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NON-RESIDENT OWNERSHIP
IN THE COUNTRYSIDE
OF
BRUCE COUNTY:
A CASE OF RURAL RESETTLEMENT

by

Robert John Worrall

Submitted in partial fulfillment
of the requirements for the degree of
Master of Arts in Geography

Department of Geography
Wilfrid Laurier University
Waterloo, Ontario

1974

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ABSTRACT

This study is concerned with the countryside facet of the non-resident ownership phenomenon. The utilization of spatio-temporal analysis in the research answered some of the questions that have arisen concerning the extent and trends associated with the non-resident ownership process.

Rather than employ one of the many diverse governmental definitions based on political ethnocentrism, this study made use of a three-part non-resident ownership definition based more on distance and the characteristics of the Bruce County agricultural subsystem. Consequently, foreigners and Canadians were equally viewed as potential non-resident owners. Such a breakdown revealed that Canadian, rather than foreign non-resident ownership, has exhibited the more significant spatio-temporal trends.

An historical examination of the spatial trends derived from the 1900 to 1974 Assessment Roles in twelve townships in Bruce County revealed a non-resident diffusion process essentially parallel to a settlement diffusion. This "resettlement" has been controlled by specific spatial determinants. Specifically, there has been a high preference for shoreline, stream and low agricultural capability land and, conversely, a negative preference for swamp land and high capability agricultural land. This latter hypothesis was examined in terms of the spatial impact of non-resident ownership upon the prime land of one of the County's townships.

The above set of explanatory hypotheses was examined vis-à-vis an 'a priori' construct which envisaged the non-resident diffusion process in Bruce County operating as two prime diffusion continuums. The continuums were defined in a North-South and West-East direction by means of a consistent "2375" non-resident acreage wave.

The non-resident ownership process in Lindsay Township (Bruce County's non-resident ownership diffusion "hearth") was explained by means of the same set of hypotheses which were employed in 'a priori' fashion to explain the diffusion along both continuums. An 'a posteriori' deterministic model, based on the same set of hypotheses, contributed "micro" justification to the diffusion's explanatory variables.

ACKNOWLEDGEMENTS

The culmination of over a year's research and writing, as presented in this thesis, undoubtedly owes much gratitude to many individuals who, either directly or indirectly, have contributed invaluable to the final product.

Without the substantial help given to me by the following township clerks, the massive data collection involved in the research would never have been permitted: R. J. Gatis (Albemarle), W. E. Johnston (Amabel), A. Sim (Arran), G. Napper (Brant), M. Hackett (Culross), M. Cameron (Eastnor), R. Wagner (Elderslie), E. Tout (Huron), F. MacKinnon (Kinloss), Mrs. F. Meyer (Lindsay), G. Cameron (St. Edmund). Special thanks is also owing to Vince Stewart (Road Superintendent, Carrick Township), whose assistance allowed the "tapping" of the Carrick Assessment Roles, and to Mrs. Meyer who, for the second year in succession, tolerated my "invasion" of the Lindsay records. I thank these people for their assistance, encouragement and hospitality.

As was the case in my previous thesis, I am once again in appreciation of the abundant assistance provided by Mr. Henry F. Noble (Senior Economist), Mr. Fred Hill, and remaining staff in the Land Use Section of the Economics Branch of the Ontario Ministry of Agriculture and Food. I extend the same gratitude to Mr. Ron Brown (Regional Analyst) of the Southwestern Ontario Section of the Regional

Planning Branch of the Ministry of Treasury, Economics and Inter-governmental Affairs.

For his special interest, encouragement and assistance in placing this study within a diffusion framework, I am indebted to Professor Lawrence A. Brown of Ohio State University.

A brief perusal of the thesis reveals a heavy emphasis on cartographic presentation. To this end I acknowledge the many hours of assistance provided by Miss Pam Coutts.

I would also very much like to thank my sister, Mrs. Elaine Petersen, for the unselfish giving of her time and patience in the preparation of the final draft.

Appreciation is also extended to Dr. John McMurry and Dr. Russell Muncaster for their unbiased criticisms of the final draft. To Dr. Muncaster and the remaining members of the Laurier geography "team", thanks is owing for five years of geographic stimulation. Of this team, a special "thank you" is given to Mr. Henry Aay, whose personal and academic acquaintance has resulted in an increased enthusiasm for the discipline and, consequently, in the genesis of a more "unmercenary" view of this thing we call geography.

Finally, the member of the "team" deserving special mention is Dr. Alfred Hecht, my thesis advisor, who listened, tolerated, persuaded, stimulated and, all in all, kept me "on track". I thank him for his rural sympathies and understanding, without which such a thesis could never have been completed.

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CHAPTER ONE

INTRODUCTION AND JUSTIFICATION

During the last decade, there has been an increasing and persistent Canadian outcry concerning the extent to which Canada has been controlled by non-residents. Such demands for economic, political and cultural nationalism are essentially ethnocentrist claims for the preservation of a Canadian "status quo". On the other hand, when these preservationists' demands are examined at a more provincial or local level of analysis, it is often the case that the intrusion of one's fellow Canadians into a regional economy or community can be viewed as being equally detrimental.

The period of the late 1960's and early 1970's was an era of increased awareness of non-resident control of Canadian culture and the nation's industrial sector.¹ The former seems to have taken place primarily via the mass media and the entertainment world, while the latter has been in terms of outright ownership. It is only now, midway through the 1970's, that Canadians are becoming conscious of how far-reaching the phenomenon of non-resident ownership really is.

Concern for, and awareness of the degree of non-resident control found its earliest geographical roots within the confines of the urban realm. Recently, however, much interest has been generated with regards to the future of the rural regime. Granted, the ever-increasing problem

or urbanization, along with its effects on the rural-urban fringe, may pose more concern for the agricultural preservationist than does the phenomenon of non-resident ownership. Nevertheless, the fact remains that federal and provincial governments are now recognizing both the severity and the extent of non-resident ownership of agricultural land. Royal Commissions which were originally set up to investigate non-resident control of the industrial and cultural systems, are now switching their focus to the location and extent of non-resident control of the rural land tenure system.² In some instances recommendations have been made for a minimum maintenance plan for the management of the land,³ while other stronger recommendations have taken the form of special non-resident land taxes⁴ or even a total freeze of the land.⁵

Even though many of the recommendations and associated legislation that have been initiated to curtail the problem are essentially in their initial stages, it reflects some degree of governmental response. A problem can be seen, however, in that the initial response may have been generated by emotionalism on the part of an uneducated public. It is only understandable that during the genesis of awareness, concern is going to be revealed primarily in some form of emotionalism. Consequently, it remains for the researcher to answer some of the questions posed and, in this way, give some realistic justification for the topical concern.

Most investigations, to date, have dealt almost solely with the extent of foreign non-residents in the rural regime.⁶ With respect to citizenship, only non-Canadians can be considered as foreign-

ers. However, when one concerns himself with a farming subsystem it is only realistic to assume that non-residents are all those who maintain a permanent residence outside the spatial subsystem in question. The agricultural subsystem could be defined as a township or a county. By looking at the problem within the framework of a more restricted system, not defined by national boundaries, the impression of who the non-residents actually are, is greatly enlarged. It is such a broad view that must be adopted when analyzing the extent of non-resident ownership.

A recent study of farm abandonment in Bruce County has revealed that the abandonment process, to a limited extent, has been acting as a "bulldozer", clearing the way for new owners and, in many instances, for non-residents in the rural land tenure system of Bruce County.⁷ Since parts of the County are considered to be in the agricultural fringe of Southern Ontario, and due to its relatively great distance from any major urban growth centre, farming of the land, on either a full-time or part-time basis is simply out of the question for most non-resident owners of agricultural land in Bruce County. Hence, this results in land being withdrawn from the agricultural system.

If it were only the marginal farm land which was falling into the hands of non-residents, then the problem would not be a critical one. The farm abandonment study revealed though that the recent time periods have witnessed the abandonment of very capable farm land. In turn, tenure analysis reveals that the same farm land has undergone a change in ownership to a non-resident who discontinued the practice of farming the

land. Consequently, the stability of the farming system of Bruce County is potentially being jeopardized by the substitution of a non-farming, non-resident owner for a farming, resident owner.

In order to understand the extent to which the farming subsystem is being jeopardized by the problem, it is essential that the researcher initially comprehends both the determining forces behind the problem and its resulting spatial extent. In short, it could be proposed that the spatial "raisons d'être" behind the process, and the spatial extent of non-resident ownership of agricultural land, are not fully understood by the rural geographer. Therefore, it becomes his task to determine the degree to which the phenomenon of non-resident ownership exists in rural space, and to provide the spatial explanations behind the problem. In this way, the initial "terrae incognitae" of non-resident ownership in the countryside can be eliminated.

In summary, it is a prime objective of this research to donate some degree of geographical justification to the present concern for non-resident ownership in the countryside. Consequently, it is an essential aim to analyze the problem of non-resident ownership in a spatio-temporal fashion. In turn, such a diffusion-based methodological approach may afford added insight into the phenomenon as a process and those spatial determinants which make the process operational.

Endnotes to Chapter One

1

Watkins, Mel, "Preface" in Silent Surrender by Kari Levitt (Toronto: Macmillan Company of Canada Limited, 1971), pp.ix-xviii.

2

Notable examples include the Royal Commission on Land Ownership and Land Use for P.E.I., and the Royal Commission on Economic and Cultural Nationalism in Ontario.

3

Rawson, Mary, Minimum Maintenance (Ottawa, Department of Regional Economic Expansion, 1973), Appendix A, p.27.

4

The Globe and Mail, Feb. 23, 1973, p.2.

5

The Financial Post, Jan. 13, 1973, p.13.

6

The Western Producer, Jan. 4, 1968, p.8.

7

Worrall, Robert J., Farm Abandonment in Bruce County (Waterloo: unpublished B.A. thesis, Department of Geography, Waterloo Lutheran University, 1973).

8

The geographical application of "terrae incognitae" is taken from Lowenthal, David, "Geography, Experience, and Imagination: Towards a Geographical Epistemology", in the Annals of the Association of American Geographers, Vol. 51, no. 3, September, 1961, pp.241-258.

CHAPTER TWO

THE ANALYTICAL FRAMEWORK

A. THE HYPOTHESES

The problem of non-resident ownership can be analyzed as a process operating through time and over space. As a result, the spatial hypotheses (expressed as positive and negative influences on the process), that can be proposed to explain such a diffusion, must themselves be derived in a historical or evolutionary fashion.

First of all, it will be seen that historically, the process of non-resident ownership of agricultural land has had a more significant impact upon tenure patterns during some time periods than others. Associated with the above is that some time periods reveal that better quality farm land presents a greater attractive force for the non-residents than is indicated in earlier time periods. In short, it can be hypothesized that earlier time periods were marked by a preponderance of shoreline and stream or river-aligned properties being purchased by non-residents. That is, the land with recreational appeal, and that land which possessed a lower dollar value (i.e., low capability agricultural land) was the land which initially fell to the non-residents. While shoreline, stream and low agricultural capability properties act as positive influences, expensive property (i.e., high capability agricultural land) and swamp land remain as negative influences on the non-resident owner-

ship process.

With the increasing desire for a new home, a second home, or a piece of property whose purchase would be based solely on speculation, the eyes of the non-resident have begun to turn away from the already heavily-populated shoreline areas. His attention is now being focused on the isolated rural areas. As the low capability farm land eventually disappears into the hands of the non-residents, what is left is the highly productive farm land. It is only recently that this latter step has been reached. It is this type of tenure alteration which is causing much concern amongst today's agriculturalists.

The combination of such hypotheses (i.e., the positive and negative controlling variables) leads to the formulation of a hypothesis which essentially sees the problem as a process or, more specifically, as a diffusion. If the diffusion hypothesis is applied to areas of Southern Ontario bordering on one or more of the Province's Great Lakes, it can be further hypothesized that the diffusion operates in the form of a continuum. The continuum would be one of decreasing density of non-resident owned land as one shifts the focus further inland. Employing the shoreline hypothesis as a starting point for the diffusion continuum allows for the formulation of a secondary hypothesis. That is, in inland townships or counties located within the original continuum there would be a secondary diffusion being generated from the various small inland lakes. In cases of large or a series of inland lakes the secondary diffusion might possibly obscure the more predominant diffusion within the shoreline to inland continuum.

B. THE STUDY AREA

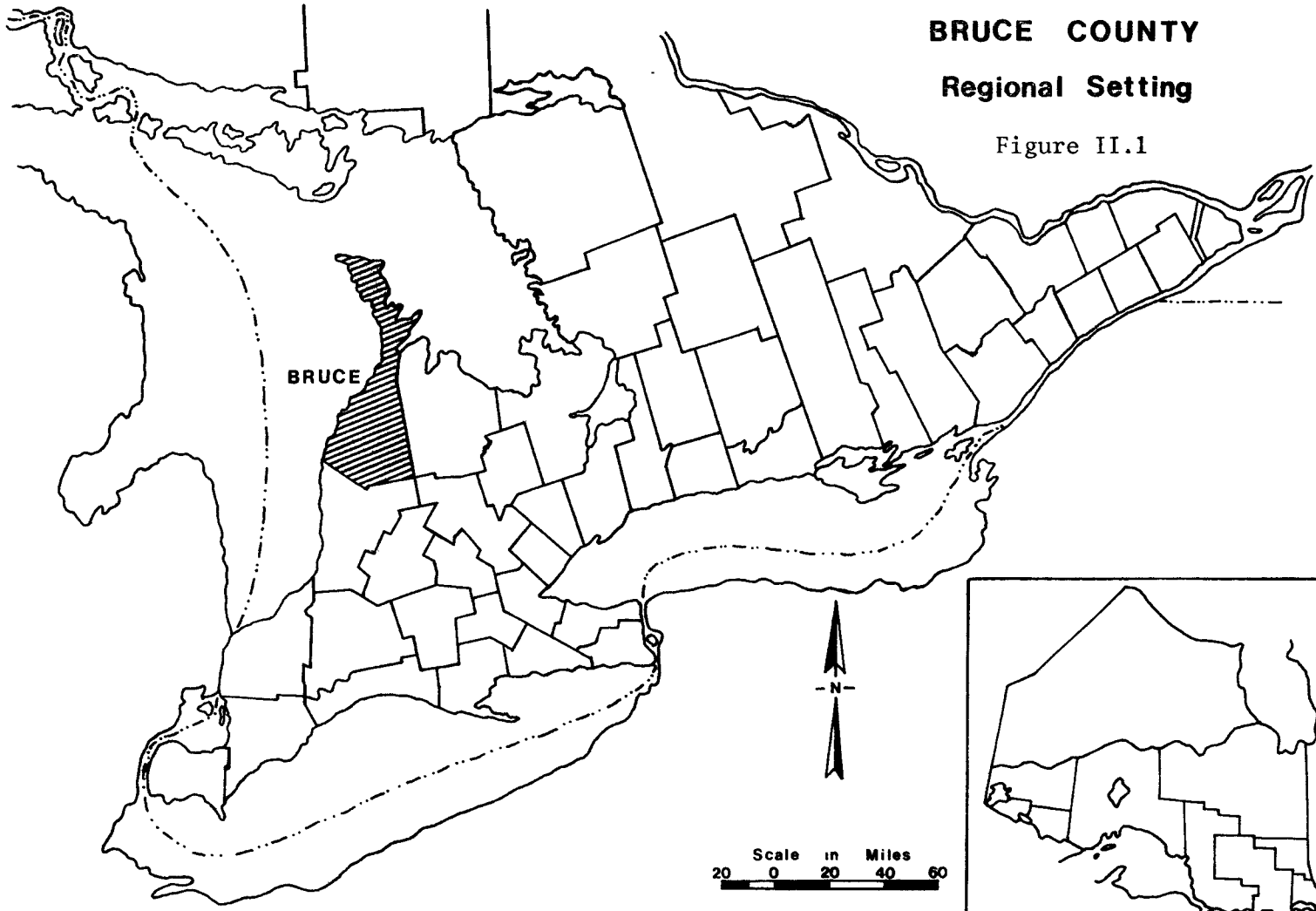
The area investigated in this research is a subset of the County of Bruce (see Figure II.1). The County itself is located in Southern Ontario between Lake Huron and Georgian Bay. The County is comprised of sixteen townships (see Figure II.2). All townships are examined with respect to the problem of non-resident ownership, with the exception of Saugeen, Bruce, Kincardine and Greenock Townships. These four townships were omitted on the grounds that they seemed least critical in understanding the diffusion process as outlined in section C of this chapter.

One of the main complicating factors in a diffusion process is a barrier. There is a large area of organic soils, called the Greenock Swamp, which presents a very effective barrier to such a "resettlement" process, just as it did to the original settlement of the County.¹ This, in turn, aids in justifying the omission of Greenock Township.

The elimination of Bruce, Kincardine and Saugeen Townships can be justified in terms of the hypotheses outlined in section A of this chapter. One aim of this study was to illustrate an initial preference by the non-residents for shoreline property, and a later preference for good farm land. By omitting Bruce, Kincardine, Saugeen and Greenock Townships from the analysis, one is left with twelve townships comprising two continuums: a West to East continuum of shoreline property to good farm land, and a North to South continuum of shoreline property and low capability farm land to good farm land and little shoreline property (see Figure II.3).

BRUCE COUNTY
Regional Setting

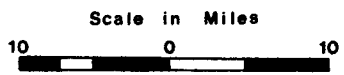
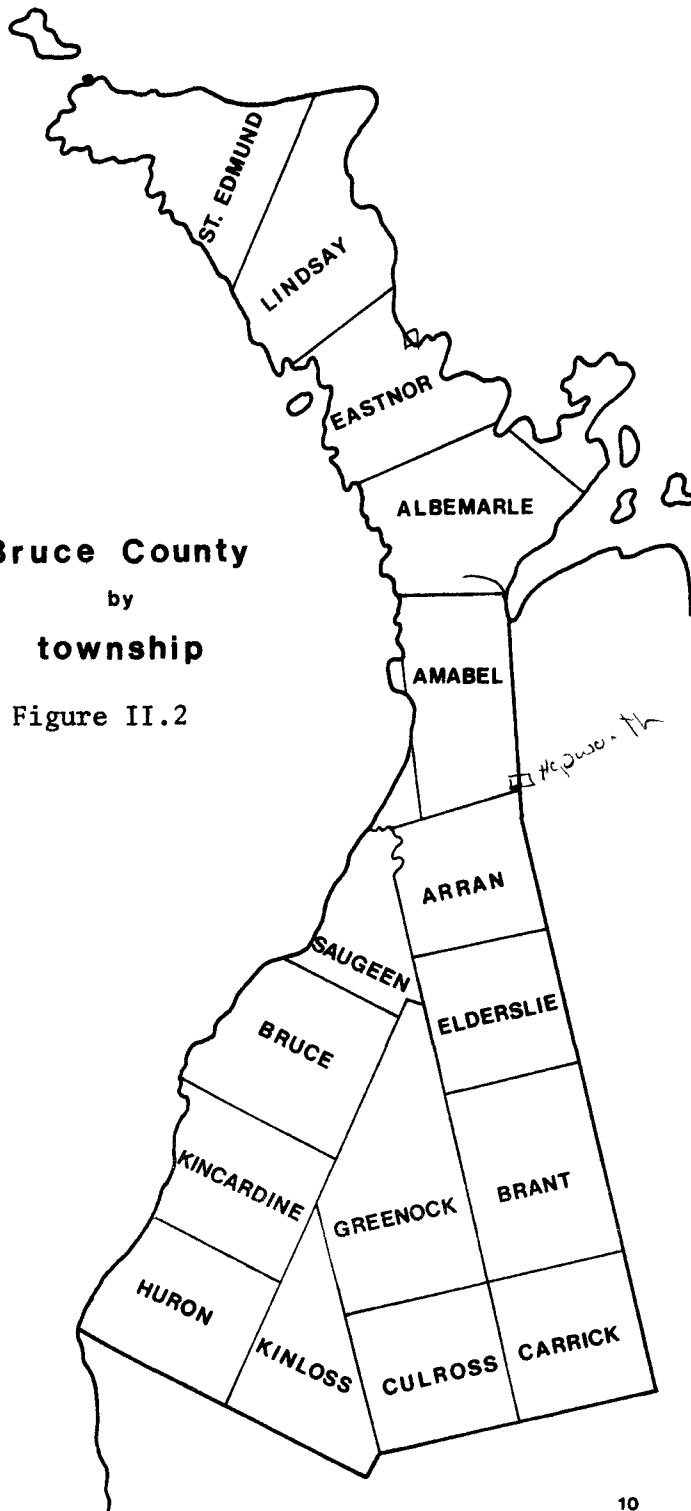
Figure II.1



rjw

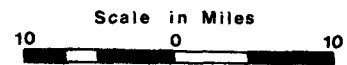
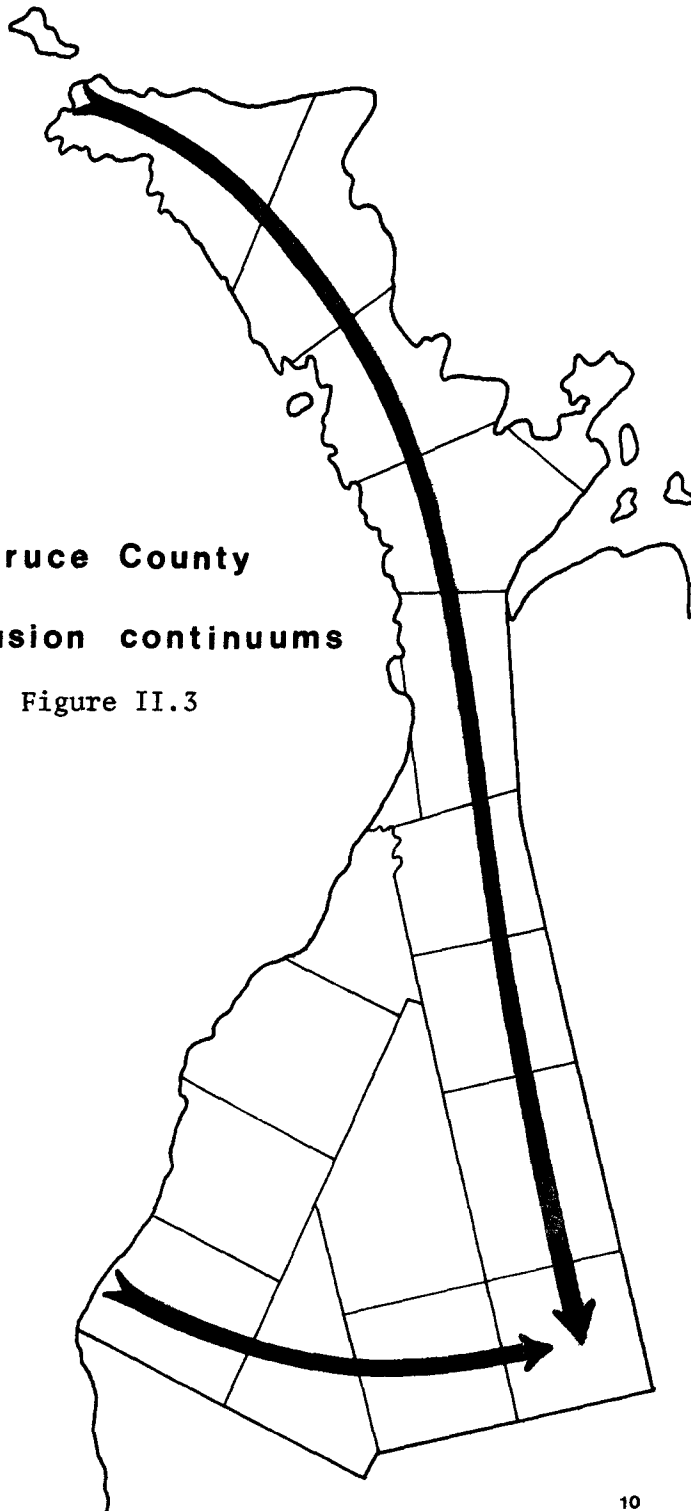
Bruce County
by
township

Figure II.2



**Bruce County
diffusion continuums**

Figure II.3



For the purposes of qualification, 75 percent of Carrick Township (which is included in both the West to East and North to South continuums) is comprised of Class 1 soils, and 90 percent of the Township is comprised of Class 1, 2 and 3 soils (i.e., those soils with moderate to no limitations at all for cultivation). On the other hand, 85 percent of St. Edmund Township (at the northern tip of the North to South continuum) is comprised of Class 7 soils (i.e., those soils possessing no capability for arable culture or permanent pasture).²

C. METHODOLOGY

The methodology and scope of this research can be viewed in two parts: first of all, the presentation and analysis of the actual or real situation; and, secondly, the introduction of a dynamic diffusion model which attempts to explain reality in terms of the hypotheses referred to in section A of this chapter.

Although understanding can only be arrived at upon the examination of the entire study, it is essential that the two critical steps in the analysis be further elaborated here. First of all, the actual spatial extent of the problem is examined and mapped through the presentation of information from the Township Assessment Roles,* concerning non-resident ownership. Six periods are examined for each of the townships

*The Assessment Role data was gathered between the months of November (1973) and May (1974). The Assessment Roles that were examined were located in the township clerks' offices for each of the twelve study townships.

referred to in section B. Cumulative maps are then constructed representing the spatial end result of the process of non-resident ownership, for the periods of up to 1900, 1901 to 1920, 1921 to 1940, 1941 to 1950, 1951 to 1960, and 1961 to 1974.

In the above-mentioned research concerning each period of analysis, data is also presented concerning the extent of different classes of non-residents, namely: circumjacent Canadian non-residents, distant-centered Canadian non-residents, and distant-centered foreign non-residents.* Such a breakdown facilitates the determination of whether or not specific periods were characterized by the introduction of any one type of non-resident over another. In short, "intra" spatial trends are analyzed.

Although the first step of the research was primarily inventory in nature, the trends that were revealed allow the researcher to formulate tentative conclusions. One of the obvious characteristics of non-resident ownership is that in areas or townships which have experienced a great deal of agglomeration of non-resident owned lots, the recent ownership trends have witnessed an intrusion of non-residents into areas of good agricultural capability. It is not intended to illustrate the degree to which agricultural productivity has been altered by such a trend. However, it remains as part of the research's initial step to

*A detailed explanation of the terms "circumjacent" and "distant-centered" as they relate to this research can be found in Chapter Four.

identify the extent to which prime agricultural land is being owned by non-residents and, to determine if there is any difference between the acreage of prime land that is owned by the three categories of non-resident owners.

The analysis of the hypotheses as mentioned above consequently leads to a set of conclusions concerning the "diffusing" nature of the process of non-resident ownership. Combined with the awareness for the problem generated by the abandonment study,³ these conclusions, although not justified by empirical investigation, are expressed by means of an 'a priori' model.⁴ Such a model can aid in the awareness of the problem along the lines of what appears to be a definite diffusion process at work. The 'a priori' model is expressed graphically by means of changing density values over distance (i.e., changing densities of non-residents over distance from the source of the initial reception or generating areas, which appears to be shoreline areas). The 'a priori' model, since it has little empirical justification, is outlined in Chapter Four in advance of the presentation of the empirically-derived maps and trends for each of the twelve study townships.

The construction of an 'a priori' model to serve as an explanatory guide, and the mere cartographic investigation of reality, alone do not represent sound empirical investigation. The 'a priori' model only leads to the formulation of an initial construct concerning the problem of non-resident ownership. It then becomes essential to investigate the regularities observed in the examination of reality and to express these

regularities in an 'a posteriori' model. The 'a priori' model simply suggests theory, while the 'a posteriori' model tests theory.⁵

The 'a posteriori' model is expressed essentially by way of a deterministic diffusion model. The mechanics of the diffusion model are discussed in depth in Chapter Five.

D. PROBLEMS IN THE RESEARCH

Many of the problems or difficulties encountered in research of this kind have already been referred to. One of the most significant problems that the researcher inevitably encounters is that of definition. The problem which cropped up in this research was one of definition concerning the term non-resident. The only qualification for this study is that he maintains his permanent residence outside of a township in which he may own a parcel of land.

Nevertheless, the situation arises whereby intrastudy area non-residents must be considered. That is, a resident of one township may own land in another township, while both townships lie within the bounds of the general study area. It appears then that the definition employed is not one of distance and residence. However, within each township the situation arises in which a landholder may own several lots throughout the township, but lives on only one of those lots. In this case he is classed as being a resident. Thus, as long as all of a landowner's property lies within the township of his permanent residence, no specific limit or mileage has to be exceeded so that a landowner can be classified

as a non-resident. However, as is outlined in Chapter Four, distance does play a crucial role in delimiting the categories of non-residents examined in this study.

The scope of this research unfortunately does not allow for the investigation of another problem area concerning the phenomenon. The extent of non-residents or the ownership of land by non-residents within the towns and villages of the study area was not examined. Nevertheless, even though the scope of the paper prevents this aspect of the phenomenon from being examined, it does not prevent the realization of the potential effect of this aspect on the more prevailing phenomenon of non-resident ownership of the non-built-up rural regime. What in fact may be the case is that the non-residents in a town or village may be acting as a springboard mechanism for the diffusion of the process into the farm land. In fact, it may be the town and village non-residents who are acting as "innovators" for the diffusion process. The answer to such a question can only lie in more involved future research.

A major problem presents itself in the selection of the study area. Diffusion barriers pose major stumbling blocks to the identification of a diffusion process. Greenock Swamp located in Greenock Township (see Figure II.2) is such a barrier. However, the West to East and North to South diffusion continuums can be analyzed without encountering the swamp. Thus, by eliminating Greenock Township from the study area, the problem is solved. Nevertheless, in order that the study area appears realistic, Saugeen, Bruce and Kincardine Townships also are eliminated.

Therefore, what may initially have appeared to have been done in the name of simplification, was actually done for the sake of a rational diffusion model.

The shape of the peninsular (St. Edmund, Lindsay, Eastnor, Amabel and Albemarle Townships) section of the study area provides another problem in that the consolidation of non-resident ownership cannot be viewed purely along the North-South continuum. The fact that major bodies of water form the eastern and western extents of the townships allows for east to west and west to east consolidation within the major continuum. However, the decrease in productive agricultural land as one moves north prevents the total elimination of a definite North to South continuum.

The only remaining problem of significance to mention is that of the data employed in the study. Despite the many flaws inherent in the nature of the historical data found in the Township Assessment Roles, the major stumbling block provided by the Roles is their occasional disappearance. The periodic absence of Roles to be examined necessitated, in many cases, the use of the Tax Roles as a suitable alternative. Unfortunately, in the case of Carrick Township, the earliest non-resident information of any sort to be examined is the 1940 Assessment Roles. All previous records have either been lost or destroyed.

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CHAPTER THREE

THE LITERATURE DIRECTLY AND INDIRECTLY RELATED
TO
NON-RESIDENT OWNERSHIP IN THE COUNTRYSIDE

It has already been mentioned that literature and research that should be surveyed in a study of non-resident ownership in the countryside can be examined in two parts, namely: directly and indirectly related literature. Directly related literature is simply that which deals with the immediate problem at hand, non-resident ownership. Literature of the indirect variety deals with processes at work in the countryside which, in some way have repercussions on the problem of non-resident ownership. Topics to be examined in this review fall into the categories of the abandonment literature, the part-time farming literature, the recreation literature, and the rural-urban fringe literature.

In no way are the above categories and their respective surveys intended to be all-encompassing. The recent expanding awareness of rural land use problems greatly hinders an up-to-date review. Nevertheless, the macro examination of both the directly and indirectly related sources presents an added dimension to the phenomenon. Hopefully, what now can be seen are, not only the effects by non-resident ownership, but also, the effects upon the phenomenon by other processes at work in the countryside of Southern Ontario.

A. DIRECTLY RELATED LITERATURE

To the author's knowledge, very little literature to date has been produced by the academic community. The topic of non-resident ownership has only been given substantive coverage in so far as the industrial and urban realms are concerned. One exception in the case of Southern Ontario is the research being conducted by W. C. Found and others at York University. They are presently analyzing the extent of the phenom¹en in the heart of the agricultural districts north of Toronto ; however, to date no reports or publications have been formalized by this group. Nevertheless, the countryside, as a base for non-resident related research has, to a large extent, been left untapped. On the other hand, 1973 produced enough concern within the governmental sphere to allow for several studies to be undergone, primarily at the provincial level. What can therefore be presented is a brief survey of these various provincial commissions and policies that have been directed towards the problem of non-resident ownership in the countryside.

In 1972, a Royal Commission on Land Use and Ownership was appointed in Prince Edward Island. A report by the commission was tabled by the provincial legislature in February of 1973 which, in essence, recommended that taxes be increased and holdings be limited on non-resident owned land. The report dealt primarily with the effects of non-resident ownership on shoreline property. It did not spend any time examining the potential of non-resident ownership of good

agricultural land adjacent to the shoreline property. A second problem that can be seen in the report arises over the problem of defining the non-resident. It defines non-residents as landowners who reside outside of the province for six months or more in any tax year.² Even though the commission's definition is more restrictive than that taken by other provinces, it will be seen in the following chapter that further restrictions or limitations on the term provide one with a far greater comprehension of the phenomenon's spatial extent and implications.

In New Brunswick and Newfoundland non-resident ownership is not yet a major issue. However, Nova Scotia has been the centre of much debate on the problem. A legislative committee, which generally favoured controls on land use rather than land ownership, is expected to publish its findings soon.³

On the west coast, the British Columbia Land Commission was established in 1973, primarily to deal with the preservation of farm land. Its scope, however, has been easily expanded to accommodate controls on non-resident ownership. The Commission defines a non-resident simply as a foreign owner.⁴

The same definition applies to Alberta's Public Lands Act which prohibits the sale of public land to non-Canadians or to corporations less than 75 percent Canadian-owned. No restrictions are expected on private land until the end of 1975 when the Land Use Forum (a three-

man committee set up in 1973 to study nine aspects of land use in Alberta) presents its final report, including legislative recommendations.⁵

Saskatchewan's legislation defines a non-resident as anyone who does not reside in the province for at least 183 days a year. An exception is made for farmers outside Saskatchewan who live within 20 miles of the Saskatchewan border. A bill was passed by the Saskatchewan legislature in 1974 which says that non-residents cannot own farm land worth more than \$15,000 in assessed value for municipal tax purposes and no corporation may own more than 160 acres unless it is engaged in farming and 60 percent controlled by Saskatchewan residents who are farmers.⁶

Manitoba is the only prairie province at the present time without any non-resident ownership restrictions. Nevertheless, a committee at present is studying the subject with legislation to be proposed by late 1974. The province seems only to be concerned, however, with non-Canadians rather than absentee ownership.⁷

In the province of Quebec, Bill 32, which was aimed indirectly at controlling the sale of land to foreigners, and presented early in 1973, has since been shelved. It was shelved because, as it was originally drafted, it ran into legal problems with the Quebec Civil Code. There is a good possibility that the bill will be revamped, reactivated, and passed in the very near future.⁸

Ontario's Economic and Cultural Nationalism Committee presented an interim report on foreign ownership of Ontario Real Estate in 1973. The committee, although being far from unanimous, made a number of sweeping recommendations to government for controlling sales of land to foreigners. Among them was the proposal that non-Canadian individuals and non-Canadian corporations (less than 75 percent Canadian-owned) should be prohibited from buying land in the province.⁹

In April of 1974, the Ontario government reacted, both to the committee's recommendations and, as was admitted later by Provincial Treasurer John White, to "rumours" of heavy foreign buying in Ontario real estate.¹⁰ As a result, in its 1974 budget, the Ontario legislature included that non-residents of Canada who buy properties in Ontario will have to pay a land transfer tax of 20 percent instead of the past six-tenths of one percent.¹¹

It is not intended at this time to present an argument for or against any of the above-mentioned provincial policies. It is, however, necessary to delineate, once again, the one area in which all of the provincial legislatures have been unable to reach a consensus. No agreement can be reached as to who the non-residents are. Granted, since the problems arising from non-resident ownership are essentially regional in nature, a national policy concerning non-resident ownership, at the present time would be out of the question. What then is required is a definition which is primarily regional rather than political in its perspective and, at the same time could be employed if a national policy became unavoidable.

B. INDIRECTLY RELATED LITERATURE

(i) The Farm Abandonment Literature

It has already been mentioned that the increase in non-resident ownership in the countryside has definite links to the farm abandonment process. A farm may, over a span of several years, go from being farmed full-time, to part-time, and eventually to total abandonment in terms of agricultural production. That is, non-resident ownership can be viewed as an integral part of the farm abandonment process. The last stage in the process is quite often accompanied by the sale of the property. In many cases, due to the decline in real value of the farm (which parallels the abandonment process), the farm is sold to non-residents with varied intentions concerning the future of the farm.

(a) Macrogeographical Studies

Studies concerned with the gross trends in abandonment, abound in the literature. On the other hand, very little abandonment literature develops the problem in a historical and explanatory fashion.¹² If the problem is part of a process, then the reasons for the process must be explained historically. Very seldom is this done.

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Both Henderson¹³ and Wehrwein¹⁴ have examined the gross farm abandonment trends in the United States at both national and state levels. The latter's studies, especially, point to the problem of non-resident ownership as a contributing factor to the high rate of abandonment.

Canadian literature, examined below, also deals to a great extent with the problem of farm abandonment at the gross level. However, much more effort seems to have been directed towards research and programs that may aid in alleviating the problem. This is the case with much of the research published by the Canadian Council on Rural Development. One particular study, Views on Rural Development in Canada,¹⁵ presents guidelines for rural development in Canada. Reference is made to regional disparities such as farm abandonment which are more prevalent in specific areas, and the possible ways in which solutions can be implemented. One solution suggested in the report is the development of the recreational attributes of the countryside. Such a recommendation implies the encouragement of non-resident ownership which, when viewed as part of the abandonment process can, in turn, have added negative implications vis-à-vis rural disparities.

An additional solution for the problem of farm abandonment is provided by A.R.D.A.'s Farm Enlargement and Consolidation Program. Farmers "holding out" on non-viable to semi-viable agricultural land can now sell their land to the government through the A.R.D.A. program commenced by Ontario A.R.D.A. in 1966. When a farmer sells his land to A.R.D.A., he is in fact abandoning the land. Therefore, the A.R.D.A. Branch of the Ontario Ministry of Agriculture and Food undertook a study in 1971. The resulting report was titled Related Socio-Economic Implications for the Farm Enlargement and Consolidation Program.¹⁶ The study concerned itself with various socio-economic reasons for the farmers selling to A.R.D.A. It viewed economic factors as strong

influential reasons for the farmer wishing to sell to A.R.D.A. The report recommended the continuation of the program to ensure the continuance of agricultural production on acres which, if not purchased by A.R.D.A., would possibly fall into the hands of the non-resident buyers.

In 1966, the Agricultural Economics Research Council of Canada published a report titled Rural Canada in Transition¹⁷ which dealt with trends in Canadian agriculture, one of which is farm abandonment. It, like many of its predecessors, viewed non-resident ownership in recent periods as a contributor to this trend. However, it declined to develop the abandonment trend and such contributors to the trend as non-resident ownership, in a meaningful "historical" fashion.

The Ontario Economic Council followed this report up with a recent publication, Ontario, A Society in Transition.¹⁸ The author, D. R. Richmond, saw the decline in the number of census-farms in Ontario in the twentieth century as a serious problem that fortunately has been compensated for by increases in productivity. At the same time, the abandonment of Ontario's farms has only served to enhance the problem of unemployment. He unfortunately fails to see the continuing problem of farm abandonment and the associated non-resident ownership as posing any future threat to the farming subsystem.

An earlier study by the Ontario Economic Council, People and Land in Transition,¹⁹ attempted to establish some concept of what might be done to make Ontario's marginal and submarginal rural land more pro-

ductive. A test study was made of six representative townships in the easterly and westerly regions of both southern and northern Ontario. The outcome of the study was much the same as that contained in a later report by the Ontario Farm Income Committee, The Challenge of Abundance.²⁰ Both made recommendations for long-run programs in terms of supply management for the agricultural industry and economic development for the neglected regions of the province. However, both also saw many farms in Ontario established on semi to non-viable land, land which should be abandoned and sold to A.R.D.A. so that either consolidation may take place, or a better use of the resource can be made. Once again, it is unfortunate that the report failed to recognize the fact that what occurs on the marginal land in one time period may, without proper rural planning, occur on the prime farm land in the following time period.

Under the direction of Henry F. Noble, the Farm Economics and Statistics Branch of the Ontario Ministry of Agriculture and Food has conducted several studies on farm abandonment in Ontario. A series of maps showing changes in acreage of occupied farm land by census townships has been prepared by the Ministry. The maps were completed for various time periods from 1911 to 1961.²¹ In a later report, Noble attempted to explain how and why the abandonment of Ontario's agricultural acres has taken place.²² His explanation took place at the macro level of Ontario agriculture and, as a result, many variables which would explain the phenomenon at a more local level are lost in generalities. Nevertheless, Noble does recognize

the fact that a prime reason for the abandonment process has been the effects of the simultaneous non-resident ownership process.

(b) Microgeographical Studies

A number of studies have been carried out examining the farm abandonment process at the "micro" level of investigation. Such a reduced study area orientation is a departure from the abandonment trends presented at the macro level of investigation. The micro-geographical abandonment studies tend to dwell more on the causative or explanatory aspects of the problem. Five such abandonment studies merit examination in light of their contribution to the understanding of the interrelationships or at least similarities between the abandonment and the non-resident ownership processes.

Hewes conducted a study that dealt with farm abandonment that resulted from wheat failures in the Central Great Plains in the United States. He attempted to explain the reasons for the abandonment for the period from 1939 until 1957.²³ He also found that in the initial periods of abandonment, many of the abandoned units were held temporarily by non-residents. In short, then, the process of non-resident ownership can be viewed as "part and parcel" of the initial stages of the abandonment process. In the following chapter, the abandonment process serves as a useful explanatory device in analyzing the degree of non-resident ownership in many of the study's townships at the turn of the century.

Sitterley's study of farm abandonment in southeastern Ohio was also both historical and explanatory in nature. Sitterley viewed the farm as a system comprised of the fundamental resources of land, capital, labour and management. Each of these varies in its ability to meet the given needs of a farm. Consequently, he examined, historically, deficiencies in these resources to explain the failure of the farm unit to meet all of the essential costs of operation. In terms of the deficiency of the amount of farm labour, he cited non-resident ownership of the farm unit as one labour-related factor encouraging the continuance of the farm abandonment process in Ohio. It is ironic that Ohio suffers from such a problem in its tenure system since it is the Ohio address which consistently "crops up" in the analysis of the non-resident tenure patterns of Bruce County.

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In studies by Vaughan²⁶ in New York State and by Clayton and Peet²⁶ in Vermont, the conclusions seem to be that abandonment has been following a similar course as it did in Ohio. In each case it required many years to materialize and passed through several stages before complete idleness of all the farming resources occurred. In all three case studies there seems to be a general progression towards the final step of total abandonment, a progression in which non-resident ownership plays an important initial role.

A final study of farm abandonment in North Dakota emphasized the effects of abandonment on the service town of Belfield.²⁷ The study presented a five-point rescue plan for small rural communities plagued

with the problem. One recommendation emphasized the need for a termination of the on-going process of non-resident ownership and the encouragement of an increased extent of "resident" farming.

In short, then, it is essential that the parallels between both the abandonment and the non-resident ownership processes be understood, especially during the initial stages of both processes. As has been pointed out in the above-mentioned studies, the non-resident ownership process is just as much an indicator of farm abandonment as the farm abandonment process is an indicator of non-resident ownership in the countryside.

(ii) The Part-Time Farming Literature

Although part-time farming cannot always be seen as being synonymous with non-resident ownership, there are definite parallels that can be delineated between the two processes. The fact evolves that there is most probably a positive relationship between closeness to a non-resident owned farm and the likelihood of that farm being farmed in a part-time fashion by the non-resident owner. That is, the Circumjacent (or nearby) Non-Resident owned land defined and examined in Chapter Four, is seen as the less "detrimental" category of non-resident owned land to the farming subsystem. This is an established fact predominantly because of the degree of part-time farming carried on by these non-residents. Therefore, in many instances, the part-time farmer is, in fact, a non-resident owner. As a result, the part-time farming literature as it applies more specif-

ically to Southern Ontario should be briefly examined.

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According to Fuller,²⁸ the terms "part-time farming" and "part-time farmer" first entered the literature in 1930 in a study by Rozman.²⁹ Since Rozman's original publication,²⁹ the topic of part-time farming has become a central theme for rural studies. In Southern Ontario the most significant part-time farming research has been the PhD³⁰ research conducted by J. Mage of the University of Guelph.

