614.9	594.6	507.7	338.6	223.7	5053.7
1942/43	57.1	63.3	136.4	310.3	475.1	737.7	813.8	644.0	686.6	499.7	408.6	284.5	5117.1
1943/44	96.3	141.6	114.8	295.6	442.8	663.6	743.1	716.2	692.3	536.9	375.3	194.3	5012.6
1944/45	133.0	59.4	146.8	337.4	444.6	620.5	651.7	712.6	692.6	506.4	373.8	245.6	4924.3
1945/46	69.6	44.5	186.5	339.1	487.6	673.5	786.1	668.3	626.2	495.5	342.1	208.2	4927.2
1946/47	92.2	40.2	129.4	343.4	517.7	676.7	803.3	590.6	623.8	591.6	364.6	235.4	5008.9
1947/48	32.6	120.4	197.1	358.4	493.1	667.7	709.9	801.1	792.7	537.7	349.6	231.6	5292.0
1948/49	113.9	79.7	210.8	347.8	478.6	674.7	742.6	752.6	577.9	488.9	364.6	215.5	5047.6
1949/50	96.5	127.6	190.0	362.2	466.3	613.8	806.2	780.0	732.9	496.5	397.0	169.7	5238.8
1950/51	100.9	75.2	227.2	370.5	442.0	555.3	658.5	591.1	586.8	410.6	345.5	209.9	4573.7
1951/52	50.6	54.0	164.8	353.8	435.6	658.9	688.4	636.5	608.5	483.9	367.2	164.2	4666.3
1952/53	58.7	39.3	181.3	361.1	467.9	619.2	682.9	610.3	671.3	415.2	395.8	169.3	4672.3
1953/54	63.4	109.1	180.3	363.7	453.1	625.1	774.4	574.3	627.4	544.3	368.7	179.5	4863.3
1954/55	60.0	117.0	190.7	381.8	470.8	577.9	619.9	630.5	663.0	569.0	406.8	206.9	4894.4
1955/56	102.6	94.6	198.8	366.0	476.5	677.3	585.1	680.2	719.8	484.9	408.6	214.6	5008.9
1956/57	109.4	101.6	216.2	342.1	435.1	713.1	890.6	719.7	658.7	547.3	419.8	261.4	5415.0
1957/58	82.9	70.6	194.4	348.3	494.0	567.2	605.6	560.0	598.9	432.7	283.3	229.0	4466.9
1958/59	107.5	64.4	182.3	373.0	488.2	752.7	729.1	819.1	752.7	508.8	397.0	263.5	5438.3
1959/60	58.0	108.0	203.9	394.4	453.1	640.4	707.7	585.5	675.7	537.3	332.4	168.2	4864.6
1960/61	52.5	57.9	159.4	351.8	496.4	638.7	782.5	819.3	716.0	526.7	360.5	143.6	5105.1
1961/62	82.2	64.6	154.3	299.4	386.9	601.8	757.9	703.7	577.4	502.9	410.8	244.7	4786.6
1962/63	167.3	103.9	222.9	353.9	439.8	660.5	652.1	683.3	707.0	543.6	320.2	273.3	5127.8
1963/64	116.5	115.8	209.1	332.0	444.0	683.0	781.2	664.6	728.0	500.2	396.4	240.3	5211.0
1964/65	101.9	137.7	216.0	360.2	526.5	654.2	721.4	684.8	643.8	526.8	433.6	218.9	5225.7
1965/66	66.4	90.1	214.9	381.8	529.3	670.8	685.2	672.5	592.3	518.0	370.9	191.6	4983.8
1966/67	49.6	88.5	212.7	343.7	411.5	575.5	737.6	719.9	748.7	598.3	395.2	165.6	5046.9
1967/68	48.2	18.3	160.9	316.6	408.2	599.8	731.0	681.4	624.8	486.4	416.3	286.3	4778.1
1968/69	113.5	193.2	176.8	336.5	535.5	613.4	663.2	574.9	609.0	552.0	393.8	165.4	4927.1
1969/70	118.5	91.3	219.7	413.4	426.4	507.6	772.5	607.1	586.2	530.5	349.4	198.4	4820.9
1970/71	86.9	75.3	234.1	347.6	433.0	710.3	768.6	684.7	585.7	460.6	283.2	209.4	4879.6
1971/72	86.7	64.0	199.1	373.5	454.9	743.8	814.7	814.5	718.4	557.5	421.6	138.8	5387.4
1972/73	104.1	106.4	223.2	383.7	537.6	842.2	800.0	658.3	692.3	528.0	370.4	206.9	5453.2
1973/74	33.6	138.8	198.0	381.7	503.4	562.3	900.2	714.2	734.2	531.6	465.3	217.2	5380.6
1974/75	132.4	113.1	192.8	391.1	499.9	644.6	835.0	847.0	659.7	526.6	409.0	251.0	5502.2
1975/76	26.9	108.7	163.5	380.6	491.8	695.5	725.3	747.9	715.1	485.3	331.9	233.9	5106.2
1976/77	92.0	80.6	159.3	369.4	510.3	712.5	731.0	719.8	631.8	504.3	407.8	172.6	5091.4
1977/78	77.8	76.7	255.4	350.2	416.5	664.7	741.7	639.0	718.0	546.9	395.8	171.0	5053.7
1978/79	74.6	105.6	266.9	393.3	567.2	692.0	658.4	746.0	558.1	501.5	306.3	144.8	5014.6
1979/80	74.9	91.0	215.4	345.6	463.8	655.6	760.2	725.0	663.8	504.4	409.3	201.7	5110.8
1980/81	125.8	166.2	238.5	384.6	489.1	687.0	709.2	583.4	592.4	478.2	294.4	207.1	4956.0
1981/82	103.8	101.1	186.9	335.6	460.6	589.0	743.3	767.2	720.1	509.9	380.9	289.7	5188.0
1982/83	93.7	93.0	187.0	415.8	472.3	666.7	718.1	685.7	629.0	413.8	345.7	182.0	4902.7
1983/84	66.3	131.7	189.5	338.6	497.4	668.3	821.1	646.6	660.6	553.2	299.6	250.4	5123.1
MEAN	84.2	93.9	193.6	358.6	474.4	652.7	738.2	684.3	658.8	511.0	371.1	212.1	5032.9

