

THE IMPACT OF MODERNIZATION ON A
TRADITIONAL REGIONAL SYSTEM:
THE CASE OF INNER PLACENTIA BAY,
NEWFOUNDLAND, 1911 - 1966

CENTRE FOR NEWFOUNDLAND STUDIES

**TOTAL OF 10 PAGES ONLY
MAY BE XEROXED**

(Without Author's Permission)

HOWARD CECIL BROWN



THE IMPACT OF MODERNIZATION ON
A TRADITIONAL REGIONAL SYSTEM:
THE CASE OF INNER PLACENTIA
BAY, NEWFOUNDLAND, 1911 - 1966

by



Howard Cecil Brown, B.A. (Hons.)

A Thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Arts

Department of Geography
Memorial University of Newfoundland
April 1985

Permission has been granted to the National Library of Canada to microfilm this thesis and to lend or sell copies of the film.

The author (copyright owner) has reserved other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without his/her written permission.

L'autorisation a été accordée à la Bibliothèque nationale du Canada de microfilmer cette thèse et de prêter ou de vendre des exemplaires du film.

L'auteur (titulaire du droit d'auteur) se réserve les autres droits de publication; ni la thèse ni de longs extraits de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation écrite.

ISBN 0-315-43336-1

Abstract

Since the early twentieth century and particularly during World War II and in the post Confederation era Newfoundland has experienced the impact of the modernization process. Increased urbanization, a more diversified economy, and a vast improvement in transportation and communication are among some of the major developments arising out of this process. However its impact has not affected all regions of the province in the same way. Growth has tended to occur primarily in traditional urban areas, in new towns created to exploit mineral and forest resources and/or in centers where changes in the transportation and communication network have presented additional employment opportunities.

Some rural areas of Newfoundland have also benefited by the modernization of the fishery. Communities which have been able to attract modern year round fresh fish filleting and freezing facilities and the large modern trawlers and draggers to supply the facility have grown. So too have some communities with a seasonally operated facility supplied by the inshore fishery. However for the majority of the fishing settlements, which were established during the late eighteenth or early nineteenth century, when dried salted codfish was the main product, modernization in the fishing industry has had a negative impact. Larger boats, equipped with marine engines and catching a variety of species have

meant that it is no longer necessary for fishermen to reside in small isolated communities. Moreover as the traditional dried salted cod industry declined, and emphasis was focused on the fresh frozen fish industry, access to the modern plant capable of processing many species became more crucial, and both the transportation and communication linkages took on an increased importance. Just as the modern fish processing facilities had evolved in communities with a locational advantage, so too have health care, educational and social facilities. As a result many small traditional marine resource based communities increasingly found themselves at both an economic and social disadvantage.

This thesis is an attempt to look at the impact of the modernization process on a traditional fishing region, Inner Placentia Bay on Newfoundland's south coast, during the period 1911 - 1966. The method chosen was the historic - geographic technique of examining an area through successive cross sectional analysis in time. By using census and related material it is possible to explain and show how the region's marine and other resources were originally utilized and how these traditional patterns were affected by changing economic and marketing conditions and by improvements in fishing technology. The thesis concludes by examining the region's response to the broader modernization process that was occurring in Newfoundland, particularly for the period 1939 - 1966.

Acknowledgements

There are a number of people to whom I am indebted in the preparation of this thesis. Dr. Michael Staveley, Department of Geography, has been a constant source of encouragement, and under his skillful guidance and helpful advice this thesis began to take shape.

I also wish to thank Dr. John Mannion, Dr. A.G. Macpherson, Dr. Colin Banfield, Dr. R. Rogerson, Dr. Chris Sharpe and Dr. William Summers of the Department of Geography at Memorial University of Newfoundland as well as Mr. C. Wood, Mr. G. McManus and Mr. C. Conway for their assistance and advice regarding the maps. David McNeil, Craig Cummings and Glenda Dawe also assisted in preparing the maps and checking the source material.

The staff of the Arts and Culture Reference Library as well as the Centre for Newfoundland Studies at Memorial University have been very helpful. The staff and my fellow colleagues at the Provincial Archives of Newfoundland and Labrador have not only brought to my attention useful pieces of information but have also been a source of encouragement.

I wish to acknowledge the financial assistance provided by the Canada Council and the Institute of Social and Economic Research at Memorial University who supported a short period of field research in the Inner Placentia Bay area.

Both my mother, A. Maude Brown and my wife Valerie have been a constant source of support and encouragement during the many months this thesis has been in progress. Finally, I also wish to thank L. Gallant who typed the thesis and assisted in its final preparation.

TABLE OF CONTENTS

| CHAPTER | | PAGE |
|---------|--|------|
| I | MODERNIZATION AND GEOGRAPHY | 1 |
| II | MODERNIZATION AND TRADITIONAL SOCIETIES - THE NORTHERN ATLANTIC CONTEXT | 9 |
| | Modernization in Newfoundland | 22 |
| | Introduction | 22 |
| | Nineteenth Century Newfoundland | 23 |
| | Population and Economy | 23 |
| | Twentieth Century Newfoundland 1900 - 1966 | 26 |
| | Newfoundland 1900 - 1939 | 27 |
| | Population | 27 |
| | Economy | 27 |
| | Transportation and Services | 31 |
| | Summary | 32 |
| | Newfoundland 1939 - 1966 | 33 |
| | Economy | 34 |
| | Transportation | 36 |
| | Communications | 38 |
| | Services | 38 |
| | Summary | 39 |
| III | THE PHYSICAL AND HISTORICAL SETTING | 40 |
| | The Physical Setting | 40 |
| | Geology | 40 |
| | Relief | 42 |
| | Soils and Vegetation | 45 |
| | Marine Topography and Oceanography | 46 |
| | Currents and Tides | 49 |
| | Climate | 50 |
| | Temperature | 50 |
| | Precipitation | 51 |
| | Fog | 53 |
| | Wind - Direction and Speed | 53 |
| | Summary | 59 |

CHAPTER

PAGE

| | |
|--|-----|
| Evolution of Early Settlement and Economy | 60 |
| Growth and Diversification 1857 - 1911 .. | 64 |
| Population | 64 |
| Fishery | 65 |
| Fishery Diversification | 67 |
| Transportation and Services | 69 |
| Summary | 70 |
| IV "TAKE ME BACK TO MY WESTERN BOAT LET ME FISH OFF CAPE ST. MARY'S | 73 |
| Population | 74 |
| Population Structure | 77 |
| Economy | 79 |
| Technology | 80 |
| Boats | 80 |
| Fishing Gear | 85 |
| Productivity and Income | 90 |
| Subsistence Agriculture | 100 |
| Livestock | 101 |
| Crops | 102 |
| Miscellaneous | 104 |
| Forests | 104 |
| Transportation and Communication | 106 |
| Religious Denominations and Education | 110 |
| Summary | 114 |
| V FAR BETTER CIRCUMSTANCES THAN EVER BEFORE | 116 |
| Population | 116 |
| Population Structure and Migration | 118 |
| Economy | 122 |
| Boats | 123 |
| Fishing Gear | 128 |
| Fisheries Productivity and Incomes | 129 |

| CHAPTER | | PAGE |
|---------|--|------|
| V | Forest Resources | 145 |
| | Transportation and Communication | 147 |
| | Religious Denominations and Education | 151 |
| | Summary | 153 |
| VI | AND IT'S HARD, HARD TIMES | 157 |
| | Population | 157 |
| | Population Structure and Migration | 159 |
| | Economy | 163 |
| | Fishery | 165 |
| | Boats | 165 |
| | Fishing Gear | 170 |
| | Productivity | 174 |
| | Subsistence Agriculture | 185 |
| | Livestock | 186 |
| | Crops | 186 |
| | Forest Resources | 190 |
| | Transportation and Communication | 191 |
| | Religious Denominations and Education | 195 |
| | Summary | 197 |
| VII | NOBODY EVER DID MORE FOR NEWFOUNDLAND THAN HITLER | 200 |
| | Population | 200 |
| | Population Structure and Migration | 203 |
| | Economy | 206 |
| | Fishery | 208 |
| | Boats | 208 |
| | Fishing Gear | 212 |
| | Productivity and Structural Change | 216 |
| | Western Boat Fishery | 221 |

| CHAPTER | | PAGE |
|---------|---|------|
| VII | The Bank Fishery | 224 |
| | Lobster Fishery | 228 |
| | Herring Fishery | 232 |
| | Whale Fishery | 236 |
| | Subsistence Agriculture | 241 |
| | Livestock | 241 |
| | Crops | 242 |
| | Forest Resources | 247 |
| | Transportation and Communication | 248 |
| | Shipping | 251 |
| | Medical Services | 252 |
| | Religious Denominations and Education | 255 |
| | Summary | 258 |
| VIII | WE ARE NOW LAUNCHED ... ON A STRANGE NEW SHIP | 260 |
| | Population | 261 |
| | Population Structure and Migration | 262 |
| | Economy | 266 |
| | Fishery | 268 |
| | Boats | 268 |
| | Gear | 269 |
| | Productivity and Structural Change | 270 |
| | The Bank and Western Boat Fishery | 275 |
| | The Lobster Fishery | 278 |
| | The Herring Fishery | 281 |
| | Whaling | 284 |
| | Subsistence Agriculture | 286 |

| CHAPTER | | PAGE |
|---------|--|------|
| VIII | Forests | 288 |
| | Transportation and Communication | 290 |
| | Roads | 293 |
| | Communications | 293 |
| | Shipping | 295 |
| | Medical Services | 298 |
| | Education | 300 |
| | Summary | 301 |
| IX | ... THERE IS A 'MOVING FEVER' IN THE BAY | 304 |
| | Population | 304 |
| | Population Structure and Migration | 307 |
| | Economy | 310 |
| | Fishery | 313 |
| | Boats | 313 |
| | Gear | 316 |
| | Productivity and Structural Change | 318 |
| | Subsistence Agriculture | 326 |
| | Forests | 327 |
| | Transportation and Communication | 328 |
| | Communications | 330 |
| | Shipping | 332 |
| | Medical Services | 334 |
| | Education | 336 |
| | Resettlement | 338 |
| | Summary | 341 |
| | Conclusion | 344 |
| | Bibliography | 357 |

LIST OF TABLES

| TABLE | | PAGE |
|-------|--|------|
| 2.1 | Newfoundland - Occupational Structure 1901 | 25 |
| 2.2 | Newfoundland - Occupational Structure 1901 - 1921. | 28 |
| 2.3 | Newfoundland and Labrador Exports of Salted Cod 1940 - 1966 | 35 |
| 2.4 | Newfoundland and Labrador - Road Mileage and Registered Motor Vehicles 1950 - 1966 | 37 |
| 3.1 | Argentia, Newfoundland - Approximate Sea Surface Temperature 1942 - 1963 | 48 |
| 3.2 | Average Monthly Temperature in °C, Inner Placentia Bay (And Argentia) | 51 |
| 3.3 | Average Monthly Precipitation, Inner Placentia Bay (and Argentia) - Precipitation in mm. and Days with Precipitation | 52 |
| 3.4 | Number of Settlements By Population Size and Total Population - 1836, 1845, 1857 | 62 |
| 3.5 | Inner Placentia Bay - Fishing Boats 1836, 1845, 1857 | 63 |
| 3.6 | Inner Placentia Bay - Agriculture Statistics 1836, 1845, 1857 | 64 |
| 3.7 | Number of Settlements by Population Size, and Total Population 1857, 1874, 1884, 1891, 1901, 1911 | 65 |
| 3.8 | Placentia Bay - Fishing Boats 1874, 1884, 1891, 1901, 1911 | 66 |
| 3.9 | Average Production of Dried Codfish for Selected Areas Per Inhabitant 1874, 1884, 1891, 1901, 1911 | 67 |
| 3.10 | Inner Placentia Bay - Agriculture Statistics 1874, 1884, 1891, 1901, 1911 | 69 |

| TABLE | PAGE |
|---|------|
| 3.11 Placentia Bay - Social Facilities and Personnel 1874 - 1911 | 70 |
| 4.1 Inner Placentia Bay - Settlements By Population Size - 1901, 1911 | 75 |
| 4.2 Inner Placentia Bay - Composition of Labour Force 1911 | 79 |
| 4.3 Composition of Labour Force - By Selected Community 1911 | 80 |
| 4.4 Inner Placentia Bay - Livestock Holdings and Value 1911 | 101 |
| 4.5 Inner Placentia Bay - Hay and Vegetable Production and Value 1911 | 102 |
| 4.6 Inner Placentia Bay - Religious Affiliation - 1911 | 110 |
| 5.1 Inner Placentia Bay - Settlements By Population Size 1911 - 1921 | 117 |
| 5.2 Inner Placentia Bay - Composition of the Labour Force 1911 and 1921 | 122 |
| 5.3 Rose au Rue, Whales Taken and Whale Products 1911 - 1915 | 137 |
| 5.4 Inner Placentia Bay - Livestock Holdings 1911 - 1921 | 140 |
| 5.5 Inner Placentia Bay - Crop Production 1911 - 1921 | 142 |
| 5.6 Agricultural and Livestock Price Changes 1911 - 1921 | 144 |
| 5.7 Inner Placentia Bay - Forest Products 1911 - 1921 | 145 |
| 5.8 Inner Placentia Bay - Religious Affiliation 1911 - 1921 | 152 |
| 6.1 Inner Placentia Bay - Settlements By Population Size 1921 - 1935 | 158 |

| TABLE | PAGE |
|--|------|
| 6.2 Inner Placentia Bay - Composition of the Labour Force 1921 and 1935 | 164 |
| 6.3 Inner Placentia Bay - Fishing Schooners and Vessels 1935 | 166 |
| 6.4 Newfoundland and Labrador Exports of Salt Cod and Average Price 1921 - 1935 | 176 |
| 6.5 Production of Newfoundland Lobster Fishery 1928 - 1935 | 178 |
| 6.6 Newfoundland Exports of Pickled, Frozen and Bulk Herring 1921 - 1935 | 180 |
| 6.7 Rose au Rue - Whaling Statistics 1928 - 1930.. | 182 |
| 6.8 Inner Placentia Bay - Livestock Holdings 1921 - 1935 | 185 |
| 6.9 Inner Placentia Bay - Crop Production 1921 - 1935 | 186 |
| 6.10 Inner Placentia Bay - Value of Crops and Livestock 1935 | 190 |
| 6.11 Inner Placentia Bay - Religious Affiliation 1921 - 1935 | 195 |
| 7.1 Inner Placentia Bay - Settlements By Population Size - 1935 and 1945 | 201 |
| 7.2 Inner Placentia Bay - Regional Population Distribution 1911 - 1945 | 202 |
| 7.3 Inner Placentia Bay - Migration Depletion By Age Groups 1921 - 1935, 1935 - 1945 | 205 |
| 7.4 Inner Placentia Bay - Composition of The Labour Force - 1935 and 1945 | 207 |
| 7.5 Inner Placentia Bay - Fishing Schooners and Vessels 1935 and 1945 | 209 |
| 7.6 Placentia Bay - Inshore Codfishery Returns 1937 - 1945 | 220 |

| TABLE | PAGE | |
|-------|--|-----|
| 7.7 | Fresh, Frozen and Chilled Cod, Haddock, Rosefish, Hake, Flounder and Halibut Production 1938 - 1945 | 227 |
| 7.8 | Newfoundland Exports of Tinned and Live Lobster 1935 - 1936 to 1944 - 1945 | 229 |
| 7.9 | Placentia Bay - Lobster Factories and Tinned Lobster Production, 1937 - 1945 | 230 |
| 7.10 | Newfoundland: Exports of Pickled; Round; Split Scotch; Dressed; Vinegar; and Matje Herring 1935 - 1936 and 1944 - 1945 | 233 |
| 7.11 | Newfoundland and Labrador - Exports of Whale Oil and Guano 1935 - 1936 and 1944 - 1945 | 236 |
| 7.12 | Rose Au Rue - Whale Oil and Guano Production 1942 - 1944 | 238 |
| 7.13 | Inner Placentia Bay - Livestock Holdings 1935 and 1945 | 241 |
| 7.14 | Inner Placentia Bay - Crop Production 1935 - 1945 | 244 |
| 7.15 | Inner Placentia Bay - Religious Affiliation 1935 - 1945 | 255 |
| 8.1 | Inner Placentia Bay - Settlements By Population Size 1945 - 1956 | 261 |
| 8.2 | Number of Births and Marriages For the Districts of Placentia West and Placentia - St. Mary's 1945 - 1956 | 265 |
| 8.3 | Inner Placentia Bay - Composition of the Male Labour Force 1955 | 266 |
| 8.4 | Fishing Gear - 1945 and 1956 | 269 |
| 8.5 | Newfoundland and Labrador Exports of Salt Cod and Average Price 1946 - 1956 | 271 |
| 8.6 | Newfoundland Lobster Production and Average Prices 1945 - 1956 | 279 |

| TABLE | PAGE |
|--|------|
| 8.7 Newfoundland Exports of Pickled Herring and Average Value 1945-46 - 1956 | 282 |
| 8.8 Newfoundland and Labrador - Exports of Whale Oil and Meal 1945-46 - 1951 | 285 |
| 8.9 Harbour Buffett - Shipping Statistics 1952 - 1955.. | 296 |
| 9.1 Inner Placentia Bay - Settlements by Population Size 1956 - 1966 | 305 |
| 9.2 Inner Placentia Bay - Composition of the Male Labour Force 1955 and 1966 | 311 |
| 9.3 Inner Placentia Bay - Composition of the Female Labour Force 1955 and 1966 | 312 |
| 9.4 Placentia Bay - Powered Fishing Craft Under 10 Tons 1962 - 1966 | 314 |
| 9.5 Placentia Bay - Fishing Craft Over 10 Tons 1962 - 1966 | 315 |
| 9.6 Placentia Bay - Fishing Gear 1956 - 1966 | 317 |
| 9.7 Placentia Bay - Cod Landings and Value Landed 1956 - 1966 | 319 |
| 9.8 Placentia Bay - Lobster Landings and Value Landed 1956 - 1966 | 320 |
| 9.9 Placentia Bay - Herring Landings and Value Landed 1956 - 1966 | 321 |
| 9.10 Placentia Bay - Total Average Fishermen's Income and Inshore Fishermen's Average Income From Cod, Lobster and Herring Fishery 1956 - 1966 | 322 |

LIST OF FIGURES

| FIGURE | | PAGE |
|--------|---|------|
| 3.1 | Inner Placentia Bay | 41 |
| 3.2 | Inner Placentia Bay - Main Geological Features | 43 |
| 3.3 | Inner Placentia Bay - Relief | 44 |
| 3.4 | Inner Placentia Bay - Water Depths | 47 |
| 3.5 | Argentia, Newfoundland - Restricted Visibility | 54 |
| 3.6 | Argentia, Newfoundland - Annual Wind Direction, Percentage Frequency 1956 - 1969. | 55 |
| 3.7A | Argentia, Newfoundland - Average Monthly Wind Speed 1942 - 1963 | 57 |
| 3.7B | Argentia, Newfoundland - Average Monthly Frequency of Wind Speeds 1942 - 1963 | 58 |
| 3.8 | Inner Placentia Bay Fishing Stations 1750 - 1810 | 61 |
| 4.1 | Inner Placentia Bay Population Distribution - 1911 | 76 |
| 4.2 | Inner Placentia Bay Population Structure 1911 | 78 |
| 4.3 | Inner Placentia Bay Fishing Boats - 1911 | 82 |
| 4.4 | Inner Placentia Bay Fishing Schooners - 1911 | 84 |
| 4.5 | Inner Placentia Bay Average Number of Nets and Lines Per Fisherman - 1911 | 86 |
| 4.6 | Inner Placentia Bay Cod Traps - 1911 | 88 |
| 4.7 | Inner Placentia Bay Lobster Traps - 1911 ... | 89 |
| 4.8 | Inner Placentia Bay Codfish Production Quintals Per Fisherman - 1910 | 92 |

| FIGURE | | PAGE |
|--------|---|------|
| 4.9 | Inner Placentia Bay Tinned Lobster - 1910 | 93 |
| 4.10 | Inner Placentia Bay Herring - 1910 | 97 |
| 4.11 | Inner Placentia Bay Income From Fishing Per Fisherman - 1910 | 99 |
| 4.12 | Inner Placentia Bay Capital Value of Livestock Per Inhabitant - 1911 | 103 |
| 4.13 | Inner Placentia Bay Value of Agricultural and Animal Products Per Inhabitant - 1911 .. | 105 |
| 4.14 | Inner Placentia Bay Major Transportation Routes - 1911 | 107 |
| 4.15 | Inner Placentia Bay Communications System - 1911 | 109 |
| 4.16 | Inner Placentia Bay Religious Denominations - 1911 | 112 |
| 4.17 | Inner Placentia Bay - Percentage of Literacy By Community Size - 1911 | 113 |
| 5.1 | Inner Placentia Bay - Population Structure 1921 | 119 |
| 5.2 | Inner Placentia Bay - Population Depletion - 1911 - 1921 | 121 |
| 5.3 | Inner Placentia Bay Fishing Boats - 1921 ... | 126 |
| 5.4 | Inner Placentia Bay Fishing Schooners - 1921 | 127 |
| 5.5 | Inner Placentia Bay Cod Traps - 1921 | 130 |
| 5.6 | Newfoundland and Labrador - Exports of Salted Cod and Average Price 1910 - 1921 ... | 131 |
| 5.7 | Inner Placentia Bay Codfish Production Quintals Per Fisherman - 1920 | 133 |
| 5.8 | Inner Placentia Bay Tinned Lobster - 1920 .. | 134 |

| FIGURE | | PAGE |
|--------|--|------|
| 5.9 | Inner Placentia Bay Herring - 1920 | 136 |
| 5.10 | Inner Placentia Bay Income From Fishing Per Fisherman - 1920 | 139 |
| 5.11 | Inner Placentia Bay Capital Value of Live- stock Per Inhabitant - 1921 | 141 |
| 5.12 | Inner Placentia Bay Value of Agricultural and Animal Products Per Inhabitant - 1921 ... | 143 |
| 5.13 | Inner Placentia Bay Distribution of Sawmills - 1921 | 146 |
| 5.14 | Inner Placentia Bay Communications Systems - 1921 | 150 |
| 6.1 | Inner Placentia Bay - Population Structure - 1935 | 160 |
| 6.2 | Inner Placentia Bay - Population Depletion - 1921 - 1935 | 162 |
| 6.3 | Inner Placentia Bay Fishing Boats - 1935 .. | 168 |
| 6.4 | Inner Placentia Bay Vessels - 1935 | 169 |
| 6.5 | Inner Placentia Bay Cod Traps - 1935 | 171 |
| 6.6 | Inner Placentia Bay Cod Nets - 1935 | 173 |
| 6.7 | Inner Placentia Bay Herring Nets and Seines, Salmon Nets and Traps - 1935 | 175 |
| 6.8 | Inner Placentia Bay Income From Fishing Per Fisherman - 1934 | 184 |
| 6.9 | Inner Placentia Bay Capital Value of Live- stock Per Inhabitant - 1935 | 187 |
| 6.10 | Inner Placentia Bay Value of Agricultural And Animal Products Per Inhabitant - 1935 ... | 189 |
| 6.11 | Inner Placentia Bay Radios - 1935 | 193 |
| 7.1 | Inner Placentia Bay - Population Structure 1945 | 204 |

| FIGURE | | PAGE |
|--------|--|------|
| 7.2 | Inner Placentia Bay Fishing Boats - 1945 | 210 |
| 7.3 | Inner Placentia Bay Vessels - 1945' | 211 |
| 7.4 | Inner Placentia Bay Cod Traps - 1945 | 213 |
| 7.5 | Inner Placentia Bay Cod Nets - 1945 | 214 |
| 7.6 | Inner Placentia Bay Lobster Traps - 1945 | 215 |
| 7.7 | Inner Placentia Bay Herring Nets and Seines, Salmon Nets and Traps - 1945 | 217 |
| 7.8 | Inner Placentia Bay Income From Fishing Per Fisherman - 1945 | 240 |
| 7.9 | Inner Placentia Bay Capital Value of Livestock Per Inhabitant - 1945 | 243 |
| 7.10 | Inner Placentia Bay Value of Agricultural and Animal Products Per Inhabitant - 1945 | 245 |
| 8.1 | Inner Placentia Bay - Population Structure 1951 | 264 |
| 8.2 | Inner Placentia Bay Coastal Steamer Routes - 1950 | 291 |
| 9.1 | Inner Placentia Bay - Population Structure 1966 | 308 |

Chapter I Modernization and Geography

Many studies in geography and cognate areas of the social sciences are required to record and explain processes of change in economy and society. Increasingly, these changes in social, economic and spatial organization have come to be described by the general paradigm "modernization". There is, however, no single accepted definition of what constitutes modernization. For example, as Ohrling has pointed out:

Theories around the conceptual complex modernization/development have occupied a great number of writers in the twentieth century and the number of definitions and explanations of the concepts involved are almost as numerous as the authors themselves (Ohrling 1972:3).

Different scholars have perceived the phenomenon in different ways. Black, for example, saw it as

the process by which historically evolved institutions are adapted to the rapidly changing functions that reflect the unprecedented increase in man's knowledge, permitting control over his environment, that accompanied the Scientific Revolution (Black 1966:7).

Moore and Smelser are more precise; to them

Modernization may be political and social as well as economic. It means essentially becoming a member of the common pool of world knowledge and useful techniques, perhaps withdrawing much and adding little, but still sacrificing many time-encrusted customs for the sake of real or visionary benefits. Modernization involves adoption of the latest procedures in administrative

organization ... in mass communication and public health, and in education and occupational placement ... (Moore and Smelser 1965: 6).

Most scholars would agree, however, that economic and technological development are major components of the modernization process. Eisenstadt argued that from the economic point of view

Modernization entails the transition from relatively localized small-scale units of production, such as the family business and small factories, to larger units of production like big corporations which operate for more universal markets (Eisenstadt 1966: 6).

The economic process is affected by new production techniques, which in turn have an impact on society. As Foster points out

Associated with every technical and material change there is a corresponding change in the attitudes, the thoughts, the values, the beliefs, and the behaviour of the people who are affected by the material change. These non-material changes are more subtle. Often they are overlooked or their significance is underestimated (Foster 1962: 2-3).

Traditionally it has been the more common practice for geographers to deal with individual facets of modernization such as migration, urbanization, transportation or communications rather than attempt to cover the phenomenon as an integrated whole. Recently however, a more comprehensive approach toward modernization has been adopted in studies dealing with various developing countries, particularly in Africa. Such

studies by (Soja 1968), (Gould 1970), (Riddell 1970) and (Jones 1971) tend to follow a similar evolutionary approach but rely heavily for their exposition and analysis on quantitative and cartographic techniques. In some respects, however, these studies have different emphases. For example, Soja adopts the basic premise that economic, political and social change is manifested in both space and time and that geographical patterns of modernization are reflected in the varying degree of social mobilization throughout the state and are closely integrated in the development of a national network of communications. The geography of modernization can therefore be viewed as the outgrowth of interaction between traditional and modern communications systems (Soja 1968: 2-3).

The analyses of Gould and Jones differ from that of Soja in two respects. They employ the technique of selecting points in time and by sub-dividing Tanzania and Uganda into 289 and 308 cells respectively, ascribed each cell a value based on the presence or absence of roads and various administrative and economic functions (Gould 1970, Jones 1971). By this means they analyse and describe the evolving modernization process and its spatial expression.

Riddell considers the geography of modernization a function of two interrelated processes: a process of spatial diffusion facilitated by the development of a transportation infrastructure and the concomitant easing of circulation, and

4

the focusing of economic activity and human organization in new urban centers (Riddell 1970: xi, 13).

Leinback also emphasizes the importance of transportation. He argues that major linkages and feeder roads provide a connective matrix over which not only commodities, but also innovations, information and ideas flow. In addition, improved access fundamentally alters the relative location of a place and restructures the pattern of communication (Leinback 1975: 63).

Other geographers have emphasized different aspects of the modernization process. Zelinsky, for example, developed a sweeping hypothesis, which he terms the mobility transition. He stresses the role of migration claiming that "there are definite patterned regularities in the growth of personal mobility through space-time during recent history and these regularities comprise an essential component of the modernization process" (Zelinsky 1971: 221-222).

To Ohrling, on the other hand, modernization means "the creation and diffusion of innovations" (Ohrling 1972: 5). He did, however, draw attention to the fact that modernization has both positive and negative values. For example, Foster has noted that with modernization rural areas lose much of their traditional independence. For instance, decisions affecting such areas come from the outside, and an increasing dependence on a cash economy tends to erode traditional co-operation and work patterns (Foster 1962: 34, 47, 52).

One can see that there is a diversity of ways in which the geography of modernization can be approached at the macro-scale. Some geographers, however, have pointed out the limitations of these macro-studies and suggest that emphasis should be concentrated on process studies and smaller geographical units. Lundqvist, for example, in an important discussion assesses the relative significance of technical and methodological approaches to modernization studies. (Lundqvist 1974). He draws attention to Hagerstrand's analysis of the modernization process which emphasizes the shift from vertical linkages to horizontal linkages: pre-modern societies which rely mainly on primary modes of production tend to be characterized by vertical linkages and are therefore self-contained and self-supporting - these societies are "predominantly site and man environment oriented" (Lundqvist 1974: 109). Modernization implies a shift to horizontal linkages and we infer that in the process, the pre-modern society loses control of many aspects of its functioning - "it is of prime interest to find out what happens to a society in this process" (Lundqvist 1974: 109).

One of the major problems noted by Lundqvist is that many modernization studies are framed at such a macro-level that the diversity within each of the large administrative units entering into the technical analysis is sufficient to vitiate the results of that analysis (Lundqvist 1974: 110). At the

very least the "technical language" used by such analysis means that "many of the shades in the very complex process of modernization are not paid enough attention or may be misinterpreted" (Lundqvist 1974: 111).

Lundqvist concludes by suggesting that one of the major needs is to flesh out the macro-scale technical analysis, of which those cited previously may serve as examples, with micro-scale process studies: "it is of great importance to find out how the process of modernization functions" and especially, its process of "interaction between the traditional part of society and the modern part" (Lundqvist 1974: 111).

Given this, and given that the larger state is too large for faithful analysis "a suitable unit is a region or district" because "by working with smaller units one has the chance to go into details and to examine complex patterns of interaction and interdependency" (Lundqvist 1974: 112). A number of scholars have also pointed out that while model building and statistical analysis are useful tools for general hypothesis development they may not reflect faithfully the nuances of areal variation in systems and processes. Black, for example, noted that although there are common "problems and policies" contained in the phenomenon of modernization each country, area or society is "individual".

No two societies modernize in quite the same way - no two have the same base or resources and skills, no two have the same heritage of

7

traditional institutions, no two are at the same stage of development, and no two have the same pattern of leadership or the same policies of modernization (Black 1966: 95).

Hansen, in a study of marginal regions and regional disparity in Norway, concluded with an emphatic affirmation of this:

The relief intensity of the economic and social landscape is often as pronounced as the physical relief itself. Uniquenesses abound, spatial analysis must stay close to the observed empirical data. Inductions from observations, more than deductions from a general theory seem to be the most rewarding way of studying this country ... (Hansen 1972: 14).

Brookfield argues that the main deficiencies of most modernization studies in geography are the heavy emphasis on quantitative method and the reliance of central place theory for explanation of observed patterns:

These patterns in turn are based on an analysis of variables having a profound urban bias. Such an approach and methodology has resulted in preoccupation with description and reliance on the weak explanatory power of central place theory to the detriment of advances in other more innovative directions (Brookfield 1975: 113).

Many a geographer, Brookfield claims, has become so preoccupied in "demonstrating the superiority of this new paradigm over the descriptive empiricism of the past that he has become a 'superb craftsman ignorant of the material with which he is working'" (Brookfield 1975: 115-116).

Brookfield's own work on Melanesia (1971, 1972, 1973)

by contrast, collectively displays a more balanced view and provides both a better insight and understanding of the complex "modernization" process in a unique insular region, with its rich and varied history and traditions. Given the wide diversity of approaches by which the process and impact of modernization can be studied, this thesis will attempt to follow some of the guideposts as suggested by Brookfield, Hansen and Lundqvist in conjunction with the historical geographical method of utilizing successive cross sections through time. Though this approach, like any technique, has its drawbacks it also has strengths, for as Darby wrote

... the method of successive cross sections has much to be said for it, especially if the cross sections are so chosen as to coincide with marked changes in an area as a whole (Darby 1953: 6).

Chapter II Modernization and Traditional Societies -
The Northern North Atlantic Context

Much of the current substantive research on modernization has dealt with the implementation of modernizing systems in developing or so-called third world countries. Newfoundland, Canada's persistently poorest province, exhibits some similarities with such countries. But for both historical and geographical reasons it should be assessed against other peripheral regions in the northern North Atlantic area. The pattern in this wider region has been not so much the rapid imposition of modernization from outside but rather a tendency to lag behind and attempt to adjust to the more industrialized and urban sector of the larger region. In both Norway and Northern Scotland, for example, a land environment of marginal agricultural potential faces seas which are generally productive by comparison: both these areas have for centuries sustained coastal populations of farmer-fishermen who by cultivating small areas and by grazing large areas of rough land and by fishing have succeeded in utilizing the varied resources. By adopting a strategy of pluralism - varied year round activity - they have managed to survive (Coull, 1971: 1).

Turnock, writing on the Scottish Highlands, points out that as long as communities retained a large measure of self-sufficiency, remoteness did not raise very serious problems.

Groups of crofter-fishermen settled in relatively inaccessible places would not be in competition with other elements in the estate economy. However, greater use of education, medical and postal services and the distribution of foodstuffs and other goods meant that remoteness, once a protection, became a handicap (Turnock 1974: 32). Similarly, Coull notes that the industrial age with its increased economic activity and its concentration of population in central places brought pressure to bear on the traditional way of life in Norway and Highland Scotland, and one effect of this has been to promote an occupational separation between fishing and crofting. The traditional way of life included a large element of subsistence, but a fuller participation in an exchange economy together with the greater capital investment it demands and the higher cost of living, prompted men to become either full-time crofters or full-time fishermen, or to take up other occupations (Coull 1971: 1)..

The transition to specialization or concentration however is seldom easy or automatic. For though specialization may bring greater individual productivity, it frequently implies fewer jobs - and therefore fewer people. These structural problems are compounded by locational factors such as availability of raw materials, transportation costs and accessibility to markets which make it difficult to attract industry to such areas. Consequently, growth has tended to occur in

more favourable regions.

The Highlands and Islands of Scotland have been influenced by the modernization process longer than most other northern north Atlantic regions. They also occupy a geographical location not dissimilar to Newfoundland - both are peripheral to a highly modernized and urbanized society. For these reasons this is perhaps a good area within which to examine briefly the impact of modernization and to seek analogies with the Newfoundland situation.

Traditionally the Highlands and Islands of Scotland had an economy based on grain cultivation and the raising of livestock. The settlers were virtually self-sufficient. Excess products were sold to pay rents and purchase goods that could not be produced locally (Darling 1955: 1-5). St. Kilda was a classic, if rather extreme example of this type of society and economy (Steel 1965).

During the late eighteenth and early nineteenth century this pattern was disrupted. More effective means to control smallpox together with the growth of the kelp industry and widespread use of the potato brought important changes. For example, potato cultivation required far less land than grain, so sub-division was common, and with the kelp industry providing a significant amount of employment and income this region experienced its peak in terms of population growth. The collapse of the kelp industry together with failures of the potato crop as well as the consolidation of estates set

in motion a process of population decline that has continued to the twentieth century. The population of the Scottish west coast and adjacent islands increased from 114 884 in 1775 to peak at 200 955 in 1831; decreased to 158 738 by 1901; and to 119 071 in 1951. The percentage ratios of those population to that of Scotland as a whole were 9.1%, 8.5%, 3.5%, 2.3% (Darling 1955: 76).

This decline was partly attributable to internal economic forces but these were accentuated by the introduction from burgeoning industrial Britain of some of the main components of modernization. For instance, this area was one of the first peripheral areas to experience innovations in transportation. As early as the 1830s steam boats were in operation between both mainland Scotland and the Hebrides, and also to the Orkney and Shetland Islands (Nicholson 1972: 78; and Bailey 1971: 122). This innovation was of profound importance:

The steamer service ... was the most potent force for change in Orkney, in that it gave the island farmers reliable trade connections with southern markets and allowed the rapid and certain transfer of mails, newspapers and other sources of information from the south (Bailey 1971: 122).

Road networks were also extended in this region and automobiles were introduced very early in the twentieth century. By 1914 cars were common in Mull and by 1938 a relatively isolated area like the Shetland Islands had over 1 100 automobiles (MacNab 1970: 119; Nicholson 1972: 108). During the 1930s air services were extended to the larger islands

(Thompson 1968: 77).

This area also experienced improvement in its communications network at an early date. Telegraph cables were extended to Lewis and Harris in 1872 and to Shetland in 1876. Telephone service was introduced at Lewis in 1897, at Shetland in 1907 and at Orkney in 1914 (Bailey 1971: 46; Thompson 1968: 83; Nicholson 1972: 112-113).

While these improvements served to alleviate the problems of isolation they also implied other changes. In Orkney, for example, the process of land consolidation prompted agricultural improvements such that the raising of beef cattle for export became the main economic base (Bailey 1971: 120-121, 136).

Perhaps, however, in no other industry was there more change than in the fishery, and since it suggests more obvious parallels with Newfoundland it merits more attention. The Shetland Islands illustrate clearly the long run structural and spatial changes arising from sustained modernization in the fishery.

Traditionally, Shetland fishing was carried on in small four-oared inshore boats. During the 1700s a combination of factors led to an expansion in the fishery. An increasing population, a local supply of capital, a bounty on dried fish, and the opening of new markets contributed to this development. This expanded fishery was effected by six-oared boats of up to thirty feet which fished up to 40 miles offshore.

It was not unusual for such boats to land 90 tons of wet fish in a season (Goodlad 1971: 91-109).

The fishing expansion brought about internal changes in the islands. New settlements were founded and existing settlements expanded. The number of inhabited islands rose from 26 in 1711 to 33 in 1733 and the village of Scalloway increased from 20 families in 1733 to 60 families in 1774 (Goodlad 1971: 95, 114).

During the early 1800s sail powered decked boats were introduced. The range of operations was greatly extended and by mid-century smacks of 50 tons or more were fishing at the Faroes, Iceland, and even Greenland. Improved methods of marketing and processing were established. By 1840 an inspection system for dried fish was having a positive effect in the foreign export markets. By 1850 an artificial method of steam drying cod was also in operation (Goodlad 1971: 137-154).

Despite these innovations the schooner or "smack" fishery was facing problems by the 1880s. New steam trawlers were taking cod on the local banks; the Faroese were developing their own smack fishery; and fishing crews were attracted to the merchant navy and the expanding local herring fishery (Goodlad 1971: 157). The smack fishery brought about spatial changes for the larger vessels required sheltered bays and suitable locations for unloading. It also fostered a

separation between fishing and farming: by 1901 only 701 out of a total of 2 614 fishermen were crofter-fishermen (Goodlad 1971: 149).

Early in the 1900s emphasis in the fishery shifted to herring and steam powered drifters were introduced. This fishery peaked prior to 1914 when marketing and other problems contributed to its decline. More recently, technological improvements such as diesel engines, radar, echo-sounder, decca-navigator and radio telephones as well as more efficient fishing gear became common, and different vessels and strategies have been adopted. By the 1960s fishing was dominated by vessels of less than 50 tons dragging for groundfish, while smaller boats utilized the shell-fish resource. Centralization continued with the catching becoming localized in a few districts while processing and servicing facilities became concentrated at the two main centres of population (Goodlad 1971: 260-271, 292, 301-303).

The Scottish fishery as a whole has experienced similar trends. The number of registered craft fell from 5 067 in 1938 to 2 937 by 1965. The size structure of the fleet is indicated by the 1 666 boats over 30 feet in 1938, but 1 012 over 40 feet in 1965. The number of fishermen declined from 17 915 to 10 157, while crofter-fishermen fell from 4 067 to 875 during the same period (Coull 1968: 23 - 25). The total catch however was 7 543 581 cwts in 1965 and 5 473 018

cwts in 1938 (Scottish Sea Fisheries Statistical Tables 1965).

The progress of modernization in Norway shows similarities to that of the Highlands and Islands of Scotland, but it occurred against a different historic background and a different approach to resource utilization. Symes, for example, argues that the western Norwegian islands were less isolated and more highly integrated with the mainland areas. He also suggests that such islands were more aware of the advantages of an Atlantic fringe location and utilized both inshore and distant waters (Symes 1968:2).

Nevertheless, there were important changes in the settlement pattern and population distribution. For example, the number of inhabited islands off the Norwegian coast has fallen from 2 141 in 1946 to 1 686 in 1960; while the number of fishermen fell from 85 518 in 1948 to 60 897 in 1960 (Symes 1968: 1, 39). Other primary resource sectors have experienced similar trends. For example, Hansen in a study of mountain areas noted that between 1960 and 1970, 48 of 73 communes experienced population decrease and between 1959 and 1969 the number of farms of ≥ 5 hectares fell by 22% (Hansen 1976: 214-216). On the other hand, Hansen also noted that whereas in 1900 only a little more than one-third of the population lived in settlements with the minimum of 200 inhabitants, by 1970 two-thirds of the population lived

in such settlements (Hansen 1972: 1).

Modernization of Norway's industries has occurred later than in the Scottish Islands and the shape of Norway combined with its rugged terrain has slowed the development of transportation and communications. Sund points out that regular coastal boat service was started only in 1893 and it was 1909 before the railroad was completed between Oslo and Bergen. More recently these same problems have confronted the extension of the road network and the development of air services (Sund 1961: 282-285).

Few regions of the northern north Atlantic have experienced the modernization process as late or as rapidly as Iceland. Traditionally, agriculture provided the mainstay of the Icelandic economy and the fishery was undeveloped. However, with the introduction of decked boats around 1890 the fishing industry began both rapid expansion and modernization. After 1900 auxiliary motors were installed in the fishing schooners and by the mid-1920s Iceland owned more than 40 trawlers (Thorarinnsson 1961: 220; Jensen 1954: 189).

World War II acted as a further catalyst for change. Large numbers of British and American troops were stationed in the island and the construction of bases as well as their maintenance brought employment opportunities and helped to break down isolation (Kristinnsson 1973: 59).

These and subsequent developments have had significant

10

spatial implications: In 1915 only about 2% of Iceland's 6 400 farms were abandoned - by 1961 the number of farms was 7 300 and 26% were deserted. Population concentrated in villages and larger centres; while Iceland's total population increased from 71 000 in 1890 to 194 000 in 1965, the rural district percentage plummeted from 89% to less than 18% (Stone 1971: 11). Urban growth however has not been uniform but has concentrated on the Reykjavik area - in 1900 about 8% of Iceland's population lived there, but by 1960 this had increased to 40%. By 1970, 53% of the population lived in Reykjavik and nearby towns (Kristinsson 1973: 59).

Iceland's remote location, however, delayed the introduction of more modern transportation and communications systems. For example, automobiles did not come into use until 1915 and by 1927 there were only 504 motor vehicles in the country. Coastal boat service was not developed until after 1900 and air services were not established on any scale until the Second World War. In addition it was 1906 before Iceland was connected with the outside world by submarine telegraph cable (Jensen 1954: 256 - 268).

The introduction of modernizing technology in the Faroes has followed a pattern similar to that of Iceland. A smack fishery was transformed into a trawler fishery. Changes in processing fish products have also occurred. For example, exports of iced fish and frozen fillets rose from 1/2% of

total export value in 1938 to 25.2% in 1969 (West 1972: 126-129, 253, 270). The modernization of the fishing fleet and the development of fishery-related industry has led to urbanization. While the population of the Faroes increased 16.5% between 1950 and 1966, Torshaven increased by 30.8% between 1960 and 1966. Population loss has occurred on the more remote islands, though the extension of the road and ferry network has enabled some islands to retain their inhabitants (West 1972: 220-224).

While Sweden is situated geographically outside the confines of the northern north Atlantic it merits attention as the impact and implications of modernization have received considerable attention from Swedish geographers. In addition to important theoretical and empirical work on migration, the problems of depopulated rural communities have been studied (Rundblad 1957) and also the impact of new technology on the traditional economy (Eriksson 1960). Similarly, Norling (1960) and Enequist (1960) have examined the retreat and abandonment of rural settlement.

Some indication of the extent of this process on Sweden can be gauged from the fact that whereas over 80% of Sweden's population lived in rural areas during the 1880s, by 1960 only about 25% did so (Norling 1960: 232; Aldskogius 1970: 131).

Similarly, in the Aland Islands, Mead found that despite

a broader economic base the Alands face many of the problems encountered by other island groups. Urbanization has occurred at a rapid pace - whereas the total population remained stable between 1950 and 1960, Marieham's population rose from 14.8% of the total in 1950 to 31.9% by 1960. Many islands have been deserted and others have demographic imbalances. One of the most serious problems in the islands was the lack of employment opportunities for women and frequently their temporary migration for employment became permanent emigration (Mead 1964: 7-8, 33-37).

In addition, some micro studies from western Ireland, while being more sociological in nature than geographic, focus attention on social reaction and adaptation to modernization. Messenger and Brody point out some of the tensions, limitations and conventions residents are subjected to and emphasize that some residents moved for social as much as economic reasons (Messenger 1969; Brody 1973). Aalen and Brody have also assessed in depth and with considerable understanding the plight of one island on the verge of abandonment off the coast of Donegal (Aalen and Brody 1969).

The processes operating in northern Europe have had a profound effect on Canada as well. Canada's population is also increasingly more urbanized. For instance, 64% of Canada's population was classified as rural in 1901 but by 1961 this had fallen to 30%. The decline of the rural farm

population was more pronounced, from 32% in 1931 to only 11% in 1961 (Tremblay and Anderson 1966: 11-12).

Urbanization in the Atlantic region however has proceeded at a slower pace than in Canada as a whole: in 1961, Nova Scotia, the most urbanized Atlantic province, still had 45.7% of its population classified as rural. Since Nova Scotia is the nearest province to the greater part of the island of Newfoundland and because it has been more involved with the fishery than the other Maritime Provinces it provides a useful comparison. Nova Scotia has also been subjected to the same processes which have affected the European countries of the northern north Atlantic. For example, there has been a significant decrease in the work force engaged in the primary sector, particularly in agriculture and fishing. Whereas 31.7%

of the male work force was employed in agriculture and 9.7% in the fishery in 1911 by 1961 only 6.7% remained in agriculture and 4.2% in the fishery (Census of Canada 1961: 3.3, 3.4).

Being an appendage of the North American continent, and particularly the most technologically advanced and industrialized part of that continent, has given Nova Scotia a tremendous advantage. In addition to economic advantages it has meant that modern transportation and communications could be introduced earlier than in most of the northern Atlantic region (i.e. railroads, automobiles, telephones, telegraph).

This brief survey indicates clearly some of the ways in which the traditional economy and society of various North-Atlantic peripheries have been affected by modernization. As Paget points out, using a military analogy

It is no longer necessary to deploy so many human beings in detail and dispersal near the "front-line". They may be held in more effective economic concentrations farther back and yet ... be capable of still more efficient economic exploitation of the forward areas without actually committing people to live there (Paget 1960: 324).

However the evidence shows these processes operating at different rates in different places and consequently it suggests the need for careful detailed local study. In essence, the variations in the scale and pace of modernization give force to Lundqvist's plea for micro-scale studies to examine "the process of modernization functions" (Lundqvist 1974: 111).

Modernization in Newfoundland

Introduction

Although Newfoundland was one of the earliest areas of North America to be explored it remained sparsely populated until the nineteenth century. Newfoundland's terrestrial resources were marginal compared to the rich marine resource found along its coasts and on the Grand Banks. The fishery was seasonal and was prosecuted from Europe on a migratory basis.

During the period 1775 to 1815 Newfoundland changed from a migratory to a sedentary fishery. A number of factors were responsible for this. During the Napoleonic Wars fish prices increased dramatically, French competition being reduced in the European markets. Higher wages for fishermen and servants attracted migrants from south-west England and south-east Ireland (Mannion 1977: 5-10). In the 1770s some 50% of the 24 000 summer population remained over the winter but by the early nineteenth century some 70 - 90% of the 27 000 did so (Head 1976: 56, 232). St. John's grew rapidly and by 1815 had a population of more than 10 000 (Joel 1971: 5-6).

Nineteenth Century Newfoundland

Population and Economy

Newfoundland's population increased from approximately 75 000 in 1836 to 221 000 by 1901. It increased not only in the older settled core, but also in the bottoms of the various bays, along the north-east coast, the south coast, the French Shore and on the Labrador. By 1901 Newfoundland's population was widely dispersed and was predominately rural - apart from the political, business and administrative centre of St. John's with over 29 000 inhabitants, there were only six towns with more than 2 000 people and of these only Harbour Grace had more than 4 000 inhabitants.

This settlement pattern and population dispersal was a function of the fact that the economy was based primarily

on the catching and curing of codfish. The spatial and temporal incidence of this activity was not conducive to population concentration - in the pre-marine engine era it was an advantage to be located as near as possible to the fishing grounds. In addition internal factors operated to place a ceiling on local demographic and economic growth. The productivity of the local fishing grounds and waterfrontage available for wharves, stages and flakes posed constraints. Moreover decreasing accessibility to wood supplies and land suitable for subsistence agriculture could also restrict expansion. For these reasons many people moved out of established communities and created new ones.

If new strategies were adopted and/or improved technology was introduced communities could expand and retain a higher population. For example, during the nineteenth century some densely populated Conception Bay communities engaged in a spring seal fishery, and a summer migratory codfishery along the Labrador Coast (Sanger 1977: 146-147; Staveley 1977: 69-72).

While Newfoundland had important mineral and forest resources they were not highly developed or utilized by 1901. The fishery was the backbone of the Newfoundland economy and was the chief employer (see Table 2.1).

Table 2.1: Newfoundland - Occupational Structure 1901

| Occupation | Number Employed | % Employed |
|-----------------------------|-----------------|-------------|
| Professionals & Govt. | 1 894 | 2.2 |
| Merchants and Traders | 1 037 | 1.2 |
| Office or Shop | 2 351 | 2.7 |
| Farmers | 2 475 | 2.8 |
| Mechanics | 3 108 | 3.6 |
| Lumbering | 1 408 | 1.6 |
| Mining | 1 576 | 1.8 |
| Factories or Workshops | 626 | 0.7 |
| Otherwise Employed | 11 617 | 13.3 |
| Fishery (Catching & Curing) | <u>61 257*</u> | <u>70.1</u> |
| TOTAL | 87 349 | 100.0 |

*40 405 males, 20 852 females.

Source: Census of Newfoundland, 1901.

The rural people's activities were governed by the seasons. In the spring, boats and fishing gear were overhauled and gardens were planted. Summer was the main time for fishing, while in fall and winter wood was cut and equipment and premises repaired. In addition there were seasonal activities such as hunting and gathering berries. This adaptation was very similar to that outlined earlier for the crofters of Norway and Scotland.

A small dispersed population, with a resource-based economy, Newfoundland lagged well behind Canada and the United States politically, economically and socially. For example, Newfoundland did not get Representative Government

until 1832 and Responsible Government until 1855. Governments in Newfoundland moreover were faced with the provision of services to the numerous isolated settlements but a weak tax base to draw on. The political system that evolved in Newfoundland was hindered by the lack of a middle class, a lack of municipal government and by sectarianism. A strong centralized government emerged with considerable political power but fragile economic power (Noel 1971: 17-25).

A good transportation network was late in developing. Road construction began in the 1830s but by 1850 it linked only the more populous north-eastern corner of the Avalon Peninsula. A limited steamer service was not introduced until 1862 and while railway construction began in 1881 it was 1896 before the line was completed from St. John's to Port aux Basques on the south-west coast (Prowse 1972: 424, 427, 448, 454; Noel 1971: 26; O'Neill 1976: 507-509).

Twentieth Century Newfoundland 1900-1966

From the point of view of social and economic development this period may reasonably be divided into 1900-1939 and 1939-1966. While many processes operate through the entire period, political and economic adjustment appear to be paramount for the first period, while the later period is more one of social change, technological improvements and an accelerated pace of modernization.

NEWFOUNDLAND 1900-1939Population

While Newfoundland's population increased from 221 000 in 1901 to 290 000 in 1935 there was no substantial change in its distribution. The greater part of the population remained rural and scattered among the hundreds of small settlements along the coastline. Some degree of urbanization did occur but it was not great. For example, whereas in 1901 22.5% of the population lived in centres with over 1 000 inhabitants, by 1935 it had increased to only 32%. Nova Scotia's urban population increased, however, from 28.1% in 1901 to 45.2% by 1931.

Economy

Economic diversification, like urbanization, proceeded slowly and the fishery continued to play the dominant role in terms of employment - for 1911 and 1921 the actual numbers of fishermen increased over 1901 (see Table 2.2).

Table 2.2: Newfoundland - Occupational Structure 1901-1921

| Occupations | 1901 | | 1911 | | 1921 | |
|-----------------------------|---------|-------|---------|-------|---------|-------|
| | Number | % | Number | % | Number | % |
| Professionals & Govt. | 1 894 | 2.2 | 3 244 | 3.1 | 3 761 | 3.6 |
| Merchants & Traders | 1 037 | 1.2 | 1 315 | 1.3 | 1 095 | 1.1 |
| Office or Shop | 2 351 | 2.7 | 4 631 | 4.5 | 5 164 | 5.0 |
| Farmers | 2 475 | 2.8 | 2 915 | 2.8 | 3 227 | 3.1 |
| Mechanics | 3 108 | 3.6 | 5 374 | 5.2 | 4 856 | 4.7 |
| Lumbering | 1 408 | 1.6 | 2 821 | 2.7 | 2 619 | 2.5 |
| Mining | 1 576 | 1.8 | 2 260 | 2.2 | 1 137 | 1.1 |
| Factories or Workshops | 626 | 0.7 | 1 204 | 1.2 | 1 883 | 1.8 |
| Otherwise employed | 11 617 | 13.3 | 14 785 | 14.3 | 15 584 | 15.3 |
| Fishery (catching & curing) | *61 257 | 70.1 | *65 036 | 62.8 | *64 081 | 61.8 |
| TOTAL | 87 349 | 100.0 | 103 585 | 100.1 | 103 707 | 100.0 |

* Includes females curing

Source: Census of Newfoundland 1901, 1911, 1921

While changes in census format for 1935 make comparisons impossible in the context of Table 2.2 of the 77 730 males reporting earnings for the year ending 30 June 1935; 45.5% were classified as cod fishermen (Census of Newfoundland 1935).

From about 1900 to 1920 the cod fishery experienced one of the better periods in its long history. Rising prices and good catches, particularly during the First World War, brought relative prosperity. But these conditions did not last and following the war the fishery was faced with many problems.

Newfoundland's fishery was poorly organized and lacked the inspection and marketing procedures to produce a product able to meet foreign competition (Alexander 1977: 1-5). The fishery was also laggard in adopting new technology and in

utilizing more groundfish species. For example, by 1935, Nova Scotia had 3 steam trawlers, 3 freezing plants and 5 reduction plants in operation in addition to the more traditional equipment. In Nova Scotia, cod accounted for about 23% of the total value of fish products marketed and of this cod, 29% was marketed as fresh or frozen fillets (Fisheries Statistics of Canada, 1935). In contrast, in 1935-36, Newfoundland's exports of dried codfish and cod oils accounted for about 73% of the total value of all the products of the fisheries exported (Newfoundland Customs Returns 1935 - 1936).

Externally, Newfoundland was affected by changing conditions in the traditional European market. For example, France and Portugal assisted the development of their domestic fisheries and Italy and Spain endeavoured to lessen their dependence upon outside sources for fish (Noel 1971: 149-150). Meanwhile Norway and Iceland who competed in the same European markets as Newfoundland, had adopted more modern fishing techniques in addition to improved organizational, processing, and marketing techniques (Innis 1954: 468).

Newfoundland's main problem was her weak position in international terms of trade:

The fundamental difficulties of Newfoundland are inherent in her position as a producer of a commodity that is consumed in tropical countries with a large Catholic population and low purchasing power. She is at the same time

subjected to the effects of industrialism in the marked concentration of the tropics on the production of products such as sugar, coffee and bananas. She is in competition with recently industrialized fishing regions and is affected by prices of supplies determined largely by the North American continent. Prices of cod rise more sharply and fall farther than prices of other products, and the result is that expansion is apt to be more pronounced and depression more acute. The products of industrialized agriculture imported from Continental North America, such as flour, pork, and beef, increased in price earlier, more rapidly, and at a more sustained rate than cod (Innis 1954: 481).

While the fishery had its problems there had been some diversification and expansion in the Newfoundland economy. A pulp and paper mill constructed in Grand Falls was producing 200 tons daily in 1912 (Chadwick 1967: 118). During the 1920s a second, larger mill was built at Corner Brook and a new mine was opened at Buchans (Smallwood 1931: 32-39, 74-82). But despite these industries, Newfoundland was ill prepared to meet the 1930s depression. Falling prices for codfish, combined with a large national debt, was more than Newfoundland could bear. By 1933 the island's economy was in a desperate state and the Amulree Commission recommended the suspension of self-government and its replacement with an appointed commission (Noel 1971: 130, 155, 216; Neary 1973: 36-37).

Transportation and Services

In terms of transportation and other services, Newfoundland lagged well behind Canada and the United States. The railway, completed in 1896, was complemented by a fleet of eight coastal boats, and by 1900 these had helped to break down isolation and facilitated the movement of passengers, mail and freight (Noel 1971: 26; Rowe 1980: 332-334).

What roads existed in the 1930s were not well integrated and consisted simply of rough gravelled surfaces. By 1935 there were only 3 794 cars and commercial vehicles in the whole island with its population of approximately 290 000 (Newfoundland Royal Commission Report 1933: 6, Map No. 4; Perlin 1959: 97).

The telephone had been introduced at St. John's in 1878 and the first exchange was set up in 1885. However, by 1920 there were still only 800 telephones in the island. St. John's was linked to Carbonear in 1921 and by 1930 most of Conception Bay as well as Placentia and Ferryland on the southern Avalon and some communities in Trinity Bay were tied into the 6 000 telephones in use (Perlin 1959: 91). Radio broadcasting began on a regular basis in 1927, though radio sets were a luxury few Newfoundlanders could afford. For example, in 1934, an Atwater Kent radio cost \$95.00 (Newfoundland Quarterly, 1934 Spring: 43). Average annual income from the fishery at that time was \$134.44. (Census of

Newfoundland, 1935).

Health and education services were of a relatively low standard. The Newfoundland Royal Commission noted that in 1933 there were only 62 doctors to serve 1 300 rural settlements. Hospital facilities were virtually nonexistent outside St. John's until the mid-1930s when a number of cottage hospitals were built (Perlin 1969: 80-81). The lack of medical care and facilities was reflected in the mortality statistics. For example, in 1939, Newfoundland's mortality rate from tuberculosis was 191 per 100 000 while that of Quebec, the highest in Canada was 83.5 per 100 000. Newfoundland's infant mortality rate was 77 per 1 000, which was about the same for Quebec, New Brunswick, and Prince Edward Island, the provinces with the highest rate in Canada (Newfoundland Vital Statistics, 1939).

Educational standards in Newfoundland were also relatively low. For instance, the 1935 census revealed that 21.3% of males and 15.0% of females 10 years and older could not read or write. In contrast, in 1931, for Nova Scotia only 4.9% of the males and 3.6% of females 10 years of age and older could not read or write (Census of Canada 1931: Vol. I:261).

Summary

Apart from St. John's and the larger and industrialized towns the modernization process had made only a limited impression on Newfoundland by 1939. The population was pre-

dominantly rural and dispersed and the traditional fishery combined with subsistence activities continued as a way of life for a majority of Newfoundlanders. Transportation and communications were not well developed and medical and educational services were poor by comparison with North American standards.

NEWFOUNDLAND 1939-1966

The pace of modernization quickened between 1939 and 1966: two great events facilitated this transition - the Second World War (1939-1945) and Confederation with Canada in 1949.

During the Second World War rising prices for fish and the construction and servicing of military bases brought Newfoundland prosperity. This led to a higher standard of living and improved public services. It also brought important social and cultural changes:

The coming of the Canadian and American forces provided much needed employment ... but the impact went far beyond that. More people were drawn away from the outport way of life and into wage-paying jobs. Accepted values and modes of behaviour were profoundly challenged. Newfoundlanders were given a glimpse of North American life that they had not had before, with devastating consequences for the old social order (Neary 1973: 67).

Confederation with Canada not only brought all the benefits of the Canadian social security system to individual Newfoundlanders but made it possible to develop an infrastructure and level of services the island was unlikely to have achieved on its own.

With increased modernization the proportion of Newfoundland's population living in rural areas declined. For example, whereas in 1945 68% of the population lived in communities with fewer than 1000 inhabitants by 1966 this had decreased to 46%. This trend toward urbanization is even more apparent since Newfoundland's total population increased by 53% between 1945 and 1966.

Economy

The fishery continued as the main source of employment but it underwent significant internal changes. Many improvements were made prior to 1949: a fishery research board was established; an inspection system was introduced; marketing techniques were improved, and vessel construction was stimulated by a government bounty. The Second World War facilitated the growth of the frozen fish industry and this led to the construction of modern processing plants and the introduction of trawlers and draggers. Following Confederation many of these processes persisted. During the 1950s a number of mechanical codfish dryers and more frozen filleting plants were built. The number of draggers and trawlers increased from 13 in 1945 to 28 by 1957 and to 53 by 1966 (Census of Newfoundland 1945; Historical Statistics of Newfoundland and Labrador 1970 Vol. 1, : 179)

These developments, which were more capital intensive than had been customary in Newfoundland tended to concentrate

the industry in the main ports, a part of the tendency towards population concentration previously noted. Such concentration in turn implied a decline in the traditional dried salt cod operation (see Table 2.3).

Table 2.3: Newfoundland and Labrador Exports of Salted Cod
1940 - 1966

| Time Period | Average Annual Number of Hundred Weights |
|-------------|---|
| 1940 - 1942 | 922 772 |
| 1943 - 1945 | 807 337 |
| 1946 - 1948 | 1 007 042 |
| 1949 - 1951 | 908 400 |
| 1952 - 1954 | 699 395 |
| 1955 - 1957 | 650 017 |
| 1958 - 1960 | 571 847 |
| 1961 - 1963 | 592 515 |
| 1964 - 1966 | 342 189 |

Source: Historical Statistics of Newfoundland and Labrador
Vol. 1, 1, 1970: 181-82.

The fresh and frozen fillet industry, however, expanded rapidly particularly towards the close of this period. Whereas in 1945, 35.9 million lbs. of fresh, chilled and frozen fish was processed, by 1956, 62.8 million lbs. was processed and by 1966, 118 million lbs. (National Convention Reports 1946-1948*; Fisheries Statistics Canada (Nfld.) 1956, 1967).

For all these structural changes to the economy and the concomitant social and geographic changes, modernization in Newfoundland was pursued in the face of a fundamental dilemma. As Noel points out:

*Appendix A. Report of the Sub-Committee on the Cold Storage Industry

The basic dilemma remains the one which has plagued the island ever since the 1890s: Outside capital can be attracted neither for the establishment of secondary industry in a small market nor for the exploitation of natural resources, which in North American terms are economically marginal, without extraordinary guarantees and concessions by the provincial government. And the terms which investors are able to extract are typically so severe as to make the investment of dubious benefit to the community (Noel 1971: 276).

However while Confederation did not solve Newfoundland's economic development problem, it did lead to a rapid improvement in the level of services and facilities in the province.

Transportation

In no other sector was the impact of modernization so great as in the field of transportation, in particular, road construction. During Commission of Government (1933-1949) there was modest development of an exiguous gravel road network. By 1945 the longest paved highway was twelve miles from St. John's to Topsail. While the road network had been extended to the Bonavista and Burin peninsulas by 1949, there were only 13 981 registered vehicles in Newfoundland at that date (Perlin 1959: 97; Historical Statistics 1970: 250). From the mid-1950s the road network was expanded rapidly as a response to a substantially increased number of vehicles (see Table 2.4).

Table 2.4: Newfoundland and Labrador - Road Mileage and Registered Motor Vehicles
1950 - 1966

| Year | No. of Miles Paved Road | No. of Miles Gravel Road | No. of Registered Motor Vehicles |
|------|-------------------------|--------------------------|----------------------------------|
| 1950 | 121 | 1 800 | 16 375 |
| 1954 | 130 | 2 050 | 34 423 |
| 1958 | 218 | 3 391 | 51 575 |
| 1962 | 514 | 3 761 | 74 119 |
| 1966 | 1 024 | 3 840 | 95 704 |

Source: Historical Statistics of Newfoundland and Labrador, 1970, Vol. 1, 1, : 249-250.

During this process roads were extended to hundreds of settlements, the various peninsulas were linked up, and by 1965 the Trans-Canada Highway was completed (Williams 1972: 249-278). The extended road network broke down the isolation of many settlements and provided access to better health care as well as educational and employment opportunities.

Air transportation also expanded rapidly. A daily air service was instituted between Newfoundland and Canada in 1942: in 1949 there were over 26 000 passengers but by 1966 over 230 000 passengers were carried in addition to 9.3 million lbs. of air freight (Perlin 1969: 180; Historical Statistics of Newfoundland and Labrador, Vol. 1, 1, 1970: 250). Rail and coastal boat service also continued to be important but there were only limited improvements in this field.

Communications

There were many improvements in the communications field. Radios became numerous as improved economic conditions enabled most households to purchase one. More powerful broadcasting and transmitting facilities were established. By 1955 television had been introduced to the St. John's area (Perlin 1959: 92-96). Telephone service was improved and extended - the number of telephones increased from 21 635 in 1950 to 94 035 by 1966 (Historical Statistics of Newfoundland Vol. 1, 1, 1970: 253).

