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NAME OF AUTHOR/*NOM DE L'AUTEUR* Mark A. Rasmussen

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NAME OF SUPERVISOR/*NOM DU DIRECTEUR DE THÈSE* Dr W.C. Wonders

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THE GEOGRAPHIC IMPACT OF FINNISH SETTLEMENT ON THE THUNDER BAY AREA OF NORTHERN ONTARIO

by

© MARK A. RASMUSSEN

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE

OF MASTER OF ARTS

DEPARTMENT OF GEOGRAPHY

Edmonton, Alberta

Spring, 1978

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled The Geographic Impact of Finnish Settlement on the Thunder Bay Area of Northern Ontario submitted by Mark A. Rasmussen in partial fulfilment of the requirements for the degree of Master of Arts.

William C. Wonders
.....
Supervisor

John F. Bergmann
.....

Robert Tait
.....

Date March 13, 1978

ABSTRACT

This study describes and analyzes the impact of early Finnish settlers, as a distinctive ethnic group, on the rural cultural landscape of the Thunder Bay area of Northern Ontario. Basic objectives of the research were to make an inventory of the various settlement characteristics of these 'Finns' and eventually produce a representative form or style. Involved were initial folk architecture and site/settlement patterns. Then, reasonings behind the characteristics and form were developed. These included cultural carry-over of Old World traditions, and New World transitions and innovation. To approach the problem, field inspections and interviews were carried out, and findings compared with those of similar surveys conducted in Finland.

The results of the study show that the Finns did produce a very distinctive style of settlement in the Thunder Bay area. This style, however, was largely the result of a transplant of their traditional cultural landscape onto a new, but familiar physical environment. The significance of the Finnish impact can be seen in their expertise in dealing with the boreal region and distinctive image.

ACKNOWLEDGMENT

The formulation and preparation of this thesis would not have been possible without the cooperation and assistance of numerous people. First, I would like to express sincere gratitude to my supervisor, Dr. W.C. Wonders, who provided direction and inspiration extending far beyond this work.

I am also greatly indebted to those residents interviewed in the Thunder Bay area, and particularly the Finnish community, for their patience and hospitality. Special thanks must be extended to Cairine Budner and the Thunder Bay Finnish Canadian Historical Society for their most helpful contributions. Appreciation must also be expressed to those connected with the Finnish Archives of Lakehead University which provided a valuable information base for the study.

Within The University of Alberta, Dr. R.R. Hett and Dr. J.F. Bergman, of the thesis committee, provided constructive criticism and able assistance. Thanks are also conveyed to Mrs. L. Wonders for guidance in the illustrative presentation and to Donna MacLean for typing.

I would also like to thank my wife, Nora, and children who supported my efforts, despite my occasional abandonment of familial responsibilities.

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CHAPTER ONE

INTRODUCTION

Nature of the Study

Since Canada entered its second century of political existence a decade ago, new dimensions have been added to the country's sense of nationalism. One of the main thrusts of this has been the great emphasis placed on the varied ethnic composition of its society and its contributions to the national fabric. Terms like 'cultural mosaic', 'multi-culturalism', and 'salad bowl' have been engrained heavily into the public mind. Ethnic diversity has become recognized as one of the great riches of Canada. It is in this vein, that this study will examine how one ethnic group, the Finns, originally dealt with the landscape, and the extent of their imprint on one region of the country.

Of the over sixty thousand people claiming Finnish ethnicity in Canada[1] over one third reside in Northern Ontario. The Thunder Bay census division alone has over eight thousand such people classified as urban and about three thousand classed as rural. This represents the largest numerical concentrations, in both categories, of 'Finns' in Canada.

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1. Based on 1971 Census of Canada. Vol. 1, Part 3.

The purpose of this study is to describe and analyze the impact of the Finnish settlers, as a distinctive ethnic group, on the rural cultural landscape of Northern Ontario, as exemplified in the Thunder Bay area. Three lines of approach have been utilized in considering this problem. First, the problem is set in perspective through a geographical sketch of the area and a brief historical outline of the people involved. Secondly, the physical characteristics of Finnish-Canadian settlement are described in terms of folk architecture and of site/settlement patterns. Finally, an analysis is made of the reasons underlying these characteristics and the significance of their impact on Canada. While the bulk of the survey deals with the main initial settlement era from 1900 to 1935, some of the transitions and evolutions to the present are also included.

Significance of the Research

The settlement characteristics analyzed are primary elements of the cultural landscape. They show initial responses of the cultural group to a new geographic setting. The theme then, is a 'man and the land' relationship, within the realm of settlement and of more generally, cultural geography. The responses of these settlers, when taken in this initial rural context, are 'pure' in two senses. First, there has been little mixing of Finnish styles and techniques with the regional non-Finnish population majority.[2] Secondly, there is little discrepancy between form and initial function;

---

2. In 1971 the local non-Finnish population was seven times as large as the Finnish population. (Based on Census Canada, see Table No. 8).

what G.H. Riviere calls "decalage".[3]

While settlement geography studies are extensive in Europe, in North America, this is a relatively new and unexplored field. Exceptions, however, do exist and are now becoming more plentiful. Calls for research in this discipline have been advanced by such people as K.H. Stone[4] and T.G. Jordon.[5] One of the 'fathers' of folk architectural studies in North America, Fred Kniffen, has appealed:

> What I should like to see is a dedicated group of young workers who will with all deliberate haste survey the surviving evidence of the oldest occupance forms and patterns, who will supply us with concepts, terms, and usable quantities . . . (and) thereby raise this very fundamental and satisfying segment of geography to a respected place among American fields of scholarly enquiry that it inherently deserves.[6]

This quotation particularly points to the timeliness of such work. In the specific case of this study, while many of the original buildings, farmstead features and a few of the original settlers persist today, in twenty years little will remain by way of first-hand sources. Research such as this is designed to reduce the loss.

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3. Riviere, G.H., "Folk Architecture: Past, Present and Future", Landscape, Vol. 4, No. 1, Summer 1954, pp. 5-12.

4. Stone, K.H. "Further Development of a Focus for the Geography of Settlement", Professional Geographer, Vol. XVIII, No. 4, July 1966, pp. 208-209.

   Also see Stone, K.H., "Development of a Focus for the Geography of Settlement", Economy Geography, Vol. 41, No. 4, October 1965, pp. 346-355.

5. Jordon, T.G., "On the Nature of Settlement Geography", Professional Geographer, Vol. XVIII, No. 1, January 1966, pp. 26-27.

6. Kniffen, F.B., "Folk Housing: Key to Diffusion", Annals, A.A.G. Vol. 55, No. 4, December 1965, pp. 577.

From the cultural aspect, there were several reasons why the Finns were chosen for the study. First, of all the ethnic groups which settled on the Canadian Shield, the Finns had come from a previous environment which was physically very similar and consequently they had to change the least in terms of environmental response. Perhaps as a result, the Finns seemed to exhibit an unusual accord with this particular landscape. Secondly, this concentration of an ethnic group in one region, and particularly one distinct area, poses some interesting questions and implications about 'channeling' factors and social cohesion. Thirdly, although Finnish immigrants have been the subject of intensive research in the United States, little has been done in Canada, as will be evident from the subsequent literature review.

Methods of Research

Census of Canada data, which identified Finnish ethnic concentrations, were used both in the initial identification of the Thunder Bay area for the survey and in the specific development of sample blocks in rural townships. Township sampling then, offered the advantage of a clearly defined spatial unit for which governmental statistics were available. Moreover the land was originally released by the Crown and settled largely by townships and thus settlement patterns were geared somewhat to those boundaries. Sample townships were chosen so as to fit into one of three categories: an extremely high Finnish concentration, an extremely low Finnish concentration, and a mixed Finn/non-Finn concentration. The latter two categories were designed as a control, showing ethnic distinctiveness and interaction of the populations.

Preliminary field inspections were also carried out to confirm the blocks'

general suitability. Some townships which initially seemed relevant statistically, were later found to be unacceptable because original settlement characteristics had disappeared under later urban overlap or 'urban shadow' effect.

With the sample blocks established, the actual field survey began. The procedure was to cruise all passable roads within each township, viewing (from the road) each visible and accessible farmstead[7] for apparent 'original' settlement characteristics (old buildings and fences). As most farmsteads were fairly close to the road and were relatively open, such viewing was possible in the large majority of sites, as confirmed by settlement data on the detailed (1:50,000) topographic sheets used. Some disadvantages of the cruising method included trespass warnings, masking of original structures with later exteriors of renovated buildings and difficulty in obtaining permission when the occupants were absent. Many of these pitfalls, however, were overcome through conversations with neighboring residents. Despite the problems, sufficient numbers of desired sites were examined as to provide a valid sample.

Upon identifying a farmstead with some of the original characteristics, an 'on-site inventory' was carried out. This included the following steps:

1. structural and locational checklist completion.
2. photographic recording.
3. sketches of structural features.
4. sketch map of site.

---

7. The term 'farmstead' refers to the area immediate to the main cluster of buildings on the farm.

5. site plotting on topographic sheets (National Topographic Series - scale 1:50,000).

6. Interviews and use of questionnaires (when possible).

Preliminary sampling of the project technique had already been tested in a 1976 study of log buildings in West-Central Alberta. In the Thunder Bay area, eight townships were surveyed; three Finnish (>75% Finnish ethnic population), three mixed (25% - 75%), and two non-Finn (<25% Finnish). A total of 190 sites were actually sampled, with checklists on 362 buildings. The data eventually resulted in a series of characteristic matrices, site distribution maps, photographic and graphic inventories of all sites, and a collection of background information from the interviews. Ethnicities of individual sites were established by information provided in the interviews, and the surnames of original settlers provided by a later titles search.

Literature Review

The background in written material has to be approached from two different areas of geography; settlement studies and cultural research. As previously stated, settlement geography was late in coming to North America. The first research into the urban sector did not begin until around 1900, and the rural aspect was not really noticed until I. Bowman promulgated his "science of settlement" in 1925.[8] Bowman, however, involved himself exclusively in the "Process" part of settlement. Form studies of settlement characteristics

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8. Bowman, I., "The Scientific Study of Settlement", Geographical Review, Vol. 16, 1926, pp. 647-653.

did not really enter the North American picture until the works of R.B. Hall in 1931[9] and F.B. Kniffen in and after 1936,[10] on rural house types. Since that time, rural works have grown gradually in number, while urban studies have become so plentiful that they have virtually formed a separate field.

Good contemporary examples of rural North American form studies have been done by such people as P. Ennals, J.F. Hart, Fred Kniffen, E. Sloane, D. Whitney and W. Zelinsky (see bibliography). In recent years, a number of popular texts have been published on barns, old churches, grist mills, covered bridges, old houses, and other such structures. The list of people involved in settlement pattern studies includes some of the above, plus such geographers as L. Gentilcore, G.T. Trewartha, J. Warkentin, and W.C. Wonders.

From the perspective of cultural research, most literature occurs under the blanket heading of 'Finnish studies". The Finnish-American community has been rather well documented by such people as M. Karni, M. Kaups, J.I. Kolehmainen, J. Wargelin and E. Van Cleef. Very little has been done on the Finnish-Canadian community, however. The first notable work was written by A.I. Heinonen in 1930, called Finnish Friends in Canada.[11] This publication of the United Church of Canada, did provide some general background, but

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9. Hall, R.B., "Rural Settlement Forms of the Monticello Quadrangle of Kentucky", Comptes Rendus de Congres International de Geographie (Paris, 1934), Tome III, pp. 257-268.

10. Kniffen, F.B., "Lousiana House Types", Annals, A.A.G., Vol. 24, December 1936, pp. 179-193.

11. Heinonen, A.I. Finnish Friends of Canada. (Toronto: United Church of Canada, 1930).

was largely church-oriented. Eugene Van Cleef, an American geographer, looked briefly at the problem in his "Finns of the United States and Canada,"[12] in 1936, and later, in 1952, in more detail with "Finnish Settlements in Canada".[13]

Since that time, most of the work done on Finnish-Canadians has come out of the two universities of Northern Ontario: Laurentian (at Sudbury) and Lakehead (at Thunder Bay). Unfortunately, however, most of this material has not been circulated outside the institutions. The special issue of the Lakehead University Review entitled "The Finnish Experience"[14] is an exception to this and includes short articles on Finnish immigration and labour movements. O.W. Saarinen of the Department of Geography, Laurentian University, has also published two articles;[15] one documenting the local community and the other a general overview of the distribution of the Finns in Canada.

On the local level, the Finnish-Canadian historical societies have

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12. Van Cleef, E., "Finns in the United States and Canada", Baltic and Scandinavian Countries, Vol. 2, May 1936.

13. Van Cleef, E., "Finnish Settlement in Canada", Geographical Review, Vol. 42, April 1952, pp. 253-266.

14. "The Finnish Experience", Lakehead University Review, Vol. 9, No. 1, Spring 1976.

15. Saarinen, O.W., "The Pattern and Impact of Finnish Settlement in Canada", Terra, Vol. 77, No. 4, 1967, pp. 113-120.

    Also see Saarinen, O.W., "The Pattern and Impact of Finnish Settlement in Canada with Special Reference to the Sudbury District". (Sudbury, Ontario: Finnish-Canadian Centennial Committee, June 1967).

produced a few local histories. Of particular value to this paper was A Chronicle of Finnish Settlements in Rural Thunder Bay,[16] which was part of their "Bay Street Project" series.

The only text currently available on general Finnish-Canadian history is Yrjo Raivio's Kanadan Suomalaisten Historia[17] which is available only in Finnish. While it again is rather church- and individual name-oriented, some useful statistics and general background are provided.

Some literature was found that dealt specifically with Finnish settlement characteristics through the geographic perspective. In North America, most notably Matti Kaups, of the Department of Geography, University of Minnesota (at Duluth) has produced several studies on Finnish folk architecture in the Great Lakes states.[18] A co-worker of Kaups, Cotton Mather, has also provided some useful work in this area.[19] Perhaps the most useful related material consisted of a number of regional settlement studies carried out in Finland, mainly during the 1930's (outlined in Chapter Six). These studies, many of

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16. Thunder Bay Finnish-Canadian Historical Society, A Chronicle of Finnish Settlements in Rural Thunder Bay. (Thunder Bay, Ontario: Canadian Uutiset, 1976).

17. Raivio, Y., Kanadan Suomalaisten Historia. (Vancouver, B.C.: New West Press Co. Ltd., 1975).

18. See for example, Kaups, M., "A Finnish Savusauna in Minnesota," Minnesota History, Vol. 45, No. 1, Spring 1976, pp. 11-20.

19. Mather, C., and Kaups, M., "The Finnish Savna: A Cultural Index to Settlement", Annals, A.A.G., Vol. 53, No. 4, December 1963, pp. 494-504.

which were produced in series by the Swedish and Finnish literary societies, provided the necessary background or 'control' needed to trace traditional cultural carry-over into northwestern Ontario.

CHAPTER TWO

THE GEOGRAPHIC SETTING

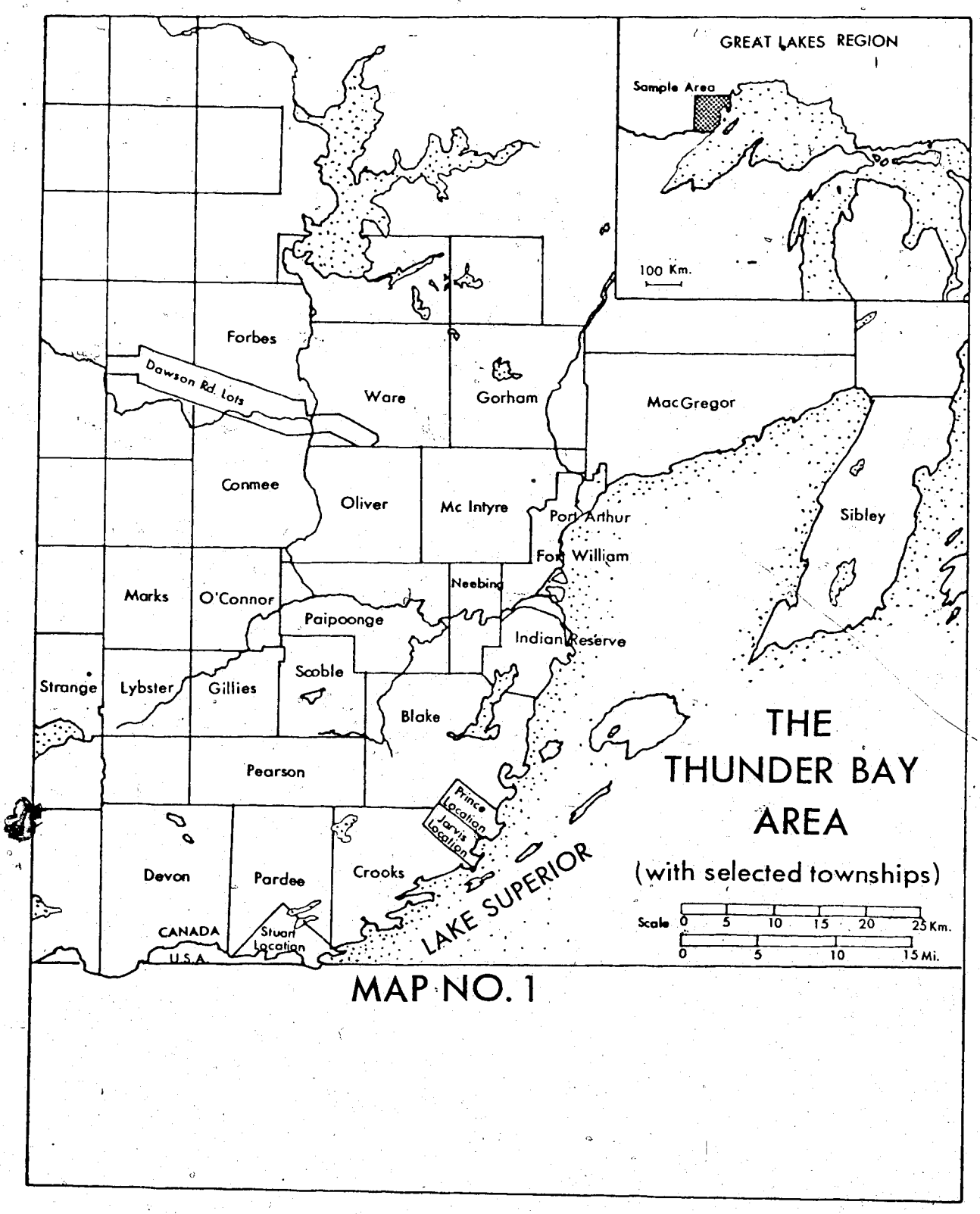
Location

The Thunder Bay area lies adjacent to an inlet on the north-west shore of Lake Superior, at approximately $48^{o}25'$ North Latitude and $89^{o}15'$ West Longitude. It is focuses on the former twin cities of Fort William and Port Arthur, which along with the townships of Neebing and McIntyre, were amalgamated and incorporated as the new city of Thunder Bay in 1970. This area, also referred to as 'the Lakehead', lies approximately 60 kilometers (37 mi.) north of the American border, 650 kilometers (404 mi.) east of Winnipeg, and 1500 kilometers (932 mi.) north-west of Toronto.

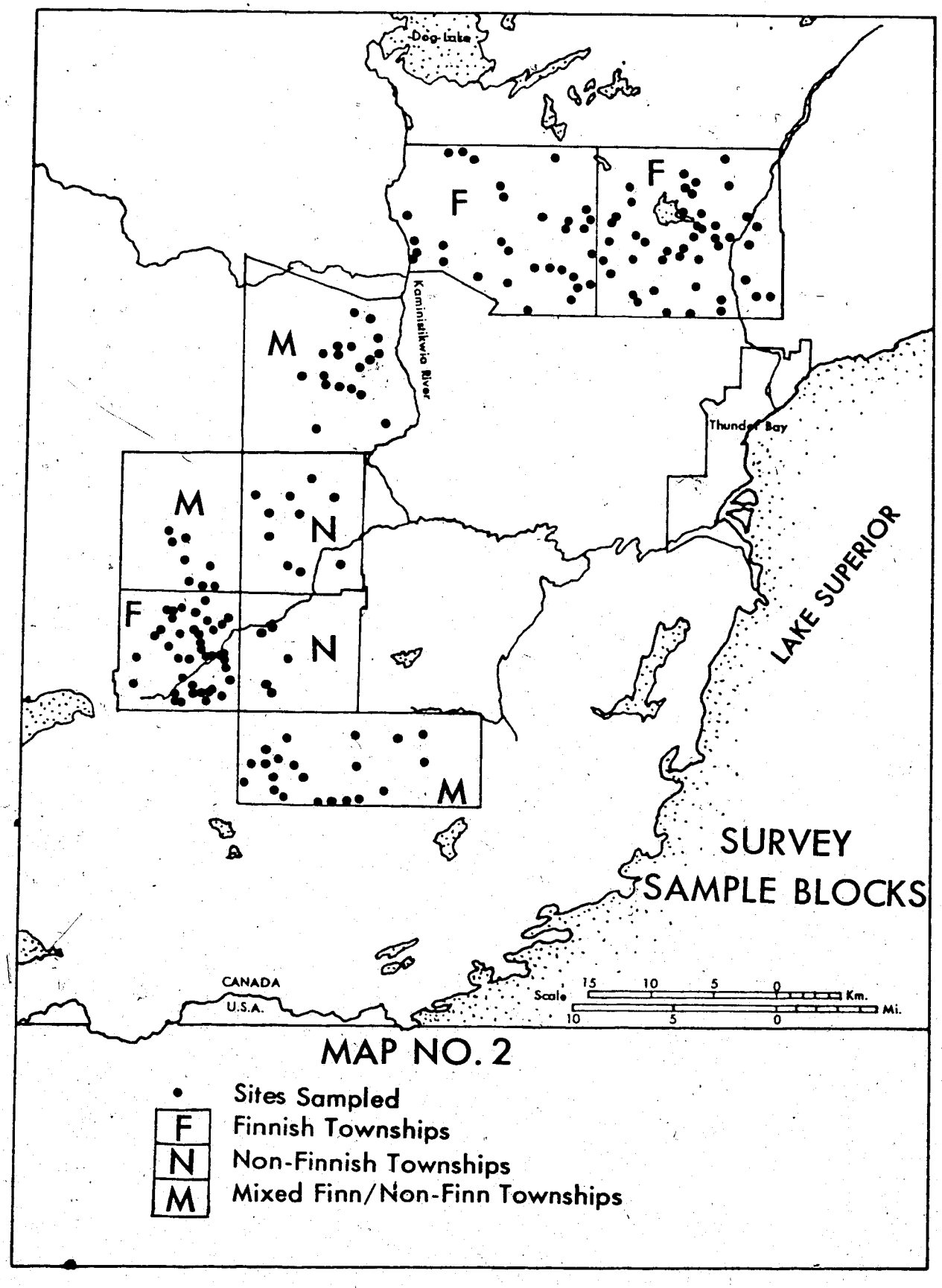
The actual sample blocks consisted of some of the outlying townships, yet were still within a 40 kilometer (25 mi.) direct radius of the city. These townships included Gorham and Ware in the north; Conmee, Marks and O'Connor in the west; and Lybster, Gillies and Pearson in the south-west.

Physical Geography: Physiography

The Thunder Bay area is located on a margin of the scarp slope of the Precambrian Shield. Three basic types of terrain are to be found in the region: formerly inundated lacustrine lowlands, tabular uplands, and

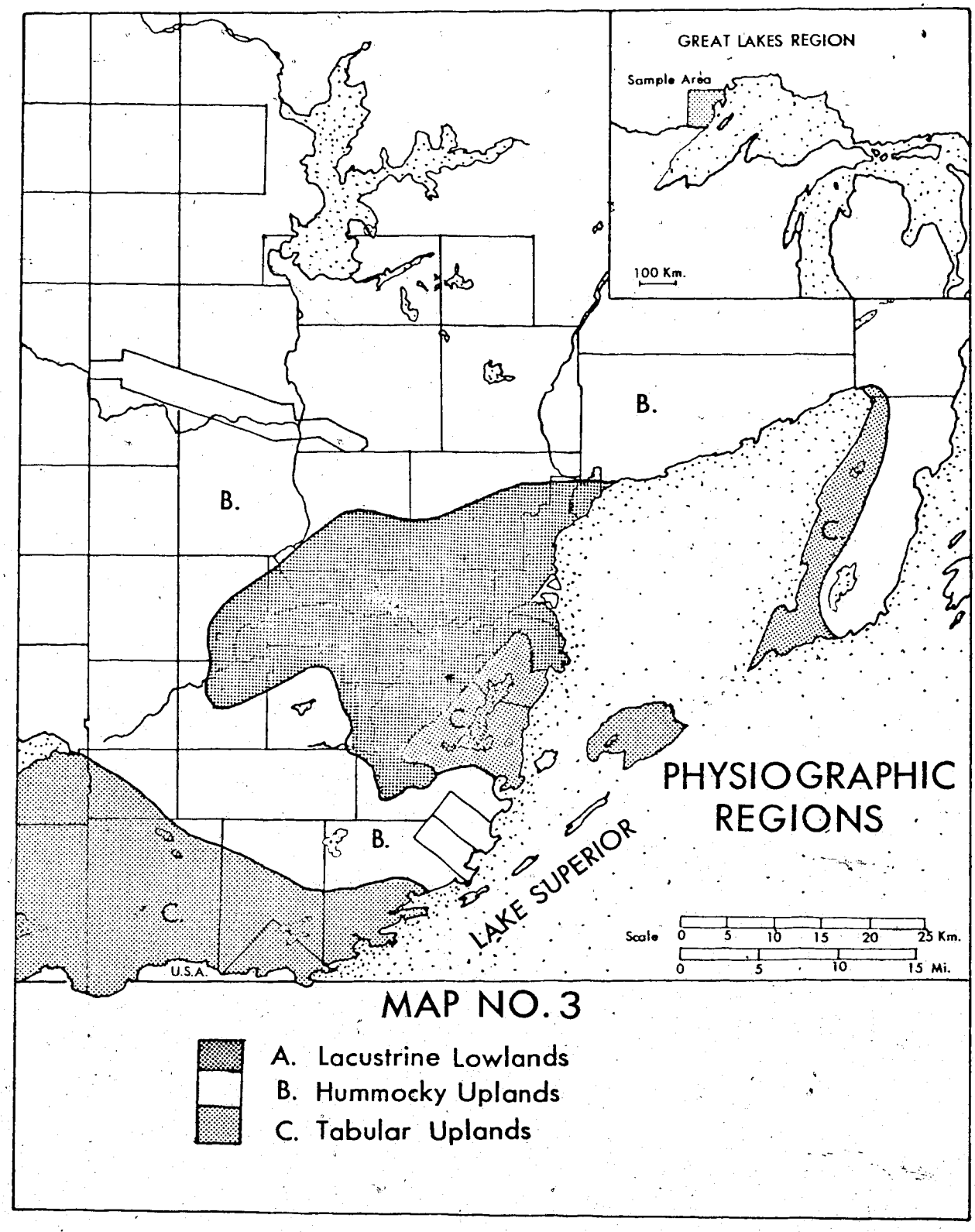

GREAT LAKES REGION
Sample Area
100 Km.
Forbes
Dawson Rd. Lots
Ware
Gorham
MacGregor
Conmee
Oliver
Mc Intyre
Port Arthur
Fort William
Sibley
Marks
O'Connor
Neebing
Paipoonge
Indian Reserve
Strange
Lybster
Gillies
Scoble
Blake
Pearson
Prince Location
Jarvis Location
Devon
Pardee
Crooks
CANADA
U.S.A.
Stuart Location
LAKE SUPERIOR
THE THUNDER BAY AREA
(with selected townships)
Scale 0 5 10 15 20 25 Km.
0 5 10 15 Mi.

MAP NO. 1



MAP NO. 2

- Sites Sampled
- F — Finnish Townships
- N — Non-Finnish Townships
- M — Mixed Finn/Non-Finn Townships



MAP NO. 3

A. Lacustrine Lowlands
B. Hummocky Uplands
C. Tabular Uplands

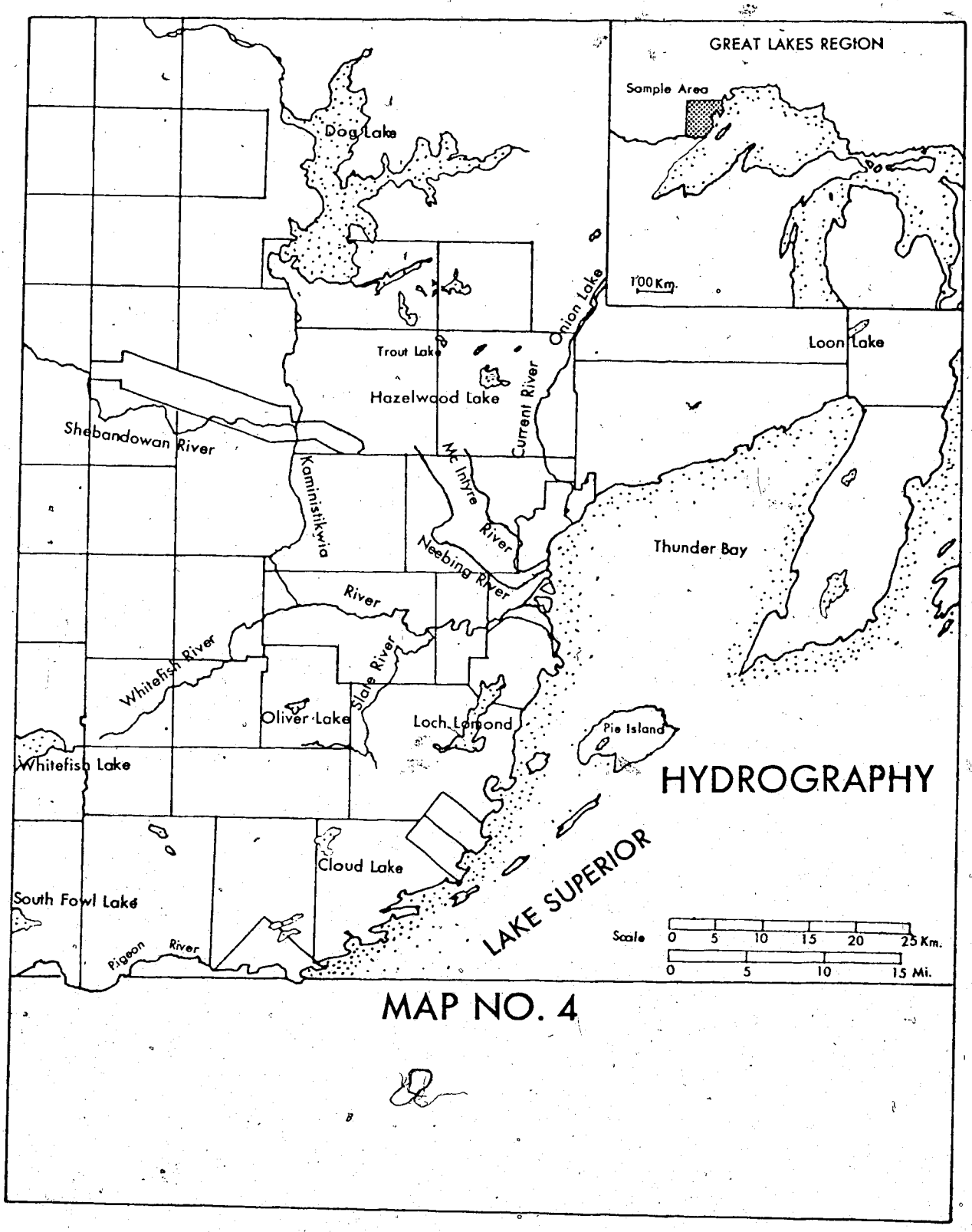
hummocky uplands. The lacustrine lowlands extend west from the city about 15 kilometers (9 mi.) in a valley about 8 kilometers (5 mi.) wide, which contains the Kaministikwia River. Surface conditions are generally flat to rolling within the valley, with elevations ranging from the lake level of 184 meters (604 ft.) above sea level (a.s.l.) to approximately 280 meters (919 ft.).

The tabular uplands contrast sharply with the lowlands with cuestas and mesas that can reach nearly 540 meters (1772 ft.) a.s.l. in elevation and possess sheer cliffs up to 245 meters (804 ft.) in height. These very distinctive landforms, produced from diabase sills and dykes, lie in the southern portion of the area and extend up along the shore to the southern edge of Fort William. Sills also extend along the Sibley Peninsula in the east, forming at its southern tip the unusual local feature known as the "Sleeping Giant".

The bulk of the area, however, is included in the hummocky uplands, with elevations ranging from 300 meters (984 ft.) to 450 meters (1476 ft.) a.s.l. This section, to the north and far west, typically consists of rock-knob relief, with rolling to steep hills, valleys filled with shallow glacial deposits, and deranged drainage.

Hydrography

In addition to being directly on Lake Superior, the area contains a myriad of smaller water bodies. The main river, the Kaministikwia, is fed largely by Dog Lake in the north-west and the Shebandowan River in


GREAT LAKES REGION
Sample Area
100 Km.
Dog Lake
Trout Lake
Hazelwood Lake
Onion Lake
Current River
Loon Lake
Shebandowan River
Kaministikwia River
Mc Intyre River
Neebing River
Thunder Bay
Whitefish River
Slate River
Oliver Lake
Loch Lomond
Pie Island
Whitefish Lake
Cloud Lake
South Fowl Lake
Pigeon River
LAKE SUPERIOR
HYDROGRAPHY
Scale
0 5 10 15 20 25 Km.
0 5 10 15 Mi.

MAP NO. 4

the west, and eventually empties eastward into Lake Superior at Fort William. The 80 kilometer (50 mi.) course of the Kaministikwia, is basically L-shaped, with the north to south leg snaking through the uplands, and the west to east leg meandering extensively on the lowland plains. Other lesser rivers include the Current, the McIntyre, and the Neebing to the north and northeast; the Whitefish to the west; and the Slate to the southwest. These smaller rivers are all fairly narrow and shallow, and do not lend themselves even to the limited navigability of the Kaministikwia. Some were used, however, for log drives in the past.

Numerous creeks net the area and there is a high density of small lakes and ponds. The larger lakes include Onion, Hazelwood, Surprise and Trout in the north; the Dog Lake chain in the northwest; Whitefish and Oliver in the southwest; and Loch Lomond and Cloud in the south. Many of these lakes which are of a rock basin nature, are quite sizable covering many square kilometers and having great depth.

Several of the lakes and rivers in the region have been dammed to control water levels, thus maintaining reserves, or as in the case of the Kakabeka Falls dam (20 km/12 mi. west of the city) to generate hydro-electric power. Natural waterfalls are common obstructions in the waterways, reflecting the youthful nature of the landscape after glaciation of this Shield area. Most notable are Kakabeka Falls (downstream from the damsite) on the Kaministikwia River, with its 39 meter (128 ft.) vertical drop. On the same river are such lesser falls as Silver and Dog. Trowbridge Falls

on the Current River is another of the lesser falls.

A large number of swampy areas also exist, mainly in detached pockets within the rocky uplands. While often hampering development efforts, these areas do provide useful wildlife habitat and cover.

Climate

In the Koppen system of climate classification, the Thunder Bay area is designated as 'Dfb", as is most of Ontario. This can be described as being short summer, continental, with some moderating influences from Lake Superior. The mean annual temperature is 2.4°C (36.3°F) at the Thunder Bay airport with mean July and January temperatures of 17.5°C (63.5°F) and -14.8°C (5.4°F) respectively.[20]

The mean total precipitation at the airport station is 738.5 millimeters (29.1") with 532.6 millimeters (20.9") falling as rain. Average annual snowfall is 222.1 centimeters (87.4").

The influence of Lake Superior and to a lesser extent the terrain, cause significant local variations in climate. The immediate lakeshore experiences up to 50 millimeters (2") more annual precipitation and up to 1.2°C (2°F) milder temperatures than the inland sectors of the area.

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20. Based on Canadian Normals: 1941 - 1970, Vol. 1-SI and 2-SI, Environment Canada, Ottawa. See Table No. 1 for further data.

TABLE NO. 1

CLIMATIC DATA FOR THE THUNDER BAY AIRPORT

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Avge	Total Annual
Mean Total Precipitation (mm)	48.0	30.2	43.7	56.4	74.7	82.8	71.1	87.9	83.6	56.9	57.2	46.0		738.5
Mean Rainfall (mm)	1.3	1.5	10.4	36.6	70.4	82.8	71.1	87.9	83.3	53.3	27.9	6.1		532.6
Mean Snowfall (cm)	51.6	31.0	35.3	20.1	4.3	0.0	0.0	0.0	Trace	3.6	30.7	45.5		222.1
Mean Daily Temperature °C	-14.8	-13.0	-6.2	2.4	8.3	13.8	17.5	16.5	11.3	6.1	-2.5	-10.8	2.4 (annual)	
Number of Days With Frost	31	28	30	24	12	1	0	0	6	16	26	31		

Based on Canadian Normals: 1941-1970, Environment Canada, Vol. 1-SI & 2-SI.

The average annual growing season is 160 to 170 days, with approximately 2400 average annual degree-days. The mean annual frost free period is 90 to 100 days.[21]

Forest Cover

The Thunder Bay area is located in a transitional zone between the Great Lakes - St. Lawrence mixed forest region and the Boreal region. Pure stands of jack pine (Pinus banksiana) occur throughout the area, on the dry sand flats. Also common throughout are poplar (Populus tremuloides and Populus balsamifera) on the cut-over areas. Within these common forest cover characteristics however, two sub-regions can be identified.

The southern area traditionally has contained good stands of white pine (Pinus strobus), red pine (Pinus resinosa) mixes, and although depleted, these still form a basis for the area's lumber industry. In the lower valleys with their lacustrine sediments, strong yellow birch (Betula alleghaniensis), and hard maple (Acer saccharum) associations formerly occurred. Luxuriant growth was fostered by lake influences, but these stands are now largely exhausted. Other species include red maple (Acer rubrum), white elm (Ulmus americana); scrub varieties of willow (salix), black cherry (Prunus serotina), gray alder (Alnus rugosa), and ironwood (Ostrya virginiana); and traces of eastern hemlock (Tsuga canadensis) and red oak (Quercus rubra). Lower, poorly drained sites

21. From climate description on "Soil Capability for Agriculture Map", Canada Land Inventory, Thunder Bay 52 B, Dept. of Regional Economic Expansion, Ottawa, 1972.

possess such species as white cedar (Thuja occidentalis), white ash (Fraxinus americana), and tamarack (Larix laricina). Large cut-over areas have become dominated by such pioneering species as poplar, balsam fir (Abies balsamea), and white birch (Betula papyrifera).

With more severe climatic and edaphic conditions, the northern portion of the region tends heavily to coniferous dominations of Boreal tree types. While some white pine still is scattered throughout this area, white spruce (Picea glauca) begins to dominate with poplar and balsam fir. White birch is common on the slopes, and boggy areas tend towards black spruce (Picea mariana) and tamarack.

