



Heritage Resources Centre
Centre des ressources du patrimoine



THE HISTORICAL ECONOMIES OF THE LONG POINT AREA



Long Point Environmental Folio
Publication Series

Working Paper 1

Long Point Environmental Folio Publication Series
Managing Editors: J. Gordon Nelson and Patrick L. Lawrence

A study team at the Heritage Resources Centre is developing an Environmental Folio for the Long Point Biosphere to assist management agencies and local citizens in understanding the human and natural components of the ecosystem. The folio will consist of a series of maps and text that would outline current major management issues and areas of concern. A series of project publications is being prepared to accompany the folio. These reports will consist of supplementary information collected during the study. This project is supported by the Royal Canadian Geographic Society and the Social Sciences and Humanities Research Council of Canada.

The Historical Economies of the Long Point Area

Steven Wilcox

Long Point Environmental Folio
Publication Series

Managing Editors:
J. Gordon Nelson and Patrick L. Lawrence

Working Paper 1

Heritage Resources Centre
University of Waterloo

March, 1993

LIST OF TABLES

Table 1	Number of Saw Mills 1817-1850	7
Table 2	Remaining Woodland in Percent, Estimates (from Census Canada)	8
Table 3	Numbers of Grist Mills 1817-1850	9
Table 4	Manufacturing Establishments, Norfolk County Censuses 1851 to 1891	12
Table 5	Quantity and Values of Commercial Fish Landings - Lake Erie, Haldimand-Norfolk (1984-1988)	18
Table 6	Number of Duck Hunters Utilizing the Crown Marsh, 1978-1991	19
Table 7	Natural Gas Production in Haldimand-Norfolk, 1978-1986	20
Table 8	Annual Aggregate Extracted Haldimand-Norfolk, 1983 - 1985	21
Table 9	Trends in Agriculture Land Use (1951-1986) for Haldimand-Norfolk Municipality	22
Table 10	Distribution of Farms by Product Type, Haldimand-Norfolk, 1971-1986	23
Table 11	Number of Farms Classified by Size, 1971-1986	23
Table 12	Flue-Cured Tobacco Production and Farm Value, Former Norfolk County, 1978-1988	24
Table 13	Employment in Manufacturing, Haldimand-Norfolk, 1989	25
Table 14	Tenure of Major Resident Industries (1989)	26

LIST OF FIGURES

Figure 1	Study Area: Long Point Biosphere and Region	1
Figure 2	Long Point Area Municipalities	2
Figure 3	Long Point spit	3
Figure 4	A Historical Economic Framework	4
Figure 5	Indian Trails in Norfolk	5
Figure 6	Big Creek Region About 1846	6
Figure 7	Location and Date of Logging on the Long Point Spit	8
Figure 8	Big Creek Region About 1856-1859	10
Figure 9	Population Trends in the Long Point Area (1815 - 1950)	13
Figure 10	Changes in Fish Distribution and migration, 1865-1970	14
Figure 11	Fuelwood Production/Maple Products	15
Figure 12	Matrix of Historical Economies	29

THE HISTORICAL ECONOMIES OF THE LONG POINT AREA

1.0 INTRODUCTION

The terms of reference for this paper are to undertake economic studies and link these studies with geomorphological and especially land use and biological work being done by other researchers. The impetus for this research is to contribute to the preparation of an Environmental Folio for the Long Point Biosphere and Region (Figure 1).

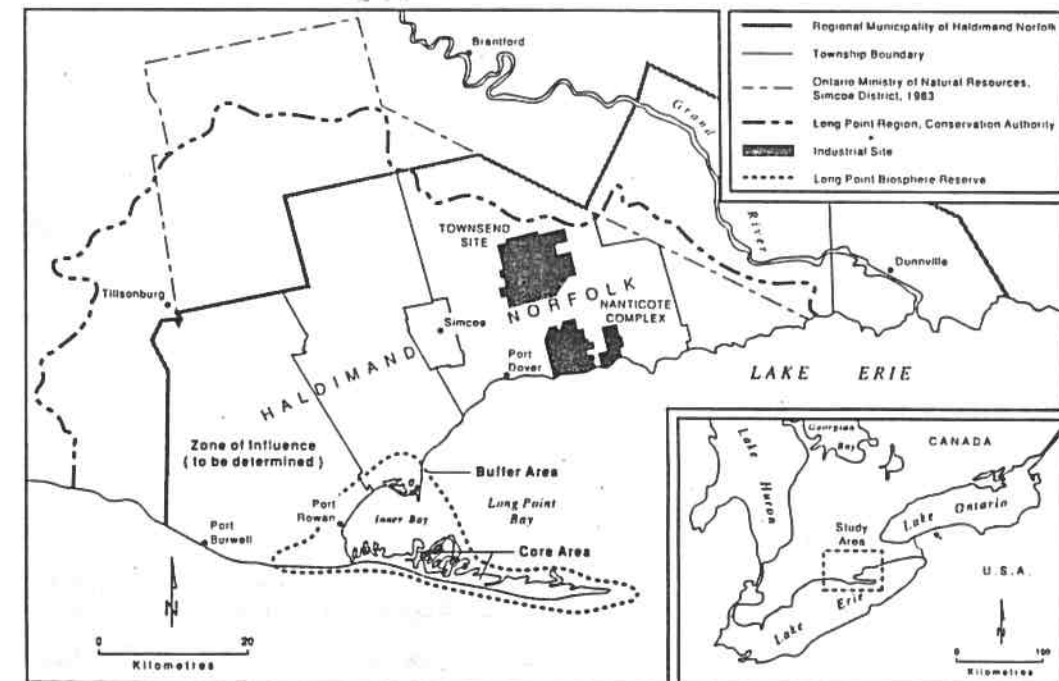
The project's purpose is to provide a means of thinking about sustainability for the Long Point Biosphere Reserve and Region through the use of an Environmental Folio. The Environmental Folio provides a means of synthesizing or integrating and graphically displaying natural and human information on the Long Point area for use in planning and management. Such a process requires that a comprehensive information base be provided so that all interested groups and people can argue their viewpoints and so that equitable decisions about future decisions are possible. To aid in this information gathering process the specific objectives of this paper are:

1. Initiate a historic economic analysis of the Long Point area;
2. Gather economic data to be used in the preparation of thematic maps for the Long Point Environmental Folio.

The information used in preparation of this report was primarily obtained through visits to the Haldimand-Norfolk Regional Municipality, Ontario Ministry of Agriculture and Food (Norfolk Branch), Norfolk Community Futures Program, and Ministry of Natural Resources. Information from both the University of Western Ontario and University of Waterloo libraries was also accessed and local citizens interviewed. In future reports, current economic information could be strengthened with the addition of 1991 census data.

most o.r.c. lands now sold or to be sold back to tenants.

Figure 1 Study Area: Long Point Biosphere and Region



2.0 METHODS

2.1 Study Area

The study area consists of what is designated by the Man and Biosphere program as the core and zone of cooperation of the Long Point Biosphere Reserve and the Long Point region as defined by the watershed boundary of the Long Point Conservation Authority (Figure 1). The term Long Point area is used often in this report to refer in a general way to the area between the Biosphere Reserve and the regional boundaries. Very rarely did economic information pertain strictly to the core Long Point area, nor did it pertain to the entire regional area in a homogeneous way. As a result, it was difficult to use the concept of a core and regional area in a rigorous way. Occasional comments are made in the report to area municipalities and sites on the Long Point spit. Figures 2 and 3 of the Long Point area are provided for reference.

Figure 2 Long Point Area Municipalities

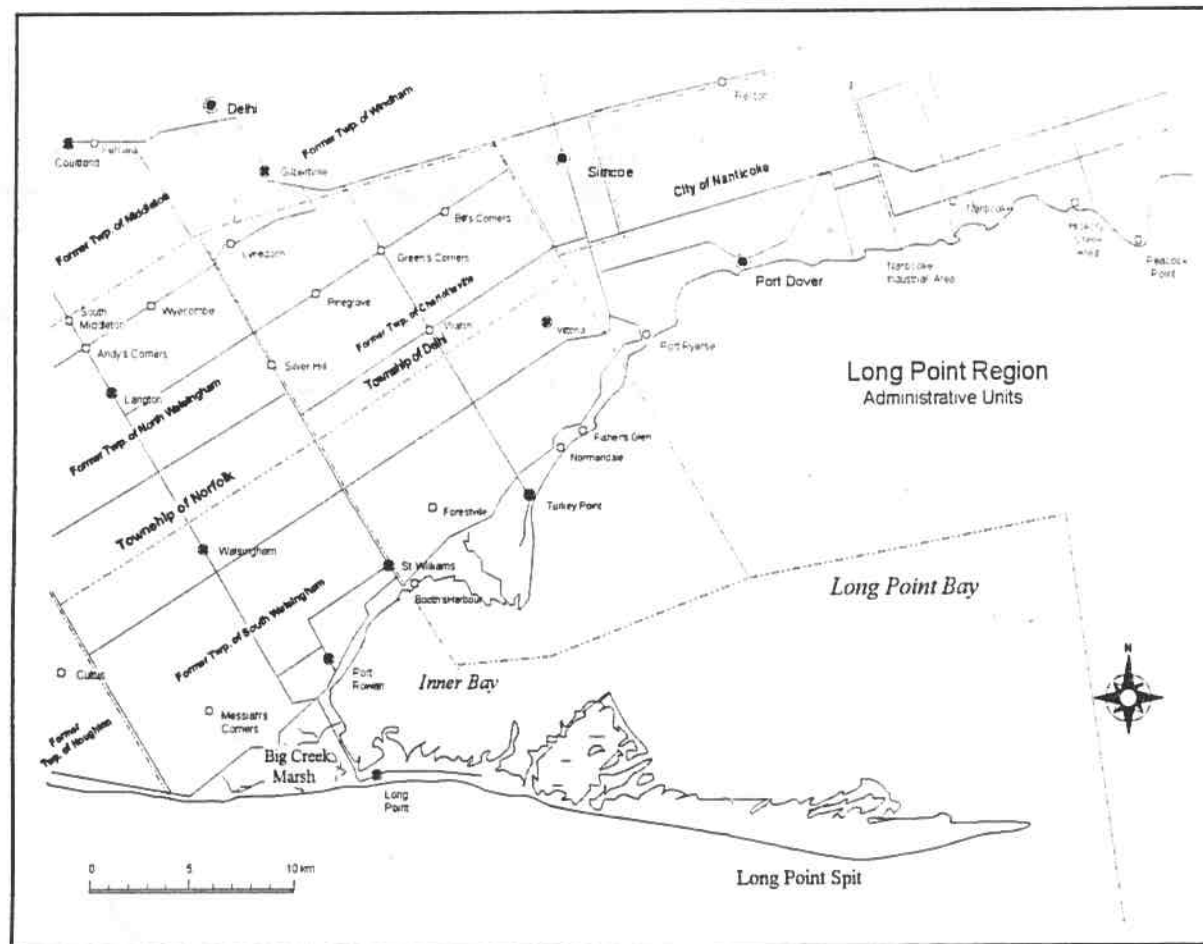
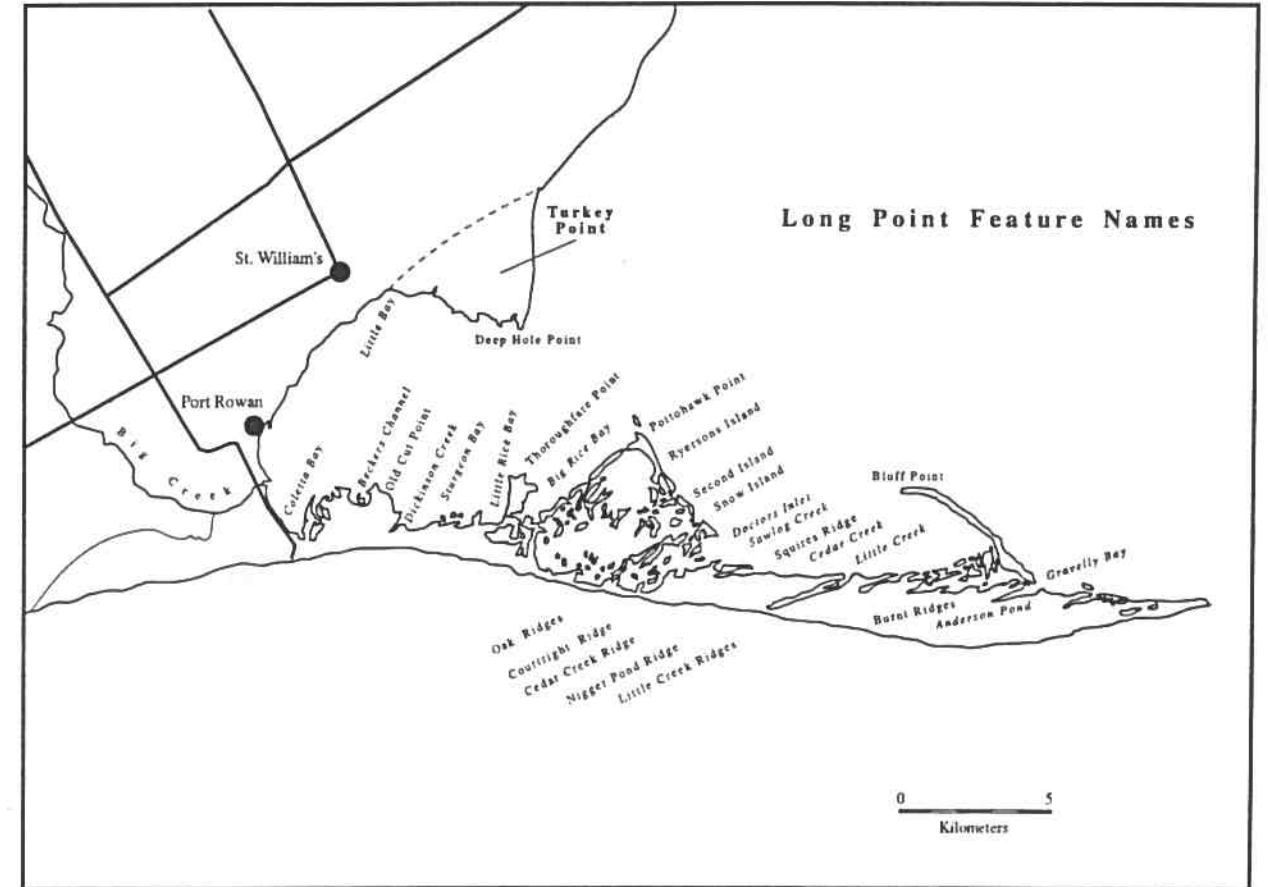