Services

The extension of roads and communications combined with federal government aid brought about a substantial improvement in the level of public services, particularly in education and health. While the number of schools remained fairly constant between 1949-50 and 1966-67, the average number of classrooms per school increased from 1.99 to 4.70 during the same period. Memorial University also expanded rapidly, from 307 students in 1949-50 to 4 762 by 1966-67 (Historical Statistics. Vol. 1, 1, 1970: 97, 100). By 1962 ten new vocational schools had been built and electricity was being extended to many rural areas (Gwyn 1972: 188, 198). For example, the number of customers purchasing electric power increased from 28 725 in 1949 to 81 387 by 1966 (Historical Statistics of Newfoundland and Labrador Vol. 1, 1, 1970: 266).

Similarly, in the field of health and medical services significant improvements took place. The number of doctors increased from 144 in 1949 to 339 by 1966. The death rate fell from 11.8 per 1 000 in 1940 to 6.2 per 1 000 in 1966. The infant mortality rate fell from 53.3 per 1 000 in 1949 to 28.1 by 1966, which was only slightly higher than the 23.2 average rate for the other nine provinces (Historical Statistics of Newfoundland and Labrador, 1970, Vol. 1, 1: 7, 27. Newfoundland Department of Health - Annual Report on Births, Marriages and Deaths 1966: 41, 43).

Summary

The foregoing outlines briefly some of the changes occurring since 1939 and following Confederation. Taken collectively they indicate clearly that Newfoundland had undergone a process of modernization. All regions of the island have experienced change, however in the outports, particularly the more isolated ones, the impact of this process has been most profound. This thesis will aim to study the impact of this process on one area of traditional Newfoundland, Inner Placentia Bay.

Chapter III The Physical and Historical Setting

The Physical Setting

Inner Placentia Bay lies on the south coast of Newfoundland between latitude 47° 20'N and 47° 55'N and longitude 53° 50'W and 54° 40'W. The area is semi-circular in shape and extends from Fox Harbour in the east, along the Isthmus of Avalon to Swift Current and along the west side of Placentia Bay to Great Paradise (see Figure 3:1).

Also included as an integral part of this region are Sound Island, Bar Haven, Woody Island and Isle Valen on the western side of the bay; Iona on the eastern side; and Verasheen Island, Long Island, Red Island and the Ragged Islands group in the centre. The direct distance from Fox Harbour to Great Paradise is approximately 53 km. (33 miles), while the distance from the mouth of the inner bay to Swift Current is approximately 61 km. (38 miles). The area of the study region is approximately 2000 sq. km. (800 sq. mls.).

Geology

Inner Placentia Bay, like most of the Avalon Peninsula, lies within the Appalachian system, a belt of Paleozoic deformation extending from the southern United States to Newfoundland (Henderson 1972: 5). The bedrock of Inner Placentia Bay dates primarily from the late Precambrian. Most of the region is composed of siltstone, arkose, con-

INNER PLACENTIA BAY

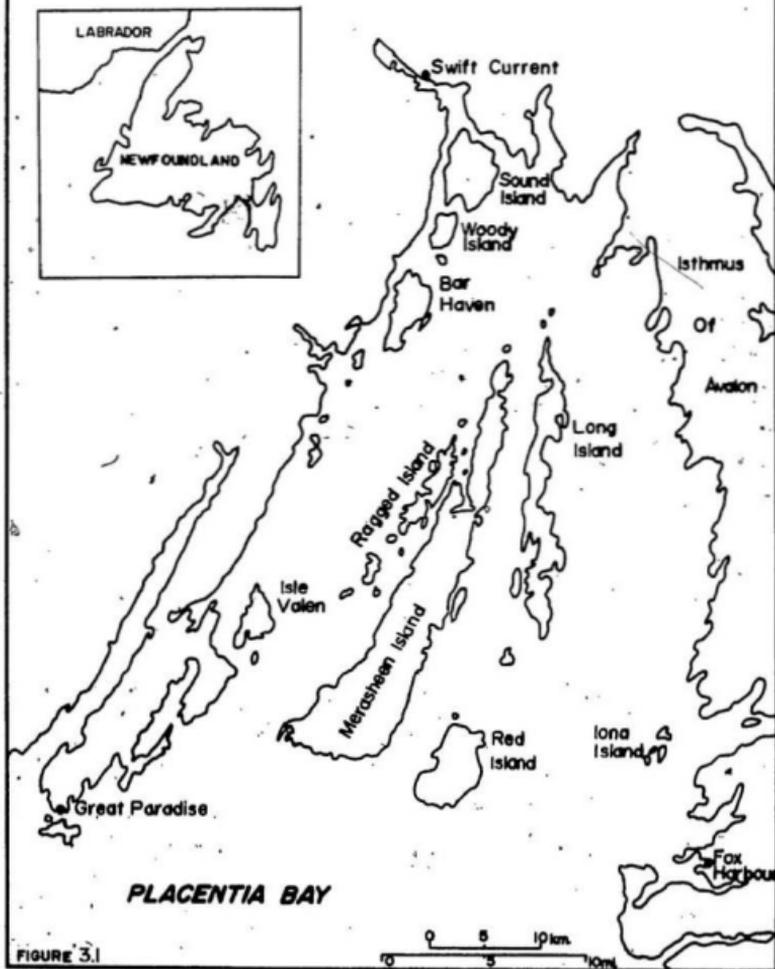


FIGURE 3.1

glomerate, slate and acidic to intermediate volcanic rocks. For example most of the western side of Inner Placentia Bay from Great Paradise to Bar Haven as well as Merasheen Island and the Eastern side along the Isthmus of Avalon is composed of these rocks (see Figure 3:2). Slate, siltstone, greywacke conglomerate and minor volcanic rock predominates on Long Island, Iona and a section of the Isthmus of Avalon lying between Little Harbour and North Harbour. Granite is predominant on Red Island and near Swift Current with smaller complexes on Bar Haven and the Ragged Islands. The Woody Island - Sound Island area is composed of volcanics, slate and greywacke with some small sections containing Cambrian shales and limestone (see Figure 3:2).

Relief

The region is rather uniform and moderate in relief. Most of the area lies within an elevation of 60m. (200 ft.) to 150m. (500 ft.). Land less than 60m. (200 ft.) is largely confined to coastal areas, especially on the islands and along the Isthmus of Avalon (see Figure 3:3). Land in excess of 150 m. (500 ft.) is confined largely to the western side of Inner Placentia Bay; to the Come by Chance and Swift Current area; and to minor concentrations in the east near Fox Harbour, in Red Island and in southern Merasheen Island.

Relief is an important influence on the settlement pattern. For example, as Figure 3.3 suggests, much of the

INNER PLACENTIA BAY

MAIN GEOLOGICAL FEATURES

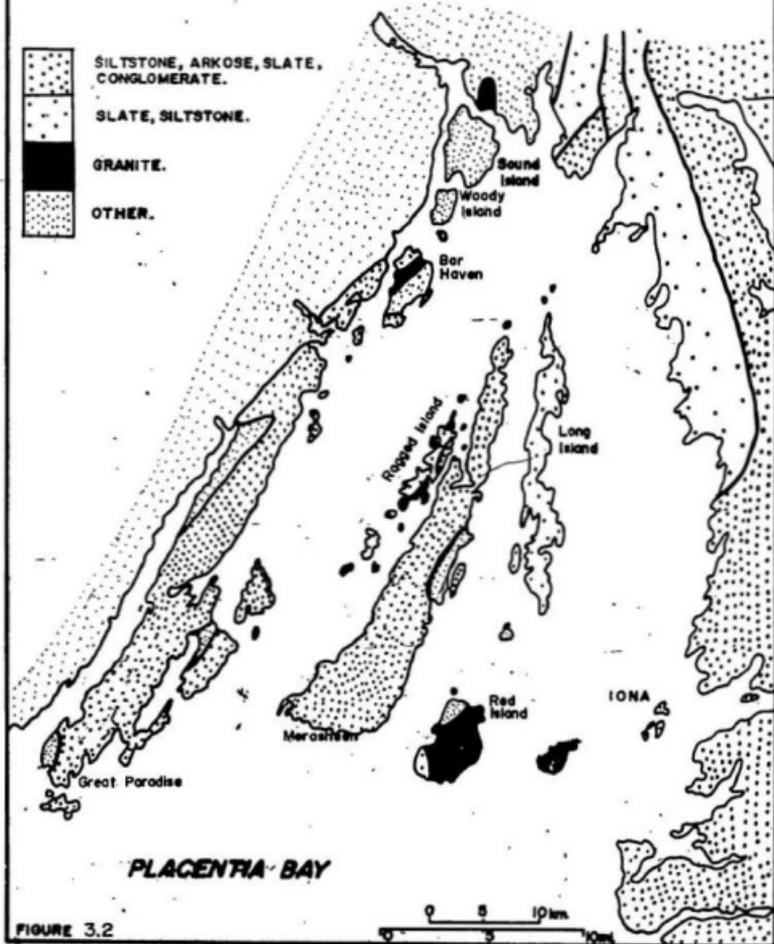
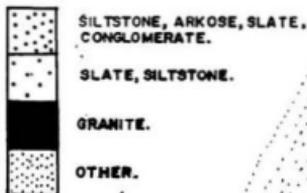
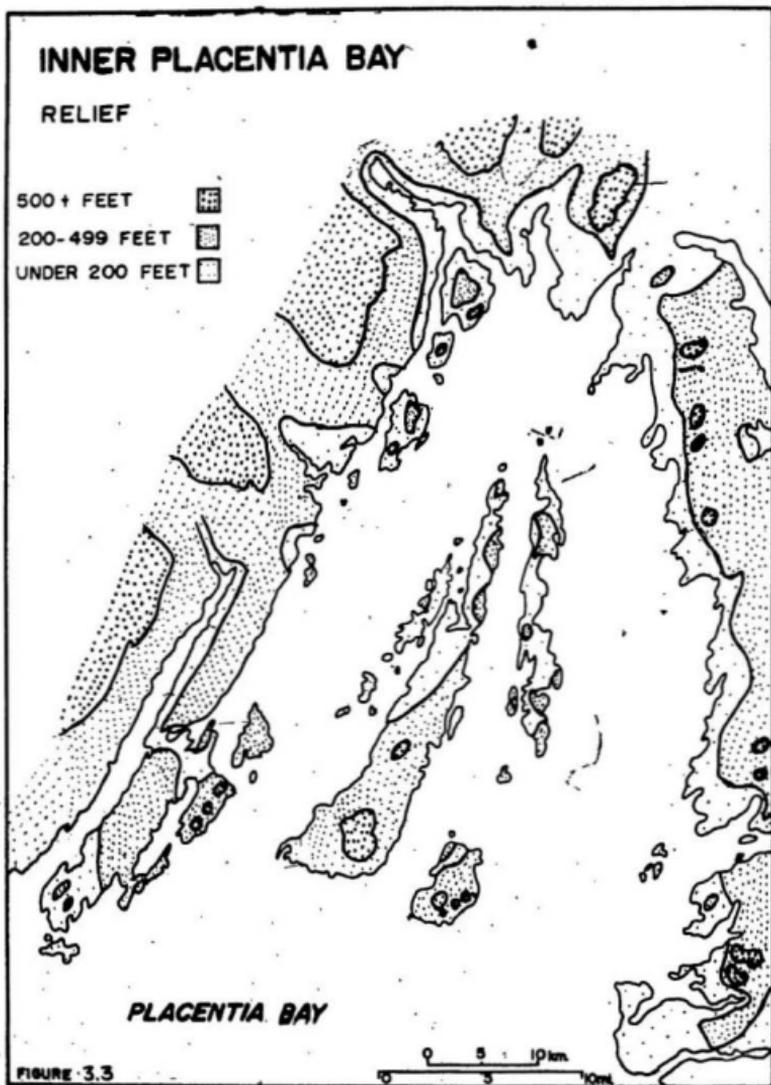


FIGURE 3.2

Source: Geology, Island Of Newfoundland, 1967, 1:1,000,000 Sheet



western side of Inner Placentia Bay as well as most of Merasheen Island and Red Island rises rather abruptly from the sea. Moreover much of this area is both more exposed to ocean winds and waves and contains fewer indentations of the coastline thereby reducing shelter for boats and the necessary onshore fishing facilities such as wharves, flakes and stages.

Soils and Vegetation

Soils, as in most of Newfoundland, are generally thin and poor. This is partly due to the nature of the bedrock which is generally acidic and resistant to decomposition in the prevailing cool temperate climate. More significant, however, has been the process of glaciation. For example, the last glaciation ended about 10,000 years ago. Most soils which had been formed prior to this were stripped away. Soils which now exist have been formed only since the glaciers receded and are principally a mixture derived from sandstone, volcanic, and granitic rocks and hard slate. This means that under cool, humid climatic conditions relatively immature podsollic soils of low fertility have been produced - thin, full of fresh rock fragments and strongly acidic in nature (Newfoundland Royal Commission on Agriculture 1955: 11-12, 240; Henderson 1972: 108).

Most of the forest cover of the area is coniferous and consists primarily of black spruce (*Picea Mariana*) and balsam fir (*Abies Balsamea*). As in other areas of the Avalon,

forests containing timber of any size are confined largely to deep valleys and to some sheltered basins. Exposed uplands and higher summits are covered by copses of black spruce, dwarf bushes, grass, and moss. Bogs and swamps are also common throughout the area (Henderson 1972: 11, 95; Pollett 1968: 3-4).

Marine Topography and Oceanography

The waters of Inner Placentia Bay are divided into three channels separated by Merasheen Island on the west and by Long Island and Red Island on the east (Figure 3:4). The largest (eastern) channel runs between Red Island and Long Island on the west and the Isthmus of Avalon on the east towards Come-By-Chance in the north. The western channel runs between Merasheen Island and the Isle Valen towards Bar Haven. A narrower central channel lies between Merasheen Island and Red and Long Islands.

Depths in the western channel range up to 450 m. (246 fathoms), while in the eastern and central channels depths of 375 m. (205 fathoms) have been recorded (Willey 1976: 1394). Depths of 27 m. (15 fathoms) to 110 (60 fathoms) occur rather uniformly throughout Inner Placentia Bay. Shallow water is more prevalent on the eastern and northern side of the bay from Fox Harbour to Bar Haven, with smaller occurrences in the Sandy Harbour, Ragged Islands area, and along the southern end of Merasheen Island.

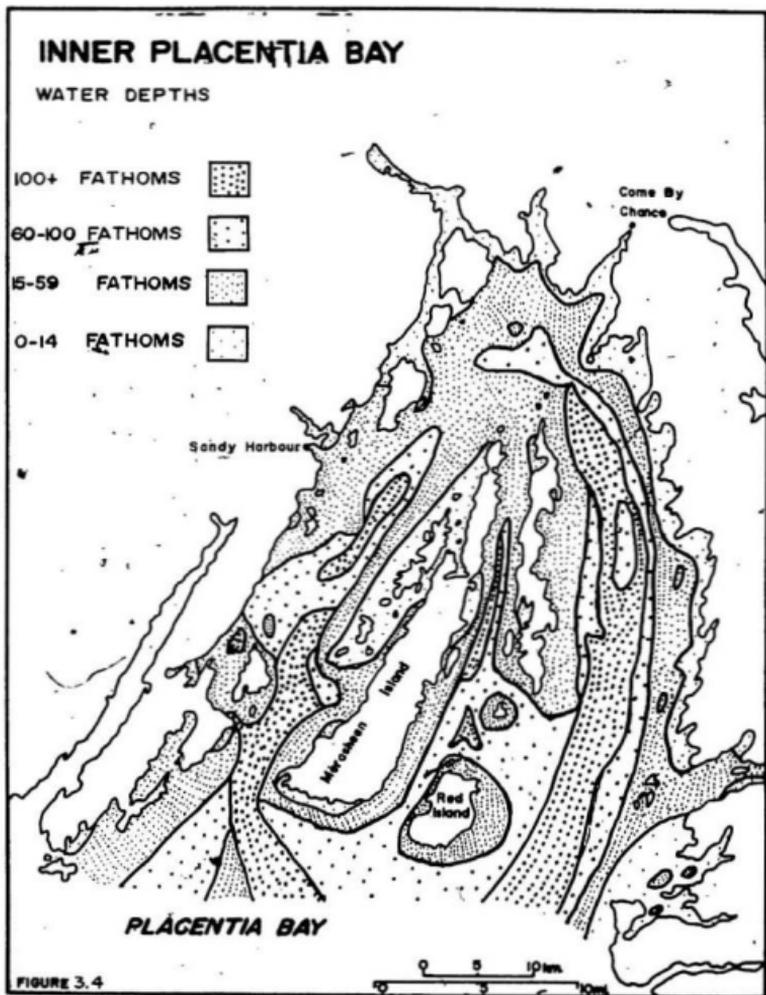


FIGURE 3.4

Source: Hydrographic Charts

Observations carried out in 1974 distinguished three thermal classes of water in Inner Placentia Bay. The deep water varied little seasonally with a temperature of 0°C to -2°C and salinity 32.8‰ to 33.0‰. The surface water varies markedly with the seasons ranging between 15.0°C and -1.5°C and 30.5‰ and 32.5‰ salinity during the year. The third water type results from mixing of the surface water with fresh stream runoff. It is also seasonally variable, with temperature range similar to the second but with lower salinity, 28.0‰ to 31.5‰ (Willey 1976: 1394-1395). Data collected at Argentia, located just outside the study area near Fox Harbour, for over a twenty year time span tend to support the 1974 findings (see Table 3:1).

Table 3.1: Argentia, Newfoundland - Approximate Sea Surface Temperature 1942 - 1963

| Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. |
|------|------|------|------|-----|------|------|------|-------|------|------|------|
| .8 | 0 | -1 | 1.3 | 3.7 | 6.5 | 10.8 | 14.2 | 12.8 | 10.3 | 7.2 | 3.2 |

Source: U.S. Fleet Weather Facility, Argentia, Newfoundland Local Area Forecaster's Handbook, September, 1964, p. 11.

Water temperatures have a profound effect upon marine life. Temperature changes in the sea of only a degree or two can greatly affect the survival of young fish while high or low temperatures appear to be crucial in the lobster fishery (Templeman 1966: 27, 120-121).

Recent studies have revealed a variety of contrasting sea bottom textures for Inner Placentia Bay. The eastern channel and northern part of the bay inside the central

islands contain materials which are assumed to be till. The western channel contains gravels and gravel-sands and some finer materials. An area in the eastern channel between Argentina and Fairhaven contains sands, gravel sands, and sand muds. At the southern extremity of the eastern channel off Argentina and Red Island there are gravels, sands, and gravel sands (Steham, 1976: 1389).

The nature of the seabottom is very important in the fishery. For example, lobster prefer shallow, rocky sea bottom. Codfish prefer gravels and sands over muds. In addition fishing gear such as trawls and cod nets are always set with depths, submarine relief and seabottom textures in mind.

Currents and Tides

The currents and tidal streams of Inner Placentia Bay are erratic. It has been reported that when the flow sets in along the east shore, it sets out of the bay on the west side and vice versa (Sailing Directions 1977: 85). Lower surface salinities in the western channel could indicate such a counterclockwise surface circulation during the warm seasons. Movement of the infrequent drift ice during the winter also indicates a counterclockwise surface circulation pattern. (Willey 1976: 1394-95). According to the Sailing Directions, rates of 2 to 3 knots for currents and tidal streams are encountered in the bay during the approach of south-east gales

and during gales, while rates of 1½ knots are encountered in settled weather (S.D. 1977: 85). Other studies suggest correlations between winds and currents in Inner Placentia Bay (Lawrence 1973:7; Trites 1969: 155-158).

Climate

The proximity of an extensive water body has a dominant effect upon the climate of Inner Placentia Bay. In winter cold air from Continental North America is funnelled through Placentia Bay and is warmed considerably by the water. Conversely in summer excessive heat is rarely encountered due to the cooling effect of the water.

Temperature

The influence of the sea is clearly indicated in the temperature data. Statistics for Arnold's Cove, Come-By-Chance and Long Harbour, as well as Argentinia, indicate that February is the coldest month, with the mean daily temperature ranging from -1.9° to -4.4° for the four stations. August, the warmest month, shows much less spatial variation in daily temperatures (see Table 3.2).

Table 3.2: Average Monthly Temperatures in °C, Inner Placentia Bay (and Argentinia)

| Station | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. |
|----------------|------|------|------|------|-----|------|------|------|-------|------|------|------|
| Argentinia | -1.5 | -1.9 | -0.5 | 2.3 | 5.6 | 9.7 | 14.0 | 15.3 | 12.5 | 8.4 | 5.0 | 0.3 |
| Arnold's Cove | -2.7 | -3.5 | -0.8 | 2.5 | 6.0 | 9.4 | 13.9 | 15.7 | 12.8 | 8.2 | 4.1 | -0.6 |
| Come-By-Chance | -4.3 | -4.4 | -1.4 | 2.1 | 6.2 | 9.9 | 14.2 | 15.6 | 12.7 | 7.7 | 3.6 | -1.3 |
| Long Harbour | -2.6 | -3.3 | 1.0 | 2.6 | 6.2 | 10.4 | 14.9 | 15.7 | 12.9 | 8.6 | 4.7 | -0.2 |

Source: Canadian Climate Normals 1951 - 1980: Vol. 15
 Temperature and Precipitation, Atlantic Provinces
 Environment Canada 1982: Vol. 2

Another significant marine influence is seen in the very slow rise of temperature in the spring. For example despite the area's relatively southerly location the mean temperature for May ranges from only 5.6° to 6.2° and even in June from only 9.4° to 10.4°. Temperatures for June are only slightly higher than those for October despite the increased amount of daylight.

Precipitation

Precipitation in the area ranges from 1068 mm. annually at Argentinia to 1321 mm. at Long Harbour the wettest of the three Inner Bay stations (see Table 3.3).

Table 3.3: Average Monthly Precipitation, Inner Placentia Bay (and Argentia)
 - Precipitation in mm. and Days with Precipitation

| Station | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
|----------------|-------------|-------------|-------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|-------------|---------------|
| Argentia | 113.9 16 | 106.2 14 | 70.6 13 | 77.3 13 | 67.4 13 | 74.7 13 | 72.7 12 | 96.2 13 | 83.5 12 | 89.6 14 | 105.4 15 | 110.4 16 | 1067.9 164 |
| Arnold's Cove | 133.8 12 | 103.9 9 | 105.9 11 | 75.9 8 | 91.6 9 | 91.3 8 | 79.5 8 | 87.8 10 | 83.1 8 | 134.2 11 | 140.8 10 | 137.4 12 | 1265.2 116 |
| Come By Chance | 101.4 13 | 96.5 9 | 103.4 13 | 90.2 10 | 76.2 12 | 97.0 10 | 68.4 10 | 93.5 11 | 68.8 10 | 104.7 11 | 110.2 11 | 117.8 14 | 1128.1 134 |
| Long Harbour | 124.1 14 | 114.3 12 | 115.6 14 | 79.5 12 | 95.9 12 | 87.6 10 | 75.9 12 | 113.2 13 | 106.4 12 | 152.7 16 | 134.5 15 | 121.7 14 | 1321.4 156 |

Source: Canadian Climate Normals 1951 - 1980 Temperature and Precipitation, Atlantic Provinces,
 Environment Canada 1982: Vol. 3

As the table indicates, precipitation is plentiful year round, but is more prevalent during fall and winter. However, even in summer, precipitation occurs regularly, - as Table 3.3 shows no station has fewer than 8 days per month with precipitation.

Fog

Inner Placentia Bay's location with respect to prevailing winds and water bodies makes fog a prevalent feature of the environment. From May to August, at Argentia, visibility is restricted to 11 km.(7 miles) or less for 35% of the time, and visibility is restricted to 1 1/2 km.(1 mile) or less for 18% of the time. Fog occurs most frequently in July when the visibility is less than 11 km.(7 miles) for 38% of the time and less than 1 1/2 km.(1 mile) for 26% of the time. The period from October to March has the least fog with an average visibility less than 11 km.(7 miles) occurring 14% of the time and visibility of less than 1 1/2 km. (1 mile) occurring for 7% of the time (see Figure 3.5).

Wind - Direction And Speed

Wind is one of the most important factors influencing the climate of Inner Placentia Bay. The area lies in the path of the prevailing south-westerlies. For 51% of the time winds blow from the south, the west and intermediate points (see Figure 3.6). But there is a marked seasonality

ARGENTIA, NEWFOUNDLAND—RESTRICTED VISIBILITY

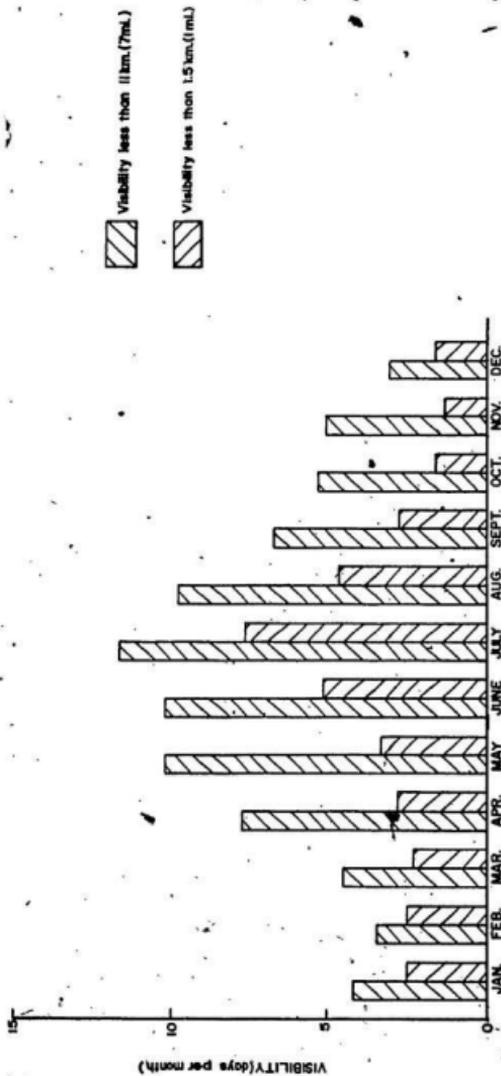


FIGURE 3.5

Source: Forecaster's Handbook, U.S. Fleet Weather Facility, Argientia, Nfld., September 1964.

ARGENTIA-NEWFOUNDLAND
ANNUAL WIND DIRECTION
PERCENTAGE FREQUENCY
1956-1969

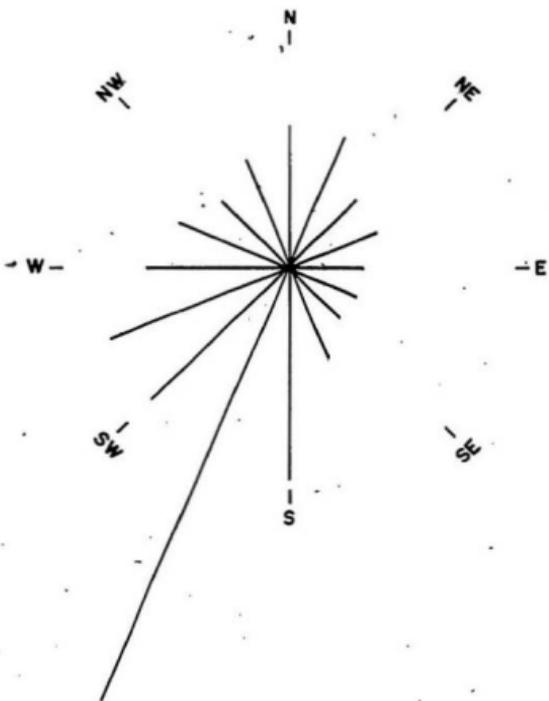


FIGURE 3.6

Source: Environment Canada, Canadian Normals, Vol. 3, p. 89, 1975.

4

in wind direction. From November to March winds are more variable in direction. From April to October, however, winds are increasingly from the south-west and the south-south-west - by April, winds from those two directions occur 29% of the time, but by July this has increased to 50% after which it falls off gradually until by October it occurs for 25% of the time. These south-west and south-south-west winds and the fog they push into the bay and coastal areas are important factors in keeping temperatures low during the spring and summer months.

Argentina has an annual average wind speed of 29.6 km. (15.9 knots). December has the highest average monthly wind speed of 33.9 km. (18.2 knots), while August is the lowest with 25 km. (13.4 knots) (see Figure 3.7A). The strongest winds occur from October until March. During this period winds ranging from 39 to 55 km. (21.3 knots) or stronger occur for at least 28% of the time, but these strengths are experienced 39% of the time in December and January. Strong winds in excess of 57 m. (31 knots) are also more prevalent during this period (Figure 3.7B). From May to September, winds in excess of 37 km. (20 knots) occur for only 14% to 21% of the time, while calm periods or winds below 24 km. (13 knots) occur for 43% to 51% of the time.

ARGENTIA, NEWFOUNDLAND - Average Monthly Wind Speed 1942 - 1963

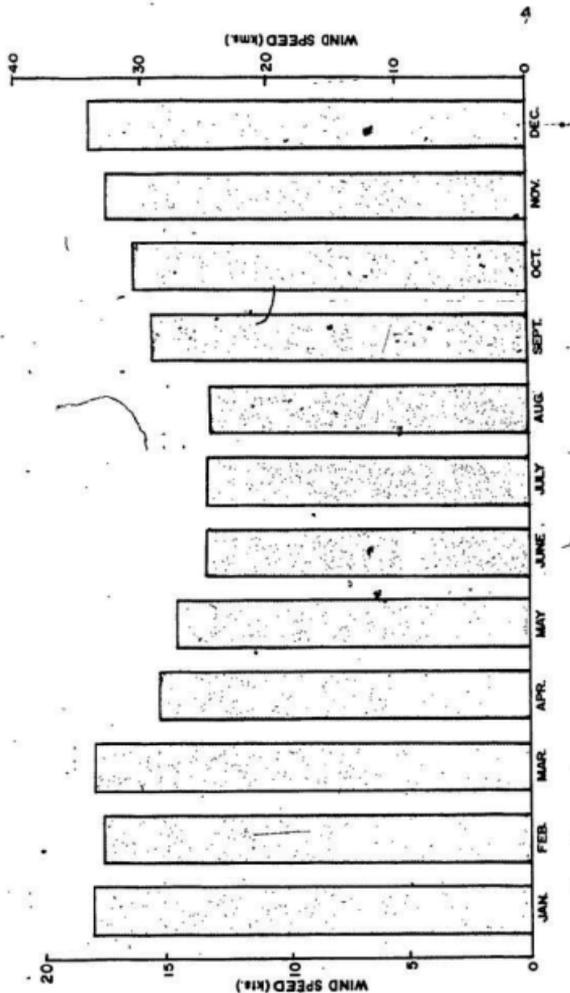


FIGURE 3.70

Source: Forecaster's Handbook, U.S. Fleet Weather Facility, Argonia, Nfld., September 1964

ARGENTIA, NEWFOUNDLAND—Average Monthly Frequency Of Wind Speeds 1942-1963

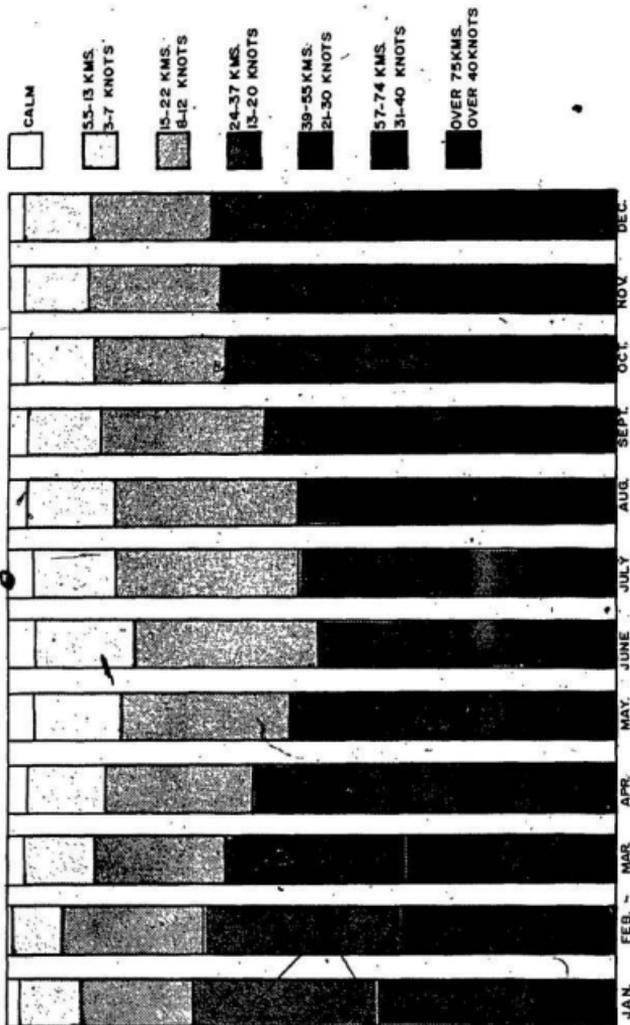


FIGURE 3.7b

Source: Forecaster's Handbook, U.S. Fleet Weather Facility, Argentia, Nfld, September 1964

Summary

The physical environment of Inner Placentia Bay has had a profound influence upon the human settlement and resource exploitation pattern within the area. The geological composition and the process of glaciation have left a legacy of thin soils which not only limit indigenous vegetation but also make agricultural development marginal. Relief also influences agriculture but it poses additional constraints on settlement, even when the rationale for such settlement is based upon the utilization of marine resources. Similarly submarine topography influences the distribution of marine life.

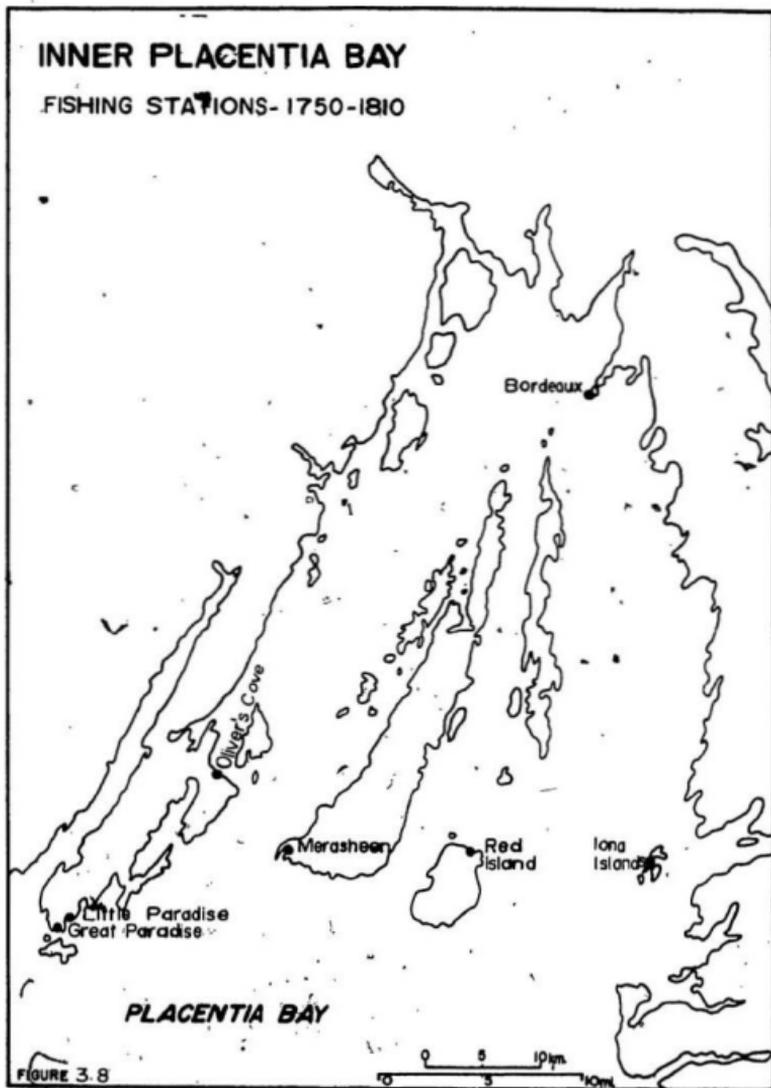
Climate is also an integral component of the physical environment. The cool, moist climate has retarded soil formation and imposed additional restraints upon agriculture as for example in inherent fertility and the length of the growing season. Climate is also an important factor influencing marine resources distribution and harvesting patterns. For example water temperatures are important in determining both the growth and the availability of species. Winds are one of the most significant climatic phenomena influencing Inner Placentia Bay. In spring and summer they bring large amounts of fog into the region keeping temperatures low. In fall and winter increased wind velocities make utilization of the marine resources more difficult.

Evolution of Early Settlement and Economy

By the late sixteenth century the marine resources of Placentia Bay were being utilized by European migratory fishermen. Settlement occurred in the seventeenth century when the French became established at Placentia. Following the French withdrawal in 1713, British migratory fishermen became active in the area (Innis 1954: 37-39, 45-46; Head 1976: 57-60).

A few hundred exploiters in the 1720s increased to between 1000 to 2000 by the 1770s, and by that date about 900 persons remained over the winter in this region (Head 1976: 57, 156). Fishing activity was well established at Paradise by 1758, while by the turn of the century several other locations were also being utilized. For example, fishermen were active in Red Island and Ram's Island (Iona) by 1792 and at Merasheen, Bordeaux and Oliver's Cove (St. Leonard's) by 1803 (see Figure 3.8 and Brown 1974: 6-9).

Inner Placentia Bay, like Newfoundland as a whole, experienced a considerable increase in its resident population during the European Wars 1793-1815. Wartime conditions, rising prices for dried codfish and fishery expansion created an increased demand for labour, and higher wages. This in turn attracted immigration from Southwest England and Southeast Ireland. Between 1804 and 1815 over 2000 passengers landed at Burin and Placentia, the two main ports in Placentia Bay



(Brown 1974: Table 1). In 1825, Rev. Blackman noted the presence of small Protestant congregations at Merasheen, Isle Valen, Barren Island (Bar Haven), Sound Island and Woody Island. Rev. Wix visiting parts of Inner Placentia Bay in 1836 reported settlers of Irish extraction and noted the presence of several Englishmen (Brown 1974: 17, 22-23). By the time of the first official census in 1836, Inner Placentia Bay had a population of 1787 distributed among some 43 settlements.

From these beginnings the population and settlement of Inner Placentia Bay expanded rapidly. Between 1836 and 1857 the population increased by over 96% and many settlements became much larger (see Table 3.4).

Table 3.4: Number of Settlements By Population Size and Total Population - 1836, 1845, 1857

| YEAR | POPULATION CATEGORIES | | | | | TOTAL POPULATION |
|------|-----------------------|---------|-----------|-----------|------|------------------|
| | 0 - 49 | 50 - 99 | 100 - 199 | 200 - 299 | 300+ | |
| 1836 | 33 | 3 | 6 | 0 | 0 | 1787 |
| 1845 | 40 | 2 | 6 | 4 | 0 | 2813 |
| 1857 | 25 | 5 | 9 | 4 | 1 | 3505 |

Source: Census of Newfoundland 1836, 1845, 1857.

The expansion of population was accompanied by an increased fishing effort the scale of which is indicated in Table 3.5.

Table 3.5: Inner Placentia Bay - Fishing Boats
1836, 1845, 1857

| Year | Less Than 15 Quintals* | 15 to 30 Quintals | Over 30 Quintals | Schooners | Average Schooner Tonnage |
|------|---------------------------|----------------------|---------------------|-----------|--------------------------------|
| 1836 | 237 | 69 | 30 | N/A | N/A |
| 1845 | 338 | 77 | 92 | 3 | 31.7 |
| 1857 | 354 | 97 | 132 | 12 | *36.8' |

Source: Census of Newfoundland 1836, 1845, 1857

Note: *1 Quintal equals 112 lbs. of dried codfish

The increase in fishing boats was more pronounced in the over 30 quintal class and in the schooners. This suggests that by 1857 resource exploitation was not confined to the in-shore fishing grounds but that fishermen were extending their range of operations. Large boats using cod seines fished in the vicinity of Cape St. Mary's during the summer season (J.H.A. 1845: Appendix 241; 1863: Appendix 483, 485). Population pressure on the local resource base probably fostered this process since overcrowding would lead to diminishing yields. For example, in 1855 at Burin, small boats averaged 25 quintals per man/year while large boats averaged 65 quintals per man (J.H.A. 1855: Appendix 289).

By 1857 the fishermen of Inner Placentia Bay were catching and curing almost 42,000 quintals of codfish and about 5000 barrels of herring. Although the fishery was the main-

stay of the economy, subsistence agriculture was also important: over 440 acres were under cultivation - potatoes and hay were the main crops, while livestock holdings consisted primarily of cattle and sheep (see Table 3.6).

Table 3.6: Inner Placentia Bay - Agriculture Statistics
1836, 1845, 1857

| YEAR | ACRES UNDER CULTIVATION | POTATOES BARRELS | HAY TONS | CATTLE | SHEEP | HORSES |
|------|-------------------------|------------------|----------|-----------------------|-------|--------|
| 1836 | 175 | 6525 | 108 | 190 | 139 | - |
| 1845 | 517 | 2338 | 97 | 256 | 773 | 10 |
| 1857 | 444 | 1259 | 167 | Neat 328 Milch 219 | 1779 | 13 |

Source: Census of Newfoundland 1836, 1845, 1857.

Growth and Diversification 1857 - 1911

This period was a very significant one for Inner Placentia Bay. Population continued to increase and new settlements were established. Expansion continued in the fishery; new technology was introduced and species other than cod came to be utilized. There were also improvements in the transportation system.

Population

The population of the area increased almost 72% between 1857 and 1911, a much slower pace than experienced between

1836 and 1857. The number of settlements also increased from 44 in 1857 to 61 by 1911, though the majority of these were small and contained fewer than 100 inhabitants (see Table 3.7).

Table 3.7: Number of Settlements by Population Size, and Total Population 1857, 1874, 1884, 1891, 1901, 1911.

| YEAR | Population Categories | | | | | Total Population |
|------|-----------------------|---------|-----------|-----------|------|------------------|
| | 0 - 49 | 50 - 99 | 100 - 199 | 200 - 299 | 300+ | |
| 1857 | 25 | 5 | 9 | 4 | 1 | 3505 |
| 1874 | 18 | 12 | 7 | 5 | 1 | 3838 |
| 1884 | 31 | 13 | 9 | 5 | 1 | 4574 |
| 1891 | 34 | 13 | 10 | 5 | 1 | 4907 |
| 1901 | 25 | 18 | 13 | 4 | 3 | 6145 |
| 1911 | 25 | 14 | 15 | 3 | 4 | 6045 |

Source: Census of Newfoundland, 1857, 1874, 1884, 1891, 1901, 1911.

Fishery

There were a number of important technological changes in the fishery during the late nineteenth century. By the 1860s the trawl or bultow had been introduced and during the 1880s cod traps, which were more efficient than cod seines, began to appear: by 1891 there were 14, but by 1911 this number had increased to 102.

The number of small fishing boats as well as schooners

increased significantly. Schooners increased from 12 in 1874 to 86 by 1911, although the average tonnage declined (see Table 3.8).

Table 3.8: Placentia Bay - Fishing Boats 1874, 1884, 1891, 1901, 1911

| YEAR | 4 - 30 QUINTALS | Over 30 Quintals | Schooners | Average Schooner Tonnage |
|------|--------------------|---------------------|-----------|-----------------------------|
| 1874 | 446 | 125 | 12 | 31.5 |
| 1884 | 611 | 119 | 33 | 32.5 |
| 1891 | 564 | 120 | 32 | 32.6 |
| 1901 | 1374 | 170 | 60 | 26.5 |
| 1911 | 1504 | 167 | 86 | 24.3 |

Source: Census of Newfoundland, 1874, 1884, 1891, 1901, 1911.

The adaptation of new technology combined with the expanding schooner fleet appears to have enabled Inner Placentia Bay to have maintained a more favourable balance between dried cod production and population expansion than the older regions on the Northeast Coast and Newfoundland as a whole (see Table 3.9).

Table 3.9: Average Production of Dried Codfish For Selected Areas Per Inhabitant 1874, 1884, 1891, 1901, 1911

| Year | Inner Placentia Bay | Conception Bay | Trinity Bay | Bonavista Bay | Newfoundland |
|------|---------------------|----------------|-------------|---------------|--------------|
| 1874 | 16.6 qtls. | 12.3 qtls. | 8.0 qtls. | 10.2 qtls. | 9.7 qtls. |
| 1884 | 8.9 | 6.8 | 8.1 | 7.5 | 6.2 |
| 1891 | 7.3 | 6.5 | 5.4 | 6.9 | 5.2 |
| 1901 | 9.4 | 6.1 | 5.8 | 7.2 | 5.8 |
| 1911 | 10.8 | 3.6 | 7.2 | 5.4 | 5.2 |

Source: Census of Newfoundland 1874, 1884, 1891, 1903, 1911

Moreover, during this period Inner Placentia Bay began to utilize other marine resources more fully.

Fishery Diversification

By the 1880s, Inner Placentia Bay vessels were fishing the offshore grounds on the Grand Banks. For example, two Harbour Buffett firms had a vessel on the banks in 1885 and 1888 respectively; and a report on the bank fishery for 1890 indicates that 6 vessels from Inner Placentia Bay, averaging 64.5 tons and employing a total of 71 men caught 2889 quintals of cod. (Evening Telegram, 2 September 1885; 21 May 1888; J.H.A., 1891: Appendix 179).

Traditionally herring were an important bait fish but quantities were often salted and sold as well. By the 1880s and 1890s a growing demand for fresh and salted herring in

New England sent American schooners to Inner Placentia Bay to purchase herring. In 1880, 14 American vessels loaded at Black River; while in 1892, 35 vessels were reported at Black River, Woody Island and Barren Island (Bar Haven). In 1896-97 53 American vessels purchased an average of 773 barrels of herring in the area (Evening Telegram 13 December 1890; 9 February 1892; J.H.A. 1897: Appendix 299-300).

Lobster became very important to the economy of Inner Placentia Bay during the 1880s. Following the introduction of canning lobster, factories were established at many Inner Placentia communities creating new employment opportunities. Many were small quasi-domestic canneries, but not all - the two factories at Ragged Island employed 29 men and 9 women in 1891. Total production for Inner Placentia Bay was 12,878 cases in 1891 and 9885 cases in 1901 (1 case = 48, 1 lb. tins).

Whaling was introduced to Inner Placentia Bay in 1901 when a facility was built at Rose au Rue on Merasheen Island. Catching was conducted by foreign vessels and crews but manufacturing into oil, guano and whale bone provided employment for local residents. Between 1904 and 1911, 565 whales were processed at the Rose au Rue facility (J.H.A. 1900-1911, Appendices).

Subsistence agriculture also grew in response to increased population. The amount of improved land increased, crop and livestock holdings were also up over the 1874 levels; but

there was a decrease in cattle and sheep between 1901 and 1911 (see Table 3.10).

Table 3.10: Inner Placentia Bay - Agriculture Statistics
1874, 1884, 1891, 1901, 1911.

| YEAR | ACRES IMPROVED | BARRELS POTATOES | TONS HAY | CATTLE | SHEEP | HORSES |
|------|----------------|------------------|----------|--------|-------|--------|
| 1874 | 618 | 3070 | 343 | 358 | 2517 | 18 |
| 1884 | 921 | 3980 | 498 | 464 | 3397 | 12 |
| 1891 | 675 | 3664 | 581 | 432 | 4509 | 15 |
| 1901 | 1245 | 4746 | 715 | 631 | 5114 | 25 |
| 1911 | 1808 | 5177 | 1245 | 574 | 4910 | 44 |

Source: Census of Newfoundland, 1874, 1884, 1891, 1901, 1911.

Transportation and Services

The transportation system of Inner Placentia Bay saw a great improvement in 1890 with the introduction of a weekly steamship service which called at all the larger settlements with passengers, mail and freight. By 1891, railroad construction was in progress through the Isthmus of Avalon - a section in the trans-island network completed by 1896 (Evening Telegram 27 September 1890; 28 August, 27 September 1891).

Growth in population and economic activity during the period 1874 - 1911 was echoed in a significant improvement in social infrastructure. For example, religious and

educational facilities and the level of indigenous mercantile activity expanded at a rate, if anything, somewhat faster than the rate of population growth alone (see Table 3.11).

Table 3.11: Placentia Bay - Social Facilities and Personnel
1874 - 1911

| Year | Clergy | Merchants and Traders | Teachers | Churches | Schools |
|------|--------|-----------------------|----------|----------|---------|
| 1874 | 2 | 15 | N/A | 13 | N/A |
| 1884 | 3 | 16 | N/A | 21 | 21 |
| 1891 | 3 | 24 | 17 | 18 | 23 |
| 1901 | 4 | 34 | 21 | 20 | 30 |
| 1911 | 6 | 42 | 26 | 31 | 47 |

Source: Census of Newfoundland, 1874, 1884, 1891, 1901, 1911

Summary

During the nineteenth century Inner Placentia Bay witnessed a period of rapid population growth and settlement expansion. Technological improvements in fishing gear, the introduction and widespread use of schooners in the cod fishery, and greater utilization of species such as lobster, herring and whales, collectively provided the economic base capable of supporting this population. Subsistence agriculture was also an important adjunct to this economy.

Such growth and diversity influenced the settlement pattern and made Inner Placentia Bay rather unique within the Newfoundland context. Geographically, it was part of the

"older core" of Newfoundland, yet in the nature of its development it resembled the "frontier" areas such as the southwest coast and the "French Shore". Population growth and resource mix in Inner Placentia Bay resembled more closely those of the "frontier" area rather than the slower pace of population growth and the resource base of Trinity and Conception Bays which was dependent on the inshore cod fishery, the migratory Labrador fishery, and the spring seal fishery (Staveley 1977: 49-75).

Similarly, like the "frontier" areas, Inner Placentia Bay lagged behind Conception and Trinity Bays, in terms of social and cultural amenities. For example in 1911 the literacy rate for the population aged 5 years or older for Inner Placentia Bay was 54.3%, in contrast to 67.2% for Conception Bay and 62% for Trinity Bay. Comparable infrastructure, such as churches, schools, community halls and government buildings, was also below standards prevalent in Conception and Trinity Bays. For example, in 1911 the average value of such infrastructure per resident of Inner Placentia Bay was only 56.7% of the value for Conception Bay and 76.4% of the value for Trinity Bay. Relatively, then, Inner Placentia Bay by 1911 was, in the Newfoundland context, resource rich but in social terms, something of a lagging region. Given the physical setting and the resource utilization patterns that had evolved, modernization in

Inner Placentia Bay was characterized initially by the adaptation of technology to these traditional patterns. However once the pace of modernization accelerated, Inner Placentia Bay was drawn increasingly toward Newfoundland as a whole and displayed similar social and economic responses.

The Period of Study

The period chosen for this study, 1911-66, is chosen only in part because at beginning and end it is bracketed by convenient sources of census data. In fact, both terminal dates mark significant transition periods in Newfoundland's development. The year 1911 marked approximately the high water mark of Newfoundland's rural economy in terms of population growth and extension of settlement. After this date, stabilisation, consolidation and decline became the hallmark of Newfoundland's rural experience. By 1966, this process approached its nadir with the implementation of formal programmes of resettlement and removal of population.

5
3

Chapter IV "Take Me Back To My Western Boat
Let Me Fish Off Cape St. Mary's"

The aim of this chapter is to provide a broad socio-economic picture of Inner Placentia Bay in 1911. The distribution and structure of population will be examined. The fishery, the major component of the economy, will be discussed with emphasis on the species caught, the technology used and areal variations in distribution of productivity. The role of subsistence agriculture will also be considered. Finally the communication and transportation system will be examined, as well as indicators of social organization and attainment such as religious affiliation and education.

In many ways, 1911 represents a high-water mark of the traditional Newfoundland economy and society. Long outstanding issues such as the "French Shore" problem and American fishing rights had recently been settled, in 1904 and 1910 respectively. Completion of the railroad in 1896 in conjunction with expanded coastal boat service in 1900 led to improved linkages between the various regions. (Rowe 1980: 332 ~ 334, Graham 1979: 108).

Since 1900, the fishery had experienced some of its better seasons and it remained the greatest source of both employment and export earnings. For example, in 1900 - 1901 the fishery employed 70% of the work-force and accounted for over 80% of export earnings. Even in 1911, despite increased

mining activity and the establishment of a large pulp and paper mill in 1909, the fishery employed 63% of the work force and contributed over 73% of export earnings.

Noel has argued that by 1911, Newfoundland society and culture was still North Atlantic oriented. World War I and its aftermath however changed all this. The introduction of motor vehicles, marine engines and increased economic and social contact with the North American continent weakened Newfoundland's traditional economy and society and set in motion processes that have continued down to the present (Noel 1971: 131, 262 - 74).

Population

In 1911 the population of Inner Placentia Bay was 6045, very similar to that of 1901. This was in marked contrast, however to the pattern experienced in the last decades of the nineteenth century when from 1891 - 1901 population increased by 25%. This suggests that during the decade 1901 - 1911, population and resources reached an equilibrium in Inner Placentia Bay, given the available economic strategies and technology.

While inconsistencies in the census occur respecting the definition of small communities it appears that by 1911 the "frontier" had been closed in Inner Placentia Bay and a process of settlement consolidation had begun. For example, while the

number of settlements recorded was two fewer than in 1901, the population living in settlements with fewer than 100 inhabitants decreased from 34% in 1901 to 28% by 1911 (see Table 4.1).

Table 4.1: Inner Placentia Bay - Settlements by Population Size, 1901, 1911

| Population Size | 0 - 49 | 50 - 99 | 100 - 199 | 200 - 299 | 300+ |
|-------------------------------|--------|---------|-----------|-----------|------|
| Number of Settlements 1901 | 25 | 18 | 13 | 4 | 3 |
| Number of Settlements 1911 | 25 | 14 | 15 | 3 | 4 |
| Proportion of Population 1901 | 13% | 21% | 29% | 17% | 20% |
| Proportion of Population 1911 | 10% | 18% | 38% | 13% | 21% |

Source: Census of Newfoundland 1901, 1911.

Even by 1911 most of the settlements were small however, 25 of the ~~25~~ had fewer than 50 inhabitants and 14 had only 50 - 99 inhabitants. There were a very few larger centres: for example, only Fox Harbour, Harbour Buffett, Red Island and Merasheen had over 300 inhabitants.

In 1911 the population of the area was widely distributed along the littoral (see Figure 4.1). With the exceptions of Fox Harbour and Long Harbour on the Avalon Peninsula, the greatest concentration of population as well as the largest settlements occurred on the islands at Sound Island, Woody

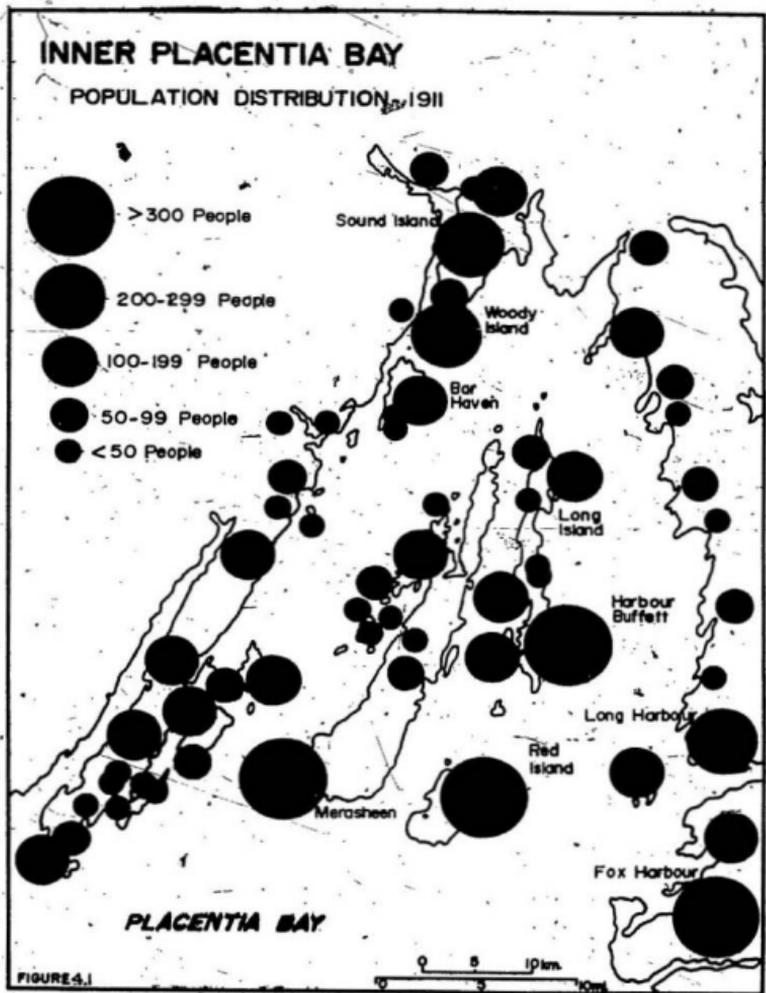


FIGURE 4.1
 Source: Census of Newfoundland 1911

Island, Bar Haven, Red Island, Long Island, Merasheen Island and the Ragged Islands.

Population Structure

Inner Placentia Bay had a fairly balanced population structure in 1911 with no gross discontinuities between the age groups: there were also no age groups that had experienced serious depletion (see Figure 4.2). There were however slightly fewer males in the 30 - 35 age group than might have been expected. There was also an excess of males over females in each of the 30 to 55 age groups and a larger number of children in the 5 to 10 age group.* Overall Inner Placentia Bay had a population structure that reflects the pattern of strong and steady population growth experienced during the nineteenth century.

*This excess of males over females in the 30 to 55 age group probably is the result of the fishery being able to absorb most of the male labour force. Maternal mortality may account for some of the discrepancy - however, with improvements in transportation after 1890 and more social and economic interaction it is probable that many young women obtained employment in the service sector in St. John's: it may be conjectured many married there and did not return to Inner Placentia Bay. The decrease in the 0 - 4 age group would suggest a declining birth rate. For example, the District of Placentia - St. Mary's recorded 150 fewer births for the period 1906 - 1911 than 1900 - 1905, while marriages showed an increase.

INNER PLACENTIA BAY—POPULATION STRUCTURE 1911

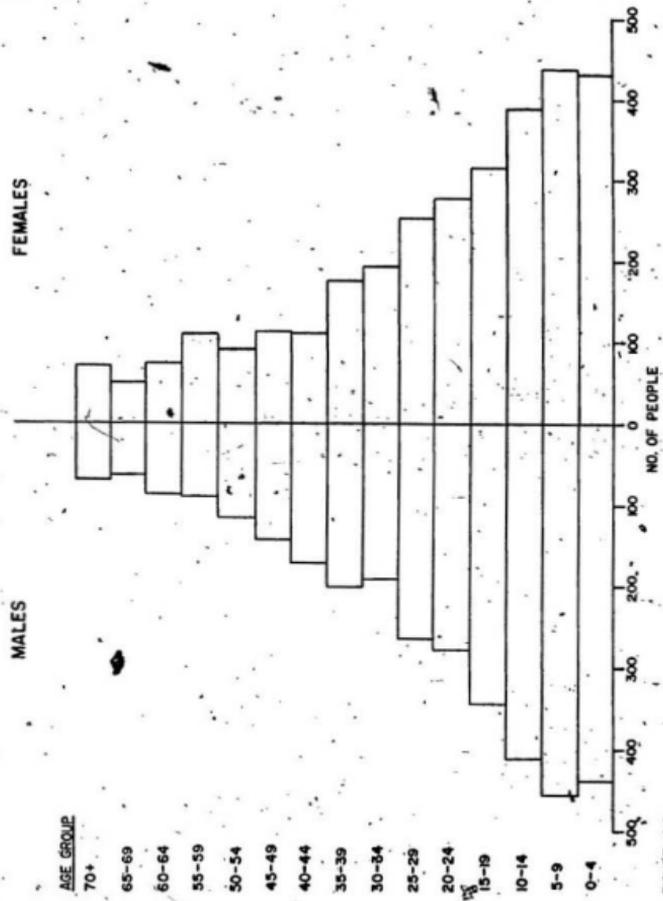


FIGURE 4.2
Source: Census of Newfoundland, 1911.

Economy

The pattern of settlement distribution in 1911 was largely a function of the nature of the Inner Placentia Bay economy. The main focus of the Inner Placentia Bay fishery in 1911 was cod with lobster and herring important in some areas, and one whale processing facility. The role and significance of the fishery is readily apparent from Table 4.2.

Table 4.2: Inner Placentia Bay - Composition of Labour Force 1911

| Occupations | Number Employed | Percentage of Those Employed |
|--------------------------|-----------------|------------------------------|
| Teachers and Clergy | 28 | 0.9 |
| Merchants and Traders | 42 | 1.3 |
| Gov't Service and Office | 29 | 1.0 |
| Mechanics | 15 | .5 |
| Farmers | 5 | .2 |
| Lumbering | 9 | .3 |
| Otherwise Employed | 127 | 4.2 |
| Catching and Curing Fish | 2771* | 91.6 |
| Total | 3026 | 100.0 |

*1743 males, 1028 females

Source: Census of Newfoundland 1911

Even in the largest settlements with a more diversified society and economy, the fishery remained supreme (see Table 4.3).

Table 4.3: Composition of Labour Force - By Selected Community 1911

| Community | Total Population | Number Employed | Number Catching & Curing | Percentage Catching & Curing |
|-----------------|------------------|-----------------|--------------------------|------------------------------|
| Fox Harbour | 457 | 164 | 152 | 93 |
| Harbour Buffett | 418 | 188 | 145 | 77 |
| Red Island | 443 | 215 | 211 | 98 |
| Sound Island | 293 | 133 | 108 | 81 |

Source: Census of Newfoundland 1911

Technology

The ways in which changing man - environment relations were mediated in Inner Placentia Bay may be studied by an examination of the technology applied in the fishery.

Boats

Most of the boats used in the fishery in 1911 were small and had a carrying capacity of less than 30 quintals of cod fish.*

*Precise data on boat size are difficult to obtain. From 1891 on only one classification, 4 - 30 quintals is given. The vast majority were probably nearer the lesser figure, since in 1874 and 1884 75% and 83% respectively were in the 4 to 15 quintal class. Butler claims that the boats used by the earlier settlers were in the 5 - 7 quintal range (Butler 1975: 54; Butler 1982:3).

These boats usually had a crew of one or two men and relied almost exclusively upon oars and sail. Boats over 30 quintals would have a larger crew, but they also relied upon oars and sail - and though more seaworthy they too restricted their operations to the inshore.

Smaller boats were found uniformly throughout Inner Placentia Bay - however the larger boats show a distinct geographical pattern (see Figure 4.3). They were concentrated in three areas - on the western side of the bay between Great Paradise and Clattice Harbour; in the Fox Harbour - Long Harbour area; and on the central islands, especially in their northern settlements. Resource use patterns influenced boat size, as did the fishing technology utilized. For example small boats were adequate in the lobster fishery but larger boats were necessary if the fishermen had a codtrap or if they operated offshore in the most exposed section of the bay.

By 1911 sailing schooners were playing an important role in the Inner Placentia Bay fishery. Their number had increased from 60 in 1901 to 86 in 1911. These schooners averaged 20 to 30 tons and were capable of carrying 150 to 300 quintals of codfish each. They were usually crewed by 5 to 7 men. A major advantage of these schooners was that they made the fishermen more mobile. They concentrated their

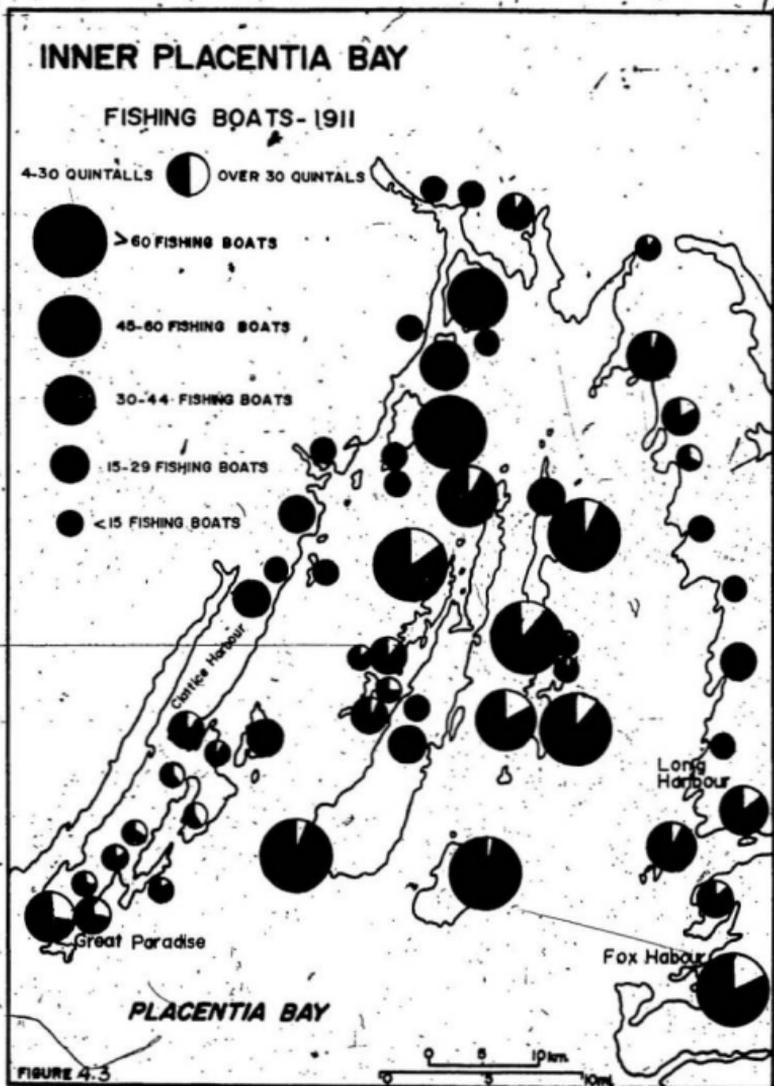


FIGURE 4.3

Source: Census of Newfoundland 1911

efforts therefore on the more productive grounds off Cape St. Mary's and Cape Pine at the mouth of Placentia Bay and as far east as Cape Race. In addition, they could remain at sea for weeks with the men living aboard, while the codfish could be cleaned on deck and then salted in the hold. The catch could be discharged at the home port where drying facilities and labour for curing were available.