Soils

The parent materials on which local soils have been developed fall into two categories: lacustrine deposits and thin glacial drifts. The lacustrine materials include clays, silts, sands and gravels, which were deposited by the waters of the former glacial Lake Algonquin. Two major soil zones of this category occur within the area.[22] In the Kaministikwia River valley, to the immediate west of the city, lies a pocket of fine material of a Brunisolic nature, in fair depth. The other zone consists of a Luvisol dominance (Gray Wooded), and is found in the south to south-western portion of the region. Gleysols also occur in both zones, in the more poorly drained areas. These finer textured soil types, provide the

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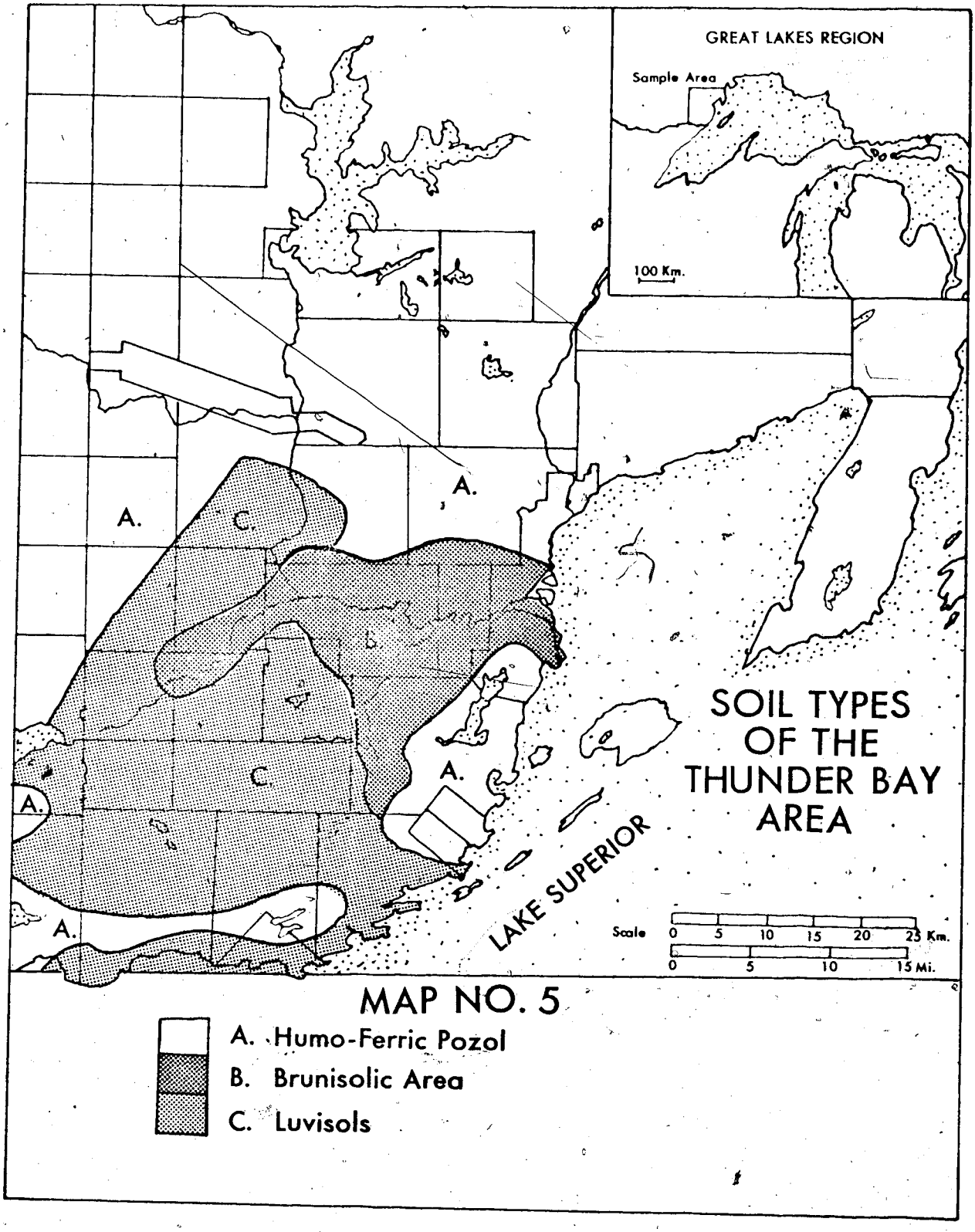
22. From "Soil Capability for Agriculture Map", Canada Land Inventory, Thunder Bay 52 B, Dept. of Regional Economic Expansion, Ottawa, 1972.



MAP NO. 5

A. Humo-Ferric Pozol
B. Brunisolic Area
C. Luvisols

base of the present agricultural district.

Extending into the higher elevations, beyond the limits of former inundation, are the drift areas of glacial tills shallowly strewn over undulating bedrock. The basic soil of this region is a Humo-Ferric Podzol of a medium to coarse texture. Also present, however, are scattered Gray Wooded areas, and occasional organic deposits in the lower, more poorly drained recesses. Exposed bedrock is quite commonly associated with this zone. While a number of the earlier farms were located on this soil type, its poor quality and lack of depth soon evidenced its lack of suitability for stable commercial agriculture.

General Settlement and Land Use: Early History

The "raison d'etre" of the Lakehead as a settlement focus has always been the geographic factor of its location as a trans-shipment point. As early as the mid-1600's, the Kaministikwia River served as one of the main water routes to the west for French explorers and "voyageurs" though the chief early route lay slightly to the south. With American independence and the imposition of customs duties, the North West Company's main western supply base at Grand Portage, had to be abandoned and relocated on "British" soil. The mouth of the Kaministikwia was the obvious choice and thus, in 1807, a new post was opened and named Fort William, after William McGillivray (the governor of the North West Company). While the era of the fort was colourful, it was also short-lived. In 1821, the North West Company was absorbed by the Hudson's Bay Company, which lead

to the rapid decline of fort activity, because of the relative advantage of their more northerly posts. Even at its best, the fort never housed more than a relative handful of fur traders, other company employees, and a few missionaries.

The idea of permanency in settlement began in the 1840's with a few minor surveys and the opening of the first mine (copper and silver) in the area, at the "Prince Location", 20 kilometers (12 mi.) north of the American border along the Superior lakeshore. In the late 1860's, with the discovery of both the Thunder Bay Silver Mine (north-east of Port Arthur) and the massive finds at the Silver Islet (on the Sibley Peninsula), the first real boom of the area got underway. Construction of the "Dawson" or "Red River Road" also occurred at this time, which, although falling far short of its goal of providing a land route to the prairies, did open up much of the northwestern Thunder Bay area to homesteading. The road, construction of which was stopped at Shebandowan in 1870, was also used later that year by Col. Garnet Wolseley's famous "Red River Expedition" to put down the Riel Rebellion. Wolseley is also credited with renaming the docking site, formerly known as the "Station", "Prince Arthur's Landing" in honor of the future Governor General of Canada. The name was later revised to "Port Arthur".

In 1871, Thunder Bay became a territorial district of the province of Ontario, and in 1873, the areas of early population concentration became organized under the one Municipality of Shuniah. In 1881, part of Shuniah was formed into the Municipality of Neebing, which included establishment

of the townships of Neebing, Paipoonge, Blake, Crooks, Pardee, and McKellar. The economic base of the area then, was basically mining, with some forestry and local agriculture.

By 1882, the rail link was established between Winnipeg and Fort William, and by 1885, both of the Lakehead cities had grain elevators. The full significance of the railway, however, was not felt until the late 1890's, when Thunder Bay was forced to shift its main economic base from mining to trans-shipment.

One interesting sidelight of this period, and one relevant to the actual settlement of the southern portion of the sample area, is the story of the Port Arthur, Duluth, and Western Railway, known locally as the "P.D.":

> The railway which once ran nearby was incorporated in 1883, as the Thunder Bay Colonization Railway Company. Promoted during the Thunder Bay silver mining boom of the 1880's to serve the mining region to the southwest of Port Arthur and tap the Mesabi iron ore deposits of northern Minnesota, the line was renamed the Port Arthur, Duluth, and Western Railway Company in 1887. Financed mainly by subsidies and bond issues, when completed in 1893, it ran some 86 miles from Port Arthur to its Canadian terminus at Gunflint Lake then continued six miles into Minnesota. The collapse of the silver boom dashed the company's hopes and in 1899, the line was purchased by the Canadian Northern Railway Company.
>
> - Ontario "Historic Sites" marker at Hymers

What the marker leaves out are the descriptions of the adverse nature of the terrain it crossed, the numerous stories of those who settled the area on speculation with high expections of the impact of the rail system, and the ultimate abandonment of most of the line.

Much of the framework for rural settlement in the Thunder Bay area had been established during the 1870 to 1890 period. Townships with the most obvious agricultural potential such as Neebing, Paipoonge, Oliver and McIntyre were claimed largely by the British, but also by such west European ethnic groups as the Germans, Dutch and French. With regard to the urban sector, in 1892, the McKellar ward of the Municipality of Neebing was incorporated as the town of Fort William. Port Arthur became incorporated in 1884, and achieved city status in 1906. Fort William became incorporated as a city in 1907. The ethnic composition of the early cities, like the area generally, was dominated by the English with some French, German, and Dutch presence, but the cities also possessed large concentrations of Ukrainians, Polish, and Italians.

In reviewing the early history of the area, the shifts in focus of the trans-shipment function should be noted. First, Thunder Bay was a transfer point on early western waterways in the fur trade era. Secondly, it became the starting point of an attempted overland route to the Red River Settlement. Thirdly, it became a shipping port for its local ores. Finally, the cities became the Great Lakes terminal sites of the major rail links for the wheat of the west on its eastward movement.

Current Economic Base and Land Use

The dominant function of the city of Thunder Bay remains transportation. It is reportedly the largest center for grain trans-shipment in the world. Included in this facility are some 24 terminal grain elevators, with an

effective capacity of approximately 110,000,000 bushels. Also associated with the port facility, is the major unloading ramp for iron ore pellets from the Steep Rock Mine at Atikokan, some 200 kilometers (124 mi.) west of Thunder Bay. Finally, the Canadian National and Canadian Pacific Railways also have major terminals linked to the port facilities and to serve the city itself (with a population of 108,445 [1971 Census of Canada]), which is a regional capital.

Other major employment industries include four pulp and paper mills, Northern Wood Preservers, and Canadian Car Company. Wholesale and retail trade functions are noteworthy, again reflecting the regional capital function. Tourism and recreation are also becoming increasingly important to the Lakehead economy.

Agriculture has never been a major contributor to the total economy of the area, because of the marginal nature of the land. A large number of the original settlers of the rural districts, however, began in farming. Only a relative few commercial operations exist today to supply the local market with dairy products, eggs, and some vegetables. The 1971 Census of Canada shows that less than .5% of the total land area of the Thunder Bay District is in agriculture. At present about 80% of the farms lie within 40 kilometers (25 mi.) of the city.

CHAPTER THREE

FINNISH IMMIGRATION AND SETTLEMENT

"Push Factors" of Early Finnish Emmigration

The latter part of the nineteenth century through to the early years of the twentieth century was a very difficult and turbulent period for many in Finland. One of the major results of these difficulties was mass emigration. Four basic "push factors" were responsible for the exodus: famines, changing economy, rapidly rising population, and political conditions. Famines occurred in Finland in 1862-8, 1892-3, 1902, and during the latter years of World War I. The famine in the 1860's in particular was so bad that . . .

> . . . tens of thousands of people died of starvation, and typhoid epidemic added to the death toll. Within two months, April and May 1868, six times as many people died as was statistically normal. In Parkano, one out of every four inhabitants died; in Ruovesi and Orivesi, almost one in six. The highways were crowded with people begging for food; the roadsides were littered with corpses.[23]

Hardest hit were the landless rural dwellers and for many, thoughts began to turn to 'the land of milk and honey' in America. As one Finnish farmer put it, "The heart pleaded No, but the stomach commanded Yes".[24]

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23. From Wasastjerna, H.R., History of the Finns in Minnesota, (Duluth: Minnesota Finnish-American Historical Society, 1957, p. 46).

24. From Kolehmainen, J.I., and Hill, G.W., Haven in the Woods: The Story of the Finns in Wisconsin, (Madison: State Historical Society of Wisconsin, 1951, p. 10).

The shift in economic base from an agrarian to an industrial society also occurred during this period, and again was particularly difficult for the rural poor in the associated agricultural conditions. Farms changed from numerous subsistence-barter operations to fewer, more efficient commerical enterprises. Even the production focus changed from wheat to mainly dairy, requiring new facilities and expertise. Land prices increased greatly, which put them beyond the reach of many and further escalated rural social stratification through a growing landlord-landless tenant system of farm ownership. The main impetus behind the shift, however, was the new industries, particularly related to the forest resource, financed by English and Western European entrepreneurs. Although new wealth resulted from these activities, its distribution was limited and many Finnish farmers derived few personal advantages from the "Industrial Revolution".

Rapid population growth also soon began to outweigh those benefits resulting from industrialization. The population of Finland had tripled during the nineteenth century. While from 1800 to 1850, the rural and urban sectors had grown evenly, between 1850 and 1900, urban population had increased 200%, while the rural had only risen 60%. A large rural to urban shift was mainly responsible for this, but urban employment opportunities were not uniformly available throughout Finland.

> In this period of migration, industrial growth was not absorbing all comers fast enough, especially during the famine years when even Helsinki had unemployment. Then,

> too, those living closest to the southern cities had the best opportunities to enter new jobs as they appeared. So the more distant rural areas sent their migrants overseas.[25]

Thus the inhabitants of northern rural districts were at a marked disadvantage compared with those of the south.

> Between 1893 and 1920, the provinces of Vaasa and Oulu provided over sixty percent of all emigrants who left the country.[26]

One factor that adversely affected both the urban and rural resident alike, was the turbulent political climate of the time. In 1878, a compulsory military service law was passed, by which all Finnish males were subject to three years service in the regular national army. This spurred emigration, but it was greatly accelerated from the 1890's with a program termed "Russification".

Czar Nicholas II, after his succession to the throne of Russia in 1893, began a series of steps meant to end the special treatment formerly granted the Grand Duchy of Finland, which formerly had enjoyed some measure of autonomy. Russian laws were given precedence over Finnish laws, and many Finnish civil servants were replaced by Russians. Of even greater impact were the imposition of the Russian language on the Finns and the 1901 law conscripting Finns into the Russian army. The people of Finland were both shocked and outraged. A period of terrorism and counter-terrorism ensued which climaxed in the 1903 assassination of the

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25. and 26. from Hoglund, W.A., Finnish Immigrants in America: 1880 - 1920, (Madison: University of Wisconsin Press, 1960, p. 9).

Russian governor-general. Continued instability followed until World War I, which resulted finally in the recognition of the free nation of Finland in 1919. Even with independence, new kinds of national uncertainty arose, which were to last for decades.

The first trickle of emigration began really in the 1870's with some 3,000 people leaving for overseas ports.[27] During the 1880's, this had increased to 36,000 Finnish emigrants and during the following decade an additional 60,000 people left Finland. The emigration peak was reached from 1900 to 1910 with approximately 150,000 additional people leaving Finland during that decade. From 1910 to 1920, this was reduced to 80,000 (again, for the decade) and during the 1920's emigration dropped to 60,000. Figures during the 1930's continued to fall and borders were closed during World War II and the 1940's.

Most Finns however, did not migrate for the sole purpose of fleeing Finland. Rather, they were also going to a new and better land.

Early North American "Pull Factors"

As with any migrant group, the Finns were subject to attraction (or "pull factors") from the New World as well as to adverse conditions ("push factors") in their home country. Four basic "pull factors" were

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27. Statistics in this paragraph from Kero, R., "Emigration from Finland to Canada Before the First World War", The Finnish Experience: Lakehead University Review, Vol. ix, No. 1, (Thunder Bay, 1976, p. 7).

responsible for North America being the main destination of the migrating Finns: high wages, "free" land, political freedom, and adventure. Concerning the first factor . . .

> The Finns found wages in America practically beyond belief. A good worker there could save three hundred dollars a year - or about fifteen hundred marks . . . In Finland, a good worker could save at the most two to three hundred marks a year.[28]

Women's wage differential was even greater, with domestic servants earning up to twenty times the salary in America that was possible in Finland. For many the streets did seem to be 'paved in gold'.

Because a large portion of the immigrants were from a rural agricultural background, with many from the former "landless" class, the prospects of free land were a major attraction of North America. A significant problem for the Finns, however, was that because they were one of the later immigrant groups, land grants were available only in the more marginal agricultural areas. While comparable at least, to the areas in northern Finland from which many of the people had left, most of these new regions still lacked the potential for lasting commercial operations. The marginality of these areas however, was not referred to in the promotional materjal provided by developers, and hence was not known by many until it was too late. But again, "marginality" was a relative term to the Finns, and better lands could eventually be purchased if desired.

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28. from Kero, R., "The Background of Finnish Emigration", The Finns in North America: A Social Symposium, Jalkanen, R.J. (editor), (Hancock, Michigan: Michigan State University Press for Suomi College, 1969, p. 60).

After the political turmoil of Finland, the "land of the free" offered new hope to those persecuted. One letter written home by an immigrant in Kaleva, Michigan stated:

> It is not worth your stay in Finland. If the gentlemen (herrat) leave something for you, the Russians (ryssat) will come and take it away from you slowly but surely . . . You know we govern ourselves.
> The Finnish language is heard wherever one goes, and all of us have our roots deep in Kaleva. The government, you know, favours Finnish immigration. The climate is good. Kaleva needs a lot of active people like yourself.[29]

In North America, the Finns had fairly autonomous communities, often with both 'white' and 'red' halls (social activity centers based on political leanings). Even education, for the most part, could be controlled by the local community and schools that taught in the Finnish language were common in new Finnish settlements. Political acumen, in fact, became one of the traits for which the Finnish ethnic group in North America became better known.[30]

The last factor of the American attraction, adventure, should also not be underestimated. Though secondary to the economic attraction, this consideration still played an important role in immigration. According to Reino Kero, perhaps the most prolific author in Finnish emigration, one of the larger and more stable groups of emigrants were the sons and daughters of land owners (see Table A33).[31] This group had certain

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29. from Kero, R., "The Background of Finnish Emigration", op.cit., p. 61.

30. see, for example, Gerdicks, A., "The Social Origins of Radicalism Among Finnish Immigrants in Midwest Mining Communities", Review of Radical Political Economics, Vol. 8, No. 3, (Fall, 1976).

economic security in Finland, and yet chose to ignore privileges of inheritance. Certainly adventure was at least part of everyone's incentive to travel several thousand miles to a new land. For many of the young, however, curiosity was probably the sole basis of their "American fever".

It is debatable which means of North American promotion was most effective with potential immigrants from Finland. Basically, though, three types of inducements were employed; advertisement, direct recruitment and correspondence from friends and kin. Advertising took either the form of newspaper advertisements or promotional booklets. The agencies responsible for these materials included the steamship lines (extolling the virtues of out-migration), governments of various developing areas (procuring settlers), the railroad companies (looking for workers, settlers, and passengers), and various industries (requiring labourers). The settlement brochures in particular often contained glowing descriptions of earthly paradises. There is little doubt that journalistic licence had a major effect on North America's draw.

While direct recruiting of immigrants was not responsible for large numbers of people, those involved did help to establish a foothold on the new continent. Open recruiting was not allowed in Finland during the 1870's and early 1880's, however many Finns went through either Sweden or Norway and some were enlisted secretly. The two largest recruiters appear

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31. from Kero, R., Migration from Finland to North America in the Years Between the U.S. Civil War and the First World War, Series B, No. 30, (Turkv: Turun Yliopiston Julkaisuja, 1974).

to have been the mining companies (most notably the Quincy Mining Company of the northern Michigan copper country), and the U.S. railway companies (particularly during the later 1880's). Ultimately some of the early Finns attracted to northern U.S. developments subsequently migrated again and ended up as among the first of the "Canadian Finns".

Letters from the early, more adventurous immigrants sent back to the Old Country, also played a major role in the immigration pull. Not only were information and assurances provided in the correspondence, but often tickets were sent back as well.

> Between July, 1907 and June, 1920, American immigration officials reported that 55,366 of the 95,516 Finnish arrivals intended to join relatives and 31,898 planned to meet friends. In the same period 63,046 paid their own passage, and 29,052 traveled on tickets bought by their relatives.[32]

Promotion in Finland was carried out however, under some degree of duress. The upper and ruling classes had little sympathy for those whom they said were deserting the homeland. Even the Church was urged by the government to declare the evils of emigration and of the New World. Opposition efforts, though, seemed to have had little success in stemming the emigration tide.

Estimates of early Finnish immigration to North America vary greatly. While one source has claimed that by 1900, over ten percent of the population

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32. from Hoglund, W.A., op.cit., p. 10, based on U.S. government figures.

of Finland (of about three million) had left for America,[33] others have put it closer to three percent at that time.[34] Because of the inadequacy of the records, the problem is a difficult one to resolve. However, it is clear that nearly all of these nineteenth century Finnish emigrants went to the United States. Canada probably had no more than 1,000 Finnish immigrants before 1900.[35]

Finnish-Canadian Immigration

The Finns first became attracted to Canada during the nineteenth century by such projects as the Welland Canal construction of the 1820's and 30's, the development of woods and port operations in the Vancouver area from the 1840's on, and the construction of the Sault Ste. Marie Locks during the 1880's. Perhaps most important, however, for the early contingent was the employment created in railroad construction during the 1880's and after. The railway, most notably the Canadian Pacific, deposited Finnish workers, many of whom were looking for land, across central and western Canada.

Again, however, the immigration flow of Finns to Canada remained relatively modest until after the turn of the twentieth century. Three

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33. from Aaltio, T., "A Survey of Emigration from Finland to the United States and Canada", The Finns in North America: A Social Symposium, op.cit., p. 63.

34. from Kero, R., "Emigration from Finland to Canada Before the First World War", op.cit., pp. 7 and 14.

35. based on Engle, E., Finns in North America, (Annapolis, Maryland: Leeward Pub., 1975, p. 64).

waves were responsible for bringing most Finns to Canada: 1900 - 1913, 1920 - 1930, and 1950 to 1960 (see Table 2). The first influx provided from 15,000 to 20,000 Finns, probably a third of whom came from the United States.[36] With periodic slack developing in the American economy, the prospects of a growing young Canada looked enticing. These "American-Finns" came largely from the Great Lakes states of Michigan, Minnesota, and Wisconsin, but some left from Montana, the Dakotas and other areas, where they had been working on construction or perhaps in resource extraction industries.

The second and largest wave during the 1920's, more than doubled the number of Finns in Canada. It occurred mainly because of two factors; hard times in Finland due to her recent Independence War, and the introduction of a quota system on immigrants to the U.S., just after World War I.

> Canada, however, was open and needed labourers willing to work. They needed only to be healthy and have $25 in their pocket.[37]

Not all Finns, though, who came to Canada stayed there, and the inter-war period saw the return of many with "Canadian time" to either the United States or Finland.

The final wave of the 1950's was about 16,000 strong and was largely tied to the lifting of the Finnish emigration restrictions of the second World War. Presently, there are about 60,000 people claiming Finnish ethnicity in Canada.

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36. based on Engle, E., op.cit., p. 64.

37. Engle, E., op.cit., p. 64

The Canadian National distribution of Finns shows that traditionally over half of their number are to be found in the Province of Ontario (see Table No. 4 and Map No. 6). Even more striking is the fact that northern Ontario contains over a third of the national total. British Columbia has been second provincially, with between 14% and 25% of the total Finnish population since the beginning of the century. There have been exchanges for the third position between Saskatchewan, Quebec and Alberta, followed by Manitoba and trace populations in the Maritimes. The largest point concentrations are in the cities of Thunder Bay, Toronto, Sudbury, Vancouver and Sault Ste. Marie (see Table No. 5).

The relative numbers of Canada's total rural population declined from 69% rural in 1921 to 24% in 1971 (see Table No. 6). Urbanization, while occurring throughout the country, was particularly hard felt by the Finns during the 1950's when government policy caused a phasing out of marginal farming operations.

Regarding the background of the Finnish immigrants to Canada, most were originally from rural occupations in the provinces of Vaasa, Turku and Pori in southwest Finland (see Map No. 7 and Table No. 3). Reino Kero suggests the reasons for this origin were largely due to timing. The worst off of the northern rural Finns (eg., from Oulu Province and northern Vaasa) already had emigrated to the United States prior to the main Canadian-bound emigration.[38] He also refers to the cluster effect of

38. from Kero, R., "Emigration from Finland to Canada Before the First World War, op.cit., pp. 10 and 13.

Year	Number	Year	Number
1900—1901	682	1933	67
1901—1902	1,292	1934	79
1902—1903	1,734	1935	64
1903—1904	845	1936	61
1904—1905	1,323	1937	94
1905—1906	1,103	1938	81
1906—1907	1,049	1939	82
1907—1908	1,212	1940	32
1908	453[2]	1941	20
1909	1,348	1942	21
1910	2,262	1943	18
1911	1,637	1944	8
1912	2,135	1945	26
1913	3,508	1946	56
1914	637	1947	81
1915	91	1848	227
1916	276	1949	267
1917	129	1950	504
1918	15	1951	4,158
1919	25	1952	2,308
1920	1,198	1953	1,252
1921	460	1954	717
1922	654	1955	652
1923	——	1956	1,128
1924	6,123	1957	2,884
1925	1,561	1958	1,296
1926	4,811[3]	1959	944
1927	5,167	1960	1,047
1928	3,758	1961	381
1929	4,712	1962	385
1930	2,811	1963	325
1931	136	1964	476
1932	62	1965	656

Sources: *Canada Year Books* (1939—1966), Canadian Department of Citizenship and Immigration.

[1] Figures prior to 1918 are not statistically accurate as many of the Finnish immigrants were classified as either Swedish or Russian.

[2] Statistics for the period 1900—1908 are from one March 31 to the next. Since 1908 the figures apply for the calendar year. Thus the figures for the fiscal year 1907—1908 and the first three months of the 1908 calendar year show an overlap.

[3] Figures prior to 1926 do not include immigrants from the U.S.A.

TABLE NO. 2

IMMIGRATION TO CANADA OF PEOPLE OF FINNISH ORIGIN (1900-1965)
(From Saarinen, O.W., THE PATTERN IMPACT OF FINNISH SETTLEMENT IN CANADA, op.cit., p. 114)

	ONTARIO	PORT ARTHUR	FORT WILLIAM
Turku & Pori	179 21.0%	43 24.7%	5 7.2%
Vaasa	423 40.5%	70 36.1%	48 71.0%
Oulu	63 7.4%	35 18.0%	6 8.7%
Kuopio	58 6.8%	20 10.3%	1 1.4%
Hume	15 1.8%	3 1.5%	0 -
Mikkeli	10 1.2%	3 1.5%	0 -
Viipuri	48 5.6%	8 4.1%	4 5.8%
Uusimaa	57 6.7%	7 3.6%	4 5.8%
TOTAL	853 100.0%	194 100.0%	68 100.0%

TABLE NO. 3

IMMIGRATION TO ONTARIO, PORT ARTHUR AND FORT WILLIAM BY FINNISH PROVINCE IN 1905
(from Kouhti, C., LABOUR AND FINNISH IMMIGRATION TO THUNDER BAY: 1876-1914, op.cit., p. 20)

TABLE NO. 4

DISTRIBUTION OF PEOPLE CLAIMING FINNISH ETHNICITY
FOR PROVINCES & TERRITORIES 1901 - 1971
(Provincial Figures in Percentages)

	1901	1911	1921	1931	1941	1951	1961	1971
All Canada	2,502	15,497	21,494	43,885	41,683	43,745	59,436	59,215
NewFoundland	-	-	-	-	-	0.1	0.06	0.08
P.E.I.	0.00	0.00	0.00	0.00	0.00	0.00	0.03	-
Nova Scotia	0.24	0.28	0.21	0.29	0.23	0.40	0.43	0.40
New Brunswick	0.08	0.15	0.16	0.31	0.26	0.30	0.28	0.24
Quebec	4.60	1.39	0.35	6.77	4.90	3.70	3.83	3.15
Ontario	48.96	55.62	59.71	61.84	64.36	67.00	67.14	65.04
Manitoba	3.04	6.97	2.35	2.31	1.94	1.90	1.80	2.45
Saskatchewan	5.48	6.50	9.01	5.27	4.65	4.10	3.18	2.91
Alberta	3.96	10.25	13.61	7.56	8.28	6.80	6.16	6.06
British Columbia	31.18	18.44	14.48	15.63	15.19	15.50	16.89	19.44
Yukon & N.W.T.	2.48	0.39	0.10	0.09	0.18	0.20	0.21	0.22
Census Division of Thunder Bay	-	-	5,258	9,000	9,420	9,922	12,607	11,105
% of National Total (in Thunder Bay census division)	-	-	24.5	20.5	22.6	22.7	21.2	18.8

Based on Census of Canada

MAP NO. 6

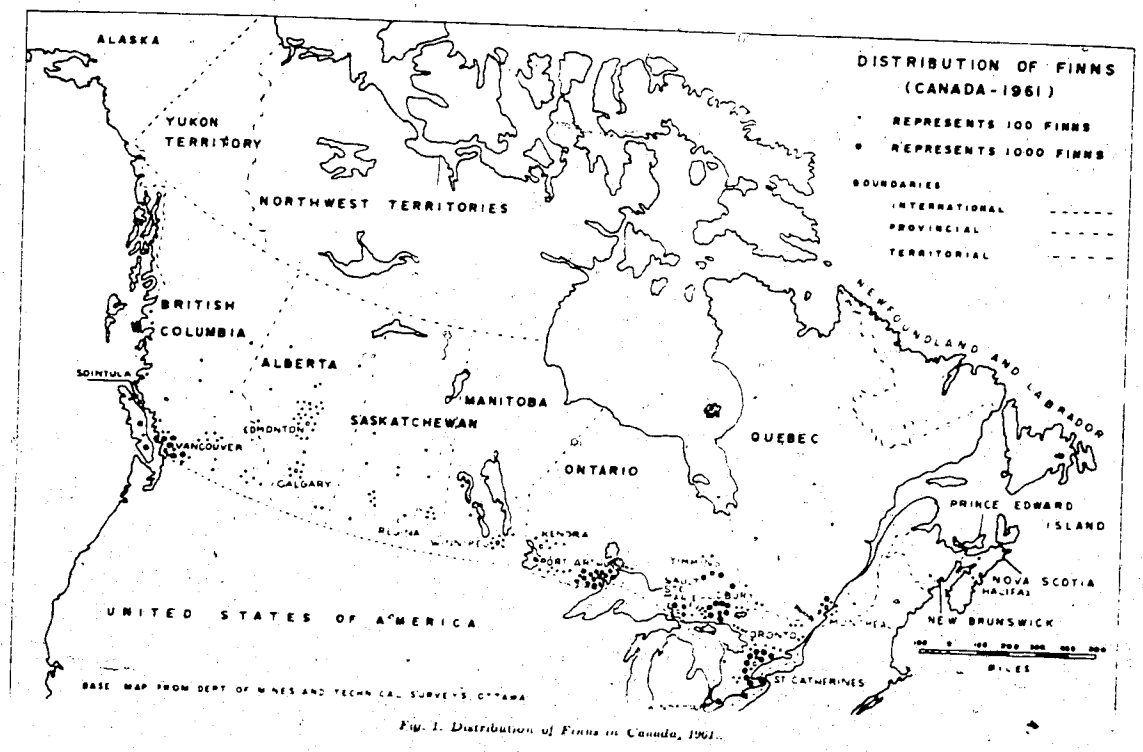


Fig. 1. Distribution of Finns in Canada, 1961.

(from Saarinen, O.W., "THE PATTERN AND IMPACT OF FINNISH SETTLEMENT IN CANADA", op. cit., Figure 1)

TABLE NO. 5

MAJOR URBAN CONCENTRATIONS OF PEOPLE CLAIMING FINNISH ETHNICITY IN CANADA

	1921	1941	1961
Port Arthur	1,566	2,943	6,257
Fort William	660	884	1,024
Sault Ste. Marie	884	851	1,301
Sudbury	296	1,241	2,994
Timmins	237	876	678
Toronto	735	2,819	3,944
Montreal	8	886	834
Vancouver	301	1,454	2,405

Based on Census of Canada

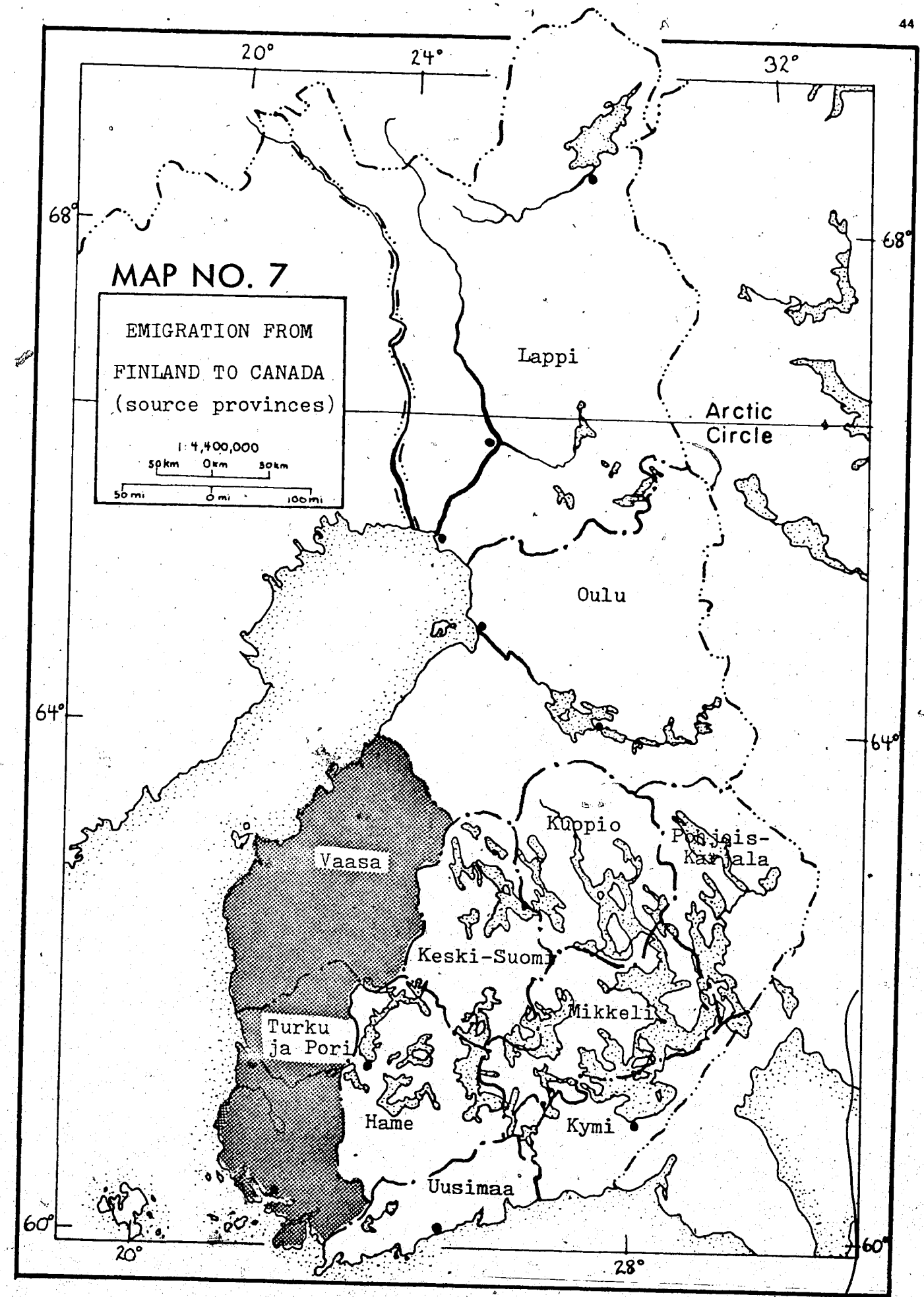
TABLE NO. 6

RURAL-URBAN SETTLEMENT PATTERN FOR PEOPLE CLAIMING FINNISH ETHNICITY BY PERCENTAGE, CANADA AND ONTARIO, 1911 - 1971

	1911	1921	1931	1941	1951	1961	1971
Canada:							
Finnish Origin	15,497	21,494	43,885	41,683	43,745	59,436	59,215
Rural %	58.9	69.0	54.2	58.0	45.9	31.4	24.1
Urban %	41.1	31.0	45.8	42.0	54.1	68.6	75.9
Ontario:							
Finnish Origin	8,619	12,835	27,137	26,827	29,327	39,906	38,520
Rural %	48.4	59.8	49.7	54.2	42.2	27.9	21.7
Urban %	51.6	40.2	50.3	45.8	57.8	72.1	78.3

NB: All percentages based on Canada and Ontario totals.

From Census of Canada.


MAP NO. 7
EMIGRATION FROM
FINLAND TO CANADA
(source provinces)
1:4,400,000
50km 0km 50km
50 mi 0 mi 100mi
20°
24°
32°
68°
Lappi
Arctic
Circle
Oulu
64°
Kuopio
Pohjois-
Karjala
Vaasa
Keski-Suomi
Mikkeli
Turku
ja Pori
Hame
Kymi
Uusimaa
60°
20°
28°

relocation due to ties of friendship, kinship and home parish.

Finnish Immigration and Settlement in the Thunder Bay Area

The first Finns in the Thunder Bay area are believed to have arrived in Port Arthur in 1876. While records provide little accurate data on this specific group, it seems likely that no more than a few hundred Finns had settled in the area before 1900.[39] These first-comers appear to have been mostly from the United States, which was experiencing some economic difficulty, and were mainly attracted by the opportunities presented by railway construction in the area. One of the earlier Finnish concentrations occurred in Lybster township, in the south-west. It was tied to the development of the Port Arthur, Duluth, and Western Railway, as well as to the Silver Mountain Mines. An immigration agent, in 1900, reported:

> In Lybster, there is a fine settlement of Finlanders. Indeed, in one day, Finlanders, aggregating one hundred persons, men, women, and children, applied to me for land in Lybster.[40]

Contrary to this impression, however, the 1901 Census of Canada, listed the total population of the township at only 84 people. Unfortunately,

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39. Based on church records (Kouhi, C., "Labour and Finnish Immigration to Thunder Bay: 1876-1914" in The Finnish Experience: Lakehead University Review, op.cit., p. 18), Reino Kero's estimate of 200 Finns in Thunder Bay during the 1880's (in "Emigration from Finland to Canada Before the First World War", op.cit., p. 14), and the total estimate of Finns in Canada of 1,000 at 1900 (Engle, E., op.cit., p. 64).

40. Dominion of Canada Sessional Papers: 1901, Vol. 35, No. 10, #25, p. 182.

again, this sort of contradiction seems to flow through much of the earlier data and accounts.

After the turn of the century, and the real beginning of the immigration surge, Finns spread throughout the entire Thunder Bay area. Four major concentrations eventually developed: three in rural townships - Gorham, Ware, and Lybster; and the urban block of Thunder Bay, largely contained in Port Arthur. While Lybster has already been discussed, the northern townships of Gorham and Ware, located near both Port Arthur and the "Dawson Road", opened up with surveys and mining operations of the 1890's. This was followed by actual land claims and settlement after 1900. Agricultural land was released in the District of Thunder Bay by provincial "Free Grants". Application for Crown land legally involved, among other things, that:

1. "the applicant be male (or sole female) head of a family, or single man over 18 years of age."
2. pay $1.50 registration charge.
3. build "a habitable house, at least 16 x 20 feet in size".
4. clear and cultivate 15 acres (of the 160 acres total in the grant).
5. "and to have actually and continually resided upon and cultivated the land for three years after location" (for at least six months per year).

These conditions supposedly had to be met before the actual patent could be applied for in three years.[41] In reality, these conditions were

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41. Conditions from Yeigh, F., The Rainy River District, Province of Ontario Canada: An Illustrated Description of Its Soil, Climate, Products, Area, Agricultural Capabilities and Timber and Mineral Resources, 3rd edition (Toronto, Dept. of Crown Lands, 1894, p. 20-21).

flexible, and a great number of variations and divergence occurs throughout the area (to be covered in further detail in Chapter Five).

The demand for land by the Finns boomed after the first decade of the twentieth century and peaked around 1930. This boom period saw the development of many small rural nodes or hamlets, such as Intola, Kivikoski, Lappe, Toimela, and Sistonen's Corners' within larger general Finnish communities such as Tarmola, Pohjola, Alppila and Ostola. These areas had colourful histories with a distinctive Finnish-Canadian lifestyle bolstered with great institutional solidarity.[42] Finnish farms were mainly subsistence operations, located on the most marginal development areas, but were aided greatly by supplemental incomes from forestry, mining and construction.

Though these communities and way of life continued until the second World War, deterioration began thereafter. Soldiers returning from the war and the youth on the farms were enticed by the financial rewards and easier life the city offered. The days of subsistence operations were clearly numbered.

While the present number of Finns in the rural sample townships has stayed near 1921 levels, the urban Finnish population has increased twenty-five times since that date. Again, the 1971 Thunder Bay census

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42. For further information on local colour refer to Thunder Bay Finnish-Canadian Historical Society, A Chronicle of Finnish Settlements in Rural Thunder Bay, (Thunder Bay, Ontario: Canadian Utiset, 1976).