It has been mentioned how the part-time farming phenomenon can be viewed as a component part of the farm abandonment process and, in turn, the non-resident ownership process.³¹ Kulshreshtha saw the presence of part-time farming in Ontario agriculture as evidence of the progression in sub-marginal areas towards abandonment. It is also an indication of the possibility of sale or rental of a portion of the farm to a non-resident. In short, part-time farming is an indicator of the farm abandonment process.

Many non-resident owners can fall into the classification of hobby farmers and, in turn, can be viewed as part-time farmers. This is the category of part-time farmers most highly characterized by non-resident³² ownership. Anderson,³³ Hale and Troughton have all dealt with this phenomenon of hobby farmers who hide the lack of agricultural production on their farm units under the guise of part-time farming.

Many part-time, non-resident farmers are, however, using the production from their farms as an income supplement and, in many cases,

they are gradually phasing out their original non-farm source of income. This leads one to believe that part-time farming resulting from non-resident ownership may be part of a beneficial rural progression towards full-time farming. This is a total reverse from the earlier case whereby part-time farming and the non-residents involved in such an activity, can be viewed as part of the progression towards total abandonment. Consequently, in some cases, the intrusion of non-residents into the countryside may be viewed as being very beneficial to the agricultural subsystem.

(iii) The Recreation Literature

The twentieth century has been marked by increased leisure time, higher incomes, and advanced transportation developments. These and other factors have all aided in the increased desire for and fulfillment of the recreational experience. As will be seen in the following chapter, the diffusion of non-residents into the countryside began in areas of traditionally high recreational capability. Later, when most of the high capability recreational land had disappeared into the hands of non-residents and as the traditional view, of what is good and bad recreational land, became more flexible, high capability agricultural land began to fall into non-resident tenure. The consequences of non-resident ownership, with respect to the agricultural subsystem, is analyzed in Chapter Four.

It should be mentioned, however, that a substantial degree of research has been conducted which examines the intrusion of non-

residents or second home owners into an area with high recreational capability. Most of these studies have dealt solely with shoreline cottage properties and have neglected the more recent phenomenon of farm ownership by the non-resident. Recent studies such as that by David ³⁴ fall into such a category. Ragatz, ³⁵ however, managed to see the shallowness in much of the rural recreation literature, and called for more theoretical developments in such research within a regional framework. American studies by Munger, ³⁶ Harper, ³⁷ and Richey ³⁸ have all analyzed the effects of non-residents in the countryside with respect to their effects on land values, taxes, and basic economic growth and development. However, all of the above research seems to have been concentrated solely on the countryside possessing shoreline property.

On the Ontario scene, ignorance of the extent of non-residents throughout the countryside is once again the situation. Wolfe's original dissertation (1951) on Summer Cottagers in Ontario ³⁹ was completed at a time when the ownership of land by non-residents had not begun to make any kind of significant imprint on good agricultural land. Nevertheless, the research of the two decades that followed his original publication has not managed to keep pace with the rapid developments characterizing the countryside of the nineteen-seventies.

The 1971 report by the Travel Research Branch of the Ontario Department of Tourism and Information analyzed the socio-economic characteristics of Ontario's 200,000 cottage owners. Once again, how-

ever, farmhouses or farm property were not categorized as being potential non-resident holdings. Only cottages or cottage property were covered in the discussion.⁴⁰

In 1971, the Ontario government announced that under the province's Recreational Land Acquisition Program Fund the province would purchase and designate land along the Niagara Escarpment for recreation and related uses.⁴¹ This has resulted in the loss of extensive amounts of good agricultural land in the agriculturally-fragile Bruce Peninsula.⁴² The failure of the provincial government to define and delineate agricultural land, and to designate critical areas for farm land preservation along the Escarpment has now become a major problem, resulting in much non-resident ownership of such prime agricultural land. Combining the above problem with the lack of research analyzing the extent of non-resident owned land has permitted the newly purchased government property to disappear into relatively unknown public statistics.

Such a conflict that arises between agricultural and recreational land use was examined by Ironside.⁴³ However, his analysis covered the commercial recreational developments in a rural settling such as the vacation farm. He did not examine the phenomenon of second home and property tenure and the conflicts that arise from such ownership.

In 1965, the United States Department of Agriculture, in the true vein of North American free enterprise, published a report concerned with the various recreational developments which a farmer may employ to enhance his income. The actual sale of the farmer's property to a

non-resident was unfortunately suggested as a "recreational" alternative to such things as the vacation farm.

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In concluding this subsection of this chapter's "review", it should be reemphasized that non-resident ownership in the countryside, as a recreational aspect of the recreational experience, has not been given its proper worth in the literature. The view seems to still pervade that the countryside recreational experience only takes place in terms of the shoreline and pleasure drive experiences. Hopefully, this research will expose a slightly different facet of the multi-faceted countryside experience.

(iv) The Rural-Urban Fringe Literature

The geographical and non-geographical literature abounds with research which has been conducted under the auspices of this topic. Many articles can be identified at both the theoretical and applied levels which analyze the effects of non-resident ownership in specific geographical areas, one example of which is the rural-urban fringe. The inclusion of this subsection is intended only to accent the interrelationships involved between the rural-urban fringe and the process of non-resident ownership within that area. It must be noted, however, that this survey is limited to a very localized level and is by no means intended to be all-encompassing in its scope.

At the theoretical level, a most widely-referred to article is that by Sinclair. The general conceptual framework in which he

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examines the effects of urban expansion on agricultural land is a modification of Von Thünen's original concentric land use zone theory. Sinclair states that as the urbanized area is approached from a distance, the degree of "anticipation" of urbanization increases and, consequently, the ratio of urban to rural land values increases. That is, the absolute value increases while the relative value for agricultural use decreases. Hence, capital and labour investment in agriculture, or the intensity of agricultural land use, decreases.

⁴⁶
Bryant is using this basic conceptual framework in his analysis of Waterloo County's price structure of agricultural land surrounding Kitchener-Waterloo in association with a similar 'anticipation of urbanization' factor. He sees this factor being strongly affected by the degree of non-resident speculative control within the rural-urban fringe.

What is often examined (but, to a more limited extent), is the land falling within the immediate "urban shadow" or the rural-urban fringe. That is, while Bryant's above-mentioned work deals primarily with the taxes and land values of non-resident owned land within the fringe, others have dealt more specifically with the physical loss of farm land within the fringe. This loss of land takes place within a broader urban land conversion process involving non-resident speculators (often disguised as hobby farmers), ⁴⁷ developers, and other intermediate landowners. The eventual fate of the land takes the form of some type of urban development, whether it be industrial or

residential. This land conversion process, as a result of the firm grip of non-resident speculators in the fringe, has been given much attention by Clawson.⁴⁸ More specifically, Martin⁴⁹ has concentrated more on the price spiral associated with the transfer of rural-urban fringe land from farmers to non-resident speculators or developers.

In many cases the intermediate landowner, whether or not he has speculation in mind is, in fact, a non-resident landowner. Many studies, concerned with the loss of agricultural land in Southern Ontario due to urbanization or the land conversion process, have dealt with the role played by the non-resident owner in the process. At the Resources for Tomorrow Conference in Montreal in 1961, Crerar⁵⁰ forecast that by the year 2000 agricultural activity would be quite insignificant in Southern Ontario as long as the present trends in urbanization were to continue. His remarks were based on Bogue's⁵¹ study which noted the decrease in farm land acres in relation to the increase in urban population.

At the same conference, Gertler and Hind-Smith⁵² presented their research on three small Ontario cities, delineating how the growth of these centres has critically reduced the amount of prime agricultural land and, in turn, the amount of agricultural production derived from such agriculturally-viable sectors as the rural-urban fringe. This presentation included the results of Russwurm's study⁵³ on London's rural-urban fringe.

In conclusion, it can be seen that the rural-urban fringe provides yet another avenue for the examination of non-resident ownership. However, in these areas it is evident that the non-resident's intent of countryside ownership is not primarily for a recreational or farming experience. It seems, on the other hand, to be an attempt to employ the rural-urban fringe speculative syndrome to the economic advantages of the non-resident.

Hopefully, this subsection dealing with indirectly related literature has been presented in such a manner so as to enable the breakdown of non-resident ownership in terms of the above-mentioned "intent" factor and, also, that the breakdown implies an indication of the differing economic and spatial consequences of the process of non-resident ownership in the countryside.

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CHAPTER FOUR

THE NON-RESIDENT OWNERSHIP

COUNTRYSIDE TRENDS

What is presented in this chapter is an analysis of each of the twelve townships referred to in Chapter Two in terms of the numerical and spatial significance of the phenomenon. The analysis is preceded by an 'a priori' model which, in the light of the data presented in this chapter is, in turn, reexamined at the conclusion of the chapter.

One of the hypotheses upon which this study focuses is that areas comprised of prime agricultural land, are usually not invaded by non-resident ownership until later time periods. On the other hand, where an area is in close proximity to the advancing diffusion "wave", such a situation frequently results in the problem of the early demise of large amounts of agricultural land. The extent to which this hypothesis is true is examined in one such township in the latter part of this chapter.

A. AN 'A PRIORI' NON-RESIDENT OWNERSHIP DIFFUSION MODEL

Chapter Two presented a series of 'a priori' assumptions concerning the phenomenon of non-resident ownership in the countryside. The initial assumption was that the phenomenon can be viewed as a process and, more specifically, as a diffusion process.

Quite often, 'a priori' assumptions can be stated or mapped in a graphic form.¹ Using the assumption concerning the West to East dif-

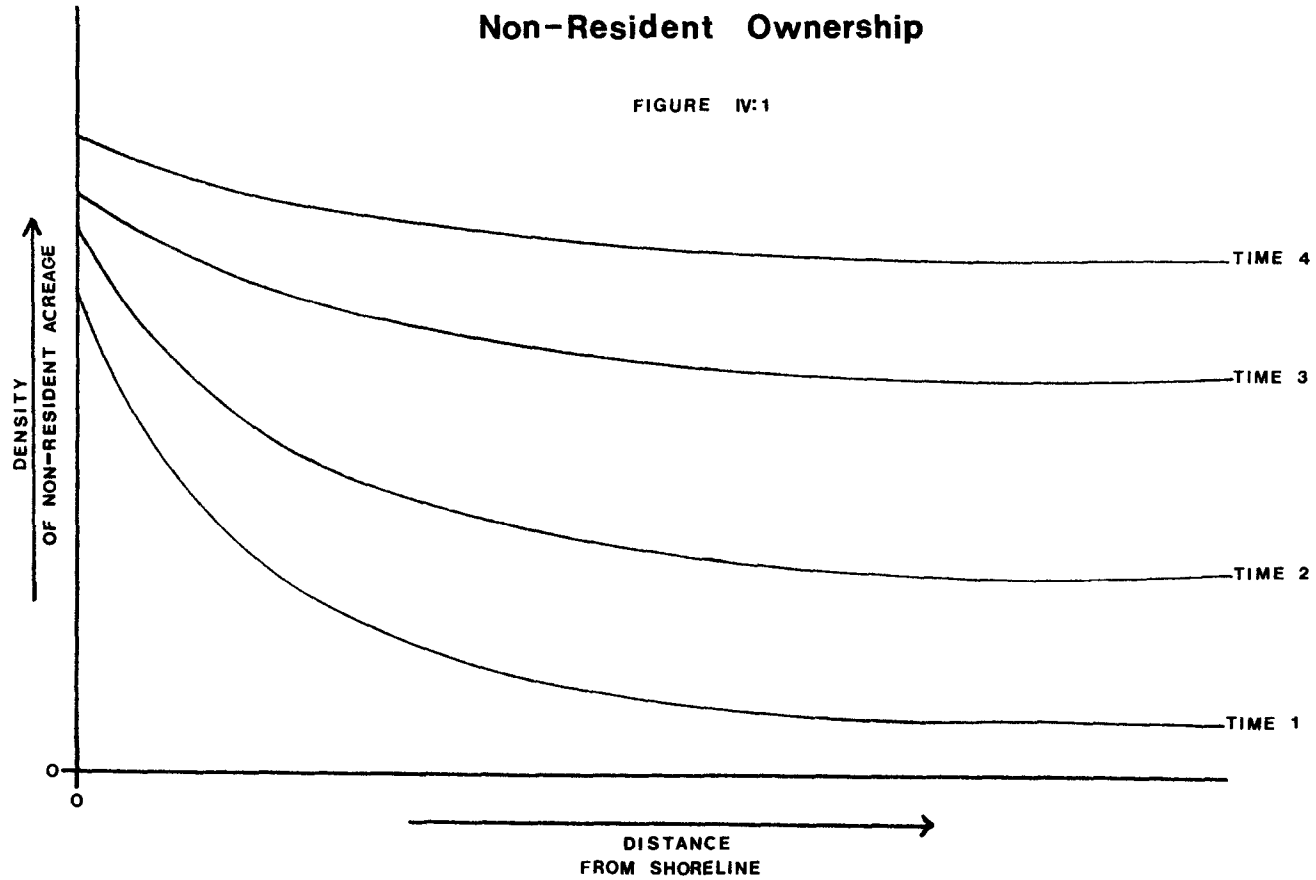
fusion continuum, such an 'a priori' analytic construct can be formulated. First of all, it should be stated that essentially the same construct could be managed for the North to South continuum. However, the variations provided by several of the northern townships, in addition to the greater variety in agricultural capability along the North to South continuum, and the greater distance involved, tend to obscure the existence of underlying trends concerning the process.

The assumptions concerning the West to East continuum were first of all that there is an early preference of non-residents for shoreline property. Secondly, non-resident ownership preferences decrease with increasing distance from the shoreline property. Thirdly, as the desirability for shoreline property increases, the amount of the same available for purchase diminishes. Finally, as the non-residents' perception of non-shoreline rural properties changes, the gap between the amount of property at or near the shoreline owned by non-residents and the non-resident owned property further from the shoreline, decreases. In short, if expressed graphically, as time progresses the slope of a line, representing the density of non-resident owned land, would decrease with increasing distance from the shoreline. In earlier time periods, the slope would be much more steep.

An analytic 'a priori' construct based on the above assumptions or hypothesis is created in Figure IV:1. No specific density or distance values are placed along the graph's axes. First of all, the construct is strictly an idealization and, secondly, the application of the con-

An 'A Priori' Construct
for the Diffusion of
Non-Resident Ownership

FIGURE IV:1



struct to various shoreline areas would undoubtedly reveal a totally different set of density values over the distance surveyed.

B. THE DEFINITION

The definitional inconsistencies involved in the provincial policies, concerning non-resident ownership in the countryside, have already been dealt with. At this point it is proposed to present a three-part definition which is more attuned to a logical analysis of the phenomenon. Part D of this chapter delves into the problems encountered with respect to non-resident ownership of prime agricultural land. Therefore, what must be presented here is a definition based more on spatiality rather than being justified totally by means of political boundaries.

To date the majority of non-resident definitions have seen the non-resident owners simply as foreign owners. The most restrictive definitions see the non-resident owner as an out-of-province owner. However, the problems arising from the phenomenon are very seldom this large in scale and are never totally political in nature. Setting aside many of the intangible problems which arise from the problem of non-resident ownership, the most outstanding problems center on the economic system. Regional economic planning cannot be developed on the national or even provincial levels, but must take into consideration all of the economic subsystems that are involved. In short, the problems of one area may not be the problems of another area. Some areas are economically advantaged, while others are very much disadvantaged.

With the present economic state of affairs, involving continually rising food prices and an ever-increasing population to feed, the preservation of prime farm land must be a prerequisite in regional planning. Non-resident countryside concern has dealt solely with shoreline or cottage property. This chapter emphasizes that concern must be directed at the entire countryside. The ownership of large amounts of shoreline property by foreigners or out-of-province dwellers might deny a certain recreational experience to in-province residents. Nevertheless, there are definite economic advantages to such ownership within isolated and depressed regions. On the other hand, as mentioned on page one, when considering the agricultural system of a province and its respective subsystems, the ownership of large parcels of prime agricultural land by specific non-residents from within a province might be just as detrimental to the subsystem, or even more so, than its ownership by a foreigner.

By utilizing the above argument, a working definition of the non-resident is constructed, based essentially on distance rather than political boundaries. First of all, it can be argued that there is a critical distance, which can be commuted to a farm by the farm's owner, which does not distract greatly from the farm's production. The further a farmer must travel from his permanent residence to manage the farm, the greater the probability of decreasing returns from the farm. Eventually, the distance factor, if increased, becomes so dominating a factor, that the farm cannot be managed directly by its owner. Consequently, the

farm is either rented out, farmed part-time, or remains idle. In all situations, the productivity is very seldom as high as it would if it were managed directly by its owner.

For the purposes of this research, a figure of 30 miles was select-²ed as an average commuting distance for the County. The application of such a figure to a working definition results in several problems which should be mentioned. First of all, this research is essentially historical in nature and, consequently, the adoption of the 30 mile limit for all time periods results in a certain amount of distortion. Secondly, the application of a strict limit means that one must analyze each farm as a separate entity. The limit has been chosen for today's commuting characteristics and, since the phenomenon is especially critical now, there is little distortion in later periods of analysis. It is strongly advised, however, that any future analysis reexamine the 30 mile limit. The second problem is a minor one as long as study areas remain relatively small. Consequently, the 30 mile limit is applied to a township, and all farms within that township.

What then is done is the construction of a 30 mile radius around each township having the centre of each township as its focal point. The three-part definition employed in this research hinges on the radius. One category of non-residents is those having their permanent residence outside the township but within the 30 mile radius. A second category resides outside of the 30 mile radius but within the confines of Canada. A final category is classed as being those residing outside of Canada.

The terms used in the research for the three categories are borrowed from Clarence W. Olmstead.³ Olmstead, in his application of the systems approach to the farm, sees the farm as functioning within a specific group of environments. He sees an immediate area surrounding the farm unit as having the most direct impact upon the operation of the unit. This area he labels the Circumjacent Environment. The more distant environments, which do not have the same immediate impact upon the farm unit, he labels the Distant-Centered Environments (see Figure IV:2). The parallel between the categorization of environments and that of non-residents, although not exact, does have some degree of merit. Consequently, non-residents living outside the township but within the 30 mile radius are classed as Circumjacent Non-Residents; non-residents living outside the 30 mile radius, but within Canada are classed as Distant-Centered Canadian Non-Residents; and, non-residents living outside of Canada are classed as being Distant-Centered Foreign Non-Residents. It is interesting to note that if a study area were chosen close to the Canada-United States border a problem would arise in that many foreign owners could possibly fall within the 30 mile Circumjacent Non-Resident radius and, as a result, the classification may have to be re-evaluated. However, it can be argued that the physical and mental presence of a border creates a definite distant-centered environment beyond that border, regardless of how close the farm may be to the border.

It will be noted that throughout the remainder of the research Circumjacent Non-Residents are examined solely as a component of the general trends, while the Distant-Centered Foreign and Distant-Centered

The Farm within its Environments

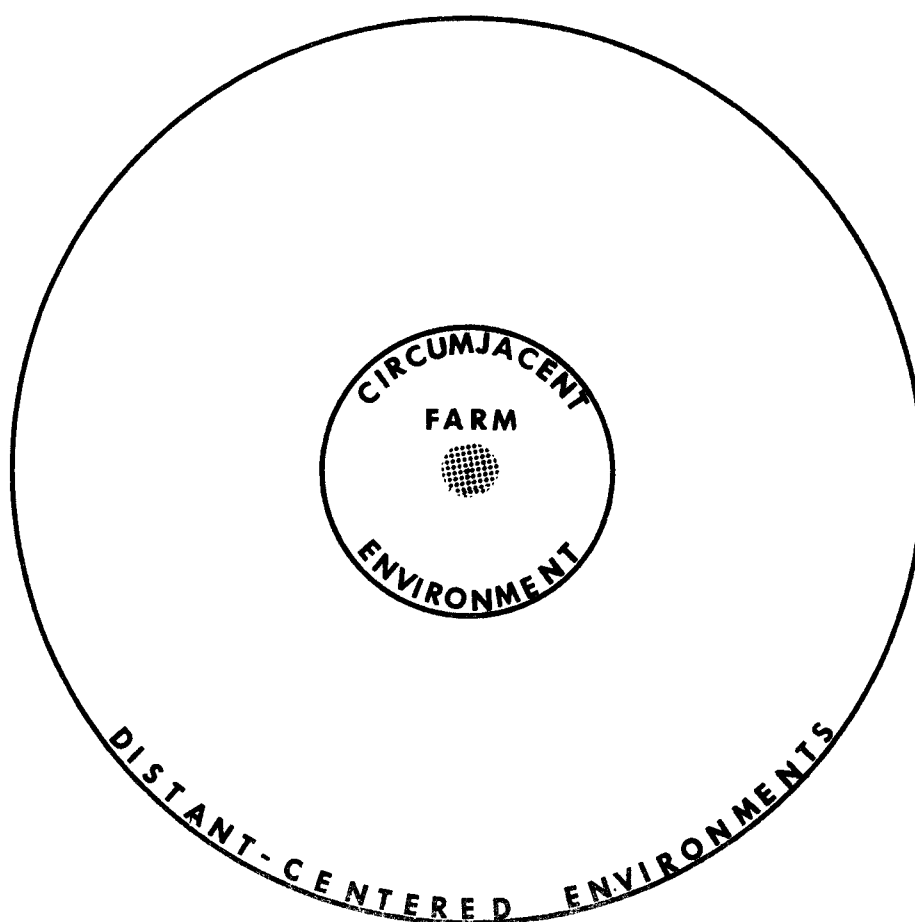


Figure IV:2

Canadian Non-Resident ownership, in addition to the above, are seen as being the source of the phenomenon's problems. When considering agricultural production and the ability of a farm unit to continue to produce when owned by a non-resident, it is difficult to distinguish between these latter two categories. On the other hand, Circumjacent Non-Residents seem to pose no immediate threat to the agricultural subsystem.

Once again, it should be mentioned that the data source for the research was the Township Assessment Roles. The absence of data for Carrick Township prior to 1940 prevented the construction of maps and tabulation of non-resident totals for 1900 and 1920. Attention should also be drawn to the fact that parcels of land subdivided (before subdivision controls) into units smaller than 25 acres were not mapped. With the odd exception, such small parcels of land occurred primarily along shoreline property. This results in large numbers of non-residents located along the shoreline areas; however, when considering the total acreage of the township, the numerical (*vis-à-vis* acres) and spatial extent of the non-residents are relatively insignificant. More detail concerning non-resident owned shoreline property will be outlined when considering townships with the same.

C. THE TRENDS*

This subsection is intended to function as an explanatory and descriptive device. The historical non-resident ownership trends are presented cartographically for each of the twelve townships and, in turn, are explained vis-à-vis the overall continuum trends and the individual township anomalies. The presentation of the townships is, first of all, in terms of the west to east continuum (i.e., Huron, Kinloss, Culross and Carrick Townships). The north to south continuum is presented in reverse (i.e., south to north). This, in turn, facilitates the development of a logical historical path towards the origin or "hearth" of the continuum. As is seen in the following chapter, it is this diffusion hearth that is tested by means of an 'a posteriori' model in a "micro" attempt to verify the hypotheses presented in "macro" or continuum fashion in the 'a priori' model of this chapter.

(i) Huron Township

Huron Township presents the initial area of examination in the west to east continuum. Analysis of Figures IV:3 to IV:8 and Table IV:1 reveals that, in the first five periods examined, the ownership of the township's land by non-residents was not really significant. Only in

*The following twelve subsections deal with the trends involved in the twelve townships under investigation. A set of six maps for each township follows each respective subsection and should be referred to for clarification and exemplification of the text.

1974 does the phenomenon become critical. The problem in 1974 is two-fold. First of all the total amount of non-resident owned land has increased from 3,600 acres in 1961 to 9,175 acres in 1974. Secondly, until 1974, the largest percentage of land in any one time period was owned by Circumjacent Non-Residents, or those who can commute to a farm in Huron Township and still farm it directly. In 1974 a drastic decline takes place in this category, not so much in total acres, but as a percentage of the total number of non-resident acres. The large increase occurs in the Distant-Centered Canadian category. Its percent of the total more than doubles, while its total number of acres increases more than five times.

The 1971 census statistics reveal that 90 percent of Huron Township is classed as prime agricultural land (10 percent is Class 1 and 80 percent is Class 2). In short, 90 percent of the township has no significant agricultural limitations. The remaining 10 percent of the township is essentially Class 3 land and is found predominantly along the Lake Huron shoreline. Figures IV:3 to IV:5 show that by 1940 no non-resident owned land is located along the shoreline. This is indicative of the fact that by 1940, all non-resident shoreline property had been subdivided into small units prohibiting their being mapped. Subdivision occurred in 1900 and 1920, but some large tracts of shoreline property still remained in the hands of single non-residents.

It is interesting to note that there may be some kind of non-resident affinity for properties with streams running through them. Most

streams in Huron Township are considered as being good trout streams. Consequently, there may be a definite spatial affinity whether it be for trout or, since the shoreline property is no longer available, simply as an alternative source of aesthetic pleasure.

A reexamination of Figure IV:8 shows that since most of the 10 percent of Class 3 land occurs along the Lake Huron shoreline, and since all large units of land (25 acres or more in size) examined in 1974 occur in the remainder of the township, then close to 100 percent of the non-resident ownership examined must take place on Class 1 or 2 land.

It is only understandable that in an agricultural area, that land having high capability for agriculture would demand a very high selling price. It then can be seen why there was such a delay in the diffusion of non-residents into the township. In other words, the recreation myth of shoreline or wilderness property being the only land with recreational appeal was not overcome until after 1960. At that time, the absence of any additional amount of shoreline cottage property, an increased desire for a recreational experience, the increase in non-resident capital for purchase of expensive pieces of rural land, and the emergence of investments in rural real estate as sound speculative investments, were all factors which contributed to the pattern which has developed by 1974.

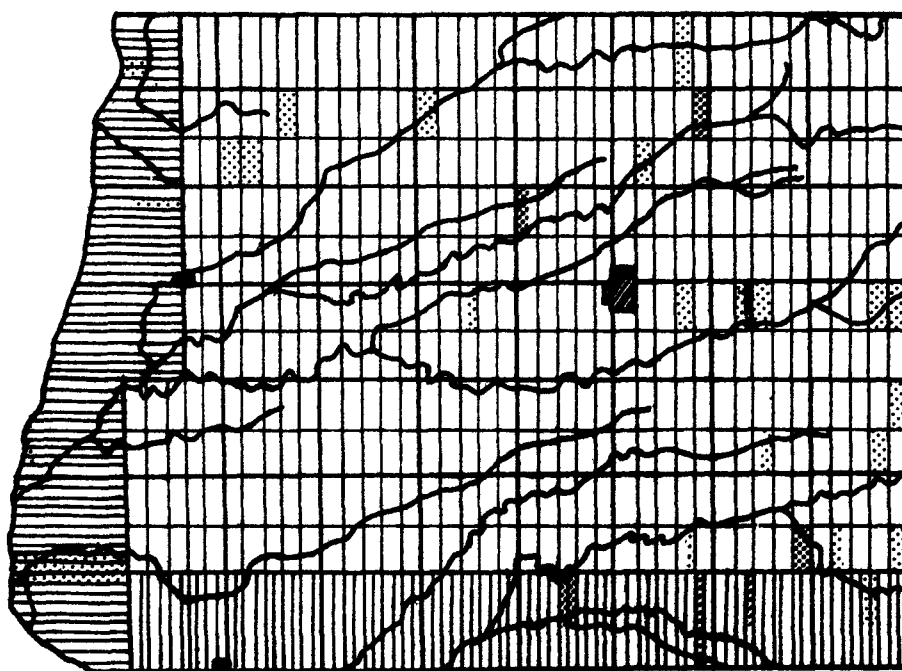
If then, the shoreline property was the original magnet for the non-residents, and if the prime agricultural land presented an early "barrier" to the diffusion of non-residents into the countryside, it could be hypothesized that the diffusion would follow a west to east continuum (see

Figure II:3). As a result, in townships further east from Huron Township, the change from a predominant class of Circumjacent non-resident owned land to Distant-Centered owned land, in addition to an overall increase in the total acreage owned by all non-residents, would take place somewhat later than occurred in Huron Township.





Non-Resident Ownership Huron Township*

1900

Figure IV:3



*non-resident units of less than 25 acres not recorded unless subdivision occurred within one category

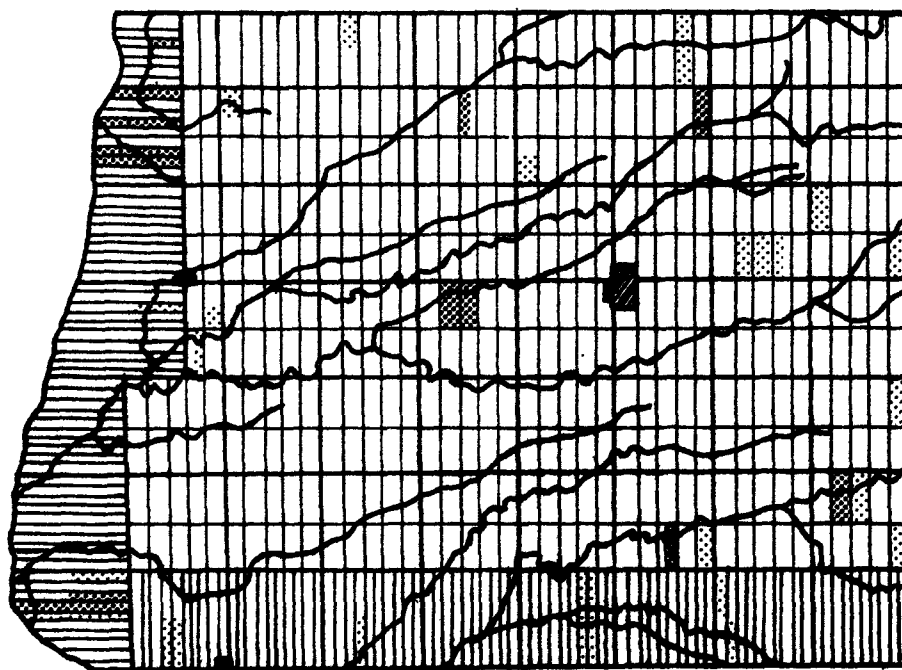
-  Villages
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign







Non-Resident Ownership Huron Township*

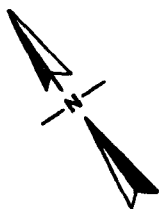
1920

Figure IV:4



*non-resident units of less than 25 acres not recorded unless subdivision occurred within one category

-  Villages
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign



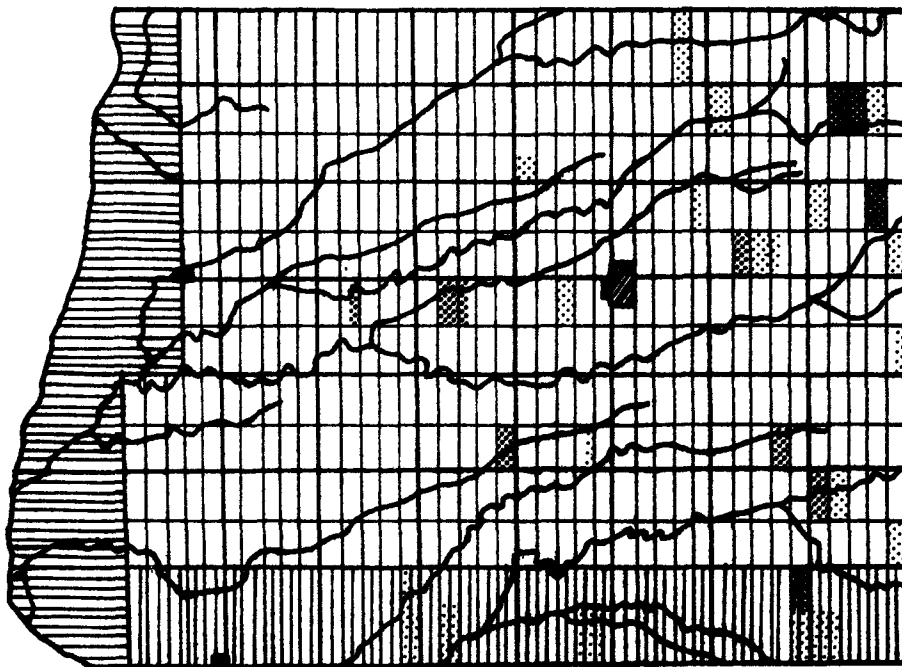
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Non-Resident Ownership Huron Township*





1940

Figure IV:5



*non-resident units of less than 25 acres not recorded unless subdivision occurred within one category



-  Villages
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

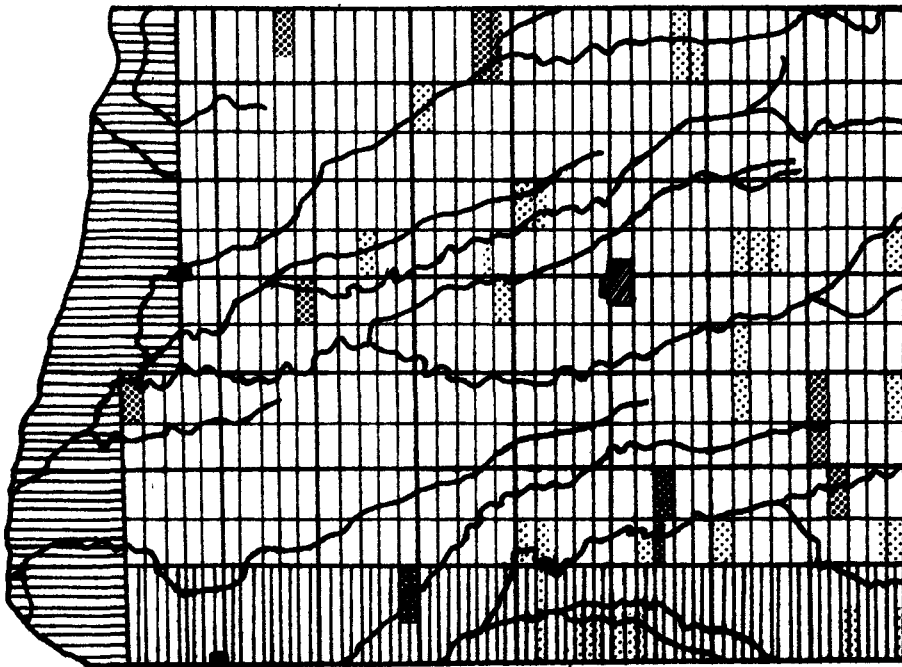
Scale in Miles
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Non-Resident Ownership Huron Township*

1950

Figure IV:6



*non-resident units of less than 25 acres not recorded unless subdivision occurred within one category

-  Villages
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

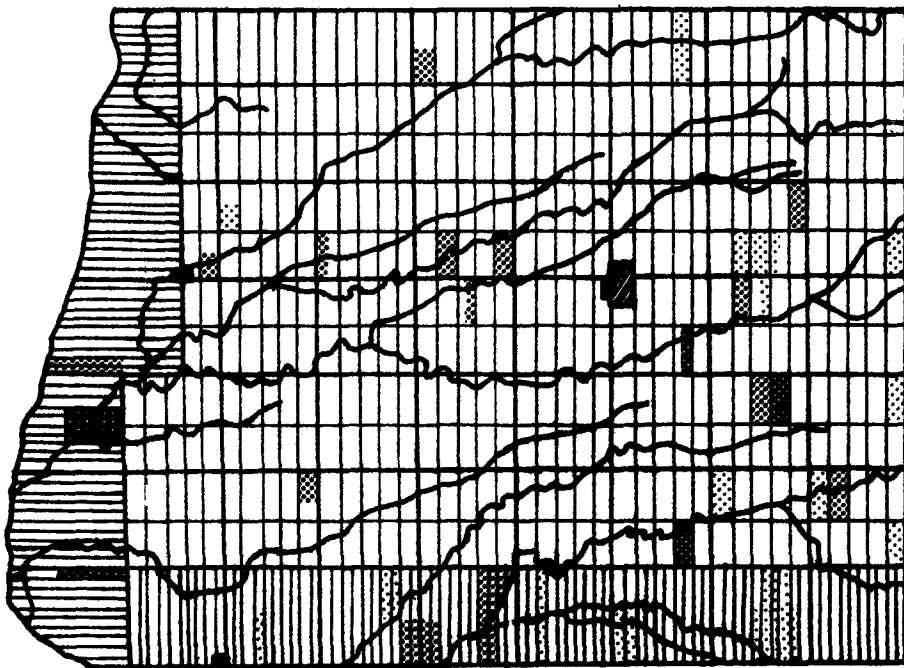


Scale in Miles
1 0 1

Non-Resident Ownership Huron Township*

1960

Figure IV:7



*non-resident units of less than 25 acres not recorded unless subdivision occurred within one category

-  Villages
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

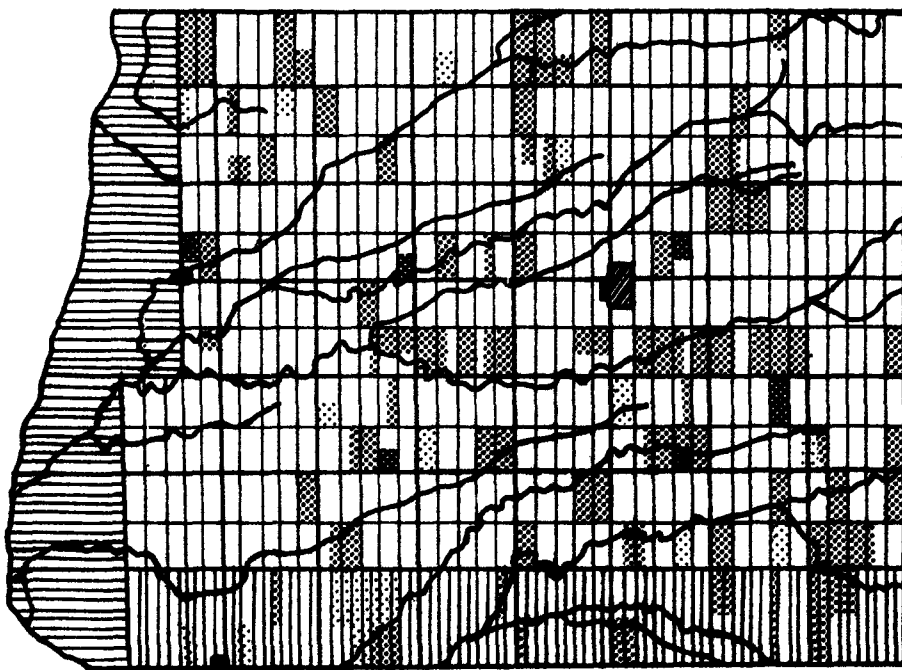


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Non-Resident Ownership Huron Township*

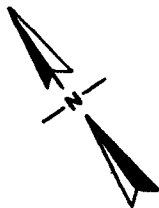
1974

Figure IV:8



*non-resident units of less than 25 acres not recorded unless subdivision occurred within one category

-  Villages
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign



HURON TOWNSHIP
NON-RESIDENT CATEGORIES
(township totals indicated in acres and as percentages
of grand total of all categories)

Table IV:1

TIME PERIODS	DISTANT-CENTERED FOREIGN	DISTANT-CENTERED CANADIAN	CIRCUMJACENT CANADIAN	TOTALS IN ACRES
1900	50 acres (2.11%)	250 acres (10.53%)	2,075 acres (87.37%)	2,375 acres
1920	100 acres (3.33%)	1,050 acres (35.00%)	1,850 acres (61.67%)	3,000 acres
1940	400 acres (14.29%)	600 acres (21.43%)	1,800 acres (64.29%)	2,800 acres
1950	250 acres (7.8%)	700 acres (21.88%)	2,250 acres (70.31%)	3,200 acres
1960	500 acres (13.89%)	1,400 acres (38.89%)	1,700 acres (47.22%)	3,600 acres
1974	350 acres (3.82%)	7,325 acres (79.84%)	1,500 acres (16.35%)	9,175 acres

*Total acreage of township = 59,475 acres

(ii) Kinloss Township

Although specific comparisons can be made with the initial township of the west to east continuum, Kinloss Township provides the first indication of the establishment of specific west to east temporal and spatial trends. As was the case in Huron Township, there is very little ownership by foreigners, of any significant amount of land, from 1900 until 1974 (see Figures IV:9 to IV:14 and Table IV:2). In fact, three of the six periods reveal no foreign ownership.

An interesting contrast is the fact that Circumjacent owned land reaches a peak in total acreage and as a percentage of the total amount of non-resident owned land much later than the same peak in Huron Township. The zero figure for Circumjacent owned land in 1950 should not be too distracting. When dealing with small amounts of land, minute fluctuations may falsely appear as trends. It could then be said that no significant trends can be seen in the Circumjacent category.

The Distant-Centered Canadian category, on the other hand, shows remarkable trends. It appears that this category decreases in acreage until 1950 when it increases between two and three times. The periods from 1950 to 1960 and 1960 to 1974 are similarly marked by increases of more than two times the acreage of the previous period. The predominance of this category in terms of a percentage in the first two time periods can possibly be attributed to the abandonment process. In fact, 1900 and 1920 both revealed a number of lots owned by residents of prairie Canada. The encouragement by the Federal Government of farmers

located on semi-viable land to move to the Qu'Appelle River Valley and other areas of western Canada resulted in much abandonment at the turn of the century in Bruce County.⁶ This accounts for the predominance of Distant-Centered Canadian Non-Residents in early periods of analysis.

Prime agricultural land comprises 71 percent of Kinloss Township. Class 6 land makes up 20 percent of the township, while organic (swamp or Class 0) soils make up 9 percent.⁷ Fortunately, the southeast section of the township, in which the majority of non-residents are located,⁸ is almost entirely Class 6 and 0 land.

A definite affinity for shoreline property can be seen in 1960 and 1974 in the northeast section of the township. Some shoreline land may have appeared to have dropped out of non-resident hands by 1974. However, what actually transpired in this area from 1960 to 1974 was the subdivision of a large amount of this shoreline property among diverse types of non-residents. It should be mentioned that these small lakes are not considered to be of exceptionally high recreational capability. This, in part, explains the delay in their occupancy by non-residents.

Briefly referring back to Table IV:1 for Huron Township, the total number of acres owned by non-residents in that township in 1900 was 2,375. Accepting 2,375 acres as a beginning unit for measuring the spatial extent of the diffusion of non-residents along the west to east diffusion continuum, this unit is then applied to the remaining townships of Kinloss, Culross and Carrick. The figure of 2,375 non-resident owned acres was not achieved in Kinloss Township until the period

between 1950 and 1960. If the diffusion is intact, and if it is an appropriate way of describing the intrusion of the process into Bruce County, then there has been a significant lag time in the movement of the phenomenon east. In short, there has been some degree of consolidation of non-resident ownership in Huron Township before the phenomenon began to diffuse into Kinloss Township.

It should be noted that the application of a non-flexible measurement (such as 2,375 acres) of a diffusion wave is not valid if there is any significant variation in the size of the units to which it is being applied. However, in the case of Bruce County, there is not a sufficient enough variation in the size of the townships to warrant the conversion of the amount of acreage involved in measuring the wave in its movement along the two continuums.*

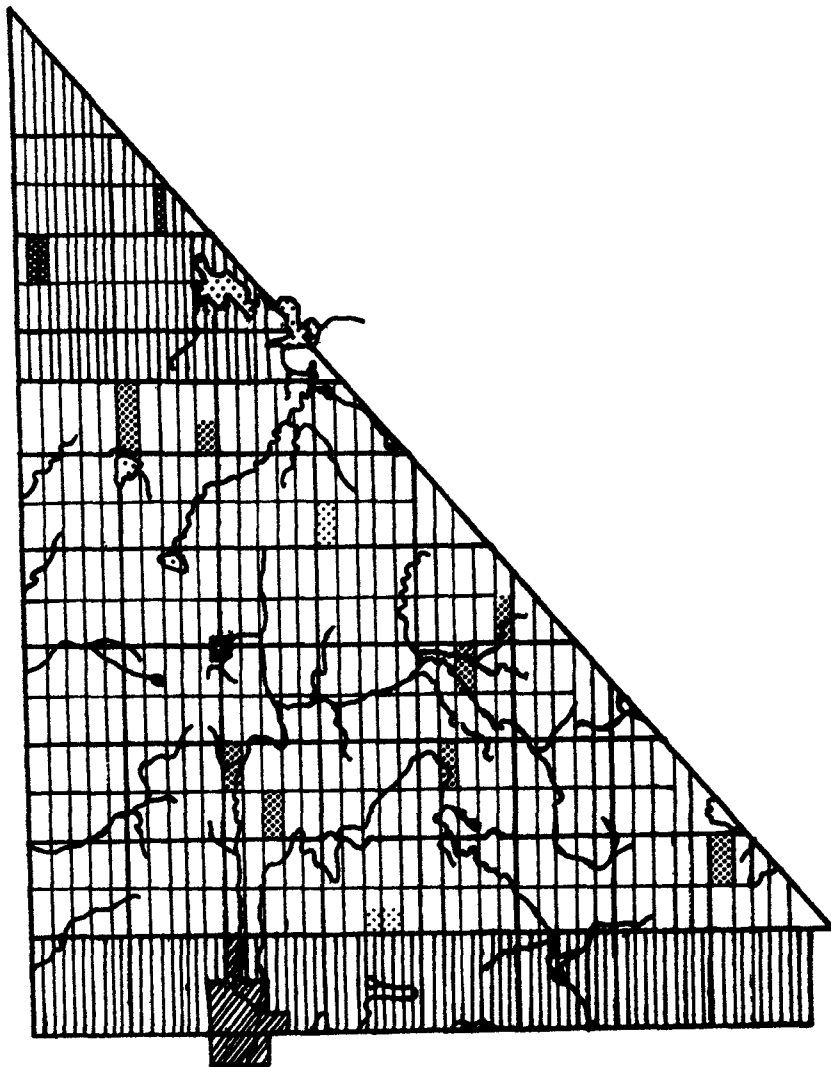
*The size of the twelve study townships ranges from 47,712 acres (Kinloss) to 57,875 acres (Culross) along the West to East continuum, and 55,731 acres (Arran) to 70,336 acres (Amabel) along the North to South continuum.