TABLE 3.0

## PROVINCIAL CONTRIBUTION TO NATIONAL POPULATION-WEIGHTED HEATING DEGREE-DAYS

## BRITISH COLUMBIA

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	ANNUAL
1939/40	4.1	2.9	9.2	19.3	21.8	27.1	33.7	28.5	23.7	16.6	10.3	5.2	202.3
1940/41	2.4	2.3	5.4	15.2	31.3	31.2	31.3	26.8	21.9	15.8	12.4	5.7	201.8
1941/42	1.5	3.0	11.0	17.6	24.9	33.3	36.3	29.1	27.7	18.1	12.5	7.4	222.3
1942/43	2.0	2.3	8.1	16.3	29.7	32.8	45.6	28.8	30.9	18.1	15.2	7.7	237.4
1943/44	3.1	3.3	7.4	17.3	25.1	34.5	33.8	30.8	29.2	18.2	12.7	6.0	221.5
1944/45	2.7	3.3	6.6	15.6	24.9	36.2	32.8	28.4	28.4	22.7	10.9	7.0	219.5
1945/46	2.4	3.1	10.9	18.2	30.1	34.3	33.2	29.0	26.9	20.5	9.8	7.4	225.8
1946/47	3.1	3.2	8.5	22.0	32.7	36.1	48.3	34.3	30.5	20.7	11.8	6.8	258.0
1947/48	3.0	4.4	10.0	20.8	34.6	37.9	41.2	41.8	35.4	27.2	16.0	4.6	276.9
1948/49	4.1	5.3	12.1	24.0	34.1	48.2	54.9	43.8	33.4	22.5	13.0	8.8	304.0
1949/50	4.8	4.8	9.1	26.3	25.7	45.5	69.8	36.7	35.9	26.4	18.9	6.5	310.6
1950/51	3.3	3.4	10.0	24.0	34.8	35.2	45.8	38.2	41.0	23.6	14.8	6.6	280.8
1951/52	2.7	4.6	10.2	23.5	33.6	48.0	47.9	36.7	34.5	23.6	15.6	10.7	291.6
1952/53	3.7	4.4	8.6	18.8	34.3	36.9	37.2	33.0	32.2	24.1	14.1	10.1	257.5
1953/54	3.2	3.1	9.6	20.3	27.5	36.2	53.8	34.3	39.3	29.7	15.8	12.0	284.8
1954/55	6.9	6.4	11.1	25.4	26.8	39.7	43.9	39.9	43.6	29.3	21.1	10.7	304.8
1955/56	7.0	5.7	12.2	24.6	45.3	49.7	47.1	46.8	39.0	23.6	12.8	11.3	325.1
1956/57	2.9	3.4	11.8	25.9	36.7	42.9	58.8	43.5	34.6	23.4	10.4	6.9	301.1
1957/58	5.7	5.2	6.6	24.9	34.0	38.0	37.1	30.4	33.1	23.6	9.2	3.2	251.1
1958/59	0.9	2.1	11.0	22.8	37.3	39.6	46.4	40.4	34.8	26.0	17.8	8.1	287.3
1959/60	3.3	6.4	13.4	24.3	38.9	41.7	48.7	38.3	37.2	23.7	18.3	9.0	303.0
1960/61	2.6	6.7	13.1	21.5	35.4	43.3	41.4	32.9	32.3	25.4	15.4	5.0	274.9
1961/62	2.3	1.6	13.5	27.2	39.3	46.3	47.6	37.3	40.2	24.2	19.4	9.4	308.5
1962/63	5.5	5.3	10.7	21.6	30.6	39.2	53.2	31.7	35.3	25.3	16.1	8.9	283.4
1963/64	5.4	3.4	6.9	20.3	35.1	42.8	44.9	40.1	39.8	30.0	21.0	10.3	299.8
1964/65	6.3	6.6	15.6	25.6	40.8	57.7	51.4	40.5	42.2	26.5	21.4	9.4	344.0
1965/66	3.9	4.5	15.7	22.6	35.8	47.9	51.7	39.2	37.5	28.5	19.1	11.7	318.2
1966/67	6.3	4.8	9.6	26.6	37.4	41.3	45.3	37.3	41.5	31.1	18.3	5.5	305.0
1967/68	3.8	1.7	7.4	23.7	35.9	47.0	48.5	38.5	33.3	29.3	17.0	10.0	296.1
1968/69	3.7	6.7	13.2	26.8	35.6	56.2	75.7	48.0	40.7	29.8	15.5	4.8	356.8
1969/70	4.9	8.0	13.6	28.9	37.7	45.4	55.4	39.4	39.9	32.2	20.7	7.4	333.3
1970/71	4.9	5.4	17.7	31.2	44.5	55.1	56.9	43.9	46.4	30.7	18.9	13.4	369.0
1971/72	6.0	2.8	16.3	30.5	39.6	62.2	64.1	48.4	38.9	35.6	17.3	10.8	372.5
1972/73	5.4	3.7	19.1	33.2	39.3	57.7	56.1	42.9	39.1	29.8	18.8	12.1	357.2
1973/74	5.7	7.7	11.8	29.0	47.8	46.1	60.1	43.9	44.2	30.2	25.2	11.3	363.0
1974/75	8.2	5.2	9.6	27.7	41.8	47.4	60.0	55.0	47.5	36.1	21.8	12.5	372.8
1975/76	4.5	8.2	12.2	30.1	44.4	54.0	52.6	48.0	49.3	31.2	21.7	15.0	371.2
1976/77	5.6	8.7	11.4	29.3	41.9	48.4	58.5	38.3	43.2	27.8	22.5	9.4	344.9
1977/78	6.8	4.6	16.8	30.7	47.5	60.1	57.7	43.6	39.9	30.2	21.9	7.0	366.8
1978/79	3.6	6.0	15.9	27.8	50.2	60.8	73.8	53.7	41.9	33.3	20.1	10.8	397.7
1979/80	4.6	3.4	10.2	27.7	48.2	49.5	69.5	47.0	46.9	28.0	19.3	12.6	367.0
1980/81	6.7	8.2	15.4	28.7	41.1	55.0	48.8	45.5	38.9	33.9	19.9	15.3	357.3
1981/82	5.6	3.2	13.2	32.9	39.6	58.8	66.6	50.5	48.1	37.6	22.5	6.8	385.6
1982/83	6.6	6.4	12.8	30.2	52.0	56.1	48.8	41.4	39.1	30.9	16.9	10.2	351.4
1983/84	6.6	3.5	17.8	32.4	40.8	71.3	54.3	43.3	38.4	32.6	25.2	12.3	378.6
MEAN	4.4	4.7	11.6	24.7	36.6	45.7	50.5	39.3	37.3	26.8	17.1	9.0	307.6

