

WOODHOUSE TOWNSHIP

By

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A C K N O W L E D G E M E N T S

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I N T R O D U C T I O N

The purpose of the following geographical study of Woodhouse Township in Norfolk County is to relate the physical and cultural developments of the past to the present land use of the township, and to discover the factors which have been responsible for the growth of the township to its present stage of development.

Land utilization depends on certain physical factors such as geology, location, soils, climate, as well as history and social factors, changing technology, and the human element. No single factor can explain fully the pattern of land use, as all the factors combine to determine what the resources of the land will yield, and what the pattern of land use will be. A changing technology and increased urbanization will also have an effect on rural land utilization.

The manner of presentation used in this thesis has been an investigation of the physical geography and historical development in the early chapters. With this as background, the present land use is discussed, both rural and urban, and the relationships between agricultural and non-agricultural areas.

CHAPTER ONE

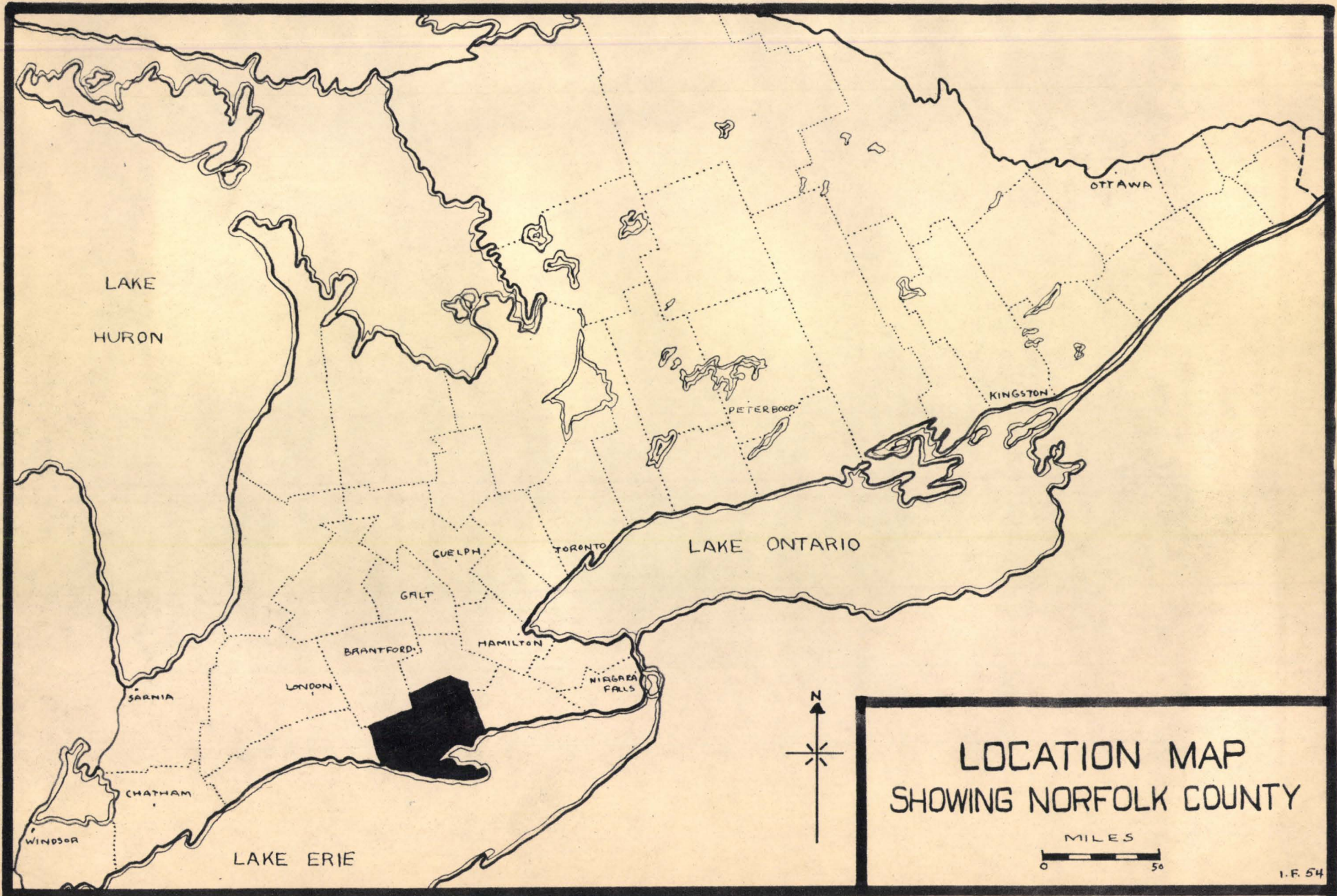
PHYSICAL GEOGRAPHY

LOCATION

Woodhouse Township is located between latitudes $80^{\circ}16'$ and $80^{\circ}5'W$ and longitudes $42^{\circ}54'$ and $42^{\circ}47'$ N, and is on the north shore of Lake Erie, about one third of the distance along the shore from the eastern end of the lake. It is situated in the southeast corner of the County of Norfolk, and comprises one of the seven townships which make up the county. The others are Townsend which is to the north of Woodhouse, Charlotteville on the west, and Windham, Middleton, Houghton, and Walsingham. The location of these townships can be seen on Map # 2.

The township comprises approximately 75 square miles, and is about 10 miles from east to west and 7 from north to south. The shape of the township is almost rectangular, with some irregularity along the shoreline.

Woodhouse is well located with respect to major centres in the Southern Ontario region, being approximately 75 miles from Toronto, 45 miles from Kitchener, 50 miles from London, 45 miles from St. Thomas, 150 miles from Windsor, the gateway to the U.S.A. at Detroit, and 75 miles from Fort Erie, and the entrance to the U.S.A. at Buffalo. Thus it can be seen that the township is within easy reach



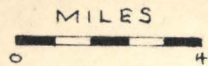
MAP # 1

LOCATION MAP
SHOWING NORFOLK COUNTY

MILES
0 50

I.F. 54

THE COUNTY OF
NORFOLK



WINDHAM

TOWNSEND

MIDDLETON

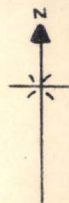
WOODHOUSE

CHARLOTTEVILLE

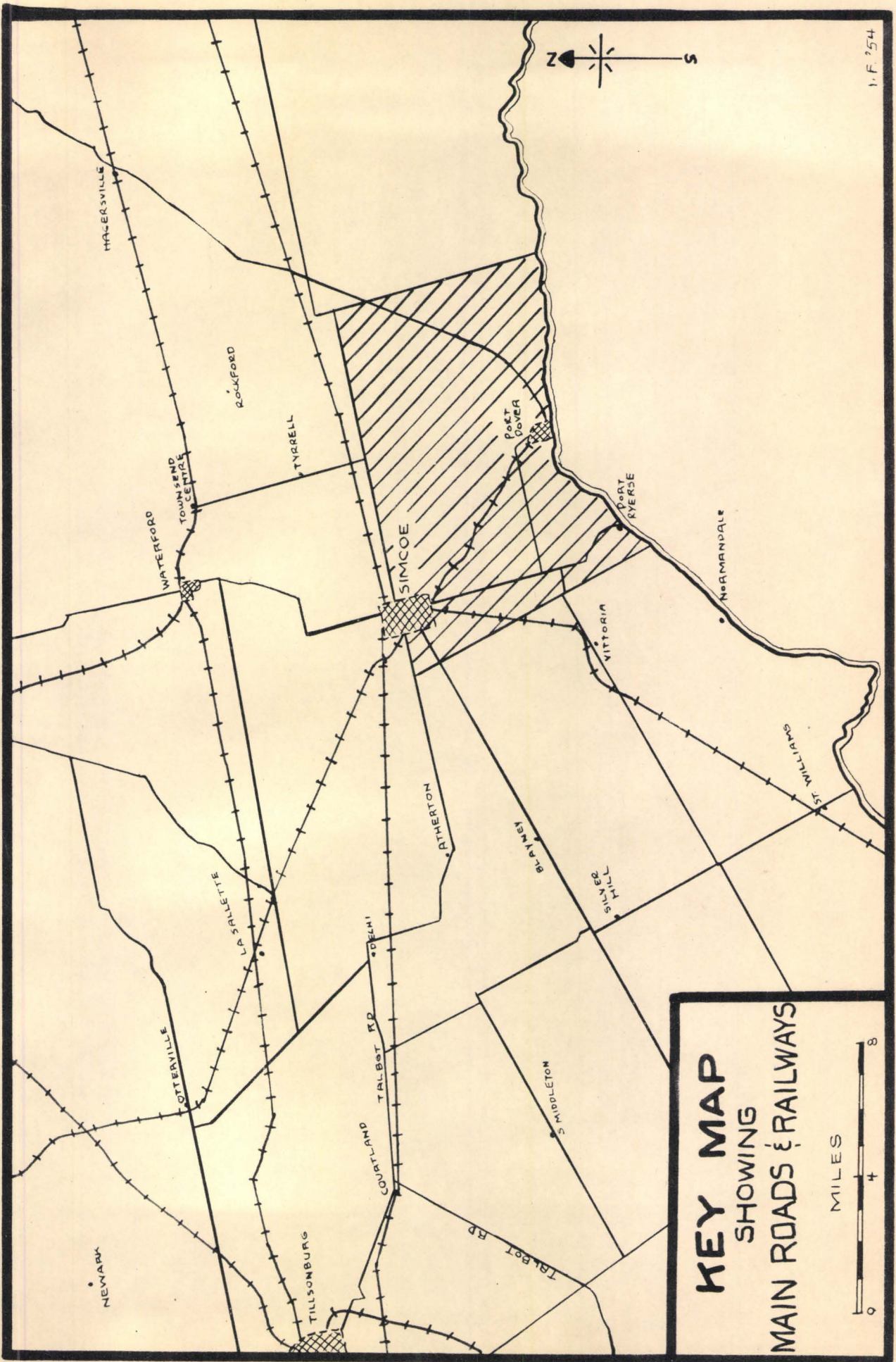
WALSINGHAM

HOUGHTON

LAKE ERIE



I. E. 54



KEY MAP
 SHOWING
 MAIN ROADS & RAILWAYS

MILES
 0 4 8

of many of the large urban markets of this heavily industrialized and densely populated area of the continent, and this in part explains the high per capita wealth of the county and the township.

GEOLOGY

Bedrock Geology

The township lies within the Ontario lowlands and forms a part of the Palaeozoic plain which stretches southward from the Canadian Shield. Woodhouse is entirely underlain by sedimentary strata, of Silurian and Devonian periods. These Palaeozoic rocks have suffered no strong deformation and are generally flat-lying. They have, however, a gentle dip toward the southwest which, in the study area, averages about 30 feet per mile.

The oscillating seas of the Silurian period resulted in the deposition of the Clinton formation, which, although it does not outcrop in Woodhouse, is important because of its value as a natural gas reservoir.

The Onondaga limestone is the youngest of the Devonian formations and underlies the whole study region. The Onondaga strata consist of grey to bluish, finely crystalline limestone beds. The high silica content of this limestone gives it a greater hardness and toughness than non-siliceous limestone and makes it ideal for road building.

Glacial Geology

The information with regard to glacial geology used in this section is from "The Physiography of Southern Ontario" by Chapman and Putnam.

Woodhouse Township lies within the area which has been glaciated during the Pleistocene period. The last of the four glaciations, the Wisconsin, laid down surface deposits which we find at present in the northwest corner of the township. These glacial deposits form the only elevated area of any consequence in the township, the slight rise to the east of Simcoe which is the western extremity of the Galt moraine.

With the retreat of the ice, large glacial lakes formed. Woodhouse Township has been affected by two of these, Lake Whittlesley and Lake Warren.

The importance of Lake Whittlesley in the township is in the formation of the Norfolk sand plain which is found in the western section of the study area. This sand plain is one of two major deltas of Lake Whittlesley, and is found at the mouth of the Grand spillway in front of the Paris and Galt moraines. These sands are calcareous containing mainly Guelph and Lockport dolomites. Within the Norfolk delta, an island of silt occurs north of Simcoe while interbedded silt, sand, and clay appear near the shore of Lake Erie west of Port Dover.

Glacial Lake Warren, at its highest stood about 60 feet lower than the level of Lake Whittlesley, and is responsible for the formation of the Haldimand clay plain. There are deep varved silts, and beds of clay, some of them interstratified with silt, deposited over the till laid down by the glaciers.

Physiographic Regions

Woodhouse Township lies, according to Putnam and Chapman, in two physiographic regions, the Norfolk sand plain, and the Haldimand clay plain. (see Map # 4)

Norfolk Sand Plain - The sands and silts of this region were deposited as a delta in glacial lakes Whittlesley and Warren. A great discharge of meltwater from the Grand River area entered the lakes between the ice-front and the moraines, to the northwest, building the delta from west to east as the glacier withdrew. The drainage of the plain is through small rivers flowing directly into Lake Erie. Within these river valleys, and along the bluffs of Lake Erie, observations have been made of sand beds up to 75 feet thick, but usually silt or clay strata or beds of boulder clay occur within 30 feet of the surface. Dissection of the sand plain is not far advanced, and near the streams the water table has been lowered so that good or even excessive vertical drainage operates. One of the favourable attributes of the Norfolk sand plain is that of abundant well water. Infiltration is rapid into the sandy soil, while the finer sediments below hold up the water table.

Haldimand Clay Plain - Although the Haldimand clay plain was entirely submerged by Lake Warren, it is not completely buried by stratified clay, and there are areas in the north in which the till comes to the surface in low morainic ridges. Because of the nature of the clay deposits, the soils are heavy textured and with poor drainage. Several sections of bog occur on the plain as a whole, but only one small area appears in the northeast corner of Woodhouse township. The better-drained areas are mapped as the Oneida Clay loam soils, and even these are dotted with wet depressions.

This region presents a problem to agriculture with its heavy clay soil deficient in lime, phosphorous, and organic matter, and the poor drainage which is present in many sections.

MAP # 4

PHYSIOGRAPHIC REGIONS OF WOODHOUSE TWP

SCALE



LEGEND:

- | | | | |
|--|-------------|--|---------------|
| | CLAY PLAINS | | TILL MORAINES |
| | SAND PLAINS | | SHORECLIFFS |

I. F. '54

CLIMATE

According to the classification of Koeppen, Woodhouse township lies in a region with a Dfb climate. This type represents a humid, microthermal climate in which we have cold winters and warm summers with sufficient precipitation throughout the year for general farming, and also for the specialized type of agriculture which is found in this township.

Within this broad climatic zone there are smaller regional variations, which are caused by local conditions. Thus in "The Climate of Southern Ontario", Chapman and Putnam include Woodhouse township in their climatic zone known as the Lake Erie counties.

"The Lake Erie region is located in the southernmost part of Ontario and enjoys the most temperate climate with the longest growing season of any section of the province. The presence of fertile soils in most cases and adequate precipitation has made agriculture a significant economic feature of these areas." (1)

Being a small area comparatively, Woodhouse township has a uniform climate, which is the same as that of the region in which it lies.

Because of the position of the area, it is directly in the path of the cyclonic storms which follow a more or less well-developed storm path. Though swinging north or south with the seasons, they usually leave the continent by way of the St. Lawrence Valley. Thus southern Ontario experiences exceedingly variable and constantly changing types of weather. The southern position of Woodhouse, with respect to the Great Lakes, greatly modifies both temperature and moisture relationships. The moderating influence of the lake waters can be seen in the

(1) 5th Annual Economic Survey, 1953, Dept. of Prov. Treasurer.

low daily temperature range, the occurrence of frost, and length of the growing season which are all more favourable to agriculture, in this area, than in the adjacent interior regions.