Figure 3. Long Point spit place names



2.2 Organization

The historic and current economic information that has been collected provides insight into conditions that have shaped the character of the Long Point area. These economies have been organized according to the following time frames:

- Pre-Settlement (prior to 1785);
- The Pioneer Years (1785 - 1880);
- The Period of Decline and Change (1880 - 1950); and
- The Recent Years (1950 - 1990).

For these time frames, the economic activities have been divided into the following sectors: natural resources (fishing, hunting/trapping, lumbering, resource extraction, naturalist activities), agriculture, manufacturing, and cottaging/tourism. These economic activities are not necessarily apparent in all of the time frames that were outlined above. For example, cottaging/tourism activities do not commence until the end of the "Pioneer Years", and naturalist activities do not rise in importance until the "Recent Years". This approach can be effectively illustrated through the use of a matrix (Figure 4). This matrix provides a framework that organizes information pertaining to various economic activities and time frames in which they occur. This in turn, allows research needs to be identified as weaknesses in available information become apparent.

Figure 4 A Historical Economic Framework

Time Period	Year	Economic Activities							
		Natural Resources					Agricultural	Manufacturing	Cottaging/Tourism
		F	H/T	L	R/E	N			
Pre-Settlement	1785								
Pioneer Years	1885								
Years of Decline and Change	1950								
Recent Years	1990								
Current									

* F, H/T, L, R/E, N respectively represent Fishing, Hunting/Trapping, Lumbering, Resource Extraction and Naturalist Activities.
 * Adapted from Battin (1978)

3.0 HISTORICAL ECONOMIES OF THE LONG POINT AREA

3.1 Pre-Settlement (Prior to 1780)

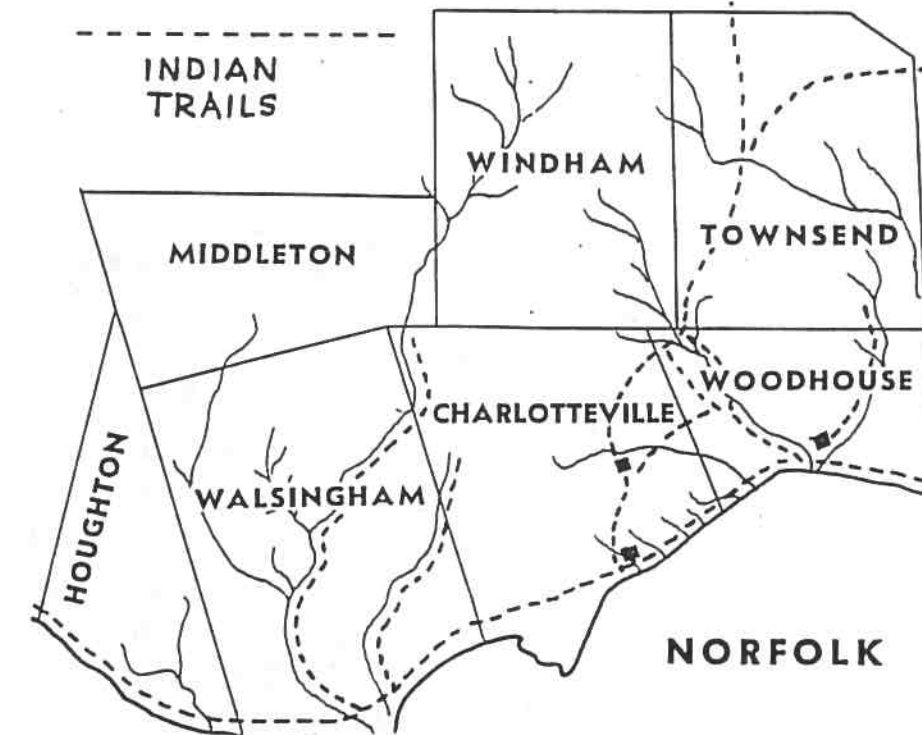
Prior to the arrival of Europeans, the Long Point area was inhabited by the Neutral Indian Nation. This tribe, visited by Samuel de Champlain in 1615, was exterminated by the Iroquois in 1650 (Big Creek Valley Conservation Authority, 1963). For many years the area was known as "the beaver hunting grounds of the Iroquois", but gradually tribes from the north migrated southward (Figure 5). One of these tribes, the Mississaugas, eventually occupied the Long Point area. Although they were a semi-nomadic people, fairly permanent villages existed at Port Dover and Turkey Point (Big Creek Valley Conservation Authority, 1963).

The Neutrals and Mississaugas relied entirely upon natural resources and agriculture for their survival. Regarding these resources, Whillans (1979) indicated that archaeological evidence has been discovered that suggests fishing activities along rivers flowing into Long Point's Inner Bay. The earliest report of European hunting activities at Long Point was in 1669 by two French missionaries, De Casson and De Galinee, when they camped at the base of the peninsula. They reported shooting bears, beaver, elk, deer and bobcats in the Long Point area (De Casson and De Galinee, 1903). Numerous reports of trapping are also present in the literature (Barrett, 1977; Big Creek Valley Conservation Authority, 1953), but no quantitative information regarding these activities was located.

In addition to utilizing natural resources, the Neutrals and Mississaugas relied heavily on agriculture, with corn, squash, beans and tobacco being important crops (Chanaysk, 1970). This reliance upon agriculture allowed large numbers of individuals to occupy villages. For example, when Jesuit Priests first visited southwestern Ontario they reported about forty villages or hamlets that contained at least twelve thousand individuals.

No mention of wild turkey population

Figure 5 Indian Trails in the Long Point Area (source: Big Creek Valley Conservation Authority, 1963)



3.2 The Pioneer Years (1780-1880)

The Long Point Region was within a tract of land purchased, May 22, 1784, by the British Crown from the Mississauga Indians (Big Creek Valley Conservation Authority, 1963). Irregular settlement occurred from 1789 to 1794, with systematic settlement beginning after townships were surveyed in the late 1790's and early 1800's. Settlement began when United Empire Loyalists came to what was called "the Long Point Settlement" in 1791-1794 (Big Creek Valley Conservation Authority, 1963). The largest acreages near the lake shore were granted to "reduced officers" or to their heirs. Initially, economic activities of the Long Point settlers were based primarily on agriculture and lumber (Figure 6). In the 1850's and 60's, manufacturing began to rise in importance and the first hints of the tourist potential of Long Point occurred in the 1860's and 1870's.

3.2.1 Natural Resources

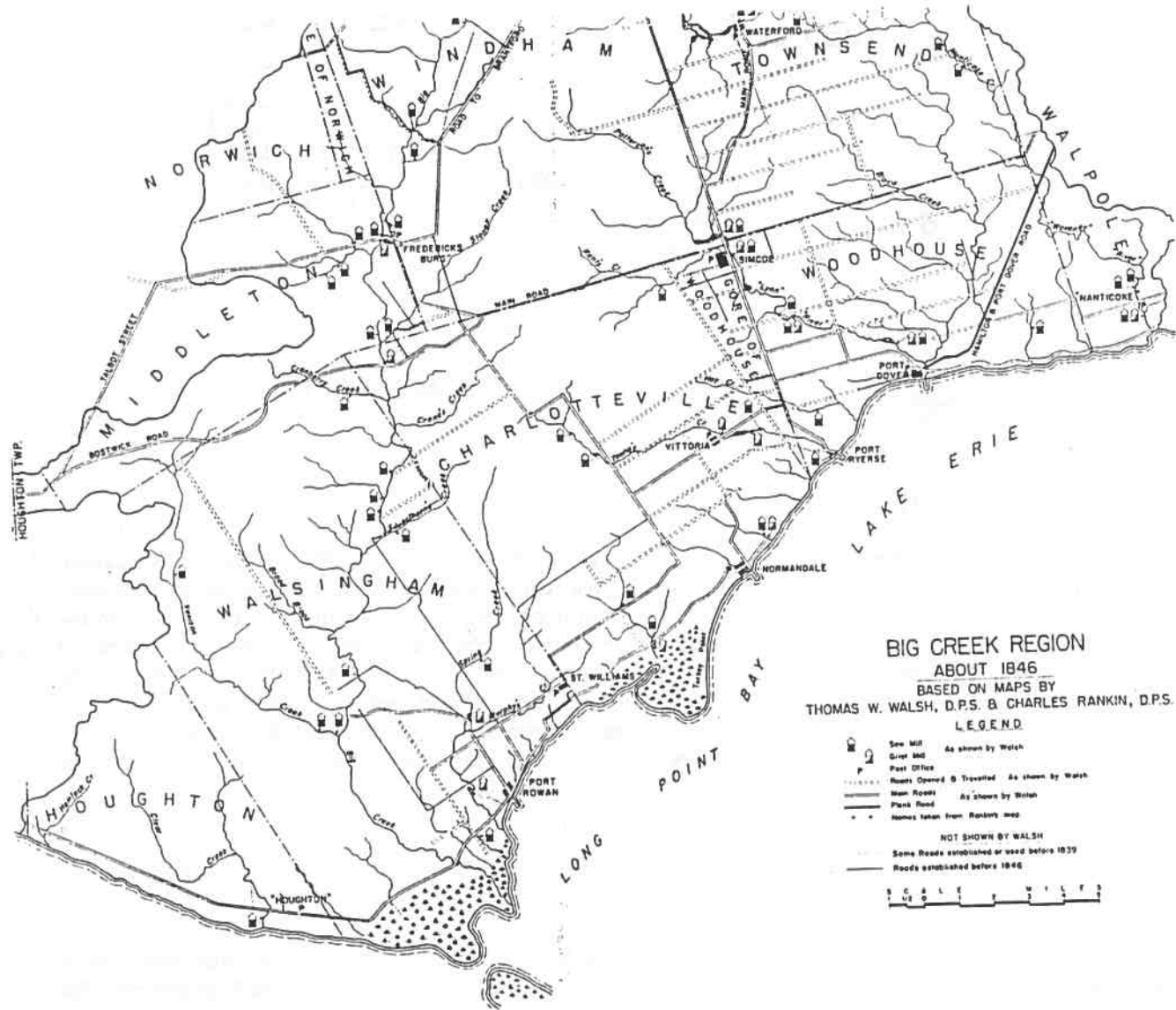
3.2.1.1 Fishery

Greenland (1974) indicated that except in the vicinity of population centres, little commercial fishing was carried on along the north shore of Lake Erie before 1850 because of the lack of an accessible market. Commercial operations increased after 1853, however, and especially after 1888 when the Great Western Railway improved fish transport from Long Point's Inner Bay. Fishing methods involved the use of seine and pound nets.