TABLE 3.1

## REGIONAL CONTRIBUTION TO NATIONAL POPULATION-WEIGHTED HEATING DEGREE-DAYS

YEAR	NORTH												MEAN
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	
1939/40	0.3	0.4	0.7	1.2	1.5	1.7	1.8	1.9	1.7	1.2	0.9	0.6	14.1
1940/41	0.3	0.5	0.6	1.1	1.7	2.0	2.1	1.7	1.8	1.4	1.0	0.5	14.7
1941/42	0.3	0.4	0.8	1.2	1.8	2.1	1.9	1.9	1.7	1.4	0.9	0.6	15.0
1942/43	0.3	0.4	0.7	0.9	1.8	2.2	2.3	1.9	1.9	1.3	1.0	0.5	15.3
1943/44	0.3	0.4	0.6	1.0	1.5	1.8	1.9	1.9	1.8	1.2	1.0	0.4	13.9
1944/45	0.4	0.4	0.7	1.1	1.5	1.9	2.0	1.8	1.7	1.6	1.0	0.6	14.8
1945/46	0.4	0.4	0.7	1.1	1.8	2.0	1.3	2.0	1.8	1.4	0.9	0.6	14.4
1946/47	0.4	0.4	0.7	1.2	1.8	2.1	2.8	2.2	1.9	1.7	1.2	0.7	17.2
1947/48	0.4	0.6	0.8	1.1	1.7	2.0	2.4	2.6	2.4	1.8	1.1	0.6	17.6
1948/49	0.4	0.5	0.8	1.3	1.9	2.7	2.7	2.7	2.2	1.6	1.2	0.7	18.6
1949/50	0.5	0.4	0.7	1.4	1.8	2.6	3.1	2.5	2.1	1.7	1.1	0.7	18.6
1950/51	0.5	0.5	0.8	1.5	2.3	2.4	2.7	2.5	2.3	1.6	1.0	0.7	18.9
1951/52	0.4	0.4	0.8	1.5	2.0	2.7	2.9	2.4	2.2	1.5	1.0	0.6	18.4
1952/53	0.4	0.6	0.9	1.4	1.8	2.2	2.8	2.1	2.2	1.4	1.1	0.6	17.6
1953/54	0.4	0.5	0.8	1.4	1.8	2.5	3.1	2.6	2.3	2.0	1.2	0.7	19.4
1954/55	0.4	0.4	0.8	1.4	2.0	2.7	2.7	2.7	2.6	1.7	1.2	0.7	19.3
1955/56	0.4	0.6	0.9	1.4	2.4	2.9	2.9	2.7	2.6	1.8	1.4	0.7	20.6
1956/57	0.4	0.6	1.0	1.7	2.1	3.1	3.1	2.6	2.3	1.8	1.3	0.7	20.7
1957/58	0.5	0.5	0.8	1.5	2.2	2.9	2.6	2.8	2.4	1.9	1.2	0.7	19.7
1958/59	0.4	0.5	0.8	1.5	2.2	2.6	3.2	2.6	2.7	1.9	1.4	0.8	20.9
1959/60	0.5	0.7	0.9	1.8	2.3	2.5	3.0	2.6	2.7	1.9	1.1	0.6	20.6
1960/61	0.5	0.5	0.9	1.5	2.4	2.5	3.0	2.6	2.8	1.9	1.4	0.7	20.7
1961/62	0.4	0.6	1.0	1.8	2.4	3.1	3.2	2.7	2.5	1.9	1.4	0.7	21.8
1962/63	0.4	0.5	0.9	1.5	2.3	2.8	3.1	2.4	2.9	1.8	1.4	0.8	20.7
1963/64	0.5	0.5	1.0	1.5	2.4	2.6	3.4	2.8	3.1	2.2	1.4	0.8	22.3
1964/65	0.5	0.6	1.0	1.6	2.3	3.3	3.3	3.1	2.6	2.0	1.4	0.9	22.8
1965/66	0.5	0.7	1.1	1.8	2.5	3.0	3.8	2.8	2.7	2.1	1.3	0.7	23.0
1966/67	0.4	0.6	0.9	1.8	2.8	3.0	3.4	3.0	2.9	2.2	1.4	0.9	23.3
1967/68	0.6	0.6	1.1	1.5	2.5	2.8	3.3	2.8	2.5	2.2	1.5	0.8	22.0
1968/69	0.5	0.6	1.0	1.4	2.2	3.1	4.1	3.0	3.2	2.2	1.7	1.0	24.0
1969/70	0.6	0.7	1.1	1.7	2.8	2.9	3.6	3.1	2.8	2.3	1.7	0.8	24.1
1970/71	0.5	0.7	1.2	1.9	2.8	3.7	3.9	3.1	3.1	2.3	1.6	0.8	25.5
1971/72	0.5	0.7	1.1	1.8	2.9	3.7	4.1	3.7	3.2	2.6	1.7	1.1	27.2
1972/73	0.7	0.8	1.4	2.3	2.8	3.7	3.8	3.3	3.1	2.4	1.5	0.8	26.5
1973/74	0.5	0.6	1.0	1.7	2.9	3.4	4.6	3.8	3.8	2.8	1.8	1.0	27.9
1974/75	0.6	0.8	1.4	2.4	2.9	3.7	4.5	3.5	3.6	2.3	1.5	0.8	28.0
1975/76	0.6	0.7	1.3	2.1	3.2	4.2	4.1	4.0	3.7	2.3	1.7	1.0	29.0
1976/77	0.6	0.8	1.2	2.1	2.8	3.9	3.6	3.3	3.4	2.4	1.6	0.9	26.7
1977/78	0.6	0.7	1.1	1.9	3.2	4.1	3.9	3.1	3.5	2.6	2.0	1.2	28.1
1978/79	0.8	0.9	1.2	2.5	3.4	3.6	4.1	4.5	3.7	2.6	1.7	1.1	30.1
1979/80	0.6	0.8	1.3	2.3	2.7	4.0	4.3	3.3	3.5	2.5	1.6	0.9	27.8
1980/81	0.7	0.7	1.4	2.0	3.1	4.3	3.2	3.3	3.1	2.8	1.6	1.0	27.4
1981/82	0.6	0.7	1.2	1.9	2.7	3.7	4.9	3.6	3.7	2.8	1.9	1.1	28.9
1982/83	0.6	0.8	1.3	2.2	3.4	4.0	4.2	3.7	3.6	2.6	2.1	0.9	29.4
1983/84	0.6	0.8	1.2	2.0	2.8	4.3	4.3	3.5	3.3	2.4	1.7	0.8	27.6
MEAN	0.5	0.6	1.0	1.6	2.4	3.0	3.2	2.8	2.7	2.0	1.4	0.8	21.9