The following data compiled by Chapman and Putnam for the Lake Erie counties summarizes the climatic conditions in Woodhouse township:

Mean Annual Temperature -----	46
Mean Winter Temperature -----	23
Mean Spring Temperature -----	43
Mean Summer Temperature -----	67
Mean Autumn Temperature -----	49
Daily Range of Temperature -----	18
Average date of last frost in spring -----	May 10
Average date of first frost in fall -----	October 10
Average length of frost-free period (days) ---	153
Beginning of Growing season -----	April 14
End of Growing season -----	November 3
Average length of growing season (days) -----	203
Average annual precipitation -----	33.8"
Average annual snowfall -----	61"
Average rainfall April 1 - Sept. 30 -----	17.1"
Average summer rainfall (June, July, August) -	8.8"
P-E Index (June, July, August) -----	12.5"
Percent Possible Sunshine in Growing season --	54%

VEGETATION

In "A Forest Classification for Canada" W. E. D. Halliday classifies this township as being in the Deciduous Forest Region. This region occupies the greater part of the eastern half of the United States, but only a small portion of Canada in the southwesterly peninsula of Ontario. The tree associations are predominantly composed of broad-leaved varieties including the chestnut, tulip tree, hickory, mulberry, rockelm, and silver maple which find their northern limit in this region. Also found within this section is the main distribution for Canada of black walnut, sycamore, white oak, beech

and butternut, and also in the region are basswood, red maple, red oak and bur oak.

The ecological associations are composed of beech, and sugar maple on the well-drained sites while on the poorly drained sections are found basswood, red maple, and the red, white, and bur oak. Woodhouse has been closely settled and much of the original forest cover has been cleared, leaving only small farm woodlots. To preserve the light textured soils which are so readily eroded away when the forest cover has been removed, reforestation has been carried out on several areas of the township. Coniferous trees including pine, fir and spruce are the main species planted in the reforested areas.

SOILS

Woodhouse township lies in the Grey-Brown Podzolic zone of North America. The soil survey conducted by the Soils Department of the Ontario Agricultural College shows twelve major types of soils in Woodhouse, nine of which occur widely within the township, and the remaining three occupying smaller areas. The information with respect to the soils used in this section was obtained from the publications of the O.A.C. Soils Department. The soils of Woodhouse and their distribution are shown on Map # 5.

Haldimand Clay (HC)

This soil type covers a large area in the eastern part of the township and is a grey acid (pH of 5.0 - 6.0) soil with fair natural drainage that has developed on a rolling upland of water-washed ground moraine. The surface soil is a light greyish-brown clay or clay loam about 5" or 6" thick. This characteristic grey colour is a result of

the low organic matter content.

The A₂ layer has 2" to 4" of yellowish-grey clay, often with a fairly high percentage of silt. In areas of poor drainage, a yellow-brown mottled layer may be present beneath the A₂. The B layer, 8" to 10" thick is composed of a heavy, compact, reddish brown clay. The influence of lake waters on this soil is clearly seen in the texture of the overburden which in places is almost stone free.

Many streams have cut their courses through this soil type and consequently considerable erosion has taken place. Good examples of this are seen along the banks of the stream valleys. The hard red clay knolls present in the fields are simply the eroded exposures of the heavy reddish-brown horizons in the normal profile.

Relief in the areas containing Haldimand soils is undulating to flat except where youthful stream dissection has produced steep-sided valleys. While the surface drainage is generally fair, the heavy impervious sub-soil restricts the internal drainage considerably.

The potential fertility of the Haldimand Clay is quite high but at present much of the land is in poor condition. Organic matter content is low and often nitrogen is deficient. The available calcium and phosphorous content is low while potash and magnesium levels are high. As a rule free carbonates do not occur within 16" to 20" of the surface unless erosion has taken place. This illustrates a rare instance in which erosion may have beneficial effects.

Brookston Clay (BC)

This soil type covers a large area along the east bank of Black Creek. The Brookston series is the poorly drained member of the Huron Catena and exhibits the characteristics of the Dark Grey Gleisolic

Great Soil Group. It consists of heavy clay with poor natural drainage. It is neutral in reaction, and high in organic matter. Because the topography of this area is level, therefore both the internal and external drainage are slow. Artificial drainage is essential for best results, and phosphate fertilizers will increase the yields of most crops. Liming is not necessary in this soil type because of the considerable amounts of plant nutrients already present in the soil.

The A₀ horizon is a layer of partially decomposed litter from the deciduous trees which are the natural vegetation cover.. This has resulted in a surface soil in which the organic matter is well incorporated with the mineral constituents. The A₁ horizon consists of up to 8" of very dark brown clay, and clay loam of a fine granular structure with a very friable consistency. The pH is 7.1. The G horizon is from 8" to 22" of mottled clay and clay loam, and the colour of the mass is light grey-brown, with mottlings of yellow-brown increasing in intensity with depth. It has a coarse blocky structure, hard consistency, and a pH of 7.2. There is grit and some stones present. The C layer is grey-brown clay, mottled, with a coarse blocky structure. It has a hard consistency when dry and is plastic when wet. It is gritty and has a pH of 7.8.

Unsatisfactory drainage is the chief limitation of the Brookston soils. With the exception of phosphorous, these soils are well supplied with plant nutrients. However, unless adequate organic matter levels are maintained, unsatisfactory physical conditions may develop.

Gully erosion is common on the Brookston soils and the deep active gullies present a problem in the utilization and manipulation of farm machinery.

Provided the drainage is improved, and good soil management is practised, the Brookston soils produce good yields of crops commonly grown in the area.

Berrien Sandy Loam (BS)

Berrien Sandy loam is the imperfectly drained member of the Brookton Catena. The profile exhibits the characteristics of the Grey-Brown Podzolic Great Soil Group. The topography is smooth to gently sloping. The natural drainage is imperfect and the runoff is low. The underlying fine textured materials, and clays, inhibit the downward movement of the soil moisture. The clay appears at depths varying from 0 to 4 or 5'. It is quite acid and low in organic matter where the sand is a fair depth.

The profile for the above soil type is as follows: A₀ horizon is a thin layer of partially decomposed leaf litter. The A₁ is 0" to 3" of very dark grey sandy loam with a fine crumb structure, stonefree, with a friable consistency and a pH of 6.7. A₂ is 3-5" of greyish brown sand, stonefree, with a single grain structure, a friable consistency and a pH of 6.0. B₂ has 5" to 15" of dark brown sand, single grain structure, stonefree, and friable with a pH of 6.9. The C horizon is 23 to 25" of greyish brown sand which is calcareous and has a pH of 7.8. The D horizon is heavy clay till, with a coarse fragmental structure calcareous, friable, and with a few stones. The pH is 8.1. The depth of the sandy overburden is variable but usually the heavy clay till occurs at depths of about 30".

The organic matter content is low, and thus the content of the available nutrients is low. The surface reaction is neutral to slightly acid. Sweet clover ploughed under would increase organic matter content, and complete fertilizers must be used. The Berrien soils would also be improved by draining the lower areas.

Miami Silt Loam (MS)

This soil type occurs only in small areas, but in several different places. These are all located, however, on the west side of the Lynn River and are intermingled with the Fox series and with the Brookston sandy loam.

This is a well-drained greyish brown loam, slightly acid in content and quite heavy in texture. Liming is not necessary in this soil type because of the abundance of available nutrients. However, the organic matter should be increased by growing plenty of legumes, and ploughing under of such cover crops as sweet clover. The use of superphosphate will give excellent results in this soil.

Plainfield Sand (PS)

This soil type is also found interspersed with the Fox series and is only in small areas on the west side of the Lynn River.

This is light, loose, open sand, of single grain texture, and is extremely subject to drifting. It is quite acid, and is very low in organic matter. When the original forest cover was removed, there was considerable drifting and loss of soil through wind erosion. Reforestation is the best method of preventing Plainfield sand from drifting, and many of the areas of this soil type in Norfolk county are now planted or are being planted with coniferous trees.

Fox Fine Sandy Loam (FL)

The Fox Catena is developed on well sorted sandy materials. It is a well-drained, greyish brown fine sandy loam with good natural drainage, but is frequently low in organic matter. It is quite acid and the following is a generalized profile description of Fox Fine Sandy loam. A₀ is a thin layer of partially decomposed litter from deciduous trees. A₁ is 0 - 5" of very dark grey sandy loam, very fine crumb

structure, and very friable consistency. It is stonefree and has a pH of 6.6. A₂₁ is 5" to 16" of yellow-brown sand with a weak platy structure. It is friable and stonefree with a pH of 6.4. A₂₂ has 16" to 22" of pale brown sand, with a very weak platy structure, a friable consistency, stonefree, and with a pH of 6.0. The B horizon has 22" to 30" of dark brown sandy loam, with a very fine nuciform structure, a friable consistency and stonefree. The pH is 6.8. The C horizon is light yellowish brown sand, with single grain structure, stonefree, and calcareous, and with a pH of 7.8.

This soil is one which is quite easily cultivated but requires the addition of commercial fertilizers and barnyard manures to get the best results. Provided satisfactory fertility levels are maintained, fair to good yields can be obtained, and in areas, near lakeshores, where the climate is more temperate, fruit growing can be carried on with fair success.

Fox Sandy Loam (FSL)

This soil type is well-drained, and is quite acid and low in organic matter. It is similar to the Fox Fine Sandy loam, the difference being that it is coarser, is a yellowish brown colour, and contains more small stones than the Fine Sandy Loam. The profile is similar, and the same methods of retaining fertility are used, as those of the Fine Sandy Loam.

Fox Coarse Sand (FS)

As can be seen from the name of this soil type, it is again coarser than either of the other two types from the Fox series which are found in Woodhouse. It is a well-drained coarse textured sandy soil, low in organic matter, and quite acid. The profile of this is similar to that described in the Fox Fine Sandy Loam, and again, it is necessary

to maintain fertility by the use of commercial fertilizers, and barnyard manures.

Bottomland (BL)

Bottomland lies along the stream courses and is subject to periodic flooding. Except in the case of large rivers, where the floodplain is wide, this flood land occurs in narrow belts and sometimes it is necessary to exaggerate the width of bottomland on the map in order to show the drainage pattern of the County. These soils are the most recently deposited and deposition still takes place during periodic flooding. The profile is made up of successive layers of silt, sand, and clay intermixed with layers of organic matter, and usually there is a gradual grading in colour from the surface down.

These soils are moist at all times, and providing the banks are not too steep, the abundant growth of grass provides good grazing land.

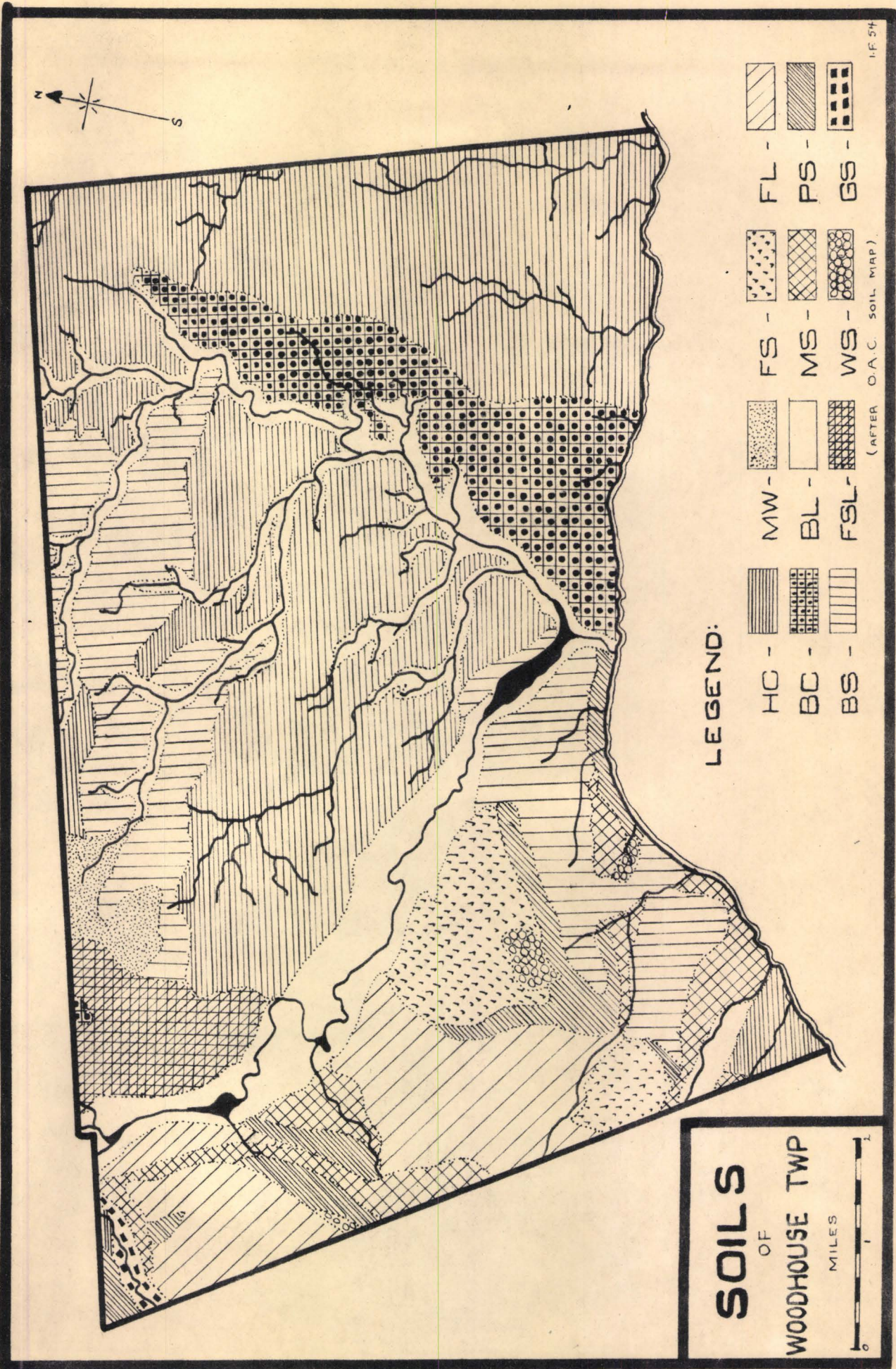
Watrin Sand (WS)

This is one of the minor soil types, and is found in only three small areas in the whole Township. It is a heterogeneous sandy soil, with watersoaked subsoil and includes areas of Granby sand, and Berrien sand. It is low in organic matter and strongly acid in the better drained areas.

Artificial drainage is necessary if these soils are to be used for agriculture and reforestation is advisable in most cases.

Granby Sand (GS)

There is only one area of Granby sand in Woodhouse, and this is found in the northwest corner of the township. This is poorly drained black sand, which has a grey mottled subsoil. It is neutral to alkaline, and has very low fertility in its natural condition. Again



LEGEND:

- HC - [Horizontal lines]
- BC - [Vertical lines]
- BS - [Diagonal lines (top-left to bottom-right)]
- MW - [Dotted pattern]
- BL - [Cross-hatch pattern]
- FSL - [Grid pattern]
- FS - [Stippled pattern]
- MS - [Diagonal lines (top-right to bottom-left)]
- WS - [Circular pattern]
- FL - [Diagonal lines (top-left to bottom-right)]
- PS - [Diagonal lines (top-right to bottom-left)]
- GS - [Grid pattern]

(AFTER O.A.C. SOIL MAP)

I.F. 54

SOILS
OF
WOODHOUSE TWP

MILES

0 1 2

MAP # 5

artificial drainage is necessary if these soils are to be used for agriculture. Reforestation is advised as the best method of using the land.

Miscellaneous Watersoaked Loam (MW)

The only area of this soil type in Woodhouse is found in the north west. It is a dark coloured loam, high in organic matter, and kept wet by seepage from sandy and gravelly ridges. If this soil is to be used for agriculture, some form of artificial drainage is necessary. Here again, reforestation is advisable.

LAND TYPES

The grouping of areas which have similar soils, slope, and drainage conditions has given rise to the unit known as the land type. Being based on physical factors, the land type presents a homogeneous appearance, and the study area has been divided into four land types which can be seen on Map # 6, and a brief description of which follows:

Berrien Land Type

The topography of the area is flat to gently rolling, with a total relief of approximately 50 feet. The main soil type of this land type is the Berrien Sandy Loam with small areas of other soils as well.