The distribution pattern of schooners closely resembled that of the boats greater than 30 quintals. Again it was on the western side of the bay, between Great Paradise and Clattice Harbour; on Red Island and Long Island; and in the Fox Harbour - Long Harbour area that the fishing schooners were concentrated (see Figure 4.4). One striking feature however is the presence of so many vessels at Fox Harbour. It is difficult to account for such a pattern, but it might be suggested that population pressure was a factor. Fox Harbour in 1911 had over 400 inhabitants; its inshore grounds were limited since it was close to Ship Harbour and Iona and also to Placentia and Argentia a little to the south.*

*Fox Harbour fishermen appear to have been more willing to innovate during the nineteenth century. Both schooners and cod traps appeared at this port earlier and in greater numbers than in most other ports.

INNER PLACENTIA BAY

FISHING SCHOONERS-1911

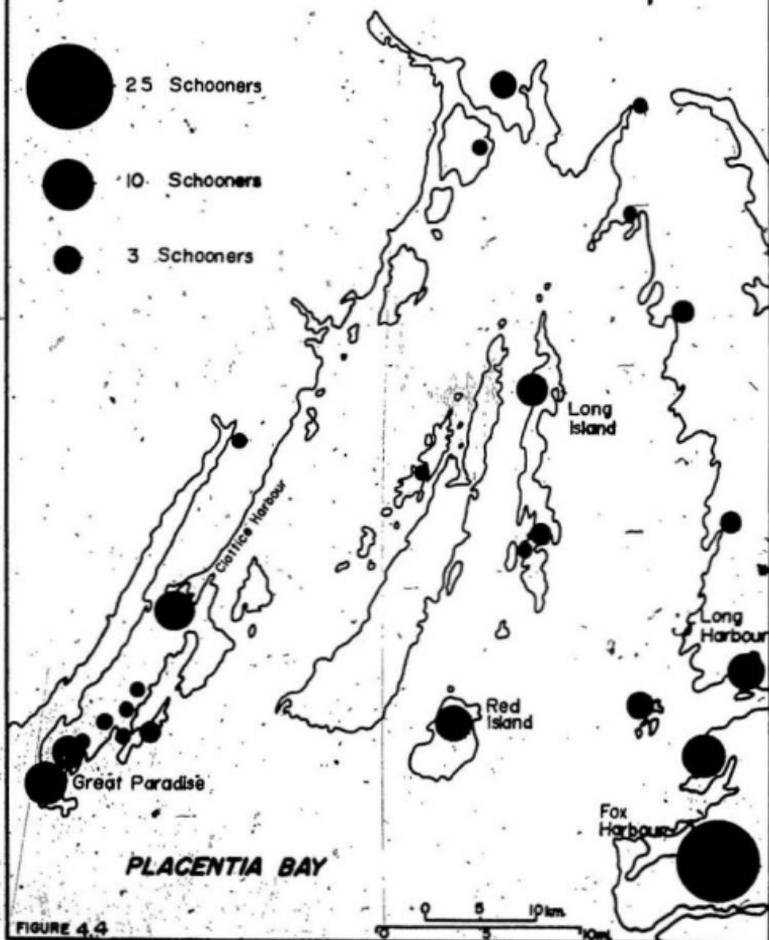


FIGURE 4.4

Source: Census of Newfoundland (1911)

Fishing Gear

There was a variety of fishing gear used in Inner Placentia Bay in 1911. The type of gear was influenced by the species being taken and the season. For example in the cod fishery the jigger and handline continued to be used in addition to trawls, cod nets and increasingly since the late nineteenth century, the cod trap (Butler 1980: 50 - 54). Each type of gear, however, had advantages and disadvantages. The jigger, the cod net and the cod trap, for example, required no bait; but the jigger was only effective when the cod were hungry and were actively seeking food. The cod net was most effective when the fish were in deeper water and stayed close to the sea bottom. The cod trap was most effective when schools of cod pursued bait fishes, such as squid or caplin, close to shore, while the trawl and handline required a ready supply of bait fishes.

Unfortunately gear data for 1911 do not give a good breakdown of fishing equipment except for the cod trap. But when the data on nets and lines are grouped, the average amount of gear being utilized per male catching and curing can be plotted by community.* There were wide variations (see Figure 4.5). The greatest number of nets and lines per fisherman occurred at Long Island and in the Great

*The Census uses the term males catching and curing rather than fishermen.

INNER PLACENTIA BAY

Average Number Of Nets And Lines Per Fisherman - 1911

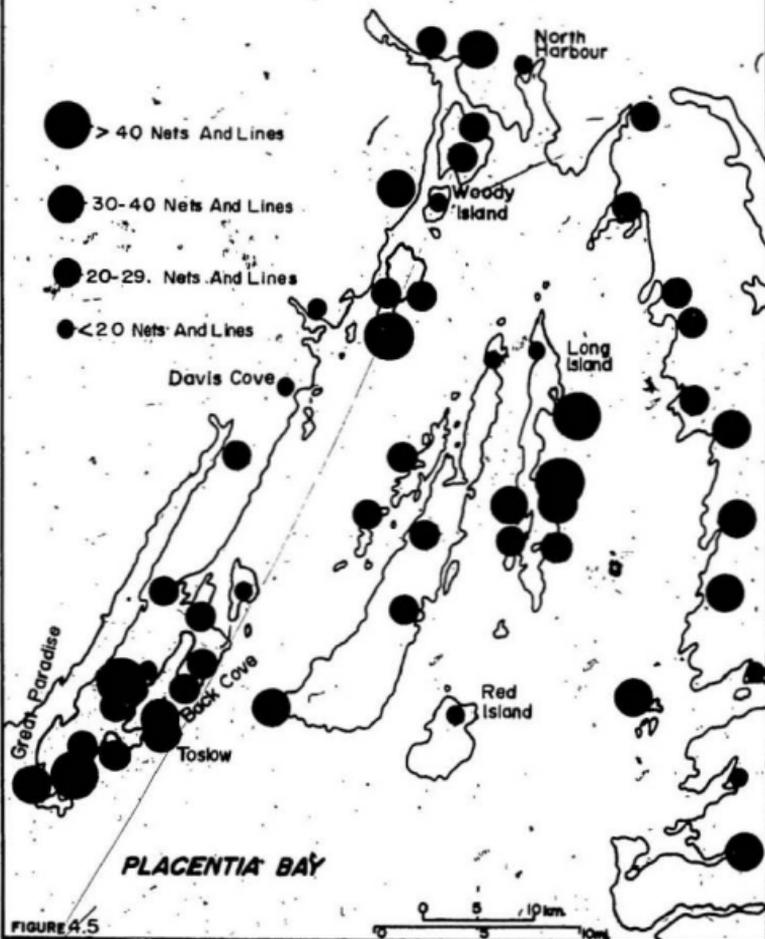


FIGURE 4.5

Source: Census of Newfoundland 1911

Paradise - Toslow area. The number of nets and lines, however, were low at Isle Valen, in the Davis Cove area, at Woody Island, North Harbour and at Red Island.

The distribution of cod traps in 1911 shows a very striking pattern. There were no cod traps on the western side of the bay between Isle Valen and Come By Chance. The greatest concentration of traps occurred in the Fox Harbour - Ship Harbour area and in the Great Paradise - St. Anne's area, with a lesser occurrence along the Isthmus of Avalon and on the islands in the centre of the bay (see Figure 4.6). This distribution of codtraps corresponds closely with the distribution of schooners suggesting that this technique was adopted primarily by the schooner fishermen rather than the inshore fishermen.

There was little variety in catching techniques in the other fisheries. In the herring fishery nets or seines were used, while the whale fishery used a harpoon gun mounted on a steam powered vessel. In the lobster fishery the lobster trap was the only technique used. Figure 4.7 shows that the greatest distribution of lobster traps occurred on the western side of Inner Placentia Bay from Clattice Harbour to North Harbour including the islands of Bar Haven, Woody Island and Sound Island; along the Isthmus of Avalon from Come By Chance to Long Harbour; and at Long Island, Ragged Islands and Isle Valen. In contrast there were very few lobster

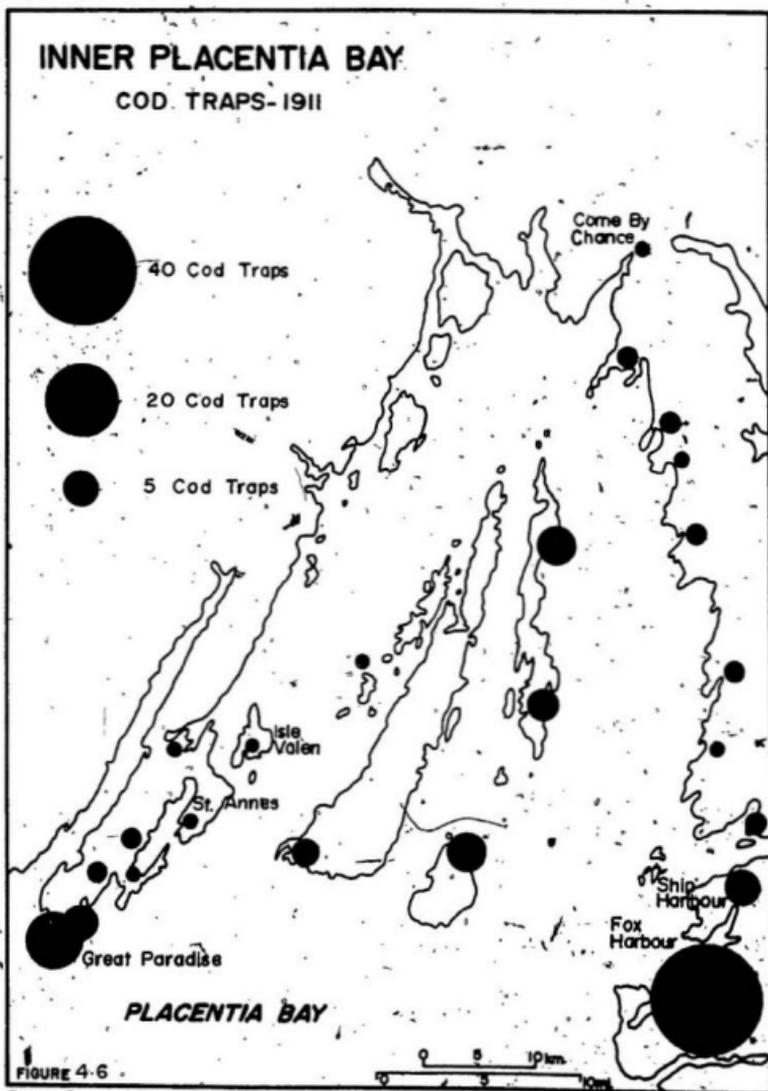


FIGURE 4-6

Source: Census of Newfoundland, 1911.

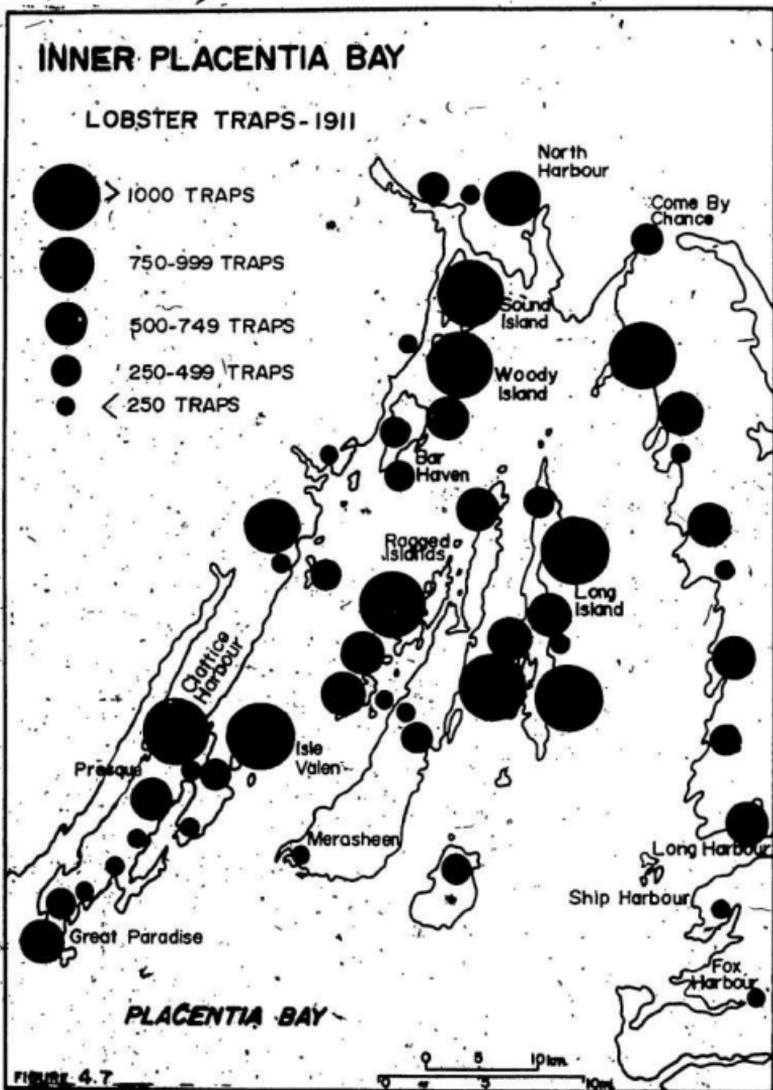


FIGURE 4.7

Source: Census of Newfoundland 1911

traps at Fox Harbour, Ship Harbour, Red Island or Merasheen. Apart from Great Paradise and Presque, lobster trap holdings were also lower on that more exposed section of the western side of the bay.

The distribution of lobster traps appears to be closely related to the presence of shoal water and to the more sheltered sections of the region. The large fleet of schooners at Fox Harbour and Ship Harbour may account for the low number of lobster traps in that area, since the lobster fishery coincided with the schooner fishery.

It is interesting to note however that within the area where lobster traps were most prevalent, even the smallest communities had a relatively large number of traps.

Productivity and Income.

Just as there were marked spatial variations in boats and fishing gear, so there were wide discrepancies in yields. For example in the codfishery there was a range in productivity per male engaged from over 80 quintals in some communities to fewer than 20 quintals in others. The most productive areas in 1910 were the Fox Harbour - Fairhaven area; the central islands; and the western side of the bay between Great Paradise and Clattice Harbour. From Fairhaven, along the Isthmus of Avalon and on the western side of the bay, from North Harbour to Clattice Harbour the productivity was

much lower (see Figure 4.8). This pattern may be explained by several factors. First, as we have seen, the outer section of the region and the central islands were the areas of greatest apparent capital input - the larger boats and schooners were found here and this area also had an average or greater than average occurrence of fishing gear. Location was also important, for as a rule in the inshore cod fishery, more exposed coastal sites had an advantage over sites farther in the bay.

In the lobster fishery, however, the most productive areas were on the more sheltered western side of the bay between Clattice Harbour and North Harbour, on Long Island and Ragged Islands and to a less marked degree along the Isthmus of Avalon to Fairhaven. This was also the area where lobster traps were most prevalent. The outer section of Inner Placentia Bay showed much lower yields (see Figure 4.9).

Unlike cod or herring the lobster required a more specialized environment and these requirements were better met farther in Inner Placentia Bay. Lobsters preferred shallow water and were usually taken in traps set at depths ranging from 5 to 22 m. (3 to 12 fathoms). Shelter from rough seas was important, as well as the nature of the seabottom, water

INNER PLACENTIA BAY

CODFISH PRODUCTION QUINTALS PER FISHERMAN-1910

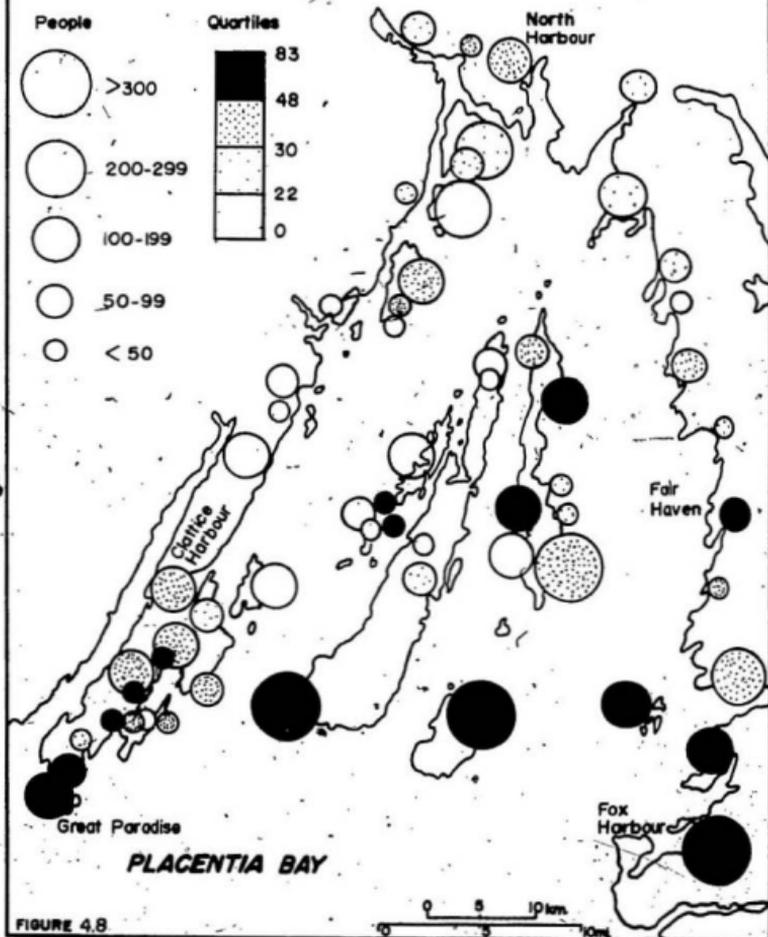


FIGURE 4.8

Source: Census of Newfoundland 1911

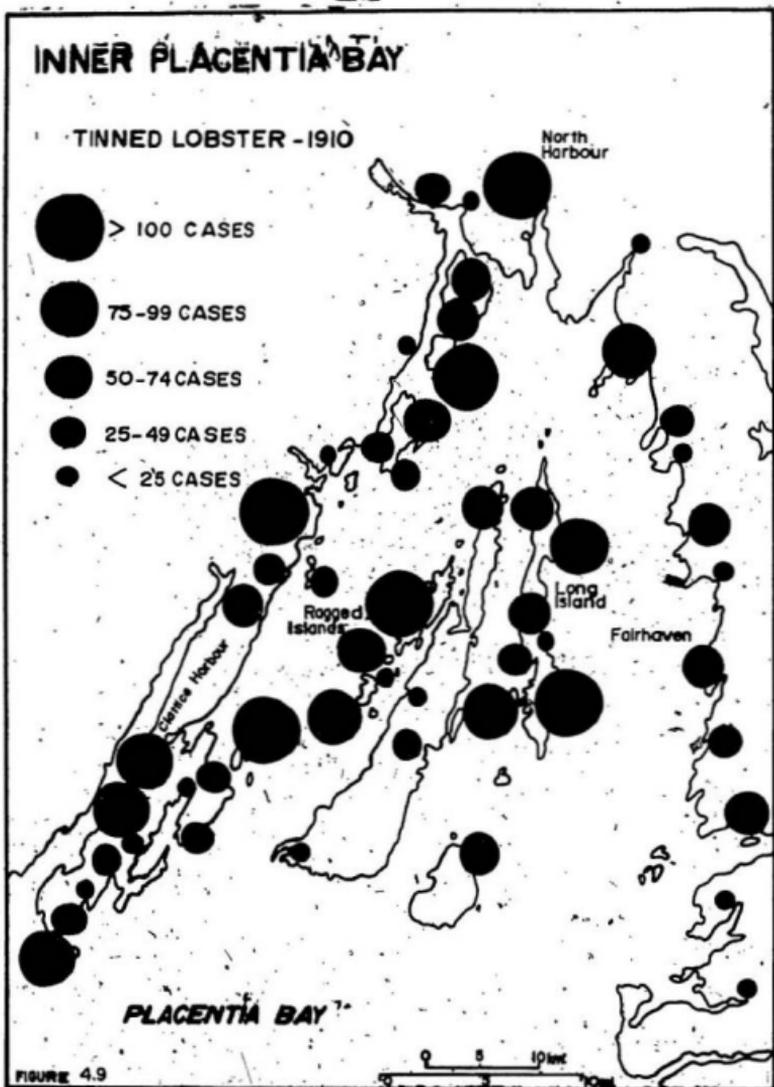


FIGURE 4.9

Source: Census of Newfoundland 1910.

temperature and wind direction.*

In 1911 the lobster fishery was both the least capital intensive fishery and the least arduous.** Consequently, fishermen in the vicinity of productive lobster grounds were eager to move into this niche. Overexpansion, however, during the period 1891 - 1911 resulted in intense pressure

*In exposed headland regions rough seas could wash lobsters ashore and destroy lobster traps. Rocky bottom with numerous small crevices suited lobster since they could hide from predators, particularly during moulting when they were especially vulnerable. Water temperatures are crucial in lobster growth. The direction of prevailing winds is also important - lobster larvae go through a stage when they float free on the surface water: prevailing offshore winds take the larvae out to sea and the young lobster have unsuitable conditions for survival. This is why Trinity Bay and Conception Bay have fewer lobster than Notre Dame Bay and Bonavista Bay, where the numerous islands and coves prevent the larvae from being blown out to sea (Templeman 1966: 119 - 121).

**As this fishery was confined to sheltered waters only a small boat was required. Framing for lobster traps was readily available from the nearby forest and practically any type of fish was suitable for baiting traps. In contrast, cod fishermen spent much effort trying to find caplin or squid for bait. The lobster fishery was also prosecuted during the most pleasant time of the year, particularly in May and June and occasionally in the early fall following the summer moult.

on the stocks and yields declined markedly. For example, a fisheries official noted in 1905 that

a few years ago less than 100 lobsters could be found to fill a case of 48, 1 lb. tins, today over 250 lobsters are required (J.H.A. 1906: Appendix 163).

In 1907 it was reported that

Whereas a few years ago a single lobster fishermen would not be satisfied with less than 25 to 30 cases, this season they consider themselves fortunate if they secure half that number (J.H.A. 1908: Appendix 191).

A report for 1910 claimed that at numerous locations in the Inner Placentia Bay area the lobster fishing grounds had been overfished continuously for years (J.H.A. 1911: Appendix 473). As a result the production of tinned lobster fell 70% between 1901 and 1911, from 9885 to 2915 cases.

The herring fishery unlike the cod or lobster fishery was prosecuted during the late fall and winter and was subject to both greater fluctuations and uncertainty. For example, gales and rough seas were more prevalent during that season. Moreover, herring might or might not make an appearance in any given year, or they might be abundant near one community while just a few kilometers away there might be none. Furthermore, many communities might not have the equipment and facilities to prosecute this fishery, for in addition to nets and larger boats, shore facilities such as a large stage or store in which to clean and salt the herring was needed. It

was also necessary to have sufficient quantities of salt as well as barrels on hand since given the season and the transportation and communications network prevalent in 1911 they could not easily be procured elsewhere on short notice.

Sheltered arms of the sea were best suited for seining herring. Nets could also be used in such areas or alternatively they could be moored in position farther offshore. In 1910, herring production was confined almost exclusively to the central islands and to Bar Haven, Woody Island and Sound Island near the bottom of the bay (see Figure 4.10).

There was also one whaling station in Inner Placentia Bay in 1911. This station was located at Rose au Rue on the eastern side of Merasheen Island and had facilities for processing the whales into oil and guano. During the period 1904 - 1911 over 600 whales were processed yielding some 600,000 gallons of oil and 1200 tons of guano (J.H.A. 1905 - 1912, Appendices).

By exploiting the cod, herring, lobster and whale resource, most communities of Inner Placentia Bay were able to achieve a living comparable to most other fishing regions in Newfoundland. For example, the average earnings for a male employed catching and curing fish in Newfoundland in 1910 was \$240.27; while that of the District of Placentia - St. Mary's was \$242.61; the average for the Inner Placentia Bay

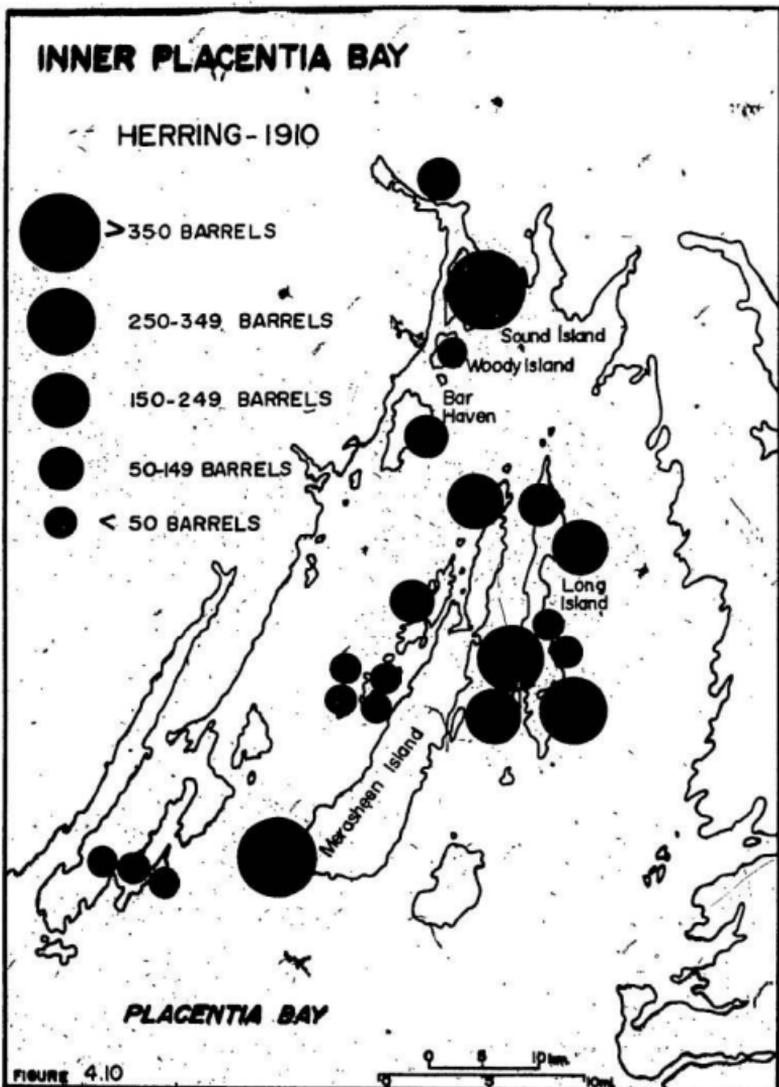


FIGURE 4.10

Source: Census of Newfoundland 1911

region however was \$261.78. The cod fishery contributed the major source of Inner Placentia Bay fishermen's income; in 1910 about 84% of total fisheries earnings were derived from cod; lobster accounted for about 10%, whaling 5% and herring 1%.*

Without a schooner fishery, Inner Placentia Bay could not have achieved a level of income 9% above the Newfoundland average, in 1910. Unfortunately the census contains no data on schooner productivity. However other sources indicate that landings by schooners represented a considerable proportion of the total cod landings and as such were a vital component in the Inner Placentia Bay economy.** Moreover as Figure 4.11 illustrates higher fishing incomes occurred in the Fox Harbour - Long Harbour area; the central islands; and on

*The values of the various species were calculated from census returns giving aggregate income from the fisheries. Since values for the herring fishery and whale fishery were provided and the value per case of lobster is recorded in the J.H.A. the balance of fisheries income would represent cod.

**Some schooners fishing the Cape St. Mary's grounds landed 200 - 250 quintals of codfish by mid-July (Evening Telegram 16 July 1910: 4). A 1938 survey indicated that the average annual catch per fisherman in the schooner fishery was 52.3 quintals. If each boat had a crew of 5 to 7, from 20,000 to 30,000 quintals of codfish might have been taken by the 86 schooners operating during the 1910 season, perhaps half of the total catch.

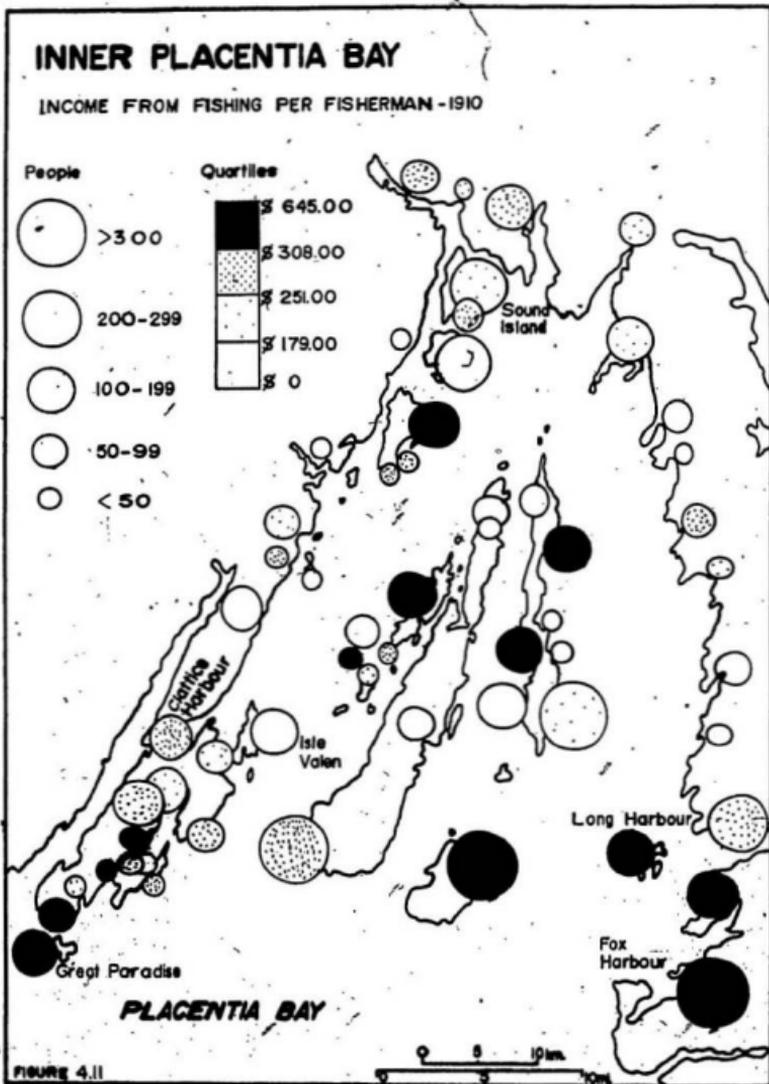


FIGURE 4.11

Source: Census of Newfoundland 1911

the western side of Inner Placentia Bay between Clattice Harbour and Great Paradise, precisely the areas where schooners were located. In contrast lower incomes were prevalent on the western side of Inner Placentia Bay particularly from Isle Valen to Sound Island and on the Isthmus of Avalon where input of gear and vessels for cod fishing was lower.

Subsistence Agriculture

Subsistence agriculture was an important adjunct to the fishery. It was carried on by most households and provided root crops and livestock to supplement the family's food supply. Its importance is revealed in the 1911 census which showed that 1473 fishermen and others cultivated land. The value of crops produced and the ongoing capital value of livestock exceeded \$100,000.00 and this represented about 21% of the total value of fish products produced in 1910. The significance of agriculture was recognized by many inhabitants of Inner Placentia Bay and in 1911, there were agricultural societies at Arnold's Cove and Merasheen, the latter having 163 members. The government assisted these societies by supplying seed potatoes, swine, bulls and rams to improve the quality and breed of livestock.

Livestock

Sheep and cattle were, in the aggregate, the most valuable domestic animals kept by the inhabitants (see Table 4.4).

Table 4.4: Inner Placentia Bay - Livestock Holdings and Value 1911

| Type | Number | \$ Value Per Unit | Total Value \$ |
|---------|--------|-------------------|---------------------|
| Cattle | 574 | 35.00 | 20,090.00 |
| Sheep | 4910 | 5.00 | 24,550.00 |
| Swine | 97 | 10.00 | 970.00 |
| Goats | 95 | 15.00 | 1,425.00 |
| Horses | 44 | 70.00 | 3,080.00 |
| Poultry | 6182 | .50 | 3,091.00 |
| | | | \$33,206.00 (Total) |

Source: Census of Newfoundland 1911

While cattle were kept at most communities the greatest concentrations occurred at Red Island; at Long Island; and along the eastern side of Inner Placentia Bay from Fox Harbour to Swift Current.

Sheep were kept throughout the entire region. The sheep was valued for both its meat and wool and unlike cattle required little attention. Sheep could graze all summer on rough and hilly ground and needed hay only for the coldest winter months.

The most concentrated areas of livestock holdings occurred at Red Island, Long Island and along the eastern side of Inner Placentia Bay. (see Figure 4.12). Merasheen Island, Ragged Islands and the entire western side of Inner Placentia Bay had much lower concentrations - communities with an above average rate were all small communities where individual discrepancies could profoundly influence the results. A further possible explanation for this pattern is the more rugged relief prevalent on the western side of the bay and a more restricted hinterland for pasture.

Crops

The main focus of arable agriculture in the area in 1911 was hay for livestock and root crops such as potatoes, turnips and cabbage for the family. As Table 4.5 indicates, hay and cabbage were the most important.

Table 4.5: Inner Placentia Bay - Hay and Vegetable Production and Value 1911

| Crop | Number | Unit Price | \$ Value |
|----------|-------------|--------------|----------------|
| Hay | 1,245 tons | \$17.00 ton | 21,165 |
| Cabbage | 528,355 hd. | .60 doz. hd. | 26,418 |
| Potatoes | 5,177 brls. | 1.40 brl. | 7,248 |
| Turnips | 495 brls. | 1.30 brl. | 643 |
| | | | 55,474 (Total) |

Source: Census of Newfoundland 1911

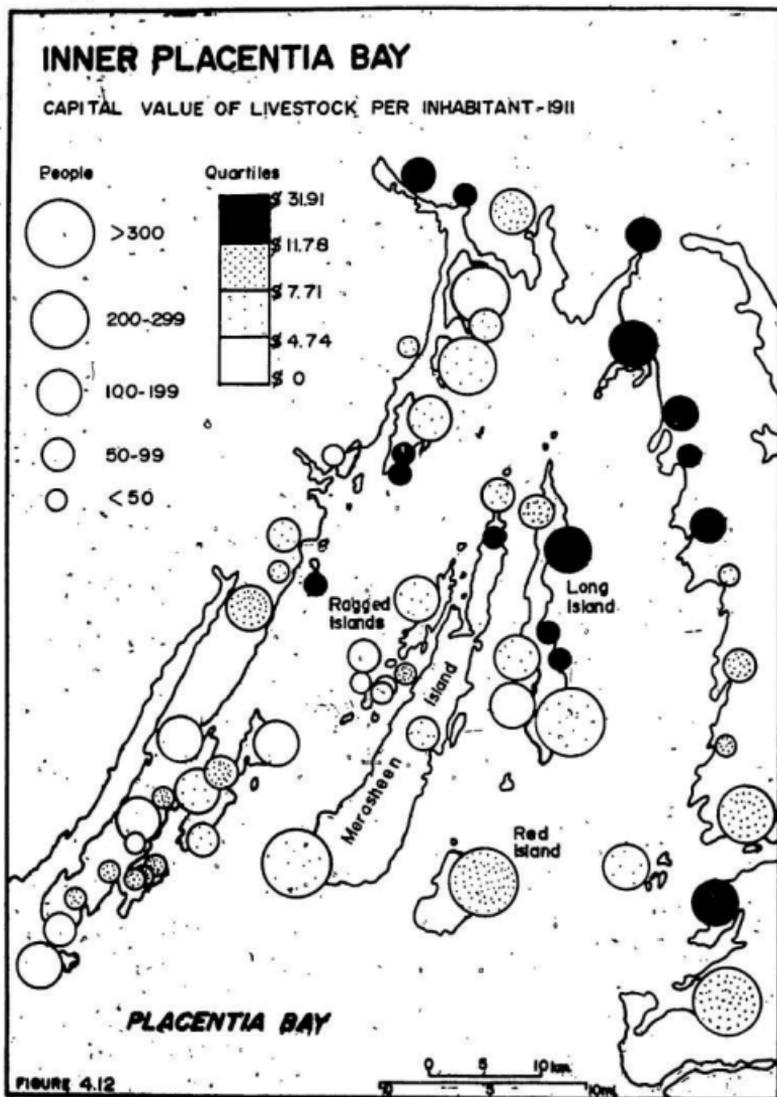


FIGURE 4.12

Source: Census of Newfoundland 1911

The level of crop production as well as consumable items such as meat, eggs, milk and wool tended to be higher on Long Island and the eastern side of the bay between Fox Harbour and North Harbour while the western side was lower (see Figure 4.13).

Miscellaneous

Hunting and berrypicking were also important subsistence activities. Rabbits and seabirds (particularly murre) were welcome additions to the regular diet during the fall and winter months and occasionally other species such as partridges, black ducks, sea ducks, pigeons, loons and mergansers were taken.

A variety of berries, such as bakeapples, raspberries, blueberries, marsh berries, and partridge berries were gathered in season and made into preserves for the family's use. Such activities introduced more variety into the diet and also provided a change in the day to day routine.

Forests

The forests provided materials for erecting and repairing houses, boats, flakes and wharves. In addition wood was the only fuel and each family procured a substantial amount of firewood. By 1911, the forest was also supplying three small sawmills at Monkstown. This industry employed 5 persons and produced birch and spruce boards, shingles and laths (for

INNER PLACENTIA BAY

VALUE OF AGRICULTURAL AND ANIMAL PRODUCTS PER INHABITANT-1911

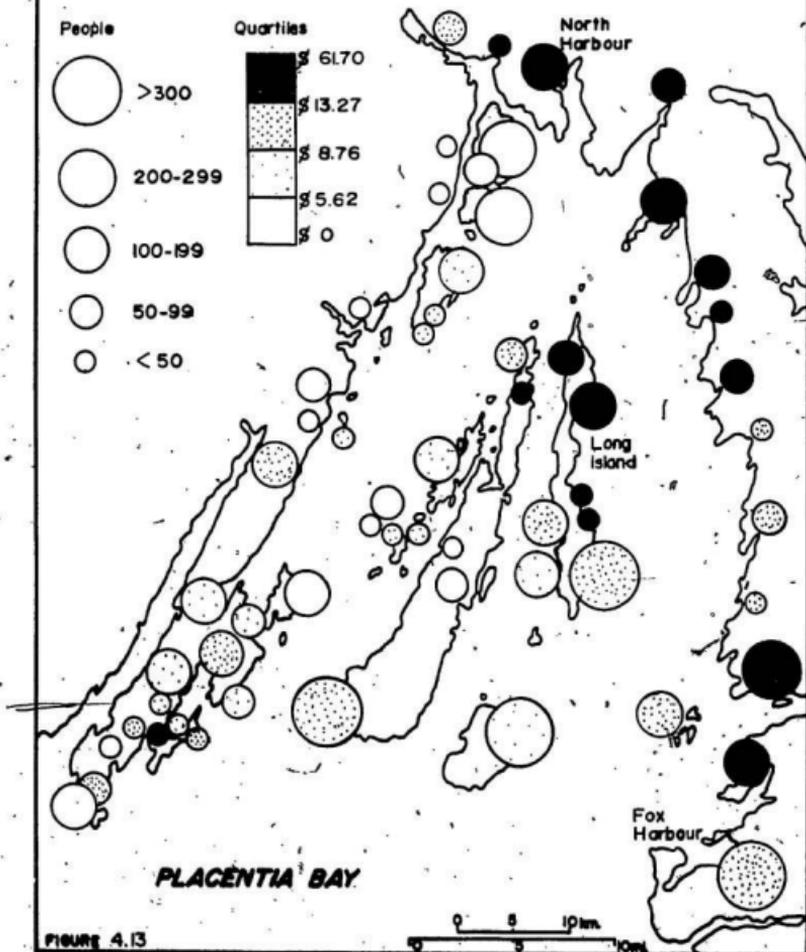


FIGURE 4.13

Source: Census of Newfoundland 1911

lobster traps) with a combined value of \$1100.00

Transportation and Communication

Since good transportation and communication facilities are essential for the movement of people, commodities and information both within and outside a region the level of such services have an important impact on any area. The level of service at Inner Placentia Bay in 1911 was not high. The sea was the main medium over which supplies and products as well as people moved. In addition to private boats and schooners there was also a government subsidised steamer service. For example, in 1911, the S.S. Argyle left Placentia every Wednesday and called at the larger ports in Inner Placentia Bay from Ship Harbour to Merasheen on the bay run. On Monday this steamer called at Presque and Great Paradise on the western run which included ports such as Lamaline on the tip of the Burin Peninsula (see Figure 4.14).

As the figure shows, with the exception of Ship Harbour there were no ports of call for the steamer on the eastern side of Inner Placentia Bay because these communities had access just a short distance inland to the railway system. Consequently these communities had better linkages with other sectors of Newfoundland and travel costs both in time and money were reduced. An additional advantage was that mail could be moved by rail as well.

INNER PLACENTIA BAY

MAJOR TRANSPORTATION ROUTES-1911

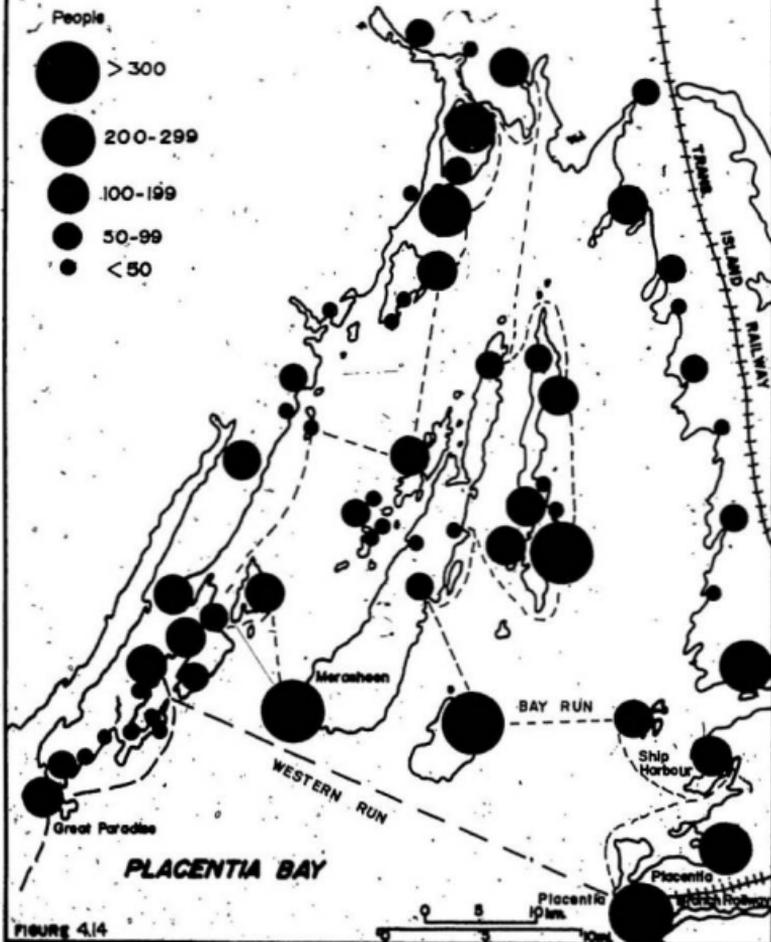


FIGURE 4.14

Source: Year Book And Almanac Of Newfoundland 1911

While most of the larger communities in Inner Placentia Bay had post offices by 1911, their function was confined almost exclusively to receiving and despatching mail. Money orders, for example, could be procured only at Red Island, Harbour Buffett, Sound Island and Black River. Only Fox Harbour, Come-By-Chance and Sound Island had telegraph service available* (see Figure 4.15). Mail for Inner Placentia Bay was carried by steamer or by rail and then dispatched by couriers to the various settlements: government estimates for 1911 - 1912 allocated monies for couriers between the railway line and the communities of Arnold's Cove, Famish Cove (Fairhaven), Fox Harbour, La Manche, Little Harbour East and Long Harbour on the Avalon Peninsula. Similarly, provision was made for couriers to take mail from the larger island communities to smaller communities: from Tack's Beach to Gaulton's Island; Harbour Buffett to Mussel Harbour Arm (Kingwell); Presque to Great Bona; and from St. Leonard's to St. Kyran's (J.H.A. 1912: Appendix 83 - 91).

*The presence of the telegraph at Come-By-Chance and Fox Harbour is attributable to their proximity to the main railway and telegraph line and the Placentia Branch Railway line respectively. Sound Island was a populous community with a customs officer and during the late nineteenth and early twentieth century was frequented by American vessels purchasing herring.

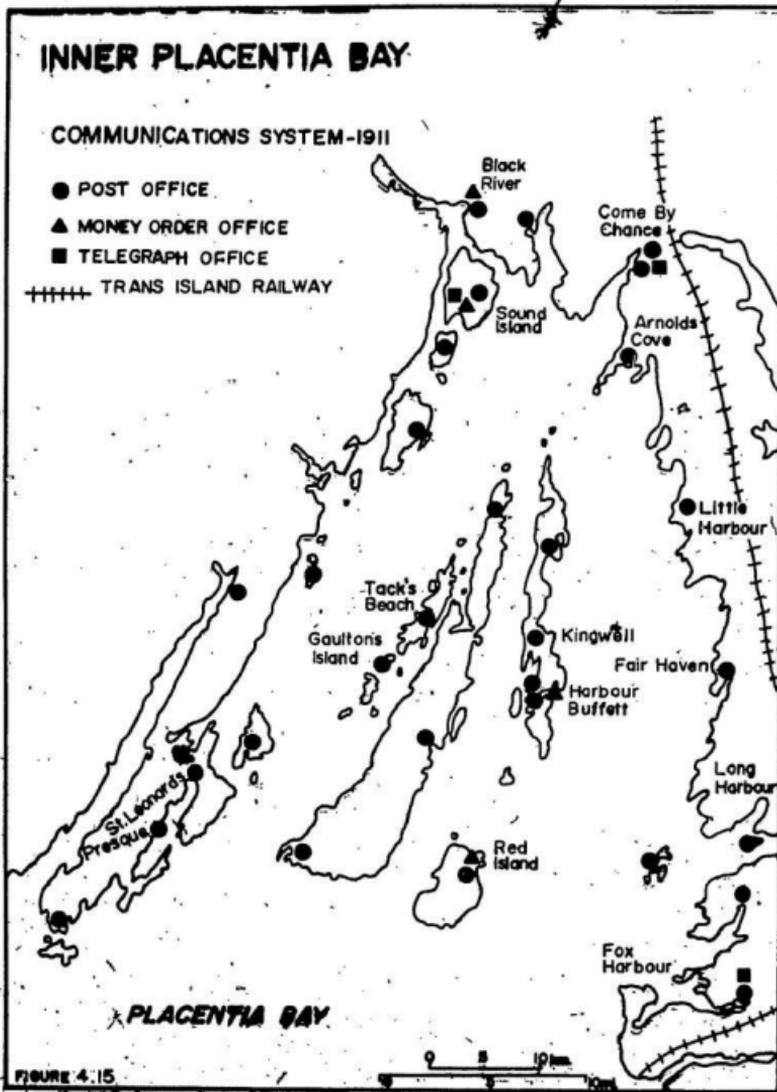


FIGURE 4.15

Source: Year, Book And Almanac Of Newfoundland 1911

Religious Denominations and Education

Religion is critical to an understanding of the social and spatial geography of Inner Placentia Bay, since as a rule most communities were homogeneous and also because the education system was organized along denominational lines. In terms of religious affiliation over 58% of the population of Inner Placentia Bay were Roman Catholic and about 42% were Protestant. Amongst the Protestants however there were three denominations with the Church of England claiming the most adherents (see Table 4.6).

Table 4.6: Inner Placentia Bay - Religious Affiliation - 1911

| Religious Denomination | Percentage of Population |
|------------------------|--------------------------|
| Roman Catholic | 58.1 |
| Church of England | 23.2 |
| Methodist | 15.5 |
| Salvation Army | 3.2 |

Source: Census of Newfoundland 1911

In terms of geographical distribution there was a very distinct pattern of religious affiliation. Apart from a small number of Protestants at Merasheen and Isle Valen, the outer section of Inner Placentia Bay was exclusively Roman Catholic. There was also a smaller grouping on the western side of Inner Placentia Bay between Davis Cove and Bollardtown on Sound

Island; and at Southern Harbour and LaManche on the Isthmus of Avalon on Long Island and on Northern Merasheen Island (see Figure 4.16). Church of England adherents were dominant on Long Island and at Ragged Islands and along the Isthmus of Avalon between Little Harbour East and North Harbour. Methodists were concentrated almost exclusively in the Woody Island, Swift Current, Come-By-Chance area at the bottom of Inner Placentia Bay with a smaller number on Long Island. The Salvation Army co-existed with other Protestant groups in four settlements while dominating at Monkstown.

The effects of small, dispersed and sometimes fragmented settlements were reflected in the educational achievements of the region. For example, whereas in 1911 over 64% of the Newfoundland population 5 years of age or older could write, the rate for Inner Placentia Bay was only 56%. When the percentage of the population 5 years or older who could write is graphed for each community, it becomes apparent that the smaller communities had a lower literacy rate (see Figure 4.17). For example, of the 24 communities with a 40% or lower literacy rate, only one had more than 100 inhabitants in that age category. Four communities with fewer than 30 inhabitants over 5 years of age had rates above 60%, however they were all within walking distance of larger settlements. There is no distinct pattern, however, for the larger communities, and the

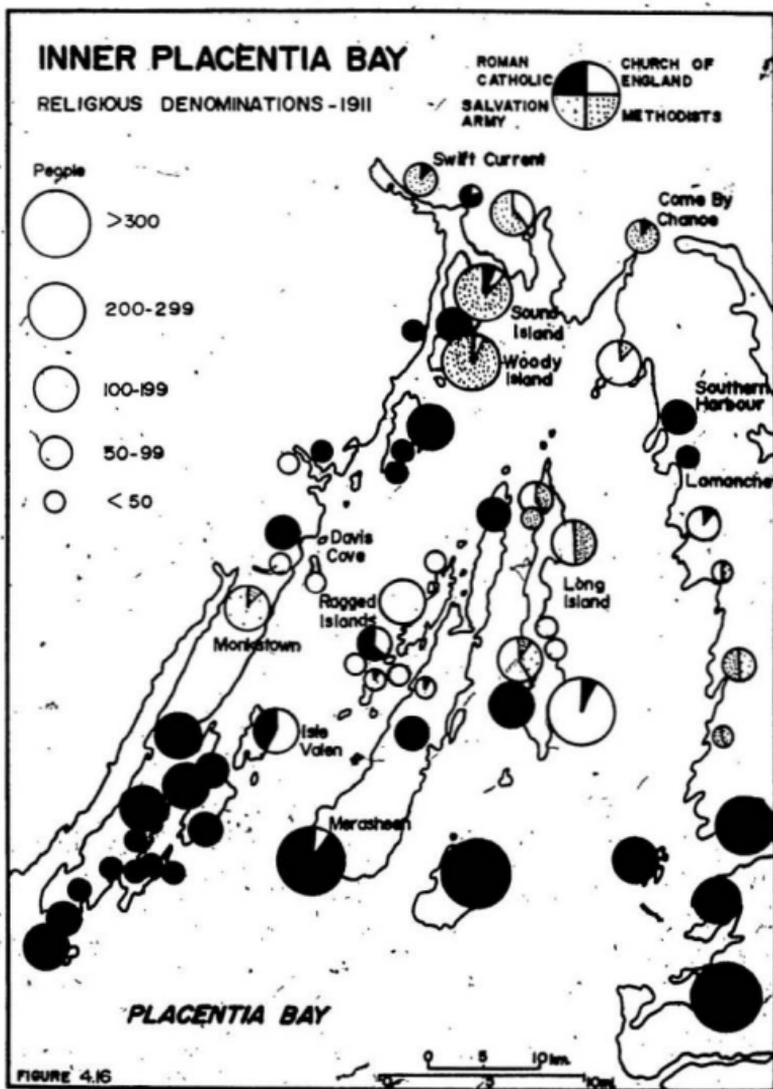


FIGURE 4.16

Source: Census of Newfoundland 1911

INNER PLACENTIA BAY - Percentage Of Literacy By Community Size - 1911

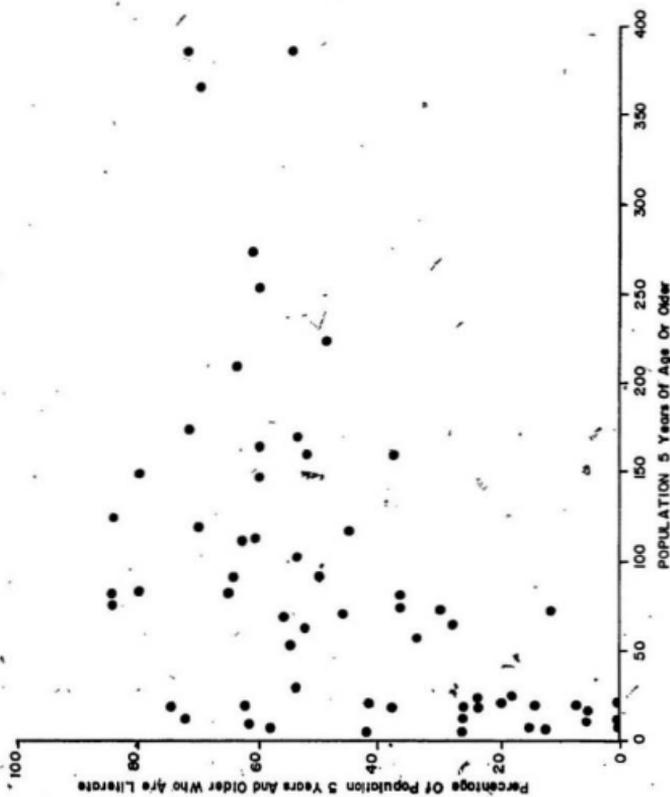


FIGURE 4.17

Source: Census Of Newfoundland 1911

graph indicates the diversity in educational attainment that can occur within even such a small and homogeneous area.

Summary

In 1911 the economy of Inner Placentia Bay appeared healthy. Population had not decreased and fishing incomes were above the Newfoundland average. However forces for change were becoming more evident. Steady and substantial population increase typical of the nineteenth century had ceased. Some communities experienced population loss and there was an increased tendency for young adults to migrate.

The fishery still provided the economic basis for the region but it was undergoing important structural changes. By 1911 cod had become more important to the regional economy as the herring and whale fishery declined. Years of over-fishing and lack of good conservation practices had seriously affected the lobster fishery.

The cod fishery was experiencing a period of increased capital input and modernization as fishermen acquired more fishing schooners and cod traps. This process however acted to increase diversity within the region. By 1911 population and incomes tended to be higher in the main cod fishing and schooner communities while the traditional lobster fishing communities were on the decline.

Outside of the fishery, the mainstay of the economy, elements of continuity and change were to be found. Subsistence agriculture remained an important element of the economy. The forest resource was an important component of this subsistence for both fuel and construction materials. But by 1911 a growing commercialization of the forest resource was evident by the establishment of sawmills in one community. This was symbolic in that it represented a shift towards the resources of the land and away from the traditional exclusively marine oriented resource base.

The railway through the Isthmus of Avalon improved linkages, but it too increased the diversity between communities and created its own subregion. In 1911, the eastern side of Inner Placentia Bay had terrestrial linkages with Newfoundland and the railway was the mode by which both passengers and mails moved. In contrast the rest of the region relied upon the weekly service provided by the coastal steamer.

Thus while the entire region retained a heavily marine oriented economy in 1911 the railway as an innovation in transportation was probably not perceived as being a problem for the long run viability of the region.

Chapter V Far Better Circumstances Than Ever Before

"Far better circumstances than ever before" - so wrote Allan Goodridge, Deputy Minister of Marine and Fisheries in his report for 1920 (J.H.A. 1920: Appendix 700). Indeed, the decade 1911-1921 was one of the best periods ever experienced by Newfoundland's fishermen. This situation was due not only to a series of good yields from the cod fishery but, as so often before in Newfoundland's history, war in Europe created an increased demand for codfish and prices increased.

The effects of the war on the economy rippled through every fishing harbour. But not only the fishery was affected - the war stimulated other sectors of the economy and increased employment opportunities for Newfoundlanders in both Canada and the United States.* Individuals, as well as communities reacted differently to these changing conditions, and adopted strategies which were felt to be in the best interests of the individual or the group. Yet, collectively these strategies had a profound effect upon the Inner Placentia Bay region.

Population

By 1921, the population of Inner Placentia Bay was 6555, an increase of 8.4% over 1911. Despite this increase however,

*According to the 1921 Newfoundland and Labrador Census, the colony lost 8987 inhabitants through emigration during the decade 1911-1921.

the process of settlement retreat and consolidation which were evident in the decade 1901 - 1911 continued. Thus while the number of communities did not change significantly, the proportion of the total population in the smaller communities did* (see Table 5.1).

Table 5.1: Inner Placentia Bay - Settlements By Population Size 1911 - 1921

| Population Size | 0 - 49 | 50 - 99 | 100 - 199 | 200 - 299 | 300+ |
|-------------------------------------|--------|---------|-----------|-----------|------|
| Number of Settlements 1911 | 25 | 14 | 15 | 3 | 4 |
| Number of Settlements 1921 | 18 | 14 | 16 | 4 | 4 |
| Proportion of Total Population 1911 | 10% | 18% | 38% | 13% | 21% |
| Proportion of Total Population 1921 | 7% | 17% | 36% | 15% | 26% |

Source: Census of Newfoundland 1911; 1921

The proportion of the total population living in communities with 0 - 49 inhabitants decreased 3% between 1911 and 1921. Within both the 50 - 99 and the 100 - 199 category the number of settlements and the proportion of total population showed little change. However, although the number of the largest settlements did not increase, the greatest increase

The large decrease of communities with 0 - 49 inhabitants was mainly due to changing census format. For example, in 1921 all the inhabited small islands south of Tack's Beach were grouped together.

of population occurred in these places, from 21% of the total population in 1911 to 26% by 1921. Most of this increase reflected the gravitation of population towards the large central places.

The distribution pattern, however, remained virtually unchanged and, with the exception of Fox Harbour, the largest centers continued to be located on the islands. However, during the decade 1911-1921 it was the communities on the central islands and from Swift Current, along the Isthmus of Avalon and along the eastern side of Inner Placentia Bay to Fox Harbour that experienced the most growth. In contrast, settlements on the western side of Inner Placentia Bay, particularly from Presque to Sound Island, tended to experience population decline. Of the 18 settlements in this area 13 experienced absolute decline and a collective loss of 198 inhabitants, while the 5 experiencing growth added only 64 inhabitants.

Population Structure and Migration

The population pyramid for Inner Placentia Bay in 1921 shows that the population was still relatively youthful (Figure 5.1). However, there are several contrasts with the population structure for 1911. For example, in 1921 there was an increase of 15% in the population group 0 - 4 years. The number of males and females in the 10 - 14 age group reflects the lower birth rate for the area for the period.

INNER PLACENTIA BAY—POPULATION STRUCTURE 1921

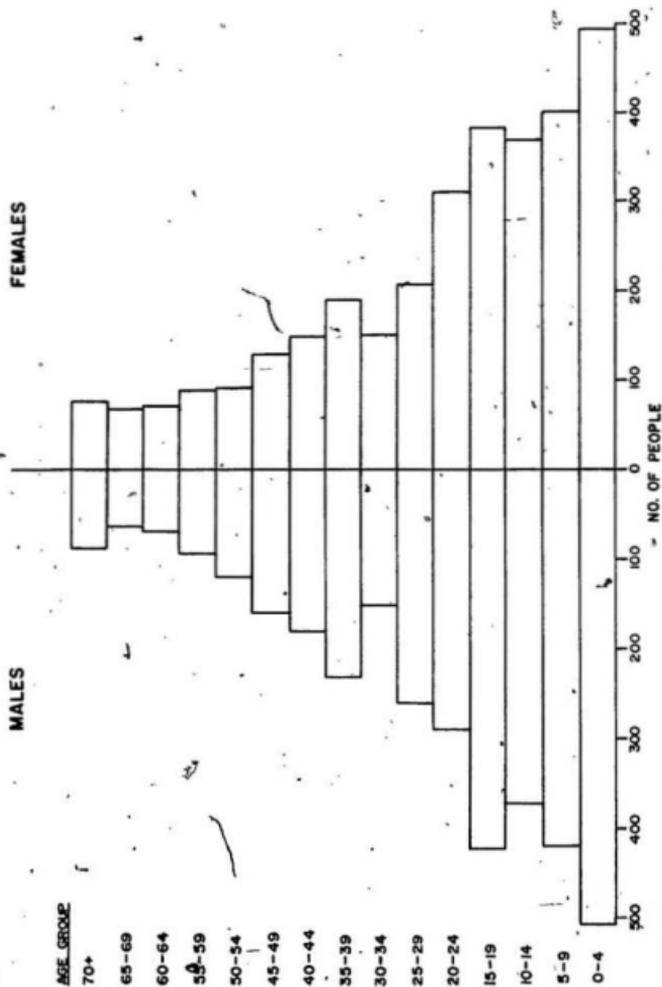


FIGURE 3.1

Source: Census of Newfoundland, 1921.

1906 - 1911, noted in the previous chapter. Another contrast is a decline in the absolute number of males and females in the 30 - 34 age category.

During the decade 1911 - 1921 Inner Placentia Bay continued to lose a considerable proportion of its population through outmigration. For example, when the age cohorts for 1911 are projected and are compared with the actual numbers for 1921 it is possible to obtain some indication of the loss and the age groups most affected. Figure 5.2 demonstrates that all age groups experienced depletion over the decade. This depletion was most prevalent in the age groups 20 to 34 years and particularly in the age group 30 to 34 years where it reached almost 45%. The depletion rate for females exceeded that of males for the age groups 25 to 40 years, while for the age group 50 to 64 years the rate for males exceeded that of females. But this "depletion" encompassed more than just population movement - as well as outmigration, death took its toll. For example, tuberculosis claimed many victims, and in 1918 an outbreak of "Spanish Flu" or influenza led to additional deaths. Statistics for the District of Placentia - St. Mary's suggest that approximately 235 inhabitants of Inner Placentia Bay died between 1911 and 1921 from tuberculosis. Between 1911 and 1917 the District's mortality rate averaged 14.38 per thousand, but in 1918 it was 23.54 (Nfld. Vital Statistics 1911-21).

INNER PLACENTIA BAY—POPULATION DEPLETION—1911 TO 1921

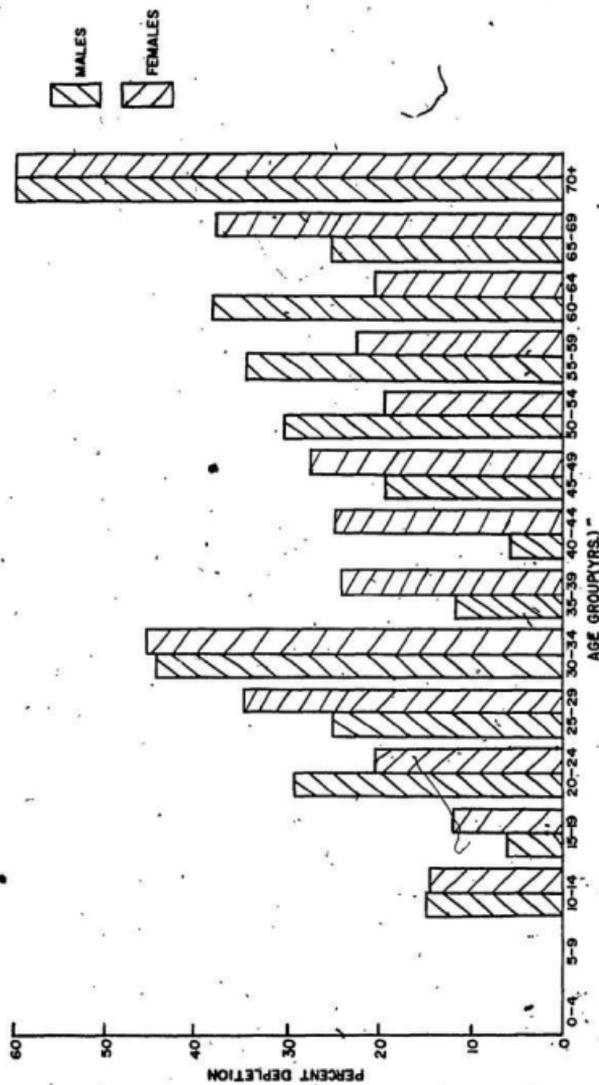


FIGURE 5.2

Source: Census of Newfoundland, 1911, 1921.

Economy

The fishery continued to play the dominant role in the economy, though this dominance was not as marked as previously. For example, whereas 91.6% of the working population was engaged in catching and curing fish in 1911, by 1921 this had dropped to 85.0%. The number of males catching and curing fish in 1921 was 164 fewer than in 1911 and females curing fish were 120 fewer. This decline in the primary sector was only partially offset by gains in employment in the secondary and particularly the tertiary sectors as is demonstrated by Table 5.2.

Table 5.2: Inner Placentia Bay - Composition of the Labour Force 1911 and 1921

| Occupations | Number 1911 | Percentage 1911 | Number 1921 | Percentage 1921 |
|-----------------------------|-------------|-----------------|-------------|-----------------|
| Teachers & Clergy | 28 | .9 | 40 | 1.4 |
| Merchants & Traders | 42 | 1.3 | 32 | 1.1 |
| Government Service & Office | 29 | 1.0 | 59 | 2.0 |
| Mechanics | 15 | .5 | 15 | .5 |
| Farmers | 5 | .2 | 2 | .1 |
| Lumbering | 9 | .3 | 10 | .3 |
| Otherwise Employed | 127 | 4.2 | 280 | 9.6 |
| Catching and Curing Fish | 2771* | 91.6 | 2487** | 85.0 |
| | 3026 | 100.0 | 2925 | 100.0 |

Source: Census of Newfoundland 1911; 1921.

