RESOURCE DEVELOPMENT OF NORTH LINCOLN COUNTY, OREGON

by

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Sincere appreciation is extended to the many people of Lincoln County who gave freely of their time and knowledge. Without them, the study would have been a far greater task.

Deepest gratitude is due my wife, Priscilla, for abundant encouragement and patience.
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RESOURCE DEVELOPMENT OF NORTH LINCOLN COUNTY, OREGON

CHAPTER ONE

INTRODUCTION

North Lincoln County is a land of mountain slopes—a portion of the Oregon Coast Range. Elevations are not spectacular nor is relief great, but for the most part ruggedness characterizes the landforms. The boundary of land and sea forms a series of varied seascapes—lengthy expanses of broad sandy beaches in the north and miles of surf-lashed, rocky shoreline to the south. All are confined between the imposing and precipitous headlands of Cape Foulweather and Cascade Head. The mountain background is covered by a dense sylvan mantle. The forest continuity is broken by man-made gaps; logging scars and clearings for urban and agricultural developments. The maritime climate is equable. The mild winters are wet and cloudy but the cool summers are usually sunny and relatively dry.

The cultural core of North Lincoln County is concentrated in a unique "shoestring" alignment of twelve communities on U. S. Highway 101. Population is not large—5,503 in 1950, but this is one of the important coastal settlement areas of the state. In this near-contiguous grouping of urban nodes, the entrepreneur has capitalized
upon scenic and recreation attractions to develop one of
the significant resort areas of the Oregon Coast.

The concentration of study on the northern portion
of Lincoln County is based chiefly on the differences of
economic stress that exist between the north and the
south. There is a strong community of interest among the
residents of the northern portion which tends to set it
apart from the remainder of the county. Moreover, the
inhabitants to the south have greater ties with the
Newport-Toledo area. Differences in the physical base are
not practical as media for developing a boundary between
the two sections since the physical environment is rela-
tively homogeneous. The southern limit of the study,
therefore, conforms to voting precincts which belong to
North Lincoln County. Political boundaries of the county
delineate the north and east with the ocean on the west.

The objectives of this study are (1) to analyze the
resource base and its economic relationships, (2) to
present a survey of each of the principal economic seg-
ments, and (3) to discuss regional problems and possible
solutions. The main focus of interest lies with the in-
habitants and their means of livelihood. The thesis,
therefore, will be concerned primarily with the factors
that influence the opportunity of the people who live and
work in North Lincoln County.
The approach differs somewhat from the traditional systematic treatment of a study area. The framework of the thesis contains the following steps. Following the introduction, Chapter Two considers the physical environment and the relationship existing between it and the economy. Farming, fishing, and forestry are covered in Chapter Three. Chapter Four deals with the leading industry, tourism. Chapter Five contains a summary of the study as well as a discussion of problems and proposed solutions.

The research was begun in the spring of 1958 and completed early in 1960. A major portion of the material was obtained through numerous interviews and hours of personal observation and field research in the study area. Much information was made available by public and private agencies in North Lincoln County, at the Lincoln County Seat in Newport, at the state capitol in Salem, and in the city of Corvallis. The Oregon State College library also yielded useful information as did individuals and agencies on the college campus. The gathering of statistical information was particularly difficult as the basis of most statistical publications is the county unit.
CHAPTER TWO

NATURAL RESOURCES AND ECONOMIC RELATIONSHIPS

The pattern of settlement and economic activity in North Lincoln County shows a close correlation with the physical environment. Timber production, the most extensive land use, is favored by the mild, moist climate and rugged terrain. Agriculture, on the other hand, is limited by a paucity of cultivable land. The recreation wealth of the coastal strip favors tourism which, owing to environmental advantages and the limited nature of other activities, is a leading element in the economy.

LOCATION AND ACCESSIBILITY

North Lincoln County, an area of approximately 230 square miles, is situated on the north-central coast of Oregon. It is bounded on the north by Tillamook County, on the east by Polk County, and on the west lies the Pacific Ocean. The boundaries of Depoe Bay and Kern election precincts mark the limit of the study area on the south (see Fig. 1).

North Lincoln County is served by excellent transportation facilities. The coastal settlements are connected by U. S. Highway 101 which extends through the area essentially following the shoreline. Two major
Figure 1  SITUATION OF NORTH LINCOLN COUNTY
thoroughfares traverse the Coast Range (one of which is several miles to the south of the study area) providing access to points in the Willamette Valley. State Highway 18 meets U. S. 101 near Otis serving traffic from the northern and central Willamette Valley. Portland, Oregon's largest population center, is 84 miles from Otis and Salem is 55 miles distant. U. S. Highway 20 joins the Coast Highway (U. S. 101) at Newport providing access from the middle Willamette Valley. Corvallis is 71 miles from Depoe Bay by U. S. routes 20 and 101. U. S. 20 and State Highway 18 are low-level routes with summits of 800 and 793 feet respectively. They are rarely closed by adverse winter weather (see Fig. 1).

The sparsely populated interior of North Lincoln County is served by only a few improved roads. State Highway 229, a secondary road, connects Kernville with Siletz and Toledo along the course of the Siletz River. Graveled county roads lead to farming areas in the Schooner and Drift Creek drainages. Several logging roads penetrate the mountainous interior.

Location offers significant advantages to the tourist industry. North Lincoln County enjoys a central position with respect to the Willamette Valley, the greatest concentration of population in Oregon. The region lies
closer to greater numbers of the inhabitants of the valley than any other area on the Oregon Coast—no point within the valley is more than three hours distant by automobile. There is, moreover, the favorable situation on U. S. Highway 101, a very important tourist route which carries a large volume of traffic through the area. Traffic on Oregon Highway 18, leading directly to North Lincoln County, is exceeded only by that on U. S. 26 among the routes leading to the coast (Oregon Rural Traffic Flow Map, 1958). Location and accessibility have made this one of the most popular coastal recreation areas.

Local forest and agricultural industries are not so favorably located with respect to their principal processing and marketing centers. Added costs of transportation on forest and farm products place North Lincoln County producers at a disadvantage. Although local farms are capable of producing a wide variety of crops, competition with Willamette Valley growers is almost prohibitive.

LANDFORMS

North Lincoln County lies within the Coast Range Province of Oregon. The landforms have been dissected into a maze of rounded mountain peaks and ridges with a maximum of slope and a minimum of level land. This irregular mountain mass is penetrated by numerous winding,
steepwalled valleys.

Elevations average over 2,000 feet in the northwest decreasing gradually toward the sea. Several peaks, usually of more durable igneous composition, rise above the general level of the landscape. Saddleback Mountain, the loftiest promontory, reaches a height of 3,359 feet. Others include Diamond Peak (2,453 feet) and Euchre Mountain (2,446 feet). Local relief along the courses of deeply-incised streams of the interior exceeds 1,000 feet in places (see Fig. 2).

Level land is confined to the flat floors of the lower reaches of larger stream valleys and to a narrow strip of rolling lowlands and marine terraces along the coast which scarcely exceeds a mile in width. The coastal strip is broken by the headlands of Cape Foulweather and Cascade Head, and several other ridges which approach the sea. Cascade Head, rising abruptly from the sea to a height of 529 feet, is a prime example of several spur ridges of the Coast Range which culminate in such spectacular headlands.

The shoreline between Cape Foulweather and Boiler Bay is rocky; composed mostly of lava. North from Fogarty Creek to the mouth of the Salmon River is an almost continuous expanse of sand beaches. Bold cliffs of sandstone and shale face the beaches in many places.
TOPOGRAPHY of NORTH LINCOLN COUNTY

SCALE, 1:12,500
CONTOUR INTERVAL, 50ft. except north of Devil's Lake, 80ft.
Landforms, perhaps more than any other physical factor, are largely responsible for the population distribution and land use patterns in North Lincoln County. Ruggedness restricts the spread of settlement and precludes cultivation of most of the region. The topography, and the increased precipitation induced by it, however, have contributed to the creation of the lush forest that dominates the landscape.

The seacoast is the most noteworthy recreation resource. Many visitors come primarily to enjoy the beaches and their associated activities, or merely to observe the rugged beauty of the coast. Virtually all the beaches are readily accessible to the public since they are owned by the state. There are numerous viewpoints along the Coast Highway (see Fig. 3). Swimming and sunbathing are very popular (see Fig. 4). Beachcombing for agates, sea shells, driftwood, and the prized Japanese fishnet float is also a favorite pastime. The coastal strip is the scene of the bulk of recreational service developments and although much of the coastal topography is relatively rough, terraces provide excellent building sites.

Topography is also an important factor determining interior land use. Farming is confined to the flat bottomlands of the major streams and the rolling lowlands around Devil's Lake. Most of the remaining area is given
Figure 3. This awe-inspiring view may be seen from Otter Crest Wayside atop Cape Foulweather. (Oregon State Highway Department).
Figure 4. Vacationists relaxing at an Oceanlake resort. The fine beaches are seldom crowded. Cascade Head may be seen in the background. (Oregon State Highway Department).
over to timber production as soil and slope conditions favor this type of land use over others.

HYDROGRAPHY

The drainage pattern consists of four major and several minor watersheds. The Siletz River drains a large area in the south and west of the region. The Salmon River watershed occupies a considerable area in the north while the central portion is drained by Drift and Schooner Creeks. Each of the major streams has numerous branching tributaries forming intricate, dendritic patterns. Several small creeks drain portions of the coastal slopes (see Fig. 5).

Siletz Bay, enclosed by a low sand spit about two and one-half miles long, receives the waters of the Siletz River, Drift Creek, and Schooner Creek. The bay is drained through a shallow channel at its northern end near Taft. Extensive mud flats are exposed in the bay at low tide.