Non-Resident Ownership

Kinloss Township*






1900

Figure IV:9



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



-  Villages
-  Lakes
-  Circumjacent Canadian
-  Distant Centered Canadian
-  Distant Centered Foreign

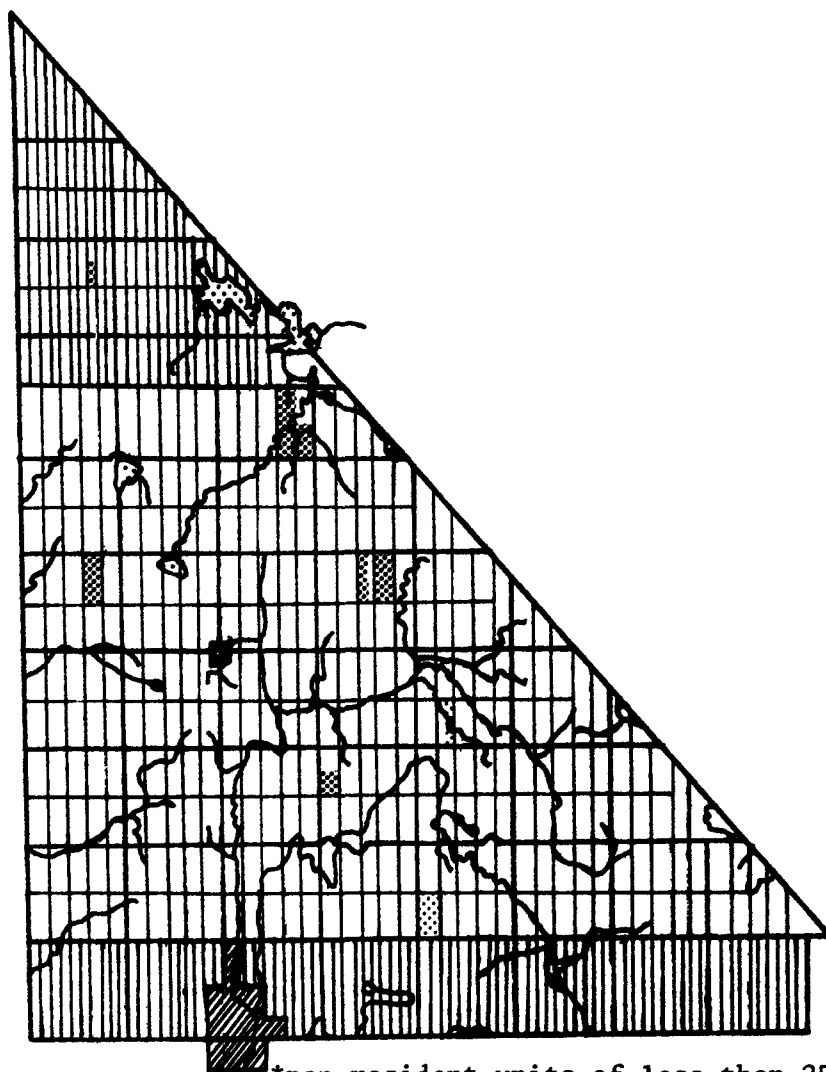
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Non-Resident Ownership

Kinloss Township*






1920

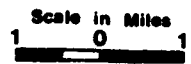
Figure IV:10



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



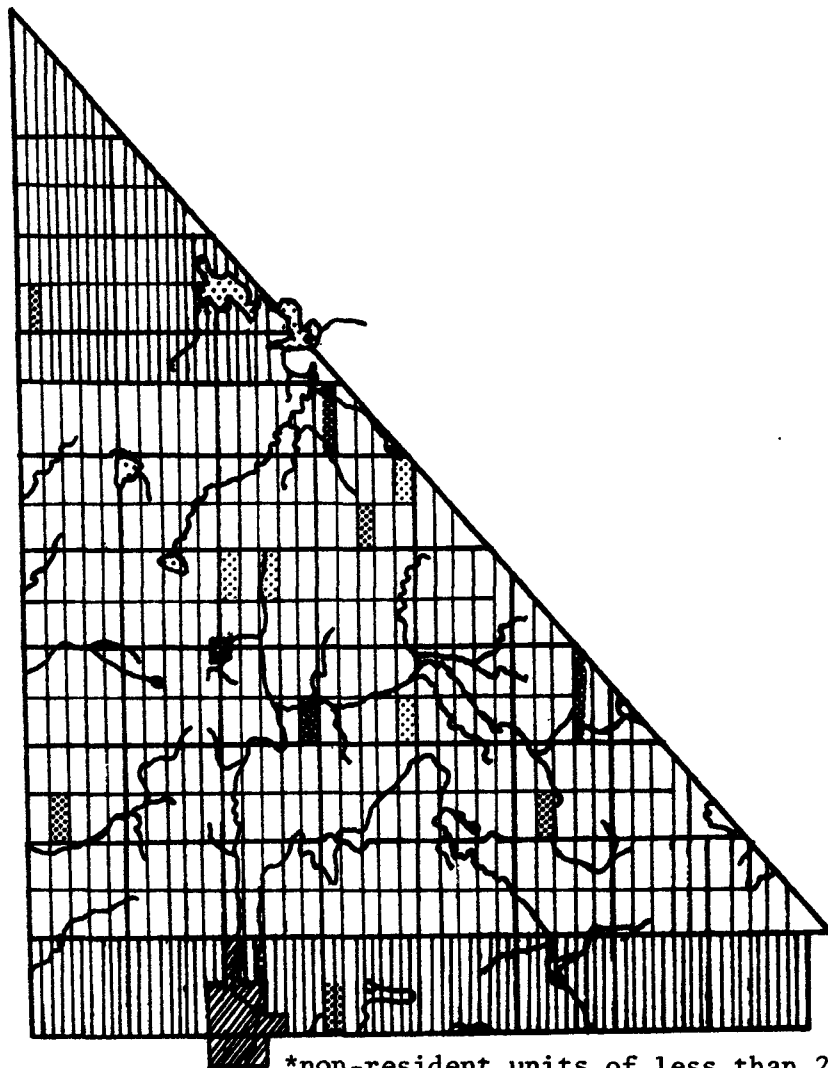
-  Villages
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign



Non-Resident Ownership Kinloss Township*






1940

Figure IV:11



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



-  Villages
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

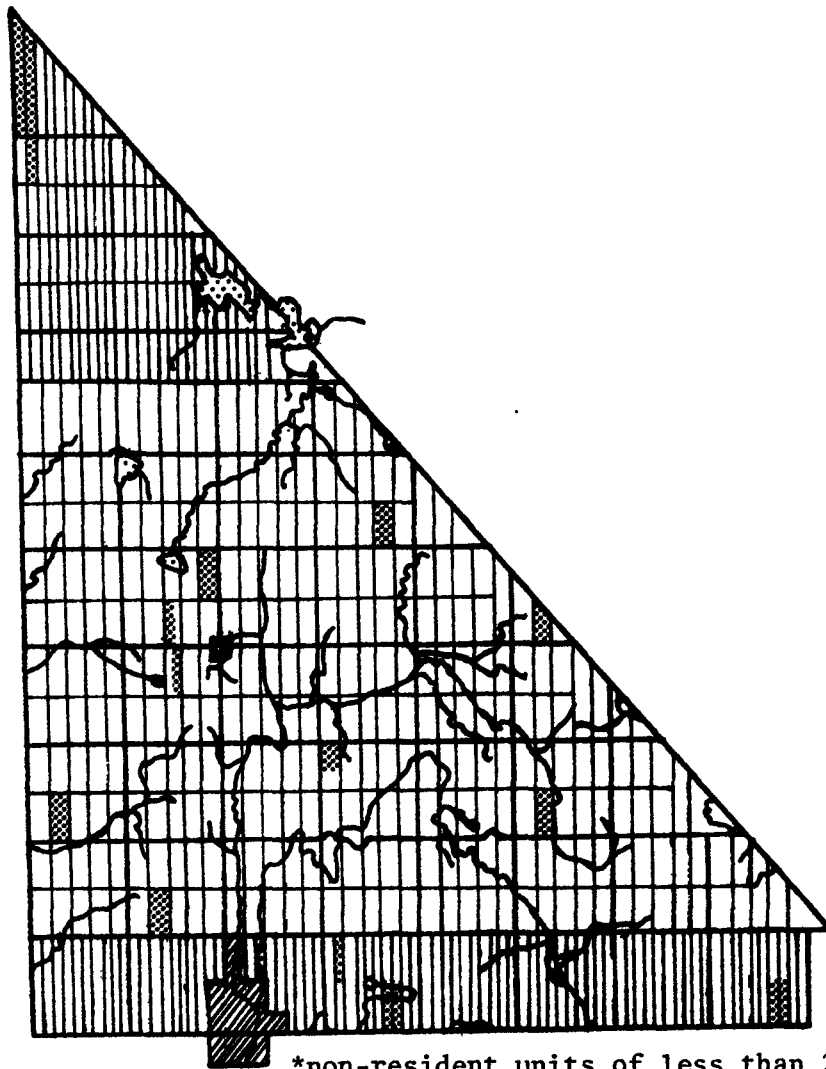
Scale in Miles
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Non-Resident Ownership

Kinloss Township *






1950

Figure IV:12



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



-  Villages
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

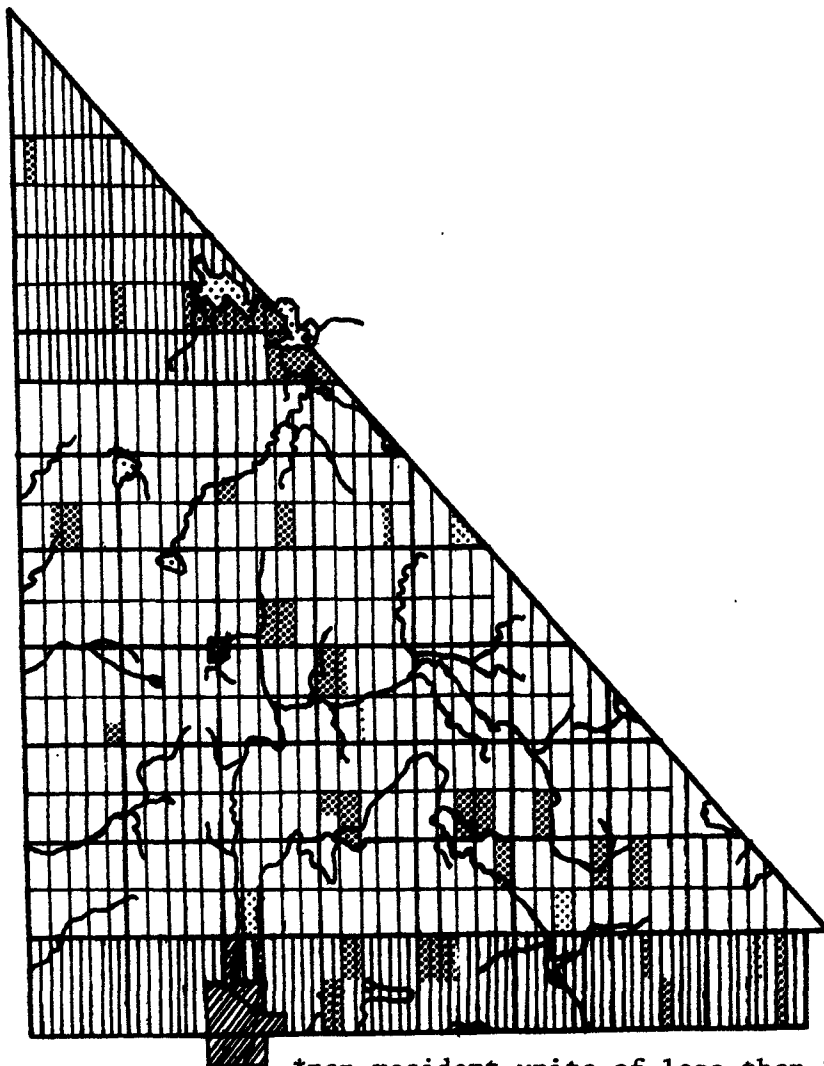
Scale in Miles
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Non-Resident Ownership

Kinloss Township *






1960

Figure IV:13



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



-  Villages
-  Lakes
-  Circumjacent Canadian
-  Distant Centered Canadian
-  Distant Centered Foreign

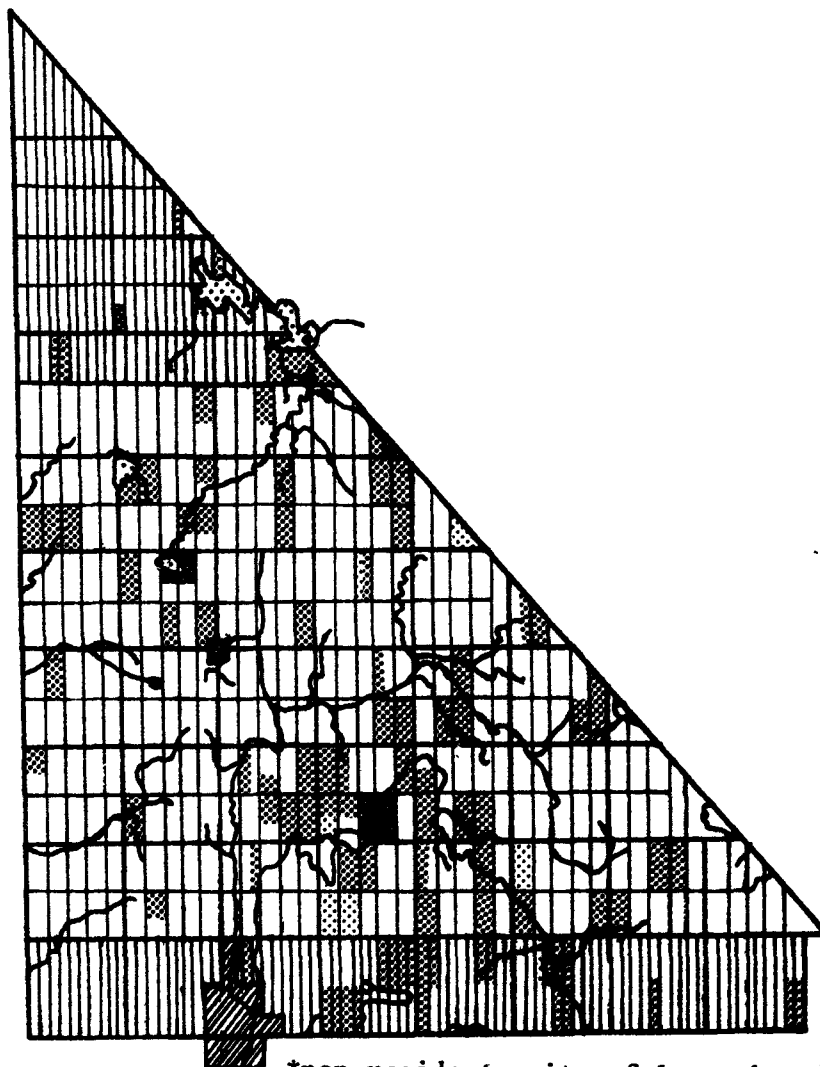
Scale in Miles
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Non-Resident Ownership

Kinloss Township *






1974

Figure IV:14



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



-  Villages
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign



KINLOSS TOWNSHIP *
NON-RESIDENT CATEGORIES
 (township totals indicated in acres and as percentages
 of grand total of all categories)

Table IV:2

TIME PERIODS	DISTANT-CENTERED FOREIGN	DISTANT-CENTERED CANADIAN	CIRCUMJACENT CANADIAN	TOTALS IN ACRES
1900	150 acres (12.00%)	900 acres (72.00%)	200 acres (16.00%)	1,250 acres
1920	0 acres (0%)	625 acres (80.65%)	150 acres (19.35%)	775 acres
1940	300 acres (25.00%)	500 acres (41.67%)	400 acres (33.33%)	1,200 acres
1950	0 acres (0%)	1,350 acres (100%)	0 acres (0%)	1,350 acres
1960	0 acres (0%)	2,950 acres (87.41%)	425 acres (12.59%)	3,375 acres
1974	325 acres (4.22%)	6,800 acres (88.31%)	575 acres (7.47%)	7,700 acres

*Total acreage of township = 47,712 acres

(iii) Culross Township

Culross Township presents additional justification for an argument supporting specific temporal and spatial trends along the west to east continuum. Nevertheless, certain comparisons with the previously-examined townships do emerge. Once again foreign ownership in this township is relatively insignificant (see Table IV:3). Ownership by Distant-Centered Canadians also appears relatively small and insignificant until 1960 when a slight break in the trend develops. The trend is verified in 1974 when there has been an increase in this category's holdings from five to six times and close to a doubling of its proportion of the total non-resident acres. On the other hand, as Distant-Centered Canadians begin to make large inroads into the township, Circumjacent Canadian owned land, as a percentage of the township's total non-resident owned land, decreases by more than 38 percent (while remaining stable in terms of the total number of acres owned by Circumjacent Canadians).

The predominance of Circumjacent Canadian owned land in 1900 can be explained by the abandonment that occurred around the turn of the century, in addition to the fact that there is a direct correlation between the Circumjacent Canadian land and the turn-of-the-century abandoned land in the northwest and southwest sections of the township. ⁹

Fortunately, the diffusion of the non-residents into the township, to a great extent, continues to take place in these areas, areas of low agricultural capability. Class 6 and Class 0 soils make up 46 percent of the township ¹⁰ and are located to a large extent in these two sections

11
of the township (see Figures IV:15 to IV:20).

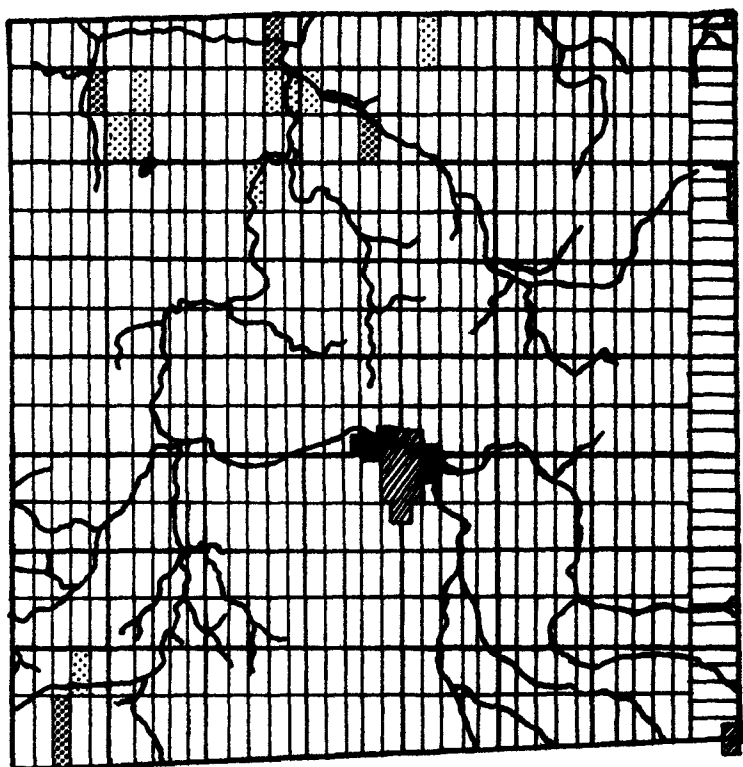
For the purposes of comparison it can be noted that in the Township of Culross, possessing no shoreline property, there seems once again to be a definite affinity, of especially Distant-Centered Non-Residents, to stream property.

In continuing to analyze the west to east extent of a diffusion wave marked by at least 2,375 non-resident owned acres it can be seen that this limit is achieved in Culross Township somewhere between 1960 and 1974. It can be recalled that in Kinloss Township this level was achieved between 1950 and 1960. It seems that once consolidation took place within Huron Township and the early diffusion lag time had elapsed that the march of the non-residents across the countryside of Bruce County becomes much steadier. Also, as the 2,375 acre limit is achieved in Culross Township (i.e., marking the beginning of the "takeoff" period), Kinloss Township had already experienced a similar "takeoff" with respect to the process.

Non-Resident Ownership Culross Township *

1900

Figure IV:15



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



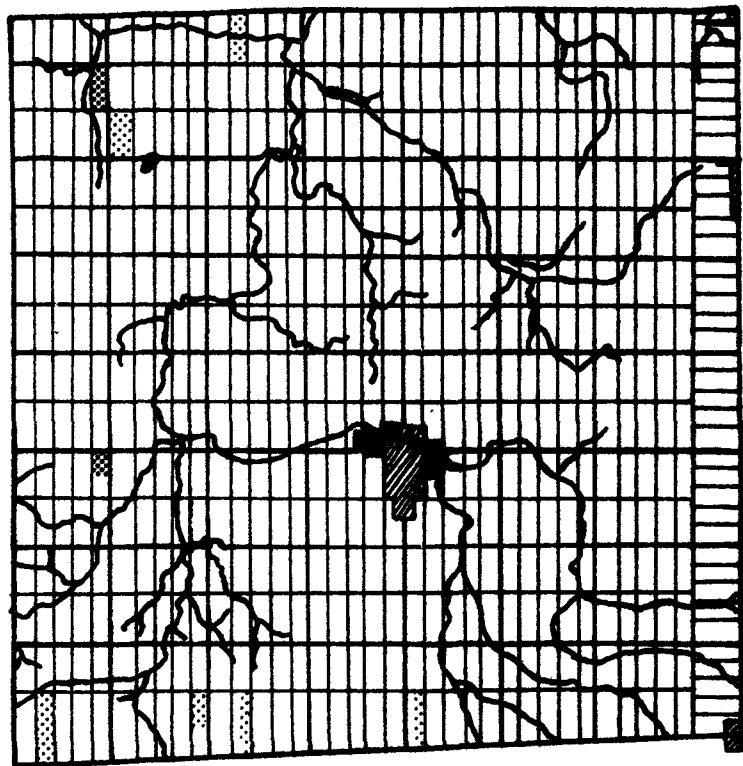
- Village
- Lakes
- Circumjacent Canadian
- Distant-Centered Canadian
- Distant-Centered Foreign



Non-Resident Ownership Culross Township *





1920

Figure IV:16



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



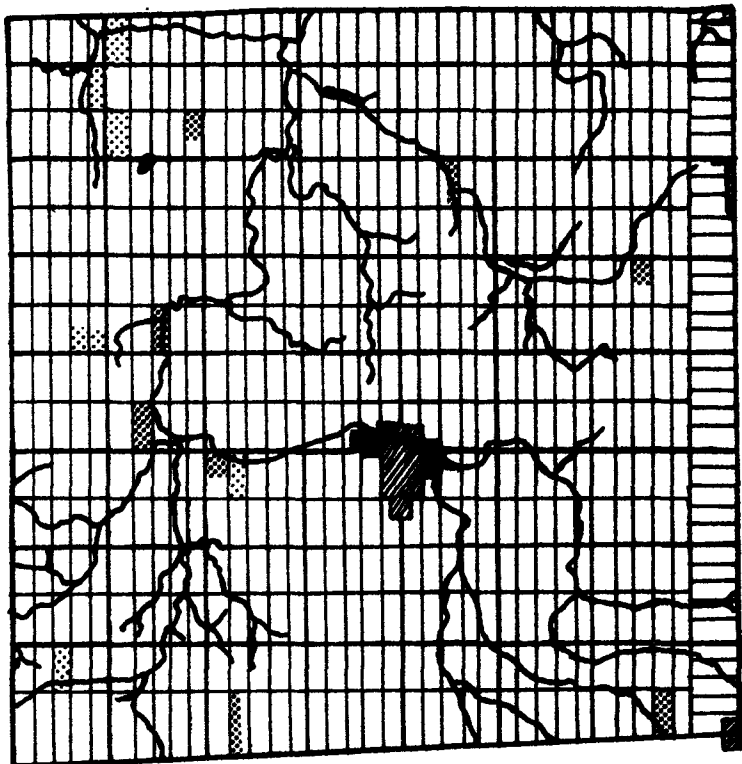
-  Village
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign



Non-Resident Ownership Culross Township *






1940

Figure IV:17



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



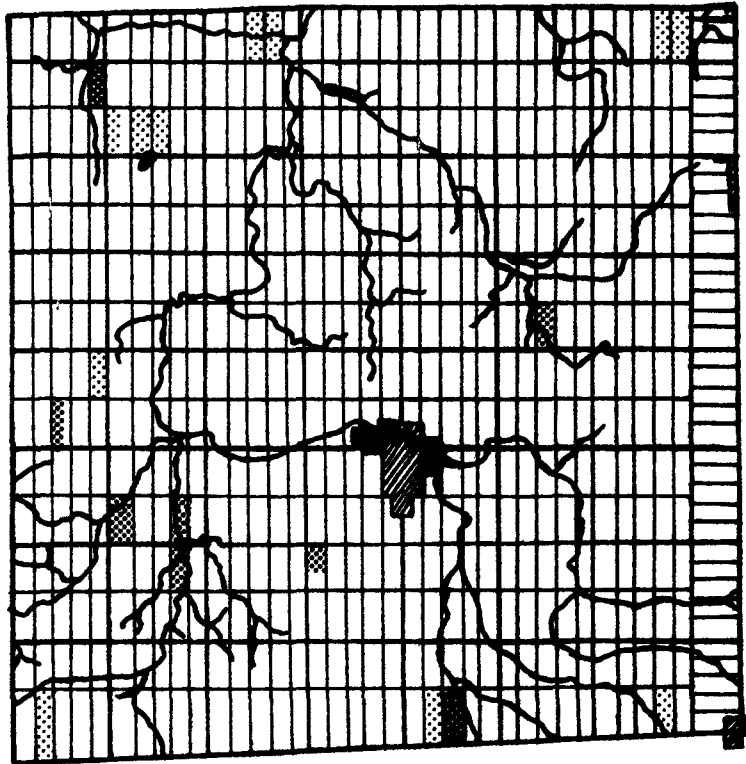
-  Village
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign



Non-Resident Ownership Culcross Township *






1950

Figure IV:18



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



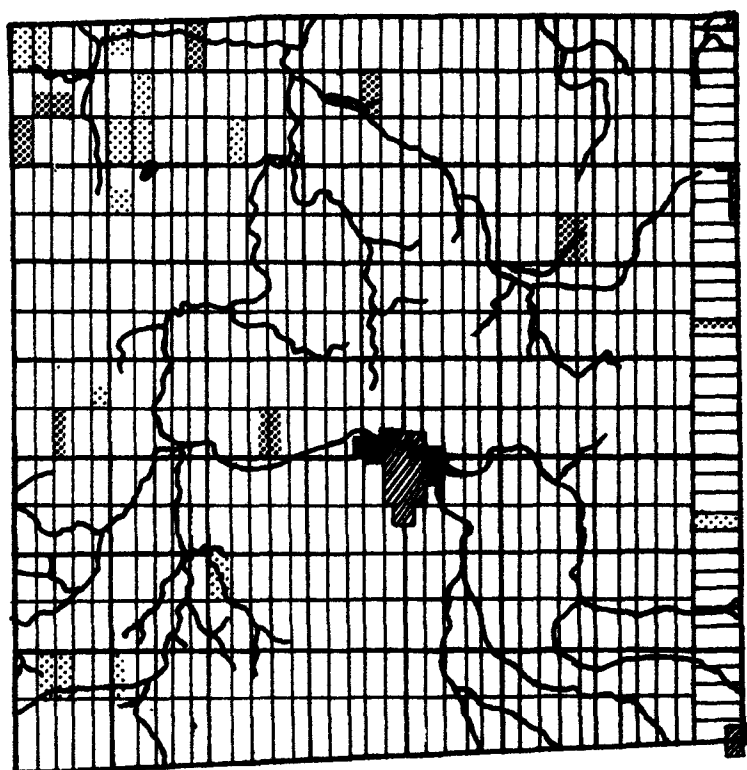
-  Village
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign



Non-Resident Ownership Culross Township *






1960

Figure IV:19



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



-  Village
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

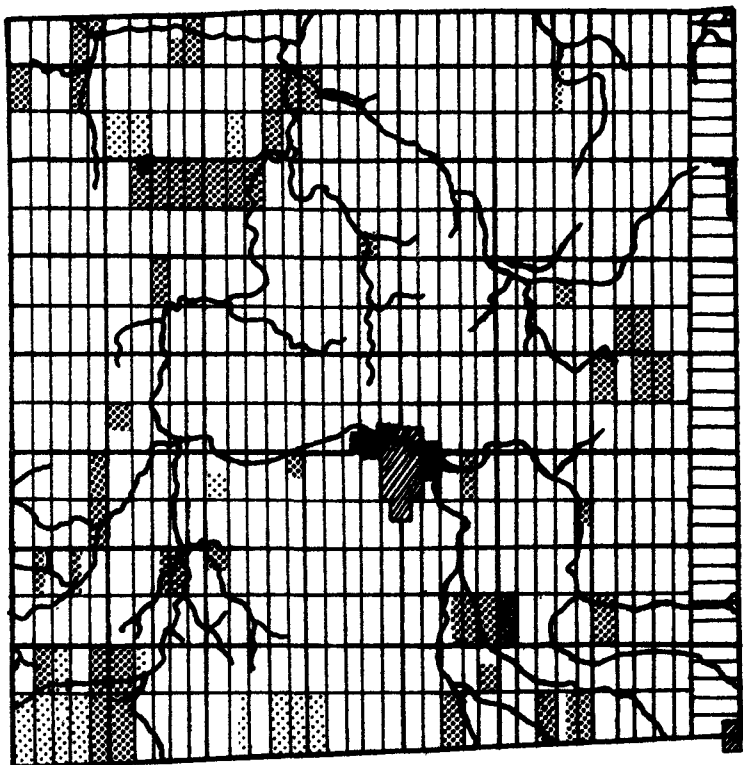
Scale in Miles
1 0 1



Non-Resident Ownership Culross Township *






1974

Figure IV:20



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



-  Village
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign



CULROSS TOWNSHIP *

NON-RESIDENT CATEGORIES

**(township totals indicated in acres and as percentages
of grand total of all categories)**

Table IV:3

TIME PERIODS	DISTANT-CENTERED FOREIGN	DISTANT-CENTERED CANADIAN	CIRCUMJACENT CANADIAN	TOTALS IN ACRES
1900	0 acres (0%)	400 acres (20.77%)	900 acres (68.23%)	1,300 acres
1920	0 acres (0%)	150 acres (25.00%)	450 acres (75.00%)	600 acres
1940	0 acres (0%)	550 acres (47.83%)	600 acres (52.17%)	1,150 acres
1950	200 acres (11.43%)	500 acres (28.57%)	1,050 acres (60.00%)	1,750 acres
1960	0 acres (0%)	750 acres (40.54%)	1,100 acres (59.46%)	1,850 acres
1974	100 acres (1.77%)	4,350 acres (76.99%)	1,200 acres (21.24%)	5,650 acres

*Total acreage of township = 57,875 acres

(iv) Carrick Township

Carrick Township represents the eastern and southern extent of the two continuums. Consequently, it must be examined in this light, with the possibility of variations in the township's trends with respect to the other townships in the two continuums being a result of two different overlapping "time-oriented" diffusion waves.

Carrick has far fewer agricultural limitations than Culross Township. 75 percent of the township is comprised of Class 1 soils, while an additional 15 percent of the township is described as Class 3 soils, having only moderate agricultural limitations.¹² Earlier time periods reveal an affinity to Class 5 soils, while the 1974 pattern shows an additional attraction to Class 3 soils.¹³ Fortunately, non-resident ownership has not become a characteristic feature of the township's Class 1 land.

Despite the fact that no data was available for 1900 and 1920 in Carrick Township, trends from 1940 to 1974 have not been obscured (see Figures IV:21 to IV:24 and Table IV:4). Once again, foreign ownership does not really enter the question. The township also follows trends similar to the previously examined townships with respect to Distant-Centered Canadian and Circumjacent owned land. The latter category, although remaining relatively stable in terms of acreage, has decreased significantly as a percent of the total non-resident acreage. At the same time, Distant-Centered Canadian owned land, which reached a premature peak (vis-à-vis percent of the total) in 1950, levelled off and,

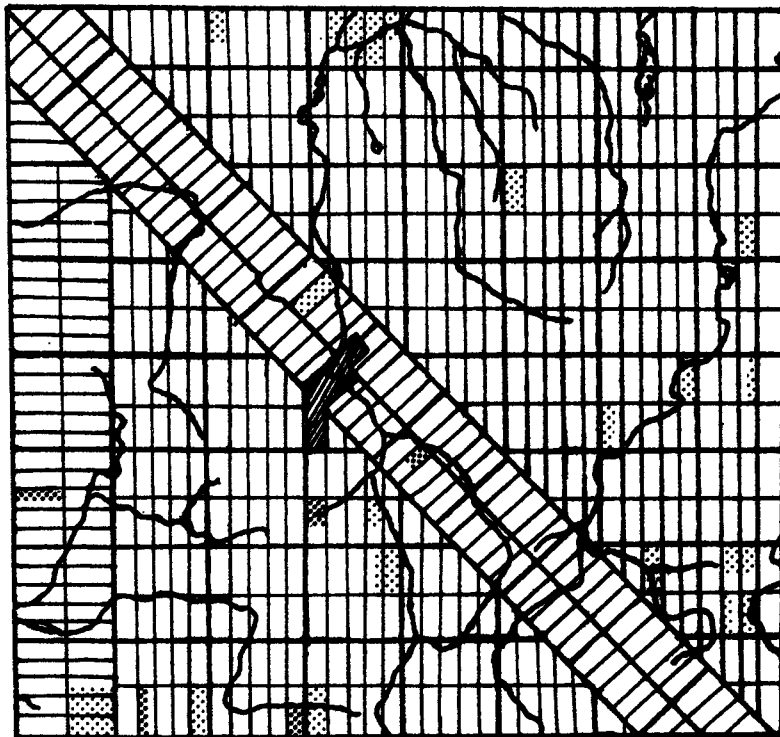
in 1974, the category controlled two and a half times the number of acres it had in 1960.

Examination of Table IV:4 reveals that the "2375 acre" diffusion wave was achieved between 1950 and 1960, or one time period earlier than it occurred in Culross Township. By 1974 (as was the case in Kinloss Township) the "takeoff" period of the diffusion was underway. This, however, does not totally negate the idea of a west to east diffusion continuum. If the corresponding hypothesis concerning a north to south diffusion continuum exists, it is extremely possible that the "takeoff" and "consolidation" of non-resident owned land along the north to south continuum took place earlier than that in the west to east continuum. This then can result in different arrival rates for the "2375 acre" diffusion wave along the north to south continuum. In turn, when trying to overlay the last township in each continuum (namely, Carrick Township), it is extremely unlikely that the "2375 acre" wave would reach the township at the same time from the north as it would from the west.

Non-Resident Ownership Carrick Township *






1940

Figure IV:21



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



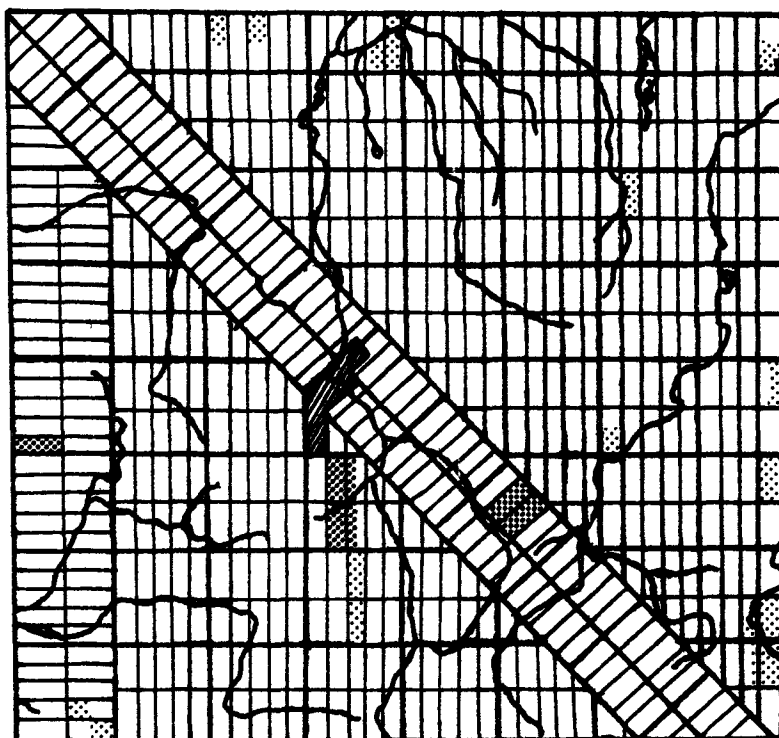
-  Village
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

Scale in Miles
1 0 1

Non-Resident Ownership Carrick Township *






1950

Figure IV:22



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



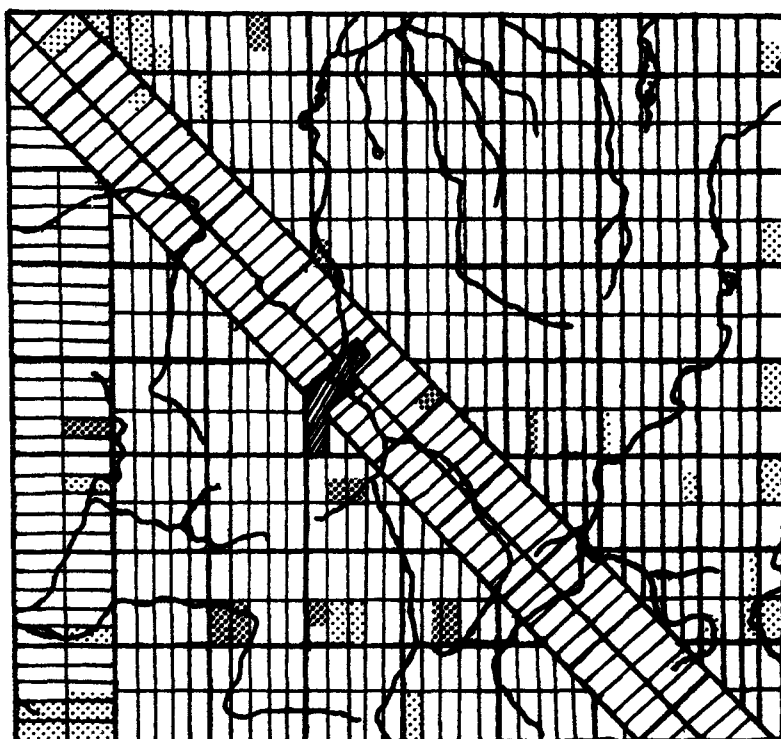
-  Village
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign



Non-Resident Ownership Carrick Township *






1960

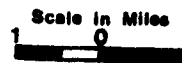
Figure IV:23



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



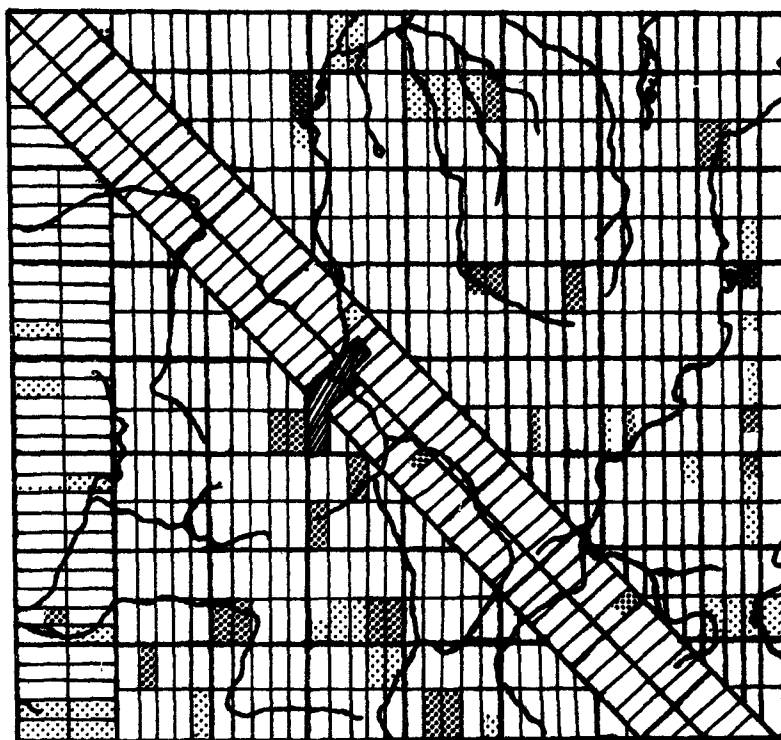
-  Village
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign



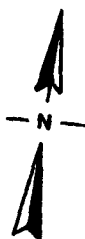
Non-Resident Ownership Carrick Township *






1974

Figure IV:24



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



-  Village
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

Scale in Miles
1 0 1



CARRICK TOWNSHIP *
NON-RESIDENT CATEGORIES
 (township totals indicated in acres and as percentages
 of grand total of all categories)

Table IV:4

TIME PERIODS	DISTANT-CENTERED FOREIGN	DISTANT-CENTERED CANADIAN	CIRCUMJACENT CANADIAN	TOTALS IN ACRES
1900	-----	-----	-----	-----
1920	-----	-----	-----	-----
1940	0 acres (0%)	250 acres (11.90%)	1,850 acres (88.10%)	2,100 acres
1950	0 acres (0%)	600 acres (33.33%)	1,200 acres (66.67%)	1,800 acres
1960	0 acres (0%)	800 acres (25.81%)	2,300 acres (74.19%)	3,100 acres
1974	150 acres (2.96%)	1,975 acres (38.92%)	2,950 acres (58.12%)	5,075 acres

*Total acreage of township = 61,082 acres

(v) Brant Township

Consistently, it has been found that foreign ownership of land in any of the previously-examined townships can be negated as a significant contributing factor to the phenomenon. In the case of Brant Township there were more foreign owned acres in 1900 than in any of the remaining five periods of analysis. The remaining two categories similarly follow the basic trends established in subsections (i) to (iv) (see Table IV.5).

The Distant-Centered Canadian category appears to have reached a percentage (of the total non-resident owned acres) and numerical peak in or before 1900, and possibly can be explained by the abandonment process. The category declines both in relative and absolute significance until 1950 when the declining trend seems to reverse. This is verified in 1960 which sees an increase both in percentage and total acreage of four times over the previous period. The trend is continued to 1974.

As the Distant-Centered Canadian category decreases consistently, the Circumjacent owned land increases rapidly in the first three time periods. It reaches a peak by 1940 and then as the Distant-Centered Canadian category experiences increases in its relative importance, the Circumjacent category experiences corresponding declines so that by 1974 only 40.63 percent of non-resident owned land is in the hands of Circumjacent Canadians. This is a marked turnaround from 1940 when 93.38 percent of non-resident owned land fell into this category.