*1743 males; 1028 females

**1579 males; 908 females

But despite this numerical decline of the labour force engaged in the fishery this sector experienced a number of changes which reflect important shifts in capital inputs and technological applications.

Boats

One of the major developments during the decade 1911 - 1921 was the introduction of gasoline engines for fishing boats. Newfoundland Customs Returns show that between 1915 and 1920 over 11,000 motor engines were imported. Undoubtedly a number were imported earlier, but imports of gasoline suggest that they were not in widespread use. For example, during the customs year 1910 - 1911 only 51,064 gallons of gasoline, naphtha and benzine were imported; by 1915 - 1916 over 340,000 gallons were imported; and by 1919 - 1920 over 1,230,000 gallons. The use of these engines was a great help to the fishermen.

The possession of a motor boat enabled a fisherman to get to the place where his bait was to be found in good time, and yet not have to leave home at mid-night in order to do it: it often meant the difference between a supply of bait and no bait for his gear. With it he reached his gear early, and could therefore have longer time on the fishing ground. He returned to his home not only much sooner, but fresh for other work (MacDermott 1938: 179 - 180).

It is difficult to determine when these engines were introduced into Inner Placentia Bay, and to what extent they

were common by 1921 as the census did not record the number of motor boats. However, by 1912 they had been introduced into Fortune Bay (MacDermott 1938: 178-179). Butler refers to engines at Harbour Buffett in 1918 (Butler 1975: 31, 33) and a Sound Island merchant's business letterhead proclaimed in 1920 that he was an agent for Lothrop, Fairbanks-Morse and Gray marine engines.*

While the types of boats being utilized in the Inner Placentia Bay fishery did not change there was a marked decrease in the number of boats in both the 4-30 quintal size category and those over 30 quintals. Boats in the 4-30 quintal category declined from 1514 in 1911 to 951 in 1921, while boats over 30 quintals fell from 167 in 1911 to 85 by 1921. The reasons for this decline may partly be attributed to the decline in the number of fishermen. However, additional factors such as the decline of the lobster fishery; increasing emphasis on cod and more widespread use of codtraps; the introduction of marine engines; and the expansion of the schooner fishery which would have diminished the number of inshore fishermen, undoubtedly were operating as well.

In contrast the number of fishing schooners increased from 86 in 1911 to 104 by 1921. The schooners were also a little larger - in 1911 the average tonnage was 24.3, but in 1921 it was 27.3.

*May 1, 1920. Sir Richard Squires Papers GNS/2, File 63, Provincial Archives of Newfoundland and Labrador (PANL)

In terms of the geographical distribution of fishing boats the pattern was similar to that of 1911, with settlements having boats roughly in proportion to their population. The over 30 quintal boats continued to be located in the Ship Harbour - Long Harbour area; at Long Island and Ragged Islands; in the Great Paradise - St. Kyran's area and at North Harbour and Arnold's Cove (see Figure 5.3).

The decrease in the number of larger boats occurred primarily at Fox Harbour, Red Island, Merasheen and in the Great Paradise - Clattice Harbour area. At Bar Haven, Arnold's Cove and North Harbour, however, there was an increase in boats over 30 quintals.

The geographical distribution of fishing schooners was also similar to that of 1911. The greatest concentration occurred in the Fox Harbour - Long Harbour area; the central islands; and on the western side of Inner Placentia Bay between Great Paradise and Clattice Harbour (see Figure 5.4). The greatest decrease in the number of fishing vessels occurred at Fox Harbour, Great and Little Paradise, Red Island, Iona, Ship Harbour, LaManche and Toslow, communities which with the exception of LaManche were located in the outer section of the study area. The greatest increase occurred in the central archipelago, at Tack's Beach, Merasheen, Harbour Buffett, Kingwell, Haystack and Bar Haven. North Harbour was the only mainland community showing a

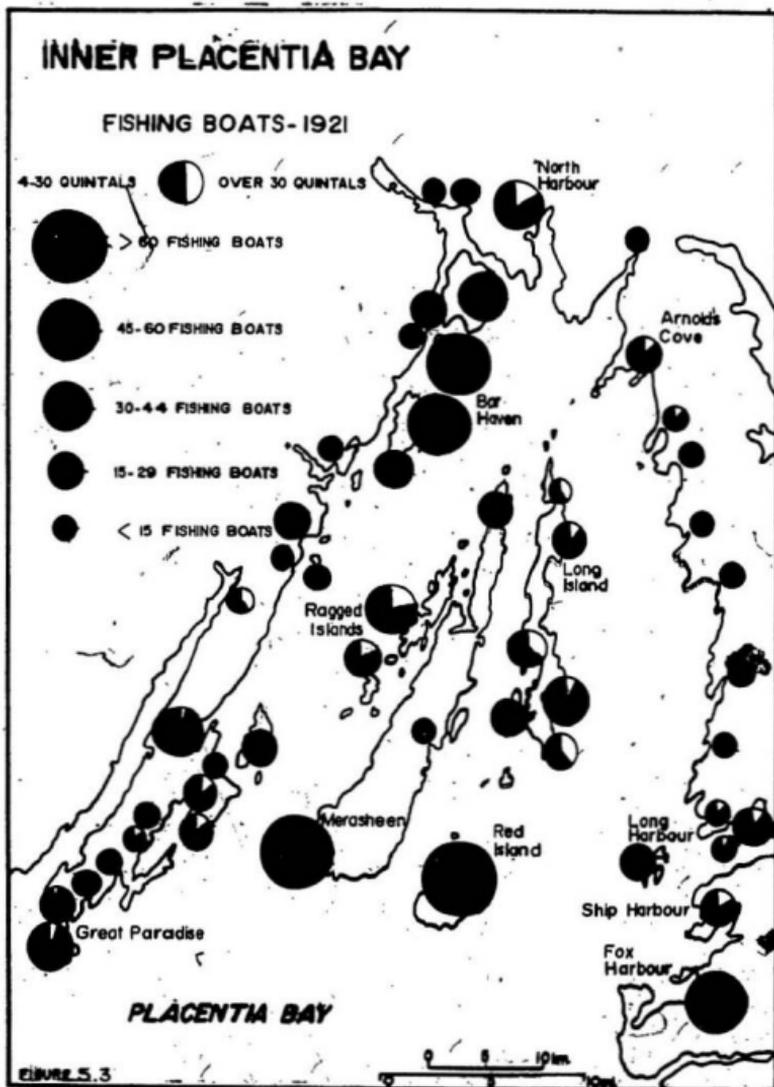


FIGURE 5.3

Source: *Chinley and Neel, 1921*

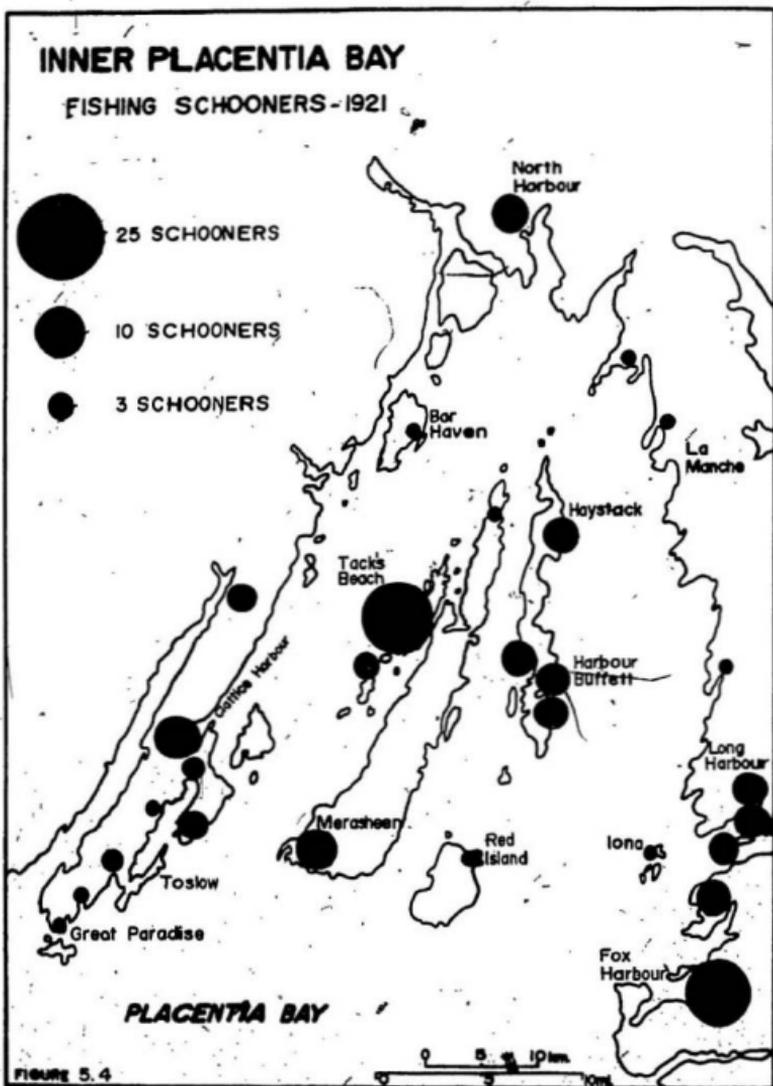


FIGURE 5.4

Source: Census of Newfoundland 1921

significant increase.

Fishing Gear

The trend towards greater capitalization in fishing boats seems to be reflected also in important changes in gear. The decade 1911-1921 saw a substantial shift from the low capital input traditional lines and nets towards the more expensive cod trap.

Between 1911 and 1921 the number of nets and lines fell from 43,784 to 34,137, a decrease of 22%. Of the 41 communities for which the comparison can be made, 26 experienced a decrease in the utilization of nets and lines while only 13 showed an increase. This increase was significant only at Red Island, Iona, Long Harbour and North Harbour.

The number of codtraps being utilized, however, increased 84% during the decade 1911-1921, from 102 to 188. More significantly, there was a considerable diffusion of this fishing technique: in 1911, codtraps were being utilized by only 23 communities, but by 1921, 37 communities had this technology. Only two communities experienced a decrease in the number of codtraps, Fox Harbour and Haystack. Many communities experienced a substantial increase in cod traps during the period, but the most significant geographic feature is the more widespread use of this technology on the western side of Inner Placentia Bay. For example, in 1911, except

for Great and Little Paradise with a total of 17 cod traps and an additional 8 traps among the communities in the Toslow, Clattice Harbour and Isle Valen area there was not a codtrap present in any community along the entire western side of the bay until one came to Come By Chance on the Isthmus of Avalon. By 1921 there were 63 cod traps in this area, distributed among some 17 communities (see Figure 5.5).

Fisheries Productivity and Incomes

Despite the increased use of codtraps and the expansion of the schooner fishery the aggregate yield from the cod fishery was lower in 1920 than it had been in 1910, 62,406 quintals down from 69,651. Nevertheless, the cod fishery, came to play a more important role in the Inner Placentia Bay economy - whereas cod fish represented about 84% of the total value of fish products in 1910 by 1920 it had increased to 92%.

The reasons for this change were primarily a number of good fishing seasons coupled with a decline in the other sectors of the region's marine economy. During the decade 1911 - 1921 the catch of cod fish in Newfoundland waters was among the highest on record. In addition, wartime conditions created a good demand for dried cod fish and prices rose (see Figure 5.6).

These conditions meant relative prosperity for many Inner

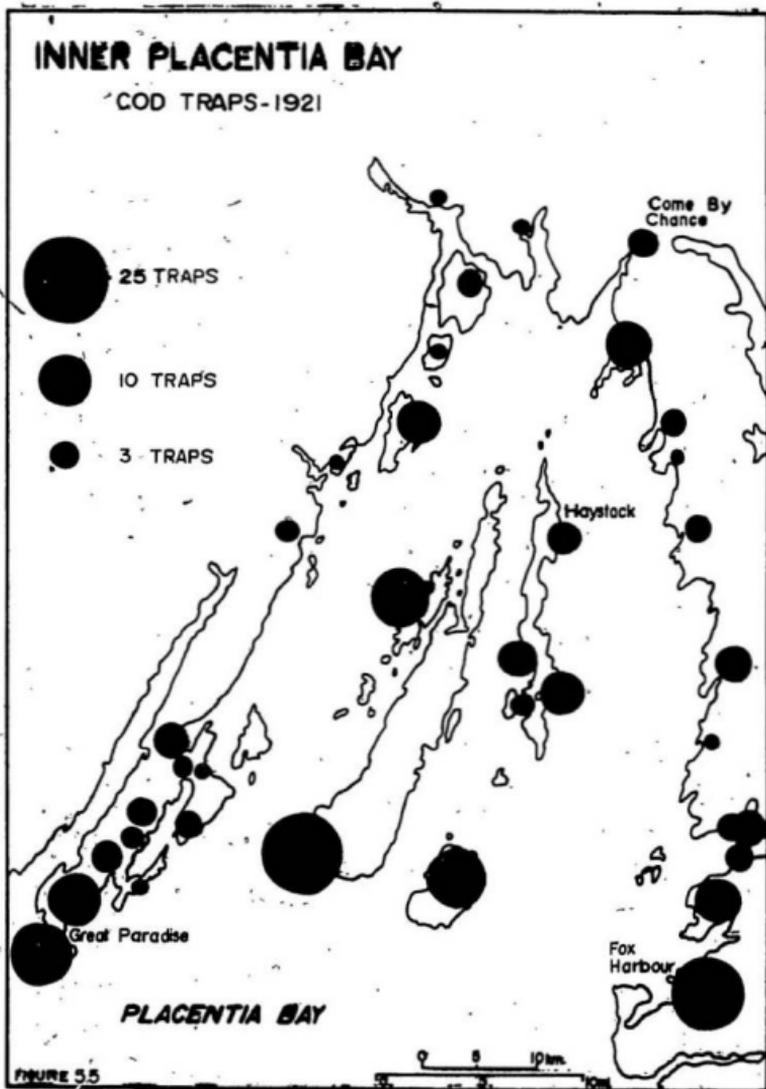


FIGURE 55

Source: Census of Newfoundland 1921

NEWFOUNDLAND and LABRADOR - Exports of Salted Cod and Average Price 1910-1921

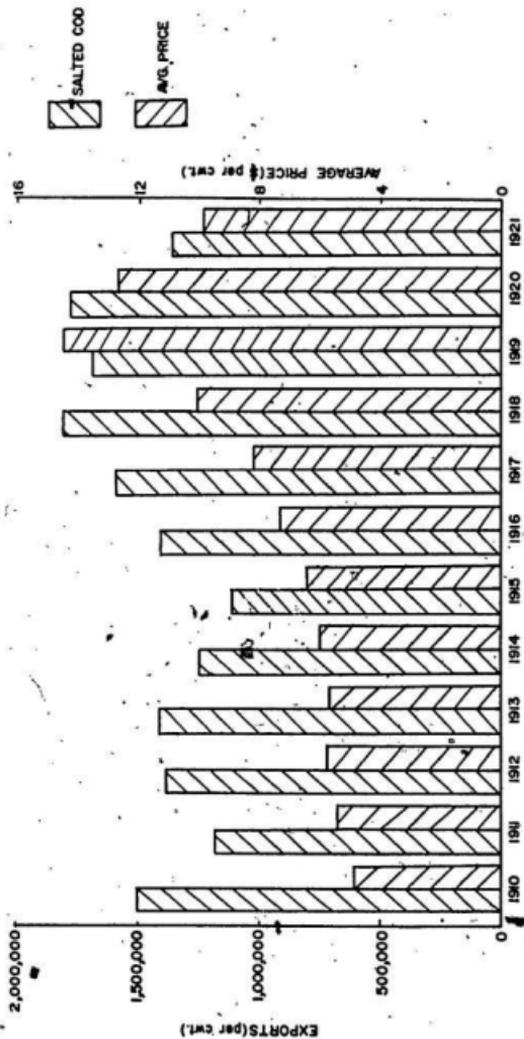


FIGURE 5.6

Source: Historical Statistics of Newfoundland and Labrador, Vol. 1, No. 1, 1970, pp. 181-182.

Placentia Bay communities and those that fared best were naturally those which had been most actively engaged in the cod fishery and had better boats and gear. For example, as Figure 5.7 shows in 1921 the pattern was similar to that of 1911 when the most productive regions were the Great Paradise - Clattice Harbour area; the Fox Harbour - Long Harbour area and the central islands.

The lobster fishery declined substantially, however, between 1910 and 1920. Whereas 2915 cases of lobster were packed in 1910 only 1718 cases were packed in 1920. The value of lobster as a proportion of the total value of fish products declined from 10% in 1910 to 6% in 1920, and the number of men and women engaged from 595 to 143. This decline was partly due to the overexploitation of the stock during previous decades but it was accentuated by wartime conditions. Given record prices and good catches of cod it was better to concentrate on this species. Moreover, the war seriously affected the marketing of lobster since before 1914 a large amount had been exported to Germany. Between 1911 and 1914 the average price of a case of tinned lobster was \$19.60: between 1915 and 1918 the price was \$16.66. High prices for tin, as well, as difficulties in securing a supply, presented additional problems (J.H.A. 1912-19, Appendices).

Figure 5.8 shows that the western side of Inner Placentia Bay from Isle Valen to North Harbour and along the Isthmus

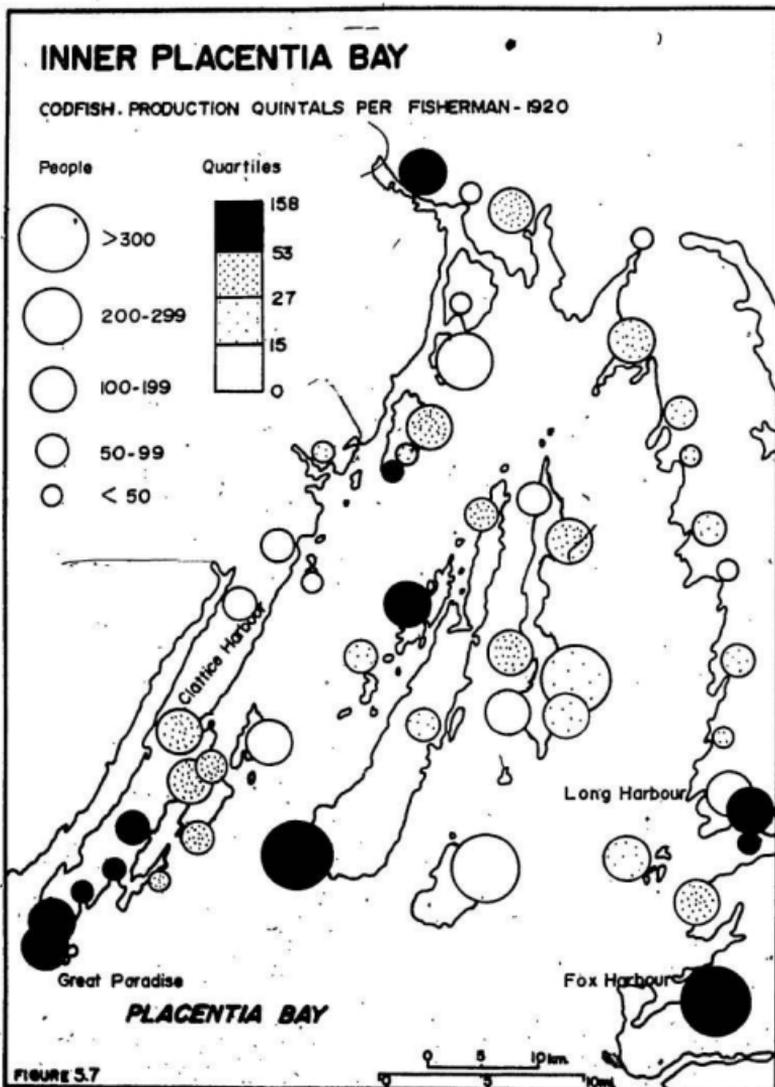
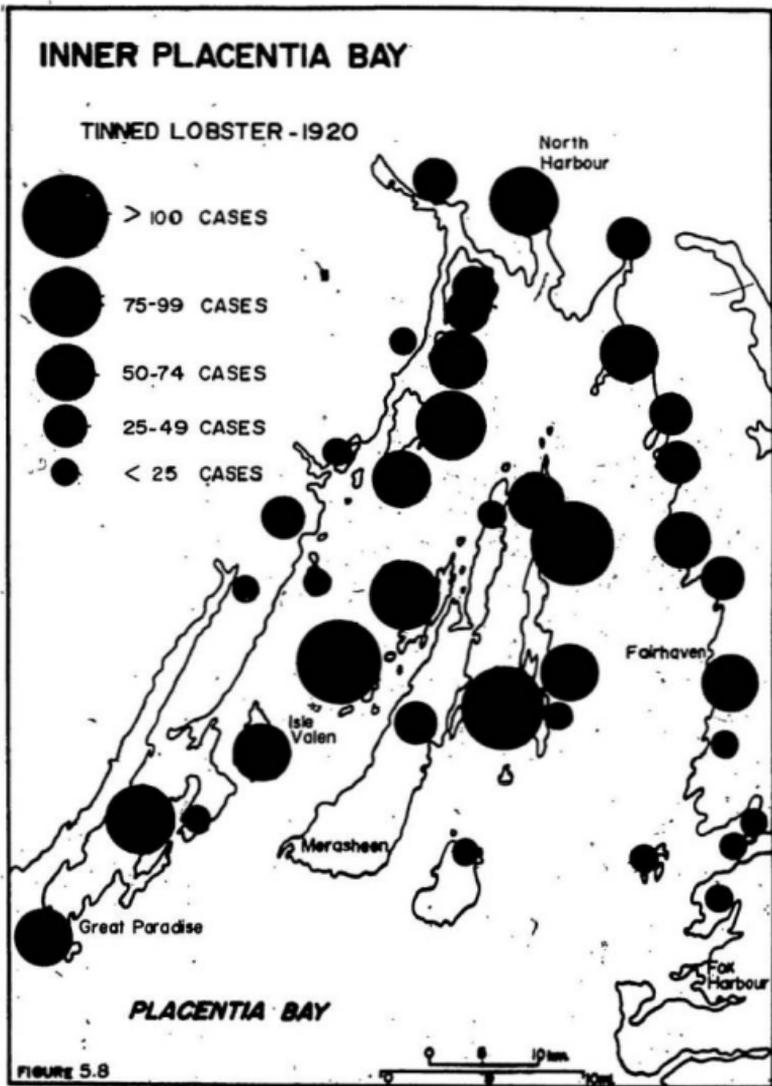


FIGURE 5.7

Source: Census of Newfoundland 1921



of Avalon to Fairhaven and the central islands continued to be the main lobster fishing areas. In 1921 many of the communities in the outer section of Inner Placentia Bay did not participate at all in this fishery - for example Fox Harbour, Merasheen, and several small communities in the Great Paradise - Clattice Harbour area.

It appears that this decline in the lobster fishery affected the communities on the western side of Inner Placentia Bay more than on the eastern side of the bay where the communities tended to be smaller, or on the central islands where there was a schooner based fishery as well. Isle Valen, Davis Cove and Woody Island appear to have been particularly affected and not having placed much emphasis on the cod fishery were much less productive in aggregate than other communities of a similar size.

The herring fishery also experienced a decline. In 1920 only 1664 barrels were packed in contrast to 2839 in 1910. In addition, almost all of the 1920 production was packed at two communities, Spencer's Cove on Long Island, and on Sound Island (see Figure 5.9).

By 1921 it appears that the whale fishery was not conducted from Inner Placentia Bay as no statistics were included in the census. What records are available suggest that depletion of the whale herds was probably responsible for the plant closure. Table 5.3 shows a dramatic decrease in the

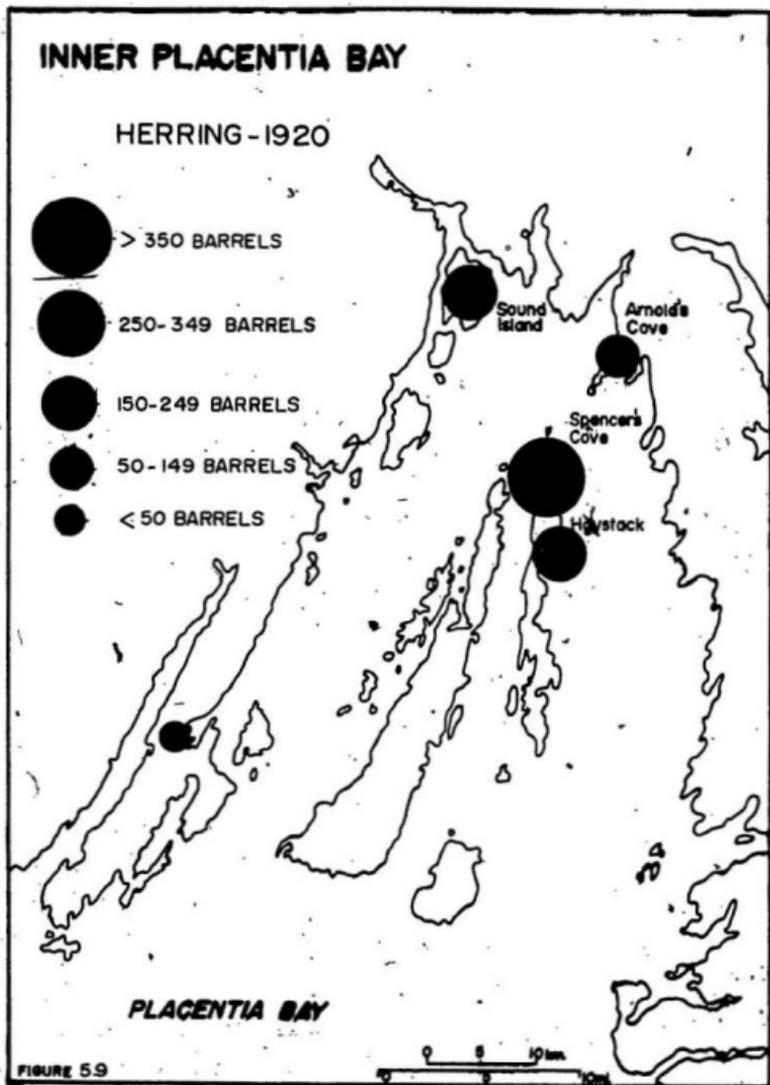


FIGURE 5.9

Source: Census of Newfoundland 1921.

number of whales processed at Rose au Rue between 1911 and 1913. In addition for both-1913 and 1915 the production of oil was far below the levels prevalent for 1912 and 1914 suggesting that smaller whales were being taken.

Table 5.3: Rose au Rue, Whales Taken and Whale Products
1911 - 1915

| Year | Whales Taken | Gallons of Oil | Tons of Bone | Tons of Guano |
|-------|--------------|----------------|--------------|---------------|
| 1911 | 146 | 174,762 | 225 | N/A |
| 1912 | 56 | 86,688 | 85 | 139 |
| 1913 | 41 | 40,433 | 66 | 103 |
| 1914* | 69 | 61,866 | 5 | 168 |
| 1915* | 69 | 40,300 | 50 | 107 |

*Includes Production for Beaverton

Source: Journals House of Assembly, Appendices 1912 - 1916.

Surprisingly, despite a drop in the production of salted cod and a significant decrease in the lobster, herring and whale fisheries, Inner Placentia Bay was still able to maintain a level of income comparable to other fishing areas in Newfoundland. For example, the average earnings of a male engaged in catching and curing fish in 1920 in Inner Placentia Bay was \$355.39 or roughly 7% above the Placentia - St. Mary's District average of \$329.98, and the Newfoundland average of \$333.66. When the earnings are mapped by community the pattern that emerges is similar to that for 1910 (see figure

5.10). The most economically productive areas continued to be the Fox Harbour - Long Harbour area; the central islands; Bar Haven, and especially the Great Paradise - Clattice Harbour area. The lowest levels of income occurred on the western side of the bay between Isle Valey and Sound Island and at the smaller communities along the Isthmus of Avalon. One striking feature, however for 1920 is that the communities of Red Island, Iona and Ship Harbour have fallen below the median whereas in 1910 all three were in the highest category.

Subsistence Agriculture

Throughout the decade 1911 - 1921 subsistence agriculture continued to be an important adjunct to the economy of Inner Placentia Bay. The Census of 1921 recorded that 1219 persons cultivated land. During the decade, agricultural societies were established at Bar Haven and Haystack, while the societies at Merasheen and Arnold's Cove continued in operation. As in 1911, livestock and root crops were the main focus. Table 5.4 shows however, that there was a decrease in the holdings of cattle and sheep. Swine continued to decline, while goats increased. The major change however, was a large increase in the number of horses.

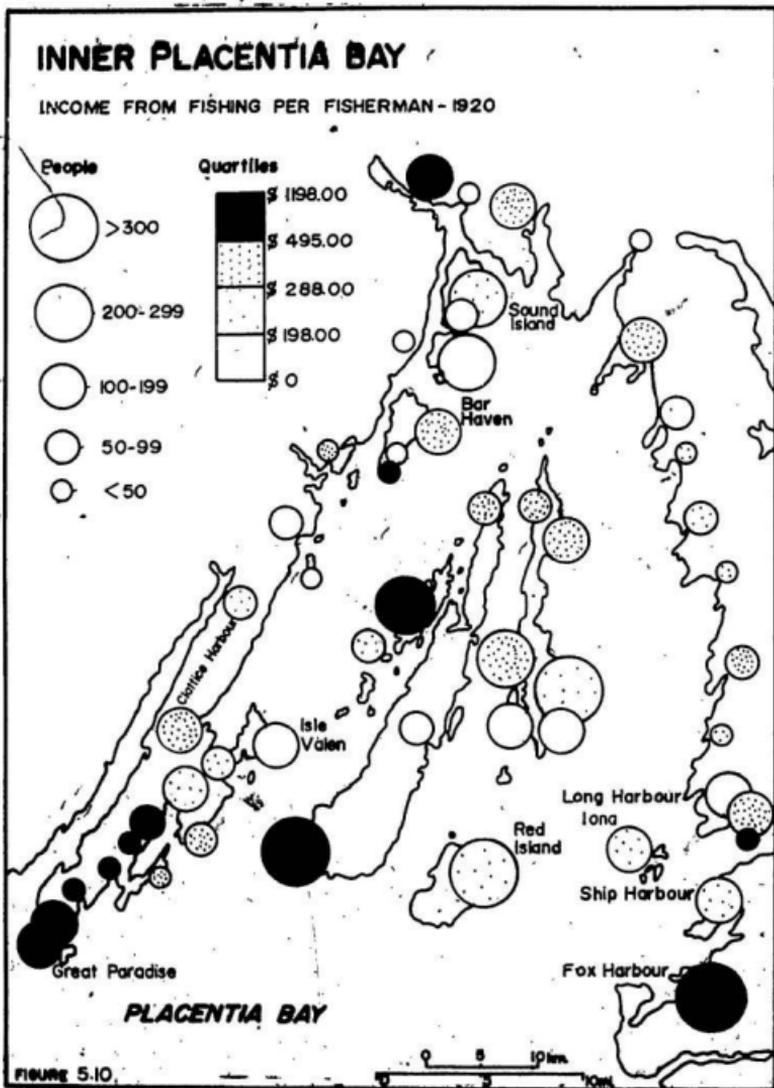


FIGURE 5.10.

Source: Census of Newfoundland 1921

Table 4: Inner Placentia Bay - Livestock Holdings
1911-1921

| Livestock | 1911 | 1921 | Percentage Increase or Decrease |
|-----------|------|------|------------------------------------|
| Cattle | 574 | 475 | -17 |
| Sheep | 4910 | 4681 | -5 |
| Swine | 97 | 49 | -50 |
| Goats | 95 | 170 | +79 |
| Horses | 44 | 112 | +155 |
| Poultry | 6182 | 5780 | -7 |

Source: Census of Newfoundland 1911; 1921

Figure 5.11 shows, however, that the distribution pattern of livestock holdings remained similar to that of 1911. The eastern side of Inner Placentia Bay from Fox Harbour to Swift Current continued to have higher than average livestock holdings. Red Island, Iona, Indian Harbour and Monkstown had more cattle than other communities located on the central islands and on the western side of Inner Placentia Bay and consequently placed higher. Haystack, with its new agricultural society, had taken steps to strengthen the subsistence sector and a report for 1917 had noted that both sheep and cattle holdings had increased (J.H.A. 1918: Appendix 411).

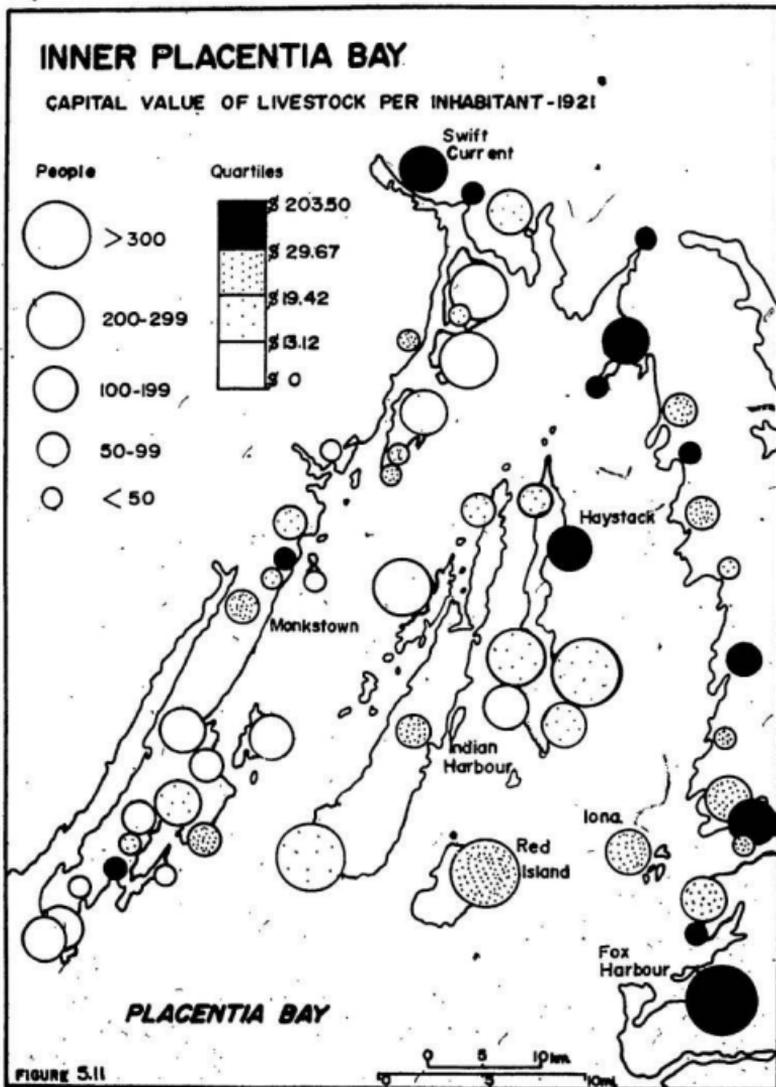


FIGURE 5.11

Source: Census of Newfoundland 1921

Crops

Hay for the livestock and root crops such as potatoes, turnips and cabbage continued to be cultivated. There was an increase in the production of potatoes and turnips while hay and cabbage production was down (see Table 5.5).

Table 5.5: Inner Placentia Bay - Crop Production
1911 - 1921

| Crop | 1911 | 1921 | Percentage Increase or Decrease |
|----------|--------------|--------------|---------------------------------|
| Potatoes | 5,177 brls. | 6,479 brls. | 25 |
| Turnips | 495 brls. | 603 brls. | 22 |
| Cabbage | 528,355 hds. | 378,840 hds. | -28 |
| Hay | 1,245 tons | 907 tons | -27 |

Source: Census of Newfoundland 1911; 1921

Figure 5.12 indicates that the pattern of crops produced by community as well as the various consumables such as milk, butter, meat, wool and eggs resembled that of 1911 and it also followed closely the pattern of livestock holdings. Again it was on the eastern side of Inner Placentia Bay between Swift Current and Fox Harbour that production was higher. Interestingly, apart from Haystack and Great and Little Paradise, all the larger communities on the central islands and the western side of Inner Placentia Bay had production levels below the median. The more rugged terrain

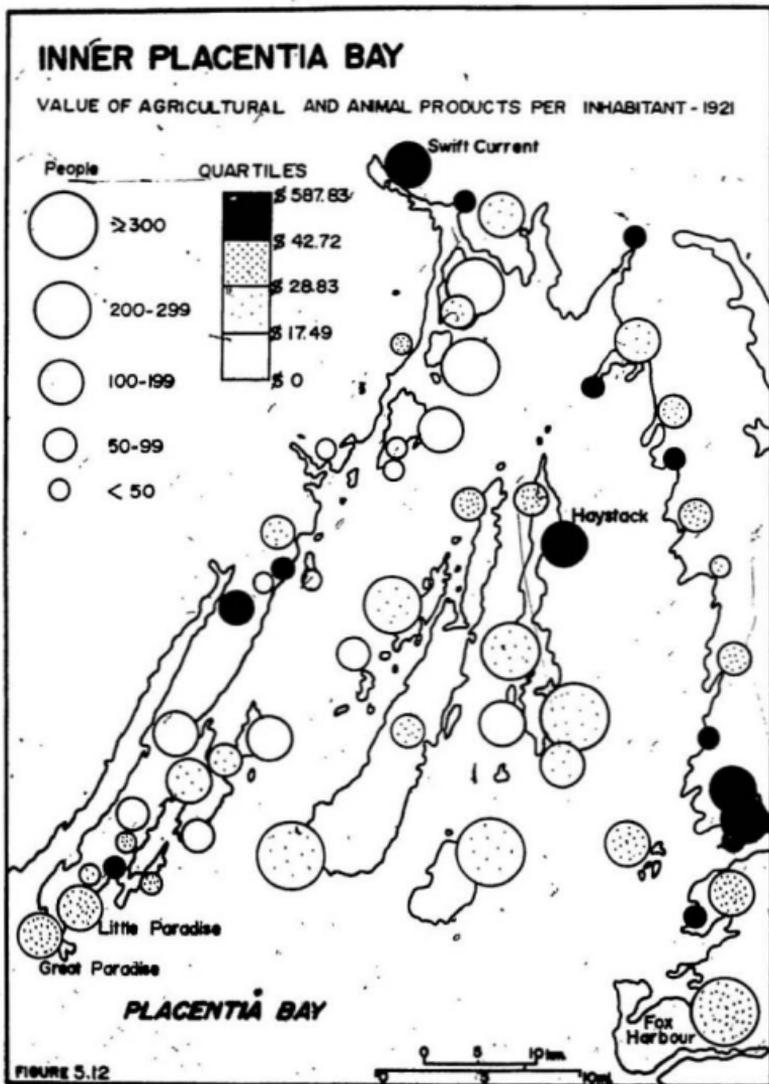


FIGURE 5.12

Source: Census of Newfoundland 1921

and differences in the rock and soil types may also have contributed to this pattern. While some communities undoubtedly were able to supply most of their own needs it appears that only the smallest communities located along the Isthmus of Avalon were approaching self-sufficiency and sometimes had surpluses for sale.

The impact of the First World War does not seem to have been detrimental to the agricultural sector - indeed it may have helped to stimulate it. While cod fish prices rose markedly so too did prices for agricultural and livestock products. Table 5.6 shows that hay and vegetable prices more than doubled and with the exception of horses and goats so did most livestock prices.

Table 5.6: Agricultural and Livestock Price Changes
1911 - 1921

| Item | 1911 Prices | 1921 Prices | Percentage Increase |
|----------|--------------|--------------|---------------------|
| Potatoes | \$ 4.40 brl. | \$ 3.35 brl. | 132 |
| Turnips | 1.30 brl. | 3.00 brl. | 131 |
| Cabbage | .05 hd. | .05 hd. | 0 |
| Hay | 17.00 ton | 52.00 ton | 206 |
| Cattle | 35.00 ea. | 80.00 ea. | 129 |
| Sheep | 5.00 ea. | 15.00 ea. | 200 |
| Swine | 10.00 ea. | 25.00 ea. | 150 |
| Horses | 70.00 ea. | 100.00 ea. | 43 |
| Goats | 15.00 ea. | 10.00 ea. | -33 1/3 |
| Poultry | .50 ea. | 1.20 ea. | 140 |

Source: Census of Newfoundland 1911; 1921 and J.H.A. 1922, Appendix 321-322.

In 1921 the value of the main crops produced and the ongoing capital value of livestock exceeded \$220,000.00 which represented about 39% of the total value of fish products in 1920. In contrast, the comparable figure in 1910 - 1911 was 21%.

Forest Resources

Table 5.7 shows clearly that forest resources continued to make an important contribution to the regional economy, even though volume of apparent output was down in most sectors:

Table 5.7: Inner Placentia Bay - Forest Products 1911-1921

| Item | 1911 | 1921 |
|-------------------|-----------|-----------|
| Fence Posts | 64,650 | 31,960 |
| Wharf Sticks | 9,670 | 7,465 |
| Railway Ties | N/A | 5,413 |
| Firewood (Sticks) | 1,281,300 | 1,147,923 |

Source: Census of Newfoundland 1911; 1921

These lower figures however disguise an increased economic utilization of the forest resource which grew out of the increasing commercialization of the rural economy. For example, whereas in 1911 there were only three sawmills, all located at Monkstown, by 1921 five other settlements had sawmills as well (Figure 5.13). With the exception of

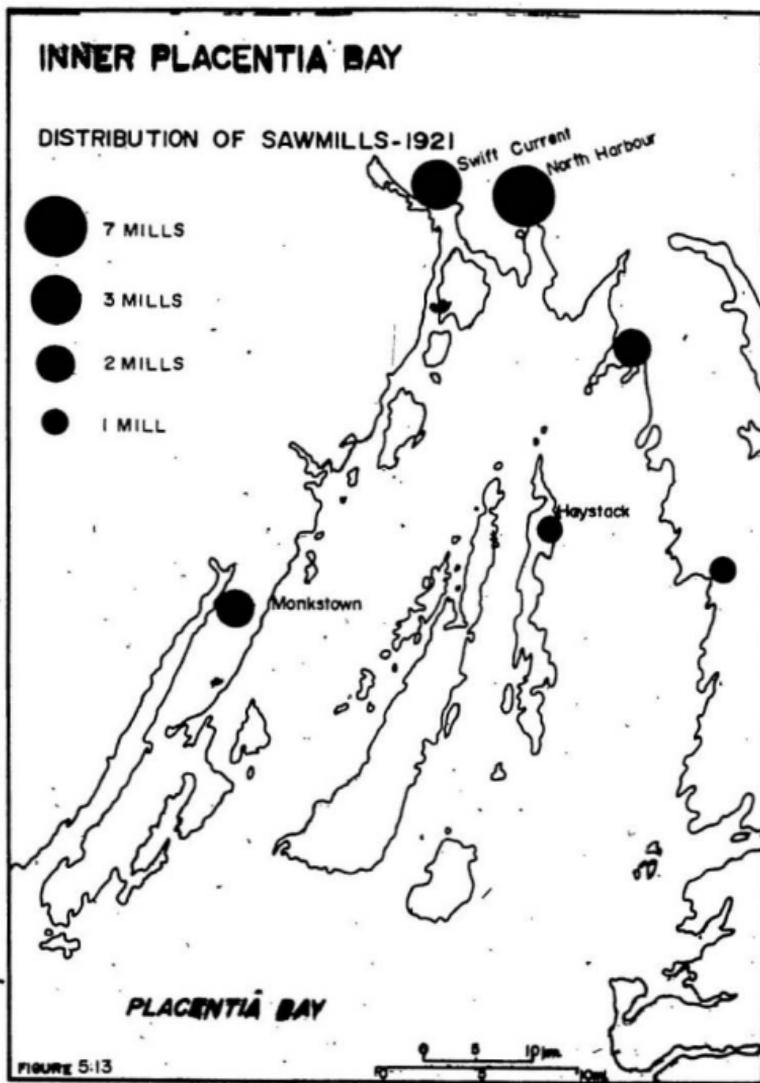


FIGURE 5-13

Source: Census of Newfoundland 1921

Haystack, on Long Island, all the new mills were located on the Isthmus of Avalon and at North Harbour and Swift Current at the bottom of the bay. These mills were small and were valued by the 1921 Census at \$400 - \$500 each. Yet in 1921 they provided employment for 18 persons and sawed lumber to the value of \$5,365.00.* In addition to producing regular products, mostly used in construction, these mills were very useful in sawing the plank and heavy timber necessary in the repair or construction of boats and fishing schooners. The fishery also created a demand for laths used for lobster traps, and with an increased tendency to ship dried codfish directly to market in Inner Placentia Bay vessels a need arose for cooperage supplies. In 1921 18,000 laths were sawed at Arnold's Cove and North Harbour, while Arnold's Cove and Haystack sawed 8,000 barrel staves. This expansion of saw-milling also helps to explain the more widespread use of horses in Inner Placentia Bay. For example, Swift Current, North Harbour and Arnold's Cove had 40 horses in all by 1921, compared with 10 in 1911.

Transportation and Communication

In 1921 the Reid Newfoundland Railway continued to operate one of its steamers such as the Argyle or Home weekly

* This did not include Swift Current which was the largest producer. Its mills employed 7 of the 18 men and the three mills were valued at \$10,500. It reported cutting 11,200 logs and sawing 66,000 superficial feet of birch, spruce and pine.

carrying both passengers and mail to most Inner Placentia Bay communities. The more widespread use of gasoline engines in fishing boats improved communication between nearby settlements and also resulted in improved linkages with settlements on the Avalon Peninsula. This was important since communities such as Come by Chance, Arnold's Cove, LaManche, Little Harbour East, Fairhaven, Long Harbour and Fox Harbour all had access to the main Trans-Newfoundland railway system just a short distance inland.

Consequently many travellers, particularly those on the central islands, and in the Bar Haven - Sound Island area, would go by small boat directly to the nearest community with access to the railway, rather than take the coastal boat which stopped at dozens of communities. For example, Butler travelled in this manner on a trip from Harbour Buffett to Central Newfoundland and returned in 1913; and from Sydney, Nova Scotia in 1920 (Butler 1975: 88, 94, 103).

It appears that shipping as a revenue earner became more important to the regional economy during the decade 1911 - 1921. Some of the larger firms not only had vessels engaged in local trade but in the foreign going trade as well. Wakely and Sons of Harbour Buffett had two vessels of about 120 tons, the Gigantic and the Amy B. Silver as well as the 260 ton Jean Wakely. In 1917, for example, the Gigantic took a load of cod fish from Harbour Buffett to Oporto, Portugal, and returned with a load of salt (Butler 1975: 66, 197-199).

This practice of shipping direct to market created employment for both stevedores and sailors, and resulted in an increased need for coopers and cooperage supplies.

There was a considerable improvement in communication facilities during the decade 1911 - 1921. For example, in 1911 there were just three settlements with a telegraph, Fox Harbour, Sound Island and Come by Chance. During 1914 and 1915 telegraph service was extended to the central islands, Bar Haven, Prowseton and the three communities of St. Kyran's, Presque and Great Paradise. By 1921, the communities of Little Paradise, Woody Island, Arnold's Cove and both Spencer's Cove and Kingwell on Long Island had a telephone connection to the nearest telegraph office in their respective neighbourhoods (see Figure 5.14).

By 1921, there were more settlements where postal money orders could be purchased and there were six additional post offices located at LaManche and Southern Harbour on the Isthmus of Avalon, and at Little Paradise, St. Anne's, St. Kyran's and Clattice Harbour on the western side of Inner Placentia Bay.

Figure 5.14 also illustrates clearly the isolated nature of some of the area's communities. Among the most isolated were Iona, Indian Harbour, Chambers Island and Monkstown. The small communities south of Tack's Beach, Isle Valen, and the small communities of Toslow, Great Bona and Little

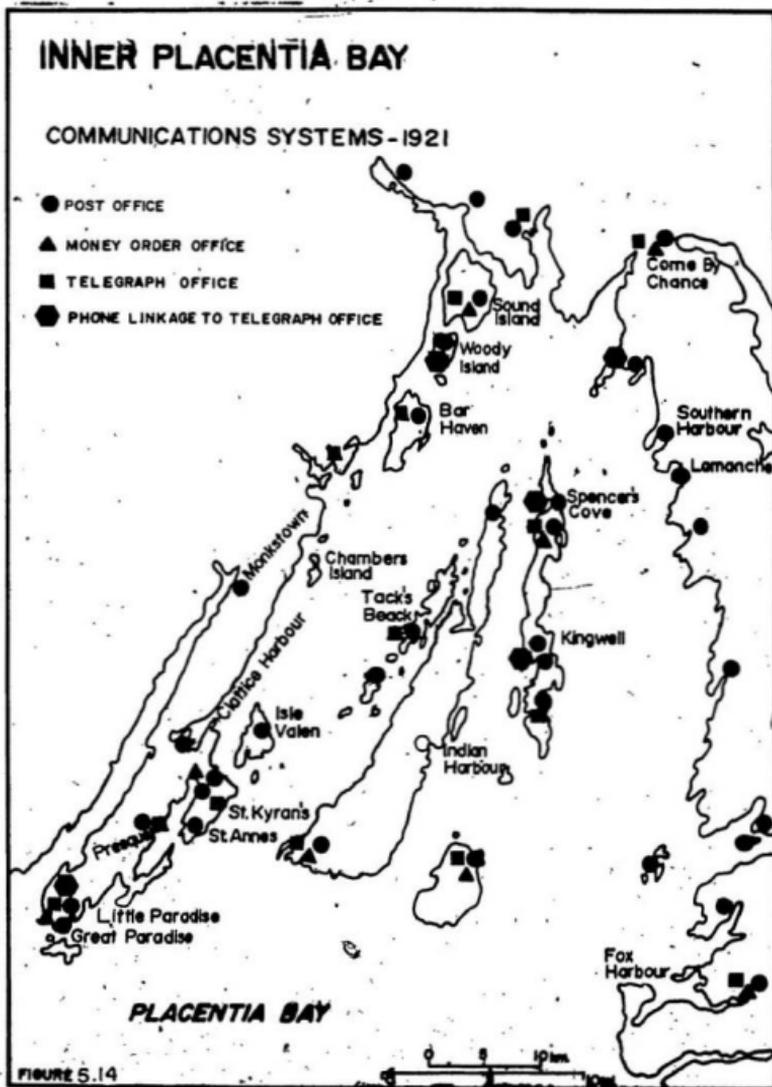


FIGURE 5.14

Source: Year Book And Almanac Of Newfoundland 1921

Bona, Butt's Hole and Davis Cove on the western side of the bay were located somewhat nearer a telegraph office but most did not even have a post office. While the smaller communities on the eastern side of the bay did not have telegraph service themselves it was available just inland at the various small railway stations.

Religious Denominations and Education

In terms of religious affiliation there was very little change during the decade - Table 5.8 indicates the long-run stability in this index of social geography.

Table 5.8: Inner Placentia Bay - Religious Affiliation
1911 - 1921

| Religion | Percentage of Population 1911 | Percentage of Population 1921 |
|----------------|----------------------------------|----------------------------------|
| Roman Catholic | 58.1 | 56.8 |
| Anglican | 23.2 | 24.5 |
| United Church | 15.5 | 15.3 |
| Salvation Army | 3.2 | 3.4 |

Source: Census of Newfoundland 1911; 1921.

Even though there was a slight decline in the proportion of Roman Catholics and a small increase in the proportion of Anglicans, the distribution pattern remained essentially the same. The small proportional change was undoubtedly

related to the growth ~~experienced~~ by the predominantly Anglican communities on Long Island and at Ragged Islands while communities on the western side of Inner Placentia Bay which were predominantly Roman Catholic had experienced population decline.

Because of a changed definition of literacy in the 1921 census it is difficult to make comparisons with 1911. For example, in 1911 literacy was calculated on the basis of the population 5 years of age and older who could write, whereas in 1921 it was based on the population 10 years of age and older who could read and write. But, some relative index of social progress can be made by comparing literacy in the region with that for Newfoundland as a whole at the two periods. In 1921, Inner Placentia Bay had a literacy rate of 67.8% which was almost 10% below the Newfoundland average of 77.5%. This was only a slight improvement over 1911 when Inner Placentia Bay's literacy rate was 12.5% below the Newfoundland average.

Literacy levels remained closely related to community size. Of the eight settlements with 200 or more inhabitants only two were below average (Bar Haven, Woody Island) at 62% and 50% respectively. Of the 14 settlements with less than a 50% literacy rate, only one (Clattice Harbour) had over 100 inhabitants. The smaller and more isolated settlements had very low literacy rates. Pinch Cove and LaManche

on the Isthmus of Avalon, and Soldier's Cove, Glendon's Cove and Davis Cove on the lower western side of Inner Placentia Bay had only a 20% literacy rate or less.

Summary

By 1921 two general indicators of economic and social well being suggested that the regional economy of Inner Placentia Bay was extremely healthy. Population was at an all time high, as were general economic conditions resulting from both high fish prices and high yields. In fact, these indicators were somewhat misleading, because by 1921 there had occurred several other developments which contained within them problems for the long-run social and economic integrity of the region.

Although population showed a strong advance, for example, this in large part reflected an increase in fertility which, is it reasonable to assume, was stimulated by a relative, though ultimately short-lived, prosperity. In fact, in the young working age-group, out migration had been continuing at a high rate, and this loss of the younger, active, population was most marked in the more isolated communities of the western side of the bay. Indeed, overall, and despite the population increase, the actual number of those working dropped, and the drop was almost wholly concentrated in the dominant sector of the community, the fishery.

This diminution of labor input was more than made up by an increase in capital input - in the shape of larger boats, heavier fishing gear, and, particularly, engines - and in a greater concentration of effort on the dominant species, cod. The problems inherent in these developments were that the economy, as it became more capitalized, commercialized and modernized, became more dependent on the cash flows characteristic of the era of high yields and high prices. To some extent, these problems were offset by the continued health of the subsistence sector, and a very modest diversification of other sectors such as sawmilling and services. But these were modest at best - and, it should be emphasized, were weakest in the areas most isolated and most dependent on the fishery - the central islands and the western side of the bay.

In a sense of course the shift of inputs from labour to capital might be interpreted as a welcome sign of a developing regional economy. It is, after all, one of the axioms of the classic modernizing process that this shift in focus occurs. But in the case of Inner Placentia Bay, it is not clear that this process worked through to a progressive conclusion. In the conventional wisdom, if labour inputs go down and capital inputs rise, it is assumed that productivity, at least as measured by per capita output, will rise. In Inner Placentia Bay by 1921 this had not happened, or, if it

happened briefly, it was not sustained. Output of dried salt cod in the 1910 - 1911 period was 39.96 quintals for each man catching and curing fish: by 1920 - 1921, despite the capital and technological inputs, this figure had declined marginally to 39.52 quintals. And this smaller aggregate and per capita yield was supporting a larger population without the help of a flourishing ancillary fishery. Only the magic of sustained high wartime prices for cod preserved the illusion of real progress.

To a degree also, the very technological developments which had taken place also contributed to the prospects of long-run regional decline. In one sense, the extension of the communications network, although superficially it acted to reduce isolation, also acted to confirm and consolidate the central place functions of the larger centres, especially those tied into the mainland transportation network. And while the introduction of engines, for example, gave greater independence in personal mobility, it also diverted custom away from the weekly passenger and mail services of the coastal steamships, thus weakening the viability of the system. Again, there were regional or zonal implications in this tendency as the areas most likely to be affected were the more remote and smaller insular and western communities.

But in 1921, these clouds on the horizon were not studied by many. The decade 1911 - 1921 had been in many ways a good

one for Inner Placentia Bay. Whereas in 1911 the region may be said to have come through a decade in which the traditional economy had reached its ultimate logical expression, the period 1911 - 1921 had seen the introduction of developments which commenced the reform and modernization of that tradition. Most inhabitants of Inner Placentia Bay, insofar as they regarded these developments at all, were probably satisfied with the promises they saw in that modernization.

Chapter VI And It's Hard, Hard Times

These words from the chorus of a folksong which details the problems and frustrations of Newfoundland's fishermen is both an ample and applicable heading to describe the social and economic plight of Inner Placentia Bay during the period 1921-1935.

The cod fishery, the economic base of the area, was affected by both falling prices and, equally serious, declining yields. The impact may not have been so drastic had it been possible to obtain alternate employment. However the onset of the Great Depression in 1929 played havoc with Newfoundland's economy. Cutbacks in social services were put into effect but were not enough to close the gap between public expenditure and income. By 1933 Newfoundland was bankrupt: Responsible Government was suspended and an appointed Commission began to run the affairs of the Colony.

Population

The population of Inner Placentia Bay declined slightly from 6555 in 1921 to 6227 in 1935, a decrease of 5%. The number of settlements also declined from 56 in 1921, to 52 in 1935. However even more significant was the change that occurred in the proportion of the total population living in communities by population size (see Table 6.1).

Table 6.1: Inner Placentia Bay - Settlements By Population Size 1921 - 1935

| Population Size | 0-49 | 50-99 | 100-199 | 200-299 | 300+ |
|-------------------------------------|------|-------|---------|---------|------|
| Number in 1921 | 18 | 14 | 16 | 4 | 4 |
| Number in 1935 | 21 | 8 | 14 | 3 | 6 |
| Proportion of Total Population 1921 | 7% | 17% | 36% | 15% | 26% |
| Proportion of Total Population 1935 | 7% | 10% | 32% | 12% | 39% |

Source: Census of Newfoundland 1921, 1935

While the proportion of the population in settlements sized 0 - 49 remained constant, in those communities with from 50 to 299 inhabitants not only was there a numerical decrease but a substantial proportional decrease as well. This was most pronounced in the 50 - 99 size category. In contrast, by 1935 communities with 300 or more inhabitants had increased from 4 to 6, while the proportion of the total population in such communities had increased from 26% to 39%.

Despite this tendency towards relative population concentration, in contrast to the decade 1911 - 1921, many of the larger communities experienced population decline between 1921 and 1935. For example, Fox Harbour declined 8%; Red Island and Harbour Buffett had a 10% decrease; Merasheen 16%; Great Paradise 22% and Sound Island 25%. Some of the smaller

and more isolated settlements had even greater losses. For example, Iona (Ram's Islands) lost 33%; while Indian Harbour on Merasheen Island lost 66%, and both Trinity Cove and Pinch Cove on the Isthmus of Avalon appear to have been abandoned.

The greatest increases within the region occurred at Tack's Beach and Long Harbour which increased by 60% and 28% respectively. The only other settlements with a substantial increase were Fairhaven and Spencer's Cove.* These settlements however, were exceptions to the general pattern of population decline. For example, of the 45 settlements for which a simple comparison can be made between 1921 and 1935, 31 experienced population loss while only 14 showed an increase.

Population Structure and Migration

The population pyramid for Inner Placentia Bay in 1935 shows quite a contrast to those of both 1911 and 1921 (see Figure 6.1). The most significant change was in the number of children aged 0 - 4 years. Whereas in 1921 there were 1002 children in this category, by 1935 there were only 642, a drop of 36%. The largest age group in 1935 was the 10 to 14 age category. Another feature is that the totals for males and females in the 25 - 49 age groups, with the exception of the

This appears to have been due to both natural increase and migration. Long Harbour appears to have received some of the Iona residents. Tack's Beach attracted residents from the Ragged Islands and from other Protestant communities. Fairhaven may have received those residents who abandoned Pinch and Trinny Cove. Spencer's Cove was by 1935 an important commercial centre.

30 to 34 age group, were all lower than in 1921. However, in the age groups 50 years and older there was an increase. Taken collectively the records indicate that an aging of the inner Placentia Bay population occurred between 1921 and 1935. By 1935 the proportion of the population under 15 years of age was 33.8% a change from 38.7% in 1921. Those in the 15 to 64 age groups increased from 56.7% in 1921 to 60.5% in 1935, while the over 64 age group increased from 4.6% to 5.7%.

The process of outmigration which was evident in the decade 1911 - 1921 continued through 1921 - 1935. When the various age groups are projected to 1935 it is possible to see where the greatest changes were.* Figure 6.2 shows that, all age groups experienced depletion except those who by 1935 were 70 years or older. The age groups that experienced the greatest depletion were those in the 30 to 44 age groups. This meant that it was from the 15 to 29 age group in 1921 that most of the outmigration came. The migration/depletion percentages for 1935 for the 0 - 9 age groups of 1921 are much higher than those experienced between 1911 and 1921. This suggests that in addition to young singles, there were also a number of young couples with families leaving the area. It is worth noting that this tendency goes against the conventional wisdom which argues that the Depression was marked

*A 14 year gap between censuses is not as convenient to work with as the regular 10 year interval, but it can provide useful information.

INNER PLACENTIA BAY-POPULATION DEPLETION - 1921-1935

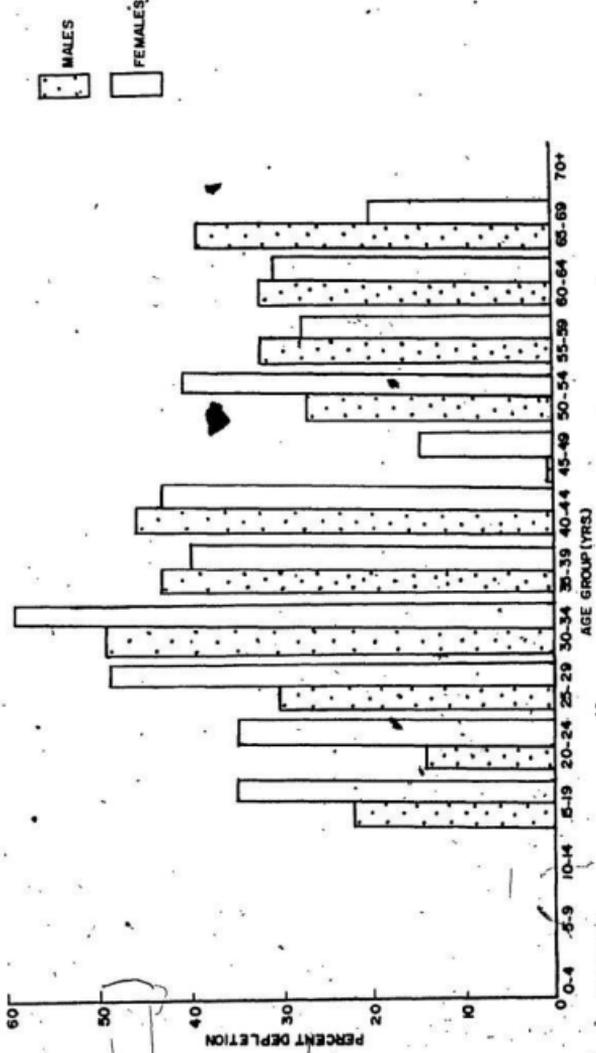


FIGURE 6.2

Source: Census of Newfoundland 1921, 1935.

dominantly, in this sector, by strong return flows of migrants to the rural areas. During the decade 1911 - 1921, the rate of outmigration for age groups over 35 had dropped off drastically but in 1935 the age groups 35 - 39 and 40 - 44 displayed a 40% or greater depletion rate for both males and females.* It is important to note that female migration must have been much heavier during this period. Figure 6.1 shows a much greater imbalance between the sexes than in 1921 and the ratio of men to women increased substantially especially in the age groups 20 - 34. By 1935 the rates of outmigration for the age group 15 to 34 were at least 10% or more higher for females than males, and in the 20 - 24 and 25 - 29 category the figures were 22% and 18% respectively.**

Economy

The fishery continued to be the backbone of the Inner Placentia Bay economy. But the percentage of the labour force apparently engaged in this activity fell from 86% in 1921 to 79% by 1935 (see Table 6.2).

*In 1911 - 1921 the rate for males in the 35 - 39 and 40 - 45 age groups was 12% and 6.5% respectively. The female rate was much higher being 24% and 25% respectively.

**This may be partly due to the open access nature of the fishery resources for males. However, for females, employment opportunities were limited in the area. Domestic or other service, generally located outside the area, or marriage, were usually the only options.

Table 6.2: Inner Placentia Bay - Composition Of The Labour Force 1921 and 1935

| Occupations | 1921 | 1921 | 1935 | 1935 |
|--|--------|-------|----------------------|-------|
| Teachers & Clergy | 40 | 1.4 | 29 | 1.5 |
| Merchants & Traders | 32 | 1.1 | 45 | 2.2 |
| Government Service & Office | 59 | 2.0 | 28 | 1.4 |
| Farmers | 2 | .1 | 16 | .8 |
| Lumbering | 10 | .3 | 62 | 3.1 |
| Otherwise Employed *(Includes Mechanics for 1921) | 295* | 10.1 | 240 | 11.9 |
| Fishery (Catching & Curing) | 2487** | 85.0 | 1593** | 79.1 |
| TOTALS | 2925 | 100.0 | 2013 | 100.0 |
| 1921** 1579 Males 908 Females | | | 1935** Males Only | |

Source: Census of Newfoundland 1921; Enumerators' Returns 1935 Census.

It should be emphasized, however, because of census discontinuities the data for 1935 do not record females involved in the curing process; had they done so the percentages would have been altered.

In reality the fishery was employing both more numerically and proportionally of the total population by 1935. For despite a 5% overall population decrease in Inner Placentia Bay and the accelerated outmigration of young males, the fishery employed 1593 men in 1935, a minor increase over the

1579 employed in 1921.

More residents gave their occupation as farmers in 1935. and there was a marked increase in the work force engaged in the forest and its related industries. Merchants and sales personnel also show an increase over the 1921 level. But, even in the aggregate, these were minor sectors. Employment in the fields of education and government service declined as did opportunities in the sector designated 'otherwise employed'.

Inner Placentia Bay offered few employment opportunities for women outside the domestic labour enterprise. Detailed analysis of employment data in the enumerators lists shows that in 1935 only 4.6% of the total work force was comprised of women. Moreover of the 92 women listed, 60 were engaged in domestic service. The remainder were employed in the teaching profession and as postmistresses and telegraph operators.