Devil's Lake is a fresh water body occupying a narrow, branching depression a short distance inland from the sea. The lake is fed by several small streams and drained by the D River. The D is reputed to be the "shortest river in the world" as its course is just 440 feet from the lake to the ocean at low tide.

Surface waters, in addition to providing water for domestic and industrial use, afford a variety of
recreational attractions. Siletz Bay and the major streams are the scene of intense fishing during the spring and fall salmon runs. Devil's Lake is an excellent spot for aquatic sports; pleasure boating, water skiing, and swimming as well as fishing.

CLIMATE

The maritime climate is characterized by equable temperatures and abundant precipitation. The Pacific Ocean, with the warm North Pacific Drift offshore, has a moderating effect on the weather. Cyclonic activity in the moisture-laden westerly winds and the orographic effect of the Coast Range produce heavy rainfall. The mild winter season is marked by prolonged cloudiness and numerous days of drenching rain while the cool summers are comparatively dry and sunny. Fog is common at higher elevations near the coast and in the mountain valleys during summer.

Climatic records, compiled at the Cascade Head Experimental Forest north of Otis, are available for three observation stations. The first is at Three Rocks located on the beach and the second is the Forest Headquarters 4.5 miles inland at an elevation of 160 feet. Published records for these stations cover the period from 1936 to 1952. Records for a third station at Neskowin Creek Camp
were kept two years, 1936 and 1937 (13, p. 2). This station is located five miles inland at 425 feet elevation.

Temperature

Mildness is the keynote to temperature. Monthly averages at Three Rocks range from 40° to 61° and the Forest Headquarters from 40° to 60°. Temperature extremes are seldom severe. The highest recorded temperatures are: Three Rocks, 95°; Headquarters, 97°; and Neskowin Creek Camp, 98°. The lowest temperatures on record are 4° at Headquarters and 11° at Three Rocks. Average daily maximums and minimums exemplify the mildness (see Fig. 6).

The annual and diurnal temperature range is relatively small due to the moderating effect of the ocean. The marine influence is most pronounced along the immediate coastline as may be seen by comparing temperature ranges at Three Rocks and Headquarters. The mean daily range at Headquarters is 17.7° while at Three Rocks it is 13.4° (see Fig. 6). The frost-free season, moreover, is greater on the coast than inland. The average period between late spring and early fall frost at Three Rocks is 271 days; at Headquarters 190 days. The frost-free season is erratic and varies from year to year. Three Rocks experienced 365 days without frost in 1941.
CLIMATIC SYNOPSIS, NORTH LINCOLN COUNTY

<table>
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<tr>
<th>STATION</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>OCT</th>
<th>NOV</th>
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<tr>
<td>T</td>
<td>40.1</td>
<td>44.1</td>
<td>46.5</td>
<td>50.1</td>
<td>55.4</td>
<td>58.0</td>
<td>60.9</td>
<td>60.1</td>
<td>58.3</td>
<td>53.5</td>
<td>47.9</td>
<td>45.3</td>
<td>51.6</td>
</tr>
<tr>
<td>H</td>
<td>40.1</td>
<td>43.2</td>
<td>45.4</td>
<td>52.4</td>
<td>52.8</td>
<td>56.6</td>
<td>59.7</td>
<td>59.9</td>
<td>58.1</td>
<td>53.2</td>
<td>45.9</td>
<td>43.2</td>
<td>50.7</td>
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<tr>
<td>N</td>
<td>39.6</td>
<td>41.2</td>
<td>47.4</td>
<td>50.0</td>
<td>54.3</td>
<td>58.6</td>
<td>61.0</td>
<td>63.4</td>
<td>60.0</td>
<td>56.8</td>
<td>49.7</td>
<td>45.8</td>
<td>52.2</td>
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Average daily maximum temperature, °F.

| T       | 47.4| 50.4| 52.7| 57.5| 62.7| 66.0| 69.3| 68.0| 66.1| 59.9| 53.7| 49.8| 58.8           |
| H       | 46.8| 50.3| 53.9| 58.1| 63.0| 66.2| 70.5| 70.5| 68.9| 62.2| 53.7| 49.2| 59.6           |
| N       | 45.8| 48.2| 56.8| 58.2| 65.0| 69.6| 73.0| 75.6| 67.8| 65.4| 54.6| 49.9| 60.8           |

Average daily minimum temperature, °F.

| T       | 37.4| 39.3| 40.0| 42.9| 46.1| 50.5| 52.4| 52.2| 50.5| 47.9| 42.8| 40.9| 45.4           |
| H       | 33.5| 36.1| 36.9| 39.0| 42.7| 46.9| 49.3| 47.4| 44.1| 38.4| 37.1| 41.9|               |
| N       | 33.4| 34.2| 38.0| 41.9| 43.6| 47.6| 49.0| 51.0| 52.2| 48.0| 44.9| 41.7| 43.8           |

Highest recorded temperature, °F.

| T       | 68  | 70  | 75  | 89  | 90  | 95  | 95  | 94  | 93  | 90  | 72  | 64  |               |
| H       | 64  | 68  | 76  | 92  | 91  | 93  | 95  | 97  | 90  | 86  | 67  | 66  |               |
| N       | 57  | 62  | 71  | 84  | 79  | 86  | 91  | 98  | 88  | 82  | 66  | 58  |               |

Lowest recorded temperature, °F.

| T       | 11  | 15  | 28  | 30  | 33  | 39  | 41  | 41  | 38  | 31  | 28  | 25  |               |
| H       | 4   | 11  | 24  | 28  | 30  | 35  | 36  | 33  | 34  | 23  | 21  | 22  |               |
| N       | 18  | 22  | 22  | 30  | 31  | 35  | 40  | 41  | 38  | 38  | 28  | 28  |               |

Average monthly precipitation, inches.

| T       | 8.91 | 9.58 | 7.75 | 4.55 | 3.15 | 2.95 | 1.12 | 1.26 | 2.68 | 6.80 | 9.74 | 11.12 | 69.54 |
| H       | 11.96| 13.07| 9.86 | 6.00 | 3.95 | 3.14 | 1.36 | 1.26 | 3.62 | 7.82 | 11.75 | 14.78 | 89.05 |
| N       | 15.61| 13.26| 10.36| 7.99 | 6.63 | 5.82 | 1.00 | 2.08 | 2.74 | 4.65 | 15.90 | 20.74 | 106.78 |

Average number of days with .01 or more inches precipitation.

| T       | 21  | 21  | 21  | 17  | 13  | 12  | 7   | 7   | 10  | 17  | 20  | 22  | 184             |
| H       | 20  | 20  | 21  | 16  | 13  | 12  | 6   | 6   | 10  | 16  | 18  | 22  | 180             |
| N       | 21  | 21  | 18  | 20  | 16  | 14  | 6   | 6   | 10  | 15  | 22  | 168            |

Average number of hours of sunshine.

| T       | 119 | 111 | 189 | 221 | 285 | 275 | 342 | 308 | 247 | 184 | 140 | 99  | 2,520          |
| H       | 103 | 91  | 167 | 176 | 235 | 262 | 334 | 277 | 227 | 165 | 127 | 67  | 2,231          |
| N       | 72  | 75  | 148 | 166 | 258 | 224 | 376 | 368 | 279 | 187 | 102 | 53  | 2,308          |

(I) T = Three Rocks, H = Forest Headquarters, N = Nesikowin Creek Camp


TRS
Precipitation

Topographic features are largely responsible for the heavy precipitation and its areal distribution. The average annual rainfall of 69.54 inches at Three Rocks increases inland to an average of 89.05 inches per year at Headquarters (elevation, 160 feet). Five miles inland at Neskowin Creek Camp (elevation, 425 feet) the recorded average is 106.78 inches annually. The highest rainfall, 129.04 inches, was recorded at Neskowin Creek Camp in 1937.

Precipitation varies considerably from season to season and from year to year. Stronger development and greater frequency of cyclonic disturbances account for maximum rainfall during the winter half-year. December is the wettest month with averages of 11.12 inches at Three Rocks and 14.78 inches at Headquarters. July and August are the dry months. Three Rocks records the lowest mean of 1.12 inches in July. The August mean at Headquarters is 1.26 inches. Total annual precipitation at Three Rocks varies from a low of 44.96 inches in 1936 to a high of 100.15 inches during 1950. The low at Headquarters is 63.08 inches for 1944 with a high of 121.47 inches in 1950 (13, p. 5).

Snowfall, although neither heavy nor of long endurance, occurs each year at higher elevations. Snowfall data is available only for the Headquarters station.
covering the years 1949-1952. The annual average for this period was 13.55 inches (13, p. 22).

Fogs that occur along this coast in summer have a significant effect on local precipitation. Studies show that tree crowns intercept moisture during a fog and precipitate it to the ground as "fog drip." One set of rain gauges located two miles inland on Cascade Head Ridge recorded over 20 inches more precipitation per year under timber than in the open in 1940-1941 (13, p. 3).

Climate is a very important aspect of the recreation environment. Summer weather is most favorable for the attraction of tourists. Summer is comparatively sunny with only occasional rainfall (see Fig. 6). Temperatures are much cooler than those of the Willamette Valley and other interior regions, often fifteen or more degrees (see Table One). One August day in 1958, the author left the coast where the temperature was a pleasant 75°, and upon reaching the Valley, found the thermometer recording 104°. Many persons of the interior seek relief from the heat on the "air conditioned" Oregon Coast.