The early historic fishery was not well documented, with Canada's Department of Marine and Fisheries first initiating commercial fishery monitoring in 1868 (Whillans, 1979). Although accurate records were not kept, Whillans (1979) suggested that until about 1890, the most desirable fish harvested were lake trout (*Salvelinus namaycush*) and whitefish. Previous to 1900, little is known about the recreational fishery (Whillans, 1979).

No mention of Coy Railway line that carried logs from Houghton Twp into S. Walsk Twp and entered at Big Creek river valley. Note logs floated to inner bay or lake side

Figure 6 Long Point area about 1846



No mention of Big Creek being diverted from lake outlet to bay outlet.

3.2.1.2 Hunting/Trapping

Wildlife appears to have been abundant in the Long Point area during the pioneer years. A local farmer, Mr. Edward Foster, claimed to have killed "... over 100 bears and wildcats without number..." between 1802 and 1877 (Illustrated Atlas of Norfolk County, 1877, p. 8). The last bear in the Long Point area was reportedly killed near Big Creek Marsh in 1866 (Peterson, 1957).

White-tailed deer were eliminated from Long Point peninsula by about 1864 (Barrett, 1977). The Long Point Company, however, restocked it's land with deer in 1874 and W. Anderson also stocked his 90 acre site near Gravelly Bay in 1881. Since then, deer have repopulated the spit.

3.2.1.3 Lumbering

Commercial lumbering was not a major industry in the Long Point district until about 1840 (Big Creek Valley Conservation Authority, 1963). Before this time sawmills were usually built in close association with grist mills, and operated by millers or farmers on a part time basis to supply local settlers with sawn lumber. Table 1 illustrates the growth of lumbering during the early 1800's in the townships of the Long Point area.

Table 1 Number of Saw Mills 1817-1850

Township	1817	1825	1829	1835	1839	1842	1845	1848	1850
Bayham	-	7	11	14	17	28	25	-	-
Houghton	-	-	-	1	4	4	6	12	14
Middleton	-	1	3	5	3	7	7	9	12
Walsingham	2	1	2	2	5	7	7	14	18
Charlottville	3	1	3	5	7	8	9	9	7
Woodhouse	7	7	5	10	10	9	13	14	12

(Source: Otter Creek Conservation Report, 1957; Big Creek Conservation Report 1963)

H.P. Smith who came from North Tonawanda, New York, exported the first lumber in 1845 (Barrett, 1977). Big Creek soon became a highway down which millions of board feet of mainly pine and oak lumber travelled. Figures for various townships show that most of the 48,250,000 feet produced annually in Norfolk County came from the western section - Walsingham, Houghton, Middleton and adjoining parts of Charlottville and Windham (Big Creek Valley Conservation Authority, 1963).

The bulk of this lumber was exported through Port Rowan and to a lesser extent Port Royal. In 1849, exports from Port Rowan were dominated by lumber. The volume of lumber increased in the 1850's and then declined throughout the 1860's with exports becoming more varied and increasingly dominated by agricultural products (Big Creek Valley Conservation Authority, 1963).

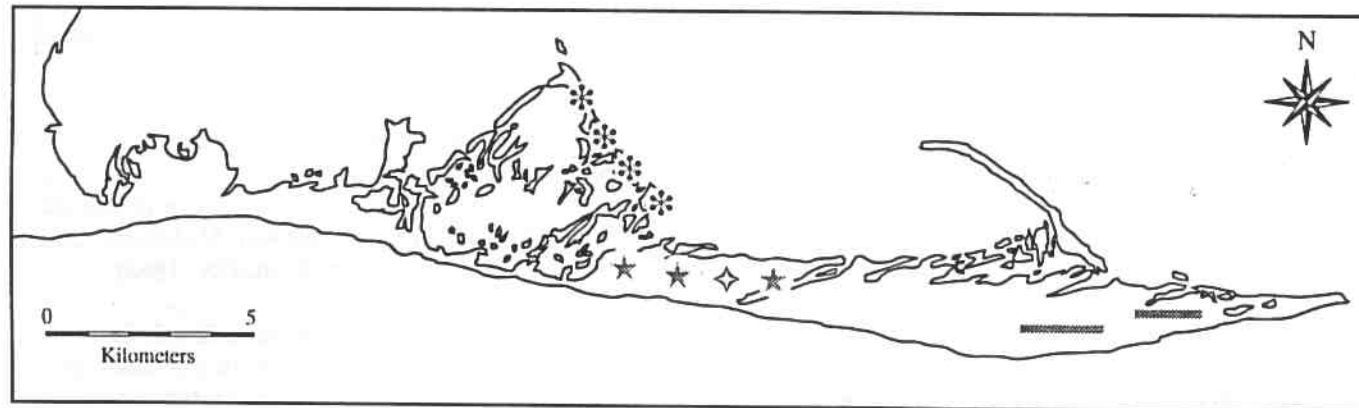
Barrett (1977) and Chanaysk (1970) indicated that the harvest of virgin forests was so quick that by 1860 the best timber was gone and by 1880 local demand could not even be satisfied (Table 2). When mainland timber became scarce, loggers turned their attention to the Long Point spit, with Boughner (1898) listing white pine as the major species removed. The logging of this area had severe implications with blowouts caused by wind and water destroying sand dunes. In 1866, the Long Point Company purchased the majority of the Long Point spit and proceeded to restrict further logging activities. Limited logging occurred between 1866 and 1951 with locations being illustrated in Figure 7.

Table 2 Remaining Woodland in Percent, Estimates From Census Canada Figures

Township	1851	1861	1891	1911	1921	1931	1941	1951
Bayham	77.8	55.1	26.1	10.8	12.9	15.7	12.4	16.3
Houghton	87.8	72.8	35.9	16.0	21.5	22.4	19.2	15.3
Middleton	89.6	75.8	36.5	16.9	20.6	20.7	18.5	16.9
Walsingham N.	81.9	72.5	31.0	15.8	18.9	22.1	20.8	15.7
Walsingham S.	89.6	76.8	34.9	22.3	18.9	20.8	19.4	17.9
Charlottville	69.2	57.8	31.7	24.8	21.9	23.3	21.2	17.3
Woodhouse	63.6	49.3	17.4	5.4	6.4	7.1	6.1	8.8

(Source: Otter Creek Conservation Report, 1957; Big Creek Conservation Report 1963)

Figure 7 Location and Date of Logging on the Long Point Spit



Date of Logging

- ✱ between 1850 - 1873
- ◇ early 1920's
- ★ 1934 - 1936
- ▬ 1945 - 1951

Location and Date of Logging on the Long Point Spit (after Heffernan, 1978)

Bay Iron was extracted at Homlock

3.2.1.4 Resource Extraction

Resource extraction was not a major component of Long Point's economy during the pioneer years. Bog iron was the first resource to be extracted with activities occurring in a ten to twelve mile radius of Normandale during the 1820's, 1830's and 1840's. Regarding other resources extensive natural gas fields underlying the region were first tapped in the 1870's in the former Haldimand County (Big Creek Valley Conservation Authority, 1953).

3.2.2 Agriculture

Wheat was the most important crop in the Long Point area, and the only crop that in the early years could also be exchanged for cash or goods. The first field of wheat in the Long Point area is said to have been grown by Lucas Dedrick in 1793 (Big Creek Valley Conservation Authority, 1963). This field is now the Bayside cemetery, which is located beside Dedrick creek, near the town of Port Rowan. In the early years, surpluses of wheat were converted into flour or whisky and exported, with the first indication of exports being 1809. The early development of grist mills is illustrated in Table 3. Exporting was a profitable venture for settlers with barrels of flour selling for \$12.50 to \$15.00 (Big Creek Valley Conservation Authority, 1963). When the purchasing power of a dollar in the early 1800's is taken into account these prices are astronomical compared to today's standards. Prices declined somewhat in the 1820's and early 1830's but had risen again by 1835. The next 40 to 50 years are considered to be the great wheat growing period of the Long Point area (Big Creek Valley Conservation Authority, 1963) (Figure 8).

Table 3 Numbers of Grist Mills 1817-1850

Township	1817	1825	1829	1835	1839	1842	1845	1848	1850
Bayham	-	3	4	3	4	3	3	-	-
Houghton	-	-	1	1	-	-	-	-	-
Middleton	-	-	1	1	-	-	1	1	1
Walsingham	3	1	2	1	2	3	2	2	2
Charlottville	3	2	3	2	3	4	2	3	3
Woodhouse	3	3	4	3	3	3	3	4	4

(Source: Otter Creek Conservation Report, 1957; Big Creek Conservation Report 1963)

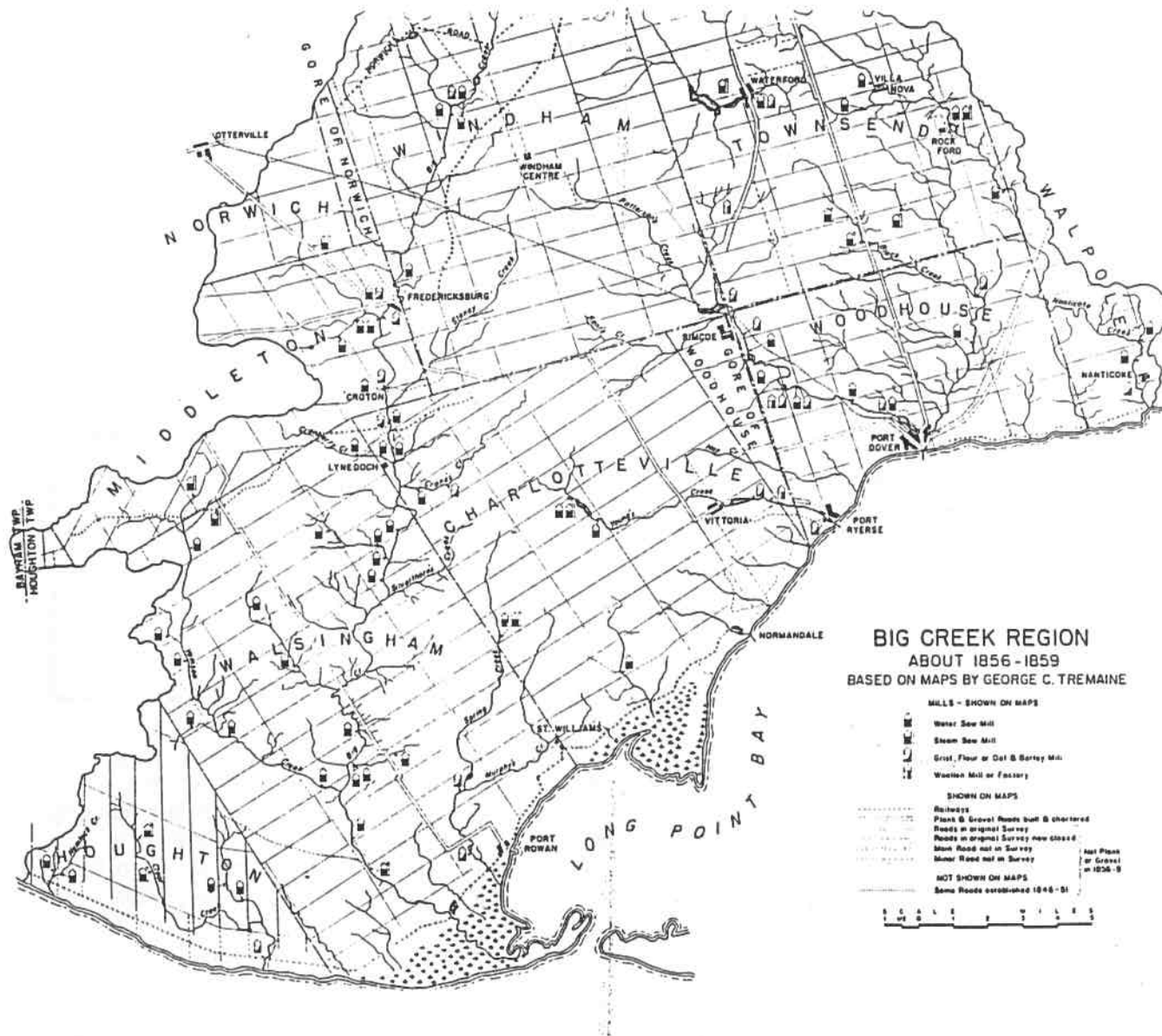
In the 1870's, wheat growers in Norfolk county experienced competition from western wheat suppliers and by 1871 wheat production in Norfolk County had declined by more than 30 per cent (Big Creek Valley Conservation Authority, 1963). By 1880, the great days of the Ontario wheat trade were definitely over, being replaced primarily by barley. The prairie provinces were coming into fuller production and buyers preferred western wheat (Big Creek Valley Conservation Authority, 1963).