Fishery

Boats

One of the most significant changes for this period was the increased use of the marine engine in fishing boats. This trend was recognized by government, for in the 1935 census smaller boats were listed in three categories - motor

boats, motor dories and dories.* By 1935 there were 339 motor boats, 26 motor dories and 1088 dories at Inner Placentia Bay. By 1935 marine engines were also being installed in some of the schooners as well - 7 auxiliary schooners were recorded. Another feature of this period was the increase in the number of smaller fishing schooners and the introduction of a fleet of larger vessels that fished on the Grand Banks (see Table 6.3).

Table 6.3: Inner Placentia Bay - Fishing Schooners and Vessels 1935

| Type | Number | Tonnage | Average Tonnage |
|---------------------|--------|---------|-----------------|
| Auxiliary Schooners | 7 | 288 | 41.1 |
| Banking Schooners | 6 | 547 | 91.1 |
| Fishing Schooners | 58 | 1361 | 23.5 |
| Western Boats* | 86 | 1875 | 21.8 |
| TOTAL | 157 | 4071 | 25.9 |

*Butler describes a Western Boat as any boat that fished at Cape St. Mary's, twenty-two to thirty tons, three to four dories (Butler 1980: 46 - 47).

Source: Census of Newfoundland 1935..

Overall, the total number of schooners increased from 104 in 1921 to 157 in 1935, but the average tonnage declined from

*The preamble to the 1935 census on fishing boats and gear noted that punts and other small craft were grouped in the same classification as dories.

27.3 to 25.9 tons and this figure would be considerably lower were it not for the inclusion of the auxiliary schooners and the larger vessels employed in the bank fishery (see Table 6.3).

In terms of the distribution pattern of motor boats and dories, Figure 6.3 shows that while they both occurred in all sections of Inner Placentia Bay there were differences. The greatest concentration of motor boats occurred at Red Island and in the Great Paradise - Isle Valen area and at Arnold's Cove on the Isthmus of Avalon. One interesting feature, however, is the relatively low number of motor boats at such large settlements as Long Harbour and Fox Harbour and particularly at the communities of Harbour Buffett; Kingwell and Haystack on Long Island; and at Tack's Beach. These settlements did however have a large number of dories.

The distribution pattern of vessels remained basically unchanged (Figure 6.4). Fox Harbour, Ship Harbour and Long Harbour; Haystack, Kingwell and Harbour Buffett on Long Island; Tack's Beach and Clattice Harbour continued to be the main fishing schooner ports with a smaller concentration at Bar Haven and in the Great Paradise - St. Leonard's area. The presence of such schooners may account for the small number of motor boats in these communities since dories were an essential part of the schooners' catching technique. In

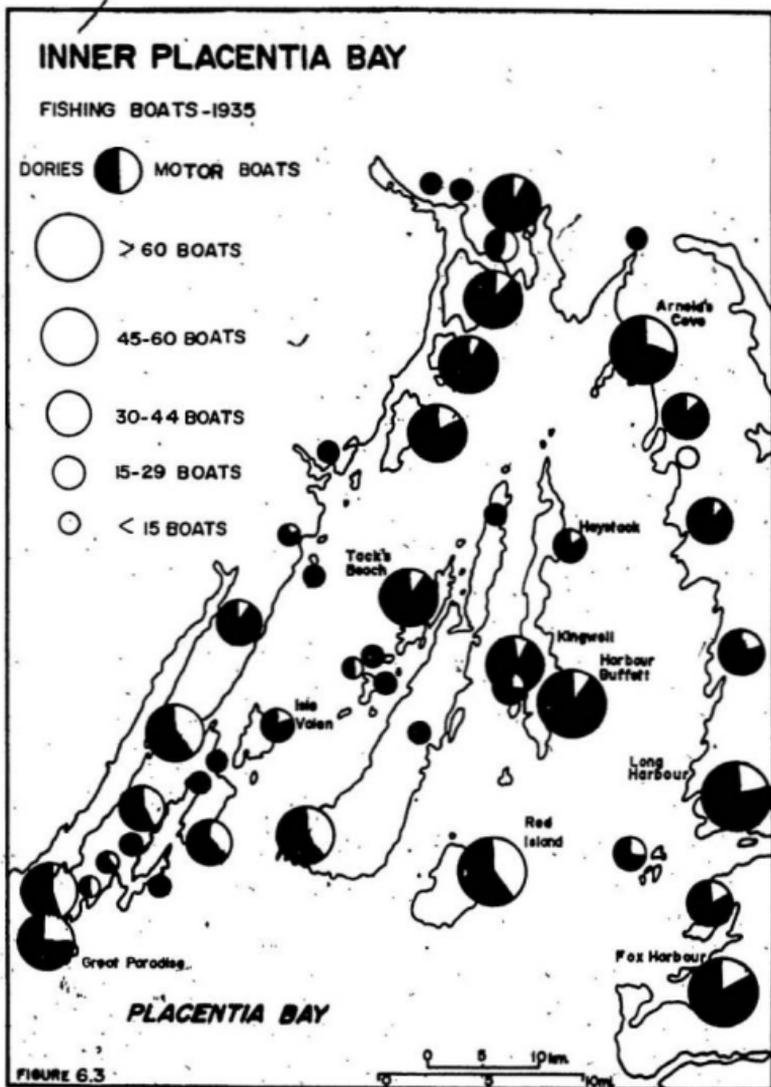


FIGURE 6.3

Source: Census of Newfoundland 1935

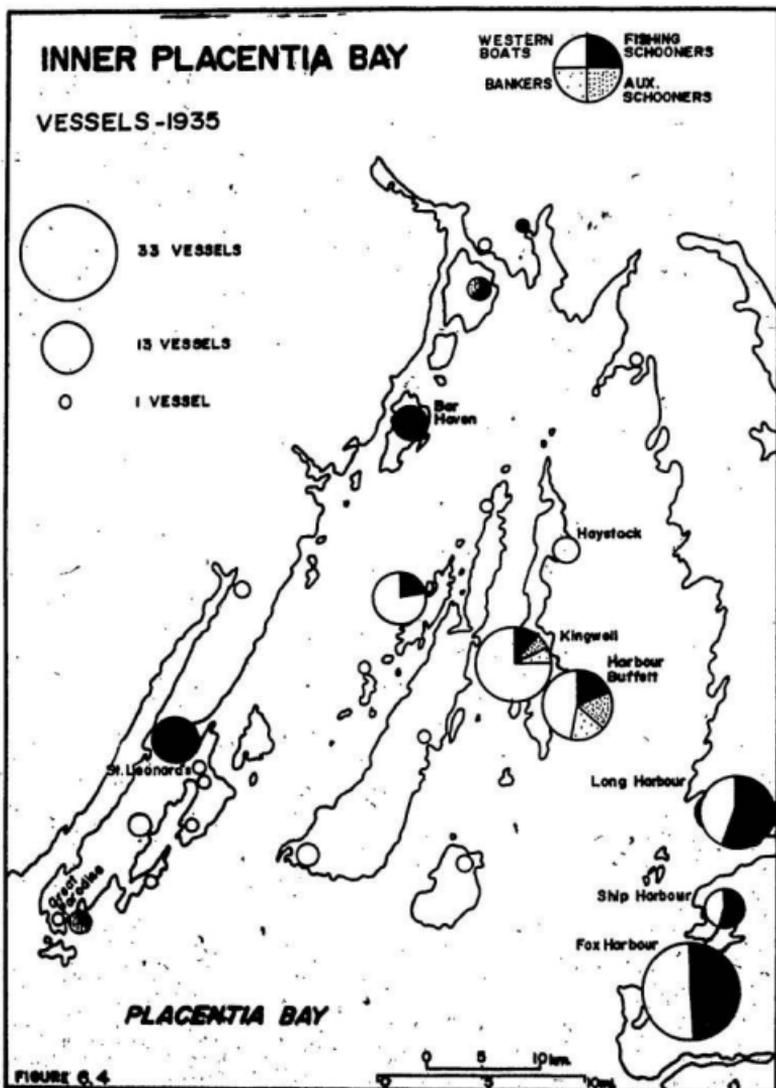


FIGURE 6.4

Source: Census of Newfoundland 1935

contrast inshore fishermen found that motor boats were better suited to their needs.

The bank fishing schooners were located at Harbour Buffett and Kingwell.

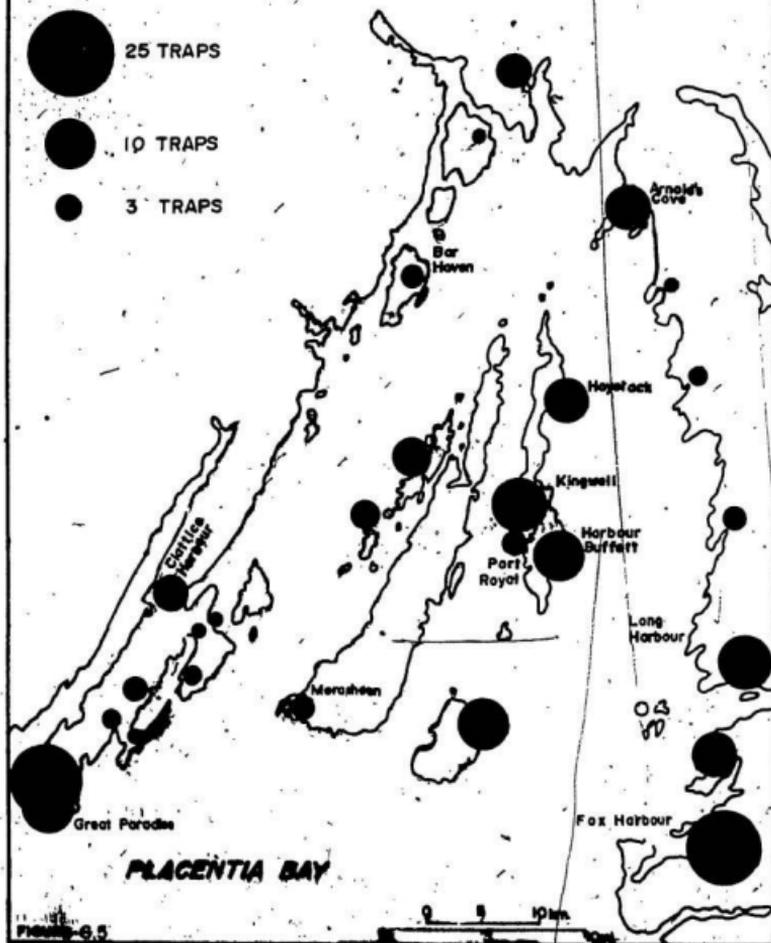
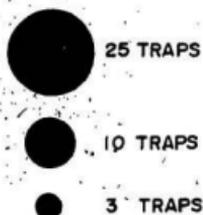
Fishing Gear

Just as there were contrasts in the distribution of vessels, motor boats and dories, the same applied to fishing gear. During the period 1921 to 1935 there was a 12.7% decrease in the number of codtraps in use. The use of the codtrap declined at 19 communities; 4 communities remained constant; while 9 communities added codtraps over the period. The greatest decline occurred at Merasheen, from 22 cod traps in 1921 to just 3 in 1935. Tack's Beach, Great Paradise and Bar Haven, also showed decreases. The increased use of this technique was confined primarily to the communities of Little Paradise, Fox Harbour and the Long Island communities of Harbour Buffett, Kingwell, Haystack and Port Royal.

Figure 6.5 shows that by 1935 the use of codtraps was confined almost exclusively to the Fox Harbour - Long Harbour area; the central islands and the Paradise - Clattice Harbour area. Apart from Arnold's Cove on the Isthmus of Avalon, by 1935 the use of codtraps on the entire mainland section of Inner Placentia Bay was minimal.

INNER PLACENTIA BAY

COD TRAPS -1935



11 1935

Source: Census of Newfoundland 1935

It appears that good catches and high prices prevalent from 1911 - 1921 may have resulted in fishermen being willing to invest in and utilize codtraps, but changing conditions, falling prices, and alternative catching techniques, or other employment opportunities, may have made the codtrap less favoured. Location was a factor as well, since cod are usually more plentiful in more exposed headland locations. Whatever the reasons by 1935 the pattern of cod trap holdings had reverted to that of 1911 when this catching technique was closely associated with the presence of fishing schooners.

The 1935 census does however, provide a detailed breakdown of fishing nets utilized for cod, herring and salmon. From such data it is possible to gain a better insight into the inshore fishery and the catching technique and product mix for the various communities.

The distribution of cod nets in 1935 shows that this technique was predominant at the bottom section of Inner Placentia Bay and particularly at the communities of Bar Haven, Woody Island, Sound Island, and Arnold's Cove (see Figure 6.6). This catching technique was also utilized to a lesser degree at Red Island and in the Paradise and Clattice Harbour area. In contrast the Fox Harbour - Long Harbour area as well as the important fishing schooner settlements on Long Island rarely used this technique. Cod nets are most efficient in the spring, the late summer and early fall when the codfish

INNER PLACENTIA BAY

COD NETS - 1935

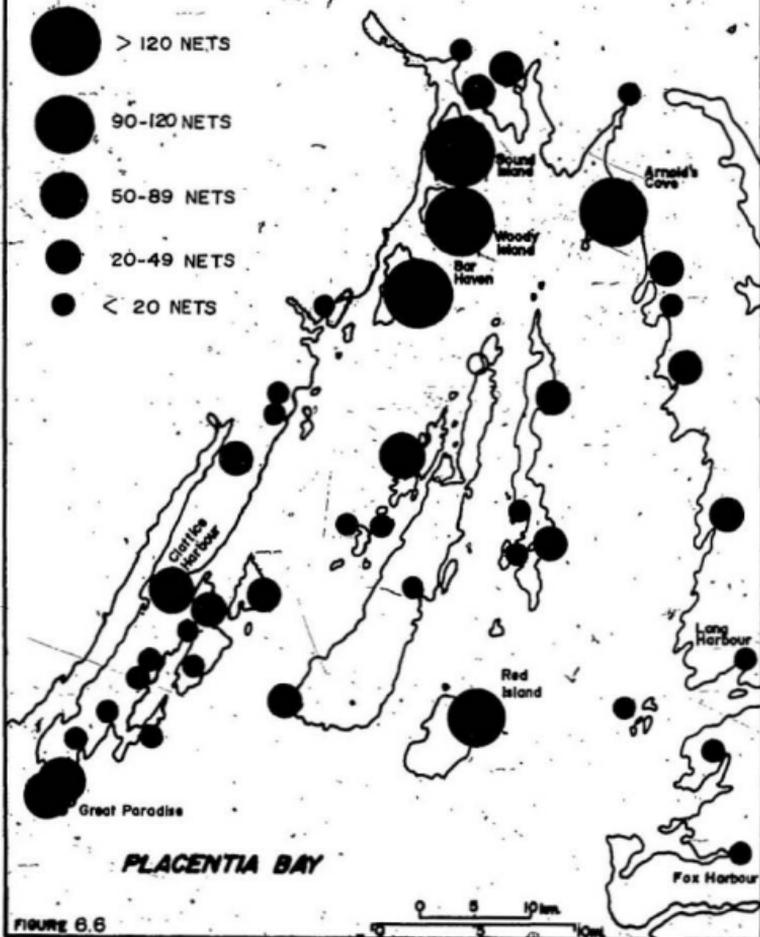
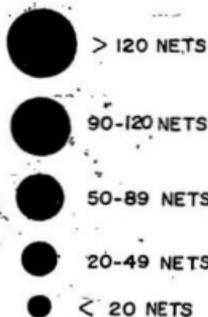


FIGURE 6.6

Source: Census of Newfoundland 1935

are more likely to be in deeper water. Inshore fishermen could use codnets in conjunction with lobster traps and at times when either bait for trawls was not available or the cod were glutted on caplin or squid. For schooner based fishermen however, this was the time of the year when they were actively engaged fishing out around Cape St. Mary's with cod traps and/or trawls.

Herring nets and seines occurred throughout the area but the greatest concentration occurred at Long Harbour, Red Island, Arnold's Cove and Bar Haven with lesser concentration on the central islands and in the Paradise - Isle Valen area (see Figure 6.7). Practically all communities had herring nets since herring could be used as bait for cod trawls; as bait for lobster traps; and finally there had always been some markets for pickled herring outside Newfoundland.

Salmon nets were confined primarily to the Long Harbour - Sound Island area. The reason for this pattern was undoubtedly related to the seasonal nature of this fishery and the salmon's return to the larger streams and rivers to spawn.

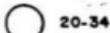
Productivity

It appears that during the period 1921 - 1935 the overall trend was one of falling productivity. But because of format changes in the 1935 census it is difficult to make

INNER PLACENTIA BAY

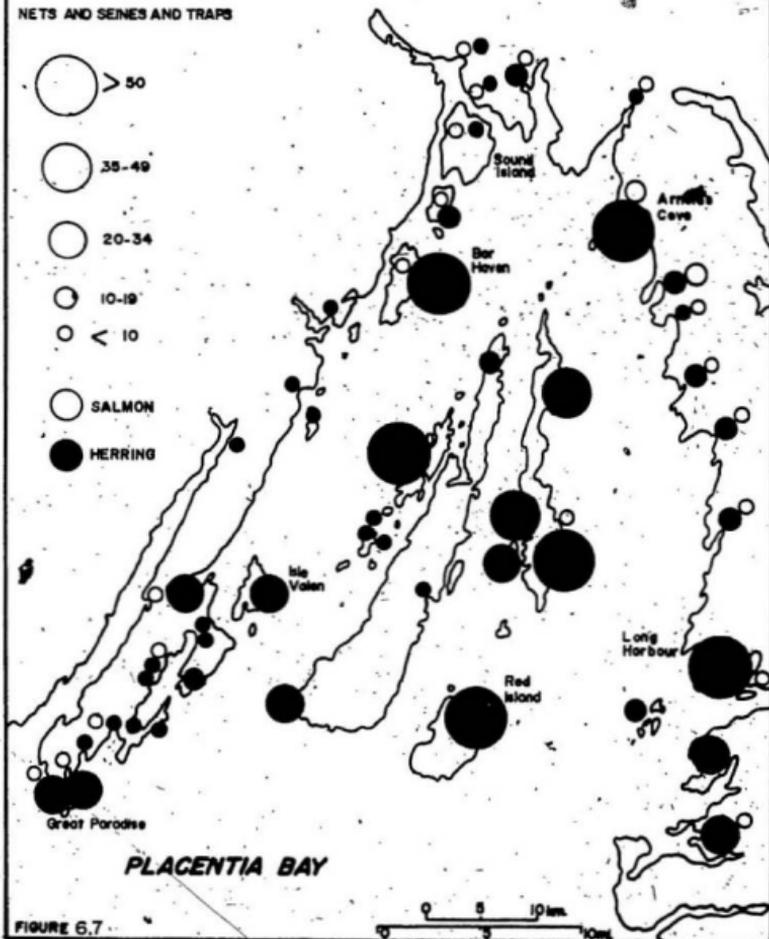
HERRING NETS AND SEINES, SALMON NETS AND TRAPS - 1935

NETS AND SEINES AND TRAPS



○ SALMON

● HERRING



PLACENTIA BAY

FIGURE 6.7

Source: Census of Newfoundland 1935

close comparisons as fish products were not recorded by community as in the previous records. Some comparisons, however, may be made by examining larger, national, production patterns and relating this to known patterns in the regional experience.

Output in the Newfoundland cod fishery for the period 1921-1935 was below the levels for the decade 1911 - 1921. For example, while Newfoundland's annual exports of salted cod averaged 1,451,378 cwt. during the 1911 - 1921 period, between 1921 and 1935 annual exports averaged 1,320,517 cwt., a decrease of 9%. What is even more revealing however, is that for the period 1929 to 1935 every year was below even this average. In addition, prices declined dramatically after 1930 and tended to remain at a lower level (see Table 6.4).

Table 6.4: Newfoundland and Labrador Exports of Salt Cod and Average Price - 1921 - 1935

| Year | Exports of Salt Cod Hundredweights | Average Price Per Hundredweight |
|------|---------------------------------------|------------------------------------|
| 1921 | 1 363 792 | \$ 9.77 |
| 1922 | 1 592 082 | 7.35 |
| 1923 | 1 483 087 | 6.83 |
| 1924 | 1 264 674 | 6.70 |
| 1925 | 1 165 097 | 8.97 |
| 1926 | 1 366 461 | 8.82 |
| 1927 | 1 589 841 | 7.58 |
| 1928 | 1 573 748 | 7.33 |
| 1929 | 1 293 502 | 9.14 |
| 1930 | 1 252 479 | 9.20 |
| 1931 | 1 147 108 | 6.73 |
| 1932 | 1 111 007 | 4.52 |
| 1933 | 1 193 969 | 4.26 |
| 1934 | 1 192 123 | 4.76 |
| 1935 | 1-218 790 | 5.02 |

Source: Historical Statistics of Newfoundland and Labrador
Vol. 1, No. 1, 1970, page 181-182.

It would appear that the cod fishery of Inner Placentia Bay decreased by at least as much or even more than the Newfoundland average for several years. For example, reports noted that the trap fishery at Golden Bay was a failure in 1922 and the trap fishery from Placentia to Cape Pine was only fair in 1923.* Similarly in 1927 the trap fishery was reported to be almost a blank with an unparalleled scarcity of bait. The inshore fishery also experienced low catches. For example, poor seasons were recorded at Merasheen in 1925, 1926, and in 1930 (Butler: 1980 25, 29-30).

The earthquake and tidal wave of November 1929 also appears to have played havoc with the fishery. In 1930 a fisheries report noted that in the devastated area and along the whole south coast from Cape Race to Cape Ray, the fishery was almost a blank and there was a great scarcity of bait. In 1931 squid were reported scarce all along the coast.** Inner Placentia Bay fishermen were also plagued by dog fish: a report in 1934 stated that "dog fish had never been so plentiful as during the past three years."*** These fish not

*Annual Report, Department of Marine & Fisheries, 1922:7; 1929:9. (These regions were important to Inner Placentia Bay schooner fishermen, particularly those from the Fox Harbour - Long Harbour area).

**Annual Report Department of Marine and Fisheries, 1930: 9, 1931: 11.

***"Summary of Reports Submitted, Economic Conditions of Placentia West." Magistrates Reports 323A/34, GN1/#, 1934, P.A.N.L.

only got on the baited trawl hooks set for cod, but were very destructive to the gear as well.

Several poor fishing seasons meant that fishermen were falling into debt and according to Butler this made merchants more reluctant to extend credit to fishermen in the form of food and fishery supplies (Butler, 1977: 16).

The lobster fishery was also on the decline, particularly during the 1920s. For example, Newfoundland's production of tinned lobster decreased from 12,006 cases in 1922, to 9,401 cases in 1923 and to 6,922 cases in 1924. This decline alarmed the government and a closed season on lobster was put into effect for the three year period 1925 - 1927. Following the reopening of the lobster fishery in 1928, yields were more stable, prices were firm, and the annual production averaged 10,270 cases for the period 1928 to 1935 (see Figure 6.5).

6.5 Production of Newfoundland Lobster Fishery 1928 - 1935

| Year | Number of Cases Packed | Average Price Per Case |
|------|------------------------|------------------------|
| 1928 | 4 344 | \$ 23.63 |
| 1929 | 17 179 | 19.92 |
| 1930 | 10 978 | 20.03 |
| 1931 | 9 562 | 20.75 |
| 1932 | 9 562 | 17.66 |
| 1933 | 10 764 | 14.01 |
| 1934 | 9 920 | 17.14 |
| 1935 | 8 853 | 18.81 |

Source: Annual Reports, Department of Marine and Fisheries, 1928 - 1932 and Newfoundland Customs Returns, 1928-1935

Prices for tinned lobster tended to be more stable than prices for salted cod. By making comparisons with the production of tinned lobster as a proportion of the total Newfoundland production in 1911 and 1921, it can be estimated that for the period 1928 - 1935, the average annual Inner Placentia Bay production was about 1273 cases. This rate however, was about 26% less than the 1921 production rate.*

The Newfoundland herring fishery was also declining during the period 1921 - 1935 (see Table 6.6). However, the Commission of Government took steps to improve this fishery. A Herring Board was established in 1934 and took measures to control both production and marketing. Consequently, the pack was limited to an amount which corresponded with marketing requirements.** Prices for herring also tended to be more stable than in the cod fishery. In addition by 1935 herring were being pickled and processed locally in Newfoundland prior to export: before this period more herring had been exported unprocessed.

*The percentage of Inner Placentia production as a proportion of total Newfoundland production was taken for both 1911 and 1921 and averaged 12.4%.

**Speech by Hon. R.B. Ewbank, Commissioner for Natural Resources, May 26, 1939. File 7/38, 1938, GN1/3, P.A.N.L.

Table 6.6: Newfoundland Exports of Pickled, Frozen and Bulk Herring 1921 - 1935

| Year | Number of Barrels | Average Price Per Barrel |
|------|-------------------|--------------------------|
| 1921 | 100 097 | \$7.24 |
| 1922 | 115 492 | 7.39 |
| 1923 | 92 627 | 4.74 |
| 1924 | 71 220 | 3.51 |
| 1925 | 62 029 | 5.64 |
| 1926 | 61 604 | 5.31 |
| 1927 | 67 739 | 7.10 |
| 1928 | 64 640 | 6.35 |
| 1929 | 74 302 | 7.33 |
| 1930 | 45 721 | 6.17 |
| 1931 | 45 406 | 6.73 |
| 1932 | 47 988 | 6.11 |
| 1933 | 28 370 | 6.36 |
| 1934 | 29 601 | 5.55 |
| 1935 | 30 983 | 7.23 |

Source: Annual Reports, Department of Marine and Fisheries; Customs Returns 1921 - 1935.

The employment provided both in catching and processing herring helped residents of Inner Placentia Bay in a small way. For example, Butler records having participated in the herring fishery during the winter of 1930 - 31 at Long Island, and later at Rose au Rue Island, adjacent to Merasheen Island, operating out of a large moored vessel. On both occasions Butler was supplied by Alberto Wareham, a Harbour Buffett merchant (Butler, 1977: 9-11, 14, 23-24, 29).

But when it is remembered that the 1921 production of herring in Inner Placentia Bay amounted to less than 2% of total Newfoundland output, it will be seen that improvement to the organization of this fishery had marginal effects on the region at best.

The whale fishery was not carried on continuously from Inner Placentia Bay during the period 1921 - 1935. Customs Returns and Fisheries Reports seem to indicate that this industry operated from 1924 - 1930, was closed during 1931 and 1932, and then operations were resumed. It appears that from this time whaling was concentrated primarily on the Labrador coast rather than at Rose au Rue on Merasheen Island. A government report of 1935 noted that while the Newfoundland Whaling Company's Plant at Rose au Rue could process 3 to 4 whales daily, the Grady plant in Labrador was larger. The company's plant at Hawkes Harbour, Labrador, however, could process 6 to 8 whales daily. This report also noted that the whale factories were equipped with press boilers for extracting oil, separators for eliminating dirt, water, and other impurities, and driers for making guano.*

The only statistics for the Rose au Rue plant are for the period 1928 - 1930 and these show a pattern of decreased activity (see Table 6.7).

*Department of Natural Resources, Memorandum to Acting Commissioner for Fisheries, January 11, 1935, File 13 S2-1-5, P.A.N.L.

Table 6.7: Rose au Rue - Whaling Statistics 1928 - 1930

| Year | No. of Whales | Oil Production | Guano Production |
|------|---------------|----------------|------------------|
| 1928 | 152 | 223,762 gals. | N/A |
| 1929 | 71 | 2,510*brls. | 1,777 sacks |
| 1930 | 42 | 930 brls. | 100 tons |

Source: Journal of the House of Assembly 1929-31

It appears, however, that Inner Placentia Bay residents were also involved in the whaling company's operations on the Labrador Coast. For example, the 1935 census shows that of the 251 men employed in the whale industry, 120 were from the district of Placentia West and a further 24 were from the district of Placentia - St. Mary's. Analysis of the 1935 Census Enumerator Records for Inner Placentia Bay showed that 34 men worked in the whaling industry. These men came primarily from Harbour Buffett, Port Royal, Tack's Beach, Harbour Island and some of the smaller communities of the western side of Inner Placentia Bay.

While the study region experienced a decline in its catches of cod and lobster between 1921 and 1935 the herring fishery was placed on a firmer basis and the whaling industry was in operation, even if both were relatively small elements in the total picture. As a result, the area fared as well as Newfoundland's other fishing areas in terms of income

during these depression years. For example, the average fisherman's income for Inner Placentia Bay in 1935 was \$135.43, which was almost identical to the Newfoundland average of \$134.44. Inner Placentia Bay, however, fared better than the districts of Placentia West and Placentia - St. Mary's, where the average fishing income was \$117.54 and \$110.38 respectively.

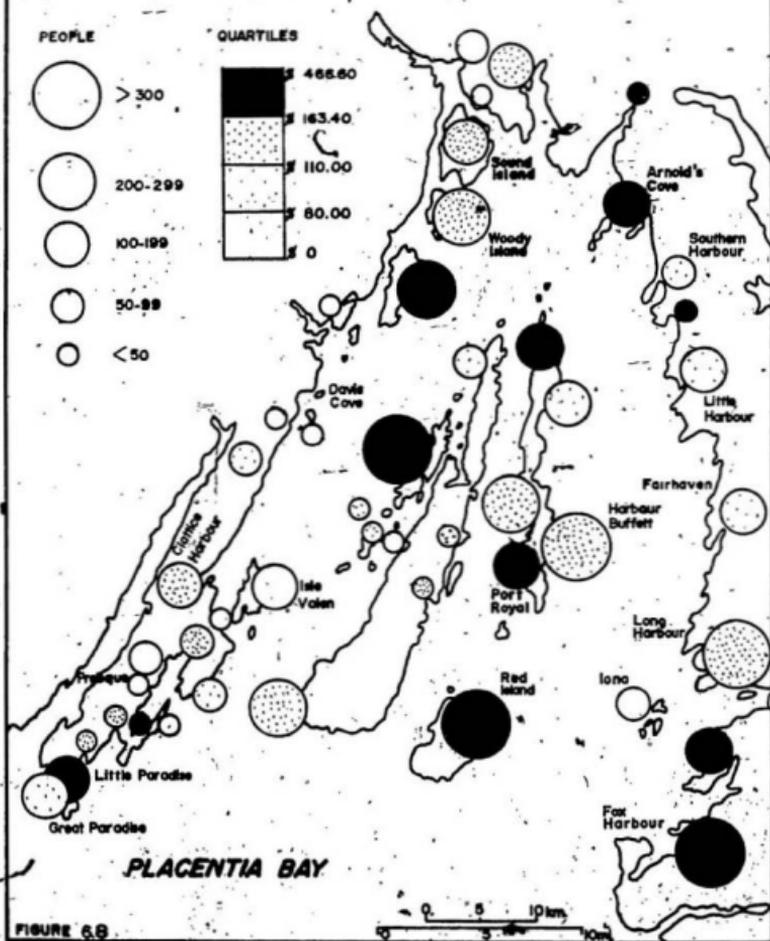
When the earnings are mapped by community the pattern resembles that of 1921 to some degree (see Figure 6.8). The Fox Harbour - Long Harbour area, the central islands, and the Great Paradise - Clattice Harbour area tended to remain above average in fishing incomes. In contrast to 1921 several of the smaller communities in the Great Paradise - Clattice Harbour area had declined; while Woody Island and Sound Island had increased their incomes over 1921. Port Royal and Harbour Buffett as well as Red Island placed higher in 1935 than in 1921. Iona, Isle Valen and Davis Cove, however, remained low.

The more widespread use of motor boats and the presence of cod nets appears to have helped Red Island, Woody Island, Sound Island, and Arnold's Cove. Harbour Buffett and Port Royal were undoubtedly helped by the introduction of the bank fishery and the whaling industry.

Lower incomes occurred in inshore cod trapping areas by 1935. Great Paradise, Presque and the nearby smaller communities, as well as Fairhaven, Southern Harbour and Little

INNER PLACENTIA BAY

INCOME FROM FISHING PER FISHERMAN - 1934



Harbour all had cod traps in 1935 yet their average was down. Little Paradise was an exception, however - it had both a larger number of cod traps as well as auxiliary and regular schooners (see Figures 6.4 and 6.5).

Subsistence Agriculture

Agriculture continued to be an important adjunct to the economy. For example, the 1935 census recorded 1335 fishermen - farmers in the District of Placentia West and 771 in the District of Placentia - St. Mary's. Livestock and root crops continued to be the main focus.

Livestock

As Table 6.8 shows, while cattle and swine declined, other species increased over 1921.

Table 6.8: Inner Placentia Bay - Livestock Holdings 1921-1935

| | 1921 | 1935 | % Increase or Decrease |
|---------|------|------|------------------------|
| Cattle | 475 | 398 | -16.2 |
| Sheep | 4681 | 5018 | + 7.2 |
| Swine | 49 | 10 | -79.6 |
| Goats | 170 | 223 | +31.2 |
| Horses | 112 | 114 | + 1.8 |
| Poultry | 5780 | 7083 | +22.5 |

Source: Census of Newfoundland 1921, 1935.

Despite these changes the distribution pattern remained similar to that of 1911 and 1921, with the eastern side of Inner Placentia Bay being most heavily stocked (Figure 6.9). The central islands and the western side of Inner Placentia Bay had a pattern of lower livestock holdings. It is also interesting to note that of 13 communities with an above average pattern of livestock holdings in that area, 9 had fewer than 50 inhabitants, whereas on the eastern side of Inner Placentia Bay only 4 of 12 similar communities had populations of fewer than 100 inhabitants.

Crops

Hay and root crops were also grown. Table 6.9 shows that between 1921 and 1935 hay production had declined, perhaps in line with the falling off of cattle but turnip and potato production had increased substantially. Comparisons for cabbage are unavailable since the unit of measure changed in the 1935 census.

Table 6.9: Inner Placentia Bay - Crop Production 1921-1935

| | 1921 | 1935 | % Increase or Decrease |
|----------|--------------|--------------|------------------------|
| Potatoes | 6,479 brls. | 9,431 bfls.* | +45.6 |
| Turnips | 603 brls. | 1,004 brls. | +66.5 |
| Cabbage | 378,840 hds. | 659,945 lbs. | - |
| Hay | 907 tons | 657 tons | -27.6 |

Source: Census of Newfoundland 1921, 1935

*Computed from 28292 bushels at 3 bushels to 1 barrel.

INNER PLACENTIA BAY

CAPITAL VALUE OF LIVESTOCK PER INHABITANT-1935

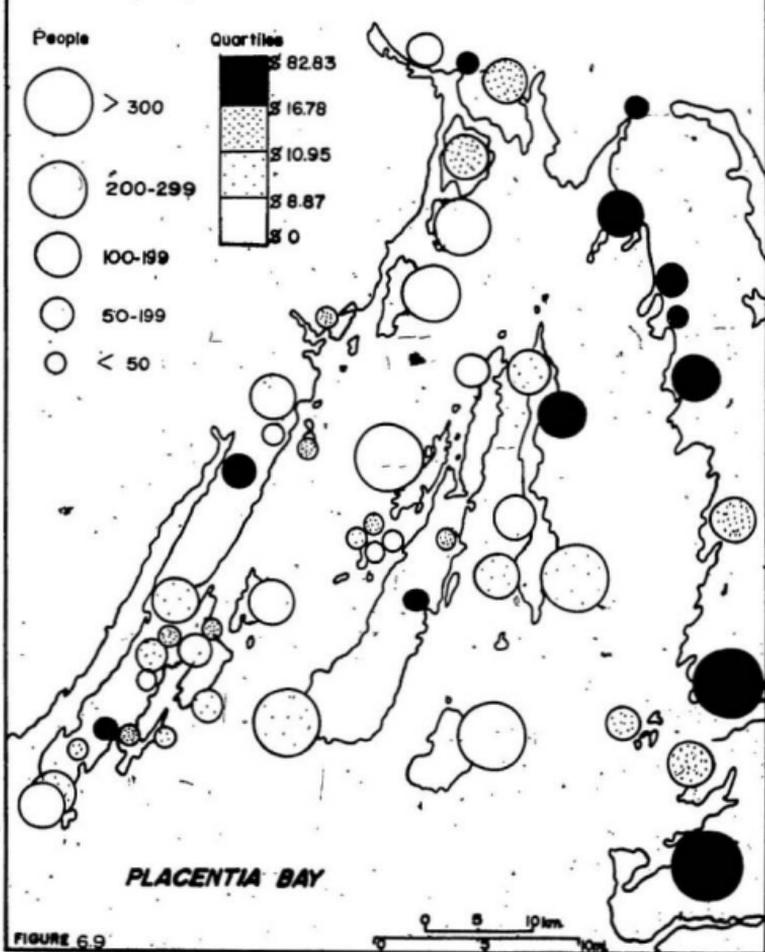


FIGURE 6.9

Source: Census of Newfoundland 1935

Figure 6.10 shows, however, that the pattern of crop production and the various livestock products consumed in 1935 was noticeably different than in 1921. The most striking change occurred on the eastern side of Inner Placentia Bay. While this area was above average in 1921, by 1935 it was at the top of the scale. Communities such as Red Island, Merasheen and Kingwell on the central islands showed an increase over 1921. However, with the exception of Bar Haven most communities on the western side of the region remained low or even decreased from the 1921 level.

Given the decline in productivity and income from the fishery the role of subsistence agriculture was very important during these depression years. While prices for agricultural produce were also lower in 1935 than in the post-World War I era, the value of the crops produced combined with the ongoing capital value of livestock was over \$129,000.00 in 1935 (see Table 6.10).

Because on the whole prices for agricultural produce did not decrease as much as that of dried codfish between 1921 and 1935, the value of subsistence agriculture in 1935 increased from 39% of the total value of fish products produced in 1920-1921 to 60% in 1935. With falling catches and declining prices in the fishery, communities with a stronger agricultural base obviously fared better economically than those more totally dependent on the inshore fishery during the depression years.

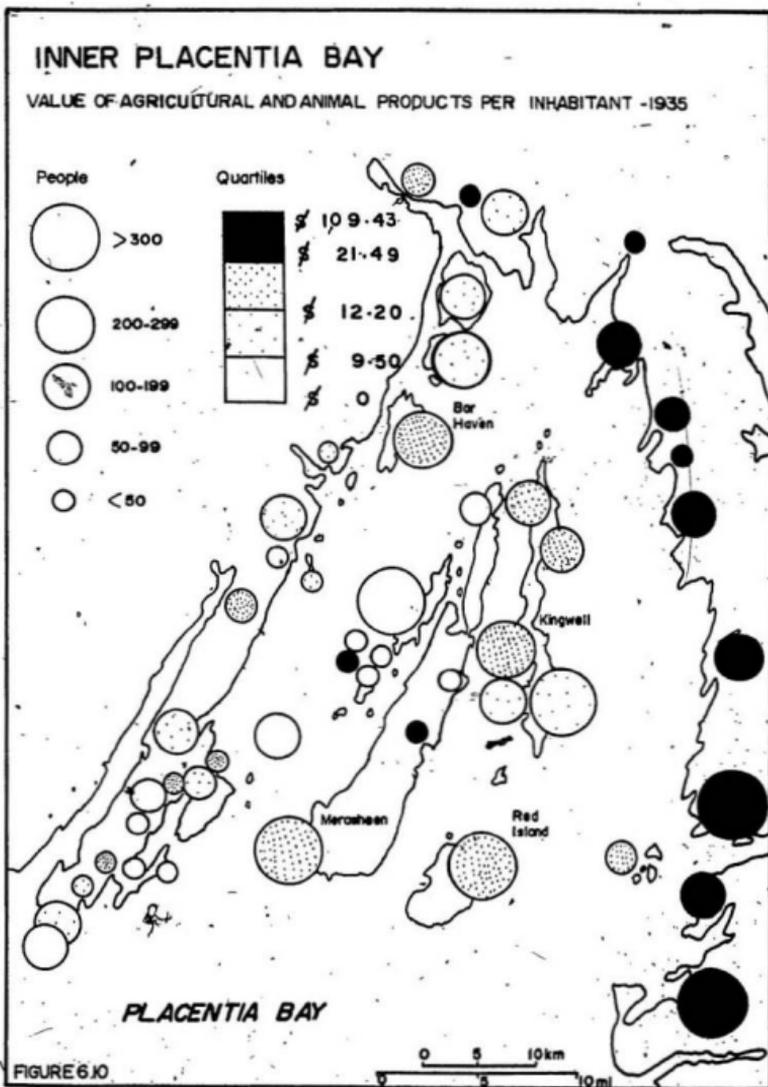


FIGURE 6.10

Source: Census of Newfoundland 1935

Table 6.10: Inner Placentia Bay - Value of Crops and Live-Stock 1935

| Items | Quantity | \$ Price Per Unit | \$ Value |
|----------|--------------|-------------------|-----------------|
| Potatoes | 28,292 bu. | .70 bu. | 19,804.00 |
| Turnips | 1,004 brls. | 1.50 brl. | 1,506.00 |
| Cabbage | 659,945 lbs. | .02 lb. | 13,199.00 |
| Hay | 657 tons | 24.00 ton. | 15,768.00 |
| <hr/> | | | |
| Cattle | 398 | 60.00 | 23,880.00 |
| Sheep | 5018 | 7.00 | 35,125.00 |
| Swine | 10 | 15.00 | 150.00 |
| Horses | 114 | 100.00 | 11,400.00 |
| Goats | 223 | 7.00 | 1,561.00 |
| Poultry | 7083 | 1.00 | <u>7,083.00</u> |
| | | Total: | \$129,476.00 |

Source: Census of Newfoundland 1935

Forest Resources

In addition to maintaining its role as the source both of fuel and construction materials for marine and terrestrial use this sector of the regional economy experienced a small but significant growth. Employment in forest industries increased from 10 persons in 1921 to 62 in 1935. Small saw-mills located in communities such as Monkstown, Fox Harbour

Swift Current, North Harbour and Arnold's Cove provided some employment. However in 1935 about 30 men were working for most of the year with the Anglo-Newfoundland Development Company as loggers for that company's pulp and paper mill at Grand Falls. It is interesting to note that of these 30 men 27 were from North Harbour.

Transportation and Communication

The central islands and the Western side of Inner Placentia Bay continued to receive a weekly passenger and mail service provided by steamers such as the Argyle or Home until 1932. But from December 1932 the service was cut back to once every two weeks (Daily News, 2 December 1932).

This retrogressive step increased the isolation of many communities, particularly those in the Isle Valen, Merasheen and Great Paradise area. Communities on Long Island as well as other communities such as Tack's Beach, Davis Cove, Bar Haven, Woody Island and Sound Island were not as adversely affected since their location further in Inner Placentia Bay made transportation by motor boat or skiff to mainland centers feasible during much of the year. From these mainland communities connections could easily be made with the railroad system.

In addition to less frequent mail service there was also a decrease in the number of post offices from 35 in 1921 to 28 in 1935. Many of the 28 were also very small and did

little business. For example, 7 postmasters with their salary and commission earned less than \$25.00 per year; while 11 more postmasters received only \$25 to \$100 per year.*

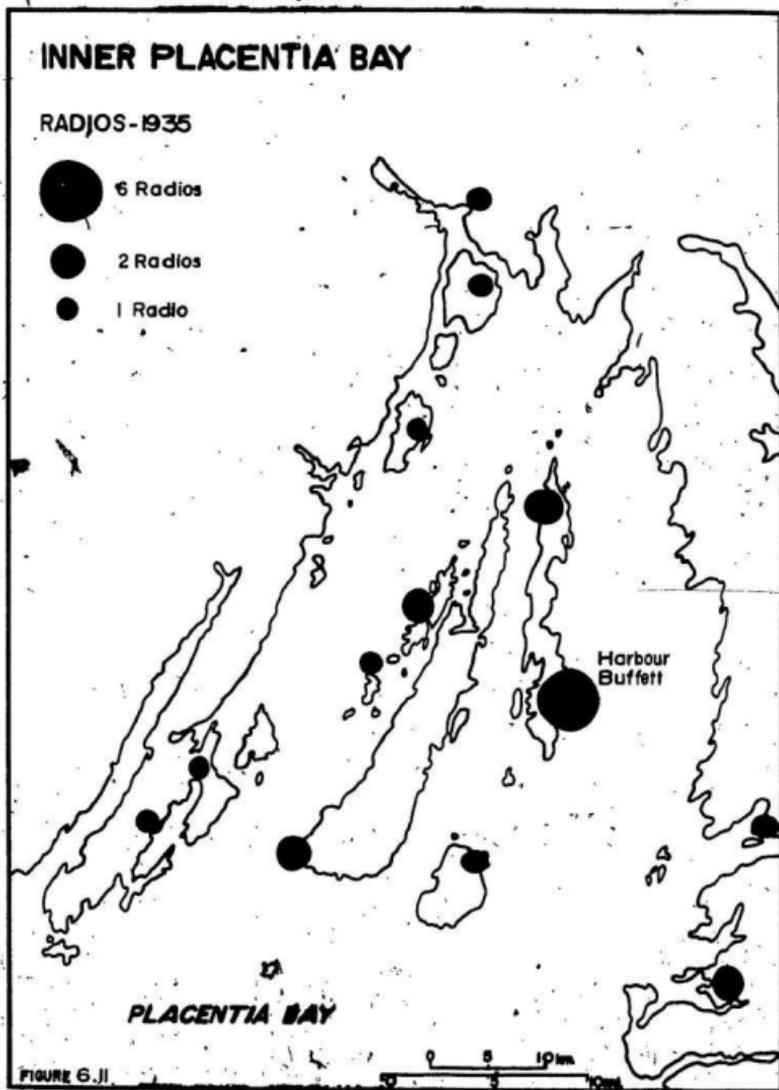
Undoubtedly the greatest change in communications during this period was the introduction of the radio. While it is possible that some residents may have had a radio during the late 1920s, there were still only 22 radios at Inner Placentia Bay in 1935, and of these 6 were at Harbour Buffett (see Figure 6.11).

The cost of a radio was apparently the reason why so few were present at Inner Placentia Bay by 1935. For example, in 1934 a radio cost \$95 (Newfoundland Quarterly 1934: 43), and this was far more than most fishermen could afford given fishery incomes for the period. Analysis of the 1935 census showed that of the 22 radio sets at Inner Placentia Bay, 13 were owned by merchants; 3 by the clergy; 2 by civil servants and 1 by a schooner captain. Even such a small number, however had a considerable impact given the close interaction of out-port society.**

Coastal and foreign-going shipping was also important to the economy. Fishing schooners carried fish products to St. John's and returned with provisions when the fishing season

*Department of Posts and Telegraphs Proposed Salaries of Out-Port Officials as from January 1, 1935, GN1/3, P:A.N.L.

**An interesting comparative figure is given by Miner in his classic study St. Denis: a French-Canadian Parish - his field work in 1936 noted a total of 28 radios in the parish of St. Denis though the population of Inner Placentia Bay was nearly ten times that of the Quebec parish (Miner 1939: 26).



Source: Census of Newfoundland Enumerators Lists 1935

was over. Banking schooners were also often used as freighters as well. For example, A. Wareham's Annie Francis and W.W. Wareham's Daisy Marquerite were used in the off fishing season to transport coal from Sydney, Nova Scotia* (Butler 1977: 23, Observer's Weekly, 3 December 1935:23).

Foreign-going vessels operated out of Harbour Buffett as well. For example, in 1930 A. Wareham & Sons contacted the Newfoundland Colonial Secretary in connection with a bill of lading for a cargo of codfish taken to Oporto, Portugal in their vessel the Frank Baxter for the Burgeo and Lapoile Export Company. Wareham's also operated the three masted Dazzle of 146 gross tons, carrying fish and salt to and from such ports as Lisbon and Cadiz.** The 1935 census showed 20 residents of Inner Placentia Bay engaged in shipping, 15 in coasting and 5 in foreign-going. While these seamen came from all communities, the 5 foreign-going seamen came from the Long Island communities of Harbour Buffett, Kingwell and Port Royal.

*The Observer's Weekly also noted that the Daisy Marquerite, of 164 tons carried 11 dories and a crew of 25 men, and had secured 3300 quintals of codfish for the year's fishing voyage).

**F. Wareham to Dr. A. Barnes, August 20, 1930, GN1/3, P.A.N.L. Observer's Weekly, St. John's, May 2, : 11; October 31, : 6; January 16, 1940: 6; Evening Telegram, St. John's, January 13, 1940: 6.

For an account of this foreign going trade see, for example, Andrew Horwood, Captain Harry Thomasen, Forty Years At Sea. (Antrim: W. & G. Baird Ltd., 173), especially chapters 10, 12 and 13.

Religious Denominations and Education

The proportion of the Inner Placentia Bay population belonging to the various religious denominations changed very little between 1921 and 1935 (see Table 6.11).

Table 6.11: Inner Placentia Bay - Religious Affiliation
1921 - 1935

| Religion | Percentage of Population 1921 | Percentage of Population 1935 |
|----------------|-------------------------------|-------------------------------|
| Roman Catholic | 56.8 | 55.8 |
| Anglican | 24.5 | 25.4 |
| United Church | 15.3 | 13.7 |
| Salvation Army | 3.4 | 3.2 |
| Pentecostal | 0 | 1.9 |

Source: Census of Newfoundland 1921, 1935

The proportion of Roman Catholics decreased slightly while that of Anglicans increased slightly. In contrast to 1921, however, there were also a small number of adherents of the Pentecostal faith in 1935. This group resided in the communities of North Harbour, Swift Current and Woody Island, which were predominantly Methodist or United Church. It would appear that the drop in United Church adherents from 15.3% in 1921 to 13.7% by 1935 is attributable to the introduction of the Pentecostal faith into Inner Placentia Bay.

There was also little change in the literacy rate. Whereas in 1921, 67.8% of the Inner Placentia Bay population 10 years of age and older could read and write, by 1935 the figure was just 68.1%. This figure, however, was much lower than the Newfoundland average 78.7%. An interesting feature of literacy in 1935 was a significantly higher rate for females than males. At Inner Placentia Bay the rate for females 10 years of age or older was 74.6%, while the rate for males was 62.7%. Both groups, however were significantly lower than the Newfoundland average, particularly for males at 75.8% and for females at 81.9%.

Even by 1935 a large number of children did not attend school at all. For example, in 1935 the district of Placentia West had 427 children age 6 to 14 not attending school out of the 2021 children in that age group. This general stagnation in this index of social progress was almost certainly related to those reductions in social services which included teaching force cutbacks (see Table 6.2).

Literacy continued to be closely related to settlement size. In 1935 of the 14 settlements with a literacy rate below 50% only 3 had in excess of 50 inhabitants. Five settlements had a literacy rate of below 20% and of these 4 had fewer than 10 inhabitants. Low literacy levels were found in the small island communities south of Tack's Beach; in the Davis Cove - Prowseton area; the small communities on

Merashéen Island and in the vicinity of Presque on the western side of the bay. Southern Harbour was an exception to the higher levels of literacy prevalent on the eastern side.

Summary

By 1935 the weaknesses inherent in the region's society and economy were becoming more apparent. Even though settlement consolidation continued, total population declined. This was in marked contrast to previous trends. As outmigration increased both smaller and larger communities were affected and population structure was altered. Outmigration, particularly of young adults, led to a declining birth rate and a marked aging of the region's population.

Little change occurred in the labour force and the fishery remained supreme. The main focus was still cod - however despite the increased use of motor boats and an expanded fleet of vessels productivity did not increase. While incomes for fishermen were comparable with the Newfoundland average closer scrutiny reveals the serious shortcomings of the region's inshore fishery. The introduction of the bank fishery and the increase in smaller vessels undoubtedly meant that a higher proportion of the total cod production came from this sector than in 1910 or in 1920. By 1935 the region's economy therefore was almost totally dependent upon

the vessels and the increased range of operations they made possible.

Subsistence agriculture played an even larger role as prices and yields of codfish declined. However patterns of livestock holdings and crop production did not always correspond to those areas most affected by the decline in productivity from the fishery.

The forest resource provided fuel and continued to support a small indigenous sawmill industry. By 1935, one community also saw commercial logging as an alternative to fishing. This trend was symbolic for two reasons, it marked a departure from the exclusively marine based traditional economy practised in every community but more importantly it was an early example of workers commuting outside the region for employment.

Government cutbacks in the field of transportation and services, particularly education, widened the gap between the region and Newfoundland as a whole. It also created sub-regional differences. Many communities became even more isolated, while linkages between others and particularly the mainland 'railway access' communities intensified. The introduction of radios created an increased awareness of the outside world, however economics mitigated against their widespread use.

The depression undoubtedly appears to have illustrated the weaknesses of a single resource based economy. Increased

investment in marine engines and additional vessels had not improved productivity. Such an experience must have also influenced peoples' attitudes towards the fishery for the future. By 1935, North Harbour was an example of a community that looked beyond the sea and sought employment opportunities elsewhere. It proved to be a decision many other communities took in the years ahead as well.

Chapter VII Nobody Ever Did More For Newfoundland Than Hitler

This remark by one character in Cahill's play, As Loved Our Fathers, would undoubtedly be debated by many Newfoundlanders. However, the 1939-45 war did set in motion events that profoundly affected Newfoundland. During the 1930s Newfoundland was severely affected by the Great Depression. War in Europe, as in the past, provided better markets for Newfoundland's marine products, but in addition, the war brought thousands of American and Canadian servicemen to Newfoundland. The construction and servicing of military bases created not only additional employment but it also exposed thousands of Newfoundlanders to a new and different culture. New work patterns were introduced; isolation was reduced; and more monies became available for services. All of Newfoundland was affected, but few regions were more affected than Inner Placentia Bay when the American government decided to build a large naval and air base at Argenteia in 1941. This base was located right on the doorstep of the Inner Placentia Bay region.

Population

The population of Inner Placentia Bay remained fairly stable during the decade 1935-1945, falling from 6227 in 1935 to 6183 in 1945, a decrease of less than 1%. Despite this small numerical decrease there were a number of important

structural and spatial changes. But as Table 7.1 shows, the process of settlement retreat and consolidation experienced earlier continued.

Table 7.1: Inner Placentia Bay - Settlements By Population Size - 1935 and 1945

| Population Size | 0-49 | 50-99 | 100-199 | 200-299 | 300+ |
|-------------------------------------|------|-------|---------|---------|------|
| Number of Settlements 1935 | 21 | 8 | 14 | 3 | 6 |
| Number of Settlements 1945 | 12 | 10 | 14 | 1 | 7 |
| Proportion of Total Population 1935 | 7% | 10% | 32% | 12% | 39% |
| Proportion of Total Population 1945 | 5% | 12% | 34% | 4% | 45% |

Source: Census Of Newfoundland 1935, 1945

Many smaller settlements were abandoned. For example, Jean de Gaunt, Pinchard's Island and Gaulton's Island just south of Tack's Beach, as well as Chamber's Island and Queen's Bank near Davis Cove were vacated. Garden Cove and Prowseton meanwhile had a sufficient population increase to place them in a higher category. Settlements in the category of 50-99, and 100-199 inhabitants, however, remained fairly stable both numerically and proportionately. The decrease in the figures for the 200-299 category is primarily attributable to the numerical and proportional increase for settlements with over 300 inhabitants.

One of the most noticeable trends during the decade was the tendency for communities from Swift Current, along the Isthmus of Avalon to Fox Harbour to retain their population and even grow slightly. But, for the island and western shore population which had been a large, if diminishing, majority, this period witnessed a sharp discontinuity (see Table 7.2):

Table 7.2: Inner Placentia Bay - Regional Population Distribution 1911 - 1945

| Year | Percentage of Total Population on Islands and Western Shore | Percentage of Total Population on Avalon and Eastern Shore |
|------|---|--|
| 1911 | 74.0% | 26.0% |
| 1921 | 72.7% | 27.3% |
| 1935 | 71.2% | 28.8% |
| 1945 | 66.0% | 34.0% |

Source: Census of Newfoundland 1911, 1921, 1935, 1945

Among the fastest growing communities was Swift Current, which experienced a 73% growth rate, from 99 inhabitants in 1935 to 172 in 1945. Little Harbour East's population increased by 36%; Ship Harbour's by 30%; while the larger settlements of Long Harbour and Fox Harbour experienced a 13% and a 7% increase respectively. Even the smaller communities on the Isthmus for the most part showed marked population gains.

Overall on the islands and on the western shore of Inner

Placentia Bay the process of population decline continued. Smaller communities were not the only ones affected. Red Island's population, for example, declined from 433 in 1935 to 322 in 1945; while Harbour Buffett experienced a 12% decrease. All the communities on the western side of the bay declined, in particular those from Great Paradise to Clattice Harbour. Sound Island continued its decline, losing 25% of its population during the decade. There were only seven communities which were able to retain their population or show a slight increase within the entire islands and western side of the region. This was also the area where several communities were abandoned.

Population Structure And Migration

The population pyramid of Inner Placentia Bay for 1945 was more balanced than that of 1935. Unfortunately the 1945 census did not define the age groups by sex so it is impossible to determine if there were major discrepancies in the various categories. The 1945 census also just gives 25 years and older for ten year groups in contrast to five year groups for 1935 (see Figure 7.1).

What emerges from an examination of the pyramid for 1945 is the great increase in the number of young children 0 - 4 years. For example, whereas there were 642 children age 0 - 4 years in 1935 there were 871 in 1945. There was also an increase in the number of persons in the age group 25 - 34 from

INNER PLACENTIA BAY—POPULATION STRUCTURE 1945

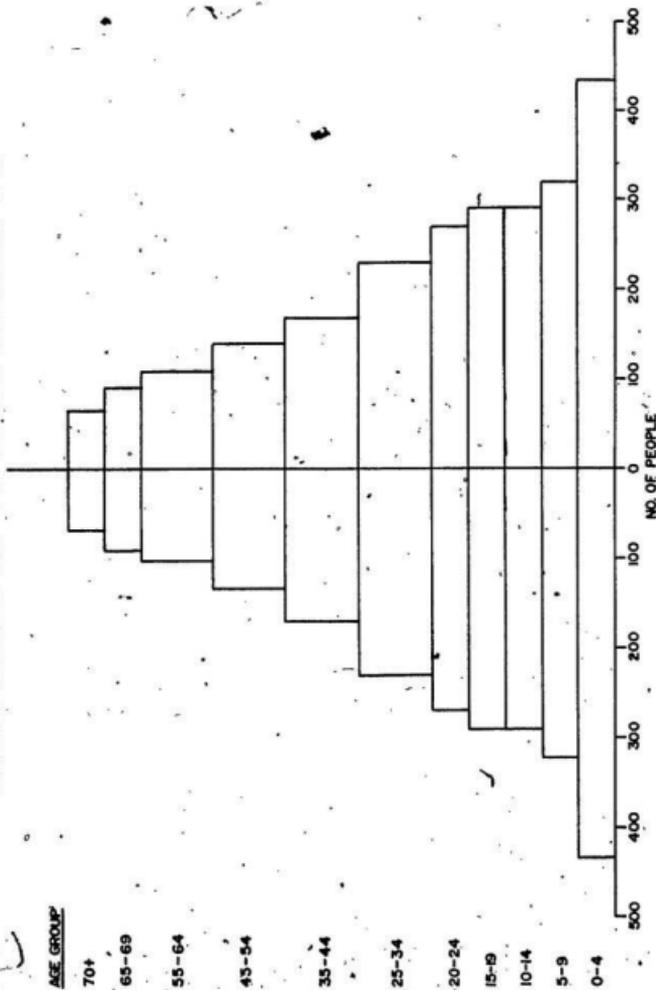


FIGURE 71

Source: Newfoundland Census, 1945.

826 in 1935 to 922 in 1945. But still, the trend towards a gradual aging of the population which was evident for the 1921-1935 period continued for the following decade. Those in the 15 - 65 age group declined slightly from 60.5% in 1935 to 59.2% in 1945. The over 65 group, however, increased from 5.7% in 1935 to 7.2% in 1945.

Outmigration, which was so evident 1921-1935 continued, though it was not so pronounced.* Again because of the census format for 1945 it is impossible to see if the rates were higher for males or females. When the percentage decrease for 1935 - 1945 is compared with 1921 - 1935 it can be seen that, with the exception of the 20 - 24 age group, the loss was markedly lower (see Table 7.3).

Table 7.3: Inner Placentia Bay - Migration Depletion By Age Groups 1921-1935, 1935-1945

| Age Group | % Decrease 1921-1935 | % Decrease 1935-1945 |
|-----------|----------------------|----------------------|
| 10 - 14 | N/A | 21 |
| 15 - 19 | 31 | 18 |
| 20 - 24 | 25 | 27 |
| 25 - 34 | 46 | 27 |
| 35 - 44 | 43 | 19 |
| 45 - 54 | 28 | 14 |
| 55 - 64 | 42 | 26 |

Source: Census of Newfoundland 1921, 1935, 1945

* Part of the decrease may be attributable to the fact that this was a ten year interval, compared to the 14 year interval between 1921 and 1935.

This pattern was particularly true for the 25 - 44 range, and undoubtedly contributed to increased fertility and the significantly higher number of young children in 1945. Even so, it will be noted that this higher fertility, and total population, did not attain levels reached in 1921.

Economy

One of the most significant changes was reflected in the decrease in the percentage of fishermen in the total work force. In the district of Placentia West fishermen as a proportion of the total male labour force fell from 80.6% in 1935 to 75.2% in 1945. In Placentia - St. Mary's the drop was from 65.3% of the total male work force in 1935 to 46.6% in 1945. By 1945, almost 30% of the male work force in Placentia - St. Mary's found employment in the service sector. This reflects the wartime growth of the U.S. naval base at Argentia (formerly the small fishing settlement of Little Placentia) and the employment there of many hundreds of civilian personnel.

The full magnitude of the impact of the decade 1935-1945 on employment in the Inner Placentia Bay area cannot be determined because of the garbled nature of the Enumerators Records surviving from the 1945 census. However, minute analysis of the available material yielded occupational information for about 55% of the work force assuming the 1945 total work force was maintained at the 1935 level. Table

7.4 shows that the most significant change was the decrease in the percentage of fishermen in the work force and the increase in the percentage of those otherwise employed.

Table 7.4: Inner Placentia Bay - Composition Of The Labour Force - 1935 and 1945

| Occupations | 1935 | % 1935 | 1945* | % 1945 |
|-------------------------------|------|--------|-------|--------|
| Teachers and Clergy | 29 | 1.5 | 15 | 1.4 |
| Merchants and Traders | 45 | 2.2 | 20 | 1.8 |
| Government Service and Office | 28 | 1.4 | 22 | 2.0 |
| Farmers | 16 | .8 | 4 | .4 |
| Lumbering | 62 | 3.1 | 52 | 4.7 |
| Otherwise Employed | 240 | 11.9 | 268 | 24.3 |
| Fishermen | 1593 | 79.1 | 722 | 65.4 |
| Totals | 2013 | 100.0 | 1103 | 100.0 |

Source: Census of Newfoundland 1935, 1945 *55% of record Enumerators lists (author's own calculations)

For example, while the proportion of fishermen declined by almost 14%, those otherwise employed increased by over 12%. Employment in the forestry sector also increased, while in the fields of education, government service and trade the percentages remained similar to those evident in 1935.

It appears that during the decade 1935-1945 there was an increase in the number of women in the work force. In Placentia West the number of women working rose from 228 to 322; in Placentia St. Mary's the number increased from

264 to 505. Women tended to be employed almost exclusively in the service industry, and the largest proportion still continued in personal or domestic services. For example, in 1945, 45.6% in Placentia West and 44% in Placentia - St. Mary's were listed as being employed in personal service.

Fishery

With decreasing employment in this sector of the economy, the fishery underwent a period of readjustment and this had important spatial and economic implications.

Boats

While there was a decrease in the number of small boats and dories from 1088 in 1935 to 921 in 1945, the number of motor boats and motor dories increased from 365 in 1935 to 467 by 1945. By 1945 engines were becoming widespread in both fishing and coasting vessels. For example, in 1945 there were 19 auxiliary schooners compared to 7 in 1935, and most of the banking schooners had engines as well (Butler 1975: 68-71).

Some of the changes in the application of capital and technology to the fishing industry may be seen from Table 7.5.

Table 7.5: Inner Placentia Bay - Fishing Schooners And Vessels 1935 and 1945

| Type of Vessel | 1935 | | 1945 | |
|---------------------|--------|--------------|--------|--------------|
| | Number | Ave. Tonnage | Number | Ave. Tonnage |
| Auxiliary Schooners | 7 | 41.1 | 19 | 29.6 |
| Banking Schooners | 6 | 91.1 | 10 | 71.4 |
| Fishing Schooners | 58 | 23.5 | 69 | 20.0 |
| Western Boats | 86 | 21.8 | 9 | 15.6 |

Source: Census of Newfoundland 1935, 1945.

The number of schooners increased substantially but the number of western boats dropped drastically - by the end of the war the western boat had almost disappeared. At the same time the average tonnage of all classes of boats had decreased.

An increase in the number of motor boats was found in most communities. However Long Harbour, Ship Harbour, Bar Haven, Davis Cove, Tack's Beach, Isle Valen and Harbour Buffett accounted for much of the increase, with each having ten or more motorboats added to the number present in 1935 (see Figure 7.2).