TABLE 3.2

REGIONAL CONTRIBUTION TO NATIONAL POPULATION-WEIGHTED HEATING DEGREE-DAYS

## PRAIRIE PROVINCES

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	ANNUAL
1939/40	5.2	9.5	41.8	104.3	110.9	151.5	225.6	183.4	158.1	101.1	37.4	23.5	1152.3
1940/41	8.5	10.4	23.5	66.4	168.1	182.5	213.6	180.5	156.2	77.6	42.2	15.6	1145.1
1941/42	3.7	14.5	52.5	82.2	135.0	185.3	174.6	181.4	135.6	87.1	55.3	25.1	1132.2
1942/43	10.2	14.6	47.6	75.4	163.0	219.7	253.2	169.5	191.7	78.7	62.6	30.7	1316.8
1943/44	4.5	10.3	40.6	68.2	123.2	165.2	174.7	190.8	181.4	76.0	37.2	23.7	1096.0
1944/45	9.4	14.5	36.4	64.5	141.5	188.0	207.5	179.4	131.3	114.4	67.2	31.0	1185.0
1945/46	8.9	10.8	53.1	83.2	174.8	218.1	206.8	195.7	130.4	72.5	56.3	25.2	1235.8
1946/47	6.1	15.0	44.1	98.4	160.2	208.0	176.1	177.0	149.4	83.8	52.1	21.2	1191.5
1947/48	3.7	13.9	42.5	57.2	134.6	168.4	171.4	186.2	162.9	106.2	37.3	13.2	1097.4
1948/49	5.3	8.5	24.8	62.9	117.3	187.4	202.3	191.8	136.8	58.4	37.6	18.8	1052.0
1949/50	8.7	7.1	35.1	81.5	91.9	196.4	261.5	164.6	156.2	97.7	49.6	20.8	1171.1
1950/51	9.8	18.5	32.9	76.1	147.3	178.7	205.9	165.6	172.4	87.4	35.8	29.9	1160.1
1951/52	9.3	19.8	44.7	90.9	135.3	192.9	210.5	151.2	150.6	55.7	37.4	19.1	1117.3
1952/53	10.0	13.6	30.3	70.5	109.5	147.2	189.9	142.0	136.5	93.2	47.6	21.2	1011.7
1953/54	9.0	7.4	35.8	54.4	98.0	146.8	224.5	115.0	143.1	108.7	53.6	23.7	1020.0
1954/55	7.2	13.9	39.9	70.0	92.4	133.1	171.3	162.7	166.3	70.6	44.0	14.6	985.9
1955/56	7.7	8.0	40.9	66.5	163.5	195.2	196.6	171.8	146.3	94.9	41.1	11.9	1144.3
1956/57	8.1	10.4	41.2	71.4	106.0	166.0	200.1	158.2	131.3	79.2	35.1	20.1	1027.0
1957/58	4.6	14.5	31.7	79.2	113.1	147.5	148.8	160.1	129.1	69.8	30.4	23.0	951.8
1958/59	8.9	8.0	35.5	63.2	122.6	167.5	201.1	157.2	107.9	74.3	50.9	16.7	1013.9
1959/60	4.5	14.7	40.3	85.1	131.0	126.3	181.2	154.0	145.2	75.5	40.3	20.1	1018.4
1960/61	4.1	9.6	30.0	63.4	121.4	153.3	160.8	133.2	114.9	84.9	39.0	6.0	920.5
1961/62	5.6	3.5	47.3	71.7	119.6	189.0	179.5	169.3	144.4	75.3	43.4	11.5	1060.0
1962/63	9.8	10.7	34.0	56.9	98.3	149.9	193.8	143.5	117.5	71.2	46.2	14.7	946.3
1963/64	4.1	6.3	20.8	43.7	115.9	165.8	156.4	121.5	150.0	69.7	35.9	16.9	906.9
1964/65	3.5	15.1	44.0	58.5	118.6	195.6	190.1	156.5	155.2	75.0	44.3	17.6	1074.0
1965/66	5.6	10.9	59.1	55.1	130.2	150.1	220.1	152.8	116.3	88.6	40.6	20.2	1049.6
1966/67	6.3	13.8	24.4	69.8	141.8	158.4	179.3	152.9	144.7	95.5	47.8	19.9	1054.6
1967/68	6.8	7.4	16.7	68.6	107.9	153.6	180.7	141.8	99.4	73.5	43.9	19.5	919.8
1968/69	10.0	18.9	32.0	67.6	104.1	177.3	219.1	145.9	133.8	57.5	38.8	23.6	1028.5
1969/70	9.2	7.2	33.5	83.5	99.4	132.1	182.0	131.1	137.9	77.5	42.1	7.9	943.3
1970/71	4.6	8.8	35.5	69.3	123.0	177.9	187.5	130.2	127.2	69.3	32.9	14.1	980.1
1971/72	11.3	4.2	34.9	66.9	111.4	172.9	194.0	168.4	120.7	73.7	30.0	11.4	999.8
1972/73	14.2	7.4	50.3	78.5	110.2	176.4	149.0	134.9	93.1	76.3	34.2	16.4	940.8
1973/74	6.3	8.9	34.0	61.8	142.4	158.4	189.5	136.5	142.7	72.0	51.3	12.9	1016.6
1974/75	5.8	18.2	41.6	57.3	100.2	122.7	157.8	151.3	137.4	85.6	39.7	17.8	935.4
1975/76	3.1	16.9	32.6	65.3	105.6	150.6	157.4	127.0	126.0	56.5	30.0	18.0	889.0
1976/77	5.2	6.8	24.6	73.5	105.2	150.4	170.9	101.9	103.8	52.1	25.8	11.9	832.2
1977/78	8.7	22.7	35.7	59.1	115.7	176.5	189.7	148.7	116.4	69.2	32.5	14.0	989.1
1978/79	7.4	15.3	30.3	57.8	125.1	163.1	196.2	190.2	121.2	94.4	53.2	16.6	1071.0
1979/80	5.3	11.4	26.3	63.4	106.1	140.5	185.3	146.5	136.0	49.5	28.9	15.9	915.0
1980/81	6.2	18.3	38.4	63.8	98.1	173.6	136.9	123.1	95.3	68.9	36.0	19.9	878.5
1981/82	7.1	3.9	30.0	72.7	90.3	157.2	224.1	156.0	135.3	85.8	41.2	17.7	1021.2
1982/83	6.4	16.3	34.7	65.7	130.6	146.8	151.0	126.5	122.6	75.9	48.1	16.9	941.5
1983/84	5.3	3.4	40.9	65.8	107.1	203.2	152.2	105.3	120.0	59.2	46.9	15.6	924.9
MEAN	7.0	11.6	36.6	69.6	121.5	168.2	188.9	154.1	136.2	78.2	42.3	18.4	1032.5