This land type occurs in two areas in Woodhouse township, one of which is found in the north central section, north of the Haldimand clay, and east of the Fox sandy loam section. It extends to the northern boundary of the township, and contains a small area of Haldimand clay and of watersoaked loam, as well as the Berrien sandy loam.

The other section of this land type is found in the southwestern corner of Woodhouse. The soils of this area are slightly more complex than those of the north. There are in addition to Berrien, small

areas of Miami silt loam, Watrin sand, Plainfield sand, and Haldimand clay.

Haldimand land type

The dominant soil of this type is the heavy textured, poorly drained Haldimand clay. There is also one large area of Brookston clay on the eastern bank of the Black Creek. The topography of this area is flat to gently rolling with an elevation of approximately 75' from the lakeshore to the northern boundary. The area is broken only by steep slopes near the stream banks, which have been cut into the clay.

This land type is the most extensive type recognized and covers the eastern half of the township.

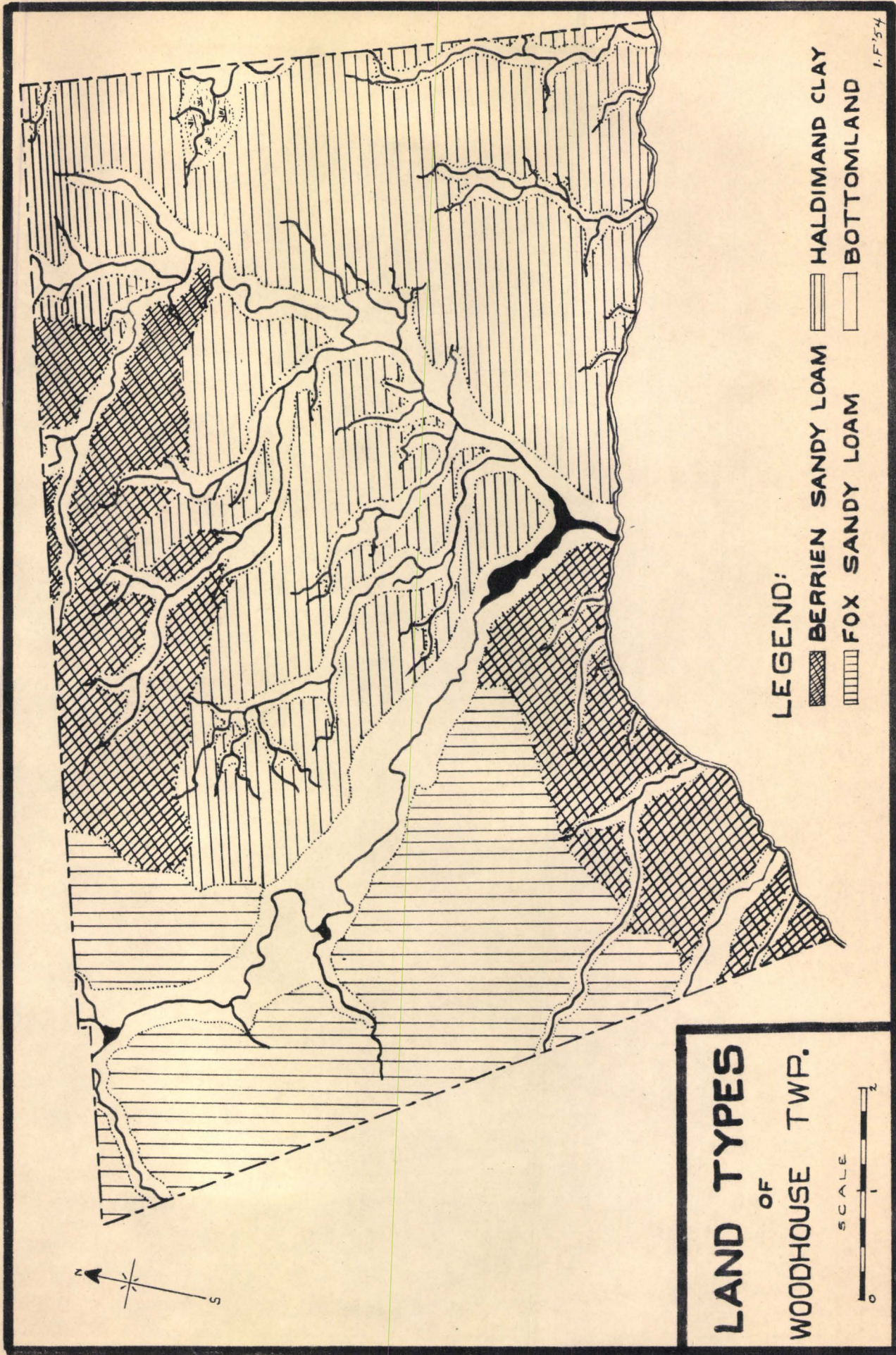
Fox Sandy Loam land type

The elevations of this area range from 700' to approximately 750' and the topography is gently rolling. The soils of the Fox series are the main types mapped in this land type, and there are three of these, the Fox Fine Sandy loam, the Fox sandy loam, and the Fox coarse sand. There are also found the Miami silt loam, Watrin sand, Plainfield sand, and Grandby sand.





The Fox sandy loam type is found in the western section of the township, west of the Lynn River and north of the Berrien Sandy loam land type.

Bottomland

This land type is found on the flood plains of streams, and is scattered throughout the other three land types. Generally the grainage is poor, and the land is too wet to grow anything but grass coverage. The bottomland area is subject to periodic flooding, and this is also a limiting factor in the growth of crops in this land type.

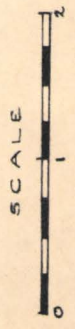


LEGEND:

-  BERRIEN SANDY LOAM
-  FOX SANDY LOAM
-  HALDIMAND CLAY
-  BOTTOMLAND

1.F.54

LAND TYPES
OF
WOODHOUSE TWP.



CHAPTER TWO

HISTORY OF SETTLEMENT

The original inhabitants of the township and of the southern Ontario region were the Neutral Indian tribes. They lived in the area between Lake Erie and Lake Huron in the 17th century, and were so called because of their strict neutrality in the savage wars between the Hurons and the Iroquois. Unfortunately for the Neutrals, they were drawn into fierce inter-tribal wars, and in the conflict were dispersed and absorbed into the neighboring tribes. Thereafter the Indians who roamed the western part of Ontario were chiefly Iroquois.

These natives practiced a primitive type of agriculture with maize as the chief crop, and with beans, squash, and sunflowers as supplementary crops. A plentiful supply of meat was obtained from the deer, bear, and other animals which abounded in the forests of the region.

The first white men to visit this area were two French priests named Dollier and Galinee, who, in 1669, set out from Montreal and reached Lake Erie in the vicinity of Port Dover where they stayed for the winter before returning. The records left by these two priests describe the "stately forests abounding with wild game of all descriptions, swirling streams teeming with fish, and a country laden with wild fruits of the finest quality."

By an act of the Imperial Parliament in 1791 Governor Simcoe

was empowered to divide Upper Canada into as many counties as he might think fit. Accordingly, in the following year, nineteen counties were surveyed, among them being Norfolk, which was named after Norfolk county in England. At first it formed part of the Western district, an extremely indefinite province. In 1798 the London district was created, and Norfolk county was incorporated as a part of it.

There were only a small number of settlers in Woodhouse prior to the American Revolution, and these settlers borrowed heavily from the Indian agricultural economy. For a number of years, Indian corn was the only grain grown. Since there were no grist mills, primitive methods of grinding the corn were carried on. The main source of income for the farmers of this period was the sale of the timber from their land.

After the end of the American Revolution, the Imperial government gave large grants of land to the United Empire Loyalists who came across the border from the United States of America. They were faced with many hardships, but settlement prospered because the land was rich. During the War of 1812, lumbering was the chief industry and a great deal of money was made because of the wealth of timber and the magnificent growths of pine, oak, and hardwoods which were on the land. As the land was cleared, and the way paved for agriculture, the numerous planing and saw mills were supplemented by grist mills. With this cleared land, the farmer was able gradually to revise his agricultural practices. New crops such as wheat, peas, and buckwheat were grown. The soils and climate were favourable to the growth of wheat, and it soon became the dominant crop of the area. The farmer of this period would have a minimum of livestock, including two or three cows, some sheep, a few pigs, and some poultry, and a yoke of oxen.

There were several small gatherings of farms by 1823 when the Talbot road which ran through the township, was opened. The opening of this road brought a great influx of settlers, and for several decades after this, many saw mills were actively engaged in the lumbering industry. In 1825 the county of Norfolk became a part of the Talbot district, and the population continued to increase.

By the year 1851, when the first census was taken the population of the township had grown to 2,894 and by 1871 had reached the total of 3,865. However, the light textured soils could not stand the regular cropping, and with a decline in fertility, and the increased loss of soil through wind erosion, there were two trends which began to take form. The first was the farm abandonment which began to take place, and became quite common in the next few decades. The second was the increased trend toward the growth of canning crops and the planting of orchards. Woodhouse now began to specialize in fruit farming. Orchards were planted in the sandy soils, and because of the temperate climate, and the length of the growing season, nearly every kind of fruit found in the temperate zone flourished in Woodhouse, -- apples, peaches, pears, plums, quince, grapes, apricots, and berries of all kinds.

On the whole, however, the period between 1850 and 1900 was one of decline. The wheat crop reached its peak in 1881 when the largest number of acres was sown, and since that time there has been a steady decline. The cultivation of barley reached its peak production in 1891 when 1,114 acres were sown. The growth of peas reached its peak in 1861 when 1,502 acres were grown, and the largest number of acres of potatoes was also reached in this period between 1850 and 1900 when 305 acres were planted in 1871. The only crop which did not show a decline was oats, due to the fact that the number of horses at this

time was at its maximum. Tables have been compiled from the Dominion Census reports, showing the trends in these crops and these are found at the end of this chapter.

By the year 1900, the number of horses in the township had reached its peak, and was beginning to decline. This decrease in the number of horses was probably due to the increase in the amount of machinery used, and the decline in the population. The number of sheep in the township reached their peak in 1861 with 3,924 and since there has been a rapid decline. The highest number of pigs in this period was reached in 1891 with a total of 2,785. After that year there was a decline in the number, but, the decline was not permanent, and an increase occurred again in the next century. The exception to the trend in farm animals is seen in the number of cows which increased steadily throughout this period, and has been increasing ever since due to the growth of the dairying industry in the township.

By 1904 the problem of soil erosion and loss of fertility had become so serious in the county that the Ontario Conservation ? department decided to take some action to preserve the remainder of the soil, and to educate the people in conservation. A forestry department was established at the Ontario Agricultural College at Guelph, and a nursery was founded to supply farmers with seedlings for replanting the more seriously eroded portions of their farms. Within four years the nursery was distributing 400,000 seedlings each year. Government forestry stations were established at St. Williams, and at Turkey Point in the heart of the waste area and at the present time, Norfolk has some 3,500 acres under reforestation, and there are at least two large areas in Woodhouse township. In 1951 nine and one-half million trees were given out for planting.

While the period from 1850 to 1900 was one of decline, this trend continued into the early part of the next century, until 1923, when specialized agriculture was begun on a large scale with the introduction of tobacco. From that year onward, it has been a period of increasing prosperity for Woodhouse township, although there has still been decline in some respects such as in the number of orchards under cultivation.

By 1931 the number of acres under orchard had reached its peak, and since then there has been a decline in number. Neglect and disease have combined to hasten the destruction of the orchards.

The decline in the number of acres under pasture since 1921 shows the decreased interest in general farming and cattle-raising and notes the increased interest in specialization. The number of acres in woodlots and waste land has not changed to any great extent since 1891 and it still comprises about 12% of the area of the township. The distribution of the woodland can be seen on Map # 7.

The most recent step in the growth of the township of Woodhouse has been the introduction of tobacco farming in 1923. In 1923 there were 20 acres of tobacco planted as an experiment on a farm near Lynedoch. The crop was excellent. Within 15 years over 60,000 acres were in tobacco. In 1951 the county of Norfolk had 109,495 acres which produced a crop valued at \$ 64,544,000.00. The county figures were used in this instance, because the township figures are not available, but they are an indication of the prosperity which is being derived from this specialized crop.

Because of the depleting effect of the tobacco on the soil, rye was introduced in recent years as a rest-crop for tobacco, and there is now practiced a three year rotation system on this land, one year in tobacco, one year in rye, and then one year in fallow. The acres under





MAP # 7

WOODLAND AREAS OF WOODHOUSE

SCALE



LEGEND:

- | | |
|--|--|
|  WOODLAND |  RAILROAD |
|  URBAN AREA |  ROAD |

I.F. 54

rye, in this rotation, have not been included in the tables at the end of the chapter because this rye is not harvested, but is ploughed into the soil to restore to the soil what the tobacco has taken out of it.

The chief cash crops of Woodhouse now, instead of being wheat and lumber, are flue-cured tobacco, apples, and small fruits, and market vegetables. These are indicative of the trends which are now prevalent in the township. Norfolk county produces 20.7% of all Canadian apples, and 55.9% of the strawberries, but it is the tobacco which has made this area the richest in Canada.

The effect of this specialization of agriculture since 1900 can be seen in the population figures of the township. They reached the lowest point of decline in the census of 1921 with 2,227 people, but by 1951 there were 3,445 people in the township, an increase of 19.9% in the last decade alone.

During this period of specialized agriculture the number of horses has continued to decline, due mainly now to the increased mechanization, and also to the fact that tobacco is harvested by hand labour. The number of sheep has continued to decline, and the number of cattle to increase, which is the same trend as was seen in the previous period between 1850 and 1900.

The number of acres planted in wheat is still declining, as is the barley crop also. Rye, oats, potatoes, and turnips have reached a more or less stable position and there is now no continuous trend of increase or decrease, but a fluctuation, being up one year and down the next.

The trend of abandonment of farms which began in the previous period, reached its maximum in the early part of this period between 1911 and 1921, just prior to the introduction of tobacco. The main

trend of abandonment was in those farms which were under 10 acres, as can be seen in a decline from 148 to 44 between 1911 and 1921. In the same period, there was a decline in those from 10 to 50 acres, but only from 153 to 122, not nearly so marked, and in farms from 50 to 100 acres the decline was only 3. Those from 100 to 200 had an increase of 9 and those over 200 remained the same. From this, it is safe to assume that those on the small farms had less to lose and were willing to abandon the farms to go elsewhere to earn a living. Those on the larger farms, having more to lose, were not so willing to leave, and thus in all probability these are the ones who changed their type of agriculture to fruit farming, and later to other types of specialized farming as well.

Since 1921 the number of farms under 10 acres has increased from 44 to 73 which would indicate that there has been a re-occupation of farms which had been abandoned. There is also an increase in the number of farms over 200 acres which would indicate amalgamation of several small farms into one large farm. Amalgamation also accounts for the change, to a large extent, in the other categories shown on the table at the end of the chapter.

In this chapter on the history of settlement, a discussion of the settlers by origins should be included. In the period of history prior to 1851 the Irish composed the largest number of settlers in the township, closely followed by the English, and the United Empire Loyalists from the United States of America. In 1871 the English took the lead with almost twice as many settlers as the Irish. In that year also, German migration into the township reached its maximum. The English have retained the lead to the present time. A table giving the population by origins is included with the tables at the end of the chapter.

RURAL DEPOPULATION AND REPOPULATION

With rural depopulation so prevalent across the province, it should be noted that in Woodhouse township the present trend has been toward the repopulation of the rural areas. There has been a steady increase in the number of farms occupied, and the number of acres under cultivation since the introduction of specialized crops, particularly tobacco.