In 1945 the 19 auxiliary schooners were all located on the central islands, with 9 at Harbour Buffett. In addition Harbour Buffett was the port from which all 10 banking vessels sailed (see Figure 7.3). The greatest decrease in the number of fishing schooners and western boats occurred at Fox Harbour and Long Harbour - by 1945 Fox Harbour had just 4

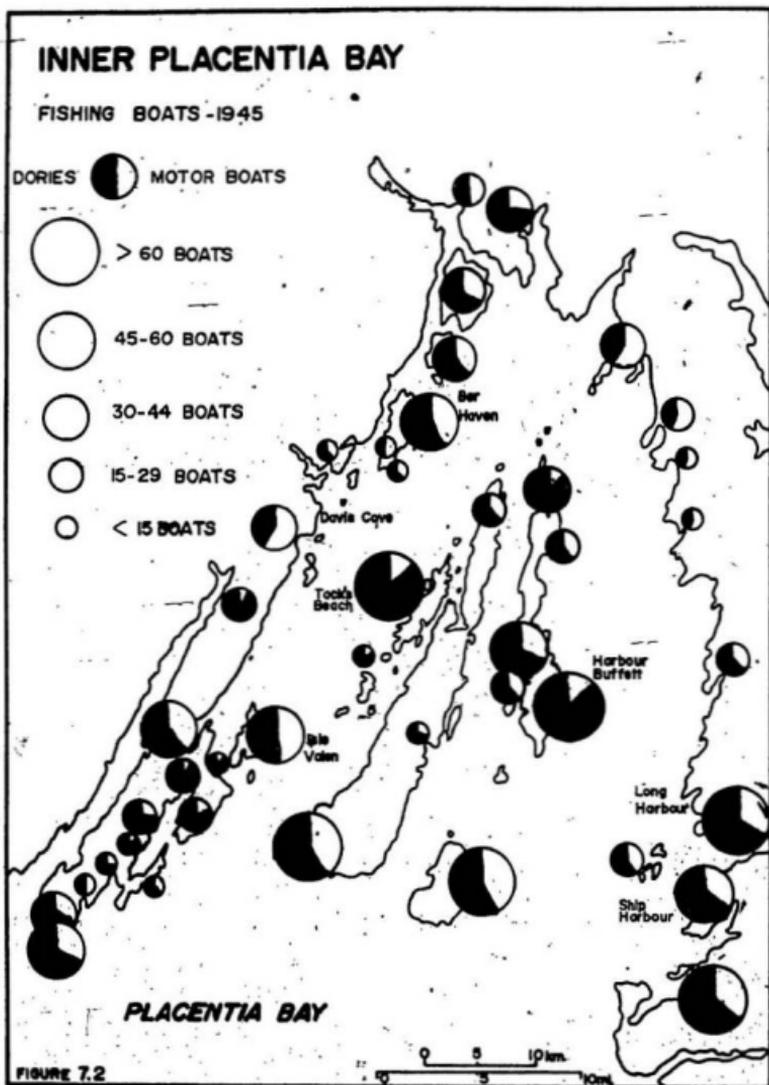


FIGURE 7.2

Source: Census of Newfoundland 1945

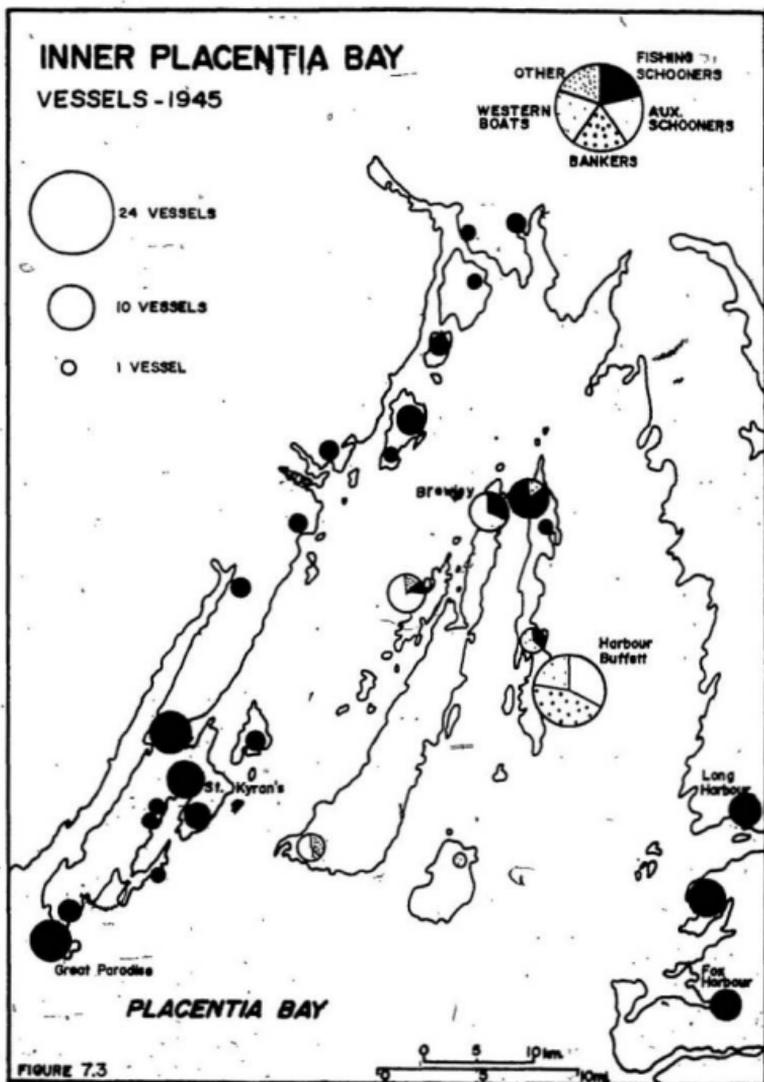


FIGURE 7.3

Source: Census of Newfoundland 1945

fishing vessels in contrast to 33 in 1935; Long Harbour's fleet dropped from 19 to 5. Both these communities were very close to Argentia and by 1945 many residents had found jobs there. Most other communities also experienced a decrease in the number of fishing schooners and western boats. Great Paradise, however, was an exception - by 1945 it had 7 vessels in contrast to just 1 in 1935. Brewley and St. Kyran's also showed an increase.

Fishing Gear

Not surprisingly the decreasing absolute numbers engaged in fishing and changes in the distribution and frequency of vessels were also reflected in changing patterns of investment in gear. For example, the number of cod traps fell from 164 in 1935 to 132 by 1945. The use of cod nets also declined from 1635 to 1492. Figure 7.4 shows the distribution pattern of cod traps, essentially unchanged from 1935. The distribution of cod nets was also similar in 1945 to that of 1935. However by 1945 use of this fishing technique had decreased substantially in the Bar Haven, Woody Island, Sound Island area. But at Isle Valen the number of cod nets increased from 34 in 1935 to 150 by 1945 (see Figure 7.5).

The 1945 census also listed lobster traps which were concentrated primarily at Tack's Beach, Isle Valen, Clattice Harbour, Long Island, and in the Arnold's Cove - Fairhaven area (see Figure 7.6). As in 1911, communities located in

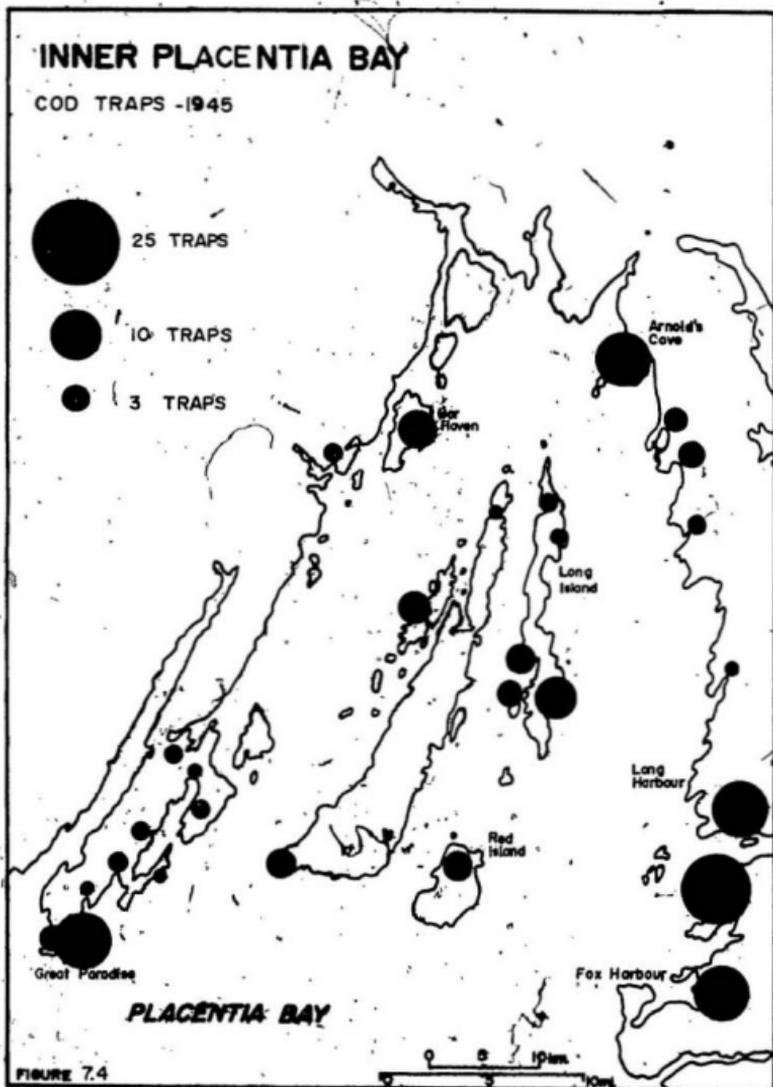


FIGURE 7.4

Source: Census of Newfoundland 1945

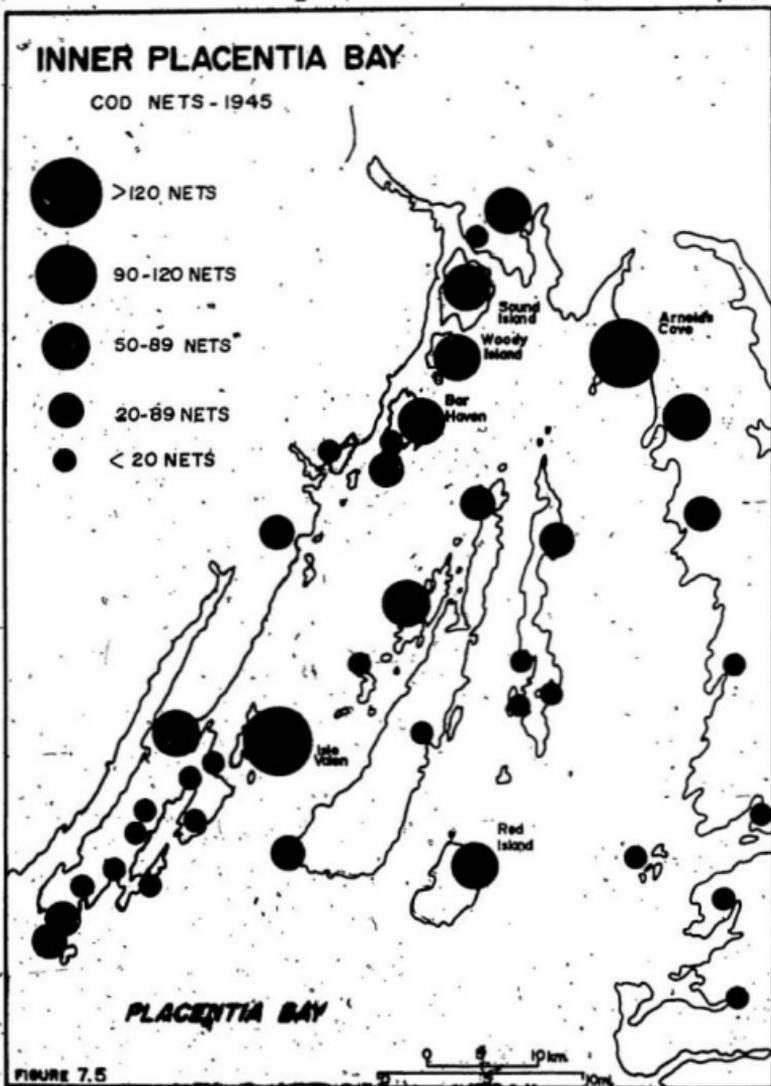


FIGURE 7.5

Source: Census of Newfoundland (1945)

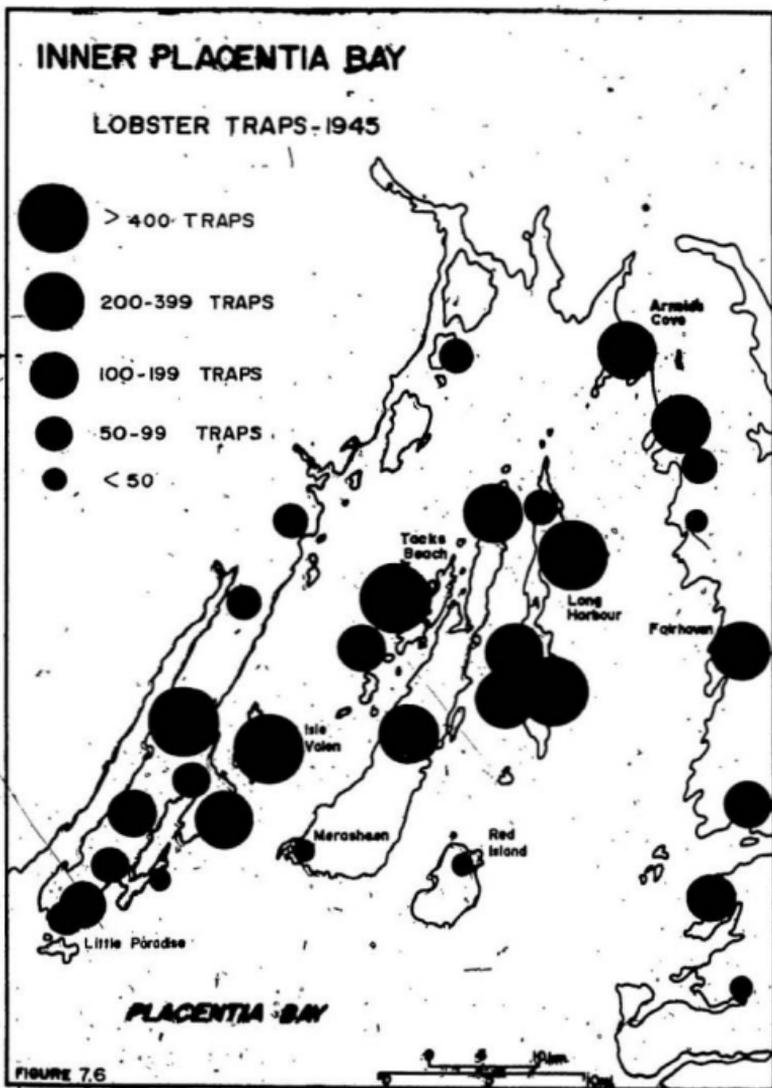


FIGURE 7.6

Source: Census of Newfoundland 1945

the more exposed section of Inner Placentia Bay were not involved in the lobster fishery. For example, Little Paradise had just 50 lobster traps in 1945, Red Island 30, and Merasheen 24. In contrast communities such as Fairhaven or Tack's Beach had from 300 to 750 lobster traps each.

An exception to the trend of declining fishing gear occurred with herring nets which almost doubled from 845 in 1935 to 1596 by 1945. The increased use of herring nets, however, was confined primarily to Long Island, Merasheen Island, Tack's Beach, and Isle Valen; with a smaller increase on the western side of the bay from Clattice Harbour to Prowseton and at Sound Island, Woody Island and Bar Haven. Only Arnold's Cove and Long Harbour on the eastern side of the bay appear to have participated in this fishery on any sizeable scale during this period (see Figure 7.7).

Salmon nets and traps were present at many communities but only Arnold's Cove on the Isthmus of Avalon had twenty or more nets (see Figure 7.7).

Productivity and Structural Change

During the decade 1935 - 1945 the fishery experienced many changes. This was due to increased government concern with the fishery; changing processing techniques; and also changes due to the impact of the war.

The inshore/cod fishery continued to be plagued by the low yields prevalent during the early 1930s for the remainder

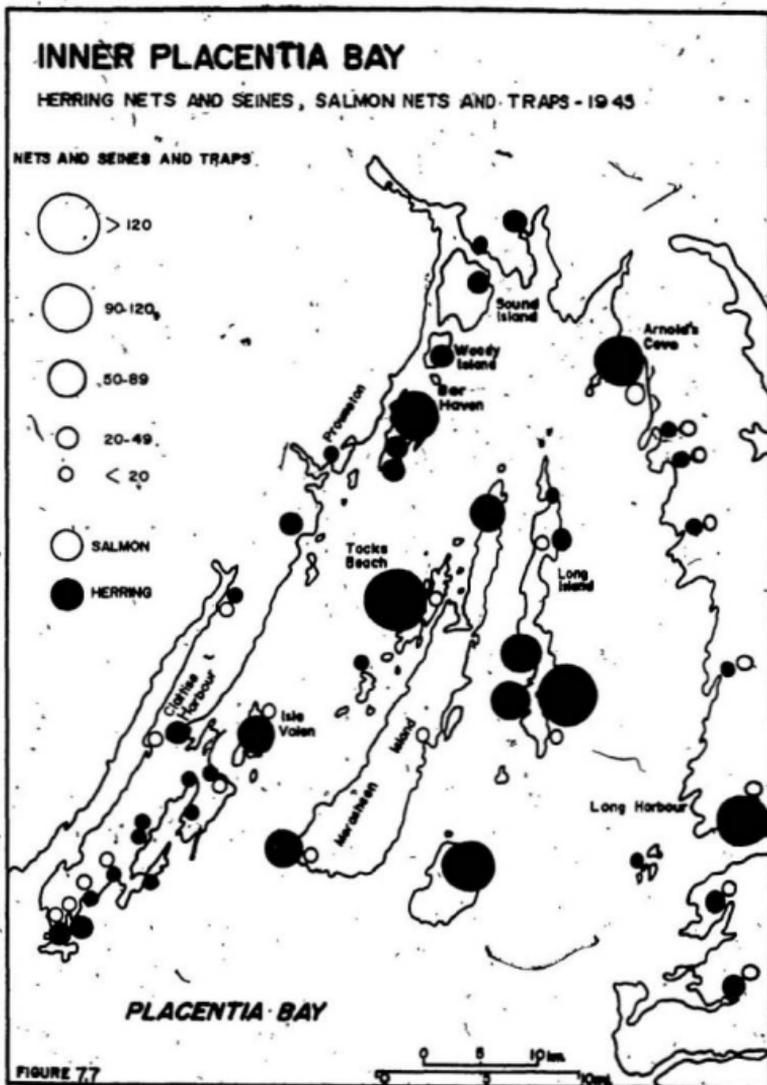


FIGURE 77

Source: Census of Newfoundland 1945

of that decade. In 1936 a report estimated that of the 75 families at Red Island, 50 were on able-bodied relief in December, with at least 10 more having to go on relief later on.* In 1937 crews on the western side of Placentia Bay from Merasheen to Lamaline were only getting 30 or 40 quintals of fish, whereas a few years before 300 to 400 quintals had been common. The depressed state of the fishery meant that a large number of fishermen were no longer in a position to keep up their fishing property and gear (Daily News, 13 October, 1937).

Conditions were also bad along the Isthmus of Avalon. A correspondent at Arnold's Cove in 1939 wrote that

the past few years this section of Placentia Bay has been severely hit because the cod fishery has been a failure, . . . there is nothing which the people can do by which they could earn a few dollars (Observers' Weekly, 13 June, 1939).

The depressed state of the fishery was of considerable concern to Commission of Government which undertook a detailed study of the area. The subsequent report published in 1939 gives an invaluable insight into the fishery of the period. The report compiled by the Placentia Bay Estimates Committee noted that inadequate fishing equipment, lack of bait and the dog-fish pest compounded the overall problem of scarcity of fish.

*Report of Magistrate M. Sinnott, Placentia, to Department of Public Health and Welfare, Dec. 1936, GN1/3 P.A.N.L.

Statistics showed that in 1938 the average catch for the inshore cod fishery for the Great Paradise - Clattice Harbour area as well as Isle Valen, Merasheen, Red Island and the Long Harbour - Fox Harbour region was approximately 10 quintals per man. The innermost section of Placentia Bay including Long Island and the Ragged Islands had an average catch of only 5.7 quintals per man.*

During the early 1940s conditions began to improve. The outbreak of the Second World War lessened European market competition for Newfoundland salted codfish and as in previous wars prices for salted codfish increased substantially. For the period 1935 - 1940 the average price per hundred weight of dried codfish was \$4.73. By 1941 it was \$6.45; in 1942, \$10.90; in 1943, \$12.51; in 1944, \$13.69 and by 1945 it had reached \$15.20 (Historical Statistics of Newfoundland and Labrador Vol. 1, 1, 1970: 182).

In addition, by the early 1940s, Placentia Bay was experiencing yields from the cod fishery reminiscent of the pre 1929 era: from 1941 to 1945 yields increased almost twofold (see Table 7.6).

*Report of the Placentia Bay Estimates Committee, (Robinson and Co. Ltd., St. John's, Nfld.) 1939, 10, 42-43.

Table 7.6: Placentia Bay* - Inshore Codfishery Returns
1937 - 1945

| Year | Number of Quintals |
|------|--------------------|
| 1937 | 22,298 |
| 1938 | 28,090 |
| 1939 | 32,750 |
| 1940 | 26,703 |
| 1941 | 32,782 |
| 1942 | 38,189 |
| 1943 | 62,240 |
| 1944 | 71,990 |
| 1945 | 64,816 |

*Includes Point Lance and Cape Shore

Source: Newfoundland Fisheries Board, Annual Reports, 1937-1945

Rising prices and increased catches helped the regional economy.

For example, in June, 1944 the Newfoundland Ranger stationed at Petite Forte (near Great Paradise) reported:

Conditions ... are very good. Everybody seems to be living in very good circumstances and with the prospects of the fishery being good and a good price being paid for same, conditions for the future seem to be bright ...*

Similarly in December 1945 the Ranger reported that:

The cod fishery ... was during the past six months the most successful one for years ... (it is) estimated that some 30,000 quintals were secured in this district. This area covers from Petite Forte to Clatice Harbour including Merasheen and Isle Valen.**

*Newfoundland Ranger Force Reports GN 38, S2-S-2 P.A.N.L.

**Ibid

During the period 1935-1945 the Commission of Government adopted policies that benefitted fishermen. For example, in 1939 a special fuel for low compression marine engines was introduced. This fuel called "acto" was much cheaper than traditional gasoline and its improved performance and lower cost helped to reduce the fisherman's operating expenses (Observer's Weekly, 16 May, 1939). Also in 1939 the government built a bait depot at Long Harbour. This depot had a freezing capacity of 10,000 lbs. and storage facilities for 250,000 lbs. Merashéen also received a storage facility for 50,000 lbs. of bait.*

Western Boat Fishery

The early part of the decade 1935-1945 was the peak of the western boat fishery operating out of Inner Placentia Bay. In contrast to the very poor yields experienced by the inshore cod fishermen during the 1930s the western boats usually did well. For example, the report of the Placentia Bay Estimates Committee in 1939 showed that the average catch per man was 55.5 quintals for settlements in the Inner Placentia Bay area.**

*Department of Natural Resources, File # N.R. 9(d) - 1944, S2-1-4, P.A.N.L.

**Report of the Placentia Bay Estimates Committee, 1939: 37.

The boats were able to use codtraps at suitable locations near Cape St. Mary's and Golden Bay. In addition both before and after the trap season they could move around the numerous banks and shoals in the vicinity of Cape St. Mary's and Cape Race. Vessels could anchor on these grounds, set trawls for cod and then clean and salt the codfish on board. Once bait was not available or the vessel was loaded it could return to the home port where the codfish would be discharged and dried.

A good insight into the western boats' and fishing schooners' methods and patterns of fishing can be extracted from reports of the Ranger from the Petite Forte detachment. In 1945 Ranger Foster wrote that 13 schooners would be sailing for the fishery. The schooners ranged from 18 tons to 45 tons and most were fitted with engines. Schooners with 2 codtraps would have a crew of 10 men. These vessels would make approximately 2 voyages to the vicinity of Cape St. Mary's during the early spring when they used trawls. About June 15th these vessels left for the trapping period which lasted from 4 to 5 weeks. Following the trap fishery these schooners, providing bait was available, would make another trip or two to the Cape St. Mary's fishing grounds and on occasion some of the larger schooners would make a fall trip to the Labrador. In 1945, vessels from this district had only small catches from the Labrador trip and by the end of

September most of the schooners were being moored for the season (Ranger Reports, Petite Forte Detachment, April, September, 1945).

The Commission of Government also assisted this fishery by providing bounties to assist in vessel construction. This was especially necessary during the depression for with low fish prices it was difficult for fishermen to replace or repair worn out vessels. This programme appears to have been well received by the fishermen of Inner Placentia Bay. During the winter of 1934-1935 there were 11 vessels under construction in the area, with a combined tonnage of 340. Even by 1945 - 1946 there were 17 applications from Inner Placentia Bay for vessels with a projected tonnage of 433.*

The outbreak of war in 1939 and the subsequent construction of a large military base at Argentia contributed to the decline of the western boat fishery. For example, in July, 1941 it was estimated that over 2200 Newfoundlanders were employed at Argentia. By October of 1941 it was estimated that over 8000 were employed by the three American bases at St. John's, Argentia and Stephenville (Observer's Weekly, 15 July; 14 October, 1941).

Because of their proximity to Argentia, many Inner Placentia Bay communities were affected, particularly Fox Harbour and Long Harbour. For example, whereas these two communities had 52 fishing vessels between them in 1935, by

*Folio # 5/35 1935, GN1/3 P.A.N.L. and Observer's Weekly, 8 October, 1946.

1945 there were just 9. Improvements in the Newfoundland economy generally, as well as the expansion of the Inner Placentia Bay bank fishery undoubtedly contributed to this decline of the western boat fishery.

The Bank Fishery

In contrast to the inshore cod fishery and the western boat fishery, the bank fishery of Inner Placentia Bay expanded during the decade 1935-1945. The number of banking vessels increased from 6 in 1935 to 10 in 1945, though the average tonnage decreased from 91.1 tons in 1935 to 71.4 tons in 1945.

The bank fishery was by the standards of the region both a capital intensive and labour intensive industry. Some of the banking schooners were small, being only slightly larger than a big western boat - however, by 1945 W.W. Wareham Ltd. of Harbour Buffett had some over 100 tons. For example, in 1945 Wareham's had the Ronald George of 160 tons and the Calvin Pauline of 120 tons. These vessels were equipped with diesel engines and carried 8 to 12 dories* (Observers' Weekly 24 April, 1945).

In addition to the crews to man these vessels considerable employment was created on shore for tradesmen such as

*Each dory carried two men when fishing. This meant that a 12 dory banker had 24 fishermen, in addition to the captain, the engineer and a cook.

carpenters and blacksmiths to maintain the vessels and labourers to cure the catch and pack it for export. This also created a demand for coopeage supplies as well as coopers.

The impact this had on any community was quite substantial. For example, in 1936 Newfoundland's Governor on a tour of the South Coast remarked that at Harbour Buffett there was no one on relief, while at Red Island, a nearby inshore fishing community, most residents were in need of assistance.*

Yields from the bank fishery were quite good and exceeded the output per fisherman in the western boat and smaller schooner fishery. For example, the Placentia Bay Estimates Committee of 1939 found that the average catch per man on vessels out of Harbour Buffett was 87.9 quintals and for Spencer's Cove it was 77.1 quintals. Both figures are much higher than the 55.5 quintal per man average for the smaller fishing vessels of Inner Placentia Bay.** This increased yield for the bank fishery was due to both a longer fishing season and the ability of these larger vessels to proceed out to the richer fishing grounds of the Grand Banks. The bank fishery apparently began in March. For example, a Haystack (Long Island) resident wrote March 11, 1937 that:

*Governors Office, GN1/3 Series, 1936, P.A.N.L.

**Report of the Placentia Bay Estimates Committee, 1939: 37

The past week the firms of A. Wareham and Sons of Spencer's Cove and W.W. Wareham and Sons of Harbour Buffett have been busy getting their schooners in readiness for the bank fishery. The former sent one schooner Jennie and Ada, which left March 7th, for Burin to go on dock proceeding thence to the banks. The latter sent two Nina L. Davis and Betty and Audrey which left March 6th (Observer's Weekly, 23 March, 1937).

The Second World War brought about important changes in the bank fishery. Whereas traditionally the only species taken was cod which was salted and taken to the home port for processing, by 1944 other species were being taken. However, considerable amounts by 1944 were going into the fresh frozen sector. One side-effect of the war was decreased fishing effort by the European countries and this opened up the British and American markets to Newfoundland. This contributed to the development of a large fresh fish industry in Newfoundland. The production of the various species rose from a negligible 1.7 million lbs. in 1938 to nearly 36 million lbs. in 1945 (see Table 7.7).

Table 7.7: Fresh, Frozen And Chilled Cod, Haddock, Rosefish, Hake, Flounder and Halibut Production 1938-1945

| YEAR | NUMBER OF POUNDS |
|------|------------------|
| 1938 | 1,668,505 |
| 1939 | 1,591,160 |
| 1940 | 10,529,192 |
| 1941 | 10,528,437 |
| 1942 | 11,689,503 |
| 1943 | 12,929,794 |
| 1944 | 24,895,290 |
| 1945 | 35,848,629 |

Source: Fisheries Committee Report, National Convention, 1946-1948, p. 13.

By 1944, several of W.W. Wareham's bankers out of Harbour Buffett were selling their catches to fresh fish filleting plants. A newspaper report of February 1944 stated that 3 vessels of Wareham's banking fleet would prosecute the fresh fishery that season while only one would go salt fishing (Observer's Weekly, 1 February, 1944).

In 1945, Wareham's had 4 vessels engaged in fresh fishing, landing their catches of fish at Job's filleting plant in St. John's. Fresh fishing had several advantages over salt fishing: the trips were not so long and the men received their pay after each voyage. Moreover the enterprise was not dependent upon the weather for the curing process

and it was often more profitable for the men to sell their fish fresh. The crew members of Wareham's banker Ronald George, for example received \$1500 each for the 1945 season (Observer's Weekly, 24 April 1945, 19 March 1946). But while the fishermen did not lose financially from fresh fishing, it meant that a considerable amount of employment was lost to the home port in the curing and packaging process.

Lobster Fishery

During the decade 1935-1945 the lobster fishery changed as processing methods and marketing forced adaptations. Traditionally lobster was tinned in the catching community; however, by the late 1930s most of Inner Placentia Bay's lobster was marketed alive. Changing market demand dictated this trend:

The lobster fishery has been undergoing a transformation in recent years as last season's export figures show. The total exports of live lobsters amounted to 2,315,501 lbs. or the equivalent of about 11,000 cases of canned lobster ... It is probably just as well that this industry has been developed as the British market has restricted the importation of lobsters as luxuries. As a large share of the canned lobster went to the British market, it is highly probable that the amount of fresh lobsters to be sold to Canada and the United States will increase (Observer's Weekly, 2 January, 1940).

This change in marketing had some advantages for the fishermen:

It is probable that selling lobsters alive is more profitable than canning them. The returns are prompt and there is no waste or loss through leaky or air-filled cans and there are no costs involved other than actual production (Ibid).

Customs returns indicate that the production of tinned lobster declined significantly especially after 1938-1939, however, the export of "live" lobsters shows a substantial increase for the period 1936-1937 to 1939-1940. Prices for both tinned and live lobsters remained fairly stable from 1935 to 1938; they dropped during the first years of the war and rose steadily from 1941-42 onwards. Yields however, tended to fluctuate from year to year (see Table 7.8).

Table 7.8: Newfoundland Exports Of Tinned And Live Lobster 1935-1936 To 1944-1945

| Year | Tinned Lobster | | Live Lobster | |
|------------|-----------------|---------------|------------------|---------------|
| | Number of Cases | Average Value | Number of Pounds | Average Value |
| 1935-1936 | 15,199 | \$19.34 | 142,448 | 11.0¢ |
| 1936-1937 | 17,227 | 19.87 | 912,575 | 10.4 |
| 1937-1938 | 11,307 | 20.66 | 1,297,083 | 11.0 |
| 1938-1939 | 9,027 | 17.44 | 1,663,189 | 11.0 |
| 1939-1940 | 2,341 | 16.74 | 3,171,703 | 8.9 |
| 1940-1941 | 731 | 17.44 | 1,851,998 | 9.9 |
| 1941-1942 | 545 | 22.75 | 2,124,261 | 11.5 |
| 1942-1943* | 97 | 33.37 | 451,793 | 12.2 |
| 1943-1944 | 1,114 | 41.01 | 1,435,615 | 15.7 |
| 1944-1945 | 1,900** | 56.16** | 1,743,052 | 21.0 |

*Nine Months

**Actual figure given as 91,206 lbs. @ \$1.17 per pound - transformed into cases of 48 - 1 lb. Tins.

Source: Newfoundland Customs Returns, 1935-1936; 1944-1945.

Records for Placentia Bay show a decrease in tinned lobster from 2710 cases in 1937 to 1018 cases in 1938. From 1939 onward little lobster was being canned. There was a corresponding decrease in the number of lobster factories (see Table 7.9).

Table 7.9: Placentia Bay - Lobster Factories And Tinned Lobster Production, 1937-1945

| Year | Number of Factories | Number of Cases Packed. |
|------|---------------------|-------------------------|
| 1937 | 80 | 2710 |
| 1938 | 76 | 1018 |
| 1939 | 25 | 39 |
| 1940 | 3 | 12 |
| 1941 | 6 | 3 |
| 1942 | 4 | 15 |
| 1943 | 4 | 15 |
| 1944 | 8 | 93 |
| 1945 | 12 | 82 |

Source: Annual Reports of Newfoundland Fisheries Board
1937 - 1945

This decrease in lobster factories appears to be related to the rise of a large lobster marketing operation being established at Inner Placentia Bay:

At Harbour Buffett, Placentia Bay, Mr. Russell, chief agent for the Maritime Lobster Company has leased premises. Mr. Russell proposes to purchase all lobsters caught in Placentia Bay and St. Mary's Bay. Last year the price ran from about 9¢ to 15¢ a pound depending on the cost of collection and shipping (Observer's Weekly, 12 April, 1938).

Ranger reports indicate that there were considerable fluctuations in yields from this fishery: at Petite Forte the catch in 1943 was less than half that in 1942. The 1944 season was somewhat better and 18,640 lbs. of lobsters were sold to the Maritime Packers at from 12 to 13¢ per pound. 1945, however, was one of the worst seasons for many years and lobsters were so scarce that the collection service was soon suspended in that area.* Undoubtedly the more sheltered and productive fishing grounds farther in the bay were utilized on a larger scale than in the Petite Forte District - however, it is likely that similar fluctuations occurred.

While the decline in canning lobster may have affected some families, the organization and collection process necessary in the switch to a live lobster operation may have created more employment. For example, during this period the canning factories consisted of little more than a licensed individual whose main piece of equipment consisted of a small hand operated patent sealer. In contrast the large live lobster company needed boats and crews to collect the lobster, and storage facilities were required to hold the lobster pending its timed release on to the Canadian and United States market. It was also hoped that the company would widen its collecting area to dominate St. Mary's Bay, and by the early 1940s live lobsters were being brought from Trinity Bay to dealers in Placentia Bay. For example,

*Ranger Reports, Petite Forte Detachment, June 1943, June 1944, June 1945.

Butler records buying lobsters at Chapel Arm, Norman's Cove and Sunnyside in Trinity Bay and having them transported by road to Long Harbour where they were placed in crates in the water overnight and then carried to Harbour Buffett (Butler 1977: 86).

Herring Fishery

The Newfoundland herring fishery expanded significantly during the decade 1935-1945. One of the early acts of the Commission of Government was to establish a Herring Board to control production and marketing. Measures were taken to improve quality as well and by 1938 compulsory inspection had been instituted.* With the outbreak of the Second World War and the disruption of the European herring fishery, markets for Newfoundland herring were more readily available. Prices also were higher. Table 7.10 shows that between 1939-1940 and 1944-1945; Newfoundland's Herring production more than tripled while at the same time prices more than doubled.

*Folio # 7/38, GN1/3, 1938, P.A.N.L.

Table 7.10: Newfoundland: Exports Of Pickled; Round; Split Scotch; Dressed; Vinegar; And Matje Herring 1935-1936 - 1944-1945

| Year | Number of Barrels | Total Value | Average Value Per Barrel |
|------------|-------------------|---------------|--------------------------|
| 1935-1936 | 42,313 | \$ 286,376.00 | \$ 6.78 |
| 1936-1937 | 26,192 | 181,708.00 | 6.93 |
| 1937-1938 | 28,296 | 179,466.00 | 6.34 |
| 1938-1939 | 35,240 | 242,857.00 | 6.89 |
| 1939-1940 | 34,886 | 244,692.00 | 7.01 |
| 1940-1941 | 56,649 | 444,838.00 | 7.85 |
| 1941-1942 | 59,590 | 549,009.00 | 9.21 |
| 1942-1943* | 44,713 | 549,158.00 | 12.28 |
| 1943-1944 | 78,846 | 1,216,684.00 | 15.43 |
| 1944-1945 | 126,057 | 2,035,506.00 | 16.14 |

*9 Months

Source: Newfoundland Customs Returns 1935-1936 - 1944-1945

The increased production for 1943 - 1944 and 1944 - 1945 was directly related to wartime conditions since the United Nations Relief and Rehabilitation Agency placed large orders for Newfoundland salted herring - late in 1944 the agency ordered 120,000 barrels and in August 1945 an order for 200,000 barrels was placed for the 1945 - 1946 season (Observer's Weekly, 2 January, 1945; 26 March, 1949).

Inner Placentia Bay benefitted by these developments in the herring fishery for even before the war many communities prosecuted this fishery. For example, a correspondent

from Spencer's Cove on Long Island wrote that

The firm of A. Wareham & Sons had packed about 1000 barrels of "Scotch Cure" and 500 barrels of "Local Cured Herring" although the price of herring is comparatively low, yet it means much, especially at this time of year, to the people of this place (Observer's Weekly, 22 February, 1938).

The Ranger at Petite Forte also commented on the benefits of this industry. In June, 1945 he wrote

The herring fishery has now finished for the spring and catches ... (are) ... fair, especially when one considers that this has been the only source of income during the early spring, and in many cases has fitted many fishermen for the cod fishery.

Interest and participation in the area's herring fishery is reflected not only in the increase of herring nets from 845 in 1935 to 1,630 by 1945 but in increased facilities for processing herring. For example, the Ranger at Petite Forte noted in 1945 that

Several merchants have recently become more interested in this branch of the fishery, and several new herring factories have been built (Ranger Reports, June 1945).

The herring fishery appears to have expanded because of favourable conditions arising from the war. However, it undoubtedly benefitted from its seasonal nature since it could be prosecuted during the "slow" time of the year and there was no conflict with either the cod, lobster or whaling season or other related occupations. For example, the Ranger at Petite Forte in his report for November, 1945 noted that

the cod fishery had ended for the season and that fishermen had begun to tan their herring nets. The nets were set during the latter part of November. Later reports noted that the herring fishery was prosecuted mainly in the eastern section of his district and particularly at Clattice Harbour, Isle Valen and Merasheen. According to the Ranger the quantity of herring taken within the Petite Forte district was 651 barrels in 1941-1942; 807 in 1942-1943; 998 in 1943-1944; and 1585 in 1944-1945 (Ranger Reports, June 1943, June 1944, June 1945, December 1945).

Given that the greatest concentration of herring nets was at Long Island, Tack's Beach and the Brewley - Bar Haven - Davis Cove area; and that the largest mercantile firms were located at Harbour Buffett, Spencer's Cove and Tack's Beach yields from this section of Inner Placentia Bay were undoubtedly higher. In addition, such firms having large vessels available were better able to collect herring given the more stormy conditions prevalent during the winter months. Such firms were also better able to procure and have on hand additional salt and cooperage supplies. The herring fishery appears to have been vigorously prosecuted from Long Island since analysis of the limited 1945 Enumerators Lists shows that 39 fishermen reported that their income came from both the herring and cod fisheries.

Whale Fishery

The whale fishery continued to provide some employment for residents of Inner Placentia Bay during the decade 1935-1945. However, this industry was sporadic, with operations sometimes confined to the Rose au Rue factory in Inner Placentia Bay, but at other times concentrated in Northern Newfoundland and Labrador. In addition yields from this fishery fluctuated widely from year to year (see Table 7.11).

Table 7.11: Newfoundland and Labrador - Exports Of Whale Oil And Guano 1935-1936 - 1944-1945

| Year | Tons of Guano | Value | Gallons of Oil | Value |
|-----------|---------------|-----------|----------------|-----------|
| 1935-1936 | 777 | \$ 27,319 | 292,245 | \$ 79,913 |
| 1936-1937 | 557 | 22,164 | 321,142 | 109,603 |
| 1937-1938 | 1762 | 73,735 | 742,963 | 283,830 |
| 1938-1939 | - | - | 6,080 | 2,160 |
| 1939-1940 | - | - | 38,273 | 17,802 |
| 1940-1941 | - | - | 6,497 | 2,247 |
| 1941-1942 | 193 | 10,000 | 124,713 | 81,406 |
| 1942-1943 | 356 | 19,464 | 422,958 | 229,223 |
| 1943-1944 | 864 | 45,877 | 50,596 | 45,025 |
| 1944-1945 | - | - | 271,989 | 292,169 |

Source: Newfoundland Customs Returns
1935 - 1936 - 1944 - 1945

It appears that the Rose au Rue plant was in operation for most years up until 1944. For example, in 1937 it was reported that the S.S. Silva would be employed whale catching for the Newfoundland Whaling Company out of Rose au Rue during the summer.* Reports of the Newfoundland Fisheries Board indicate that in both 1941 and 1942 whaling operations were confined to just the Rose au Rue plant. In 1944, however, the factory at Rose au Rue was closed and most of the equipment was taken to Williamsport on the eastern side of the Great Northern Peninsula. The manager noted that no fishing had occurred in this region for many years and that whales also tended to be fatter in this region. Subsequently, he noted that

It can be confidently expected therefore, that a season's catch with our present equipment will yield a great deal more in oil and guano than we could secure at Rose au Rue ... the fishing season is (also) of longer duration than in Placentia Bay.**

Statistics included in the letter are given in Table 7.12.

*The Evening Telegram 19 April, 1937.

** Olof Oslen, Managing Director, Olsen Whaling and Sealing Limited to P.D.H. Dunn, Commissioner of Natural Resources, January 9, 1945, File N.R. 18-45; S2-1-5, P.A.N.L.

Table 7.12: Rose Au Rue - Whale Oil And Guano Production
1942 - 1944

| Year | Whale Oil | Value | Guano | Value | Total Value |
|------|--------------|-------------|--------------|-------------|-------------|
| 1942 | 797,440 lbs. | \$71,891.20 | 515,200 lbs. | \$14,467.33 | \$86,358.33 |
| 1943 | 584,640 lbs. | 47,359.19 | 345,895 | 10,512.04 | 57,871.23 |
| 1944 | 661,413 lbs. | 58,715.91 | 401,340 | 11,114.20 | 69,830.11 |

Source: File N.R. 18-45; S2-1-5, P.A.N.L.

The closure of the Rose au Rue factory did not affect the economy of Inner Placentia Bay dramatically since the whaling company rehired many of its skilled workmen who went to Williamsport or on the Labrador Coast during the whaling season. Such mobility was not new to many whale factory workers. Indeed, in October of 1936, for example, five Inner Placentia Bay men joined the whale factory ship S.S. Salvestria in St. John's for a voyage to the Antarctic (Observer's Weekly, 20 October, 1936).

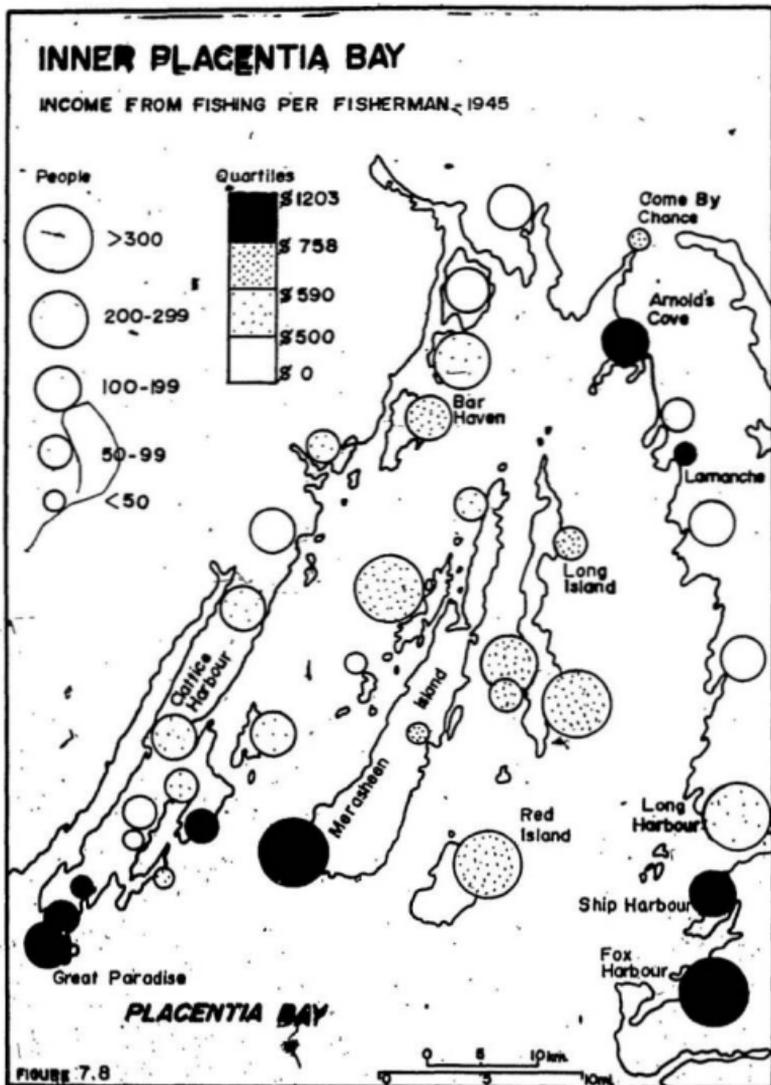
Although employment statistics for the regional whaling industry in 1945 are not as complete as those for 1935, they show that Harbour Buffett - Port Royal, Tack's Beach and Harbour Island as well as communities such as Bar Haven, Davis Cove, Presque and St. Anne's were the main communities with men employed in this industry.

By 1945 with the catch of cod fish having returned to pre 1929 levels; an expanded herring fishery; and the continued

operation of the lobster and whale fisheries, Inner Placentia Bay fishermen had returned to a position similar to that of 1911 and 1921. Their incomes were once again both above the district average and the Newfoundland average. For example, in 1945 the average Inner Placentia Bay fisherman's income appears to have been \$641.51* which was about 16% higher than the Newfoundland average of \$533.00. It was also higher than the \$570.00 average for the District of Placentia - St. Mary's and the \$565.00 average for the District of Placentia West.

When the earnings are mapped by community the pattern for 1945 continued to remain similar to those for previous census years. The Fox Harbour - Ship Harbour area, the central islands, and the Great Paradise area were the most productive regions. In contrast to earlier censuses, however, by 1945 Long Harbour and Clattice Harbour were lower. Indeed with the exception of Bar Haven and Arnold's Cove and the small communities of LaManche and Come By Chance the whole mainland and island section of Inner Placentia Bay from Clattice Harbour to Long Harbour were below both the Inner Bay average and the district averages (see Figure 7.8).

*This figure is based on calculations by the author for about 55% of the total work force for which data available.



Subsistence Agriculture

Improved economic conditions appear to have contributed to a decline in subsistence agriculture. Between 1935 and 1945 the number of fishermen and others who cultivated land declined 14.3% in the District of Placentia - St. Mary's and 17.8% in the District of Placentia West. This decrease is also reflected in diminished livestock holdings and vegetable production.

Livestock

With the exception of horses and goats there was a decrease in livestock holdings as well as poultry holdings. The largest proportional decrease was in the number of cattle and in poultry with sheep declining at a much lower rate (see Table 7.13).

Table 7.13: Inner Placentia Bay - Livestock Holdings
1935 and 1945

| | 1935 | 1945 | Percentage Increase or Decrease |
|---------|------|------|------------------------------------|
| Cattle | 398 | 268 | -32.6 |
| Sheep | 5018 | 4601 | - 8.3 |
| Swine | 10 | 8 | -20.0 |
| Goats | 223 | 278 | +24.6 |
| Horses | 114 | 156 | +36.8 |
| Poultry | 7083 | 5407 | -23.6 |

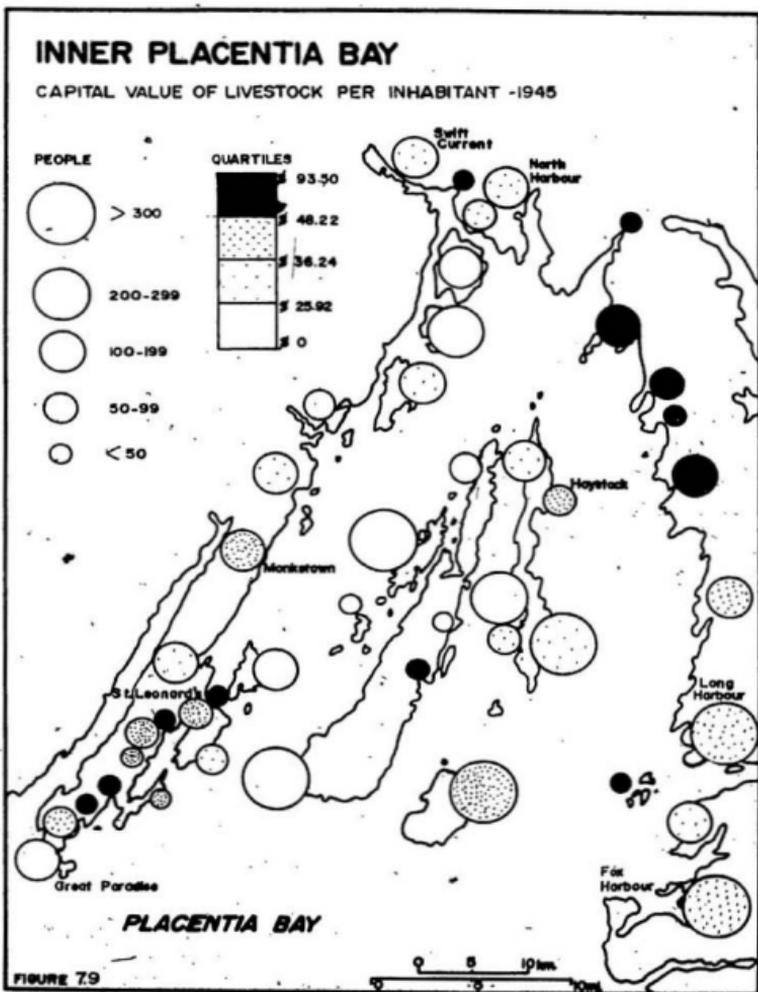
Source: Census of Newfoundland, 1935, 1945

The greatest increase in horses occurred in the Swift Current - North Harbour area while the greatest increase for goats occurred at Fox Harbour; on Long Island, and in the Clattice Harbour - Presque area on the Western side of Inner Placentia Bay. Notwithstanding these changes, however, the distribution pattern of livestock and poultry holdings remained basically the same as with previous censuses, with the communities along the Isthmus to Long Harbour and Fox Harbour being most prominent. Apart from Red Island, Haystack and Monkstown and the smaller communities in the Little Paradise to St. Leonard's area, the central islands and the western side of Inner Placentia Bay had low livestock holdings (see Figure 7.9).

The smaller settlements in the Little Paradise - St. Leonard's area had no cattle but placed high because of above average holdings of sheep and goats. For example, the Ranger at Petite Forte noted in 1945 that there were only three cows within his district. According to the Ranger the main reason for this was insufficient hay within the district and consequently all feed would have to be imported (Ranger Reports, June 1945).

Crops

The region also experienced a substantial decrease in vegetable production, particularly for cabbage and turnips with a smaller decline for potatoes. Hay production remained



fairly stable (see Table 7.14).

Table 7.14: Inner Placentia Bay - Crop Production
1935 - 1945

| | 1935 | 1945 | Percentage Increase Or Decrease |
|----------|--------------|--------------|------------------------------------|
| Potatoes | 28,292 Bu. | 21,334 Bu. | -24.5 |
| Turnip | 1,004 Brls. | 118 Bu. | -93.7* |
| Cabbage | 659,945 Lbs. | 280,161 Lbs. | -57.5 |
| Hay | 657 Tons | 677 Tons | + 3.0 |

*Barrel is roughly equivalent to 3 bushels

Source: Census of Newfoundland 1935 and 1945

The pattern of crop production and the various livestock products consumed, however, remained similar in 1945 to that of previous censuses. The area from Black River to Fox Harbour remained above average. Red Island and Long Island, however, placed much higher than in 1935 as did some communities on the western side of Inner Placentia Bay (see Figure 7.10).

With rising prices and better catches from the fishery, the role of subsistence agriculture diminished in terms of its overall contribution to the regional economy. Whereas in 1935, subsistence agriculture was equal to 60% of the total value of income derived from the fishery, by 1945 it was equal to an estimated 34.5% of the total value of fishing

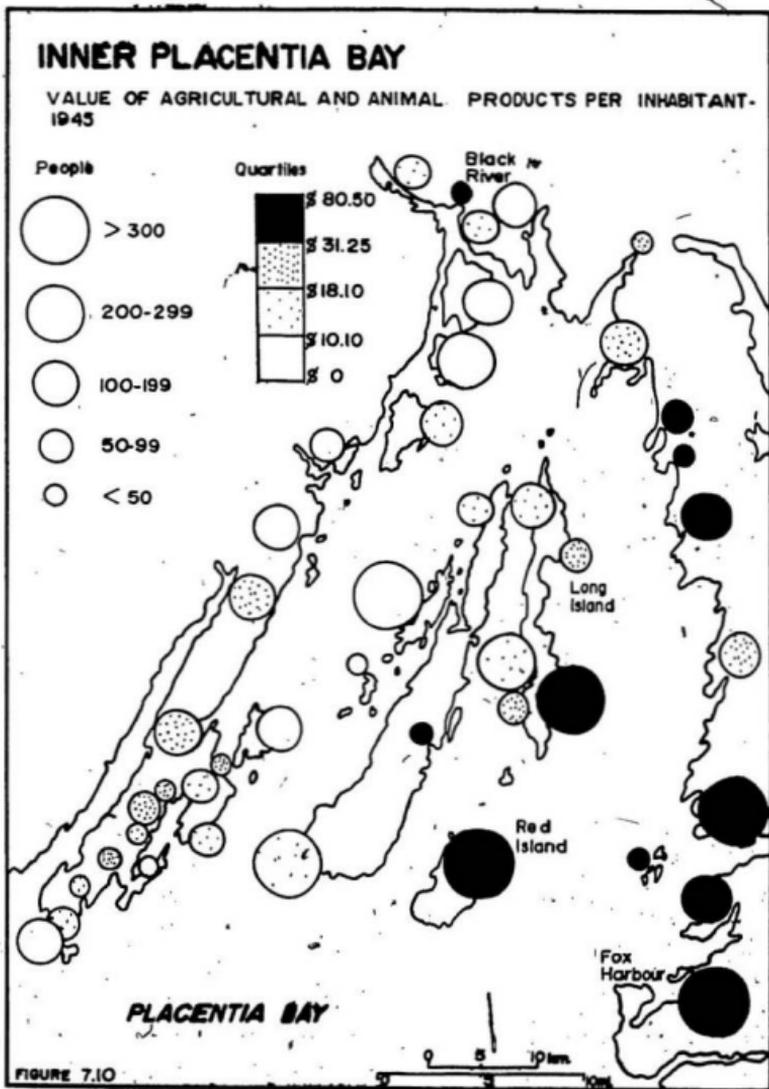


FIGURE 7.10

Source: Census of Newfoundland 1945

income.* This was also below the 39% rate for 1921 and moving closer to the 21% computed for 1911.**

This decline in subsistence agriculture was undoubtedly effected by changing employment patterns. For example, in the traditional fishery, apart from the schooner fishery, the fisherman lived year round in his community and was available for part of the day to tend to livestock or crops. However, the increased importance of both the bank fishery and construction related jobs meant that fewer Inner Placentia Bay men were spending much time in their home community and therefore could not contribute the labour input subsistence agriculture required.

Changing economic conditions were a factor as well. For example, the average fisherman's income rose from \$135.43 in 1935 to \$641.51 by 1945 while at the same time vegetable and livestock prices only doubled. Moreover wages for construction workers were much higher than the fishermen's earnings.***

*Since the 55% sample of estimated fishermen in 1945 earned \$463,175.00 total earnings extrapolated would be \$842,136.00. Crop production and livestock holdings in 1945 were \$290,875.

**For example, by 1945, the number of fishermen in the work force had declined markedly and more workers were in higher paid jobs and could more easily purchase vegetables, meat, eggs, etc.

***For a good insight into the impact the construction of the military base had on one farming settlement see W. Gordon Hancock, "The origin and Development of Commission of Government Land Settlements in Newfoundland 1934-1969", M.A. Thesis, Memorial University of Newfoundland. Especially Chapter IV on Markland.

The decline in subsistence agriculture appears to be related primarily to increased earnings and changing employment patterns, but the physical environment may have contributed as well. For example, during the late 1930s the Commission of Government looked to agriculture as a partial solution to the economic distress prevalent at Inner Placentia Bay. However, a 1938 report showed that many communities had little or no gardening possibilities while others had but a few sheep and limited gardens with little or no chance to expand.*

Forest Resources

During the decade most Inner Placentia Bay residents continued to use wood for fuel and for maintaining their fishing buildings and waterfront structures. A number of sawmills continued to operate principally at Swift Current, Monkstown and Prowseton. Improved cod catches and the expansion of the herring fishery created a need for cooerage supplies. Many small sawmill owners also benefitted by the increased demand for lumber generated by both the overall improvement in the economy and especially the construction of military bases.**

*Gorvin Report, October, 1938, Appendix III.

**This may be the reason also why the number of horses increased.

The major change in this sector however, was the increase in the number of loggers cutting pulpwood for the paper mills at Grand Falls and Corner Brook. As in 1935, many North Harbour residents were engaged in this industry, but by 1945 Woody Island had several men in logging. Indeed by 1945, all the communities from Swift Current, along the Isthmus of Avalon to Long Harbour recorded part of their work force in the logging industry.

Transportation and Communication

There was little improvement in the transportation system at most Inner Placentia Bay communities during the decade 1935-1945. The coastal steamer's pattern of two-weekly calls persisted. Much of the travelling was done by the regular fishing motor boats which were usually open to the elements. This method of travel was not too unpleasant in summertime or between settlements in the more sheltered parts of the bay but for more exposed regions like Great Paradise and the Merasheen - Red Island area it could present problems. A Little Paradise resident noted in 1935 that the priest had undergone severe hardships, travelling in open boats to and from the different settlements in his parish (Observer's Weekly, 10 December, 1935). The Ranger at Petite Forte noted that small motor boats were available at times (for hire) but the coast was such that people did not like

the idea of travelling long distances. He also remarked that boarding accommodations were difficult to obtain.* Butler also refers to the problems and difficulties in travelling by motor boat (Butler 1977: 74-77). In contrast settlements from Swift Current along the Isthmus of Avalon, as well as Long Harbour and Fox Harbour had access a short distance inland to the railway. In addition, during this decade considerable road building was being carried on in this area as part of the plan to eventually link the Bonavista and Burin Peninsulas with St. John's. By 1938 it was possible to travel by car from Swift Current to Goobies (railway station). In 1939 survey work had begun on the road from Swift Current to Terrenceville in Fortune Bay and a bridge was being built over Black River.** By 1945 the road network was completed on the Isthmus of Avalon and it was possible to motor from St. John's to parts of Bonavista Bay and Fortune Bay (Observer's Weekly, 11 April, 1944).

The most significant change in communications was the more widespread use of the radio. The number of radio receiving sets in operation in Newfoundland increased from 10,941 in 1937 to 37,676 in 1945.*** There were a number of

*Ranger Reports, December 1944, April 1945.

**Observer's Weekly, 26 July, 1938. Daily News, 15 and 21 July, 1939.

***Report on Broadcasting; National Convention Reports, 1946-1948.

reasons for this increase. Improvements in transmitting facilities were a factor, but the overall prosperity that arose during the Second World War was undoubtedly a major cause. Radio sets became both more varied and cheaper. For example, by 1943, The Royal Stores in St. John's were offering a Philco Radio for \$65.00 (Newfoundland Quarterly, Summer 1943: 39). This meant that radios came within the reach of the average Newfoundlander and many of the residents of Inner Placentia Bay purchased a set. Even before prosperity returned the number of radios increased at Inner Placentia Bay from 22 in 1935 to at least 54 by 1940* and by 1945 there were undoubtedly hundreds.

A different, but yet important form of communication was the contact with and the exposure to the North American economic system and culture experienced by many residents of Inner Placentia Bay who worked on the military base at Argentia. Taken collectively, this exposure, and the more widespread use of radios, helped to make residents much more aware of the larger, modernizing world outside.**

*Newfoundland 1940 Handbook, Gazetteer and Almanac, J.R. Smallwood Editor, St. John's, 1940.

**For a perspective on the impact of the radio and mass media see D. Lerner and W. Schramm Communication and Change in The Developing Countries, (Honolulu: East-West Center Press), 1967, pp. 11, 16, and 124.

Shipping

The largest business firms such as A. Wareham & Sons of Harbour Buffett and W.W. Wareham & Sons of Harbour Buffett expanded their involvement in shipping. For example, A. Wareham & Sons continued to operate the Dazzle, carrying dried fish and salt, until 1940 when she foundered in the North Atlantic.* In 1945 the company purchased a large sailing vessel of 1200 tons, the Herbert L. Rawding installed diesel engines and put this vessel into the foreign trade between Newfoundland, European and West Indian ports.**

Also in 1945, W.W. Wareham & Sons bought the Invasion from the shipyard of Captain Henry Stone at Monroe, Trinity Bay. This vessel could carry 100 tons of cargo and had an 85 H.P. marine engine.*** Other large fishing schooners or bankers were often used as freighters, particularly in the late fall, to procure cargoes of coal or to ship fish to St. John's or Halifax (Butler 1975: 46-48).

Smaller vessels were engaged in local coasting carrying cargoes of fish, salt and provisions. For example, a correspondent at Spencer's Cove in 1938 wrote that

The schooner Calvin Lloyd, C. Berkshire Master, has made one trip to St. John's this spring, and

*Evening Telegram, 18 January, 1940

**Observer's Weekly, 5 June, 1945; 22 January, 1946; 15 April 1947.

***Observer's Weekly, 29 January, 1946.

is at present on another trip. The schooner Village Bride owned by A. Wareham & Sons, has made one trip to St. John's and at present is there on another ... (Observer's Weekly, 14 June, 1939).

The Ranger at Petite Forte noted that in the summer of 1944 several schooners from his district had gone coasting.*

Some small schooners also were fitted up as shops and carried on trade within the Placentia Bay region: they issued food, clothing and fishing supplies and collected fish as payment. Both the Wareham firms had such vessels and during the depression Butler was often in charge of such a schooner (Butler 1977: 38-87).

Medical Services

One of the greatest changes that occurred in Inner Placentia Bay during the decade was the improvement in medical services. The Amulree Report of 1933 had revealed a deplorable level of provision of medical care to rural Newfoundland.** Shortly after the Commission of Government came into being it decided that owing to the dispersed nature of Newfoundland's population the most effective way to deal with the problem was to build strategically located cottage hospitals. The hospitals were established with a view to providing well equipped headquarters for district nurses and adding to the

*Ranger Reports, August, September 1944.

**See Newfoundland Royal Commission Report, 1933: 73, 210-213.

existing supply of hospital beds. Such facilities could ensure prompt and adequate treatment for "minor" conditions for which the St. John's hospitals did not have facilities to accommodate many rural patients. Also it was hoped that such centers would train women as midwives or in home nursing.*

By 1936 a hospital had been built at Come by Chance and one at Argentia. The sites were chosen on the basis of population distribution and facilities for transportation. Argentia was selected partly because it was the eastern terminal of the south steamship service. Come by Chance was accessible by rail and was strategically located to service the bottom of Placentia and Trinity Bays. Moreover it was also near the planned road network through the Isthmus of Avalon.**

In addition to the cottage hospitals, district nursing stations were also established. By 1937 there were nurses at Harbour Buffett and Sound Island as well as a part time nurse at Haystack. By 1942 Tack's Beach also had a district nurse and both this community and Harbour Buffett had dispensaries equipped with a waiting room and consulting office (Observer's weekly, 20 October, 1942).

The need for medical facilities and health education was

*GN1/3 Series, Folio 33/35, 1935, Enclosures to Colonial Development Fund Committee, P.A.N.L.

GN1/3 Series. Folio 18/37, 1937, P.A.N.L.

**Originally the Argentia hospital had 12 beds. With the establishment of the American base the hospital was relocated to Placentia. By 1948 Placentia had 24 beds and Come By Chance hospital had 28. (Report of Committee on Public Health & Welfare, National Convention Reports, 1946-1948: 5).

quite evident from surveys carried out during the early 1940s. A 1944 study, which included in its sample a settlement in Placentia Bay, was carried out by Canadian doctors and found widespread evidence of deficiency diseases and malnutrition. The physicians observed that the average person was somewhat slow in mental reactions and lacked initiative. Children especially were apathetic and abnormally subdued and in attitude and behaviour they resembled little adults. Heights were about normal but body weights were generally low for both sexes and for all ages. For example, 43% of the females and 31% of the males were more than 10% below, and 14% of the females and 5% of the males were more than 20% below the standards chosen. Muscular development was very poor in many individuals of both sexes and all ages. Dental caries was prevalent - of the 376 Newfoundlanders examined over 16 years of age, 41% had lost all or nearly all their teeth.*

A different study carried out in western Newfoundland, published in 1944, but equally applicable to most of Inner Placentia Bay, largely attributed the cause of poor nutrition to economic and geographic constraints. Both the foregoing studies noted that poor soils and lack of pasture limited the local production of meat, milk and vegetables. Lack of good transportation, as well as refrigeration and storage facilities, and poverty restricted the type of foods which were imported.

*"Medical Survey of Nutrition in Newfoundland." Canadian Medical Association Journal, Vol. 52, No. 3, March 1945, 231 & 240.