3.2.2.1 Agricultural Activities in the Core Long Point Area

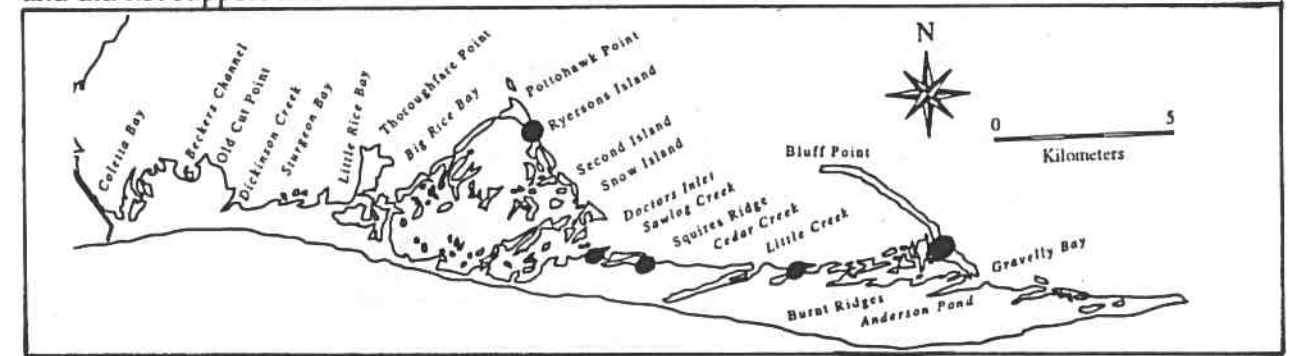
There were two types of agricultural activities that affected the core Long Point area: marsh haying and fruit farming. These activities existed for short durations and had minimal affects upon the area. In addition, they were not nearly as economically important as agricultural activities in the surrounding region.

The Long Point and Turkey Point marshes were used extensively for grazing and as sources of hay for range cattle in the early years of settlement (Big Creek Valley Conservation Authority, 1963). These marshlands were extremely valuable to area farmers because they provided a source of pasture and

Figure 8 Long Point Area about 1856-1859



winter fodder that did not have to be cleared of timber. At first, settlers took hay from wherever they wished in the marshes. After 1795, with new settlers constantly arriving, several of the landowners fronting the marsh became concerned about their supply of hay and applied for grants of marshland. Grants of land were given to most of the landowners who fronted the marsh in Walsingham township (Big Creek Marsh) by the turn of the century. Cattle ranged at large before 1870, and were often left out the entire year during the initial pioneer period. The marshes provided a vast area of grazing without much danger of stock becoming lost. Although fruit farming was not extensive on the Long Point spit, a number of small operations did exist before the establishment of the Long Point Company. These operations were described by Haskins (1869, pp. 24-27) and summarized by Heffernan (1978) as follows: 1) A small section of Ryerson's Island had some grapevine and a few peach trees, 2) Fifteen hectares on the north end of Courtright Ridge, were cultivated as a vineyard and which had a few peach trees, 3) An area of five hectares on Clark's Bluffs (now Bluff Point) was under some sort of cultivation, including a vineyard and peach orchard, 4) A garden of one hectare at the north end of Little Creek Ridge, and 5) A clearing of about 2 hectares at the north end of Squire's Ridge. Barrett (1977) indicated that the Long Point Company purchased these small parcels and did not support further cultivation.



3.2.3 Manufacturing

One of the earliest manufacturing activities in the Long Point area was the production of pig iron at the Van Norman Furnace (Big Creek Valley Conservation Authority, 1963). The first record of successful operation was in 1823. Bog iron was hauled from a ten to twelve mile radius of Normandale. As the supplies of bog iron were reduced, the operation of the furnace became unprofitable and it closed in 1847 (Big Creek Valley Conservation Authority, 1963). During the pioneer years, the major centres of manufacturing were located at Port Rowan and Port Dover, where ready access to shipping was available. At one time, the Port Dover Tannery was considered to be the best in Ontario and employed 10 to 15 people (Big Creek Valley Conservation Authority, 1963). A woollen mill, carriage-maker, and cabinet-maker were also present in Port Dover during the 1860's and 1870's. As the Long Point area became more populated the number of Manufacturing establishments increased (Table 4). The first industries that developed were distilling, wool-dressing, tanning and the making of lye and potash (Big Creek Valley Conservation Authority, 1963). As more equipment became available, additional industries developed.

3.2.4 Cottaging/Tourism

The first mention of the Long Point area being used for recreational activities was during the late 1850's and early 1860's (Barrett, 1977). One of the first individuals to frequent Long Point was Egerton Ryerson. He had inherited land from his father in 1854 (i.e., Ryerson Island), and first visited the Point in 1859. Although his initial use of the spit was for sport hunting he eventually began to spend his summers there as well. Other sportsmen were also attracted to the excellent shooting at Long Point and soon brought substantial business to the area. In the early years there were few restrictions on the shooting season and none on the size of the bag, or sale of game. "Pot hunting," both for use and for market, was common practice and an additional resource for punters and villagers of Port Rowan (Big Creek Valley Conservation Authority, 1963). Concern over the quality of the hunt prompted a group of sportsman to form the "Long Point Company" which bought the majority of the Point in 1866.

Table 4 Manufacturing Establishments, Norfolk County Censuses 1851 to 1891

Type	1851	1861	1871	1881	1891
Flour Grist Mills	19	13	20	32	42
Cooperages	-	3	14	17	19
Sawmills	112	77	62	59	63
Shingle Mills	-	7	29	8	6
Sash, Door & Blind	-	-	2	9	6
Carding & Fulling	6	-	1	2	-
Woolen Factories	1	2	4	3	4
Tanneries	7	11	12	7	6
Foundries	5	2	-	-	-
Agricultural Implements	-	-	4	4	-
Blacksmith Shops	-	-	61	80	118
Pump Factories	-	-	5	5	7
Carriage & Wagon	-	5	35	40	41
Cabinet Ware Factory	-	1	-	-	-
Soap & Candle Factories	-	1	-	-	-
Asheries	-	-	2	4	2
Distilleries	6	3	-	-	-
Brewers	3	1	1	1	1
Cheese Factories	-	-	11	20	33
Brickyards	-	1	-	-	-
Shipyards	-	1	-	-	-

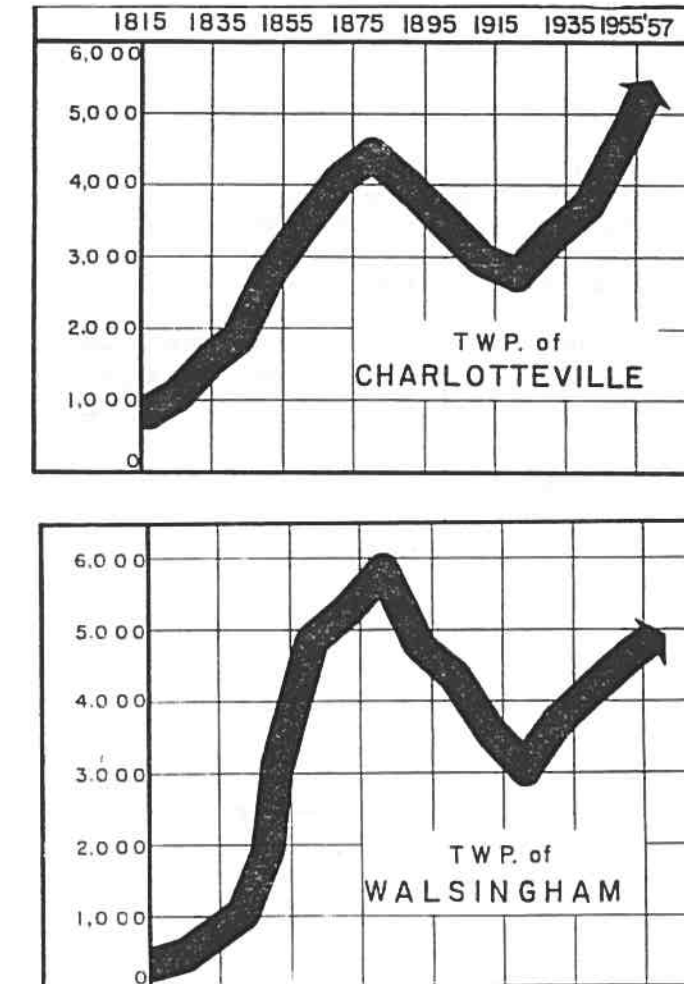
(Source: Big Creek Conservation Report, 1963)

During the 1870's summer vacations and summer cottages were becoming common in Ontario (Big Creek Valley Conservation Authority, 1963). No longer were hunting and fishing the only recreational resources of the area, bathing and boating were becoming popular and beach sites were in demand. As the pioneer period ended, Port Dover and Port Rowan began to benefit substantially from the "cottage trade" as commercial and service industries increased (Big Creek Valley Conservation Authority, 1963).

3.3 The Years of Decline and Change (1880-1950)

The economy of the Long Point area appears to have experienced a substantial decline between 1875 and 1885. This decline is most explicitly shown by population trends for the townships of the area (Figure 9). The reasons for this decline were not clear in the literature, but may be linked to declining soil fertility, increased competition from agricultural commodities produced in other areas or possibly due to the absence of a lake shore railway, (i.e., routes skirting the edge of the Norfolk sandplain were preferred because the river valleys were not as wide or as deep).

Figure 9 Population Trends in Long Point Area (1815-1950)
(from Big Creek Valley Conservation Authority, 1963).



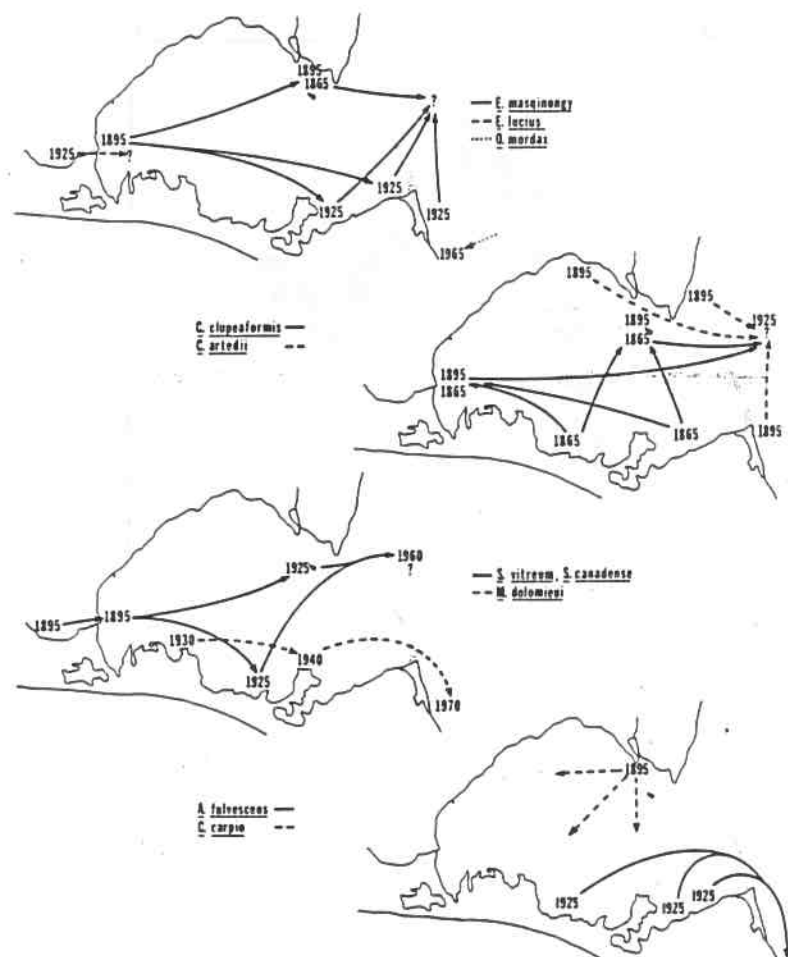
3.3.1 Natural Resources

3.3.1.1 Fishery

During the period of decline and change, commercial fishery operations remained very active. Whillans (1979) indicated that seine operations peaked between 1896 and 1905, with 15-17 seines being licensed in 1894, and 27 in 1906. Lake trout and whitefish coregonids remained important. Herring coregonids, blue pike (*Stizostedion glaucum*) and walleye (*Stizostedion vitreum*) increased in importance, while lake sturgeon (*Acipenser fulvescens*) became highest in demand.