An examination of Figures IV:25 to IV:30 indicates that more and more justification can be found in a "stream property" hypothesis. There also seems to be a definite consolidation of non-resident owned land by 1974 in the northwest section of the township. It should be noted that while 79 percent of the township is either Class 1 or Class 2 land,¹⁴ most of the township's 20 percent of Class 5 and 0 land (characterized by severe soil and topographic constraints) is found in the northwest section of the township.¹⁵

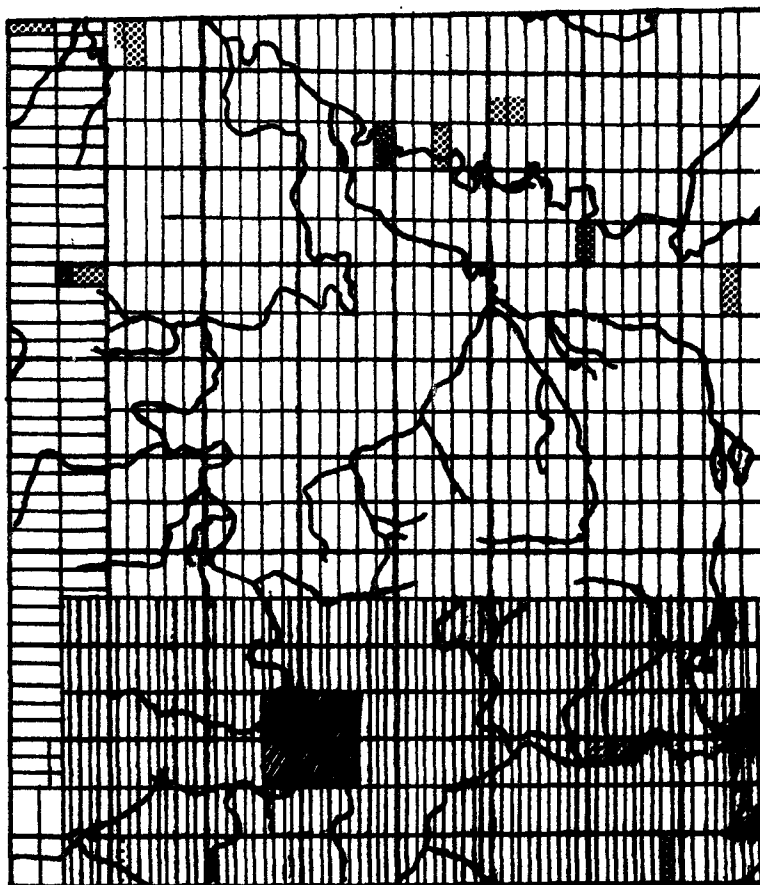
Finally, if the north to south continuum is to be verified the "2375 acre" diffusion wave should have been reached prior to the period between 1950 and 1960 (the time the wave reached Carrick Township). Table IV:6 reveals that it was reached between 1920 and 1940. Now it is evident that not only has there been a non-resident diffusion wave in operation in a west to east fashion, but also, in the light of the above evidence, added justification begins to emerge for the existence of a similar north to south diffusion wave.

Non-Resident Ownership

Brant Township *






1900

Figure IV:25



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



-  Towns
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign



Non-Resident Ownership Brant Township *

1920

Figure IV:26



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



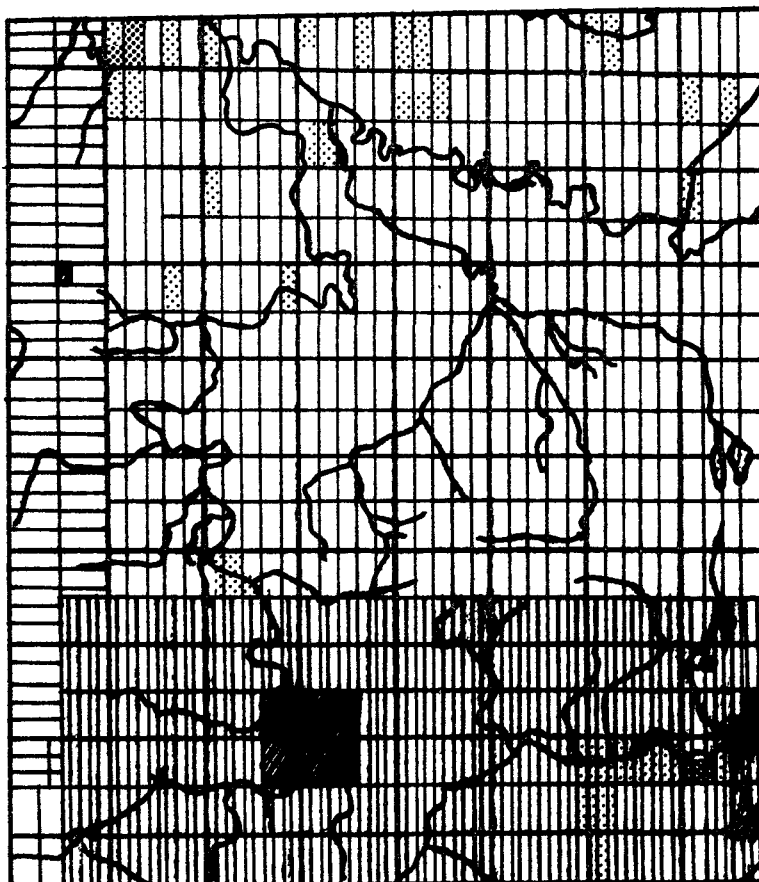
- Towns
- Lakes
- Circumscent Canadian
- Distant-Centered Canadian
- Distant-Centered Foreign



Non-Resident Ownership Brant Township *

1940

Figure IV:27



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



Towns

Lakes

Circumjacent Canadian

Distant-Centered Canadian

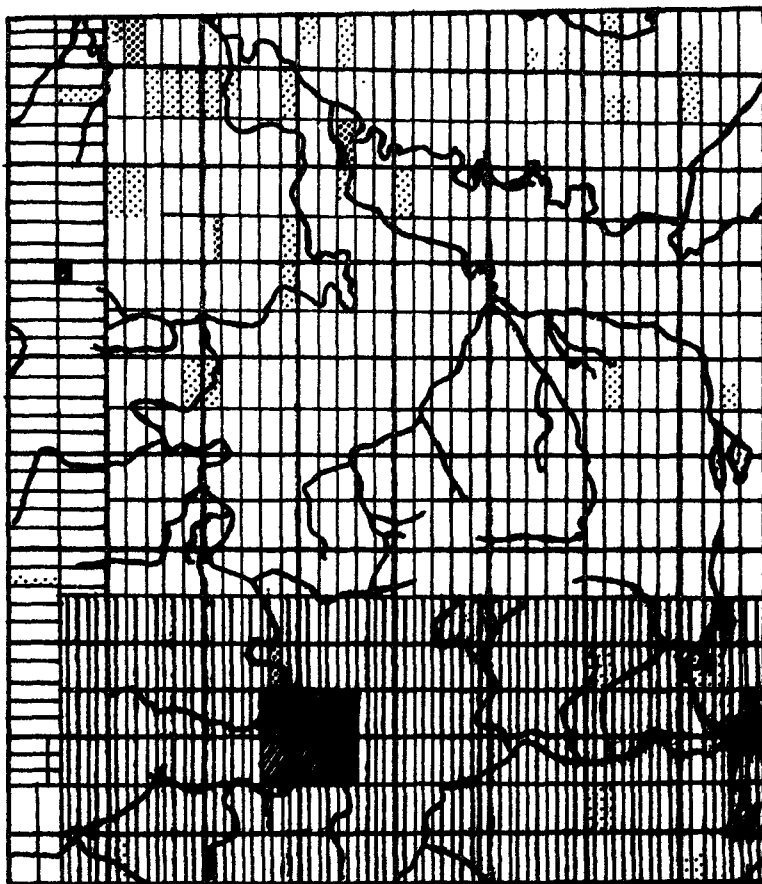
Distant-Centered Foreign



Non-Resident Ownership Brant Township *






1950

Figure IV:28



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



-  Towns
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

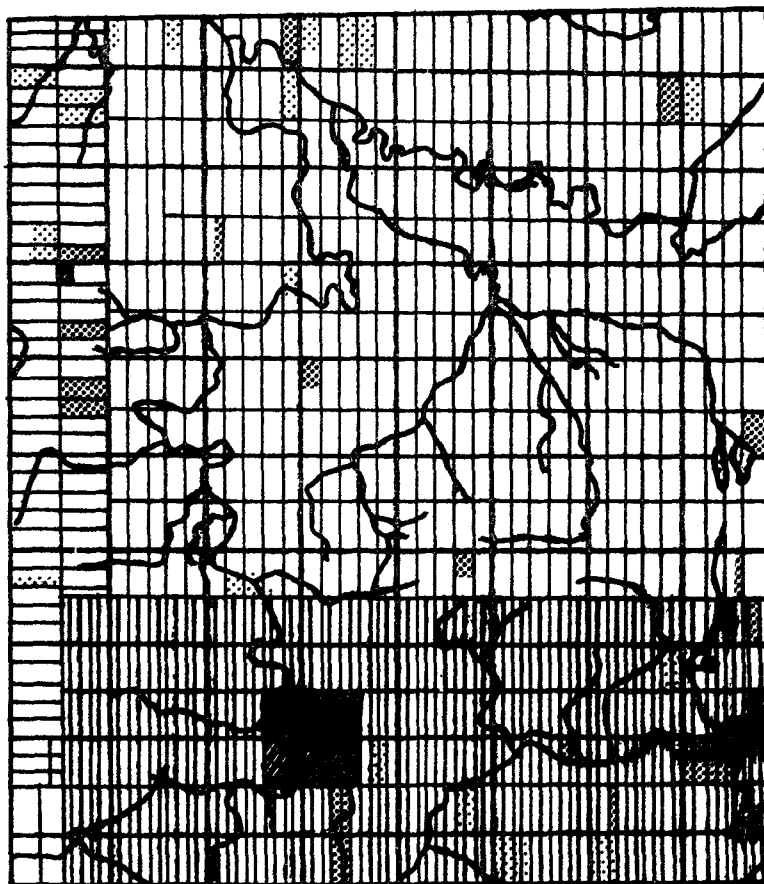
Scale in Miles
1 0 1



Non-Resident Ownership Brant Township *






1960

Figure IV:29



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



-  Towns
-  Lakes
-  Circumjacent Canadian
-  Distant Centered Canadian
-  Distant Centered Foreign

Scale in Miles
1 0 1



Non-Resident Ownership Brant Township *






1974

Figure IV:30



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



-  Towns
-  Lakes
-  Circumjacent Canadian
-  Distant Centered Canadian
-  Distant Centered Foreign

Scale in Miles
1 0 1



BRANT TOWNSHIP *

NON-RESIDENT CATEGORIES

**(township totals indicated in acres and as percentages
of grand total of all categories)**

Table IV:5

TIME PERIODS	DISTANT-CENTERED FOREIGN	DISTANT-CENTERED CANADIAN	CIRCUMJACENT CANADIAN	TOTALS IN ACRES
1900	250 acres (24.39%)	725 acres (70.73%)	50 acres (4.88%)	1,025 acres
1920	0 acres (0%)	175 acres (53.85%)	150 acres (46.15%)	325 acres
1940	75 acres (2.21%)	150 acres (4.4%)	3,175 acres (93.38%)	3,400 acres
1950	0 acres (0%)	350 acres (11.29%)	2,750 acres (88.71%)	3,100 acres
1960	125 acres (3.76%)	1,375 acres (41.35%)	1,825 acres (54.89%)	3,325 acres
1974	200 acres (2.5%)	4,550 acres (56.88%)	3,250 acres (40.63%)	8,000 acres

*Total acreage of township = 71,206 acres

(vi) Elderslie Township

The total number of non-resident acres in Elderslie remains relatively constant until 1960. This, in turn, reinforces the concept of a north to south diffusion continuum. However, within such a generalization, specific interesting aspects of this macro trend are worth mentioning.

First of all, the Distant-Centered Foreign category reveals nothing that has not already been seen. The Distant-Centered Canadian category decreases from 72.09 percent and 1,550 acres in 1900 to 12.77 percent and 300 acres in 1950. Over the same period, the Circumjacent Canadian owned land has increased from 600 acres and 27.91 percent to 1,850 acres and 78.72 percent. Thus, from 1950 to 1974 the trends of both categories are reversed. The Distant-Centered Canadian land increases from 1,150 acres and 37.10 percent in 1960 to 6,425 acres and 74.06 percent, while the Circumjacent Canadian owned land decreases from 59.68 percent in 1960 to 15.94 percent in 1974. The absolute acreage, however, for this latter category, remains constant. Its relative significance has been decreased by large increases in the number of Distant-Centered Canadian owned acres (see Table IV:6).

It can be recalled that the above trends were also present in Brant Township. However, the time of trend reversal, which occurred between 1950 and 1960 in Elderslie, occurred between 1940 and 1950 in Brant.

Once again, an analysis of Figures IV:31 to IV:36 reveals that there appears to be a stream property preference. It should also be noted that

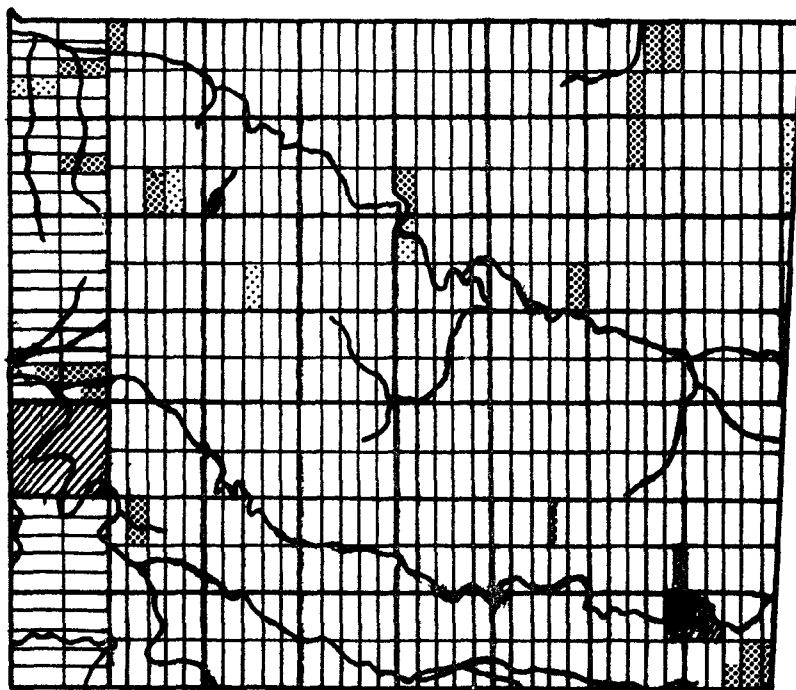
90 percent of the township is either Class 1 or 2 land.¹⁶ The 1974 pattern shows no alignment or consolidation of non-residents in any specific area of the township. Consequently, Elderslie Township faces severe agricultural problems, when considering the earlier statements regarding the ability of a non-resident to keep up the productivity of a farm.

The "2375 acre" diffusion wave hits Elderslie Township between 1900 and 1920, one time period earlier than in Brant Township to the south, thus maintaining the north to south diffusion continuum hypothesis. The total acreage drops to below 2,375 acres in 1950. However, Assessment Role examination has revealed that this was due to the purchase of large tracts of land by in-township residents for the purpose of consolidation of large beef ranch holdings.

Non-Resident Ownership Elderslie Township *





1900

Figure IV:31



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



-  Villages
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

Scale in Miles
1 0 1

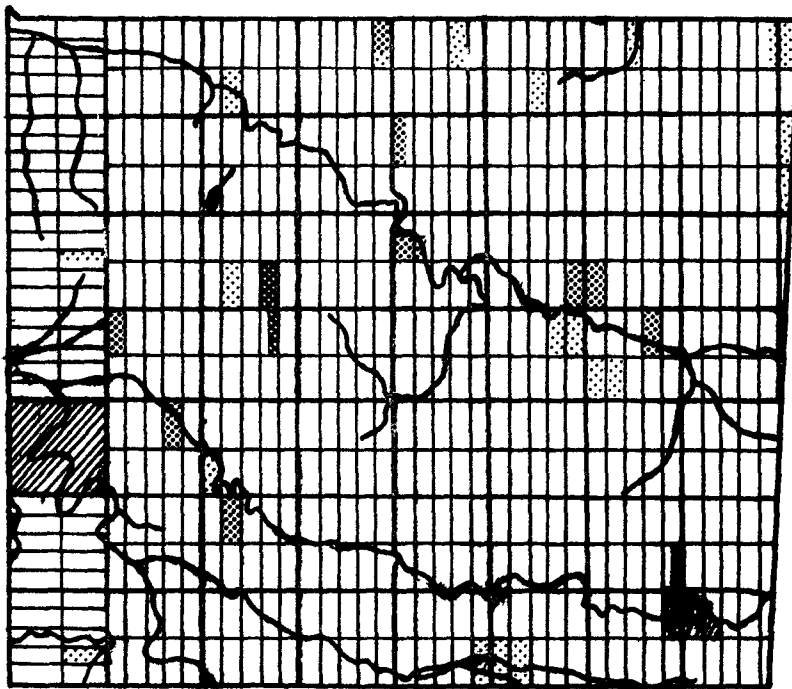


Non-Resident Ownership

Elderslie Township*





1920

Figure IV:32



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



-  Villages
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

Scale in Miles
1 0 1

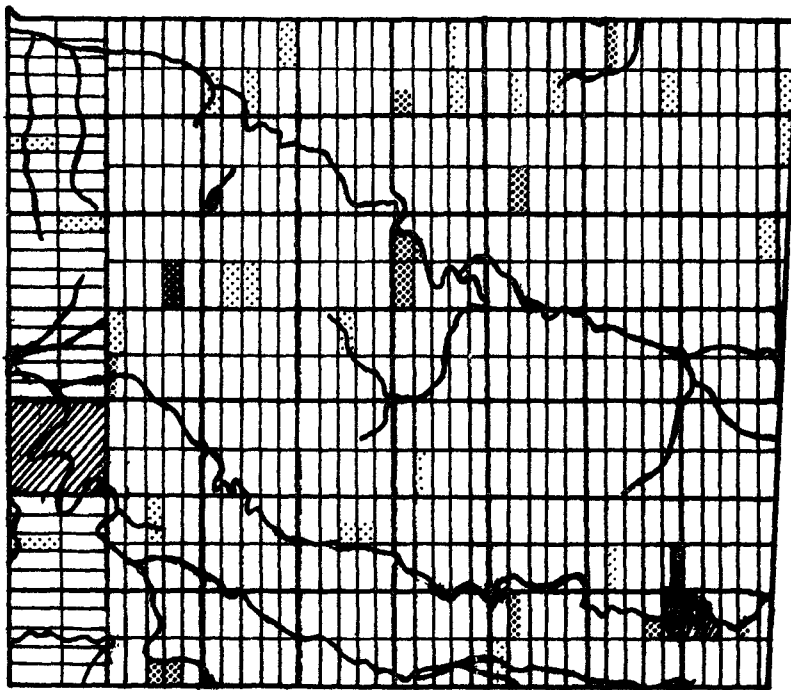


Non-Resident Ownership

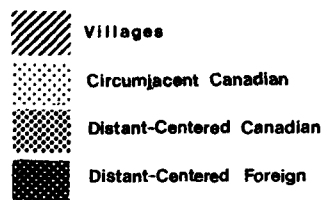
Elderslie Township*

1940

Figure IV:33



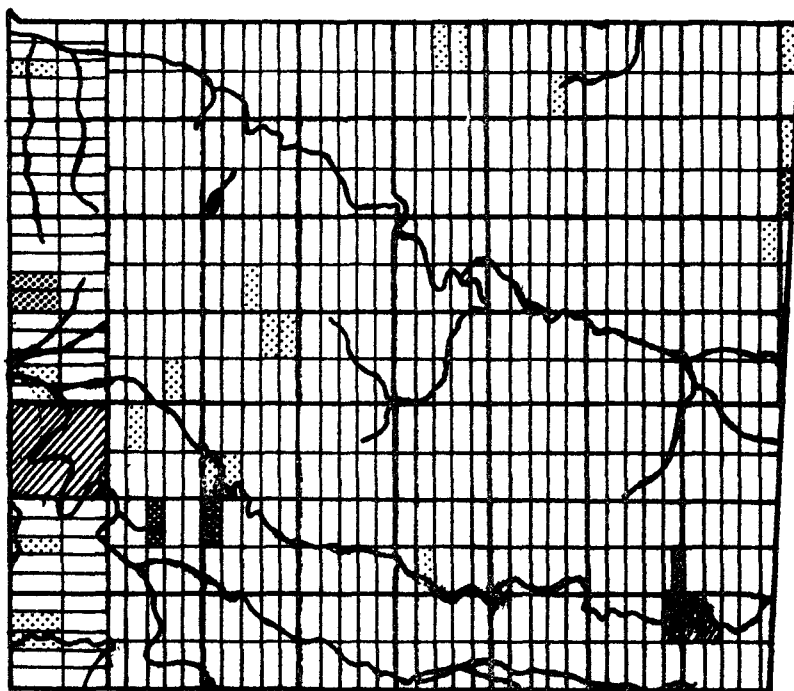
*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



Non-Resident Ownership Elderslie Township *





1950

Figure IV:34



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



-  Villages
-  Circumjacent
-  Distant-Centered Canadian
-  Distant-Centered Foreign

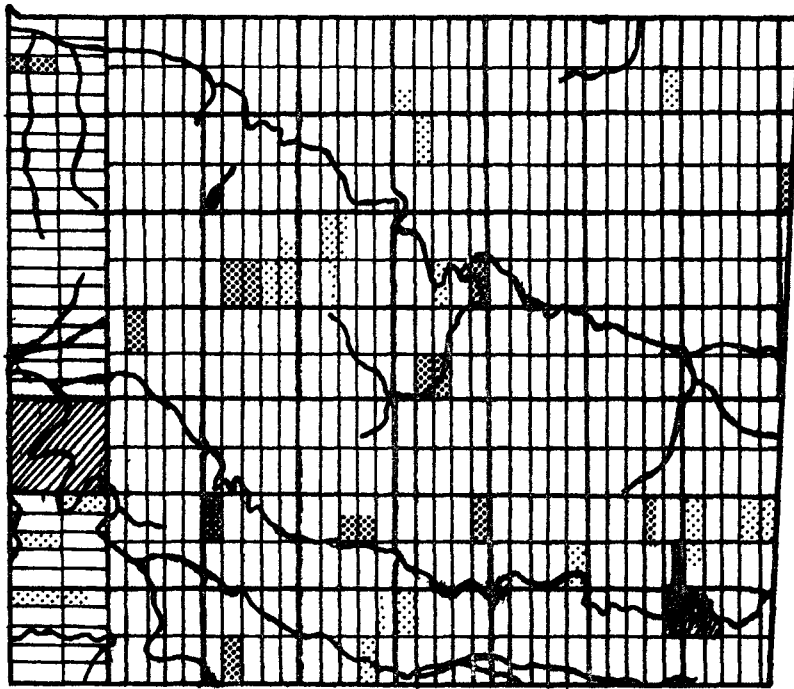
Scale in Miles
1 0 1



Non-Resident Ownership Elderslie Township *





1960

Figure IV:35



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



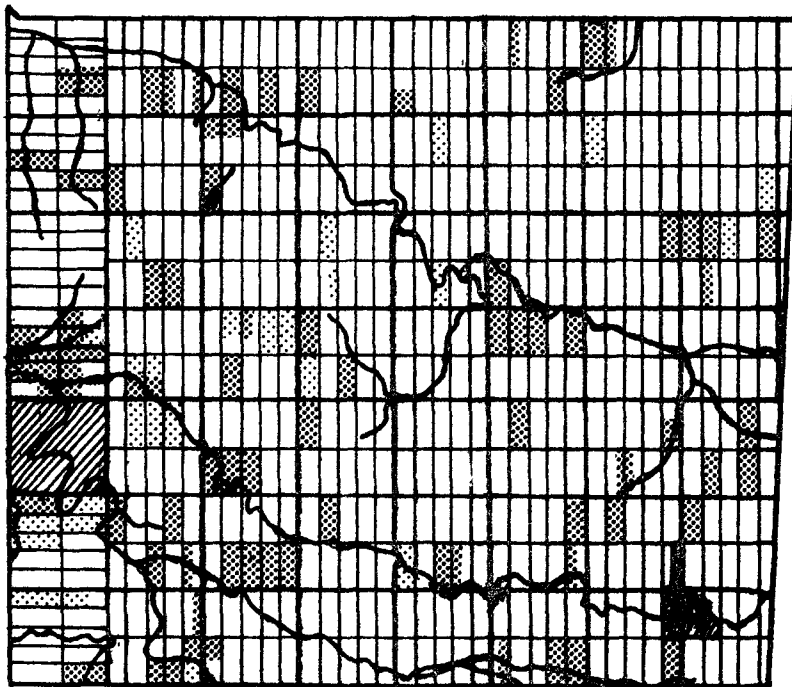
-  Villages
-  Circumjacent
-  Distant-Centered Canadian
-  Distant-Centered Foreign



Non-Resident Ownership Elderslie Township*

1974

Figure IV:36



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



- Villages
- Circumjacent Canadian
- Distant-Centered Canadian
- Distant-Centered Foreign

Scale in Miles
1 0 1

ELDERSLIE TOWNSHIP *
NON-RESIDENT CATEGORIES
(township totals indicated in acres and as percentages
of grand total of all categories)

Table IV:6

TIME PERIODS	DISTANT-CENTERED FOREIGN	DISTANT-CENTERED CANADIAN	CIRCUMJACENT CANADIAN	TOTALS IN ACRES
1900	0 acres (0%)	1,550 acres (72.09%)	600 acres (27.91%)	2,150 acres
1920	150 acres (5.41%)	775 acres (27.93%)	1,850 acres (66.67%)	2,775 acres
1940	100 acres (3.51%)	650 acres (22.81%)	2,100 acres (73.68%)	2,850 acres
1950	200 acres (8.51%)	300 acres (12.77%)	1,850 acres (78.72%)	2,350 acres
1960	100 acres (3.23%)	1,150 acres (37.10%)	1,850 acres (59.68%)	3,100 acres
1974	0 acres (0%)	6,425 acres (74.06%)	2,250 acres (25.94%)	8,675 acres

*Total acreage of township = 57,780 acres

(vii) Arran Township

Arran Township provides many interesting exceptions to the above-mentioned "consistent" trends. The "2375 acre" diffusion wave appears to have arrived in Arran Township prior to 1900, which would maintain the north to south diffusion continuum hypothesis (it arrived in Elderslie to the south between 1900 and 1920). However, the total non-resident acreage declines drastically in 1920 and does not achieve any significance again until 1960 (see Table IV:7). Once again, the Assessment Roles revealed that the consolidation of many units of land into large beef ranches accounts for the relative decline of the non-resident ownership phenomenon from 1920 to 1950. That is, many non-resident holdings during this period were purchased by farmers consolidating their beef ranch holdings. In short, what is being witnessed in the case of Elderslie and Arran Townships, as a result of farm consolidation, could be described as a "pulsating" diffusion wave.

The trends associated with the three categories of non-residents remain the same as those in Brant Township. The number of foreign owned acres remained relatively insignificant. The Distant-Centered Canadian category decreased in relative and absolute importance until the period between 1940 and 1950 in which the category began to take over as the predominant type of non-resident owned land. The Circumjacent owned land increased in relative importance until the same period after which it was marked by a decline in its importance relative to the total number of non-resident owned acres.

Arran Township is comprised of 55 percent of Class 1 and 2 land,¹⁷ while 45 percent of the township is comprised of Class 5 and 0 land. Even though there seems to be a definite affinity of non-residents for the Class 5 and 0 land,¹⁸ the dispersed pattern exhibited in Figures IV:37 to IV:42 means that a limited amount of non-resident ownership has taken place on prime land. Consequently, there is some room for concern regarding the agricultural subsystem, but not nearly to the same extent as in Elderslie Township.

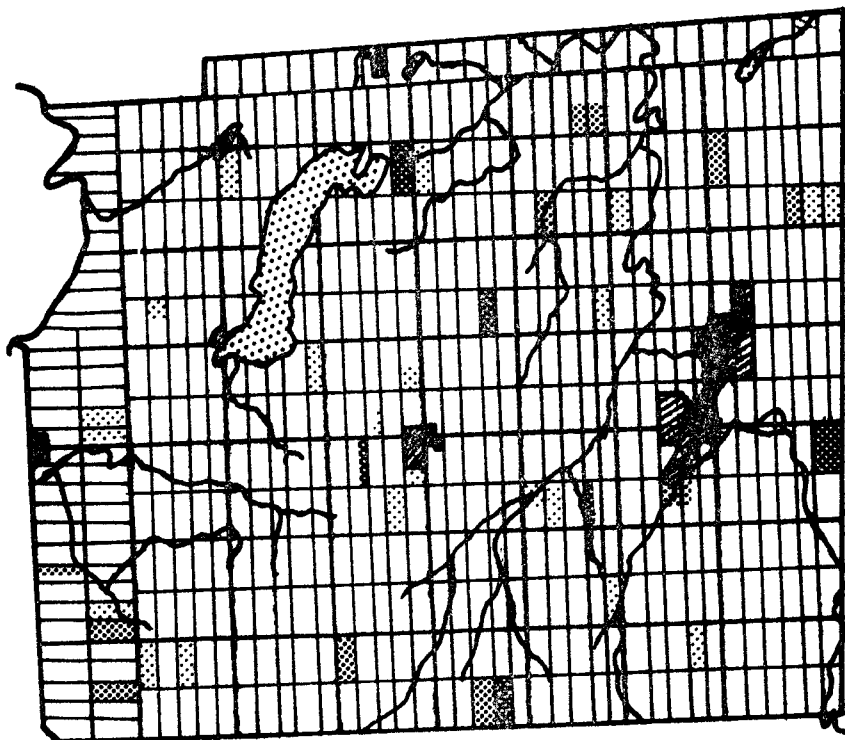
In conclusion, it should be noted that even though Figures IV:37 to IV:42 do not seem to reveal a shoreline affinity (for Arran Lake in the northwest of the township), this is not the case. Assessment Role examination revealed a definite preference for such property along Arran Lake. However, the most desirable lots were purchased by 1950 to 1960 and had been subdivided to such an extent that mapping the presence of such ownership was prohibited.

Non-Resident Ownership

Arran Township *




1900

Figure IV:37



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



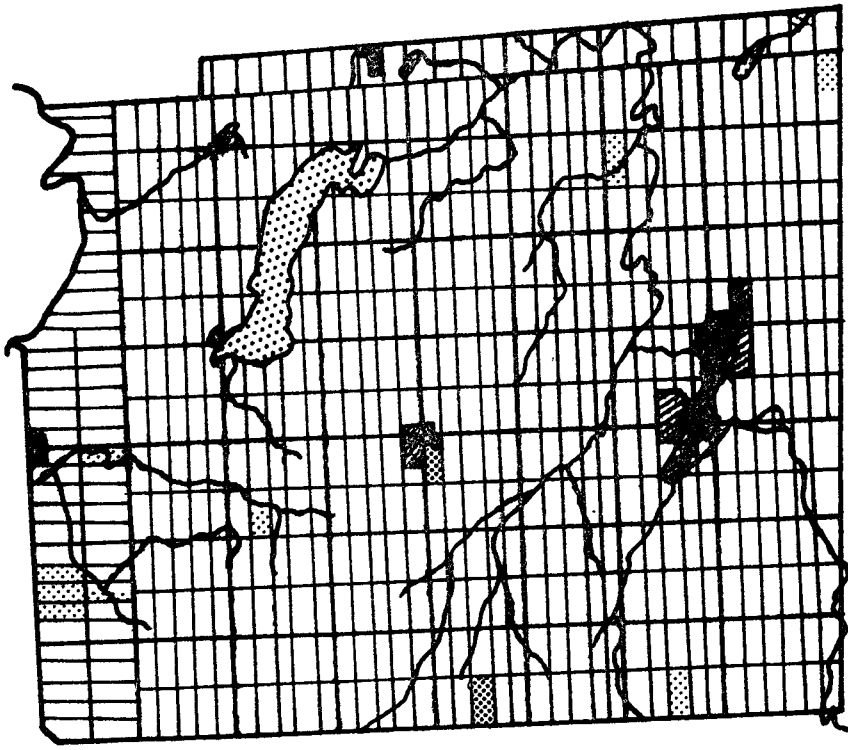
-  Villages
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

Scale in Miles
1 0 1

Non-Resident Ownership Arran Township *






1920

Figure IV:38



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



-  Villages
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant Centered Foreign

Scale in Miles
1 0 1

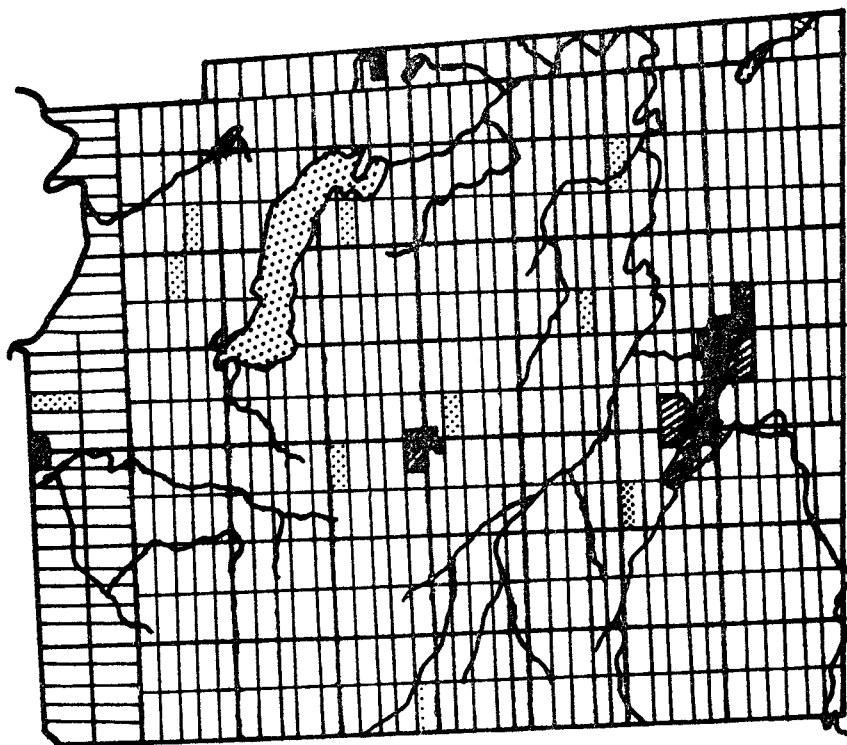


Non-Resident Ownership

Arran Township *

1940

Figure IV:39



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



 Villages

 Lakes

 Circumjacent Canadian

 Distant-Centered Canadian

 Distant-Centered Foreign

Scale in Miles
1 0 1

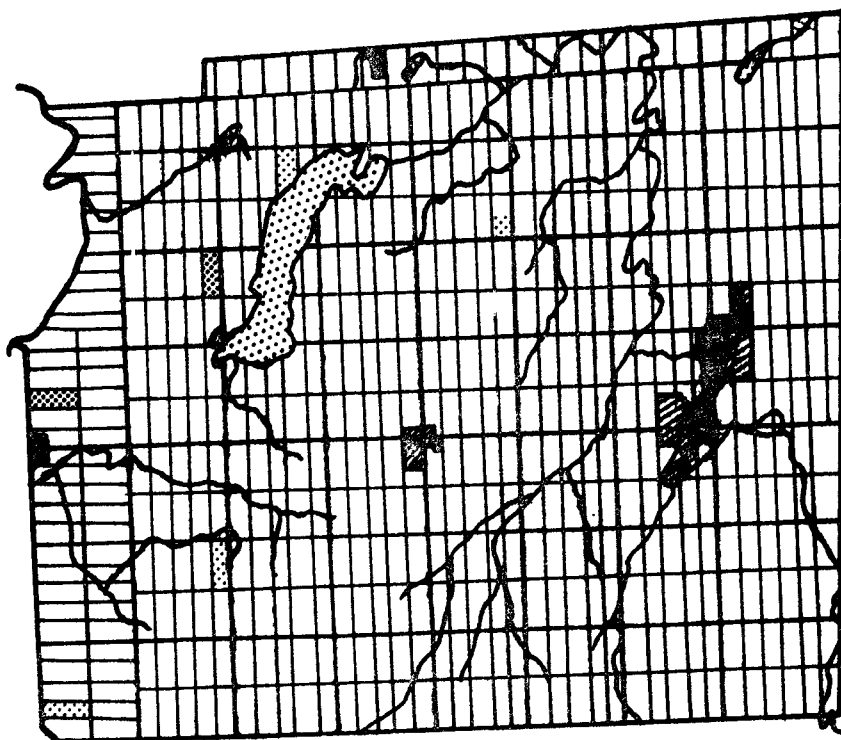


Non-Resident Ownership

Arran Township *

1950


Figure IV:40



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



 Villages

 Lakes

 Circumjacent Canadian

 Distant-Centered Canadian

 Distant Centered Foreign

Scale in Miles
1 0 1

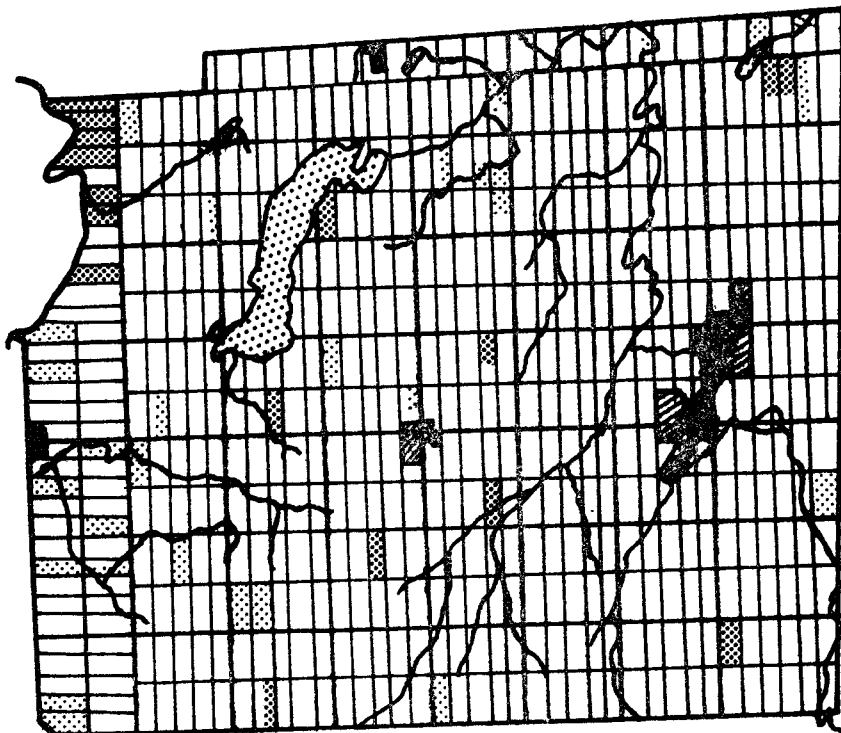


Non-Resident Ownership

Arran Township *






1960

Figure IV:41



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



-  Villages
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

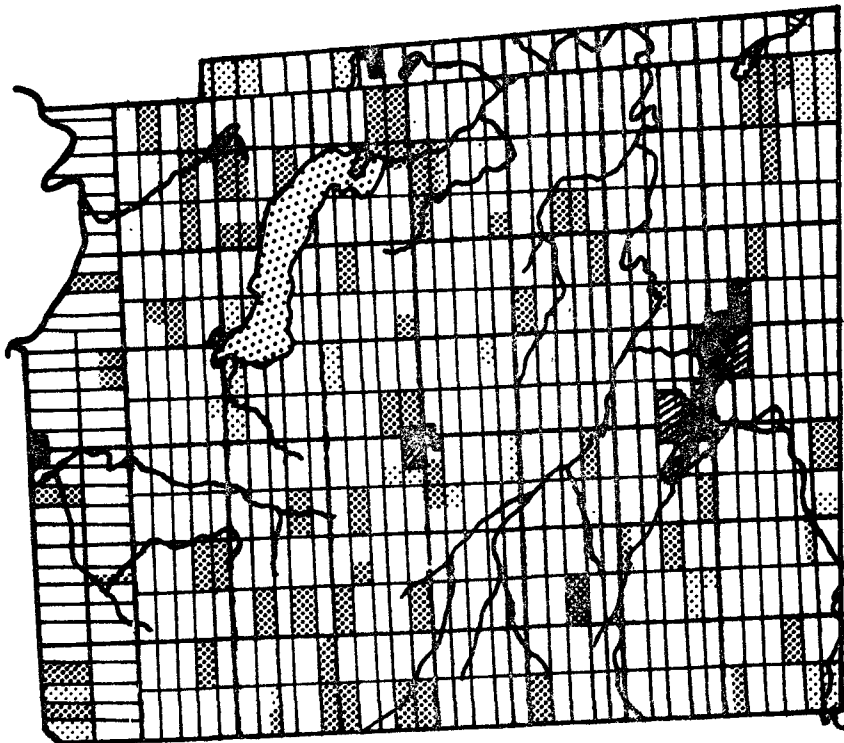


Non-Resident Ownership

Arran Township *






1974

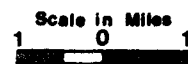
Figure IV:42



*non-resident units of less than 25 acres not recorded, unless subdivision occurred within one category



-  Villages
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign



ARRAN TOWNSHIP *
NON-RESIDENT CATEGORIES
(township totals indicated in acres and as percentages
of grand total of all categories)

Table IV:7

TIME PERIODS	DISTANT-CENTERED FOREIGN	DISTANT-CENTERED CANADIAN	CIRCUMJACENT CANADIAN	TOTALS IN ACRES
1900	550 acres (16.79%)	925 acres (28.24%)	1,800 acres (54.96%)	3,275 acres
1920	0 acres (0%)	175 acres (18.92%)	750 acres (81.08%)	925 acres
1940	0 acres (0%)	50 acres (5.56%)	850 acres (94.44%)	900 acres
1950	0 acres (0%)	200 acres (36.36%)	350 acres (63.64%)	550 acres
1960	0 acres (0%)	1,400 acres (39.72%)	2,125 acres (60.28%)	3,525 acres
1974	100 acres (1.29%)	5,700 acres (73.79%)	1,925 acres (24.92%)	7,725 acres

*Total acreage of township = 55,731 acres

(viii) Amabel Township

The examination of the remaining five townships unveils definite problems in defining an explicit north to south diffusion continuum. It is strongly felt, however, that most of the anomalies can be explained by means of agricultural capability, changing non-resident preference, distance, and other contributing factors.

Amabel Township is the first township that reveals any significant number of foreign non-resident owned acres. This is only a recent development and, as can be seen in Figures IV:43 to IV:48, in the case of foreign owned land there has been a definite affinity for shoreline and other properties with high recreational potential. Once again, even though Figure IV:48 does not reveal any buildup of shoreline non-resident ownership, this has been concealed from this research by subdivision of the shoreline lots. It is evident, however, that a large amount of the foreign owned land is very close or immediately adjacent to the shoreline lots.

With the exception of a slight drop in 1950, Distant-Centered Canadian owned land has risen consistently, with a doubling of this category occurring in the last decade. This has also been the situation with Circumjacent owned land which experienced a slow increase (almost arithmetic in appearance) until 1960 and 1974 which depict a rapid turnover to such ownership (appearing almost geometric in its progression).

If there are any beneficial aspects concerning the ownership of 14,150 acres in Amabel Township by non-residents it could be the fact that proportionately, the Circumjacent owned land is increasing with respect to a slower growth of Distant-Centered owned land.