TABLE NO. 7

TOTAL POPULATION LEVELS 1901-61

Township	1901	1911	1921	1931	1941	1951	1961
Fort William	3633	16499	20541	26277	30585	34947	45212
Port Arthur	3214	11220	14866	19818	24426	31161	45276
Paipoonge	284	742	991	1170	1392	1496	2145
Oliver	504	772	944	1040	1158	1026	1269
Gorham	57	152	420	571	540	355	458
Scoble	16	54	116	192	220	169	196
Pearson	--	46	252	335	347	247	252
Ware	22	104	394	464	439	448	357
Conmee	19	145	306	390	362	318	323
O'Connor	151	371	394	330	368	332	375
Gillies	279	395	422	412	474	379	425
Lybster	84	344	427	454	379	337	386
Marks	--	120	165	225	215	184	186

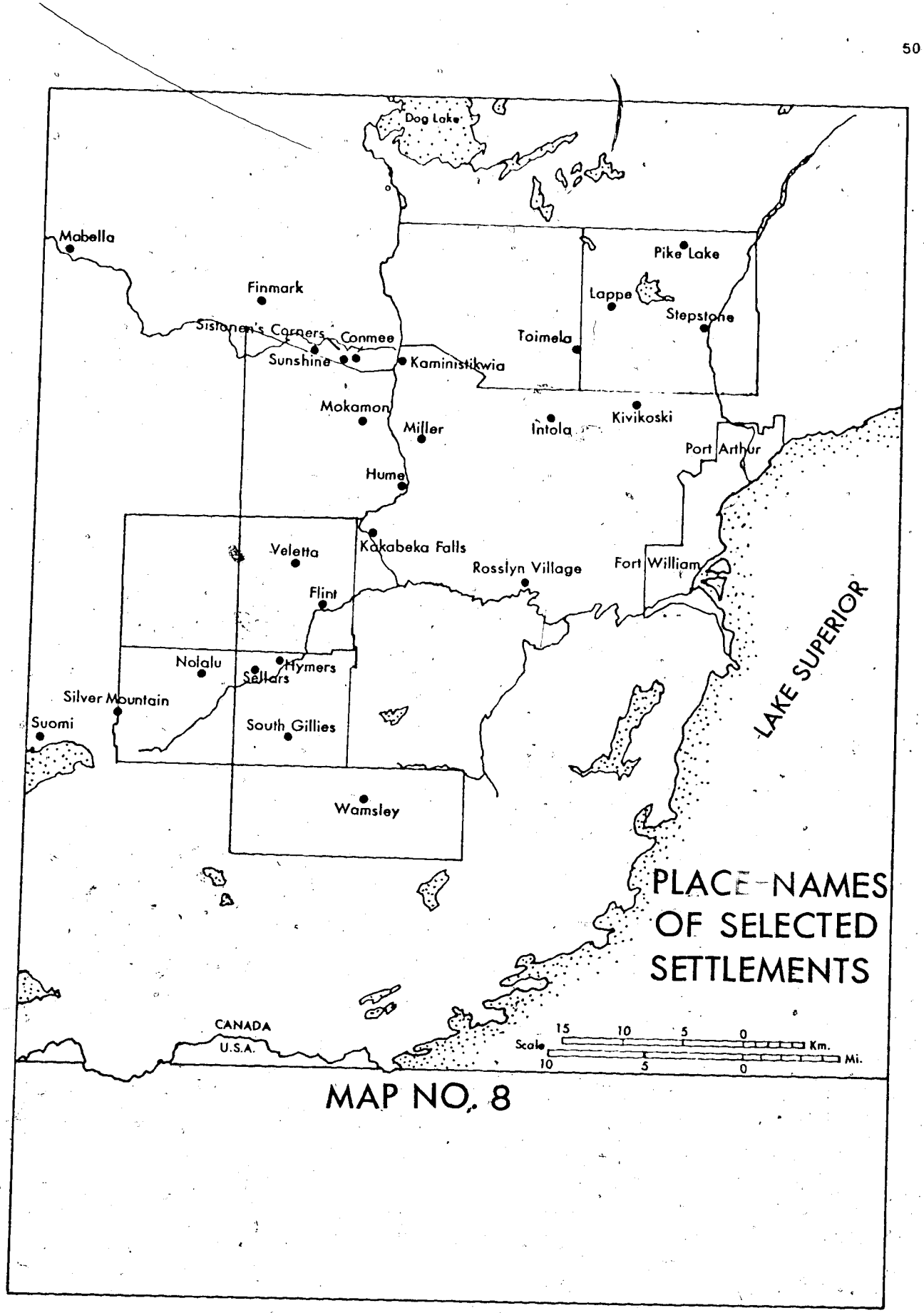
Based on Canadian Census Reports, Vol. 2, 1961

TABLE NO. 8

FINNISH CONCENTRATIONS IN THE THUNDER BAY AREA (1921 - 1961)

Area	1921 % of Area's Population			1941 % of Area's Population			1961 % of Area's Population		
	Finn	British	Total Pop. Level	Finn	British	Total Pop. Level	Finn	British	Total Pop. Level
Thunder Bay	10.6	56.2	55,407	11.1	47.3	55,011	9.1	40.0	
Fort William	2.9	61.6	20,541	2.9	53.8	30,585	2.3	45.0	45,214
Port Arthur	10.5	65.0	14,866	12.0	53.4	24,426	13.8	40.6	45,276
Gorham Twp.	97.4	0.0	420	92.9	1.3	540	89.9	1.5	458
Oliver Twp.	16.7	64.7	944	18.1	52.5	1,158	18.7	43.5	1,269
Paipoonge Twp.	1.9	64.1	991	2.6	50.4	1,392	2.3	44.7	2,145
Scoble Twp.	.9	68.9	116	.4	66.1	220	.5	65.3	196
Ware Twp.	85.3	8.1	394	86.3	2.5	439	78.1	2.5	357
Conmee Twp.	40.5	46.4	306	55.2	28.7	362	50.1	27.8	323
O'Connor Twp.	1.5	78.1	394	.6	74.7	368	0.5	67.7	375
Gillies Twp.	20.1	60.0	422	16.9	57.3	474	16.2	52.5	425
Pearson Twp.	37.9	41.8	252	46.4	28.2	347	47.2	25.7	252
Lybster Twp.	90.2	5.2	427	91.6	4.4	379	89.8	4.7	386
Marks Twp.	45.5	49.1	165	36.1	49.1	215	30.6	49.1	186

Based on Census of Canada


Dog Lake
Mabella
Finmark
Sistonen's Corners
Conmee
Sunshine
Kaministikwia
Pike Lake
Lappe
Stepstone
Toimela
Mokamon
Miller
Intola
Kivikoski
Port Arthur
Hume
Kakabeka Falls
Veletta
Rosslyn Village
Fort William
Flint
Nolalu
Hymers
Sellars
Silver Mountain
Suomi
South Gillies
Wamsley
LAKE SUPERIOR
PLACE-NAMES OF SELECTED SETTLEMENTS
CANADA
U.S.A.
Scale
15 10 5 0 Km.
10 5 0 Mi.

MAP NO. 8

division reports about three thousand rural Finns, as opposed to over eight thousand urban. Little of the original rural lifestyle exists today. The former hubs of the communities are now either gone or marked only by a store or gas station. What were once farms, now for the most part are merely residences or are abandoned. Most present rural Finnish residents are retired people, commuters to urban employment, or are involved in local logging or trucking operations.

Summary

The late 1800's to early 1900's were difficult times in Finland, with many adversely affected by famines, a changing economy, a rapidly rising population, and an unstable political situation. Attracted by North America's prospects of high wages, "free" land, political freedom and sheer adventure, thousands of Finns emigrated. Canada received three basic waves of Finnish immigrants: 1900 to 1913 (with 15,000 to 20,000 immigrants), 1920 to 1930 (with slightly over 20,000 additional people), and 1950 to 1960 (with another 15,000). In the first two waves, which are the concern of this study, most Finns came to Canada from the rural areas of Vaasa, Turku, and Pori in southwest Finland.

Over one-third of all the Finns that settled in Canada chose to reside in northern Ontario. The Thunder Bay area carries the distinction of traditionally possessing the largest numerical concentrations of both urban and rural Finns in Canada. Thunder Bay began to receive Finns in 1876, with major influxes beginning shortly after 1900. Four major

concentrations of Finns eventually developed in the area; three in the rural townships of Gorham, Ware and Lybster, and the urban block in Thunder Bay (mainly in Port Arthur). In the rural blocks, which are the focus of this study, strong Finnish communities developed, marked by great institutional self-sufficiency. The farms within these communities, located on the rugged upland areas, were subsistence agricultural operations supplemented by incomes from forestry, mining, and construction projects. The climax of the communities was around 1930 and World War II brought about a rapid decline in the area's activities.

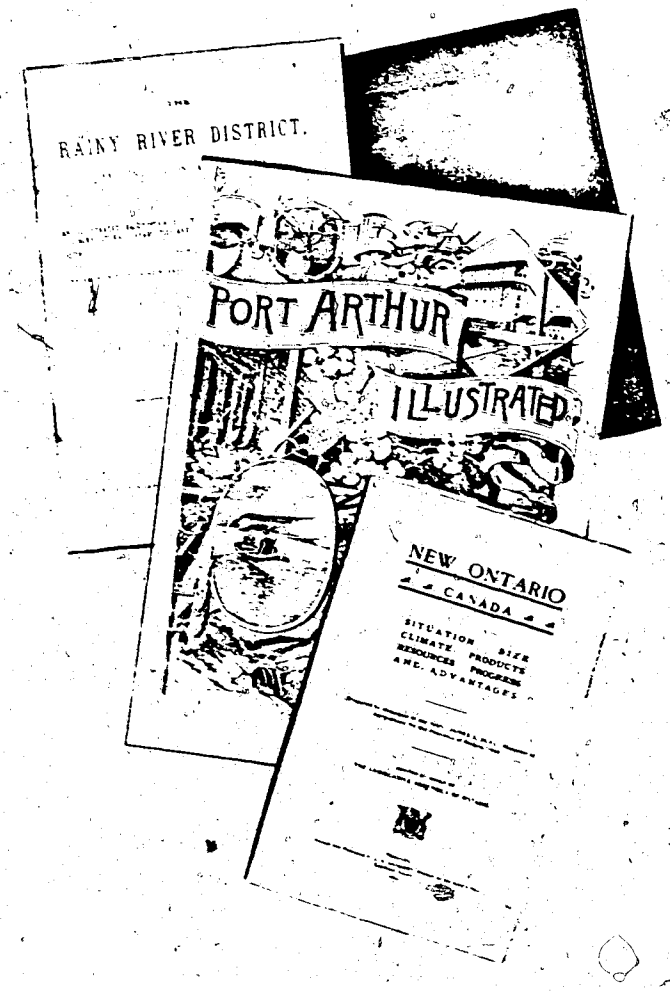


Figure 1

EARLY PROMOTIONAL MATERIAL FOR THE AREA

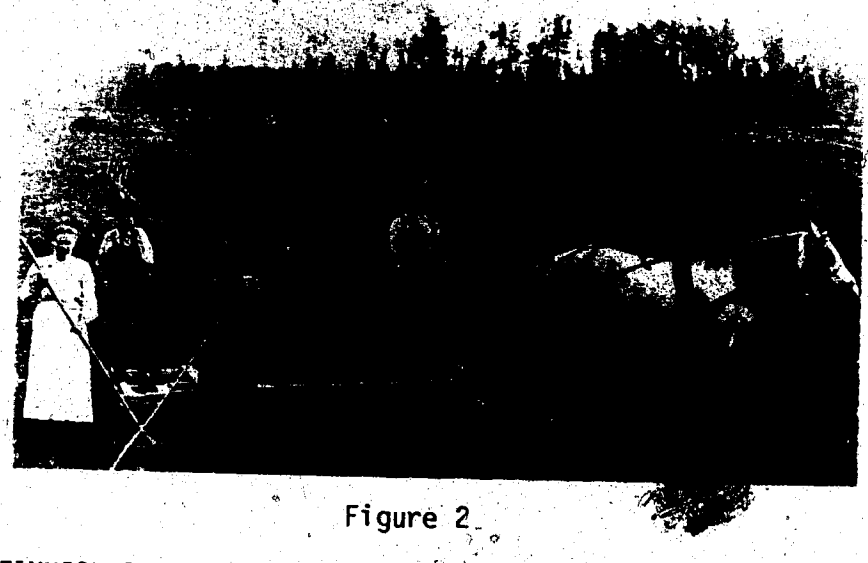


Figure 2

FINNISH SETTLERS IN RURAL THUNDER BAY - TAKEN ABOUT 1908
(From Collection of the Thunder Bay Finnish-Canadian Historical Society, Donor - R. Adams & C. Budner)

Figure 3

HAYING TIME LUNCH-BREAK ON EARLY FINNISH FARM AT KIVIKOSI, ONTARIO
(From Collection of the Thunder Bay Finnish-Canadian Historical Society, Donor - M. Ranta)

Figure 4

EARLY FINNISH SETTLER BREAKING LAND IN STRANGE TOWNSHIP
(From Collection of the Thunder Bay Finnish-Canadian Historical Society, Donor - Karila Family)

Figure 5

UPLAND SHIELD AREA, LYBSTER TOWNSHIP

Figure 6

MANY FINNS WORKED ON THE EARLY RAIL GANGS SUCH AS THIS ONE AT SUOMI IN STRANGE TOWNSHIP
(From Collection of the Thunder Bay Finnish-Canadian Historical Society, Donor - Karila Family)

Figure 7

LOGGING WAS ALSO A MAIN SOURCE OF RURAL EMPLOYMENT. THIS SLED IS LOADED WITH FRESHLY CUT RAILWAY TIES. TAKEN ABOUT 1910.
(From Collection of the Thunder Bay Finnish-Canadian Historical Society, Donor - Karila Family)

Figure 8

TYPICAL NON-FINNISH FARM IN THE SLATE RIVER VALLEY. TAKEN 1977.

Figure 9

TYPICAL FINNISH FARM IN HUMMOCKY UPLANDS - CONMEE TOWNSHIP. TAKEN 1977.

CHAPTER FOUR

FOLK ARCHITECTURE

Definition and Geographic Focus

Current North American settlement geography has been defined by one author as "the study of the form of the cultural landscape, involving its orderly description and attempted explanation".[43] One of the most important of these "form" elements is the building style representative of the common man of that culture, termed "vernacular" or "folk" architecture. Certainly one of the greatest impacts an individual and his cultural group has on their physical surroundings is in the erection of buildings. Housing, for example, for most individuals is the single greatest investment, the largest material 'fruit of their labour'.

The term "folk architecture" can be approached on two levels. In the narrower, traditional sense, it refers to non-professional architecture, constructed from memory rather than formal graphic plans.[44] Traditionally also, folk architecture has been applied to the structures characteristic of the people of one particular culture.[45] In the broader sense, the term

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43. from Jordon, T.G., "On the Nature of Settlement Geography", op.cit. p. 27.

44. see Jordon, T.G. & Roundtree, L., The Human Mosaic: A Thematic Introduction to Cultural Geography, (San Francisco: Canfield Press, 1976, p. 307)

45. Montell, W.L. & Morse, M.L., Kentucky Folk Architecture, (Lexington: University Press of Kentucky, 1976, p. xi).

has been liberalized to include even planned buildings, such as "tract" housing, as long as they are still representative of the common man. Broad usage also extends its representation to regional or local forms of architecture, regardless of the number of influences involved. An example of this is the inclusion of the "soddy" or sod house of the Great Plains which was produced through the amalgamation of several diverse cultural traditions.[46] This chapter is concerned with descriptions of structures built by a particular ethnic group (the Finns), when settling in a new and relatively virgin environment (rural Thunder Bay).

While many of the general geographic implications of folk architecture (as a characteristic of settlement) were discussed previously under "Significance of the Research", a review and clarification would be helpful here. Two major geographic concepts are being dealt with in this study; the man-land relationship of the Finns, and the diffusion of that relationship. Folk architecture clearly illustrates each of these concepts. The linkage of the Finns to the physical landscape of Thunder Bay can be seen both in the maximum use of local material for construction and in the distinctive shelter design for protection from the elements of a severe climate. The diffusion of the relationship is obvious, in that "folk" traditions are being dealt with, thus involving cultural carry-over (to be examined in detail in Chapter Six). Beyond this however, acculturation and the dispersal of traditions can also be spatially monitored through

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46. Welsh, R.L., Sod Walls: The Story of the Nebraska Sod House, (Broken Bow, Nebraska, Purcells, Inc., 1968).

folk architectural studies.

A final reason for examining folk architecture is because of aesthetic considerations. These again, relate back to the man-land relation, in that the beauty of these structures stems largely from their pure functionalism and harmony with their natural surroundings.

The Survey and General Building Form[47]

Through preliminary investigations it was discovered that nearly all of the initial buildings of the sample area still remaining were built from logs. Although a few frame buildings on which dates were established were included in the survey, the criterion of log construction became a pre-requisite to site inspection.[48] The survey, which ultimately consisted of 362 buildings over 190 sites, possessed a Finnish content of more than 85% of all buildings over at least 83% of the sites. English, Dutch, Swedish and French Canadian sites were also confirmed, but 7% of the buildings over 8% of the sites were not identifiable as to original ethnicity (see Table No. 9).

The types of structures included about one-quarter houses (26%), one-quarter cow barns (27%), 14% saunas, 11% hay barns, 6% horse barns,

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47. Further statistical details of the survey are to be found in the appendices.

48. The frame buildings sampled were only on sites that also possessed log buildings, and had dates confirmed on them. They were included only to show that a minor portion of the original buildings of the "Finns" were built from frame.

TABLE NO. 9

ETHNIC COMPOSITION OF SURVEY SAMPLE

PART "A" - GENERAL SAMPLE

Townships	Total Buildings	Total Sites	Finnish Content	British	Dutch	French-Canadian	Other
Gorham	95/46		90/43	-	-	-	5/3 ethinicity unknown
Ware	57/33		53/31	-	-	-	4/2 ethnicity unknown
Lybster	94/45		88/42	-	2/1	3/1	1 school
O'Connor	13/10		-	9/7	-	-	4/3 ethnicity unknown
Gillies	7/5		6/4	1/1	-	-	-
Pearson	41/24		33/18	2/2	-	-	6/4 ethnicity unknown
Conmee	42/19		28/14	-	3/2	-	5/2 unknown 6/1 Swedish
Marks	13/8		10/6	-	-	-	3/2 ethnicity unknown
Totals	362/190		328/158	12/10	5/3	3/1	27/16 unknown 6/1 Swedish 1 school

KEY: Number of Buildings

Number of

TABLE NO. 10

ETHNIC COMPOSITION OF SURVEY SAMPLE

PART "B" - FURTHER BREAKDOWN SHOWING VERIFICATION OF THE FINNISH SAMPLE

Townships	Finnish Total Buildings / Total Sites	F1-* One Confirmation	F2- Two Confirmations	F3- Three or More Confirmations
Gorham	90/43	29/16	32/15	29/12
Ware	53/31	28/21	3/3	22/7
Lybster	88/42	36/18	4/3	48/21
O'Connor	-	-	-	-
Gillies	6/4	-	2/2	4/2
Pearson	33/18	8/4	10/6	15/8
Conmee	28/14	10/5	8/4	10/5
Marks	10/6	4/3	2/1	4/2
Totals	308/158	115/67	61/34	132/57

*Confirmation Sources: Land Title Records (surname), Personal Interviews with Neighbors, Names on Mailboxes, etc., "Chronicles Survey" Records. F3 sites usually also had direct confirmation from the builder or his immediate family.

KEY: Number of Buildings

Number of Sites

5% chicken coops, 3% blacksmith shops and 8% miscellaneous structures (garages, pig barns, goat sheds, granaries, storage sheds, root cellars, a lodge, a camp, a school house, and a cooperative store). Construction dates of the buildings ranged from 1877 to the 1950's, but 71% were built between 1910 and 1939.

Log materials were mostly jack pine (44%) but poplar was also used frequently (22%), followed by spruce (13%), balsam fir (9%), cedar (7%), white pine (3%), and tamarack (2%). Beam styles (see Figure 10) were dominated by the occurrence of logs flattened on two sides, and grooved or "saddle hewn" on the bottom (71%). Other styles included the basic round log (14%), logs flattened on two sides only (7%), squared logs, usually sawn (6%), and round logs with the bottom saddle grooved (2%). Nearly all logs were de-barked to a certain extent. Beam diameters ranged from 4" (10.1 cm) to 14" (35.5 cm), but were most commonly 5" (12.7 cm) x 8" (20.3 cm) on the hewn logs.[49]

Corner styles of log constructions were nearly half "full-dovetail" joints cut flush to the wall (49%), often with corner boards covering the jointing sections (see Figures 16 & 17). The "lock" joint was also common (27%) with beams trimmed about 5" (12.7 cm) past the cut corner. The "saddle notch" occurred on 10% of the buildings, the "half-dovetail" 5%, the "butt" joint 4%, the "A-V" joint 2%, and a few instances with the "lap", "lapped", "lazy-man", and "square notched" corners.

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49. The Imperial system of measurement will be used first here, for structural materials and timber, as it is commonly accepted internationally.

TABLE NO. 11

TYPES OF STRUCTURES SAMPLED

Township	Total Number of Sample Buildings in the Township	Houses	Cow Barns	Hay Barns	Stables (Horse Barns)	Saunas	Blacksmith Shops	Chicken Coops	Others
Gorham	95	26	26	7	5	18	1	7	1 lodge 2 pigsheds 2 garages 2 granaries
Ware	57	12	14	9	2	7	4	5	1 camp 2 garages
Lybster	94	28	20	12	9	13	3	3	1 schoolhouse 1 garage 1 pigshed 2 storage sheds 1 root cellar
O'Connor	13	4	5	1	2	0	0	1	0
Gillies	7	3	2	2	0	0	0	0	1 granary
Pearson	41	15	13	2	3	3	1	2	1 store 1 garage
Conmee	42	4	13	6	1	7	2	1	1 root cellar 3 storage sheds 1 pigshed 1 goat shed
Marks	13	4	6	0	1	2	0	0	
Total	362	96	99	39	23	50	11	19	25 miscellaneous
% of Total		26%	27%	11%	6%	14%	3%	5%	8%

TABLE NO. 12

STRUCTURE ERECTION DATE
(based on the interviews)

Townships	Pre-1900	1900 - 1909	1910 - 1919	1920's	1930's	1940's	1950's
Gorham	2 (1895@)	5	7	5	8	6	1
Ware	-	-	8	7	4	-	-
Lybster	8 (4 1890's, 2 1896, 1 1897, 1 1898)	7	8	7	13	2	-
O'Connor	1 (1 1877)	1	-	-	1	-	-
Gillies	-	3	-	1	2	-	-
Pearson	-	1	2	12	1	1	-
Conmee	-	2	7	8	5	1	1
Marks	-	-	2	-	2	2	-
Total*	11	19	34	40	36	12	2
% of Dated Total	7%	12%	22%	26%	23%	8%	1%

*154 structures were dated out of 362 buildings in the survey (43%).

Most buildings had, between the tiers of logs, some form of caulking or "chinking". Most commonly this was sphagnum moss (47%), but rags, particularly burlap, were also used (27%), as well as cement (8%), wooden slats (4%), and trace occurrences of oakum, rope, mud and manure. Deliberate gaps of 2" (5 cm) - 4" (10.1 cm) were left between each tier on 31 buildings, mostly hay barns for ventilation.

Wall alignment was often secured and reinforced by various methods. Most common was the use of wooden pins (1 1/2" [3.8 cm] - 2" [5 cm] in diameter) drilled through a few tiers of beams at regular intervals, and around window or door frames. Another interesting means was the use of "reinforcing posts", found on 16 buildings, which were verticle beams bolted through the wall, acting as braces (see Figure 13). A third method involved nailing the corner joints to prevent slippage, and was found on 20 of the buildings.

Exterior walls were most commonly bare (75%), but other finishes included shiplap (6%), oil stain (5%), rough board (4%), and trace occurrences of "rockface" or insul-brick (sheet asphalt impregnated with coloured rock chips), "red wash" stain, paint, tarpaper, and plaster. Trim around doors and windows, as well as corner boards was often painted on such buildings as houses and saunas. Interior walls were usually also left bare (81%), but many houses were papered, painted or paneled inside. Root cellars (the separate buildings for that purpose) were either rock or concrete-lined. One house was even lined with sail canvas.

Roof types were predominantly gable (86%) (see Figure 18), some of which were complex with L-shapes, dormers and the like. Gambrel style composed 10% of the buildings, mostly in instances of larger barns. The residual 4% were shed styles, hip, pyramidal and arch roofs. Roof framing varied greatly, being either frame or pole construction, and with or without purlins. Sheeting materials were usually 1" (2.5 cm) x 6" (15.2 cm) rough cut lumber or slabs, although dimensions ranged from 1" (2.5 cm) x 3" (7.6 cm) to 1" (2.5 cm) x 12" (30.4 cm). Surficial roofing materials had a 45% occurrence of wooden shakes, 15% shingles (tar based), 15% metal sheeting, 8% tarpaper, 2% board and 1% pole and birch bark covering buildings. Two of the materials, however, shingles and metal sheeting, were later additions or replacements for the original surfacing.

Although about half of the buildings were so badly sunken that the foundations could not be examined, those which could included 42% with rock foundations, 28% with vertical post (usually cedar), 16% with concrete (a later renovation feature), and 13% with horizontal logs or wood blocks. Many of the structures, however, seemed completely without foundations of any kind.

Building size varied according to function and will be described later in greater detail, however, walls were generally determined by the 30' (9.1 m) log length produced by the average tree. The number of rooms also varied; most structures, however, consisted of one or two rooms, separated if need be by log walls tied into the side wall. Buildings were mostly one story (74%), but many were 1 1/2 (16%), and some were

two story (10%). Some of the barns were of great height (over 25' [7.6 m]), yet still had no more than two activity levels. One and one-half story buildings were defined as having two activity levels above ground, but only having a partial vertical sidewall on the upper floor. Many of the one story buildings did have some attic or loft space, but with no sidewall, were accessible only from small outside doors, and were of limited use (usually storage). A limited number of houses had detectable full basements (6) and some had root cellars under the floor (10), but these figures are conservative because of limited internal access and lack of visibility.

While 83% of the buildings were considered to have displayed fair original workmanship (see Table A29, appendix for value judgement guidelines), 57% of the structures are still in fair condition. Only 8% of the buildings are presently in what is considered good condition.

With regard to building use, only 23% of the structures are still being used for the original function. Thus 77% have changed function at least once (abandonment is considered a change in function), and approximately 14% have changed function at least twice. Nearly half (48%) of the buildings sampled were abandoned.

In removing the 15% of the survey which was not confirmed Finnish, it is first useful to examine the control (non-Finn) township blocks of O'Connor and Gillies. These areas which were settled predominantly by British (see Table 8), had township populations roughly similar to the Finnish blocks during the period of the 1920's and 1930's, and yet the present incidence of log structures there is markedly less. Considering

that these non-Finn townships were settled first, it would seem logical to assume that more log structures would be evident there, than in later Finnish areas. However, through both interviews and field inspections, it became clear that many of the non-Finnish settlers, particularly the British, often built with frame even initially. Moreover, those log structures which had been built by these people were generally not of a lasting quality or had been torn down and replaced.

The non-Finnish elements found in the survey accounted for all the incidences of the "half-dovetail" cornering, the majority of the cement chinking, the plaster exteriors, and the instances of the use of massive logs (over 12" [30.4 cm] in diameter). With the exception of one Dutch site, the workmanship and quality of the Finnish style was not matched on the non-Finnish sites.

The Sauna

Usually the first structure built on the new farmstead by the Finns was the sauna. In its first years, this building often acted as a temporary house,[50] as the settler had to concern himself more with the development of a livelihood than with construction of a more intricate dwelling. Later, however, the structure became devoted to its main design purpose as a steam bath-house. Two types of saunas were found; the

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50. This is contrary to Matti Kaups' findings of the Finns in the U.S. See Kaups, M., "A Finnish Savusauna in Minnesota", Minnesota History, Vol. 45, No. 1, Spring 1976, p. 20.

traditional savusauna (smoke sauna) and the updated more common style. In the savusauna, a fire was built in a chimneyless stove (kiuas) constructed from mortarless field stone, which was positioned in the corner of the steam room (see Figure 20). After heating for two to three hours, so as to reach the proper ranges (from 65°C [149°F] to as high as 121°C [250°F]), a vent would be opened in the rear wall to release the thick smoke build-up and water would be thrown on the fire and rocks. Finally after a short period of "ripening", when the air was allowed to clear and dry, the bath was ready for use. The more common version employed a metal or brick stove with chimney, which was readied in much the same way, except with less preparation time required, and a lack of smoky smells.

Building form was basically the same for the two types of saunas and in some cases conversions were made of the traditional facility to the more updated version, with stove replacement. The dimensions were typically 8' (2.4 m) x 16' (4.9 m), which was usually equally divided into two rooms (a steam room and a change room). Smaller one-room structures, however, were also common and many of the two-room saunas actually had a frame change room which was a later addition.

These buildings were invariably one story in height, but with a small attic space sometimes used for storage, and usually containing a thick layer of dirt or sawdust over the steam room ceiling for insulation purposes. The typical form also included one outside door, one or two small windows, and a chimney and/or vent hole. Some auxiliary uses for the sauna found

in the survey included summer kitchen, maternity room, laundry, grain drying, and even smoke-curing.

The sauna was (and still is) truly one of the more essential features of every Finnish farmstead, and also was unique as a cultural indicator.[51]

Housing Form

Although the basic construction techniques of most of these early Finnish dwellings were the same, variance did occur in both size and intricacy. Houses ranged from simple 8' (2.4 m) x 12' (3.6 m) bachelor accommodations to two story 30' (9.1 m) x 30' multi-roomed structures. Typically, however, structures were about 16' (4.9 m) x 20' (6.1 m) one story with loft to one and one-half story buildings with gable roof, one or two doors, four to six windows and perhaps a small frame porch addition. Usually the first floor was divided into two rooms by a log wall tied into the outside walls, and the upper floor or loft was either left open or also divided in two. Exteriors again were generally bare log, but interiors were usually covered with paper, paint, board, or combinations thereof. As with those of the sauna, floors were typically partially hewn beams, covered with one or two layers of boards. Floors on housing, however, were often supported independent of the walls to avoid distortion from settling. Only a few houses had full basements,

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51. More detail on the sauna will be presented in Chapter Six. Also for additional information see Mather, C., and Kaups, M., "The Finnish Sauna: A Cultural Index to Settlement", Annals, A.A.G., Vol. 53, No. 4, Dec. 1963, pp. 494-504.

but small root cellars, accessible through a trapdoor in the floor, were fairly common.

One feature found in nearly every house sampled was a red brick chimney mounted on a wall about 5' (1.5 m) above the floor level, supported either by tie-ins to the wall or large boards which extended to the floor (see Figures 20 & 55). This is in contrast to extending the chimney itself to the ground level and incorporating it into the foundation, as found in most contemporary construction practices.

Another notable feature was the frequent lack of internal access to the loft on one story buildings and even the upper floor on some one and one-half storied houses. The outside ladder to a small door opening under the gable end provided a cold night climb for children and guests to what was often designated the upper bedroom.

Barns and Animal Buildings

Composing slightly over a quarter of the buildings sampled, cow barns occurred in two basic forms. The one type, which will be referred to as the "cow parlor" form, consisted generally of one room broken up with several animal stalls (mostly for dairy cattle) comprising part or all of the ground level of a large two story "combination" barn. While the parlor itself was made of log (largely for reasons of insulation), the rest of the structure, which was used for hay and some equipment storage, had a light board exterior over a hewn beam skeleton frame (see Figure 30).

Dimensions of the log section ranged from 12' (3.6 m) x 16' (4.9 m) to 25' (7.6 m) x 35' (10.7 m), but most commonly averaged about 18' (5.5 m) x 24' (7.3 m). The other style of cow barn was smaller, usually 14' (4.3 m) x 18' (5.5 m), one story with a small hay loft. These were often the earlier structures, with just a few stalls, which frequently were later converted into calf barns, as the larger combination barn was built.

The log hay barns were one of the most distinct of all the types of buildings noted. Invariably, they were round log structures (usually poplar) with deliberate gaps of 2" (5 cm) - 4" (10.2 cm) left for ventilation and corners joined usually in a quickly made "saddle notch". Sizes of these buildings ranged from about 12' (3.6 m) x 16' (4.9 m) to 18' (5.5 m) x 40' (12.1 m), averaging about 18' (5.5 m) x 24' (7.3 m). Peak height varied also from 9' (2.7 m) to 30' (9.1 m), but these barns always consisted of one large open room inside, with no form of loft. Windows in these buildings were non-existant and doors consisted of one or two large bays where hay loads could easily be transferred and perhaps the wagon stored. Also a unique practice of the area's Finns was the use of outward-slanted or cantilevered walls on hay barns. The reason for this feature was probably because of added drainage and ease of unloading. While only a few buildings with the cantilever occurred in the sample, several people interviewed said that they were once common through the Finnish areas. It is likely that the slant design and rougher construction produced a less stable structure, and few have lasted to the present. The later large combination barns also did away with the need for these structures.

Chicken coops were also fairly distinctive, characterized by a long narrow building (averaging approximately 12' [3.6 m] x 20' [6.1 m]), with a bank of large south-facing windows and often a brick chimney for heating purposes. The inside was lined with nest boxes, and a few small holes were placed near the floor level in the walls which allowed the chickens access to an outside pen.

Other animal buildings were less distinctive in form, either resembling the smaller cow barn or appearing like a storage shed. Often the sheds used for goats or pigs were simple small additions to the side or rear wall of the main barn, almost resembling a "lean-to" style (see Figure 69). Many of these smaller animal shelters had vent holes in the wall or small board chimneys for ventilation, and some of the larger barns had cupolas on the roof ridge.

Other Buildings

Eleven blacksmith shops were found in the sample, although most were designed only to serve the immediate needs of the farm, rather than being of a commercial scale. Normally these were sauna-sized structures, and in a few cases were likely at one time to have been saunas. They usually had one door, one or two windows, a chimney (usually a large round metal one) and perhaps a board vent. These were also usually one-roomed buildings with a hand-powered forge in one corner connected to a brick oven or metal stove (often placed on a concrete pad), and walls lined with rough tools and/or horse-shoes.

Garages built from logs were also found in the survey, although clearly these were later structures or were converted from buildings of other original function. Normally these were about 12' (3.6 m) x 16' (4.9 MO with a bay and a small window. Storage sheds were likewise fairly plain structures, often quite small.

Two root cellars, which were independent of houses and involved logs, were found in the sample. As stated previously, one was rock-lined, the other concrete-lined and both were partial dugouts. Several other sightings were also made of non-log cellars, although most were merely remnants, examplified by a hole in a bank lined with rock.

While most of the granaries resembled the normal storage sheds, one large structure was found which was divided into a grain-drying room (with chimneyless stove) and a grain threshing room with raised threshing floor. This unique building, styled after the traditional riihi barns of the Old Country (to be discussed in Chapter Six), was believed by its Finnish builder to produce a better tasting grain and flour than that which had been processed through a combine.

The remaining types of buildings, of which there was one each, included a schoolhouse, a lodge, a camp and a co-op building. While each provided many insights into the social links of the early Finnish communities, only brief comments will be made here. The schoolhouse, Lybster School No. 3, was a 20' (6.1 m) x 24' (7.3 m) one story, log structure, built in 1919. At one time instruction was in the Finnish language in this school. This

building which had been in active use until the early 1960's, at the time of the survey was in the process of being turned into a garage.

The lodge currently on Hazelwood Lake (originally on Black Sturgeon Lake), was a later structure built in 1941 by Finnish carpenters of the Great Lakes Pulp & Paper Company. This huge building (approximately 40' (12.2 m) x 40', 1 1/2 stories) was constructed from pine logs left round, but "saddle-grooved" and was perhaps the most ostentatious of all structures noted. The camp, built on the shore of the Kaministikwia River, was a small plain structure, but illustrated that even at early dates the Finns of the area were fond of nature retreats or cottages. Perhaps the most interesting of all structures in the survey was the co-op. Built in 1909, the huge 18' (5.5 m) x 45' (13.7 m) two story log structure served as the hub of the village of Nolalu. Not only were goods made available to the local community through it, many of the area's commodities were channeled and marketed by it, to the cities of Fort William and Port Arthur. This building, while currently vacant, still stands in excellent condition and while shiplap covers the exterior, the stained log walls are still visible on the inside.

Other buildings such as the churches and meeting halls of the Finns were not included in this part of the survey, because they were all frame structures and were not particularly architecturally distinct. The socio-economic implications of these institutions will, however, be discussed in detail in Chapter Five.

Construction Factors

The five basic elements involved in construction are planning, materials, tools, manpower, and time. Planning for all of these buildings was non-professional, but only in the sense that accredited architects were not used. Many of these men were, however, master carpenters in their own right. Materials were nearly all local; usually the timber and rock were taken directly off the farm on which the structures were built. Brick for the chimneys came from the local brickyard at Rosslyn Village. Shakes for the roof were either split by hand, taken off an improvised mill run by a group of farmers (usually incorporating a reciprocating blade powered by horse, waterwheel, or a few men), or purchased from a small local sawmill (of which there were many). Only trim items such as wallpaper, paint, glass, and certain furnishings (such as a box stove) were imported from other areas, usually via the co-op.

Tools for the construction of these initial buildings usually included a broad axe, a regular axe, a cross-cut saw, an auger (usually [redacted]cm]), a chisel, a blacksmith's hammer, a log scriber (wara), and perhaps a drawknife or peeling spud (for removing bark). Even some of these tools were hand-forged locally.

Manpower varied greatly, ranging from an individual builder to a "building bee" construction crew consisting of many neighbors and friends. Accordingly, the time element involved in erection varied from a few days to a couple of years. Seasonality was of little importance in the first

buildings, because settlers built when they came on the land, regardless of the season and continued to erect only when there was free time.

Summary

In sum, then, the survey has revealed certain distinctive features of the initial folk architecture of the Finnish settlers in this part of Northern Ontario. Original buildings were constructed almost entirely using a characteristic, highly refined log construction style. Beams were normally flattened on two sides and grooved or "saddle hewn" on the bottom. Corner styles were predominantly "full dovetail" or "lock notched" joints. Due to the tight fit of the logs, the need for chinking was usually kept to a minimum but when necessary, employed either sphagnum moss or rags. Beams were normally reinforced with wooden pegs, connecting tiers at regular intervals, and instances of both nailing and bolted reinforcing posts were also found.

Exterior walls were nearly always left bare, although painted trim was common. Interior walls were likewise bare, except in houses, which were usually papered or boarded. Roofs were predominantly gable, with mixed framing styles, 1" x 6" (2.5 cm x 15.2 cm) rough-cut sheeting, and wooden shakes for roofing. Foundations were at times lacking, but when present consisted commonly of rock or vertical posts.

The two most distinctive architectural building forms on the Finnish farmstead were the sauna and the hay barn. The sauna, unique to the Finnish farms of the area, had a very standard design (8' x 16' [2.4 m x 4.9 m],

two-roomed facility with one external door and one or two small windows), but came in two styles; smoke sauna and common (depending on the type of stove used). Usually the sauna was the first structure on the farmstead and served as a temporary house. The hay barn was the exception to the general construction style, invariably having rounded logs with wide gaps between, and occasionally slightly cantilevered walls.

The dwelling houses varied in form somewhat, but were normally about 16' (4.9 m) x 20' (6.1 m), one to one and one-half story buildings, with gable roof, two to four rooms, and perhaps a small porch. Other common features included a wall-mounted red-brick chimney, external access to the loft, and a small root cellar dug under the dwelling floor.

The main animal barn was the largest structure on the farm, averaging 18' (5.5 m) x 24' (7.3 m), with the lower cow parlor built of logs and the top hay loft area constructed of frame. This barn was usually multi-purposed, serving as shelter for a variety of animals as well as providing storage for feed and equipment. Smaller animal shelters were less distinctive, with the exception of the chicken coops, which characteristically were long narrow buildings (averaging 12' [3.6 m] x 20' [6.1 m]) with large banks of south facing windows.