The diet tended to be monotonous with salted meats and fish being prevalent. In season, fruits and berries were available - however, the studies noted lack of education prevented residents from getting the most nutrients out of what fruits or vegetables they did possess.*

Religious Denominations And Education

The proportion of the population in the various religious groups changed very little during this period (see Table 7.15).

Table 7.15: Inner Placentia Bay - Religious Affiliation
1935 - 1945

| Religion | Percentage of Population 1935 | Percentage of Population 1945 |
|---------------------|-------------------------------|-------------------------------|
| Roman Catholic | 55.8 | 53.2 |
| Anglican | 25.4 | 25.2 |
| United Church | 13.7 | 16.8 |
| Salvation Army | 3.2 | 2.9 |
| Pentecostal & Other | 1.9 | 1.9 |

Source: Census of Newfoundland 1935, 1945

The largest decrease was in the proportion of Roman Catholics, which reflects the outmigration from communities in the Great Paradise to Clatfice Harbour area as well as on Red Island. United Church adherents showed an increase because though communities such as Sound Island and Haystack were declining others such as Swift Current and Garden Cove were

*Ibid and "Vitamin Status of the Population of the West Coast of Newfoundland, with Emphasis on Vitamin C." Annals of Internal Medicine, Vol. 20, No. 1, January, 1944.

increasing at a faster rate. Religion appears to have been an important factor in determining where people moved when they stayed within the Inner Placentia Bay region. For example, some United Church adherents at Sound Island in 1935 were living at Swift Current and Garden Cove by 1945. Similarly Anglican adherents at Pinchard's Island, Gaulton's Island and Jean de Gaunt in 1935 had moved to Tack's Beach before 1945 where there was both a large Anglican School, a church and a resident clergyman. In 1945, Harbour Island was the only small remaining community just south of Tack's Beach, its population of 42 contained 39 Roman Catholics and 3 Anglicans. Similarly people leaving Iona could move to Long Harbour, a large Roman Catholic community nearby.

There was a significant improvement in the literacy rate for Inner Placentia Bay during the decade. The proportion of the population 10 years of age and older who could read and write rose from 68.1% in 1935 to 79.6% by 1945. This was about 6% below the Newfoundland average of 86.5%, as against almost 11% below the Newfoundland average in 1935. As in 1935, however, the literacy rate for females continued to be higher than that for males. For example, in 1945 the rate for females was 82.8% in the District of Placentia West and 93.9% in the District of Placentia - St. Mary's while the rate for males was 74.2% and 88.7% respectively.

This improvement in literacy was in part due to the

increased emphasis placed on education by the Commission of Government. Compulsory schooling for children aged 6 to 14 years was instituted in 1942, but steps had also been taken to benefit adults. The co-operative movement was promoted and several communities in Inner Placentia Bay had societies. In 1937 it was noted that an adult school had been conducted during the previous winter at Red Island and that learning clubs had been established for women; and children's clubs were formed in school. Adult education classes were held at Great Paradise in 1944 and books had been ordered from the travelling library.*

Such programmes helped to foster an increased interest and awareness of the importance of education and it appears that overall the people were very responsive to these efforts. For example, during Education Week in 1939, at St. Kyran's a large cabinet style radio was brought 1½ miles on a hand barrow to the school so that the pupils and parents could hear a lecture on education (Observer's Weekly, 13 June, 1939).

Despite these general gains the smaller and more isolated communities continued to have much lower literacy levels. For example, the communities of Davis Cove, Prowseton and Tósselo on the western side of Inner Placentia Bay and both Indian Harbour and Brewley on Merasheen Island had only a 49% - 60% literacy rate while many larger communities were also below the Inner Placentia Bay average of 79.6%.

*Observer's Weekly, 17 August 1937; 4 February 1944

Summary

The Second World War had a crucial impact on the region. On the surface diminished outmigration and increased fertility combined with a relatively prosperous fishery would have seemed to have confirmed the viability and vigour of the region. Although the demographic situation had improved the regional economy was weakened. Artificially high prices helped, but the war led to important structural changes in the cod fishery and it also speeded the modernization of that fishery. The fresh, frozen fish industry expanded rapidly and as it did so the traditional dried salted cod industry declined. Moreover in contrast to World War I, less capital input was going back into the fishery in terms of boats or gear. Labour input also declined as more employment opportunities outside the fishing industry became available. This meant however that many communities lost their locational advantage and transportation linkages became more crucial. By 1945 the gap between the central islands and the western side of the bay compared to the eastern side had widened. In addition to the latter's traditional rail connection the developing road network and the establishment of cottage hospitals had strengthened and confirmed the central place function of these otherwise "peripheral" locations.

Isolation diminished as more residents came into personal contact with American and Canadian cultural and urban values.

More widespread distribution of radios also increased the awareness of the outside world. Education came to be valued more and literacy levels improved markedly over those prevalent in 1935.

The coastal steamer service was not improved despite the increased movement of people for medical and employment reasons. Consequently, the small local boat linkages between isolated and mainland communities were strengthened and reinforced.

The processes and patterns that had begun to emerge by 1945 were due to the increased pace of modernization, however their implications were largely ignored because of wartime prosperity and the effort and attention that was focused on the course of the war itself.

Chapter VIII ...We are now launched ... on a strange new ship.

... So wrote Albert Perlin in a editorial of April 1, 1949. This metaphor describes as well as any the course Newfoundlanders had adopted by deciding in a second referendum of July 22, 1948 to become a province of Canada.

The decision to join Canada had important consequences for Newfoundland. Among the most significant was the strengthening of the modernization process which had accelerated both during and immediately following the Second World War. With Canadian financial assistance the provincial road network was extended, improvements in the field of health and education continued and Newfoundlanders benefitted individually from Canadian social programmes such as family allowances, old age pensions and unemployment insurance payments.

While fiscal transfers aimed at the individual could easily be remitted to a small fishing village, it was more difficult to bring in services. Ironically, modernization lessened the need for such small dispersed communities, and changing technology and fish processing techniques, as well as changing employment patterns, disrupted the traditional way of life and also weakened the subsistence sector. Just as Newfoundland had to adjust to these changes, so did Inner Placentia Bay.

Population

During the period 1945 - 1956 the population of Inner Placentia Bay remained fairly stable and even showed a slight increase, from 6183 inhabitants in 1945 to 6459 in 1956, a gain of over 4%. Despite this increase the process of settlement retreat and consolidation experienced earlier continued at an even greater pace. Whereas in 1945, 17% of Inner Placentia Bay's population lived in communities with fewer than 100 inhabitants, by 1956 only 7% did so. By 1956, 60% of Inner Placentia Bay's population lived in communities with at least 200 inhabitants, (see Table 8.1) in contrast to 49% in 1945.

Table 8.1: Inner Placentia Bay - Settlements By Population Size 1945 - 1956

| Population Size | 0-49 | 50-99 | 100-199 | 200-299 | 300+ |
|--|------|-------|---------|---------|------|
| Number of settlements in 1945 | 12 | 10 | 14 | 1 | 7 |
| Number of settlements in 1956 | 9 | 3 | 14 | 4 | 7 |
| Proportion of total population in 1945 | 5% | 12% | 34% | 4% | 45% |
| Proportion of total population in 1956 | 4% | 3% | 33% | 15% | 45% |

Source: Province of Newfoundland. Report of the South Coast Commission 1957; and Population Characteristics - Unincorporated communities Newfoundland and Labrador, Department of Regional Economic Expansion, Ottawa, Canada. April 1971.

In terms of the distribution of population changes, the western side of Inner Placentia Bay and the central islands experienced further population decrease. In the most extreme examples of this, Sound Island, Iona (Ram's Island) and Indian Harbour were abandoned while the communities of Brule and Haystack approached abandonment. Brule's population fell from 93 in 1945 to 6 by 1956; while Haystack's population fell from 97 to 15 during the same period.

In contrast the settlements along the mainland section of Inner Placentia Bay between Swift Current and Fox Harbour all experienced population increase: the total population in this area increased from 2081 in 1945 to 2789 in 1956, an increase of over 34%.* Moreover by 1956 of the 12 communities in this area only LaManche had fewer than 100 inhabitants.

Population Structure and Migration

Data on population structure and migration is more limited for this period owing to changes in census format.** However,

*A similar pattern of population movement occurred in Bonavista Bay. See E. Grant Head, "Settlement Migration in Central Bonavista Bay", R.L. Gentilcore, Canada's Changing Geography, (Scarborough: Prentice-Hall, 1967) 92-109.

**The census of Canada for 1951 and 1956 gives population data by census sub-division rather than by community as in the Census of Newfoundland for 1945. In addition the 1956 Census does not give as much information on age groups.

what material is available suggests that population structure and migration continued the patterns noted in previous decades. For example, the population pyramid for the western side of Inner Placentia Bay and the central islands for 1951 shows a large number of children in age groups 0 - 4 and 5 - 9; but it decreases steadily for the age groups 10 - 14 and 15 - 19; and is very low for the age group 20 - 24 (see Figure 8.1). The age groups from 25 to 64 are more balanced and there is also a significant number of older people.

For this section of Inner Placentia Bay the proportion of the population age 0 - 14 years was 41.3%; 15 - 64 years was 49.5%; and the age group 65 and over was 9.2%. This was a marked change from 1945 when the percentages for the entire Inner Placentia Bay area were age 0 - 14 years 33.7%, age 15 - 64 years 59.2% and over age 64, 7.2%. A further indication of outmigration from the central islands and the western side of the bay can be seen by comparing the number of births and marriages in the Districts of Placentia West and Placentia - St. Mary's (see Table 8.2).

INNER PLACENTIA BAY—POPULATION STRUCTURE 1951

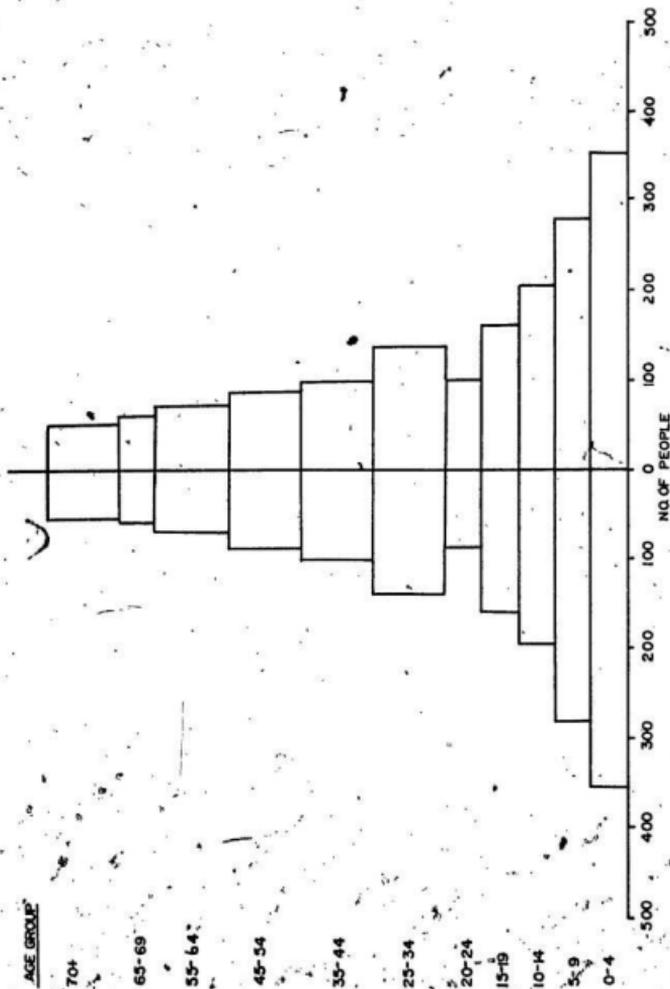


FIGURE 8J

Source: Census Sub-Divisions 2A and 2B, Census Of Canada VOL. I, Table 23, 1951.

Table 8.2: Number Of Births & Marriages For the Districts
Of Placentia West and Placentia - St. Mary's
1945, 1956

| Year | Placentia West | | Placentia - St. Mary's | |
|------|----------------|-----------|------------------------|-----------|
| | Births | Marriages | Births | Marriages |
| 1945 | 282 | 81 | 315 | 63 |
| 1946 | 243 | 52 | 390 | 77 |
| 1947 | 350 | 35 | 390 | 76 |
| 1948 | 279 | 26 | 408 | 74 |
| 1949 | 338 | 45 | 400 | 49 |
| 1950 | 371 | 41 | 443 | 69 |
| 1951 | 264 | 41 | 522 | 87 |
| 1952 | 258 | 37 | 576 | 89 |
| 1953 | 311 | 25 | 583 | 76 |
| 1954 | 326 | 33 | 629 | 98 |
| 1955 | 320 | 33 | 571 | 86 |
| 1956 | 208 | 41 | 589 | 76 |

Source: Newfoundland Department of Health. Vital Statistics
Division, Report on Births, Marriages and Deaths
1945 ... 1956.

What emerges from this table is the significant difference between the two districts particularly during 1950 - 1956 when the number of births and marriages in Placentia - St. Mary's was almost double that in Placentia West. In general, the figures indicate that marriage and family formation was in the ascendant in Placentia - St. Mary's, but stagnant or declining in Placentia West.

Economy

The most significant trend in the regional economy during this period was the decline of the fishery and a continued diversification of the labour force. A detailed analysis of the voter lists for the region in 1955 shows that fishermen composed 52% of the work force, a decrease of over 13 points from the 65.4% estimated for 1945 (see Table 8.3).

Table 8.3: Inner Placentia Bay - Composition Of The Male Labour Force 1955

| Occupation | Number Employed | Percentage |
|--------------------|-----------------|------------|
| Labourers | 193 | 12 |
| Forest Industries | 129 | 8 |
| Clerical and Trade | 97 | 6 |
| Construction | 152 | 9 |
| Transportation | 89 | 6 |
| Miscellaneous | 108 | 7 |
| Fishermen | <u>838</u> | <u>52</u> |
| TOTAL | 1606 | 100 |

Source: List of Electors, District of Placentia - St. Mary's and District of Placentia West 1955..

Table 8.3 shows that general labour work, construction and forest industries were the greatest source of employment

outside the fishery. The voters' lists also show that the number of fishermen was declining faster in the section from Swift Current to Fox Harbour than in other sections of Inner Placentia Bay - by 1955 only 30% of the labour force from Swift Current to Fox Harbour were classified as fishermen while the figure for the central islands and the western side of the bay was 65%.*

Employment opportunities for women, however remained severely limited. The 1955 voters' list shows only 101 women listed in occupations other than housewives, and of these 25% were classified as housekeepers. Clerical, teaching, government service and the food industry accounted for the rest.

This lack of employment opportunities for women undoubtedly contributed to the outmigration from the area and appears to have been a long standing problem for only a small percentage returned. Such a process operating over the years helps to explain the much lower incidence of births and marriages prevalent in Placentia West between 1945 and 1956 compared to Placentia - St. Mary's.

Further analysis of the voters' lists show that there

*Since the voters' list was compiled usually by individuals within the community undoubtedly many who received the greater part of their income from welfare or other transfer payments were classified as fishermen for social reasons and to avoid personal disputes.

was considerable diversity in communities and employment patterns. For example, by 1955 Woody Island was predominantly a logging community; Fox Harbour's labour force was engaged in transportation, construction and trade while on the central islands marine transportation and fishing were dominant.

Fishery

Declining labour input into the fishery also brought about changes in fishing boats and fishing gear.

Boats

By 1956 there were only 336 sail and row boats with an average value of \$50.90 and 700 gasoline and diesel powered boats with an average value of \$488.20 in the entire Placentia Bay region. In contrast Inner Placentia Bay alone had 921 dories and 467 motor boats and motor dories in 1945. In addition the average value of gasoline and diesel boats suggests that these consisted almost exclusively of motor boats since the cost of a 22 - 25 foot boat together with a 3 - 4 H.P. engine would be within this price range. By 1956 it also appears that there were no large schooners engaged in the fishery: the only large vessels listed were 3 trawlers, 3 draggers and 3 longliners. Moreover the trawlers and draggers were undoubtedly associated with the large fresh fish processing plant located at Burin.

Gear

Between 1945 and 1956 there was a substantial decrease in all types of fishing gear with the exception of lobster traps. When comparisons are made for Inner Placentia Bay alone in 1945 and the entire Placentia Bay region in 1956 the differences are striking. For example, the number of cod nets and herring nets in 1956 was below the number found in the Inner Placentia Bay area alone in 1945. The number of cod traps and salmon nets had also declined. For example, excluding Burin District, there were 361 cod traps and 297 salmon nets in just the District of Placentia West and Placentia - St. Mary's in 1945. The number of lines of trawl indicate that by 1956 this was one of the main types of gear used in the inshore cod fishery (see Table 8.4).

Table 8.4: Fishing Gear - 1945 and 1956

| Type of Gear | Inner Placentia Bay 1945 | Placentia Bay 1956 |
|----------------|-----------------------------|-----------------------|
| Cod Traps | 132 | 251 |
| Cod Nets | 1492 | 138 |
| Herring Nets | 1596 | 1492 |
| Salmon Nets | 30 | 171 |
| Lines of Trawl | 171 | 28540 |
| Lobster Traps | 6997 | 25750 |

Source: Census of Newfoundland 1945; - Fishery Statistics of Canada, Newfoundland 1956, Capital Equipment employed in primary operations. Table 4.

The greatest expansion took place in the lobster fishery with lobster traps being 80% more numerous than in 1945.

Productivity And Structural Change

The inshore cod fishery continued to be important despite the overall pattern of declining labour input and reductions in boats and gear. Indeed, with the decline of the bank fishery and the small schooner fishery, fishermen were confined to the inshore fishing grounds. This reduction in mobility meant that the fisherman was restricted to the resources available in his immediate neighbourhood, since the motor boat, unlike the schooner had no accommodation or processing facilities built in and was therefore totally dependent upon onshore facilities.

The cod fishery of Inner Placentia Bay was affected by marketing problems and low prices prevalent in the Newfoundland salt fish industry generally in addition to the low productivity experienced locally. Marketing salt codfish became increasingly more difficult following the war owing to increased competition and currency difficulties (Alexander 1977). Prices did not increase, and during the 1950s began to slump (see Table 8.5).

Table 8.5: Newfoundland And Labrador Exports Of Salt Cod
And Average Price 1945 - 1956

| Year | Exports of Salted Cod CWTs. | Average Value Per Cwt. |
|------|--------------------------------|------------------------|
| 1945 | 813,319 | 15.20 |
| 1946 | 1,025,119 | 15.95 |
| 1947 | 1,010,862 | 15.10 |
| 1948 | 985,144 | 16.81 |
| 1949 | 952,630 | 16.62 |
| 1950 | 917,227 | 15.53 |
| 1951 | 855,344 | 14.60 |
| 1952 | 757,771 | 15.02 |
| 1953 | 628,888 | 15.42 |
| 1954 | 711,527 | 16.25 |
| 1955 | 811,629 | 13.95 |
| 1956 | 525,072 | 14.00 |

Source; Historical Statistics of Newfoundland and Labrador.
Vol. 1, No. 1 1970: 181 - 182.

Consequently, aggregate and average earnings were low. For example, data compiled for 22 communities on the western side of Inner Placentia Bay and on the central islands in 1957 showed that the average earnings of a fisherman were \$706.36.* This was only 10% higher than the average fishing.

*Report of South Coast Commission, 1957. Appendix 3
District 9.

income in 1945. In contrast the average earnings for sixteen Inner Placentia communities with residents working away from home for part of the year or in full-time employment was \$1273.81 (Ibid).

The Inner Placentia Bay area experienced a number of important structural changes in the cod fishery during the period 1945 - 1956. The extension of the road network along the Isthmus of Avalon made it possible for communities with road connections to sell their fish fresh and have it trucked to processing plants in Trinity and Conception Bays. By 1956 some island communities were also selling their fish fresh. For example at Bar Haven in 1955 no cod fish was dried as all the fishermen sold their fish fresh.*

Another important structural change was the introduction of mechanical fish dryers which created a demand for "salt bulk" codfish. By 1941 mechanical dryers were being used in Nova Scotia and while initially costs were higher than for sun-cured fish, the process enabled the producer to achieve a uniform quality and to make sales with the certainty of meeting the market despite adverse weather conditions.**

*The Newfoundland Fisherman Vol. 4, No. 4, Dec. 1955.

**J.T. Cheeseman, May 31, 1941, Department of Natural Resources, 56 - 1941, S2-1-5, P.A.N.L.

By 1948 a mechanical dryer was operating at Fortune; in 1952 another was operating at St. John's and in 1956 Inner Placentia Bay had one as well. This dryer was owned by W.W. Wareham and Sons Ltd. of Harbour Buffett; it cost \$250,000.00 and had a capacity to produce 70,000 quintals annually.*

The introduction of mechanical dryers had an important impact on the fishery. It enabled the fisherman to concentrate more time on fishing since he did not have to dry his catch prior to sale. Moreover he could sell his fish earlier and was not dependent upon good weather for curing. By 1956 much of the cod fish taken in the outer section of Inner Placentia Bay was going into "salt bulk" production. For example, 903 drafts (224 lbs. = 1 draft) was produced at Merasheen in 1956; and in 1955 at St. Anne's most of the fish was sold heavy salted.** Indeed by 1956 the production of heavy salted cod fish greatly exceeded the output of light salted dried cod fish in Inner Placentia Bay.***

*Observer's Weekly, 14 September 1948; 21 October 1952; Evening Telegram, 8 February 1957.

**Newfoundland Fishermen, Vol. 4, No. 1, 1955; Vol. 6, No. 1, 1957; Proceedings of First Session, 31st General Assembly of Newfoundland, 1957. Vol. 2, 1957, Appendix, 146.

***South Coast Commission Report: 104.

By 1956 considerable diversity existed in the preparation of cod fish in Inner Placentia Bay, with some communities putting their production into the fresh frozen sector; others sold their product heavy salted; while some communities such as Tack's Beach and Isle Valen continued to dry their catch.

In 1953 the federal government looked at the feasibility of establishing a regional fishing center in Inner Placentia Bay and a detailed study was carried out at Merasheen. The study however felt the community was unsuitable and gave several reasons for its decisions among them being the rugged topography; its insularity; navigational hazards such as fog; high cost of installing water and sewage; a one resource area; and a small population and little incentive to keep people there.* In addition much of the area faced problems common to many areas of the South Coast such as low prices for fish, a short fishing season, inadequate boats and gear, lack of a continuous supply of bait and a lack of adequate transportation and communication.**

*Merashen: Eastern Newfoundland Settlement Survey 1953. Department of Mines and Technical Surveys, Geographical Branch: 45. (Undoubtedly much the same conclusions would apply for most communities of Inner Placentia Bay).

**South Coast Commission Reports: 101 and 108.

The Bank And Western Boat Fishery

The period 1945 - 1956 witnessed the demise of both the bank fishery and the traditional schooner and/or western boat fishery.

The war stimulated the bank fishery since prices for salted codfish rose, foreign competition was reduced, and fresh frozen fillets were in great demand. Since the fresh fish industry was in its infancy in Newfoundland, it had not had time to build and develop a modern dragger or trawler fleet and such vessels were obviously not a priority with shipyards between 1939 and 1945.

Following the war, changes occurred rapidly. Falling prices and marketing difficulties made many banking vessel owners reluctant to persist in this fishery. For example, whereas there were 88 vessels in the Newfoundland bank fishery in 1949, there were only 40 in 1950 (Daily News, 30 December 1950).

By 1950 it was becoming more difficult to get crews to man banking schooners or western boats. With the return of peacetime conditions many fresh fish filleting operations began to acquire modern vessels and these attracted experienced captains and crews from the traditional banking schooners. For example, one of the captains who had been on W.W. Wareham's largest bankers in 1945 had assumed command

of the trawler Fearless operating out of St. John's by 1948, while another took command in 1947 of a new steel dragger owned by Fishery Products Ltd.*

Crews became both difficult to obtain and retain during this period. For example, at Grand Bank in August 1946 several banking vessels were already tied up for the season in contrast to October when traditionally the season ended. In 1949 three Grand Bank vessels had to tie up in July because the crews refused to sail in them. By 1953, Lunenburg skippers who traditionally hired large numbers of South Coast fishermen for both fresh and salt fishing vessels found it difficult to get crews as there was work available nearer home.**

Working conditions for the bank fishermen in their traditional dories deteriorated following the war, as several European countries began to rebuild their fishing fleets and returned to the Grand Banks. In 1947 it was noted that

the fishing fleets from Spain, France and Portugal will be more than double the number which have fished off the Newfoundland coast in recent years.

... Ships from European ports, of the trawler type, have appeared on the Grand Banks. These vessels are powerfully built with the most modern equipment in fishing.***

*Observer's Weekly, 24 April, 1945; 15 April, 1947; 25 May, 1948.

**Observer's Weekly, 27 August, 1946; 26 July, 1949; 12 May 1953; 12 January, 1954.

***Observer's Weekly, 11 March, 1947.

In addition to competing for fish these foreign vessels frequently destroyed the hooks and lines of Newfoundland fishermen and the presence of additional vessels increased the danger of dorymen being run down.*

Both the banking fleet and the western boats of Inner Placentia Bay were affected disadvantageously by such trends and, as boats became worn out or lost at sea, they were seldom replaced. In addition some vessels were put to alternate use such as freighters for coal, salt bulk fish, or general cargo.** Some western boats were used as local coasters and collectors and some were converted to carry passengers.

The demise of these fishing vessels turned the Inner Placentia Bay cod fishery into a totally inshore operation; it reduced the demand for labour in the processing sector and eliminated many jobs. For example, as a banking schooner the Tack's Beach owned "Howard Cecil" employed 19 fishermen and seamen - however, as a coaster the crew was reduced to 5.

*Observer's Weekly, 4 October, 1949; 29 April, 1952.

**The Labrador (schooner) Fishery was also affected by such trends. See W.A. Black, "The Labrador Floater Codfishery," Annals Association of American Geographers, Vol. 50, 1960: 267-295.

The Lobster Fishery

The lobster fishery expanded between 1945 and 1956, however, it was a seasonal fishery and only extended from April 20 to June 30 each year. Because of this it was usually carried out in conjunction with the inshore cod fishery since a fisherman had to exploit both species to earn even a relatively small income. This was possible since the average motor boat with its 3 - 4 H.P. engine could be used in either fishery. Also it was usually mid or late June before the caplin struck in and cod fish became more plentiful on the fishing grounds. The lobster fishery had an advantage for the fisherman in that his catch could be marketed "live", whereas cod fish had at least to be gutted or split and salted for salt bulk, or even sun cured in some communities. The lobster fisherman could concentrate his efforts solely on catching the product since the local merchant or collector boat provided a market in every community. Live lobsters were sold mainly in the United States and exporters faced few problems in comparison with salt codfish exporters. Moreover, prices for lobster also increased during the early 1950s (see Table 8.6).

Table 8.6: Newfoundland Lobster Production And Average Prices 1945 - 1956

| Year | Exports Live Lbs. Lobsters | Average Price Per Lb. | Exports Canned Lobsters Lbs. | Average Price Per Lb. |
|---------|----------------------------|-----------------------|------------------------------|-----------------------|
| 1945-46 | 1,590,092 | 22¢ | 137,420 | \$ 1.20 |
| 1946-47 | 2,535,915* | 26¢ | 200,101 | 1.50 |
| 1947-48 | 3,191,744 | 21¢ | 156,593 | 1.11 |
| 1948-49 | 3,663,295 | 22¢ | 124,295 | 1.31 |
| 1950 | 4,400,000 | 18¢ | 108,884* | N/A |
| 1951 | 3,864,000 | 16¢ | 86,160 | N/A |
| 1952 | 3,100,000 | 23¢ | 34,848 | N/A |
| 1953 | 4,100,000 | 26¢ | 28,224 | N/A |
| 1954 | 4,900,000 | 25¢ | 42,480 | N/A |
| 1955 | 5,300,000 | 26¢ | 33,600 | N/A |
| 1956 | 4,400,000 | 27¢ | 28,800 | N/A |

Source: Newfoundland Customs Returns, 1945 - 1949 and Daily News Year End Edition, 1950 - 1956.

*1950 - 1956 Canned Lobster Converted From Cases. - 1 case = 48 lbs.

Unfortunately, it is impossible to know how many lobster fishermen there were in Inner Placentia Bay as the voters' lists do not give such details. Yields are only given for the entire Placentia Bay area. Nevertheless from what data are available, it appears that for this period the lobster

fishery provided a sizeable proportion of the inshore fisherman's income. For example, in 1956 the average fisherman's income from lobster for all of Placentia Bay was \$67.42 or 17% of the average income from codfish which was \$394.66. Obviously for Inner Placentia Bay, which was the most productive section for lobster, the rate would have been higher. For example, at Tack's Beach in 1956 one firm's lobster sales was 27% of its codfish sales.*

The lobster fishery also created jobs in the collecting and exporting stage of production. For example, Maritime Packers operated out of Harbour Buffett and Alberto Wareham Ltd. had holding facilities at Kingwell. These firms not only collected lobster in Placentia Bay but in other bays as well, and were, along with Fishery Products Ltd., the principal lobster buyers in the province (Observer's Weekly, 15 May, 1951).

Inner Placentia Bay also retained its role in the export of live lobsters from other bays as well. Since there was no highroad network across the province, lobster continued to be trucked to communities with road linkages in Inner Placentia Bay from where they were taken to Harbour Buffett or Kingwell and stored in large floats until a shipment was arranged for export. Statistics show that for the period 1950 - 1953, Maritime Packers at Harbour Buffett were collecting about

*Financial Statement for Year Ending 28 February 1957.
H.C. Brown and Sons Ltd., (Authors Private Records).

77,000 lbs. annually in Placentia Bay and about 110,000 lbs. annually, in Bonavista Bay.*

By sailing from Placentia Bay, the journey was shortened and time was a crucial factor in getting a perishable item such as live lobster into the United States market.

The Herring Fishery

Newfoundland's herring fishery had expanded during the war because of both good market conditions and the presence of herring in Newfoundland waters. But by 1950 the herring fishery was experiencing problems. During 1946 and 1947 herring were plentiful in Newfoundland waters and the Newfoundland Fisheries Board continued to receive large orders for herring from the U.N.R.R.A., but during the 1950's the situation changed and the production of pickled herring fell markedly (see Table 8.7).

*The author acknowledges with thanks this information obtained from Mr. Thomas Collett, a former employee of the company.

Table 8.7: Newfoundland Exports Of Pickled Herring And Average Value 1945-46 - 1956

| Year | Number of Barrels | Average Value Per Barrel |
|---------|-------------------|--------------------------|
| 1945-46 | 199,075 | \$16.86 |
| 1946-47 | 281,047 | 17.16 |
| 1947-48 | 128,180 | 16.29 |
| 1948-49 | 154,727 | 15.62 |
| 1949-50 | 42,922 | N/A |
| 1950-51 | 49,313 | N/A |
| 1951-52 | 42,650 | N/A |
| 1953 | 40,200 | N/A |
| 1954 | 33,490 | N/A |
| 1955 | 28,661 | N/A |
| 1956 | 21,987 | N/A |

Source: Newfoundland Customs Returns 1945-46 to 1948-49, and Daily News Year End Editions, 1950 - 1956.

This decline was attributable to poor market conditions and also scarcity of herring for some years. A spokesman for the Federation of Fishermen noted in 1952 that

Newfoundland's herring fishery is in pretty bad shape ... Norway has taken our market ... and places a first class product at a lower price. The big New York market and other markets ... are now glutted with cheaper Norwegian fish and local merchants are finding it difficult to dispose of the limited quantities they have been packing.*

*Observer's Weekly, 4 March 1952, C. Max Lane also noted that in Bay of Islands the price of herring dropped from \$2.25 to \$1.75 a tub to the fishermen.

This decline had a marked impact on Inner Placentia Bay since during the decade 1935 - 1945 considerable expansion had occurred in the herring fishery in the form of both fishing gear and buildings. The region shared in the relative prosperity experienced in the immediate post war herring fishery. For example, in 1947 provision was made for one port in Placentia Bay to ship all herring taken in that area as part of the U.N.R.R.A. contract. In 1948 packers were advised to take their herring for a U.S. Army contract to Harbour Buffett where the S.S. Arizpa would pick them up.*

Depressed market conditions and scarcity of herring during the 1950's, however, weakened this sector of the local economy. By 1956 the number of herring nets in the entire Placentia Bay region was 6.5% below the number held by Inner Placentia Bay fishermen alone in 1945.

Yields from the Placentia Bay herring fishery fell from 3.2 million lbs. in 1955 to 2.1 million lbs. in 1956. Based on landed value the average income for Placentia Bay fishermen from herring in 1956 was a paltry \$13.97.**

*Observer's Weekly, 7 January 1947, 24 August 1948,

**Fisheries Statistics of Canada, Newfoundland Table 2. Landings, Quantity and Value by species and Fishing Areas, Nfld. 1955-1956. The total landed value of herring in 1956 was only \$22,000.00 for Placentia Bay's 1575 fishermen.

Whaling

The whaling industry continued to provide seasonal employment for some Inner Placentia Bay residents who travelled to Williamsport and/or Hawke's Harbour, Labrador. These factories usually began operations in June and continued until October and November, processing finback whales and a few blue, sulphur and sperm whales. Whales were fairly plentiful in these northern waters and for the period 1945 - 1951, 400 - 500 were usually taken annually.*

Statistics show that considerable amounts of oil and meal were being produced (see Table 8.8). This industry also paid good wages: despite its seasonal nature the average wage at the Williamsport operation was \$606.75 in 1945 and \$769.70 in 1946.**

*Daily News, 30 December 1950; 31 December 1951. National Convention Reports, 1946 - 1948. Report of the Fisheries Committee, Appendix E. Report of the Sub-Committee on the Whaling Industry.

**Ibid - Report Subcommittee on the Whaling Industry.

Table 8.8: Newfoundland and Labrador - Exports of Whale Oil and Meal 1945-46 - 1951

| Year | Gallons of Whale Oil | Value \$ | Gallons Sperm Oil | Value \$ | Lbs. Whale Meal | Value |
|---------|----------------------|-----------|-------------------|----------|-----------------|---------|
| 1945-46 | 347,257 | 263,174 | 266,904 | 196,441 | 336,000 | 9,000 |
| 1946-47 | 570,960 | 675,544 | 54,650 | 87,325 | N/A | |
| 1947-48 | 979,871 | 1,342,025 | 41,523 | 80,213 | 4,406,631 | 172,234 |
| 1948-49 | 654,739 | 1,123,296 | 23,449 | 31,949 | 3,610,548 | 125,216 |
| 1949 | 890,690 | N/A | 135,080 | N/A | N/A | N/A |
| 1950 | 756,542 | N/A | 71,197 | N/A | N/A | N/A |
| 1951 | 918,319 | N/A | N/A | N/A | 4,100,000 | N/A |

Source: Newfoundland Customs Returns 1945 - 1946 to 1948 - 1949 and Daily News Year End Edition 1950 - 1951.

By 1951 however markets for whale oil were weakening and both factories closed down following the 1951 season. From 1952 to 1956 Newfoundland's whaling industry was confined to harvesting a few minke and pothead whales by inshore fishermen in Trinity Bay for animal feeds.*

The collapse of the whaling industry eliminated many seasonal jobs for Inner Placentia Bay residents and some of

*Daily News Year End Edition, 1951 ... 1956 & Newfoundland Fishermen, Vol. 2, No. 1, March 1953.

the smaller communities were particularly adversely affected. For example, in 1945, half of Harbour Island's work force was employed in this industry. By 1956 with the decline of the schooner based cod fishery, the demise of the whaling industry and reductions in the herring fishery, the region's fishermen had only the lobster fishery and the inshore cod fishery to depend upon for a livelihood. Limited to these options they were faced with two alternatives - to remain with the fishery and hope for the best, or move into some other sector. Given the low levels of earnings prevalent in the Inner Placentia Bay fishery by 1956 many fishermen made the transition whenever the opportunity arose.

Subsistence Agriculture

Subsistence agriculture declined between 1945 and 1956, and it appears that by the end of this period it was insignificant in Inner Placentia Bay. The marked decrease in both crop production and livestock holdings noted between 1935 and 1945 continued. Improved economic conditions during and following the war, combined with transfer payments from the Canadian social security system after 1949, brought more cash into the average home than ever before. This meant that it was no longer necessary to produce foodstuffs locally given the limited potential for agriculture.

For example, the Merasheen survey of 1953 reported that

there were numerous abandoned gardens in the community. Production was not as high as in 1945 because people had not bothered with their gardens, but purchased vegetables which generally came by schooner from Prince Edward Island. Some cabbage continued to be grown and some residents kept sheep and hens.* This decline in subsistence agriculture was not restricted to the Inner Placentia Bay area but was occurring throughout the province. Gerald S. Doyle, who visited various outport communities annually reported in 1955 that one of the most notable effects taking place in rural Newfoundland was the scarcity of cows and other livestock, fallen fences and deserted gardens (Daily News, 6 September 1955). The South Coast Commission also noted that agriculture was not significant anywhere on the coast and with the exception of a few families at Winterland and a small amount of pastoral activity on the tip of the Burin Peninsula, agriculture was practically non-existent.**

*Merashen: Dept. of Mines and Technical Surveys 1953: 17 - 18. The survey noted that the availability of canned milk was a factor in the residents' decision to abandon keeping cattle.

**South Coast Commission Report, 1957: 88 and 92.

Forests

Between 1945 and 1956 the forests not only provided fuel and building materials but increasingly provided more seasonal employment, as favourable market conditions encouraged expansion in the pulp and paper industry. In 1946 large ten-year contracts were secured by the paper companies. By 1948 the two Newfoundland mills were estimated to be giving employment to an average of over 13,000 people.*

As this expansion occurred at the same time that the fishery was in decline, many Inner Placentia Bay residents sought employment in this field. By 1955, logging was given as the occupation of many Inner Placentia Bay men. The greatest concentration of loggers occurred at Woody Island - however, all communities from Swift Current, along the Isthmus of Avalon, to Fairhaven recorded loggers in their work forces. Earnings in the forest industry were more stable than in the fishery, and moreover, following Confederation, loggers qualified for unemployment insurance benefits whereas it was not until 1957 that fishermen qualified.**

*National Convention Reports 1946 - 1948. Report of Forestry Committee. October 24, 1946: 2 and proceedings of 29th session, House of Assembly, Newfoundland 1949. p. 836.

**Newfoundland Fishermen, Vol. 6, No. 2 1957: 18 - 29.

Small indigenous sawmills also continued to be important. For example in 1953 there were 23 licensed to operate in the area. These small sawmills or "push benches" might turn out anything from a few hundred feet up to 50,000 feet or more of lumber per year. They were operated on pulpwood sized logs and used balsam fir almost exclusively.* But product quality was uneven:

it (push bench) is underpowered. The log is fed through the saw by hand, and often has to be pushed through to keep the saw turning. The lumber produced is inevitably poorly sawn, of small dimensions and characterized by excessive wane.**

Despite these shortcomings, the technology fitted in well since the small average size of Newfoundland trees prohibited the manufacture of top grade wide lumber which commanded better prices. It also created employment locally and enabled the operator to fill his own and the fisherman's intermittent needs since low cost was a priority and quality did not often matter.***

Wood continued to be used for domestic heating and cooking, but by 1956 most residents were purchasing some coal and/or oil as well.

*Report of Newfoundland Royal Commission on Forestry 1955: 128.

**Ibid., 128.

***Ibid., 130.

Transportation and Communication

There was some improvement in the internal transportation system of the region between 1945 and 1956. By 1950 the coastal boat service was again operating on a weekly basis bringing passengers, mail and freight to the larger communities on the central islands and on the western side of Inner Placentia Bay (see Figure 8.2). This was a considerable improvement over the previous schedule of once every two weeks. The communities of Merasheen, St. Kyran's, Presque and Great Paradise were included on the west run which called at communities on the Placentia Bay side of the Burin Peninsula. The bay run was restricted to the Inner Placentia Bay area alone and involved a round trip of over 200 miles.

The M.V. Burin, built by the Commission of Government during World War II, was put into service. This vessel was not designed to carry passengers, but with some minor alterations, it was used in Placentia Bay for 10 years. However, in 1957 it was noted that the vessel was "totally inadequate for the service in which she is engaged".*

Since it was not always convenient to go via the Burin, motor boats were often used to get to a mainland community with road and rail connections. By 1956 many of the larger island communities had a large decked boat available for hire

*South Coast Commission Report: 75.

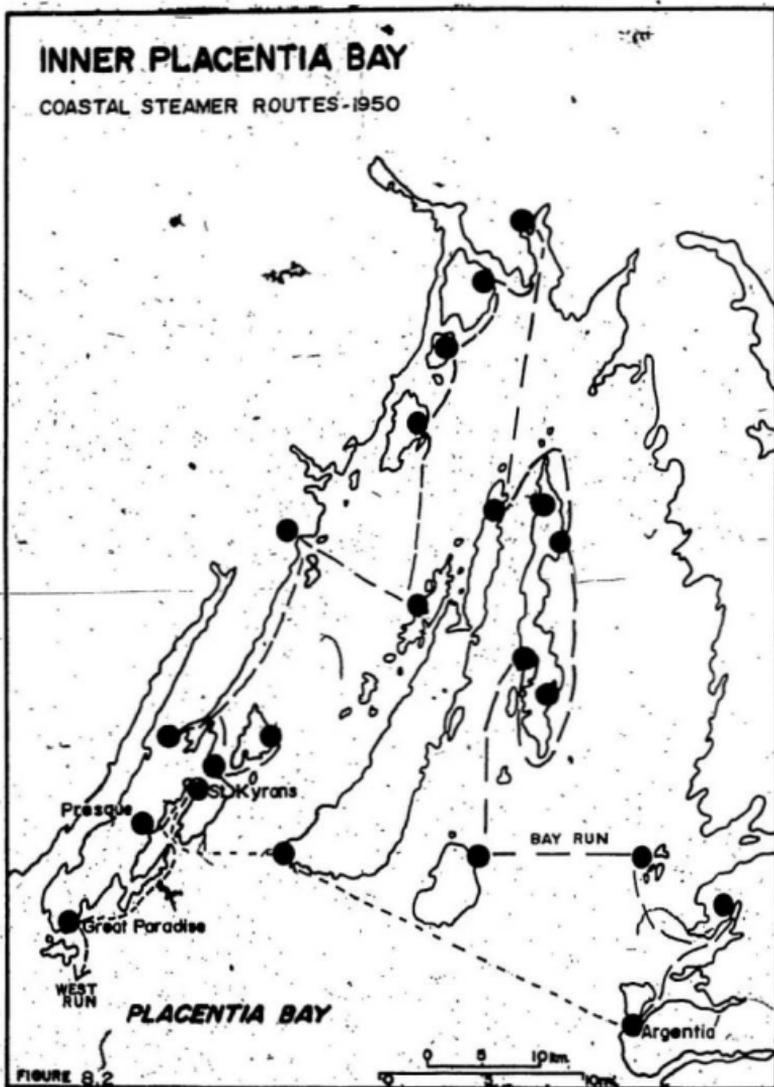


FIGURE 8.2

Source: Observer's Weekly JAN.31 1950

if residents had to travel for medical or other reasons. These boats were often diesel powered, were well equipped and varied in size from forty to sixty feet. These "water taxis" as the commission referred to them provided "a means of internal communication vital to the whole wellbeing of the South Coast".*

Linkages between the islands and mainland communities varied. For example, Merasheen and Red Island residents went to Argentina; Tack's Beach, Spencer's Cove and Kingwell residents usually went to Arnold's Cove; Davis Cove, Bar Haven, Woody Island and Sound Island residents often went to Swift Current; while Harbour Buffett residents often made connections at Little Harbour East. For the communities located inside Red Island and Merasheen it was often far more convenient to hire a boat and make connections with the rail-road rather than take the long return trip of the Burin to Argentina and be faced with just as great a trip to reach St. John's by either car or train. Boats were expensive to hire - however, if a group were travelling the cost was reduced and overnight accommodations were not required. Similarly travellers could also telegraph the passenger boat operator to meet them at a mainland community and return to the islands:

*South Coast Commission Report: 75 - 76.

Roads

Several of the larger communities from Swift Current to Fox Harbour had road connections by 1945, however during the 1950s some of the smaller communities gained connections as well. Garden Cove was linked by road to Swift Current by 1953, and by 1954 there were plans to extend the road to Fairhaven.*

By 1956, mainland communities with road connections had experienced a considerable increase in the number of motor vehicles. While no data are available on a community basis, the province as a whole experienced an increase of motor vehicles from 13,981 in 1949 to 45,997 by 1956.**

Communications

The communications system remained substantially unchanged at Inner Placentia Bay, particularly on the islands and on the western side of the bay - "it was in the field of communications and utilities that the deficiency of the entire area was most apparent." Come by Chance was connected to Clarenville by telephone and there was also a telephone connection from Come by Chance to Swift Current. Woody Island and North Harbour were also connected by a land line telephone

*Proceedings of Third Session, 30th General Assembly of Newfoundland 1953: 288. and Proceedings of Fourth Session, 30th General Assembly of Newfoundland Vol. 1, 1954: 471-472.

**Historical Statistics of Newfoundland and Labrador, Vol. 1 No. 1, 1970: 250.

with Come by Chance.*

The central islands and the smaller communities on the western side of the bay were served by the Canadian National Telegraph system. Little Paradise, Merasheen and Harbour Buffett were connected to the wireless telegraph station in Placentia. Little Paradise had a single wire telegraph connection with Bar Haven, Prowseton, Davis Cove, Monkstown, Clattice Harbour, St. Leonard's, St. Kyran's, Presque and Paradise. From Merasheen wireless messages were passed to Isle Valen and Red Island by radio - telephone. At Harbour Buffett a multi-party telephone circuit was provided by a single wire connecting Harbour Buffett, Spencer's Cove, Haystack and Kingwell.**

The main disadvantages of the C.N.T. Network was that frequently messages often had to travel many miles out of the way and in most cases services were not available after 6:00 P.M.*** By 1956 battery powered radio sets could be found in practically every Inner Placentia Bay home. Television sets were also beginning to appear providing there was a source of power available locally. For example, some of the larger merchants had diesel generating plants to provide

*South Coast Commission Report, 1957: 64-65, 69.

**Ibid.: 68-69.

***Ibid.: 69.

electricity to light their stores and to run refrigerators for meats and perishables.* Many residents and organizations also had smaller generating plants in combination with storage batteries to provide lighting. For example, in 1953, a gasoline motor supplied electricity for the church and hall in Merasheen.**

Shipping

Shipping retained its significance in the regional economy, both as a means of transporting goods and increasingly as a source of employment. Following the demise of the bank fishery, banking vessels were used as freighters while some smaller fishery schooners were used as collectors or traders and some were remodelled to carry passengers. Firms such as the Warehams of Harbour Buffett and Spencer's Cove and Browns of Tack's Beach were active to some degree in shipping within the Inner Placentia Bay area. For example, a spokesman for the Fishermen's Local at St. Anne's reported in 1955 that fishermen in that area sold mackerel to Alberto Wareham Ltd., and dried codfish to H.C. Brown & Sons, and W.W. Wareham & Sons Ltd. handled their heavy salted fish

*For example, at Tack's Beach both merchants had a 110 volt, diesel generator. Undoubtedly Harbour Buffett and Spencer's Cove had them as well.

**Merasheen: Dept. of Mines and Technical Surveys 1953: 6.

and supplied them with salt.*

The larger vessels also operated between Newfoundland and Nova Scotia ports carrying coal not only to Inner Placentia Bay ports but to other destinations around Newfoundland as well. For example, Brown's vessel Marie Stone supplied coal to merchants at Trepassey, Harbour Main and Greenspond. Alberto Wareham's vessels also made trips to New England freighting live lobster (Observer's Weekly, 30 June, 1953).

W. W. Wareham's vessels called at many Newfoundland ports for "salt bulk" codfish, especially following the completion of their large mechanical dory in 1956-1957.

Statistics show that for the period 1952 - 1955 an average of 15,599 tons of shipping annually passed through the port of Harbour Buffett (see Table 8.9).

Table 8.9: Harbour Buffett - Shipping Statistics 1952-1955

| Year | Coastal & Canadian | | Foreign | | Grand Total Tons |
|------|--------------------|----------|---------|----------|---------------------|
| | Loaded | Unloaded | Loaded | Unloaded | |
| 1952 | 2,396 | 3,986 | 11,392 | 2,156 | 19,930 |
| 1953 | 3,762 | 6,291 | 821 | 2,067 | 12,941 |
| 1954 | 5,181 | 6,813 | 967 | 2,709 | 15,670 |
| 1955 | 4,451 | 6,565 | 659 | 1,179 | 13,854 |

Source: Report of South Coast Commission 1957, Appendix 3.

*Newfoundland Fisherman, Vol. 4, No. 4, December 1955, 26. The spokesman commended the crews of the vessels, Invasion, Bay Rover, Effie H., Ronald George and Governor Anderson.

These returns indicate, however, that after 1952 the pattern of trade increasingly became a Canadian one, and that large quantities of marine products such as herring or codfish were no longer being loaded at Harbour Buffett for direct shipment to foreign ports. The cargo unloaded from foreign ports was undoubtedly salt which was brought in from Portugal or the West Indies.

Supplying the smaller communities in Inner Placentia Bay with salt and provisions, collecting codfish, lobster, and herring in conjunction with carrying quantities of coal and general cargo to other Newfoundland ports kept many vessels in operation and gave considerable employment. For example, the 1955 voters' list showed that Tack's Beach and the Long Island communities of Harbour Buffett, Port Royal, Kingwell and Spencer's Cove had 15 captains and 15 engineers* in addition to a number of mates, cooks and seamen.

*The crew member who operated and maintained the diesel engine or engines on the vessel was always known in the area as "the engineer" although in most instances he would not have tradesman's papers.

Medical Services

Throughout this period the cottage hospitals at Come by Chance and Placentia continued to provide medical services and facilities for Inner Placentia Bay residents. In addition, during the 1950s, the M.V. Lady Anderson* visited the communities on the central islands and the isolated communities on the western side of the bay. This vessel had a doctor and a nurse aboard and could attend to minor medical problems and dental extractions. She usually visited each community about once a month, but would also come in case of emergency.**

*This vessel was 90 tons gross, 92 feet overall and was equipped with twin diesel motors of 125 H.P. each. The vessel had a crew of eight in addition to the medical personnel (Observer's Weekly, 13 June, 1950).

**To contact the vessel one would have to send a telegram, and then depending upon what section of the bay the vessel was in, it could take hours to reach the community. In such cases, however, the local passenger boat usually handled the emergency. For example, from Tack's Beach to the Cottage Hospital in Come by Chance would take less than three hours by boat and car. Places like Spencer's Cove or Harbour Buffett could have a patient there even sooner. Similarly, Merasheen, Red Island or Isle Valen could have a patient into the Placentia Cottage Hospital within 3 to 4 hours unless the weather was exceptionally stormy.

The introduction of the Lady Anderson to the Placentia Bay area however led to a decline in the resident nursing stations located in Inner Placentia Bay. For example the nursing station at Tack's Beach was closed during the mid-1950s and the Woody Island nursing station was reduced to a part-time nurse.* But in other areas, there was expansion and consolidation of services - Come by Chance hospital had thirty-one beds and six bassinets and was staffed by two doctors and three nurses to serve the area from Davis Cove to Fairhaven in Placentia Bay and a section of Trinity Bay. Placentia hospital had twenty-two beds and six bassinets and it also had two doctors and three nurses.**

The extension of medical facilities, combined with improvements in transportation and better economic conditions generally, contributed to advances in the health and welfare of area residents. A nutrition survey carried out in 1948 by the same physicians on approximately the same number of subjects (including 26% of those surveyed in 1944) found less conspicuous and less frequent characteristics of malnutrition. A change in the attitude and behaviour of children was also noted (Observer's Weekly, 14 September, 1948).

*South Coast Commission Report 1957: 61.

**Ibid., 61. Note: The outer zone of the study area, including Merasheen, Paradise, Red Island, etc. was served by the Placentia hospital.

Education

The South Coast Commission Report of 1957 found that overall the standards of education were below the Newfoundland average. For example, there were approximately two rooms per school on the South Coast while the provincial average was 2.3 rooms per school. The qualifications of the teachers in the wider area were also low. For example, of the 397 teachers, 76% were either licensed or probationary and only 8% had more than one year of University training.*

Statistics compiled for the central islands and the western side of the Bay including the communities of North Harbour, Garden Cove and Swift Current showed that there were 28 schools in existence in 1955 - 56: 16 were one room schools; 5 were two room schools; 6 were three room schools and there was 1 four room school. Of the 45 teachers, only 6 were graded; 35 were licensed and 4 were probationary. Very few of the pupils completed high school. For example, during the school year 1955 - 1956 there were 97 pupils in Grade 9; 39 in Grade 10 and only 19 in Grade 11.**

Educational standards were undoubtedly similar for the settlements along the Isthmus of Avalon section of Inner Placentia Bay, each one of which had a population of fewer than

*South Coast Commission Report 1957: 47.
Teachers with one or more years of university were 'graded' teachers.

**Ibid., 59.

200 inhabitants in 1956. The Long Harbour - Mount. Arlington Heights area with a population of 507 and Fox Harbour with a population of 615 probably fared somewhat better.

It was difficult to get teachers for small one room schools and this was a factor in some communities being abandoned. For example, in 1952 the fourteen families on Sound Island could not get a teacher to live on the island and this was cited as one of the main reasons the settlement was abandoned early in 1953.*

Summary

By 1956 the process of modernization generated by the Second World War and accelerated by Confederation had had a significant impact on the region. The pattern of settlement consolidation had continued, though increasingly focused on those mainland centers with good transportation linkages. On the islands and western side of the region population loss and economic decline were becoming more pronounced.

This economic decline was largely attributable to sweeping changes in the Newfoundland fishery. Falling fish prices coupled with increasing employment in other sectors had contributed to the demise of the traditional bank and western boat/schooner fishery. This loss of mobility and access to cod

*Noel Iverson & D. Ralph Matthews. Communities in Decline: An Examination of Household Resettlement in Newfoundland. Institute of Social and Economic Research, Memorial University of Newfoundland 1968: 32 - 34.

stocks made the entire region totally dependent upon the vagaries of the inshore fishery. Structural and processing practices compounded the problem. For example, the growing tendency for more cod to enter either the fresh fish filleting operation or as the 'raw material' in "salt bulk" production meant that less was sun cured and employment in curing and packaging was reduced.

As the fishery declined and the larger economy became increasingly more diversified many communities began to lose the locational advantages they initially possessed. Diversification resulted in a larger proportion of the work force being employed outside the region and this made the availability of good transportation facilities and linkages more crucial.

As the pace of modernization quickened, much of the region lagged further and further behind as educational facilities and teachers gravitated toward larger centers. Similarly medical staff and facilities were located at mainland centers with access to the rail and road network.

More widespread use of radials and by 1956 television as well had contributed to a greater awareness of the outside world and the opportunities it presented. Changing economic conditions and perceptions had also diminished the role of traditional subsistence activities. The forests too were no longer being exclusively used as a source of fuel.

While the mainland section of the region benefitted from

the extension of the road network and the increased use of vehicles within the province the more isolated communities did not. Moreover, there were only minor improvements in the coastal boat service and it was only in 1950 that a weekly schedule was introduced. Although this was barely adequate it did contribute to the rise of an indigenous (though expensive) passenger boat service and strengthened the linkages between insular and mainland centers within the region.

Thus the modernization process by 1956 had helped to shape two distinct sub-regions in Inner Placentia Bay. One benefitted from this complex of processes and was strengthened; the other region did not and became more vulnerable.

Chapter IX ... there is a 'moving fever' in the Bay.

This brief statement amply describes the period 1956 - 1966 for Inner Placentia Bay. Movement and settlement consolidation had been experienced since 1901 - 1911, however it quickened during the Second World War and immediately following Confederation. During the decade 1956 - 1966 however, the pace accelerated further.

The continued decline of the inshore fishery, changing employment patterns, and the outmigration weakened the communities on the central islands and the western side of Inner Placentia Bay. Meanwhile, mainland communities from Swift Current to Fox Harbour benefitted from the increased pace of modernization that Newfoundland as a whole was experiencing. According to Gwyn, it was during this period that Newfoundland experienced its greatest growth since Confederation and that the province acquired the basis for a modern industrial state (Gwyn, 1972: 198).

Population

The population of Inner Placentia Bay declined slightly falling from 6459 inhabitants in 1956 to 6186 by 1966, a decrease of 4%. The number of settlements also declined from 37 in 1956 to 32 in 1966 (see Table 9.1).

Table 9.1: Inner Placentia Bay - Settlements by Population Size 1956 - 1966

| Population Size | 0-49 | 50-99 | 100-199 | 200-299 | 300+ |
|-------------------------------------|------|-------|---------|---------|------|
| Number of Settlements 1956 | 9 | 3 | 14 | 4 | 7 |
| Number of Settlements 1966 | 6 | 5 | 8 | 8 | 5 |
| Proportion of Total Population 1956 | 4% | 3% | 33% | 15% | 45% |
| Proportion of Total Population 1966 | 2% | 6% | 19% | 33% | 40% |

Source: Province of Newfoundland, Report of the South Coast Commission 1957, and Population Characteristics - Unincorporated communities Newfoundland and Labrador, Department of Regional Economic Expansion, Ottawa, Canada, April 1971.

In terms of the distribution of population changes, the central islands and the western side of Inner Placentia Bay continued to experience marked population decreases. For example, this section of Inner Placentia Bay's population fell from 367 inhabitants in 1956 to 2696 inhabitants by 1966, a decrease of over 26%. Communities in this region also continued to be abandoned. For example, Harbour Island was abandoned around 1960, and in 1964 following a disastrous fire at Spencer's Cove which destroyed large mercantile premises the people decided to relocate.* St. Anne's, Toslow,

*Government of Newfoundland and Labrador, Department of Welfare Annual Reports, Year ending March 31, 1964 and March 31, 1965, 148-149, 152.

Great Bona and Little Bona were not listed in the data for 1966 which suggests they may have been abandoned as well.

Undoubtedly, it was those changes taking place on the central islands and the western side of Inner Placentia Bay that contributed not only to a decline in the number of settlements depicted in Table 9.1 but in the marked difference of the total population living in the various sized communities. By 1966 only 2% of the population lived in communities with fewer than 50 inhabitants while 40% resided in communities with over 300 inhabitants. However the greatest changes occurred in communities with 100 - 199 and 200 - 299 inhabitants. This change was the result of many island communities losing enough population to place them in a different category while some mainland communities experienced sufficient increases to move up into another category. For example, by 1966, with the exception of Woody Island (341), the other communities with over 300 residents were all located between Swift Current and Fox Harbour.

This mainland portion of Inner Placentia Bay continued to experience population growth - by 1966 this area had 3490 inhabitants, an increase of over 25% from 1956: in 1956 only 43% of the area's population lived in this region but by 1966 over 56% did so. The communities of Fox Harbour, Long Harbour, Ship Harbour and Swift Current experienced an increase within the 17% to 26% range. But the communities of Arnold's Cove

and Come by Chance almost doubled their population. Fairhaven, Little Harbour East and LaManche were exceptions to the overall pattern of growth found in this section. Little Harbour East experienced a 22% decrease and Fairhaven 9%. The community of LaManche was on the brink of abandonment, its population having decreased from 29 in 1956 to just 1 in 1966.

Population Structure and Migration

Outmigration, particularly of young adults, persisted as a dominant element in the region's population structure. The population pyramid for 1966 shows that it was in the age categories 20-24, 25-34 and 35-45 years that the imbalance was most pronounced (see Figure 9.1). There were fewer persons in the age group 25 - 34 than in the age group 35 - 44 and the age group 45 - 54 years. This outmigration of the young adult population is also reflected in the number of children in the age group 0 - 4 years. For example, there were more children in both the 5 - 9 age group and 10 - 14 group than there were in the age group 0 - 4 years. Indeed by 1966 there were almost as many in the 15 - 19 age group as there were in the 0 - 4 category.

The pyramid also shows that there was a marked imbalance in the number of males and females in the 45 - 54 age group, and in the 55 - 64 age group. The percentage of males in both these age groups was 55% and 57.5% respectively.*

*These figures tend to affirm the greater tendency for females to migrate outlined in previous chapters.

INNER PLACENTIA BAY - POPULATION STRUCTURE 1966

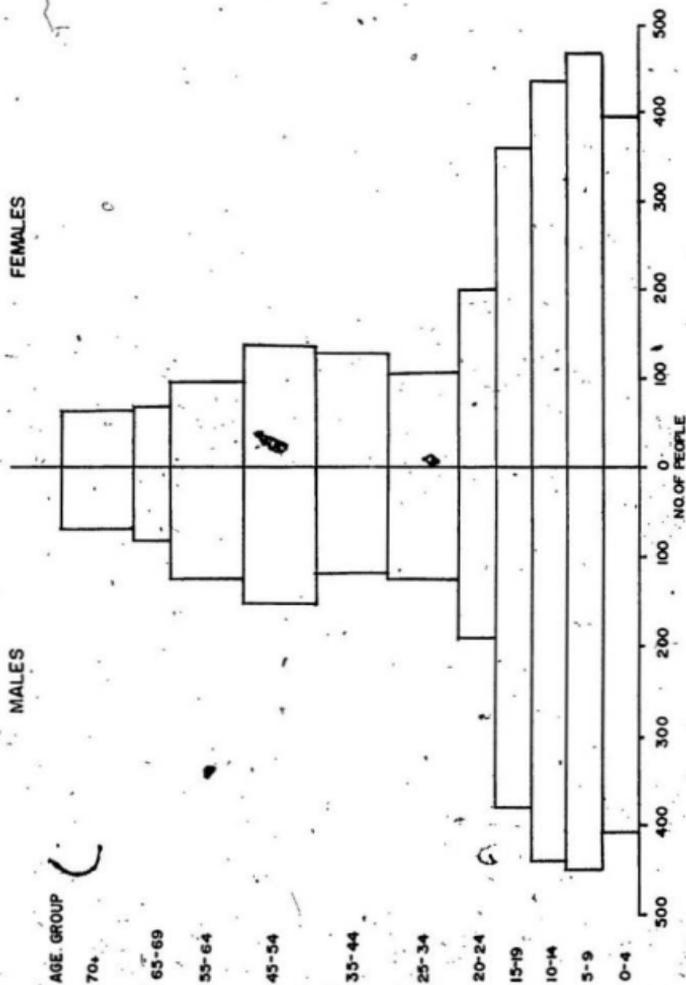


FIGURE 91

Source: Population Characteristics - Unincorporated Communities Newfoundland And Labrador, Department Of Regional Economic Expansion, Ottawa, Canada, APRIL 1971

A somewhat paradoxical feature of the population structure in Inner Placentia Bay in 1966, however, despite this sustained heavy outmigration of young adults was the increase in fertility that had occurred since 1945. For example, whereas 33.7% of the Inner Placentia Bay population was in the age group 0 - 14 years in 1945, it had increased to 41.9% by 1966. The number of children in the 0 - 14 age group was 23.5% higher than in 1945 while the number of adults in the age group 15 - 44 was 21.7% lower. The percentage of the population of Inner Placentia Bay in the age group 15 - 64 was 51 in 1966 in contrast to 59.2 in 1945. The 65+ age group remained constant at 7.1%.

Such demographic processes added to the problems facing the more isolated communities of Inner Placentia Bay. Increased fertility, which was also prevalent at the provincial level, placed heavy demands upon the province's educational system and trained teachers were especially difficult to get for the smaller schools in isolated areas.*

*Between 1936 and 1944 the birth rate for Newfoundland and Labrador averaged 26.9 annually. However between 1945 and 1961 the birth rate averaged 34.9 annually. Historical Statistics of Newfoundland and Labrador. Vol. 1, No. 1, 1970: 7.

In a sense, the increase in the school age population, which in former circumstances might have been seen as a healthy social index, now became a liability. For in a situation in which there was province-wide pressure on educational resources and heightened educational aspirations, it was natural that the smaller, more isolated and especially insular communities would fall behind in the acquisition of such resources. For example, Wells in 1960 found this to be a problem for several Inner Placentia Bay communities (Wells 1960: 114, 116). In addition continued out migration of the young adult population meant that some communities had a high percentage of elderly people beyond prime working age. This was the case for example at St. Kyran's and at Prowseton where the average age of fishermen was 55 and 53 respectively.*

Economy

The regional economy continued to become more diversified between 1956 and 1966 and the number of fishermen decreased ever further (see Table 9.2). There was also a marked decrease in the other primary resource sector, the forest related industries where employment fell from 8% of the male labour force in 1955 to just 3% by 1966. During the decade however significant job opportunities opened up in the transportation

*South Coast Commission Report 1957: Appendix 3, District 9.

Table 9.2: Inner Placentia Bay - Composition of the Male Labour Force 1955 and 1966

| Occupation | 1955 | | 1966 | |
|--------------------|------------|------------|------------|------------|
| | Number | Percentage | Number | Percentage |
| Labourers | 193 | 12 | 236 | 16 |
| Forest Industries | 129 | 8 | 45 | 3 |
| Clerical and Trade | 97 | 6 | 80 | 5 |
| Construction | 152 | 9 | 158 | 10 |
| Transportation | 89 | 6 | 193 | 13 |
| Miscellaneous | 108 | 7 | 209 | 14 |
| Fishermen | <u>838</u> | <u>52</u> | <u>587</u> | <u>39</u> |
| Total | 1606 | 100% | 1508 | 100% |

Source: List of Electors. District of Placentia West 1955, 1966. District of Placentia - St. Mary's 1955, District of Placentia East 1966.

sector as well as in the miscellaneous category and there was also a smaller but an important increase in employment for labourers (see Table 9.2).

This increased diversity however was much more prevalent for the mainland section of Inner Placentia Bay from Swift Current to Fox Harbour. (For example, while the male work force increased 31.2% between 1955 and 1966 the number of fishermen declined 11.7% and by 1966 fishermen accounted for only 20% of the male work force in this area.

Far less diversification had occurred on the central islands and on the western side of Inner Placentia Bay. For example, while the number of fishermen was declining in this area as well, fishermen still comprised over 59% of the total male labour force, a decrease of only 6% from that of 1955.