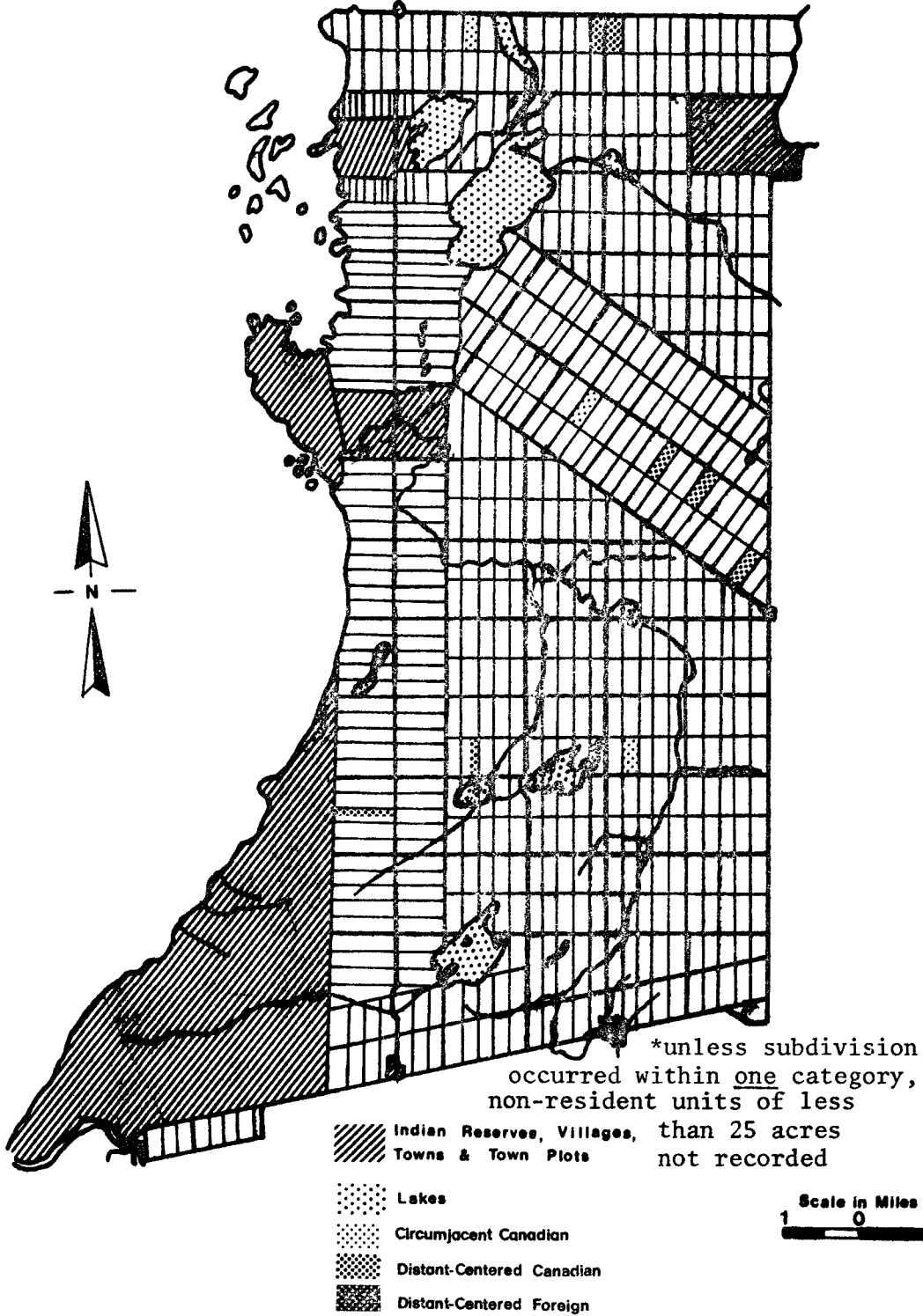
A major problem in the analysis is created by the apparent late arrival of the "2375 acre" diffusion wave. The wave seemed to arrive in Arran Township to the south by 1900 (although it has been seen that this may have been a premature appearance), while in Amabel Township it arrived between 1950 and 1960 (although interpolation would reveal it as arriving very close to 1950). Justification for the late appearance of the "2375 acre" wave can be partially found in the fact that the big cottage explosion did not occur until after World War II.¹⁹ As has already been mentioned, the intrusion of shoreline owners marked the beginning of the takeoff period of non-resident ownership in townships with a great deal of shoreline property. A later takeoff can also be explained in terms of the greater distance involved between Amabel Township and large centres of distant-centered population. Consequently, it is only understandable that the importance of the distance factor would only be eliminated in the last two decades. Finally, although Amabel is a township with high recreational capability, it is very low in agricultural capability. Only 15 percent of the township is classed as prime agricultural land, while 68 percent falls into a 5, 7 or 0 classification.²⁰ It has already been seen that abandonment in the first couple of decades after the turn of the century explains a certain degree

of non-resident ownership during those time periods, and possibly the early takeoff of the phenomenon in several of the southern (characterized by better agricultural land) townships. Amabel experienced remarkably less abandonment than other peninsular townships. This was not so much due to the presence of large amounts of prime or non-fringe agricultural land which would prevent the creation of a retreating agricultural frontier but, rather, to a lack of initial settlement in Amabel Township for the purposes of agricultural production. Consequently, the recreational hypothesis must explain a great part of the takeoff of the phenomenon. Therefore, with the involvement of the distance factor (i.e., physical distance proved to be more of a limiting factor to potential turn-of-the-century non-resident ownership of recreational land than it has in the post World War II period) and lack of significant amounts of turn-of-the-century abandonment, the diffusion wave is prevented from making significant inroads into Amabel Township until the period between 1950 and 1960.

Non-Resident Ownership Amabel Township *

1900

Figure IV:43

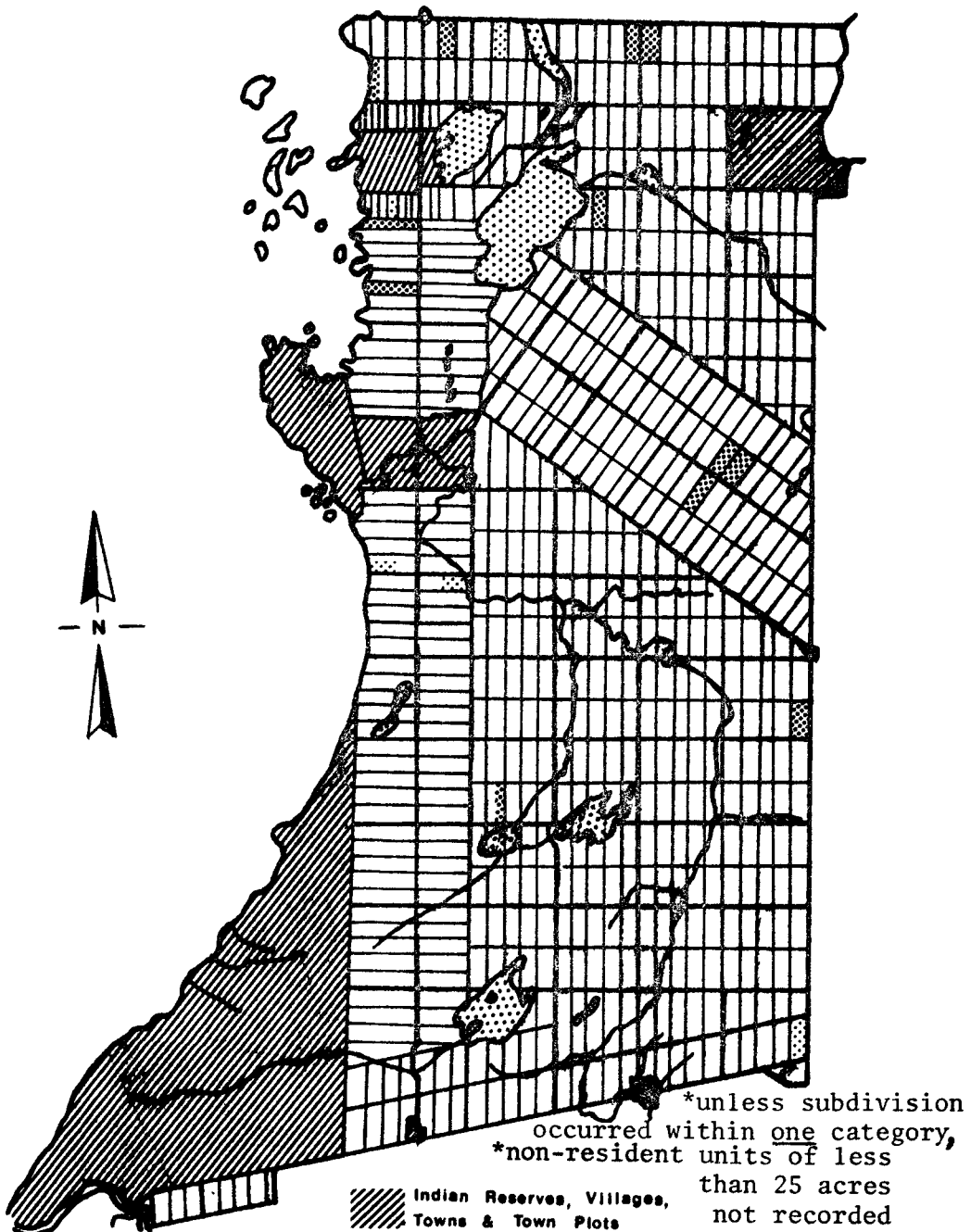







Non-Resident Ownership

Amabel Township *

1920

Figure IV:44



-  Indian Reserves, Villages, Towns & Town Plots
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

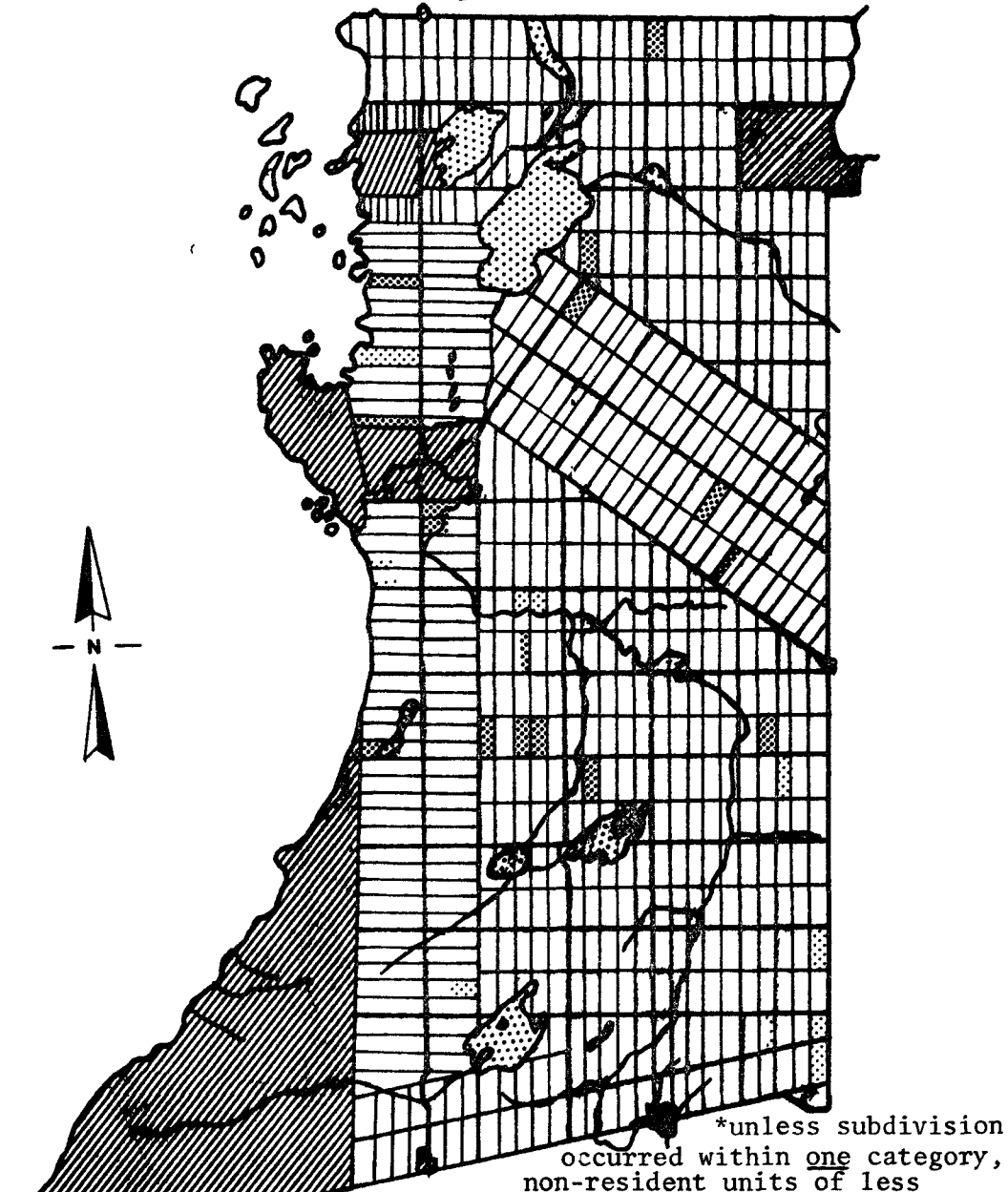
Scale in Miles
1 0 1

Non-Resident Ownership






Amabel Township *

1940

Figure IV:45



*unless subdivision occurred within one category, non-resident units of less than 25 acres not recorded

-  Indian Reserves, Villages, Towns & Town Plots
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

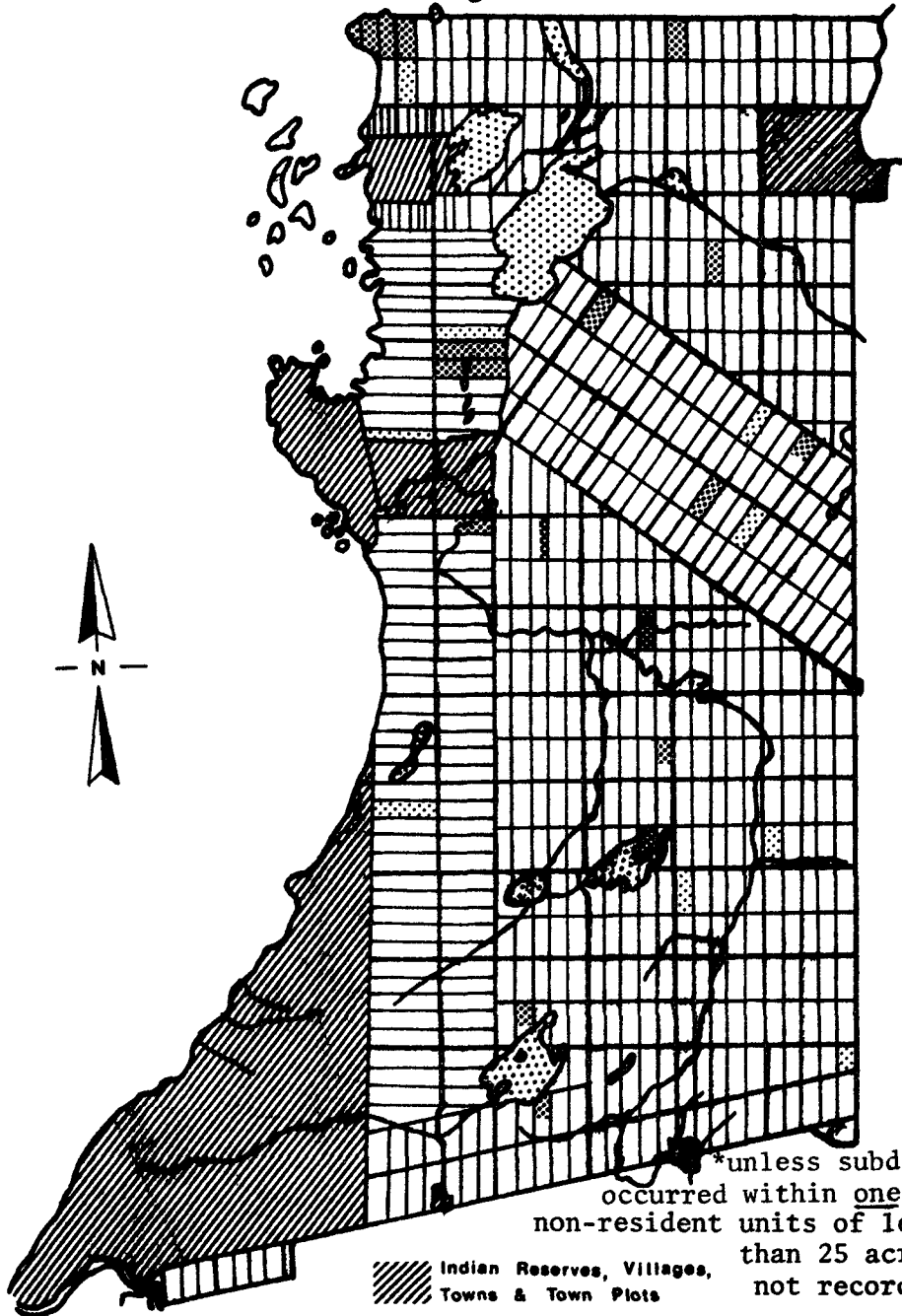
Scale in Miles
1 0 1

Non-Resident Ownership






Amabel Township *

1950

Figure IV:46



*unless subdivision occurred within one category, non-resident units of less than 25 acres not recorded

-  Indian Reserves, Villages, Towns & Town Plots
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

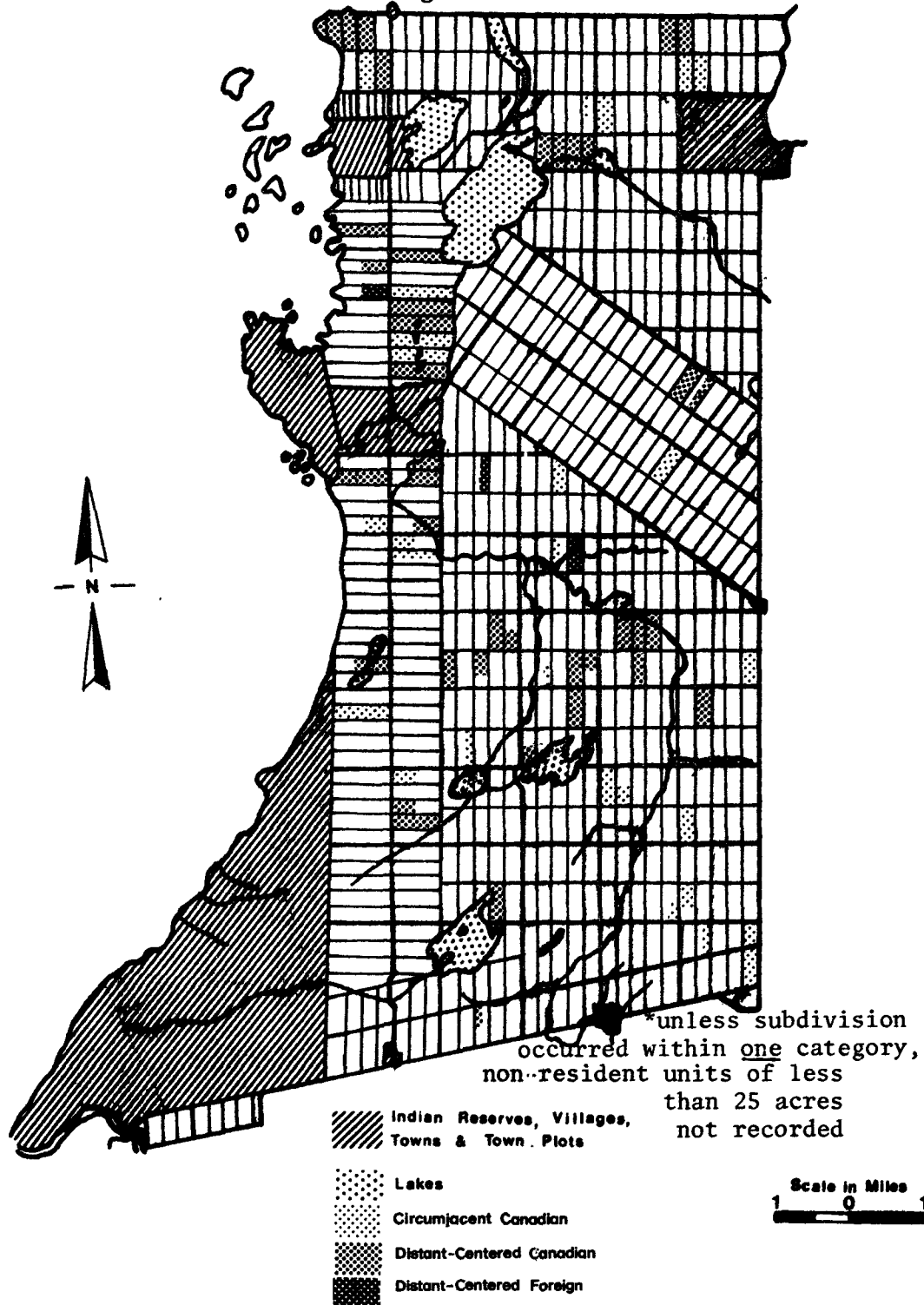
Scale in Miles
1 0 1

Non-Resident Ownership

Amabel Township *

1960

Figure IV:47

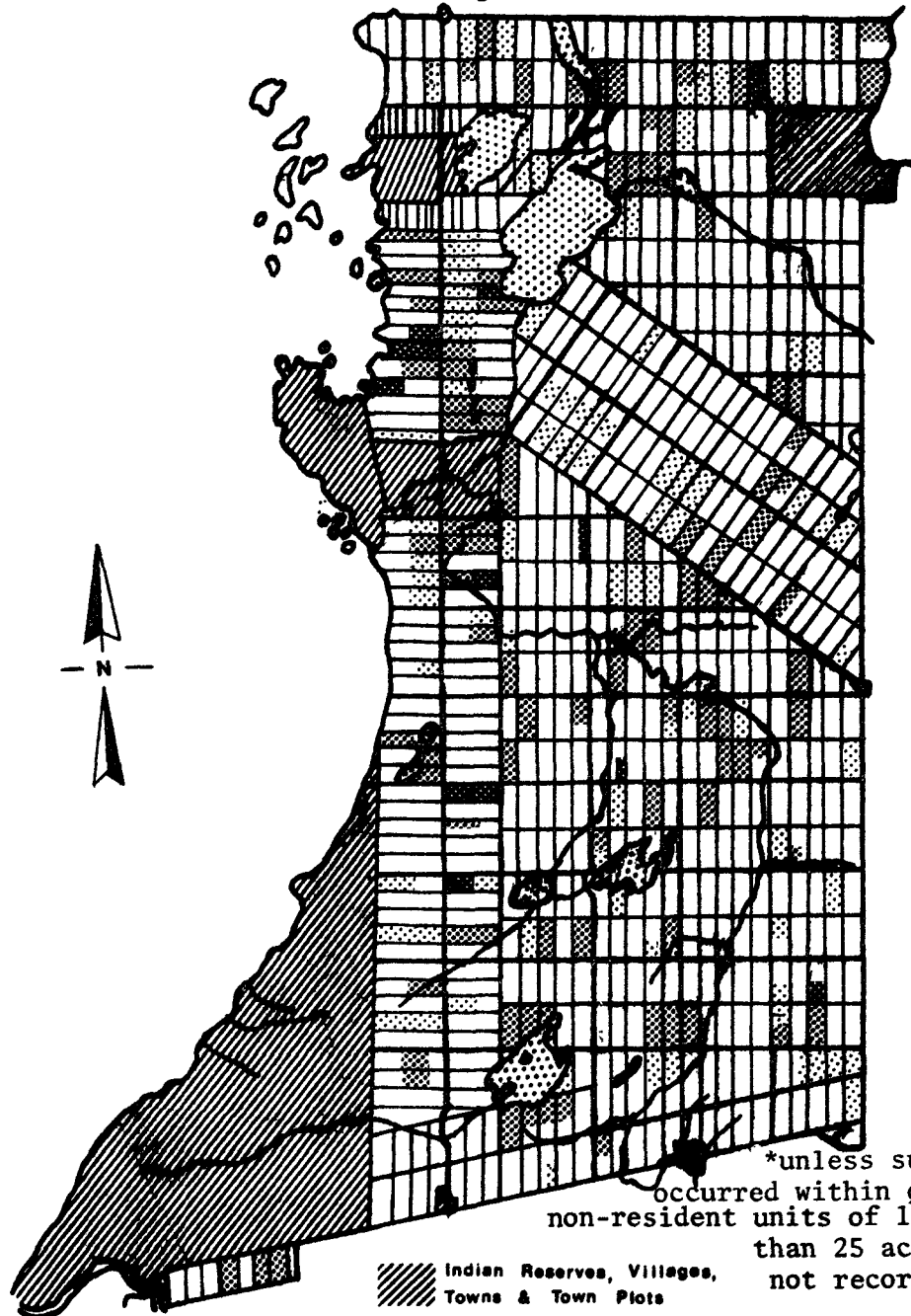


Non-Resident Ownership






Amabel Township *

1974

Figure IV:48



*unless subdivision occurred within one category, non-resident units of less than 25 acres not recorded

-  Indian Reserves, Villages, Towns & Town Plots
-  Lakes
-  Circumjaent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

Scale in Miles
1 0 1

AMABEL TOWNSHIP *
NON-RESIDENT CATEGORIES
 (township totals indicated in acres and as percentages
 of grand total of all categories)

Table IV:8

TIME PERIODS	DISTANT-CENTERED FOREIGN	DISTANT-CENTERED CANADIAN	CIRCUMJACENT CANADIAN	TOTALS IN ACRES
1900	0 acres (0%)	600 acres (66.67%)	300 acres (33.33%)	900 acres
1920	0 acres (0%)	1,100 acres (78.57%)	300 acres (21.43%)	1,400 acres
1940	125 acres (5.62%)	1,400 acres (62.92%)	700 acres (31.46%)	2,225 acres
1950	225 acres (9.68%)	1,200 acres (51.61%)	900 acres (38.71%)	2,325 acres
1960	200 acres (3.42%)	3,550 acres (60.68%)	2,100 acres (35.90%)	5,850 acres
1974	700 acres (4.95%)	7,175 acres (50.71%)	6,275 acres (44.35%)	14,150 acres

*Total acreage of township = 70,336 acres

(ix) Albemarle Township

As was the case in Amabel Township, only 15 percent of Albemarle Township is classed as being prime agricultural land, while 85 percent falls under 5, 6, 7 or 0 classification. ²² Nevertheless, this township was characterized by a greater amount of turn-of-the-century abandonment. This, in turn, aids in explaining why this township is consistent with the north to south diffusion continuum. It also helps explain the early peaking in 1900 of the Distant-Centered Canadian category, which in itself surpasses the critical 2375 non-resident acreage (see Table IV:9).

The decline in total acreage of non-resident owned land until 1960 is, in part, due to consolidation efforts in Albemarle Township. This decline is also partially reflected in the increases in the Circumjacent-owned land from 1900 until 1940. It is interesting to note that the Circumjacent-owned land then declines to 1,175 acres in 1950 from 1,650 acres in 1940. This, in part, is due to the intrusion of distant-centered non-residents into the township, a process characteristic of the post World War II cottage boom. It therefore should be noticed that the Distant-Centered Canadian category increases from 600 to 1,075 acres over the same period. Both the Distant-Centered Canadian and Circumjacent categories experience drastic increases from 1950 to 1974. The latter is, to a large extent, due to consolidation of farm land and possibly to a certain amount of land speculation (however, the speculative motive is far more difficult to ascertain). The former's increases are due primarily to the changing value system of distant-centered individuals

towards the recreational experience. By 1974 most available shoreline property is in the hands of non-residents, so non-residents have turned their attention to the more rugged inland lots.

An examination of Figures IV:49 to IV:54 shows a definite alignment by non-residents with the shoreline property of the inland lakes. Much of this affinity has been obscured due to the subdivision into small units. Figure IV:51 depicts a very interesting alignment of foreign owners with the inland lakes.

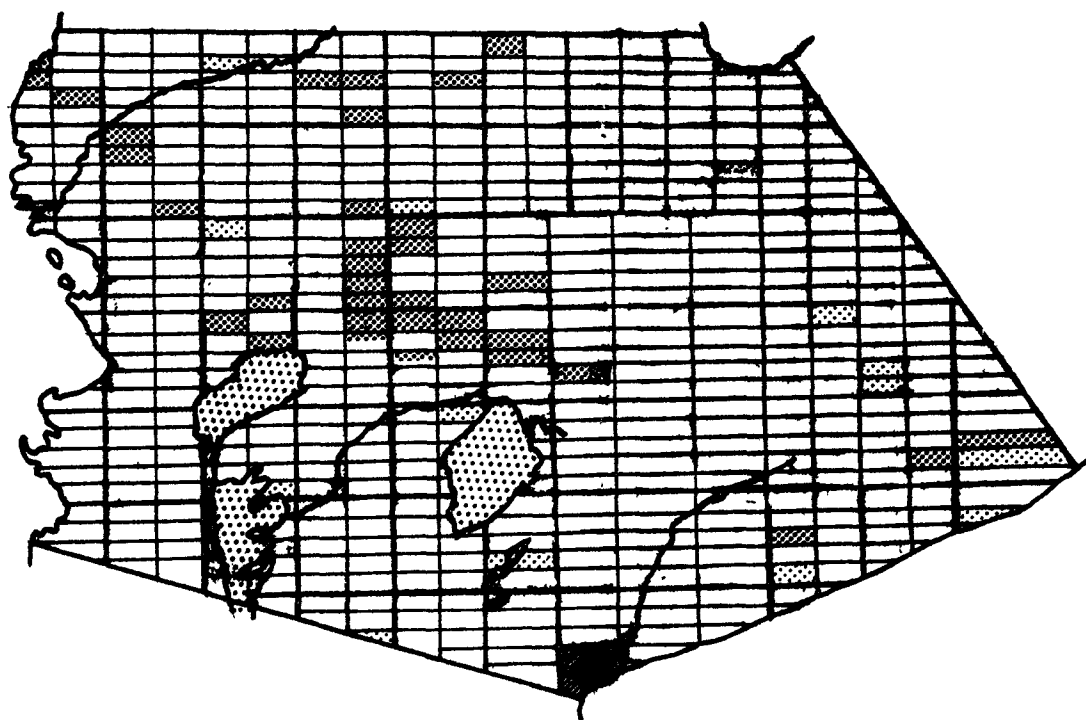
It should be mentioned that although foreign ownership seems to be quite extensive in 1974 (1,075 acres), in terms of the total number of non-resident owned acres (17,550 acres) it is not that much of a contributing factor to the phenomenon.

Non-Resident Ownership

Albemarle Township*






1900

Figure IV:49



*non-resident units of less than 25 acres not recorded unless subdivision occurred within one category



-  Village
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

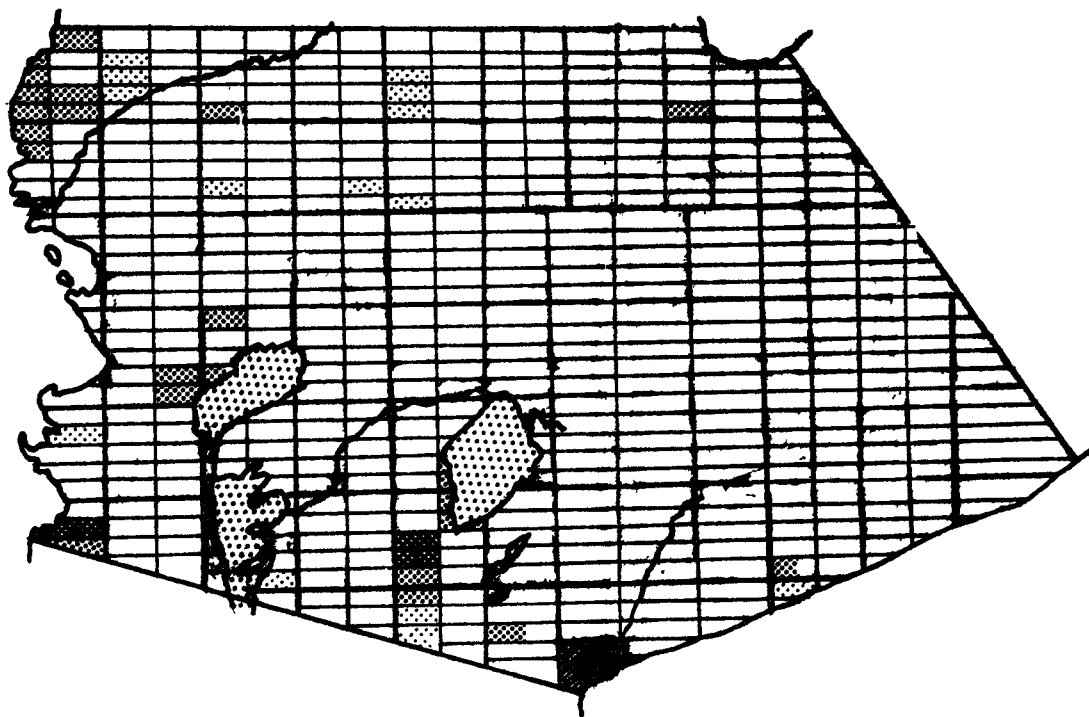
Scale in Miles
1 0 1



Non-Resident Ownership Albemarle Township *






1920

Figure IV:50



*non-resident units of less than 25 acres not recorded unless subdivision occurred within one category



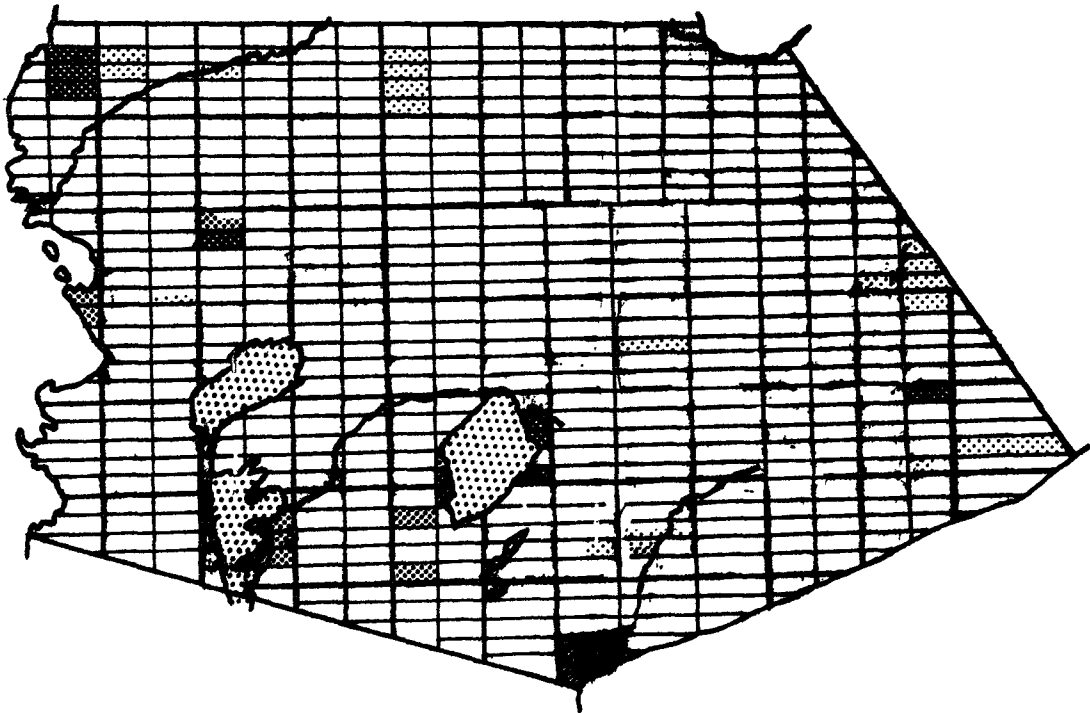
-  Village
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

Scale in Miles
1 0 1

Non-Resident Ownership Albemarle Township *






1940

Figure IV:51



*non-resident units of less than 25 acres not recorded unless subdivision occurred within one category



-  Village
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

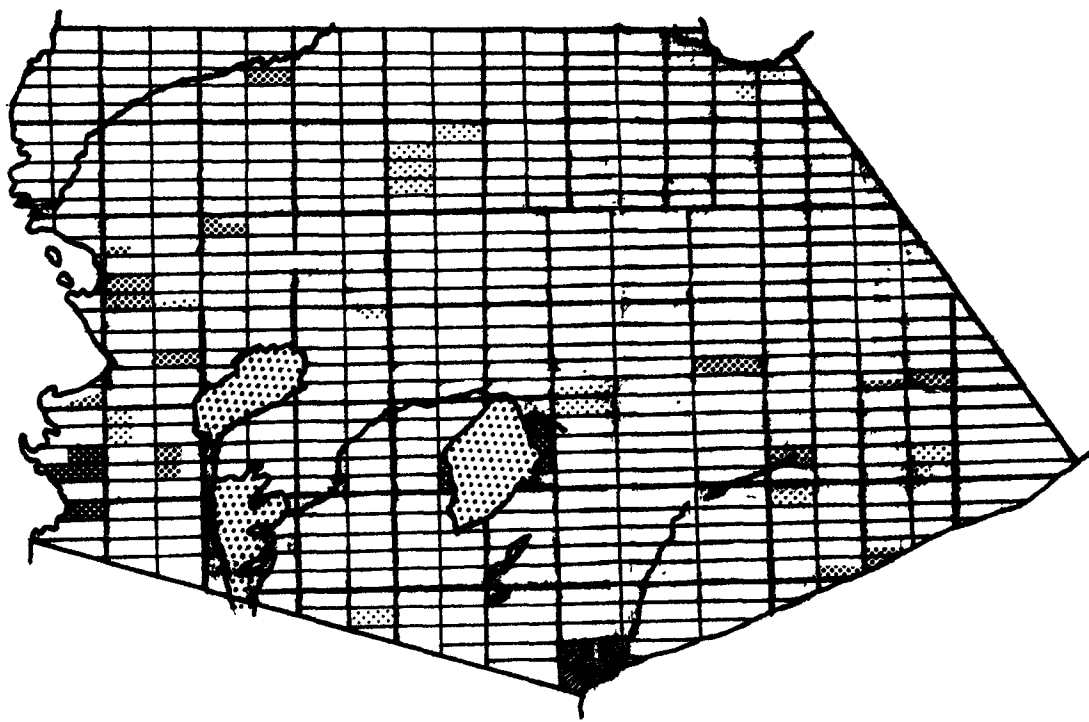
Scale in Miles
1 0 1

Non-Resident Ownership

Albemarle Township*






1950

Figure IV:52



*non-resident units of less than 25 acres not recorded unless subdivision occurred within one category



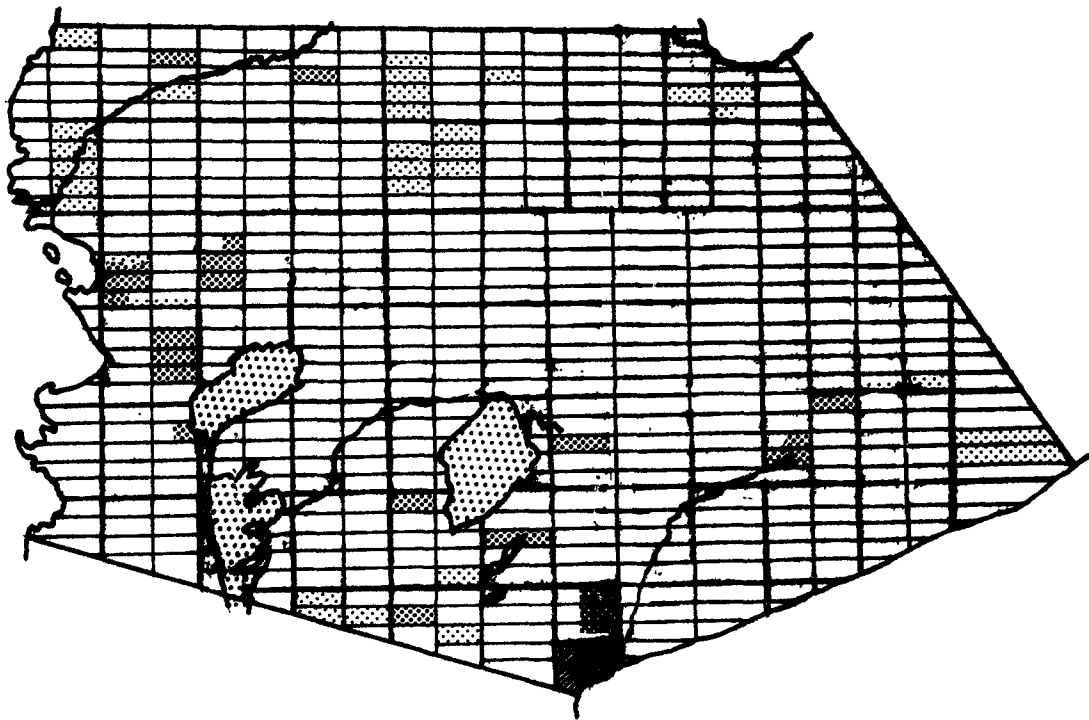
-  Village
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

Scale in Miles
1 0 1

Non-Resident Ownership Albemarle Township*





1960

Figure IV:53



*non-resident units of less than 25 acres not recorded unless subdivision occurred within one category



-  Village
-  Lakes
-  Circumjacent Canadian
-  Distant Centered Canadian
-  Distant Centered Foreign

Scale in Miles
1 0 1

Non-Resident Ownership Albemarle Township *

1974

Figure IV:54



*non-resident units of less than 25 acres not recorded unless subdivision occurred within one category



-  Village
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

Scale in Miles
1 0 1

ALBEMARLE TOWNSHIP *
NON-RESIDENT CATEGORIES
 (township totals indicated in acres and as percentages
 of grand total of all categories)

Table IV:9

TIME PERIODS	DISTANT-CENTERED FOREIGN	DISTANT-CENTERED CANADIAN	CIRCUMJACENT CANADIAN	TOTALS IN ACRES
1900	0 acres (0%)	3,375 acres (71.81%)	1,325 acres (28.19%)	4,700 acres
1920	325 acres (9.29%)	1,725 acres (49.29%)	1,450 acres (41.43%)	3,500 acres
1940	750 acres (25.00%)	600 acres (20.00%)	1,650 acres (55.00%)	3,000 acres
1950	550 acres (19.64%)	1,075 acres (38.39%)	1,175 acres (41.96%)	2,800 acres
1960	225 acres (4.57%)	1,550 acres (31.47%)	3,150 acres (63.96%)	4,925 acres
1974	1,075 acres (6.13%)	9,325 acres (53.13%)	7,150 acres (40.74%)	17,550 acres

*Total acreage of township = 59,648 acres

(x) Eastnor Township

Eastnor Township presents an interesting contrast to most of the Bruce Peninsula with respect to its agricultural capability. Twenty percent of the township is classed as being prime agricultural land, while an additional 15 percent is referred to as Class 3 (with only moderate agricultural limitations) land. Sixty-six percent is Class 6, 7 or 0 land.²³ In short, 35 percent of the township should be under agricultural production.

Fortunately, it is not until 1960 that non-resident ownership makes any significant impact upon the good agricultural land in the central part of the township (see Figures IV:55 to IV:60).²⁴

Nevertheless, Table IV:10 reveals that the "2375 acre" wave does move into the township prior to the turn of the century. The fact that the 1900 period is characterized by 1,800 (62.02 percent) Distant-Centered Canadian owned acres is indicative of the abandonment process that was quite severe in Eastnor Township at this time.²⁵

Other trends that should be identified are concerned with the rapid increase (from 50 to 1,900 acres) in foreign ownership from 1920 to 1940 (see Figures IV:56 and IV:57). However, the rapid drop in 1950 of this category's absolute and relative importance is indicative of the sale by a foreign owner of the southwest corner to a Circumjacent owner. This, in turn, aids in explaining the relative and absolute increase in the importance of the Circumjacent category in 1950. The sale, over the same time period, of the west-central peninsula from a Distant-

Centered Canadian non-resident to an in-township resident explains both the drop in the importance of the Distant-Centered category and in the overall number of non-resident owned acres.

1960 shows a marked increase in foreign owned acres; however, 1974 illustrates that many of these foreign owned acres are being purchased by Distant-Centered and in-township residents (see Figures IV:59 and IV:60). The same situation is revealed concerning the turnover of Circumjacent owned acres to Distant-Centered non-residents. On the other hand, it is the Distant-Centered category which experiences rapid, relative and absolute increases, especially between 1960 and 1974 (an increase from 4,000 acres and 28.47 percent to 13,275 acres and 66.96 percent).

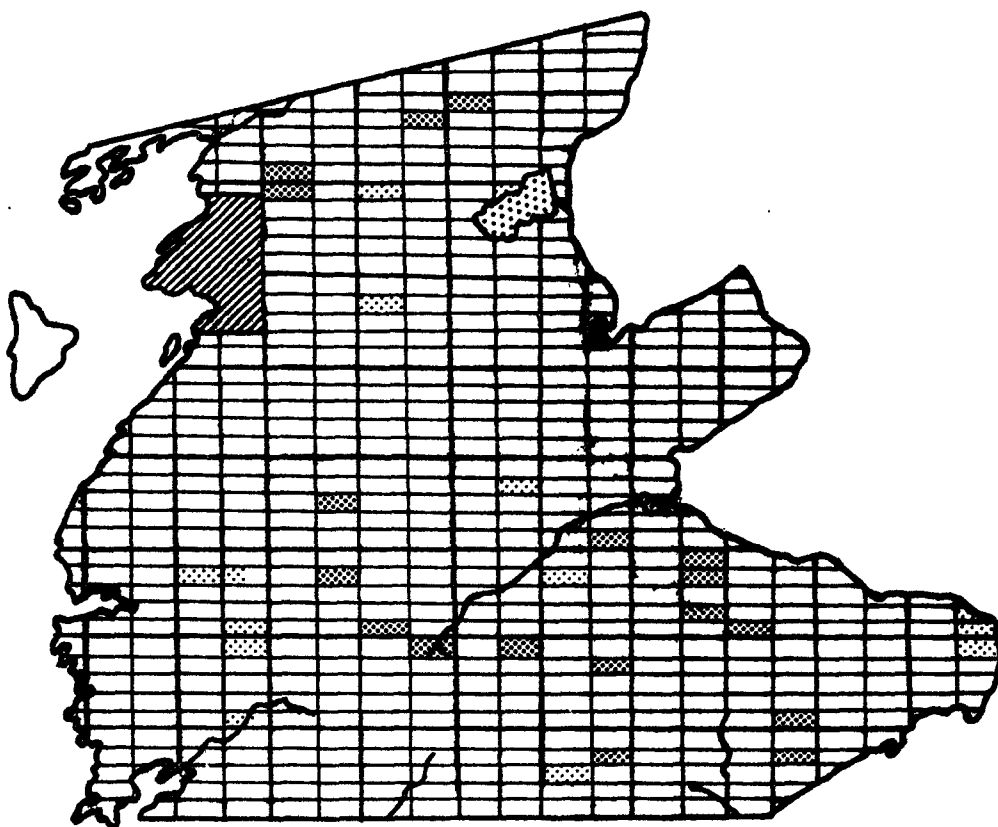
It is in the final time period that the great increase in non-resident owned acres in Eastnor Township has resulted in the removal of farm land from the hands of in-township farmers and its transfer into the hands of non-farming Distant-Centered Non-Residents. It is interesting to note, however, that from 1940 to 1974 (see Figures IV:57 to IV:60) that there has been a definite shoreline preference. No great amount of subdivision has occurred in the three northern-most townships. Consequently, the preference has not been obscured. Many areas, where there is little or no non-resident alignment with shoreline property are large tracts of land owned by lumber companies situated within the township and by in-township residents.