Other buildings in the area included several blacksmith shops, garages, root cellars, granaries, a traditional threshing barn, a schoolhouse, lodge, camp and cooperative store. While their construction style was characteristic, often their general form was not particularly unusual in comparison with similar structures erected by non-Finnish settlers.

This early Finnish architecture displays great harmony with its natural surroundings because of an unpretentious nature, reflected in clean design and maximum use of local materials. It has proved itself among the most functional and sound of all of the initial constructions in the entire region.

- Corner Joints -

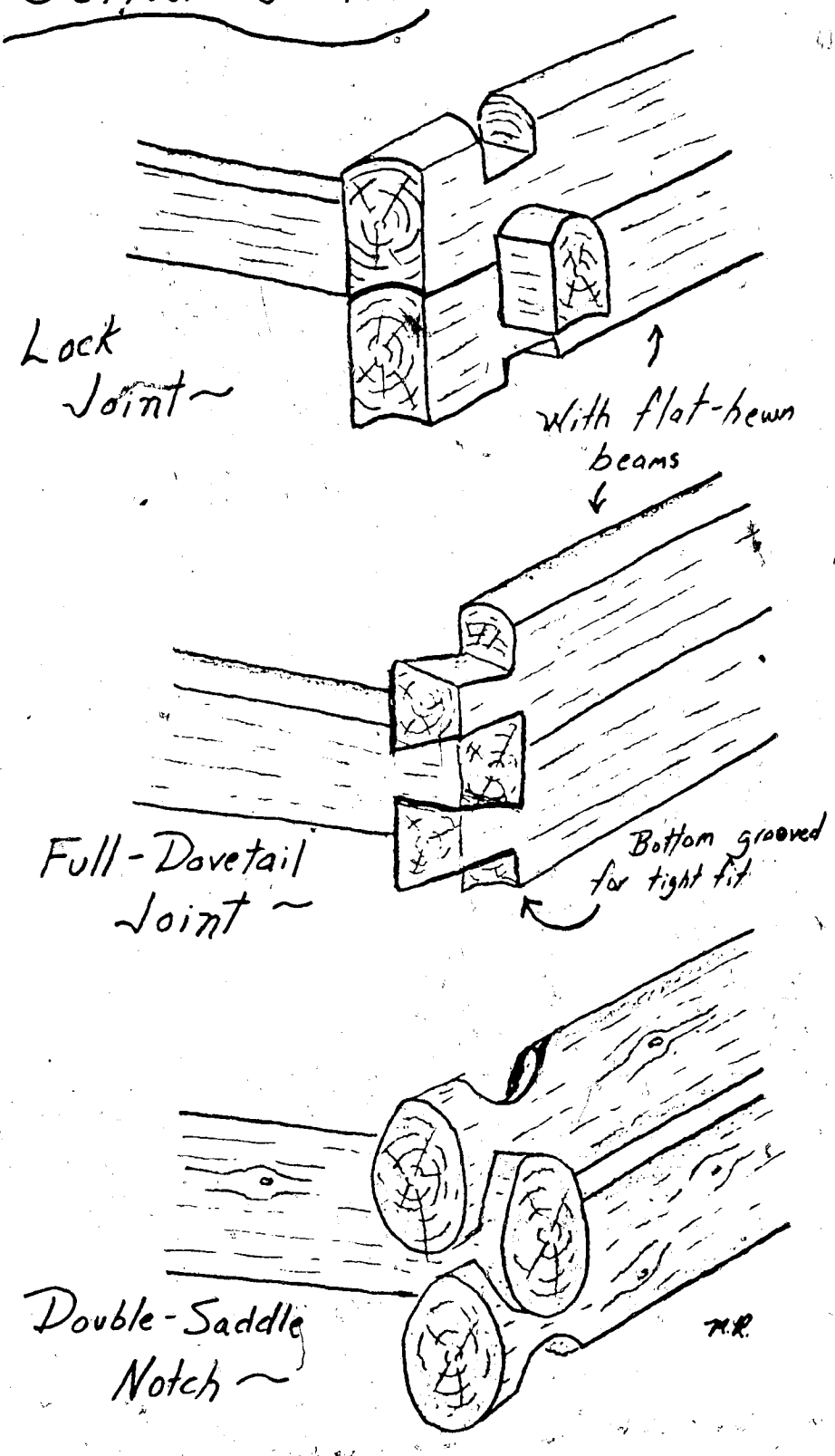
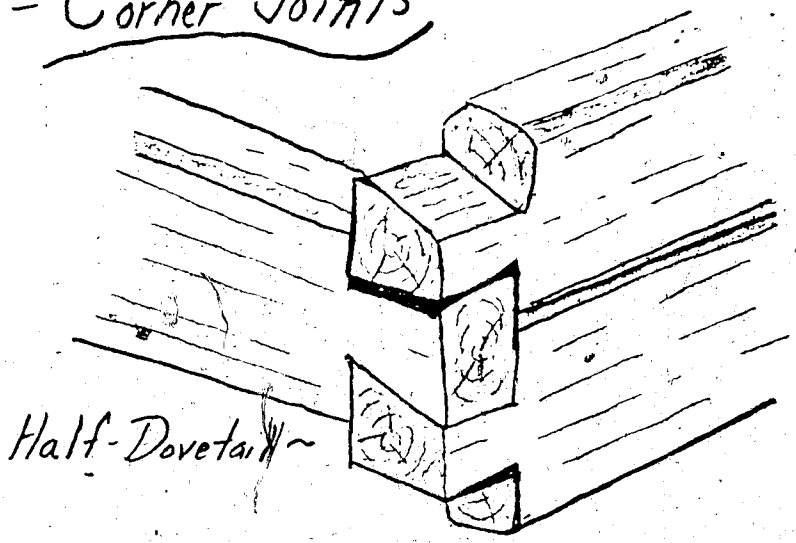
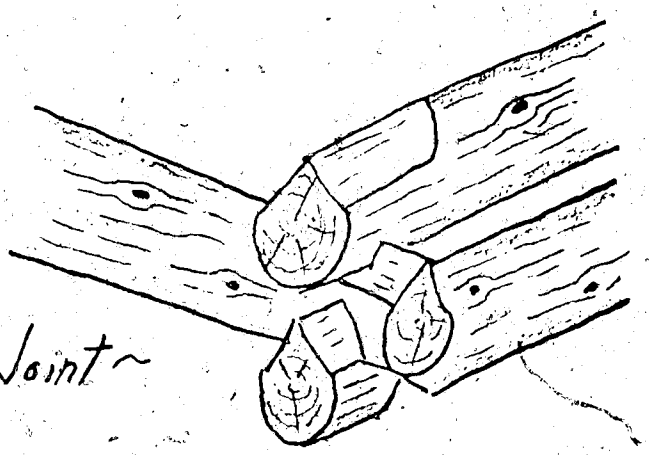


Figure No. 10

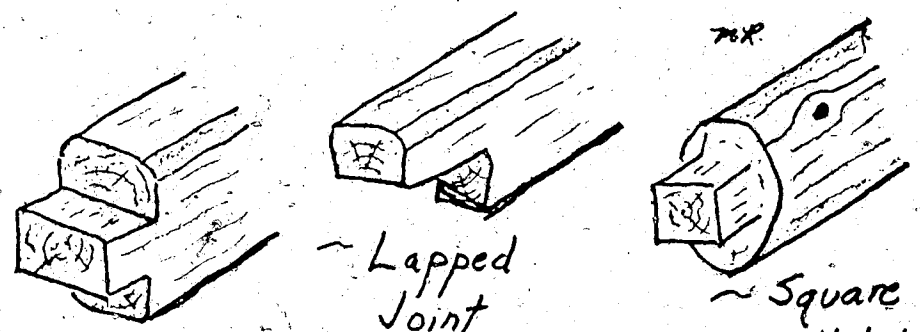
- Corner Joints -



Half-Dovetail ~



A-V Joint ~



~ Lap Joint

~ Lapped Joint

~ Square Notch

Figure No. 11

Figure 12

FULL-DOVETAIL JOINTS WITH JACK PINE BEAMS ON A FINNISH SAUNA

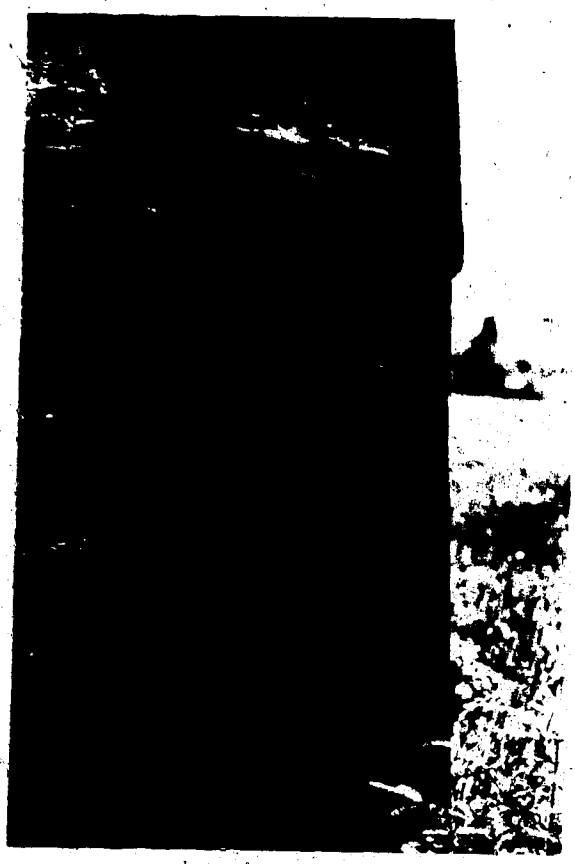


Figure 13

HALF-DOVETAIL CORNER ON AN EARLY ENGLISH HOUSE. NOTE THE WIDE GAPS WITH MUD CHINKING BETWEEN LARGE WHITE PINE LOGS (KNIFE FOR SCALE).

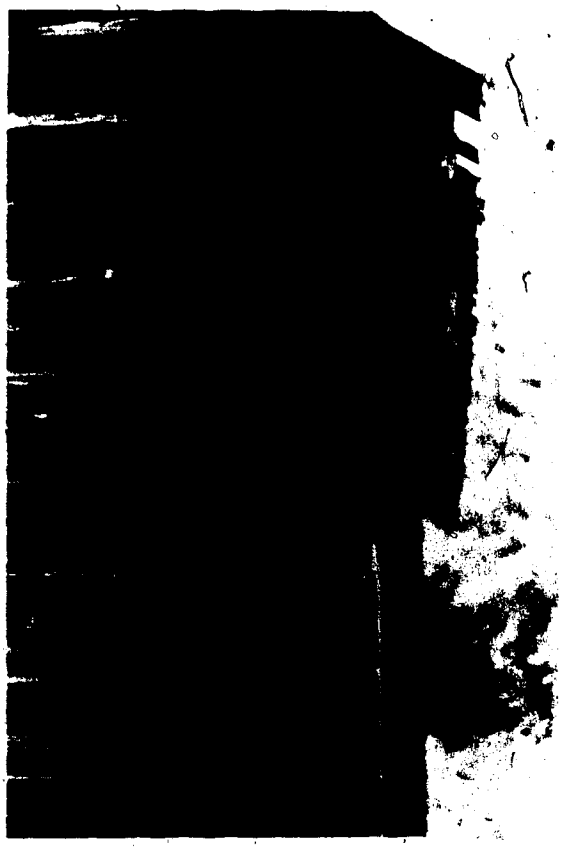


Figure 14

LOCK JOINT CORNERING ON A FINNISH BUILT STRUCTURE.
NOTE POLE RAFTERS AND SHEETING.

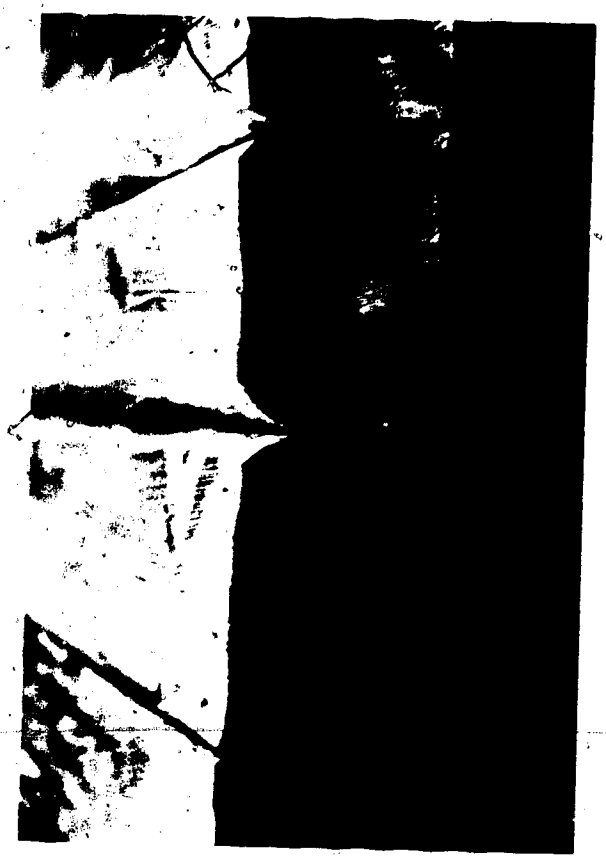


Figure 15

SADDLE-HEWN BEAMS ON A WALL OF A FINNISH HOUSE

Figure 16

CORNER BOARDS COVERING A FULL-DOVETAIL JOINT ON WALL OF FINNISH HOUSE

Figure 17

COW BARN AND HORSE BARN IN GORHAM TOWNSHIP. NOTE DOVETAILING UNDER CORNER BOARDS OF FAR BUILDING. TAKEN 1977.

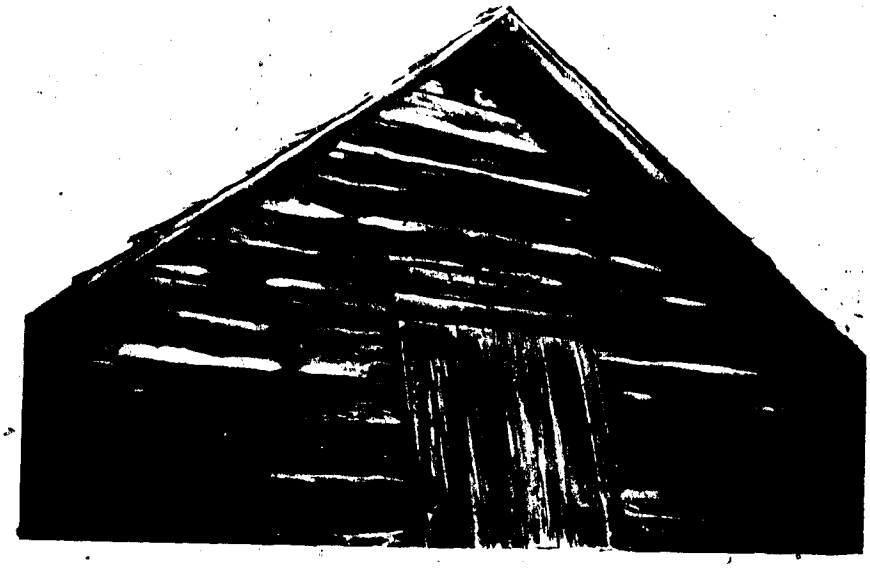


Figure 18

GABLE END ON FINNISH STRUCTURE SHOWING POLE PURLINS, ROUGH CUT LUMBER SHEETING, SHAKES, AND AXE MARKS ON BEAMS

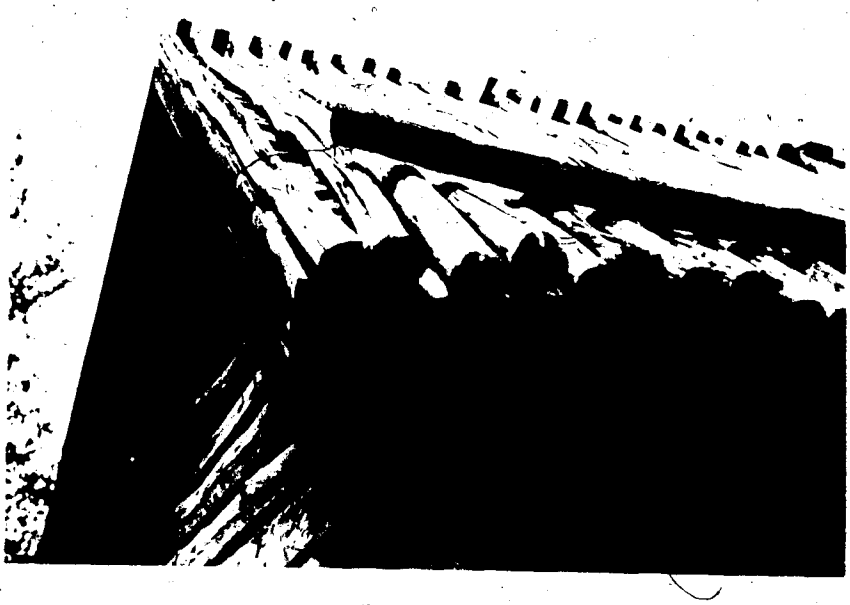
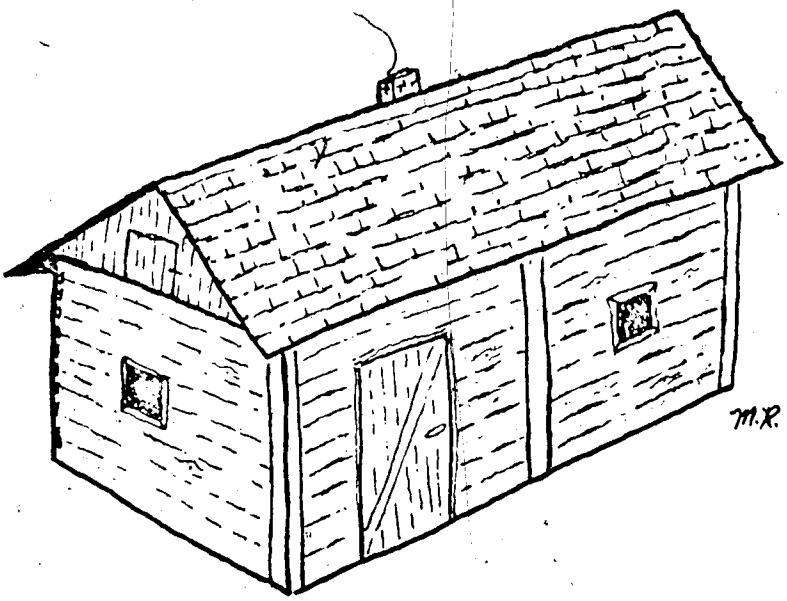
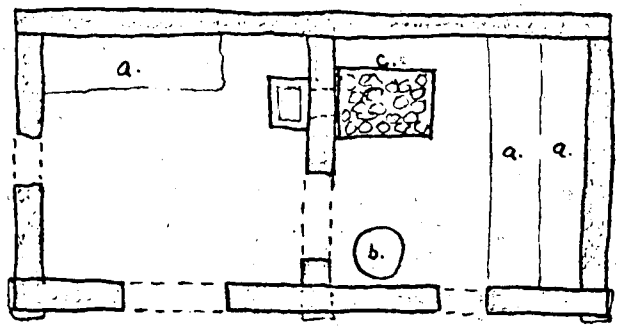


Figure 19

TRADITIONAL POLE ROOF STYLE. WARE TOWNSHIP. TAKEN 1977.

The Sauna





Sauna Layout-

a. benches
b. water bucket
c. metal stove & chimney

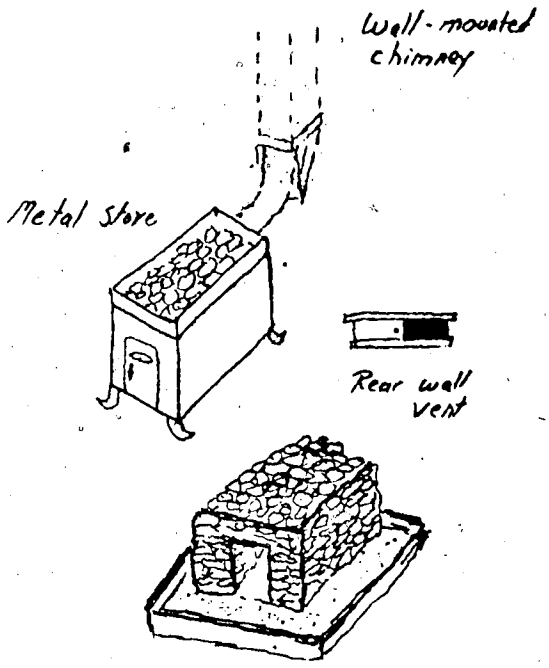


Figure No. 20

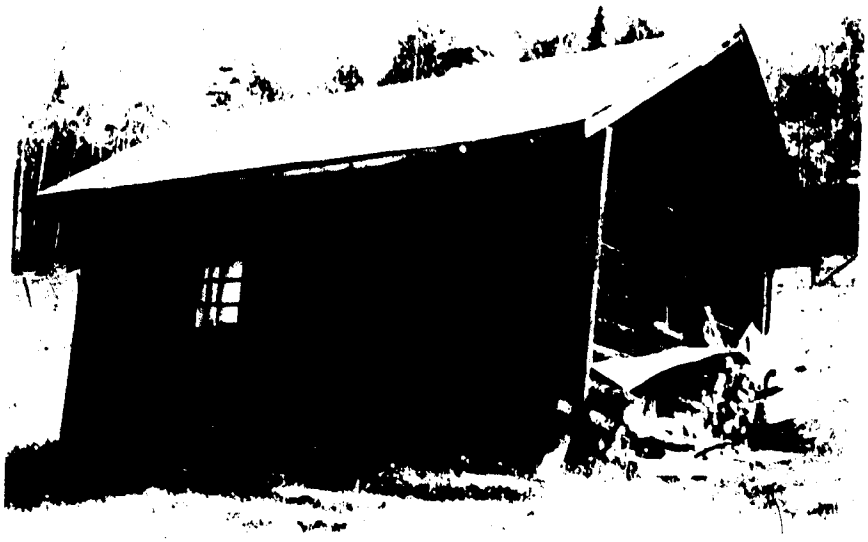
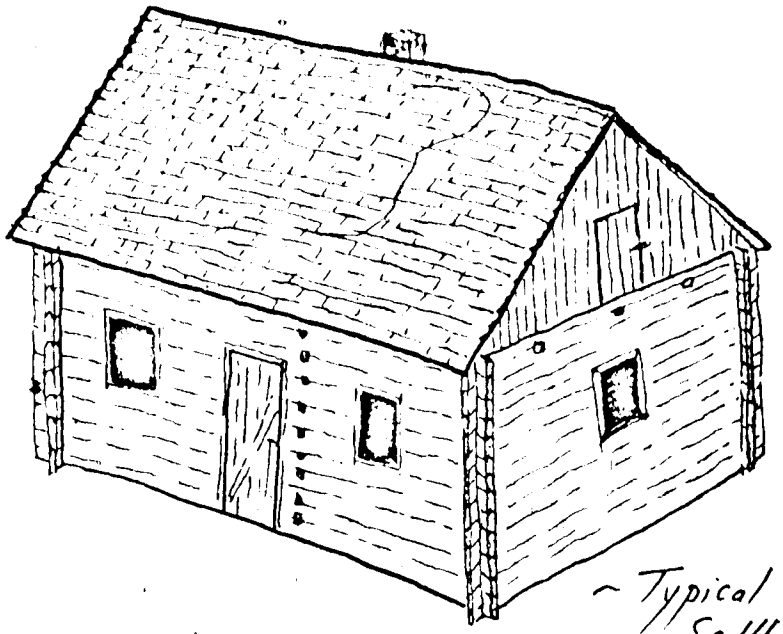


Figure 21

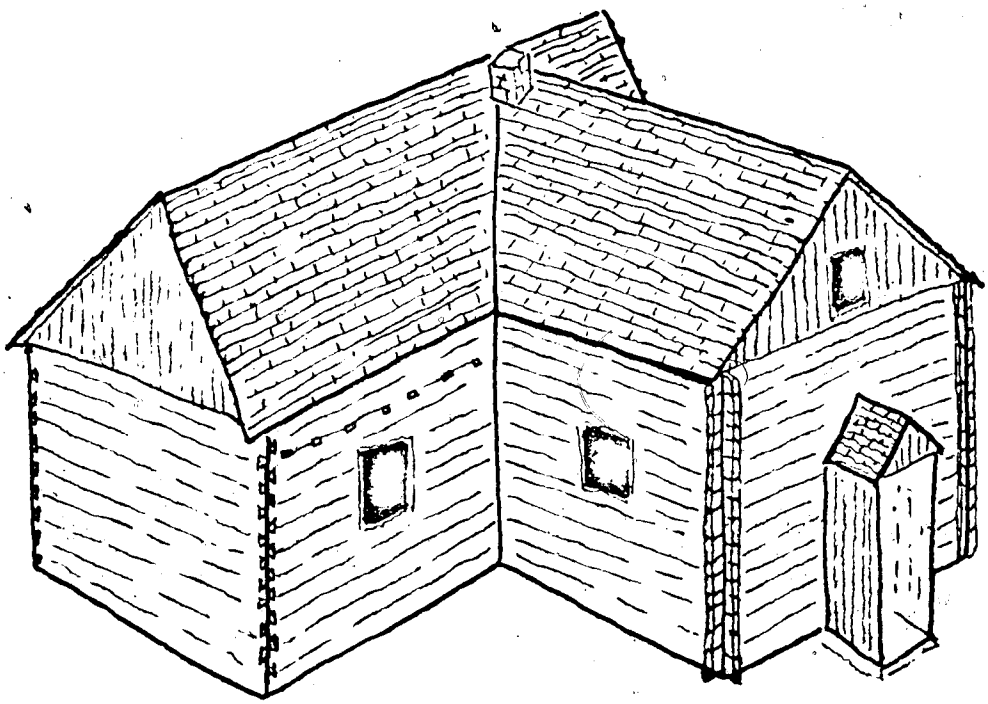
SAUNA WITH "RED-WASHED" EXTERIOR, GORHAM TOWNSHIP
TAKEN 1977. NOTE THE BRICK CHIMNEY.

Figure 22

SAUNA WITH LOG STEAMROOM AND FRAME CHANGEROOM. NOTE SMOKE VENT UNDER GABLE END AND LACK OF CHIMNEY (SMOKE SAUNA), LYBSTER TOWNSHIP. TAKEN 1977.



~ Typical Finnish Settler's House



~ L-Shaped House, Pearson Twp.

Figure No. 23

Figure 24

FINNISH LOG HOUSE, LYBSTER TOWNSHIP, TAKEN 1977

Figure 25

FINNISH LOG HOUSE, BUILT APPROXIMATELY 1930, LYBSTER TOWNSHIP, TAKEN 1977.

Figure 26

EARLY PHOTO OF FINNISH HOME IN GORHAM TOWNSHIP
(From Collection of the Thunder Bay Finnish-Canadian Historical Society)

Figure 27

EARLY PHOTO OF A KIVIKOSI HOME, GORHAM-MCINTYRE TOWNSHIP AREA
(From Collection of the Thunder Bay Finnish-Canadian Historical Society,
Donor - Luhtala)

Figure 28

EARLY PHOTO OF A WEDDING PARTY IN FRONT OF A LARGE LOG HOUSE NEAR NOLALU IN LYBSTER TOWNSHIP
(From Collection of the Thunder Bay Finnish-Canadian Historical Society, Donor - Maki)

Figure 29

IN CONTRAST, A MEAGRE PIONEER HOME NEAR SILVER MOUNTAIN, LYBSTER-STRANGE TOWNSHIP AREA
(From Collection of the Thunder Bay Finnish-Canadian Historical Society, Donor - Niemi)

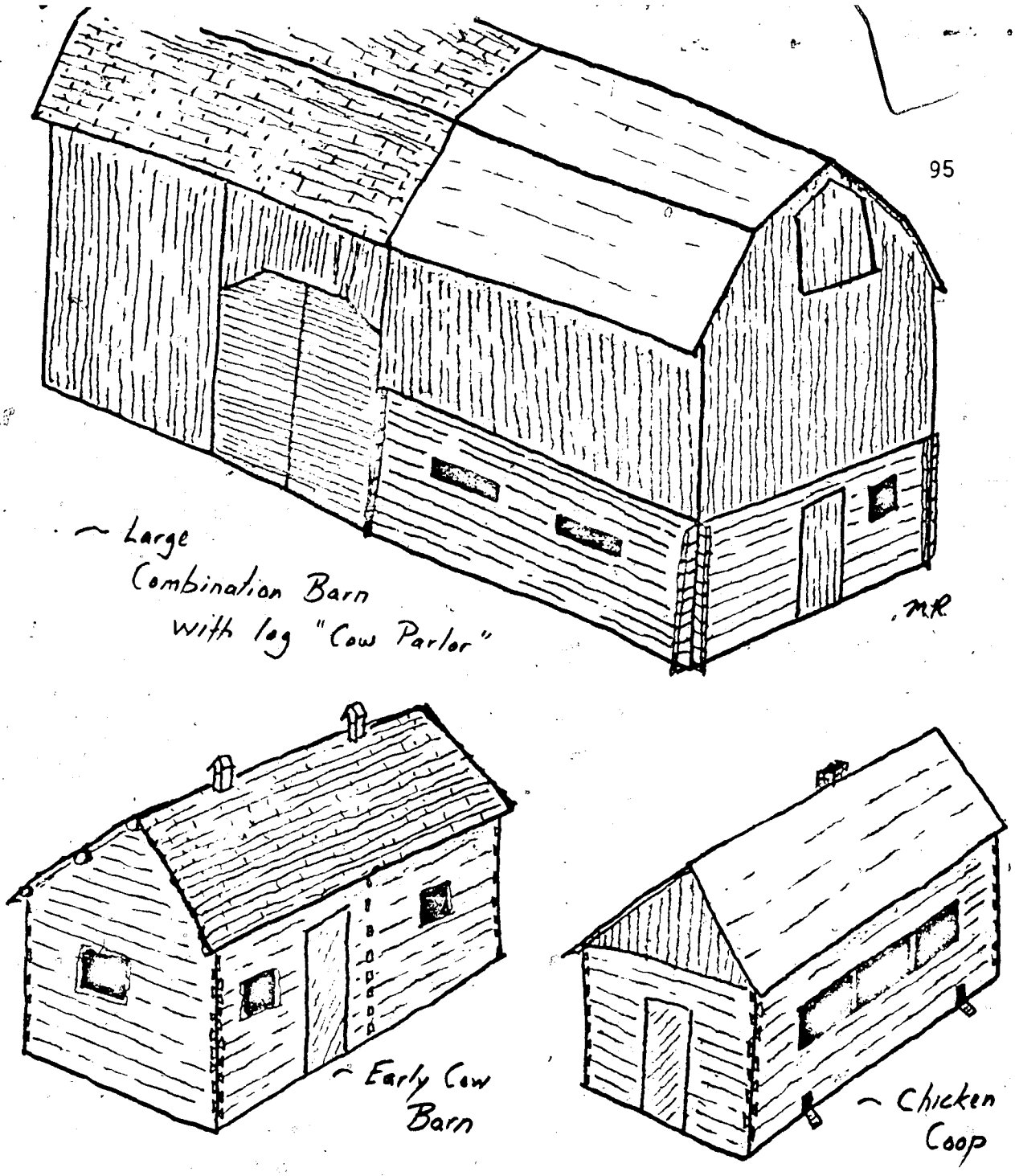
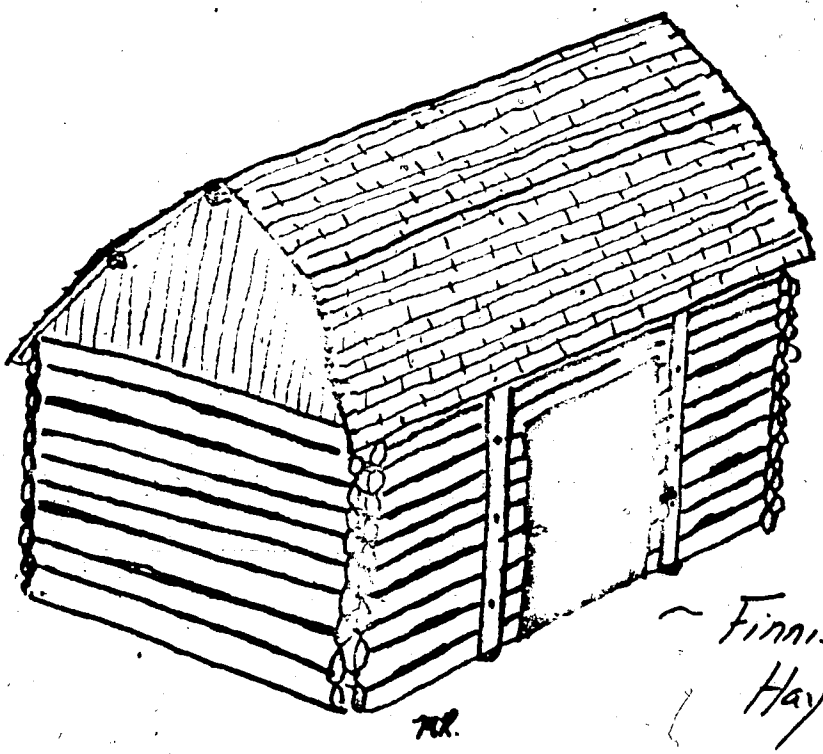
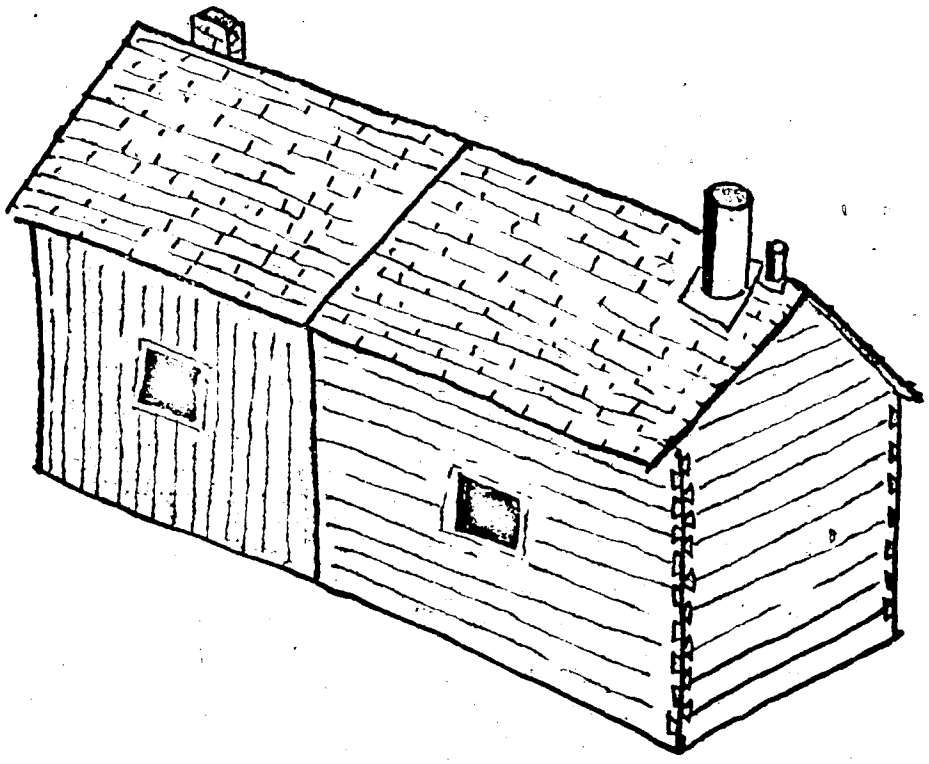

~ Large
Combination Barn
with log "Cow Parlor"
MR
~ Early Cow
Barn
~ Chicken
Coop

Figure No. 30



~ Finnish Haybarn



~ Blacksmith's Shop

Figure No. 31

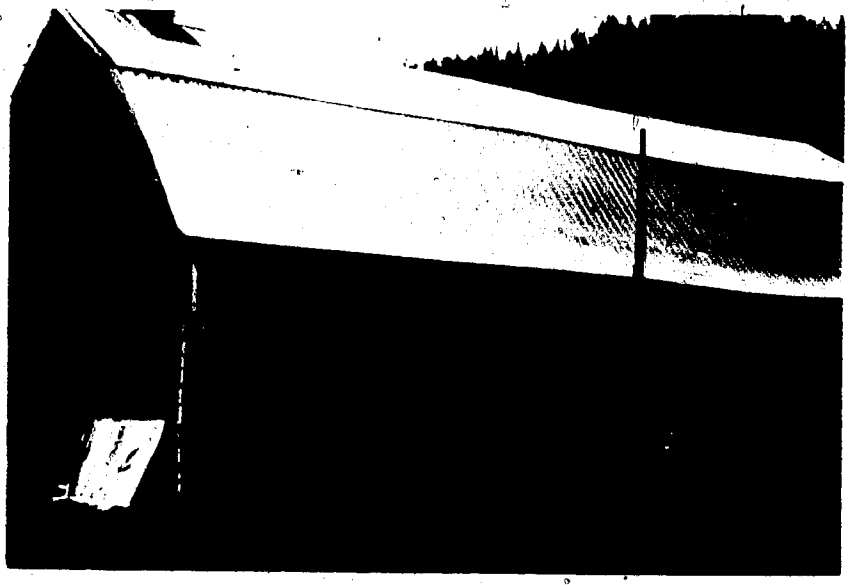


Figure 32

LOG "COW PARLOR" IN COMBINATION BARN IN GILLIES TOWNSHIP WITH ITS FINNISH-CANADIAN BUILDER. TAKEN 1977.

Figure 33

COMBINATION BARN IN WARE TOWNSHIP WITH "RED-WASH" ON WALLS & WHITE CORNER BOARDS.

Figure 34

STABLE IN LYBSTER TOWNSHIP. TAKEN 1977.

Figure 35

FINNISH HAY BARN IN LYBSTER TOWNSHIP. NOTE GAPPED ROUND LOGS ON SLIGHTLY CANTILEVERED WALLS. TAKEN 1977.

Figure 36

ROOT CELLAR DUG INTO BANK IN CONMEE TOWNSHIP. TAKEN 1977.

Figure 37

STORAGE SHED ON FINNISH SITE IN LYBSTER TOWNSHIP. TAKEN 1977.

Figure 38

HAZELWOOD LAKE LODGE, BUILT LARGELY BY FINNISH CARPENTERS OF THE GREAT LAKES PULP AND PAPER COMPANY IN 1941, MOVED FROM BLACK STURGEON LAKE. TAKEN 1977.

Figure 39

BARN RAISING ON A FINNISH FARM IN PEARSON TOWNSHIP ABOUT 1920
(From Collection of the Thunder Bay Finnish-Canadian Historical Society, Donor - J. Lankinen)

CHAPTER FIVE

SITE AND SETTLEMENT PATTERNS

Spatial Aspects and Variance

To the geographer, evaluations of settlements also have to be approached on a series of scales. The different levels of relevant space here (the building site, the farmstead, the farm, the local community, and general regional rural settlement pattern) however, each displayed wide diversities. This was only to be expected with such a lack of homogeneity in the land and to a degree the people. The Canadian Shield is far from uniform in the details of its landscape feature.[52] Moreover the Finns were not completely a unified whole contrary to common belief.[53] Beyond this, the original settlement of the area was in certain respects less systematic and less planned than might have been expected.

Despite these divergent elements, however, certain broad trends and patterns did occur. An underlying theme of functionalism versus aesthetics in placement, can be detected here. Although difficult to document, and still secondary, appreciation of scenic beauty did seem to play an unusually

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52. For further information see Robinson, J.L., Resources of the Canadian Shield. (Toronto: Methuen Pub., 1969).

53. See Kaups, M., "Patterns of Finnish Settlement in the Lake Superior Region", Michigan Academician, No. 3, Winter 1971, p. 89.

large part in the spatial aspects of Finnish settlement in the area. In examining the various scales, both the natural physical attributes and the man-imposed variables of each should be considered.