The gray skies and rainy weather of winter are less favorable to outdoor recreation. Those who vacation in winter tend to choose more sunny climes. Winter temperatures, however, are warmer than interior regions and winter storms are sometimes followed by periods of clear,
TABLE ONE

<table>
<thead>
<tr>
<th>Station</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug.</th>
<th>Sept.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Maximum Temperature, °F.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Otis (Three Rocks)</td>
<td>62.7</td>
<td>66.0</td>
<td>69.3</td>
<td>68.0</td>
<td>66.1</td>
</tr>
<tr>
<td>Hillsboro</td>
<td>70.7</td>
<td>75.5</td>
<td>82.4</td>
<td>81.4</td>
<td>76.4</td>
</tr>
<tr>
<td>Corvallis</td>
<td>69.7</td>
<td>74.6</td>
<td>81.3</td>
<td>81.8</td>
<td>77.0</td>
</tr>
<tr>
<td>Cicero (Chicago)</td>
<td>71.8</td>
<td>81.2</td>
<td>86.6</td>
<td>84.6</td>
<td>76.5</td>
</tr>
<tr>
<td>Kansas City, Mo.</td>
<td>76.8</td>
<td>85.2</td>
<td>89.9</td>
<td>88.7</td>
<td>81.4</td>
</tr>
<tr>
<td>Highest Recorded Temperature, °F.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Otis</td>
<td>90</td>
<td>95</td>
<td>95</td>
<td>94</td>
<td>93</td>
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<tr>
<td>Hillsboro</td>
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<td>99</td>
<td>107</td>
<td>104</td>
<td>102</td>
</tr>
<tr>
<td>Corvallis</td>
<td>95</td>
<td>100</td>
<td>107</td>
<td>102</td>
<td>103</td>
</tr>
<tr>
<td>Cicero</td>
<td>101</td>
<td>105</td>
<td>108</td>
<td>104</td>
<td>102</td>
</tr>
<tr>
<td>Kansas City, Mo.</td>
<td>95</td>
<td>103</td>
<td>107</td>
<td>106</td>
<td>108</td>
</tr>
</tbody>
</table>


Sunny weather. Significant numbers of people are attracted by mild weather while others visit the coast to observe the ocean during the fury of winter storms. Thus the winter season experiences some tourist activity, especially on week-ends.

Climate plays a role in the forest industry. Moderate, humid conditions and the long frost-free season favors rapid tree growth. The absence of heavy snow allows timber harvest to be carried on for as many as eleven months of the year; only excessively wet and muddy conditions halt logging activities. Summer fogs are
influential, adding soil moisture during the growing season and decreasing fire danger (13, p. 3).

Climatic conditions favor excellent pastures and a wide variety of crops. The seasonal distribution of rainfall is very important. Production of hay and grains is risky because of the possibility of excessive moisture during the ripening and harvest seasons. Vegetables and other field crops mature later than in other areas, a factor which could provide a marketing advantage. Heavy winter rains present a serious problem as much farmland is poorly drained (7, p. 14).

SOILS

Nearly all the soils of North Lincoln County are classified generally as brown latosols; all are acid in reaction. The several series are considered in two groups; (1) residual soils of the hills and marine terraces, and (2) recent alluviums in the valley bottoms.

The hill soils are composed of three series. They are (1) Astoria silt loam, (2) Hembre silt loam, and (3) Winema silt loam. The Astoria and Winema developed from sandstones and shales, the former under a forest cover and the latter under grasses and ferns. The Hembre series formed on basalts under a forest cover. All are deep and well-drained.
Three series are distinguished on the marine terraces near the coast. Two have developed under forest conditions; the Nelscott loam which is well-drained, and the Depoe loam, a ground water podsol. The third, the Delake silt loam, is a well-drained, prairie-like soil that evolved under a cover of grass.

The valley bottom soils also consist of three series found in parallel bands along the streams. The Nehalem silt loam, a well-drained soil, lies nearest the streams. Next is the Nestucca silt loam which is moderately well-drained. The poorly-drained Brenner silty clay loam lies farthest from the streams.

Several other series are found in small areas. The Netarts loamy fine sand and the Yaquina loamy fine sand, both podsols, have formed on coastal sands. The coquille silt loam evolved on tidal flats. Some peat soils have developed over tidal muds near the mouth of the Salmon River (Appendix A, 23).

Generally, the hill soils are best suited to timber production and should not be cultivated, except on gentle slopes. Since the soil survey of Lincoln County is only now in progress, exact soil capabilities are not widely known. The farmer should seek the advice of the county agricultural extension agent or the local soil conservation officers for lime and fertilizer requirements of his land.
VEGETATION

The forests are the dominant feature of the biotic landscape. There are three major types of forest, the distribution of which may be described as follows. A narrow strip along the coastline, seldom more than a mile in width, is dominated by shore pine (Pinus contorta) and Sitka spruce (Picea sitchensis) growing in mixed and pure stands. Farther inland is the spruce-hemlock forest association of the so-called "fog belt" (see Fig. 7). It occurs in a band paralleling the coast three to six miles wide. Western hemlock (Tsuga heterophylla) and Sitka spruce are the principal species, stands of which vary from nearly pure spruce to nearly pure hemlock. The third type, which dominates the remainder of the area, is the Douglas fir (Pseudotsuga menziesii) forest (see Fig. 8). Other important conifers include small tracts of Pacific silver fir (Abies amabilis) in the northwest of the county and western redcedar (Thuja plicata) found growing intermixed with all the major species. Red alder (Alnus rubra), the principal deciduous species, grows along stream courses, in areas where conifers have been removed, and as single trees in the forest. Forest openings are commonly occupied by various broadleaf trees and shrubs along with ferns and grasses.
Figure 7. An example of the dense growth of Sitka spruce and western hemlock in the Oregon "Fog Belt." Timber volume ranges as high as 5,000,000 board feet per 40 acres on some sites. (U. S. Forest Service).
GENERALIZED DISTRIBUTION of FOREST TYPES

NORTH LINCOLN COUNTY

1. SHORE PINE - SITKA SPRUCE
2. SITKA SPRUCE - WESTERN HEMLOCK
3. DOUGLAS-FIR
4. WESTERN HEMLOCK - MOUNTAIN HEMLOCK - PACIFIC SILVER FIR

SOURCE: FOREST TYPE MAP OF LINCOLN COUNTY, OREGON.
U.S.D.A. FOREST SERVICE. PORTLAND, 1955

Figure 8
More than ninety-one per cent of North Lincoln County is classed as commercial forest land. The forest resources are among the finest in the world; climatic and soil conditions make this a most productive timber growing area. The importance of the forests to the local economy, however, is limited by factors which will be discussed in a later chapter.

Recreational potential in the forests is overshadowed by their commercial value. Clear-cutting destroys the aesthetic values. Several state parks insure the preservation of limited areas of near-natural forest for recreational purposes on the coast but, there is little development based on recreation in the interior where fishing and hunting are the main attractions.

FAUNA

The marine fauna is perhaps most important in North Lincoln County. Anadromous fishes include chinook salmon (Oncorhynchus tshawytscha), silver salmon (Oncorhynchus kisutch), humpback salmon (Oncorhynchus gorbuscha), steelhead (Salmo gairdnerii), and cutthroat trout (Salmo clarkii). Resident trout include rainbow (Salmo gairdnerii), brown (Salmo trutta), and cutthroat. Devil's Lake, recently poisoned to rid it of scrap fish, was stocked with silver salmon, rainbow and cutthroat trout, and channel catfish (Ictalurus lacustris). Pacific cod
(Gadus macrocephalus), red snapper (Sebastodes ruberrimus), sablefish (Anoplopoma fimbria), Pacific halibut (Hippoglossus stenolepsis), and albacore (Germo alalunga) are important commercial salt water species. Crab (Cancer magister) and razor clams (Siliqua patula) are also of commercial importance. Harbor seals (Phoca vitulina) are found offshore. The Pacific gray whale (Eschrichtius gibbosis) may be seen during its annual migration.

The forest is inhabited by Columbia black tail deer (Odocoileus columbianus), Roosevelt elk (Cervus canadensis), black bear (Ursus americanus), cougar (Felis concolor), and many small furbearers and rodents. Several species of migratory waterfowl frequent North Lincoln County. Other aquatic birds such as gulls, cormorants, and pelicans may be seen along the shore. Many species of inland birds inhabit the interior.

Marine life provides the basis for the sport fishery and a significant commercial fishery at the port of Depoe Bay. The general fishing season extends from April 26 through October 31. Salmon runs in local waters attract large numbers of fishermen (see Fig. 9). Deep-sea fishing is popular during the salmon season. Moreover, steelhead and other trout may be taken from the streams during winter months provided they exceed twelve inches in length. Salt water fishing for various bottom species
Figure 9. Siletz Bay is the scene of intense fishing during the salmon run. (Lincoln Anderson).
may be carried on throughout the year. A number of fishing resorts have been developed in response to the sport fishery.

Other wildlife is an important part of the recreation resource. Hunters are attracted by waterfowl, deer, elk, and bear in season. The marine life along the coast attracts the attention of observers who enjoy watching the activities of seals and aquatic birds. The annual migration of the Pacific gray whale is of particular interest.
Figure 10. This beautiful Chinook salmon was landed from the beach near Taft on Siletz Bay. (Lincoln Anderson).
CHAPTER THREE

FARMING, FISHING, AND FORESTRY

Farming, fishing, and later forestry were the bases for early settlement in North Lincoln County. The earliest homesteads were established during the late 1890's when portions of the Siletz Indian Reservation were opened to white settlement.

The first inhabitants, mostly farmers, filed claims on the more favorable agricultural lands of the coastal lowlands and on the bottomlands of the major stream valleys. Many early farmers found that tilling the soil did not provide a sufficient living and turned to commercial fishing to provide a supplemental cash income. Because of environmental restrictions and relative isolation from markets, farming in the region has never become much more than a modest means of livelihood for a small number of persons.