Non-Resident Ownership

Eastnor Township *






1900

Figure IV:55



*non-resident units of less than 25 acres not recorded unless subdivision occurred within one category



-  Town Plot
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

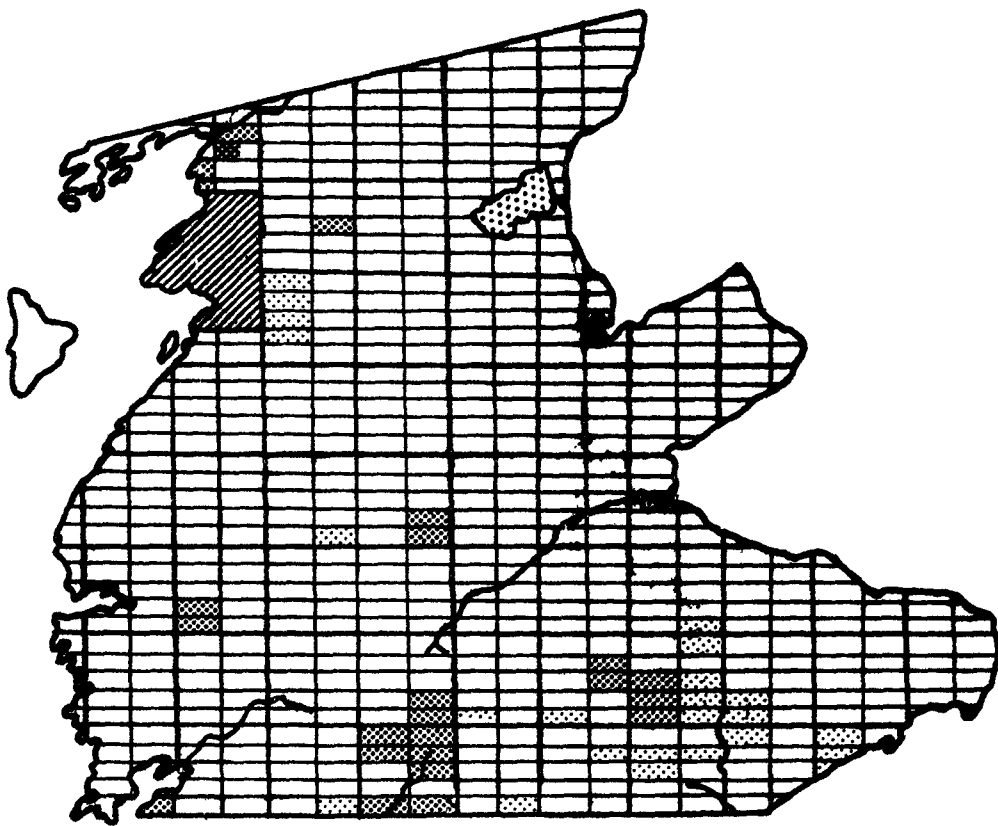


Non-Resident Ownership

Eastnor Township *






1920

Figure IV:56



*non-resident units of less than 25 acres not recorded unless subdivision occurred within one category



-  Town Plot
-  Lakes
-  Circumlocut Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

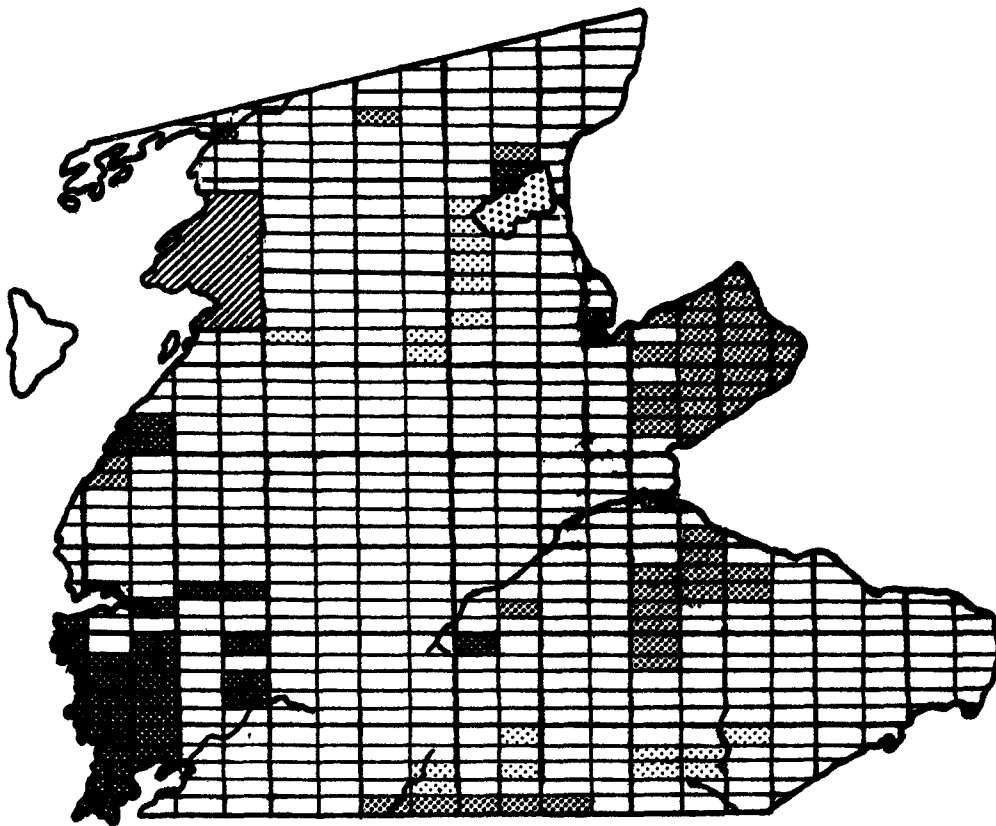
Scale in Miles
1 0 1

Non-Resident Ownership

Eastnor Township *






1940

Figure IV:57



*non-resident units of less than 25 acres not recorded unless subdivision occurred within one category



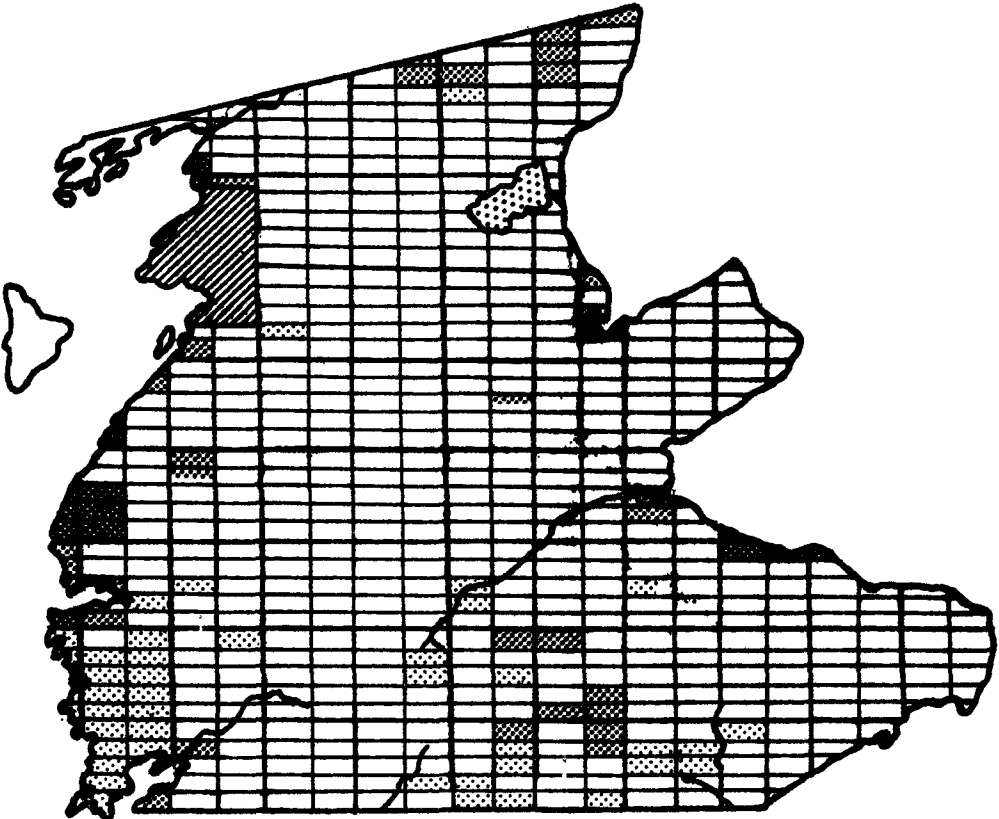
-  Town Plot
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

Scale in Miles
0

Non-Resident Ownership Eastnor Township *





1950

Figure IV:58



*non-resident units of less than 25 acres not recorded unless subdivision occurred within one category



-  Town Plot
-  Lakes
-  Circumlocut Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign



Non-Resident Ownership Eastnor Township*

1960

Figure IV:59



*non-resident units of less than 25 acres not recorded unless subdivision occurred within one category



- Town Plot
- Lakes
- Circumjacent Canadian
- Distant-Centered Canadian
- Distant-Centered Foreign



Non-Resident Ownership Eastnor Township*






1974

Figure IV:60



*non-resident units of less than 25 acres not recorded unless subdivision occurred within one category



-  Town Plot
-  Lakes
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign

Scale in Miles
1 0

EASTNOR TOWNSHIP *
NON-RESIDENT CATEGORIES
(township totals indicated in acres and as percentages
of grand total of all categories)

Table IV:10

TIME PERIODS	DISTANT-CENTERED FOREIGN	DISTANT-CENTERED CANADIAN	CIRCUMJACENT CANADIAN	TOTALS IN ACRES
1900	0 acres (0%)	1,800 acres (61.02%)	1,150 acres (38.98%)	2,950 acres
1920	50 acres (1.13%)	2,125 acres (48.02%)	2,250 acres (50.85%)	4,425 acres
1940	1,900 acres (20.82%)	4,350 acres (47.78%)	2,875 acres (31.51%)	9,125 acres
1950	825 acres (11.62%)	2,325 acres (32.75%)	3,950 acres (55.63%)	7,100 acres
1960	2,750 acres (19.57%)	4,000 acres (28.47%)	7,300 acres (51.96%)	14,050 acres
1974	1,400 acres (7.06%)	13,275 acres (66.96%)	5,150 acres (25.98%)	19,825 acres

*Total acreage of township = 57,190 acres

(xi) Lindsay Township

One of the most significant aspects about the non-resident owned land in the remaining two townships, Lindsay and St. Edmund, is that the total non-resident acreage achieved in most of the southern townships by 1974 is equalled or even surpassed by these two townships in 1900 (see Table IV:11).

Lindsay's total non-resident acreage in 1900 is 14,125 acres. The total increased again by 1920 to 24,925 acres, but levelled off until 1974 which was marked by a significant increase again of close to 8,000 acres. The increase in non-resident owned acres over the last decade can be totally attributed to the ownership characteristics of the Distant-Centered category which experienced close to a three-fold increase from 1960 to 1974. A large majority of this increase can be attributed to the buying up by branches of the provincial government of large tracts of land for the purposes of consolidation of the government's holdings of high capability recreational land. It is unfortunate that much of this land (see Figure IV:66) is high in agricultural capability as well. ²⁶ The buying up by the provincial government (which, for the purposes of this research, has been classified as a Distant-Centered Non-Resident) of large tracts of land, not only explains the increase in the importance of Distant-Centered owned land, but also the decline in relative and absolute importance of Distant-Centered Foreign ownership and Circumjacent ownership. The Distant-Centered category experienced an early peaking in the first two decades of this century

and, once again, abandonment was a prime contributing factor. ²⁷

Foreign ownership did not become a significant factor until 1940 (see Figure IV:63) which was marked by the takeover by foreigners of large consolidated tracts of non-resident owned land from what was Distant-Centered and Circumjacent owned land in 1920 (see Figure IV:62). The successive periods indicate an expansion and consolidation of foreign owned land with what appears to be a strong affinity for shoreline (both inland and peripheral) property (see Figures IV:64 to IV:66).

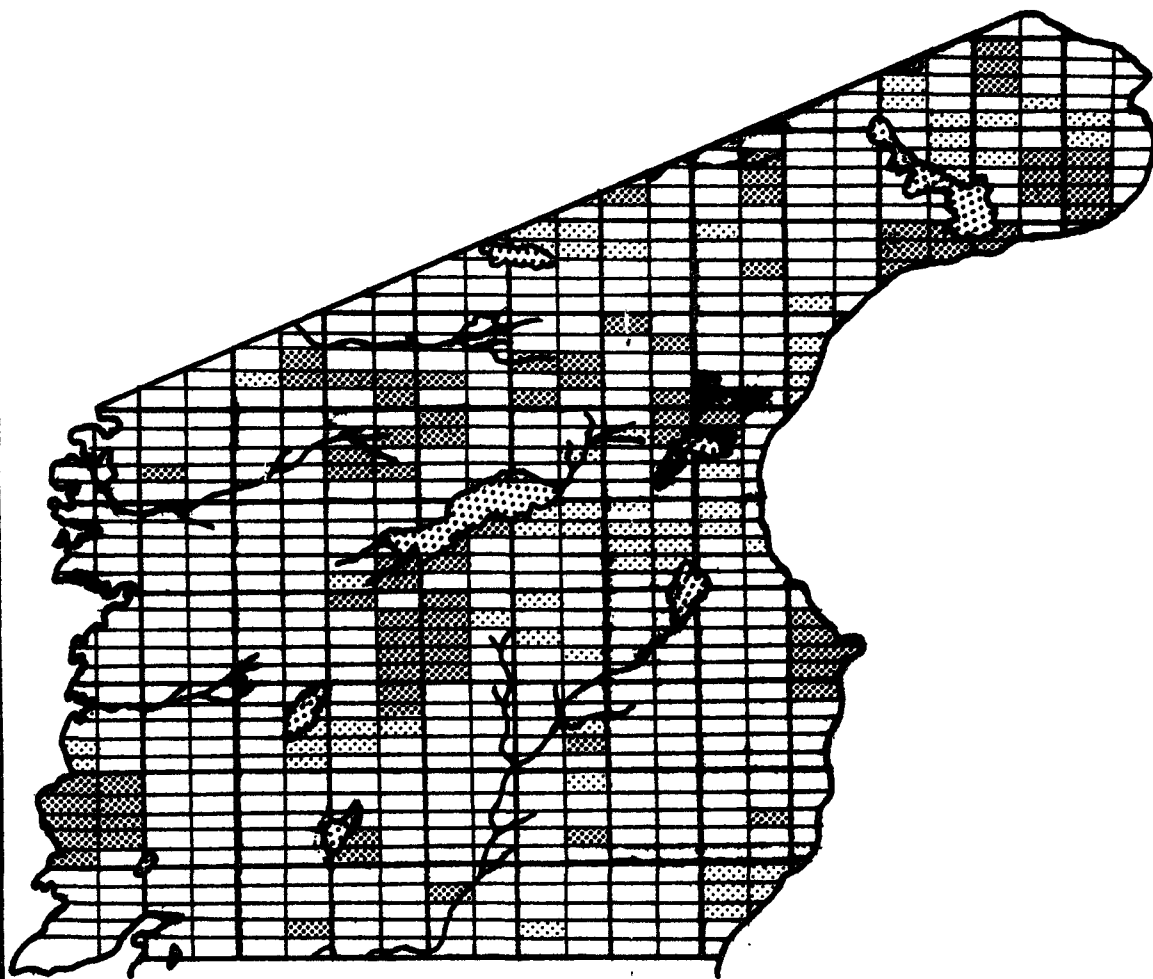
It should be noted that the decline of Distant-Centered owned land in the central part of the township from 1920 to 1940 can be attributed to the purchase of large tracts of land by in-township and Circumjacent-based lumber companies. In addition, it should be mentioned that many of the large increases and decreases in the various categories from 1900 to 1974 can likewise be attributed to the direct purchase by a single owner of one category from a single owner in another category.





In conclusion, with respect to agricultural capability, the only two areas that present a problem to the preservationist are those surrounding the large lake in the central part of the township (Miller Lake) and the southeast section of the township. It is in these two sections that the township's 10 percent prime land is located. ²⁸ Eighty-
²⁹ eight percent of the township is classed as being 5, 7 or 0 land.

Non-Resident Ownership Lindsay Township *

1900

Figure IV:61



-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign
-  Lakes



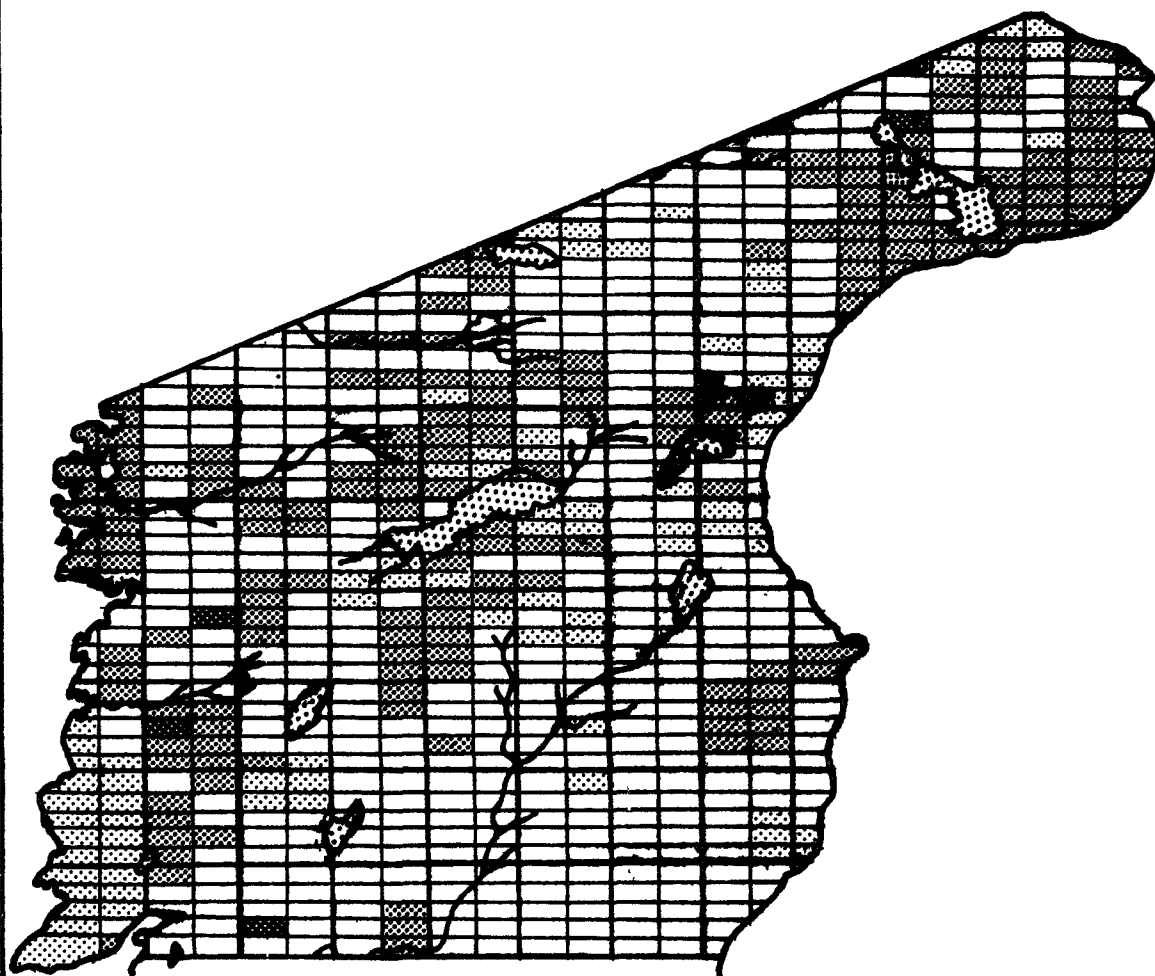
*non-resident units of less than 25 acres not recorded unless subdivision occurred within one category





Non-Resident Ownership

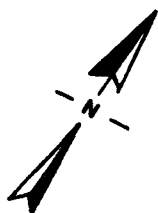
Lindsay Township *

1920

Figure IV:62



-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign
-  Lakes

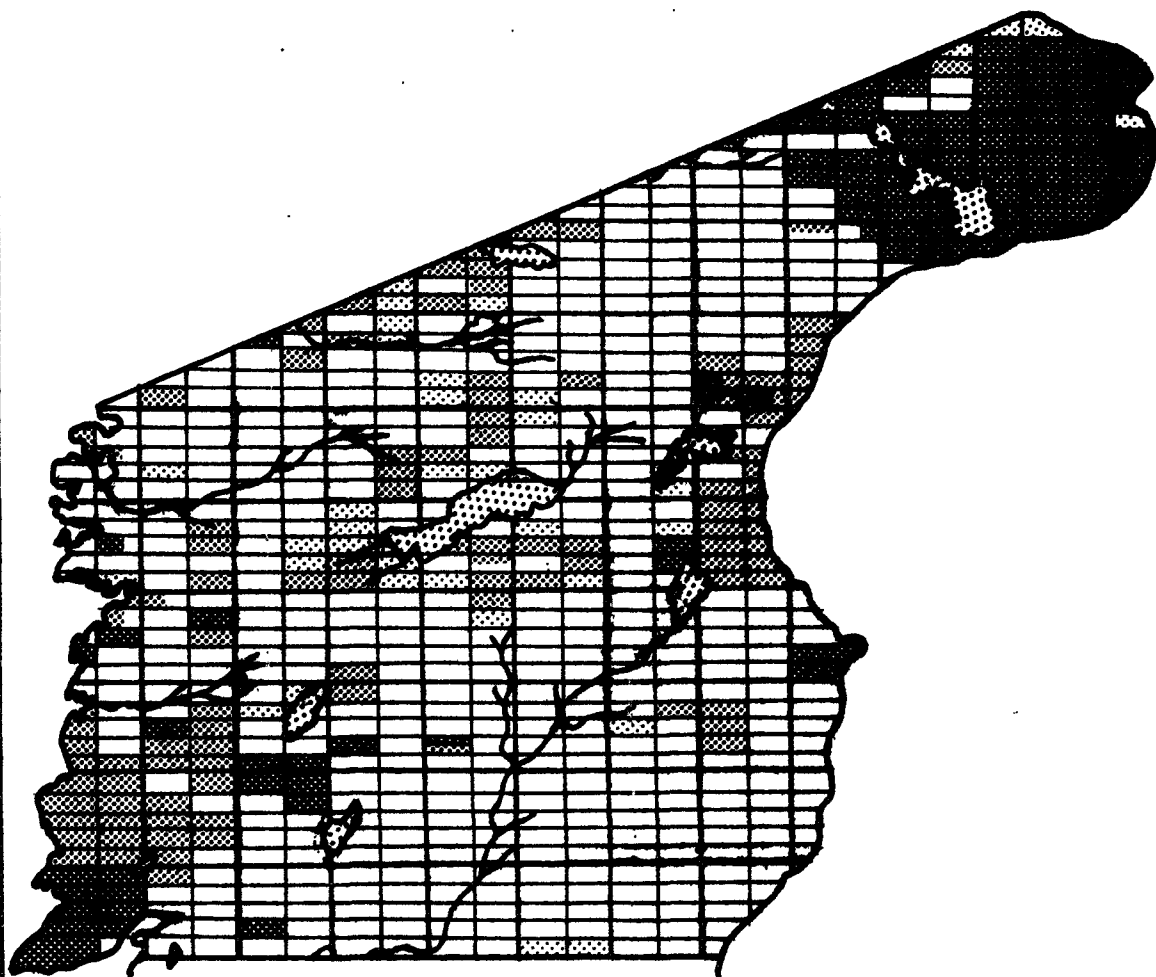






*non-resident units of less than 25 acres not recorded unless subdivision occurred within one category

Non-Resident Ownership Lindsay Township *

1940

Figure IV:63



-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign
-  Lakes

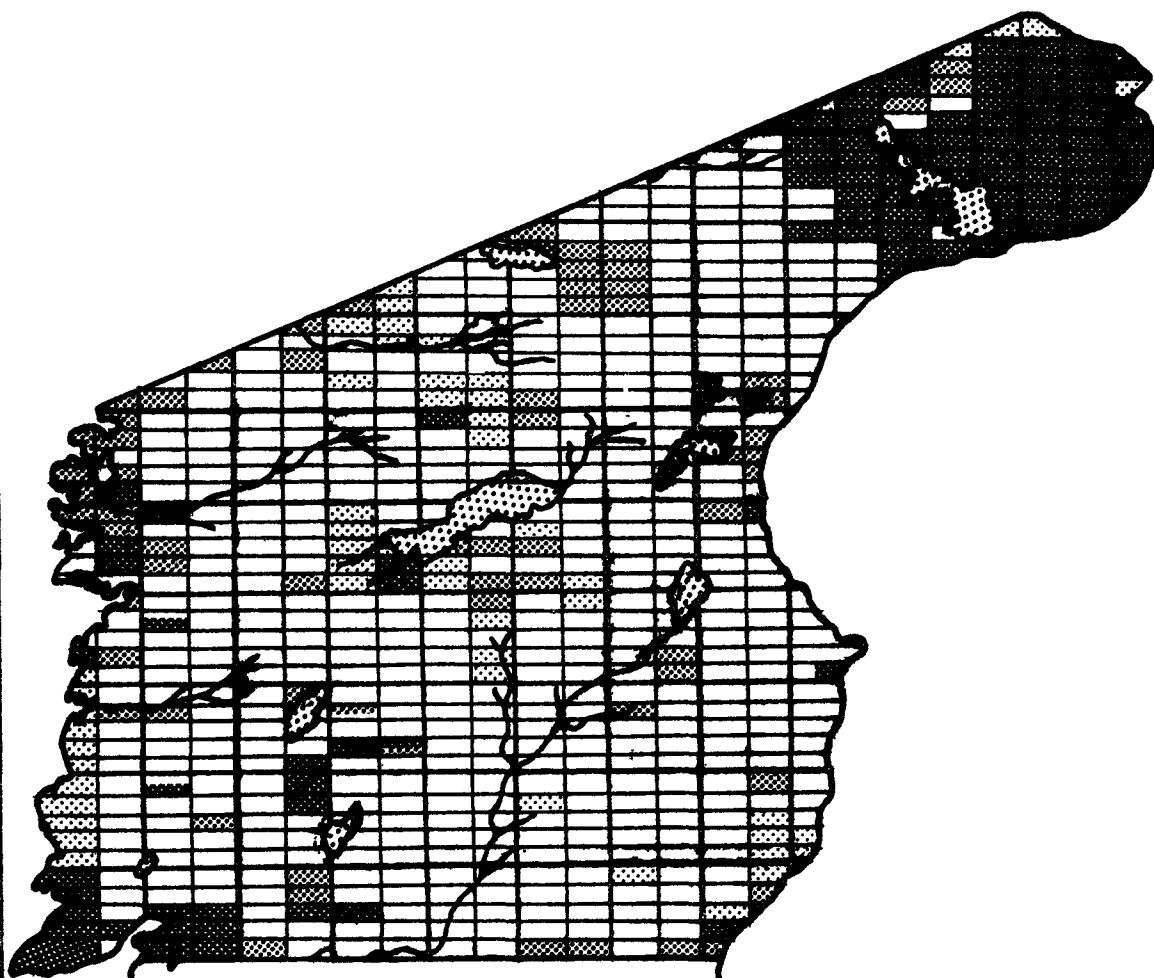
Scale in Miles
0 1





*non-resident units of less than 25 acres not recorded unless subdivision occurred within one category

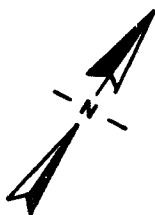
Non-Resident Ownership Lindsay Township *

1950

Figure IV:64



-  Circumscribed Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign
-  Lakes



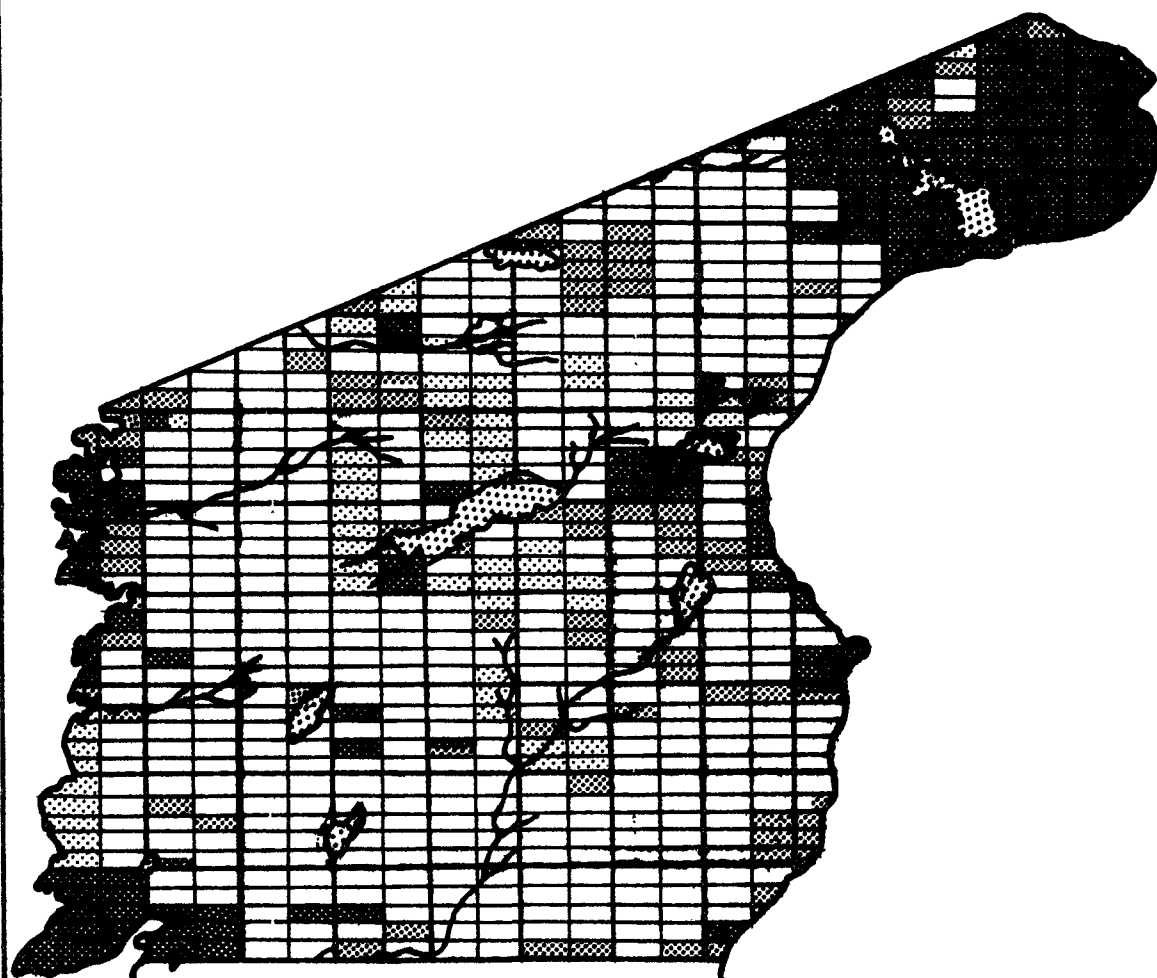
*non-resident units of less than 25 acres not recorded unless subdivision occurred within one category





Non-Resident Ownership

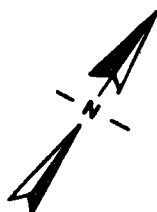
Lindsay Township *

1960

Figure IV:65



-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign
-  Lakes

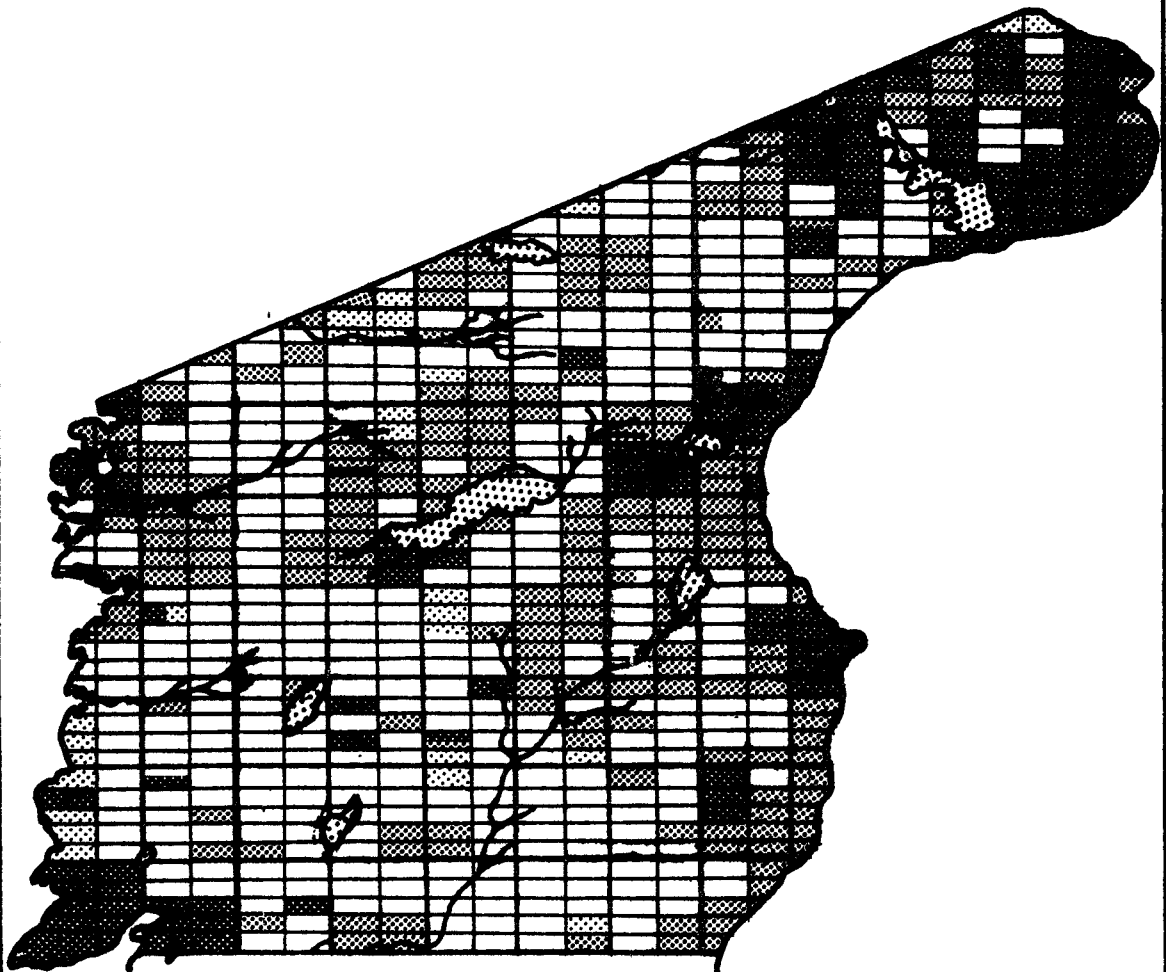






*non-resident units of less than 25 acres not recorded unless subdivision occurred within one category

Non-Resident Ownership Lindsay Township *

1974

Figure IV:66



-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign
-  Lakes



*non-resident units of less than 25 acres not recorded unless subdivision occurred within one category

LINDSAY TOWNSHIP *
NON-RESIDENT CATEGORIES
(township totals indicated in acres and as percentages
of grand total of all categories)
 Table IV:11

TIME PERIODS	DISTANT-CENTERED FOREIGN	DISTANT-CENTERED CANADIAN	CIRCUMJACENT CANADIAN	TOTALS IN ACRES
1900	0 acres (0%)	8,600 acres (60.88%)	5,525 acres (39.12%)	14,125 acres
1920	425 acres (1.71%)	16,600 acres (66.60%)	7,900 acres (31.70%)	24,925 acres
1940	8,575 acres (40.83%)	9,100 acres (43.33%)	3,325 acres (15.83%)	21,000 acres
1950	9,075 acres (47.39%)	5,550 acres (28.98%)	4,525 acres (23.63%)	19,150 acres
1960	10,800 acres (47.42%)	6,825 acres (29.97%)	5,150 acres (22.61%)	22,775 acres
1974	9,900 acres (32.46%)	18,225 acres (59.75%)	2,375 acres (7.79%)	30,500 acres

*Total acreage of township = 66,874 acres

(xii) St. Edmund Township

The fact that the "2375 acre" diffusion wave had penetrated into St. Edmund Township by 1900 (see Table IV:12), but with what appears to have been at a much reduced intensity (8,700 non-resident owned acres in St. Edmund in comparison to 14,125 in Lindsay Township) results in a slight alteration of the north to south diffusion continuum. It is now quite evident that, historically speaking, Lindsay Township was the earliest non-resident "hearth". The diffusion of non-resident ownership after the turn of the century then progressed in two directions: one south into Eastnor and the other townships already examined, and the other north into St. Edmund Township.

The takeoff and consolidation of the phenomenon occurred at a much faster rate in St. Edmund than it did in Lindsay Township. While Lindsay experienced slightly less than a doubling of non-resident owned acres from 1900 to 1974, St. Edmund's non-resident owned acres increased five times over the same period (see Table IV:12).

As was the case in Lindsay Township, Figures IV:67 to IV:72 reveal that many of the increases and decreases in the various categories (see Table IV:12) are due to the purchase of the land by residents of another category. Setting aside the fluctuations exhibited by each of the Distant-Centered Canadian and Circumjacent categories it is interesting to note that in 1974 there has been a total reversal from 1900 in which 98.28 percent of the total non-resident owned land was in the hands of Circumjacent non-residents, and 1.72 percent was owned by Distant-Cen-

tered Canadians. In 1974 Distant-Centered Canadian ownership predominates, controlling 68.74 percent of the non-resident owned land while Circumjacent owners hold only 14.94 percent of the non-resident owned land. In fact, for the last two decades, more land has been in the hands of foreign owners than has been under Circumjacent ownership.

For the economic nationalist there is one consoling aspect concerning the drastic increases in the total amount of non-resident ownership illustrated in Table IV:12 and Figures IV:67 to IV:72, and that is that since 1960 slightly less than half of the township's foreign owned land has changed hands so that it now lies in Canadian hands. Nevertheless, when considering the fact that only 5 percent of the township is classed as prime agricultural land and 94 percent falls under a 6, 7 or 0 classification,³⁰ there does not seem to be any justifiable concern regarding the maintenance of any form of an agricultural subsystem. Also, all viable land is located in the northeast corner of the township,³¹ which happens to be void of non-resident ownership (see Figure IV:72).

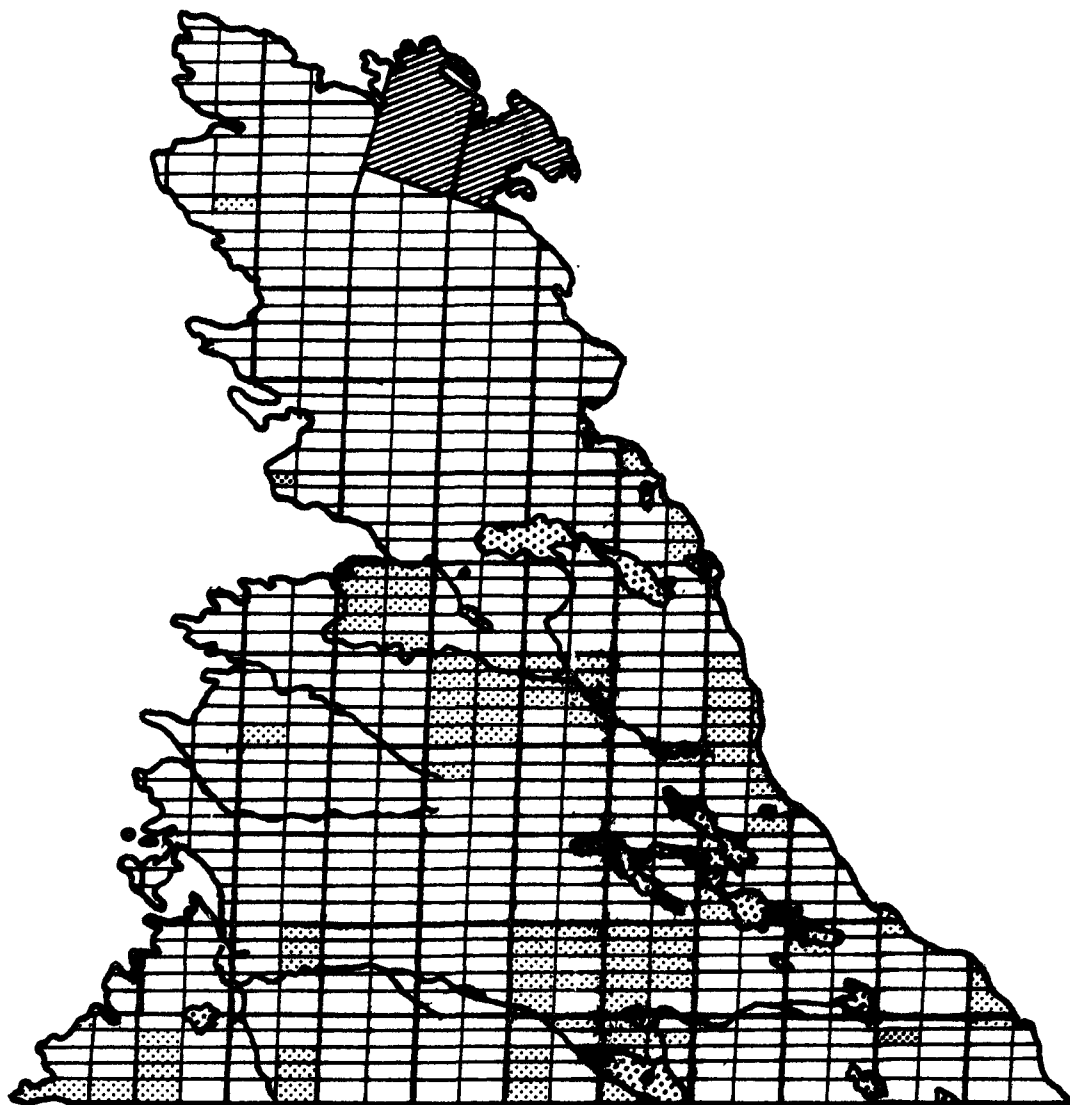
The extent of non-resident ownership, not just along shoreline property, but throughout the township, from 1920 to 1974, makes it difficult to ascertain any spatial trends regarding an early shoreline preference by the three categories of non-residents. There was, however, (as can be seen in Figure IV:67) an early occupance, by non-residents, of most available land around the township's inland lakes. On the other hand, although a shoreline preference is difficult to determine for the Distant-Centered Canadian category, the period from 1920 to 1974 (see

Figures IV:68 to IV:72) revealed a definite trend by foreign non-residents to locate on or near shoreline property. The void of non-resident ownership in the central part of the township appears to give the impression of an additional shoreline preference by Distant-Centered Canadians. However, this section of the township is owned by the County of Bruce and is part of the Bruce County Forest, prohibiting ownership by any individual. This is also the situation in the northern "void". It should also be added that there are small sections of the township owned by in-township lumber companies. Consequently, what appears to be a Distant-Centered Canadian shoreline preference cannot be justified in light of the type of ownership of most of the areas void of non-resident ownership in the township.