TABLE 3.3

YEAR	ONTARIO												ANNUAL
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	
1939/40	4.2	2.0	38.2	97.8	168.3	209.5	290.4	238.5	235.3	140.3	62.7	22.3	1509.4
1940/41	6.7	12.4	31.2	104.7	165.4	224.2	269.7	230.2	227.1	90.5	48.6	9.4	1420.2
1941/42	2.2	12.7	28.6	87.7	142.9	212.3	257.2	240.7	175.7	94.5	53.4	11.8	1319.7
1942/43	6.1	7.9	40.9	84.9	157.5	258.4	289.2	224.2	220.1	150.6	63.1	13.0	1515.9
1943/44	2.1	8.1	44.5	96.0	162.4	245.7	226.2	237.5	225.6	141.7	38.6	16.1	1444.4
1944/45	2.9	5.8	30.1	94.1	149.3	252.4	310.4	221.9	140.7	104.8	87.9	29.9	1430.2
1945/46	6.5	7.0	35.6	100.8	154.0	255.2	254.3	245.2	139.7	120.1	67.6	24.8	1410.8
1946/47	4.4	12.8	27.0	70.7	141.0	226.4	244.0	242.4	208.4	136.8	77.1	21.6	1412.5
1947/48	4.7	4.1	36.5	47.0	158.5	240.6	286.8	248.6	203.3	103.3	67.0	15.7	1415.9
1948/49	1.9	3.9	18.9	96.3	118.7	207.8	228.7	206.7	201.9	113.7	52.2	10.8	1261.5
1949/50	2.6	4.4	42.3	67.1	167.8	210.8	221.4	233.5	228.2	147.4	58.0	18.6	1402.0
1950/51	6.0	9.0	37.8	76.8	159.5	235.9	245.0	214.8	187.0	114.2	46.3	13.7	1346.0
1951/52	3.3	8.5	34.4	82.9	180.6	229.7	242.7	214.4	199.3	96.3	63.0	10.8	1365.9
1952/53	2.7	5.7	28.4	111.7	138.4	196.7	228.2	196.5	174.3	111.3	51.1	13.9	1258.9
1953/54	5.3	4.8	35.0	75.2	127.0	199.1	283.1	190.2	209.4	116.8	69.9	11.6	1327.2
1954/55	4.6	8.5	35.3	81.0	147.1	232.6	265.0	224.5	210.3	88.9	42.4	8.0	1348.2
1955/56	1.4	2.9	34.4	77.1	165.2	257.3	253.8	226.6	222.6	138.6	86.7	18.4	1484.9
1956/57	5.8	9.1	54.4	74.9	149.3	219.9	290.8	209.6	186.2	110.5	68.1	14.8	1393.5
1957/58	3.6	10.7	32.6	94.9	131.1	205.8	252.3	251.7	177.2	105.3	70.2	31.1	1366.6
1958/59	4.6	9.3	29.8	89.0	146.2	279.3	285.4	253.6	217.7	120.4	52.8	14.4	1502.5
1959/60	1.4	3.0	28.2	98.7	176.6	221.3	257.8	230.8	253.8	118.1	48.7	13.9	1452.4
1960/61	5.7	4.8	22.2	90.6	138.4	258.7	294.5	210.7	197.8	139.1	73.7	20.8	1457.0
1961/62	5.0	5.2	21.2	71.0	152.7	230.7	283.7	258.3	196.1	122.7	43.4	10.4	1400.4
1962/63	5.1	5.5	43.0	85.9	161.8	251.1	294.9	271.6	200.4	117.6	70.1	14.3	1521.4
1963/64	4.3	11.5	47.2	52.4	129.3	279.4	242.0	239.9	207.7	125.2	43.6	22.6	1405.1
1964/65	2.2	16.9	38.4	103.6	148.9	235.3	279.5	243.9	225.2	143.5	44.4	20.2	1502.1
1965/66	10.6	14.7	34.1	106.2	163.8	206.1	287.0	226.6	190.8	132.6	85.8	15.7	1473.8
1966/67	2.2	5.7	39.6	100.1	150.0	240.1	237.6	268.0	221.2	127.1	93.4	5.5	1490.7
1967/68	7.6	8.4	37.1	95.1	177.5	219.7	292.7	265.3	188.2	100.9	73.3	18.0	1483.8
1968/69	6.2	10.3	16.0	79.2	162.1	250.9	269.0	224.0	220.1	116.4	71.2	26.4	1452.0
1969/70	4.2	3.5	33.9	99.1	156.9	258.7	313.4	253.6	223.4	118.9	61.5	15.2	1542.3
1970/71	2.6	5.7	29.7	76.7	146.0	261.6	303.7	230.6	229.6	140.3	61.6	11.8	1499.9
1971/72	4.8	9.2	20.4	54.3	164.8	219.9	268.8	266.9	238.6	151.0	44.0	22.7	1465.4
1972/73	7.1	9.0	28.3	118.6	175.6	241.8	251.4	255.6	162.0	122.5	73.9	11.1	1457.0
1973/74	2.8	3.2	37.2	72.6	156.7	247.2	268.4	263.4	221.5	119.6	84.5	16.0	1493.1
1974/75	4.0	4.6	47.7	116.1	160.0	217.7	250.2	227.3	231.5	161.7	33.5	11.2	1465.5
1975/76	3.1	6.0	45.3	84.2	125.1	258.8	308.8	220.6	204.0	112.3	73.8	7.8	1449.8
1976/77	5.6	10.4	41.5	123.2	191.8	293.8	330.1	243.3	176.1	112.1	42.3	21.6	1591.8
1977/78	4.2	12.9	32.1	101.9	151.6	255.3	306.5	279.0	242.2	146.3	56.3	22.9	1611.3
1978/79	5.8	6.6	39.8	104.2	165.9	242.1	289.9	293.0	185.9	133.1	67.3	18.2	1551.8
1979/80	4.5	11.5	35.8	105.8	140.6	219.0	263.7	266.2	217.7	120.1	47.4	35.5	1467.9
1980/81	2.5	2.4	38.7	120.0	175.0	277.5	311.9	200.5	192.6	114.5	63.6	12.2	1511.4
1981/82	3.2	4.0	42.4	120.5	153.3	230.7	317.2	251.2	217.2	143.2	35.7	24.1	1542.6
1982/83	3.4	15.7	35.7	87.2	149.5	198.2	252.2	215.8	192.1	132.9	82.5	17.1	1382.3
1983/84	2.7	2.7	27.4	93.7	158.3	273.0	303.0	201.8	247.8	111.7	79.2	10.7	1512.0
MEAN	4.3	7.6	34.6	90.5	154.7	237.5	273.4	236.9	206.1	122.9	61.8	16.8	1447.1