Kernville, the first town in North Lincoln County, was founded on the fishing industry. Daniel Kern of Portland constructed a fish cannery on the Siletz River about one mile above its mouth in 1896. A post office was established at the cannery on July 6, 1896 (6, p. 18). Local farmers, Indians, and a number of Scandinavian immigrants provided the cannery with fish that abounded
in the local waters. Commercial fishing continued as an important economy for many years. The streams of the area, however, have been closed to commercial fishing (Salmon River, 1946; Siletz River, 1956) and since Depoe Bay is the only suitable fishing port, the activity is now confined to that site.

Although the first sawmills were built on Drift Creek and the Siletz River as early as 1905, the lumber produced was for local use only. Not until the First World War did commercial timber production begin on a large scale. A mill was constructed on the Siletz River near Kernville about 1916, primarily for the production of spruce for use in airplane construction. Beginning in 1920, and until 1939, millions of feet of logs were taken by barge from the Siletz country to milling centers of the Columbia River and in Washington State (6, pp. 25-26).

Several sawmills were built over the years, but most are now idle. A number of factors have contributed to the decline of the local forest industries: (1) failure of the milling operations to keep pace in modernization and thereby decreasing their ability to compete, (2) the development and widespread use of truck transportation in the logging industry enabling timber owners to move logs to distant mills at a reasonable cost, and (3) adverse conditions in the timber market have recently forced
closure of some local mills and curtailed logging operations.

FARMING

Farms and Farm Types

The 1954 Census of Agriculture reported 177 farm units in North Lincoln County. Only a small percentage of the farms are full-time operations prosperous enough to support a family. During a recent farm status survey conducted by the Toledo office of the Oregon State Employment Service, questionnaires were mailed to 134 local farm residents. Response to the survey revealed that of those contacted, 50 were farming full-time, 14 part-time, and 61 were not farming (appendix A, 7). It may be seen that the majority of these persons derive income from other sources and that many farms are a supplementary source of income.

Dairy and general livestock operations are the dominant types of commercial farm enterprise. Many farms combine both. Some farms produce field crops, but in very limited amounts. There are a few specialized farms raising holly, flower bulbs, and berries, but these have not proved too successful.

Most farms do not reflect a high degree of prosperity. Poor pastures and shabby buildings show signs of neglect.
Only the most enterprising operators are able to overcome environmental problems and achieve marked success.

Land Use

Land use reflects the restricted nature of agriculture. The area in farms in 1954 was 24,284 acres, less than seventeen per cent of the total land area (see Fig. 19). Well over half, 14,008 acres, of the land in farms was woodland. Only 4,157 acres were classed as cropland in 1954, and crops (mostly silage and hay) were harvested from just 1,353 acres. Pasture is the most important agricultural land use. Note that much of the woodland and cropland is pastures (see Table Two).

TABLE TWO

<table>
<thead>
<tr>
<th>Selected Farmland Statistics, North Lincoln County, 1954</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Farms</td>
</tr>
<tr>
<td>Total Land Area</td>
</tr>
<tr>
<td>Land in Farms</td>
</tr>
<tr>
<td>Woodland, Total</td>
</tr>
<tr>
<td>Cropland, Total</td>
</tr>
<tr>
<td>Cropland, Harvested</td>
</tr>
<tr>
<td>Land Pastured, Total</td>
</tr>
<tr>
<td>Woodland Pastured</td>
</tr>
<tr>
<td>Cropland Pastured</td>
</tr>
<tr>
<td>Irrigated Land</td>
</tr>
</tbody>
</table>

Source: Based on area enumeration district data, 1954 Census of Agriculture.
Figure 11. Riverbottom farmland in the lower Salmon River drainage. Most farms in North Lincoln County are situated on similar land in all the major stream valleys. (Author).

Figure 12. Rolling hill pastures to the north of Devil's Lake. Soils and topography in this area are favorable to grass and grazing, but land use of this type is very restricted in the region as a whole. (Author).
Farm Production and Marketing

Farm products, for the most part, move out of North Lincoln County for processing and marketing. There are no creameries or meat packers. Niggardly amounts of field produce have not been conducive to the establishment of agricultural based industry; secondary agricultural income is negligible.

Milk and meat are the chief products of local farms. Dairymen produce both grade A and B milk. Grade A milk is marketed through the Farmers Co-operative creamery of McMinnville and the Dairy Co-operative Association of Portland. Grade B or "factory milk" moves to Tillamook and is made into cheese.

Animals from the few livestock farms in the area are sold mainly at Brah's livestock auction yard in Corvallis. Small numbers of stock are butchered by the farmer and sold directly to local consumers. Small stock and eggs are often marketed in this manner (Appendix A, 12).

Crop production is limited and is generally for farm use only. Forage grasses and hay are the chief crops harvested. The production of hay is limited because of local weather conditions as it is often too moist during the curing season. Early rains during the harvest season render the raising of grain hazardous (7, p. 18). Most farmers find it necessary to purchase a large portion of
their supplementary livestock feed from Willamette Valley sources.

Small amounts of horticultural specialties and vegetables are grown on small garden plots for home use. Some produce of this type is sold to local grocers in season.

Forest products are presently the main source of farm income in Lincoln County, accounting for more than half of the total farm income in 1954 (17, p. 265). Many local farms have timberland which, under proper management, is a very important potential source of income. This type of enterprise is not, however, as well developed in the northern as in other parts of the county (Appendix A, 12).

Farm Studies

Detailed studies of three farms are presented for a better understanding of the nature of farming in North Lincoln County. The first is a full-time dairy operation which illustrates the success that may be achieved through wise management. The second and third are part-time farms, more characteristic of the dominant type of farm enterprise.

The Kiser Farm. The Kiser farm is located about one and one-half miles east of Taft on Schooner Creek. Mr. and Mrs. Walter Kiser purchased the original holding of eighty acres in 1943. Since that time an additional 37 acres have
been acquired. Timber harvested from the original holding financed a large part of the purchase of the additional acreage.

Mr. Kiser has initiated a number of improvements on the farm. The barn has been renovated and expanded, new silos have been built, and the drainage system and all pastures have been improved. Plans for the near future include the construction of a new machine shed and clearing of 22 additional acres for pasture. At present, the holding represents an investment of 45,000 dollars (see Figs. 13 and 14).

Sixty-five acres of the 117 acre farm are in pasture. All the land is bottom and bench land except for 30 acres of hill land that is covered by young second growth spruce and hemlock. Pasture land is under a cover of mixed grasses and legumes including alta fescue, orchard grass, ryegrass, lotus major, and New Zealand white clover.

Silage is generally harvested from about twenty acres of bottom land before the cattle are allowed to graze it. One-hundred thirty tons were harvested from 15 acres in 1958. Four acres of hay were also harvested. Silage is fed to the dairy herd through the winter months along with about 40 tons of alfalfa hay that are purchased from a farm in the Willamette Valley. Grains are fed each day
Figure 13. Part of the Walter Kiser dairy herd. The Kiser farm is located on Schooner Creek four miles above Taft. (Author).

Figure 14. The Walter Kiser farm home. (Author).
during milking hours. Supplementary feed costs Mr. Kiser about 2,200 dollars per year.

Mr. Kiser has 48 head of cattle, mostly Jerseys, and a bull for breeding purposes. Thirty-two cows are milked in summer producing about 1,000 pounds of milk per day. Winter production drops of around 400 pounds daily for a yearly average of 700 pounds per day. The sale of milk is the entire source of income which averages about eight to ten thousand dollars annually.

Grade A milk was produced by Mr. Kiser for many years. In 1958, he purchased a bottling machine and sold bottled milk to local customers. This was a very successful venture but proved so time consuming that little time was left for maintenance of the farm. When the farm mortgage had been paid, the bottling machine was sold and Mr. Kiser turned to the production of grade B milk which he markets with the Tillamook County Creamery Association. A new milking parlor and holding tank would have to be installed before the Kisers could again market grade A milk under state regulations.

Mr. Kiser is a cooperating member of the Lincoln Soil Conservation District and follows good management practices. His pastures are divided into ten parts which are grazed on a rotation plan. Pastures are plowed, fertilized, and replanted every five to six years. A young man hired
during harvest of the silage crop is the only outside labor utilized. Mrs. Kiser and her two daughters raise a vegetable crop each year to help supply the family food requirement (Appendix A, 17).

The Phelps Farm. The Phelps farm is located about one mile north of Otis on U.S. Highway 101. It is a dairy-livestock farm operated on a part-time basis by Mr. Gayton Phelps. Mr. Phelps has been employed at the post office in Otis for twenty-five years, and has been postmaster since 1941. Although the post office is his career and his principal source of income, Mr. Phelps is keenly interested in his farm enterprise (see Fig. 15).

The present holding, which contains 390 acres, is mostly hill land situated south of Cascade Head Ridge. There are only 25 acres of tillable bottom and bench land located in the valley of Deer Creek. This land is in improved pasture and is irrigated. The remaining land is under forest cover; half Douglas-fir and half alder. Some of the woodland is grazed by farm animals.

Since the purchase of the original holding seventeen years ago, over two million board feet of mature timber have been sold to contract loggers. The proceeds of these sales have been utilized to pay the mortgage, purchase additional land, and to make improvements on the farm.
Figure 15. Barn and pasture of the Gayton Phelps farm. Livestock are allowed to browse woodland in the background. (Author).

Figure 16. The Quick farmstead located on U. S. 101 north of Neotsu. (Author).
A modern home was built in 1948.