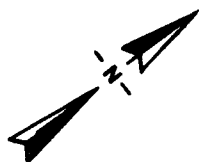
Non-Resident Ownership St. Edmund Township *






1900

Figure IV:67



unless subdivision occurred within one category,
*non-resident units of less than 25 acres not recorded



-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign
-  Lakes
-  Town Plot

Scale in Miles
0 1

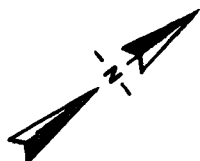
Non-Resident Ownership St. Edmund Township *






1920

Figure IV:68



unless subdivision occurred within one category.
*non-resident units of less than 25 acres not recorded



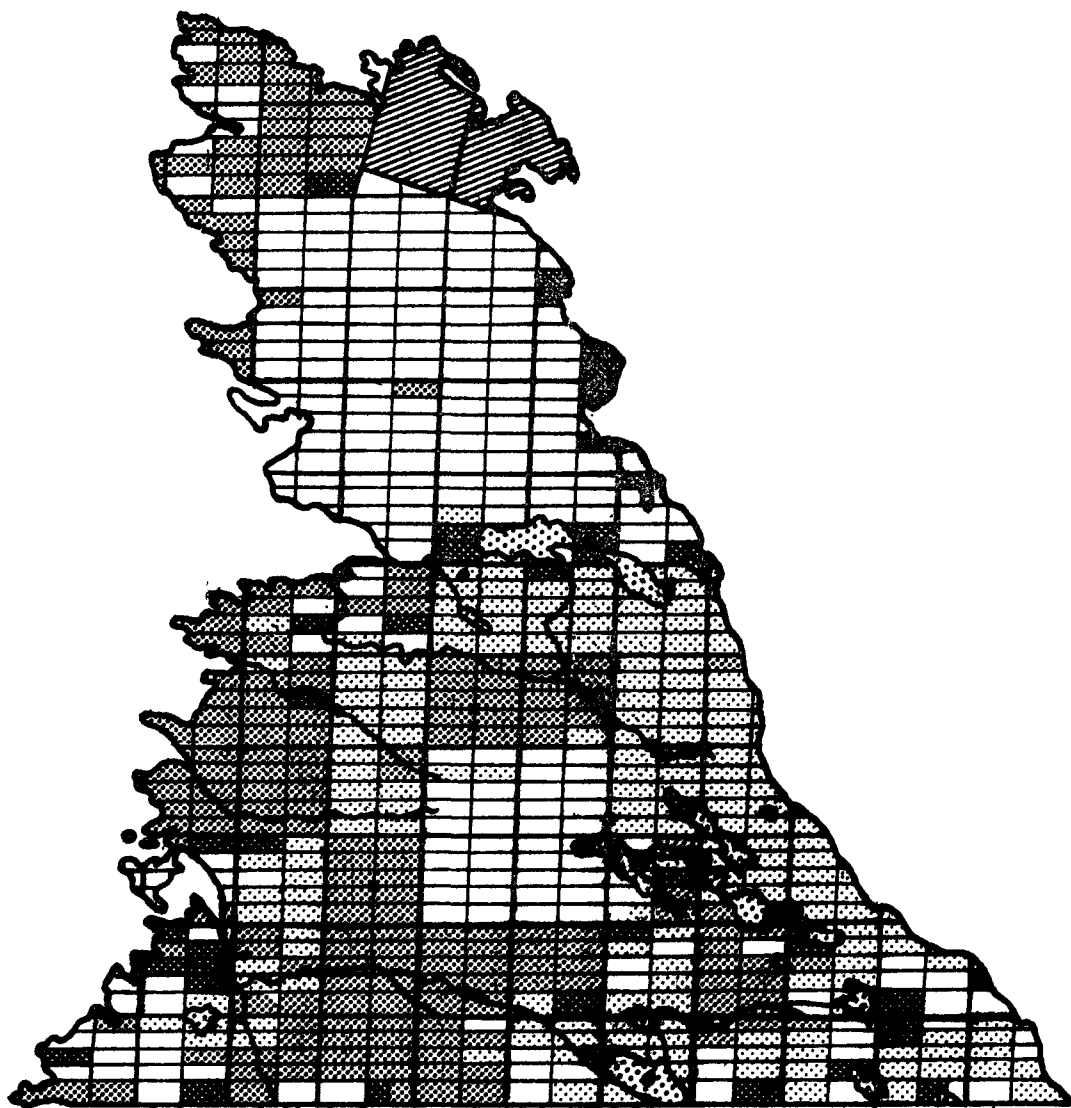
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign
-  Lakes
-  Town Plot

Scale in Miles
0 1

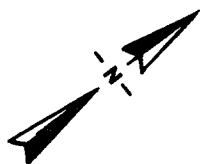
Non-Resident Ownership St. Edmund Township *






1940

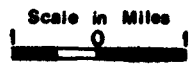
Figure IV:69



unless subdivision occurred within one category,
*non-resident units of less than 25 acres not recorded



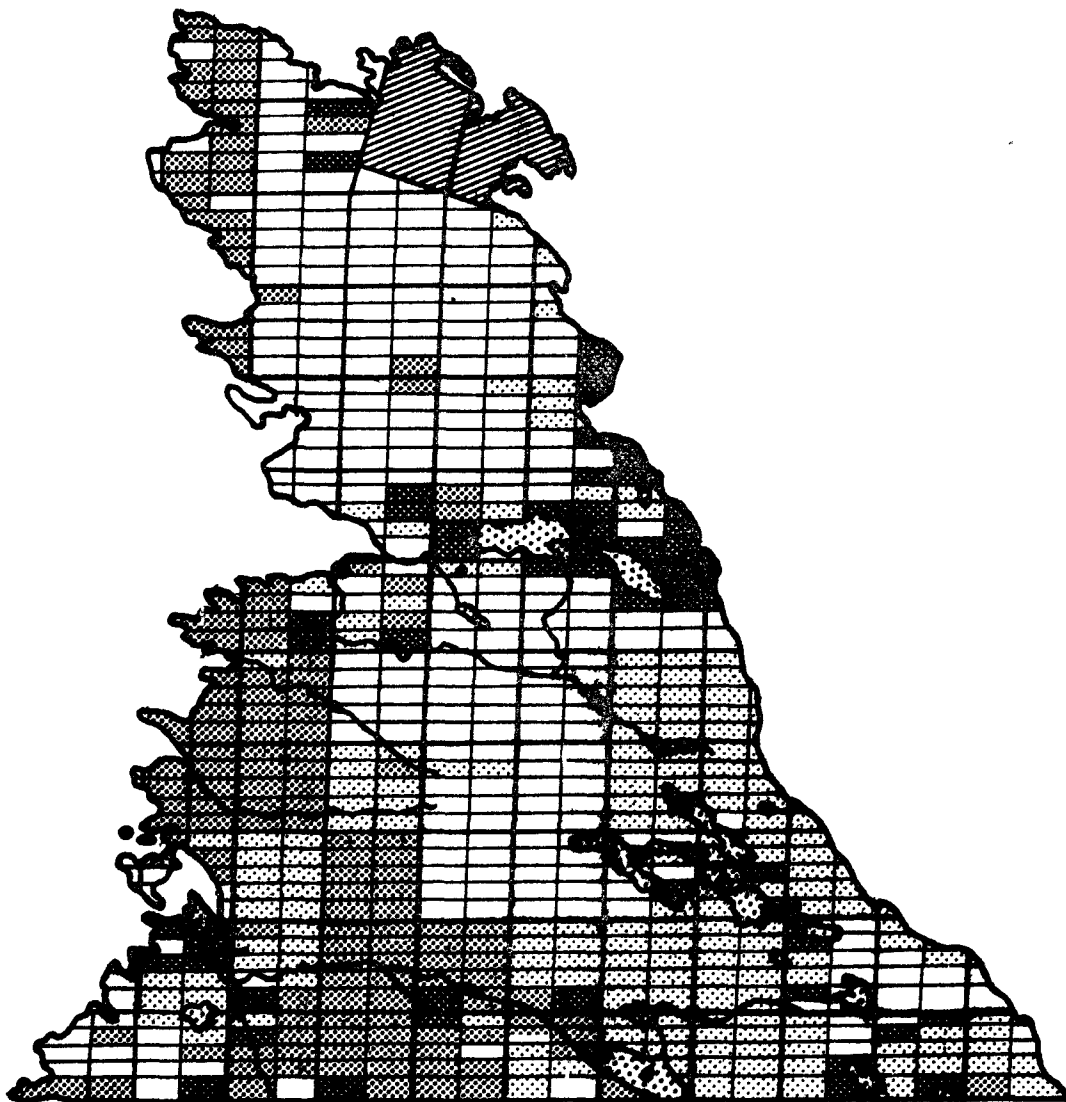
-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign
-  Lakes
-  Town Plot



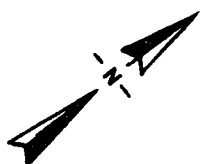
Non-Resident Ownership St. Edmund Township *






1950

Figure IV:70

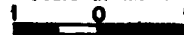


unless subdivision occurred within one category,
*non-resident units of less than 25 acres not recorded



-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign
-  Lakes
-  Town Plot

Scale in Miles
0 1








Non-Resident Ownership St. Edmund Township *


1960

Figure IV:71



unless subdivision occurred within one category,
*non-resident units of less than 25 acres not recorded

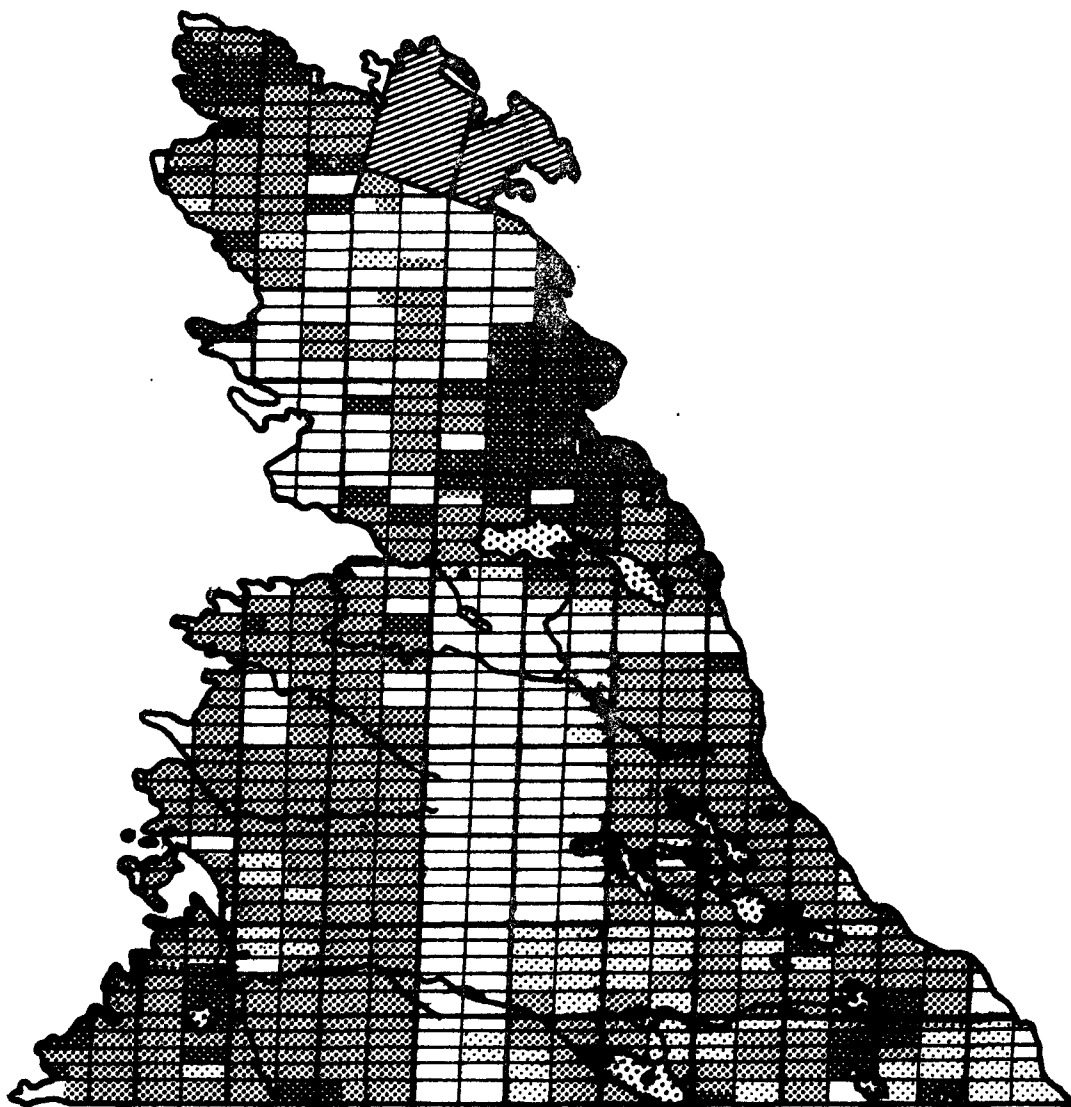
-  Circumferent Canadian
-  Distort-Centered Canadian
-  Distort-Centered Foreign
-  Lakes
-  Town Plot

Scale in Miles


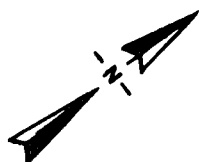
Non-Resident Ownership St. Edmund Township *






1974

Figure IV:72



unless subdivision occurred within one category,
*non-resident units of less than 25 acres not recorded



-  Circumjacent Canadian
-  Distant-Centered Canadian
-  Distant-Centered Foreign
-  Lakes
-  Town Plot

Scale in Miles
0 1

ST. EDMUND TOWNSHIP *
NON-RESIDENT CATEGORIES
 (township totals indicated in acres and as percentages
 of grand total of all categories)

Table IV:12

TIME PERIODS	DISTANT-CENTERED FOREIGN	DISTANT-CENTERED CANADIAN	CIRCUMJACENT CANADIAN	TOTALS IN ACRES
1900	0 acres (0%)	150 acres (1.72%)	8,550 acres (98.28%)	8,700 acres
1920	1,800 acres (6.10%)	14,950 acres (50.64%)	12,775 acres (43.27%)	29,525 acres
1940	3,400 acres (8.86%)	18,275 acres (47.62%)	16,700 acres (43.52%)	38,375 acres
1950	4,775 acres (13.58%)	13,375 acres (38.05%)	17,000 acres (48.36%)	35,150 acres
1960	15,050 acres (36.89%)	12,850 acres (31.50%)	12,900 acres (31.62%)	40,800 acres
1974	7,100 acres (16.32%)	29,900 acres (68.74%)	6,500 acres (14.94%)	43,500 acres

*Total acreage of township = 63,494 acres

D. THE LAND CAPABILITY HYPOTHESIS

The preceding section of this chapter analyzed the process of non-resident ownership in terms of two diffusion continuums. Reference at the time was made to the individual hypotheses which have acted together through time and over space in what could be called the non-resident ownership "plot". It was mentioned that one of these hypotheses, namely the land capability hypothesis (i.e., the positive influence of low capability agricultural land and the negative influence of high capability agricultural land in the initial stages of the diffusion process) is of special significance.

It has been suggested that where and when non-residents have a choice, they avoid the purchase of prime farm land (because of the higher price tag traditionally associated with Class 1 and 2 versus Class 3 to 6 agricultural land). The extension of the hypothesis is that in the latter or any stage of the diffusion process in which only prime farm land remains, then it does in fact fall into the hands of non-residents. This hypothesis is, in turn, incorporated into the diffusion model presented in the following chapter. However, this subsection analyzes the spatial implications of the non-resident ownership process when it is forced to invade a township (Elderslie) with a large percentage of its area being comprised of prime farm land.

In the case of Elderslie Township, the diffusion wave moves into the prime farm land for two essential reasons. First of all, there is a lack of any significant amount of highly-preferred non-resident land

in Elderslie Township. Secondly, the well-established diffusion front to the north of the township (i.e., a great deal of early consolidation of the process in the Peninsula) has exerted a certain degree of non-resident "pressure" upon the townships to the south of the Peninsula.

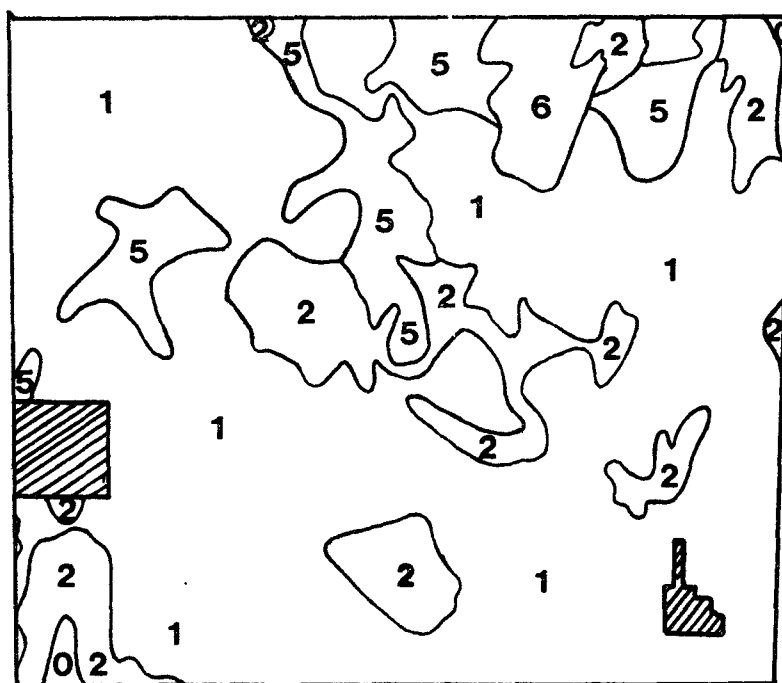
Elderslie Township is an excellent example of a township possessing both extensive acreages of prime agricultural land and non-resident owned land. This sub-section analyzes the relationships between the prime agricultural land in Elderslie Township and that township's non-resident owned land in 1974 as presented in sub-section C of this chapter. This is done in an attempt to give added justification to the land capability hypothesis which, in turn, plays a crucial role in the deterministic model presented in Chapter Five.

The Canada Land Inventory's classification for agricultural capability is presented in Appendix 1. It should be mentioned that, for all intensive purposes, A.R.D.A.'s designation of Class 1 and 2 land as being prime land (i.e., that land with few, if any limitations to agricultural production) is similarly employed in this research.

Figure IV:73 depicts the pattern of agricultural soil capability for Elderslie Township. The area of the township is 57,780 acres of which 52,002 acres or 90 percent are classed as being prime land (Class 1 and 2). A comparison of Figure IV:36, depicting the spatial extent of non-resident ownership in Elderslie Township in 1974, with the township's soil capability for agriculture seen in Figure IV:73 is presented in Table IV:13). The comparison reveals that 5,925 acres or 91.8 percent

Soil Capability for Agriculture Elderslie Township

Figure IV:73



High Capability
←
→
 Low Capability



DESCRIPTIVE LEGEND: See Appendix 1

Villages



**Non-Resident Ownership
in acres
of Soil Capability Categories
present in Elderslie Township
1974**

Table IV:13

SOIL CAPABILITY CATEGORIES	NON - RESIDENT CATEGORIES			TOTALS
	DISTANT-CENTERED FOREIGN	DISTANT - CENTERED CANADIAN	CIRCUMJACENT CANADIAN	
CLASS I & II (prime land)	0	5,925	2,150	8,075
CLASS V	0	275	100	375
CLASS VI	0	175	0	175
CLASS O	0	50	0	50
TOTALS	0	6,425	2,250	8,675

of the 6,425 Distant-Centered Canadian owned land takes place on prime agricultural land.

Similarly, a very high percentage of Circumjacent Canadian owned land (95.6 percent) takes place on prime land. However, it has been stated earlier that, to date, the Circumjacent category poses a much reduced potential threat to the maintenance of the agricultural subsystem than do the Distant-Centered categories. However, the fact that through time this category has become relatively less and less important, while the Distant-Centered Canadian category has become increasingly significant, combined with the fact that the Distant-Centered Canadian category is, in some townships, located predominantly on prime agricultural land does pose a definite threat to the maintenance of a viable agricultural subsystem.

Other revealing statistics which give added justification for such concern can be derived from Table IV:13. Of the township's 52,002 acres of prime land, 15.5 percent or 8,075 acres are under non-resident ownership. Of this total amount of non-resident owned prime land (8,075 acres), 73.37 percent or 5,925 acres are owned by Distant-Centered Canadian Non-Residents, while 26.63 percent or 2,150 acres are owned by Circumjacent Canadian Non-Residents. In terms of the total amount of prime agricultural land in the township (52,002 acres), 11.4 percent or 5,925 acres are under Distant-Centered Canadian ownership, while only 4.1 percent or 2,150 acres are owned by Circumjacent Canadians.

In concluding this subsection, it should be emphasized that if the alignment of Distant-Centered Canadians with prime agricultural land continues in other areas of the Province, then there is definitely room for concern. Undoubtedly, such a comparison of non-resident ownership with agricultural capability at an expanded level of investigation (i.e., Regional or Provincial) remains as being a much-needed piece of research in both the understanding of and legislating for the present and future countryside in Ontario.

E. THE INTERPRETATION OF THE 'A PRIORI' MODEL

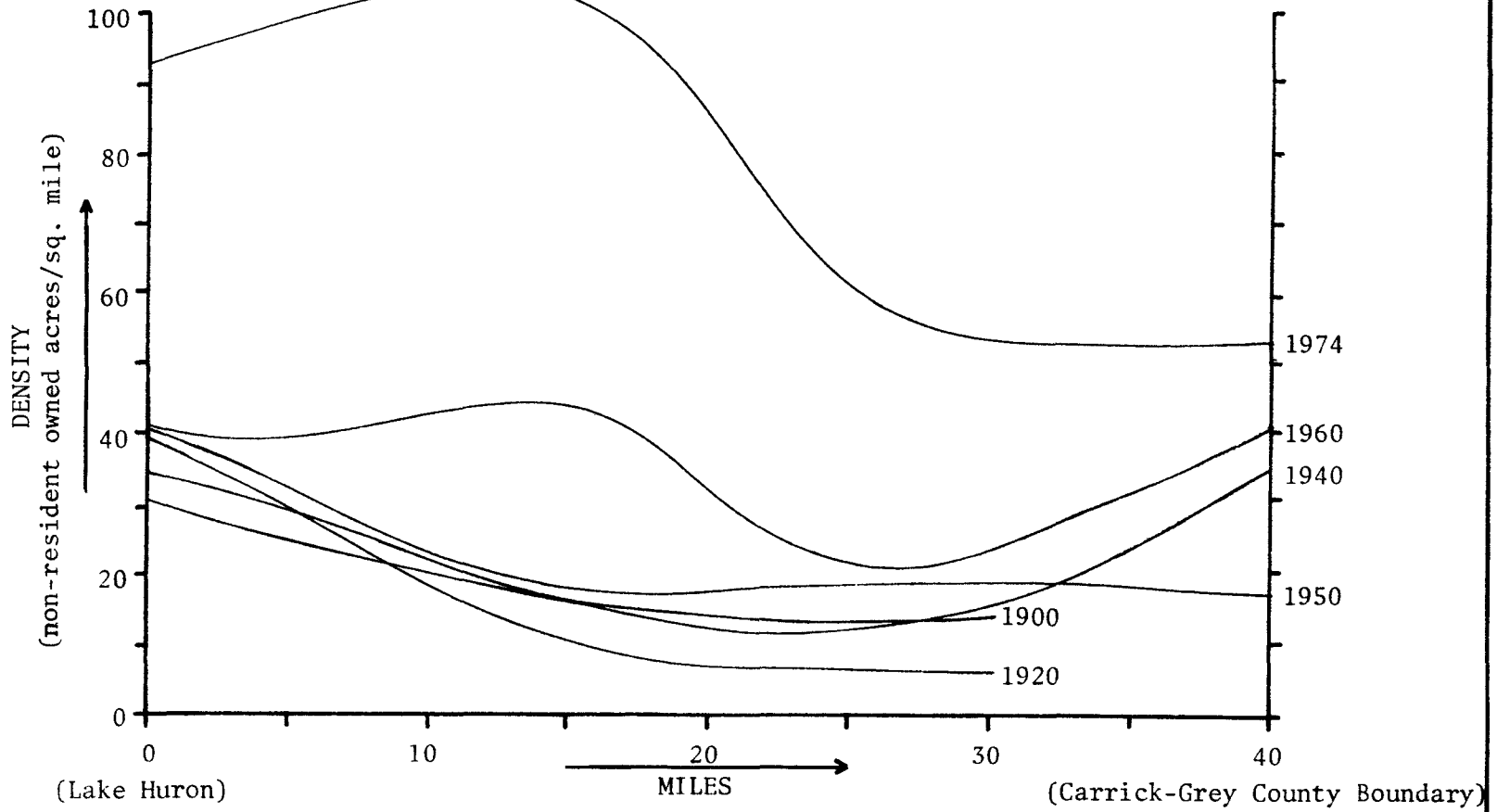
Although Harvey warns of the dangers involved in prediction by means of 'a priori' models ³² such as the one presented in Part B of this chapter (see Figure IV:2), it is felt that the understanding of the process presented in this chapter, in addition to the 'a posteriori' model outlined and applied in the following chapter, both justify its interpretation as seen in Figure IV:74.

Figure IV:74 represents the density of non-resident owned acres per square mile, as one moves along the West to East continuum from the Lake Huron shoreline to the eastern edges of Carrick Township. All time periods examined in Chapter Five are represented on the graph. Once again, the absence of data for Carrick Township in 1900 and 1920, prevents the completion of the graph for those time periods.

To construct the graph, the average density for each of the four townships was calculated for each time period and plotted at what would

**NON-RESIDENT DENSITIES
WEST TO EAST CONTINUUM
1900 to 1974**

FIGURE IV:74



be the half-way point across each township. As can be seen, several variations from the 'a priori' construct appear in Figure IV:74. However, in view of the information presented in Part D of this chapter, these can be explained.

First of all, if reality had lived up to expectations, the representation of 1920 would have appeared as a much greater density curve than 1900. However, the graph reveals that 1900 had a greater density of non-residents past the five-mile distance progressing from the shoreline. As was seen earlier, this, in part, can be explained by the degree of farm abandonment in Kinloss, Culross and Carrick when compared to the relatively stable agricultural subsystem of Huron Township at the turn of the century.

A second variation is found in the fact that along the Lake Huron shoreline in 1940, there seems to have been less non-resident ownership than in 1920. This is not the case. Once again the subdivision of non-resident owned shoreline property into cottage lots, and the elimination of these lots from the research gives an apparent impression of decline while reality would reveal a definite increase in non-resident owned shoreline property in 1940.

Another interesting variation is the fact that in 1940, 1950 (to a more limited extent), and 1960, the amount of non-resident owned land increased eastward from an area of decline in the west of the continuum. It was seen in Chapter Five that Carrick Township achieved the "2375" critical acreage before Culross Township. In short, the process entered

Carrick Township earlier from the north than it entered Culross Township to the immediate west, thus explaining this anomaly to the 'a priori' construct. By 1974, however, it can be seen that the consolidation of non-resident ownership in Culross has caught up and surpassed that of Carrick Township.

One final variation is the fact that in 1960 the density of non-resident ownership is greater in the vicinity of Kinloss Township than in Huron, hardly what would be expected. However, further subdivision of shoreline lots in part explains this variation, in addition to the fact that it was at this time that the inland lakes of Kinloss were "found" and bought by non-residents.

Despite the variations presented and explained above, Figure IV:74 does provide a great deal of justification for the 'a priori' model. The variations seem to have occurred between the 1920 and 1974 periods of examination, with a slight variation due to turn-of-the-century abandonment occurring around 1900 in Kinloss, Culross, and Carrick Townships. Nevertheless, the changing preference for and availability of land for non-resident purchase which, although resulting in significant variations in 1940, 1950 and 1960, seem to have run their course by 1974. The result is that 1920 and 1974 visually coincide with what is expected from the 'a priori' model. A longer period of analysis and an increased study area (to the east) would possibly nullify the importance of the variations in the early and interim periods of this research.

However, it is strongly felt that Figure IV:74 does give sufficient verification to the 'a priori' model, therefore justifying several conclusions. First of all, it can be seen that shoreline areas do experience an earlier and much more extensive degree of non-resident ownership than do those areas further inland. Secondly, the gap between the amount of shoreline non-resident property and inland non-resident property decreases through time. This is indicative of an increased preference for non-shoreline countryside property, and decreasing availability of shoreline property. Finally, the diffusion that takes place through time very strongly resembles a wave-like progression of non-residents across the landscape whereby definite periods of takeoff, expansion and consolidation associated with the settlement of "hollow" frontiers can be identified. In the case of the four townships examined in this and earlier sections of this chapter, it is found that as one township was experiencing consolidation of non-resident owned land, the township to the east was experiencing a period of expansion of the phenomenon, while the township east of the second township was experiencing the period of take-off.

Figure IV:75 depicts the non-resident density curves for the North to South continuum for 1900, 1960 and 1974. The intervening curves between 1900 and 1960 are omitted. This is done primarily because overall spatial-temporal trends, as was the case in the West to East continuum, exhibit a certain amount of graphic "noise" during this period. The "pulsating" effect of the diffusion wave in Arran and Elderslie Townships is one reason for the problems in determining a definite North

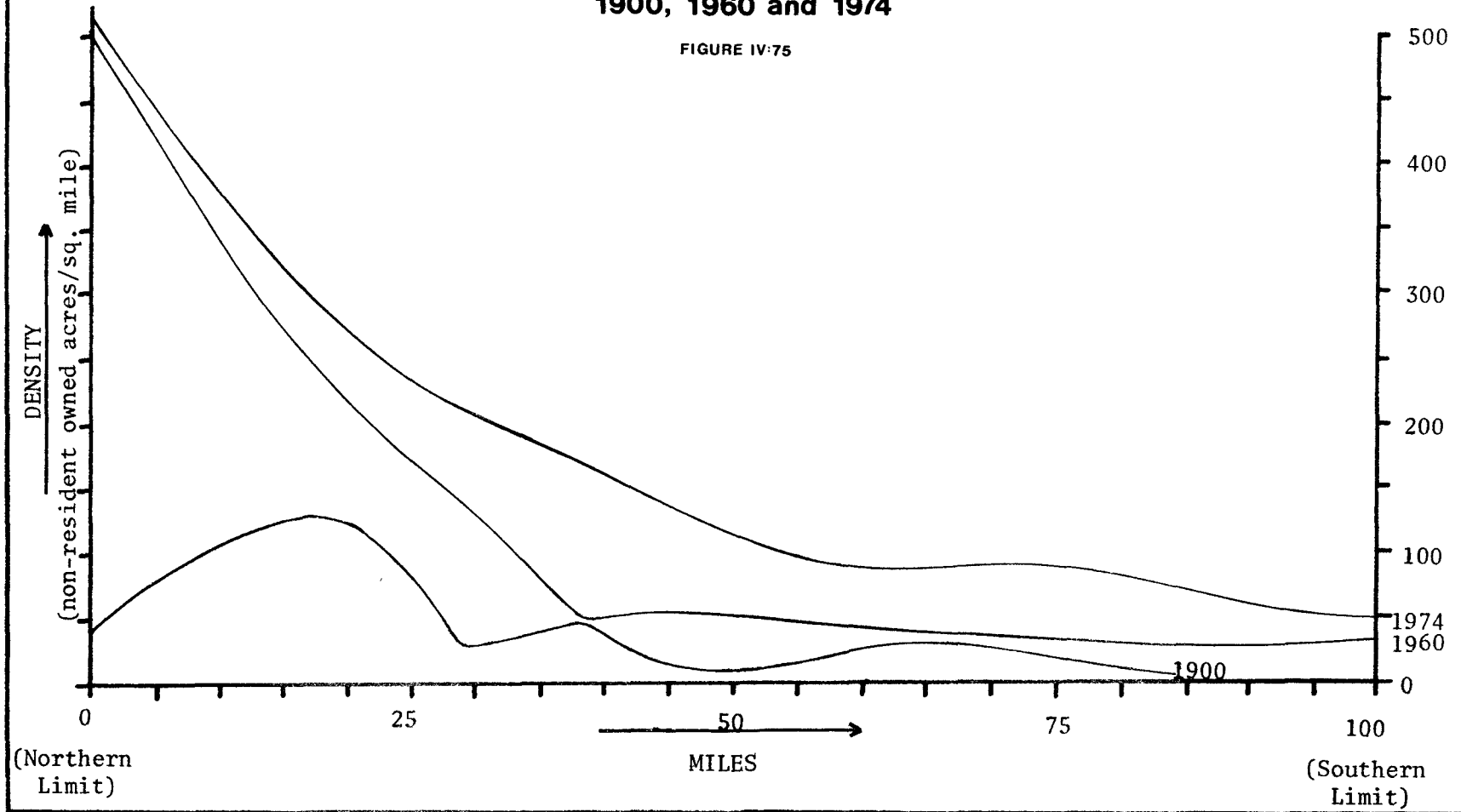
to South spatial-temporal continuum. However, when enlarging the time span between the density curves, as is done in Figure IV:75, the trends become much more obvious, and a definite North to South continuum can be delineated.

It is interesting to note that with the inclusion of the 1900 curve, the early diffusion "hearth" in Lindsay Township is exhibited, while the later curves indicate Lindsay's replacement by St. Edmund Township as the diffusion "hearth". In addition, the much higher density values exhibited by the Peninsula and the rapid decline towards the southern and more agriculturally-oriented townships are, once again, indicative of the traditionally higher preference values attributed to shoreline and low agricultural land.

In conclusion, the process has been continuing and it could be hypothesized to continue until there would not appear to be any great difference in the amount of non-resident ownership of shoreline and the amount of non-resident owned land in the "heart" of Ontario's good farm land. Recent provincial legislation will not arrest the on-going process simply by legislating against foreign non-residents. Part C of this chapter indicated that such ownership is almost absent or declining in areas of good farm land. Therefore, the legislation could possibly encourage the degree of rapid expansion of Distant-Centered Canadian owned land in the countryside.

**NON-RESIDENT DENSITIES
NORTH TO SOUTH CONTINUUM
1900, 1960 and 1974**

FIGURE IV:75



F. CONCLUSIONS

Concluding remarks for this chapter center on the formulation of a résumé of similarities within, and anomalies concerning the trends of the twelve townships examined.

One trend that seems to have developed in most townships since the turn of the century has been the change from the early predominance of Circumjacent Canadian owned land to a more recent predominance of Distant-Centered Canadian owned land. Foreign ownership has remained relatively insignificant in the southern part of the County. The Bruce Peninsula, however, has, from a relatively early point in this century, been characterized by greater relative and absolute foreign control. Even then, it is only Lindsay and St. Edmund Township that present any degree of consolidated foreign owned land. It should also be noted that absolute and relative control by foreign non-residents in Lindsay and St. Edmund has been declining since 1960. This latter fact, in addition to the fact that foreign non-resident owned land in southern Bruce County is an insignificant contributing factor to the phenomenon, leads one to believe that recent legislation has been directed at the wrong category of non-residents.

Remarks should also be directed to the fact that the phenomenon has not achieved any significant spatial extent in southern Bruce County until the period from 1960 to 1974. Historically speaking, in the Bruce Peninsula the phenomenon has been present much longer and has been much more significant in terms of its consolidation throughout the country-

side. Therefore, while a "2375 acre" diffusion wave was sufficient for explaining the diffusion of the phenomenon in a west to east fashion in those townships south of the Bruce Peninsula, difficulties are met with such an explanatory tool in the Peninsula.

The main problem has been due to the fact that in 1900 most northern townships had already surpassed the "2375" acreage by a large margin. However, by analyzing the turn-of-the-century period, it can be seen that Lindsay Township had surpassed it by the greatest margin. At the same time, Lindsay Township did not, as did other peninsular townships, experience a decline in non-resident owned acres after the turn of the century. As a result, the north to south diffusion continuum hypothesis has had to be modified so that Lindsay Township, acting as an early non-resident "hearth", has a continuum progressing south to Carrick Township and a second continuum extending north into St. Edmund Township. It is this latter township which later takes over as the township with the most extensive amount of non-resident owned land.

It should be mentioned that for the variations within categories (whereby one category experiences a rapid increase while another experiences a rapid decline in owned acres), explanation for the Peninsula's Townships can often be found in the fact that one owner often has large blocks of land, the sale of which to an owner of another category results in great variations in each category. Likewise, the sale of a large block of land to an in-township resident results in a drop in both a specific category and in the total number of non-resident owned acres.

Consequently, the fact that much land in the Bruce Peninsula has been consolidated under non-resident ownership and then sold back and forth to owners of different categories and in some cases to in-township residents has resulted in far greater fluctuations in the Bruce Peninsula than in southern Bruce County where smaller holdings are the norm.

It has been noted that the "diffusion continuum" hypothesis, in light of the research presented in this chapter, has had to be modified slightly. Problems also arose in identifying a definite "shoreline" hypothesis (i.e., an early non-resident preference for shoreline property). The main problem has been the subdivision of much of the shoreline property adjacent to good beaches. The subdividing of a 100 acre lot into 100 or more units owned by 100 non-residents of all types prevents the mapping of such ownership after subdivision takes place. Nevertheless, in considering both the aggregate cartographic picture and the township non-resident acreage totals, the subdivided shoreline lots do not present a significant proportion of the total non-resident picture. Nevertheless, the shoreline hypothesis is justified when analyzing the small individual shoreline lots.

In the Bruce Peninsula, where few of the shoreline lots possess good beaches, little subdivision of these lots has taken place. Although the absence of subdivided property has not allowed for the identification of a shoreline preference in all non-resident categories, the hypothesis has been verified in the case of foreign owned land.

On the other hand, the "stream" hypothesis (a preference for property with streams running through it) does not seem to hold up in townships with shoreline property. However, there does seem to be some justification for such a hypothesis in those townships with no shoreline property.

In many of the agriculturally-viable townships examined, abandonment of many of the agricultural acres, in part explains the early "peakings" of the Distant-Centered Canadian and Circumjacent categories. In later time periods, the cottage explosion and the subsequently altered countryside recreational preferences explain the continued importance of these categories as contributors to the overall phenomenon. In townships where the "takeoff" did not occur until much after the turn of the century (due in part to very little agricultural land and, consequently, little turn-of-the-century abandonment) the cottage boom and altered countryside recreational preferences explain the phenomenon's "takeoff".

In conclusion, a comparison of land capability maps of the County with the maps presented in this chapter indicates that until the last decade the phenomenon of non-resident ownership has not presented any real threat to the agricultural subsystem of the County. That is, the "prime farm land" hypothesis, examined in Part E of this chapter, until recently has played a significant role in keeping non-residents off prime agricultural land. However, as was seen in Part E, in instances where few options other than prime land are open to the prospective non-resident and where pressure is being placed upon that land by the diffusion

process, the process continues on the prime farm land of that township.

An appendix (2) is included at the conclusion of this study which lists the total number of non-resident owned acres in each of the six time periods for all of the townships examined. This appendix simply reemphasizes the inter- and intra-township trends already examined in this chapter's presentation of the non-resident ownership diffusion process in the countryside of Bruce County.

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CHAPTER FIVE

DIFFUSION THEORY

AND ITS APPLICATION TO

NON-RESIDENT OWNERSHIP OF THE COUNTRYSIDE

A. DIFFUSION AS A CONCEPT WITHIN GEOGRAPHY

Visualizing non-resident ownership as a diffusion process, and the examination of such a process by means of the deterministic model in the latter part of this chapter, necessitates some form of survey of the antecedents to the diffusion methodology (the deterministic model) employed here. The presentation of this section of the present chapter is not intended as a review of diffusion literature specifically related to the problem of non-resident ownership. To the author's knowledge, no such methodologically-related studies have been completed. What is attempted, is a brief review of the development of geographical diffusion studies so that a better comprehension can be had of the place of deterministic diffusion models (such as the model employed in this chapter) within the overall development of the diffusion concept. By employing a deterministic diffusion model without proper understanding of its historical antecedents leaves a void parallel to the problems that would arise in a study of the process of non-resident ownership in 1974 without examining past trends.

(i) The History of the Evolution of Geographical Diffusion Theory

It would be safe to assume that most significant researchers in diffusion theory have been influenced to some extent by pre-diffusion

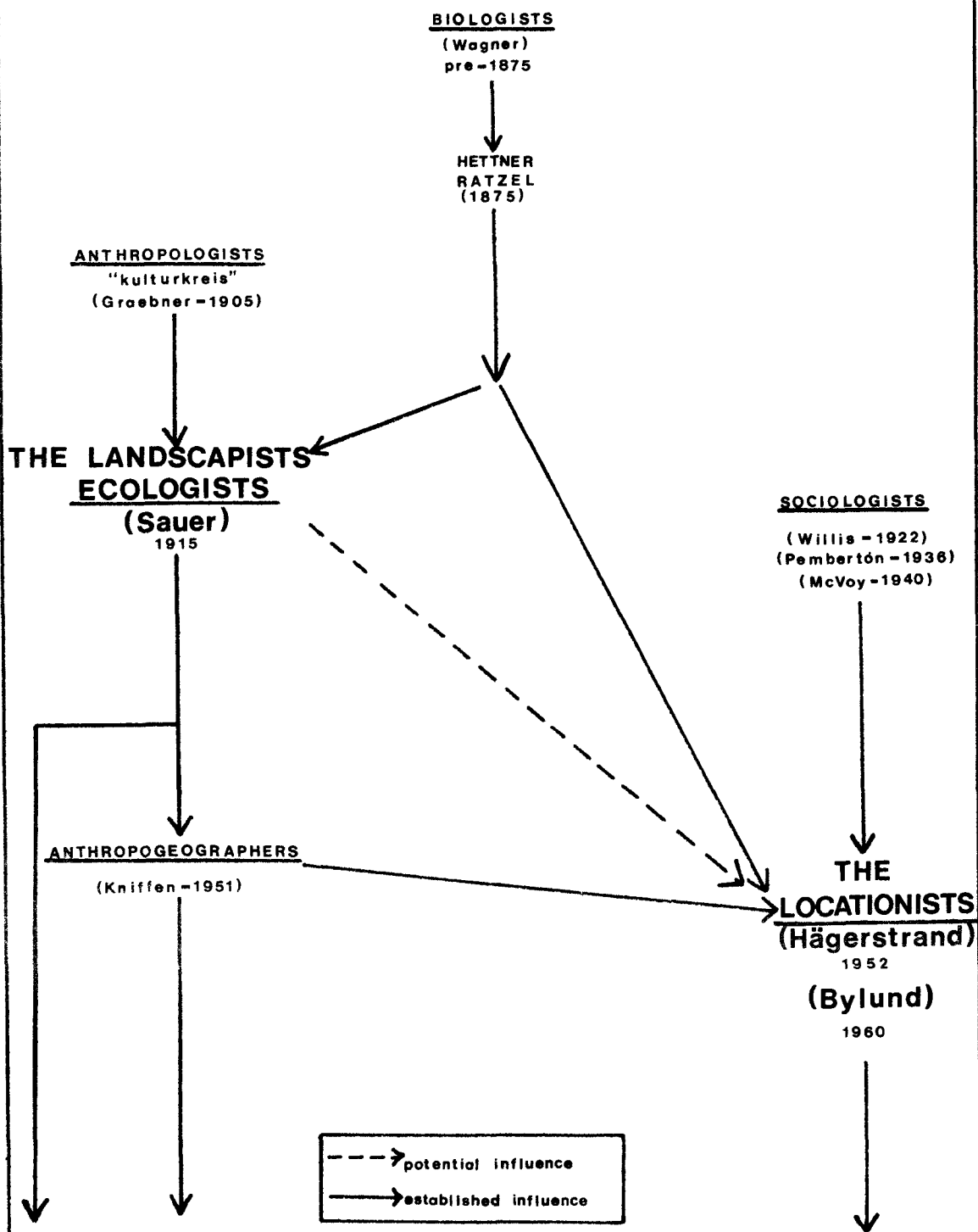
thinking. Since Sauer's "culture origins" or "landscapist" diffusion subset, and Hägerstrand's "locationist" subset stand as the two central geographical diffusion themes (see Figure V:1), it is primarily the works of Hägerstrand and Sauer that should be analyzed with respect to the influence exerted upon present-day diffusion thinking. What one finds are definite historical antecedents in the geographical and non-geographical literature that had a strong impact upon Sauer and Hägerstrand.