In recent years the increase in population has not been as great, and it is thought that this is due mainly to the fact that small privately-owned farms have been bought out and turned into large plantations under company control, particularly under the control of the Imperial Tobacco Company, who receive, grade and pack most of the crop. This has resulted in a more efficient management of the farms, and better systems of harvesting, and thus a reduction in the number of people needed to harvest the crop.

There are still a number of abandoned farms in the township, but the number is relatively small, and these are in areas where the soil is not adaptable to the specialized type of agriculture which has grown up in the area.

The information contained in the following tables has
all been taken from the Dominion Census Reports.

TABLE # 1

POPULATION OF WOODHOUSE TOWNSHIP

<u>Year</u>		<u>Year</u>	
1851	2,894	1911	2,302
1861	3,703	1921	2,227
1871	3,865	1931	2,576
1881	2,922	1941	2,778
1891	2,508	1951	3,445
1901	2,379		

TABLE # 2

LAND UTILIZATION IN WOODHOUSE TOWNSHIP

<u>Year</u>	<u>Acres Held</u>	<u>Under Crops</u>	<u>Under Pasture</u>	<u>Gardens & Orchards</u>	<u>Waste, Wild & Woodland</u>
1851	26,157	9,053	3,482	255	13,367
1861	28,864	13,079	4,187	538	11,060
1871	34,091	18,002	4,872	1,081	-----
1881	34,045	19,870	4,000	1,113	-----
1891	34,416	23,671	4,075	1,265	5,405
1901	-----	-----	-----	-----	-----
1911	35,122	-----	-----	2,047	-----
1921	33,965	19,032	8,082	1,381	5,048
1931	34,918	24,202	4,894	5,758	5,216
1941	34,403	19,140	5,270	2,899	5,103

TABLE # 3

CROPS OF WOODHOUSE IN ACRES

Year	Wheat	Barley	Rye	Oats	Peas	Buck- wheat	Corn	Pota- toes	Turnips
1851	3,273	16	108	1,187	73	546	764	165	30
1861	3,812	626	256	1,337	1,502	551	441	289	125
1871	3,226	---	---	---	---	---	---	305	---
1881	5,444	---	---	---	---	---	---	284	---
1891	4,696	1,114	---	2,953	---	---	---	176	105
1901	---	---	---	---	---	---	---	---	---
1911	4,929	756	---	4,168	---	458	1,330	254	37
1921	3,780	521	297	4,542	302	252	726	261	43
1931	2,270	731	186	3,581	---	---	---	212	35
1941	1,967	312	372	3,599	---	---	---	140	---

TABLE # 4

LIVESTOCK OF WOODHOUSE

Year	Horses	Cows	Sheep	Pigs
1851	787	1,702	5,369	2,150
1861	888	2,311	3,924	2,118
1871	---	---	---	---
1881	---	---	---	---
1891	1,745	2,943	1,754	2,785
1901	---	---	---	---
1911	---	---	---	---
1921	---	---	---	---
1931	1,429	3,794	1,079	1,811
1941	1,243	3,932	689	3,306

CHAPTER THREE

PRESENT AGRICULTURAL LAND USE

Agriculture is the dominant industry of Woodhouse. The generally level topography, the favourable climate, the nature of the soils, the proximity of large urban markets, and the initiative and progressiveness of the farmers have been factors which have contributed to the prosperous state of the industry. Norfolk is the wealthiest county per capita in Ontario, and this is due mainly to the specialized nature of her agriculture. The degree of intensity of the agricultural use of the land in the township varies with the nature and texture of the soil.

The specialization of agriculture which is carried on has provided the farmers of the area with a stable and a high income and this has enabled them to equip the farms with the latest of modern machinery and to use the most modern methods in producing a crop. Outside the specialized area, where general farming is still being carried on, the income is also stable, but not as high, and in these areas, older methods of agriculture are still seen and the general appearance is one of less prosperity than in the specialized regions.

A systematic field-by-field survey was made of the township and from the information gained by this survey, the accompanying land use map was drawn (Map # 8). From an examination of this map, it can be seen that there are four main types of agricultural land use in the township.

At the time the survey was made for the map, each farmhouse was also classified according to the following:

first class - the house is large, fairly new, well-kept, and usually of brick or stone construction. The grounds around the house are also cared for, and landscaping of some type has been done. The barn and other buildings are painted and clean in appearance, and the fences are in a state of repair. The farm has an overall appearance of prosperity.

second class - the house in this case, is smaller than that of first class and often frame in construction. The appearance of the grounds is one of tidiness, and the barn and other buildings also appear to be clean and cared for. The main difference between first and second class is the size and construction of the house, barn, and other buildings.

third class - the house and barn are again smaller than that of the second class, and the appearance is usually one of untidiness, with the fences in need of repair. The barn is nearly always unpainted, or in need of paint, and the house is small, usually of frame construction and run down looking. The lawn and barnyard are usually cluttered with machinery, much of which is obsolete.

fourth class - these are the poor looking run-down farms. They have not been painted for many years, the steps are



An example of a first class farmhouse.
Note neat and tidy appearance, well-kept
and painted fences, and landscaped grounds.



A typical second class farmhouse found
in the areas of general farming. Note
frame construction, neat and tidy appearance.



An abandoned farm, found in the area of general farming.



2

The one remaining saw mill in Woodhouse township.

falling off the house, the windows are broken, and the appearance in general is one of neglect and decay. In many cases the fences have disappeared completely, and the fields have been allowed to grow up full of weeds. Most of the farm is uncultivated. The majority of these farms are abandoned.

The area of particular specialization is the area of tobacco farming which is found on the western side of the township. The farms of this area are very prosperous looking, and the equipment and methods are the latest. It is a common sight to drive along the highway and see a large well-kept farmhouse, with from 5 to 15 tobacco curing houses in a row behind the house. Most of the farms in the section were classified as first and second class homes, and not one instance of an abandoned farm was seen. Nearly every available acre was in use. Almost every farm had its own small garden plot in which vegetables are grown for the use of the farmer and his family and usually there are several fruit trees of different varieties. In some cases fields of grain, other than rye, are also planted for feeding of animals and for sale at nearby markets. However, few animals are seen on these farms. Because the work is done with modern machinery, there is no need of keeping horses. The location of this area with respect to Simcoe and other centres has made it possible to have milk delivered to the door by the dairies of these centres and thus the keeping of milk cows on the farms is unnecessary. Since there is more profit in the specialized crop than in keeping hogs, or chickens or other animals, for sale as meat, these are rarely seen, in this specialized tobacco area.

The number of acres of tobacco is regulated by the Flue-Cured



- Examples of the two crops which form part of the three-year rotation in the tobacco growing area.
- Above - note the sandy texture of the soil seen between the rows of tobacco plants. Rye is the crop in the background.
 - Below - Note the windbreaks of pine trees separating the fields. This is one method used to preserve the soil from wind erosion.



Tobacco Marketing Association of Ontario which was set up as a result of the report of the Tobacco Inquiry Commission which was investigating the conditions in the tobacco producing industry. The commission was necessary because of a large surplus from the 1926 and 1927 crops. This surplus was lowering the price of the product. In spite of this the acreage continued to increase and the price continued to fall. In 1934 the farmers organized and decided to reduce the acreage. The Natural Products Marketing Act passed by the Dominion government in 1934 laid the basis for the establishment of the Flue-Cured Tobacco Marketing Association. Acreage control was voluntary, but at the present time most of the growers are members of the association.

Because they are limited by the association as to the number of acres of tobacco planted each year, the farmers plant other crops such as market vegetables, small fruits, and some grains on the land not in tobacco, rye or fallow. These other crops can be sold in Simcoe and other centres.

The remaining agricultural area of the township is one of general farming with special emphases. As is seen on Map # 7 there is emphasis on fruit, grain, and dairying.

The fruit farming area is found along the lakefront, and around the Simcoe area. The soils of this area are heavier clays, and sandy loams, and not particularly suitable for tobacco. Economic conditions also have been partly responsible for this concentration around Simcoe. The presence of a large canning factory in the town, which was built because of the fruit grown in the area, has meant a steady sure market for the fruit of the farms and thus has maintained the orchards of this area when those in other sections of the province have been left to decline. The presence of the large packing

plant, and a cold storage house in Simcoe have also helped to maintain this area of specialized fruit farming.

The farms of this area are prosperous looking, mainly of second class with some first and third class farms as well. Again each farm has its own small garden plot which produces vegetables for the use of the farmer and his family.

The methods are quite modern, as is the machinery used in most cases, because this area also has a stable and fairly high income from the sale of the fruit to the large urban markets nearby and to the canners. Few animals are seen on these farms, although often more than are seen on the tobacco farms. Horses are used in place of some types of machinery, but large tractors are also in use on most of these farms. No cases of farm abandonment were seen.

The dairying area is found in the north east corner of the township, and is a part of a large dairying section which extends into the townships to the east of Woodhouse. In Haldimand county the main emphasis in agriculture is on dairying, and this emphasis has extended into Woodhouse on the Haldimand clay soils, on which large herds of beef and dairy cattle are seen.

Although the physical environment is favourable to the development of the dairying industry, there have been important external stimuli. The tremendous conurbation which has occurred around the industrial centres of Toronto and Hamilton has created an ever-expanding market for fluid milk, butter, cheese, and other dairy products. It is the presence of this profitable market only one or two hours drive by transport from Woodhouse which has caused the dairying industry to develop in the township. Further increases in the population of these two centres, will probably in the future mean that some of the land now

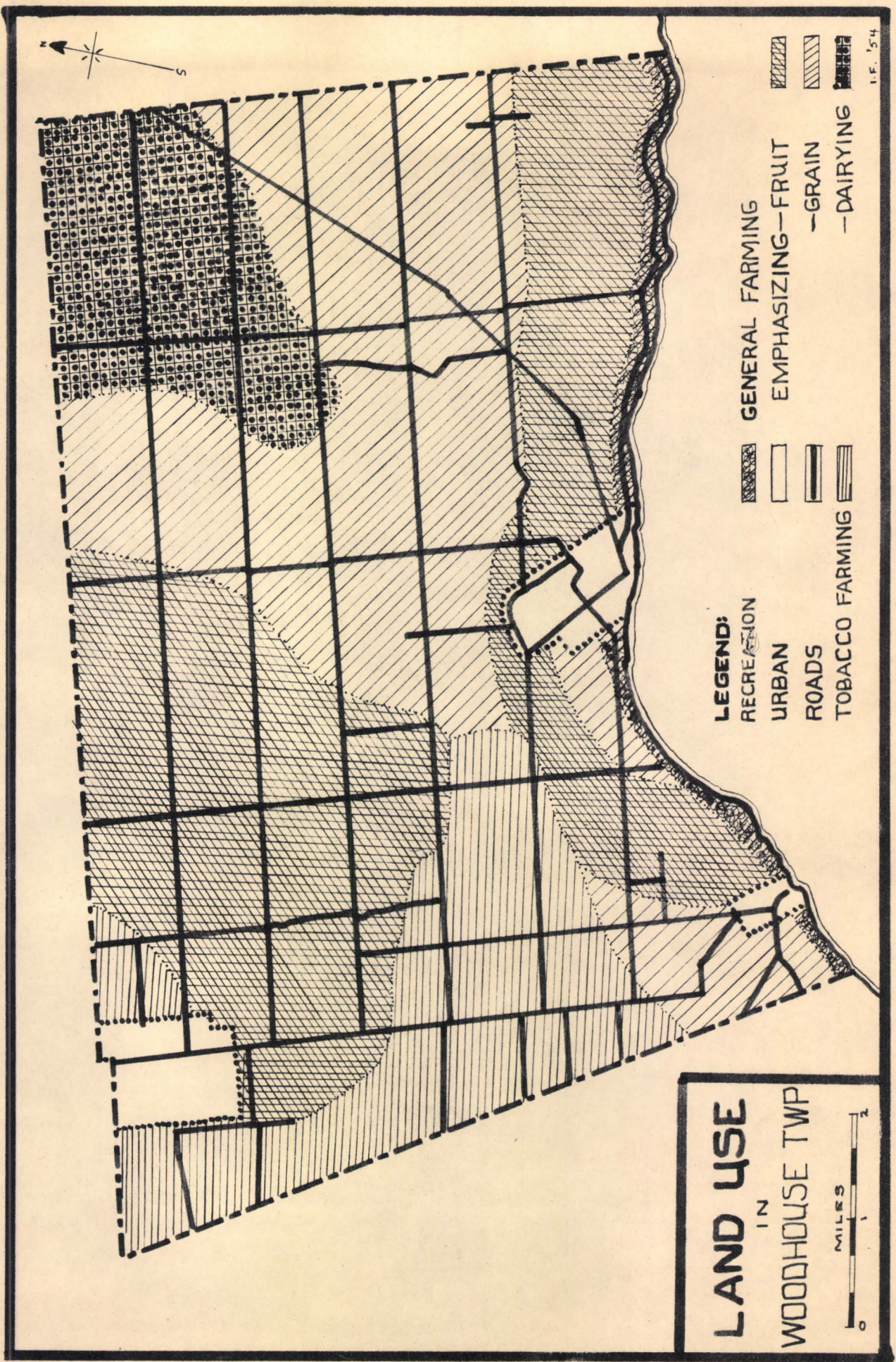
classified as farming with emphasis on grain will have more emphasis on dairying.

The farms of this area are prosperous looking being predominantly second class, with some third, and a few first class farms. There are several abandoned houses, but the farms for the most part are being worked, and it is, in all probability, a case of the amalgamation of two farms to be worked by one farmer.

The remaining portion of the township is one of general farming with emphasis on grain growing. This area is the least prosperous looking of the township, and several cases of farm abandonment can be seen. This is an area which is carrying on with the type of general farming which once was over the whole township. There has been no specialization. The farms are predominantly third class with several second class, and a few fourth class. The number of first class farms is three. The largest percentage of idle land is seen in this area. Agricultural methods and equipment are not so modern as in the other areas, because the income is not as high, although it is fairly stable. Herds of cattle can be seen, and larger numbers of horses than in the other areas due to the lack of modern machinery. The lack of machinery is due to low capital which is in turn due to the lack of a high value cash crop such as tobacco, fruit, or dairy products. Poultry are found in this area together with hogs and a few sheep.

The main crop is oats which is used as feed for the poultry cattle, and horses, but large fields of fodder corn are also found. Wheat and barley are grown in fairly large amounts. Also seen in this area are large fields of hay and pasture which are not found to any extent in the other three areas.

The remaining sections of the township are either covered in woodland or are waste land. The areas of woodland can be seen on Map # 7 and consist mainly of small farm wood lots. The waste land comprises mainly those areas along the banks of the rivers and streams. These can be seen on Map # 5 classified as Bottomland (BL) and on Map # 6 which is the land type map and on which it is also classified as bottomland.