The farm livestock includes eleven milk cows, six heifers, and thirty-four head of Romney sheep. An average of 350 pounds of milk is produced daily which is marketed on the grade B market with the Tillamook County Creamery Association. The sheep were added in 1957 and, as yet, little income has been realized from them. Stock feed is purchased at a cost of about 1,500 dollars annually. Most of the income from farm products goes into the maintainance of the holding.

Mr. Phelps plans to continue as postmaster until his retirement. The farm is being developed as a source of future income and security. Looking to the future, Mr. Phelps planted five acres with 5,000 young Douglas-fir for Christmas trees in the fall of 1957. Holly was planted on two and one-half acres at that time. An additional 5,000 Douglas-fir will be planted. There are about 500,000 board feet of merchantable Douglas-fir in scattered plots that soon will be ready for harvest.

The Quick Farm. The E. D. Quick farm is a nine-acre holding located on U. S. Highway 101, one mile north of Neotsu (see Fig. 16). Mr. and Mrs. Quick have lived on the acreage for one year. The farm is a part-time operation. Mr. Quick works as a logger and Mrs. Quick does most of
the farm work.

The farmstead occupies about one acre and the remainder is cleared and in pasture of mixed grasses. The farm is devoted mainly to the production of meat products for sale to local customers. Stock includes 600 chickens, 200 rabbits, 16 goats, five calves, and two pigs. Chickens and rabbits are butchered and sold as fryers. Twenty laying hens supply some eggs for sale. Four calves, two Hereford and two Guernsey, will be butchered this fall for beef. One Jersey will be kept for a milk cow. One pig will be butchered and the other kept as a brood sow. Milk from the goats is fed to the calves.

Presently, the bulk of the income from farm products is utilized to buy feed and make improvements on the farmstead. Plans for the future include plowing and planting the pastures to high quality grasses. Three acres are to be planted with vegetables for sale on the local market.

THE FISHERY OF DEPOE BAY

Depoe Bay is one of the most unique and picturesque fishing ports on the Oregon Coast, although it is among the smallest. It is the only commercial fishing center in North Lincoln County. Many residents of Depoe Bay derive their livelihood from the fishing industry. A significant sport fishing industry is also an important aspect of the
The activities of the fishing fleet combined with the beauty of the setting, also make Depoe Bay one of the outstanding tourist attractions of North Lincoln County. The harbor, only four acres in area, is connected to the sea by a narrow channel about twenty feet wide and eight feet deep. Every day, during the summer season, scores of persons line the bridge, which crosses over the channel, to observe the arrival and departure of the fishing craft (see Fig. 17). It is a thrilling sight to see these boats expertly maneuvered through the channel during a heavy surf.

The Commercial Fishery

Fifteen resident fishermen operate from the harbor at Depoe Bay. Two firms, the New England Fish Company and The Depoe Bay Fish Company, operate fish receiving stations at the harbor. The New England Fish Company, a Canadian holding firm, employs two men during the fishing season but is closed the remainder of the year. The Depoe Bay Fish Company employs four men throughout the year and an additional eleven women during the crab season.

The commercial fishing season begins April 1, and continues through the end of October. Activities are generally slow until spring run salmon arrive in large
Figure 17. A typical scene of the congested business center of Depoe Bay during the tourist season. (Author).

Figure 18. Port facilities and the commercial fishing fleet at Depoe Bay. (Author).
numbers in the Depoe Bay area during late April and early May. When fishing is particularly good in the vicinity, many fishermen from other ports land their catch at Depoe Bay. Occasionally, as many as 100 craft may be crowded into the small harbor (Appendix A, 11).

The principal species landed are salmon, albacore tuna, and crab. The annual catch represents an average value of approximately $120,000 dollars to the fisherman (Appendix A, 6). Silver salmon are landed in greatest numbers followed by Chinook salmon (see Table Three). Small amounts of humpback salmon are taken in alternate years. Only a few albacore are caught, usually from mid-July to mid-September when these fish are found within range of Depoe Bay. Tuna, however, are becoming increasingly important. Bottom fish are usually taken when salmon catches decline.

The area is not especially favorable for crabs, and crab landings are steadily decreasing. The crab season extends from November 15 to August 15, but local fishermen do not generally land crab after mid-June. Only two local fishermen are engaged in crabbing. They account for the entire take at Depoe Bay.

Most of the local fishing boats are operated by a single individual. Virtually all fish are taken with
### TABLE THREE
Commercial Fish Landings, Depoe Bay

<table>
<thead>
<tr>
<th>Species</th>
<th>1956</th>
<th>1957</th>
<th>1958</th>
<th>1959¹</th>
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</thead>
<tbody>
<tr>
<td><strong>Salmon, Total:</strong> lbs.</td>
<td>390,691</td>
<td>487,746</td>
<td>406,611</td>
<td>273,189</td>
</tr>
<tr>
<td>Silvers</td>
<td>287,760</td>
<td>364,706</td>
<td>217,122</td>
<td>206,271</td>
</tr>
<tr>
<td>Chinook</td>
<td>102,859</td>
<td>108,852</td>
<td>189,481</td>
<td>64,963</td>
</tr>
<tr>
<td>Humpback</td>
<td>(2)</td>
<td>14,186</td>
<td>(2)</td>
<td>1,955</td>
</tr>
<tr>
<td><strong>Tuna:</strong> lbs.</td>
<td>8,814</td>
<td>994</td>
<td>41,622</td>
<td>39,615</td>
</tr>
<tr>
<td><strong>Bottom Fish:</strong> lbs.</td>
<td>(3)</td>
<td>(3)</td>
<td>16,158</td>
<td>15,615</td>
</tr>
<tr>
<td><strong>Crab:</strong> dozens</td>
<td>15,736</td>
<td>8,211</td>
<td>5,954</td>
<td>919</td>
</tr>
</tbody>
</table>

1. Figures for 1959 are incomplete.
2. Humpback are taken only in alternate years.

Source: Based on personal letters from H. S. Smith, Auditor, Oregon Fish Commission, Portland.

Heavy commercial trolling gear (hook and line). After landing at the receiving plant, fish are graded, packed in ice, then shipped by truck to markets in Portland and Seattle.

The Depoe Bay Fish Company

The Depoe Bay Fish Company is owned and operated by Mr. Eldon Bates. The company is a wholesale and retail dealership which operates throughout the year. During the fishing season, Mr. Bates buys and processes an average of 2,000 to 3,000 pounds of fish per day. As many as 10,000 pounds per day are processed in the plant during peak periods. The bulk of the fish are transported to Portland and Seattle in company-owned trucks.
Processing of crab is the major activity during the winter season. Crab is cleaned and canned in the plant and sold on the wholesale market. Eleven women are employed to assist in the crab canning operations.

A retail outlet is operated at the plant site through which small amounts of fish are marketed to local residents and to the tourist trade. Mr. Bates also does custom canning for sports fishermen (Appendix A, 6).

The Deep-Sea Sport Fishery

Two sport fishing fleets operate out of Depoe Bay. Tradewinds Trollers, Incorporated, with nine modern craft, is the largest. The Sea Trollers Company has four vessels. An average of about 32,000 persons per season have patronized the two enterprises during recent years, paying approximately 128,000 dollars per year for the service.

Chartered fishing excursions begin with the opening of the season on April 1, and end on October 31 when the season closes. Nearly eighty per cent of the business volume comes in June, July, and August, the months of peak tourist travel. An average of 300 passengers per day is carried by the two fleets during this period. The average number of fish landed during the height of the season is 150 per day, about one for every two customers.

Statistics kept by Stanley Allyn, co-owner of Tradewinds Trollers, Inc., were obtained to illustrate the
nature of the firm's business. Although business volume has been relatively stable during recent years, the data shows that the amount of fish landed has steadily decreased (see Table Four). Mr. Allyn points out that the decrease is due largely to discontinued use of commercial fishing gear. Only light sport tackle is used at present in order that the fishing be more sportsmanlike (Appendix A, 4).

TABLE FOUR
Selected Statistics, Tradewinds Trollers, Inc.

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Passengers</th>
<th>Pounds of Fish</th>
<th>No. of Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td>1952</td>
<td>29,000</td>
<td>51,000</td>
<td>2,000</td>
</tr>
<tr>
<td>1953</td>
<td>27,500</td>
<td>49,350</td>
<td>1,970</td>
</tr>
<tr>
<td>1954</td>
<td>26,740</td>
<td>38,254</td>
<td>1,887</td>
</tr>
<tr>
<td>1955</td>
<td>26,753</td>
<td>34,721</td>
<td>1,896</td>
</tr>
<tr>
<td>1956</td>
<td>26,780</td>
<td>27,630</td>
<td>1,936</td>
</tr>
</tbody>
</table>

Source: Based on records kept by Tradewinds Trollers, Incorporated.

Emphasis for the first few weeks of the season is on bottom fish. The arrival of spring-run salmon and steelhead, however, brings about a shift to trolling, the real interest of most of the fishing enthusiasts. As in the commercial fishery, silver salmon are taken in greatest numbers. When albacore are to be found within reach of Depoe Bay, special tuna charters are arranged.
The Forest Resource

The commercial forests of North Lincoln County occupy some 133,200 acres; over 91 per cent of the total land area. Most of the present forest cover dates from the mid-1800's, having started following a series of great fires that burned a large portion of the Coast Range. As a result, even-aged stands of young-growth timber approximately one-hundred years old are prevalent, although a few scattered pockets of old-growth Douglas-fir and hemlock are present. The bulk of the sawtimber stands are mature and ready for harvest.

Approximately 45,050 acres of the commercial forest lands have been logged over. Sawtimber stands, mostly 21 inches d.b.h. or more, occupy 88,150 acres or somewhat more than 66 per cent of the commercial forest land. Applying the average volume per acre for Lincoln County, we find that the sawtimber volume in North Lincoln County amounts to approximately 4,441 million board feet by Scribner rule.