During the decade there was a significant increase in the female labour force of the region. By 1966, 207 females other than housewives were recorded in the voters list as paid employees which was more than double the 101 recorded in 1955. The majority of these females continued to be employed in domestic service, or as teachers, post mistresses or as clerks and salesladies (see Table 9.3).

Table 9.3: Inner Placentia Bay - Composition of the Female Labour Force 1955 and 1966

| Occupation | 1955 | | 1966 | |
|-------------------|-----------|------------|-----------|------------|
| | Number | Percentage | Number | Percentage |
| Clerical or Trade | 24 | 24 | 42 | 20 |
| Teacher | 16 | 16 | 50 | 24 |
| Post Mistress | 8 | 8 | 19 | 9 |
| Miscellaneous | 15 | 15 | 29 | 14 |
| Domestic Service | <u>38</u> | <u>37</u> | <u>67</u> | <u>33</u> |
| Total: | 101 | 100% | 207 | 100% |

Source: List of Electors: Placentia West 1955, 1966;
Placentia - St. Mary's 1955; Placentia East 1966

It is also interesting to note that despite this numerical increase the proportions changed very little except for the teachers which experienced an 8% increase. The greatest increase in female employment however occurred in the mainland settlements. For example, this area's female work force increased from 39 in 1955 to 114 by 1966. Although female employment also increased on the islands and the western side of the bay it did so by only 50%.

Fishery

Although the number of fishermen at Inner Placentia was declining, this was not accompanied by any significant changes in catching techniques or in fishing craft.

Boats

The small open motor boat continued to be the main type of boat used in the fishery. For Placentia Bay as a whole the number of sail and row boats increased from 336 in 1956 to 542 by 1966 while the number of gas and diesel boats increased from 700 in 1956 to 902 by 1966. The number of long liners increased from 3 in 1956 to 18 by 1966.

The off-shore fishing fleet also expanded - by 1966 there were 13 trawlers and draggers in contrast to 6 in 1956. It appears however that Burin, with its fresh fish filleting plant, had all these larger vessels. In 1963 the Burin operation employed 125 men on vessels and 200 onshore in the plant,

but by 1965 there were 180 men on vessels and the plant was employing 400 workers on shore at peak periods of production.*

By 1962 statistics became available for fishing craft by size and these show that the vast majority of the boats used in Placentia Bay were less than 30 feet, with the greatest concentration occurring in the category 20 - 24.9 feet (see Table 9.4).

Table 9.4: Placentia Bay - Powered Fishing Craft Under 10 Tons 1962 - 1966

| Year | Less Than 20 Feet | 20-24.9 Feet | 25-29.9 Feet | 30-34.9 Feet | 35-39.9 Feet | 40 Feet |
|------|-------------------|--------------|--------------|--------------|--------------|---------|
| 1962 | 129 | 476 | 208 | 163 | 30 | 1 |
| 1963 | 110 | 560 | 203 | 137 | 40 | 1 |
| 1964 | 130 | 509 | 242 | 153 | 47 | 1 |
| 1965 | 100 | 527 | 214 | 141 | 29 | 0 |
| 1966 | 132 | 394 | 206 | 138 | 25 | 7 |

Source: Dominion Bureau of Statistics, Fisheries Statistics, Newfoundland 1962 - 1966

*Dominion Bureau of Statistics, Fisheries Statistics Newfoundland 1956 and 1966. Department of Public Welfare Annual Reports 1963, 1965.

Throughout the period 1962 - 1966 fishing craft were concentrated most consistently in the 20 to 29.9 foot range which was the size of the average motor boat powered by a 3-H.P. or 4 H.P. marine engine. Skiffs used in the cod trap fishing operation were somewhat larger and undoubtedly account for the majority of the craft in the 30 - 34.9 foot category.

The boats less than 20 feet were suitable for lobster fishing and cod fishing in the more sheltered areas of Placentia Bay but they were inadequate for the herring fishery which was prosecuted during the late fall and winter months when weather conditions had deteriorated.

Table 9.5 depicting larger fishing craft indicates clearly that by 1966 there was less diversity than ever before.

Table 9.5: Placentia Bay - Fishing Craft Over 10 Tons
1962 - 1966

| Year | 35 - 49.9 Feet | 50 - 74.9 Feet | 75 - 99.9 Feet | Over 200 Feet |
|------|-------------------|-------------------|-------------------|------------------|
| 1962 | 17 | 8 | 4 | 5 |
| 1963 | 22 | 4 | 5 | 6 |
| 1964 | 17 | 4 | 4 | 5 |
| 1965 | 19 | 4 | 3 | 5 |
| 1966 | 20 | 4 | 0 | 14 |

Source: Dominion Bureau Statistics, Fisheries Statistics,
Newfoundland 1962 - 1966.

For example, there were only 4 vessels in the entire 50 - 99.9 foot category, and just 20 in the 35 - 49.9 foot category, a slight increase over the 17 present in 1962. In contrast the larger craft over 100 feet almost tripled during the 5 year period. This was also a period of modernization as well as of expansion: the average value of an offshore vessel in Placentia Bay in 1962 was \$148,100.00 but in 1966 it was \$496,200.00. This increased average value was due to companies replacing older vessels with modern new stern trawlers.

Such statistics indicate clearly the marked contrasts in the Placentia Bay fishery which by 1966 had developed into one with a distinctive traditional inshore fishery and an expanding modernized deep-sea fishery. This appears therefore to be a classic regional example of the dualism in the Newfoundland fishery as outlined by Brox (1972: 20).

Gear

The type and quantity of fishing gear did not change significantly between 1956 and 1966 which is to be expected given that the type of boats used in the inshore fishery had not changed. Traps and nets as well as trawls or lines were used for cod while herring and lobster continued to be taken

*See Observer's Weekly, 8 December 1962.

in nets and traps respectively. Statistics compiled for Placentia Bay show that the number of lines or trawls remained fairly constant until after 1964 when it declined. Cod traps increased 60% between 1956 and 1963, after which they declined. The most significant change was the great increase in cod nets - from 138 in 1956 to 6858 by 1965, with the greatest increase occurring between 1961 and 1965 (see Table 9.6).

Table 9.6: Placentia Bay - Fishing Gear 1956 - 1966

| Year | No. Cod Traps | No. Cod Nets | No. Trawls. or Lines | No. Herring Nets | No. Lobster Traps |
|------|---------------|--------------|----------------------|------------------|-------------------|
| 1956 | 251 | 138 | 28,540 | 1492 | 27,750 |
| 1957 | 256 | 616 | 27,250 | 1240 | 24,335 |
| 1958 | 282 | 652 | 29,970 | 1370 | 23,970 |
| 1959 | 292 | 669 | 25,247 | 1258 | 22,435 |
| 1960 | 333 | 1442 | 24,339 | 1875 | 28,367 |
| 1961 | 369 | 1296 | 27,833 | 1953 | 35,903 |
| 1962 | 386 | 2335 | 26,590 | 2007 | 34,300 |
| 1963 | 401 | 4757 | 27,294 | 1921 | 35,473 |
| 1964 | 390 | 5695 | 24,402 | 2062 | 34,319 |
| 1965 | 371 | 6858 | 20,664 | 2499 | 36,075 |
| 1966 | 353 | 5161 | 13,945 | 1372 | 27,833 |

Source: Dominion Bureau Statistics, Fisheries Statistics, Newfoundland, 1956 - 1966

This increase came about because of the substitution of nylon twine for the cotton traditionally used in cod net construction. Nylon was both stronger and more resistant to deterioration and codfish became entangled much easier than in the older twine. Government subsidies helped fishermen acquire this new type of net - for example in 1962 fishermen could receive a \$25.00 refund on the purchase of a completed nylon cod net, ready for fishing or \$12.50 for a linnet which a fisherman could then fasten to a head and foot rope.*

Herring nets also showed an increase particularly in 1960 and 1965. Lobster traps showed an increase of 60% between 1959 and 1961 and the number remained at a high level until 1966.

Productivity and Structural Change

Statistics for the entire Placentia Bay region show that cod landings fluctuated annually, with the period 1959 - 1961 being the most productive (see Table 9.7). Prices, however, tended to remain stable but low for the period 1956 - 1959, after which there was a steady rise.

*The Newfoundland Fishermen Vol. 2, No. 2, 1962: 10-11.

Table 9.7: Placentia Bay - Cod Landings and Value Landed
1956 - 1966

| Year | Landing in Lbs. | Value Landed | Average Value Per Lb. |
|------|-----------------|--------------|-----------------------|
| 1956 | 26,477,000 | 590,400.00 | 2.2¢ |
| 1957 | 34,017,000 | 734,800.00 | 2.2¢ |
| 1958 | 33,059,000 | 704,300.00 | 2.1¢ |
| 1959 | 42,099,000 | 990,200.00 | 2.3¢ |
| 1960 | 53,865,000 | 1,413,600.00 | 2.6¢ |
| 1961 | 39,771,000 | 1,117,300.00 | 2.8¢ |
| 1962 | 33,784,000 | 986,500.00 | 2.9¢ |
| 1963 | 35,633,000 | 1,118,800.00 | 3.1¢ |
| 1964 | 30,390,000 | 1,139,000.00 | 3.7¢ |
| 1965 | 33,371,000 | 1,325,000.00 | 4.0¢ |

Source: Dominion Bureau of Statistics, Fisheries Statistics, Newfoundland, 1956 - 1966.

Lobster landings tended to fluctuate even more than cod landings and it was not unusual for a season to be as much as 30% to 40% below the previous year's catch - this occurred in 1957, 1959, 1961, 1965 and 1966 (see Table 9.8).

Table 9.8: Placentia Bay - Lobster Landings and Value Landed
1956 - 1966

| Year | Landings in Lbs. | Value Landed \$ | Average Value Per Lb. |
|------|------------------|--------------------|-----------------------|
| 1956 | 438,000 | 106,200.00 | 24.2 |
| 1957 | 308,000 | 76,500.00 | 24.8 |
| 1958 | 325,000 | 80,300.00 | 24.7 |
| 1959 | 209,000 | 62,500.00 | 29.9 |
| 1960 | 325,000 | 96,400.00 | 29.7 |
| 1961 | 217,000 | 64,100.00 | 29.5 |
| 1962 | 275,000 | 93,500.00 | 34.0 |
| 1963 | 275,000 | 100,700.00 | 36.6 |
| 1964 | 371,000 | 151,000.00 | 40.7 |
| 1965 | 217,000 | 127,000.00 | 58.5 |
| 1966 | 205,000 | 123,000.00 | 60.0 |

Source: Dominion Bureau of Statistics, Fisheries Statistics
Newfoundland 1956 - 1966

Prices for lobsters remained stable for the period 1956 - 1958, increased 20% and remained stable during the 1959 - 1961 seasons following which they began to increase more rapidly.

In terms of quantity landed, however, there was no species more subject to fluctuation than herring) (see Table 9.9).

Table 9.9: Placentia Bay - Herring Landings and Value Landed
1956 - 1966

| Year | Landing in Lbs. | Value Landed \$ | Average Value Per Lb. |
|------|-----------------|--------------------|--------------------------|
| 1956 | 2,051,000 | 22,000 | 1.07¢ |
| 1957 | 3,310,000 | 45,000 | 1.36¢ |
| 1958 | 2,950,000 | 41,600 | 1.41¢ |
| 1959 | 3,566,000 | 49,000 | 1.37¢ |
| 1960 | 6,064,000 | 82,200 | 1.60¢ |
| 1961 | 3,973,000 | 63,600 | 1.60¢ |
| 1962 | 4,102,000 | 64,500 | 1.57¢ |
| 1963 | 6,948,000 | 113,900 | 1.62¢ |
| 1964 | 1,816,000 | 31,000 | 1.70¢ |
| 1965 | 3,468,000 | 63,000 | 1.75¢ |
| 1966 | 3,875,000 | 68,000 | 1.75¢ |

Source: Dominion Bureau of Statistics, Fisheries Statistics, Newfoundland 1956 - 1966

In addition, prices for herring did not rise as rapidly as those for cod or lobster,

Statistics for the Placentia Bay region show that fishermen's income tended to be fairly stable throughout the period. The last two years however showed a marked increase (see Table 9.10). However, by 1965 and 1966 prices for cod had risen and lobster prices had increased by almost 50%.

Table 9.10: Placentia Bay - Total Average Fishermen's Income and Inshore Fishermen's Average Income From Cod, Lobster and Herring Fishery 1956 - 1966

| Year | Total Fishermen | Average Income \$ | Total Inshore Fishermen | Average Income From Cod, Lobster, and Herring Fisheries \$ |
|------|-----------------|-------------------|-------------------------|--|
| 1956 | 1575 | 911.93 | 1477 | 486.53 |
| 1957 | 1638 | 897.13 | 1549 | 552.80 |
| 1958 | 1803 | 770.93 | 1689 | 489.16 |
| 1959 | 1792 | 897.71 | 1672 | 658.91 |
| 1960 | 1933 | 1104.86 | 1792 | 888.50 |
| 1961 | 2003 | 888.51 | 1887 | 659.78 |
| 1962 | 1988 | 881.43 | 1857 | 616.32 |
| 1963 | 2085 | 913.81 | 1959 | 680.65 |
| 1964 | 2027 | 914.65 | 1886 | 700.42 |
| 1965 | 1888 | 1161.54 | 1687 | 898.00 |
| 1966 | 1759 | 1268.33 | 1542 | 1013.62 |

Source: Dominion Bureau of Statistics, Fisheries Statistics, Newfoundland 1956 - 1966

Fishermen's income in the Inner Placentia Bay area, which were based almost exclusively on the cod, herring and lobster fishery, would have been lower than that of the total average for Placentia Bay, and would have also tended to fluctuate more. The higher Placentia Bay total average income was influenced significantly by the year round fresh fish plant

operation at Burin. Landings by its draggers and trawlers included species such as haddock, redfish, plaice and sole and this accounted for a high proportion of the total landed value. For example, in 1956, haddock alone accounted for 29% of the total value of all fish landed. By 1965 and 1966 plaice and flounder were accounting for over 25% collectively of the total value of fish landed.

What is most striking however is that for the period 1961 to 1964 the average income from the cod, herring and lobster fishery was basically the same as that of 1959 despite price increases for these three species. In addition despite increased labour input, increased boats and fishing gear, yields, particularly in the cod fishery, did not increase. Lobster production for the period 1961 - 1966 was 19% below the average for the period 1956 - 1960 despite a 36% increase in the number of lobster traps.

These factors combined with the uncertainty of the herring coming into the Inner Placentia Bay area made it difficult for most inshore fishermen to make a living and undoubtedly this was a factor that contributed to a decline of fishermen in the total labour force. Given such conditions it was only natural that many fishermen moved into other occupations whenever opportunities to do so became available.

Decreasing yields and low levels of income from the

fishery had quite an impact particularly on the central islands and on the western side of Inner Placentia Bay where the majority of the area's fishermen were located. The welfare officer responsible for this area noted that the fishery was only fair to disappointing for the cod and lobster fishermen in his district throughout the period 1960 to 1966. The herring fishery was somewhat better, especially for 1963.*

Consequently many Inner Placentia Bay residents could not make ends meet and were dependent upon government assistance for part of the year. For example, during the period 1957 to 1966 an average of 655 persons were receiving assistance either in cash or as able bodied relief in the district annually during the month of March.**

The fishery was also undergoing a period of increased structural change. For example, expansion in the fresh fish sector led to increased fishing offshore. By 1966 offshore fishermen comprised over 12% of the total number of fishermen in Placentia Bay compared to 6% in 1956. The number of part-time and casual inshore fishermen also increased. During the

*See Annual Reports, Dept. of Public Welfare, 1960 - 1967.

**Annual Reports, Dept. of Public Welfare, 1957 - 1967. In 1957 the South Coast Commission's findings showed that in some Inner Placentia Bay communities the average welfare receipts exceeded the average income from fishing. See Appendix 3.

period 1962 to 1966 for which statistics are available the number of part-time and casual fishermen as a percentage of the total number of inshore fishermen in Placentia Bay increased from 20% to 30%.*

Other government programmes were also instituted to assist fishermen. For example, in 1955 a salt assistance programme was introduced whereby a fisherman received a rebate of 50% of the value of the salt he had used (Observer's Weekly, 12 March 1960).

In 1957 the federal government extended the Unemployment Insurance scheme to include fishermen. Both fisherman and fish buyer made a contribution to the fund which was determined on the basis of the fisherman's weekly earnings. Originally 15 weeks of contributions were required for a fisherman to qualify for 10 weeks of benefits.** Since benefits were based on the fisherman's level of earnings during the fishing season it gave the fishermen more incentive to fish and to invest in gear. Indeed this may have been partly responsible for the increased number of fishermen in Placentia Bay during the period 1958 - 1964 and the increase in gear.***

*Historical Statistics of Newfoundland and Labrador, Vol. 1, No. 1, 1970: 183-184.

**The Newfoundland Fisherman, Vol. 6, No. 2, 1957: 18-29.

***Gwyn has pointed out that this increase in fishermen, which also occurred at the provincial level was a response to the economic recession of the late 1950s. (Gwyn 1972: 183, 202, 284).

Additional bait depots were installed at Inner Placentia Bay. In 1960, portable depots capable of holding 20,000 lbs. of bait were placed at Harbour Buffett and Merasheen and in 1962 15,000 lb. units were scheduled to be erected at Arnold's Cove and at Little Paradise.* Despite such subsidies and facilities the dried salt cod industry continued to decline. Alexander claims that both government and private enterprise concentrated too heavily on the fresh fish sector and consequently good production techniques were not implemented and marketing facilities for the traditional staple were not maintained. Such a policy, he argues weakened the economy of rural Newfoundland (Alexander 1977: 148). Many Inner Placentia Bay communities were especially vulnerable, given the very limited employment opportunities available locally other than in the fishery.

Subsistence Agriculture

This sector of the traditional economy continued its decline. The increased diversity of the labour force, which meant that many residents were away from their community for at least part of the year contributed to this trend but improved economic conditions played their part. For example, field interviews revealed that subsistence agriculture was

*The Newfoundland Fisherman, Vol. 9, No. 1, 1960: 18; Observer's Weekly, 22 April, 1962.

discontinued for a number of reasons, chief of which were "it was too hard a work", the family (children) had moved away, and it was cheaper and easier to buy vegetables.

Lack of pasture and conflict with other activities hindered livestock holdings. Moreover, by 1966 some mainland communities had councils which prohibited roaming animals and with the extension of the road network and increased traffic, accidents involving animals became more frequent.

Forests

By 1966 the forest related industries were providing fewer employment opportunities for Inner Placentia Bay residents. Employment in this sector fell from 129 in 1955 to 45 by 1966. This decrease was in response to structural changes and mechanization in the pulp and paper industry. Gasoline operated chain-saws were introduced in the 1950's and by 1956 were quite common.* The power saw enabled the logger to earn more per day, but it also enabled the annual mill requirements to be harvested in less time. During the 1960's wheeled skidders were introduced into the logging industry and by 1964 there were 116 in operation. In addition as road transportation facilities improved logs were moved by truck thereby eliminating many jobs that traditionally

*Proceedings of Seventh Session 30th General Assembly of Newfoundland, 1956, Vol. 1: 798. In 1956 the loggers union was pressing the provincial government to have these saws exempt from paying the tax on gasoline.

were available during the winter haul-off and spring drive (Peters 1965: 20,43).

The communities along the mainland section of Inner Placentia Bay from Swift Current to Fairhaven as well as Woody Island were most affected by this change. By 1966 this area still accounted for what few loggers remained in the industry.

The small sawmills appear to have remained viable throughout the period for even by 1966 there were still a number of millmen listed in the voter's list. These workers resided in the Fox Harbour - Long Harbour area, and at Come by Chance, Woody Island and Monkstown.

As the consolidation of settlement continued and the labour force became more diversified it became no longer feasible for many residents to procure all their fuel requirements from the forest. Consequently, coal and oil came to be used in many households, particularly in the larger communities.

Transportation and Communication

There was a considerable improvement in transportation facilities during the decade. By 1961 the M.V. Burin had been replaced on the Placentia Bay routes by a new type of vessel. Coastal boat service was now provided by either the M.V. Hopedale or the M.V. Petite Forte. These vessels not

only carried the latest navigational aids but they also had good passenger accommodations and facilities.* By 1966, mainland communities from Swift Current to Fox Harbour had excellent road connections with the rest of the province following the completion of the Trans Canada Highway in Newfoundland in 1965.**

Despite the new coastal steamer, travel was still one of the main problems facing the isolated communities of Inner Placentia Bay. For example, there was no increase in frequency of coastal boat service - it continued to call just once a week at most communities. Consequently, many communities continued to rely heavily on local passenger boats. The welfare officer for the district continually refers to difficulties in travelling. In 1964 he wrote

Travel is both costly and slow, and dependence on weather and wind conditions aggravates the situation further.***

*Observer's Weekly, 3 December 1960.

**For example in 1956 not only was the road to St. John's unpaved for most of the distance but it also wound around parts of Trinity and Conception Bays. By 1966 travel time to St. John's was cut in half for most communities.

***Dept. of Public Welfare, Annual Report to 31 March, 1964: 149.

Iverson and Matthews also noted that transportation costs were high and in addition people's perceptions toward travel were changing. For example, Tack's Beach residents reported that the community was "too isolated" and it was so hard to get back and forth (Iverson, Matthews 1968: 61-62).

Communications

The communications system also continued to display deficiencies. For example, in 1962 the District Welfare Officer noted that except for the Canadian National Telegraphs and the mail services, there were no communication facilities in the district and consequently it was very difficult to administer.*

By 1962 a radio telephone[†] was in operation at Woody Island and in 1963 at Bar Haven and Davis Cove. A direct phone connection was also planned from the mainland to Long Island.** Mainland communities had good communications by 1966. An automatic telephone exchange was in operation at Swift Current and a new telephone exchange had been recently opened at Long Harbour.***

*Dept. of Public Welfare, Annual Report, to March 31, 1962: 190.

**Ibid, 190 and Annual Report, 1963 169-170. The Long Island project was scheduled to be operated on power supplied by the merchant at Spencer's Cove. However, as mentioned previously Spencer's Cove was abandoned by 1964.

***Daily News, 31 December 1964; 31 December 1966

The completion of the Trans Canada Highway, facilitated the movement of mail by road for mainland communities and there were also some improvements for the more isolated areas. By the early 1960s mails were delivered twice weekly to communities on Long Island, and at Woody Island, Isle Valen, Bar Haven, Tack's Beach, Davis Cove and Clattice Harbour. This service was provided by a small vessel operated by Alex Lockyer of Woody Island. Prior to this service mails had been delivered by the weekly trip of the coastal boat.

Many communities also benefitted from the extension of electricity to rural areas of the province. It appears that electricity was introduced to the Fox Harbour - Long Harbour region before it became available in the communities of Swift Current, Garden Cove, North Harbour, Come By Chance, Arnold's Cove, Southern Harbour and Little Harbour East in 1964.* By 1965, 80 kilowatt diesel generators were also in operation producing electricity at Woody Island and at Merasheen.** Once electricity was available residents were able to purchase appliances and, undoubtedly, television sets were more numerous in many communities by 1966.

*Daily News, 31 December, 1964.

**Daily News, 7 June 1965; 31 December 1965.

Shipping

During the decade 1956 - 1966 the number of larger coasting vessels declined. Some vessels had been lost due to storms or fire and others were in need of repairs. In addition repairs were costly, and it was very expensive to build or purchase modern vessels. By 1966 there were few large vessels left in Inner Placentia Bay. For example, the M.V. Marie Stone was lost in 1963 and Alberto Wareham Ltd. of Spencer's Cove had no large vessels at the time the community was abandoned in 1964.

In addition to high vessel replacement costs, there was also less freight available for these coasters. For example, the expansion of the fresh fish industry meant that there was less fish being dried or even being put into "salt bulk". Whereas in 1957, over 72% of cod landings was entering salt fish production, by 1966 only 45% was doing so.* Coal was also less in demand as people switched to oil. Moreover, the extension of the provincial road network and the completion of the Trans-Canada Highway made many communities turn to truckers to supply their transportation needs.** The improved road network also made it possible to ship live lobster to New England markets by road thus weakening the locational

*Department of Fisheries of Canada, Newfoundland Region, 1966: 2.

**Between 1957 and 1966 surfaced road mileage increased from 3319 miles to 4864 miles and commercial vehicles increased from 13,333 to 23,120. Historical Statistics of Newfoundland and Labrador Vol. 1, No. 1: 249-250.

advantage Inner Placentia Bay traditionally had in this industry.

Within the Inner Placentia Bay area itself, however, there continued to be some work for smaller vessels delivering fishery supplies and provisions and collecting fish products.

Although indigenous vessels were decreasing, employment in marine transport and related activities was increasing. For example, the voters' lists show that employment in this sector rose from 56 in 1955 to 100 by 1966. According to one businessman this was because by the 1960s the Placentia Bay region was unique in that it still had good sailors left in contrast to other areas of the province, and that was why so many were able to obtain employment on Canadian National vessels and on federal fisheries boats.* Once a steady job was procured on such vessels, many seamen moved from the isolated communities to communities with good transportation links. For example, whereas in 1955 only 14% of the seamen and mariners lived in communities from Fox Harbour to Swift Current by 1966 38% did so.

*Robert Johnson, "Outporters go Inport" Atlantic Advocate, Vol. 61, No. 1, 1970: 26.

Medical Services

Medical services and facilities changed very little between 1956 and 1966. The cottage hospitals at Come'by Chance and Placentia looked after the medical needs of Inner Placentia Bay residents.* The central islands and the isolated communities on the western side of Inner Placentia Bay also continued to be visited by the medical ship M.V. Lady Anderson. During the 1960s many communities were also visited on occasion by a private doctor who conducted a practice from a 40 - 45 foot boat. The M.V. Christmas Seal also visited Inner Placentia Bay. For example, during the summer of 1958 this vessel was in the area carrying out a B.C.G. vaccination programme and taking X-rays as part of the Newfoundland government's programme to combat tuberculosis (Observer's Weekly, 7 June 1958).

While such vessels could provide some levels of service many cases required the better facilities available at the out-patients clinics of the cottage hospitals, while others may have warranted hospital admission. Travel to the cottage hospital was both time consuming and costly for many residents of Inner Placentia Bay including even some mainland residents.

*For a good description of the cottage hospitals see John Ross "Some Aspects of the Cottage Hospitals Today". Newfoundland and Labrador, Department of Health, Annual Report, 1966: 57-61.

335

For example, one study found that although Garden Cove was accessible by road, medical facilities were many miles away and several older residents had exhausted their savings in travelling to see a doctor. Similarly, the high cost of travelling for medical care was cited as a factor in influencing some residents to move from Tack's Beach, while lack of medical care in the community was cited by others (Iverson and Matthews 1968: 36, 61-62).

The District Welfare Officer's Reports also mention this problem. Both in 1960 and in 1964, the officer wrote:

Transportation of patients for medical care and attention presents a problem and a challenge to the welfare officer.*

Expanding on this theme a subsequent report noted that

... transportation of indigent persons to and from hospital is very costly in this general area, and a great deal of time is consumed in carrying out this service ... for those requiring medical attention at Come-By Chance hospital, it is quite often necessary to engage the services of local passenger boat operators in order to have patients conveyed there for treatment. This proves very costly. Each case involves two, and at times, three means of conveyance hence the necessity of issuing a comparable number of transportation orders. It is not always possible to get transportation orders to the patient in time to make connections, being only two mails out of the office each week, and in such instances transportation has to be approved by telegram.**

*Department of Public Welfare, Annual Report, 1960 & 1964.

**Ibid. Annual Report, 1965, p. 152-153.

Education

Because of the dispersed nature of the population and the fact that many communities were both isolated and insular the consolidation of schools which was occurring in much of Newfoundland during 1956 - 1966 was not feasible for most of Inner Placentia Bay. For example, the average number of classrooms per school in Newfoundland and Labrador was 2.71 for the school year 1956 - 1957, however by 1966 - 1967 it stood at 4.7.*

With many communities experiencing a decline in population it was often difficult to maintain educational standards and schools at a comparative level of 1956 - 1957 standards. It was also very difficult to get teachers to continue to work in small isolated communities. For example, Wells in 1960 noted that the communities of Little Paradise, Prowseton and St. Anne's were all experiencing problems in getting teachers and Iverson and Matthews noted that in late August of 1966 no one knew if there would be a teacher in Tack's Beach for the coming school year.**

Even when teachers were available for small schools, very few of the pupils went on to complete high school. For example,

*Historical Statistics of Newfoundland and Labrador, Vol. 1, No. 1, 1970: 97.

**Wells, 1960: 114, 116; Iverson and Matthews, 1968: 58.

Rowe in 1958¹ remarked that a child's probability of matriculation in one room schools was about 1/6 of 1%. Government, he noted, was becoming increasingly aware of the difficulties of providing social and educational services in small communities, many of which had lost the economic justification for their existence.* Yet paradoxically it was precisely this low level of educational achievement which enabled many isolated communities to survive. Given the above average illiteracy rate for the region outlined in previous chapters, many residents had not the educational qualifications to move into jobs that gave year round employment and the number of unskilled jobs available was never high enough to accommodate all those who could have filled them.

Statistics compiled by the Department of Public Welfare for Placentia West show that for the period 1961 to 1965 an average of 197 heads of families in the district received relief during the month of March. Of these the proportion with a grade 1 to grade 3 education ranged from 34% to 43%; those with a grade 4 to grade 6 education ranged from 33% to 40%, while those with a grade 7 to grade 9 education ranged from 18% to 25%. Those with a grade 10 or higher education ranged from just 1% to 3% over the same period.**

*Observer's Weekly, 18 January 1958.

**Department of Welfare, Annual Reports 1961 - 1965.

Low educational qualifications, a shortage of teachers in conjunction with economic and demographic problems and the high costs and difficulties of providing transportation, communication and medical services to rural Newfoundland became a pressing problem for the provincial government during the decade 1956-1966. Resettlement increasingly came to be seen as a solution.

Resettlement

Resettlement was not new to Inner Placentia Bay or Newfoundland. Indeed since 1911 a process of settlement retreat and consolidation had been taking place in which people had moved on their own initiative and almost exclusively at their own expense. By 1953, however, the provincial government was providing assistance of up to \$600.00 per family to assist people to move to larger centers. To receive this grant the whole community had to be willing to move though no restriction was placed on where the people might move (Iverson and Matthews, 1968:2).

The South Coast Commission Report of 1957 felt that some resettlement was needed but argued that employment opportunities should be available and should precede the granting of financial aid. It also recommended a reduction from the 100% consent required for a community's residents to move, and interest free loans as well as grants based on need, to assist

people to move to areas which had good potential.*

With regard to Placentia Bay the Commission felt that the southern half of the Burin Peninsula had the greater potential for growth, while the islands were unsuited to support much larger populations.**

Late in 1957 the provincial government distributed questionnaires throughout the province which requested opinions as to those communities within the various districts that might be abandoned in the future. The subsequent report, released in 1960, listed 199 communities, containing 14,800 inhabitants that ought to resettle (Wells 1960: 1-2). Inner Placentia Bay findings suggested that the communities of Brule, Harbour Island, Prowseton, Little Bona, St. Leonard's, St. Kyran's, St. Anne's, as well as Monkstown and Spencer's Cove, should be resettled. The report also noted that enquiries regarding resettlement had come from Merasheen and Tack's Beach (Wells, 1960: 109-121).

The report argued that resettlement was necessary because of the physical isolation of many communities, difficulties in providing services, and the economically unhealthy state of the fishery. It also saw a major deficiency in the 1953 scheme in that rural residents unaccustomed to urban living

*South Coast Commission Report, 1957: 137-143.

**Ibid., 140 and Map 11 (Development Areas). Note, this was much the same conclusion the Merasheen study of 1953 had arrived at.

and mortgages often moved to settlements nearby with only marginally better services but which were still in a state of economic decline (Wells 1960: 5 - 10).

For the resettlement programme to be a success, it was recommended that people move to centers where existing fish plants were capable of expansion or to places where fisheries development was contemplated. Other recommendations stressed the need for careful planning, the need for government to refuse aid if it did not approve of a location to which residents wanted to go. Loans of up to \$3000.00 should also be made available to assist in buying, building, or moving an old home to a new location. Both levels of government should provide these loans and administer the programme jointly (Wells 1960: 3-10, 20-21).

Government studied these proposals and in March, 1965 a new five year resettlement programme was introduced. This programme was a joint effort, with both the federal and provincial Departments of Fisheries being responsible for its administration. It provided for grants of \$1000.00 per household, plus \$200.00 for each person in the household plus the cost of moving their personal belongings. This aid would only be forthcoming if 90% of the community agreed to move and monies would be given only after the family had resettled. A "Resettlement Committee" consisting of representatives of various government departments would approve the move of each

family as well as grant permission for the community to move, thus preventing the move from one declining community to another (Iverson and Matthews 1988: 3).

The necessary administration was in place and the details of the plan were available by 1965, however, at the community level discussion, meetings and eventually individual family decisions had to be made before government could be approached. This process, as well as the government's response, and finally actual resettlement involved a considerable period of time. Consequently, any impact this new resettlement plan was to have on Inner Placentia Bay had not been experienced by 1966, the termination date for this study.

Summary

Between 1956 and 1966 the patterns and process of modernization accelerated creating even more diversity and contrast in the social geography of the region. Population concentration continued in the mainland section of the region. On the central islands and the western side of the bay, outmigration, demographic imbalances and occasionally settlement abandonment prevailed.

Similar tendencies occurred in the region's economy. As the pace of modernization increased during the early 1960's in the province, the mainland section of the region became more economically diversified - in the process, fishing was reduced to a minor role. In contrast, the fishery was still paramount

on the islands and western side of the region, possibly because it remained virtually untouched by modernization. Changes in processing fish products had not led to expansion or modernization of boats or gear but instead made the industry more capital intensive and centralized. By 1966, Burin had emerged as the center for the increasingly modernized fishery of Placentia Bay. Low prices and declining catches also contributed to further weaken the traditional inshore fishery.

Between 1956 and 1966 the mainland section of the region became more integrated and benefitted from developments that were occurring within the larger province. For example, by 1965 the Trans-Canada Highway was completed; a telephone system had been installed and electricity had been extended to the area. Such improvements in transportation and communication facilitated access to medical and educational facilities as well as to job opportunities.

In contrast, lack of roads and services further diminished the traditional locational advantage the islands and western side of the bay once enjoyed. As the viability of this sub-region declined access to mainland centers became more crucial for both employment opportunities and health care as well as educational facilities.

By the 1960's the problem of small isolated communities with a very limited resource base and a depressed economy was becoming an increased concern of government. Resettlement was

seen as a solution and programmes were designed to assist this process. By 1966 such a policy was undoubtedly of interest to many inhabitants of Inner Placentia Bay.

Conclusion

The impact of modernization on Inner Placentia Bay was influenced by a number of factors. The physical setting itself posed constraints. The region consisted of a number of islands as well as lands forming part of both the Avalon and Burin peninsulas. A cool climate and the effects of glaciation had resulted in soils that were marginal at best. In contrast however, the presence of marine resources, suitable harbours and the lack of drift ice in the spring made the region a desirable one for fishermen and the early history of the area reflected this fact.

Originally the region's marine resources were exploited on a seasonal basis, by migratory fishermen, however during the early nineteenth century the fishery developed into a sedentary one.

As population increased, new settlements were established and new exploitation strategies were adopted. The rise of larger boats and the introduction of fishing schooners gave increased mobility to fishermen and lessened the dependency on the local inshore fishing grounds. For example, the schooners fished in the vicinity of Cape St. Mary's and cleaned and salted the codfish aboard the vessel and later discharged the catch at the home port for the drying process.

The viability of the economy was further strengthened during the late nineteenth century when the introduction of

the canning process made it possible to utilize the region's lobster resource. The large number of islands, and shallow water protected from rough seas, posed an ideal habitat for lobster and residents were quick to develop this industry, when an appropriate technology made this feasible. Additional diversity was introduced as well, when in response to a growing demand in New England markets, American schooners annually visited Inner Placentia Bay to purchase herring.

This diversified marine based economy was supplemented by a considerable subsistence agriculture. Despite the physical constraints most residents kept cattle and sheep and grew hay, cabbage and potatoes. With a ready supply of wood for fuel and building material available in the nearby forest, Inner Placentia Bay residents were faring quite well by rural Newfoundland standards.

The vitality of the region was characterized by steady and strong population growth experienced during the late nineteenth century. This was in marked contrast to the trends found in much of Conception Bay and Ferryland District during the same period (Staveley 1977: 67, 70).

The region had also benefitted by the introduction of a government operated weekly steamship service introduced in 1890. The completion of the trans-island railway system during the 1890's benefitted many mainland Inner Placentia Bay communities, particularly those located on the Isthmus of Avalon, which now had access to the system just a short

distance inland.

Although Inner Placentia Bay entered the twentieth century from a position of economic diversity and strength this situation did not last and a process of gradual decline and weakness can begin to be detected during the period 1900 - 1921. The most serious development was the erosion of the diversity that had been characteristic of the region's fishery. For example, political and changing market conditions had weakened the herring fishery. Over-exploitation of the lobster stocks had led to a drastic decline in this fishery. For example, production of tinned lobster in 1910 was about 70% below that of 1900. A whale processing plant established in the region during the early 1900's was also soon affected by a depletion of the whale herds.

As these sectors of the regional economy declined the cod fishery came to play a more crucial role. Investment in the cod fishery continued as more schooners were being built and the use of the more capital intensive cod trap also increased. This increase in capital input however occurred at a time when both yields from the cod fishery and prices, (particularly as a result of the favourable market conditions arising out of World War I) were at an all time high. In reality it disguised the real capability of the cod fishery to support the entire economy of the region.

Subsistence agriculture remained important, ~~BUT~~ despite the decline in the lobster and herring fishery it did not

expand. In contrast there was some increased utilization, of the region's forest resource. For example by 1921 there were several small indigenous sawmill operations. The geographical location of these sawmills is symbolic of a process that had by 1921 begun to affect Inner Placentia Bay. Not only do they represent a departure away from the traditionally marine resource based economy but these mills were almost exclusively located at mainland centers.

The decline of the lobster and herring fishery in conjunction with the increased employment opportunities available outside the Inner Placentia Bay area led to a marked decrease in the pattern of strong population growth typical of the nineteenth century. A process of settlement retreat and consolidation as well as increased outmigration began to set in.

One striking feature of the modernization process that had an impact on the region during this period was the improvement in transportation and communications. Telegraph service had been extended to many mainland as well as insular communities. Marine engines, which were beginning to be installed in fishing boats as part of the modernization process that was occurring in the fishery, had the side effect of making movement between fishing communities both easier and faster. One adverse effect however was that it weakened the viability of the steamship service and fostered increased interaction between many insular communities and mainland

communities with access to the railway. This increased contact with the mainland communities is a further expression of their emerging locational advantage over their insular counterparts.

The period 1921 - 1939 was also marked by a decline in the regional economy. The cod fishery continued to provide the main source of fishermen's income as the lobster, herring and whale fisheries showed little or no improvement from even their 1911 - 1921 levels. Unfortunately for the region both yields from the cod fishery and prices, particularly during the depression years were well below average. Decreased productivity and falling prices combined with lack of alternate employment opportunities outside the region during the depression caused considerable hardship.

Yet despite these setbacks there were still forces of change operating within the fishery. The number of fishing vessels increased and marine engines continued to be installed in fishing boats. Indeed by 1935 motor boats were widely distributed throughout the region. The rise of an indigenous bank fishing fleet was a further expression of the modernization process. For whereas the traditional fishing schooners were almost universally owner operated the banking vessels were all owned by the largest mercantile firms. The banking vessels made possible an extension of the fishing season, through access to more distant fishing grounds, but they also represented a far greater outlay of capital and a more

noticeable division of labour. The bank fishery then is an example of the shift from vertical linkages to horizontal linkages typical of the modernization process.

Just as the period was drawing to a close the lobster fishery was transformed from being a small individualistic canning operation into a live lobster export industry with both the collection and export of lobster being managed by a large company.

Further evidence of the modernization process can be detected in the changing employment pattern evident in one mainland community. By 1935 North Harbour had begun to specialize in logging and the majority of its work force was engaged in cutting pulp wood for one of the large mills located in central Newfoundland. The seasonality of this activity was not a radical departure from traditional work patterns but the fact that employment was being sought outside the region and the fishery was.

The subsistence agriculture sector remained strong but it was not always located where distress due to the depressed state of the fishery was most acute. Indeed by 1935 the subsistence agriculture sector was far stronger on the eastern side of the region, particularly from Swift Current to Fox Harbour, than on the central islands or the western side of Inner Placentia Bay.

One of the most striking features of this entire 1921 - 1939 period is the almost complete lack of improvement

in the fields of transportation, communication and social services. Indeed in 1932 the government cutback on the steamship service to the area. Cutbacks in education resulted in the region not having improved its literacy rate in 1935 over that of 1921. When a comparison is made with overall Newfoundland literacy standards the percentage may have even declined.

During the 1930's radios became more readily available, but their cost, given the depressed state of the fishery, made them a rarity in the Inner Placentia Bay region. A considerable improvement in the level of medical services available to the region's inhabitants occurred in 1936 when cottage hospitals were built at Come By Chance and Argentia.

The more widespread use of marine engines strengthened the linkages between the more isolated mainland and insular communities and those "railway access" mainland communities. Reduction in the steamship service and the establishment of the cottage hospital at Come By Chance made these linkages even more important to much of the region. It was the Second World War (1939 - 1945) that proved to be the greatest force for change within the Inner Placentia Bay region. As with previous wars, it acted as a stimulus to the fishery industry in that prices for marine resources increased. However the construction of a large American naval base at Argentia created numerous job opportunities and many Inner Placentia Bay fishermen abandoned the fishery. This decimated the

schooner based fishery, particularly in the Fox Harbour - Long Harbour area.

The war also resulted in the rapid expansion of the fresh frozen filleting industry in Newfoundland and it was not long before the effects were felt in Inner Placentia Bay. Even before the war ended some Inner Placentia Bay banking vessels were landing their catches at fresh fish plants outside the region, thereby eliminating the processing jobs traditionally carried on at the home port.

There was some investment in the Inner Placentia Bay fishery, but, in contrast to World War I, it occurred almost exclusively in the inshore fishery and consisted primarily in the increased use of motor boats and expansion in the region's herring fishery. But the war also took fishermen out of the inshore fishery. In addition to job opportunities on military bases, the war also stimulated other sectors of the Newfoundland economy and created jobs as well. Thus by 1945, the fishery at Inner Placentia Bay was no longer employing as large a percentage of the work force as in 1935.

The war brought about important spatial and demographic changes within the Inner Placentia Bay region. During the decade 1935 - 1945 the process of settlement retreat and emigration, particularly on the islands and the western side of the region, continued at a quickened pace. In contrast, mainland settlements within the Swift Current - Fox Harbour region not only retained their population but showed a

modest increase. In terms of social developments, one of the greatest achievements was the rise in literacy levels. Compulsory school attendance for children aged 6 - 14 years had been introduced in 1942 and emphasis had also been directed toward adult education. Increased prosperity now made it possible for most Inner Placentia Bay residents to obtain radios, and with the increased contact with Canadian and American servicemen an awareness of the broader outside world intensified.

While steamship service did not improve, mainland centers particularly along the Isthmus of Avalon had their locational advantage reinforced by increased government emphasis on road building. By 1945, road construction had been completed in this area, a section in the overall plan to link the Bonavista and Burin peninsulas with St. John's.

Contact between isolated communities and these "mainland access" communities increased as now in addition to trips for medical services, travel to and from jobs outside the region became much more frequent.

While World War II had been instrumental in beginning to change profoundly the traditional economy and society of Inner Placentia Bay, Confederation of Newfoundland with Canada in 1949 and the increased pace of modernization in the province as a whole, speeded up this process.

Following the war, Inner Placentia Bay's fishery was soon facing a whole range of changes. Wartime prosperity was soon followed by post war marketing difficulties and falling prices particularly for salted dried codfish. As a result the region's bank fishery had ceased to exist by 1950 and undoubtedly most of the region's smaller schooner fishery was gone as well. New modern trawlers and draggers were built to supply the growing fresh fish plants with raw material.

By the 1950's the traditional method of salting and drying codfish had largely disappeared as road access to mainland communities brought fresh fish buyers who purchased fish and trucked it away for processing. The use of mechanical dryers to cure salted codfish created a market for "salt bulk" fish and by the 1950's many communities, particularly in the outer section of Inner Placentia Bay sold their fish in this manner. Both processing techniques however diminished employment within the region.

Inner Placentia Bay was unable to make the transition from a traditional salted cod operation to the more modern fresh fish filleting one. A study carried out at Merasheen in 1953, but undoubtedly applicable to the region as a whole, found there were not enough locational advantages to make it feasible. Burin, with its fish plant built during World War II, remained the community that had benefitted most by the modernization of the fishing industry in Placentia Bay, and increased investment in new and larger trawlers occurred

there during the 1960's.

As the bank fishery and the schooner fishery declined Inner Placentia Bay became an inshore fishing region. Despite government assistance in the form of rebates on salt, bounties on fishing gear, and the establishment of bait depots it was still difficult for most inshore fishermen to make a living from the fishery. Depressed markets for herring, as well as years in which herring were very scarce in the region, did not help much. While prices for lobster were better, yields fluctuated greatly from year to year despite marked increases in the number of lobster traps. Given these conditions it can be seen why employment in the fishery declined.

Meanwhile as the modernization process within the province progressed employment opportunities in other areas became available. Communities reacted differently to this changing situation. Mainland communities for the most part soon had a high percentage of their work force in the forestry, construction or transportation sectors. On the central islands, many found employment on coastal boats and freighters.

The decline of the traditional fishery, changing work patterns and increased income from wages and transfer payments led to the virtual abandonment of subsistence agriculture.

As the level of services improved within the province and the transportation and communication networks improved it was the "mainland access" communities that benefitted most.

For example, by 1966 these communities had received electricity, telephone service and with the completion of the Trans-Canada Highway in 1965 good access to the rest of the province. These communities had been strengthened by the modernization process, they experienced population growth and their economy was becoming more diversified.

For the communities on the central islands and the western side of the bay the modernization and structural changes in the fishery put them at a disadvantage. They rapidly lost their locational advantage as the fishing industry became concentrated in the larger ports and the emphasis turned to the fresh fish sector rather than the traditional dried salted sector. Declining yields and falling prices provided little incentive to remain with the fishery but as employment opportunities in other areas became available transportation and communication facilities took on increased importance. In addition to experiencing diminished economic viability these communities were beginning to lose their social viability as well. A prolonged period of outmigration had disrupted the age structures and the population was declining. This meant that it was difficult to maintain schools at even previous levels and it became harder to attract teachers to such communities.

Faced with these as well as other problems, and the presence of more favourably located settlements nearby, many small isolated settlements had been resettled before

1966, and it was an option many other communities were seriously contemplating as well as by that date.

Inner Placentia Bay's response to the modernization process in Newfoundland was unique. The process divided the region and hastened the decline of the traditional inshore fishing communities, while strengthening the mainland access communities. As the fishery modernized and centralized, traditional fishing communities lost their locational advantage. However, mainland communities, with their better transportation and communication linkages, were in a much better position to adapt, adjust and take advantage of the employment opportunities and diversification that the modernization process had created.

The impact of modernization on Inner Placentia Bay shows many similarities to that of other regions within the northern North Atlantic context. Settlement retreat, outmigration, and modernization of the fishery are common themes. The Inner Placentia Bay regional experience, however, occurred at a relatively later date and differed most markedly in that, while the modernization process did not benefit the region's primary resource based economy, it permitted both a greater interaction and access to the diversification that was occurring within Newfoundland as a whole. Thus the Inner Placentia Bay experience tends to support Black's hypothesis that each region has its own unique complex of variables and that no two regions modernize in quite the same way (Black, 1966:95)

Bibliography

Primary Sources

- Canada Department of Fisheries Newfoundland Region.
Newfoundland Fisheries in 1966. St. John's: Department
of Fisheries of Canada, Newfoundland Area 1959 - 1978.
- Canadian Climate Normals 1951 - 1980. Environment Canada
9 Vols. Ottawa, 1982.
- Canadian Hydrographic Service. Sailing Directions Newfoundland:
5th ed. Ottawa: Department of Fisheries and Environment,
1977.
- Census of Canada - 1931, 1951, 1961. Dominion Bureau of
Statistics, Ottawa.
- Fisheries Statistics: Newfoundland - Statistics des peches:
Terre Neuve - 1961 - 1976 Ottawa: Statistics Canada,
Manufacturing and Primary Industries Division 1962 -
1977.
- Great Britain Royal Commission 1933 Newfoundland Royal
Commission 1933 Report. London: H.M. Stationary Office,
1933.
- Merasheen: Eastern Newfoundland Settlement Survey 1953. Ottawa,
Department of Mines and Technical Surveys, Geographical
Branch, 1953.
- Newfoundland - Commission of Government - GN 38 Series -
Department of Natural Resources Files S2 - 1 - 4
S2 - 1 - 5
S2 - 2 - 5
(Provincial Archives of Newfoundland and Labrador)
P.A.N.L.
- Newfoundland Customs Returns. 1922 - 1949.
- Newfoundland, Department of Colonial Secretary. Census of
Newfoundland, 1836, 1845.
- Newfoundland, Department of Colonial Secretary. Census of
Newfoundland and Labrador, 1857, 1874, 1884, 1891,
1901, 1911, 1921, 1935, 1945.
- Newfoundland Department of Health - Annual Report 1966.

Newfoundland Department of Health - Annual Report of the Registrar General of Births, Marriages and Deaths, 1911 - 1966.

Newfoundland Department of Public Welfare, Annual Report of the Department of Public Welfare, 1949 - 1966.

Annual Report Newfoundland, of the Department of Marine and Fisheries, St. John's, 1921 - 1933.

The Newfoundland Fisherman, Newfoundland Federation of Fishermen, St. John's Vol. 2 - 6, No. 1 1953 - 1957; Vol. 2, No. 2 1962.

Newfoundland - Governor's Office. Miscellaneous Papers and Despatches GN1/3A Series 1930, 1935 - 1939 (P.A.N.L.)

Newfoundland, House of Assembly Journals (J.H.A.) 1845 - 1931:

Newfoundland and Labrador Department of Finance Economics and Statistics Division. Historical Statistics of Newfoundland and Labrador Vol. 1 No. 1 St. John's: Creative Printers and Publishers Ltd., 1970.

Newfoundland National Convention 1946 - 1948 Reports of the Committees 6 vols. Ottawa: 1948.

Newfoundland Royal Commission on Agriculture. Report of the Royal Commission on Agriculture 1955. St. John's: Queen's Printer, 1956.

Newfoundland Royal Commission on Forestry, Report St. John's: D.R. Thistle, Queen's Printer, 1955.

Official List of Electors, Placentia East 1955, 1966; Placentia West, 1955, 1966; St. John's: Queen's Printer 1955, 1966.

Population Characteristics Unincorporated Communities Newfoundland and Labrador. Ottawa: Department of Regional and Economic Expansion, 1971.

Proceedings of the House of Assembly during the Twenty-Ninth Session House of Assembly Newfoundland 1949.

Proceedings of the House of Assembly Third Session of the Thirtieth General Assembly of Newfoundland, 1953.

Proceedings of the House of Assembly Fourth Session of the Thirtieth General Assembly of Newfoundland, 1954.

Proceedings of the House of Assembly Seventh Session of the Thirtieth General Assembly of Newfoundland, 1956.

Proceedings of the House of Assembly First Session of the Thirty-First General Assembly of Newfoundland, 1957.

Report of the Newfoundland Fisheries Board and General Review of the Fisheries for the years 1937 - 1948 with Statistical Surveys for the Period 1930 - 1948. St. John's: Department of Natural Resources, 1940 - 1949.

Report of the Placentia Bay Estimates Committee. St. John's: Robinson & Co. Ltd., 1939.

Report of the South Coast Commission 1957. St. John's, 1957.

Scottish Sea Fisheries Statistical Tables; Department of Agriculture and Fisheries Scotland, Edinburgh, H.M. Stationary Office 1965.

U.S. Fleet Weather Facility, Argentia, Newfoundland. Local Area Forecasters Handbook September, 1964.

Newspapers

The Daily News, St. John's 1932, 1937, 1939, 1950 - 1956, 1964 - 1966.

The Evening Telegram; St. John's, 1885, 1888, 1890, 1891, 1892, 1910, 1937, 1940.

The Observers Weekly, St. John's 1935 - 1962.

Letters, Business Records, Etc.

Financial Statement, H.C. Brown & Sons Ltd. Tack's Beach, Placentia Bay 1957.

Sir Richard Squires Papers, GN8/2 Series (P.A.N.L.).

Statistics, Maritime Packers Ltd. Harbour Buffett, Placentia Bay 1950 - 1953.

- Aalen, F.H.A.; Brody, Hugh. Gola - The Life and Lost Days of an Island Community. Cork: Mercier Press, 1969.
- Adamson, Colonel J.D.; Tolliffe, N.; Kruse, H.D.; Lowry, O.H.; Moore, P.E.; Platt, B.S.; Sebrell, W.H.; Tice, Anti-air commander J.W.; Tisdall, Group-Captain F.F., Wilder, R.M. "Medical Survey of Nutrition in Newfoundland". Canadian Medical Association Journal Vol. 52 No. 3 (March 1945): 227-258.
- Aldskogrus, Maj. "Population Change and Urban Growth". Geografiska Annales Vol. 52B No. 2 (1970): 131-140.
- Alexander, David. The Decay of Trade. Toronto: University of Toronto Press, 1977.
- Bailey, Patrick: Orkney. Great Britain: David and Charles (Publishers) Ltd., 1971).
- Black, C.E. The Dynamics of Modernization, New York: Harper & Row; 1966.
- Black, W.A. "The Labrador Floater Codfishery", Annals of Association of American Geographers, Vol. 50, 1960, 267-295.
- Brody, Hugh. Inishkillane, Change and Decline in the West of Ireland. London: Allen Lane The Penguin Press, 1973.
- Brookfield, Harold. Colonialism, Development and Independence. Cambridge: Cambridge University Press, 1972.
- Brookfield, Harold. Interdependent Development. London: Methuen and Co. Ltd., 1975.
- Brookfield, Harold. Melanesia. London: Methuen and Co. Ltd., 1971.
- Brookfield, Harold, ed. The Pacific in Transition. New York: St. Martin's Press 1973.
- Brown, Howard C. "Inner Placentia Bay The Evolution of Settlement and Trade." Honors Dissertation, Memorial University of Newfoundland, 1974.

- Brox, Ottar. Newfoundland Fishermen in the Age of Industry, A Sociology of Economic Dualism. St. John's: Institute of Social and Economic Research. Memorial University of Newfoundland, 1972.
- Butler, Victor. Buffett Before Nightfall. St. John's: Jespersion Press, 1982.
- Butler, Victor. Suposin' I Dies in O' Dory. St. John's: Jespersion Printing Ltd., 1977.
- Butler, Victor. The Little Nord Easter: Reminiscences of a Placentia Bayman. St. John's: Breakwater Books Ltd., 1980.
- Butler, Victor. The Little Nord Easter: Reminiscences of a Placentia Bayman. St. John's. Memorial University of Newfoundland Folklore and Language Archive, 1975.
- Chadwick, St. John. Newfoundland Island into Province. London: Cambridge University Press 1967.
- Coull, James. Crafter-Fishermen in Norway and Scotland. O'Dell Memorial Monograph No. 2 (1971) Dept. of Geography University of Aberdeen.
- Coull, James, R. "Modern Trends in Scottish Fisheries". Scottish Geographical Magazine 84-85 (April 1968): 15 - 28.
- Darby, M.C. "On the Relations of Geography and History" The Institute of British Geographers Transactions and Papers No. 19 1953, 1-11.
- Darling, F. Fraser. West Highland Survey. London: Oxford University Press, 1955.
- Eisenstadt, Shmuel Noah. Modernization: Protest and Change. New Jersey: Prentice-Hall Inc. 1966.
- Enequist, Gerd. "Advance and Retreat of Rural Settlement in Northwestern Sweden." Geografiska Annaler Vol. XLII. No. 4 (1960): 211-220.
- Erikson, Gosta, A. "Advance and Retreat of Charcoal Iron Industry and Rural Settlement in Bergslagens." Geografiska Annaler Vol. XLII No. 4 (1960): 267-284.
- Foster, George M. Traditional Cultures: And The Impact of Technological Change. New York: Harper & Row, 1962.

- Goodlad, C.A. Shetland Fishing Saga Shetland: The Shetland Times Ltd., 1971.
- Govin, J.H. Papers Relating to a Long Range Reconstruction Policy. 2 Vols. St. John's Long Brothers (Vol. 1), Robinson and Co. (Vol. 2), 1938.
- Gould, Peter R. "Tanzania 1920 - 1963: The Spatial Impress of the Modernization Process". World Politics Vol. 22 No. 2 (January 1970): 149 - 170.
- Graham, Frank W. We Love Thee Newfoundland. Vahalla Press, 1979.
- Gwyn, Richard. Smallwood the Unlikely Revolutionary. Toronto: McClelland and Stewart Ltd., 1972.
- Handcock, W. Gordon. "The Origin and Development of Commission of Government Land Settlements in Newfoundland 1934-1969." M.A. Thesis, Memorial University of Newfoundland. 1970.
- Hansen, J. Chr. "Mountain Communities in Norway". Norsk Geografisk Tidsskrift 30-31 (Bind 30, Hefte 4, 1976) 211 - 220.
- Hansen, J. Chr. "Regional Disparities in Norway with Reference to Marginality." Institute of British Geographers Annual Conference. Aberdeen. Jan. 4-8, 1972.
- Head, C. Grant. Eighteenth Century Newfoundland. Toronto: McClelland and Stewart Ltd., 1976.
- Head, C. Grant. "Settlement Migration in Central Bonavista Bay, Newfoundland". R. Louis Gentilcore, Canada's Changing Geography, (Scarborough: Prentice-Hall of Canada Ltd., 1967). 92 - 109.
- Henderson, E.P. Surficial Geology of Avalon Peninsula, Newfoundland. Ottawa: Department of Energy, Mines and Resources, 1972.
- Horwood, Andrew. Captain Harry Thomasen, Forty Years At Sea. Antrim, North Ireland: W & G Baird, 1973.
- Innis, Harold. A. The Cod Fisheries Toronto: University of Toronto Press 1954.
- Iverson, Noel; Matthews, D. Ralph. Communities in Decline: An Examination of Household Resettlement in Newfoundland. St. John's: Institute of Social and Economic Research, Memorial University of Newfoundland, 1968.

- Jensen, Amy Elizabeth. Iceland Old-New Republic. New York: Exposition Press, 1954.
- Johnson, Robert. "Outporters Go 'Inport'." Atlantic Advocate Vol. 61, No. 1, (Sept. 1970): 25 - 31.
- Jones, A.H. "The Spatial Dimension of Modernization in Uganda: Basic Aspects and Implications." East African Geographical Review No. 9 (April 1971).
- Kristinsson, Valdimar. "Population Distribution and Standard of Living in Iceland." Geoforum 13 (1973): 53 - 62.
- Lawrence, D.J.; Foster, L.A.; and Loucks, R.H. Statistics of Currents for Navigation and Dispersion in Canso Strait and Come By Chance Bay. Nova Scotia: Bedford Institute of Oceanography, 1973.
- Leinback, Thomas R. "Transportation Development and Modernization in Malaya." Geografiska Annaler Vol. 57B No. 1 (1975): 63 - 68.
- Lerner, Daniel, Schramm, Wilbur. eds. Communication and Change in the Developing Countries. Honolulu: East-West Center Press, 1967.
- Lundqvist, Jan. "Structure and Process of Modernization. Some Remarks on Recurrent Features in Geographical Studies of Modernization." Norsk Geografiska Tidsskrift. 28 (Bind 28, Hefte 4 1974): 103 - 113.
- MacDermott, Hugh. MacDermott of Fortune Bay. London: Hodder and Staughton Ltd., 1938.
- McDevitt, Ellen; Dove, Margaret A.; Dove, Robert F.; Wright, Irving, S." Vitamin Status of the Population of the West Coast of Newfoundland with Emphasis on Vitamin C." Annals of Internal Medicine Vol. 20 No. 1 (January 1944): 1 - 11.
- Macnab, P.A. The Isle of Mull. Great Britain: David and Charles (Publishers) Ltd., 1970.
- Mannion, John J. The Peopling of Newfoundland. Toronto: University of Toronto Press, 1977.
- Mead, W.R. Saltvik Studies from an Aland Parish. England: Geographical Field Group, 1964.
- Messenger, John C. Inis Peag, Isle of Ireland. New York: Holt, Rinehart and Winston, 1969.

- Miner, Horace M. St. Denis: A French Canadian Parish. Chicago: The University of Chicago Press, 1939.
- Moore, Wilbert, E.; Smelser, Neil, J. Ed. The Impact of Industry. New Jersey: Prentice-Hall Inc., 1965.
- Neary, Peter. The Political Economy of Newfoundland, 1929-1972. Toronto: Copp Clark Publishing, 1973.
- Newfoundland Quarterly. (Spring) St. John's: John J. Evans Printers, 1934.
- Newfoundland Quarterly (Summer). St. John's: John J. Evans Printers 1943.
- Nicholson, James R. Shetland. Great Britain: David and Charles (Publishers) Ltd., 1972.
- Noel, Sidney J.R. Politics in Newfoundland. Toronto: University of Toronto Press, 1971.
- Norling, Gunnar. "Abandonment of Rural Settlement in Vasterbotten Lappmark, North Sweden, 1930-1960." Geografiska Annales Vol. XLII No. 4 (1960): 232-243.
- Ohrling, Staffan. "Development and Modernization". CHOROS NR 40 1972. Kulturgeografiska Institution, Goteborgs Universitet.
- O'Neill, Paul The Story of St. John's, Newfoundland. 2 Vols. Ontario: Press Porcepic, 1976.
- Paget, Ernest. "Comments on the Adjustment of Settlements in Marginal Areas." Geografiska Annaler Vol. XLII No. 4 (1960): 324-326.
- Perlin, A.B. The Story of Newfoundland St. John's: 1959.
- Peters, Robert, D. "The Social and Economic Effects of the Transition from A System of Woods Camps to a System of Commuting in the Newfoundland Pulp Wood Industry." M.A. Thesis, Memorial University of Newfoundland, 1965.
- Pollett, Frederick. Peat Resources of Newfoundland. St. John's: Department of Mines, Agriculture and Resources, Mines Branch, 1968.
- Prowse, D.W. A History of Newfoundland. Ontario: Mika Studio, 1972.

- Riddell, J. Barry. The Spatial Dynamics of Modernization in Sierra Leone. Evanston: Northwestern University Press, 1970.
- Rowe, Frederick, W. A History of Newfoundland and Labrador. Toronto: McGraw-Hill Ryerson Ltd. 1980.
- Rundblad, Bengt. G. "Problems of a Depopulated Rural Community." In Migration in Sweden, p.p. 184-191. Edited by David Hannerberg, Torsten Hagerstrand, Bruno Odeving-Lund: G.W.K. Gleerup Publishers, 1957.
- Sanger, Chesley. "The Evolution of the Sealing and the Spread of Permanent Settlement in Northeastern Newfoundland." In The Peopling of Newfoundland. Edited by John Mannion. Toronto: University of Toronto Press, 1977.
- Smallwood, Joseph R. Ed. Handbook Gazettes and Almacac. St. John's: Long Bros. 1940.
- Smallwood, Joseph R. The New Newfoundland. New York: MacMillan Company, 1931.
- Soja, Edward W. The Geography of Modernization in Kenya. Syracuse: Syracuse University Press, 1968.
- Staveley, Michael. "Population Dynamics in Newfoundland: The Regional Patterns", in The Peopling of Newfoundland. Edited by John Manion. Toronto: University of Toronto Press, 1977.
- Steel, Tom. The Life and Death of St. Kilda. Edinburgh: Printed by R & R Clark Ltd. for the National Trust of Scotland, 1965.
- Stehman, Charles F. "Pleistocene and Recent Sediments of Northern Placentia Bay, Newfoundland." Canadian Journal of Earth Sciences. Vol. 13 No. 10 (October 1976): 1386-1392.
- Stone, Kirk H. "Isolations and Retreat of Settlement in Iceland." Scottish Geographical Magazine 86-87 (April 1971): 3-13.
- Sund, Tore. "Norway". In A Geography of Norden, pp. 235-292. Edited by Axel Somme. London: Heineman, 1961.
- Symes, D.G. Vagsøy, A Western Norwegian Island. Edited by P.T. Wheeler England: Geographical Field Group, 1968.

- Templeman, Wilfred. Marine Resources of Newfoundland. Ottawa: Fisheries Research Board of Canada, 1966.
- Thompson, Francis. Harris and Lewis Outer Hebrides. Great Britain: David and Charles (Holdings) Ltd., 1968.
- Thorarinson, Sigurdur. "Iceland". In A Geography of Norden, pp. 203-233. Edited by Axel Somme. London: Heineman, 1961.
- Tremblay, Marc-Adelard; Anderson, Walton, J., ed. Rural Canada in Transition. Ottawa: Agricultural Research Council of Canada, 1966.
- Trites, R.W. "Capacity of an Estuary to Accept Pollutants." in C.I.C. Pollution Conference Halifax: St. Mary's University, 1969.
- Turnock, David. Scotland Highlands and Islands. London: Oxford University Press, 1974.
- Wells, Robert. Report on Resettlement in Newfoundland, St. John's, 1960.
- West, John. Faroe, The Emergence of a Nation. London: C. Hurst and Company, 1972.
- Willey, Joan, D. "Geochemistry and Environmental Implications of the Surficial Sediments in Northern Peninsula Bay, Newfoundland." Canadian Journal of Earth Sciences. Vol. 13 No. 10 (October 1976): 1393-1440.
- Williams, Alan F. "Roads to Resources: Node-Connecting Sequences in Newfoundland". 1972.
- Zelinsky, Wilbur. "The Hypothesis of the Mobility Transition." Geographical Review. Vol. 61 No. 2 (April 1971): 219-249.