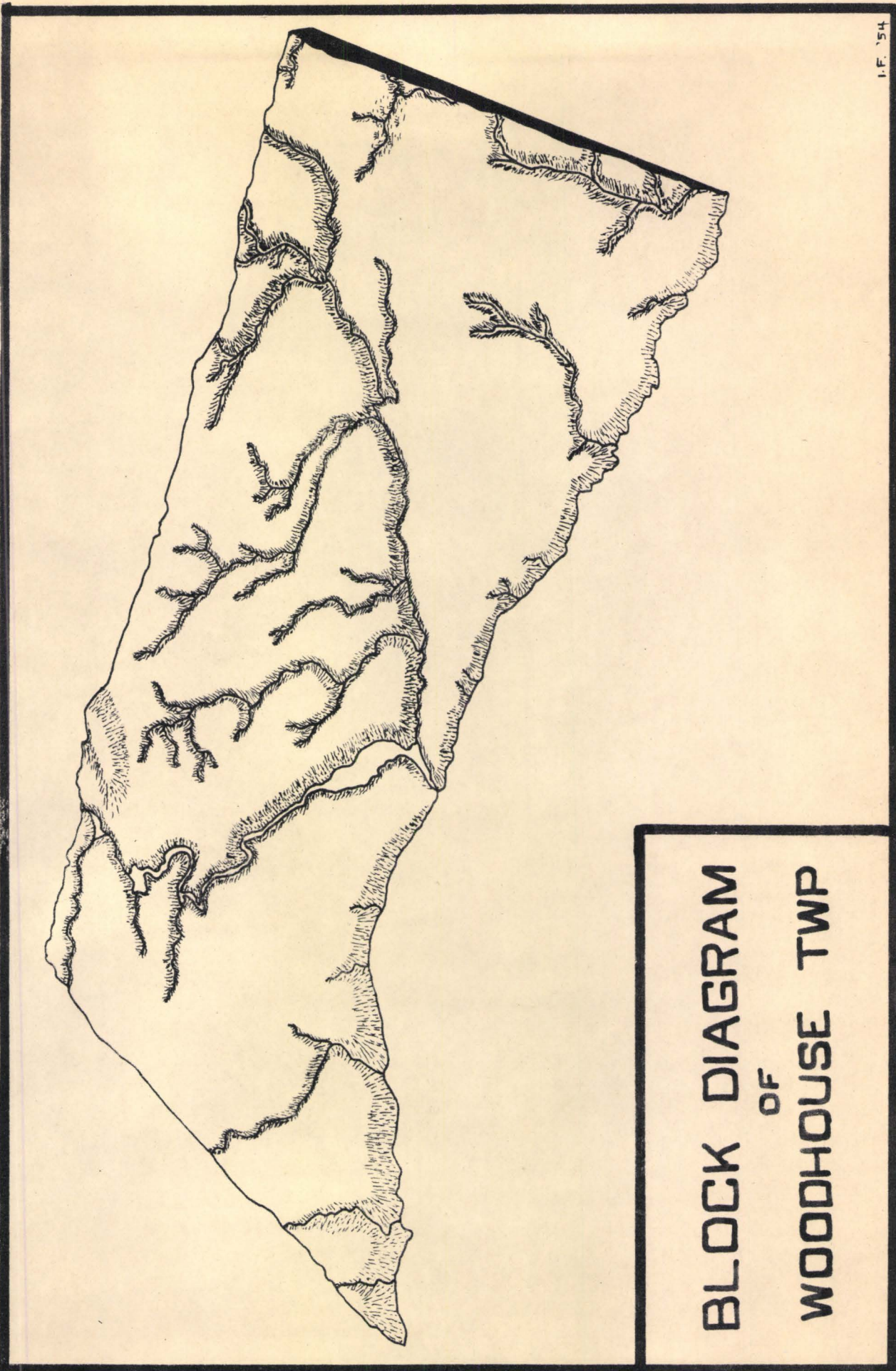


LEGEND:
 RECREATION [Cross-hatched pattern]
 URBAN [White box]
 ROADS [Double line]
 TOBACCO FARMING [Horizontal lines]
 GENERAL FARMING [Diagonal lines (top-left to bottom-right)]
 EMPHASIZING—FRUIT [Diagonal lines (bottom-left to top-right)]
 —GRAIN [Dotted pattern]
 —DAIRYING [Vertical lines]

LAND USE
 IN
WOODHOUSE TWP
 0 1 2
 MILES

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I.F. 54



**BLOCK DIAGRAM
OF
WOODHOUSE TWP**

CHAPTER FOUR

RURAL NON-AGRICULTURAL LAND USE

There are four different types of rural non-agricultural land use in Woodhouse Township, including recreation, natural gas, transportation and mining.

RECREATION

There are several reasons for the use of areas of rural land in Woodhouse for recreational purposes. The warm waters of Lake Erie are enjoyable for swimming from early in June to late in September. The beaches in most places are sandy and clean, and thus are easy and pleasant to walk and play on. The gentle offshore slope results in shallow water which is safe for small children to wade in. There is no undertow in the water, and therefore, there is less danger of drowning. The fishing, especially in Turkey Point Bay is excellent, all summer, and in the fall it is a favourite spot for duck hunters.

The recreational area of Woodhouse is found along the lake-shore, especially in the areas where access to the water is easy. In a few areas of the lakefront, there is an embankment which is at the edge of the lake. This makes access to the water more difficult, especially for older people. However, in several places there have been streams flowing into the lake which have cut into the bank, making the descent not so steep, and the access to the lake, therefore, is less arduous than in the areas of steeper embankment. In these areas summer camps for

young people are found. An example of this can be seen just west of Port Ryerse on the lake shore where there is a camp which was owned by the Y.M.C.A. and was used as a boys camp. This camp has recently been purchased for the use of the C.G.I.T. and is now a girls camp in the summer months.

There are at intervals along the shore, wherever the bank is lower or is back from the shoreline, small clusters of cottages or even single cottages. Almost every available spot which is at all accessible to the water is used for either cottages, or summer camps.

These recreational attractions are also responsible for a large tourist industry which is carried on during the summer months. As well as Canadians from all parts of Southern Ontario, hundreds of American citizens come to Canada and camp on the north shore of Lake Erie. Much money is spent in Norfolk County and in Woodhouse Township each summer by these tourists, and it has become one of the important sources of revenue in the township.

The areas of Woodhouse which are used for recreation can be seen on the land use map (#8)

NATURAL GAS

Drilling for natural gas constitutes a form of land use, the importance of which is well out of proportion to the area it occupies. There are approximately 108 producing wells in Woodhouse, and there is a fairly stable production of about 406,383,000 cubic feet of gas per year. Gas companies employ 54 men all told.

TRANSPORTATION

Woodhouse is well served by roads and railroads, as seen in Map # 3. There are several lines of the C.N.R. running through and into the township. One C.N.R. line goes from Port Dover to Simcoe and on to the area in the north. The main bulk of east-west traffic, both road and rail in Southern Ontario, passes to the north of the township, and this line from Port Dover is to connect the harbour facilities of Port Dover with this main artery of transportation to the north.

Another C.N.R. line runs from Port Rowan through Vittoria to Simcoe, and on to the main line of traffic in the north. This branch was built to serve the area between the shore and the main line of traffic and which is found west of Simcoe and south of Delhi. Also the Lake Erie and Northern Electric Railway runs from Port Dover to Simcoe and on through Brantford Galt, Paris and other urban centres in the north. This is mainly a passenger line at the present time.

There are approximately 30 miles of paved, wide and well-kept highways, and approximately 3 miles of narrow paved road which is cared for by the Provincial Department of Highways. There are also many miles of improved, gravel-surfaced county roads. The pattern, for the most part, is a grid pattern, with some slight deviation in the west of the township, because of the triangular shape of the western section. This road pattern can be seen on Map # 8.

There is only one public road in the township which is in a state of disrepair, and that is the road along the lakefront between Port Dover and the eastern boundary of the township. The waves of Lake Erie have been cutting into the bank in this section of the township, undercutting the bank and making the road unsafe in many places. Therefore the road has been closed, but another road will be built farther from

the edge of the bank to ensure safety, at least temporarily, from the action of the waves and the falling away of the bank.

MINING

The only mining in Woodhouse township is the extraction of sand and gravel from surface deposits for use on the roads of the township, and for construction purposes.

In May and June of 1952 the United States Steel Company took options on 5,400 acres of land in Norfolk County, about half in Woodhouse township, and the remainder in the township of Charlotteville, which is west of Woodhouse. It had been discovered by the use of the magnetometer that there was a large body of magnetic ore below the surface at a depth of approximately 3,000 feet. However, in the autumn of 1953, it was announced that the United States Steel Company had abandoned any intention of mining the ore. It was considered to be of poor quality, and difficult to mine, because of the depth of the ore beneath the surface. The cost of drilling would be too great, and it would not compete favourably with other ores on the markets. It will be kept as a reserve, for the future when other sources of supply become extinct or unavailable.

CHAPTER FIVE

URBAN LAND USE

The urban land use in the township of Woodhouse consists of the town of Simcoe, the village of Port Dover, and the village of Port Ryerse.

THE TOWN OF SIMCOE

The town of Simcoe is built on parts of nine township lots, 6 of which are in Woodhouse, 2 in Windham, and 1 in Townsend. The town is situated on the river Lynn seven miles north of Lake Erie on a line between Windsor and Niagara Falls. It is 45 miles southwest of Hamilton and 25 miles south of Brantford.

The town was founded on this spot because of a mill site at the junction of the Lynn and Patterson Creeks. It is well located with respect to transportation facilities. The town is on the line of the Canadian National Railways running between Windsor and Fort Erie, over which the freight trains of the Wabash Railway also run. A branch of the C.N.R. runs from Simcoe to Port Dover and another runs to Port Rowan in the southwest, thus bringing the traffic from southern Norfolk into Simcoe. The Lake Erie and Northern railway, a branch of the C.P.R. provides radial car service through Simcoe to Port Dover in the south and Brantford, Galt and other centres to the north.

King's Highways Nos. 3 and 24 intersect at Simcoe. Convenient motor transport is thus ensured and both Canada Coach and Greyhound lines operate buses through this municipality. The County of Norfolk has built a network of surfaced roads leading into Simcoe and the rural residents have year-round convenient access to their county shopping centre.

Within 100 miles of Simcoe are located nearly one-half of all of Canada's manufacturers, ready sources of raw materials, one-third of Canada's buying power and a ready market for the sale of its products. Simcoe is only 82 miles from Toronto, 45 miles from Hamilton, 45 miles from Kitchener, 50 miles from London, and 70 miles from Fort Erie. It is also within easy travelling distance of two points of entry to the markets of the United States, Buffalo which is 85 miles from Simcoe, and Detroit which is 174 miles distant.

This position with respect to rail, and road communication with both southern Ontario and the United States has contributed greatly to the development of Simcoe, and this location can be seen on Map # 3.

History of Settlement

The town of Simcoe, which is the county town of Norfolk, takes its name from General John Graves Simcoe, the first Governor of Upper Canada, who passed the site in 1794 en route to Turkey Point where he established Fort Norfolk. The town was founded and developed around the mill site. The original mill was built below the junction of the two rivers, Lynn and Patterson, where the river narrows and the flow of water at this point has a greater amount of force, and thus more power is available for the mill.

The first general store was built in 1815 by Mr. William Bird. By 1829, because lumbering and grain farming were the main occupations

in the area, there were two grist mills, and three saw mills operating along the river in the town. There also was established a soap factory, several distilleries, and a cooperage which made barrels for the breweries. There was also a blacksmithing establishment which operated seven forges, a foundry, a wagon shop, and a tin shop, all connected with the farming of the area. Before long there was also a church, a bank, and a school.

In 1837 Mr. Lewis Burwell was called in to make a survey and plan of the hamlet, and from this time the growth was rapid. Simcoe became the county seat, with an influx of county officials, and the erection of the county buildings, it received a great impetus.

In 1840 "The Norfolk Observer" became the first newspaper of the town. The little settlement grew rapidly, adding more industries to those already established, and by 1851 Simcoe was incorporated as a village.

In 1858 the Union School was built, and it later became the High School. The Simcoe Reformer was founded in the same year. In 1872 the Great Western railroad from Glencoe to Fort Erie reached Simcoe bringing more trade and opportunities with it, and in 1875 the railroad from Port Dover to Woodstock was completed. In 1878 Simcoe was incorporated as a town and the following year the railway between Simcoe and Port Dover was completed. This was part of the electric line which was to run from Port Dover to Galt. This line was completed in 1916 and Simcoe was then linked with Waterford, Brantford and Galt. In 1907 the water system was begun, and in 1914 the sewage system was well under way.

The population of Simcoe during this period was steadily increasing, until, at the present time, it has reached a total of 7,138. The following table gives the population of Simcoe at each census from 1851 to 1951:

TABLE # 7

POPULATION OF THE TOWN OF SIMCOE

<u>Year</u>	<u>Population</u>
1851	1,452
1861	1,858
1871	1,856
1881	2,514
1891	2,674
1901	2,627
1911	3,227
1921	3,953
1931	5,226
1941	6,037
1951	7,269

Land Use in the Town of Simcoe

The land use in the town of Simcoe is divided, in this study, into five categories as follows: Industrial, Commercial, Residential, Vacant Land, and that land which is owned by the government, and is used for parks or public buildings, and institutional land used for schools, hospitals, etc.

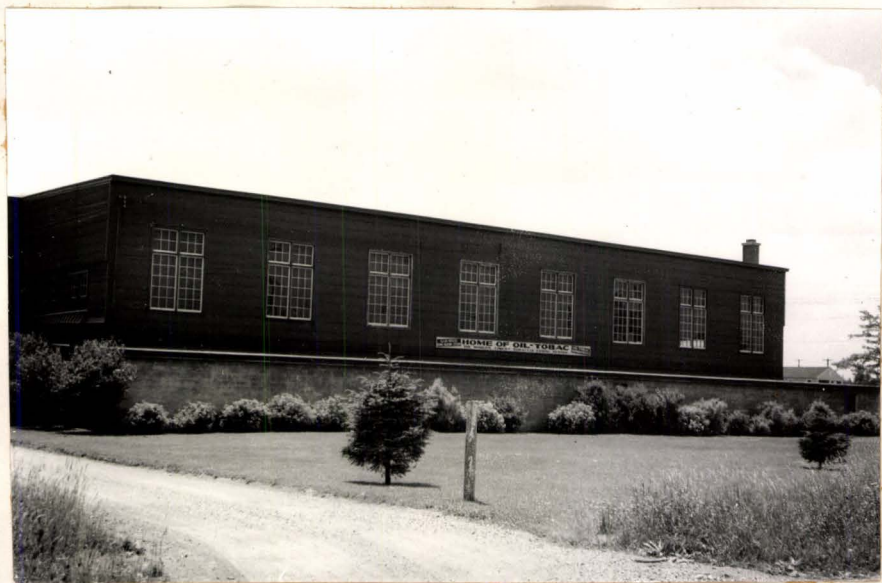
Industrial land use

The industrial zones of Simcoe are located on the rail lines, along the bank of the river, or in the outlying districts of the town. There have been several new areas opened recently for industrial development and at the present time the Simcoe Board of Trade is extending an invitation to industries to locate in these new sections of Simcoe.

There are at present twenty-seven industries located in the Simcoe area of which the American Can Company, employing 283 workers, is the largest. The only other two industries employing over 100 laborers are the Brook Woolen Co. Ltd., with 195 and the Canadian Cannery Limited with 175 employees.



Canadian Cannery Limited,
One of Simcoe's largest industries.



The Home of Oil-Tobac,
Tobac Curing Systems Limited.

There are four industries which employ over 50, including the British Knitwear Limited, 93, J. B. Jackson Ltd., 86, St. Williams Preservers, 75, and Simcoe Mitt and Glove, with 50 employees. Other industries of importance are the Tobac Curing Systems, 38, Springstead Knitwear Co. Ltd., 29, Simcoe Wool Stock Co., 47, Pearce Publishing Company (The Simcoe Reformer) 31, Norfolk Co-operative Limited, 34, Leamington Tobacco Sales Corporation, Kitchen Overall and Shirt Co., 40, Jackson's Bread Co., 36, Cannerns Machinery Limited, 34, and many other smaller industries.

Because Simcoe is situated in the middle of a rich agricultural district, and fruit area, the Canadian Cannerns Limited built their largest plant in Simcoe. The presence of this plant has drawn the American Can Company into the area to supply the cans necessary for the canning of the produce of the area. Also connected with the canning industry are such industries as Cannerns Machinery Limited, Stalker Engineering Co., machinists, and the West Machinery Limited, International Cooperage, Lealand Company Limited, makers of jams, and jellies, and the St. Williams Preservers, who also make jams, jellies, marmalades, etc.

Simcoe is located in the tobacco area of Ontario, and therefore industries such as Tobac Curing Systems Ltd., Leamington Tobacco Sales Corp'n, processors of tobacco for cigarettes, have located here.