Forest Ownership

More than seventy per cent of the total land area of North Lincoln County is held by the federal government and large timber companies, including the greatest share of
the commercial forest lands (see Fig. 19). Federal holdings account for a total of 39,503 acres: 32,455 acres in the Siuslaw National Forest, and 6,048 acres of public domain and re-vested land grants managed by the Bureau of Land Management. Another 6,960 acres is owned by eight private firms each holding 1,000 or more acres (see Table Five). Numerous small holdings, mostly private, but including state, county, and municipal lands, account for the remainder of the forest resource.

**TABLE FIVE**

<table>
<thead>
<tr>
<th>Holdings of Large Timber Interests</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Georgia Pacific Corporation</td>
</tr>
<tr>
<td>2. Longview Fiber Corporation</td>
</tr>
<tr>
<td>3. Oregon Pulp and Paper Company</td>
</tr>
<tr>
<td>4. Crown Zellerback Corporation</td>
</tr>
<tr>
<td>5. Spaulding Pulp and Paper Company</td>
</tr>
<tr>
<td>6. Murphy Lumber Company</td>
</tr>
<tr>
<td>7. Miami Corporation</td>
</tr>
<tr>
<td>8. Valsetz Lumber Company</td>
</tr>
</tbody>
</table>


Cutting has been most extensive on private lands, and much of the remaining sawtimber is found on federal lands (see Fig. 19).

**Significance to the Economy**

Ownership of the forest resource limits its importance to the local economy. The large companies owning the timber have not established production facilities in this area. Their processing plants are located at more
favorable sites where rail or water transportation of finished products is available, mainly in the Willamette Valley. The Georgia Pacific mills at Toledo have an excellent location close to the timber resource, railroad facilities, and the Port of Newport.

Thus, the forest industry is confined mainly to logging by contract although a few specialized milling operations provide employment for a limited number of persons.

Logging

Seven major logging concerns operate in the region as well as several individual loggers. The seven major operators usually employ about 185 men with an annual payroll of approximately 900,000 dollars. Their combined capacity is nearly 500,000 board feet of timber cut and hauled daily.

Two large timber interests maintain logging operations in North Lincoln County which employ local labor. The office of the Neskowin Timber Company, a subsidiary of the Publishers Paper Company, is located north of Otis in the Cascade Head Experimental Forest. The company is logging under contract on the experimental forest lands and also on Siuslaw National Forest land south of the experimental forest. The rate of production is 60,000 board feet per day, primarily Sitka spruce and western hemlock. Logs are trucked to the Murphy log dump north of Dayton, Oregon
and floated downstream to Oregon City (Appendix A, 5).

The Oregon Pulp and Paper Company has a large logging operation based at Cutler City where ninety persons are normally employed. Only eighteen men, however, were on the payroll in 1958. Logging is carried on in the vicinity of Euchre Mountain and on the company's Otter Rock Tree Farm south of Cape Foulweather. Eighty thousand board feet of timber is normally cut daily during the season (Appendix A, 13).

The other logging concerns in the area are locally owned and, for the most part, are engaged in contract logging for large timber companies. The Jones Logging Company of Nelscott, the largest of these and presently the largest operation in the area, employs seventy men (see Fig. 20). The company is currently operating under contract with the Longview Fiber Company of Longview, Washington. Peak production is at the rate of 150,000 board feet daily (Appendix A, 16).

Other logging firms are Holliday Logging Company of Rose Lodge, Dale Allen Logging of Taft, Phelps and Hines Logging Company of Taft, and Jim Barton Logging Company of Cutler City. There are a number of smaller concerns, usually one man with one or two trucks, hauling logs by contract.
Figure 20. Office and shops of the Jones Logging Company at Nelacott. (Author).

Figure 21. The Coleman Shingle Company mill near Cutler City. (Author).
The majority of the timber is hauled by truck via State Highway 18 to Willamette Valley points for processing. Timber cut for the Georgia Pacific Corporation by Phelps and Hines Logging Company is moved south to Toledo.

Wood Products Manufacturing

Very little of the local timber resource is processed in North Lincoln County today. Only four mills of a specialized character continue to operate; two shingle mills, a small sawmill producing 2x4s and railroad ties, and an alder sawmill.

The largest mill is that of the Coleman Shingle Company located near Cutler City (see Fig. 21). This mill usually operates about ten months per year employing ten men. The annual payroll averages approximately 40,000 dollars. The plant normally produces sixty squares of cedar shingles and twenty squares of cedar shakes per day when in operation. Production fluctuates according to availability of raw materials as well as with changing market conditions (Appendix A, 14).

The Tooley Shingle Company has a smaller mill located at Delake. When in full operation, the plant runs two shifts employing six men including the owners, Mr. J. T. Tooley and his brother Mr. H. B. Tooley. The annual payroll averages 25,000 dollars. This mill produces an
average of 30 squares of shingles per day (Appendix A, 26).

The cedar logs purchased by these shingle companies are essentially by-products of logging operations carried on by firms engaged in pulp and paper production. The cedar logs are not used in paper manufacture. At one time, the Oregon Pulp and Paper Company operated a shingle mill on the Siletz River to process cedar cut from its holdings.

Products of the shingle mills are hauled to California markets by various trucking firms whose trucks would otherwise return to California empty after making deliveries in the Northwest.

The Heilman Lumber Company mill, located near Otis, produces Douglas-fir railroad ties and 2x4 studs at the rate of 80,000 board feet per month when in operation. The owner, Mr. A. W. Hellman, has a contract for selective logging of 600,000 board feet of timber on Siuslaw National Forest lands. Mr. Hellman and his two employees cut and haul logs for a week, and during the following week they process the logs in the small sawmill. The rough ties and studs are trucked to a planing mill at Willamina (Appendix A, 15).

The Panther Creek Lumber Company operates a small sawmill near Rose Lodge producing rough red alder lumber (see Fig. 22). Peak capacity is about 4,700 board feet daily.
Figure 22. The Panther Creek Lumber Company mill near Rose Lodge. (Author).

Figure 23. An idle mill on Siletz Bay near Kernville. The bunkhouse in the foreground is now used for tourist lodging. The "Old Mill Cabins" are available at a very low cost. (Author).
The lumber is produced to order and sold mainly to a Portland furniture manufacturer. Three employees work from six to eight months per year at the mill. The mill could operate for a longer period except for the limited market for alder lumber (Appendix A, 1).

Forest Related Industry

The Salmon River Box Company of Rose Lodge, owned and operated by Mr. Louis R. Albert, is engaged in the production of fruit boxes and flats, vegetables crates, nursery flower boxes, and fish boxes. The small factory, built in 1954, operates the year-round. Mr. Albert and two employees work the entire year and two additional men are employed during the summer months. The payroll averages 7,000 dollars per year.

Boxes are produced on order and delivered to growers in the Portland and Salem areas and to fish packers in Lincoln County. Nearly 20,000 boxes are produced during peak months. Raw material for this operation is finished lumber which is purchased mainly in Yamhill County as no local mills produce planed lumber (Appendix A, 2).

Forest gathering adds to the income of various residents, mainly Indian families. Swordfern is the principal product. The Green Mountain Evergreen Company receiving station in Delake purchases fern and other items gathered in this area (Appendix A, 25).
CHAPTER FOUR

TOURISM

The era of tourism in North Lincoln County opened following the development of suitable transportation facilities. The Oregon Coast Highway was extended into the region during the mid-1920's bringing a fresh influx of population. Real estate speculators bought up land, platted it, and sold lots to newcomers. Several communities were founded during this period of growth (Delake, 1924; Nelscott and Depoe Bay, 1925; Oceanlake and Roads End, 1926; Gleneden Beach and Lincoln Beach, 1927). Many new inhabitants invested capital in commercial enterprises to serve the increasing population and the growing tourist trade. The region took on the air of a resort area.

Commercial recreation development has progressed steadily and today, the compact settlements along the coast of North Lincoln County contain the greatest concentration of residences, summer homes, and small businesses catering to the tourist to be found in any similar area on the Oregon Coast (11, p. 4). Settlement reaches its highest intensity between Oceanlake and Taft. Here, commercial establishments flank the Oregon Coast Highway, occupy the choice sites on the ocean front, and are intermixed with residential properties between the highway and
the beach. To the north and south of this area settlement is more widely spaced. The highway skirts the edges of the smaller communities and here, commercial developments are fewer (see General Highway Maps, following Appendix A).

Today, tourism is the leading economy, largely in response to the following factors. (1) A highly favorable location with respect to tourist travel. (2) The character of the environment and its recreational attractions. (3) The initiative of the entrepreneur and his investment in recreational services. (4) The limited nature of other types of livelihood.

The leading position of tourism is reflected in the nature of employment. Statistics derived from a recently completed occupational survey show that there are 424 firms operating in the study area providing the income of 576 self-employed individuals and 749 wage earners (14). Seventy-seven per cent of these firms are services or retail and wholesale businesses, many of which depend upon the tourist for a large share of their income. The service industry ranks first. Two hundred and nineteen service establishments (mostly motels and other lodging facilities) employ 510 persons. The services are heavily dependent upon the tourist. Retail and wholesale firms, including grocers, clothing stores, gasoline stations, and
restaurants, rank second. One hundred and nine such businesses employ 327 persons.

The Tourist Economy

It is difficult to determine the over-all value added to the economy by tourism since no accurate information of this type concerning the study area is available. We may indicate, however, that local income from tourism clearly exceeds that from other sources. A survey of lodging facilities has been consummated to illustrate this point. The survey included sixteen motels and motor courts, which represent nearly ten per cent of the lodging establishments in the study area. Two factors were considered: (1) the gross annual income from rentals of each establishment, and (2) the number of rental units of each. The results of the survey are relatively valid, for every effort was made to obtain a representative sample.