Carl O. Sauer stands today as the father of the "culture origins" subset of geographical diffusion. According to Sauer, "geography, in any of its branches, must be a genetic science, that is accounting for origins and processes"¹. As a result he was less than kind to Hartshorne for relegating historical geography to the fringes of the discipline. He again stated that a subject ruled not by its inquisitiveness,² but by definition of its boundaries, is likely to face extinction. It is generally accepted that such a genetic view of geography upheld by Sauer came from Hettner.³ At the same time, Ratzel is credited by Sauer as recognizing the process of the origin and spread of culture and culture traits.⁴ This theme then becomes the core of one of the two subsets of diffusion thinking.

The third individual, or rather group of individuals who can be credited with influencing the diffusion thinking of Sauer are the anthropologists. Sauer has long felt that geography must deal closely with anthropology in studying culture origins and dispersals. The forms of

The History of the Evolution of Geographical Diffusion Research

Figure V:1



material culture with which the anthropologists deals are identical⁵
with those of human geography.

The anthropologists' diffusion thinking seemed to culminate under the German anthropologist Graebner in 1905 with the adoption of the term "Kulturkreis" or a (circular) cultural district in which a number of traits are more or less coextensive.⁶ It is interesting to note, however, that the work of Graebner and the later treatment of "Kulturkreis" by another German-American anthropologist, Kroeber, can in turn be directly traced, once again, to Ratzel.⁷

Finally, it can be argued that not only a group of individuals influenced Sauer's thinking but, also, a specific environment namely, the American Southwest, can be credited with affecting Sauer's developments. Sauer sees that in analyzing culture traits the geographer must be conscious at all times of the setting. In short, he believes that American Geography cannot dissociate itself from physical geography.⁸

The second subset of diffusion theory, which falls under the category of deductive, model-oriented diffusion theory, can equally be viewed as being influenced by earlier non-diffusion or at least non-model-oriented thinking. Pred sees Hägerstrand as being very strongly influenced by Ratzel in the belief "...that cultural elements spatially spread outward from their centers of origin 'like ripples on a pond'".⁹ This notion in turn led to the conceptualization of Hägerstrand's wave model which, surprisingly enough, was essentially the same as the growing edge of the culture area described by the sociologist, Wissler.¹⁰

It is now imperative to see exactly how both Hägerstrand and Sauer were influenced by the same man, Friedrich Ratzel and, simultaneously, to understand how this thinking developed into two distinct ways of diffusionist thinking. However, since Hägerstrand's work began some thirty years after Sauer's original work on cultural origins, it is extremely possible that Hägerstrand, himself, may have been influenced by Carl Sauer. Nevertheless, the fundamental difference between the manner in which these two individuals conceptualized the actual diffusion process provides the justification for two specific diffusion subsets.

It is also interesting to note, even though it is probably totally circumstantial, that the sociologist Dodd's treatment of diffusion was not only very similar to that of Hägerstrand, but also his results were published at approximately the same time as were those of Hägerstrand.¹¹ Reference has been made to Wissler, a sociologist who, along with others of this discipline, strongly affected Hägerstrand's thinking. Hudson sees Hägerstrand as being influenced by anthropologists even though he "does not specifically cite the earlier spatial models of cultural diffusion developed in anthropology".¹² It can be argued, however, that the anthropologists, as was mentioned earlier, had their greatest impact upon the cultural origins diffusionists and, that it was the sociologists like Wissler, Hogden and McVoy who acted as the non-geographical catalysts to Hägerstrand's thinking.¹³

Despite such a rigid stand vis-à-vis the influence of sociologists and lack of influence of anthropologists on the deductive, model-based diffusion theory of Hägerstrand, there seems to be one main exception, the work of Fred Kniffen. Kniffen's works are quoted by Hägerstrand as having influenced...."the importance of a cultural approach to questions of distribution in geography"¹⁴. Hägerstrand is far from being extravagant in justifying his own work by reference to prior studies. Consequently, his reference to the works of Kniffen^{15a,b,c} can be viewed as literature contributing at least some degree of peripheral value towards Hägerstrand's quantitative developments.

It is interesting to note that at the time of Kniffen's original publications, he held a joint position as professor of geography and anthropology at Louisiana State University. Therefore, Kniffen, as an anthropogeographer, remains as the exception to the lack of direct anthropological influence on Hägerstrand.

It can also be noted that the anthropologists, while influencing the Sauerian diffusion school and being influenced by the geographer Ratzel, were at the same time influenced by biologists namely, J. C. Willis and others, who envisioned a biological age-area principle for the interpretation of evolutionary sequences of floras which was virtually identical to the age-area principle in anthropology.¹⁶ Consequently, it is very interesting to observe the praise bestowed upon Sauer by biologists in a review, in the Quarterly Review of Biology, of Sauer's collection of articles in Land and Life. The review states

that Sauer "has consistently moved outward on the frontiers of thought, often derided as a visionary, yet frequently proven right after a time. From the rich production of this gifted mind, Leighly has collected a book full of seminal essays".¹⁷

The influence of the biologists in the formulation of diffusion thought can be extended further back to the time of Ratzel. In fact, Ratzel himself could have been considered a biologist in his early twenties. Sauer recalls Ratzel's long friendship with the naturalist Moritz Wagner, who had developed the thesis that evolution was a result of migration into new habitats and that people and their ideas change with their dispersal. Later, Ratzel expanded on Wagner's migration concept to the "diffusion and differentiation of cultures and of particular cultural traits".¹⁸

(ii) The Locationists

The locationist approach, and the one which is employed in Part B of this chapter, involves a switch of concern from the culture trait being diffused to the processes involved in bringing about the phenomenon's observed locational pattern. The kingpin of this approach has been Torsten Hägerstrand.¹⁹ Even though his original "The Propagation of Innovation Waves" actually evolved from earlier cultural studies and within the cultural tradition, Hägerstrand's later work has focused directly upon the processes involved in the locational change associated with a specific diffusion.

While the Sauerian tradition may be classed as being primarily inductive in its methodology, research within the Hägerstrand mode of diffusion thinking has been essentially deductive and theoretical in its approach. Hägerstrand's original work is similar to earlier diffusion research in its primarily inductive approach and in its focus on diffusion patterns rather than processes. However, further studies resulted in Hägerstrand's observation that

"the spatial order in the adoption of innovations is very often so striking that it is tempting to try to create theoretical models which simulate the process and eventually make certain predictions achievable".²⁰

This statement is representative of the change in Hägerstrand's work from description and inductive generalization to a definite deductive approach concerned with the generative processes.

Locationist studies originate as 'a priori' assumptions concerning the behaviour of individuals. These assumptions are, in turn, translated into a probabilistic or deterministic framework which allows for the generation of stochastic and deterministic models of the spatial diffusion process. Hypothetical diffusion patterns are then generated simply by aggregating large numbers of individual stochastically- or deterministically-controlled decisions. The validity of the initial behavioral assumptions are tested by comparing the similarity between the generated and actual spatial patterns. This latter step, however, contains one of the greatest unresolved questions in diffusion theory, and remains as the most predominant "thorn in the side" of the location-

ist tradition.

It should be noted, that the Monte Carlo simulation model, which developed out of Hägerstrand's original wave model, has not been employed in all cases in which the wave model has been interpreted quantitatively. While Gould and others have used trend surface analysis,²¹ Cassetti and Semple have used a multivariate spatial model,²² and Tobler²³ has given an analytical treatment of the wave phenomena. Nevertheless, the fact that such approaches maintain strong conceptual links with Hägerstrand's Monte Carlo diffusion model has been emphasized by Morrill.²⁴ One is probably justified in saying that the Monte Carlo model has been considered as the stochastic counterpart of the deterministic wave model.²⁵

Finally, it should be reemphasized that Hägerstrand's interest has been primarily in the dynamics of the process rather than in the specific phenomena being diffused. Hägerstrand simply refers to the data he uses as "indicators". In his 1952 monograph he said that "the indicators employed here are in themselves of no greater interest than any other available cultural elements".²⁶

A review of the historical development of diffusion studies as depicted in Figure V:1 reveals that Bylund's deterministic framework, which is employed in Part B of this chapter, can be viewed as an outgrowth of Hägerstrand's stochastic developments. To a certain extent, there is some merit in the opinion that the deterministic developments have evolved as some form of a reaction to the earlier stochastic dif-

fusion models. That is, Hägerstrand's stochastic model was developed to understand the diffusion of physical entities or ideas through an "already-established" populace. To date, such a model has not been employed to either understand or simulate the human settlement of a hollow frontier. Possibly refinements of Hägerstrand's earlier wave model could have achieved this.

The stochastic model introduces the element of chance into a diffusion. Bylund felt that such an element of chance settlement does not really exist at any significant level to allow the application of the stochastic model to the settlement process. Bylund saw the settlement of an area as being strongly determined along specific spatial lines.²⁷ In short, Bylund's work in Inner Sweden can be seen as a modification of Hägerstrand's stochastic model for the purposes of simulating a different type of diffusion process. Parallels have already been drawn between the original settlement of a landscape and the later trend of non-resident ownership within that landscape, whereby non-resident ownership can be viewed essentially as a process or, in fact, as a "resettlement" of the landscape. Consequently, Part B of this chapter applies a deterministic model to the process as it was examined in Chapter Four.

B. A DETERMINISTIC MODEL FOR THE DIFFUSION OF NON-RESIDENT OWNERSHIP IN THE COUNTRYSIDE

(i) Introduction

The previous chapter presented a very basic geometric view of the

process of non-resident ownership in the countryside. The 'a priori' construct envisages the phenomenon as a series of changing density curves, changing through time and over space. The empirical evidence presented in Chapter Four and reexamined in terms of density curves seemed to give some justification for such an 'a priori' model. However, it has been already suggested that with respect to theory formulation, the 'a priori' model provides only one of the required steps, and that the 'a posteriori' model is one further along the continuum towards a theoretical statement. In addition, the 'a posteriori' model allows for manipulation of relationships and further testing of the hypotheses.²⁸ Consequently, it is an aim here to attempt to fulfill this latter step on the continuum of theory formulation, by applying the non-resident ownership "spatial" hypotheses in terms of a deterministic diffusion model.

One of the most often-applied 'a posteriori' models to diffusion processes is the stochastic or probability-based model. In such a model, probabilities are applied to a grid which, in turn, determines the direction and extent of the diffusion of an item over space. The probabilistic nature of the model allows for chance to enter into the process and, as a result, has been quite successful in its application to diffusion processes concerned with the acceptance of an item or idea through an "already-established" population.²⁹ However, the stochastic model has not experienced any great degree of application to the settlement process. In such instances it is the deterministic model which seems to be the more reasonable alternative. Bylund's deterministic

model for the settlement of Inner Sweden is an example of such a develop-
ment within the deterministic framework.³⁰ The main problem associated
with the deterministic model, however, is that the element of chance is
essentially eliminated. Nevertheless, it is felt that in the case of
the settlement process, the settling of an area is determined along
well-defined "spatial" lines (i.e., the hypotheses "controlling" the
settlement), and that once the process has begun, the element of chance
settlement is quite questionable.

Assuming that the process of non-resident ownership, as outlined
in Chapters One and Two, is quite similar to a settlement process, and
that the various hypotheses referred to in the research are the controlling
or determining factors for the non-resident settlement of an area,
then it is not the stochastic, but rather the deterministic model which
must be applied in the 'a posteriori' examination of the process.

(ii) The Model

(a) The Study Area

The 'priori' model outlined in Chapter Four was explained in
terms of "four" and "nine" township continuums. It is felt that all
the hypotheses incorporated into the 'a priori' model's application
could be found to have been operating at a more micro level namely, in
one township. If such is the case, then the application of the deter-
ministic 'a posteriori' model to a single township, rather than to the
continuum, would be more in keeping with the pervasive general to
particular approach employed in this study.

It has already been established that the general trend of the diffusion of non-resident ownership in Bruce County has been along a west to east and a north to south continuum. A slight modification in the north to south continuum occurred in Lindsay Township which necessitated the alteration of the continuum so that the process moved north and south from a diffusion "hearth" in Lindsay Township. It is felt that, in order to give proper worth to the hypotheses, the deterministic model (when applied to a single township) should be applied to a township which is quite "mature" with respect to the process. That is, a township should be chosen which experienced the influx of non-resident ownership early and which is depicted as having a significant amount of non-resident owned acreage to make the application of the model worthwhile.

The township chosen should also possess a wide range of preference values as defined by the model. That is, the township should have significant amounts of both highly-preferred and undesirable land in the eyes of prospective non-resident owners. In short, the choice of such a township would represent a micro example of the more expansive continuums. That is, the hypotheses that are employed to explain the west to east and north to south continuums would likewise be used to explain the diffusion of non-resident ownership into this one township. Consequently, intra-township spatial trends would be readily identifiable in that township if the hypotheses viewed at the macro continuum level (i.e., inter-township spatial trends) in Chapter Four are valid at the micro or township level. Therefore, the 'a posteriori' construct

is applied, not at a spatially comparable level of investigation (i.e., one of the macro diffusion continuums) but, rather, it is applied to a reduced level of investigation (i.e., one township) possessing all of the non-resident spatial characteristics exhibited over the greater expanse covered by the continuums.

Utilizing the above criteria, Lindsay and St. Edmund Townships are the most likely choices. However, the latter presents two problems. First of all, the takeoff period was followed closely by a period of very rapid consolidation of non-resident ownership. This makes it difficult to identify the direction of the process. Secondly, large consolidated acreages in St. Edmund have been bought and sold by non-residents, greatly confusing the expected spatial and numerical trends. As a result, the model developed here is applied to the original Peninsular diffusion hearth, Lindsay Township.

(b) The Construct

The hypotheses upon which the model is based have already been referred to, but are restated here. First of all, there is a shoreline preference by prospective non-resident owners. Secondly, there is a high preference for property with rivers or streams running through it. Thirdly, there is a preference for lower valued property, namely the lower capability classes of agricultural land. Nevertheless, swamp land and expensive property (i.e., high capability agricultural land) do not present an attractive force to the non-resident buyer.

Based on the above hypotheses or assumptions, which have been given

some degree of visual justification in Chapter Four, the principles for the model's construction can be outlined. A brief outline of the model's procedure reads as follows:

1. The model's grid appears the same as the lot and concession grid for Lindsay Township.
2. Numerical values based on the above hypotheses are applied to the grid.
3. Hearths for the initiation and generation of the diffusion process within the township are identified.
4. Several "series" of non-resident owned lots are generated by the various hearths until the total number of non-resident owned lots equals the total number of non-resident owned lots in Lindsay Township in 1974.

Table V:1 summarizes the lot value system employed by the deterministic model. Reviewing the table suggests that by summing the various values available for a lot's cumulative value, the maximum value that a lot may attain is 5 (keeping in mind that a lot may only be assigned one value from category A). On the other hand the minimum value that a lot may be assigned is 0. In short, the deterministic model's grid value system operates on the following equation:

$$N = (S + R + L) - (P)$$

In the above equation, N represents the non-resident's perceived value of countryside property; S represents the proportion of the total perceived value that can be attributed to the property's proximity to physical shoreline or shoreline property; R represents the proportion

SUMMARY OF VALUES
EMPLOYED IN THE CUMULATIVE LOT TOTALS
OF THE DETERMINISTIC MODEL

Table V:1

CATEGORY	LOT CLASSIFICATION	ASSIGNED VALUE
A	a) Prime Shoreline Lots (inland, eastern and southwestern)	+3
	b) Substandard Shoreline Lots (northwestern)	+2
	c) Once-Removed Substandard Shoreline Lots	+1
	d) Once-Removed Inland Shoreline Lots	+1
	e) Once-Removed Prime (non-inland) Shoreline Lots	+2
	f) Twice-Removed Prime Shoreline Lots	+1
B	River and Stream Lots	+1
C	Low Agricultural Capability Lots	+1
D	Prime Agricultural Lots	-1
E	Swamp Lots	-1

of the total value that can be attributed to the property's proximity to rivers or streams; L represents the value assigned to low capability agricultural land; and, P represents the consequence of either prime agricultural land or swamp land on the total perceived value.

The Land Capability for Recreation map for Lindsay Township was superimposed upon the township and revealed that the recreational capability of the western shore (with the exception of the southwest shore) is lower than that of the eastern shore.³¹ Consequently, the lots bordering on the northwestern shore (with the exception of the southwest shore) are assigned lower values than those on the eastern shore. The western shore lots were assigned a value of 2, with immediately adjacent lots assigned a value of 1. The eastern shore lots were assigned a value of 3, with immediately adjacent lots having a value of 2, and twice-removed lots having a value of 1.

The Land Capability for Recreation map depicts all inland lakes to be fairly high in terms of their recreational capability.³² Consequently, all lots bordering on inland lakes were assigned a value of 3 with immediately adjacent lots having a value of 1. The assumption here is that the desire to live once- or twice-removed from a body of water is much less with respect to small bodies of water than it is with larger bodies of water.

Lots with streams or rivers passing through them are assigned an additional value of 1, as are lots with an agricultural capability of between three and seven (assuming that this is lower valued land). On the

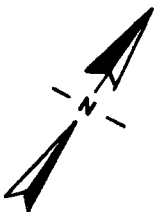
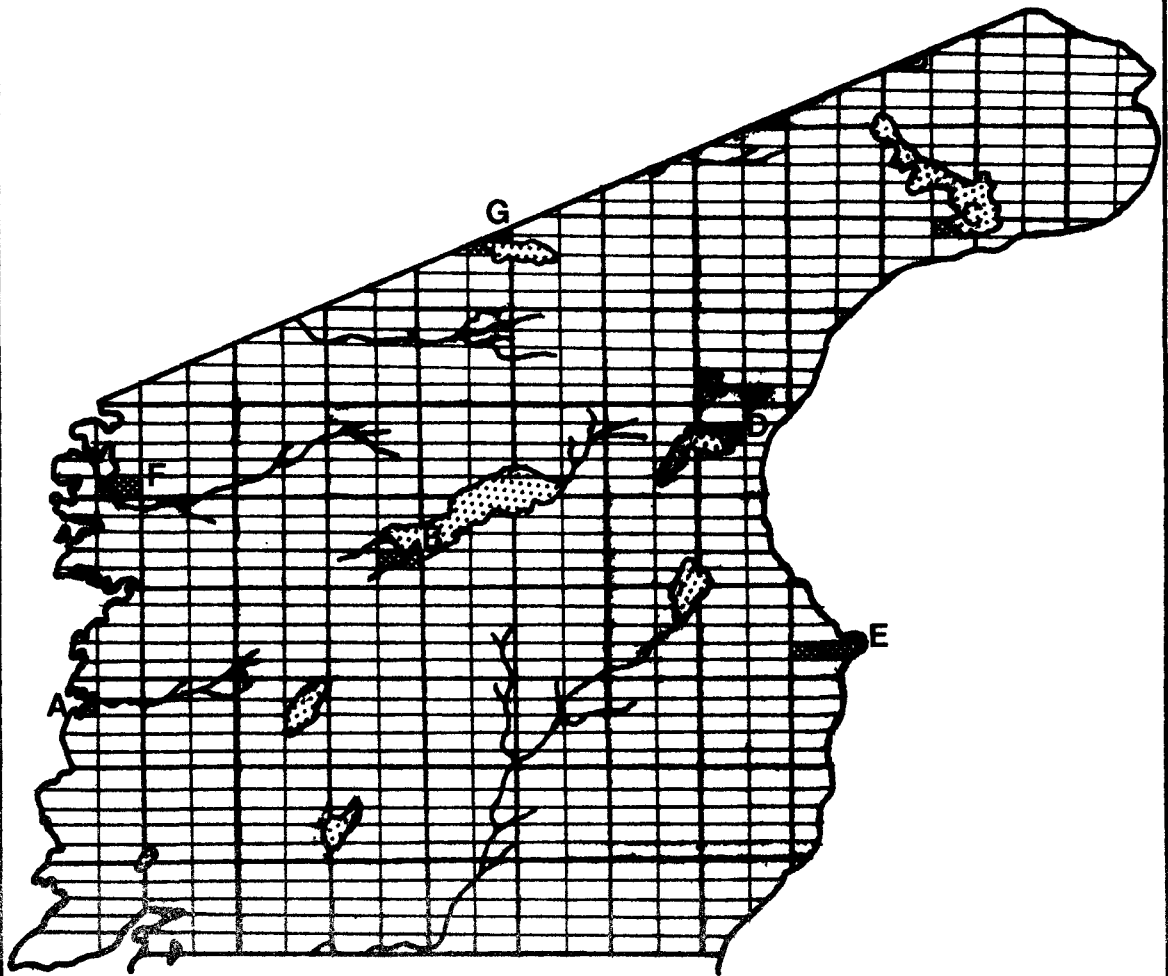
other hand, lots with the majority of their acreage being comprised of either swamp (Class 0) land or Class 1 or 2 (higher valued) land are assigned a value of 0. This is only done if the lots do not have another value (i.e., if they are not stream or shoreline lots). If, however, these lots already have a value assigned to them, a value of 1 is subtracted from the previous value. In some cases this only reduces the already assigned value but, in others, it may totally nullify the lot's value. Appendix 3 depicts the final product of the assignment of values to Lindsay Township.

As was mentioned earlier, hearth lots are required in a deterministic model in order to generate or simulate the spatial effects of the non-resident ownership process. Figure V:2 depicts the hearth lots employed in this model in order to generate non-resident owned lots. The seven lots were chosen, partially on the evidence presented in Chapter Five concerning the process in Lindsay Township and, in part, on what appeared to be hearths of high valued cells in Appendix 5. That is, areas within Lindsay Township with an agglomeration of cells with cumulative values of 3, 4 or 5 would be those identified as hearth cells. The specific hearths, represented by A to G in Figure V:2, were chosen on the basis of being centrally located in areas having such high preference values for non-resident ownership.

Bylund's model's patterns were produced using the underlying assumption that the settling of Inner Sweden was geometric in its progression. However, the figures presented in Table IV:12 in Chapter Four

Diffusion Hearth Lots Lindsay Township

Figure V:2



 Lakes

Scale in Miles


do not seem to reveal such a progression in Lindsay Township. Consequently, for the various time periods employed in this model, the hearth area itself generates a fixed number of lots immediately adjacent to the expanding area comprising the hearth, rather than each new non-resident owned lot generating a number of new lots. It is strongly felt that since the hearth areas revealed the predominance of certain cities, areas or states as the home address for the non-resident, it is in fact the hearths that are generating the influx of non-residents into Bruce County.

The application of the model to Lindsay Township involved the simulation of eleven time periods or settlements, producing 310 non-resident owned lots. The procedure employed in the eleven simulations should be elaborated upon. First of all, for the initial three settlements or simulations, each of the A, B, C, D and E hearths generates five new non-resident owned lots. The lots chosen are those with the highest value immediately adjacent to the hearth. If a choice of lots is available (i.e., a choice between two lots with a value of three), then the lot to be chosen is that closest to the last-settled or purchased lot. However, it could be presumed that the remaining lot with the value of three would be non-resident owned after the following settlement period. For settlement periods four to nine, five additional lots are generated by the new hearth F. This latter hearth and the later addition of hearth G are not brought into the "generation" process in the initial simulation along with hearths A to E due to the slightly lower preference values and reduced extent of F and G hearths. Presumably then, settlement or

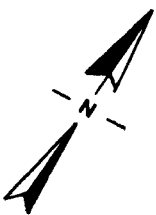
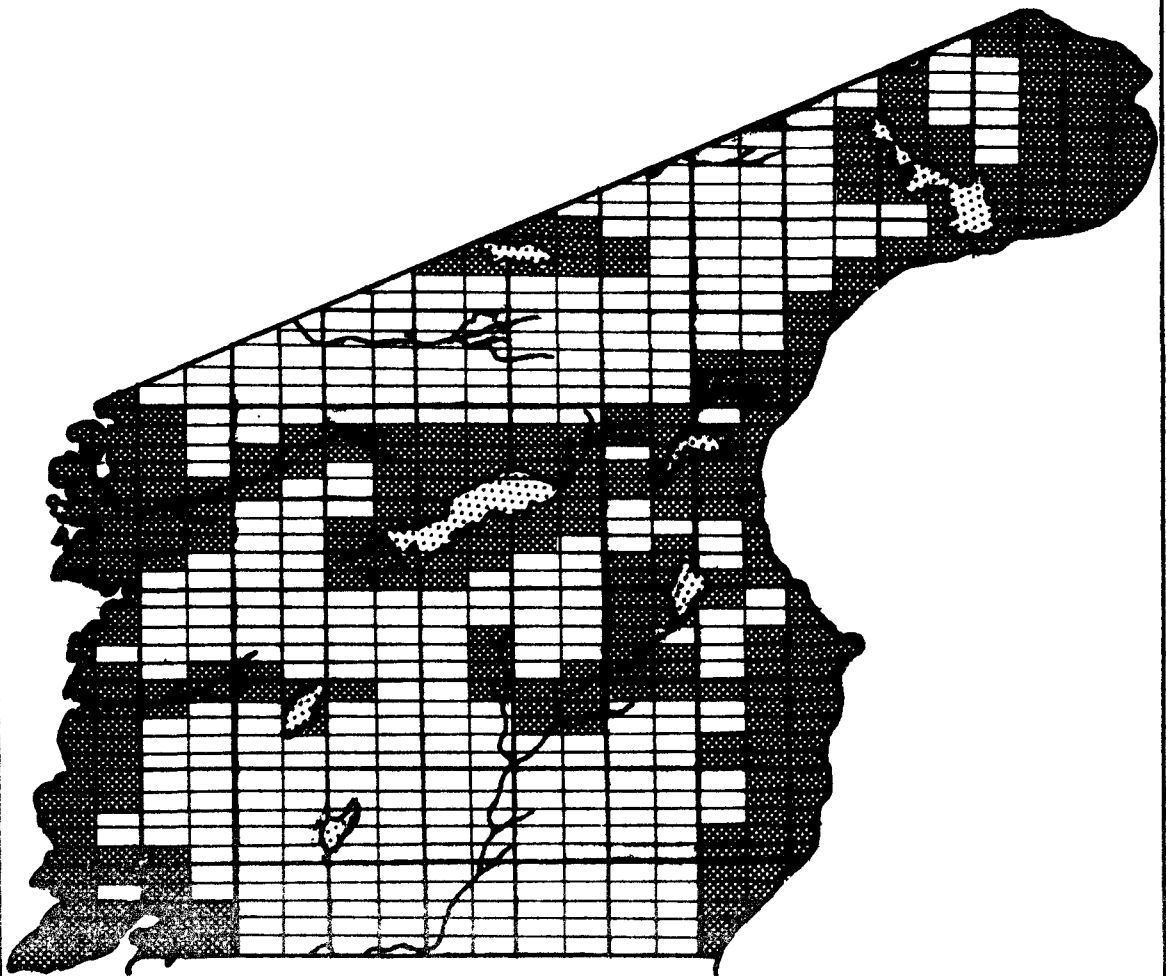
the non-resident ownership process would ignore these hearths in the initial intrusion of settlers or non-residents into the township. However, the disappearance of high valued land around the five original hearths necessitates the later successive implementation of two additional generating hearths.

Consequently, for each of settlements four to nine, thirty lots fall into non-resident ownership in comparison to twenty-five for each of settlements one to three. In settlement ten, an additional five lots are generated by the new hearth G. However, in settlement eleven, sufficient conglomeration of non-resident owned lots has taken place so that A and F appear as one hearth and together generate five lots, as do B, D and E which likewise generate 5 lots between the three former sub-hearths. However, C and F each generate five new non-resident owned lots.

The final result of the eleven settlements is presented in Figure V:3. Since the first period examined in Chapter Four (i.e., the 1900 non-resident ownership pattern in Lindsay Township) had already experienced a certain degree of non-resident ownership, it is impossible to attach any of the earlier simulated patterns of the model to the 1900 or subsequent real patterns. However, the simulation of eleven time periods or 310 non-resident owned lots is compared to the time period which, in numerical extent, approximates the "310" simulated pattern. This time period is the 1974 pattern, seen in Figure V:4 and represented by the actual distribution of 305 non-resident owned lots.

**Simulation
Non-Resident Ownership
Lindsay Township
1974**

Figure V:3

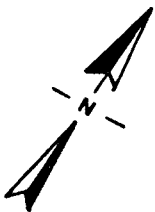


 Lakes

Scale in Miles
1 0 1

**Summed
Non-Resident Ownership
Lindsay Township
1974**

Figure V:4



 Lakes
 Non-resident owned land

Scale in Miles
0 1

(c) The Simulation and its Evaluation

Figure V:3 presents the final result of the eleven settlements, which in sum produced 310 non-resident owned lots at an average of 100 acres a lot. The actual 1974 Lindsay pattern revealed 30,500 non-resident owned acres, or approximately 305 lots. In short Figure V:3 represents a close numerical simulation of the 1974 non-resident ownership pattern,utilizing the hypotheses mentioned above.

The 1974 pattern is reincluded in this chapter (see Figure V:4) for the purposes of evaluating its spatial similarities with Figure V:3 and, in turn, the deterministic model for the diffusion of non-resident ownership into the countryside.

The simulation possesses remarkable similarity to the actual 1974 summed pattern (i.e., the spatial combination of all three types of non-resident owned land). However, there are some problem areas which are in need of explanation. First of all, there are areas of conglomerated non-resident owned land in the northern part of the township which did not appear in the simulation. It is possible that since these specific areas did not appear in this analysis until 1960 and 1974 (see Chapter Four), St. Edmund Township to the north has begun to act as a diffusing hearth for non-resident ownership. In fact, a reexamination of the 1960 and 1974 St. Edmund patterns reveals such a degree of consolidation that would force prospective buyers to search further south in Lindsay Township for land.

The other major problem with the simulation is that it did not allow

the appearance of a number of non-resident owned lots in the south-central sector of the township. It would appear that since the latter settlements simulated in the model were being forced to utilize land with a low numerical value, that at this point the process has possibly taken on a more probabilistic nature.

In evaluating the usefulness of the model then, it seems that the premises upon which it is based have been given substantive justification. The latter problem referred to suggests the possibility of applying a more stochastic-based model for the future time periods. Nevertheless, the ability to predict the phenomenon in the immediate future by means of any model, deterministic or stochastic, is much in question when considering the possible side effects that may result from the recent Ontario legislation (see Chapter Three). The major problem remaining in evaluating Figure V:3 and the model lies in determining some scientific way in which reality and the simulation can be compared. As was pointed out in Part A of this chapter, this remains as a major "stumbling block" to the acceptance of modern diffusion theory. An effective way of comparing the simulated and real patterns has yet to be developed. However, the degree of visual success presented in the previous chapter is hopefully a sufficient starting point in the genesis of theoretical statements concerning the diffusion of non-resident ownership in the countryside.

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CHAPTER SIX

CONCLUSIONS

The main objective of this study was to add spatial and temporal relevance to the problem of non-resident ownership within the much-neglected rural geographical framework. To date, only the fringes of the literature (farm abandonment, part-time farming, rural-urban fringe and rural-recreation) even hint at the existence of widespread rural non-resident ownership. In fact, only in the literature concerning the urban realm has any degree of substantive thinking been given to the problem and its ramifications. Even provincial governments have failed to achieve the acceptance of a universal definition of who the non-residents really are. The Circumjacent and Distant-Centered definitional breakdown employed in this study is an attempt to use a more truly spatial context in defining the non-resident, rather than fall back on a governmental definition based solely on political ethnocentrism. Hopefully, the acceptance of Distant-Centered Canadians and Distant-Centered Foreigners as being equally "foreign" to a farm subsystem, because of the distance factor involved, is more relevant than defining solely along political boundaries.

The adoption of the historical perspective, as a means of analyzing spatial trends concerning the problem, confirmed the author's view that the problem of non-resident ownership is and has been very process-oriented. Consequently, concluding comments deal primarily with this

study's findings concerning the process of non-resident ownership in Bruce County's countryside.

It is felt that the process of non-resident ownership as analyzed in this study reveals strong parallels to a very strictly determined settlement diffusion. Consequently, the process or diffusion of non-resident ownership can equally be referred to as a "resettlement" of the rural landscape. However, as is the case with the original settling of Bruce County, the "resettlement" by non-residents is strictly controlled by specific spatial determinants or explanatory variables for the process. These spatial determinants or hypotheses can be summarized as:

1. a high preference by non-residents for shoreline property;
2. a positive preference by non-residents for stream property;
3. a positive preference by non-residents for property with a low agricultural capability;
4. a low preference by non-residents for property with a high agricultural capability;
5. and, a low preference by non-residents for swamp property.

As well as being historical in nature, the methodology employed in this research also goes from the general to the particular. The spatial determinants referred to above are thus employed in a general 'a priori' construct which envisions the non-resident ownership process as operating on a spatial continuum basis, whereby the shoreline property (the most highly preferred) falls first to the non-residents,

followed by stream property and land with a low agricultural capability. Once again, when all highly preferred available non-resident land has been occupied by non-residents, then the prime agricultural land falls into the hands of non-residents.

The application of such an 'a priori' model to Bruce County results in West to East and North to South non-resident ownership diffusion continuums, characterized by more extensive non-resident ownership in the West and North, and decreasing in intensity to the East and South. The analysis of the Township Assessment Roles for 1900, 1920, 1940, 1950, 1960 and 1974 justified such an 'a priori' model with one exception. It was revealed that the North to South continuum had its origins in Lindsay rather than the expected St. Edmund Township. Therefore, since the North to South continuum was established prior to the West to East continuum, Lindsay Township can be viewed as the non-resident ownership "hearth" for Bruce County.

The mapping and analysis of the information derived from the Assessment Roles not only revealed the overall trends concerning the extent of non-resident ownership through time (analyzed by means of a hypothetical "2375" critical non-resident ownership acreage "wave"), but also, it revealed specific spatial-temporal trends within the three non-resident categories. First of all, Southern Bruce County revealed an early predominance of the Circumjacent non-resident category; however, later time periods have been marked by the relative and absolute importance of Distant-Centered Canadian owned land. Meanwhile,

Distant-Centered Foreign owned land remains relatively and absolutely insignificant in Southern Bruce County. In fact, some townships experienced more foreign owned land at the turn of the century than they exhibit in 1974. In the Peninsula, the early dominance of the Distant-Centered Canadian category is explained primarily by means of the farm abandonment process. It is not until recent time periods that the Distant-Centered Canadian category regains such absolute and relative dominance. Meanwhile, in the northern part of the Peninsula, it is most interesting to note that the Distant-Centered Foreign category has been declining in both relative and absolute acreage since approximately 1960. This leaves this category, in terms of all of Bruce County, in a rather insignificant position when considering the trends rather than a static view of non-resident ownership.

While the 'a priori' model examined the above trends and hypotheses at the macro level by means of non-resident ownership diffusion continuums, the 'a posteriori' model, presented in Chapter Five, utilized the micro level of investigation for further verification of the explanatory variables for the diffusion of non-resident ownership.

It has been mentioned that Lindsay Township was identified as the early non-resident ownership "hearth". It is also interesting to note that Lindsay Township is quite diverse with respect to the property it possesses and the resulting wide disparity in the value that the township's properties pose for the potential non-resident

buyer. That is, Lindsay Township possesses large acreages of highly preferred non-resident land and, at the same time, it is characterized by large areas of low valued non-resident land. In short, Lindsay Township can be viewed as possessing all of the characteristics exhibited in the more macro diffusion continuums. Using the same hypotheses, then, that were employed in the 'a priori' model, values were assigned to these five major explanatory variables and applied to the Lindsay Township lot and concession grid. The model, which was described in depth in Chapter Five, was then used to generate a 1974 simulated pattern.

It should be mentioned that the area of Lindsay Township that possesses low valued non-resident cells, as generated by the hypotheses, seemed to present a contradiction between the simulated and the real 1974 pattern. That is, this area of low values, which theoretically should have had no non-resident owned lots in 1974, in fact, did exhibit a significant number of dispersed non-resident owned lots. Since most high valued cells were occupied by 1974, and since the nature of the non-resident settled low valued lots appears to be rather dispersed, what in fact is transpiring on the remaining countryside is a settlement based on equal probabilities. Therefore, the deterministic nature of the diffusion only is justified while there is a choice of high valued non-resident cells. When these cells are purchased, the determinism inherent in the diffusion is terminated. Consequently, future simulations of the pattern in townships such as

Lindsay would be compelled to switch focus from the deterministic model to a simulation based solely on "equal-probabilities". In such a simulation, chance is the sole determining variable.

As was the case with the 'a priori' model's application to the diffusion continuum, the 'a posteriori' deterministic model seemed to visually verify the aggregate picture determined by the five hypotheses. A major problem in the deterministic model's application arises in the fact that, to date, there is no effective technique available for the quantitative comparison of the model's simulated pattern to the actual pattern. Fortunately, the initial model's simulation developed in this study presents sufficient visual success to warrant, in this situation, acceptance of the so-called "eyeball" technique.

In short, then, the variables controlling the process of non-resident ownership are acting, not only as a diffusion at the macro or continuum level of investigation, but also, at the micro or township level of investigation.

Utilizing the concept of non-resident ownership taking place on low valued non-resident land when only low valued land remains, tends to support the impression of an ongoing diffusion process which, although deterred or spatially hindered in some places, eventually diffuses into those places. This idea was given additional support in Chapter Four in the examination of the "high capability agricultural land" hypothesis. In that chapter, it was seen that although Elderslie

Township is predominantly comprised of high capability agricultural land, the diffusion has been an ongoing process in that township.

In conclusion, it should be restated that this study has provided, at best, a partial understanding of the diffusion of non-resident ownership in the countryside of Bruce County. Hopefully, this study's historical examination of the process by means of 'a priori' and 'a posteriori' analysis has contributed to such an understanding and, in turn, provides a suitable springboard for additional research and comprehension of rural non-resident ownership.

APPENDICES

APPENDIX 1

Descriptive Legend

for

Soil Capability for Agriculture*

- CLASS 1 - Soils in this class have no significant limitations in use for crops. The soils are deep, are well to imperfectly drained, hold moisture well, and in the virgin state were well supplied with plant nutrients. They can be managed and cropped without difficulty. Under good management they are moderately high to high in productivity for a wide range of field crops.
- CLASS 2 - Soils in this class have moderate limitations that restrict the range of crops or require moderate conservation practices. The soils are deep and hold moisture well. The limitations are moderate and the soils can be managed and cropped with little difficulty. Under good management they are moderately high to high in productivity for a fairly wide range of crops.
- CLASS 3 - Soils in this class have moderately severe limitations that restrict the range of crops or require special conservation practices. The limitations are more severe than for Class 2 soils. They affect one or more of the following practices: timing and ease of tillage; planting and harvesting; choice of crops; and methods of conservation. Under good management they are fair to moderately high in productivity for a fair range of crops.

*Canada Land Inventory, Soil Capability for Agriculture (Ottawa: Queen's Printer, 1967).

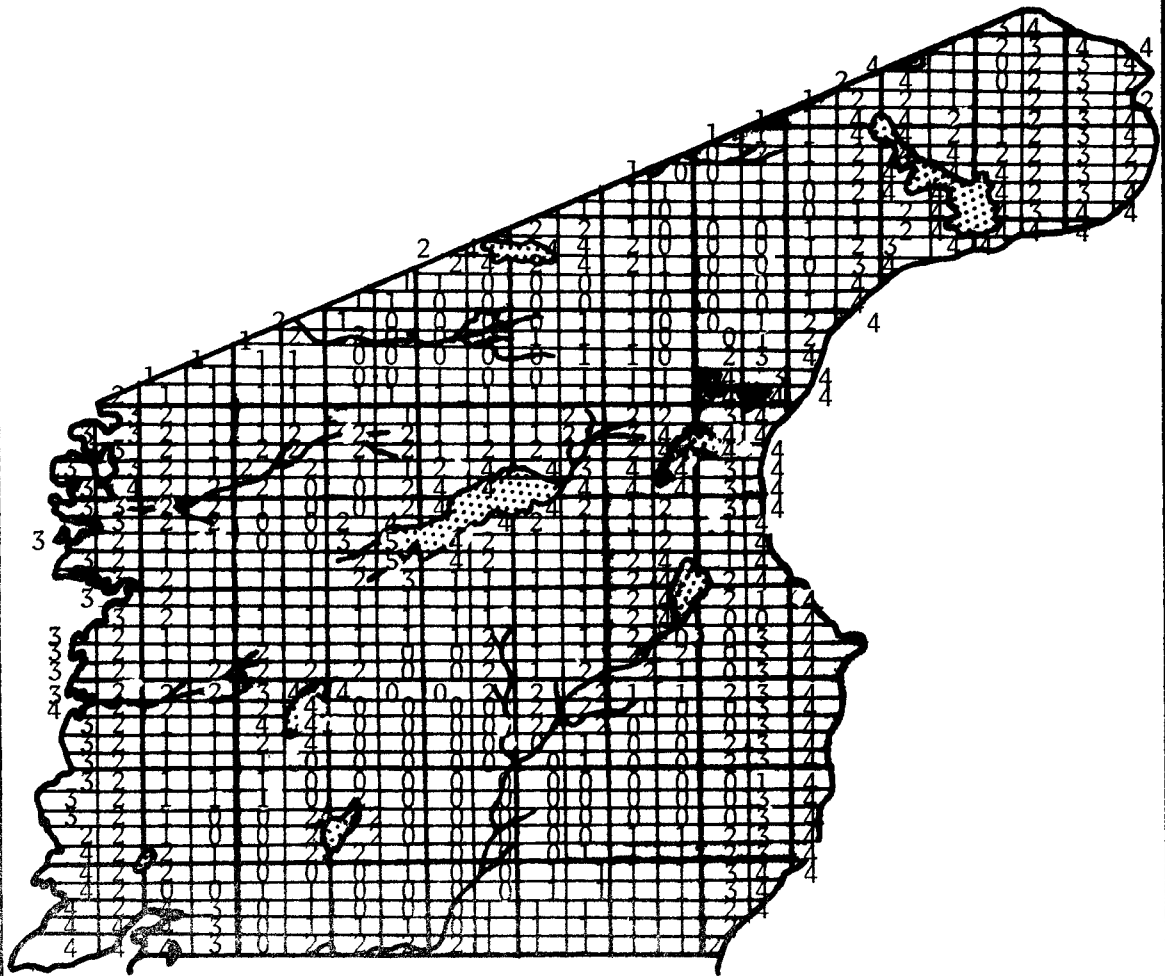
- CLASS 4 - Soils in this class have severe limitations that restrict the range of crops or require special conservation practices, or both. The limitations seriously affect one or more of the following practices: timing and ease of tillage; planting and harvesting; choice of crops; and conservation methods. The soils are low to fair in productivity for a fair range of crops but may have high productivity for a specially adapted crop.
- CLASS 5 - Soils in this class have very severe limitations that restrict their capability to producing perennial forage crops, and improvement practices are feasible. The limitations are so severe that the soils are not capable of use for sustained production of annual field crops. The soils are capable of producing native or tame species of perennial forage plants, and may be improved by use of farm machinery. The improvement practices may include clearing of brush, cultivation, seeding, fertilizer, or water control.
- CLASS 6 - Soils in this class are capable only of producing perennial forage crops, and improvement practices are not feasible. The soils provide some sustained grazing for farm animals, but the limitations are so severe that improvement by use of farm machinery is impractical. The terrain may be unsuitable for use of farm machinery, or the soils may not respond to improvement, or the grazing season may be very short.
- CLASS 7 - Soils in this class have no capability for arable culture or permanent pasture. This class also includes rockland, other non-soil areas, and bodies of water too small to show on the maps.
- CLASS 0 - Organic Soils (Not placed in capability classes).

APPENDIX 2

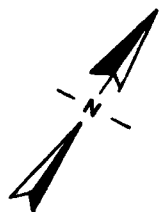
TOTAL NON-RESIDENT OWNED ACRES
FOR TWELVE STUDY TOWNSHIPS
1900 - 1974

TIME PERIODS	HURON	KINLOSS	CULROSS	CARRICK	BRANT	ELDERSLIE	ARRAN	AMABEL	ALBERMARLE	EASTNOR	LINDSAY	ST. EDMUND
1900	2,375	1,250	1,300	---	1,025	2,150	3,275	900	4,700	2,950	14,125	8,700
1920	3,000	775	600	---	325	2,775	925	1,400	3,500	4,425	24,925	29,525
1940	2,800	1,200	1,150	2,100	3,400	2,850	900	2,225	3,000	9,125	21,000	38,375
1950	3,200	1,350	1,750	1,800	3,100	2,350	550	2,325	2,800	7,100	19,150	35,150
1960	3,600	3,375	1,850	3,100	3,325	3,100	3,525	5,850	4,925	14,050	22,775	40,800
1974	9,175	7,700	5,650	5,075	8,000	8,675	7,725	14,150	17,550	19,825	30,500	43,500

APPENDIX 3
TOTAL ASSIGNED GRID VALUES
Lindsay Township



3
3
PARSONS



 Lakes

Scale in Miles
0 1

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