TABLE 3.4  
PROVINCIAL CONTRIBUTION TO NATIONAL POPULATION-WEIGHTED HEATING DEGREE-DAYS

QUEBEC

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	ANNUAL
1939/40	7.6	4.3	48.7	102.1	166.6	218.9	273.1	231.9	208.8	134.3	59.8	22.3	1478.3
1940/41	8.0	15.2	38.0	106.7	158.3	232.9	270.3	209.9	210.2	96.5	56.5	20.4	1422.9
1941/42	5.5	20.1	40.6	101.5	150.3	217.6	264.3	222.9	167.2	107.4	40.7	18.2	1356.2
1942/43	8.6	10.6	40.1	85.1	153.3	256.5	283.8	219.2	216.2	152.0	64.1	22.9	1512.5
1943/44	7.6	12.8	46.5	91.1	153.0	252.5	235.3	238.4	212.3	135.4	43.9	21.7	1450.2
1944/45	5.6	7.6	33.8	98.5	142.0	246.5	286.7	213.3	152.9	92.9	75.0	25.5	1380.2
1945/46	6.9	9.7	39.4	104.6	155.5	241.3	263.8	249.6	151.8	124.8	69.8	28.4	1445.6
1946/47	11.4	16.2	30.3	79.2	148.8	233.3	256.2	220.3	185.4	151.3	81.9	29.1	1443.2
1947/48	4.0	8.9	47.5	61.7	153.0	243.7	276.3	256.1	206.8	119.4	64.8	26.0	1468.4
1948/49	5.7	8.0	30.7	95.3	119.6	203.4	234.5	214.8	198.8	108.6	57.2	14.3	1290.9
1949/50	4.3	8.3	44.1	74.1	172.2	208.4	235.2	243.3	222.8	130.2	57.0	22.3	1422.1
1950/51	8.4	14.7	55.1	91.2	137.4	217.4	244.5	214.5	182.5	108.3	55.8	22.2	1352.0
1951/52	7.0	16.0	41.6	88.4	168.0	230.9	254.0	209.8	184.9	108.5	67.6	14.9	1391.6
1952/53	3.7	9.5	37.2	110.1	142.7	207.2	234.4	202.2	179.2	108.4	53.7	18.8	1307.1
1953/54	7.1	14.4	42.3	85.6	125.0	197.8	284.8	189.0	195.7	124.7	66.6	20.7	1353.6
1954/55	12.0	15.0	48.8	85.3	143.4	220.2	263.8	215.9	203.0	107.2	46.1	11.7	1372.5
1955/56	3.2	6.7	43.7	86.0	150.7	255.3	222.7	217.9	217.5	125.4	86.5	23.0	1438.5
1956/57	12.0	16.8	57.2	84.9	146.0	228.2	284.7	208.8	177.6	110.6	64.5	20.8	1412.2
1957/58	8.0	19.7	37.2	81.6	135.4	200.3	229.8	229.9	158.0	103.8	70.2	35.6	1309.3
1958/59	7.5	11.7	36.9	96.3	143.5	241.4	257.8	249.7	205.7	114.2	48.6	22.3	1435.8
1959/60	2.4	7.6	31.6	96.1	155.8	213.3	253.3	197.0	207.6	118.1	35.1	14.9	1332.9
1960/61	7.1	9.1	34.0	93.3	128.1	232.2	288.0	214.3	197.4	116.9	68.2	20.2	1408.9
1961/62	6.8	9.1	22.6	75.3	134.8	204.2	263.9	245.1	168.9	119.1	54.9	14.4	1319.1
1962/63	12.3	8.9	45.0	91.4	154.1	226.4	238.0	239.7	198.9	115.1	60.4	15.3	1405.5
1963/64	8.0	19.1	53.3	61.6	125.5	267.4	225.9	218.2	183.3	111.7	45.2	22.1	1341.3
1964/65	6.7	18.0	41.5	96.9	150.2	217.4	264.9	225.9	187.1	119.5	49.5	19.6	1397.3
1965/66	11.8	16.7	40.2	99.6	163.9	208.1	248.4	209.9	174.3	117.3	73.8	18.1	1382.1
1966/67	7.1	9.6	48.5	91.2	128.5	217.1	228.4	252.8	213.9	127.2	86.0	11.2	1421.6
1967/68	3.5	9.0	36.2	90.8	157.9	212.6	285.4	248.9	176.8	92.0	56.9	24.2	1394.2
1968/69	7.6	21.4	20.5	73.0	161.6	236.8	227.1	191.5	185.9	121.5	68.9	20.7	1336.5
1969/70	8.2	8.6	44.4	92.9	132.0	217.8	286.2	221.4	187.6	113.4	60.9	20.6	1394.0
1970/71	5.4	10.9	40.0	73.5	132.3	250.5	273.4	210.2	193.3	125.3	56.1	19.9	1390.7
1971/72	8.8	15.5	27.1	68.0	156.1	227.5	242.7	244.9	210.2	129.9	54.8	23.5	1409.0
1972/73	9.2	16.7	37.1	112.8	158.1	238.6	235.0	221.9	142.2	109.4	62.0	16.2	1359.3
1973/74	4.8	11.1	45.2	90.0	152.6	211.5	245.2	220.5	193.9	114.0	76.4	13.8	1379.0
1974/75	5.5	7.2	47.2	99.4	144.5	190.4	231.9	204.0	190.8	127.3	36.1	15.9	1300.2
1975/76	4.4	9.8	42.1	89.8	128.3	221.5	277.9	210.9	186.7	100.2	61.2	12.4	1345.3
1976/77	6.3	14.4	46.6	102.4	202.5	248.7	262.0	200.4	146.7	109.7	47.2	23.1	1409.9
1977/78	9.6	15.8	46.0	90.1	128.3	217.2	254.4	224.9	200.7	123.5	44.4	21.3	1376.3
1978/79	8.5	12.5	54.4	98.6	151.4	217.3	226.3	236.7	148.3	100.9	47.8	18.4	1321.1
1979/80	6.8	16.9	42.1	85.5	120.4	192.6	226.2	216.9	173.3	97.9	50.9	28.3	1258.0
1980/81	8.4	6.5	48.6	104.1	150.9	249.7	276.4	153.6	156.7	98.1	52.0	17.3	1322.2
1981/82	6.9	11.8	42.8	104.6	139.7	194.6	281.9	213.6	182.6	122.2	44.0	24.3	1368.8
1982/83	9.4	22.8	39.0	81.8	127.8	185.3	223.4	190.6	163.2	110.9	62.6	19.0	1235.9
1983/84	6.8	9.6	29.8	88.2	138.0	223.9	260.0	176.1	210.1	102.6	68.6	21.9	1335.6
MEAN	7.3	12.6	41.0	90.2	146.4	223.9	255.2	218.8	187.1	115.7	59.0	20.4	1377.5