It will also be noted that there are six textile factories in Simcoe. These plants are nearly all owned by members of the same family, and in most cases, the plants were opened in Simcoe because it was the hometown of the family. There is no specific geographical reason for the location of these plants in Simcoe. They preferred to settle and establish their plants in their own home town rather than to take their business elsewhere. It was economically sound to do this because of the



Norfolk Fruit Growers Association
Cold Storage Plant



A section of Memorial Park, one of
several beautiful parks found in
Simcoe.

position of Simcoe with respect to the retail and wholesale markets of Southern Ontario.

There are also the necessary service organizations such as bakeries, dairies, and wholesale grocers, and a number of miscellaneous concerns, such as lumber and building suppliers, work clothing manufacturers fertilizer plant, and job printing plants which are necessary to serve the needs of a town the size of Simcoe.

Retail or Commercial land use

The retail section of Simcoe extends about two blocks in each direction at the intersection of Argyle and Norfolk Streets. The commercial section located here originally because of the nearness to the original industrial site on the river's edge. The mill was built, and before long the first general store was opened at what is now corner of Argyle and Norfolk Streets, just a short distance from the mill. Around the commercial section homes were built and when later expansion of the retail section occurred, it was at the expense of the homes in the area. The retail section has tended to develop in a westward direction along Argyle Street, rather than along the highway as would be expected. This westward development has occurred because of two reasons. Parking facilities are more readily available away from the highway, and there is more room for expansion in this direction along Argyle street. Retail expansion eastward is limited by the river, and northward there is not a very great distance until it would again be limited by the river. Southward along the highway it is only a short distance until the town limits are reached. The development of the town appears to be in an east-west direction, in the areas closest to the commercial section.

Expansion in the north section of the town is to the north and west. This is going farther away from the present commercial section,

and several stores have been built, and another smaller shopping centre is beginning to grow up in this section of the town.

The main commercial centre serves a trading area of nearly 35,000 people, and enables the town to provide a variety of merchandise both in staples, household goods, and in luxury articles. Every type of article required to run a home, or office, is available in the stores of Simcoe. There are also five national banks, four hotels, and adequate restaurant service for the use of the people in the town, and those who are driving through. A municipal market served by the local farmers, supplies the town with fresh farm produce from the surrounding area.

Residential land use.

Over 65% of Simcoe's families own their own homes, and this proportion is one of the highest in the province.

In making the functional survey of the residential areas of Simcoe, four classes of housing were recognized and mapped:

First class housing - these are homes of superior appearance, usually of brick or stone construction, although in some cases large, new ranch-type homes of frame construction were also considered to be in this category. These homes are usually relatively new, although in several cases, old, well-built well-kept homes were also included. The grounds are quite spacious, and tidy in appearance. The approximate value of these homes is over \$ 20,000.00.

Second class housing - this classification consists of homes which are smaller than those of the above class, but still of brick or stone construction. Grounds are less spacious, but well-kept. Also in this category are included large homes relatively new,



An example of first class housing in Simcoe.
 Note the spacious, landscaped grounds.



An example of fourth class housing in Simcoe.
 Note the nearness of the next house on the
 left, the lack of paint, and the railroad
 track in the lower right corner.

and of frame construction, but smaller than those of class 1. The approximate value of these would be \$ 10,000.00 to \$ 20,000.00.

Third class housing - these are again smaller, and frame construction dominates this group. Usually the grounds around these homes are very small, and quite often there is only a passageway separating the houses. Semi-detached houses are also in this category. Approximate value is from \$ 5,000.00 to \$ 10,000.00.

Fourth class housing - in this category are the poorer homes of the community. They are generally built of wood, and usually have an untidy, unkept appearance. Quite often they are in need of paint and are valued at less than \$ 5,000.00.

There are a number of first class housing areas in Simcoe, all of which can be found on Map # 10. All of these sections but two have new homes, which are large, well-kept and with spacious grounds. Some are of cut stone or brick construction, but the larger percentage are of frame ranch-type construction, and are found mainly in the outlying districts, or newly annexed areas of the town. The two areas excluded above are large, old, well-kept homes of brick construction found near the centre of town in areas of older second and third class homes.

The areas of second class housing are found mainly in the vicinity of the first class areas, and are similar to them but are smaller in size, with less grounds, and therefore of less value. These again are found mainly in the outside margin of the town. There are some second class homes within the central section of the town, but these

are older, of brick construction, with less spacious grounds, but well-kept.

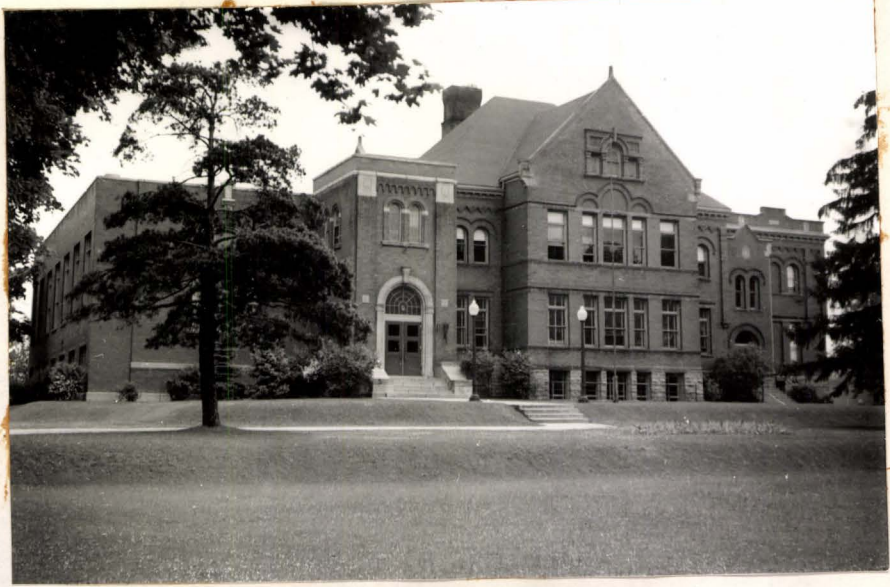
The fourth class housing areas are found mainly in conjunction with the industrial sections, and along the railway lines. There is one section of Simcoe which could almost be called a slum section. It is found in the vicinity of Kent Creek, just west of North Public School. The houses are run-down and in need of paint and repairs. The only difference between this section and the slum section of a larger city is that these all appear to be simple family homes in contrast to the tenements of the city slums.

The rest of the residential areas are built up with third class housing. These are small, generally with very limited grounds, but in a fairly good state of repair and are usually inhabited by small families or older couples. This is the most numerous and most common type of home, and is scattered throughout the whole town. It would be difficult to locate each section of third class housing specifically, and therefore they have been left until the last.

Public Utilities and Facilities

The Electric power of the town of Simcoe is supplied from the publicly-owned Hydro Electric Power Commission of the Province of Ontario, and utilizes a Public Commission as its local distributing authority. Simcoe also is fortunate in having an ample supply of bacteriologically pure water supplied from gravel-walled wells. The Dominion Natural Gas Co. Ltd., provides Simcoe with natural gas, the distribution of which is under the jurisdiction of the Minister of Mines of the Province of Ontario.

Established in 1858, the Simcoe Reformer has given continuous public service to Simcoe ever since. It is a tri-weekly general newspaper with a circulation of 8,200. Simcoe also has an excellent police force, with radio-equipped cars, and a fully-trained, efficient volunteer fire department.



Simcoe District High and Vocational School



Elgin Avenue Public School

The educational facilities of Simcoe appear to be adequate to the needs of the town. There are three public schools and one separate school. Simcoe North Public School, with 390 pupils, and Simcoe South Public School with 368, both of which are built on exactly the same plan, each have 10 rooms and 10 teachers. Elgin Ave. Public School is a new and modern school with 12 teachers on the staff, and an enrolment of 268. St. Mary's Separate school has approximately 150 students and four teachers. The Simcoe District High and Vocational School has a total of 54 rooms a staff of 32 teachers, and an enrolment of approximately 800 students which come from Simcoe, Port Dover, and the surrounding rural areas as far as St. Williams in the south, Waterford in the north, Delhi in the west, and the township boundary in the east. Simcoe also has a business college which is a member of the Business Educator's Association of Canada.

The schools of Simcoe are well located with respect to serving the town. The High School is on the main street, just north of the commercial section in a large park with playing fields and a swimming pool behind it. This was the original public school and was built on this site because of the need for a large area on which to build playgrounds. Originally it was on the outskirts of the town where land was available, but the town has since been built up around it.

South Public school is built near the southern limits of the town, and serves the area south of the commercial section between the railway and the river.

North Public School has been built to serve the area north of the Kent Creek. Elgin Street school, the new public school, has been built in the west central section, on the edge of the town. It serves the area west of the commercial and industrial section and the newly developed areas in the western end of the town.

The new survey which has just recently been developed in the eastern section of the town, at the present time, is served by the North Public School.

The reasons for the locations of the public schools is similar to those of the high school, being originally built on the edge of the town where land is available, and where the new residential areas are being built.

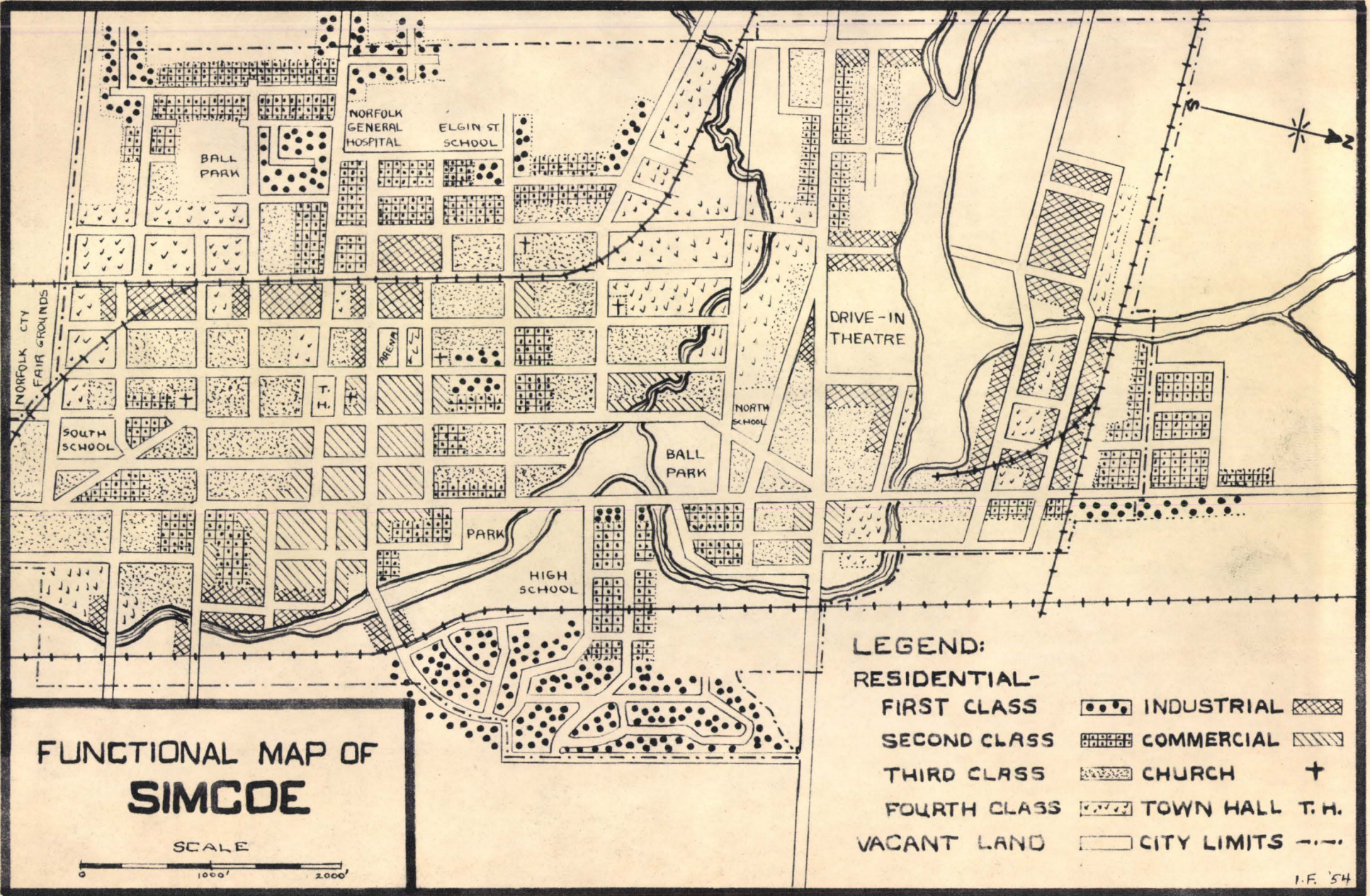
Hospital and health services are carried on by the Norfolk General Hospital in Simcoe, which is a 100-bed, completely modern hospital. It is located on the western extremity of the town, originally built away from the residential sections, and from the noise of the town. However, in recent years, the residential area has built up around the hospital. It serves Simcoe and its rural area, being about the same area as that served by the High School.

The religious life of the town is taken care of by 12 different churches, including Anglican, Baptist, Christian Science, Methodist, Lutheran, Pentecostal, Plymouth Brethren, Presbyterian, Roman Catholic, Salvation Army, and the United Church of Canada.

Simcoe also employs a full-time recreational director, and boasts a new arena with a seating capacity of 1500. Other recreational facilities include Norfolk Golf and Country Club, Simcoe lawn Bowling club, Wellington Park for softball, Waterworks Park for hardball, Memorial Park for baseball, and Agricultural Park which is the centre of interest for Midget baseball. The Kinsmen Swimming pool on the high school grounds offers supervised swimming and instruction classes.

Rural-Urban Relationships

Because of its position in the centre of a rich agricultural area, Simcoe has an important relationship with its rural hinterland.



The very existence of Simcoe is mainly due to its position as a leading market town and service centre for the region. There are several reasons for this, the most important being the fact that Simcoe is the only large centre in the area. It is far enough from Hamilton, Brantford, and London, not to be influenced by them to any great degree, and thus has developed its own trade. Easy access to rural districts is another reason. Also, because of the efficient methods used by the farmers, the industrious nature of the farmers, and the high cash values of the crops, especially tobacco, there is a high measure of prosperity in this region. It therefore comprises an excellent market for the consumer goods of the town's manufacturing industries. In Simcoe, the canning factories in the town provide a market for the produce, especially of the fruit farms, and the establishment of a fertilizer plant, feed and seed stores, and outlets for farm machinery and equipment are also due to the agricultural nature of the hinterland.