The Building Sites

Building site topography varied, but was usually fairly flat and at an intermediate elevation on the farm. Exceptions to this were those for such buildings as saunas, which occurred occasionally at lower levels to take advantage of available water courses, and hillside houses or barns. Houses were often built on the side of a bank to ease construction of a root cellar or partial basement (see Figure 41). Barns likewise frequently had a lower level for animals, but made use of the elevation differential for easy unloading of hay and other feeds from the upper storage area (see Figure 33). Separate root cellars throughout the area were invariably partially dug into the side of a bank, mainly for reasons of insulation.

Water orientation, even at this micro-scale was quite strong for certain structures. Again saunas, which required large amounts of water for steaming and rinsing, were often situated directly on the lakeshore when available. Most often, however, they were within close proximity (c. 10 m [30']) of a minor field drainage course. Some wash-houses (for laundry) and milk-cooling sheds (structures classified as sheds in the survey) were also noted place directly over a minor drainage rill. The lodge and cottage were also built directly on the lake and river shore for obvious reasons of scenery and recreational opportunities.

The placement of the building on the site was largely dictated by functional considerations, but also at least partially determined by site aesthetics. Of the 362 buildings sampled in the survey, 34% faced in the general direction of south, 32% faced east, 22% west (facing), and 12% north (facing). The natural climatic factors involved were the disadvantages of facing either the prevalent Westerlies or the occasional cold North winds of winter, as contrasted with the advantages of southern exposure with its maximum radiation effects. However, the majority of the buildings seemed to be laid out in a symmetrical pattern (eg., roof ridges running either north-south or east-west) corresponding generally with the road network (also based on "true" directions). It is debatable whether symmetry in this case, on a somewhat variable landscape, is functional or aesthetic, but probably there were elements of each. In those instances where buildings were not positioned "true" (eg. N.N.W.), it appeared as though some were randomly placed and many others were made to fit work patterns (fitting the building position to traffic flow). Nevertheless, in several instances, houses were positioned so as to maximize the appeal of the view with no particular regard for practicality (see Figure 43).

While view orientation is not unusual in later more luxurious dwellings, it is significant in these initial or "early" housing forms. Thus appreciation of the beauty of a rock face or of an expanse of valley was an important consideration in positioning houses for the

TABLE NO. 13

LOCATIONAL FEATURES

Township	Building Relationship: Near Other Buildings within 50 m	Building Relationship: Separate past 50 m	Building Orientation - Exposure: North	East	South	West	Control Number of Buildings in Township
Gorham	92	3	12/12	33/35	29/31	21/22	95
Ware	52	5	4/7	19/33	20/35	14/25	57
Lybster	90	4	16/17	31/33	29/31	18/19	94
O'Connor	10	3	-	4/31	7/54	2/15	13
Gillies	6	1	4/57	1/14	2/29	-	7
Pearson	38	3	1/2	11/27	18/44	11/27	41
Conmee	41	1	5/12	12/29	16/38	9/21	42
Marks	12	1	3/23	4/31	3/23	3/23	13
Totals	341/94%	21/6%	45/12	115/32	124/34	78/22	362

KEY: Noted Occurrences / % of Occurrences in Township

Note: Exposure refers to the direction the "front" of the building is generally facing

Finnish settler from the beginning.[54]

The Farmstead, Field and Forest

The farmstead is basically an agglomeration of the man-made features on the building site. Normally chosen was a fairly level area approximately 2 acres (0.8 hectares) to 3 acres (1.2 hectares) in size, and again at an intermediate elevation on the farm. Often the farmstead was at least partially bordered by the forest, a rocky knoll, or a drop to a valley. Orientation to surface water played some part, although drinking water was taken from wells. The major determinant, however, for farmstead position, was access to some form of a road. In the survey 83% of the farmsteads sampled were road-oriented (within 100 meters [328 ft.]) of the road.[55] Approximately 15% were basically centered in their land-holding, and 2% were clearly water-oriented.

With regard to the relationship of a particular building to others, two aspects must be considered; relative distance between buildings and associations of different building types. Of the structures sampled 94% were considered to be "clustered" or part of the "farmstead" (see Table 13). The remaining 6% were well detached from other buildings, mainly field

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54. It is noteworthy that the Finns did not have any cultural predilection (religious or symbolic) for building orientation. This was not the case with many other cultural groups as described in Rapoport, A., House Form and Culture. (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1969, pp. 74-78).

55. The percentage of road-oriented farmsteads is somewhat high due to the nature of the survey. An estimated 10% to 15% of the farms in the area could not be sampled due to restricted access.

TABLE NO. 14

FARMSTEAD POSITION

Farmstead Position of Sites

Township	Road Oriented (within 100 m)	Center of Landholding	Water Oriented (often additionally)	Number of Sites per Township
Gorham	36/78	7/15	14/30	46
Ware	30/91	3/9	7/21	33
Lybster	33/73	12/27	4/9	45
O'Connor	9/90	1/10	-	10
Gillies	5/100	-	2/40	5
Pearson	20/83	4/17	5/21	24
Conmee	17/89	2/11	7/37	19
Marks	8/100	-	3/38	8
Total	158/83	29/15	42/22	190

KEY: Noted Occurrences / % of Occurrences in Township

Note: Some sites further off the road were not sampled (access restrictions)

hay barns designed to serve remote field areas.

From the house to main barn the characteristic distance was about 35 meters (114.8 ft.) and they were normally oriented with roof ridges at similar or right angles. The sauna to house association was one of the more variable features of these Finnish farms, and again was probably due to the need for some form of surface water for the sauna. Distances between these buildings ranged from about 10 meters (32.8 ft.) to 150 meters (492.1 ft.), averaging approximately 50 meters (164 ft.). It was not uncommon to find the sauna on the very edge of the cleared farmstead area, probably for reasons such as privacy, natural landscape, a more ready wood supply and the water feature. Other buildings were usually situated near the main barn. Some roadside garages were seen, but just as often they were positioned up the driveway between the house and the main barn.[56]

Placement of the buildings again was usually quite symmetrical on the farmstead and divided in half by the rough driveway (see Map 9). Of the five to eight buildings on the farmstead, nearly all were oriented somewhat to the driveway for obvious reasons of access, with the exceptions of some of the smaller animal sheds. These buildings were found positioned off the main barn, commonly beyond it and occasionally enclosed in a corral area. Fencing was not particularly distinctive in that it was normally

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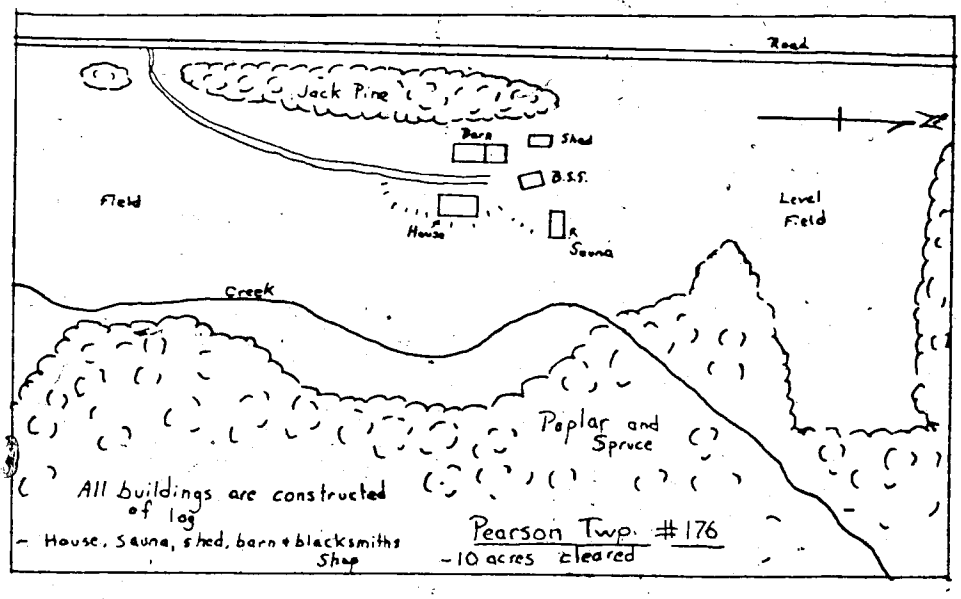
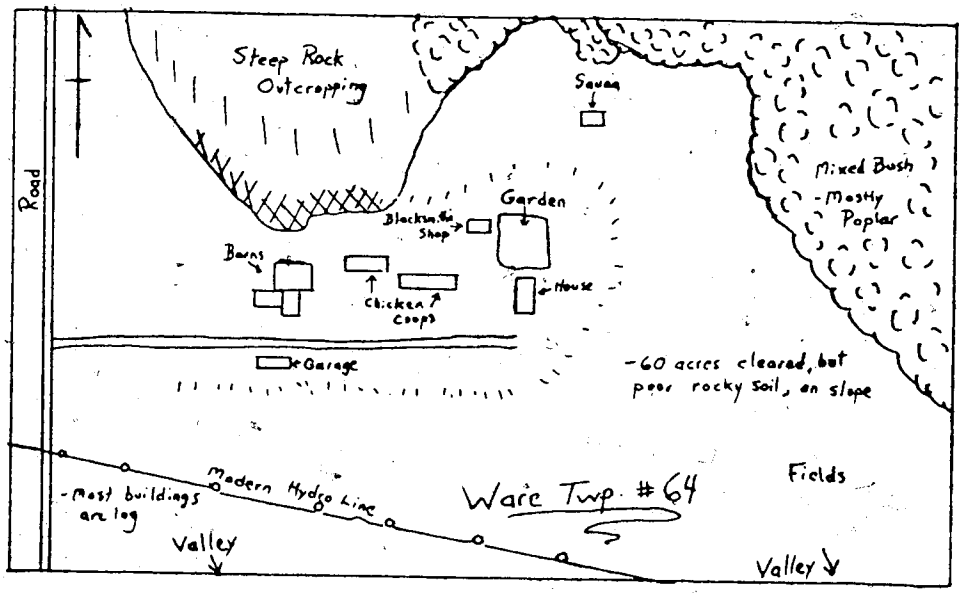
56. This tends to contradict a study's findings in Michigan, Wisconsin and Minnesota, in which roadside garages were considered a partial Finnish cultural indicator. See Mather, C., and M. Kaups, "The Finnish Sauna: A Cultural Index to Settlement", op.cit., p. 501.



MAP NO. 9 LAYOUT OF FINNISH FARMSTEAD IN RURAL THUNDER BAY (Photos #47,41,&39 taken on this site)



MAP NO. 10 LAYOUT OF ANOTHER FINNISH SITE FROM THE SURVEY

barbed wire (three to four strands on 6" [15.2 cm] softwood posts approximately twelve feet [3.7 m] apart). It is questionable, however, whether any of this was used originally, and ruins of various types of log fencing were occasionally found.

The garden was also an integral part of the farmstead, usually located off to one side of the house and away from the barn. The size of these plots varied a great deal and original boundaries were impossible to delineate. Present gardens on the Finnish farms ranged in size from 10 meters (32.8 ft.) x 15 meters (49.2 ft.) to approximately 1 acre (0.4 hectares). Usually they were quite well kept, particularly among the retired people on many of the holdings. Common produce grown included turnips, beets, cabbage, onions, carrots, and potatoes. Normally these rectangular plots were aligned with the buildings and road.

An interesting locational aspect of the farmstead was its relationship to the field areas. Quite often the main fields were well removed from the farmyard, connected only by a field road through the bush. In some cases this situation occured of necessity (limited choice of developable sites), but occasionally this was due to aesthetic-based placement of the farmstead.

Field patterns in this particular area can best be characterized as scattered, irregularly shaped patches, with relatively little of the total farm area cleared. While it was impossible to determine all of the original field boundaries, approximations based on present clearance, old fence lines,

and tree stand patterns showed that 72% of the farms sampled had less than 30 acres (12.1 hectares) cleared out of their 160 acre (64.8 hectares) total. Field sizes ranged, however, from non-existant to over 100 acres (40.5 hectares).

Field topography varied, but was usually fairly level at the lower elevations to rolling at the intermediate levels. The high elevations rarely had enough soil to support good crops, aside from having too much slope and exposure. Likewise, field shapes at the lower valley floors were slightly more symmetrical than the irregular fields of higher levels. Fields basically laid between the numerous areas of rock or of restricted slope and swamp. Sometimes forest also played a part as well, but for somewhat contradictory reasons. Land was occasionally cleared because it either possessed good stands of desirable tree species (primarily for timber harvest, with field space a secondary result) or because the area was easy to reclaim (avoiding dense stands) for field space.

Drainage of the fields was almost exclusively natural, with little attempt even towards crude surface ditching. However, most land did have enough slope to drain fairly well despite this. The exception was the flatter bottom land, on which spring planting would be delayed because of wet conditions.

The field crops were mostly hay, some grains (oats, barley and wheat) and patches of potatoes and turnips. Equipment was quite limited, usually small horse-drawn implements and a great deal of handwork was involved.

TABLE NO. 15

CLEARED AREAS

Township	Cleared Land in Acres (Approx). 0 - 9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	No. of Sites
Gorham	19/41	16/35	6/13	2/4	2/4	-	-	-	1/2	-	46
Ware	23/70	4/12	2/6	-	1/3	-	2/6	-	1/3	-	33
Lybster	13/29	10/22	8/18	3/7	5/11	-	6/13	-	-	-	45
O'Connor	1/10	3/30	1/10	-	3/30	-	2/20	-	-	-	10
Gillies	-	1/20	-	1/20	1/20	-	2/40	-	-	-	5
Pearson	9/38	6/25	2/8	1/4	5/21	-	1/4	-	-	-	24
Conmee	3/16	1/5	3/16	1/5	7/37	-	2/11	-	1/5	1/5	19
Marks	1/12	4/50	1/12	-	1/12	-	1/13	-	-	-	8
Total	69/36	45/24	23/12	8/4	25/13	-	16/8	-	3/2	1/1	190

KEY: Noted Occurrences / % of Occurrences in Township

A senior resident of Gillies township, Mr. W. Ojala, said that the first tractors did not begin to appear until around 1928. Even in the '30's tractors, trucks and cars were few in number among the settlers. The lack of machinery helps to explain both the lack of desire for more cleared land, and to an extent, the lack of clearing ability. The one advantage of having the lighter horse-drawn equipment, however, was its agility and adaptability to the rugged terrain. Use of the horse permitted some areas to be worked that would have been impossible for the early bulky tractors.

The extensive forested areas of these farms did not portray the inhospitable wilderness to the Finns, that they did to many others. Finnish settlers intensively used and appreciated the woods for many purposes and reasons. Not only could they readily construct their buildings from logs off their own property, but selling extra timber (particularly pine) provided extra money in the beginning and in slack times when it was so badly needed. Aside from this, the forest supplied such things as firewood, wildlife habitat for extra meat and fur, windbreak for field and farmstead areas, rough pasturage for domestic animals, and again desirable aesthetic qualities. Nearly all Finnish holdings had logging trails that the original settlers built and used, to the back limits of the properties. Perhaps only the French Canadians and Scandinavians could begin to match the Finns, as founding ethnic groups, in their utilization of the woods.

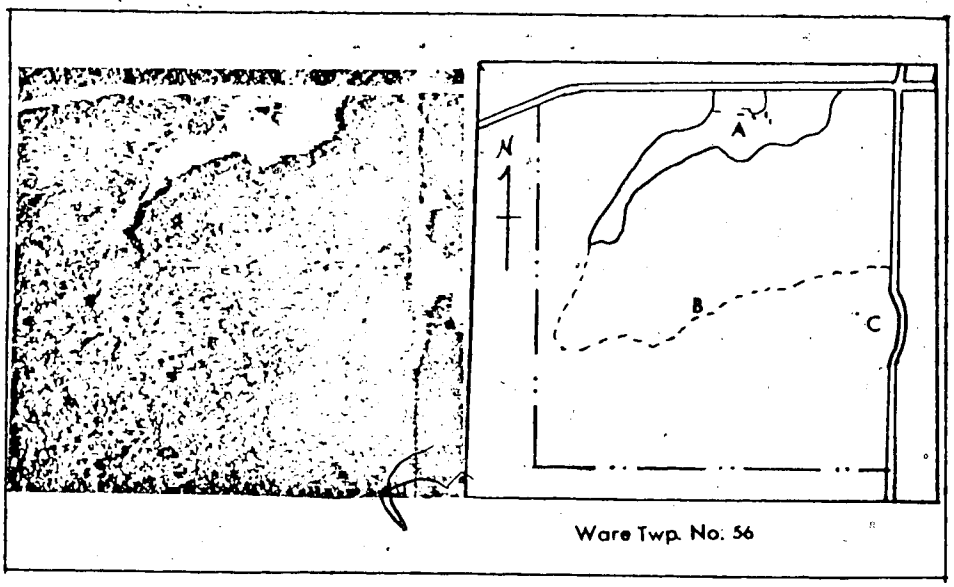
The Farm Pattern

Crown surveys that employed "lots and concessions" were used to divide

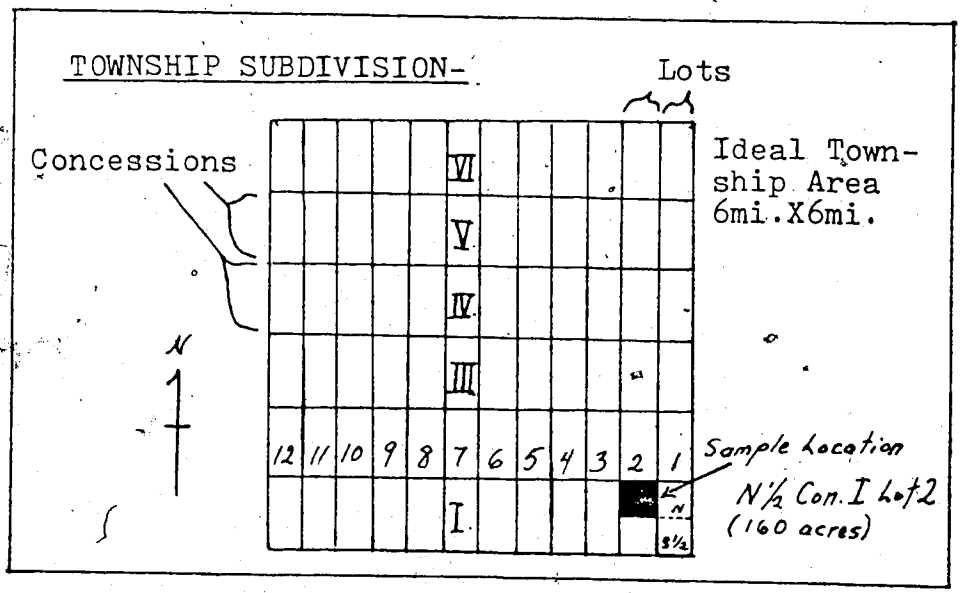
the Thunder Bay area. While theoretically township units were supposed to have dimensions of 6 miles (9.7 km) x 6 miles, actual sizes varied because of two factors. First were the physical considerations of both the Lake Superior coastline from which the survey began, and the occasional use of major rivers as boundaries in the interior. Secondly, allowances were made for settlements established prior to surveying. Therefore, a myriad of shapes and sizes were left (see Map 11). Likewise, each township's subdivision could vary from its ideal of six concessions, extending sequentially from south to north, with each concession subdivided into twelve lots (see Map 12). These were further subdivided into a north and south half for each lot. The ultimate result was supposed to be a township consisting of 144 - 160 acres (65 hectares) parcels with dimensions of one-half mile (0.8 km) x one-half mile each. An example of the variation, however, can be seen in Ware township, one of the largest units, which has eight concessions and twenty-one lot divisions.

Roads theoretically were supposed to follow each of the concession lines (east-west) and every other lot division (north-south). This was to produce a grid of 1 mile (1.6 km) x 1 mile squares, oriented on "true" directions. However, again, the rough topography and prior settlement tended to deflect roads from this theoretical organization and symmetry in actuality, in these outlying areas.

Perhaps the best way to illustrate the initial selection of the farm unit is by use of a model (see Table 16). Potential settlers in the area were normally directed to the Ontario Crown Lands Agency branch in



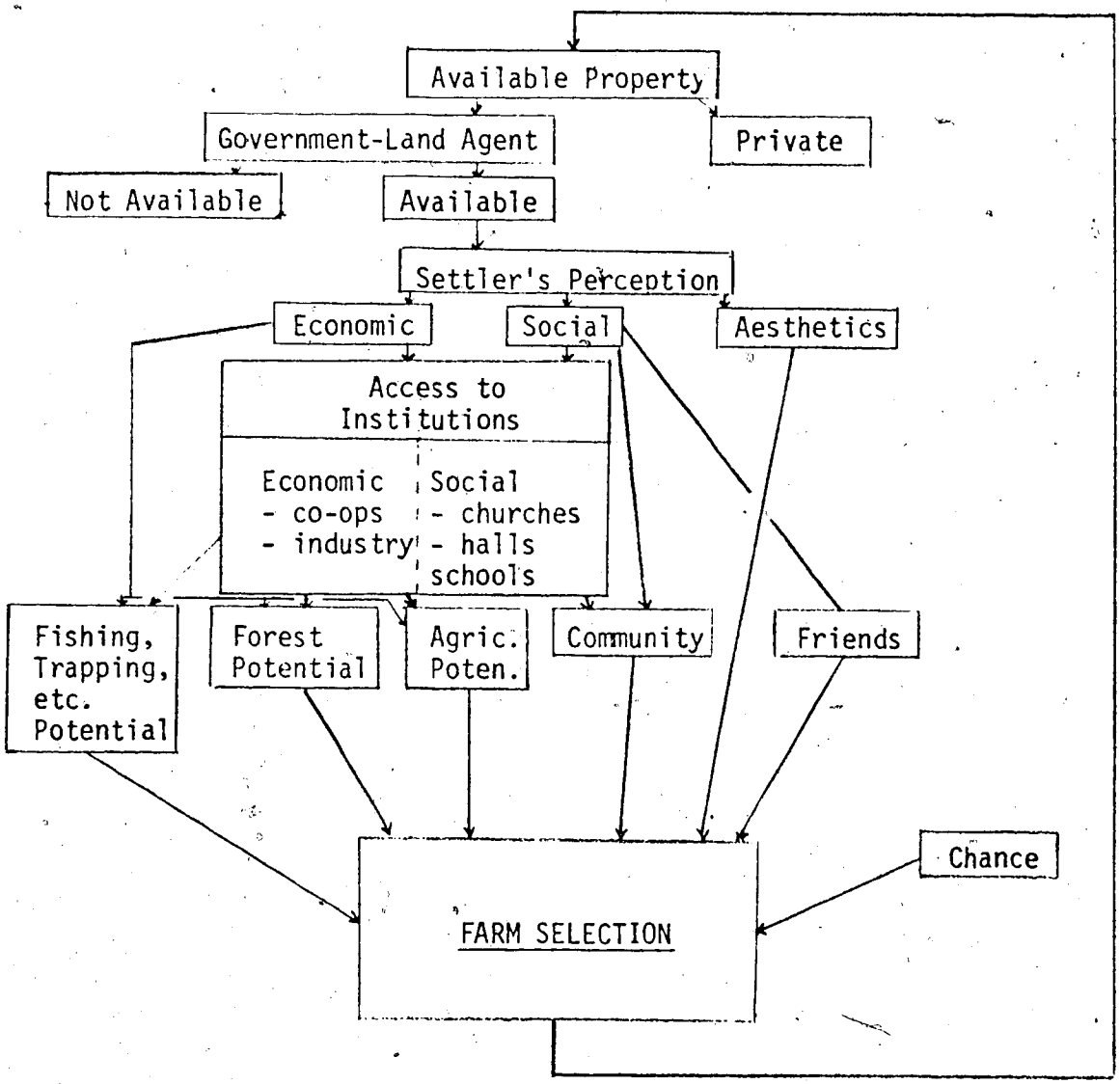
MAP NO. 11 EXAMPLE OF FINNISH FARM LAYOUT IN RURAL THUNDER BAY A.-APPROXIMATELY 15 ACRES OUT OF THE 160 TOTAL ARE CLEARED B.-LOGGING TRAILS EXTEND THROUGH THE REAR OF THE PROPERTY, CUTOVER BUSH LEFT IS LARGELY POPLAR WITH SOME SPRUCE AND A FEW PINE B.-UNDULATING LAND AS SHOWN BY THE JOG IN THE ROAD



MAP NO. 12 DIAGRAM OF TOWNSHIP SUBDIVISION

TABLE NO. 16

FARM SELECTION MODEL FOR EARLY FINNISH SETTLERS IN RURAL THUNDER BAY



Port Arthur, which supervised the distribution of government land sales and grants. There, the settlers could look over rough maps to see what was available and make arrangements for a field inspection with the government "land guide". While normally the settler had a choice between several lots in a township, it appears as though certain channeling efforts were made by the land agents. (The motives and actual power of these officials remain somewhat of a mystery.) Naturally, the time of immigration was also of major importance in land availability, with the Finns relative latecomers.

Aside from government offerings, private concerns also had property available for those who desired a better quality land and could afford to pay for it.

> "Land in Paipoonge township can be bought from private owners at $10 per acre, a credit of ten years given . . ."
>
> . . . Slightly improved farms (in Oliver township) can be had here from $2,000 to $3,000, while occasionally an unimproved farm can be bought for a low figure."
>
> - quotations from The Thunder Bay, Kenora, and Rainy River Districts of New Ontario, a promotional booklet of the Minister of the Interior, Ottawa, 1913, p. 7.

However, few Finns had either the money or the desire for debt, associated with these better sites, and most ended up on the more marginal grant land.

After the settler learned of the choices open to him, the decision had to be made as to which site he would devote the next several years of his life. He had to consider the economic prospects of the properties. Which

could yield the best timber for buildings and sales? Which offered the best agricultural possibilities - quality of soils, topography, microclimate, and access to water? Which presented opportunities for hunting, fishing or specialized commercial businesses? He also had to consider his access to economic resource institutions such as a cooperative for supplies and marketing, or an industry such as a mine, commercial logging operation or construction project that would provide that all-important supplemental income.

Social aspects also had to be taken into account in the choice of a farm. If one's only language was Finnish, then naturally one would seek the Finnish communities in the area. These communities not only had the conventional facilities such as the post office and school where Finnish generally was spoken, but had special institutions such as the churches and meeting halls that promoted the cultural values of the Finnish-Canadian way of life. In addition, there was the frequent attraction of locating next to specific friends or kin. As outlined in Chapter Three, letters back to "relations" in Finland were a factor in immigration to the area, but beyond this, many friendships also developed around arrival time.

Aesthetics on this scale also played a part in determination of location. While again difficult to quantify, situations with strong view orientation, yet limited practicality were not uncommon. It is only natural also, that scenic appeal played some role in every site selection. For the Finns, however, this appreciation for the visual aspects of the northern landscape was extremely strong. This part of their cultural

character, however, will be considered more closely in the next chapter.

The element of chance might also help to account for certain farm locations that could not be explained otherwise. Perhaps some settlers chose land, "site unseen" either on questionable advice or because of seeming necessity. Perhaps the land was inherited or awarded, or maybe simply the first site seen was chosen out of anxiety. Obviously, these were usually among the less successful ventures.

While researching the deeds of the sample townships, five significant observations were noted. First, a large number of the non-Finnish names among the titles of the "Finnish" townships were given land under the Military Land Grant (M.L.G.) in which soldiers could receive free properties. However, the forfeiture rate of these deeds was very high. Secondly, several other of the non-Finnish names were early mining claims, which again were usually cancelled. Thirdly, a large number of names, both Finn and non-Finn appeared on several property titles and were later left to revert to the Crown. It is likely in these cases that the claiments took only quick, cheap timber cutting rights with no intention of actual settlement. This practice seemed to continue on for several decades, unchecked by the government. Fourth, care in recording claim location and patent dates and even accuracy in the property situation was often lacking. Apparently there was both little concern for the legal niceties among settlers and a certain casualness on the part of the registry officials. Finally, many of the 160 acre parcels were further subdivided as time went by.

Community Delineation[57]

Finnish communities in rural Thunder Bay were fairly clearly defined social units. Community boundaries, however, had little correlation with township lines, despite the fact that surveying was effected prior to settlement. Rather, communities were delineated along the limits of institutional service areas. This theme was first explored in A Chronicle of Finnish Settlements in Rural Thunder Bay produced by the Thunder Bay Finnish-Canadian Historical Society. In their work, actual mapping of the communities was attempted by institutional criteria and brief anecdotal histories were presented for each area. While their work was good for its purpose as a local history, its spatial explanations and cartographic portrayal were lacking. These latter aspects and their geographical significances will be developed here.

The cooperatives were the economic hearts of the Finnish communities. They served not only as the supplier of essential goods, but also as the central marketing agency for the area's produce. Normally these were customer-shareholder owned, but also tied into larger organizations. The three companies involved in the area were the International Co-op Trading Company, Ltd. (with former branches located at Nolalu, Kaministikwia, Tarmola, Intola-near Toimeal, and apparently South Gillies and Devon), the People's Co-operative network (former branches at Port Arthur, Lappe,

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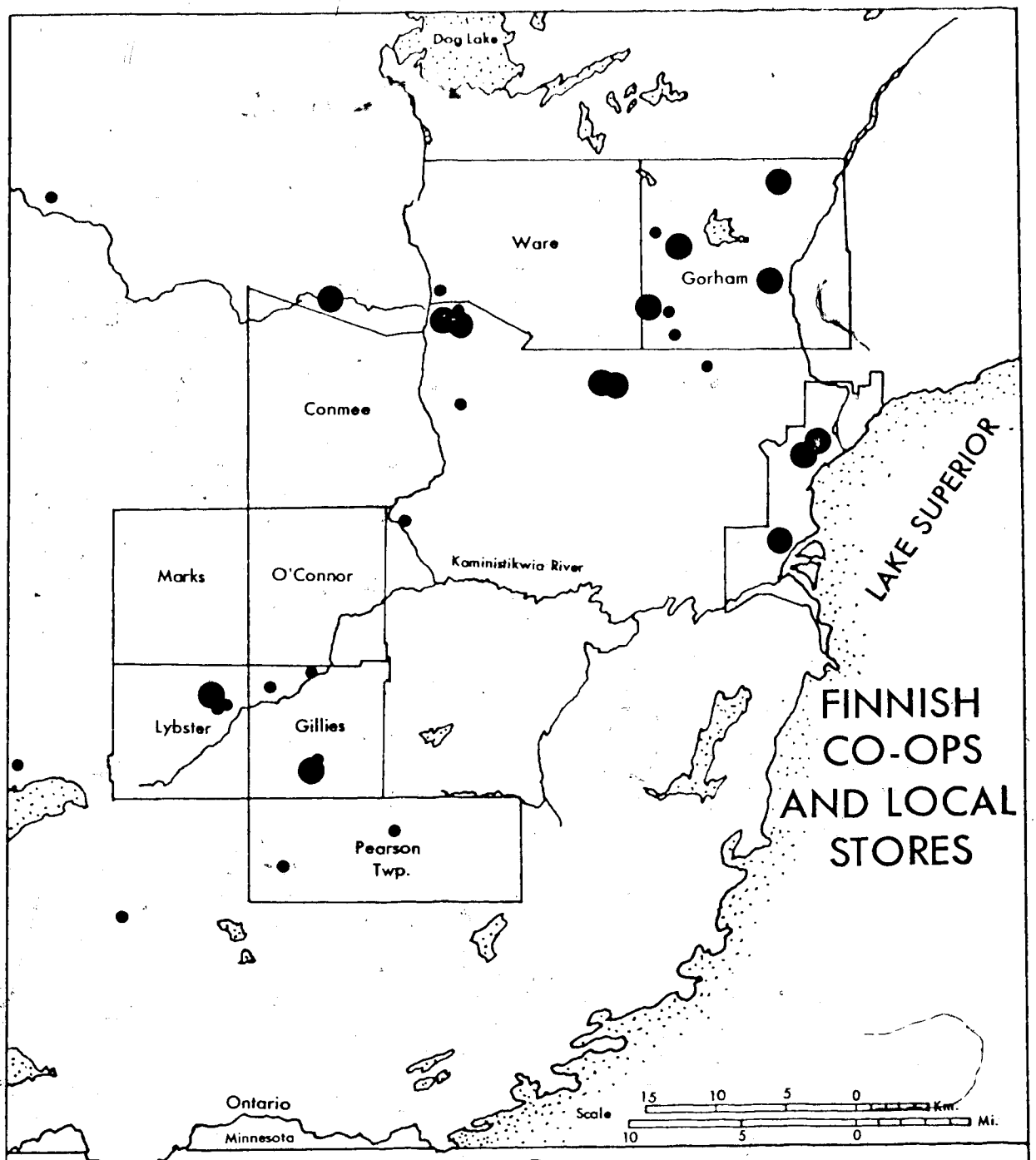
57. The term 'community' refers here to a place occupied by a group of people with strong common interests, who share certain basic facilities.



MAP NO. 13

● Finnish Co-ops

• Local stores (selected)

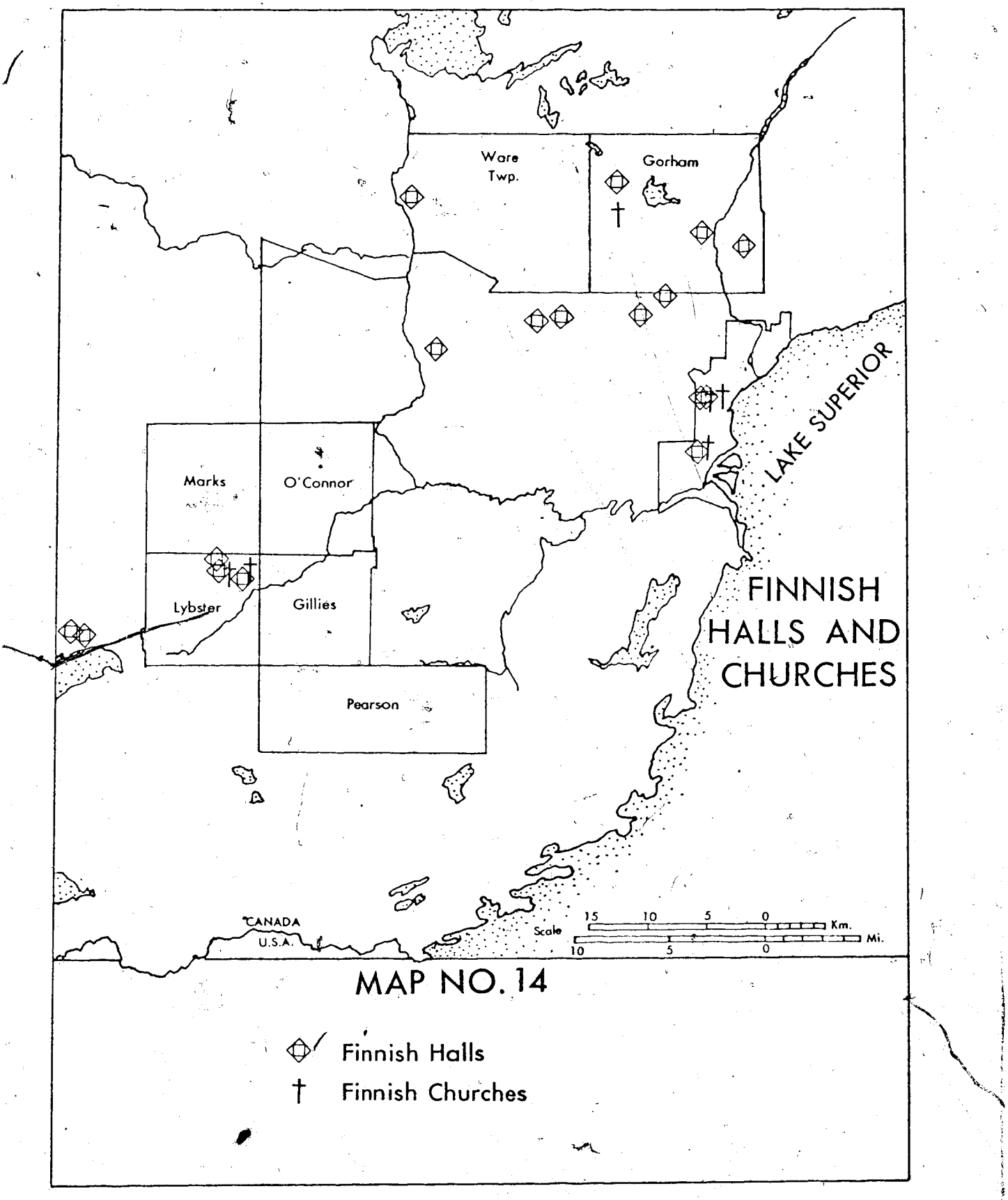
Current River, and Sunshine), and the Port Arthur Co-op (former branches in Port Arthur, Fort William, Pike Lake and Hurkett) (see Map 13).

Exceptions to the large organizational networks did appear, such as the one run by the "Intola Farmers' Supply Firm", formerly on the Dawson Road. Another similar organization was the Thunder Bay Co-op Dairy, formed to a large extent by Finnish farmers, which acted as a marketing agency that allowed smaller farming operations, particularly in the outlying areas, to compete with the large commercial concerns (of, for example, the Slate River area).

Spatially, co-ops were often shared between smaller communities, which were unable to support one individually. However, another 'stop-gap' feature was the proliferation of privately owned neighborhood stores usually run out of part of a house. On average, one or two of these could be found in each community.

What the co-ops were to rural Finnish economic life, the "meeting halls" were to rural Finnish social life. The halls were multi-purpose buildings, flexibly designed to take on any activity, whether it be a dance, wedding reception, temporary classroom (for school), or the stage for athletic, dramatic, or concert performances by local clubs (see Figure 50). Many of the halls, however, were politically oriented.

Several instances can be found where the Finnish communities, split on their political beliefs, built separate halls. While often within close



MAP NO. 14

Finnish Halls

† Finnish Churches

proximity, they would have very little exchange.[58] These were commonly referred to as the "White" or "Red" halls (the former referring to rightist political leanings, the latter leftist). While gone from most of the rural areas, examples still can be seen on Bay Street in Port Arthur (see Figure 49).

Churches seemed to play a much lesser part in the Finnish communities than they did among other ethnic groups in other areas. While active congregations of Lutherans were found in both Lappe and Nolalu, generally only the more conservative "Church Finns" would attend. Again, a large portion of the Finns of the area were strongly committed to leftest political views, with religious consideration a minor factor, if in fact, existant. In addition, the physical facilities of the churches were not needed by the Finns for social activities because of their halls. Architecture of the Finnish churches was not distinctive from other churches in the region (see Figures 52 and 53).

Schools in the early rural Finnish areas were plentiful in number, but small in scale. With limited transportation, greatly restricted tax bases, and lack of government subsidization, groups of neighbors (perhaps a dozen families per group) would jointly construct a small one-roomed structure and hire a teacher at a meager wage to educate their children.