The 16 establishments of the survey included a total of 176 rental units which had a total gross income of approximately 181,800 dollars in 1959. By dividing the gross income by the number of rental units, the average income per unit was approximately 1,033 dollars. By projecting the average income per unit ($1,033) to the total number of rental units in North Lincoln County (1,205), an estimate of tourist expenditures for lodging in the
The estimated income from forestry, second in importance, is somewhat over $200,000.

It was found that income is directly proportional to the quality of the facilities, ranging from less than 500 dollars per unit for older enterprises to over 3,000 dollars per unit for a few modern, elaborate resorts. Apparently, location is none too significant as some beachfront properties earned less than others not so favorably located.

A study of the upper Rogue River Basin has shown that 31.3 per cent of tourist spending in that region was for lodging (20, p. 15-16). If we may assume that the same figure would apply to this area, tourist expenditures in North Lincoln County should exceed 4,000,000 dollars annually. It may well be that this figure is exceeded considerably for there are large numbers of people from the Willamette Valley who make one-day trips into the area and do not stay overnight. Although these persons undoubtedly spend smaller amounts locally than the overnight visitor, they are a very important source of revenue.

Tourism is doubly important in that it provides the basis for a number of other services, many of which could not operate without the tourist dollar. There are, for
example, 69 restaurants and 38 service stations; obviously more than required to serve the less than 6,000 local residents.

The tourist economy is very seasonal in character. Two graphs have been prepared to illustrate the seasonal fluctuations in business activity. The first is based on the average monthly gasoline sales of six local service stations (see Fig. 24). This is an example of services not wholly dependent upon tourists. It is evident, however, that they experience considerable increase in trade during the tourist season. The second graph charts the number of visitors, by months, at the Depoe Bay Aquarium, an enterprise in which virtually all income is derived from tourists (see Fig. 24). The graphs show that November through February is the slow period. Business begins to improve in March and increases steadily into June. The economic pulse of the region is greatly increased during July and August. Highways and streets carry heavy loads of vacation-bound traffic. Most lodging facilities are filled to capacity; advance reservations are usually required to secure accommodations in the better establishments.

Activity declines sharply through September and October. Motels display signs advertising reduced rates to attract off-season trade and most offer commercial
AVERAGE MONTHLY GASOLINE SALES, NORTH LINCOLN COUNTY
1959

Based on a sample of six service stations

VISITATIONS TO DEPOE BAY AQUARIUM
1957

From records of the Depoe Bay Aquarium

Figure 24
rates to itinerate businessmen. Some tourist services, of course, are closed during the winter season. Appreciable numbers of people are attracted to the coast in winter, however, and many of the high-quality motels are filled to capacity on winter week-ends.

The Commercial Recreation Developments

A host of business enterprises have been developed in North Lincoln County based upon the tourist trade. The commercial scene of the area is dominated by such establishments. Motels, hotels, lodges, cabins, and apartments are numerous. Restaurants, gift shops, curio shops, and other resort type businesses are present in unusually large numbers. Because of the relatively large numbers of tourist catering concerns, one cannot mistake the North Lincoln County coastal area as a resort development.

Unlike many resort areas, however, the number of "midway type" amusements is relatively small. Although there are a few enterprises of this type, there are no boardwalks with their ubiquitous shooting galleries, penny arcades, etc., which is often the case with beach developments.

The great number of lodging facilities vividly attests to the dominance of tourism. Records of the Lincoln County Health Service show that there are 176
establishments in North Lincoln County offering lodging to the public. The majority of these are motels and beachside apartments.

The commercial recreation developments are highly concentrated in the urban areas and along the Coast Highway. The area including the communities of Oceanlake, Delake, Nelscott, and Taft has been most heavily developed (see Fig. 25). Sixty-one per cent of the motels and apartments mentioned above are located in this area within a distance of four and one-half miles along the coast. The city of Oceanlake alone contains fifty-two such establishments. Eighteen are found in Taft, twenty-two in the small community of Nelscott, fifteen in Delake; a total of 107 in these four urban areas. Another concentration is found at Depoe Bay where thirty businesses offering lodging are located (see Fig. 26). There are smaller numbers at Lincoln Beach, Gleneden Beach, Cutler City, and to the north of Oceanlake. Many motels front the ocean and beaches while the Coast Highway is lined with motels, restaurants, gasoline stations, and other tourist services. Boat launching and rental facilities are found on the Siletz and Salmon Rivers, Siletz and Depoe Bays, and on Devil's Lake. Several landings on the Siletz River also offer lodging to those who wish an extended fishing vacation.
Figure 25. Oceanlake is the largest city in North Lincoln County. The business center flanks U. S. 101 which is clearly visible in the photo. Devil's Lake is seen on the right and the "D" River in the left foreground. (Lincoln Anderson).
Figure 26. Depoe Bay from the air. Thousands of visitors are attracted to this picturesque community each year. Note the small size of the harbor and channel. (Lincoln Anderson).
Figure 27. The King Surf Motel in Depoe Bay is a large, modern resort featuring a spacious dining room and lounge with an Hawaiian motif. (Author).

Figure 28. The Finisterre Lodges Motel in Depoe Bay is an older, but excellently-maintained establishment. Facilities include nine individual cabins. (Author).
Figure 29. The Dorchester House Hotel in Oceanlake is a favorite eating place of many coast visitors. (Author).

Figure 30. This establishment, located in Taft, is a more common example of the lodging facilities in North Lincoln County. (Author).
The Public Recreation Developments

The State Parks Division of the Oregon State Highway Department maintains several state parks and waysides in North Lincoln County. These include Devil's Lake, Fogarty Creek, and Depoe Bay State Parks and the H. B. Van Duzer Forest Corridor, Boiler Bay, Rocky Creek, and Otter Crest Waysides (see Fig 31). City and County Parks are the only other public developments of note.

The H. B. Van Duzer Forest Corridor, situated astride Oregon Highway 18, contains 1,507 acres of old-growth Douglas-fir forest that has been set aside for future generations to enjoy (see Fig. 32). It lies partly in Lincoln, Polk, and Tillamook Counties. The park affords a pleasing drive of some five miles through large timber which remains in nearly its original state. A roadside rest area with picnic facilities is provided.

Devil's Lake State Park, a new development which was opened to the public in 1958, is located near the outlet on the southern end of Devil's Lake. The park consists of two tracts of land on opposite shores of the lake, donated to the state by the city of Delake. The area on the north side of the lake features overnight camping with 32 campsites. Boat launching facilities are nearby as well as ocean beaches and the commercial centers of Oceanlake and Delake. The tract on the south shore of the lake, which
OREGON STATE PARK DEVELOPMENTS

NORTH LINCOLN COUNTY

Figure 31
Figure 32. The Van Duzer Forest Corridor is the only inland State Park in North Lincoln County. (Oregon State Highway Department).
remains unopened as yet, is to be developed as a day-use area in the future.

Fogarty Creek State Park, providing access to an excellent beach area with an attractive forest setting, is perhaps the most outstanding park in the area (see Fig. 33). This day-use park is equipped with electric stove shelters, running water, and sanitary facilities. The park contains over 104 acres, much of which is not presently developed. Overnight camping facilities may be provided in this park as pressure on near-by overnight camps increases.

Depoe Bay State Park is a three acre tract located on the Pacific shore in the center of Depoe Bay. Attractions include views of the ocean, the rocky shoreline, the famous spouting horns of Depoe Bay, and the activities of the fishing fleet. Facilities provided at this park consist of a building with restrooms, an observation deck, a refreshment and souvenir concession, a small, grass covered rest area, and roadside parking.

Otter Crest, Rocky Creek, and Boiler Bay Waysides feature roadside parking with views of the Pacific Ocean, the rockbound coast, and the thundering surf (see Fig. 34). Otter Crest, with the most spectacular viewpoint in the area, is a one-acre tract atop Cape Foulweather with parking facilities only (see Fig. 3). Rocky Creek and
Figure 33. Fogarty Creek State Park offers an excellent spot for play at the beach. Unfortunately, the small tree on the rocks was lost in a storm. (Oregon State Highway Department).
Figure 34. The raging surf as seen from Boiler Bay State Park. (Oregon State Highway Department).
Boiler Bay Waysides are equipped with parking, picnicking, and sanitary facilities. Fishing from the rocks and views of the surf are outstanding attractions of both.

Contributions of the State Parks

The state parks of the region offer the public means for an inexpensive outing and attract many tourists. Day-use areas are free and charges for overnight camping are very reasonable. Unimpeded access to the ocean and beaches is one of the most useful functions of the parks; safeguarding these areas against commercial exploitation is another.

Thousands of persons make use of the state parks annually. Fogarty Creek Park, a very popular day-use area, received visitors at an average rate of 440 per day in 1958. Visitations at Boiler Bay Wayside were higher as more persons stop here for a moment to observe the scenery (see Table Six). Although no count is made of the visitors at Depoe Bay State Park, it is probably the most heavily used park in the area. While visitations at H. B. Van Duzer and Otter Crest Waysides decreased sharply in 1956-1957, traffic at the other parks has increased steadily each year. The author can advance no concrete reason for the decline at H. B. Van Duzer and Otter Crest.
TABLE SIX

Estimated Number of Day Visitors at State Parks

<table>
<thead>
<tr>
<th>Park</th>
<th>1955</th>
<th>1956</th>
<th>1957</th>
<th>1958</th>
</tr>
</thead>
<tbody>
<tr>
<td>H. B. Van Duzer</td>
<td>164,190</td>
<td>67,413</td>
<td>75,165</td>
<td>124,530</td>
</tr>
<tr>
<td>Fogarty Creek*</td>
<td>---</td>
<td>---</td>
<td>86,220*</td>
<td>160,851</td>
</tr>
<tr>
<td>Boiler Bay</td>
<td>225,615</td>
<td>227,676</td>
<td>235,302</td>
<td>267,216</td>
</tr>
<tr>
<td>Rocky Creek</td>
<td>41,217</td>
<td>49,539</td>
<td>56,499</td>
<td>72,831</td>
</tr>
<tr>
<td>Otter Crest</td>
<td>150,525</td>
<td>106,320</td>
<td>90,468</td>
<td>133,779</td>
</tr>
</tbody>
</table>

* Eight months only.