Before the turn of the century there appears to have been very little recreational fishing in the Inner Bay. Whillans (1979) discovered references indicating that in 1916 fewer than 100 summer anglers were on the bay daily, with 50 to 200 fish per rod being regular catch estimates. Ice fishing at that time attracted no more than 12 people per day. By 1930, summer recreational fishing had intensified with upwards of 900 people fishing in the Inner Bay during a busy day. During this time frame (i.e., 1880 - 1950) several fish species underwent substantial abundance and spatial transformations (Figure 10). The most notable periods of change were in the years around 1900 and in the post-World War Two period. Whillans (1979) indicated that the former is remembered the best because of the demise of the major migrant off-shore economic species, while post-war changes predominately involved near-shore fishes. During the initial 1900 period, walleye and yellow perch evacuated spawning territories in Big Creek, and lake sturgeon, lake trout, and lake herring ceased utilizing the bay as a seasonal spawning, nursery or feeding ground (Whillans, 1979).

Figure 10 Changes in Fish Distribution and migration, 1865-1970 (from Whillans, 1979)
Arrows indicate changes in the location of centres of spawning



Whillans (1979) argued that the construction of the Long Point causeway in 1928 contributed substantially to the disappearance of muskellunge (*Esox masquinongy*) and to decreased populations of northern pike (*Esox lucius*), since there were no other apparent stresses at the time of their declines. Northern pike apparently shifted their spawning grounds from Big Creek marsh eastward along the south shore. Whillans (1979) also indicated that there is evidence that the construction of a dam in Big Creek between 1889 and 1894 severely disrupted walleye and yellow perch populations in the Inner Bay.

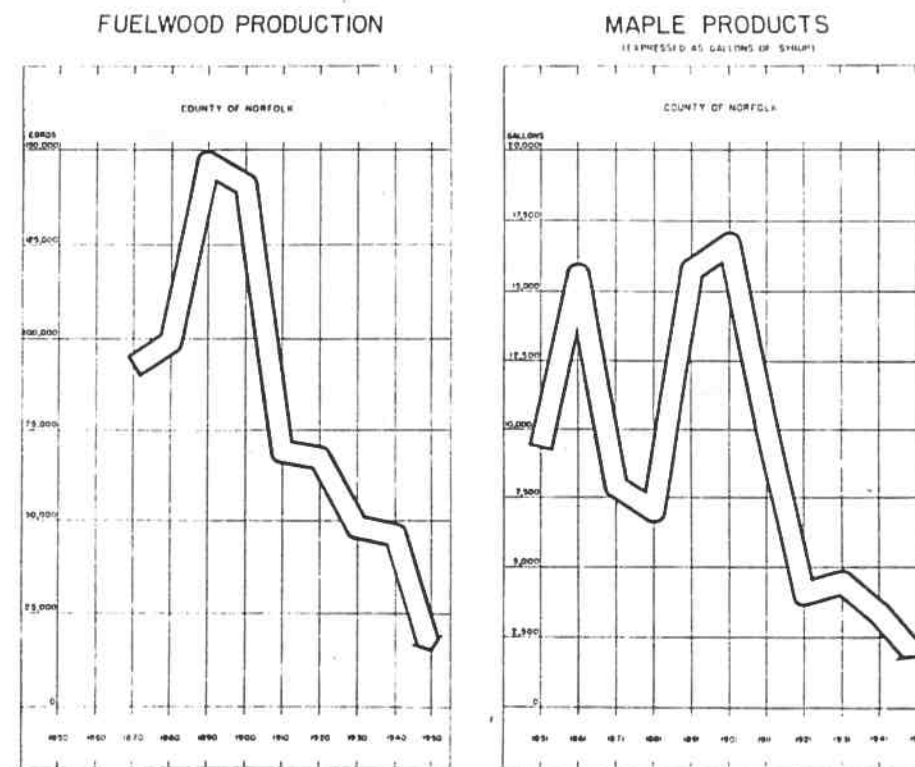
3.3.1.2 Hunting/Trapping

Although hunting and trapping was a common practise in the area, no published sources of data were found during a literature review. Further examination of historical records of the various hunting clubs in the area will be required in order to assess the economic impact of these activities in the Long Point area.

3.3.1.3 Lumbering

Although the woodlands of the Long Point area were decimated in the 19th century (see Table 2), products such as fuel wood and maple syrup remained important into the 20th century (Figure 11) (Big Creek Valley Conservation Authority, 1963). As a whole, however, the forestry products industry was a mere shadow of it's former economic importance in the mid 1800's. The establishment of the St. Williams forestry station in 1908, however, opened a new chapter in the natural resources sector of Ontario. A total of 1,650 acres was purchased by the government to form the nucleus of Ontario's first forestry station (Zavitz, 1963). Through the provision of seedlings, this station was largely responsible for the reforestation of large areas of Norfolk county and the establishment of extensive wind breaks. It also provided a large source of employment for residents of the area.

Figure 11 Fuelwood Production/Maple Products



3.3.1.4 Resource Extraction

Only minor removal of sand and gravel occurred in the Long Point area during this time period. No documentation of large scale activities was found.

3.3.2 Agriculture

Although the decline in the production of wheat during the 1870's was partially attributed to increased competition from the prairie provinces, declining soil fertility may have also played a large role. As the 19th century came to a close, production of grain for export had declined in importance and mixed farming was becoming common in Norfolk County. The census of 1901, for example, shows higher totals for oats and corn than for wheat, with all three being much higher than barley (Big Creek Valley Conservation Authority, 1963).

In some areas, however, the topsoil was so badly depleted that blow-sand deserts developed. Vance (1952) indicated that the greater part of Norfolk county was either devoid of natural vegetation, cropped in long rotation or blowing freely away. In the words of local residents, the Norfolk soil moved about so freely that a "roving deed" was essential. The land was deemed useless for anything but reforestation and sold for as little as five dollars an acre (Zavitz, 1963).

In 1920, the first experimental crop of burly tobacco was grown by Henry Freeman near Lyndock (Big Creek Valley Conservation Authority, 1953). Although the crop was successful, in 1921 the market for burly tobacco plummeted from fifty cents a pound to 10 cents a pound making this venture unprofitable. In 1922, he planted five acres of flue-cured tobacco. Unfortunately this crop was destroyed by hail, and it was not until the summer of 1923 that the first successful crop of flue-cured tobacco was grown in Norfolk county.

From these difficult beginnings the tobacco industry grew and thrived on the Norfolk sandplain. By 1930, 17,200 acres were planted and by 1950 this had increased to 53,287 acres (RMHN, 1989). The decline in the agricultural economy of the Long Point area had been reversed.

As tobacco uses high levels of nutrients, fertilizer must be heavily applied and a rotation system used to build humus. As a result, a two year rotation system that consists of rye, as a cover crop, before tobacco became common practice. In addition to creating humus, this method also decreased the amount of wind and water erosion that was occurring. The establishment of wind breaks became an important part of tobacco farming. The wind breaks produced favourable micro-climates and protected the tobacco plants from the sand blasting effect of wind erosion. It can be argued that these wind breaks along with the rye rotation played a large role in transforming the deserts of Norfolk county into one of the most productive and profitable agricultural areas of Ontario.

3.3.3 Manufacturing

Limited information regarding the manufacturing sector in the Long Point area was available for this time frame. Manufacturing activities probably dealt with the agricultural industry and were concentrated in centres such as Simcoe, Delhi, or Port Dover. An exception to this generalization would be fish processing plants in Port Dover.

3.3.4 Cottaging/Tourism

The "neck" of Long Point Peninsula was designated as Long Point Park in 1921 (Heffernan, 1978), and in 1923 the Ontario government commissioned "A Plan of Subdivision of Part of the Long Point Park" (Speight and VanNostrand, 1923). With the construction of the causeway in 1928, better access to the new park was provided and cottage development was initiated.

Heffernan (1978) indicated that there is little information on the early development of the park except for a 1938 London Free Press article that reported roads being built throughout the park and that "cottages were springing up". In 1940, Wilson (1974) reported less than 100 summer cottages and one permanent residence within the Long Point Park. Cottage development increased in 1944, however, when the provincial government began to supply new cottage lots on a 21-year lease (Zavitz, 1963).

3.4 The Recent Years (1950-1990)

The economy of the Long Point area was extremely strong through the 1950's, 60's and 70's. With the decline in the tobacco industry this is no longer the case. The Norfolk District Community Futures Corporation (1988, p.i) described the mid 1980's situation as follows:

"The economy had been expanding, but not fast enough to accommodate the population growth and rising participation of women in the work force. The result was persistent out migration of young people, relatively low participation rates compared to the rest of the province and a relatively large elderly population. Tobacco, the dominant agriculture crop, had suffered severe problems since 1982, compounding the longer term adjustment problems and raising the unemployment rate above that of surrounding municipalities".

3.4.1 Natural Resources

3.4.1.1 Fishery

The commercial fishery of Haldimand-Norfolk operates primarily out of Port Dover and Port Maitland. In addition, during the early spring there are a number of hoop and trap nets located around Long Point's Inner Bay. With over 250 people employed, this is considered to be Canada's largest freshwater fishery (RMHN, 1989). There are also four fish processing plants and a number of other establishments that service the industry.

Rainbow Smelt have consistently been the main species harvested. In 1988, they accounted for 89% of the total landings by weight and 53% of total landing value. White bass and Yellow perch are next in importance, accounting for 8.3% of total landings by weight and 35% of total landing value (Table 5). Total landing value of all species in 1988 was \$5,160,673.

The summer sport fishery expanded considerably after the Second World War. By the late 1950's about 7000 anglers could be seen on the Inner Bay when bass season opened (Reynolds, 1961). Ice fishing also increased considerably in the late 1950's when commercial huts became available, with between 500 and 1000 people fishing on a normal weekend (Whillans, 1979).

Long Point Bay is one of the few areas of Lake Erie that is suitable for a small-boat recreational fishery. The MNR (1976) indicated that it has potential for 383,000 angler-days per year, 318,000 in the Inner and 65,000 in the Outer bay. The value of this sport fishery was estimated by Meleski (1972) to be approximately 3.7 million dollars (in 1972 dollars).

Table 5 Quantity and Values of Commerical Fish Landings
Lake Erie, Haldimand-Norfolk (1984-1988)

SPECIES	1984		1985		1986		1987		1988	
	QUANTITY (lbs)	AVERAGE (\$/lb)	QUANTITY (lbs)	AVERAGE (\$/lb)	QUANTITY (lbs)	AVERAGE (\$/lb)	QUANTITY (lbs)	AVERAGE (\$/lb)	QUANTITY (lbs)	AVERAGE (\$/lb)
Bowfin	23,905	.20	--	--	--	--	5	0	60	.10
Bullheads	47,401	.26	--	--	--	--	--	--	--	--
Burbot	370	.01	74	0	140	.01	1,708	.02	1,022	.12
Carp	9,229	.10	1,490	.04	3,041	.05	1,587	.08	1,488	.08
Catfish	3,090	.40	716	.32	1,747	.34	3,420	.39	2,413	.40
Crappies	20,296	1.39	22	.15	--	--	--	--	155	1.32
Eel	338	.59	6	0	19	.05	22	.55	78	.24
Freshwater Drum	244,533	.09	27,890	.07	26,335	.07	40,702	.11	145,328	.07
Gar	--	--	4	0	6	0	--	--	--	--
Gizzard Shad	--	--	1	.02	213	0	--	--	100	.04
Lake Trout	659	.94	--	--	--	--	--	--	--	--
Lake Whitefish	2,324	.37	4,107	.70	4,914	.68	53,260	.78	31,855	.88
Lamprey	--	--	--	--	4	0	--	--	--	--
Northern Pike	13,278	.82	--	--	--	--	--	--	--	--
Pacific Salmon	499	.73	1	0	--	--	--	--	--	--
Rainbow Smelt	14,058,818	.10	12,050,820	.13	14,677,200	.17	17,706,212	.16	15,225,713	.18
Rock Bass	23,890	.59	1,413	.26	2,428	.41	1,972	.43	1,232	.43
Sturgeon	13	1.79	--	--	--	--	--	--	--	--
Suckers	2,934	.07	11	.10	387	.09	437	.10	403	.10
Sunfish	66,450	.63	--	--	--	--	--	--	38	.50
White Bass	515,621	.42	259,100	.43	140,514	.78	227,826	.84	636,880	.61
White Perch	16,285	.27	9,133	.27	11,627	.42	46,942	.46	193,576	.45
Yellow Perch	562,127	1.82	325,652	1.07	231,843	1.88	585,382	1.66	804,492	1.81
Yellow Pickerel	68,688	1.37	84,846	1.17	158,405	1.35	175,123	1.69	284,638	1.78
Mixed	59,387	.01	12,675	.02	1,348	.02	5,805	.02	405	.02
TOTAL LANDINGS (lbs)	15,740,134		12,777,961		15,260,271		18,850,403		17,329,881	
TOTAL LANDED VALUE (\$)	2,896,674		2,123,566		3,143,469		4,443,782		5,160,673	

Source: Ministry of Natural Resources, Lake Erie Fisheries Assessment Unit

Table 6 Number of Duck Hunters Utilizing the Crown Marsh, 1978-1991.