Some schools taught initially in the Finnish language despite the

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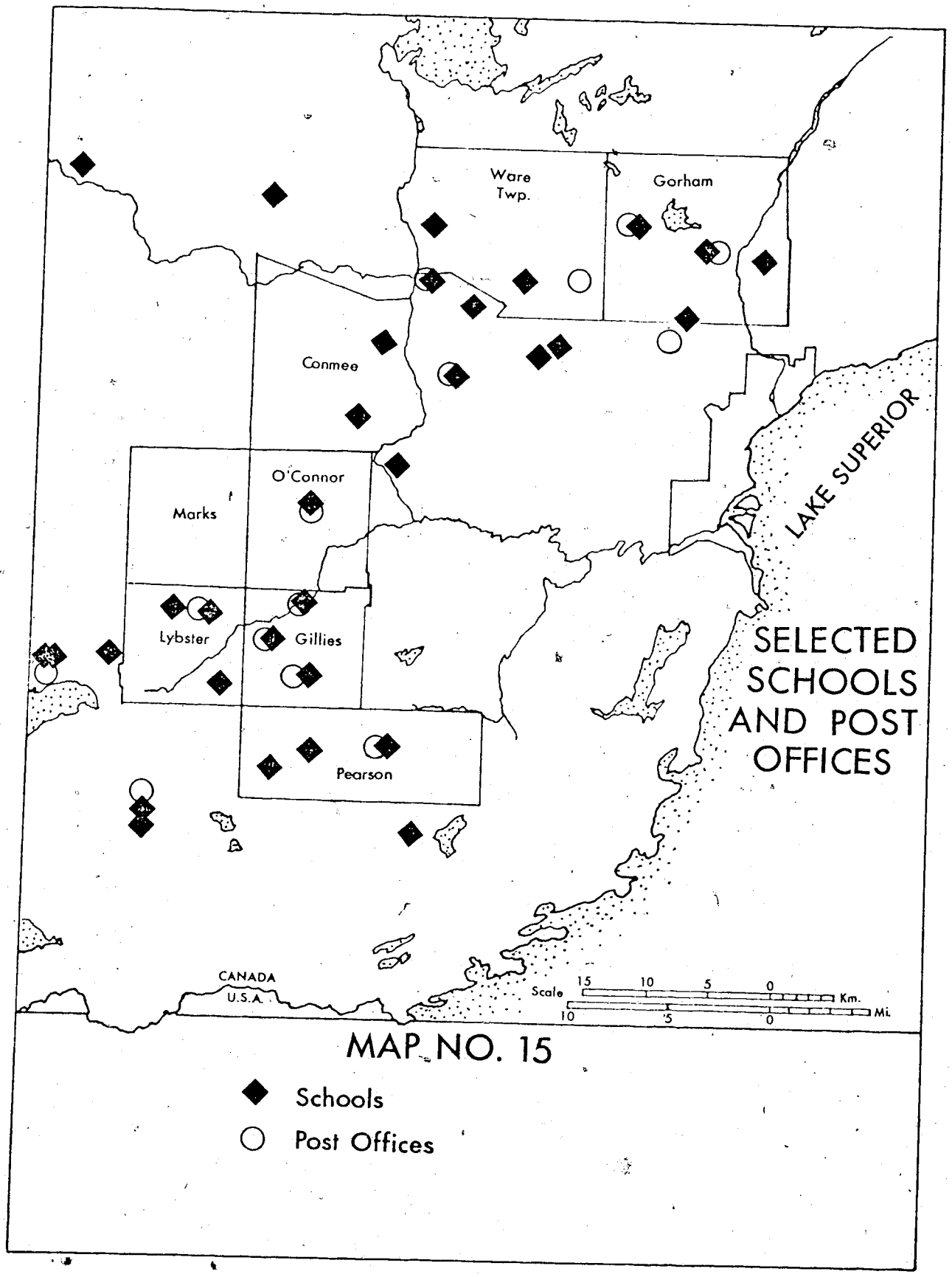
58. Accounts in interviews stated that entering the "wrong" hall was, for many, a social taboo.

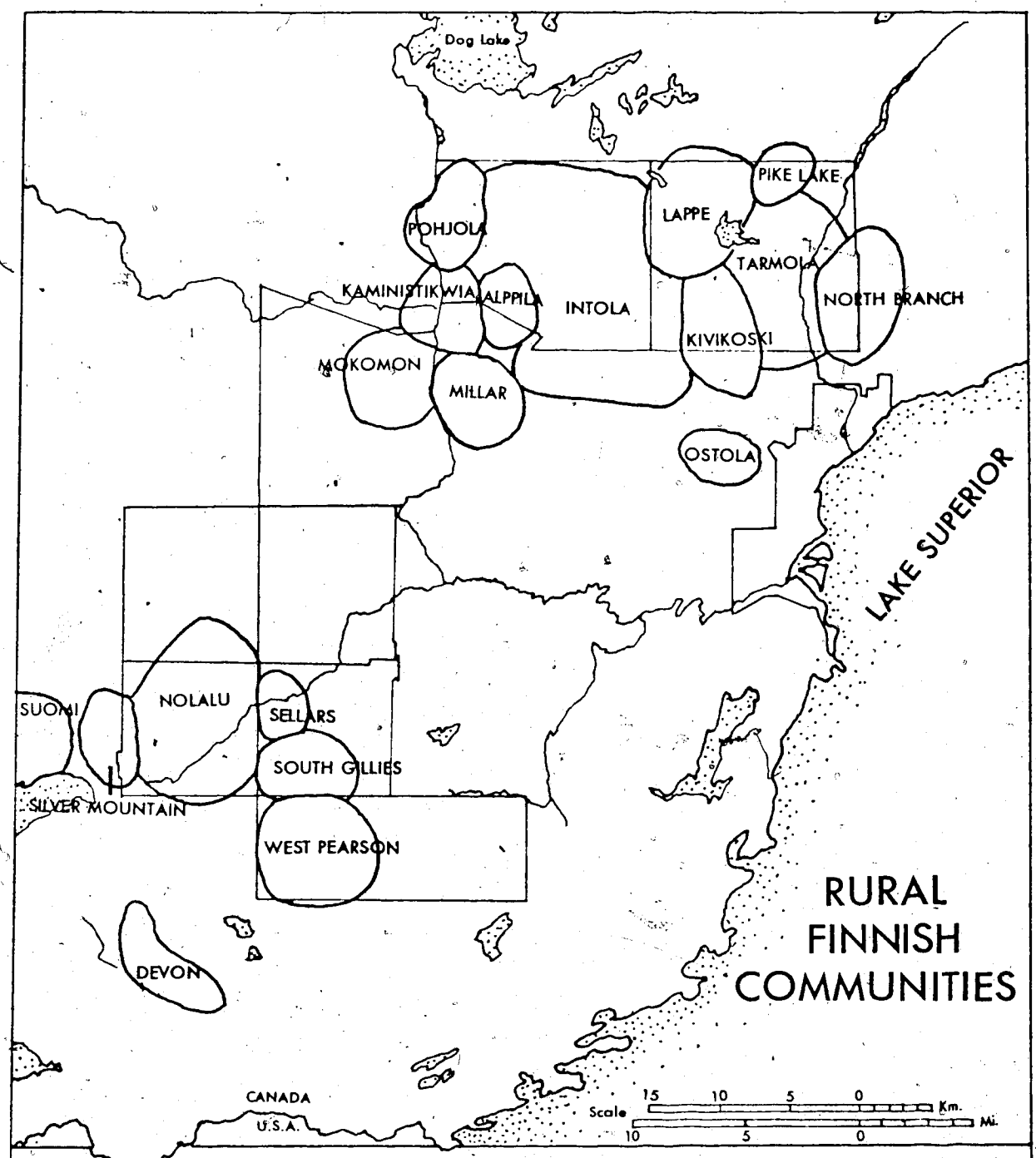

Ware Twp.
Gorham
Conmee
O'Connor
Marks
Lybster
Gillies
Pearson
LAKE SUPERIOR
SELECTED SCHOOLS AND POST OFFICES
CANADA
U.S.A.
Scale
15 10 5 0 Km.
10 5 0 Mi.
MAP NO. 15
Schools
Post Offices

occasional non-Finn student. However, lessons were in English from the beginning in other schools and eventually in all, thus confining "Finnish" to the playground chatter. Unfortunately, early records for the schools were extremely difficult to locate, making the specifics of such things as the dates of Finnish language usage and even the precise location of some of the early schools impossible to establish.

An interesting sidelight of schools in the area can be seen in the comparison of an early Finnish schoolhouse (Lybster No. 3) to that of a basically English school (Paipoonge No. 3) in one of the better agricultural developments (See Figures 54 & 55). While it is not certain how representative the English example (a large multi-roomed, brick building) is, the Finnish structure (small, one-room, log) was indeed typical for the time. While the buildings were erected within a decade of each other (the former c. 1919, the latter 1929) and are located no more than 30 kilometers (19 miles) apart their forms were radically different. Again, the relative prosperity of the peoples and the service area differential are quite apparent.

Post offices were also numerous, and were either run out of a store or from part of someone's house. While perhaps less important than the other institutions, post offices still did serve as a cohesive force, or "contact point", among a group of people to further the idea of community.

In conclusion, while communities were institutionally based, they were not based on a single institution. Rather, cohesive groups formed



MAP NO. 16

Community Boundaries (approximate locations)

– based partially on the Bay Street No. 2 Study
(Thunder Bay Finnish-Canadian Historical Society)

from overlapping spheres of influence (see Map 16). Most important was the cooperative economically, and the meeting hall socially, both of which were distinctly Finnish, in the initial settlement stage.

General Settlement Pattern

Two major questions arise from consideration of Finnish settlement in the area. First, "Why did they choose Thunder Bay?", and secondly, "Why did the rural Finns settle on the more marginal upland area?"

The choice of Thunder Bay was largely based on three factors; work availability, established Finnish community, and the physical similarity to the Old Country. A survey conducted by students at Lakehead University in 1971-1972[59] found that 48% of the Finns asked chose Thunder Bay for work reasons, 45% were Finnish community oriented, 3% gave curiosity as a response and only 3% listed the similarity of the climate to Finland. The low physical environmental response is surprising in the light of much of the written material and most of the public opinion personally encountered, which pointed to the environmental deterministic reasoning. However, it appears as though their survey was not based solely on rural dwellers who would have been more environmentally aware.

The survey does not adequately investigate all the complex factors

59. Tuominen, G., & Valila, S., "A Study of Finnish Immigration to Thunder Bay", undergraduate history assignment, (Lakehead University, 1971-72) in Finnish Archives, Lakehead University.

involved in migration of the Finnish community. What seems most likely is that the Finns chose Thunder Bay because it offered them an excellent opportunity to repeat and to some extent, to modify and improve on the Old Country lifestyle. Trades did not have to be changed drastically; they knew how to deal with and appreciate that type of landscape; and the community provided familiar social functions.

As to why the rural Finns concentrated on the marginal uplands, two possible explanations exist. First, because the Finns were one of the later groups there was a limited choice in available government lands. It is interesting to speculate, however, even if they had been given the option, whether they would have selected otherwise. Again, the deterministic factors, such as familiar aesthetics, might point to the upland preference. The answer to this, as well as other questions raised in this section, will be developed in the next chapter.

Summary

Site and settlement patterns of the Finns of Thunder Bay are somewhat harder to characterize than their architectural style, however, certain tendencies were observable. The farmstead consisted of five to eight buildings, laid out symmetrically over a level two to three acre (0.8 - 1.2 hectare) area at an intermediate elevation on the farm. The cluster was usually road-oriented, often water-oriented and at times aesthetically based. Field patterns could be characterized as scattered, irregularly shaped patches with little of the total farm area cleared. Forests covered

the majority of the Finnish holdings and were highly utilized by these settlers.

The choice of the farm unit was based specifically on the economic opportunities (such as in agriculture and forestry) and social ties (friends or kin) that the particular site had to offer. However, more general considerations were access to the social and economic institutions of the Finnish community, and the proximity to supplemental employment industries (eg., commercial forestry operations, mines, construction projects). Certain elements of chance and aesthetics also entered the selection process.

The Finnish communities were institutionally based, delineated by composite service areas. Of most importance to the community economically was the cooperative and socially, the "meeting hall". However, schools, churches and post offices were also involved.

General settlement patterns raise questions about why the Thunder Bay area was chosen by the Finns and why the rural Finns settled on the marginal upland. However, these questions can not be properly explained without examining traditional Finnish settlement.

Figure 40

SAUNA ON RIVER SHORE IN PEARSON TOWNSHIP. TAKEN 1977.

Figure 41

FINNISH HOUSE WITH PARTIAL BASEMENT DUG INTO HILLSIDE, BUILT APPROXIMATELY 1928, PEARSON TOWNSHIP. TAKEN 1977.

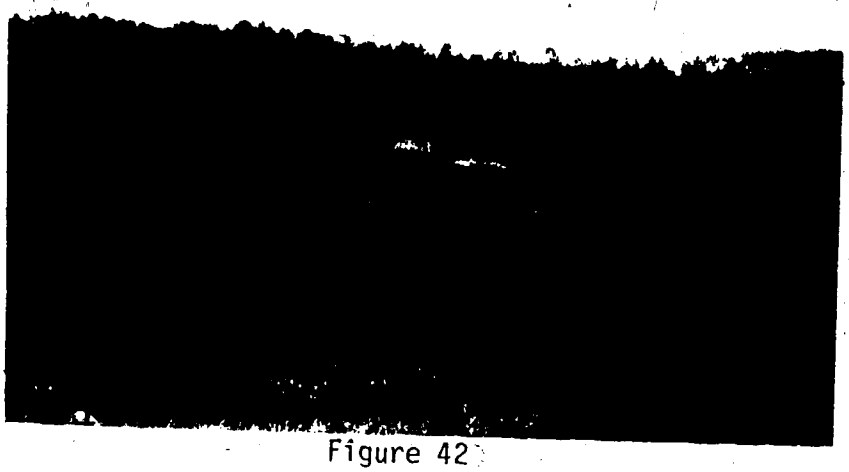


Figure 42

FIELD HAY BARN ON A FINNISH SITE IN WARE TOWNSHIP. TAKEN 1977.

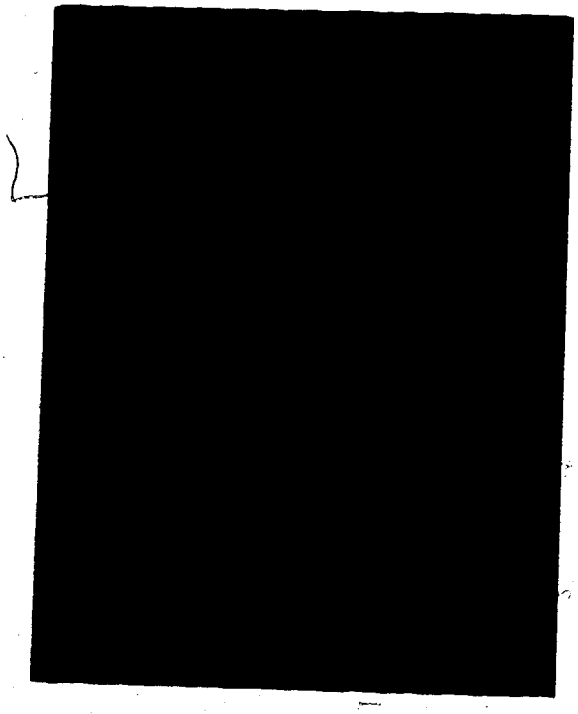


Figure 43

VIEW ORIENTATION OF FINNISH DWELLING IN PEARSON TOWNSHIP. SEE MAP NOTE ROCK SILL THROUGH MAIN WINDOW.

Figure 44

FINNISH FARMSTEAD IN INTOLA AREA, ABOUT 1911
(From Collection of the Thunder Bay Finnish-Canadian Historical Society, Donor - Ranta)

Figure 45

FINNISH FARMSTEAD IN LYBSTER TOWNSHIP. NOTE BUILDING SYMMETRICAL ALIGNMENT. TAKEN 1977.

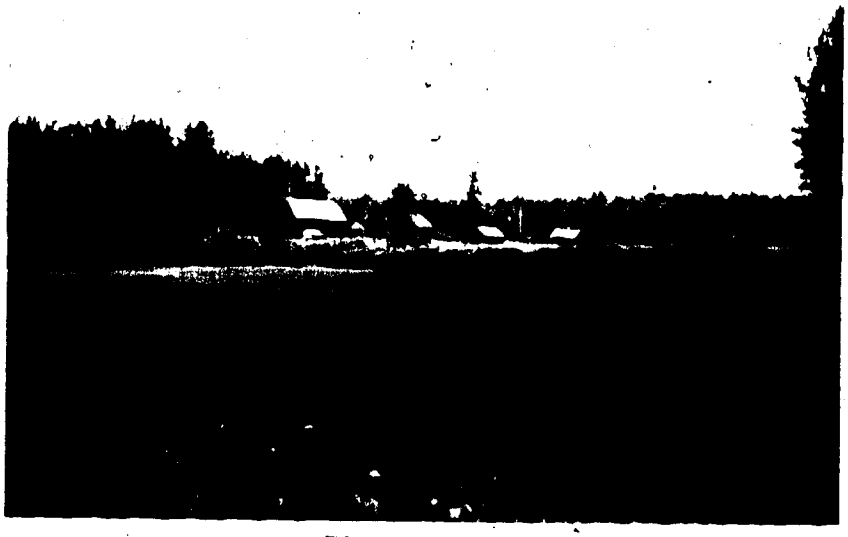


Figure 46

FINNISH FARM IN PEARSON TOWNSHIP. TAKEN 1977.

Figure 47

ANOTHER FINNISH FARM IN PEARSON TOWNSHIP. TAKEN 1977.

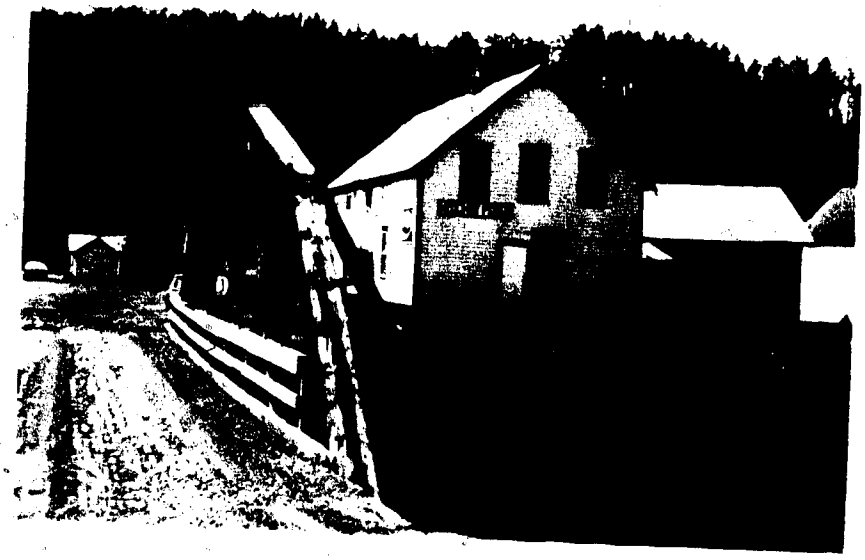


Figure 48

OLD CO-OP BUILDING IN VILLAGE OF NOLALU, LYBSTER TOWNSHIP, BUILT 1909, PARTIAL LOG STRUCTURE COVERED WITH SHIPLAP. TAKEN 1977.

Figure 49

BAY STREET IN PORT ARTHUR WITH THE PEOPLES CO-OP, THE "SMALL FINN HALL" ("RED" HALL) BUILT 1914 AND THE "BIG FINN HALL" ("WHITE" HALL) BUILT 1910. TAKEN 1977.

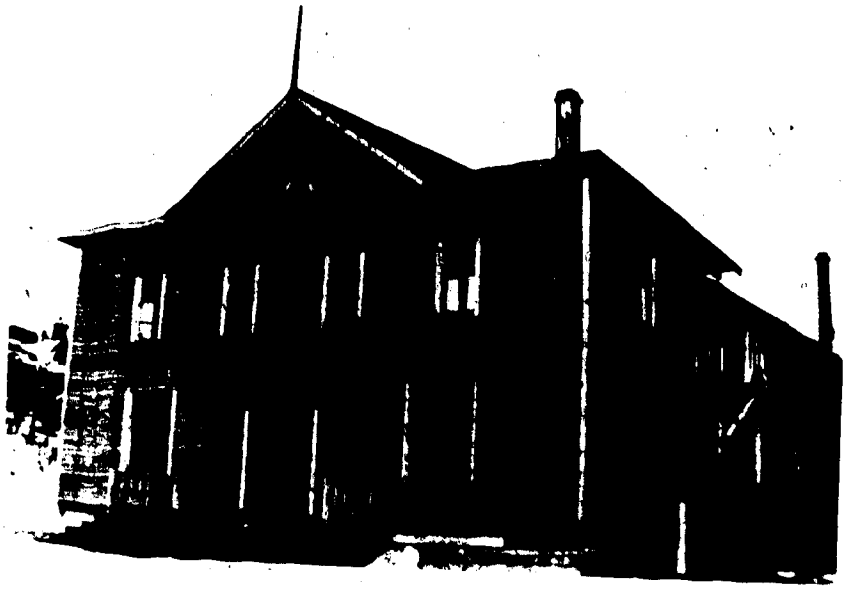


Figure 50

EARLY PHOTO OF THE POHJOLA (DOG RIVER) HALL, BUILT 1933 IN WARE TOWNSHIP (From Collection of the Thunder Bay Finnish-Canadian Historical Society, Donor - V. Teras)

Figure 51

FORMER TOIMELA POST OFFICE AND PRIVATE RESIDENCE IN WARE TOWNSHIP, PARTIAL LOG STRUCTURE COVERED WITH SHIPLAP. TAKEN 1977.

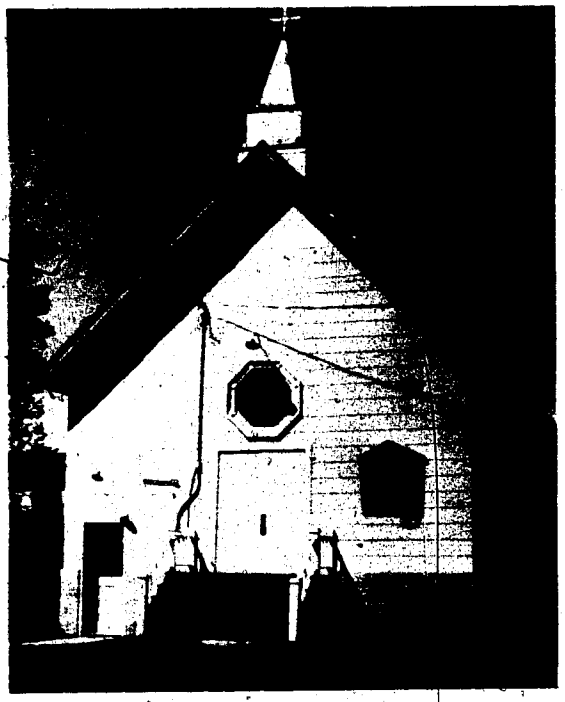


Figure 52

LAPPE LUTHERAN CHURCH, GORHAM TOWNSHIP. TAKEN 1977.

Figure 53

FORMER LUTHERAN CHURCH IN LYBSTER TOWNSHIP NEAR NOLALU. TAKEN 1977.

Figure 54

PAIPOONGE SCHOOL NO. 3 MULTI-ROOMED, SOLID BRICK EXTERIOR. TAKEN 1977.

Figure 55

LYBSTER SCHOOL NO. 3. NOTE WALL-CHIMNEY AND INSUL-BRICK ROCK-FACE OVER LOG WALLS. TAKEN 1977.

CHAPTER SIX

CULTURAL CARRY-OVER AND THE SIGNIFICANCE OF THE FINNISH IMPACT

Lifestyle Transition

The natural physical similarities between Finland and Northern Ontario are well known.[60] Climate, geology, hydrology, soils and vegetation are strikingly alike, with strong subregional parallels. In migrating then, the Finns did not dramatically change the type of physical environment to which they were accustomed. Rather, the main difference in their new geographic setting was a lessening of cultural restrictions. Here with limited supervisions, they were relatively free to make their own choices and create their own lifestyles. As with most immigrants, this was a process of trade-offs, seeking the best from their cultural past, yet fulfilling some former dreams through innovation, and adapting to the features (which were either desired or imposed) of the new nation. While many of the more adaptable newcomers chose the economic advantages of the city, others preferred to resume the rural lifestyle, yet with certain modifications. These alterations, however, were very limited in the initial stages of settlement.

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60. As noted by Ehlers, E., "Recent Trends and Problems of Agricultural Colonization in Boreal Forest Lands", in Frontier Settlement, Ironside, R.G., Proudfoot, V.B.. et.al.(eds.). (Edmonton: Department of Geography, The University of Alberta, 1974, p. 60).

W.R. Mead stated that the development of most farms in northern Finland could be characterized in six stages: three building stages and three clearing.[61] The building sequence was first the sauna, second the animal barn, and third the farm house. Less distinctive were the clearing stages of stump destruction, fencing of fields, and the establishment of a permanent cover crop. Mead went on to refer to the importance of the income from the bushlot . . .

> As the frontiers between the forest and farmed land have stabilised, it becomes apparent that on this farm, as on so many Finnish farms, a substantial contribution must derive from the woodland.[61]

He then discussed such things as woodland pasturage, the importance of the farmer's wife in farm maintenance and seasonal activity rhythms (which he actually charted, see Table 32). The agricultural base of the "small holding" was mixed.

> One or two heifers are maintained with their weaning calves, one horse, one sow and half a dozen chickens. . . . The bulk of the (field) area is therefore under grass or fodder crops (oats, roots, clover).[61]

In conclusion Mead stated . . .

> A limited amount of farm income derives from the animals, most of their produce being consumed by the family. It is, in other words, a marginal subsistance venture; capital for the development, if not the maintenance of which comes at best from the woodlot or from direct outside subsidy.[61]

His descriptions, while referring to Finland, could also apply

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61. Mead, W.R., An Economic Geography of the Scandinavian States and Finland. (London, University of London Press, Ltd., 1958, p. 167).

well to the Finnish settlements in rural Northern Ontario, with only minor qualifications. First, certain of the Finnish farms in Thunder Bay did have more animals than mentioned above. The egg business, for example, was taken up by many farm wives for extra money. Secondly, the the outside subsidy that Mead referred to in Finland, was probably direct government aid. In Thunder Bay, the only subsidy was from outside jobs in resource or construction industries. However, similar supplemental work was also carried out by many in rural Finland.

Finnish Folk Architectural Transfer

The Finns are generally credited as being the first to bring European log structure styles to North America through their settlement with the Swedes in Delaware in 1638.[62] It has been said of this small colony that . . .

> Transplanted Finns carried their customs and manners to the banks of the Delaware almost intact. Old skills inherited from their ancestors were put to steady use in the great forests of North America.[63]

Not only were the Finns first, however, with these log buildings, but their distinctive structures have proved to be among the most lasting; a fact which can be verified by the continued existence of some of their first

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62. See Weslager, C.A. The Log Cabin in North America: From Pioneer Days to the Present. (New Brunswick, N.J.: Rutgers University Press, 1969, p. 150).

    Also see Olin, S.C. Finlandia: The Racial Compsoition, the Language and a Brief History of the Finnish People. (Hancock, Michigan: The Book Concern, 1957, p. 140).

63. See Engle, E. Finns in North America, op.cit., p. 20.

buildings.[64]

> The Finns, with their natural atunement to the forests, were skilled craftsmen in several forms of log housing; they used both round and dressed logs, and their methods of corner timbering were unique. Even though family names were sometimes changed, shortened, or appeared to be Swedish, it was the characteristic Finnish log cabin that has allowed historians to track the original builders.[65]

While it has proved difficult to assess the impact of this early colony, certainly there was an influence from this base on later colonial developments of other peoples. Likewise, later enclaves of Finns, particularly in the Great Lake states, displayed a traditional architectural style which was highly respected among settlers.

The Finns, however, were not the first to bring log structures to Thunder Bay, and in fact, they could be considered the last. The French, British, Germans and others had built with logs prior to the relatively late Finnish settlement. Many of these earlier settlers, in fact, already had switched to frame techniques before the major waves of Finns came. The Finnish settlers upon arrival, though, brought a new sophistication to log construction in the area. Ironically, this "new" skill was actually a display of design and dexterity steeped in many centuries of Finnish tradition. Log beams were hewn by the Finns in a way that functionally could not be improved upon for strength and fit, and for appearance, presented a neat face. Similarly, cornering as a rule was so tight rot was no longer

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64. See Engle, E., Finns in North America, op.cit., p. 19, and Weslanger, C.A., The Log Cabin in North America, op.cit., pp. 166 & 167.

65. See Engle, E., Finns in North America, op.cit., p. 18.

a major immediate problem and visually, their log houses were often mistaken for frame at a distance.

The construction techniques found in the Finnish log structures in Thunder Bay often reproduce almost identical structures found in Finland. Certainly not all the various regional architectural styles of Finland can be seen in Thunder Bay. Nevertheless, the generalized Finnish style can be traced from one country to another.

The main features of the general Finnish style have been set out by J.G. Grano, the Finnish geographer, in his descriptions of traditional "peasant habitation".[66] With regard to houses, Grano pointed out that most were rectangular in shape, but sometimes had L-shaped "wing-type" floor plans. They were mostly single story, with the common gable roof predominant. Practically the sole building materials used were log, but some clapboarding appeared in the more affluent areas. Shingles (wooden) were the most common roofing material. Porches, either open or closed, were an "important subsidiary feature which lend form to the building". The colour of the dwelling was usually unpainted natural grey (from weathering) in the more outlying areas, but could be painted with lighter colours such as white, light yellow, and light brown in the more affluent areas. Red staining was also common. Often corner boards and window trim were painted, usually white.

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66. Grano, J.G., "Settlement of the Country", in Suomi: A General Handbook on the Geography of Finland, Grano, J.G. et.al.(eds.). (Helsinki: Geographical Society of Finland, 1952, pp. 358-361).

Barns, he noted, were also built of logs in the more outlying districts and were usually larger than the dwelling house. The function of the barn was mixed, providing shelter for a variety of animals and a hay loft. The stable either was part of the large barn or an entirely separate building (often multi-chambered and with a small hay loft). Outbuildings were generally unpainted and were frequently roofed with materials other than shingles, such as board or birch bark.

This description, although referring to rural Finland, could also apply quite well to Finnish settlements in rural Thunder Bay. While Grano also spoke of other elements not found in Thunder Bay (to be discussed later), his general summary holds true for this region.

Massive amounts of research on Finnish folk architecture, farmstead layout and other folk traditions have been published by the "Svenska Litteratursaalskapet I Finland" (Swedish Literary Society in Finland) in their Folkloristiska Och Ethnografiska Studier series. While most of their work has been directed at the "Swedish" population of Finland, both of the two major concentrations of Swedo-Finns (along the coasts near Vaasa and near Turku) are located in southwest Finland, near the districts of origin of most of the Thunder Bay Finns. Although a few distinctive Swedish features can be detected in their illustrations (such as decorative points and fireplace structure), the basic Finnish style is clear, with many relevant regional elements shown. In Valter Forsblom's Sydosterbottniska

allmogebyggnader[67] (South Ostrobothnian Folk Architecture) for example, of 1916, the "saddle-hewn" beams and "lock-notch" cornering is found on nearly every building and many of the photographed features are nearly identical to those found on some of the Thunder Bay sites (see Figure 58). A later, 1931, article by Forsblom in a subsequent series Allmogebyggnader i Esse[68] (Folk Architecture in Esse), also had both similar general characteristics and regional specifics such as roofing styles and building layout (see Figure 59).

In a series of the "suomalaisen Kirjallisuuden Seura" (The Finnish Literary Society), Albert Hamalainen examined historic building traditions of central Finland in Kesi-Suomen Kansanrakennukset: Asuntohistoriallinen Tutkimus, published in 1930. Here again many of the general construction features such as the "saddle-hewn" beam, "lock-notch" corner, the pole-birchbark roofing, and specific building types parallel much of that found in Thunder Bay.

It would appear that only minor variations occurred in the transference of building types from Finland to Canada. While general layout and construction were much the same, roof materials changed slightly. The pole-birchbark style remained identical, shakes, however, changed from poplar to mixed wood in Finland to cedar to mixed wood in Canada. Cedar was also used in Canada for sills and foundation posts occasionally. However, cedar

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67. Volume I of the series, published in Helsinki.

68. Volume II of the series, published in Helsinki.

was not used as much by the Finns in Canada as by other ethnic groups, perhaps because they were not familiar with it in the home country. (Cedar does not commonly occur in Finland.) Thatched roofs, which could be seen occasionally in remote areas of Finland during the early twentieth century, were not found at all in the Thunder Bay area.

Other differences included the use of stone. While large stone-walled foundations and even stone barns could be found in certain of the more prosperous areas of southwest Finland, they were almost non-existant in Thunder Bay. It is suspected that the time element differential accounted for this. In the new land the settler was in a greater hurry to get established and thus chose materials and methods which were easier to use. Even the log sill arrangements in Finland seemed more complex than found in the survey. The practice of "red wash" staining[69] would also seem to have been more common in Finland, although it could be found on several sites in the Thunder Bay area. Fireplace-stove refinements too, seemed to have taken place in the transfer. While in Finland it would appear that fireplaces in the main dwelling were built of stone or claybrick, in Thunder Bay even in the early times, a metal stove was connected to a mid-wall brick chimney (see Figures 25 and 27). All of these changes, however, were rather minor.

When looking at particular types of buildings, again the most

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69. "Red wash" was a red powder (ochre based) which, when mixed with water, could be applied as a wood stain.

distinctive of the Finnish farm was the sauna. Both the concept and design were transplants from Finland with only minor modifications (see stove styles in Chapter Four). The significance of this structure to the Finns again must be emphasized.

> A rune of Kalevala says that Kotihenki, or the 'home spirit' dwells not in the house, but in the sauna and the Finns believed this with all their hearts. Since ancient times, sauna had been associated with birth, rite-of-passage, love, health and death. To the Finns in America, no matter how poor they were or how humble the building, sauna gave them a stability and link with the past that was almost as necessary as food or shelter.[70]

The distinctive hay barn was also a very clear example of carry-over. With round legs, gapped for ventilation and walls often slightly cantilevered for drainage and ease of unloading, the Finnish hay barn was a characteristic of the fields of both countries (see Figures 66 and 67). Referring to the Finnish immigrants in the Great Lakes region, A.W. Hoglund said:

> They cut logs and built hay barns in the fashion of their native Northland. Such barns could be built with little cash outlay for labor and materials.[71]

Another building displaying a strong degree of architectural transfer was the threshing barn or riihi. The barn with drying room and separate threshing room with raised threshing floor, was formerly found only in certain areas of southwestern Finland.[72] A near-classic example, however

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70. Engle, E., Finns in North America, op.cit., p. 53.

71. Hoglund, W.A., Finnish Immigrants in America: 1880-1920, op.cit., p. 23.

72. See Atlas of Finland: 1925. Section No. 23, Chart No. II

can also be found built by a Finn in Gillies township in the Thunder Bay area (see Figure 70). The need for these structures was lost somewhat in the transfer, though, because of the mechanization here, and only the one example was sighted.

Transfer in the Farmstead and Overall Farm Pattern

One of the most common generalizations about the Finnish farmsteads in North America is the large number of buildings found on them.

> Finnish-American homesteads were different from those of other Americans; usually they had smaller buildings, but more of them.[73]

Cotton Mather and Matti Kaups noticed that Wilson, Davis and Van Cleef had all commented on this feature, although they had not found it all that significant.[74] While this certainly was a characteristic of the Finnish farms (as found also in the survey), it was not unique to the Finns. Other Nordic groups, and even such people as the Ukrainians, often had a multitude of buildings on their farmsteads. What was more distinctive however, were the types of buildings erected and their layout on the farm

In Grano's description of the "peasant home" in Finland,[75] he cited the traditional composition as including the house, the mixed barn, the storehouse, a few small animal sheds, the hay barn, the sauna and a

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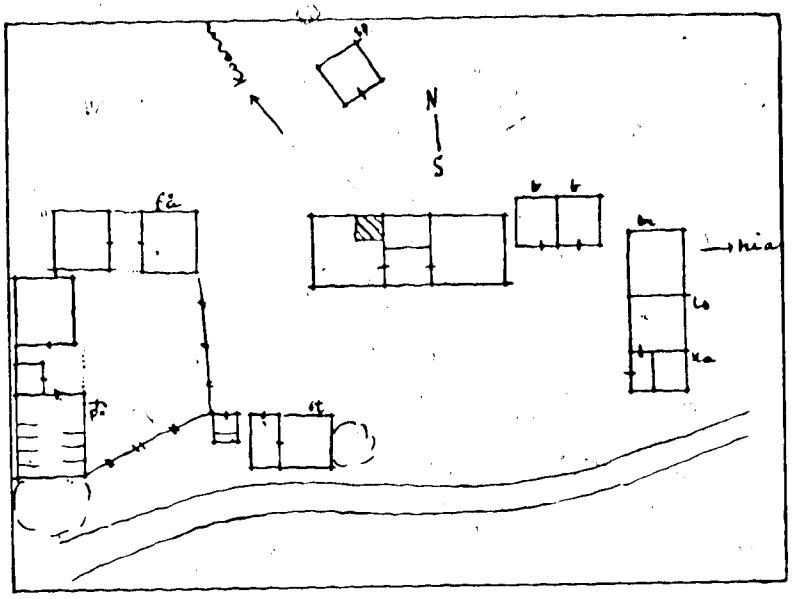
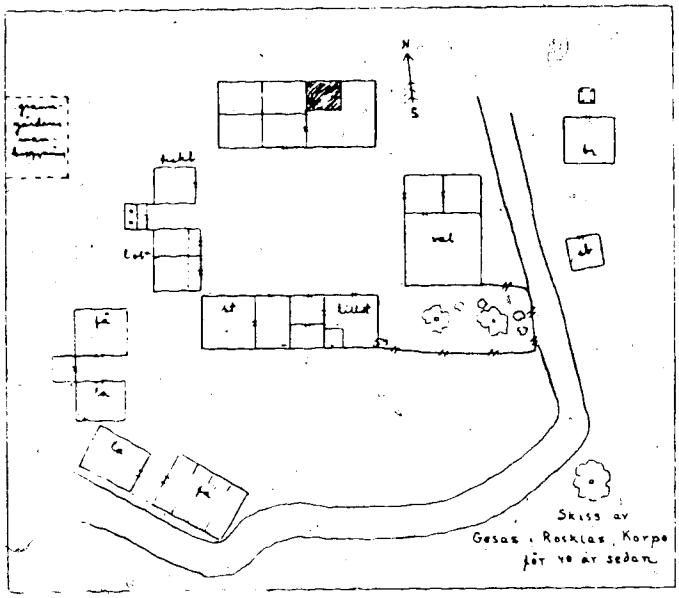
73. Engle, E., Finns in North America, op.cit., p. 48.