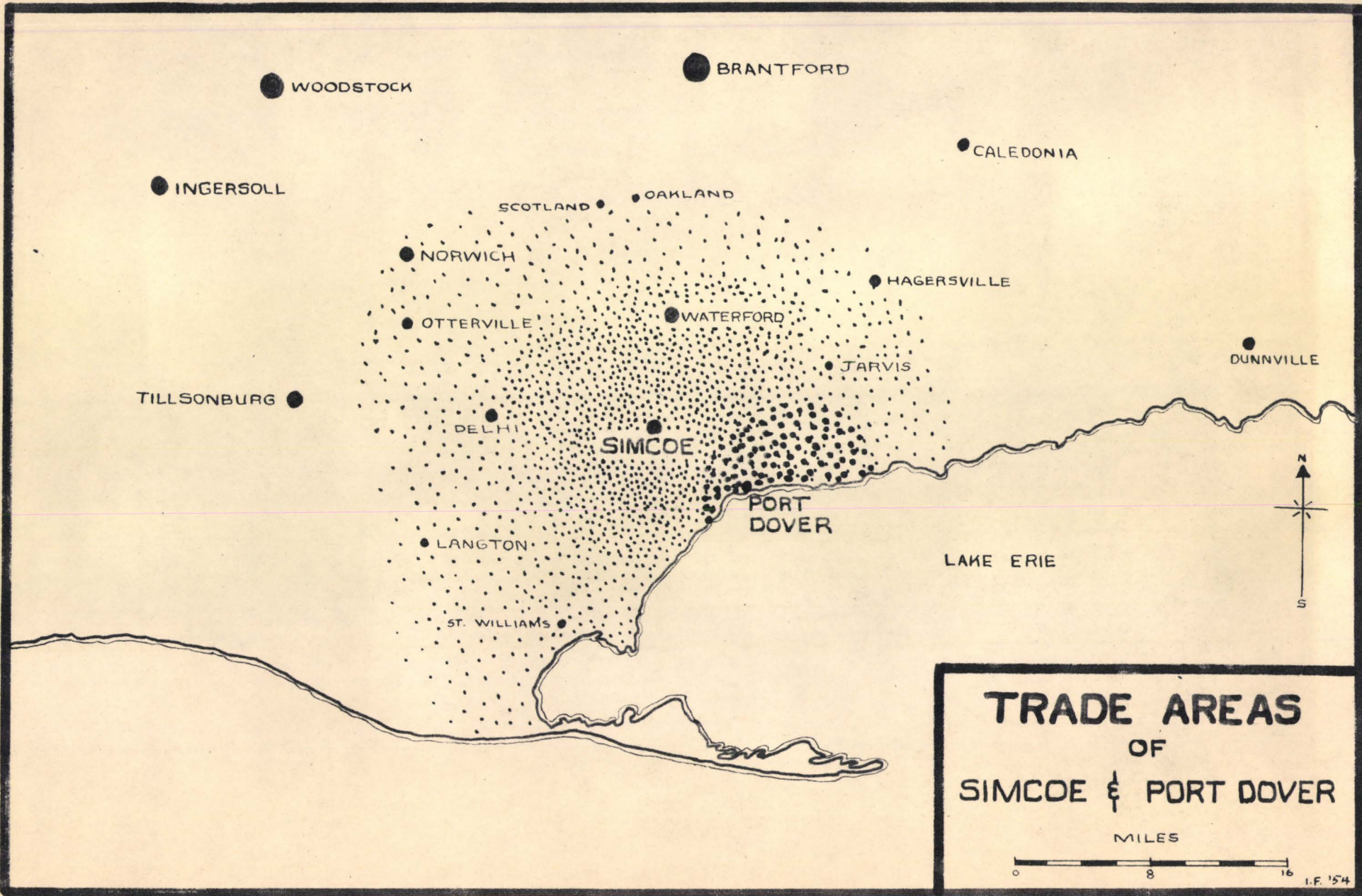
The presence of three theatres in the town, three of the four in the township, the fourth being a small one in Port Dover, provides entertainment for the farmers, and trade for the town.

The close association between rural communities and Simcoe is further strengthened by the fact that Simcoe has the only high school of the area. Rural students are carried into the town by bus and electric railway. This has enhanced the position of Simcoe as the focal point of the region.

Trade Area of Simcoe.

The trade area of any community is that area which looks to the community as the focal point of its economic and social relationships.

The approximate extent of the trade area of Simcoe has been established by the use of numerous criteria, such as a survey of the



MAP # 11

TRADE AREAS
OF
SIMCOE & PORT DOVER

MILES

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people who shop in the town in an effort to discover where they come from, or to find the area from which the local industries draw their labour force. Also important are the areas serviced by the schools, newspaper circulation, and the area served by the bank.

From the sources mentioned above it was found that the trade area of Simcoe is as follows: from a point on Lake Erie at Long Point, northwest to Langton, and north to Norwich, east along the county line to Hagersville, and south to a point on Lake Erie 10 miles east of Port Dover. This includes the town of Simcoe, and the villages of Delhi, Port Dover, Waterford, Port Rowan, Jarvis, Hagersville, St. Williams, Vittoria, Norwich, and Vanessa, and can be seen on Map # 11.

The shape of the trade area of Simcoe is almost circular with the bottom of the circle cut off by the lake. It covers an area of approximately 100 square miles. Beyond this circle the trade is with the other large centres in the region, including Tillsonburg on the west, Ingersoll and Woodstock on the northwest, Brantford on the north, and Hamilton in the east and southeast.

Future Possibilities

The future of Simcoe appears to be a bright one. The town is well-located at the junction of several transportation routes which lead to markets both in the United States and Canada. It has easy access both to retail and wholesale markets, and to sources of raw materials. It also has access to an adequate labour supply, being close to the larger centres of population such as Hamilton and London.

The presence of many industries already successfully located in Simcoe, an aggressive Board of Trade and town Council, availability of such facilities as hydro, transport, and water, a large trade area in the centre of one of the richest agricultural areas in Ontario, and sites now

available on the edge of town are all conducive to the establishment of new industries and the expansion, development, and further growth of Simcoe.

THE VILLAGE OF PORT DOVER

The village of Port Dover is situated on Highway No. 6 at the point where the Black Creek empties into the River Lynn, just before it reaches Lake Erie.

The village is approximately 9 miles from Jarvis, 11 miles from Simcoe, and 45 miles from Hamilton. It is served by a branch of the C.N.R. which runs from Simcoe. The Lake Erie and Northern Electric Railway, a branch of the C.P.R. also provides service between Port Dover and Simcoe, although at present, this is mainly passenger service. This line, in addition links the village with other centres to the north such as Brantford and Galt.

The Canada Coach line buses which run between Hamilton and Simcoe travel through Port Dover, and thus the village has regular bus service with Hamilton. Highway No. 6 also provides an excellent transportation route through Jarvis, Hagersville, and Caledonia to Hamilton.

History of Settlement

The site of the village of Port Dover, originally the village of Dover, is at the junction of Black Creek, and the River Lynn. This site was the location for the first mill in the vicinity, and was chosen because, at this point of meeting of the two rivers the maximum amount of water is available for power. Also to be considered in connection with the choice of the site was the location at the mouth of the river and thus the possibility of building a harbour. A reef of rocks about three-quarters of a mile in length and running out into the lake a short distance from the harbour protected it from the violence of the waves of the lake.

When the province of Upper Canada was formed, Governor John Graves Simcoe realizing the need for settlers offered land on liberal terms to encourage immigration. He particularly granted land to the officers and soldiers of the crown and to those who had been dispossessed of their lands because of their adherence to their allegiance to the British King. Thus the land in the vicinity of Port Dover was granted to United Empire Loyalists and soldiers of the crown.

Most of the village is built on land which was granted, in 1799 to Captain William Francis. Alexander McQueen bought the greater part of this land, and in 1801 his son Daniel built the first mill.

Several other small lots were sold by William Francis but he does not seem to have conceived the idea of starting a village. This was the inspiration of Daniel McQueen who realized that the workers in his mill would need homes in the vicinity. He also realized that these in turn would attract others into the area, and thus he laid out a plan for a village along the road leading from the mill to the mouth of the river, the village of Dover.

The road leading from the mill to the lake was opened the same year in which the mill was built in order that the products of the mill might be shipped to markets in the east. The only boats which could enter the river at that time were small flat-bottomed boats, Schooners had to anchor in the lake, and load and unload by means of barges. Despite these difficulties, 600 barrels of flour were shipped in 1806. It was not until 30 years later that piers were built and the bar at the river mouth was dredged to form a fairly satisfactory harbour.

In 1807 the government made provision for the establishment of a grammar school in each district. The citizens of Dover offered to provide a building, if the school were opened there, and in 1808 the request was granted.

The little village of Dover grew and prospered until the War of 1812. Dover occupied a strategic position on the routes between the east and west. The summer of 1813 was a busy one for Dover. Guns, ammunitions, and supplies, provisions and men were brought from the east to the head of Lake Ontario, and then to avoid Niagara Falls, overland by way of Brant's ford to Dover and from there to the military post at Long Point. There were no roads through the western wilderness. The road to Dover was established because of the presence of the army post at Long Point. During the course of the war, when the Americans were in command of Lake Erie, the village of Dover was attacked and burned to the ground. The mill which had been the principal support of the village was gone, and there was no money to rebuild it. Soon a rival village closer to the river mouth, the new village of Port Dover, arose. Port Dover had the advantages of the harbour, and it began to grow.

In the middle of the last century, the township of Woodhouse alone had 12 sawmills, 4 grist mills, 2 carding and fulling mills, 7 tanneries and 2 foundries, and, as the principle outlet for the produce of most of Norfolk County, Port Dover was the most important port. Exports from Port Dover for the year 1848 were valued at more than £ 16,000 and included 5,465,667 feet of lumber, as well as shingles, wool, wheat, flour, potatoes, sheep skins, and potash. Imports for that year exceeded £ 14,000 and included broom corn, cheese, saltmeat, and hops.

Exports for the year 1850 has increased to £ 20,000 and included 6,534,000 feet of lumber, as well as shingles, staves, whiskey, wool, potatoes, seeds, wheat, sheep skins, furs, oats, old copper, bran, shorts, fruit, cedar posts, rye flour, wheat flour, potash, and 5 horses and 5 cows.

In 1850 Port Dover had some 600 inhabitants and it was now the main terminus of the Hamilton- Port Dover Plank road (Hwy No. 6) over which considerable traffic travelled.

By 1870, however, the port had started to decline. The lumber was becoming exhausted, and in 1875 the railroad from Simcoe was completed. In 1878 the Hamilton-Lake Erie railroad reached Port Dover, but has since been abandoned because of lack of trade, and is now torn up. The building of the railroads to the north took the grain trade from the port. However, the port stayed open because of the passenger and coal trade which now existed, and which had been developing over the past 4 or 5 years, between Port Dover and Erie Pennsylvania. In December 1895 there were 1314 cars of coal shipped through the port, and the duties alone for that year amounted to \$ 14,000.00. From June 30 to December 31, 1897 there were 8000 cars of coal, and 3,294 passengers. The duties of that year amounted to \$ 72,850.00. But by 1909 this trade had declined because of the high duties and high shipping costs on the coal.

This trade in coal developed mainly as a result of the fact that Port Dover was the only port on the eastern end of the north shore of Lake Erie. The coal was shipped to Port Dover, and from there went by rail to Hamilton, and other large centres. It was less expensive to ship it this way than to have to take it through the Welland Canal. However, after the duties had been raised on both shipping and rail, it became cheaper to go through the canal, to reach Toronto and Hamilton.

The people of the area were inclined to use the railroad for their trade, also, because of the fact that the railroad gave year round service, whereas the port was closed for several months in the winter by ice.

During the 1880's the tourist industry began and cottages were built along the lake front. The majority of the cottage-owners came from Simcoe and the area around Port Dover at first. Now they are mostly Canadian and come from a radius of 40 - 50 miles, but mainly from the two centres of Hamilton and Brantford.

The main use of the port at the present time is by the fishing industry. It is the home of the largest commercial fresh-water fishing fleet in the world.

The population of Port Dover has shown fluctuations until 1921 and from then on a steady increase. As the shipping industry declined, the fishing industry and the recreational facilities were developed. Other industries have also come in, and at the present time the village owns several fine parcels of property that have been ear-marked for industrial sites. Thus the population figures for Port Dover indicate this trend. The larger increase from 1921 to 1951 was general throughout the township, and was caused by the repopulation of the rural areas, and the growth of the tobacco industry. At the present time, it is mainly the tourist and recreational facilities which are responsible for the larger increase between 1941 and 1951. This has been a result of an increase in the number of privately-owned cottages, made possible by the prosperity which has been prevalent since the war, and also because of the increased urbanization and more leisure time which the workers have as a result of shorter hours of work.

TABLE # 8

POPULATION OF THE VILLAGE OF PORT DOVER

<u>Year</u>	<u>Population</u>
1881	1,146
1891	1,213
1901	1,177
1911	1,138
1921	1,462
1931	1,707
1941	1,968
1951	2,442

Land Use in the Village of Port Dover

In the land use in the village of Port Dover, six categories were recognized and mapped, and which are as follows: Residential, Commercial, Industrial, Recreational, Cottages, and Vacant Land, These are discussed in the following sections, and can be seen on Map # 12.

Residential

In making the survey of the residential areas of the village, homes were classified into four types. The criteria used in differentiating these are the same as those used in the town of Simcoe, and are outlined in the section on Simcoe.

There are three sections of first class housing in Port Dover. The Prospect Hill district located on the east side of Silver Lake, has large, new ranch-type homes, usually of frame or cut stone construction, with spacious grounds. A similar section can be found in the centre of town, one and two blocks west of the main street, and extends to the village limit on the west. The new homes found on the main street, in the north of the village are also first class.

There are two areas of second class housing in Port Dover. One is found in the blocks bordering the first class section on the west side of town. The other is the two blocks just south of the first class section in the north, and on the east side of the highway.

All other residential areas are third class. It should be noted that there is no fourth class housing section in Port Dover. There are some fourth class houses, but these are scattered throughout the second and third class sections and were not numerous enough to map on the generalized form of map which is used in this thesis.

The relationship between the zones of first, second and third class housing in Port Dover is seen in that the third class homes are the



An example of First Class Housing
in Port Dover.



An example of Second Class Housing
In Port Dover.



An example of Third class housing in Port Dover. Note small size but neat appearance.



An example of Fourth Class housing in Port Dover. Note dirty, untidy appearance, and lack of paint.

oldest, and are found in a belt around the commercial section, and in conjunction with the industrial and recreational sections. Also they are found in the old area where the original town of Dover was founded. The second class homes are found between the first and third class in a narrow strip, and the first class homes are found outside the second class, next to the vacant and undeveloped areas. They are the newest, and therefore are the farthest from the centre, and they have the highest value.

Retail or Commercial

The retail or commercial section of Port Dover is found on both sides of the main street, for a distance of approximately four blocks, behind the industrial and recreational areas which are found along the lakeshore. The trading area of Port Dover has a radius of approximately five miles, and this commercial section provides mainly staple household goods, and daily necessities. There are fruit stores, grocery stores, two banks, a movie, a hardware store, a barber shop, a beauty parlour, and a few small specialty shops, i.e. childrens' wear, shoe stores, and 5¢-\$.00 stores.

Industrial

All industry in Port Dover is located either along the rail lines, on the west bank of Silver Lake, and the Lynn River, or by the harbour. These locations can be seen on Map # 12.

Port Dover is said to be the village of "Fish, flowers, and fun", and this phrase is indicative of the three main occupations of the area. Kolby^e's Fish is the largest industry of the area, and they market fresh-frozen fillers, as well as large catches of fresh fish such as whitefish, blue and yellow pickerel, perch, herring, etc., The equipment of this plant is modern, with freezing and ice-making sections, and steel fishing vessels with modern Diesel engines. It also has electric fish scalers, and other such appliances.



The filletting plant, and retail fish market of Kolby's Fish Company.



Willow Park Miniature Golf Course, a part of the recreational area of Port Dover.

Along the east bank of Silver Lake, can be seen the greenhouses of Thomas A. Ivey & Sons Ltd., the growers of the famous Ivey Roll-Pakt roses.

There is a small woolen factory known as the Norfolk Knitters, Also to be found are such industries complementary to the fish industry as ship building and repairing (fishing fleet) small boat repair shops for pleasure boats, a fertilizer plant which uses the waste products of the fishing industry, Fisherman's Co-operative (fresh fillets, and fresh fish) and several other smaller industries. There is also the Beaver Lumber Company, and the Port Dover Coal and Supply Co. Because of the rich agricultural area which surrounds Port Dover, a small cannery has also developed in the town, and here vegetables are preserved.

Recreation & Cottages

These two categories are closely connected, yet have been mapped separately because, in the case of the cottages they are privately-owned residential, and in many cases are permanent homes. The recreation area is strictly a profit making venture which, for the most part, is open only in the summer season.

The section mapped as recreation is found just north of the industrial area and along the waterfront on the west side of the harbour. It contains bathing beaches, miniature golf course, fun rides for children, bowling alleys, dance halls, booths such as are found on midways, refreshment stands, etc.

This recreational area is the main tourist attraction, and because of this, there are to be found in that area three large hotels, Buck's Hotel, Norfolk Hotel, and Erie Beach Hotel, as well as numerous tourist homes, and several motels.