Year	# of Hunters	Year	# of Hunters
1978	2922	1985	2969
1979	2961	1986	2486
1980	3118	1987	3008
1981	3082	1988	2790
1982	3810	1989	2458
1983	3492	1990	2912
1984	3356	1991	2846

(Source: Long Point Provincial Park, Pers.Comm, 1992)

3.4.1.3 Lumbering

Approximately 18 percent, or 131,657 acres, of Haldimand-Norfolk's total area remains forested (RMHN, 1989). This area does not support a significant amount of commercial activity, with considerable areas being associated with conservation areas, private recreational land uses and urban areas. The activity that does occur is based in private woodlots concentrated in the western part of the region. Employment in forestry and logging accounts for less than one percent of Haldimand-Norfolk's employment base, with much of this employment being in the form of reforestation, planting and conservation activities (RMHN, 1989). A variety of products including woodchips, fuelwood, maple syrup and hardwood timber are produced by the industry. Approximately 17 million board feet are cut per year with an estimated production value of \$8 million (RMHN, 1989).

3.4.1.4 Extractive Industries

Since 1950, three major minerals have been extracted from Haldimand-Norfolk. These are gypsum, natural gas, and aggregates (sand, gravel and stone). The major centres of gypsum production, Hagersville and Caledonia, produce over 80% of Ontario's production. These mines are located at the edge of the Long Point Project study area and thus, do not have a large affect on the Long Point area economy. More than 55% of the province's off-shore natural gas and almost 20% of the province's onshore natural gas produced in 1986 (Table 7) came from Haldimand-Norfolk (RMHN, 1989). In addition, RMHN (1989) indicates that total volume produced has increased from 153 million cubic metres in 1978 to approximately 247 million cubic meters in 1986, an average annual increase of 7.7%. Current estimates indicate in excess of 50 billion cubic meters of natural gas (RMHN, 1989). Given current rates of extraction this resource should last almost 200 years.

Aggregate production in Haldimand-Norfolk fluctuates considerably depending on demand (Table 8). The DPA Group (1987) suggested that while the potential to expand aggregate production exists, rapid expansion in this region is not likely to occur for three reasons. First, demand for aggregates is not expected to rise sharply in the future. Second, the high cost of transportation of aggregates makes it difficult to compete in markets beyond the boundaries of the Region. Third, opposition to further expansion is likely to increase if quarrying impinges on residential or environmentally sensitive areas. In the core Long Point area there are no areas of aggregate extraction, with the closest "pits" being in the Delhi area. Therefore, for this reason, and for the reasons outlined above, aggregate extraction activities will not play a large role in the economy of the Long Point area.

3.4.1.2 Hunting/Trapping

Chanaysk (1970) indicated that in 1968 about 60 trappers harvested 6000 muskrat, over 400 raccoon, nearly 200 mink, 12 fox and 7 beaver. During the same time frame he also indicated that grouse pheasant, cottontail and European rabbits and waterfowl were hunted. Waterfowl hunting is especially predominant in the Long Point area. For example, in 1968 some 2451 hunters were accommodated by the Ministry of Natural Resources in the crown marsh. More recent numbers are provided in Table 6.

Table 7 Natural Gas Production in Haldimand-Norfolk, 1978-1986.

Year	Location	Norfolk County			Haldimand County			Total % of Ontario Production
		Gas Wells	Production		Gas Wells	Production		
			1000's Cubic Meters	% of Ontario		1000's Cubic Meters	% of Ontario	
1978	Total	235	74,018.3	21.0	266	78,833.3	22.3	43.3
	Off Shore	68	50,397.4	23.7	141	76,674.6	36.1	59.8
	On Shore	167	23,620.9	16.8	125	2,158.7	1.5	18.3
1979	Total	251	88,766.0	22.9	302	67,620.7	17.4	40.3
	Off Shore	74	63,571.8	29.7	152	65,887.3	30.8	60.5
	On Shore	177	25,194.2	14.5	150	1,733.4	1.0	15.5
1980	Total	256	83,268.6	18.7	282	83,297.0	18.7	37.4
	Off Shore	34	37,333.9	13.7	140	81,816.7	30.0	43.7
	On Shore	222	45,934.7	26.6	142	1,480.3	0.8	27.4
1981	Total	306	92,911.3	22.1	341	90,370.2	21.6	43.7
	Off Shore	102	66,329.7	20.4	205	88,959.0	27.4	47.8
	On Shore	204	26,582.6	28.0	136	1,411.2	1.5	29.5
1982	Total	282	83,375.0	19.1	300	134,216.8	30.8	49.9
	Off Shore	109	57,590.0	16.3	170	132,918.5	37.6	53.9
	On Shore	173	25,785.0	30.9	130	1,298.3	1.6	32.5
1983	Total							
	Off Shore	116	70,821.0	18.7	236	127,563.0	33.7	52.3
	On Shore	178	24,223.6	16.8	146	1453.2	1.0	17.9
1984	Total							
	Off Shore	76	64,672.5	16.0	270	154,041.1	38.2	54.2
	On Shore	184	23,839.5	16.9	132	1660.0	1.2	18.1
1985	Total							
	Off Shore	125	67,834.0	15.8	303	166,305.0	38.6	54.4
	On Shore	192	23,611.0	15.0	124	1,614.9	1.0	16.0
1986	Total							
	Off Shore	124	64,548.0	16.2	307	156,353.0	39.3	55.5
	On Shore	213	24,329.0	18.2	150	1,463.0	1.1	19.3

(Source: HNRM Economic Base Study, 1984, 1989)

Table 8 Annual Aggregate Extracted, Haldimand-Norfolk, 1983-1985.

Year	'000's of Metric Tonnes	Annual % Change
1975	3,100	n/a
1976	3,598.4	+ 16%
1977	3,144.6	- 13%
1978	2,531.8	- 19%
1979	2,919.3	+ 15%
1980	2,183.0	- 25%
1981	1,858.7	- 15%
1982	1,565.3	- 16%
1983	1,263.5	- 19%
1984	1,960.7	+ 55.2%
1985	1,504.0	- 23.3%
1986	1,529.3	+ 1.7%
1987	1,895.7	+ 24.0%
1988	2,051.6	+ 8.2%

(Source: HNRM Economic Base Study, 1984; 1989)

3.4.1.5 Naturalist Activities

The natural habitats of the Long Point area provide a broad resource base that is utilized yearly by thousands of individuals. Kreutzweiser (1979) estimated 10,000 nature viewers, fishermen, waterfowl hunters, and other wetland recreational users frequented Long Point. There is no doubt that this number has grown with the rise in popularity of naturalistic sports such as birding and photography.

Bird watching is probably the fastest growing recreational activity in North America. Point Pelee National Park, a "hot-spot" for birders, receives 60,000 to 80,000 gate visits during the spring migration, involving more than 20,000 individuals (Butler and Fenton, 1986). Although not as well known as Point Pelee, Long Point is also a popular location for birders in the spring. Because the whole of Long Point is not a regulated park, it is difficult to determine the number of individuals that visit this area. However, there is no doubt that in the spring months this activity is important to local economy when tundra swans, dabbling and diving ducks, shorebirds and songbirds migrate through this area. As a group, birders are often poorly understood. The little-old-lady-in-tennis-shoes caricature is a highly outdated image for the modern bird watcher (Butler and Fenton, 1986). Many people and communities are coming to realize that birding means large local revenues. In 1989, the New Jersey Audubon Society's Cape May Bird Observatory conducted a national survey in the United States. The survey results suggested that birders as group spend large amounts of money: a conservative \$1,850 per person per year on a wide variety of products and services (Kerlinger and Wiedner, 1992).

At Long Point no studies have focused specifically on the value of bird watchers to the local economy. The only study dealing with the recreational significance of Long Points Marshes was conducted by Kreutzwiser (1978). This study focused on the marsh as a resource base for nature viewers (i.e., viewing and photographing waterfowl, wildlife and flora), fishermen, waterfowl hunters and other wetland users. These users derived recreational value from the Long Point marsh in excess of \$122,000 and spent \$76,000 in the local area on gas, food, lodging, and other items (Kreutzwiser, 1978). A recent study conducted at Point Pelee National Park (Butler and Fenton, 1988) confirms the economic importance of birders to local economies. Their study estimated that bird watching trips to Point Pelee in May of 1987 resulted in total expenditures of over \$3.8 million, of which \$2.1 million was spent locally in the Leamington district. The average bird watcher spent \$126 locally on these trips, and an average of \$37 per day spent birding.

Another example of the significance of Long Point's biotic features to the local economy is the Long Point Bird Observatory (LPBO). LPBO is a non-profit organization that operates largely through the efforts of volunteers. This organization has grown considerably over the years in terms of its professional reputation and economic impact on the local economy. The observatory is now internationally renowned for its operations and in 1991 had a cash-flow of \$741,920, which was predominantly spent in the local economy (LPBO, 1990).

3.4.2 Agriculture

Until quite recently, the Haldimand-Norfolk region was predominately an agricultural area. The DPA Group (1987) indicated that sixty percent of the region's population lived on farms in 1951. By 1986 this level had fallen to fifteen percent and reflects both a decline in the number of farms (from 6,027 in 1951 to 3,300 in 1986) and a decline in employment growth in other sectors. Surrounding counties such as Brant, Elgin, Oxford and the Regional Municipalities of Niagara and Hamilton-Wentworth have experienced even more pronounced declines (DPA Group, 1987).

The RMHN Economic Base Study (1989) confirms these trends in their study of agricultural land use trends between 1951 and 1986 (Table 9). The most significant of the trends identified for the region were as follows:

- Number of farms declined by 45.2 percent.
- Total farmland area in the Region declined by 101,594 acres from 623,799 in 1951 to 522,205 in 1986. By 1986, total farmland area represented only 72.7 percent of the Region's total area whereas in 1951 it represented 87 percent.
- Average farm size increased from 103.5 acres in 1951 to 158 acres in 1986, an increase of 52.9 percent.
- Total farm population decreased from 40,256 in 1951 to 10,675 in 1986, a decline of 73.5%.
- Persons per farm decreased from 6.7% to 3.2%.

Table 9 Trends in Agricultural Land Use (1951-1986) for the Regional Municipality of Haldimand-Norfolk

	1951	1961	1971	1976	1981	1986	% change (1951-1986)
Number of Farms	6,027	5,381	4,480	4019	3,899	3,300	-45.2
Total Farm Area (acres)	623,799	607,663	575,675	552,467	557,477	522,205	-16.3
Average Farm Size (acres)	103.5	112.9	128.5	137.5	143.0	158.0	+52.9
Total Farm Population	40,256	23,701	18,850	-	13,554	10,675	-73.5
Persons/Farm	6.7	4.4	4.2	-	3.5	3.2	-52.2

(Source: HNRM Economic Base Study, 1984; 1989)

The trend to decreased numbers of farms and increased average size of the remaining farms has accelerated in recent years. The 1980's have brought difficult times to farmers. Stockpiled inventories, increased interest charges, losses due to poor weather or disease, and substantial changes in technology necessary to make farms competitive have resulted in the industry changing considerably (RMHN, 1989). One of these changes has been an 18% increase in small grain production since 1971 (Table 10). Since small grains are most efficiently produced with large equipment, and large equipment necessitates large acreage to defray capital costs, it is not surprising to find a trend to increased farm size (Table 11). In the early 1980's, there was an increase in farm parcels that were less than 3 acres in size. This can be accounted for by an increase in the popularity of "hobby farming".