Devil's Lake State Park was the first state park to be developed in close proximity with a heavily settled area. Apprehension at the possibility of conflict in such a situation caused careful consideration before the decision was made to go ahead with the development. Overnight camping at Devil's Lake Park during its first season (1958), however, was slightly higher per camp unit than at Beverly Beach Park (located south of Cape Foulweather) indicating the success of the Devil's Lake site.
CHAPTER FIVE

SUMMARY AND CONCLUSION

North Lincoln County is one of the more important settlement areas of the Oregon Coast. The physical environment contains the ingredients for a variety of economic activities. Farming, fishing, and forestry are important means of livelihood, but the real wealth of the region depends upon the natural resources for tourism and recreation.

History of settlement in North Lincoln County is relatively brief. The initial homesteaders arrived during the mid-1890s. Early settlers were engaged primarily in farming and fishing. World War I provided the impetus for timber-based industry on a large scale. Several sawmills were built during and following the war.

Construction of the Roosevelt Highway (U. S. 101) and the Salmon River Cut-off (Ore. 18) during the 1920s opened the area to tourist travel and paved the way for commercial exploitation of the recreation resources. Population had its greatest increase between 1920 and 1940 (2, p. 2). Much of the regional growth and development during this period was in response to the expanding tourist trade.

World War II brought a lull in development but this was followed by a period of renewed building and population
influx. Many retired persons settled in this area during the post-war period. These people are presently purported to be the second largest income group (Appendix A, 19).

Today, tourism has supplanted all other economic activities as the chief source of income. The greatest percentage of the gainfully employed inhabitants are engaged in the service industries, particularly tourist services. Several factors have brought tourism to the fore. The Pacific Ocean, with its associated beaches and marine life, is the primary recreation attraction (see Fig. 35 and 36). North Lincoln County enjoys a more central location with respect to the populous Willamette Valley than any other area on the Oregon Coast. Fast all-weather roads provide excellent access. Here this combination of factors has led to the evolution of one of the most intensely developed resort areas of the state.

It is likely that tourism will dominate the economy in the future. Recreation use of the area increases each year and should continue to do so. Confidence in the future is evidenced by the continual development of additional tourist facilities.

Major expansion of other activities, however, seems very unlikely. Agriculture is restricted by the lack of cultivable land. Harbor facilities of Depoe Bay, the only commercial fishing port, are severely limited. It is
Figure 35. Sand beaches such as this scene near Lincoln Beach reach from Fogarty Creek State Park to the mouth of the Salmon River. (Oregon State Highway Department).
Figure 36. The rocky, surf-lashed shore at Boiler Bay is characteristic of the southern part of the North Lincoln County Coast. (Oregon State Highway Department).
doubtful that other facilities will be developed in the near future, or that a large fishing fleet will ever be based in this area.

There has been considerable decline in the timber-based industry in the past decade. Large-scale manufacture of timber products will probably never occur again in North Lincoln County. The trend in this industry is toward large, integrated mills and the near-by Yaquina Bay area and the Willamette Valley offer more favorable sites for this type of development. Contract logging, however, should continue as an important source of income for local residents.

Large timber interests and the Federal Government control the greatest share of the forest resources. This pattern of ownership is perhaps most favorable in terms of the perpetuation and long-range utilization of the resource. The federal forest lands are well-managed on a sustained-yield basis. The large private concerns realize that wise management is essential to insure future timber supplies and are better able to stand the cost of proper reforestation than the small operator.

Agriculture offers considerable opportunity for improvement and expanded production. A soil conservation district has been established in Lincoln County. The Soil Conservation Service is now engaged in numerous research
projects, including the initial soil survey, and is working toward solution of the many problems of farming in this region. Although the results of the soil survey will not appear in print for several years, much progress has been made toward the determination of land-use potential.

The principal problem facing the farmer is one of improving the productivity of his land. Pasture management can be improved by planting high-quality grasses and legumes suited to the area and through utilization of a rotation grazing program. Improvement of drainage systems and greater use of irrigation will also increase the return per acre. Dairy and livestock farmers could produce a major portion of their feed requirements in the form of silage to reduce the necessity of purchasing high-cost imported feeds.

Climate favors the culture of various horticultural and vegetable crops. The latter mature later in this area than in others offering a possible marketing advantage. The major problems have been a shortage of harvest labor for these crops and relative isolation from markets. It is suggested that cooperative efforts among the growers in procuring labor and in marketing could result in an increase of production (7, p. 10-12).

The farm woodlot is an important potential source of farm income and timber products are presently the chief
source of farm income in Lincoln County (7, p. 14). Many farms possess timber of merchantable size. Much farm forest land is capable of producing marketable timber in 30 years or less. The farmer would do well to include woodland in his over-all farm management program and should seek qualified technical advice for maintainance of his timber crop.

It is disappointing that only a token number of the local farmers are cooperating members of the soil conservation district. This organization as well as the County Agricultural Extension Agency offers valuable assistance to the farmer in planning his program. It is apparent that greater cooperation on the part of the farmer is necessary before marked improvement of conditions may be achieved.

Since North Lincoln County depends upon tourism, physical attractiveness becomes very important. Building has proceeded largely without the restriction of planning and zoning. Development, therefore, has not been orderly. Commercial and residential properties are intermixed indiscriminately. There is an over-abundance of small commercial establishments as evidenced by numbers of vacant and run-down business properties. Shabby, neglected buildings and grounds detract a great deal from the appearance of this area. Unpleasant surroundings do not
attract outsiders. It is felt that more concerted action on the part of municipal governments and civic groups to correct and prevent such occurrences would be most desirable.

The seasonal nature of the tourist economy creates many problems. Although they prosper well in summer, many shopkeepers and motel operators are barely able to meet expenses during the off-season. Many such enterprises are owned by semi-retired persons and are a secondary source of income. Proper maintenance and repair are often neglected under these circumstances.

There is a rapid turnover of lower-quality property; "For Sale" signs are a prominent feature of the landscape. It was found during the survey of lodging facilities conducted by the author, that in approximately one-third of the establishments visited the present owners had been there less than one year. It is obvious that such enterprises do not produce an adequate income.

State parks are becoming an increasingly important part of the recreational scheme. There are presently seven state parks in North Lincoln County, two of which have opened since 1957. Existing facilities, however, are not adequate to serve future needs as park attendance is increasing at a very rapid rate. Overnight camping facilities in particular need to be expanded. Several sites in
North Lincoln County have been surveyed for possible future state park developments. Property values proved prohibitive in some cases—other locations were undesirable. The recent developments at Fogarty Creek and Devil's Lake have helped to relieve pressure for the present, but surely, expansion of these and other facilities in the area and acquisition of new sites will be needed before long.

Certain other community problems remain to be solved. Planning and zoning ordinances should be passed as quickly as possible. The influx of summer population creates peak demands for domestic water during the period of least supply. Water and sewage facilities are inadequate in the larger settlements as are police and fire protection (2, p. 18). Local streets and roads need to be improved.

These problems are most pressing in the heavily populated area including Oceanlake, Delake, Nelscott, and Taft. There have been proposals for the merger of these several communities into one city so that cooperative measures could be taken toward overcoming the urban problems (2, p. 54). The proposals of consolidation have met with considerable resistance. Long-time residents are reluctant to allow their respective communities to lose identity. Retired persons, a significant part of the population, live on a fixed income and naturally resist
the prospect of increased taxes which would result from such a scheme.

In 1954, a group of local businessmen met and formed the Oregon Coast Ad Club, an organization devoted to the promotion of tourism in North Lincoln County. One of the principal objectives of the group is to extend the length of the tourist season; to attract more visitors during the off-season. A name was adopted for the region which is now widely known as "The Twenty Miracle Miles." The Ad Club conducts many special advertising programs and each April, it sponsors a festival called the "Miracle Days Week-end" which attracts thousands of visitors.

It is clear that the future prosperity of North Lincoln County lies largely in the tourist and recreation industries. Recreation use of the area is increasing steadily. Public utilities, especially sewage disposal, water supply, and streets, must be improved to accommodate the expanding summer population influx. Means should be found to promote a general clean-up of unsightly and trashy areas as improvement of physical attractiveness and removal of safety hazards will increase recreational potential.

The author suggests that public recreation facilities be expanded as rapidly as possible. The Oregon State Parks Division has been most active in this field with new
parks on Fogarty Creek and Devil's Lake. Perhaps the county and municipal governments could cooperate in providing additional campgrounds, bathhouses, and parking areas at strategic points near the beaches to augment the existing state park facilities. Such a program, and others before-mentioned, would serve to attract greater numbers of people into the area and bolster the recreation economy.


22. You're invited to miracle days on the 20 miracle miles. Sunday Oregonian (Portland, Oregon) Special Section. April 6, 1958. 32 p.
APPENDIX
APPENDIX A

PERSONAL INTERVIEWS


12. Cate, Rufus H., Jr. Lincoln County Agricultural Agent. Newport, Oregon.