The cottages themselves could be classified into first, second and third class, but since they are intermingled, classification in this



An example of cottages found in the new area of Port Dover west of the harbour. Note the spacious grounds and modern design.



An example of a better class cottage in the old area east of the harbour. Note screened-in porches and absence of foundations.

manner would be difficult to show except on a large scale map on which each cottage is marked. Many of the cottages are permanent homes now, but again these are interspersed with cottages and difficult to map. One thing which can be noted regarding the cottages, however, is that those on the west side of the harbour are newer, larger, with more spacious grounds, and of a more permanent nature than those on the east side. The eastern cottages have screened-in porches, no foundation, and are quite close together. Those in the newer section are of a more modern design and feature such things as picture windows overlooking the lake, stone foundations, attached garages, etc.

The vacant land of Port Dover, some of which has been ear-marked for industrial development, but most of which is for future residential use, can be seen on Map # 12.

Public Utilities and Facilities

The village of Port Dover is supplied with electricity from the publicly-owned Hydro Electric Power Commission of the Province of Ontario, and with an ample supply of bacteriologically pure water obtained from the lake. The Dominion Natural Gas Co. Ltd., provides Port Dover with natural gas.

Port Dover has a weekly newspaper which has a circulation of 1,340 and which consists mainly of advertising, and news of local interest. It circulates mainly in the town itself, and in the trade area or hinterland of the town. A large percentage of the inhabitants of the town also subscribe to the Simcoe Reformer, and a smaller number to the Hamilton and Toronto papers.

Port Dover has one large elementary school found on the main street near the northern limit of the village. It has approximately 10 rooms, with all eight grades, and kindergarden. For secondary school

education, the students of Port Dover must attend the High School in Simcoe. The Lake Erie and Northern railroad is used to carry the students to and from Simcoe.

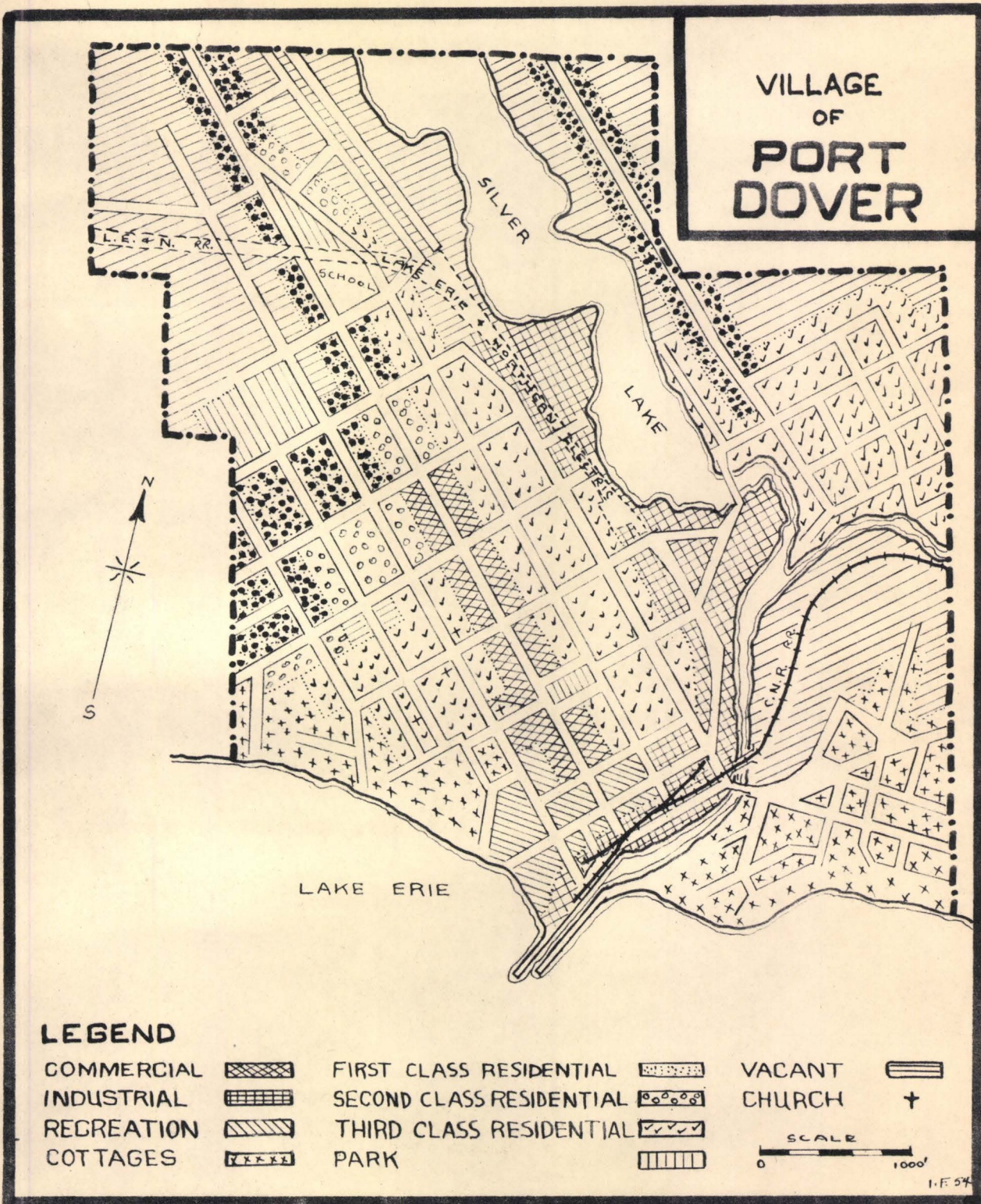
For hospital services, Port Dover relies on the facilities available in Simcoe, but there are several doctors in the village to tend to immediate needs. In the case of a serious operation, the patient is taken to the hospitals of Hamilton, which is not too distant, and can be reached in less than an hour's drive.

The religious life of the town is taken care of by churches of three denominations, the Anglican, the Roman Catholic, and the United Church of Canada. These are all located within one block of each other quite close to the commercial section of the village.

Rural-Urban Relationships

Although Port Dover is situated in the centre of a rich agricultural district, its proximity to Simcoe has meant that the relationships between the rural area and Port Dover itself have not been developed to any great extent. The presence of a vegetable cannery, and a fertilizer plant have created some trade, but on the whole most of the trade between farmers and merchants is with Simcoe. The nature of the stores in Port Dover reflects this situation. The population of Port Dover and the surrounding rural area do their shopping for necessities such as groceries, and other everyday items in Port Dover, but for any specialty item or luxury, they tend to drive the extra miles and shop in Simcoe, where the stores are more specialized. Items such as cars, machinery of all types, clothing other than work clothes, radios, home appliances, etc., are nearly all purchased in Simcoe.

In the realm of entertainment, however, the rural urban relationships are good. Bathing, dancing, outdoor bowling, and other sports, especially in summer, are all available to a greater extent in



MAP # 12

Port Dover, due to the presence of the lake, and the recreational centre. The rural population, especially in summer, go into Port Dover for entertainment and to be near the lake. However, in the winter when indoor sports are more preferable, the rural population tend to go to Simcoe.

Trade Area of Port Dover

The method used in delimiting the trade area of Port Dover was similar to that used in the case of Simcoe. It was found that Port Dover has a fairly well-defined trade area which extends to a distance of approximately five miles from the village. This trade area is valid only in the case of items of every day use or necessities such as medicine, and as a consequence Port Dover itself and its trade area, are in reality, a part of the trade area of Simcoe.

There is some commuting done between Simcoe and Port Dover by workers who are employed in Simcoe, but prefer to live in Port Dover, and also by those who are unable to find employment in the industries of Port Dover.

The trade areas of both Simcoe and Port Dover and the relationship between them are shown on Map # 11.

Future Possibilities

The transportation routes together with the fact that it borders on the lake have helped to maintain the present position of the village. However, its nearness to Simcoe, and other large centres has been and will be a major handicap to the further growth of the village.

THE VILLAGE OF PORT RYERSE

The land in the vicinity of Port Ryerse was originally given to Samuel Ryerse by Governor Simcoe in 1794. Ryerse built the first saw and

grist mill on the site. The stream which flows into the lake at this point falls over the embankment at the site on which the mill was built. At this point the water has its maximum force and thus more power for the mill. The mill was burned to the ground and rebuilt several times, and in 1860 it was burned for the last time. It was never rebuilt.

As early as 1835, lake steamers came into the port of Port Ryerse for wood, both to export and for fuel. Coal was not used on the steamers at this time for fuel, but the engines were run on wood. Edward P. Ryerse built the first dock, and by 1856 there was a large trade in flour ground in the mill, and in lumber, also from the mill. Port Ryerse was the chief shipping point and point of entry in Norfolk County at this time. By 1863 ship building was being carried on at Port Ryerse.

In 1867 the Port Ryerse Tram, Railway and Harbour Company was formed. It was intended to build a tram road to Simcoe, but this was never done. However, stock was issued, and a large sum of money was raised and spent dredging the harbour and improving the dock facilities. For a number of years after this, trade through Port Ryerse boomed. In 1870 seven million feet of lumber were shipped.

Port Ryerse at one time was doing more shipping than Port Dover but with the depletion of the lumber supply and the decline of the lumbering industry, Port Ryerse began its downward journey. The railroad was built just north of the area, by-passing the port which was now already in a state of decline. The coming of the railroad brought about the complete decline of Port Ryerse, because it took the grain trade. The farmers of the district found it much more convenient to take their grain to the rail lines, than to carry it the longer distance to the lakefront. With the decline of the milling industry, the harbour was abandoned. It began with disuse to silt up. Also, by this time, most of the land in

the area had been cleared, and erosion was taking place on a larger scale than previously. Much soil was carried down by the stream and deposited in the harbour.

The rapid decline in Port Ryerse can be seen from the number of school children attending S. S. No. 1, which is located at Port Ryerse. In 1876 there were 94 children in attendance, and in 1926, just 50 years later, there were 11 pupils in the school. It is now closed.

Port Ryerse today is a summer resort. There are several streets of cottages found at different levels, because of the embankment along the lake front. The majority are found at the top of the hill, several are on a level area about two-thirds of the way down, and, at the bottom on a sandy strip which is at the foot of the embankment, there is another small colony of cottages. All that remains of the harbour is a few piles which appear above the surface of the water, and are a hazard to those who use the area for pleasure boating. There is a small boat repair shop still on the bank of the river, and a general store and post office. The school still exists at the top of the hill where it was originally built, but it is no longer used. The pupils, if there are any, go to school at Normandale or in Simcoe. However, Port Ryerse is now mainly a summer resort, and it is doubtful whether there would be more than two or three families at the most who would live there during the winter.

As a summer resort it is a pleasant place. There is a safe sandy beach for small children, and the fishing is good. However, in the early part of the season, the fishing is in Turkey Point Bay which is approximately ten miles away by water, and this is a disadvantage. Also, because of the lack of any other form of entertainment, it is not as popular as other resorts of the area such as Turkey Point, Normandale and Port Dover. Thus, Port Ryerse is inhabited mainly by older couples who enjoy the peace and quiet of the small resort, and young married couples

with small children who enjoy the safe sandy beach where the children can play.

In the future Port Ryerse will, in all probability remain just as it is now. Because of the embankment on either side of the river which reaches the lake front, a short distance along the shore from the mouth of the river, there is no room for expansion at the lake level, and it is not likely that many people will want to built on the top of the hill, when places at the lake level are available at other resorts.

CHAPTER SIX

SUMMARY AND CONCLUSION

Summary

Woodhouse township lies on the north shore of Lake Erie, west of the Niagara Peninsula, and is well-served by excellent roads and railways which lead to Toronto, Hamilton, London, Windsor, and the United States. The topography of the area reflects the flay-lying nature of the bedrock, the whole township being flat to gently rolling. There is only one rise of any significance which is the end of the Galt moraine just east of Simcoe. The study area was glaciated in Pleistocene times, and subsequently inundated by the waters of glacial lakes Whittlesey and Warren. The deposition which occurred resulted in the formation of the clay plains, and the sandy soils which cover the region.

The climate of the township is a humid microthermal climate, with cold winters, and warm summers, and with sufficient precipitation throughout the year. The vegetation of the region is deciduous forest.

The soils of Woodhouse consist mainly of heavy clays, sandy loams, and sand. The clay soils are potentially fertile, but care must be exercised in their use. The sandy loams, and sands, are used for specialized agriculture, and with proper care, and protection against erosion, will produce good crops. These soils are responsible for the large wealth per capita of this township.

The township has been divided into four distinct land types,

each of which has a different land use, and there has been an adjustment in the agriculture of the area to suit the conditions in each land type.

The original inhabitants of the area were the Neutral Indians, but in 1792, Norfolk county was surveyed, along with eighteen other counties at the request of Governor Simcoe. In 1798 the London district was created and Norfolk county was a part of it. At the close of the American Revolution, the United Empire Loyalists came across the border to settle in parts of the area. In 1825, the county became part of the Talbot settlement, and the population continued to increase. However, because of the destruction of the soils, between 1900 and 1925, there was considerable farm abandonment. The population of the area reached its peak in 1881 with 33,593, but in 1921 it had declined to a low of 26,366. However, in 1923, the introduction of a specialized form of agriculture, tobacco farming, reversed the trend, and by 1951 the population had risen again to 42,708. English, Irish and Scottish groups comprise the dominant national groups in the area.

The agriculture of the area, once the timber had been cleared from the land, was a form of general farming, but in recent years it became much more specialized. At the present time, the western section of the township is an area of tobacco farming; in the northwest, and along the lake front, are areas of fruit farming; in the northeast there is a section of dairying on the Haldimand clay soils, and in the rest of the township there is general farming, with emphasis on the growing of grain.

Non-agricultural land use, with the exception of roads and railroads, consists of three urban centres, Simcoe, Port Dover, and Port Ryerse, and an area of recreation along the lake front. There is also a small amount of mining and some natural gas is found in the study region.

The largest town of the area is Simcoe, which is the county

seat for Norfolk. It is the distributing centre for an important rural area, and is situated at the junction of highways Nos. 3 and 24. It is well located with respect to sources of raw materials, and markets for its products. The future of Simcoe appears to be bright, because of its excellent transportation facilities, ready markets and large specialized rural hinterland.

Port Dover was at one time a thriving port, but with the coming of the railroad, it lost much of its trade. However, it now has the largest fresh-water fishing fleet in the world, and is the home of the famous Ivy Roll-Pakt Roses. There are several other industries in the town including recreation, but its main function is that of a fishing port.

Port Ryerse, also, was at one time an important shipping centre on Lake Erie, and similarly, with the coming of the railroad lost most of its trade. The harbour was allowed to silt up, and today Port Ryerse is just a small summer resort, with not much possibility of any future expansion. As a summer resort it is a pleasant place, and will, in all probability, continue to thrive as this type of centre.

Conclusion

Woodhouse township is a region of specialized fruit and tobacco farming, and dairying, together with areas of more generalized farming. The township is drained by two river systems which, together with the gently rolling nature of the topography and the absence of any steep hills, has made the area excellent for agriculture.

Woodhouse has been a township which has survived an era of depopulation, only to see a complete reversal of this and repopulation again, as a result of the introduction of specialized crops which are suitable to the area.

The land utilization pattern of Woodhouse has been the result of both physical and cultural influences, but the most important has been the physical influence.

Because the climate of the area is advantageous, and the growing season is long, they can be considered as a physical influence for the good, being suitable to the growth of specialized agriculture as well as the more general type of farming.

Soil has been the main influence on the type of agriculture carried on in the study region. In the Fox land type, the sandy nature of the soil was adaptable to the growth of tobacco. In the Berrien land type, it was found that the soils were suitable for fruit farming. The heavy texture of the clays in the Haldimand land type was the limiting factor with regard to specialized crops, and thus this region developed into a dairying area, or remained an area of general farming.

This wealthy agricultural hinterland which surrounds the town of Simcoe, the main urban centre of the area, is responsible for the existence of the town, and its development to its present position.

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