Table 10 Distribution of Farms by Product Type, Haldimand-Norfolk, 1971-1986

Product Type	1971	1976	1981	1986	% change 1971-1986
Dairy	16.5	14.2	9.0	9.4	-7.1
Cattle & Other Livestock	21.5	14.6	15.0	18.3	-3.2
Wheat	0.6	2.9	2.0	2.3	+1.7
Small Grains	4.2	11.3	20.7	22.8	+18.6
Tobacco	45.5	39.2	36.3	29.9	-15.6
Fruits & Vegetables	6.6	5.8	7.4	8.6	+2.0
Other Field Crops	1.3	4.2	4.4	5.4	+4.1
Mixed Farms	3.7	7.8	5.2	3.3	-0.3

(Adapted From: HNRM Economic Base Study, 1984; 1989)

Table 11 Number of Farms Classified by Size, 1971-1986

Farm Size (Acres)	1971	1976	1981	1986	% Change (1971-1986)
Less than 3	66	49	68	55	- 20
3 - 9	158	140	131	101	- 56
10 - 69	1,014	882	949	785	- 29
10 - 129	1,612	1,385	1,249	953	- 69
130 - 179	716	632	565	480	- 49
180 - 239	430	411	372	339	- 26
240 - 399	350	362	363	361	+ 3.1
400 - 559	88	96	121	123	+ 39
560 - 759	19	40	39	56	+ 190
760 - 1,119	16	16	31	33	+ 106
1,120 - 1,599	4	5	8	7	+ 75
1,600 or larger	2	1	3	7	+ 250
Total Farms	4,475	4019	3,899	3,300	- 35

(Adapted from: HNRM Economic Base Study, 1984; 1989)

Ontario's tobacco industry experienced a substantial decline in the early 1980's. From a peak production of nearly 230 million pounds in 1978, production fell to a low of 110 million pounds in 1987 (Table 12). In 1987, the Ontario Flue-Cured Tobacco Growers Marketing Board negotiated a three year agreement with tobacco product manufactures for a total crop size of 110 million pounds. Although this has brought some stability to the sector, farmers were allowed to produce less than 30% of their quota (DPA Group, 1987). Since this scale of production was uneconomic for small farms and farms with heavy debt loads a decline in the number of tobacco farmers and a shift to other crops occurred. Heavy debt loads generally stem from expansion in the 1970's and early 1980's as well as losses from blue mold in 1979 and frost in 1982.

Table 12 Flue-Cured Tobacco Production and Farm Value, Norfolk County, 1978-1988.

Year	Total Marketed Production ('000's lbs)		Farm Value of Marketed Production Total (\$'000's)	
	Norfolk Cty.	Ontario	Norfolk Cty.	Ontario
1978	124,130	229,585	146,832	271,914
1979	67,047	149,227	89,395	198,375
1980	112,710	213,691	153,921	291,644
1981	118,258	219,878	179,640	334,076
1982	74,049	153,567	119,796	248,461
1983	117,490	214,872	191,902	351,051
1984	93,095	169,889	158,131	288,625
1985	91,955	169,783	157,211	289,879
1986	71,102	129,485	120,795	219,752
1987	59,764	110,013	106,966	196,520
1988	72,151	133,417	132,021	243,229

(Source: HNRM, 1984, 1989)

With the reduction in tobacco acreage, there are a large number of farmers who are interested in growing and marketing alternative crops. Some of the "exotic" crops that are being tried include ginseng, garlic, chick peas, evening primrose, peppermint, artichokes, okra, celeriac, oriental vegetables, collards, broccoli, peanuts and greenhouse crops (DPA Group, 1988). Although some of these crops, (i.e., ginseng), offer exciting potential, they operate in niche markets that will not develop to near the scale required to cushion the blow of the declining tobacco industry.

Market gardening, (i.e., fresh fruit and vegetables), is already established in this area and offers great potential for future expansion. However, one of the barriers to this expansion is a widely distributed marketing system that is highly fragmented and dominated by imports. In the Long Point area there is a complete lack of marketing infrastructure to support the expansion of perishable crops. The nearest major marketing operation is the Ontario Food Terminal in Toronto, 150-200 km away. Studies have been conducted to determine the feasibility of establishing a central packing/marketing facility for fresh fruits and vegetables in this area and a Central Erie Produce business plan has been proposed (DPA Group, 1988; Norfolk District Futures Corporation, 1988).

3.4.3 Manufacturing

RMHN (1989) indicated that approximately 22% of the Region's employment base was engaged in manufacturing at the time of the 1986 federal census. By 1989, this had risen to almost 24%, or 10,858 employees (Table 13). Regarding these percentages, it is important to realize that very little manufacturing activity occurs in the immediate vicinity of the Long Point area. The Township of Norfolk, for example, has smallest number of manufacturing establishments and the lowest number of people employed in manufacturing of any of the Towns or Townships that make up the Regional Municipality of Haldimand-Norfolk.

Table 13 Employment in Manufacturing, Haldimand-Norfolk, 1989

Municipality	No. of Establishments		Full-Time		Employment Part-Time		Seasonal		Total	
	1984	1989	1984	1989	1984	1989	1984	1989	1984	1989
Dunnville	28	27	900	398	61	62	435	401	1,396	861
Haldimand	39	46	962	1,148	68	53	68	116	1,098	1,317
- Caledonia	11	20	429	599	18	25	41	62	488	686
- Cayuga & Area	17	15	159	116	19	16	23	29	201	161
- Hagersville	11	11	374	433	31	12	4	25	409	470
Nanticoke	54	59	3,224	3,760	147	232	195	439	3,566	4,431
- Jarvis & Area	15	15	2,612	843	16	162	81	70	2,709	1,075
- Port Dover	19	28	425	2,775	109	42	28	242	562	3,059
- Waterford	20	16	187	142	22	28	86	127	295	297
Simcoe	43	42	2,391	1,947	73	111	348	443	2,812	2,501
Delhi	21	29	470	797	32	13	418	207	920	1,017
Norfolk	16	13	287	457	36	37	159	237	482	731
Region of Haldimand-Norfolk	201	216	8,234	8,507	417	508	1,623	1,843	10,274	10,858

(Source: HNRM, 1984, 1989)

The DPA Group (1988; p.5) suggested that the manufacturing industries can be grouped into the following four categories:

1. Food processing, fish processing, gypsum products, aggregates products, tobacco processing and other industries that process products produced in the Region. They account for about one-third of the manufacturing employment;

2. The Stelco, Texaco and Ontario Hydro plants at Nanticoke account for about one-quarter of the Regions Manufacturing employment;
3. About 10 percent of the Region's manufacturing employment is in industries such as shipbuilding, fertilizers and chemicals, and printing and publishing, that serve local markets; and
4. Firms with no strong ties to the Region account for the remaining third of the manufacturing employment. These include textile manufacturers, sporting goods, jewelry, auto parts, horticultural products, etc.

The manufacturing sector in Haldimand-Norfolk consists of a small number of externally controlled firms and a much larger number of locally controlled firms (Table 14). These locally controlled firms are extremely important to local economies. The majority of the manufacturing industries within the Region are small in size, employing between one and nineteen people (RMHN, 1989).

Table 14 Tenure of Major Resident Industries (1989)

COMPANY	OPERATION/PRODUCT	LOCATION	CURRENT EMPLOYMENT	CONTROL ¹
Rosa Flora Limited	Rose Growing	Dunnville	80	L
Beatrice Foods	Ice Cream	Simcoe	80	E
The Gourmet Baker Inc.	Frozen Deserts	Simcoe	89	E
Norfolk Cherry Company	Processing Cherries	Nanticoke	90	L
Ranpro Inc.	Industrial Rainwear	Simcoe	97	L
Borg-Warner Automotive (Can.) Ltd.	Motor Engine Parts	Simcoe	102	E
Jax Mold and Machine Limited	Tire Molds	Simcoe	110	L
Cometic Technology Inc.	TV Antennas/Towers	Delhi	115	L
Canvil Ltd.	Steel Pipe Fittings/Couplings	Simcoe	117	L
Ont. Flue-Cured Tobacco Grow.M.B.	Marketing Tobacco	Delhi	120	E
Simcoe Leaf Tobacco Company Ltd.	Buy/Process/Export Tobacco	Simcoe	125	E
Iveys Incorporated	Floral Products	Nanticoke	140	L
Delhi Industries Inc.	Air Moving Products	Delhi	145	L
Total Distribution Systems Ltd.	Wood Crates/Boxes	Nanticoke	150	E
Henry H. Misner Ltd.	Processing Fish	Nanticoke	150	L
The Norfolk Fruit Growers Assoc.	Grow/Grade/Pack Apples	Simcoe	155	L
Norfolk Co-op Co. Ltd - Simcoe	Grain/Lumber/Petro	Multiple	161	L
Beatrice Foods (Good Humour Div.)	Ice Cream Novelties/Popsicles	Simcoe	175	E
Bruce R. Smith Limited	Transportation Service	Delhi	200	L
Cuddy Chicks Ltd.	Hatching Chicken Eggs	Nanticoke	255	E
Canada Wire & Cable Ltd.	Magnet Wire	Simcoe	280	E
Ball Packaging Products	Food/Packaging Containers	Simcoe	330	E
Fernlea Flowers	Greenhouse	Norfolk	350	L
Canadian Gypsum Company	Gypsum Products	Haldimand	350	E
Domtar Gypsum	Gypsum Products	Haldimand	363	E
Bick's Specialty Foods Division	Pickles/Vegetables	Dunnville	380	E
McColl-Frontenac Inc.	Oil Refining/Petro Products	Nanticoke	450	E
Nanticoke T.G.S.	Electricity Production	Nanticoke	721	E
Stelco Steel Lake Erie Works	Steel Slabs/Coils	Nanticoke	1625	E

¹E = Externally Controlled; L = Locally Controlled.

Source: Economic Base Study, 1989, Planning & Development Department, Policy Section.
Note: Includes seasonal employment. Lists only industries whose permission to release above information has been granted.

A study by the Ministry of Industry, Trade and Technology (1987) suggested that locally-controlled firms typically contribute 60 to 90 percent of the net employment growth, but go unnoticed due to small increments in employment gain. Externally controlled firms, however, come and go with greater impact. For this reason, the DPA Group (1988) suggested that the best prospect for achieving a higher rate of economic growth is in stimulating the start up and expansion of locally controlled firms.

The largest single centre of manufacturing in the Long Point area is the Nanticoke Development. As outlined above, the Stelco steel mill, Texaco refinery, and Ontario Hydro thermal generation plant provide 25% of the regions manufacturing base. Serafin (1989) indicated that this industrial development was one of the largest ever undertaken in Canada, exceeding in investment even the Alberta Oil Tar Sands projects. Its impact on the local economy, however, has not been nearly as high as expected. In the late 1960's and early 1970's, handling the expected rapid growth of the areas economy was perceived to be a future problem. This resulted in a major restructuring of the local government and the construction of a new regional centre - Townsend. This growth never occurred.

3.4.4 Cottaging/Tourism

Wilson (1974) indicated that by 1956 there were about 450 cottages and a half dozen permanent residences in Long Point park. By 1961, this had increased to 600 cottages and 30 permanent residences. And by 1970 the number of cottages had risen to 900, with permanent residences totalling 50. The number of cottages has remained steady ever since.

In 1956, the administration of Long Point Park was switched from the Long Point Park Commission to the Department of Lands and Forests and officially became a provincial park (Zavitz, 1963). In 1959, the Department of Lands and Forests began to sell leased lots to cottagers. These land sales reduced Long Point park from 930 hectares in 1944 to 5 hectares in 1961 (Zavitz, 1963). In 1961, however, the provincial government expropriated 325 hectares of land adjacent to the eastern boundary of the park. This land had belonged to H. Ferris, a former warden for the Long Point Company, who received it upon his retirement in 1944. Zavitz (1963) indicated that there were only 100 campsites in 1960, with the number increasing to 250 by late 1961. Currently there are 268 campsites at the Long Point Provincial Park (MNR, 1989).

The use of Long Point as a cottage area has led to much capital investment to combat shoreline erosion. In some cases these investments have been successful in meeting their objectives, while in other cases additional problems have been created. For example, the Ministry of Transportation and Communications spent \$177,000 in the Long Point area, mainly on a gabion breakwall to protect Highway 59 from erosion (Jephson, 1976).

Unfortunately this structure, while protecting the highway, increased erosion on downdrift private property to such an extent that provincial authorities built a 600 - foot sandbag breakwall to remedy the situation (Edwards, 1976). This action was not enough and cottagers on the downdrift side had to build extensive protective works at their own expense (Day and Fraser, 1979). Hastings Drive is another area where considerable efforts and capital investment have been made to combat erosion. The majority of these initiatives, however, have been unsuccessful.

It has been estimated that some 950,000 person-trips are made to Haldimand-Norfolk each year (Norfolk District Futures Corporation, 1988). These visitors spend some \$48 million in the region, with tourism businesses representing 24% of the industrial/commercial assessment. Average reported expenditure by Haldimand-Norfolk tourists was \$58.50. (Norfolk District Futures Corporation, 1988). It is argued that the tourism industry in Haldimand-Norfolk has not kept pace with the changing market trends of the industry (Norfolk District Futures Corporation, 1988). Few of the tourist operations in the region can be considered modern and may fail to meet expectations of some visitors. There is also a lack of marketing activities to attract visitors to the Haldimand-Norfolk region. As a result, they conclude that the potential of the tourist industry in the area has not been fully developed.