74. Mather, C., and Kaups, M., "The Finnish Sauna: A Cultural Index to Settlement", op.cit., p. 501.

75. Grano, J.G., "Settlement of the Country", op.cit., p. 361-365.

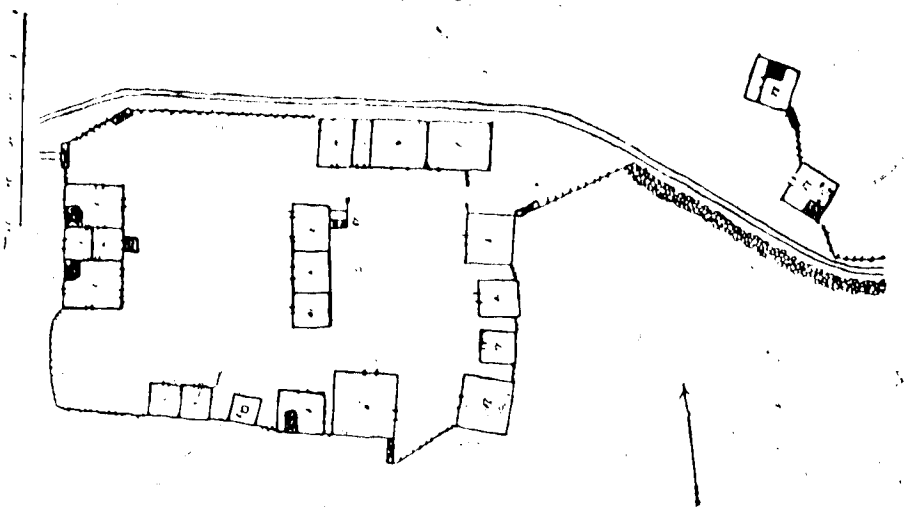


MAP NO. 17

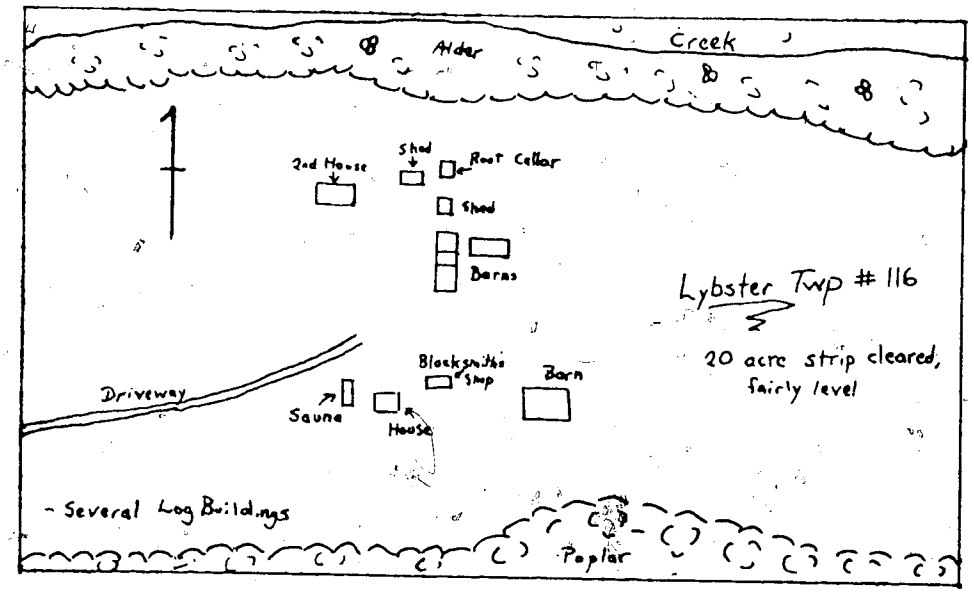


MAP NO. 18

EXAMPLES OF EARLY FARMSTEAD LAYOUTS IN SOUTHWEST FINLAND
(From Appelgren,A. "OM BYFORMEN OCH GARDSTYPERNA I ABOLANDS VASTRA SKARGARD" in FOLKLORISTISKA OCH ETNOGRAFISKA STUDIER IV.,op. cit.,Helsinki,1931,pp.202



MAP NO. 19 LAYOUT OF AN EARLY FARMSTEAD IN SOUTHWEST FINLAND -NOTE SYMMETRY & ALIGNMENT (From Forsblom,V.,"ALLOGEBYGGNADER I ESSE"in FOLKLORISTISKA OCH ETNOGRAFISKA STUDIER IV., op.cit., Helsinki,1931,pp.67)



MAP NO. 20 LAYOUT OF A FINNISH SITE IN RURAL THUNDER BAY -COMPARE CLUSTERING, ORIENTATION AND RELATIONSHIPS OF BUILDINGS WITH MAP NO.19

granary-threshing barn, with the latter three usually being separated from the farmstead cluster. He also commented on the symmetry of the layout saying:

> Unless this arrangement is obstructed by topography, the various buildings constituting the farmstead are generally constructed at right angles to each other or are all in the same direction.[76]

While in early times in Finland, this often resulted in a tight pattern with the buildings and fences arranged to form a small closed rectangle, by the turn of the twentieth century, it had begun to open up. Despite the opening, however, the layout still took on a generalized rectangular to U-shaped pattern. Again, Grano's descriptions would also apply fairly well to the Finnish farms of Thunder Bay, as would Smed's characterization of farmstead site elevation.

> Farmsteads are very often located on rocky or till-covered hills which protrude through the sediment cover and provide a firm, dry site, leaving the fine grained deposits entirely in arable.[77]

While farmsteads were usually not on the hilltops in the Thunder Bay area, because hills are higher here, most were on the intermediate slopes for the reasons described above.

Another distinction of the Finnish farms, was their relatively small amount of cleared land. While in North America average farms were approximately four times the size of those which they had left in

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76. Grano, "Settlement of the Country", op.cit., p. 362.

77. Smeds, H. "Finland", in A Geography of Norden, Sømme, A. (ed.). (Toronto: Heinemann, 1968, p. 168).

Finland,[78] cleared acreage remained the same. In 1910, according to Smeds, 68% of the farms in Finland had less than 24.7 acres (10 hectares) cleared.[79] Again, in the Thunder Bay survey of Finns 72% of the farms sampled were estimated to have less than 30 acres (12.1 hectares) cleared. Therefore, despite fitting into a new survey system (providing 160 acres/ 65 hectares per farm), farm activity, as reflected in cleared area, remained the same.

Transfer of the General Settlement Pattern

The carry-over of general rural settlement pattern can best be approached in three ways: site types, population dynamics, and socio-economic institutions. With regard to site types, Grano set out a number of descriptive categories for site classification of Finland.[80] The two major types were "coastal or shore dwellings" (which were water-oriented and scattered over much of the country), and the "hill or Vaara" settlements (which were on the higher, forest clad hills of eastern Finland). Within each of these, were other mixed descriptive elements pertaining to orientations to forest, fields, or roads, thus producing categories like "shore-field" or "forest-road". Esker settlements were also found spotted over southern Finland.

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78. Based on 1920 Finnish government enumeration figures, see Brander, U., "Agriculture", in Finland: The Country, Its People and Institutions. (Helsinki, Otava Pub. Co., 1926, p. 318); and a North American figure of 160 acres (64.8 hectares).

79. Smeds, H., "Finland", op.cit., p. 173.

80. Grano, J.G., "Settlement of the Country", op.cit., pp. 341-356.

Finnish settlement in the Thunder Bay area, however, would certainly fall into a mixed classification entailing elements of all the categories, rather than falling neatly into any one of Grano's classes. It is interesting to note though, that the pattern would more closely resemble the Vaara type of eastern Finland, than the coastal settlements of, for example, southwest Finland.

A question raised in the last chapter can now be answered. "Would the Finns have originally settled in the lower, flatter Slate River Valley of the Thunder Bay area if they had been given the opportunity?" The answer would be 'yes', because actually it more closely resembled their former homeland location (with the coastal or shore types) than did the upland. Thus a transition was made in site type for most of the Finnish settlers in rural Thunder Bay, although it still could not be considered an extreme change from that of the home country.

Another feature of the physical influences on settlement pattern was raised by Helmer Smeds in regard to soil:

> As a general rule the overwhelming majority of rural settlements is related to clay, silt, and fine sand deposits, the best soils for reclamation in Finland.[81]

While again referring to Finland, thus rule could apply equally well to the Finnish distributions in Northern Ontario, which correspond highly to the lacustrine pockets on the Shield area.

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81. Smeds, H., "Finland", op.cit., p. 168.

With regard to population dynamics, southwestern Finland (again, the most common region of origin for Thunder Bay Finns) was at the turn of this century, in a state of transition in settlement. Reforms were taking place which were breaking up the traditional agglomerated villages of the region, into the dispersed patterns found elsewhere in Finland. Rural population statistics in Finland at this time are rather incomplete and have limited validity.[82] Thus, it is difficult to give specific population and settlement hierarchy comparisons for the era around or before 1900. It is clear, though, that rural settlements did have a far greater population density in southwestern Finland than in northwestern Ontario. By 1920, the Vaasa province of Finland had a population of 14.3 persons per square kilometer with 88 rural communities. Turku and Pori had 22.0 persons per square kilometer with 111 rural communities.[83] Only about 15% of the populations of the provinces in 1920 were urban-based,[84] therefore these figures are not radically different when citing just the rural densities. The immediate Thunder Bay area, similarly had a population density of about 21.8 persons per square kilometer in 1921, however 88% of that population was urban.[85] The three Finnish townships had a 1921 population density of about 2.4 persons per square kilometer.

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82. As noted by Grano, "Settlement of the Country", op.cit., p. 367.

83. See Sederholm, J.J., "Situation, Boundaries, Population and Divisions of Finland", in Finland: The Country, Its People and Institutions, op.cit., p. 15.

84. Based on a 1930 nation total of 18.3% urban and the 1888 figure of 8.4% urban, see Tunkelo, A., "Population" in Sumi: A General Handbook of the Geography of Finland, op.cit., p. 317.

85. Based on the 1921 Census of Canada figures.

Another comparative measure of rural population density was farm size. As previously mentioned, the average Canadian holdings were approximately four times the size of the home farms in Finland. Thus, the density aspect of settlement did radically change in the transfer, with most Finns coming to Thunder Bay experiencing a degree of dispersion to which they were unaccustomed.

In examining the transfer of institutions, it would be appropriate to start with the cooperative, considering its economic importance to the Finns. While the cooperative movement did not begin in Finland until 1899, by 1920 over 3,000 were registered within the country.[86] This widespread acceptance sprang largely from the strong socialist movements of the time.

> In the socialist view cooperatives helped to liberate workers and farmers from capitalism.[87]

Moreover, many of the Finns who emigrated were of a strong Socialist bent. While the Finns were not solely responsible for establishment of the cooperative movement in North America, they did certainly play a major role.[88]

> The cooperative movement is something the Finns found developed to a considerable degree in their native land and was brought over from there.[89]

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86. See Book, E., "Co-operation", in Finland: The Country, Its Peoples and Institutions, op.cit., p. 138.

87. See Hoglund, W.A., The Finnish Immigrants in America: 1880-1920, op.cit., p. 77.

88. See Kercher, L.C., Consumer's Cooperatives in the North Central States. (Minneapolis, University of Minnesota Press: 1941).

89. Wargelin, J., The Americanization of the Finns, op.cit., p. 87.

It is interesting to note that most of the early dairy cooperatives in Finland were located in the southwestern portion of the country. Likewise, similar co-ops were among the strongest in the Thunder Bay area, again helping to establish the regional transfer.

Another major institution, advanced largely by the socialists as noted in the last chapter, was the early development of the meeting hall and its relation to the church. To a great extent the importance of the Church had been lost for many of those whom had seen both rapid social reform in Finland and were faced with the trials of migration and establishment.

> As one churchman said, America was the land for home mission work, because the immigrants were not attached to regular church life as they had been in Finland.[90]

To replace the social base of the communities, the halls were established. While halls were not unique to the Finns, they were distinctive in the sense that they were created in the very early stages of settlement. Their extremely high degree of activity would also seem to set them apart from halls of other groups. Both of these features were a tribute to the organizational abilities associated with the Finns who did settle here.

While the Church suffered in the transfer, it certainly did not cease to exist. Lutheranism was the denomination of the state Church of Finland, and again the branches found in both Lappe and Nolalu, in the sample area,

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90. Hoglund, W.A., The Finnish Immigrants in America: 1880-1920, op.cit., p. 27.

were Lutheran. Traveling missionaries also serviced the rural Thunder Bay area, most notably Pastor A.I. Heinonen from Port Arthur, who wrote Finnish Friends in Canada, mentioned previously.

The Significance of the Finnish Impact

Two elements in the transplanted Finnish character can be identified in nearly all the research carried out on the Finns in North America: resolute determination or sisu, and a marked organizational ability. Determination in this study can be seen in their strong pioneering ethic:

> Among the Norden peoples the Finnish one is, and perhaps always has been, foremost in pioneering, a clearer of forests and wrestler with stones and boulders. . . The drive northwards into the forests is as typical a Finnish phenomenon as the challenge of the sea has been typically Norwegian, and pioneering is a major formative feature of the Finnish character . . . Sisu has been fostered by pioneering work continuing for many centuries in unusually hard conditions.[91]

The Finns in Northern Ontario, as in much of North America, carved out settlements in wilderness where other groups could not or at least would not make the attempt. But aside from clearing fields and harvesting timber, the Finns were also highly respected as hard workers in the mines, mills, construction projects, and in nearly any other line they chose.

The organizational abilities of the Finns were seen in the great independence of their communities and the large number of organizations they created for nearly every purpose. Associations were formed for such

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91. See Smeds, H., "Finland", op.cit., p. 156.

activities as sport, drama, music, temperance, church, politics and labor, and several economic functions. Not only were church and schoolhouse erected, as in other communities, but cooperatives and meeting halls formed integral parts of the cultural landscape as well, even in early times.

While these two features of will power and organization were the Finns' strongest assets, in the beginning they were also often their greatest barrier to acceptance by other communities. Determination was sometimes viewed as obstinacy, stubbornness, or worse. The desire for organizational completeness was occasionally termed clannishness, by those from outside. In addition, the Socialist movements of the Finns were regarded with great suspicion in a capitalist North America.

While at times, then, there was friction between the Finns and their host society, there was never estrangement between the Finns and the host environment of Northern Ontario. The Finns brought with them a mastery of the boreal landscape born out of numerous centuries of dealing with it. Their ancient Northern traditions not only reinforced the Canadian image of "drawers of water, hewers of wood", the people and methods rather ideally symbolized the theme. This transferral of image was indeed, the Finns' greatest cultural carry-over.

Summary

The Finns did not significantly change their type of physical environment in the migration, yet did have fewer formal cultural restrictions

in the new geographic setting. Despite this freedom, rural settlers retained many of their Old World settlement characteristics. Economic life, although improving slightly, remained much the same initially, with subsistence agricultural operations, supplemented with income from forestry and other outside sources. Architecturally, general styles, as well as many specific forms, remained nearly identical in the transfer. The most distinctive and obvious of these carry-overs was the sauna and field hay barn styles. Minor structural transitions were made, however, in such things as foundations, stoves, and certain materials.

The farmstead was basically the same in the Thunder Bay area that it had been in Finland also, with a cluster of buildings, that characteristically included the dwelling house, main barn, storage sheds, animal sheds, sauna, and hay barn. The threshing barn, which had been common in Finland, however, was lost in the transfer due to improved mechanization in the New World. Buildings were laid out symmetrically and the farmstead positioned on higher, drier sties. Cleared field area remained the same, despite a four-fold increase in total farm size in North America, as opposed to Finland.

The most radical change in the general settlement pattern was the much greater dispersal of population over the Northern Ontario landscape. Site types also changed slightly in the transfer. Institutionally, the cooperative was a rather direct carry-over, however, through a loss of influence of the Church, meeting halls were developed largely as an adaptive or innovative feature.

The significance of the Finnish impact can best be approached through two transplanted aspects of the Finnish character. First, the resolute determination of the Finns can be seen through their tremendous pioneering efforts. Secondly, strong organizational abilities are evident through the solid institutional completeness of their communities. The Finns displayed a great mastery of the boreal landscape and their traditions helped, in part, to mould the Canadian image.

Figure 56

FINNISH HOUSE IN WARE TOWNSHIP. NOW USED AS A CAMP, NOTE POLE ROOF. TAKEN 1977. ALSO SEE FIGURE 19.

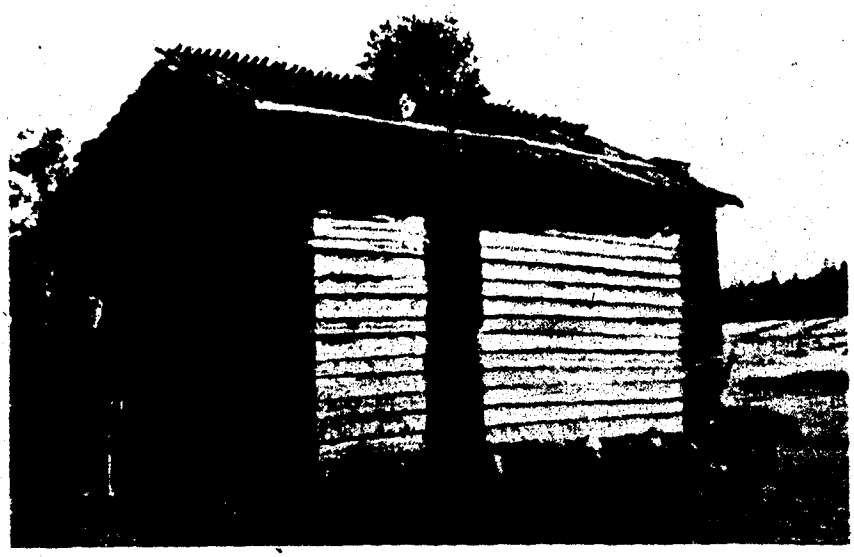

Figure 57

EARLY SAUNA IN SOUTHWEST FINLAND. NOTE POLE ROOF STYLE. (From Forsblom, V.W., "ALLOMOGEBYNADER I ESSE," op.cit., p. 25)

Figure 58

LOG HOUSE IN SOUTHWEST FINLAND, TAKEN ABOUT 1915, NOTE SIMILARITY TO STRUCTURES PREVIOUSLY ILLUSTRATED IN THUNDER BAY. STONE, HOWEVER, IS USED FOR THE CHIMNEY ON THIS HOUSE.
(From Forsblom, V.W., "SYDOSTERBOTTNISKA ALLMOGEBYGGNADER", op.cit., p. 33)

Figure 59

SMALL LOG HOUSE IN SOUTHWEST FINLAND. COMPARE THIS TO FIGURE 22.
(From Forsblom, V.W., "ALLMOGEBYGGNADER I ESSE", op.cit., p. 7)

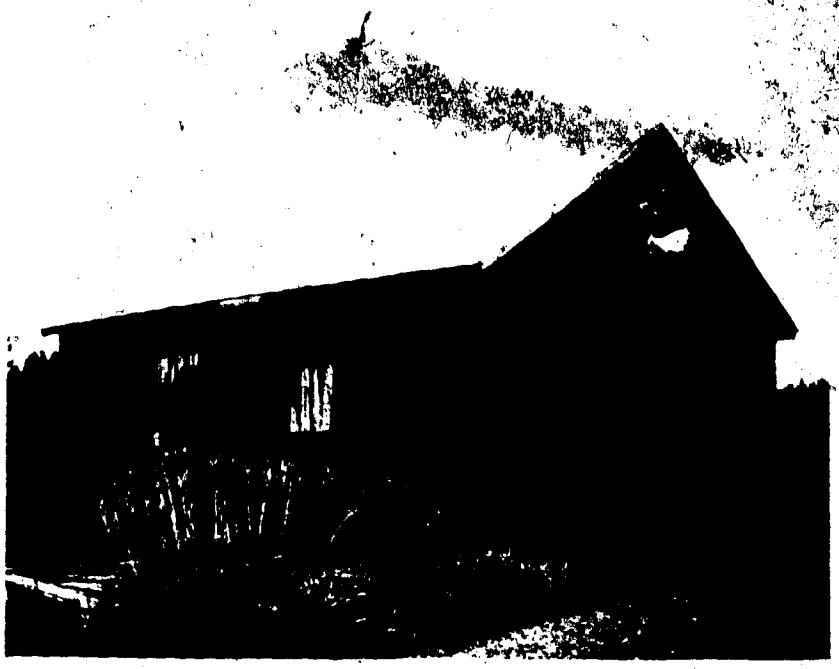

Figure 60

EARLY FINNISH HOME IN LYBSTER TOWNSHIP. TAKEN 1977.

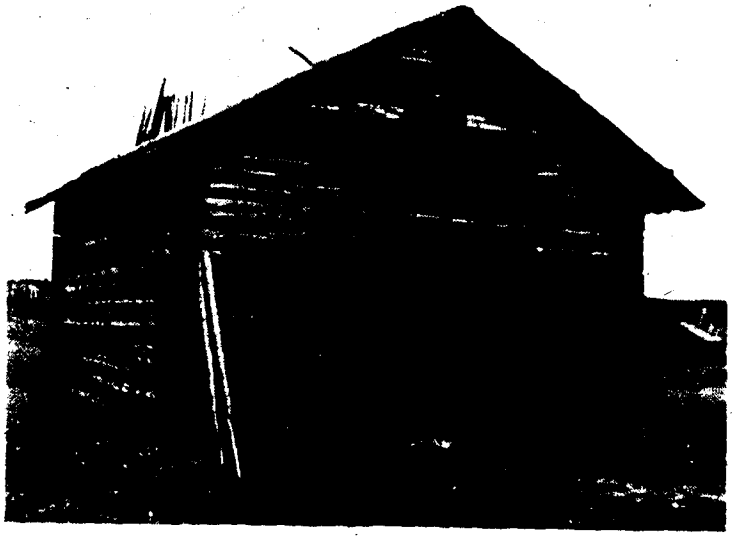

Figure 61

SMALL BARN IN FINLAND, TAKEN 1948. COMPARE GENERAL FORM WITH FIGURE 60.
(From Talve, I., "DEN NORDOST-EUROPEISKA RIAN", op.cit., p. 17)

Figure 62

OLD SMOKE SAUNA WITH BIRCH BARK ON ROOF, LYBSTER TOWNSHIP. TAKEN 1977.

Figure 63

SAUNA IN SOUTHWEST FINLAND, C. 1915
(From Forsblom, V.W., "SYDOSTERBOTTNISKA ALLMOGEBYGGNADER", op.cit., p. 71)

Figure 64

REMAINS OF TRADITIONAL ROCK STOVE IN SAUNA IN RURAL THUNDER BAY.

Figure 65

HAY BARN IN SOUTHWEST FINLAND, C. 1915,
NOTE STRAW ROOF, COMPARE WITH FIGURE 35.
(From Forsblom, V.W., "SYDOSTERBOTTNISKA ALLMOGEBYGGNADER", op.cit., p. 81)

Figure 66

FINNISH HAY BARN IN GORHAM TOWNSHIP. TAKEN 1977.

Figure 67

HAY BARN IN SOUTHWEST FINLAND, C. 1915
(From Forsblom, V.W., "SYDOSTERBOTTNISKA ALLMOGEBYGGNADER", op.cit., p. 80)

Figure 68

SMALL ANIMAL SHED OFF BARN IN FINLAND. TAKEN 1948.
(From Talve, I., "DEN NORDOST-EUROPEISKA RIAN", op.cit., p. 21)

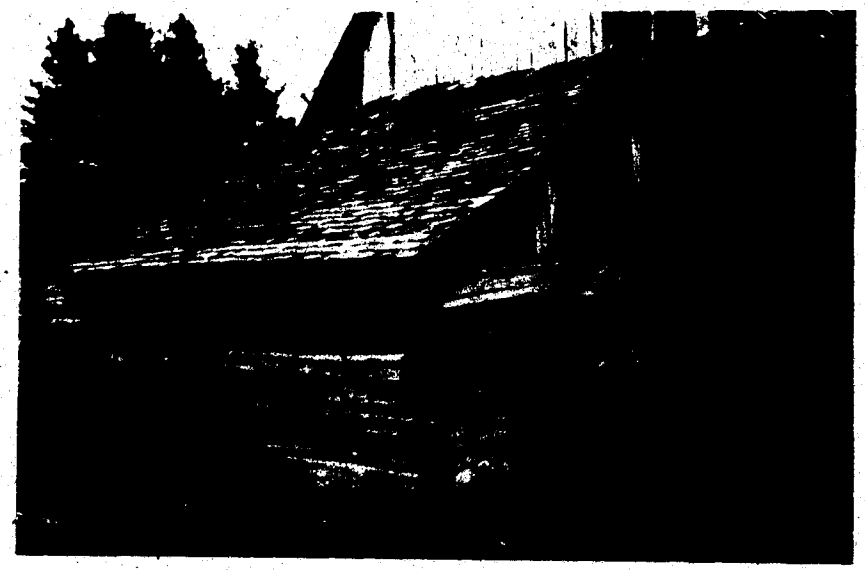

Figure 69

GOAT SHED OFF BARN ON FINNISH SITE IN CONMEE TOWNSHIP. TAKEN 1977.

Figure 70

TRADITIONAL RIIHI GRAIN DRYING-THRESHING BARN. WITH RAISED THRESHING FLOOR IN GILLIES TOWNSHIP. TAKEN 1977.

Figure 71

FARMSTEAD IN SOUTHWEST FINLAND, TAKEN 1915, NOTE FAMILIAR BUILDING FORMS AND SYMMETRY OF FARMSTEAD LAYOUT,
(From Nikander, G., "BY OCH I SVENSKOSTERBOTTEN," FOLKLIVS-STUDIER: V, Helsinki, 1959, p. 29)

Figure 72

EARLY FINNISH FARMSTEAD NEAR INTOLA, C. 1905
(From Collection of the Thunder Bay Finnish-Canadian Historical Society,- Donor - Maki)

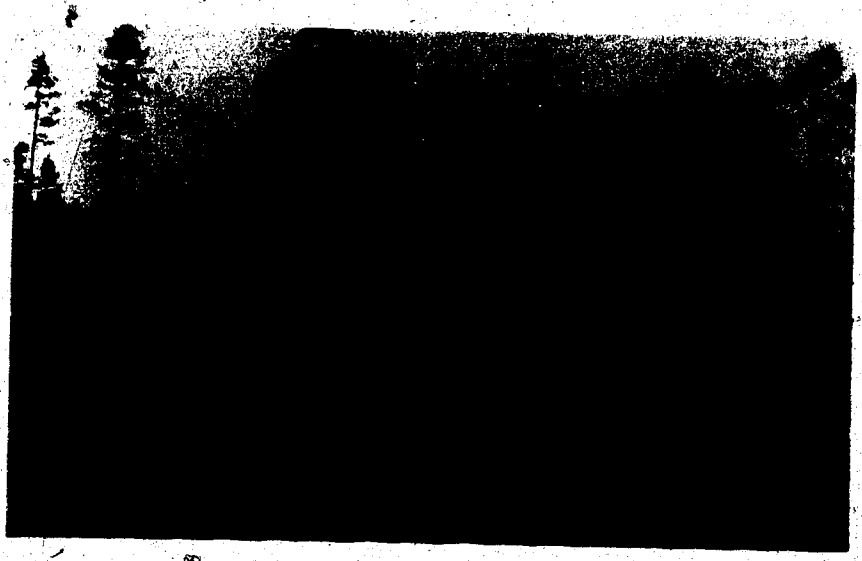

Figure 73

AN EARLY SETTLER'S FARM IN NORTHERN FINLAND
(From Book, E., " THE LAND QUESTION AND LAND REFORM", in FINLAND: THE COUNTRY, ITS PEOPLE AND INSTITUTIONS, op.cit., p. 135)

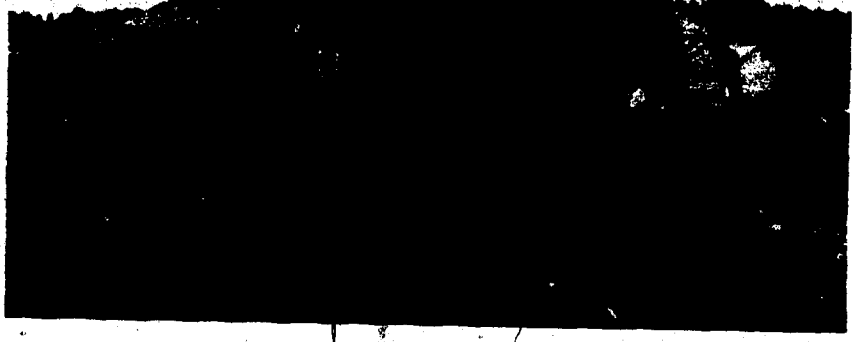

Figure 74

SEMI-OPEN TYPE "VAARA" FARMSTEAD IN EASTERN FINLAND
BIRCH BARK ROOFS ON BUILDINGS AT RIGHT, TURNIP FIELD IN FOREGROUND
(From Grano, J.G., "SETTLEMENT OF THE COUNTRY", op.cit., p. 3)

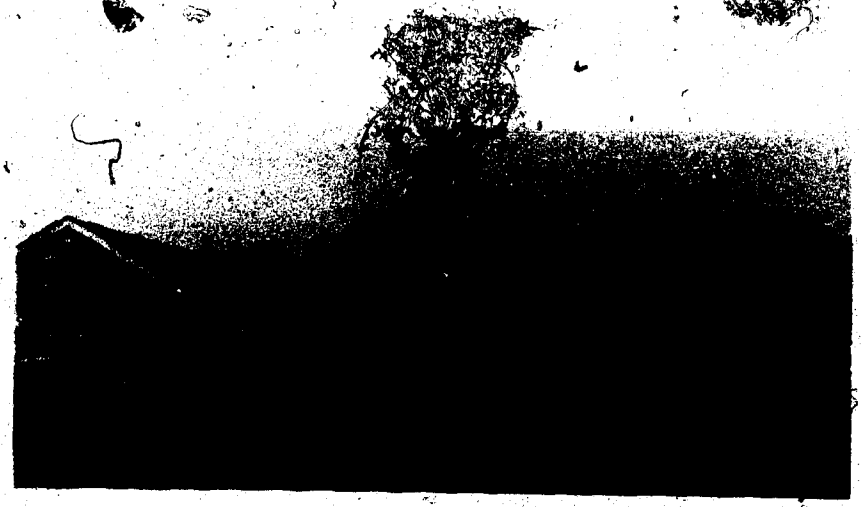

Figure 75

FARMSTEAD IN SOUTHWEST FINLAND
(From Appelgren, A., "OM BYFORMEN OCH GARDSTYPERNA I ABOLAND VASTRA SKARGARD", FOLKLORISTISKA OCH ETHNO-GRAFISKA STUDIER, Vol. IV, 1931, p. 204)

Figure 76

TIGHTLY CLUSTERED FARMSTEAD IN FINLAND, NOTE SIMILAR CONSTRUCTION OF BUILDINGS TO THOSE SHOWN OF THUNDER BAY
(From Grano, J.G., "SETTLEMENT OF THE COUNTRY", op.cit., p. 360)

Figure 77

FARMSTEAD IN SOUTHWEST FINLAND, NOTE BUILDING FORM AND SYMMETRY OF FARMSTEAD LAYOUT
(From Nikander, H., "DET GAMLA BYGGNADSSKICKET I KRONOBY", op.cit., p. 3)

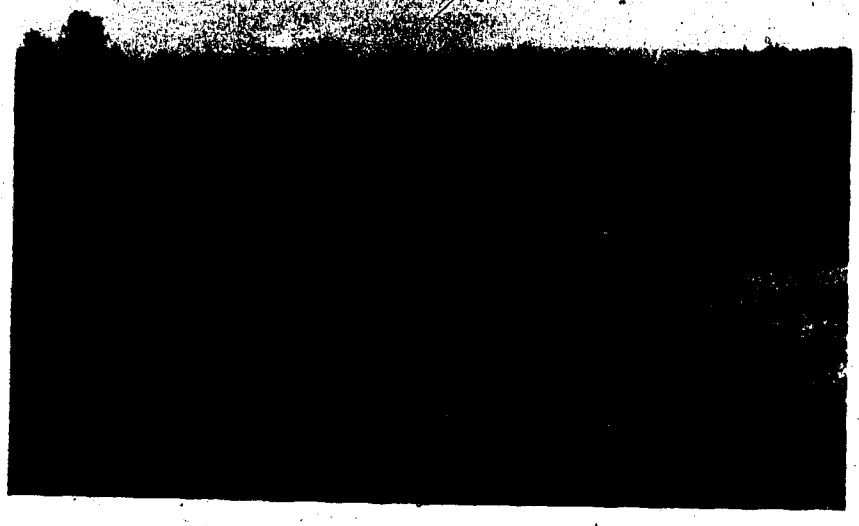

Figure 78

FIELD-FOREST TYPE RURAL SETTLEMENT IN FINLAND
(From Grano, J.G., "SETTLEMENT OF THE COUNTRY", op.cit. p. 348)

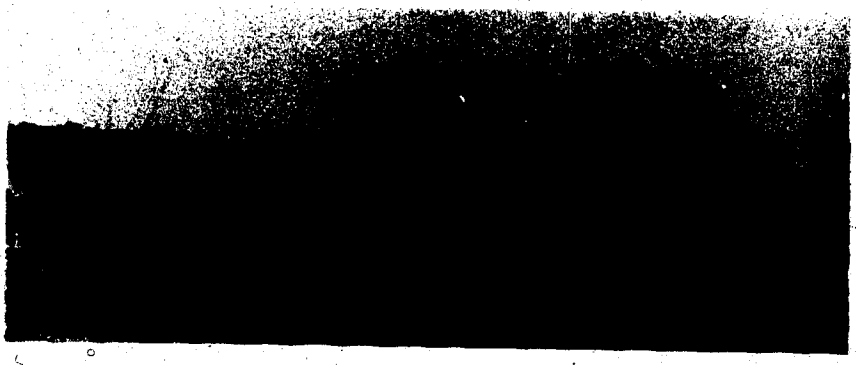

Figure 79

EARLY FARMSTEAD IN SOUTHWEST FINLAND, AGAIN NOTE FORM AND LAYOUT
(From Appelgren, A., "OM BYFORMEN OCH GARSTYPERNA I ABOLAND VASTRA SKARGARD", op.cit., p. 208)

CHAPTER SEVEN

CONCLUSION

The Thunder Bay area of Northern Ontario has traditionally possessed the largest numerical concentrations of both urban and rural "Finns", in Canada. Rural Finnish settlement, the concern of this study, took place mainly from 1900 to 1935, and concentrated in three areas of the peripheral rugged uplands. These rural Finns established many distinctive settlement characteristics in the area. Vernacular architecture was largely of a highly refined log construction style. Certain building types, notably the sauna and hay barn, were unique. The form of the Finnish-Canadian architecture displayed great harmony with its natural surroundings, because of an unpretentious nature, reflected in clean design and maximum use of local materials.

The Finnish farmstead was distinctive particularly in building types, however, also in its symmetrical layout, orientation (to road, water and view), and general location (intermediate elevation). Field patterns could be characterized as small, scattered, irregularly shaped patches. Forests covered the vast majority of the Finnish-Canadian holdings, and were of crucial economic importance to the settlers.

The Finns settling in rural Thunder Bay established strong independent communities, marked with great cohesiveness and institutional solidarity.

That they chose to occupy these most "marginal" areas at all is, however, perhaps the most distinctive feature of this rural Finnish settlement. The Finns, then, were responsible for a significant expansion of the ecumene of the Thunder Bay area, as they were elsewhere in many parts of North America.

What the Finns accomplished in rural Thunder Bay was a fairly direct transplant of their traditional cultural landscape into a new, but familiar physical environment. Economically, these people retained their limited agricultural base, partially subsidized by activities in resource or construction industries. Architecturally, transference was almost complete in both general construction style and specific building types. Even the strong traditional significance of the sauna remained largely intact. While affected by a new survey system, which radically reduced their density of settlement, the spatial patterns of the farms remained much the same as in the homeland, with comparable farmstead layouts, field patterns and forest exploitation. Sites chosen for farms were similar, despite certain modifications which had to be made by Finnish immigrants, due to limited land availability. Institutions, such as the cooperative and the Lutheran church were also transferred, though the church lost influence in the move and was replaced institutionally to a degree by the meeting hall.

The significance of the impact of Finnish settlement on rural Thunder Bay is noteworthy in two respects. First the Finns demonstrated a mastery of the boreal landscape born out of centuries of dealing with it. Secondly, the transplanted Finnish character with its strong will and great organizational

abilities, proved to be compatible with the general ideals of Canada, yet at the same time imparted a distinctive image to the relatively small total Finnish immigrant population.

In conclusion, two recommendations for further studies are made. First, there exists in Canada a desperate need for further systematic studies of early settlement, particularly relating to folk architecture, while some physical evidence of many original cultural landscapes still remains. These records provide additional insights into our heritage, not found in most local historical accounts. Secondly, Finland as well as other countries could continue to provide many more useful techniques for pioneering and northern development as yet untried in Canada. Their longer experience and greater development emphasis of the northern landscape could be of great benefit to Canada. Although there is already some international cooperation[92] and mutual exchange between the northern nations, this should be extended further, to the mutual benefit of all.

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92. See, for example, Wonders, W.C.(ed.) The Arctic Circle: Aspects of the North from the Circumpolar Nations. (Don Mills, Ontario: Longman Canada Ltd., 1976).

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APPENDIX

FINNISH SETTLEMENT IN RURAL THUNDER BAY

Mark A. Rasmussen, Department of Geography, University of Alberta
Master's Thesis Field Research- Summer, 1977

STRUCTURAL CHECKLIST

SITE NUMBER-_____ PHOTO NUMBERS-_____ DATE-_____
FARM/OWNER NAME-_____
Original Owner-_____
SITE LOCATION-_____
STRUCTURE TYPE- House_____ Barn_____ Other_____
Original_____ Secondary_____
Log_____ Frame_____ Other_____

LOG STRUCTURES-
LOG CONSTRUCTION STYLE- Horizontally Stacked_____ Verticle_____
LOG MATERIAL- Pr_____ Pw_____ Pj_____ Sw_____ Sb_____ Cd_____
T_____ Bf_____ Po_____ Other_____
BEAM TYPE- Round_____ Squared(4s)_____ Squared(2s)_____ Other____
CORNER STYLE- Dovetail_____ Lap_____ Lapped_____ Saddle_____
Locked_____ Mortise&Tenon_____ Other_____
CORNER & BEAM REENFORCEMENT- Pinned_____ Nailed_____ Other_____
CORNER OVERHANG- Flush_____ Trimmed_____ Untrimmed_____
AVERAGE BEAM DIAMETER- 5-7"_____ 8-10"_____ 11-13"_____
14-16"_____ 17+"_____
CHINKING- No_____ Yes_____ Type-_____

FRAME STRUCTURES-
STUD SIZE-_____ STUD SPACING_____*(When Possible)
BEAM MATERIAL-Pine_____ Spruce_____ Other_____
STUD SURFACE- Rough Sawn_____ Planed_____
OTHER NOTES_____
_____
_____

-BUILDING AND SPECIAL FEATURES SKETCH ON REVERSE SIDE OF THIS SHEET

GENERAL STRUCTURAL FEATURES-

EXTERIOR WALL COVERING- Bare_____ Stained_____ Painted_____
Board_____ Plastered_____ Other_____
Colour_____

INTERIOR WALL COVERING- Bare_____ Plastered_____ Papered_____
Other_____ Colour_____

-SKETCH OF WALL CROSS-SECTION ON REVERSE SIDE OF THIS SHEET

ROOF STYLE- Gable_____ Gambrel_____ Other_____

ROOFING MATERIAL- Shakes_____ Shingles_____ Rockface_____
Metal_____ Other_____

SHEETING MATERIAL-_____

TRUSS TYPE- Purlin_____ Scissors_____ Other_____

FOUNDATION- None_____ Post_____ Rock_____ Concrete_____ Other_____
Continuous_____ Pier Spacing_____ Pier Size_____

NUMBER OF DOORS-_____ NUMBER OF WINDOWS-_____ VENTS-_____

BUILDING SIZE (Approximate)-_____

ADDITIONS-_____

NUMBER OF STORIES- 1_____ 1½_____ 2_____ Other_____
Basement_____ Crawl Space_____

BUILDING CONDITION-(Value Judgement) Good_____ Fair_____ Poor_____

ORIGINAL WORKMANSHIP-(" ") Good_____ Fair_____ Poor_____

BUILDING USE- Original_____ Present_____ Abandoned___

OTHER STRUCTURAL COMMENTS-_____

-SKETCH OF INTERIOR LAYOUT ON THE REVERSE SIDE OF THIS SHEET

LOCATIONAL CHECKLIST

BUILDING ORIENTATION- By Road_____ Center of Farm_____ Other_____
Near Other Buildings_____ Separate_____
Front Facing- North___ South___ East___ West___

CLASS OF LAND- (Keyed Through the Canada Land Inventory)_____

FUNCTION OF SITE- Original_____ Present_____

TOTAL FARM AREA-_____ CLEARED_____ NON-ARABLE_____

-SKETCH OF BUILDING SITE AND TOTAL FARM ON REVERSE SIDE OF THIS SHEET

OTHER COMMENTS CONCERNING LOCATION-_____

FINNISH SETTLEMENT IN RURAL THUNDER BAY QUESTIONAIRE

Mark A. Rasmussen, Department of Geography, University of Alberta
Master's Thesis Field Research- Summer 1977

SITE NUMBER_____ DATE_____ INTERVIEWEE_____

WHO BUILT THE BUILDING?_____
WHAT WAS HIS ETHNIC BACKGROUND?_____
WHAT PART OF THAT COUNTRY DID HE COME FROM?_____WHEN?_____
WHEN WAS THE BUILDING CONSTRUCTED?_____
DID HE BUILD OTHERS?_____
HOW LONG DID IT TAKE TO BUILD?_____
HOW MANY MEN WERE INVOLVED?_____
WHERE DID HE GET THE MATERIALS?_____
WHAT TOOLS WERE REQUIRED?_____
BRIEFLY DESCRIBE THE TECHNIQUE AND TIME ELEMENT INVOLVED-

_____
_____
_____
_____

WAS THE ORIGINAL "FARM" FULL-TIME OR PART-TIME?_____
OTHER JOBS?_____
LIST THE ORIGINAL SETTLERS-_____
WHY DID THEY CHOOSE THIS SITE?_____
WHY THE THUNDER BAY AREA?_____
DID THEY SETTLE DIRECTLY ON THE FARM?_____
DID THE SETTLER COME DIRECTLY TO THUNDER BAY FROM THE OLD COUNTRY?