TABLE 3.5

## REGIONAL CONTRIBUTION TO NATIONAL POPULATION-WEIGHTED HEATING DEGREE-DAYS

YEAR	ATLANTIC PROVINCES												ANNUAL
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	
1939/40	4.7	3.8	19.5	38.8	63.1	79.9	101.7	89.7	78.2	59.2	34.1	18.7	591.2
1940/41	4.3	8.5	16.2	45.7	58.7	89.3	101.4	80.8	84.5	55.5	37.3	21.0	603.2
1941/42	5.2	11.4	24.3	44.2	60.1	81.7	89.9	85.9	70.4	54.6	28.6	15.8	572.2
1942/43	4.5	6.1	14.4	35.1	61.1	97.5	108.8	81.1	82.6	60.2	39.0	22.9	613.1
1943/44	5.8	8.9	15.3	34.0	56.5	89.8	91.6	91.3	83.8	58.5	30.9	17.1	583.8
1944/45	5.9	4.2	13.0	38.9	52.4	83.8	91.1	85.5	73.2	49.8	39.1	20.7	557.4
1945/46	3.9	3.7	16.9	40.1	58.3	87.0	97.3	88.9	68.7	59.0	34.0	17.2	575.0
1946/47	7.1	4.9	12.4	34.2	59.2	85.6	91.8	72.7	71.2	60.2	33.6	19.9	552.7
1947/48	1.7	6.8	17.4	32.3	54.0	83.3	91.6	97.0	86.1	56.4	34.7	19.2	580.5
1948/49	6.2	4.9	17.9	36.4	49.1	75.0	84.5	82.0	70.1	49.3	33.6	14.3	523.4
1949/50	4.5	6.2	16.6	34.1	56.4	71.3	87.7	90.1	82.0	53.4	32.5	14.3	549.2
1950/51	5.8	5.7	22.6	37.6	45.0	65.9	79.1	70.6	67.1	43.5	31.9	17.1	491.8
1951/52	2.6	3.6	14.0	34.9	52.2	79.7	85.5	76.3	70.8	48.9	35.9	12.7	517.0
1952/53	2.4	3.1	15.9	37.5	53.8	73.6	78.7	71.6	71.3	44.8	35.1	14.5	502.3
1953/54	3.6	7.9	15.0	35.3	46.6	67.2	86.5	63.4	67.1	51.2	32.8	13.9	490.5
1954/55	4.6	7.7	17.5	32.8	48.7	64.0	75.2	70.5	70.4	51.2	33.3	16.2	492.0
1955/56	4.8	5.2	17.8	34.5	51.6	82.1	66.4	77.3	78.1	50.6	39.2	15.6	523.2
1956/57	7.0	8.2	20.0	33.4	47.1	74.3	98.9	73.4	66.7	50.0	33.3	15.9	528.3
1957/58	6.0	6.7	15.2	32.4	46.9	61.3	69.2	69.8	61.2	43.1	29.4	18.6	459.9
1958/59	5.5	4.3	17.0	37.4	51.8	89.4	79.9	81.7	70.1	45.7	28.6	17.9	529.3
1959/60	3.1	5.6	13.8	33.8	45.2	65.9	77.1	61.0	68.1	47.8	23.7	10.9	455.9
1960/61	3.0	3.2	13.3	34.4	46.2	69.1	88.4	78.9	72.2	50.8	30.7	11.2	501.5
1961/62	5.7	3.9	9.6	27.1	41.5	63.5	80.5	80.7	60.4	46.7	34.0	16.3	469.9
1962/63	12.2	6.3	17.8	32.9	46.8	70.5	71.5	76.9	72.2	51.8	29.6	16.7	505.2
1963/64	4.8	7.9	19.8	29.0	42.8	81.6	75.3	68.3	65.6	46.2	29.4	16.7	487.4
1964/65	6.1	8.6	18.3	32.1	50.2	65.7	77.9	70.0	62.7	47.9	33.1	14.4	487.0
1965/66	4.7	6.6	17.5	34.2	51.7	68.0	68.1	67.2	56.1	46.7	30.3	13.2	464.3
1966/67	3.8	4.4	17.7	30.5	39.3	58.9	71.8	74.5	73.8	53.4	36.5	11.2	475.6
1967/68	2.2	1.8	12.9	28.5	43.3	64.4	80.7	75.0	60.1	41.1	31.9	17.3	459.2
1968/69	4.2	10.0	11.1	26.1	50.3	62.4	66.7	57.3	58.8	45.4	30.5	9.9	432.7
1969/70	6.5	4.7	14.5	33.4	39.2	53.6	81.0	62.2	57.9	44.9	26.3	12.8	436.9
1970/71	4.4	3.9	17.0	27.6	41.6	72.5	78.9	65.4	56.3	41.3	23.6	14.1	446.6
1971/72	4.0	4.5	13.3	28.1	45.0	70.0	75.1	75.1	67.1	49.5	29.6	10.7	472.1
1972/73	5.2	5.6	14.4	34.6	49.9	74.1	74.1	65.7	57.8	43.6	29.9	10.9	465.6
1973/74	2.0	5.4	15.9	31.7	47.3	55.2	78.5	68.0	62.9	43.9	36.2	11.9	458.8
1974/75	5.9	5.1	15.2	35.7	44.9	59.4	74.1	73.5	62.0	46.6	29.0	14.1	465.4
1975/76	2.8	5.4	12.7	31.7	41.6	66.6	74.7	65.3	61.4	41.3	25.5	11.4	440.2
1976/77	4.5	4.6	13.1	32.3	47.4	69.9	76.5	65.6	54.3	44.0	29.4	14.0	455.6
1977/78	4.1	4.3	17.5	29.3	39.6	62.9	72.5	65.9	64.6	47.0	26.7	11.9	446.3
1978/79	4.5	5.0	20.8	32.6	50.6	66.0	63.7	68.4	50.3	40.1	21.5	9.4	433.1
1979/80	3.5	6.0	14.6	27.9	37.4	59.6	69.8	67.8	59.9	39.4	29.0	14.0	428.9
1980/81	6.2	5.8	17.2	31.6	44.7	69.1	75.4	51.6	52.5	38.9	23.1	11.9	428.0
1981/82	4.5	5.6	13.8	29.8	41.2	53.2	76.5	67.1	60.7	42.4	28.2	16.4	439.3
1982/83	4.1	7.3	12.8	31.0	39.3	57.2	65.1	61.6	53.8	36.0	26.0	10.4	404.4
1983/84	3.2	5.3	11.0	27.3	40.8	62.0	73.5	55.6	60.9	43.2	24.4	14.1	421.4
MEAN	4.7	5.8	15.9	33.4	48.5	71.2	80.5	73.1	66.8	48.1	31.0	14.9	493.7