There are a wide variety of tourism resources in the Haldimand-Norfolk region. The natural features of the area, (i.e., the beaches of lake Erie), the lake itself for boating and fishing, the unique environment of Long Point, the Carolinian Forests and the sandhills, are the most important tourists resources of the region. In addition, historical and cultural attractions such as the Backus Historical Complex and the Lighthouse Festival Theatre are also important attractions. The region has over 5,000 campsites, many of which are seasonal, 560 units of roofed accommodation and almost 3,000 boat slips ((Norfolk District Futures Corporation, 1988).

To improve on these resources, the Haldimand-Norfolk Tourism Strategy (Norfolk District Futures Corporation, 1988) identified a number of development proposals that include:

1. a housekeeping resort in the Long Point Area, possibly within the Long Point Provincial Park;
2. a family-oriented participatory attraction in Port Dover;
3. the development of a new country inn;
4. increased development, programming and staffing at the Backus Historical Complex to make the site a "living history" village. This would include a program of regular entertainment and the development of a heritage craft village on the site;
5. the development of a specialty shopping complex with associated attractions in Dunnville.

4.0 SUMMARY AND ADDITIONAL RESEARCH NEEDS

This report uses a historical economic framework to divide the economic activities into sectors and organize them according to various time frames. Figure 12 is intended to summarize the importance of various activities during the different historic time frames of the Long Point area and to identify information gaps.

Figure 12 Matrix of Historical Economies

Time Period	Year	Economic Activities							
		Natural Resources					Agricultural	Manufacturing	Cottaging/Tourism
		F	H/T	L	R/E	N			
Pre-Settlement	1785								
Pioneer Years	1885			Major	Major		Major	Minor	Major
Years of Decline and Change	1950	Major		Major	Major		Major		Major
Recent Years	1990	Major		Major	Major		Major		Major
Current		Major		Major	Major		Major		Major

* F, H/T, L, R/E, N respectively represent Fishing, Hunting/Trapping, Lumbering, Resource Extraction and Naturalist Activities.
 * Solid blocks represent time periods for which information was available, dashed blocks represent time periods where information was lacking.
 * Magnitude of Activities: Major (thick block), Minor (thin block)

Two main comments can be made regarding this matrix. First, there is a major information gap for all sectors during the period of decline and change. Economic information pertaining to natural resources, manufacturing or tourism sectors was absent from the literature that was reviewed. To deal with this shortcoming an expanded literature search, and a review of the census Canada data may be required. Although this would be time consuming it would create a more complete summary of historical economic activities in the Long Point area.

Second, activities such as resource extraction and manufacturing have never been important components in the economies of the Long Point area. Even during the current economic time frame these activities are located at the periphery of the Long Point study area (with the exception of natural gas extraction in the outer bay) and thus do not have a direct affect upon the area. Indirect affects are present, however, with the Long Point area being used as a recreational area for individuals who are supported by manufacturing and natural resource extraction activities outside of the immediate area.

4.1 Sustainability From a Historical Economic Perspective

As of yet, sustainable development has not been explicitly recognized at public meetings as an objective of the Long Point Project. It is, however, an underlying concept that the use of the ABC Resource Survey Approach and the preparation of the Environmental Folio will foster.

The consideration of historical and current economies of Long Point using an analytical approach based on the concept of sustainability could provide some interesting insights. This approach would require consideration of factors such as the maintenance of essential ecological processes; the preservation of diversity (biotic & culture); the protection of resource productivity; and, fostering of equity, i.e., access to land use, resource and environmental opportunities, now and in the future.

The economy of the Long Point area appears to have declined significantly during the late 1800's and early 1900's. It rebounded with the development of the tobacco industry and remained strong until the end of the 1970's. Currently, however, the economy is again falling as it follows the decline in the tobacco industry. This in turn is leading to a search for new economic opportunities and to impacts on forests, wetlands, and other resources, already reduced by many years of economic exploitation without sufficient consideration of the foregoing factors relating to sustainable development.

5.0 ACKNOWLEDGEMENTS

The following agencies provided assistance during the preparation of this report: Norfolk District Community Futures Corporation, Norfolk District Business Development Corporation, Ontario Ministry of Agriculture, Long Point Region Conservation Authority, Central Erie Agricultural Co-operative, Regional Municipality of Haldimand-Norfolk, and the Long Point Biosphere Reserve Committee. The folio work and associated studies are supported by grants from the Royal Canadian Geographical Society and the Social Sciences and Humanities Research Council of Canada. Supplementary support was provided by a Donner Foundation grant to George Francis, University of Waterloo. A study team at the Heritage Resources Centre, University of Waterloo, has been assembled for the folio project which consists of Gordon Nelson (project director) and graduate students from the Department of Geography; Karen Beazley, Patrick Lawrence, Kerrie Pauls, Andy Skibicki, Ron Stenson, and Chi Ling Yeung.

6.0 REFERENCES

- Barrett, H.B. (1977) *Lore and Legends of Long Point* Burns & MacEachern Ltd., Don Mills, Ontario.
- Battin, J.G. (1975) *Land Use History and Landscape Change, Point Pelee National Park, Ontario* M.A. Thesis, Department of Geography, University of Western Ontario.
- Big Creek Valley Conservation Authority (1953) *Big Creek Valley Conservation Report* Department of Lands and Forests, Conservation Authorities Branch, Toronto, Ontario.
- Big Creek Valley Conservation Authority (1963) *Big Creek Valley Conservation Report* Department of Lands and Forests, Conservation Authorities Branch, Toronto, Ontario.
- Boughner, L. J. (1898) "Notes on the flora of Long Point Island, Lake Erie, Province of Ontario, Canada" *Canadian Field Naturalist*, Vol 12.
- Butler, J.R. and G.D. Fenton (1986) *Bird Watchers at Point Pelee National Park, Canada: Their characteristics and activities, with special consideration to their social and resource impacts.* Paper Presented at First National Symposium on Social Science in Resource Management, Oregon State University, Corvallis, Oregon, May 12-16.
- Butler, J.R., Hvenegaard, G.T. and D.K. Krystofiak (1988) *The economic values of bird watching at Point Pelee National Park, Canada* Paper submitted to Wildlife Society Bulletin.
- Chanasyk, V. (1970) *The Haldimand-Norfolk Environmental Appraisal: Volume 2 / Synthesis and Recommendations* Ontario Ministry of Treasury, Economics and Intergovernmental Affairs.
- Day, J.C. and Fraser, J.A. (1979) "Flood and erosion hazard adjustments near Rondeau and Long Point: a perceptual approach" *Contact: Journal of Urban and Environmental Affairs* 11(1): 117-135.
- De Casson, D. and De Galinee, B. (1903) "Exploration of the Great Lakes, 1669-70" (translated by J.H. Coyne) *Ontario Historical Society Papers and Records* No. 4.
- DPA Group Inc. (1987) *Economic Outlook for the Regional Municipality of Haldimand-Norfolk.* The DPA Group in association with: M.M. Dillion Limited, Toronto, Ontario.
- Edwards, L. (1976) Ontario Ministry of Natural Resources, Simcoe, Ontario, personal communication, June 28, 1976, as cited in Day, J.C. and J.A. Fraser (1979) "Flood and erosion hazard adjustments near Rondeau and Long Point: a perceptual approach" *Contact: Journal of Urban and Environmental Affairs*. 11(1): 117-135.
- Greenland, G. (1974) *Fishing on North Lake Erie Shoreline* Ontario Ministry of Natural Resources, Regional Office, London.
- Haskins, W. (1869) *A Synopsis of the Early History of the Long Point Company* Ontario Provincial Provincial Archives, Toronto, Ontario.
- Heffernan, S.E. (1978) *Long Point, Ontario: Land Use, Landscape Change and Planning* M.A. Thesis, School of Urban and Regional Planning, University of Waterloo, Waterloo, Ontario.
- Heffernan, S. and Nelson, J.G. (1979) "Land use history, vegetation and planning for Long Point, Rondeau, and Point Pelee Peninsulas, Lake Erie" *Contact: Journal of Urban and Environmental Affairs*. 11(1): 53-79.
- Knight, D.K. (1983) *Conceptual Ecological Modelling and Interaction Matrices as Environmental Assessment Tools with reference in the Long Point ecosystem, Lake Erie.* M.A. Thesis, Department of Geography, University of Waterloo, Waterloo, Ontario.
- Isard, W. (1972) *Ecological-Economic Analysis for Regional Development* The MacMillian Company, New York, New York.
- Jephson, E. (1976) Planning Engineer, Ministry of Transportation and Communications, London, Ontario, personal communication, November 23, 1976, as cited in Heffernan, S.E. (1978) *Long Point, Ontario: Land Use, Landscape Change and Planning* M.A. Thesis, School of Urban and Regional Planning, University of Waterloo, Waterloo, Ontario.
- Kerlinger, P. and Wiedner, D. (1992) "Birding Economics: or Birders Mean Big Bucks" *Living Bird*. Winter 1992 issue.
- Kreutzwiser, R.D. (1979) *Recreational Significance of the Long Point Marsh, Lake Erie* Department of Geography, University of Guelph, Guelph, Ontario.
- Meliski, T. (1972) *An Economic Evaluation of the Sport Fishery on Long Point Bay, Lake Erie* Ontario Ministry of Natural Resources, Aylmer, Ontario.

- Ministry of Industry, Trade and Technology (1987) *The State of Small Business* Toronto, Ontario.
- Ministry of Natural Resources (1976) *The Ministry of Natural Resources in Haldimand-Norfolk: A Statement of Interests* Southwestern Region, London, Ontario.
- Norfolk District Futures Corporation(1988) *Haldimand-Norfolk Tourism Strategy* The Economic Planning Group of Canada Toronto, Ontario.
- Otter Creek Valley Conservation Authority (1957) *Otter Creek Valley Conservation Report* , Department of Lands and Forests, Conservation Authorities Branch, Toronto, Ontario.
- Page, H.R. (1877) *Illustrated Atlas of Norfolk County* (reprint edition) Mika Silk Screen Ltd., Belleville, Ontario.
- Peterson, R.L. (1957) " Changes in the Mammalian Fauna of Ontario " in *Changes in the Fauna of Ontario*, pp. 43-57, edited by F.A. Urghart, University of Toronto Press, Toronto, Ontario.
- Regional Municipality of Haldimand-Norfolk (1984)*Economic Base Study 1984* Department of Planning and Development, Townsend, Ontario.
- Regional Municipality of Haldimand-Norfolk (1989)*Economic Base Study 1989* Department of Planning and Development, Townsend, Ontario.
- Regional Municipality of Haldimand-Norfolk (1991) *A Growth Strategy for the Region of Haldimand-Norfolk and its Area Municipalities* Department of Planning and Development, Townsend, Ontario.
- Serafin, R. (1989) *Research and Monitoring for Environmental Protection: Twenty Years of Research and Monitoring at the Nanticoke Industrial Complex on the North Shore of Lake Erie* Final Report to Canadian Environmental Assessment Research Council, Ottawa, Ontario.
- Sharpe, B. (1992)*Community Futures in Ontario: The Organization and Process of Local Economic Development* (unpublished) Department of Geography, Wilfrid Laurier University, Waterloo, Ontario.
- Speight and VanNostrand (1923) *Map showing the plan of subdivision of part of the Long Point Park* Department of Lands and Forests, Toronto, Ontario.
- Whillans, T.H. (1979). " Response of fish communities to stress: a historical study of Inner Bay, Long Point " *Contact: Journal of Urban and Environmental Affairs* 11(1), p.1-18.
- Wilson, D.L. (1974) *Long Point: Its Historical Geography* (unpublished) undergraduate thesis, Department of Geography, University of Western Ontario, London, Ontario.
- Zavitz, C.H. (1963) *A History of the Lake Erie Forest* Department of Lands and Forests, Toronto, Ontario.

Long Point Environmental Folio
Publication Series
Heritage Resources Centre
University of Waterloo

Managing Editors:
J. Gordon Nelson and Patrick L. Lawrence

- Working Note 1. Preparing an Environmental Folio for the Long Point Biosphere Reserve and Region
by J. Gordon Nelson, Patrick L. Lawrence, Karen Beazley, Ron Stenson, Andy Skibicki, Chi Ling Yeung, and Kerrie Pauls
- Technical Note 1. Analysis of Land Use/Land Cover Change of the Long Point Region from 1974 to 1984 Using Landsat MSS Images
by Chi Ling Yeung
- Working Paper 1 The Historical Economies of the Long Point Area
by Steven Wilcox