_____
WHAT WAS THE SETTLERS OCCUPATION IN THE OLD COUNTRY?_____
BRIEFLY DESCRIBE THE OPENING THIS FARM & DEVELOPMENT OF THE AREA-

_____
_____
_____
_____

WHEN WAS THIS FARM FIRST SETTLED?_____
DID THE SETTLER PARTICIPATE IN ANY CULTURAL ACTIVITIES?_____

_____

TABLE A17

LOG MATERIALS USED

	Tree Species						
Township	Jack Pine	White Pine	Poplar	Balsam Fir	Spruce (white or black)	Cedar	Tamarack
Gorham	35/38	10/11	19/21	4/4	6/7	15/16	2/2
Ware	23/40	-	10/18	-	16/28	4/7	4/7
Lybster	42/39	-	24/23	16/15	20/19	3/3	1/1
O'Connor	6/43	-	2/14	2/14	-	4/29	-
Gillies	5/45	1/9	4/36	1/9	-	-	-
Pearson	31/66	-	9/19	4/8	1/2	1/2	1/2
Conmee	24/40	1/2	13/22	9/15	11/18	2/3	-
Marks	8/57	-	6/43	-	-	-	-
Totals	174/44	12/3	87/22	36/9	54/13	29/7	8/2

KEY: Noted Occurrence / % of Occurrence in Township

TABLE A18

BEAM STYLE USED

Townships	Flattened 2 sides & Saddle Hewn	Left Round on Saddle Hewn	Round	Flattened 2 sides	Flattened 4 sides
Gorham	62/65	3/3	14/14	3/3	14/14
Ware	39/70	3/5	7/13	4/7	3/5
Lybster	77/87	-	7/8	4/4	1/1
O'Connor	-	-	3/25	7/58	2/17
Gillies	5/71	-	-	2/29	-
Pearson	33/70	2/4	8/17	3/6	1/2
Conmee	28/68	-	11/27	2/5	-
Marks	13/100	-	-	-	-
Total	257/71	8/2	50/14	25/70	21/6

KEY: Noted Occurrence / % of Occurrence in Township

TABLE A19

CORNER STYLES USED

Township	Full-Dovetail	c.b.*	Half-Dovetail	c.b.	Lock-Joint	c.b.	Saddle-Notch	u.t.**	Butt Joint	c.b.	Others
Gorham	65/56	17	1/1	-	18/16	-	13/11	1	13/11	2	5/4 A-V joint 1/1 Lap joint
Ware	31/62	12	-	-	8/16	-	7/14	-	3/6		1/2 Lazy-man joint
Lybster	30/34	5	2/2	-	47/53	-	9/10	-	-	-	--
O'Connor	-	-	11/84	-	-	-	1/8	-	-	-	1/8 A-V joint
Gillies	1/14	-	1/14	-	4/57	-	-	-	-	-	1/14 Square notch
Pearson	18/43	5	2/5	1	18/43	-	3/7	-	-	-	1/2 A-V joint
Conmee	26/67	4	2/5	-	2/5	-	4/10	-	-	-	2/5 Lazy-man joint 1/3 Lap joint 2/5 Lapped joint
Marks	11/85	2	-	-	2/15	-	-	-	-	-	--
Total	182/49	45	19/5	1	99/27	5	37/10	1	16/4	2	7/2 A-V joint 3/1 Lazy-man joint 2/1 Lap joint 2/1 Lapped joint

* c.b. - corner boards
** u.t. - untrimmed logs

KEY: Noted occurrences / % of Occurrence in Township

TABLE A20

CORNER & BEAM REINFORCEMENT USED

Township	Wood Pins	Nails	Reinforcing Posts
Gorham	42/82	7/14	2/4
Ware	12/60	2/10	6/30
Lybster	51/90	1/2	4/7
O'Connor	1/100	-	-
Gillies	4/67	2/33	-
Pearson	11/73	3/20	1/7
Conmee	2/22	5/56	2/22
Marks	3/75	-	1/25
Total	126/78	20/12	16/10

KEY: # of Noticeable Occurrences / % of Occurrences in the Township

TABLE A21

TYPES OF CHINKING USED

Township	Moss	Rags	Slats	Cement	Oakum	Rope	Mud	Others	Deliberate Gaps
Gorham	26/36	28/39	1/1	5/7	1/1	3/4	-		9/12
Ware	22/48	13/28	-	3/7	-	-	-		8/17
Lybster	63/65	23/24	1/1	3/3	-	-	-		7/7
O'Connor	-	-	4/26	7/47	1/7	-	2/13	1/7 manure	-
Gillies	4/57	-	1/14	-	-	-	1/14		1/14
Pearson	23/53	10/23	5/12	3/7	1/2	-	-		1/2
Conmee	6/24	10/40	1/4	3/12	-	-	-		5/20
Marks	2/67	1/33	-	-	-	-	-		-
Totals	146/53	85/30	13/5	24/9	3/1	3/1	3/1		31/

KEY: Noticeable Occurrences / % of Total Occurrences in the Township

TABLE A22

EXTERIOR WALL COVERING OF STRUCTURES

Township	Bare Log	Shiplap	Board	Rockface or Insul-brick	Red Wash	Oil Stain	Painted	Tarpaper
Gorham	72/73	4/4	-	4/4	-	11/11	5/5	2/2
Ware	41/66	5/8	4/6	1/2	2/3	5/8	4/6	-
Lybster	73/74	8/8	5/5	1/1	3/3	3/3	4/4	1/1
O'Connor	11/73	1/7	3/20	-	-	-	-	-
Gillies	4/50	1/12	1/12	-	2/25	-	-	-
Pearson	40/89	3/7	2/4	-	-	-	-	-
Conmee	39/81	2/4	1/2	-	2/4	1/2	-	2/4
Marks	11/73	1/7	-	2/13	-	1/7	-	-

KEY: Noted Occurrence / % of Occurrences in Township

Note: A Few buildings had more than exterior cover

TABLE A23

INTERIOR WALL COVERING OF STRUCTURES

Township	Bare	Papered	Painted	Board	Shiplap (Tongue & Groove)
Gorham	63/83	4/5	5/7	-	4/5
Ware	32/91	1/3	1/3	-	1/3
Lybster	60/80	8/11	1/1	5/7	-
O'Connor	8/80	-	1/10	-	-
Gillies	5/63	1/12	1/12	1/12	-
Pearson	21/75	5/18	1/3	1/3	-
Conmee	28/80	3/9	3/9	-	-
Marks	7/88	-	-	1/12	-
Total	224/81	22/8	13/5	8/3	5/2

KEY: Noted Occurrences / % of Occurrence in Township

Note: Some interiors could not be seen

TABLE A24

ROOF TYPES OF STRUCTURES

Township	Gable	Complex	Gambrel	Shed	Hip	Pyramidal
Gorham	76/85	6	8/9	3/3	1/1	1/1
Ware	44/81	2	6/11	1/2	1/2	1/2
Lybster	78/90	4	8/9	1/1	-	-
O'Connor	12/92	-	-	1/8	-	-
Gillies	6/86	-	1/14	-	-	-
Pearson	33/97	3	2/3	-	-	-
Conmee	26/79	3	5/15	1/3	1/3	-
Marks	8/67	-	2/17	1/8	1/8	-
Total	283/86	18	32/10	8/2	4/1	2/1

KEY: Noted Occurrences / % of Occurrences in Township

Note: Some buildings had no roof left

TABLE A25

ROOFING MATERIALS USED

Township	Wood Shakes	Shingles	Rockface	Metal	Tarpaper	Boards
Gorham	47/50	20/21	12/13	8/9	6/6	1/1
Ware	22/37	5/8	23/39	5/8	3/5	-
Lybster	49/48	12/12	7/7	21/26	8/8	3/3
O'Connor	2/17	2/17	-	6/50	2/16	-
Gillies	3/43	1/14	1/14	1/14	-	1/14
Pearson	16/42	8/21	5/13	2/5	4/11	3/8
Conmee	23/56	4/10	3/7	4/10	7/17	-
Marks	3/27	1/9	1/9	6/55	-	-
Total	165/45	53/15	52/14	53/15	30/8	8/2

KEY: Noted Occurrences / % of Occurrences in Township

Note: Some buildings had more than one material

TABLE A26

FOUNDATION TYPES USED

Township	Rock	Post	Log or Wood Horiz-Blocks	Concrete
Gorham	10/28	3/8	8/22	15/42
Ware	14/56	7/28	-	4/16
Lybster	28/44	27/42	6/9	3/5
O'Connor	2/50	1/25	1/25	-
Gillies	4/57	2/29	-	1/14
Pearson	12/54	5/23	5/23	-
Conmee	4/27	4/27	3/19	4/27
Marks	1/25	1/25	-	2/50
Totals	75/42	50/28	23/13	29/16

KEY: Noted Occurrence / % of Occurrence in Township

Note: Often buildings were sunken and foundation was not visible.

TABLE A27

DOORS, WINDOWS, VENTS OF STRUCTURES

Township	Total Number of Buildings	No. of Doors	No. of Windows	No. of Chimneys Red Brick	No. of Chimneys Concrete	No. of Chimneys Metal	No. of Board Vents	No. of Cupolas	No. of Openings (Vent Holes)
Gorham	95	138	289	24	-	3	7	5	5
Ware	57	88	141	7	5	3	8	1	10
Lybster	94	137	209	19	1	5	5	6	19*
O'Connor	13	21	31	1	-	1	-	1	-
Gillies	7	15	20	1	-	1	2	1	1
Pearson	41	58	131	12	2	3	6	-	-
Conmee	42	69	89	5	2	-	1	-	7*
Marks	13	21	46	2	1	-	2	3	-
Totals	362	547	956	71	11	16	31	17	42

Based on total numbers, not number of sites with the occurrence

Note: Functions of buildings differ and limit comparisons between townships

TABLE A28

BUILDING HEIGHT OF STRUCTURES

Township	1 Story	1 1/2 Story	2 Story*	Basement**	Root Cellar	Total No. of Buildings in Township
Gorham	62	20	7	2	1	95
Ware	45	7	5		1	57
Lybster	70	11	13	3	1	95
O'Connor	12		1			13
Gillies	5	2	2		1	7
Pearson	33	7	2	1	2	41
Conmee	25	11	2	1	4	42
Marks	8	1	4			13
Totals	267	59	36	6	10	
	74%	16%	10%			

362 Total Buildings

* To be considered a two story building, the structure had to have at least two floors, neither of which had angled side walls (for roof peaking). In the case of many of the larger barns, buildings were of great heights (over 30'), yet still had not more than two activity levels.

** Basement, and Root Cellar based only only noticeable occurrences. Also, building functions vary again, limiting comparisons.

TABLE A29

WORKMANSHIP/CONDITION OF STRUCTURES*

Township	Original Workmanship			Present Condition			Total Number of Buildings in Township
	Poor	Fair	Good	Poor	Fair	Good	
Gorham	8	79	8	40	49	6	95
Ware	4	53	-	24	32	1	57
Lybster	4	74	16	29	52	13	94
O'Connor	5	8	-	8	5	-	13
Gillies	-	7	-	2	5	-	7
Pearson	5	31	5	15	20	6	41
Conmee	3	38	1	8	32	2	42
Marks	1	12	0	2	10	1	13
Total	30	302	30	128	205	29	
	8%	83%	8%	35%	57%	8%	

* Value Judgements - see key

KEY: Workmanship:
Poor - quickly built for short term, lack of precision
Fair - moderately solid structure with neat appearance
Good - precision built structure

Present Condition:
Poor - partially fallen in, beyond simple repair
Fair - capable of use with minor repairs needed
Good - in use or capable of it, and in good repair

TABLE A30

CHANGES IN USE OF STRUCTURES

Township	One Function (use stayed the same)	Two Function (changed at least once)	Three Function (changed at least twice)	Abandoned	Total No. of Buildings in Township.
Gorham	21/22	74/77	12/23	50/53	95
Ware	9/16	48/84	10/18	24/42	57
Lybster	22/23	72/77	7/7	45/48	94
O'Connor	2/15	11/85	2/15	7/54	13
Gillies	-	7/100	3/43	3/43	7
Pearson	9/22	32/78	10/24	24/59	41
Conmee	17/40	25/60	3/7	16/38	42
Marks	5/38	8/62	2/15	3/23	13
Total	85/23	277/77	49/14	172/48	362

KEY: Noted Occurrence

% of Occurrences in Township

TABLE A31

SAMPLE OF LANDS TITLE RECORDS

(From "Doomsday Book" Records, Ministry of Natural Resources, Thunder Bay, Ontario)

Concession No. 2

Lot	Area	Locatee	Patent Date
1	280		
N 1/2	140	Gust Lehtinen	Oct. 21, 1921
S 1/2	140	Oscar Silkanaa	May 5, 1916
2	282		
N 1/2	141	Peter Widgren	Jan. 2, 1921
S 1/2	141	Oscar Lehtinen	Aug. 16, 1923
3	280		
N 1/2	140	Axel Maki	Nov. 21, 1923
S 1/2	140	Gust Fiskar	August, 1912
	Later -	Carl Fiskar	July 12, 1948
4	280		
N 1/2	140	J. Lamminen	Dec. 11, 1918
S 1/2	140	John Karja	Oct. 12, 1917
	Correction -	Elivia Karja	Apr. 22, 1948
5	268		
N 1/2	134	Edward Koivisto	Apr. 11, 1923
S 1/2	134	J. Moline	Sept. 11, 1917
6	160	W.A. Robinson	Feb. 6, 1948
7	263		
N 1/2	131 1/2	John Palo	Sept. 16, 1921
S 1/2	131 1/2	Nick Makela	Apr. 6, 1921
8	237		
N 1/2	118 1/2	Heary Hamalainen	Apr. 21, 1920
Spt.	91 1/2	Arne Hamalin	Jan. 10, 1936
9	115	Arthur Forsberg	Sept. 12, 1919
10	222		
N 1/2	111	Audrey Koskinen	Jan. 21, 1916
S 1/2	111	Audrey Koskinen	Dec. 13, 1941
11	281		
N 1/2	140 1/2	J. Korhanen	Jan. 9, 1931
S 1/2	140 1/2	J. Luastarinen	Oct. 19, 1916
12	260		
N 1/2	130	L. Pederson	Nov. 12, 1920
S 1/2	130	Antti Pitkanan	May 6, 1941
13	128	Alex Palmn	Dec. 15, 1915
14	223		
N 1/2	63	Alex Palmn	Aug. 10, 1921
S 1/2	160	Hiram Windsor	June 26, 1913
15	280		
N 1/2	140	Axel Johnson	Aug. 23, 1912
S 1/2	140	J.J. Babcock	Aug. 15, 1911
16	279		
N 1/2	139 1/2	Matt Pakka	Jan. 2, 1913
S 1/2	139 1/2	Alex Wertanen	May 9, 1912
17	280		
Npt.	120	Otto Hill	May 14, 1919
S	160	John Stewart	Oct. 17, 1913

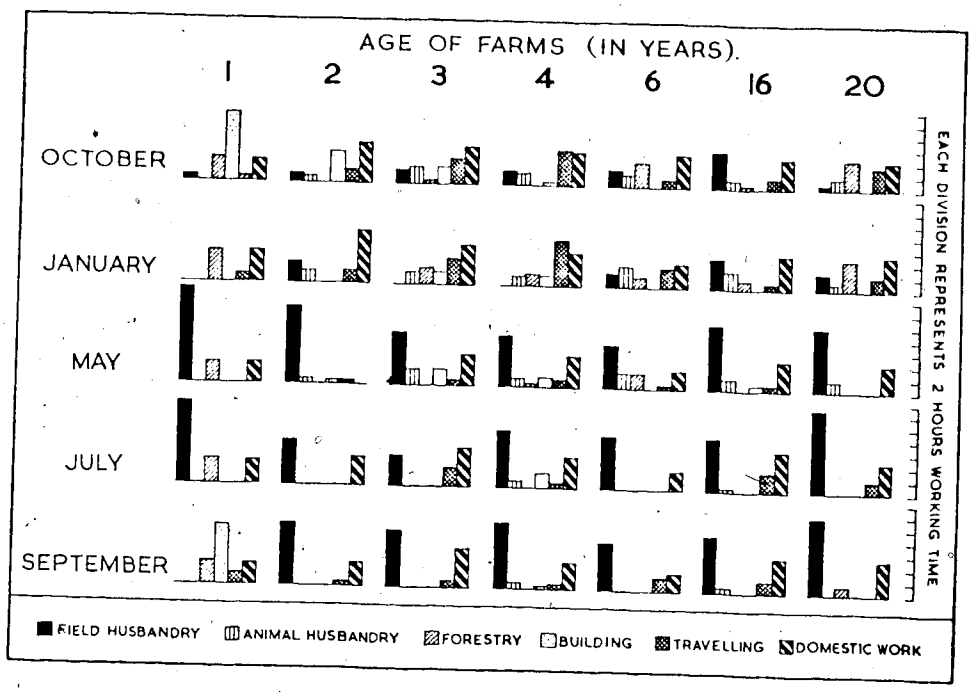

TABLE NO A32

MEAD'S CHARACTERIZATION OF ACTIVITY PATTERNS
ON DEVELOPING DAIRY FARMS IN NORTHERN FINLAND
(from Mead, W.R., ECONOMIC GEOGRAPHY OF SCANDINAVIA AND FINLAND, op.cit., p. 168)

TABLE A33

FINNISH EMIGRANTS BY OCCUPATION OF HEAD OF FAMILY 1893 - 1930

	1893-1895	1896-1900	1901-1905	1906-1910	1911-1915	1916-1920	1921-1925	1926-1930
Totals	14,517	33,040	81,056	77,776	50,668	16,678	31,026	27,533
Landowners	8.6	7.4	5.6	4.3	4.3	6.4	10.5	17.3
Sons and Daughters of Landowners	25.4	27.0	22.8	24.9	24.2	23.2	23.5	23.5
Tenant Farmers	5.1	3.9	3.0	2.2	1.4	1.3	0.8	0.3
Sons and Daughters of Tenant Farmers	7.9	10.3	10.3	10.0	8.3	5.0	3.1	0.9
Cottagers, hired hands, other landless persons	30.0	31.8	25.9	27.0	23.4	21.2	9.6	3.7
Other employed in Agric.	--	--	0.2	0.3	0.3	0.3	1.3	2.3
Merchants and Clerks	0.5	0.4	0.9	0.8	1.1	2.0	1.8	2.7
Seamen	2.7	1.3	1.9	1.5	1.7	1.0	1.5	0.8
Handicraftsmen	4.7	2.6	5.6	4.6	5.9	5.6	8.3	7.0
Factory Workers	0.5	0.3	1.5	1.6	1.9	2.7	3.6	3.8
Domestic Servants	6.5	7.6	5.9	6.0	6.4	4.9	4.9	6.7
Persons without Fixed Occupations	5.2	5.0	12.9	12.7	15.4	14.1	16.3	18.3
Public Officials and Employees	0.6	0.5	1.0	1.1	1.1	1.8	1.3	0.9
Persons whose Occupation not reported	2.1	2.0	2.4	3.2	4.6	10.5	13.5	11.9

Based on Siirtolaisuustilastot, Official Statistics of Finland, Series XXVIII, No. 1-24, 1900-1945.

BEAM DIAMETERS

Township	Widest Dimension of Beam 4" (10.2 cm)	5" (12.7 cm)	6" (15.2 cm)	7" (17.8 cm)	8" (20.3 cm)	9" (22.9 cm)	10"* (25.4 cm)	11" (27.9 cm)	12" (30.5 cm)	13" (33.0 cm)	14" (35.6 cm)
Gorham	2	6	11	21	51	8	-	-	-	-	-
Ware	-	3	5	21	25	2	1_F	-	-	-	-
Lybster	1	1	4	53	20	4	$2_{S,D}$	1_{FC}	-	-	1_{FC}
O'Connor	-	1	1	7	-	1	2_B	-	-	-	1_B
Gillies	-	-	-	6	-	-	-	-	-	-	1_B
Pearson	-	3	2	49	5	3	-	1_F	-	-	-
Conmee	-	3	4	28	5	1	1_F	-	-	-	-
Marks	-	-	-	7	5	-	1_F	-	-	-	-
Total	3/1%	17/4%	27/7%	192/50%	111/29%	19/5%	7/2%	2/1%	-	-	3/1%

* All buildings 10" and up have builder ethnicity indicated: F - Finnish, D - Dutch, B - British, FC - French Canadian

KEY: Number of Occurrences / % of Total Occurrences

FINNISH FOLK ARCHITECTURE AND SETTLEMENT IN RURAL THUNDER BAY

MARK A. RASMUSSEN - DEPARTMENT OF GEOGRAPHY - UNIVERSITY OF ALBERTA - MASTER'S THESIS

STRUCTURAL CHECKLIST

*NOTE- Individual categories must be keyed through the separate legend.

Sheet No. 5

Log Buildings Only / Frame Only

Township- Lybster Site Number	Type of Structure	Builder Ethnicity	Year Built	Log/Frame	Log Material	Beam Type	Corner Style	Corner & Beam Reinforcement	Average Beam Dimension	Chinking	Stud Size	Stud Spacing	Stud Material	Exterior Wall Covering	Interior Wall Covering	Roof Type	Roof Covering	Roofing Material	Rafting	Floor Type	Foundation	Number of Doors	Number of Windows	Building Size	Additions	Number of Storeys	Loft/Basement	Building Condition	Original Condition	Original Building Use	Present Use	Other Uses	Other Structural Comments
91	H	F3	1908	L	Sw-Sp	Sh	Lt	P	5x8	MR				B	B	G	T	HG	5 purlins	CR	1	2	—	14x20	f 10	1½	—	P	F	H	S.S.	—	beam rafters in all,
	HB	"	—	"	"	Rd	St	"	9"	G				B	B	G	S	"	"	"	1	0	—	18x24	—	"	—	F	F	HB	S.S.	—	all open, [illegible] HB style
	HB	"	—	"	Ol,Sp	Rd	St	"	8"	G				B	B	G	[illegible]	"	17 purlins	"	1	0	—	18x24	—	"	—	F	G	HB	HB	—	" , 17 purlins, good shape
	CB	"	1937	"	Sw-B	Sh	Df	"	5x8	MR				O	B	G	S	"	5 purlins	"	1	c.5	—	20x20	—	1	—	F	G	CB	A	—	Large loft, good shape, [illegible] loft beams
	HB	"	1911	"	"	Sh	Lt	"	"	[illegible]				B	B	G	S	"	"	"	1	1	—	14x16	—	1	—	P	F	HB	A	—	Badly deteriorating, [illegible]
	C.C.	"	—	"	DfSw	"	Df cb	"	"	[illegible]				B	B	G	T	"	—	"	1	2	Crb	12x18	—	1	—	F	F	C.C.	A	—	[illegible] windows S.
	S	"	—	LoF	Sw	"	Lt cb	"	"	"				[illegible]	—	G	S	"	3 purlins	"	1	2	1w	10x10	f 5x10	1	—	F	F	S	S	—	Crib at [illegible] joint, Smoke Sauna
92	CB	F1	—	L	Sw	Sh	Lt	—	5x8	M				B	B	G	S	HG	—	—	c.2	c.2	—	12x20	f [illegible]	1	—	F	F	CB	A	—	CB-HaB linked by [illegible]
	HB	"	—	"	"	"	"	—	"	—				B	—	G	"	"	—	—	"	"	—	12x20	connected?	1	—	F	F	HB	A	—	Barn building, same style
93	CB	F1	—	"	—	Rd	St	—	8"	—				[illegible]	—	G	S	HG	R	—	2	c.9		20x20	f HB [illegible]	1	—	F	F	CB	A	[illegible]	Has large loft, frame top
	HB	"	—	"	—	Sh	Lt cb	—	5x8	G				B	B	Gr	"	—	—	—	1	0		24x28	—	1½	—	P	F	HB	A	—	[illegible], all open, 4 [illegible]
94	H	F3	[illegible]	"	Pj,Rd	Sh	Df	Psb	5x7	M				Sl	[illegible]	G	[illegible]	HG	5 purlins	[illegible]	1	c.12	Cb	18x32	f 10x10	2	—	F	F	H	H	—	[illegible] frame, [illegible]
	RC	"	c.1911	"	"	"	"	"	6x9	M				B	[illegible]	G	S	[illegible]	3 purlins	R	1	2	2w	14x18	—	1	B	P	F	RC	A	—	Basement Root [illegible] for cold storage - note
95	H	F3	1906-8	"	Pj,Sw	Sh	Df	P	5x7	M				[illegible]	[illegible]	G	[illegible]	HG	—	—	1	c.12		18x28	f 6x12	2	—	G	G	H	C	—	Renovated, 2 stories of logs
	HB	"	—	"	T	[illegible]	St	—	6"	G				B	B	G	S	"	—	—	2	0	—	15x15	—	1½	—	F	F	HB	A	—	Ca. [illegible] walls, extended eaves
96	H	F3	1906	"	Pj	Sh	Df	P	5x7	MR				Sl	B	G	[illegible]	HG		HR	1	c.4	—	16x20	—	1½	—	F	F	H	H	—	Shiplap over Pj log
	RC	"	—	"	Df	"	Lt	"	"	"				B	B	G	S	"		"	1	0	—	10x12	—	1	—	P	P	RC	RC	—	
	CB	"	—	"	Sf	"	Lt	"	"	"				B	B	G	S	"		"	1	c.2	—	12x16	—	1	—	F	F	CB	A	—	
97	H	F3	1919	"	[illegible]	Sh	Lt	P	8x7	M				B	[illegible]	G	[illegible]	HG		—	1	10	Cb	30x30	—	2	—	G	G	H	C	—	2 story, all logs, renovated
	S	"	—	LF	Pj,Rd	Sh	Lt	"	"	"				B	B	G	S	"	R&R	—	1	1	1w	8x12	f 6x8	1	—	P	F	S	A	—	Smoke Sauna - Stone stove, louver [illegible]
	CB	"	—	L	Sw,Pj	Sh	Df	—	6x8	—				B	B	G	S	HG	—	—	1	2	—	16x24	f 16x16	1	—	P	F	CB	A	—	Built [illegible]
98	H	F3	1908	L										[illegible]	[illegible]	G	[illegible]	HG	C	—	2	11	Cb	18x26	f 8x8, 5x10	1½	—	F	F	H	H	—	[illegible] logs, [illegible]
99	Com	F3	1909	L	P,Sw	Sh	Df	P	5x8	C				[illegible]	[illegible]	G	M	—	[illegible]	RC	3	12	Cb	18x45	f [illegible]	2	B	G	G	Com	[illegible]	—	3 [illegible], good shape, [illegible] to Taylor
100	S	F3	c.1922	FL	[illegible]	Sh	Lt	P	"	M				[illegible]	—	G	S	[illegible]	[illegible]	—	1	1	Cb	8x8	f 6x8	1	—	F	F	S	S	—	Typical style S
	HB	"	—	L	Sw	Sh	Lt	P	6x8	M				O	B	G	M		"	[illegible]	2	1	1w	12x24 2w	—	1½	—	F	F	HB	SS	—	Wall storage, up to 12" [illegible], tall
101	H	F1	—	"	P,Sw	Sh	Df	P	5x8	M				B	[illegible]	G	S	[illegible]	[illegible]	R	1	3	Cb	16x20 2w	f 6x6	1	—	P	F	H	A	—	[illegible]
102	H	F1	—	L	Pj,S	Sh	Mcb	P	"	R				B	[illegible]	G	S	HG	—	R	1	6	Cb	14x20 2w	f 5x5	1½	—	F	F	[illegible]	A	—	Poor [illegible], loft access from outside
	S	"	—	LF	"	Sh	L	—	"	"				B	[illegible]	G	S	"		R	1	1	1w	8x8	f 4x8	1	—	P	F	[illegible]	A	—	Smoke Sauna, Collar [illegible], Rock [illegible]
	CB	"	—	L	Sw	Sh	Df cb	P	"	"				B	B	Gr	S	[illegible]	3 purlins	R	3	9	3w	18x18	—	1½	—	F	F	CB	[illegible]	—	Single [illegible], 3-stall, [illegible] floor
103	H	F1	—	L	Pj	Sh	Lt	P	5x7	M				B	[illegible]	—	S	[illegible]	R&R	—	1	4	—	16x20	f [illegible]	1	—	P	F	[illegible]	A	—	[illegible], Collapsed
104	CP	F3	1916	L	Sw	[illegible]	[illegible]	—	10"	G				[illegible]	[illegible]	↓	↓	↓	↓	P	2	1	—	24x30	HB	1	—	F	G	CP	A	—	up to 20" beam Sw - [illegible] - HB connects
	HB	"	1916	F							[illegible]	[illegible]	[illegible]	[illegible]	B	Gr	[illegible]	[illegible]	[illegible]	P	1	0	—	24x52 2w		2	—	F	G	HB	A	—	Intricated Beam Truss System
105	[illegible]	F3	1917	L	Pj	[illegible]	[illegible]	—	10"	G				B	[illegible]	Gr	[illegible]	[illegible]	"	[illegible]	—	—	—	24x24	f [illegible]	2	—	F	F	[illegible]	HB	—	" " , Hay loft [illegible]
	CB	F	1930	L	Pj	Sh	Lt	—	5x8	M				B	B	Gr	[illegible]	[illegible]	[illegible]	[illegible]	—	—	—	24x24	[illegible]	2	—	F	F	CB	CB	—	" " Renovated
106	H	[illegible]	[illegible]	"										[illegible]	—	[illegible]	[illegible]	[illegible]	[illegible]	R	2	8	Cb	[illegible]	f 8x10	1½	—	F	F	H	H	—	Logs covered with SL
	H	"	1908	"	Pj	Sh	Lt	—	[illegible]	[illegible]				[illegible]	[illegible]	G	[illegible]	[illegible]	[illegible]	[illegible]	2	2	—	[illegible]	f [illegible]	1½	—	F	F	H	SS	CB	Similar to Finnish Style
107	S	F3	—	"	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—	1	2	[illegible]	10x16		1	—	F	[illegible]	S	SS	—	Built on S [illegible]
108	H	F3	[illegible]	"	Pj	Sh	[illegible]	—	[illegible]	[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	2	[illegible]	12x18	—	1	—	P	P	H	SS	CB	New Roof, Loft [illegible]
109	H	F1	—	"	Pj	Sh	[illegible]	—	[illegible]	[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18x20	—	1½	—	G	F	H	H	—	[illegible]
	G	"	—	"	Pj	[illegible]	[illegible]	—	[illegible]	[illegible]				[illegible]	[illegible]	G	[illegible]	[illegible]	[illegible]	[illegible]	1	0	[illegible]	12x16	—	1	—	F	F	G	G	—	Uses Pj [illegible]
	[illegible]	"	—	"	Pj	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	6	[illegible]	[illegible]	—	1	—	[illegible]	F	BS	SS	—	Functional [illegible], Sloppy
110	H	F3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—	[illegible]	[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—	1	—	P	F	H	SS	—	Loft-outside entrance, Rough ladder, [illegible]
111	H	F	[illegible]	[illegible]	[illegible]	Sh	[illegible]	[illegible]	[illegible]	C				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—	1½	—	G	G	H	H	—	Logs covered, [illegible]
	S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	M				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]	f 5x8	1	—	[illegible]	[illegible]	S	S	—	Smoke Sauna converted to Storage [illegible]
	CC	"	[illegible]	L	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1½	—	P	[illegible]	CC	A	—	Very [illegible], small loft, [illegible]
	[illegible]	"	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	G				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—	1	—	[illegible]	[illegible]	[illegible]	[illegible]	—	Pj boards [illegible]
112	H	F	[illegible]	[illegible]	[illegible]	Sh	Lt	[illegible]	[illegible]	[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—	[illegible]	—	[illegible]	[illegible]	H	SS	CB	[illegible]
	[illegible]	[illegible]	[illegible]	L	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12x20	f [illegible]	1	—	[illegible]	[illegible]	[illegible]	SS	—	1x6 exterior [illegible]
113	S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	—	[illegible]	F	S	SS	—	

...TECTURE AND SETTLEMENT IN RURAL THUNDER BAY

SHEET-

...TY - UNIVERSITY OF ALBERTA - MASTER'S THESIS FIELD RESEARCH - SUMMER OF 1977

...TURAL CHECKLIST | LOCATIONAL CHECKLIST | BACKGROUND

Building Size	Additions / Number of Storeys		Building Condition	Original Workmanship	Original Building Use	Present Use	Other Uses	Other Structural Comments	Functional Position	Relation to other Buildings	Front of Building Facing	Class of Land (C.L.I.)	Original Function of Site	Present Function of Site	Total Farm Area / Acres Cleared	Other Locational Comments	Other General Background
f ND	1½	-	F	F	H	S.S.	-	Some rafters in all	C	N	E		mf	R		60. Fairly Level, Mixed Bush S,B,Po	Settled 1904 - father [illegible] English
-	"	-	F	F	HB	S.S.	-	all open, typical HB style	"	N	W		"	"		Red clay soil, Site well off road	Present H - 1½ F unpainted
-	"	-	F	G	HB	HB	-	" 17 partial, good shape	"	S	S		"	"		Field Hay Barn	
-	1	-	F	G	CB	A	-	Large loft, [illegible] loft beam	"	N	E		"	"			
-	1	-	P	F	HB	A	-	Badly deteriorating, toppings inside	"	"	SE		"	"			
-	1	-	F	F	C.C.	A	-	[illegible] S.	"	"	S		"	"		On back hilly area	
f 5x10	1	-	F	F	S.	S	-	Corner log [illegible], Smoke Sauna	"	"	W		"	"		"	
f ND	1	-	F	F	CB	A	-	CB + HB linked by collapsing addition	C	N	E		mf	R		Hilly, red clay mixed bush	Restricted Access
connected?	1	-	F	F	HB	A	-	Barn building same style	"	"	S		"	"		30.	"
f HB ND.	1	-	F	F	CB	A	-	Has large loft, frame top	R	N	N		mf	R		60. Fairly level, mixed bush + Pj	" other log buildings also but N.D.
-	1½	-	P	F	HB	A	-	[illegible] all open, 4 [illegible]	"	S	S		"	"		Field Hay Barn	
f 10x10	2	-	F	F	H	H	-	Top frame, [illegible]	R	N	N		mf	R		Level area 20. [illegible]	S. Pajala, Lived in same [illegible]
-	1	B	P	F	RC	A	-	Basement + Root cellar for cold storage - [illegible] joists	"	N	E		"			Incorporated into hill Pj → Clay?	Some logging, Picked up [illegible]
f 6x12	2	-	G	G	H	C	-	Remodeled, 2 stories of logs	C	N	E		mf	C		Rolling, Mixed Bush, Heavy Clay	J. Saimes farm - Blacksmith + farmer
-	1½	-	F	F	HB	A	-	Cantilevered walls, extended eaves, loft	"	"	E		"	"		Incorporated into hill	Old country style - could be [illegible]
-	1½	-	F	F	H	H	-	Shiplap over the log	R	N	E		mf	R		Rolling Mixed Bush	
-	1	-	P	P	RC	RC	-		"	"	S		"	"		Some backing down	Sites 95-98 in [illegible]
-	1	-	F	F	CB	A	-		"	"	S		"	"		c. 3	
-	2	-	G	G	H	C	-	2 story all log, renovated	C	N	E		mf	C		30. Moderately hilly, mixed bush	Kangas farm - had shingle mill on creek
f 6x8	1	-	P	F	S	A	-	Smoke Sauna - Stone stove, louver on roof	C/W	N	W		"	"		Next to creek	Smoke stained walls [illegible]
f 16x16	1	-	P	F	CB	A	-	[illegible]	C	N	E		"	"		In a long series of log frame barns	2 more log buildings N.D. (CC + HB?)
f 8x8, 5x10	1½	-	F	F	H	H	-	[illegible], good logs covered	R	N	E		mf	R		Hilly Pj area	[illegible]
f ND	2	B	G	G	Comm.	[illegible]	-	[illegible], good shape, next to [illegible]	[illegible]	N	S		Store	[illegible]		Next to P.O. mail, hwy. + creek in Nolalu	Store/post office c. 1920 - [illegible] group, centre of community
f 6x8	1	-	F	F	S	S	-	Typical style	"	"	E		[illegible]	[illegible]		On side of hill, on edge of village, Pj area	Nolalu Post office site - ½ of house is [illegible]
-	1½	-	F	F	[illegible]	SS	-	[illegible], up to 12" [illegible], tall	"	"	W		"	"		On hillside "	[illegible] was S1 over, 1½ [illegible] frame, [illegible] N.D.
f 6x6	1	-	P	F	H	A	-	[illegible] - 2 Pj	R	N	E		mf	A		20. Rolling slightly, Po, Bl. Sw bush	[illegible] chimney [illegible]
f 5x5	1½	-	F	F	H	A	-	[illegible], loft access from outside	R	N	E		mf	A		5? Gently Rolling, Mixed Bush	Change rooms [illegible], Steam room [illegible]
f 4x8	1	-	P	F	S	A	-	Smoke Sauna, Collapsing, Rock stove	"	"	S		"	"		On small water course	
-	1½	-	F	F	CB	A	-	[illegible], 3 stalls, [illegible] floor	"	"	W		"	"		In Field area	
f [illegible]	1	-	P	F	mc	A	-	[illegible], Collapsed	R	N	E		mc	A		2. Flat, mixed bush	All built the same time, Built by 1 man (Frenchman)
HB 2	1	-	F	G	CP	A	-	Up to 20" [illegible] - HB covers CP	R	N	E		"	"		20. heavy clay, good hay growing	French + Scots in [illegible] before Finns
	2	-	F	G	[illegible]	A	-	Intricated Beam Truss System	R	"	S		"	"		On hillside, rolling area	Built by French neighbour - site 114
f Connecting [illegible]	2	-	F	F	HB	HB	[illegible]	" " , Hay loft [illegible]	R	"	S		mf	mf		Clay, mixed bush, rolling [illegible]	Built by father - Mr. Paako; some logging
"	2	-	F	F	CB	CB	[illegible]	Remaining [illegible]	"	"	S		"	"		Across from site 117	Good comparison of styles - Took 2 men 2 years
f 8x10	1½	-	F	F	H	H	-	Logs covered with SL	R	N	S		mf	mf		30. Rolling, Mixed bush to Pj still cattle	1st settlers in area
f ND.	1½	-	F	F	H	SS	CB	Similar to Finnish style	"	"	E		"	"		"	2nd house - changed [illegible]
-	1	-	F	F	S	SS	-	Built on [illegible]	R	N	E		mf	Fc		10. Rolling Pj to mixed bush, old school site (gone)	Next to old School site
-	1	-	P	P	H	SS	CB	New Roof, Loft originally	R/W	N	E		mf	R		1. Hilly, heavily treed	1st house
-	1½	-	G	F	H	H	-	[illegible]	R	N	N		mf	R		15. Sandy [illegible] Pj area, surrounded by log [illegible]	
-	1	-	F	F	G	G	-	[illegible] Pj [illegible]	"	"	W		"	"		On driveway near house	
-	1	-	P	F	[illegible]	SS	-	[illegible]	"	"	E		"	"			2 other log sheds N.D. [illegible]
-	1	-	P	F	H	SS	-	Loft [illegible], Roof Ladder [illegible]	R/W	N	S		mf	R		5-10, [illegible] Pj [illegible]	Old Finnish woman [illegible] English [illegible]
-	1½	-	G	G	H	H	-	Logs covered, [illegible]	C	N	E		mf	mf		60 Rolling, Mixed Bush [illegible] Pj	Rautala farm, Built this by himself
f 5x8	1	-	G	G	S	S	-	Smoke Sauna converted to Standard Sauna	C	"	E		"	"		2 main houses on same site	
-	1½		P	F	CC	A	-	Very low roof, small loft [illegible]	"	"	E		"	"		Leaning toward [illegible] (Sw from [illegible]) →	
-	1		P	F	[illegible]	SS	-	Pj [illegible], [illegible] floor	"	"	W		"	"		"	[illegible] Range + [illegible]
-	1½	-	F	G	H	SS	CB	[illegible]	C	N	E		mf	R		Mixed bush, rolling 15	[illegible] 1st house
f 8x12	1	-	F	F	CB	SA	-	1x6 [illegible] "	"	"	W		"	"			
f ND	1	-	F	F	S	SS	-		R	N	W		mf	R		10. on top of ridge Pj area	[illegible] added building on site