TABLE 3.6

## POPULATION-WEIGHTED MONTHLY AND ANNUAL HEATING DEGREE-DAYS

CANADA

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	ANNUAL
1939/40	26.1	22.9	158.0	363.5	532.2	688.6	926.2	773.9	705.7	452.6	205.2	92.7	4947.5
1940/41	30.4	49.3	114.9	339.8	583.6	762.1	888.4	729.9	701.6	337.3	197.9	72.6	4807.9
1941/42	18.4	62.1	157.8	334.3	514.9	732.3	824.2	761.9	578.2	363.1	191.6	78.8	4617.6
1942/43	31.7	42.0	151.8	297.7	566.3	867.0	982.9	724.7	743.5	460.8	244.9	97.8	5211.1
1943/44	23.5	43.8	155.0	307.7	521.7	789.6	763.5	790.8	734.1	431.0	164.3	85.0	4809.8
1944/45	26.7	35.7	120.7	312.7	511.6	808.8	930.5	730.4	528.2	386.1	281.0	114.7	4787.1
1945/46	28.9	34.8	156.7	348.0	574.4	838.0	856.7	810.3	519.3	398.3	238.4	103.6	4907.4
1946/47	32.5	52.5	122.9	305.7	543.7	791.6	819.3	748.8	646.7	454.5	257.6	99.3	4875.0
1947/48	17.4	38.7	154.7	220.0	536.4	775.9	869.7	832.3	696.9	414.2	220.8	79.4	4856.6
1948/49	23.6	31.0	105.1	316.3	440.7	724.6	807.6	741.7	643.2	354.2	194.8	67.8	4450.5
1949/50	25.3	31.2	147.9	284.6	515.9	735.0	878.7	770.7	727.1	456.7	217.2	83.1	4873.5
1950/51	33.7	51.8	159.1	307.3	526.4	735.4	823.1	706.2	652.3	378.5	185.6	90.2	4649.6
1951/52	25.2	53.0	145.7	322.2	571.6	783.9	843.4	690.8	642.2	334.5	220.4	68.8	4701.8
1952/53	22.9	37.0	121.3	349.9	480.5	663.8	771.2	647.5	595.7	383.3	202.7	79.1	4354.9
1953/54	28.7	38.1	138.5	272.1	425.9	649.5	935.8	594.4	656.9	433.1	239.9	82.6	4495.5
1954/55	35.7	51.9	153.4	295.9	460.4	692.3	821.8	716.2	696.2	348.9	188.2	61.8	4522.7
1955/56	24.4	29.1	149.9	290.1	578.6	842.5	789.6	743.2	706.0	434.8	267.5	80.9	4936.7
1956/57	36.1	48.5	185.5	292.2	487.3	734.5	936.5	696.1	598.6	375.5	212.7	79.2	4682.6
1957/58	28.4	57.3	124.2	314.5	462.8	655.7	739.8	744.6	560.8	347.4	210.6	112.3	4358.3
1958/59	28.0	36.0	131.1	310.2	503.6	819.9	873.9	785.3	638.9	382.6	200.0	80.2	4789.6
1959/60	15.3	37.9	128.3	339.9	549.8	671.0	821.0	683.7	714.6	385.1	167.2	69.4	4583.2
1960/61	22.9	33.9	113.5	304.8	471.8	759.1	876.2	672.6	617.5	419.0	228.5	63.8	4583.5
1961/62	25.7	23.8	115.4	274.0	490.2	736.8	858.3	793.5	612.7	389.9	196.5	62.8	4579.6
1962/63	45.2	37.2	151.5	290.2	494.0	739.9	854.5	766.0	627.1	382.7	223.7	70.6	4682.5
1963/64	27.0	48.7	148.8	208.5	451.0	839.6	747.9	690.7	649.5	385.1	176.5	89.4	4462.7
1964/65	25.3	65.8	158.9	318.3	511.0	775.0	867.2	739.9	675.0	414.5	194.2	82.1	4827.1
1965/66	37.0	54.0	167.8	319.4	547.9	683.2	879.2	698.5	577.7	415.9	250.9	79.6	4711.1
1966/67	26.1	39.0	140.8	320.0	499.8	718.8	765.8	788.5	698.0	436.5	283.4	54.1	4770.8
1967/68	24.5	28.9	111.4	308.1	525.0	700.0	891.3	772.3	560.2	339.0	224.5	89.8	4575.1
1968/69	32.3	67.9	93.8	274.2	516.1	786.7	861.7	669.7	642.3	372.8	226.5	86.4	4630.4
1969/70	33.5	32.7	140.9	339.5	467.9	710.4	921.6	710.7	649.5	389.2	213.1	64.7	4673.8
1970/71	22.5	35.3	141.0	280.1	490.2	821.3	904.3	683.4	655.8	409.1	194.7	74.0	4711.8
1971/72	35.4	36.9	113.1	249.5	519.8	756.3	848.9	807.4	678.7	442.3	177.5	80.1	4745.9
1972/73	41.7	43.2	150.8	380.0	535.9	792.3	769.4	724.3	497.2	383.9	220.3	67.5	4606.5
1973/74	22.0	37.0	145.2	286.7	549.6	721.8	846.4	736.0	669.0	382.5	275.3	67.0	4738.4
1974/75	30.0	41.2	162.8	338.6	494.2	641.3	778.6	714.7	672.8	459.6	161.5	72.1	4567.4
1975/76	18.5	47.0	146.1	303.2	448.3	755.8	875.5	675.8	631.1	343.7	214.0	65.6	4524.5
1976/77	27.8	45.8	138.4	362.7	591.6	815.0	901.5	652.8	527.5	348.2	168.8	81.0	4661.0
1977/78	34.1	61.1	149.3	313.0	486.0	776.1	884.8	765.3	667.4	418.9	183.7	78.4	4817.8
1978/79	30.6	46.3	162.5	323.6	546.5	753.0	854.0	846.5	551.3	404.5	211.6	74.4	4804.7
1979/80	25.3	50.1	130.3	312.7	455.5	665.2	818.8	747.7	637.4	337.4	177.1	107.2	4464.7
1980/81	30.8	41.9	159.8	350.2	512.9	829.2	852.5	577.6	539.0	357.0	196.3	77.6	4524.8
1981/82	27.9	29.2	143.5	362.3	466.7	698.1	971.2	742.0	647.7	434.1	173.4	90.3	4786.4
1982/83	30.6	69.3	136.2	298.1	502.6	647.5	744.7	639.5	574.4	389.2	238.2	74.6	4344.8
1983/84	25.1	25.3	128.1	309.4	487.8	837.6	847.4	585.5	680.5	351.7	246.1	75.5	4599.9
MEAN	28.1	42.8	140.7	310.0	510.0	749.4	851.7	725.0	636.1	393.8	212.6	80.2	4680.3

TABLE 3.7

Population-Weighted Heating Degree-Days for Canada

Regional Season Means and Percentage of the National Season Mean  
Ranked from Highest to Lowest

Rank	Geographic Region	Regional Season Mean ( $^{\circ}\text{C}$ )	Percent of National Season Mean
1	Ontario	1447.1	30.9
2	Québec	1377.5	29.4
3	Prairies (ALTA/SASK/MAN)	1032.5	22.1
4	Atlantic (NB/NS/PEI/NFLD)	493.7	10.5
5	British Columbia	307.6	6.6
6	North (YT/NWT)	21.9	0.5
National Season Mean		4680.3	100.0

TABLE 3.8

**Seasons Of High Heating Energy Demand Nationally And Regionally**

The severity of each season is shown expressed as a percentage of the long-term average season weighted heating degree-day totals. An indication of the degree of impact is given by the percentage of the total national population affected. Ranking is from most to least severe.

Rank	Season	National Total Weighted HDD	Percent of Long-Term National Average	Regions Affected	Percent of Population Affected
1	1942/43	5211.1	111	all except NWT	99
2	1939/40	4947.5	106	Ont, Que, NB, NS, PEI	73
3	1955/56	4936.7	105	all except Nfld	97
4	1945/46	4907.4	105	Alta, Man, Ont, Que, NB	79
5	1946/47	4875.0	104	all except BC, NS, PEI, Nfld	87
6	1949/50	4873.5	104	all except NS, PEI	95
7	1947/48	4856.6	104	all except BC, YT, NWT	92
8	1964/65	4827.1	103	all except Que	71
9	1977/78	4817.8	103	all except YT, NWT	99
10	1943/44	4809.8	103	Ont, Que, NS, PEI	71

TABLE 3.9

**Seasons Of Low Heating Energy Demand Nationally And Regionally**

The benignity of each season is shown expressed as a percentage of the long-term average season weighted heating degree-day totals. An indication of the degree of impact is given by the percentage of the total national population affected. Ranking is from most to least benign.

Rank	Season	National Total Weighted HDD	Percent of Long-Term National Average	Regions Affected	Percent of Population Affected
1	1982/83	4344.8	93	all except NWT	99
2	1952/53	4354.9	93	all	100
3	1957/58	4358.3	93	all except NWT	99
4	1948/49	4450.5	95	Sask, Man, Ont, Que, NB, NS, PEI	82
5	1963/64	4462.7	95	BC, Alta, Sask, Man, Ont, Que	89
6	1979/80	4464.7	95	all except NS, PEI, Nfld	94
7	1953/54	4495.5	96	all except YT, NWT, Alta	93
8	1954/55	4522.7	97	all except BC	91
9	1975/76	4524.5	97	Alta, Sask, Man, Ont, NB, NS, PEI	59
10	1980/81	4524.8	97	BC, YT, NWT, Alta, Sask, Man, Nfld	31